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VOLUME CLXII NUMBER TEN

DETROIT, MARCH 1, 1924

## CURRENT COMMENT

It takes a big man to live up to the estimate of his youthful son.

As one rotten apple will spoil a bushel, so will one scrub bull damage the whole herd a decade hence.

We hear that dog meat is being eaten in Germany. Maybe some of our mutton-flavored canines could profitably be exported.

When things look dark and discouraging in public affairs, please remember that the scum always comes to the top.

Have the harnesses been repaired and oiled, the wagons been greased, and other tools put in repair? If not, it is likely to be now or never. It will pay to make it now instead of never.

The wiseacre who said that it is good for one to do something disagreeable each day, apparently did not realize that most of us fulfilled that unpleasant duty by getting up in the morning.

## Quantity Production

Henry Ford has shown the world that its benefits accrue to all who are interested in the product at any stage from manufacturer to ultimate consumer, including the workmen whose labor is one of the large items entering into the cost of the product.

It would be well for us to consider whether this economic law, so clearly demonstrated in the example cited, has a general application in all business, including agriculture, and if so, how we, as farmers, may benefit by its operation. It will be generally concluded without argument that its application is universal in manufacturing industries. A similar assumption regarding its application to the agricultural industry would start a heated argument. But a careful analysis of the question as to whether it applies, and if so to what extent, may be both profitable and timely.

Agriculture is a manufacturing industry involving the use of a fixed plant, raw material and labor and labor-saving machinery in the production of a marketable product. It is different from the industries generally classed as manufactures in that the turn-over is slow, and impossible to speed up, there is a far less possible degree of control of the factors of production cost and a wholly different

marketing problem. There is no practical possibility of gauging production to probable demand, as is the case with manufactures, and little possibility of stimulating greater consumption by passing a portion of the benefits of quantity production on to the consumer. The market for most farm products is always at the saturation point and any seasonal increase in production in any line means over-production and an over-crowding of the market in that line, which is disastrous to the producer. This is a fact so often and clearly demonstrated that many farmers have little patience with the discussion of production problems, particularly in connection with the word "Quantity."

But there are important factors in quantity production as practiced by Mr. Ford and his imitators in the manufacturing field, other than the quantity of the output, which do apply to the farm factory. Perhaps first among these is an efficient plant, well adapted and equipped for the use to which it is put. Not all of the units of the great Ford enterprise are large. Some of them are small and devoted exclusively to the manufacture of a single small part. But they are so arranged and equipped as to turn out that part in the quantity desired at the lowest possible labor cost, and the labor employed is highly skilled in a single operation in the manufacture of that part which is built on the same specifications year after year. Quantity production in this case is measured in relation to the labor unit, and in this sense is just as applicable to the economy of agriculture as to any line of manufacturing.

While the same degree of specialized production may not be possible on the farm, the same general principles will apply in this phase of quantity production. A careful survey can be made of the farm plant to determine the line of production to which it is best adapted. It can be improved in potential fertility by a carefully considered rotation of crops and judicious fertilization. It can be equipped with labor-saving machinery for some special line of production at moderate cost. The owner can develop a superior skill in that special line of production which will insure a quality product at a low labor unit cost and greatly simplify the marketing problem. And adherence to this line of production will in the long run prove more profitable than continual changes in production policy, if a wise choice is made at the outset.

Every farmer who has not already given it consideration would do well to make a careful study of the economics of quantity production in this sense of the word and at this time, giving due regard, of course, to a proper distribution of available labor throughout the year.

## Let's Make It Work

At the last meeting of the managers of Michigan fairs, the resolution passed providing for the elimination of certain types of objectionable shows was a most commendable step.

The trouble will come, of course, when managers attempt to put the resolution into effect. Fairs, generally, are not money-making institutions. Often directors are compelled to go outside for funds to pay premiums and settle other accounts.

The question then is, will not some distressed managers weaken when some oily promoter of a tabooed type of show, comes in and offers real money to admit his feature? These managers are human, and we may expect some of them, at least, to yield to temptation.

But what of the patrons and prospective patrons of these fairs? Have they any responsibility in the matter? Can they aid in putting across what these managers are attempting?

These patrons can combat these

shows by not patronizing them. But perhaps the most effectual thing they can do is the early preparation of the best exhibit possible from their respective farming communities.

Such exhibits and the interest attending their development and preparation would, to some degree, at least, divert attention from the objectionable features to the very purpose for which these long established institutions were created.

## Keeps A Memorandum

A FEW days back we had the pleasure of discussing farm problems with one of the most methodical and efficient farmers of our acquaintance.

Among the various means this farmer uses to keep himself and his help employed in season and out, during good weather and bad, is to have always with him a memorandum book in which he marks down any suggestions that may come to him, or any jobs that need doing. These jobs are classified as winter or summer jobs, rainy or fair weather jobs.

The real advantage coming to this man through his system, is that he is able to have present with him at all times a reminder of the things needed doing, and, also, the best suggestions of the hours when his brain is in the fittest condition to think clearly of the duties and obligations before him.

With a vocation which must meet the many requirements and conditions that farming must, some help of this kind is needed, at least, for the average farmer. For it too frequently happens that we are called upon to do the most serious thinking when we are in the least favorable condition to do it.

We, therefore, suggest to our many readers that they develop the memorandum book habit.

## More Light On Cows

EVERY day there comes to the office one or more pieces of testimony to the value of cow testing associations in uncovering information on dairy cows. Here is a sample from Genesee county:

In Association No. 2 of that county there were sixty-one pure-bred cows showing an average annual milk production of 7,637 pounds, and of butter-fat, 330.9 pounds. The 110 grade cows in this association made an average of 7,582 pounds of milk, and 279.9 pounds of butter-fat. The thirty-nine scrubs had an average of 5,731 pounds of milk and 219.7 pounds of fat.

With few exceptions, the pure-breds were better cared for. But the feed bill ran about the same, the chores were no more difficult to perform, and the stable room no larger for these pure-bred animals.

There is, however, a difference when returns are inspected. The 1,906 pounds of milk increase of the pure-breds over the scrubs means, at \$3.00 per hundredweight, \$57.00, or, on the butter-fat basis, the 111 pounds of fat at forty-five cents, the average for 1923, means \$45.50. On five or ten cows that difference merits the attention of any farmer in Michigan.

So, again we say, "Hats off to good breeding," and also to the cow testing associations through which this convincing evidence is brought within reach of the men who pull teats.

## The Real Problem

THE northwest has been receiving considerable attention lately because of its financial status which has caused considerable suffering. This section is due the major interest it has received at recent agricultural conferences since everything should be done to alleviate the condition. It should be helped, not only for the sake of the individual, but for the good of the country as a whole.

It seems that these wheat growers

had become careless in the heyday of wheat growing and are now suffering the reaction. The wheat yields of these growers are only half of those of Michigan and other diversified farming states. These farmers have been accused of sinning socially because their soil, while not exhausted, has been drained of its vitality by the treatment it has received.

No person or class of people can become careless and inefficient without sometime suffering the consequences. And then, when it comes to the time of stress, whether it be in farming or any other class of personal activity, it becomes difficult to get help because of the misdeeds of the past.

Regardless of what the circumstances are now, we are sure this trial and stress which the northwest is now suffering will bring adjustments which will mean a much more substantial and profitable agriculture for that section. It is but in keeping with human experience that this "low" condition should bring a reaction which will be much better than that which existed before.

## Nothin'

I KINDA have that nothin' feelin'. You know what it is. It's when you have nothin' to say and don't know how to say it.

You see, it's this way: Sophie had pickled pigs' feet and sour kraut fer dinner, and that made me feel so full of somethin' that I feel like nothin'. The pigs' feet is interfering with the workin' of my head.

I feel like a dog with a full stomach what would like to curl up and go to sleep. Sleep is the easiest thing I could do just now, but if I don't get this out there won't be nothin' where this oughta be. Sophie says that's what I get fer waitin' to the last minute—I ain't even got time ta go to sleep.

Havin' nothin' ta say and ta talk about it, is what you call the accomplishment of great talkers and writers. So I'm just keepin' in practus by doin' this. So, please excuse me while I practus.

If we was all ta wait until we had somethin' ta say, this would be a quiet and peaceful world. Most of the papers what is printed would go bust, and the grass would grow under the mail man's feet. Sometimes I think it does anyhow, spechully when I'm waitin' fer letters.

But, anyhow, this sayin' somethin' is like the seeds o' nature. Nature makes lots o' seeds but there's only a few what fall on fertile ground and amount ta anything. Same way with words. There's lots o' them fallin' around all the time, but most o' them don't amount ta nothin'. I kinda gotta contribute ta the supply. So here it goes.

Spring is comin', ain't it?—with its muddy roads and barnyards, and Sophie tellin' me ta take my shoes off in the woodshed. Grand and glorious spring, what springs lots o' work on you—what turns nice white snow into rivers of mud—what has winds what go right through you—what gives you a akin' in the bones and makes you take sulfur and molasses. Spring ain't what it used ta be, 'cause there ain't no fun takin' spring tonics, 'cause most folkses take them the year around now. The only kinda spring I'd like now is a bed spring where I kin repose in peace and quietness.

Well, I've said nothin' about nothin', so I've accomplished my purpose. But, if you wanta see what pickled pigs' feet kin do to a fellow, just read this over again. Next week I'm goin' to try calf's brains and see if that won't do no better.

HY SYCKLE.





# Dollars and Sense Side of Farming

## *A Practical Discussion of the Economics of Agriculture*

By Prof. J. T. Horner, of M. A. C.

FARMERS, like other men, are in business to secure the means to provide a living. This involves making a profit from their operations. They want to know what practices will cause profit to increase and then follow them. It is worth while to inquire into the nature of profits. What is profit? Profit is the difference between earnings and expenses. Anything which increases earnings will result in a greater profit, provided expenses remain the same. Profit can also be reduced by increasing expenses and letting earnings stay the same.

The farmers' earnings depend upon the value of his produce in the market

factors which have an influence. The simplest statement of the truth is that price is an expression of value. If Neighbor Brown asks you the value of that four-year-old cow, you think in terms of dollars. You think in terms of what she could be sold for.

There is much confusion concerning the cause of value. Why is that four-year-old cow of yours valuable? Why is your automobile valuable? Why are shoes, hats, talking machines, dry-goods, nails, fence posts, rat traps, milk pails, lead pencils, washing machines, books, pictures, chairs, over-

ue), because they can be secured for nothing. Fire-wood, in a timbered country, can be secured free of charge if one will gather it. Berries and nuts in the forest are free for the picking. In a pioneer country cattle are permitted to graze at large and no charge is made. Water from the springs in the forest is free to all who wish to fill their jugs. Berries, nuts, firewood, water and pasturage is sometimes free. Why? Because it is not necessary to give anything in order to secure them. These things exist in such abundance that there is more than enough to supply the wants of those who can use them. Therefore, they are free.

The more abundant a certain product is the less important each bushel, yard, or gallon of it is. If there were only 100,000,000 bushels of potatoes produced in the United States this year, there would be such a scarcity that potatoes would be very valuable—that is, they would be so hard to get that each bushel of potatoes would be of more importance than if there were a greater quantity. If there were a billion bushels of potatoes produced in the United States, potatoes would be so plentiful that each bushel would not be of so much importance—would be of little value.

Things do not have value unless they are desired by people. People desire things which will satisfy their wants. It is very difficult to determine why people want some of the things they do. Human wants are, in many instances, not rational. There seems to be no good reason why a man should want a brightly-colored, tasteless apple in preference to a juicy, highly-flavored one with less color. Nevertheless, most people in the city market places prefer just such apples. Because such apples are preferred, they have greater value than other apples.

The man who is attempting to in-

crease his profits by getting more money for the things he has to sell needs to find out what people want, how they want it, when they want it and how much of it they want. Stated in another way, the successful seller needs to find out what the demands of the market are.

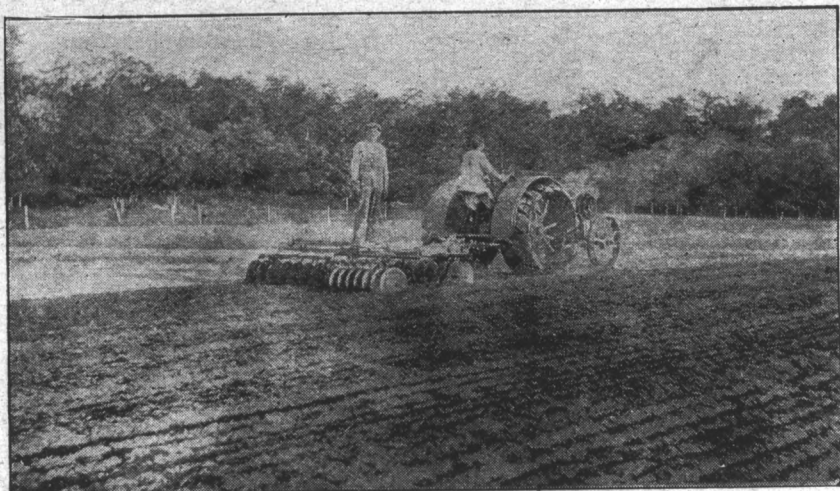
Anyone can make more money by finding out what is wanted in the market place and supplying that want in the cheapest manner than in any other way. It is a great fallacy to assume that things which have cost money and labor to produce are valuable. Things do not have value because it cost money and effort to produce them. Things have value because someone wants them and is willing to pay money in order to get them.

The farmer is attempting to find out why he is not getting more for his efforts. He wants to find out how he can increase his profits. Before he can effectively do this he must give consideration to both ends of his business—that is, his income and his outgo. While it is important that a study be made of the selling end of the business, agriculture must not forget the producing end and eliminate as much of the expense as possible.

In the future, as in the past, the successful farmer will be the one who is able to produce at costs which will return him a profit at the prevailing prices. It is probably hopeless to expect that in agriculture prices can be secured so that every man will be enabled to make a profit. Such a happy state of affairs does not prevail in any of the other industries or the professions. There must be always that ever-present watch on the outgo if an enterprise is to be successful.

It has been the aim of cooperative associations to so organize the selling end of the farmer's business that prosperity would result. I am inclined to believe that any unbiased person will conclude, after weighing all the evidence, that cooperative endeavors

(Continued on page 357).



Ernest Pettifor Finds the Tractor

place. A bushel of potatoes, or a hundred pounds of milk, is worth what it sells for in the market place. There is no measure of value except in terms of money. The farmer is vitally interested in what causes his product to be worth so many dollars in the city, or at the local country shipping point. He wants to know what causes potatoes to be worth \$1.00 a hundred this month and \$1.50 last month. This whole program of price is hard to understand because there are so many

a Sensible Way to Save Dollars.

coats and the numerous other articles valuable? These things have value because someone will give up money in order to get them. Why will people give money to get them? Because these things are desired to satisfy wants and they cannot be secured for nothing. This is the basis of value. A thing has value because it is desired to satisfy wants and cannot be secured for nothing.

Some things satisfy wants, but do not have value, (that is, market val-

# League Buys Out Big Distributors

*Then Re-sells Part to the Borden Company—Most Important Move Since Sheffield Farms Left the Pool*

By George Herbert

THE most important transaction in the New York milk field, since the Sheffield Farms Company stopped cooperating with the pooling policy of the Dairymen's League Cooperative Association, was carried through at the end of January, when the Empire State Dairy Company, one of New York's "Big Three" milk distributors, sold out its entire property to the league, which in turn transferred the city end of its new acquisition to the Borden Farm Products Company.

The deal is not only important, but to the officers and members of the league is highly gratifying, marking as it does, a long step ahead in strengthening and consolidating not only the league's fluid milk market, but its fundamental policy of pooling.

The property conveyed includes fifteen country milk plants and six city distributing stations, together with 292 milk routes in the boroughs of Brooklyn and Queens, with their truck and wagon equipment, etc. The country plants are retained by the league in pursuance of its policy of controlling sufficient country terminals of the distributing system to insure "an open road to the New York market for every member every day in the year."

Two of these plants are manufactories of condensed and evaporated

milk. The remainder are shipping stations, equipped with the necessary pasteurizers, etc., to comply with the full requirements of the New York City Board of Health for retail fluid milk. All the plants, city and country, are modern and in first-class shape. The consideration paid has not been made public in either transaction.

The sale appears to have grown out of the increasing difficulties which the Empire State Company seems to have encountered on account of its opposition to the league's pooling policy, which it abandoned at the same time with the Sheffield Farms Company. As Vice-president Miller, of the league, has said, that policy "has been praised to the skies and damned to the depths."

The "price war" described in an earlier article is only one phase of the controversy. As there explained, the trouble arises of the differing views as to how to take care of the fluid milk surplus, the production in the New York territory being about twice what New York City will absorb in fluid form at living prices for the farmer. Half of it must be sold in less remunerative forms, as butter, cheese, etc., and the league's plan is to dis-

tribute this loss to every producer pro rata, since all add to the surplus. This is done by pooling the entire net return for milk sold, and returning to each farmer his fair share, pro rata to the quantity and quality of the milk he ships, without regard to the particular form, as fluid, cheese, etc., in which his milk is marketed.

The refusal of the "Non-pool" farm-

ers to cooperate is natural enough. Located, as many of them are, close to the country shipping stations of the non-cooperating milk distributors, (who deal almost wholly in fluid milk), they are able to get the higher fluid milk prices while avoiding the burden of caring for the surplus. They do not see why they are not entitled to the full benefit of their favorable location and of the highest price offered them, especially since it is of-

(Continued on page 377).



The End of One of Michigan's Giants in Otsego County.



# LATE AGRICULTURAL NEWS

## LESS FUNDS FOR AGRICULTURE.

THE agricultural appropriation bill for 1925 just reported out by the appropriations committee, contains much interesting information concerning the expenditures of the United States Department of Agriculture. The prevailing impression appears to be that the department is run wholly in the interest of agriculture and that the appropriations are made solely for the benefit of the farmers. This, however, is far from the truth. Only a small part of the appropriations for the department are for the benefit of agriculture. A large share is expended for roads and for regulatory work which concerns the consumers, perhaps more than it does the farmers.

The total appropriation recommended for the department proper is \$39,058,513, a decrease of \$1,482,940, and for improvement of highways \$17,700,000, a decrease of \$14,600,000, making a total appropriation of \$56,758,513 for the next fiscal year, which is \$16,082,940 below the 1924 appropriation.

The committee's report states that since 1917 federal appropriations to the amount of \$392,817,500 have been made available to the states for highway improvement, of which \$284,380,399 had been paid to the states prior to January 1, last. Estimating that expenditures are being made during the fiscal year at the rate of \$6,000,000 a month, the committee figured that \$72,437,160 would be available July 1 for expenditure in the coming fiscal year in addition to the \$17,700,000 carried in the bill.

## WOULD AID FRUIT GROWERS.

A FROST-WARNING service has been carried on by the weather bureau for several years and has proven exceedingly beneficial to the limited area to which it was given. A paragraph in the agricultural appropriation bill for this service has been amended to permit the weather bureau to give advice and warnings to fruit growers as to frost, harvest weather, and fruit-spraying conditions, and an appropriation of \$20,000 is recommended.

## TO REDOUBLE EFFORT AGAINST JAPANESE BEETLE.

DURING the fiscal year 1924 there was available for the control of the Japanese beetle the sum of \$120,000. The committee recommends that this appropriation be increased to \$237,500 for 1925. The bureau of entomology is also permitted to cooperate with the federal horticultural board in establishing, maintaining and enforcing quarantines promulgated under the plant quarantine act.

For preventing the spread of moths the committee recommends an appropriation of \$572,360 for 1925, which represents an increase of \$41,360 over 1924.

## STATUS OF VARIOUS APPROPRIATIONS.

THE amount allowed for the bureau of agricultural economics is \$4,208,464, an increase of \$196,511 over the present year. Of this sum, \$308,000 is recommended for the market inspection of perishable foods, \$33,000 greater than the appropriation for this purpose for 1924.

In the paragraph appropriating for crop and live stock estimates is recommended a new provision that no part of the funds shall be available for reporting the intentions of farmers as to the acreage to be planted in cotton.

For the administration of the United States warehouse act, the committee

recommends an appropriation of \$163,000, or \$26,600 more than the current year.

The bureau of animal industry will receive \$7,468,916, or \$623,916 more than the present year, if the committee's recommendations are followed.

## FIGHT AGAINST TUBERCULOSIS ENCOURAGED.

DUE mainly to the united efforts of the farm organizations, the budget reduction of \$19,843 in the operating expenses for the eradication of tuberculosis has been restored by the committee, making the amount available for that purpose \$850,000, and in addition an increase of \$400,000 over the 1924 appropriation of \$2,027,600 for the payment of indemnities is recommended. The committee believes that as the states are appropriating large sums of money to carry on tuberculosis-eradication work, sufficient cooperative funds should be provided by the federal government, so as not to hamper and restrict the activity.

## SAY FARMERS FAVOR THE McNARY-HAUGEN BILL.

AS the hearings before the agriculture committees in congress progress, it is becoming evident that the McNary-Haugen agricultural-export corporation emergency bill is far in the lead of the vast number of bills designed to aid agriculture.

The proposed measure with the emergency limit fixed at five years instead of ten as provided in the original bill, has been reported favorably by the senate committee.

The bill is receiving strong support from the farmers' organizations. Testifying before the house committee on agriculture, Dr. T. C. Atkeson, Washington representative of the National Grange, declared that the McNary-Haugen bill was the least objection-

able and most defensible emergency measure of all the bills before the committee. "The National Grange, after a thorough investigation of all the relief measures, is endorsing it as an emergency proposition and is backing the measure for all it is worth."

That the McNary-Haugen bill will be worth a billion dollars to the farmers of this country, and everybody will share in their increased prosperity, was the assertion of Gray Silver, speaking for the American Farm Bureau Federation.

The bill has two powers, says Mr. Silver: First, it determines what money prices for agricultural products should be in order to equal in purchasing power the prices received by the farmer for the same products during the pre-war years. For example, if five bushels of wheat would buy a pair of shoes of a certain quality before the war, the bill determines a price for five bushels of wheat which will purchase the same pair of shoes at the present time. Having determined these fair prices, the bill provides a buying corporation to go into the market at any time to purchase at the determined price. This is not arbitrary price-fixing, but merely the insurance of farm commodity prices equal in exchange value to the prices of manufactured and other products.

A provision for the maintenance of tariffs on the affected products at a point high enough to protect the enhanced prices from foreign competition makes secure the adjusted domestic price levels.

Stating the proposal tersely, Mr. Silver points out that the McNary-Haugen bill proposes to make the tariff wall effective for agriculture so that through a government agency the exportable surplus which depresses our home markets may be shipped abroad and whatever amount of money is lost in the transaction will be allocated back to the entire crop, thus affording

us a continuous higher domestic market and permitting agriculture to prosper on a parity with other national groups when considered in the light of conditions as they were ten years prior to the war.

Those who have drafted the McNary-Haugen bill say they have endeavored to so word it that the present channels of trade would function as freely as possible.

## FARMERS PROTEST INCREASE IN OCEAN RATES.

AN increase of ten cents per 100 pounds in the eastbound freight rates on certain farm products has aroused vigorous protests in this country. Secretary of Agriculture Wallace says the increase will be detrimental to American agricultural producers, especially at this time, and to business in general. He believes the increase wholly unwarranted.

The fact that lines in which the American government is interested were a party to the agreement to raise rates, and intimation that the conference of steamship lines, practically dominated by British shipping interests controls freight rates on the North Atlantic has been brought to the attention of government officials, and in the form of a resolution, Senator King, of Utah, has asked the United States Shipping Board some very pointed and embarrassing questions.

The farm organizations are taking considerable interest in this rate increase. It is regretted that a shipping organization which has received vast appropriations of public funds to enable it to build up a large American merchant marine should even permit itself to be charged with having discriminated against American farm products in ocean freight rates, and against American ports in favor of Canada. It will require more than blank denials to remove the suspicion of unfair treatment of the American shippers.

## WINTER WHEAT COSTS VARY WIDELY.

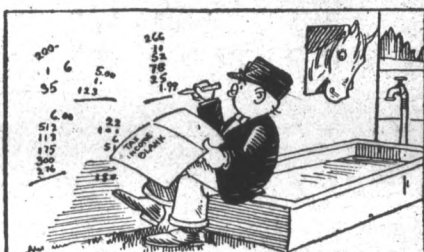
MOST figures of winter wheat production, based on records obtained by the bureau of agricultural economics in 1920 on 467 farms in four middle west states, emphasize the wide range in costs that exist on different farms.

The variation in net cost per bushel to owners operating their own farms was ninety-nine cents to over \$3.00 per bushel. On rented farms the variation to tenants was from forty cents to over \$10 per bushel. The yield to owners having costs of \$1.20 or under per bushel, ranged from twelve to thirty-one bushels per acre. Those having a cost of \$4.00 or more per bushel had yields which ranged from slightly less than three to seven bushels per acre.

The average yield for the 467 farms was 14.3 bushels per acre. Seventy per cent of the farmers obtained yields ranging from seven to nineteen bushels per acre. Six per cent had yields of less than seven bushels, and twenty-four per cent had yields of over nineteen bushels per acre. The average total net cost to owners operating their own farms was \$1.80, and on rented farms \$1.83 per bushel.

These figures seem to indicate that crop yield per acre has a very important bearing on cost per bushel. Nothing that the government now proposes to do to aid agriculture will save the man whose yields are under seven or eight bushels per acre. The small yield farmer will have to improve his methods or quit growing wheat.

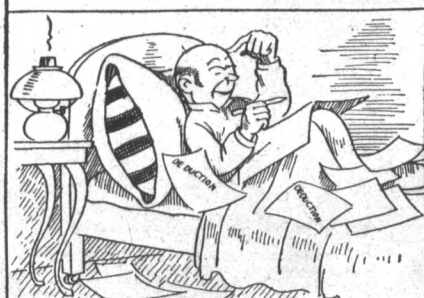
## Filling Out Form 1040



HEN HUSTLE NEVER LETS TAX RETURNS INTERFERE WITH BUSINESS. HE SAYS HE THINKS BEST IN THE OPEN, KEEPS HIS ACCOUNTS ON THE SIDE OF THE BARN AND FILLS OUT HIS INCOME TAX IN THE BARN YARD!



MA BIM STOPS TO REMARK—  
"CLASSIFYIN' TH' HIRED MAN AS FARM LABOR AN' TH' HIRED GAL AS A LUXURY IS PLAIN DISCRIMINATION 'GAINST OUR SEX!"



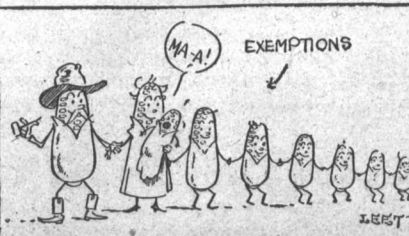
SAM SHANKS, WHO SAYS HIS MIND WORKS BEST IN BED LIKES TO "RASSE" WITH HIS BLANK IN A REPOSEFUL MANNER!



THE EXECUTION SHOULD BE AS PAINLESS AS POSSIBLE!  
BILL BEND WHO RAN AWAY WITH A CIRCUS ONCE, UNDERSTANDS IT BEST IN THIS POSTURE



CY CITYFELLER, ORNAMENTAL FARMER SAYS—"LET YOUR CORPORATION LAWYER FILL IT OUT, IT'S CHEAPER!"



EXEMPTIONS  
KERNEL KOB SAYS—"I SHOULD WORRY!"



# How to Spray for Better Cherries

*Practical Recommendations Resulting from Some Interesting Experiments*

By H. M. Wells and W. C. Dutton

*Horticultural Specialists at M. A. C.*

THE season of 1923, especially during the early part, was rather dry. This condition was unfavorable for leaf spot development. The disease did not at any time develop to any appreciable extent, even on unsprayed trees. Therefore, no comparisons could be made between the various materials used in so far as their ability to control leaf spot was concerned. Fortunately, however, definite results were obtained from the 1922 experiments in the Grand Travers



What Leaf Spot Did.

erse district. A report of that work was given a year ago but the essential parts will bear repeating.

In the 1922 experiments a comparison was made of lime-sulphur and Bordeaux sprays, and sulphur and copper sulphate dusts. The season was such that leaf spot developed early and to such an extent that unsprayed and poorly sprayed trees lost so much of their foliage before harvest that the cherries were worthless and in many cases were not picked. The experiment was planned to allow for four applications as follows: First, just as the shucks were dropping; second, about two weeks later; third, ten days to two weeks following the second, and fourth, just after the fruit was

picked. The outstanding result of this work was that lime-sulphur and Bordeaux mixture gave equally satisfactory results in the control of leaf spot. There are, however, other factors to be considered which will now be discussed.

## Foliage Injury.

The question of foliage injury resulting from the use of spraying materials was studied in all the experiments of 1923. Of the standard materials used Bordeaux caused the most serious defoliation. This injury first appears in the form of small brownish spots on the leaves, which soon turn yellow with scattered green and brown areas on the surface, giving it the general appearance of leaf spot. Soon after the leaves turn yellow, abscission takes place. This injury developed at various periods during the summer when atmospheric conditions were favorable. In the Grand Traverser region it was much in evidence late in August. In the college orchards at East Lansing, Bordeaux injury developed seriously in September on English Morello and Montmorency trees which had not been sprayed since June. This would indicate that the danger from injury is not confined to a short period after application.

In all the cherry spraying work of 1923, lime-sulphur solution was diluted at the rate of one and one-half gallons in fifty, and although no serious injury developed, there was at Traverse City a limited amount of injury at the tips of the leaves, apparently where the material had accumulated in larger

quantities than on the rest of the leaf. This injury produced a white area, from which the green chlorophyll had been removed without serious injury to the leaf tissues. This form of injury seldom resulted in leaf fall. In the 1922 experiments, lime-sulphur was used at the weaker strength of one and one-quarter gallons in fifty, which gave satisfactory results in the control of leaf spot without injury to the foliage. These results indicate that, because of the danger of injury at the one and one-half to fifty strength, lime-sulphur should be used on cherries at the rate of one and one-quarter to fifty.

## A Mixed Spray Schedule.

A very interesting but unexpected form of foliage injury developed in the experimental plots and in many orchards throughout the state. This was prevalent on trees which were sprayed with lime-sulphur at one application and Bordeaux at another, or when sprayed with Bordeaux first and followed with lime-sulphur at later sprays. The time of season apparently had no influence on the injury as cases were reported when changes were made following the second, third and fourth applications. The early stages of the injury gave the leaves much the same appearance as that caused by leaf spot that growers would invariably call it leaf spot. The trees were in many instances badly defoliated.

There are indications that the direct foliage injury is not the only undesirable result, as at East Lansing such

trees were affected late in the season by leaf spot. This would indicate that the fungicidal properties of the spraying materials were destroyed or that the material was changed over to a soluble form and washed off by rain. The method of preventing this injury is very simple, if you start spraying with one material, continue its use throughout the season.

## Effect of Defoliation.

The results of poor spraying, or none at all, is usually very keenly felt at the time, particularly if the crop cannot be harvested, as in 1922, but greater losses may be in store in future seasons as a result of the defoliation. Records obtained during 1923 show this very plainly. In 1922 at Traverse City the check or unsprayed trees were almost completely defoliated before harvest, while the trees in the sprayed plots lost practically no leaves at any time during the season.

During the season of 1923 complete records were obtained for trees which



Kept Healthy by Spraying.

were defoliated in 1922 and on others which lost no leaves in 1922, to determine what effect the defoliation would have on blossoming, fruit set, total production of fruit and growth of (Continued on page 347).

# The Progress of the Federal Land Bank

*A Glimpse from the Inside, of Its Operations and Wonderful Growth, as Told by E. J. Van Leuven, Director from this District*

THE Federal Farm Loan act was approved by congress in 1916, "To provide capital for agricultural development, to create a standard form of investment based upon farm mortgages, to equalize rate of interest upon farm loans, to furnish a market for United States bonds, to create government depositories and financial agents for the United States, and for other purposes."

Twelve Federal Land Banks were established. Let us see to what extent the act has functioned in the short space of seven years, or a trifle over, five years of actual operation.

The original stock was all subscribed by the United States government aggregating \$8,892,130. Already \$6,457,745 have been paid back to the United States government, leaving only \$2,434,385 now owned by the United States government, and it has created a standard form of investment based upon farm mortgages of \$765,724,205 which represents the amount of farm loan bonds issued. In other words, by reason of the passing of this law it has sold to the investing public nearly eight million dollars in long-time bonds at a low rate of interest, which amount it has loaned to the farmers of this land at a lower rate of interest than ever before—and for a longer period—it has fully performed the intent of the law.

The Federal Land Bank of St. Paul, Minnesota, which serves the seventh district, composed of North Dakota, Minnesota, Wisconsin and Michigan, has paid back to the United States government all of the capital it sub-

scribed and now has a capital of a little over \$5,000,000, all owned by the National Farm Loan Associations of this district, and they in turn are owned and controlled by the farmer borrower.

The Federal Land Bank of St. Paul,

control of the Federal Land Bank. No one, seven years ago, ever dreamed or had any conception of the wonderful growth of the Federal Land Bank. It has been the means of getting money to the farmer at much lower rates of interest by all other loaning agencies.

## He Knows The Farmer

ELTON J. VAN LEUVEN, the author of this article, is a Michigan farm product. He was recently elected to represent Wisconsin and Michigan as a director of the Federal Land Bank, of St. Paul. This position was tendered him by a very large majority vote of the stockholders of those states.

Mr. Van Leuven knows the farmer and his problems as few men know them; he owns a farm or two himself; he is Secretary of the Isabella County Farm Loan Association and is very optimistic for the Farm Loan System.

The long and close connection which he has enjoyed with a bank that has ever been loyal to the farmers' best interests, has given him a grasp of financial affairs that, coupled with his farmer-mindedness, makes him an especially valuable man on the Land Bank Board.

since its organization in 1917, has paid a dividend of six per cent to its stockholders until the close of business July 1, 1922, it paid eight per cent, and for the close of business July 1, 1923, it paid a dividend of ten per cent, which amounted to \$460,000. Do you know, or have you ever heard, of any other loaning agency ever paying a dividend to the borrowers?

Every borrower is a stockholder in this great Land Bank to the extent of five per cent of his loan, so that the borrower is the owner and in absolute

I wonder what rate of interest farmers would be paying were it not for this Federal Farm Loan system.

Some of us have been highly censured for promoting this system, but we have stuck to it, for we felt it was one of the ways out for the salvation and continuance of a prosperous American agriculture.

The Federal Farm Loan act provides that the temporary management shall be vested in a president, vice-president, secretary and treasurer and members of the farm loan board, until

such time as the majority of the capital stock shall be held by the national farm loan associations—which time arrived early in the year of 1923. At that time, the seventh district was divided into three districts, namely: North Dakota was designated District No. 1; Minnesota, District No. 2, and Wisconsin and Michigan as District No. 3—and the associations of these various districts were asked to elect a director, which resulted in the election of Mr. Torgeson, of North Dakota, Mr. Erickson, of Minnesota, and your humble servant as director representing Wisconsin and Michigan. The associations of the entire district elected Mr. Ben F. Faast, Eau Claire, Wisconsin, who is known as the director at large. These four directors are known as association directors and all meet with the president, secretary and treasurer at the Land Bank in St. Paul on the second Monday in each month.

So you can see that the national farm loan associations are fully represented. How well they may look after the interests of the association will be determined by their acts. So far they have associated in paying the association a dividend of ten per cent—and the associations in Michigan who require the time, will have three weeks in which to close loans instead of two weeks as heretofore.

The thousands who are members of local farm loan associations are, therefore, stockholders in the biggest bank in America, which is rendering a much needed and very valuable service to the farmer.



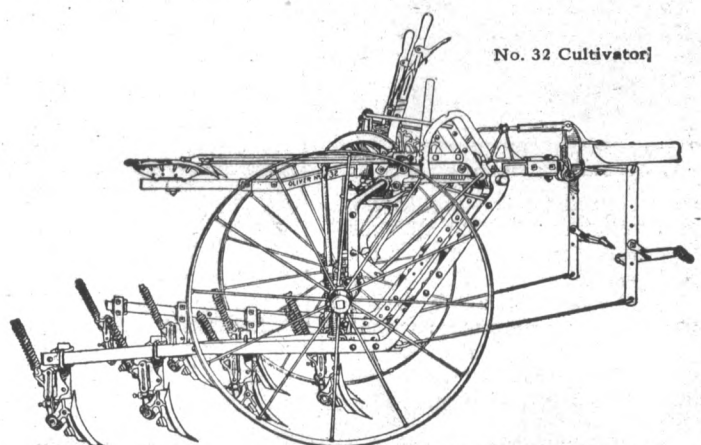


## When Spring is Here

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HARRY J. MARX  
Ohio

"Have done cultivating with the Centaur and it had ample power to pull the load and to spare. It is heavily built and a far better, stronger outfit than we had expected to see. Plow and cultivator are fine."  
C. M. LONG, Mich.

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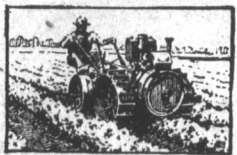
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# SMALL FARM TRACTOR

## He Grew Spuds Profitably

A Wayne County Farmer Works Out a Plan that Brings Results

By a Staff Member

IT is the fairies who do the unusual and impossible things. We shall, therefore, be regular by asking what would you do if a fairy would increase by eight hundred dollars the returns from five acres of potatoes?

And, fairy like, would add this amount to the average income from this potato acreage without requiring that you add extra expense, even making it a little more convenient in caring for and handling the crop?

That is, however, the additional cold cash which G. Schmidt, of Wayne county, received from five acres of potatoes during the season of 1923, this coming to him without the accompanying excitement of the fairies, but rather as the result of fitting his farming to market conditions as he found them.

Through the kind offices of County Agent Carr, of that county, it was the pleasure of the writer to hear from the lips of this farmer, in his own home, how this most sensible plan had worked out.

Until five years ago, Mr. Schmidt, who is yet a man with plenty of youthful vigor, and a head that cooperates with his hands, had been a market gardener operating near the city of Detroit. The expansion of Michigan's metropolis tempted him to sell his property to real estate men and buy a 120-acre farm near Plymouth. Since coming to this new location he, for four years, has followed the practice which has brought him many additional dollars from his potato field.

Potato growers generally will be interested in the secret of Mr. Schmidt's success, in knowing just how this man conducts his potato business. In a broad sense, one might say, that the secret lies in using his head. This is, however, an unsatisfactory answer, so we shall go into details.

First, let us glance at the potato markets. A study of supplies and values shows that during the month of September prices usually rule high. Then, old potatoes are gone, the bulk of the New Jersey crop, not required for near-by consumption, is sold, and the late crop is yet a few weeks off. 'Tis then that supplies run low and prices make a jump.

This tendency of the potato market, Mr. Schmidt had observed during his years of trading on the Detroit city markets. When, therefore, he moved to his present location, he decided to try, if possible, to grow potatoes economically to meet this September demand.

For four years he has succeeded. Here is how he does it: His sandy loam soil is well manured and fertilized to receive the early potato crop. This past year the manure was applied at the rate of ten or twelve tons per acre, and, of fertilizer, he added 300 pounds of a 3-8-10 commercial product.

The soil was plowed about eight inches deep as early in the spring as he could get to it. Last season it was done around May first. Then the ground was thoroughly worked down with disc, roller and harrow.

The 1923 crop was planted on the fifteenth of May. He did not choose Irish Cobbler or other early varieties which are commonly planted for early crops, but selected Rural Russets. His experience has taught him that this variety is well adapted to his purpose. He intends, however, to try out a plot of Irish Cobbler this year and compare the results with the Rural Russets.

The seed was cut by hand and planted with a horse-planter in rows thirty-six inches wide and the potatoes placed eighteen in the row. This required from eighteen to twenty bushels of seed per acre. The seed stock used was field run.

Cultivation started early and was continued until the end of June. The field was gone over four times—three times with the two-horse cultivator and the last with a one-horse rig. The vines were in full bloom about the time other fields of late potatoes showed the rows sufficiently to cultivate.

Mr. Schmidt practices spraying. He uses a power sprayer which delivers the spray at a pressure of about 150 pounds. A combination of arsenic and Bordeaux was applied four times during the growing season.

These Rural Russets planted and cared for as indicated, were ready for harvest by the first of September. During the four years' experience, Mr. Schmidt has started harvesting on the day following Labor Day. This year the first two loads dug were not fully mature, but, thereafter they came out of the ground in good condition.

"We continued to dig and market the crop as fast as we could handle them, finishing the last of September just as the market started on its downward course," said this shrewd grower.

"The range of prices received for these potatoes," said Mr. Schmidt, "was from \$1.90 per bushel for the first load, down to \$1.50 per bushel for the last. I estimate that the average price paid me for the whole crop from that field was \$1.70 per bushel."

"But," I asked, "Did not the lower yield cut your income down to where it would have been had you planted the field to late potatoes?"

"No, it was quite the contrary," came back his reply. "These early potatoes yielded more per acre than did a nine-acre field of late planted tubers. The early crop averaged 190 bushels per acre, while the late ones gave me only 180 bushels per acre. In all respects that late crop was treated the same, and had as good a chance, as the early one. The price received on the same market, however, was just \$1.00 per bushel instead of \$1.70."

From the figures given, a little mental calculation will give one the added revenue coming to this wide-awake man by reason of his planting potatoes the middle of May instead of a month later.

While his markets are more favorably located than those of the majority of farmers, the fact remains that throughout southern Michigan, at least, a ready market exists for potatoes during the month when Mr. Schmidt is busy selling his early crop.

#### RADIO HAS IMPROVED FARM LIVING.

A CONFERENCE of state extension directors was held at the department of agriculture, recently, with Dr. C. D. Smith, director of state extension work, in charge. The directors from the various states gave hopeful views of the agricultural situation. Those from the range states said that the radio was proving to be a useful aid to the stock raisers on the large ranches remote from towns and with meager mail facilities. They receive market reports sent out from the leading markets. It was also reported that the radio was having a beneficial effect in keeping the farmer boys and girls at home evenings, and enabling them to have wholesome, high-class entertainment and receive helpful information. Large numbers of farmers and ranchers have installed radio sets.

Says Sam: Nowadays you see these young sports driving with one hand. They used to ride around in the buggy with one foot hanging out.

Soy-bean acreage in the corn belt has increased two thousand per cent in the last five years.



# Lime, Legumes and Livestock

*The Three L's Which are Real Soil Builders*

By E. A. Kirkpatrick

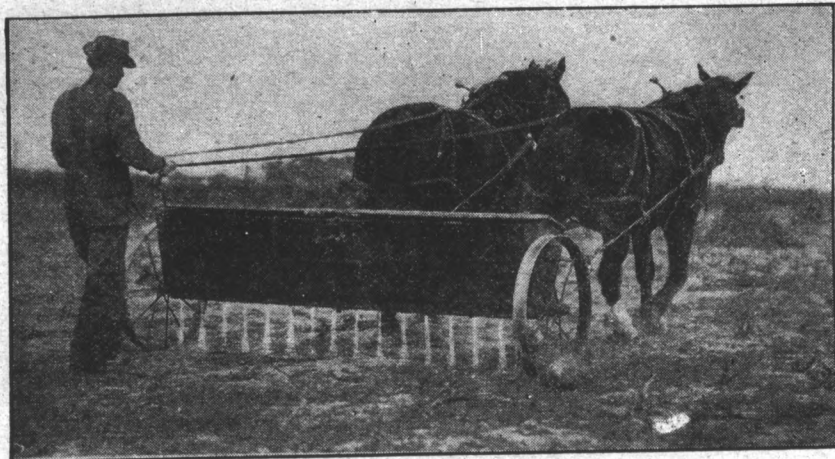
"Lime, legumes and live stock,  
Build up run down soil  
Give the worthy farmer  
Profit for his toil."

THERE is more truth than poetry in the foregoing lines, and realizing that such is the case, Michigan and Wisconsin farmers are bearing down hard on these three things—lime, legumes and live stock.

A campaign is on to get farmers to use more lime, so that the land will grow more legumes, so that more stock can be fed, so that more manure will be produced, and so on through the cycle again.

Progress is being made in this campaign, too. For instance, in Rock county, Wisconsin, four limestone crushers are busy the year round

One of the most interesting developments in connection with the cherry spraying work is the effect of certain materials on the size of the fruit. This was first noticed in 1921 when it was found that the fruit on trees sprayed with Bordeaux was noticeably smaller than that on unsprayed trees or on trees sprayed with lime-sulphur. In 1922 records showed a reduction in size of about ten per cent from the use of Bordeaux. In 1923 further records show that lime-sulphur caused very little reduction in size, while Bordeaux reduced the size of the fruit about thirty per cent. You may ask why there was so much difference in the results of 1922 and 1923. A partial answer may be found in the fact that



You Never go Wrong in Spreading a Good Thing.

grinding out lime right at the farms, and 20,000 tons have been applied in the last three years. The acreage of soy-beans and alfalfa has trebled as the result.

Why don't neighborhoods put on lime campaigns? I have asked quite a few farmers, and their answer generally is, "I don't have time." My answer to that argument is, "Do the work in winter when work is comparatively slack."

There are other advantages to winter liming. If your farm is up-hill from the railroad station, winter hauling, by sled, is desirable. With good sleighing, you can haul a bigger load on a sled than you can on a wagon during the spring, summer or fall.

If the weather is favorable and the snow is not too deep, limestone may be applied at any time during the winter. If not needed immediately after hauling, lime should be kept in a dry place. Hydrated lime must be kept dry or it continues slaking and the bags burst open, making it difficult to handle, and causing some waste. Further, it takes up weight so there is more to handle when it comes to hauling and spreading. This increase in weight and bulk may well be considered in spreading, so as to be sure that enough is used to grow the desired crop.

How much to apply? It is hard to say exactly; the amount varies on different soils. As a general rule, though, say a ton or two to the acre.

## SPRAYING CHERRIES.

(Continued from page 345).  
leaves and wood during 1923.

Trees which held their foliage, compared with defoliated trees show more fruit buds per spur and more blossoms in each fruit bud. A higher percentage of the blossoms on normal trees developed into ripe fruit, and each cherry was larger than on defoliated trees. If you will consider the effect of all these things you will readily see that the trees which were well sprayed in 1922 would produce much more fruit than defoliated trees. In this case normal trees bore four and one-half cases per tree while defoliated trees produced only two and one-half cases.

the rain fall during the fruit growing period of 1923 was much less than during the same period in 1922. Much work will have to be done with the problem concerning the effect of sprays on the size of cherries before definite recommendations can be made. It may, however, be safe to say that losses of this nature may be largely avoided by the substitution of lime-sulphur for Bordeaux.

## Conclusions.

The loss from defoliation is not confined to the year in which it occurs, but will seriously lower the production and vigor of the trees in the following years.

Lime-sulphur solution one and one-quarter to fifty, will, if applied in a thorough and timely way, control the leaf spot.

Bordeaux, even with an excess of lime, will cause serious foliage injury when the climatic conditions are favorable for the development of such injury.

It is unsafe to use Bordeaux or lime-sulphur for part of the applications and the other material for applications. This seems to be true for all times of the season and regardless of which way the change is made.

Bordeaux, made with an excess of lime, causes a serious dwarfing of the fruit; this result is more in evidence in dry than in rainy seasons.

## Recommendations.

In view of the facts above stated, the following tentative recommendations are made for 1924:

## Applications.

First.—As soon as petals have dropped and not later than when "shucks" have dropped.

Second.—Ten days to two weeks after first.

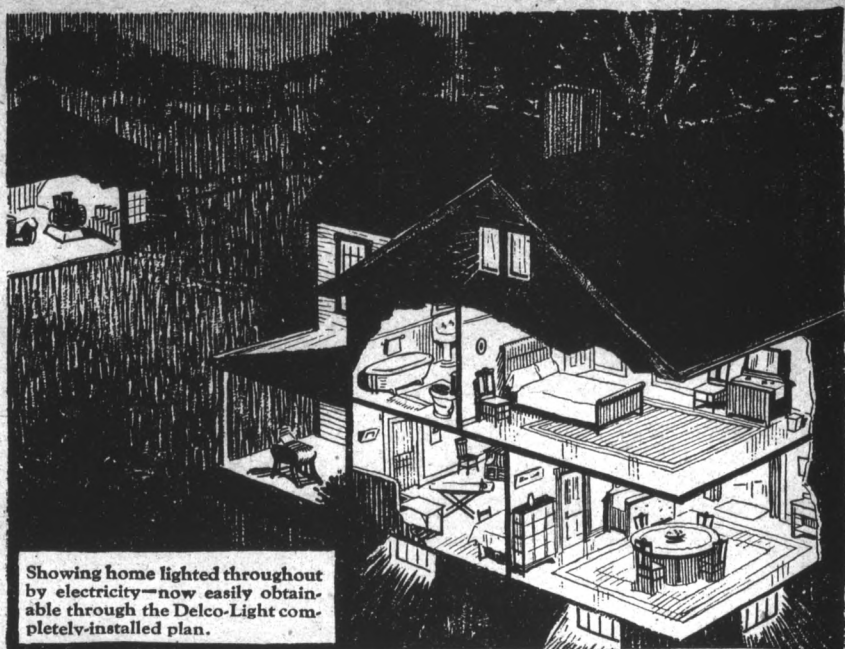
Third.—Ten days to two weeks after second.

Fourth.—Just after fruit is picked.

## Materials.

Lime-sulphur solution, diluted at the rate of one and one-quarter gallons in fifty gallons, plus lead arsenate powder at the rate of one pound to fifty gallons.

The use of lead arsenate is a necessary precaution against insect injury, and will also increase the fungicidal value of the lime-sulphur.



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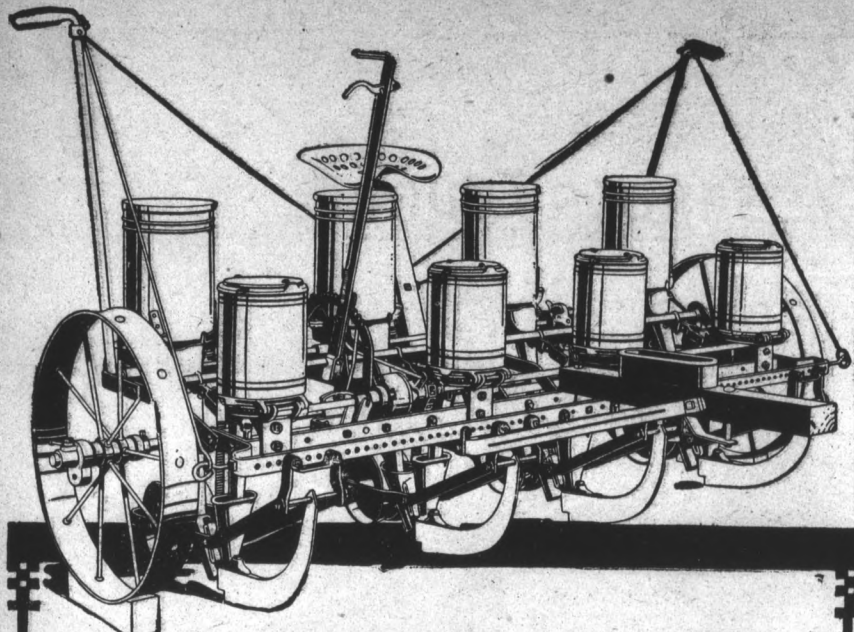
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### EMERGENCY SHEEP PASTURE.

Will you kindly give me a little advice on sheep pasture. The land is good, and is well fertilized. Will be plowed in the spring. What will be good for sheep the summer through? I thought some of sowing rape, mustard and grass.—B. H.

You have the right idea, that is, sow a mixture of several different kinds of plants—the more the better. Get as thick a growth as you can.

There is perhaps nothing better than Dwarf Essex rape for one of the plants. It will grow continuously through the season. Oats and Canada peas make good early pasture. We do not know so much about Sudan grass but it is worth trying. There is no good reason for sowing mustard, and it might become a nuisance. Red clover and timothy might come on and make good late fall pasture and should be included in the mixture.

Sow as early as possible and use plenty of seed.

### DISPOSAL OF WIFE'S PROPERTY.

At death of wife, can husband hold any of her real estate or personal property by dower right? Who is liable for sickness and death expenses—heirs, husband, or both? If husband said he owned half of real estate and settled with part of heirs, and they find out he never had a lawful claim, can they tender him his money and let the law take its course? If the husband claims he made improvements on the property, is he entitled to same? Husband said there was a will, but now says there was no will.—C. H. S.

If the wife left children, the husband takes no share of her real property. The husband is liable for the wife's funeral expenses and medical treatment. If there was a contract to pay for the improvements, it must be proved by evidence other than the husband's testimony. He would not be permitted to testify to matters equally within the knowledge of the deceased.—Rood.

### SUNFLOWER SILAGE.

Would like to know the food value contained in sunflower silage. I do not seem to be able to find it anywhere. Am putting a cow on test and would like to know as soon as possible so as to be able to balance her ration. Also would like to know the food value of the chaff and seed that comes from timothy and clover hay.—C. H.

At the Agricultural College in Montana, an exhaustive digestion experiment was conducted with sunflower silage. The percentage of digestible nutrients, as determined in these trials are given as follows: Total dry substance, 21.4; crude protein, 1.24; crude fiber and nitrogen-free extract, 10.13; ether extract, .37.

It would be quite unsatisfactory to attempt to give the food value of the chaff and seed you speak of. Probably the chaff would differ little from the hay, though if there is much clover leaves these might be considered more valuable on account of their containing many vitamins. However, in a short test, these would have but little effect, but in a yearly test they might count on the health of the cow.

You will probably get no benefit from any clover or timothy seed that may happen to be present, owing to the fact that they will not be properly masticated, and therefore not digested and assimilated. But if there are many seeds it would indicate that the hay was not cut at the proper time and therefore not of full value.

### LIME FOR MUCK.

Please let me know how much lime it would require for an acre of muck land for truck gardening, and I want to get in communication with a good house where they handle all kinds of fertilizers, etc.—E. N.

It is a popular opinion that all muck

soils require lime for satisfactory crop production. As a matter of fact, relatively few mucks are in need of lime. Lime, applied to muck soil, which already has plenty of lime combined in it, is entirely wasted, and, in some instances, has been found to actually decrease the crop yield. A muck may be quite acid and still contain from two to four per cent of lime. It is only when the soil is strongly acid that lime is certain to be needed. Then an application of from two to eight tons per acre of ground limestone may be needed, depending on the degree of acidity and the crop to be grown. If a good quality marl can be obtained in the vicinity, it may be used instead of the ground limestone, with equally good results and usually at a somewhat lower cost. I would suggest that you send in a pint sample of your soil and have the degree of acidity determined.

In answer to your second question, I would advise you to write to the State Department of Agriculture at Lansing and secure a copy of their latest "Michigan Fertilizer Bulletin." In it you will find a list of the companies having fertilizers for sale in this state, as well as the number of samples of each which were analyzed in the department, and the number which were found below guarantee.—P. H. Harmer.

### DOG TAXES.

I was assessed for my dog in April, 1923. County officers say this is due \$3.00 in advance on male dog. In October I received a notice to appear at our county seat and settle for dog tax and cost. They did not serve a warrant, but wanted me to appear on the nineteenth of October. Did not go. Then they said if I would send \$3.00 tax and \$2.50 for cost, they would dismiss the case. I sent \$3.00 for tax. Can they charge that much cost on that amount of tax? Is the tax uniform throughout the state, \$3.00 on a male dog and \$5.00 on a female? Understand in the cities they pay only \$1.00.—G. M.

The tax is uniform throughout the state: \$3.00 for male dogs, \$6.00 for female, and \$2.00 for unsexed dogs. The costs are taxable in addition to the tax if proceedings are taken to collect. The justice's costs alone would be \$2.00, without the fees of the officer serving the process.—Rood.

### WHITE DIARRHEA CARRIER.

Yesterday I killed a hen for eating which I thought was not a layer. When I came to dress her I found four full-sized eggs—all soft shelled—in the egg-sac, which looked like cooked yolks. When opened the whole contents was like egg yolk in color, but watery. The egg next the vent was ill-shapen, as though the one from above had crowded into it and grown fast, the inside of the sac was inflamed, all the other organs looked normal and healthy, the hen was fat, and the meat and skin were clear, though I was told that it would be all right to use, I could not bring myself to cook it. Would it have been all right? What caused the trouble? All the small undeveloped eggs were little hard lumps.—F. H. M.

The hen was a carrier of white diarrhea, which caused the abnormal condition and the diseased ovaries. There is a natural prejudice against using poultry meat for food unless the bird is in the best of physical condition. However, if the bird only shows she is a carrier of the white diarrhea by undeveloped eggs showing like hard lumps and the remainder of the carcass seems in first-class condition it is probably fit for food.

Says Sam: Destructive criticism has its place. For instance, I have a right to say an egg is rotten, even if I can't lay a fresh one myself.

It pays to take time to think.



## ART FIBER WORK FINDS FRIENDS.

INTEREST in art fiber work at Daggett and Carney, Menominee county, is strong and is being promoted by clubs of young women there under the direction of Mr. A. G. Matthews, instructor in manual training at the Menominee County Agricultural School. This phase of club work includes basketry, tray-making, sewing-stands and ferneries. At Daggett a social has been projected to raise money to pay for material used in the club projects. An exhibition is also being planned. The Menominee County Agricultural School intends to promote the establishment of new clubs in art fiber work during the present year.

## ONE SOLUTION TO THE MARKETING PROBLEM.

THIS is a summer resort locality and the main roads are heavily traveled in season by the resort tourist, each individual being regarded in the light of a potential customer. The demand was not for the melon with a heavy rind to withstand shipping, but the most luscious, sweetest and finest looking melon. As long as his stock of melons lasted, the road in front of his house resembled a county fair. Last year's melon crop brought him nearly \$300 at his door. And the demand was greater than the supply.—G. Everitt.

## LIKES WINTER SPELT.

THERE are two varieties of spelt—spring and winter. The spring is a bearded kind, and, after four years' trial, I have given it up as unsuited to this locality (Cass county). My soil is a clay loam.

The winter spelt, I have raised continuously for more than thirty years and expect to continue it. It has yielded from twenty-seven to sixty bushels per acre, and in feeding value, is one and a half times the value of oats. Its protein content is from twelve to fifteen per cent. It is a splendid feed for horses, cattle, hogs and chickens, but should always be ground. In the dairy feed it takes the place of a bran.

In threshing, the concave should be removed and a board substituted in the machine. Cleaned grain, free from shelled grain, weighs thirty-two pounds per measured bushel. Do not sow the shelled grain. The young plantlet needs the hull for early nourishment.—G. H. Redfield.

## WHERE QUALITY COUNTS.

SOME Michigan farmers have profited from the example of the mythical builder of the proverbial world's best mouse trap. They have found that, in producing a commodity of superior quality to that of any of their neighbors, the public immediately parks their autos at the producer's door.

One farmer makes grain raising a specialty. There is not a detail involved in the preparation of the soil, selection and application of the fertilizer, selection, preparation and sowing of the seed, eradication of noxious weeds during the growing season, the timely harvesting and threshing of the grain, but what is to him of vital importance.

The sequence of this rigidly pursued program is that this man not only has the highest grain yield of the plumpiest, weightiest berry, but a local demand for his grain to be used by his neighbors for seed at a price often above that offered by the local elevator.

Another farmer gives the same careful attention to the breeding and management of high-grade cattle. He has always a local market for the young calves at a price considerably above that what he could receive on the market for common veals.—G. Everitt.

## A NEW 4-PASSENGER COUPE

This car is Dodge Brothers response to a definite demand—

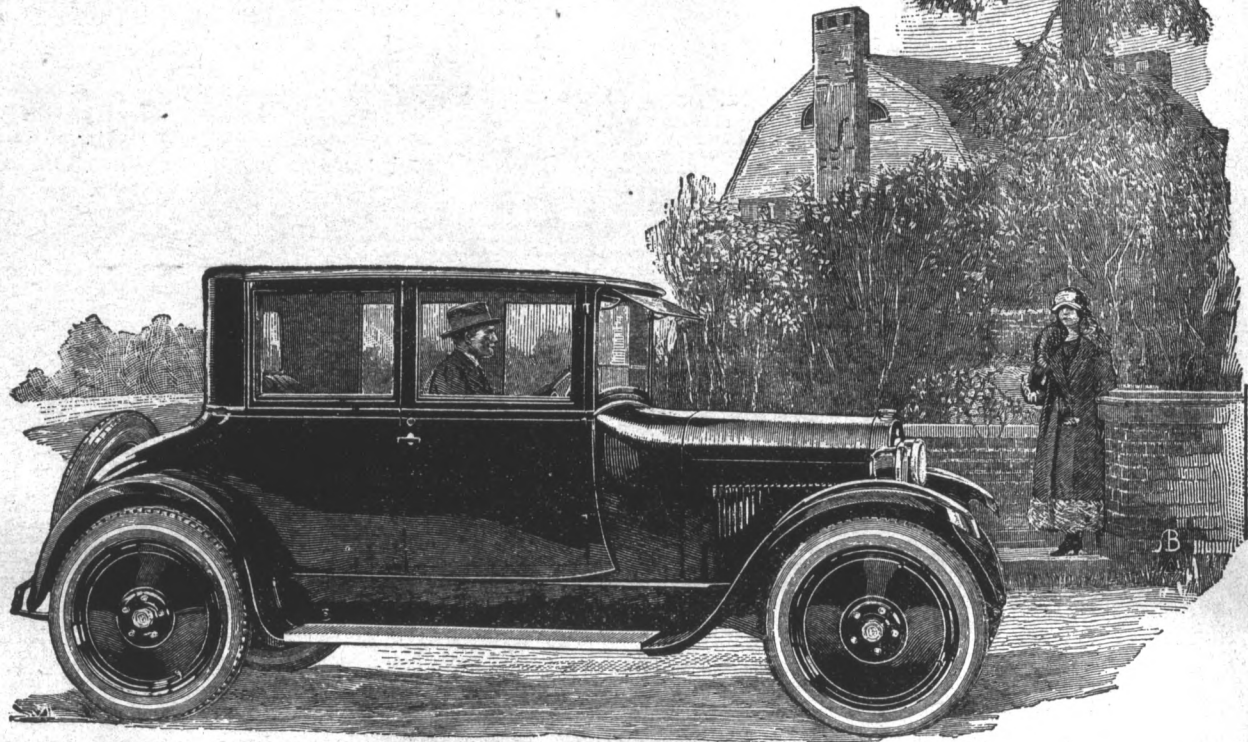
A high grade coupe of moderate weight and size that will seat four adult passengers in genuine comfort.

The body is an admirable example of fine coach building. Low, graceful, smartly upholstered and attractively finished in Dodge Brothers blue, it reflects dignity and distinction in every line.

Above all, the 4-passenger coupe is characteristically a Dodge Brothers product. It possesses all the attributes of construction and low-cost service for which more than a million Dodge Brothers Motor Cars are favorably known throughout the world.

The price is \$1375 f. o. b. Detroit

DODGE BROTHERS



## Strawberries 25% Off

Prices slashed on Raspberry, Blackberry, and Grape plants. Stock guaranteed. 30th year. Catalog free. J. N. ROKELY & SON, Route 6, Bridgman, Mich.



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DEVOTE three or four months (your slack ones) to contract ditching with this Buckeye Ditcher—and add from \$2,000 to \$4,000 to your annual income!

Here is a fair and square, high-class business proposition. If you want all the facts

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Find out what other men like yourself have done in this profitable business. Write for booklet today. No obligation.

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Write for particulars of our spare time proposition. It will pay you big returns. You need no experience, we ask no investment. Outfit free. A tried and true proposition, one that has stood the test of years. Write today. P. O. Box 206, Rochester, N. Y.

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## FARM BARGAINS NEAR WASHINGTON

Let me send you this interesting free booklet, telling why Southern Md. farmland offers the greatest opportunities to the ambitious farmer. K. A. McRae, Exec. Sec. Southern Maryland Immigration Commission College Park, Md.

**Ditch!**  
The Martin  
Ditcher-Terracer-Grader  
All steel, adjustable, reversible. Cuts V-shaped ditch to 4 ft. Open, tilling or irrigation. Cleans old ditches; builds field terraces. Does work of 100 men. Operates horses or tractor. **10 DAYS FREE TRIAL.** Satisfaction or no sale. Send for free book and special low price. Owensboro Ditcher & Grader Co., Inc. — Box 1015 Owensboro, Ky.

**Why Not PUT THIS NEW MILL ON YOUR OLD TOWER**  
ALBION  
Albion steel and wood mills are quiet and powerful. One-third the working parts of any other mill. Only main Pinion bearing subject to wear. This is oilless, and easily replaceable. Govers by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your chore hours now with a good **Wadell**? This is your chance—**F. O. B. Albion.** Erect it yourself. Ask your dealer, or write direct to  
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# Big Price Cut This Season

## Strawberry Plants

Down go our prices on highest grade Strawberry Plants, Grapes and other small fruits and shrubbery. All our stock, new grown on virgin soil is offered at big price cuts. Stahelin's Strawberry Plants have been known for three generations as the biggest and most profitable of all producers. Robust, vigorous, well rooted. Adaptable to any soil. Will earn up to \$1200.00 an acre. An unusual opportunity to secure this finest stock at very lowest prices. Every plant is carefully inspected and guaranteed to give satisfaction or money refunded. Stahelin's strains are dependable. Make sure of your profits. Cultivate and grow varieties that you know will bring you the largest profits. Our price slash is so great that we have marked down some of our varieties AS LOW AS \$2.50 per M.

**Cooper-Champion-Premier-Eaton** Among our famous strains are the COOPER, famous for its size; the CHAMPION, the wonderful everbearer; the PREMIER, the early variety; the EATON, preferred for its size and flavor; the Marvel, the Delicious and many other excellent varieties, offered at very low prices.



### Grape Plants

Grape Plants are one of our specialties. We have sold millions throughout the country. Vigorous, supplied to you with the full root system intact. Big producers and great money makers. Price especially low.

**Per M and up \$30.00**

**\$2.50 PER M AND UP**

Stahelin's Berries are firm in texture, large sized, supremely delicious. Bring markets best prices. Splendid varieties now offered at special reductions. Get our proposition before you buy.

### FREE Beautiful Rose Bushes

As a special "get acquainted" offer, we are giving away, absolutely free, beautiful Rose Bushes of superb beauty and marvelous aroma. You do not pay a single penny for these Rose Bushes. We give them to you absolutely free, so that you may have in your lawn a beautiful reminder at all times of the quality and excellence of Stahelin's stock. Get full details with our Free Catalog.



**Send for FREE Catalog**

Get our big catalog which illustrates in full color Raspberries, Blackberries, Asparagus, Currants, Gooseberries, etc., also full details of the Beautiful Rose Bushes which we give away free.

**Shrubbery** Folks come to us from all parts of the country for our shrubs and other ornamentals. Our varieties of Roses, Gladioli, Peonies and Vines are noted for their exquisite beauty and remarkably fast growing qualities. Every person interested in beautifying their home surroundings should get Stahelin's varieties for the utmost in color and brilliance. Our prices on these ornamentals are also extremely low. Lower, we believe, than anywhere else in America. All our varieties are illustrated from life in actual colors in our complete catalog. Sent free on request.

F. C. STAHELIN & SON, Proprietors

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The Michigan Farmer

## Grapes

are in greater demand than ever before and are selling at prices that yield attractive profits to growers.

Practical viticulturists have learned that liberal quantities of nitrogen must be supplied to produce the most abundant crops. Experiments have shown that

## Nitrate of Soda

200 Pounds Per Acre  
Early in Spring

supplies the necessary nitrogen in immediately available form at just the right time. All small fruit crops are found to profit greatly from the use of Nitrate of Soda nitrogen. And it is now recognized that it is almost useless to attempt to grow orchard fruits profitably without Nitrate of Soda.

My free Bulletin Service issued periodically is full of the latest and most authentic information on the proper use of nitrogen in its best form for all crops. If you wish to receive these bulletins, send me your name and address and to identify this advertisement add the number 1542.

Dr. Wm. S. Myers, Director, CHILEAN NITRATE COMMITTEE  
25 Madison Avenue, New York



## Believe in Farm Gardens

OUT of the scores of letters coming in reply to our announcement on "why a farm garden," there was only one who declared that they had given up the garden and would not go back to it again. Every other writer stood firm for this adjunct to the farm. Economy, health and general inspiration seemed to be the leading reasons given in the many well-written letters, of which the following were chosen to receive prizes. Others will likely be published in the regular columns at some later date:

### GOOD EVIDENCE HERE.

THIS often said that we never appreciate a blessing until deprived of it, and we surely proved the truth of this saying when the grasshoppers destroyed our garden just as the early vegetables were about ready for use. They came like a cloud, and as the

The labor, our own, and the cost of the seed rarely exceeds \$15, and we often realize more than \$50 a season from our garden, besides having all the fresh vegetables we can use for our own table. Any surplus that we may not sell, is easily fed to stock, and its value as food is not wasted.

The food value of fresh vegetables is not necessary to emphasize, especially that of tomatoes. In addition to the vegetables that we eat and sell, we can enough to last over the winter months until the fresh ones are again secured.

I certainly think it has paid me to have a home garden, and I would suggest that a lot of the farmers that are complaining of "hard times" try the plan out for a while. They are just lazy.—W. R. Jack.

### REDUCES THE GARDEN LABOR.

OUR garden consists of a plot of ground fourteen rods in length, and of sufficient width to permit six rows of vegetables sufficiently far apart to be cultivated with a two-horse cultivator, which is done, thoroughly, in thirty minutes' time, leaving the work with the hoe, in cleaning the rows, little less than a pastime. A plot of grass, at each end of the rows, gives a good place to turn horses and cultivator upon.

The soil is mostly a sandy loam and has been in continuous cultivation, as a garden, for many years. It is kept enriched by a liberal coating of stable manure applied in early winter and plowed under in the spring. The garden is reached by a few steps from the kitchen door, and the amount and variety of its products, which reach our table, is truly surprising.

At one side of the garden is a bed of asparagus and pieplant, and on the other side a row of berries, one-half of the row being red raspberries and the other half strawberries, which are cared for mostly by mulching, leaving little work to be done with the hoe. At one end of the row of raspberries is a Juneberry bush, which bears abundantly and affords appetizing dishes of berries for the supper meal and, as one has said, "We eat all we can and can what we can't." Surely the farmer who fails in having a good garden is making a sad mistake.—J. T. Daniells.

### GARDEN CONSERVES HEALTH.

A PHYSICIAN, passing our home as I was working in my garden, remarked, as he pointed to a flourishing onion bed, "We medical men are seldom called to homes where plenty of those grow."

Possibly there is much of truth in that statement. We have always had a good garden and very seldom had a doctor. Our children grew to manhood and womanhood without ever needing medical attention. No headaches at our house.

It is hard, of course, to find time to work gardens as they should be, especially where hired help is unobtainable. We rise early and call the day's work in the field done at half-past four P. M. Then the chores, milking, etc., are done in time for a six o'clock supper. After that, until too dark to see, the time is usually spent in the garden. Also a whole day's work there is required occasionally.

We have strawberries and other small fruits, and also of many varieties of vegetables, more than is required (Continued on page 354).

garden was some distance from the house, in less than a day it was totally demolished; and then—think of eating meal after meal without lettuce, radishes, green onions, young beets or carrots, green peas or string beans. Except when some kind-hearted neighbors, whose garden was spared, would share some green, to him a trifle; but how good they did taste to us!

Nor was this all. We all lacked our usual energy and seemed all tired out, regardless of other conditions. Then the following winter, when our little boy complained of pains and weakness in wrists and ankles—the doctor said, "lack of vegetables in the diet."

Oh, yes, though our garden may not be a very paying investment so far as dollars go, and perhaps not always quite as free from weeds as we would like, it surely is worth, in health and pleasure, all that it costs—land, seeds, and backache!—J. E. Shackangast.

### STARTS HIS GARDEN EARLY.

AS far as my own experience goes, it has been decidedly worth while. It has provided us with a ready source of fresh green vegetables, both for our own use and with a surplus that provided no small amount of pin-money for the good wife. We have one pit hot-bed, and several cold frames that enable us to get stronger, earlier plants before the rest of our neighbors have even planted their gardens. In this way we get top prices for our surplus from the town people who are ever eager for early vegetables.



## NEWS FROM CLOVERLAND

### GET \$9.28 PER TON FOR BEETS.

THE Menominee River Sugar Company—the only beet sugar plant in the Upper Peninsula—recently distributed \$175,000 to farmers of its territory. This was the final payment in settlement of its account with the farmers. The total payments to farmers thus figured out at \$9.28 per ton for beets furnished the factory. This February payment represents the bonus due as per contract on the basis of the market price for sugar. Beets came to the factory from Menominee, Marquette, Delta, Oconto, Brown and other counties in Michigan and Wisconsin. The total cut of beets by the factory amounted to about 60,000 tons, it is stated.

### URGING POTATO SEED GROWING.

ART LONSDORF, county agricultural agent of Dickinson county, is advising his farmers to take more interest in the growing of seed potatoes. While it is recognized that there may be over-production in this line, as elsewhere, it is well worth while to see what can be done before this stage has been reached. It is believed that certified stock will bring more even for table use than ordinary potatoes, if the worst should come. Last season seven Dickinson farmers grew certified potatoes. Two of these farmers received ninety-six cents per bushel, which is considerably better than ordinary stock sold at in this territory.

### ARTICHOKE OFFERS PROMISING POSSIBILITIES.

HOUGHTON county farmers will try out a new variety of artichoke this year, under the direction of Mr. L. M. Geismar, county agricultural agent, announces the Daily Mining Gazette, of Houghton. The variety to be tested out is the Mammoth French White Jerusalem artichoke introduced into America by J. C. Sibley, of Franklin, Pennsylvania. This variety is said to be excellent as food for man and beast. It has already been demonstrated that artichokes do very well in this region. Mr. Geismar planted a test bed of artichokes last season, which grew to a height of eight feet and had abundant leafage. The new venture has very attractive possibilities.

### WILL FURTHER TEST CANNING PEAS.

HOUGHTON county farmers will continue the test plantings of canning peas, begun last season under Mr. L. M. Geismar's direction. One canning firm will distribute to Houghton county farmers, it is stated, 600 bushels of seed peas among forty or fifty farmers. No charge will be made for these seed-peas but farmers receiving them will be asked to replace them with an equivalent amount from their own crop. Although conditions last season were adverse, the results were regarded as highly encouraging; and if this season's efforts continue the good showing a concerted effort is to be made to establish canning factories in the copper country, it is announced.

### SET FAIR DATES.

AT the recent meeting of the Cloverland Association of County Fairs, Mr. Pat O'Brien, of Iron River, was elected as its president, and Mr. E. G. Amos, of Marquette, its secretary. Mr. O'Brien is editor of the Iron River-Stambaugh Reporter, and Mr. Amos is assistant state leader of county agents in the Upper Peninsula. The

next meeting of the association will take place at Iron River in October. The county fair secretaries have fixed the dates of the county fairs for this territory as follows: Alber county, September 1-4; Chippewa, September 1-6; Houghton, September 23-27; Iron, September 1-4; Luce, September 9-13; Mackinac, September 15-17; Marquette, September 9-13; Delta, September 16-19; Schoolcraft, September 22-25; Gogebic, September 9-12.

In talks by delegates at the association meeting, Mr. L. F. Livingston, of Marquette, advised closer cooperation with farm implement dealers; A. G. Kettunen urged increased promotion of boys' and girls' club work; G. E. Bishop presented the topic, "When is a Fair Successful?" and Attorney J. J. Herbert discussed gambling devices on fair grounds. This last point will be controlled by the individual county fairs.

### WILL FIGHT HOG CHOLERA.

A CONCERTED effort is to be made to rid the peninsula of hog cholera, according to Dr. F. K. Hansen, assistant state veterinarian, located at Marquette. Hog cholera is said to be especially destructive to hogs maintained at lumber camps, where they are fed on the waste from the cook houses. Indeed, all the outbreaks of hog cholera reported to the veterinarian, the past year, were, with one exception, in lumber and mining camps. One lumberman is said to have lost \$7,000 worth of hogs from this cause.

The cause of hog cholera is found to be in scraps of pork thrown out uncooked in the garbage at the camps or in manure from stock cars brought into the district. Refuse pork is by far the commonest source of hog cholera, says Dr. Hansen. This arises from the slaughtering of hogs in the early stages of the disease and the subsequent use of this meat as food. The curing of the meat does not destroy the disease germ which is readily communicated to well hogs through the garbage fed to them at the camps.

Dr. Hansen states that there is a new serum which, when properly administered immunizes hogs permanently against cholera. This is work for a veterinarian. Pigs from thirty to forty pounds in weight and from six weeks in age can be thus permanently rendered immune from cholera. The cost is low. Raising hogs at lumber camp is profitable if disease can be eliminated. Dr. Hansen has pamphlets relating to the detection and treatment of hog cholera, for free distribution.

### COLLEGE FURNISHES FORESTRY STOCK.

THE forestry department of the Michigan Agricultural College will supply Gogebic county with transplants of white pine, Norway pine and black walnut for a reforestation plot of twelve acres located at Watersmeet. This tract of land was donated for this purpose by Mr. Ted Kelly, of Watersmeet, and adjoins the new state fish hatchery there. Arrangements for this effort at reforestation were made, it is stated, by Mr. C. E. Gunderson, agricultural agent of Gogebic county, during his recent attendance at the county agents' conference at East Lansing.

What counts is the working together of our whole mind. Any deficiencies can, through earnest enthusiasm, be compensated for by the cooperation of other facilities.

The sum total of our habits tell closely the type of beings we are.



## Why good rope costs you less

When you buy rope, you pay for the actual work you get out of it. Thus, a low-priced rope, soon worn out, is not the cheapest in the end.

On the contrary, buying two or more cheap lines where one good rope would do is mighty expensive in the long run. But how can you be sure of getting good rope?

Here's a way to tell. Untwist the strands of the rope you plan to buy. See that a thin, blue thread marker—the "Blue Heart"—runs between the strands. Then you may be sure you have a rope that in the end will cost you less.

### What the "Blue Heart" signifies

The "Blue Heart" marker means that the rope is genuine H. & A. "Blue Heart" Manila Rope spun by skilled rope makers from high grade, pure selected manila fibre.

It means also that in any size, on any job, the rope will wear longer and deliver without fail the strength you have a right to expect. For the selected fibres of H. & A. "Blue Heart" Manila Rope are drawn, spun, laid and properly lubricated so as to insure the smooth working of every fibre, yarn and strand.

Buy rope scientifically. Know what you are getting. Untwist the strands and look for the "Blue Heart"—our registered trade mark that assures you of dependable rope value.

### For sisal rope

For other jobs where a high-grade sisal rope is wanted, use the best—H. & A. "Red Heart" Sisal Rope—spun from selected sisal fibre by the same skilled rope makers.

Whatever may be your use for rope you will find an H. & A. brand of cordage to meet your requirements.

### GUARANTEE

H. & A. "Blue Heart" Manila Rope is guaranteed to equal in yardage and exceed in tensile strength the specifications of the U. S. Government Bureau of Standards. Any H. & A. "Blue Heart" Manila Rope found not to be as represented will be replaced.

### Special offer

The coupon below with 25c will entitle you to our special Halter Lead made from H. & A. "Blue Heart" Manila Rope. It is 1/2 inch in diameter, 7 feet long, and is fitted with a snap at one end. It is offered to introduce to you the great strength and wonderful wearing qualities of H. & A. "Blue Heart" Manila Rope.

If your dealer does not carry H. & A. "Blue Heart" and cannot supply you with this special Halter Lead, fill out the coupon below and mail it to us with 25c, coin or stamps, and your dealer's name. A Halter Lead will be sent you prepaid at once.

Gentlemen:	M.F.-3-8
Enclosed is 25c for which please send me one H. & A. "Blue Heart" Manila Halter Lead.	
My Name.....	
Address.....	
My Dealer's Name.....	
Address.....	

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"Spinners of fine cordage since 1869"

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### H. & A. "Star Brand" Binder Twine

evenly spun from the best fibres, is of full yardage, ample strength, and is used from coast to coast by farmers who claim it is never cut by insects.



## H&A "Blue Heart" Manila Rope

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# KELLOGG'S STRAWBERRIES



Many folks working ordinary hours, are making \$500 to \$1200 per acre from Kellogg's Thorobred Strawberries. Many others are making big profits in their spare time, only. Here are a few examples. Why not be one of the many who are doing it?

W. L. Forbes of Vermont grew Kellogg's Thorobred Strawberries for 15 years and seldom made less than \$1200.00 per acre. Henry Clute of New York realized \$888.17 from one acre. E. D. Andrews of Lansing, Mich., paid for a \$4000.00 home with two acres and G. M. Hawley of California, sold \$3000.00 worth of berries from two acres. Our FREE Book tells about many others, also about people who make \$50.00, \$100.00, \$150.00 and up from small Kellogg gardens.

These people are just like you, but they used KELLOGG THOROBRED STRAWBERRY PLANTS—the kind that produce as high as 5000 quarts per acre, while ordinary plants usually produce less than 2000 quarts to the acre.

## FREE BOOK "Great Crop of STRAWBERRIES & How to Grow Them" TELLS HOW

The folks above began by sending for our FREE BOOK—"Kellogg's Great Crops of Strawberries and How to Grow Them." This book written by the world's greatest strawberry expert, is beautifully illustrated in colors and brimful of the latest strawberry information. It tells how to plant, when to plant, what to plant, and how to care for the plants after they are set. It fully explains the "Kellogg Way" of growing strawberries so as to produce

### Big Crops and Big Profits

It describes Kellogg's twenty-one best varieties, including THREE FAMOUS EVER-BEARERS. It pictures and describes SEVEN SPECIAL STRAWBERRY GARDENS—one for every size plot and every pocket-book. Even if you don't care for profits, you should have your own strawberry garden, and berries fresh from the vines, because that is the way they are the most delicious.

### Mail Coupon Today

Write for FREE BOOK

Whether you want strawberries for home use or for market, in the spring or in the fall; and whether you are a beginner or a seasoned grower, you need this book. Send for a copy now. REMEMBER THE BOOK IS FREE. Planting time will soon be here. SEND NOW. Coupon or postal will do.

### R. M. Kellogg Company

Box 3614, Three Rivers, Mich.

Please send your big FREE strawberry book which describes the "Kellogg Way" of making \$500.00 to \$1200.00 per acre. (Write plainly please.)

Name.....

Town.....

St. or R. F. D..... State.....

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## Blueberries with a Pedigree

They Grow as Large as Grapes

By Stanley Johnson

THE small, unattractive wild blueberries have given way to large, exceedingly attractive blueberries of named varieties at Whitesbog, New Jersey. Whitesbog is located near New Lisbon, New Jersey, in the central part of the state. It includes six hundred acres of cranberry bogs, besides many acres of wild land covered with jack pine, scrub oak and wild blueberry plants. In fact, the country greatly resembles certain portions of the northern part of the Lower Peninsula of Michigan. However, the climate is not as severe as in northern Michigan, but more closely resembles the climate of southwestern Michigan near the lake. The land near Whitesbog is of very little value for general farming, but no doubt has a great future in the new blueberry industry.

### Pioneer Work.

A great deal of credit is due Miss Elizabeth White, a daughter of the owner of Whitesbog, for her work in improving the blueberry. She first became interested in the work about 1910, after studying some work already done by the United States Department of Agriculture. Miss White realized the possible future in the improvement of the wild blueberry, and especially its application to the vast tracts of land in New Jersey, which were hardly suited for anything else. She furnished all of the natives of the district, who were picking the wild blueberries for the New York market, with metal rings five-eighths of an inch in diameter, and agreed to pay a certain sum of money to any picker who would locate, and properly label, a bush that was producing berries as large as the ring. These plants were then dug in the spring and transferred to a prepared piece of land near the buildings. Selection then began and although most of the plants were discarded, a few proved to be really valuable.

### Process of Selection.

Dr. Coville, of the United States Department of Agriculture, had been working with blueberries some time prior to the work at Whitesbog. Naturally, a cooperative agreement was made between the two parties in order to more efficiently carry on the blueberry improvement work. To date more than sixteen acres have been planted, with 27,000 different hybrid seedlings. Eight or ten varieties of real merit have been selected and several more hold considerable promise of being valuable.

The soil on which the blueberry plants are growing is a grayish-white sand containing some peat. It is very acid, as blueberries will not thrive on a sweet soil. One portion of the field had at one time been used as a dumping ground for the plaster from a wrecked house. On this particular spot the plants had died out two years in succession, while nearby were vigorous plants three and four feet in height. Besides being acid the soil must have an abundant moisture supply, although very poor drainage is injurious.

### The Commercial Type.

The plants were largely of the high-bush type, although in the breeding plots there were many plants of the low-bush type and many hybrid between the two. The high-bush berries are considered of the greatest commercial importance at the present time. The recommended planting distance is eight feet by four feet. After the plants get very large every other one in the row can be removed, leaving the plants eight feet by eight feet. The plants at Whitesbog were about three feet in height in their fourth growing season. Probably they would have been larger had they not been so severely pruned each year of the new

wood which was used for cuttings.

A succession of varieties extends the season through July and the first few days of August, a period of about five weeks. Attempts are being made through breeding and selection to extend this season both early and late. It was a wonderful sight to see the great bunches of large berries hanging all over the bushes. Each bush bore fruit exactly like its neighbor of the same variety, similar to the manner in which all Elbertas or all Northern Spys resemble each other. The great differences found in the wild blueberries were entirely missing. It seemed almost a miracle that there could be such a difference between the ordinary small, rather unattractive wild blueberries and these great luscious berries produced as the result of long and patient effort. Almost needless to say, the berries sold readily and had averaged fifty cents a quart on the New York market all season. Not nearly enough berries have been produced to supply the markets in the New Jersey district.

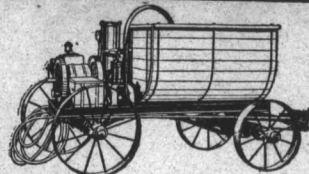
### Difficult to Propagate.

Apparently blueberries are rather difficult to propagate. Young plants are rather capricious but once established they seem to cling to life with great tenacity and thrive exceedingly well. Budding and grafting cannot be used as new shoots are sent up each year from the roots. Almost every form of propagation has been tried at Whitesbog with the final selection of dormant hardwood cuttings. These cuttings are three buds in length and are cut in late fall or early winter. They are then placed in boxes of sawdust with the butt ends up and stored in cellars. As soon as they callous they are removed in the boxes to cold sheds where they go through a chilling process. In the spring they are planted in cold frames. Late in the summer these young plants are potted in three inch pots. When the plants are sold they are taken from these pots and put in durable cardboard pots of the same size as it is necessary to ship and transplant blueberries with earth on the roots. The expense of propagation is naturally very great, due to so many handlings. Also only about fifty per cent of the cuttings live and make plants, according to the propagator at Whitesbog. Of course, the method of propagating blueberries is comparatively new, and better results should be obtained in the future.

### Michigan Possibilities.

Naturally, many people are interested in the possibility of growing these varieties of blueberries in Michigan. It would be well to consider the proposition thoroughly from all angles before making a decision as the blueberry plants are expensive and a large sum of money can very easily be tied up in this business. The plants of established varieties were quoted at one dollar each up to 250 plants—over that number they could be obtained for sixty cents each. It is rather doubtful if these high-bush varieties will stand the severe winters in certain portions of the state. In February, 1918, the fruiting twigs of some plants were killed by a temperature of twelve degrees below zero F., at Whitesbog. Just what temperatures the plants will stand under Michigan conditions is not known. Spring frosts also cause considerable damage so that proximity to a large body of water is a desirable feature. A planting of the improved varieties is going to be made at the South Haven Experiment Station in the spring of 1924 in order to observe the behavior of these varieties of blueberries under our conditions. No doubt if these plants do well, more extensive work will be undertaken in an attempt to build up a blueberry industry in Michigan.

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## Some Fruit Farm Notes

By L. B. Reber

THE peaches are frozen again, according to reports there isn't a live peach bud left in our county. Oh, la, la, ain't that too darn bad! They froze last year too, and the year before that, yet I had to prop up the limbs to keep them from breaking with the load of fruit. In fact, they freeze every year along about this time. A couple of years ago the trees froze and winter-killed. A neighbor pulled out over 300 of a 700 orchard. Spring work came on so fast he had to let the other 400 dead trees go. They are alive yet and bore an enormous crop last year. We did have an unusually warm and wet fall and the trees were full of sap, with the buds soft and sappy. No doubt some buds did freeze. Last spring I could not see many live buds but we had so many peaches that it was hard to get rid of them for enough to pay expenses.

No doubt the fierce January blizzards have cleaned up a few of the many bug pests. I noticed, while trimming my young apple trees, that there were a number of dead leaves clinging to the limbs. Apparently the wind had wrapped the leaf around the twig. I pulled off a leaf and it had about a thousand bug eggs snugly wrapped up in silk quilts under the leaf. Those innocent dead leaves came off from the trees as fast as I could reach them.

So far I have been too poor to build the hen house of my dreams, so I got a little shiplap last fall and built a temporary scratching shed. The front is made of my hot-bed sash, stood on end and screwed fast to two-by-fours. It answers the purpose as it makes a warm, dry place. Every day I cook up a stew of table scraps, potato parings, half-rotted apples, a little oyster shell grit and a little cut hay. This, with wheat and whole corn, is all I feed, yet the egg basket fills up every week although I am not getting a 100 per cent yield nor anywhere near it.

I notice that my mixed hens and pullets, of which I still have a few, lay better than the Jersey Giants. The Giant pullets are sure slow about maturing, but those big, black, lumbering hens and pullets do climb on the nest occasionally. Please do not write to me for breeding stock or eggs, as I have none to sell. When I do have some to sell you will sure see my ad in our paper.

I have one old sister of a Light Brahma hen. I brought her from home when my mother died. She is over five years old and weighs about twelve pounds. We call her Betsy Ann. About five times a year Betsy lays an egg, and she sure does come to the house and tell us all about it. Betsy will not end in the stew pot as so many of her sisters do, but she will have a home as long as she lives, eggs or no eggs.

An auto hit one of my Giant roosters and knocked him cock-eyed. I carried him out to bury him, but he still kicked, so I put him in a box. Next

day he was alive, but he was a sick rooster. I doctored him up and now he is all right again, except that he lost about three pounds in weight. He is an outcast now, as the other roosters make life miserable for him. If you want him, come on over and I will give him to you.

I have a few thousand Dr. Burrill strawberry plants which anyone may have for nothing if they will come and dig them next spring. We raise the Gibson strawberry to sell, but let the other fellow eat them. Dr. Burrill is the best canning berry I ever tasted, but not much for a market berry.

I hustled my trimming when the weather was nice and have it all done and brush all picked up and hauled out. These winter days I hole up like a woodchuck and spend my time reading and helping take care of the newest baby. We named him Calvin, I give you one guess as to my politics. My oldest boy was born a Hoosier and he sure was one cantankerous kid, this last one has the regular Michigan weather disposition, lots of fine days and some squalls.

Buckwheat pancakes for breakfast, corn beef and cabbage for dinner, fresh bread and fruit for supper, and between times a warm stove, a pipe, a table full of magazines, and a few chores for exercise. Have pity, I pray you, on the poor over-worked farmer.

### THE FARMER'S SITUATION.

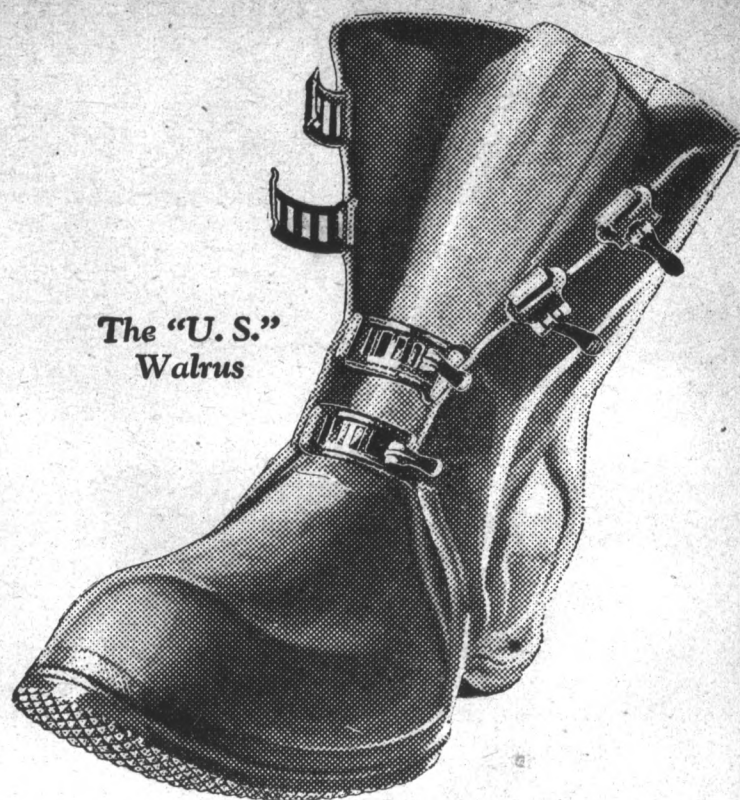
CHARLES J. BRAND, consulting specialist in marketing, of the United States Department of Agriculture, says: "The optimist is always with us, and he is a good fellow to have about, provided that he does not lead us into the false security of a fool's paradise."

He pointed out that commentators on the agricultural situation who use total figures of the department of agriculture crop values are misled by them and reach wrong conclusions. For instance, of the total gain of \$873,891,000 in crop values, \$505,796,000 is the gain in six crops that largely furnish the feed for meat animals and farm work stock. The gain in the six feed crops means nothing more nor less than that the farmer is, to an extent, helping himself out by growing foodstuffs for his own animals and thus holding up the price, and that he is thus spreading the terrific and continued blow which has been shocking his system since 1920 over a period of additional years.

"In effect the farmer is bidding up his feedstuffs and carrying his live stock and shifting over more to other crops involving the use of farm products for feed, making long-time loans to himself. It is often said that time is on the side of right. The farmer by such means is gaining time, and hence creating for himself additional opportunities to work out his very difficult problems."



One of the M. A. C. Extension Men Showing High School Students How to Prune.



The "U. S."  
Walrus

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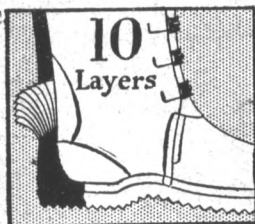
If you cut deeper, you'd find layer on layer of reinforcements—the strongest reinforcements ever put into an overshoe. Where the hard strains come there are as many as 10 separate layers of rubber and fabric in the "U. S." Walrus.

The "U. S." Walrus wears longer because it's *built* to wear longer. Ask your own dealer to show you a pair.

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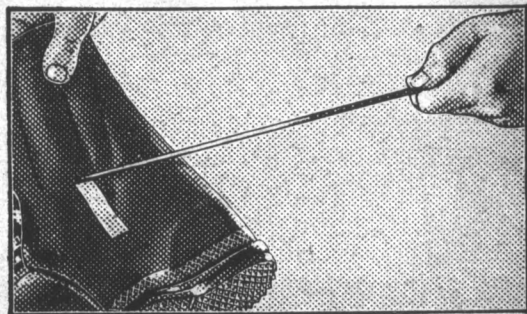
"U. S." Boots, built so strongly they're famous wherever boots are worn—Rubbers and Arctics, all styles and sizes for the whole family—"U. S." Bootees, the all-rubber lace shoes for spring and fall use—every kind of rubber footwear is included in the big "U. S." line. Look for the "U. S." Trade Mark.

United States Rubber Company



Ply on ply of rubber and fabric are built into the wall of the "U. S." Walrus. Here at the back of the heel are 10 separate layers.

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I have more foxes on my ranch than any other in Michigan.*



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## MILK PRODUCERS HOLD DELEGATE MEETING.

A DELEGATE meeting of the Michigan Milk Producers' Association was held in Detroit on February 27 for the purpose of considering the question of handling milk from those who have, from one cause or another, failed to sign the new milk contracts.

The new contracts authorized at the last annual meeting of the organization have been accepted and signed by over ninety per cent of the membership. This agreement, which has been in use in the Flint, Grand Rapids and Ann Arbor areas, and which makes the organization the selling agency, has a strong appeal to the members because through the contract the organization guarantees payment for the milk delivered.

To reach the membership, meetings have been held by the secretary and field men of the organization in every nook and corner of the area. But, in spite of this contact, many men, for one reason or another, have not been reached. The Detroit meeting was for the purpose of authorizing the directorate in relation to milk coming from men not yet signed up on the new contract, and, also, from those who are still working under the old contract.

In the talks it was emphasized that the common sense, forbearance, and cooperative spirit so fundamental to the practical working of these mutual organizations, were ever needed to make for service and efficiency, but particularly in time when changes were being effected.

A compact like this organization is for thoughtful and intelligent men. The short-sighted, thriftless and ignorant can have little real part in such a scheme. It was contended that moral responsibility, a sense of loyalty, a willingness to sacrifice for the benefit of the whole, for the good of the cause, are essential for the ultimate success of such an organization as the Michigan Milk Producers' Association.

After due discussion it was voted by those present that the matter of handling milk from those not yet signed up be left with the director and the sales committee, with power to act.

## SHRINKAGE IN CLOVER.

Please let me know how many pounds of unhulled sweet clover it will take to make sixty pounds of hulled seed.—R. A.

Sweet clover will shrink from thirty-five to forty per cent in hulling under ordinary conditions. Much will depend, however, upon the way the sweet clover was threshed. If the seed is quite dry, a considerable per cent of the seed will be hulled in threshing, while if the hulls are tough practically none of the seed will be hulled.

It will require from ninety to 100 pounds of unhulled sweet clover seed to make a bushel, or sixty pounds of hulled seed.

## BELIEVES IN THE FARM GARDEN.

(Continued from page 350).  
quired for our own use. There is always a ready sale for these. So the garden is a source of revenue in a dull time of year, beside solving the "What to Eat" problem in our own home for all the year around.

I start many of the plants in the hot-bed or in boxes in a sunny window so they are ready to transplant early.

All vegetables taste better fresh from your garden, and if you plan to buy them I notice you seldom have them. We think a garden pays, and pays well, both in a financial way and as a safeguard to health. A half-acre devoted to a good garden is the best half acre on the farm.—George H. Harper.

(The fifth article on the "Farm Garden, by W. H. Collar, will appear next week.—Eds.)

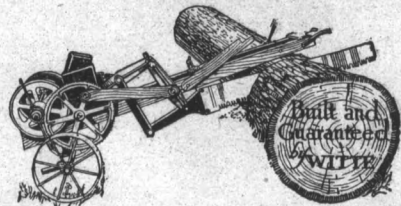
Our farmers should not delay making certain of their seed corn supply. Some are being disappointed, and more are likely to be when tests are completed.

## 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.

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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.

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If you get the right start, fox raising will pay you enormous profits—they are almost unbelievable. We show you how—we start you right. On a small investment of \$200 to \$500 you can start on the road to fortune.

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or wood when you can burn gas in your stove or heater by installing a Uni-Hete Kerosene Burner (with exclusive 1924 features) in five minutes time. It gives common kerosene to the hottest and cheapest fuel known. Does away with dirt and high fuel cost. Heat regulated to any degree by valve. Increases stove efficiency 100%. Has brought joy and economy to thousands. **FREE TRIAL.** Saves its cost in 30 days. Write quick for full particulars and introductory price.

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for use alone or for  
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408 Central Bank Building, Columbus, O.



## Truck Solved Problem

By F. R. Cozzens

IN the eastern part of my county lives John Bronson, a grain farmer who, for twelve years, was handicapped by poor marketing conditions. His nearest elevator was nine miles away, and Bronson was compelled either to take any price the buyer offered, or to drive six miles farther on with team and wagon over a badly-kept dirt road. At the height of the marketing season, this elevator often became overstocked, and shut down, leaving their patrons to market the remainder of the crop among the neighbors.

But in 1921, Bronson determined to change matters and bought a motor truck. Since then he has solved his problem, and by a well-planned schedule he is making his investment pay dividends.

"I bought the truck with the idea of bringing the market closer to my farm," Bronson explained to me recently. "But before long, I found myself within range of five different buyers, and I was in position to state my rights. Instead of hauling in a load of grain and trusting to luck, as I formerly did, I now step to the telephone and if the price at the first elevator does not suit me, I call another.

"I sell occasionally to a dealer twenty miles distant and can make the trip by truck and be back home for dinner. This formerly required one and one-half days with team and wagon. A haul of this kind can be made without the usual exposure, and during the busy season, I often drive it at night. That's why I can market my total crop while the other fellow is getting his first load in. This is especially noticeable in the pocket-book at a time when the market is changeable, for sometimes a load in the morning will bring \$10 more than one delivered in the afternoon.

"And as to the running expense: I find the first cost much greater than team and wagon, but I prepared for this by making it a point never to come back from town empty. My machinery, repairs, fertilizer, and other farm necessities are purchased in advance, and are hauled back to the farm from the town I happen to be in. This eliminates the cost of an extra trip.

"When my own needs are small, I make up a load of supplies for my neighbors. It saves them extra bother, and my rates gives me a fair profit over the cost of the trip. When farm work is slack, I am offered more community hauling than I can do.

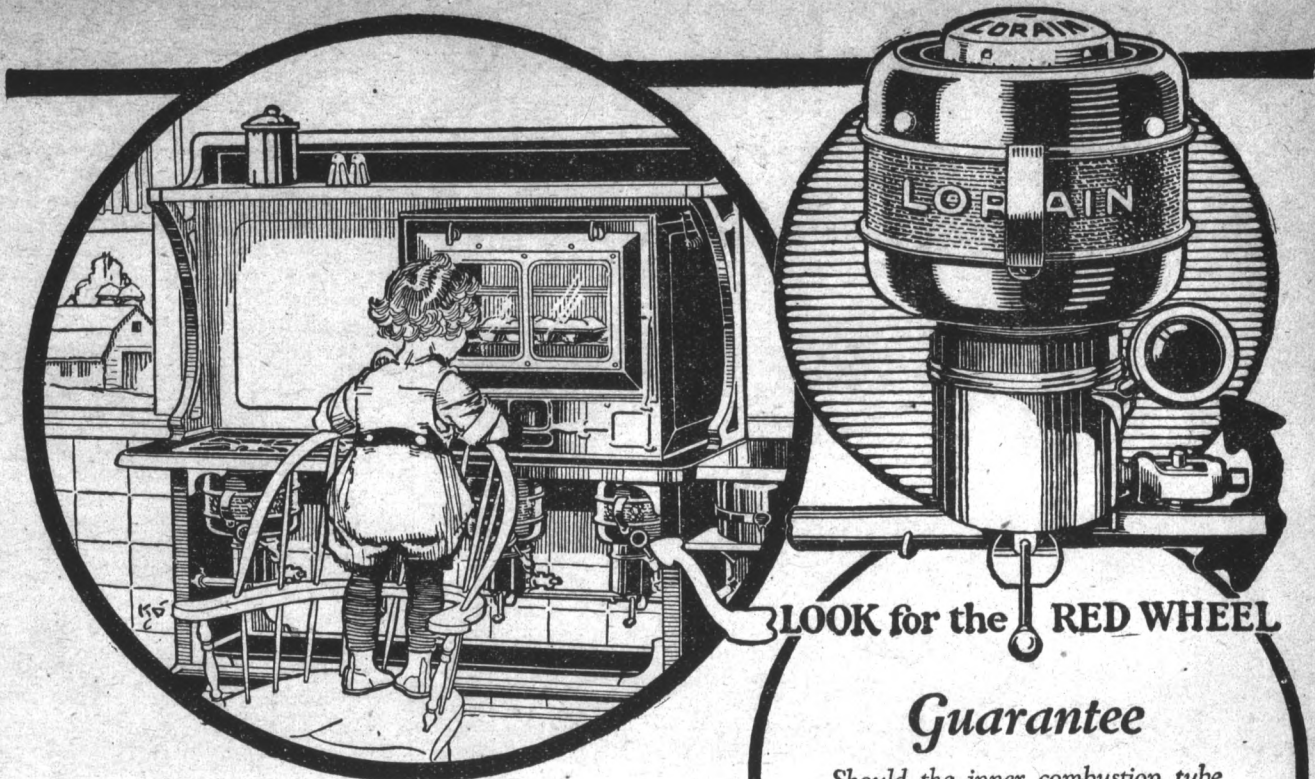
"When labor is scarce at harvest time, I sometimes use the truck as a tractor, pulling mower, transporting machinery, hauling an extra wagon from field to barn. While not designed exactly for that purpose, it has saved \$100 worth of grain for me on one occasion.

"A great deal of trucking can be done while the fellow with the team is idle. That's why my fertilizer and field supplies are ready at the shed when the planting season opens, and also why, when selling time comes, I can market my crop while the other fellow is waiting on the local elevator to make an offer."

### POTATO PRODUCERS TO MEET IN APRIL.

THE annual meeting of the Michigan Potato Producers' Association will be held at either Cadillac or Petoskey the first week in April, the particular day not yet having been set.

The stock of certified seed under the control of the organization is moving rapidly, only about twenty-five per cent of the supply remaining to be sold, according to Secretary H. C. Moore. About eight carloads of early stock have been secured for planting in the state.



## Real Facts About Oil Stoves

TO enjoy true cooking satisfaction, get an oil stove equipped with the famous Lorain High Speed Oil Burners. Such a stove is far superior—first, because the burner generates a clean, odorless, blue flame of great intensity. Second, because this intense heat comes in direct contact with the cooking utensil.

The Lorain Burner is easy to operate. It won't get out of order. It seldom needs cleaning. Gives no wick trouble. And the burner lasts. The vital part is guaranteed for ten years. Read the Guarantee.

For twelve years this burner has been giving perfect satisfaction in thousands upon thousands of homes. Each year the demand for Lorain-equipped Oil Stoves has steadily increased. Last year the demand was far ahead of production—great though that production was.

The Lorain High Speed Oil Burner is standard equipment on many well-known makes of oil stoves. That's why you can get almost any size, style, and color of oil stove equipped with this famous burner. Ask your dealer. If there's none nearby, write us for name of nearest one.

**AMERICAN STOVE COMPANY, St. Louis, Mo.**  
Sole Manufacturers of Gas Ranges equipped with the Lorain Oven Heat Regulator  
World's Largest Manufacturers of Cooking Appliances

**LORAIN**  
HIGH SPEED  
**OIL BURNER**

LOOK for the RED WHEEL

### 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.

Because the short chimney oil stove burner produces an intense flame which strikes directly on the bottom of the cooking utensil, the heat generated has, in the past, caused the early destruction of its vital part, the inner combustion tube.

This fault has been completely eliminated in the Lorain High Speed Oil Burner by making the inner combustion tube of "Vesuvius Metal" which is not affected by the destructive action of this intense heat. Therefore, American Stove Company now gives with each Lorain Oil Burner the unconditional guarantee shown above.

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

**CLARK JEWEL**  
George M. Clark & Co. Div., Chicago, Ill.  
**DANGLER**  
Dangler Stove Co. Div., Cleveland, Ohio  
**DIRECT ACTION**  
National Stove Co. Div., Lorain, Ohio  
**NEW PROCESS**  
New Process Stove Co. Div., Cleveland, O.  
**QUICK MEAL**  
Quick Meal Stove Co. Div., St. Louis, Mo.

## BEE SUPPLIES

We have made the highest class of Bee Supplies for over fifty years. Our ability to satisfy beekeepers has made us the largest manufacturer. Get our prices. There is a Root dealer near you.

### WRITE FOR FREE BOOKLETS:

"Better Beekeeping" for you who want to keep bees better. Our Fine Catalog for you who are experienced beekeepers. Wouldn't you also like our free booklet, "How to Sell Honey." Ask for it.

The A. I. Root Co., Box 423, West Side Sta., Medina, O.



## Color Your Butter

"Dandelion Butter Color" Gives That Golden June Shade which Brings Top Prices

Before churning add one-half teaspoonful to each gallon of cream and out of your churn comes butter of Golden June shade. "Dandelion Butter Color" is purely vegetable, harmless, and meets all State and National food laws. Used for 50 years by all large creameries. Doesn't color buttermilk. Absolutely tasteless. Large bottles cost only 35 cents at drug or grocery stores.

Wells & Richardson Co., Burlington, Vt.

**SAVE 50¢ A ROLL**  
**Ward's RADIO ROOFING**

Regular 85-pound standard weight  
Don't confuse this full-weight 85-pound roofing with cheaper, lighter roofing sold at the same price.  
Lay it over old roofs. There is enough in one roll to cover 100 square feet—yet a roll costs only \$1.85, with nails and cement.

**Fire Underwriters Approve it**  
Radio Roofing is surfaced with red or green slate that beautifies as well as protects it. Resists fire. Not affected by heat and cold.

We guarantee it for 15 years—it should last many more.  
Send for Free Sample  
Examine it! Cut it open! Test it. Judge its remarkable quality. Write for free Building Material Catalogue.  
Order the roofing you need. Catalogue No. 174-M00. State color—red or green.

Shipped From	Price Per Roll	Order From
Chicago	\$1.85	Chicago
York, Penna.	1.85	Chicago
Southern Illinois	1.85	Chicago
New Orleans	2.00	Chicago
Kansas City	2.00	Kansas City
St. Paul	2.00	St. Paul
Portland, Ore.	2.00	Portland
Houston, Texas	2.00	Ft. Worth
Oakland, Calif.	2.00	Oakland

Add 10¢ for extra long nails  
Shipping weight 85 pounds per roll

**WARD'S 85lb Slate Surfaced ROOFING**  
\$1.85 PER ROLL  
Guaranteed 15 Years

**Montgomery Ward & Co.**  
Chicago Kansas City St. Paul Portland, Ore. Ft. Worth Oakland Cal

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**HOME HEATING PLANS FREE!**  
Write and get factory-to-you prices on the finest quality furnace made—pipe or pipeless style of installation. Blue prints free.  
\$10.00 Down—Easy Payments  
Quick shipment. Money back guarantee. Save 1/4 to 1/2. Bargain Book Free—Write Today.  
Stoves, ranges, furnaces, etc. More than 1/2 million booster customers. Write today.  
**Kalamazoo Stove Co.**  
424 W. Rochester Ave.  
Kalamazoo, Michigan



# WEAR-MORE

## Makers of the Famous FITZALL COLLAR

### Now Announce Wonderful Improvement in Harness

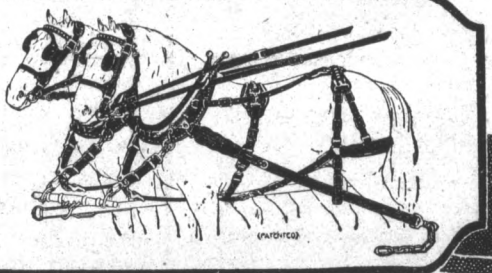
GROUPS of harness experts in many states, to whom it was first submitted, pronounce WEAR-MORE the greatest harness ever built. Many add, "... or that ever will be built". Tests prove it. Now we offer it to you.

Two things are cutting the life of your harness in half. First, rubbing and see-sawing between leather and metal. This literally wears away the leather. Second, the short-snubbing of leather under buckle edges or around narrow, metal units. This bruises and packs it—squeezing out every bit of oil and gradually cracking the dry strap until it cuts it in two. See actual magnifying-glass view showing result of short-snubbing. Leather is injured just as your hand would be after carrying a heavy pail of water without a round, wooden handle on the bale.

WEAR-MORE is the greatest of all harness because it scientifically conquers both these defects. Metal-rubs-metal instead of leather rubbing metal—no "grinding" friction. And besides, leather isn't pinched or packed. It pulls against a big, broad bearing surface, just as naturally and as well protected as is your hand when it grips the comfortable, round wooden handle on a pail ball. Even down to its return buckles, which make strap adjustments simple and positive, there isn't an inch of leather, under pulling strain, which is short-snubbed.

Write for Free Catalog on this wonderful Harness and Fitzall Collars before buying.

**JOHN C. NICHOLS CO.**  
SHEBOYGAN Dept. D-3 WISCONSIN



You can carry a pail with a wooden handle at least twice as far, without injuring your fingers, as one without. Just as the wooden pail handle protects your hand, so we give twice the service in harness over that you are now getting.

**SWEET CLOVER SEED** and honey direct from producer. Prices and circulars on request. **JOHN A. SHEEHAN, R. 4, Falmouth, Ky.**

**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.**

**FREE GRAPE PLANTS**—with order of Strawberry and Raspberry Everbearing plants. Concord Grape Plants, \$30.00 per 1000, all state-inspected and guaranteed. Free booklet. **WESTHAUSER'S NURSERY, Sawyer, Michigan.**

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You've heard your neighbor praise the Pathfinder, the wonderful weekly news and story magazine with over half a million subscribers. Unbiased digest of national and world affairs. Chock full of just the kind of reading you want. Fun, fashion, question box, books, health, entertainment and instruction for all. Exciting serial and short stories. Send 15c (coin or stamps) today for this big \$1 paper 13 weeks. Money back if not satisfied. Sample copies free. **PATHFINDER, 603 Langdon Sta., Washington, D. C.**

**One Man Alone Pulls Big Stumps Easy!**

No Horses or Help Needed

Clear idle stump land in spare time—without help or horses. Grow bigger, better crops on that rich, virgin soil! Increase farm value! Make big profits every year.

**SEND NO MONEY**

**30-Day Trial**

**ONE MAN Stump Puller**

Fastest, most powerful of all One Man Stump Pullers. Pulls big, green, or taprooted stumps. Many patented improvements. Guaranteed three years in writing. Four speeds; double action lever. Mounted on wheels; easy to move. Clears 2-3 acre without moving.

**BIG FACTORY SALE**

**CUT PRICE—EASY TERMS**

See what you save during this introductory **FACTORY TO FARM** Sale. Greatly reduced prices to early buyers. **NO MONEY DOWN**—Easy Payments. You will want to buy now even if you just ready to start clearing. Illustrated Folder gives full details. No obligation. Write for it—**TODAY**

**A. J. KIRSTIN CO., Escanaba, Mich.**

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Tan Hide and Make Robe Complete, using No. 1 Flush Lining, \$10.00 to \$12.50. All work guaranteed. Write for samples and prices. **Badger Robe & Tanning Co., Stevens Point, Wis.**

**Furnishes Power Like Steam.**

**The Nichols-Shepard 20-42 Oil-Gas Tractor**

delivers as steady power to a thrasher as a steam engine. When coupled with the 30x52 Red River Special it makes the most economical and profitable threshing outfit possible.

You have been waiting for this kind of an outfit. It is just the right thing for either a group of farmers or a thresherman. It will do all the work you want in a day's run, because it will thresh all the average crew can get to it.

The 20-42 Tractor is also adapted to plowing, grading, silo filling, wood cutting and other power applications on the farm.

Easily handled, starts quickly in cold weather and burns kerosene economically.

Write for catalog and learn of the great advantages which this tractor and this outfit possess.

**Nichols & Shepard Co.**  
(In Continuous Business Since 1848)  
Builders Exclusively of Red River Special Threshers, WindStackers, Feeders, Steam and Oil-Gas Traction Engines.  
**Battle Creek, Michigan**

## Co-ops at Capital City

### Many Address Leaders of Cooperatives in Annual Session

THE second annual conference called by the National Council of Farmers' Cooperative marketing Associations met in Washington with a large attendance of delegates.

Acclaiming the first achievement of the council to be the enactment of the intermediate credits banking act, Robert W. Bingham, of Kentucky, chairman of the conference, said that the organization was opposed to any schemes of price fixing; to any schemes of government subsidizing; to any sort of schemes which attempt to favor the farmer as a class.

Senator Capper said he was an optimist over the rewards which will come to farming from the increasing ability to work together which the producers are developing. He declared, however, that men in congress must approach the farm problems from different angles from the leaders of cooperative marketing associations. "We have all kinds of proposed bills presented to us with urgent appeals that they be converted into law. We send for representatives of farm organizations, and many witnesses come themselves voluntarily to testify. We hear all kinds of opinions and judgments, and receive all kinds of suggestions and criticisms. We note that the evidence and statements made are frequently contrary, criss-cross, and at variance with each other. We are surprised at this lack of unity, not merely in solution of problems, but in the point of view on which the testimony is based. Only a small part of the problem can be solved by legislation, but congress will go just as far as possible. The farm movement will never be able to secure the type of legislation needed to encourage agricultural progress until there is some kind of unity of viewpoint as well as unity of problems among farm leaders themselves.

At the time of the panic of '73 and '93, prices of steel products and manufactured goods generally declined as much as did the prices of products of the farm. Why is it that in this period of depression we are now going through, farm products have declined while labor and manufactured products have maintained a high level of prices? Ex-Governor Frank O. Lowden, of Illinois, answered this question by the fact that labor and industry are organized, while farmers are not well organized.

"Agriculture finds itself with its millions of members freely competing among themselves while it is obliged to sell in a highly organized industrial and commercial world. The farmer must organize for the purpose of marketing his product," declared Mr. Lowden, "if agriculture is to be saved from bankruptcy."

While he had much confidence in the ability of the management personnel of the cooperative marketing associations, O. M. Kile, of Washington, pointed out that one weak link in the cooperative chain was the lack of local community activity among the membership.

"Have you ever stopped to think that, without exception, the first successful producers' cooperative marketing enterprises, taking one country with another," said Mr. Kile, "have been among dairymen? Why has this been the case? There are several very good reasons. In the first place, milk is a perishable product and requires considerable skill to market it properly to distant consumers. In the second place, some of the machinery required for processing milk in the early days was secured through cooperative effort. But I am convinced that the most important factor in this early cooperative success of dairymen has been the fact that the nature of his business requires the cooperative organization to be active locally.

"The dairyman is reminded every day that he belongs to a live, active organization. He can see the wheels go round. He meets his neighbors and talks organization matters over on his frequent trips to the creamery, or if his milk is collected he sees an agent of the association almost every day. There is someone close at hand to answer his questions, to chat with him or to make complaints to. He gets his milk check monthly, and in a dozen ways the member of the dairy cooperative has brought to his attention constant tangible evidence that his organization is on the job. Contrast this situation with that of the wheat grower who sells his entire crop perhaps in a single day. About the only intimate contact he has with his organization is when he delivers his crop and again when the final proceeds of the pool are distributed."

About the most important job before the cooperatives today, concluded Mr. Kile, was to complete their organizations by going out into the field and either directly, or in cooperation with other organizations, putting under them this foundation of local interest and loyalty, not only in every county, but in every community in the territory covered by the association.

Officers elected were: Judge Robert W. Bingham, of Louisville, Ky., re-elected chairman; Carl Williams, Oklahoma City, re-elected vice-chairman.

It was decided to maintain permanent offices of the Council at Washington, as well as to issue a national publication in the interest of the Sapiro organizations.

### REPORTS OF POTATO CROP.

THE estimated quantity of potatoes available for sale on January 1 in the thirty-five producing states is 108,000,000 bushels, as compared with 129,000,000 one year ago, and 90,000,000 two years ago. The amount still in the counties where grown that were available on that date for shipment out of the county by rail, boat, truck, etc., is estimated at 70,000,000 bushels, as compared with 91,000,000 on January 1, 1923. An inspection of the official figures for the important producing states indicates that the stocks in the east are larger than one year ago, but are considerably less in the central and western states.

The estimated stocks in the leading states available for shipment after January 1, together with comparative figures for the previous year, are given below.

State.	Bushels.	Bushels.
Maine .....	13,117,000	10,085,000
New York ....	8,343,000	7,351,000
Michigan ....	9,665,000	10,409,000
Wisconsin ....	6,253,000	12,724,000
Minnesota ....	9,576,000	13,434,000
North Dakota ..	2,098,000	4,309,000
Nebraska ....	1,154,000	2,189,000
Colorado ....	3,653,000	6,424,000
Idaho .....	3,986,000	6,127,000

The total Michigan shipments by rail from the 1922 crop were 19,830 cars, of which approximately 12,000 moved after January 1. As the stocks this year are about seven per cent less; it is expected that about 11,000 cars should move after the corresponding date, although this may be reduced somewhat if the movement by truck should be relatively greater than last year.

God bless him who pays visits and short visits.—Arabian Proverb.

Ordinary shelled corn is the best supplement to skim-milk for calves.

These are the signs that indicate poor diet: Low vitality and susceptibility to disease; wrinkles and crows' feet; early signs of age; hair loses its luster, falls out, is uneven and easily broken; digestive system out of order and inefficient.



## Winter Is Their Vacation

*It is the Time When Tools, Implements and Machinery Should Be Made Ready for the Busy Season*

By J. B. McMurtry

**W**INTER time is usually the rest time for the great majority of farmers—these take their summer vacation in the winter. Too often this "vacation" is continued until the spring work drives them to the field.

Tools, implements and machinery are all too often just as, and where, they were unhitched from last year. Many less careful farmers have left most of their implements out in that tool shed which has the sky for a roof and possibly one or more barbed wire fences for sidewalls! Such implements have depreciated approximately seven per cent since last year. Pretty heavy tax, isn't it? And they are certain to receive no attention until the day next spring or summer when the rush of work demands their immediate use. For the type of farmer who abuses his implements this way there is little hope of improvement. This story is not written so much for his benefit as for the farmer with a good enough business head on him that he wants to develop more efficiency in his business as a rural gentleman.

### Put Workshop in Order.

It is high time now to bring that vacation to a close. The first thing to be looked after—if it needs it—on the well-regulated farm in preparation for putting the implements in A-1 shape for spring, is to have a workshop and have it in order. Frequently I go into the workshop on a farm and find that it has become a catchall—just a junk shop, having the accumulations of scraps, and broken things for the Lord knows how many years! The first thing that should be done in such a shop is to clean house. Load all of the scrap and junk onto the wagon or truck and haul it to the junk dealer. He needs it in his business. You don't need not suggest that perhaps there is enough other scrap around after you have taken out bolts, etc., which may be useful, to make a full load.

Get all of the working tools together and fix them up, getting every tool in good working condition—file and set saws, grind drawshave, axes and chisels, draw out cold chisels, pinch and crowbars, get a rasp and some new files, etc., and have a regular place for every tool. Get a stove in and have a floor space large enough to hold a tractor clear—in short, make your shop a real business unit in your farm business.

### Overhaul All Implements.

As you think it over you will recall that several of your implements need repairing, or worn or broken parts need replacing, or the implement needs a general overhauling. One day in harvest time last year I called on a good farmer friend. The knocker on the binder was causing a lot of trouble. He had monkeyed several hours with it and then had to stop the harvesting and drive fourteen miles to get a new part. Said it bothered last year. He would doubtless have been \$20 ahead of the game if he had overhauled the binder last winter and replaced the part which his memory said had caused trouble before.

Many an implement is allowed to rot or rust down just because some part has failed and the farmer thinks only in terms of what it would cost to load the implement, haul it to town and pay the blacksmith and woodworker good high fees for doing the job.

But, with the exercise of a little ingenuity and a small outlay for parts, the work can be done at home with the farmer actually earning mechanics' wages! You can pay yourself fifty cents to \$1.00 per hour for good, faithful work and thus get the tools and implements all ready for the season's work. How nice to earn machinists' wages for three or four weeks and

stay right at home where you can stick your legs under your own well-loaded table and tuck yourself into your own woolen blankets at night!

Well, pull the tractor into the shop the first thing. If you are inexperienced get a neighbor who knows how to do it, and learn by acting as his helper. Overhaul the tractor, replacing piston rings and all other parts that are not giving 100 per cent service. Grind valves, etc. Go over the gas engines with the same care. Every engine should be overhauled annually if it has much work to do. Don't neglect the truck and pleasure cars.

Then get the disc. More than likely this tool would be fifty per cent more efficient if well sharpened. See that all bearings are in good shape. Go over all of the tools and implements with the greatest of care. Be as rigid in your service requirements as if you were a government inspector.

### Profitable Use of Paint.

After all of the working and wearing parts of the implements and machines are fixed up properly, go over them with a heavy coat of good paint. Maybe some of them have gone so long without paint that two coats will be highly advisable.

Choose thoughtfully the color you want for wood and the one for metal work. Get good quality of paint. You may be surprised to be informed that you can sell good quality paint to your implements and machinery, when they need it, at more than \$24 per gallon! What do I mean? Just this: Good painting of farm implements, when care is taken to get an ample supply of it into all joints, and especially where wood and metal work join, will prolong the life and usefulness of the implements sufficiently to repay at the rate of more than \$24 per gallon for the paint. Then the added pride and self-respect which well-painted implements give the farmer are of greater value than the actual increase in intrinsic value of implements.

### DOLLARS AND SENSE SIDE OF FARMING.

(Continued from page 343).

have been of great benefit to agriculture. While there have been many co-operative business failure and some of the desired aims have not been fulfilled, agriculture has accomplished much through its cooperation.

Cooperation is, relatively speaking, a new thing in our economic life. We know less about it than we should. There has been much false information spread about it for the purpose of retarding the movement. There has also been very much false praise of its accomplishments and possibilities. What we need is an impartial study of the accomplishments, possibilities, purposes and limitations of cooperation.

Every farmer who is interested in the welfare and future of agriculture should study this problem of agricultural cooperation diligently. The information which is obtainable is very inadequate.

In the following series of articles, attempt will be made to present in as clear and simple a manner as possible just what cooperation has done, and probably will be able to do for agriculture.

### DAMAGE BY PIGEONS.

I have pigeons. Neighbors say that if my pigeons fly on their land or eat any crop they can shoot them. Is that true?—F. B.

The owner of the pigeons is liable in an action in trespass on the case for all damages done by them. But persons on whose land they trespass have no right to kill them because of the trespass.—Rood.



## Don't Depend On How Roofing Looks—Test It

"Paper-soled" shoes and genuine leather shoes look much alike when new. So does ordinary asphalt roofing and genuine Beaver Vulcanite roofing.

There's a way to prove the difference. Test it.

And then you can be sure that when you put Beaver Vulcanite roll roofing over your old roof, that it will last you for years—a fire-safe, weather-tight roof. Vulcanite has been the quality standard for twenty-five years. It's thick, tough and non-fading. You can put it right over your old roof. You don't need experts to apply it. Simple, complete instructions are contained in each roll.

To make these important, telltale tests, ask your dealer, or mail coupon to us for free sample of Beaver Vulcanite slate-surfaced roofing. Then put it to the six daring tests listed on this page. They will prove to you that Vulcanite will give you longer service for less cost.

Mail the coupon today. With the free sample we will send you complete information about Beaver Vulcanite roofing—roll and shingles.

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Manufacturers of Beaver Wall Board, Beaver Vulcanite Roofing, Beaver Plaster Wall Board and Plaster Products

For sale by thousands of dealers, everywhere

# BEAVER VULCANITE ROOFING



THE BEAVER PRODUCTS CO., Inc., Dept. H. H. 3  
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Gentlemen: Please send me your two free books, "Beaver Vulcanite Roofing," and "How to Re-Roof," and also a sample of genuine Beaver Vulcanite Roofing.

Name \_\_\_\_\_

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I am also interested in

☐ Beaver Wall Board ☐ Beaver Plaster Wall Board  
☐ Beaver Tile Board ☐ Plaster and Plaster Products (124)

## 6 DARING TESTS you should make before you buy any roofing

1 **Heat test:** Lay sample of Vulcanite Slate Surfaced Roofing on hot radiator for 12 hours. See if it will melt or dry out.

2 **Ice test:** Lay sample on ice for 12 hours. Then pour boiling water on it. See if extremes of temperature affect it.

3 **Water test:** Soak sample in water for 12 hours. See if, by weight, it absorbs any water.

4 **Acid test:** Immerse sample in hydrochloric acid. See if it is affected in any way.

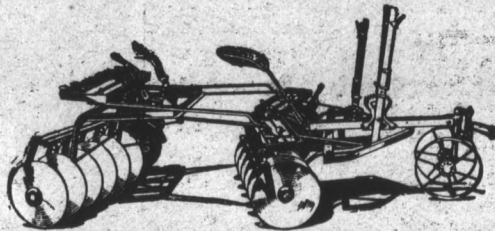
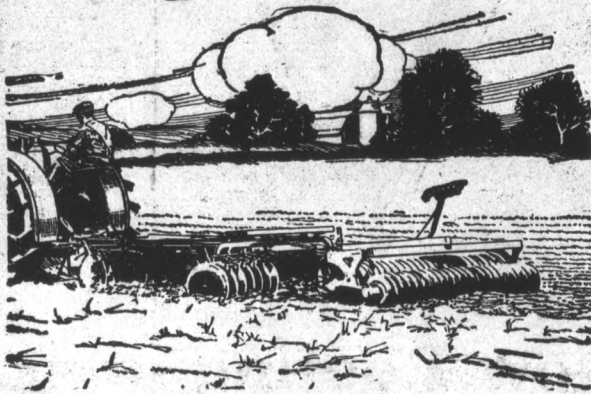
5 **Fire test:** Lay white-hot coal of fire on sample. See if it sets the roofing on fire.

6 **"Scuff" test:** Lay sample on floor; scuff it hard with your shoe. See if any of the slate-surfacing will come off.

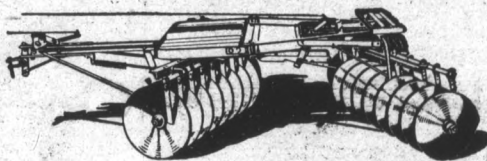


# McCormick-Deering

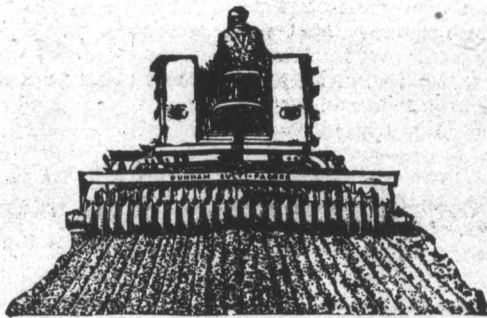
## Tillage Implements



The McCormick-Deering Disk Harrow is a simple and efficient implement, built and trussed like a steel bridge, to serve many years. You will like the details and conveniences—the dust-proof bearings and the bearing oil cups set above the frame, the built-in angle-steel weight boxes, the oscillating disk scrapers, the forecarriage, etc. Made in sizes for everybody—4 to 10 feet. All sizes can be equipped with the tandem attachment which is shown above. Double diskings is popular—farmers know that it more than pays for itself.



The McCormick-Deering Leverless Disk Harrow is a genuine tractor disk, not a made-over horse harrow. It is built for heaviest duty. It is controlled entirely from the driver's seat, without levers, yet it is very simple. Merely backing the tractor automatically sets the angle of both front and rear gangs. When the tractor starts forward the gangs hold that angle until released by a pull on the rope. In 5 to 10-foot sizes to fit your power.



The Dunham Culti-Packer has no equal as a seed-bed finisher. It pulverizes the soil, fills out air spaces, and saves moisture content. Following the drill, it helps the little plants to get a quick start, firmly set in finely mulched soil. Use it to prevent winter-killing of wheat; to rejuvenate meadows, etc. It is far ahead of a roller for small grains. Made in eight sizes, for horse and tractor use.

SEED-bed making will call for fast and thorough work this year as always. The planting season will roll around in a twinkling, but no matter how few the days between plowing and planting you can have a profit-building soil by using efficient equipment.

McCormick-Deering Tillage Implements combine the three essentials—good work, long life and convenience. They are of practical design, their construction being based on ninety years of farm and factory experience. They are priced on the basis of economical quantity production, and as an investment they offer you attractive returns.

To Fill All Your Tillage Tool Needs See the McCormick-Deering Dealer. It Pays!

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OF AMERICA  
(INCORPORATED)  
606 So. Michigan Ave. Chicago, Ill.

### TREATING CONCRETE FOR THE STABLE FLOORS.

REGARDING the treating of concrete floors for dairy barns and stalls, I know of no special way except by different methods of laying. There are two quite different ways of placing concrete for this purpose and in doing either it is necessary to avoid two evils.

One evil is to get the floor so smooth that the animals slip badly on it; the other, to get it so rough that it is difficult to clear and has a wearing effect.

A very satisfactory floor can be made of concrete by what is known as the one-course method of construction. By this method the concrete is laid of the desired thickness, wet enough so that it will quake when struck with a shovel. It is then screeded, with a two-by-four sawed back and forth across the surface, and settled by striking gently and rapidly on the top of this two-by-four. It may then be floated with a wooden trowel which gives an even surface and one which can be cleaned reasonably well.

A more expensive method of floor construction is laying the concrete in two floors somewhat in the same manner as sidewalks are usually constructed. A thickness of floor is put in and a surface coat of richer material, usually one of cement to two of sand, mixed wet, is placed on top. It is then leveled by means of the two-by-four used as a screed, and a wooden float for leveling.

It is generally advisable to use the steel trowel very sparingly on the surface as it has a tendency to pull toward the surface and to produce a very smooth surface which is also likely to crack if too much cement is drawn to the surface. Where concrete floors are used in the stalls for animals, it is advisable to keep plenty of bedding in the stalls.

Cork floors or creosoted wood block floors are sometimes used for stalls. Perhaps the principal advantage is that these floors conduct less heat so that the animals are kept somewhat warmer. These floors are, however, more expensive than concrete.—H. H. Musselman, M. A. C.

### POINTS OUT PRESENT FARM TENDENCIES.

IN its resume of agricultural conditions the bureau of agricultural economics concludes that if we could all carry in mind more completely the picture of economic relationships it is likely the whole community would give earnest attention to the farmers' situation this year. Unless a number of far-sighted men are mistaken no distant day may find agricultural buying power the main back-log of prosperity.

It is inevitable that there should be radical shifts from one enterprise to another. The weight of production swings from feed crops to the animals that eat them; from animals to direct money crops; then the reverse. This a sentiment in favor of corn over hogs; of dairy products over cash crops in the west; of sheep over cattle; of poultry over fruit. Many wise farmers, however, are not blindly following the crowd in these continual shiftings. They realize that the difficulties of this period are less to be met by chasing elusive price advantages of the moment than by following the tested system of leaving no stone unturned to improve that system.

The bureau of agricultural Economics points out that the year 1923 maintained increases in poultry and egg production, with fully ten per cent more poultry on the farms. Efficient production of high quality product will be of great importance in making poultry and eggs profitable and in encouraging consumption of a larger supply.

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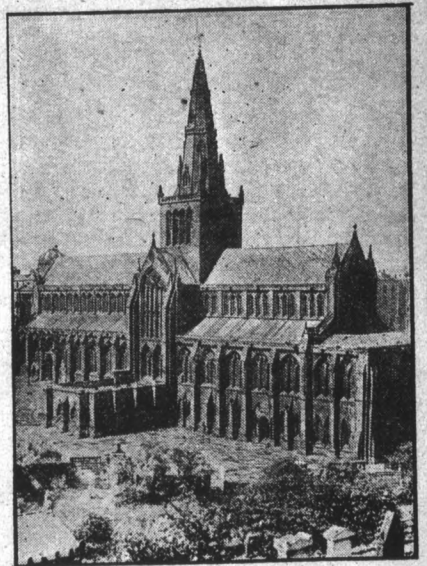
# WORLD EVENTS IN PICTURES



Herrin, Illinois, was under military control, following battles between the "wets and dries."



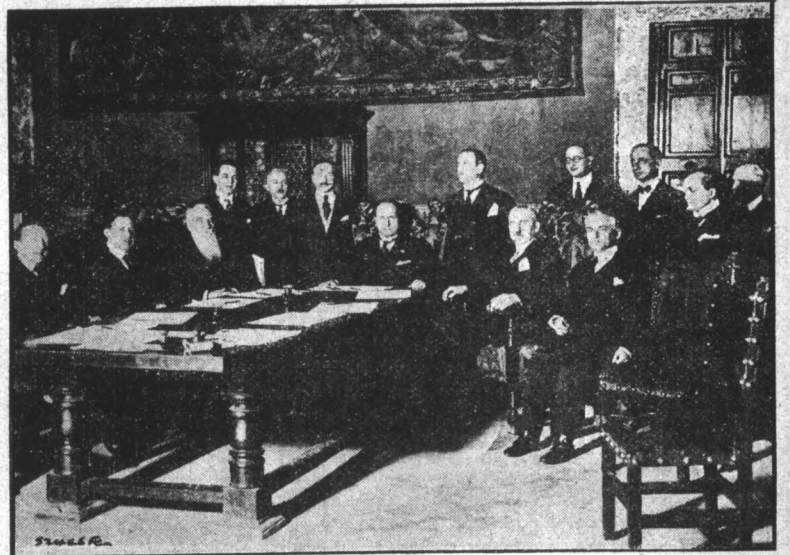
Labor, Royalty and Republicanism sat side by side at a recent banquet in London in honor of the new U. S. ambassador to court of St. James, and new British ambassador to the United States.



This famous old cathedral in Glasgow, Scotland, was constructed in the year 1175.



"Roses that bloom in the snow—American beauties all," was the scheme for one of the floats in the annual winter carnival at Saranac Lake, in the Adirondacks.



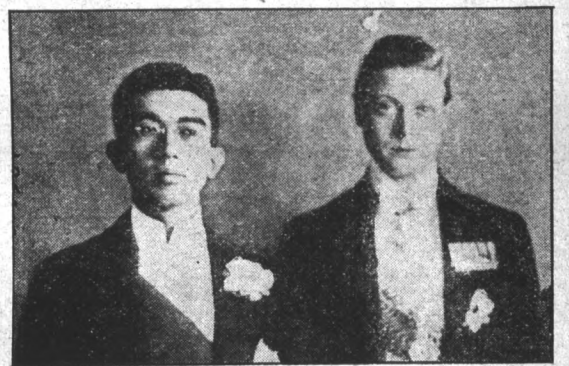
Italy and Serbia recently signed a treaty of amity ending Fiume Controversy. At head of table is Mussolini, at his right Premier Pachich, at his left Minister Ninichich, both of Yugoslavia.



Dr. Anita Augsberg, Germany's leading physician, and Lida Heyman, vice-president Women's Intn'l League for Peace, lecture in U. S.



G. F. Mara is arranging the National Democratic Convention, but Mrs. Mara is helping him.



Two leading throne heirs of the world who wanted their way and got it—Crown Prince Hirohito, of Japan, and the Prince of Wales.



These well equipped Mexican troops in a strategic move against the Huertista forces drove them back, virtually ending the resistance of the Revolutionaries.



Ramsey MacDonald, first labor prime minister, enjoys a stroll with his two daughters, through the garden of the "Chequers," official country home of British Premiers.



I AGREE with you there. But to return to the original statement. Am I right, or am I wrong, when I say that you were striving very hard for a record that would aid you in the election?"

"Every official tries to make the best possible record. Especially at election time."

"No matter whom it injures."

"I didn't say that."

"But I did—and I repeat it. No matter whom it injures! Now, to be plain and frank and brutal with you tonight as you were with me in the courtroom, Mr. Worthington, I have pretty convincing evidence that you knew I was innocent. Further, that you knew it almost at the beginning of the trial. But that in spite of this knowledge, you continued to persecute me—notice, I don't say prosecute—to persecute me in a hope of gaining a conviction, simply that you might go before the voters and point to me in prison as a recommendation of your efficiency as a district attorney."

"Oh!" Worthington threw away his cigarette with an angry gesture and came forward. "You fellows are all the same. You're always squealing about your innocence. I never saw a man yet who wasn't innocent in one way or another. Even when they confess, they've got some kind of an alibi for their act. They didn't know the gun was loaded, or the other fellow hit me first or—"

"In my case I have no alibis. And this isn't simply my own statement. I have sufficient witnesses."

"Then why didn't you produce them at the trial?"

"I couldn't. You had them."

"I?"

"Yes. I don't mind giving you the names. One of them was Doctor Horton. Another was Doctor Mayer. A third was Doctor Brenstead, all physicians of the highest reputation. I would like, Mr. Worthington, to know why you did not make use of them in the trial instead of the expert Hamon, and that other one, Jaggerston, who, as every one knows, are professional expert witnesses, ready at all times to testify upon anything from handwriting to the velocity of a rifle bullet, providing they are sufficiently paid."

"Why? Simply because I figured they would make the best witnesses."

"It couldn't have been," and Houston's voice was more coldly caustic than ever, "that it was because they would be willing to perjure themselves, while the real doctors wouldn't?"

"Of course not! This whole thing is silly. Besides, I'm out of it entirely. I'm—"

"Mr. Worthington," and Houston's tone changed. "Your manner and your words indicate very plainly that you're not out of it—that you merely wish you were. Isn't that the truth? Don't you?"

"Well," and the man lit a fresh cigarette, "I feel that way about every murder case."

"But especially about this one. You are not naturally a persecutor. You don't naturally want to railroad men to the penitentiary. And I believe that,

as a general thing, you didn't do it. You tried it in my case; election was coming on, you had just run up against two or three acquittals, and you had made up your mind that in my case you were going to run the gauntlet to get a conviction. I don't believe you wanted to send me up simply for the joy of seeing an innocent man con-

perfect one. I was persecuted when the official in charge of the case knew that I was not guilty. To that end I can call the three doctors I've mentioned and put them on the stand and ask them why they did not testify in the case. I also can call the officials of Bellstrand Hospital in New York where you conducted certain experi-

## The White Desert

By Courtney Ryley Cooper

### DO IT TODAY!

By James E. Hungerford

Today is the day that your tasks should be done—

The day that God's given to you;

You're living right now, and this day is the one

To do what you're going to do!

This second, this minute is all that you've got;

The future's a myth, anyhow;

The past, with its shadows, the sooner forgot

The better—so do it right now!

You number your days from the day you were born,

And count them with sighing and tears,

But really, my friend, you're reborn ev'ry morn—

In spite of the calendar years;

Each day, you start life with a viewpoint that's new;

The past is a dream that has fled;

You cannot go back to the you that was you,

In days that are finished and dead.

Nor can you go forward one day in advance,

And glimpse what the morrow may hold;

You can't change the future, or one circumstance,

Except as the minutes unfold;

Today is the day that your tasks should be done;

So live it that you need not fear

What's "going to happen," with each rising sun—

Next week, or next month, or next year!

finied in prison. You wanted a conviction—wasn't that it?"

"Every prosecutor works for that."

"Not when he knows the man is innocent, Mr. Worthington. You knew that—I have proof. I have evidence that you found it out almost at the beginning of my trial—August second, to be exact—and that you used this information to your own ends. In other words, it told you what the defense would testify; and you built up, with your professional experts, a wall to combat it. Now, isn't that the truth?"

"Why—" The former district attorney took more time than usual to knock the ashes from his cigarette, then suddenly changed the subject. "You spoke of a suit you might bring when you came in here?"

"Yes. Against the city. I have a

ments on cadavers on the night of August second; also a doctor who saw you working in there and who watched you personally strike the blows with a mallet; further, I can produce the records of the hospital which state that you were there, give the names of the entire party, together with the number of corpses experimented upon. Is that sufficient evidence that I know what I'm talking about?"

Worthington examined his cigarette again.

"I suppose it's on the books down there. But there's nothing to state of what the experiments consisted."

"I have just told you that I have an eye-witness. Further, there are the three doctors."

"Have you seen them?"

Houston thought quickly. It was his

only chance.

"I know exactly what their testimony will be."

"You've made arrangements for your suit then." Worthington's color had changed. Houston noticed that the hand which held the cigarette trembled slightly.

"No, I haven't. I'm not here to browbeat you, Mr. Worthington, or to lie to you. It came to me simply as a ruse to get in to see you. But the more I think of it, the more I know that I could go through with it and possibly win it. I might get my million. I might not. I don't want money gained in that way. The taxpayers would have to foot the bill, not yourself."

"Oh, I guess I'd pay enough," Worthington had assumed an entirely different attitude now. "It would hurt me worse in business than it would if I were still in office. Whether it's true or not."

"You know in your heart that there's no doubt of that."

Worthington did not answer. Houston waited a moment, then went on.

"But personally, I don't want to file the suit. I don't want any money—that way. I don't want any bribes, or exculpations, or statements from you that you know me to be innocent. Some might believe it; others would only ask how much I paid to have that statement given out. The damage has been done and is next to irreparable. You could have cleared me easily enough by dropping the case, or making your investigations before ever an indictment was issued. You didn't, and I remain guilty in the minds of most of Boston, in spite of what the jury said. A man is not guilty until convicted—under the law. He is guilty as soon as accused, with the lay mind. So you can't help me much there; my only chance for freedom lies in finding the man who actually committed that murder. But that's something else. We won't talk about it. You owe me something. And I'm here tonight to ask you for it."

"I thought you said you didn't want any bribes."

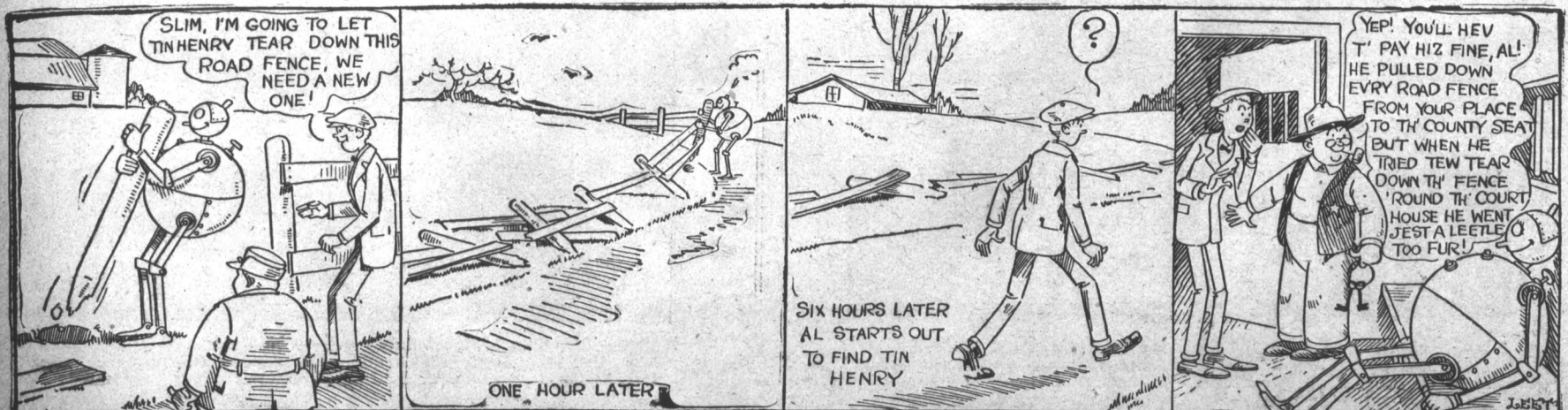
"I don't. May I ask what your margin of profit is at your machinery company?"

"My margin of profit? What's that? Well, I suppose it runs around twelve per cent."

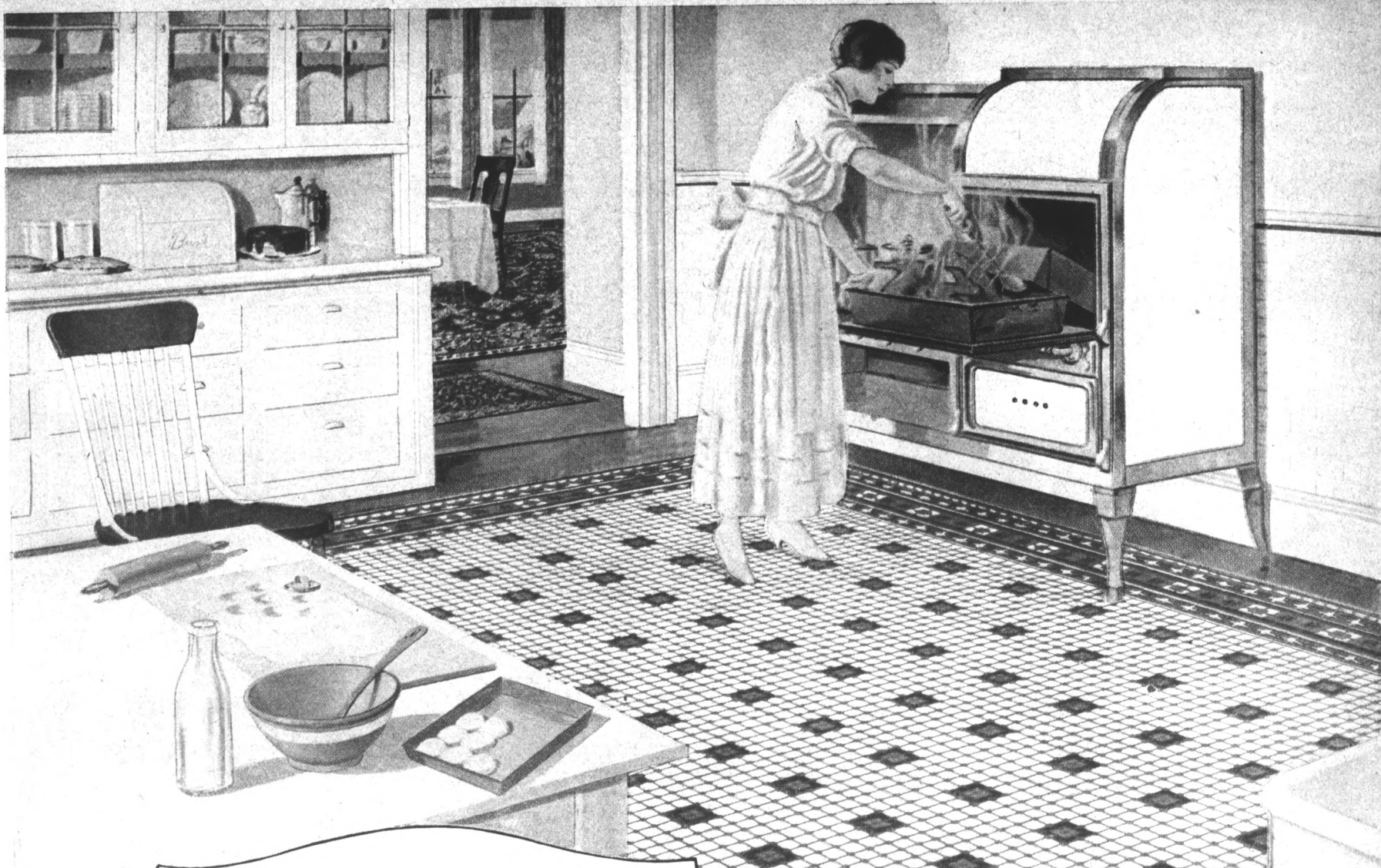
"Then will you please allow me to give you twelve thousand dollars in profits? I'm in the lumber business. I have a contract that runs into the millions; surely that is good enough security to a man—he couldn't resist the temptation—"who knows my absolute innocence. It isn't good for the bankers, who still believe me guilty, so I've decided to come directly to you. I need one hundred thousand dollars' worth of lumber-mill machinery, blade saws, crosscuts, jackers, planers, kickers, chain belting, leather belting, and everything else that goes to make up a first-class plant. I can pay for it—in installments. I guarantee to give you every cent above my current running expenses until the bill (Continued on page 365).

### AL ACRES—Tin Henry Does A Toro Job and Land in Jail

By Frank R. Lee.







### **An Attractive Kitchen Makes Cooking a Pleasure!**

Company for dinner! There—the roast is nearly done. Now, to bake the biscuits and give the finishing touches to the table. Drudgery? No, indeed. For getting up a dinner is a pleasure, especially when the kitchen is bright, cheerful—and spotlessly clean.

With a *Gold-Seal* Congoleum Rug on the floor it's so easy to keep the kitchen immaculate. No matter what is spilled, a few strokes of a damp mop will make the rug as fresh and clean as new.

*Gold-Seal* Congoleum Rugs come in a wealth of attractive designs. In addition to the neat tile and woodblock patterns for the kitchen, there are dainty floral effects for the bedroom and richly colored motifs for the living and dining rooms. Another advantage—these rugs lie flat without any fastening.

It's no wonder thousands of women are making their homes attractive with *Gold-Seal* Congoleum Rugs. For these rugs are tremendously durable and labor saving, and surprisingly inexpensive.

6 feet x 9 feet	\$ 9.00	Pattern No. 386 (shown below) is made in all sizes. The other patterns illustrated are made in the five large sizes only.	11½ feet x 3 feet	\$ .60
7½ feet x 9 feet	11.25		3 feet x 3 feet	1.40
9 feet x 9 feet	13.50		3 feet x 4½ feet	1.95
9 feet x 10½ feet	15.75		3 feet x 6 feet	2.50
9 feet x 12 feet	18.00			

*Owing to freight rates, prices in the South and west of the Mississippi are higher than those quoted.*

# Gold Seal CONGOLEUM RUGS



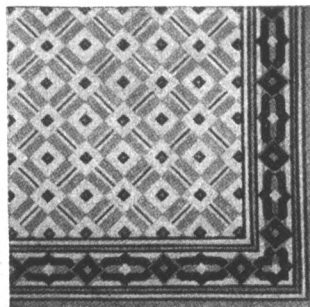
*Above is  
Pattern No. 540*

### **Look for this Gold Seal**

There is only one guaranteed Congoleum and that is *Gold-Seal* Congoleum identified by the Gold Seal shown above. This Gold Seal (printed in dark green on a gold background) is pasted on the face of every guaranteed *Gold-Seal* Congoleum Rug. It is your protection against substitutes. Look for it.

**CONGOLEUM COMPANY  
INCORPORATED**

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*Gold-Seal Congoleum  
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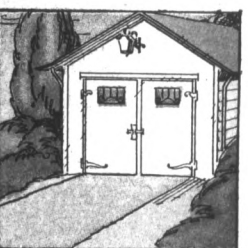
To protect its beauty



To "insure" your roof



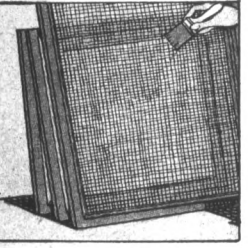
To "re-new" your car



For lasting attractiveness



To resist wear



To save your screens



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# FARM GUIDE

For Painting, Varnishing, Staining and Enameling

IMPORTANT: Each of the products specified below bears our name and trade mark



TRADE MARK

	TO PAINT Use product named below	TO VARNISH Use product named below	TO STAIN Use product named below	TO ENAMEL Use product named below
AUTOMOBILES .....	S-W Auto Enamel: for the man who paints his own car	S-W Auto Enamel Clear: a colorless varnish		S-W Auto Enamel: assorted colors
AUTOMOBILE TOPS AND SEATS .....	S-W Auto Top and S-W Auto Seat Dressing			
BARN, SILOS, OUT-BUILDINGS, Etc. ....	S-W Commonwealth Paint: barn red and barn gray S-W Roof and Bridge Paint: 5 colors		S-W Preservative Shingle Stain	
BRICK .....	SWP House Paint: a full oil gloss S-W Concrete Wall Finish: dull finish			Old Dutch Enamel: full gloss for outside exposure
CEILINGS, Interior .....	Flat-Tone: the washable, flat oil paint	Scar-Not Varnish: for woodwork only; such as beamed ceilings, etc.	S-W Handcraft Stain: Penetrating spirit stain for new hard wood Floorlac: varnish and stain combined, new or old wood	Enameloid: assorted colors
Exterior .....	SWP House Paint:	Rexpar Varnish: weather resisting, for porch ceilings, etc.	S-W Oil Stain: for new wood	Old Dutch Enamel: white, gray, ivory, gloss or rubbed effect
CONCRETE .....	S-W Concrete Wall Finish: a paint, resists weather			
DOORS, Interior .....	SWP House Paint:	Scar-Not Varnish: gloss Velvet Finish Varnish No. 1044: dries to a dull finish without rubbing	S-W Handcraft Stain: penetrating spirit stain for new wood only	Enameloid: assorted colors
Exterior .....	SWP House Paint:	Rexpar Varnish: weather resisting spar varnish	S-W Oil Stain: for new wood	Old Dutch Enamel: white, gray, ivory. For interior and exterior use
FENCES .....	SWP House Paint: Metalastic (iron or wire only) S-W Roof and Bridge Paint: for rough work		S-W Preservative Shingle Stain	
FLOORS, Interior (wood) ..	S-W Inside Floor Paint: stands repeated scrubbing	Mar-Not Varnish: water resisting, heel-proof	Floorlac: a varnish and stain combined	S-W Inside Floor Paint: the enamel-like finish S-W Concrete Floor Finish: high-gloss; durable
Concrete .....	S-W Concrete Floor Finish: wears well; washes well			
Porch .....	S-W Porch and Deck Paint:			
FURNITURE, Indoors .....	Enameloid: the decorative enamel	Scar-Not Varnish: stands hard usage	Floorlac: a varnish and stain combined	Old Dutch Enamel: white, gray, ivory, gloss or rubbed effect Enameloid: assorted colors
Porch .....	Enameloid: assorted colors	Rexpar Varnish: weather resisting	S-W Oil Stain: for new wood	Old Dutch Enamel: enduring gloss
HOUSE OR GARAGE Exterior ..	SWP House Paint:	Rexpar Varnish: weather resisting	S-W Preservative Shingle Stain:	
IMPLEMENTS, TOOLS, TRACTORS, WAGONS, TRUCKS .....	S-W Wagon and Implement Paint	Rexpar Varnish		
LINOLEUM .....	S-W Inside Floor Paint: stands repeated scrubbing	Mar-Not Varnish: protects the pattern		S-W Inside Floor Paint: the enamel-like finish
RADIATORS .....	Flat-Tone: flat oil paint S-W Aluminum or Gold Paint			Enameloid: assorted colors
ROOFS, Shingle .....	S-W Roof and Bridge Paint: Metalastic		S-W Preservative Shingle Stain:	
Metal .....	Ebonol: black coal tar paint			
Composition .....				
SCREENS .....	S-W Screen Enamel:			S-W Screen Enamel
WALLS, Interior (Plaster or Wallboard) .....	Flat-Tone: the washable, flat oil paint SWP House Paint: a full oil gloss			Old Dutch Enamel: white, gray, ivory; gloss or rubbed effect Enameloid: assorted colors
WOODWORK, Interior ..	SWP House Paint: gloss Flat-Tone: flat oil paint.	Scar-Not Varnish: high gloss but can be rubbed to a dull finish Velvet Finish Varnish No. 1044: dries dull without rubbing	S-W Handcraft Stain: penetrating spirit stain for new hard wood S-W Oil Stain: for new soft wood Floorlac: for new or old wood; a varnish and stain combined	Old Dutch Enamel: white, gray, ivory; dull or gloss; aristocrat of enamels, specified by leading architects Enameloid: assorted colors

NOTE: Best results can be had by following the carefully prepared directions on labels.

SHERWIN-WILLIAMS  
PAINTS AND VARNISHES

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Mark on the "Household Guide" the particular surface or article you have in mind to finish. The Guide covers the more common problems. If you have some painting, varnishing, enameling or staining problems in your home, not covered by the Guide, write us. It will pay you to visit the store of the nearest Sherwin-Williams dealer and consult the more extensive store "Guide" displayed on his walls.

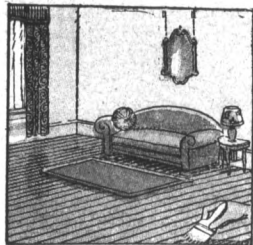
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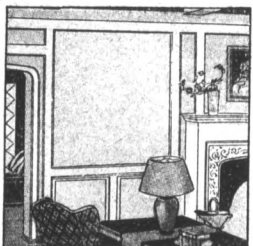
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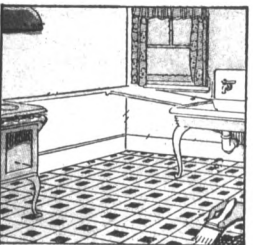
Have it handy for reference. It tells the exactly correct paint, varnish, stain or enamel for successful work throughout your home.



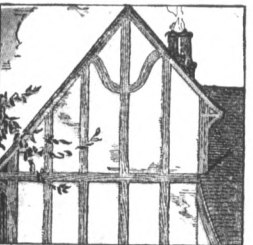
To enrich hard wood



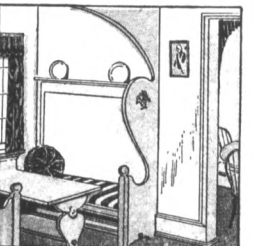
For cheerful satisfactory walls



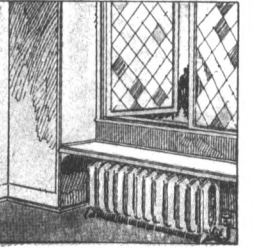
To keep linoleum like new



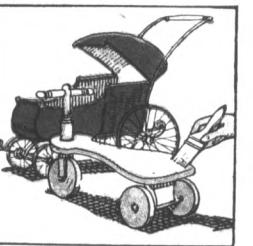
For stucco



To properly finish woodwork



For better-looking radiators



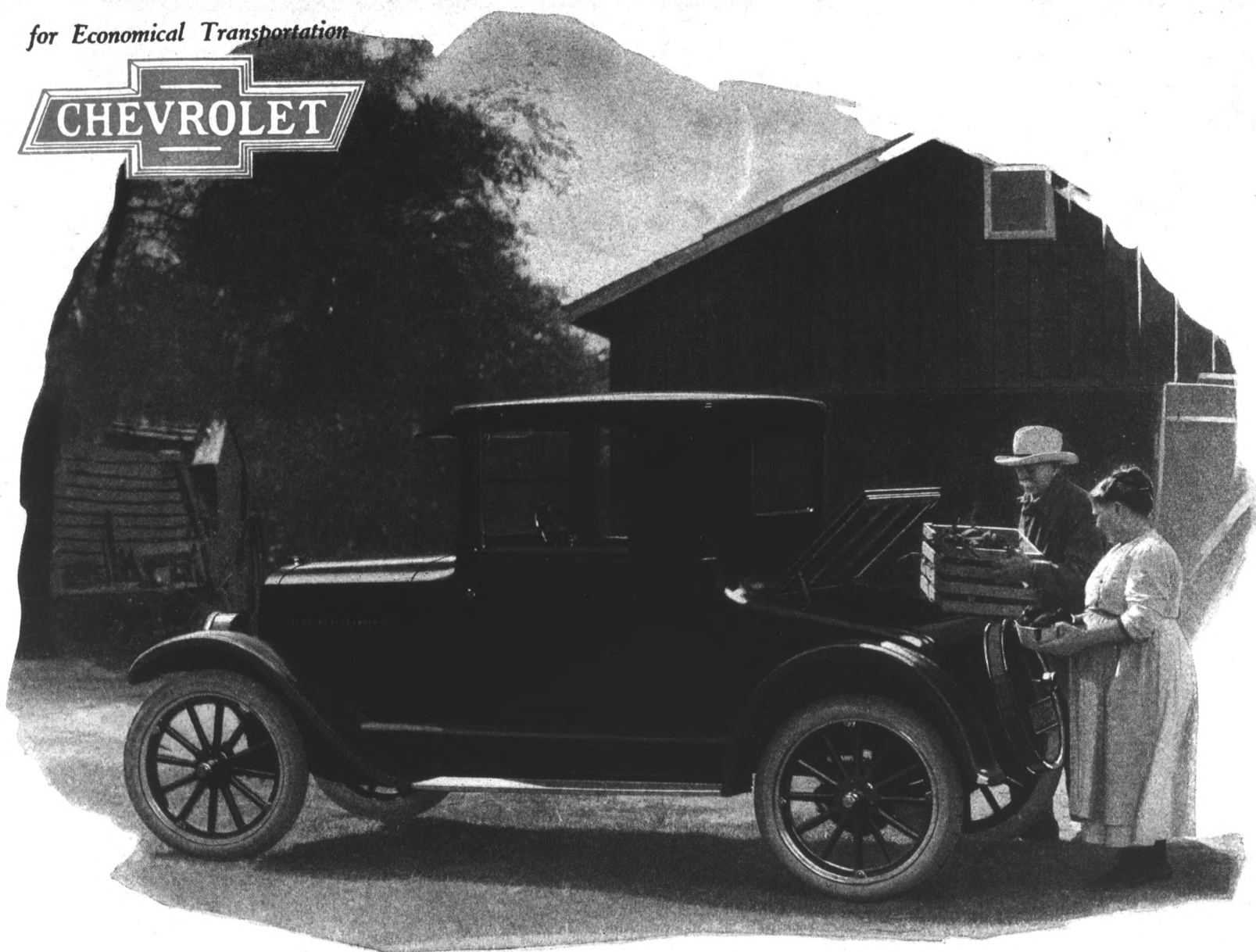
To make toys "new"



To withstand the weather



for Economical Transportation



## Every Farm Needs Two

**E**VERY farm needs two automobiles, one of which should be a closed model Chevrolet.

The open touring car is best for general farm use, carrying passengers or perhaps miscellaneous bulky produce or merchandise, but for cold or rainy weather, and for church or social use the family needs a closed car, either a two-passenger Utility Coupé as illustrated, or the five-passenger Sedan. The extra large rear compartment is the feature of the Coupé.

These closed cars are very finely made, furnished, upholstered and trimmed. The windows are of plate glass and can be lowered, providing as much air as an open car, yet affording full protection against wind, rain, snow or cold when raised.

With a second car on a farm, one is always available for those at home when the other car is out.

The low prices of Chevrolet make the ownership of two cars feasible for most farm families.

### Prices f. o. b. Flint, Michigan

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SUPERIOR Roadster	-	-	-	-	\$490
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SUPERIOR Sedan	-	-	-	-	795
SUPERIOR Commercial Chassis	-	-	-	-	395
SUPERIOR Light Delivery	-	-	-	-	495
Utility Express Truck Chassis	-	-	-	-	550

Chevrolet Dealers and Service Stations everywhere. Applications will be considered from high-grade dealers only, for territory not adequately covered.

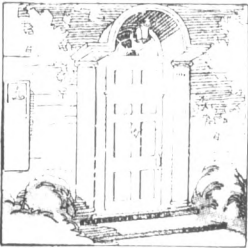
## Chevrolet Motor Company, Detroit, Michigan

Division of General Motors Corporation

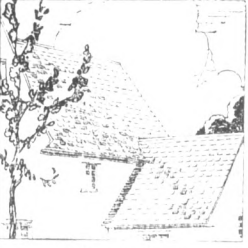




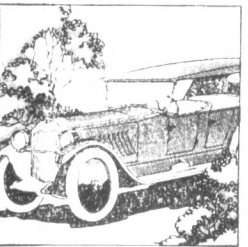
For permanence and beauty



To protect its beauty



To "insure" your roof



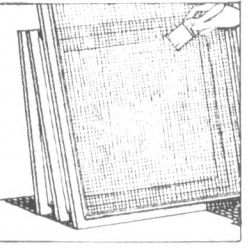
To "re-new" your car



For lasting attractiveness



To resist wear



To save your screens



To keep attractive

SAVE this guide for reference with your family, your painter and the Sherwin-Williams dealer

CONDENSED

# FARM GUIDE

For Painting, Varnishing, Staining and Enameling  
IMPORTANT: Each of the products specified below bears our name and trade mark



TRADE MARK

	TO PAINT <i>Use product named below</i>	TO VARNISH <i>Use product named below</i>	TO STAIN <i>Use product named below</i>	TO ENAMEL <i>Use product named below</i>
AUTOMOBILES .....	S-W Auto Enamel: for the man who paints his own car	S-W Auto Enamel Clear: a colorless varnish		S-W Auto Enamel: assorted colors
AUTOMOBILE TOPS AND SEATS .....	S-W Auto Top and S-W Auto Seat Dressing			
BARNs, SILOS, OUT-BUILDINGS, Etc. ....	S-W Commonwealth Paint: barn red and barn gray S-W Roof and Bridge Paint: 5 colors		S-W Preservative Shingle Stain	
BRICK .....	SWP House Paint: a full oil gloss S-W Concrete Wall Finish: dull finish			Old Dutch Enamel: full gloss for outside exposure
CEILINGs, Interior .....	Flat-Tone: the washable, flat oil paint	Scar-Not Varnish: for wood work only; such as beamed ceilings, etc.	S-W Handcraft Stain: Penetrating spirit stain for new hard wood Floorlac: varnish and stain combined, new or old wood	Enameloid: assorted colors
Exterior .....	SWP House Paint:	Rexpar Varnish: weather resisting, for porch ceilings, etc.	S-W Oil Stain: for new wood	Old Dutch Enamel: white, gray, ivory, gloss or rubbed effect
CONCRETE .....	S-W Concrete Wall Finish: a paint, resists weather			
DOORs, Interior .....	SWP House Paint:	Scar-Not Varnish: gloss Velvet Finish Varnish No. 1044: dries to a dull finish without rubbing	Floorlac: a varnish and stain combined S-W Handcraft Stain: penetrating spirit stain for new wood only	Enameloid: assorted colors
Exterior .....	SWP House Paint:	Rexpar Varnish: weather resisting spar varnish	S-W Oil Stain: for new wood	Old Dutch Enamel: white, gray, ivory. For interior and exterior use
FENCEs .....	SWP House Paint: Metalastic (iron or wire only) S-W Roof and Bridge Paint: for rough work		S-W Preservative Shingle Stain	
FLOORs, Interior (wood) ..	S-W Inside Floor Paint: stands repeated scrubbing	Mar-Not Varnish: water resisting, heel-proof	Floorlac: a varnish and stain combined	S-W Inside Floor Paint: the enamel-like finish S-W Concrete Floor Finish: high-gloss, durable
Concrete .....	S-W Concrete Floor Finish: wears well, washes well			
Porch .....	S-W Porch and Deck Paint:			
FURNITURE, Indoors .....	Enameloid: the decorative enamel	Scar-Not Varnish: stands hard usage	Floorlac: a varnish and stain combined	Old Dutch Enamel: white, gray, ivory, gloss or rubbed effect Enameloid: assorted colors
Porch .....	Enameloid: assorted colors	Rexpar Varnish: weather resisting	S-W Oil Stain: for new wood	
HOUSE OR GARAGE Exterior ..	SWP House Paint:	Rexpar Varnish: weather resisting	S-W Preservative Shingle Stain:	Old Dutch Enamel: enduring gloss
IMPLEMENTs, TOOLs, TRACTORs, WAGONs, TRUCKs .....	S-W Wagon and Implement Paint	Rexpar Varnish		
LINOLEUM .....	S-W Inside Floor Paint: stands repeated scrubbing	Mar-Not Varnish: protects the pattern		S-W Inside Floor Paint: the enamel-like finish
RADIATORs .....	Flat-Tone: flat oil paint S-W Aluminum or Gold Paint			Enameloid: assorted colors
ROOFs, Shingle .....	S-W Roof and Bridge Paint: Metalastic:		S-W Preservative Shingle Stain:	
Metal .....	Ebonol: black coal tar paint			
Composition .....				
SCREENs .....	S-W Screen Enamel:			S-W Screen Enamel
WALLs, Interior (Plaster or Wallboard) .....	Flat-Tone: the washable, flat oil paint SWP House Paint: a full oil gloss			Old Dutch Enamel: white, gray, ivory, gloss or rubbed effect Enameloid: assorted colors
WOODWORK, Interior ..	SWP House Paint: gloss Flat-Tone: flat oil paint	Scar-Not Varnish: high gloss but can be rubbed to a dull finish Velvet Finish Varnish No. 1044: dries dull without rubbing	S-W Handcraft Stain: penetrating spirit stain for new hard wood S-W Oil Stain: for new soft wood Floorlac: for new or old wood; a varnish and stain combined	Old Dutch Enamel: white, gray, ivory; dull or gloss; aristocrat of enamels, specified by leading architects Enameloid: assorted colors

NOTE: Best results can be had by following the carefully prepared directions on labels.

SHERWIN-WILLIAMS  
PAINTS AND VARNISHES

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Mark on the "Household Guide" the particular surface or article you have in mind to finish. The Guide covers the more common problems. If you have some painting, varnishing, enameling or staining problems in your home, not covered by the Guide, write us. It will pay you to visit the store of the nearest Sherwin-Williams dealer and consult the more extensive store "Guide" displayed on his walls.

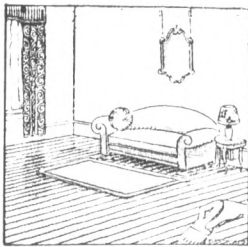
Write for free booklet B-45, with complete Household Guide and helpful information on all painting, varnishing, staining and enameling. Valuable whether you do the work yourself or employ a master painter.

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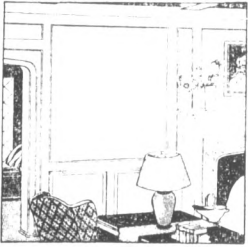
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# KEEP THIS PAGE

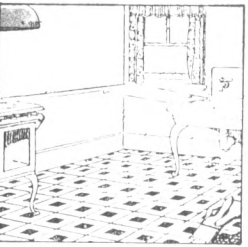
Have it handy for reference. It tells the exactly correct paint, varnish, stain or enamel for successful work throughout your home.



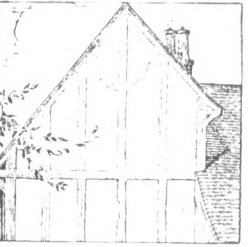
To enrich hard wood



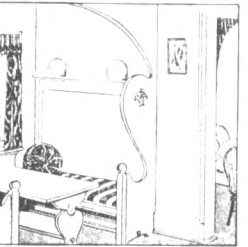
For cheerful satisfactory walls



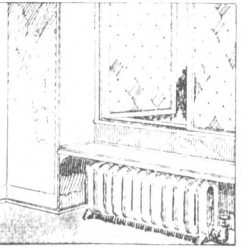
To keep linoleum like new



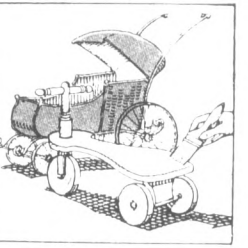
For stucco



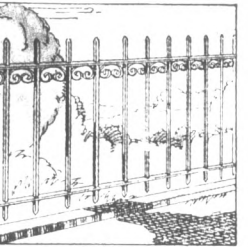
To properly finish woodwork



For better-looking radiators



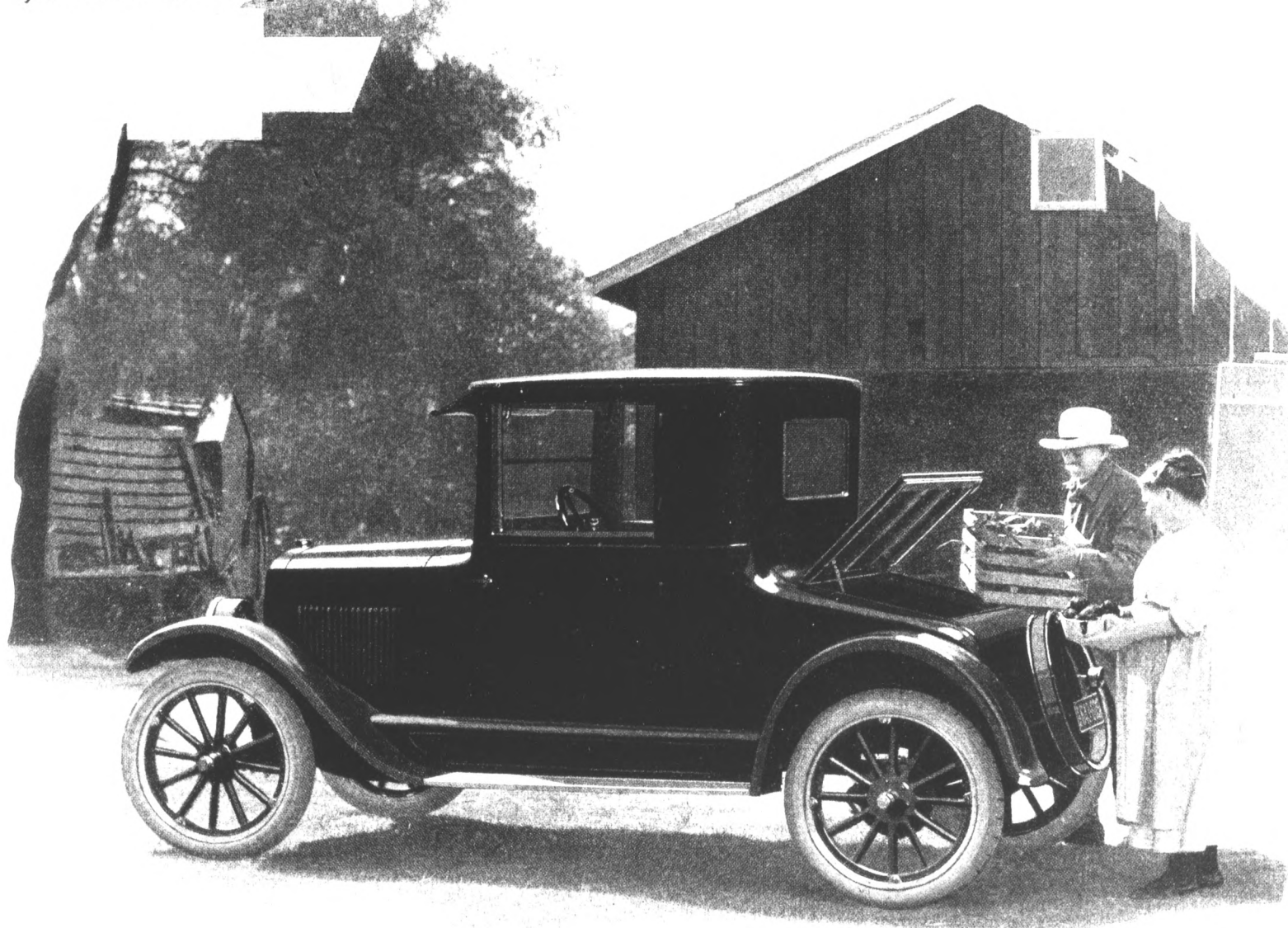
To make toys "new"



To withstand the weather



for Economical Transportation



## Every Farm Needs Two

**E**VERY farm needs two automobiles, one of which should be a closed model Chevrolet.

The open touring car is best for general farm use, carrying passengers or perhaps miscellaneous bulky produce or merchandise, but for cold or rainy weather, and for church or social use the family needs a closed car, either a two-passenger Utility Coupe as illustrated, or the five-passenger Sedan. The extra large rear compartment is the feature of the Coupe.

These closed cars are very finely made, furnished, upholstered and trimmed. The windows are of plate glass and can be lowered, providing as much air as an open car, yet affording full protection against wind, rain, snow or cold when raised.

With a second car on a farm, one is always available for those at home when the other car is out.

The low prices of Chevrolet make the ownership of two cars feasible for most farm families.

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SUPERIOR Roadster	-	-	-	-	\$490
SUPERIOR Touring	-	-	-	-	495
SUPERIOR Utility Coupe	-	-	-	-	640
SUPERIOR Sedan	-	-	-	-	795
SUPERIOR Commercial Chassis	-	-	-	-	395
SUPERIOR Light Delivery	-	-	-	-	495
Utility Express Truck Chassis	-	-	-	-	550

*Chevrolet Dealers and Service Stations everywhere. Applications will be considered from high-grade dealers only, for territory not adequately covered.*

## Chevrolet Motor Company, Detroit, Michigan

*Division of General Motors Corporation*



# JELL-O

with Apples

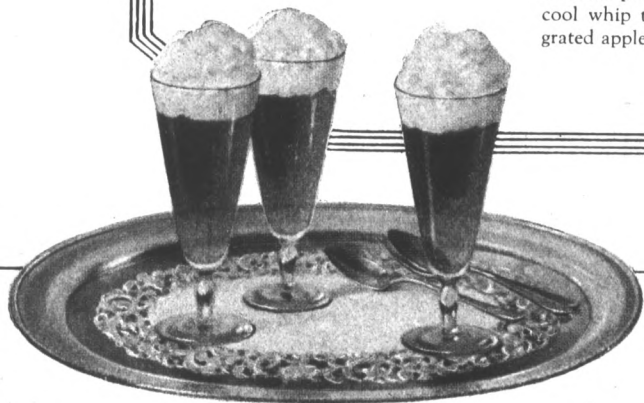


## JELL-O AND BAKED APPLES

BAKE six medium-sized or small apples that have had cores removed and filled with brown sugar and chopped nuts. When cold arrange the apples in a pan and cover them with Raspberry Jell-O (one package dissolved in a pint of boiling water). After the Jell-O has set, cut into squares, using a knife dipped in hot water, and serve with whipped cream. Or place each apple in a cup and pour the Jell-O over.

## APPLE SNOW JELL-O

Dissolve a package of Strawberry Jell-O in a pint of boiling water. When partly cold turn into sherbet glasses, filling three-quarters full. When firm pile Apple Snow on top. To make Apple Snow, dissolve one-half package of Lemon Jell-O in half a pint of boiling water. When cool whip to consistency of thick whipped cream. Then add one grated apple and four tablespoonfuls of sugar.



*The Genesee Pure Food Company,  
Le Roy, N.Y.  
Canadian Offices & Factory, Bridgeburg, Ont.*



## The White Desert

(Continued from page 360).

is disposed of. My contract is with the Mountain, Plains and Salt Lake Railroad. I don't even ask a discount, or for you to lose any of your profits. I don't even ask any public statement by you regarding my innocence. All I want is to have you do what you would do to any reputable business man who came to you with a contract running into the millions of dollars—to give me credit for that machinery. It's a fair proposition. Come in with me on it, and we'll forget the rest. Stay out—and I'll fight!"

For a long moment, Kilbane Worthington paced the floor, his hands clasped behind him, his rather thin head low upon his chest. Then, at last, he looked up.

"How long are you going to be in town?"

"Until this matter's settled."

"Where are you staying?"

"The Touraine."

"Very well. I'll have a machine there to pick you up at ten o'clock tomorrow morning and take you to my office. In the meanwhile—I'll think it over."

### CHAPTER XVIII.

IT was a grinning Barry Houston who leaped from the train at Tabernacle a week later and ran open-armed through the snow toward the waiting Ba'tiste.

"You got my telegram?" He asked it almost breathlessly.

"Ah, oui, oui! Sacre, and you are the wizard!"

"Hardly that." They were climbing into the bobsled. "I just had enough sense to put two and two together. On the train to Boston I got a tip about my case, something that led me to believe that the district attorney knew all the time that I was innocent. He had conducted experiments at the Bellstrand Hospital of which nothing had been said in the trial. Three famous doctors had been with him. As soon as I saw their names, I instinctively knew that if the experiments had turned out the way the district attorney had wanted them, he would have used them in the trial against me, but that their silence meant the testimony was favorable to me."

"Bon!" Ba'tiste grinned happily. "And he?"

"It just happened that now he is in the mill machinery business. I," and Houston smiled with the memory of his victory, "I convinced him that he should give me credit."

"Eet is good. In the woods there many men. The log, he is pile all about the mill. Three thousand tie, already they are stack up."

"And the woman—she has caused no trouble?"

"No. Peuff! I have no see her. Mebbe so, eet was a mistake."

"Maybe, B'tiste, but I was sure I recognized her. The Blackburn crowd hasn't given up the ghost yet?"

"Ah, no. But eet will. Still they think that we cannot fill the contract. They think that after the first shipment or so, then we will have to quit."

"They may be right, Ba'tiste. It would require nearly two thousand men to keep that mill supplied with logs, once we get into production, outside of the regular mill force, under conditions such as they are now. It would be ruinous. We've got to find some other way, Ba'tiste, of getting our product to the mill. That's all there is to it."

"Ba'teese, he have think of a way—that he have keep secret. Ba'teese, he have a, what-you-say, hump."

"Hunch, you mean?"

"Ah, oui. Eet is this. We will not bring the log to the mill. We will bring the mill to the log. We have to build the new plant, yes, oui? Then, bon, we shall build eet in the forest, where there is the lumber."

"Quite so. And then who will build

a railroad switch that can negotiate the hills to the mill?"

"Ah!" Ba'tiste clapped a hand to his forehead. "Veritas! I am the prize, what-you-say, squash! Ba'teese, he never think of eet!" A moment he sat glum, only to surge with another idea. "But, now, Ba'teese have eet! He shall go to Medaine! He shall tell her to write to the district attorney of Boston—that he will tell her—"

"It was part of my agreement, Ba'tiste, that he be forced to make no statements regarding my innocence."

"Ah, but—"

"It was either that, or lose the machinery. He's in business. He's afraid of notoriety. The plain, cold truth is that he tried to railroad me, and only my knowledge of that fact led him into doing a decent and honorable thing. But I sealed any chance of his moral aid when I made my bargain. It was my only chance."

Slowly Ba'tiste nodded and slapped the reins on the back of the horse.

"Ba'teese will not see Medaine," came at last, and they went on.

Again the waiting game, but a busy game however, one which kept the ice roads polished and slippery; which resulted, day by day, in a constantly growing mountain of logs about the diminutive sawmill. One in which plans were drawn, and shell-like buildings of mere slats and slab sidings erected, while heavy stone foundations were laid in the firm, rocky soil to support the machinery, when it arrived. A game in which Houston hurried from the forests to the mill and back again, now riding the log sheds as a matter of swifter locomotion, instead of the thrill, as he once had done. Another month went by, to bring with it the bill of loading which told that the saws, the beltings, the planers and edgers and trimmers, and the half hundred other items of machinery were at last on their way, a month of activities and—of hopes.

For to Ba'tiste Renaud and Barry Houston there yet remained one faint chance. The Blackburn crowd had taken on a gamble, one which, at the time, had seemed safe enough; the investment of thousands of dollars for a plant which they had believed firmly would be free of competition. That plant could not hope for sufficient business to keep it alive, with the railroad contract gone, and the bigger mill of Houston and Renaud in successful operation. There would come the time when they must forfeit that lease and contract through non-payment, or agree to re-lease them to the original owner. But would that time arrive soon enough? It was a grim possibility—a gambling wager that held forth hope, and at the same time threatened them with extinction. For the same thing applied to Houston and Ba'tiste that applied to Blackburn and Thayer. If they could not make good on their contract, the other mill was ever ready to step in.

"Eet all depen'," said Ba'tiste more than once during the snowy, frost-caked days in which they watched every freight train that pulled, white-coated, over the range into Tabernacle. "Eet all depen' on the future. Mebbe so, we make eet. Mebbe so, we do not. But we gamble, eh, mon Baree?"

"With our last cent," came the answer of the other man, and in the voice was grimness and enthusiasm. It was a game of life or extinction now.

March, and a few warm days, which melted the snows only that they might crust again. Back and forth traveled the bobsled to Tabernacle, only to meet with disappointment.

(Continued next week).

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The original compression ring for replacement. Its great flexibility and equal tension mean better performance in worn cylinders.



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**50¢**  
The original oil reservoir ring for oil-pumpers. Collects excess oil on each down stroke and empties on each up stroke, which ordinary grooved rings cannot do. Use one on each piston.

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**Alpha Portland Cement Co.**

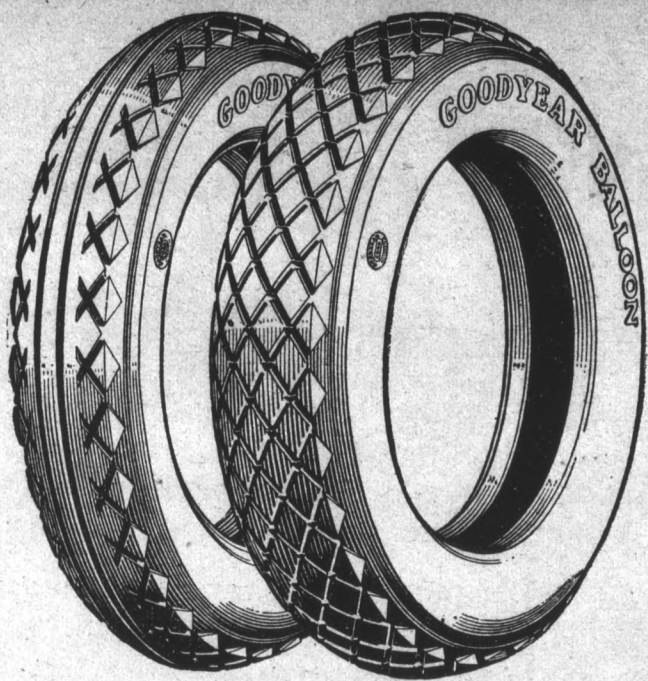
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**GOODYEAR**

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## About King Saul

Our Weekly Sermon—By N. A. McCune

THIS is the story of a county boy who was suddenly thrust into prominence and power. It is no wonder that he ran and hid himself among the stuff. It was different with others who rose from obscurity to great place, for they rose slowly. They matured as they went along. But with Saul it was done with a jump. And the surprising fact that strikes the Bible reader is, that the mistakes of the king were not made when he was green and trembling, but when he was old and experienced. His sins were not those of ignorant rashness, but of understanding rashness, which goes to support the statement frequently made, that a man's worst temptations do not always come in youth, but in middle life.

Saul cut his eye teeth in the king business in connection with a fracas between the Ammonites and a community at Jabesh. The Ammonites came over to the town hall at Jabesh and said that the two communities would always be on friendly terms, providing the men of



Jabesh permitted their neighbors to gouge out their right eyes. Probably the Ammonite warriors thought this would have the effect on the Jabeshites, that dehorning has on a cow. They would be quiet and docile from that time forth. A message was sent to the young king, to see what he would do in defense of his people. "His anger was kindled greatly," he sent out a call to war and defeated the Ammonites overwhelmingly. His stock was high from that day. His magnanimity was finely shown in his refusal to punish the base fellows who had despised him. If he only had continued the way he began! Kingship is hard on a man, seemingly. It was said by the Romans, "Of the emperors, Vespasian alone changed for the better after his accession." Perhaps that is one reason why there are so few kings left. Humanity feels that kingship is too great a strain.

STOP and think. Suppose some young man of your acquaintance should be suddenly elevated to a place of authority where he had the power of life and death. Suppose he were the most dependable, the most level-headed young man of your acquaintance. Having exchanged his farm clothes for a royal uniform covered with gold lace, his ability to toil for a dozen body-servants, and his herd of Holsteins for an army that awaited his command, would he make no mistakes? Would he not make some very serious mistakes, that people would be slow to forget? That partly explains Saul.

But his training was good. It was the discipline of real life—the invigorating out-of-doors, companionship with herdsmen and shepherds. The present king of England was trained in a similar school. King George was not the oldest son, hence was not educated for the throne. He was a sailor. "He has reefed the sail and swabbed the deck and fed the fire. He has stood at the helm through the tempest and the night. He knows what it is to be grimy and perspiring, to have blistered hands and tired feet. In short, he knows what it is to be a working-man. It is his unique merit as a king." That is something worth saying. Evidently the best training a king can receive is not to know he is to become one. That would fit Saul and David, but not Solomon. And there are kings who do not wear royal purple. Such are the kingly men who have become presidents of the American republic.

But King Saul fell. It looks as

though he fell as suddenly as he rose, but he probably did not. Men may rise suddenly, but they have been laying the foundation for that rise long before. And when they fall it is the same. They appear to go down with a thud, but in reality they have been slowly declining for a long time. There are two final scenes in the life of Saul, on which we ought to look, for they are like the red lights at a crossing that warn of an approaching train. The first is when he went to seek advice of a necromancer, the night before a battle. A man has fallen low when he seeks a fortune-teller, a witch, as his only source of counsel and comfort. I have always thought of that night as black and wet. At least it was black for Saul. The old witch cannot do him much good. The other scene is on the day of battle. Let First Samuel tell it: "Then said Saul to his armorbearer, 'Draw thy sword, and thrust me through therewith; lest these uncircumcised come and thrust me through, and abuse me.' But his armorbearer would not, for he was sore afraid. Therefore Saul took a sword and fell upon it."

Saul began the descent when he did some things he knew were not exactly right. They were not so bad in one way. He did not hold anyone up, kill him and take his money, nor steal another man's wife. But he did not fully obey the voice of God. He violated his own conscience until he arrived at the place where his conscience was no longer sensitive. It was not a quick plunge over the cliff. He was practicing for the plunge for years. Most men do. I think of two instances. They are as far apart as Saturn is from the earth. But in principle they are close together.

LORD Bacon was the most learned man of his day. He was one of the fathers of modern science. His head contained that rare substance called brains. But he lived a dual life. Dual-purpose cattle are good, but dual-purpose men are bad. On one side Bacon was high-minded, pursuing truth. On the other he was self-seeking, always looking for office. His letters to the Duke of Buckingham are like a puppy licking one's boots. Bacon fell, and it was a terrific fall. He was charged with receiving bribes while in office, fined forty thousand pounds and sent to prison. He said, "I am old, weak, ruined, in want, a very subject of pity." But he had been falling for years.

The other is that of the Bootleg King of California. His name was—or is—Harry Brelaski. In four months in 1920 this brainy young man made California the wettest state in the Union. People forgot there was a Volstead Act. The state was drenched in a tidal wave of liquor, and Brelaski and his pals made barrels of money out of it. One liquor transaction he negotiated amounted to \$200,000. He was convicted of violating the law and sentenced to two years in prison and to pay a fine of ten thousand dollars. Two facts show that this extraordinary young man, for such he is, did not experience any quick fall from honor. During the trial he threw dice at \$300 a throw, indicating that he had done it before. Further, a saying, frequently on his lips was, that he "always took a gambling chance." But one cannot gamble with right and wrong, in Saul's day or ours.

### SUNDAY SCHOOL LESSON FOR MARCH 9.

SUBJECT:—The Reign of Saul. I Sam. Chaps 8 to 15.  
GOLDEN TEXT:—"Behold, to obey is better than sacrifice."

Happy is the man whose pocket is empty enough that he can, if necessary, put his pride in it.

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4930 Industrial St., Peoria, Ill.





## Doings In Woodland

*Bruin Is Tricked Again*

LET'S build a little house out in the old maple tree for Lady Wren," said Rolly Rabbit to Bruin one morning. "She is the best singer in Woodland, and if we can get her to build her nest in that tree we will have music all summer."

"Fine," said Bruin, "and I'll help you. Yesterday I saw her fluttering around out there just as if she were looking for a place to make her home."

And so the two set about their carpenter's task. Bruin whittled and shaved the boards, while Rolly fitted and nailed them together. Everything was going well until just as Rolly's hammer came down on the biggest nail, it slipped right onto his biggest finger.

"Ouchie—ow, ouchie—ow," he cried. "That hammer is so hard," and ran off



"I Have Something that will Cure the Pain Right Quick," said Dr. Fox.

to the house to get some medicine for it. Bruin followed on the run, too, for he had pounded his finger lots of times and knew just how badly it hurt.

When the bruised finger was all bathed in some clear water, Bruin went for the "Sooth-all."

"Oh, dearie me! The bottle is empty," called Bruin from the bedroom. "Whatever shall we do?"

"Run over to Willie Woodchuck's house," said Rolly. "I'm sure he'll have some."

But when Bruin was only out by the front gate, he met Mr. Fox.

"Good morning, sir," said the fox. "Why the hurry and the sad face this fine morning?"

"My friend, Rolly Rabbit, has just hurt his finger, and I am on my way to get some medicine for him," said Bruin. "Sorry I can't stop to talk."

"But wait, sir. I am Doctor Quack Fox, and I have something here that will cure the pain right quick," he said. "You may have it for twenty-five cents."

"Oh, thank you, kind friend. Here is the money," said Bruin, reaching into his pocket. "It will save me so much time."

Never looking at the bottle the doctor gave him, he ran back to the house and the doctor went hurrying down the road.

Explaining to Rolly how he got the medicine, he started to put some on Rolly's injured finger.

"But what do the directions say?" asked Rolly.

Then Bruin began to read. "For coughs and colds, take one teaspoonful every hour."

"Ah, ha! A sly fox has tricked you again," laughed Rolly.

"Tricked again," admitted Bruin. "If I only hadn't been in such a hurry. But I'll run as fast as I can to Willie Woodchuck's for the Sooth-all."

And on his way he resolved to be more careful after this. He had learned again that "the more haste the less speed."

### THEY ARE TWINS.

Dear Aunt Martha:

My birthday was yesterday. A neighbor boy's birthday is the same day as mine.

Well, I guess this is all for this time.

From a little reader of your woodland stories, Ida Farnsworth, Wayland, Michigan, R. 1.

## Springtime Recollections

THE melancholy days are waning. Already the sun's rays shine bright and warm, gladdening the heart of both man and beast. The huge snowdrifts that are always a part of the winter landscape of this Northland, are shrinking perceptibly as though to hide themselves from the gaze of Old Sol.

Mother, who has been hibernating, so to speak, during the storms and blizzards of the long winter, ventures forth on one of these bright sunny days to call on Mrs. Neighbor.

The boys are shining the sap buckets and getting everything in shape for tapping as soon as the snow settles a little more.

Father is pounding on something in his workshop, and actually whistling.

"Dad used to whistle a great deal in his younger days," mother recalls as she walks along the still drifted roadway, leading from her modest home to that of her neighbor. "Let's see, it's fifteen—no, it's seventeen years ago this spring that dad and I first kept company (that term has now become obsolete, but not for mother). Funny, I had always known John, but I never had thought of loving him till we went on that picnic," mused mother. "Later, when I got to know him better, much better, in fact, I learned that he shared a like indifference toward me. Of course, I had been a little girl of eight and he a big boy of seventeen

when my folks settled here. My! How quickly time flies," thought mother to herself. "Then, like most boys entering young manhood he went away for several years 'to see the world,' only to return and find me grown up and in the early twenties. But it was that picnic that did it, and by the time John had taken three helpings of salad I had made, I knew he was more than casually interested in me. Well, by going-home time we were what you'd call badly smitten. That summer, John settled down on the home farm to earn his fortune, and in the fall I settled down with him. In the eyes of the world our fortunes may not be accounted large, but taking all in all, there have been more fat years than lean ones."

Here mother came to an abrupt stop. She had walked a few paces past the neighbor's gate. A blush stole over her countenance to think that she had become so engrossed in those past courtship days as to forget where she was going.

"Must be those sun's rays going to my head," chuckled mother.

"Just the same, I hope there will be more such picnics this very spring, and with like results, too," mother thought secretly to herself as she tapped on her neighbor's door.—Mrs. G. S.

If combs freeze, get more air into the henhouse. It's a sign of dampness.

## "They Can't Put You in Jail for That!"

"Can't, eh?" said the man, "Well, I'm here!"

After your sleepless night from coffee drinking and your friends say it's all imagination, remember the sleepless night.

Also remember that Postum, the pure cereal beverage, contains nothing that can interfere with sleep. It has every desirable quality of a mealtime drink—cheering warmth, delightful flavor and wholesomeness that makes for health.

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"There's a Reason"

Your grocer sells Postum in two forms: Instant Postum [in tins] prepared instantly in the cup by the addition of boiling water. Postum Cereal [in packages] for those who prefer the flavor brought out by boiling fully 20 minutes. The cost of either form is about one-half cent a cup.



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In quality and price. I invite comparisons with any similar products manufactured anywhere, sold by anyone. My Bargains speak for themselves. My Direct-from-Factory-to-Farm Plan of selling means a saving of Millions of Dollars to my customers.

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CREAM SEPARATORS, ROLLERS, MANURE SPREADERS are 3 leaders that make my challenge airtight. I know there are no better products made. I have seen and tested them all. No price lower than mine, no terms easier, investigate, compare, test thoroughly on my Trial Plan. Then decide whether you keep mine or the other. Write for big 50-day Sale Bargain Circular. W. M. GALLOWAY CO. 187 Galloway, Sta. Waterloo, Iowa.

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### Frost Proof, Open Field Grown

Cabbage, onion and tomato plants, \$1.00 thousand. Northern farmers grow vegetables fifteen to twenty days earlier with our plants. Safe delivery guaranteed. Catalog free. CARLISLE SEED & PLANT FARMS, Valdosta, Ga.

## --FISH--

New Winter Caught Frozen Pickerel, round 8½¢ per lb.; headless and dressed, 10½¢; Bayfish, large, 7¢; Pike, 14¢; Salmon, 14¢; Flounders, 10¢; Gold Eyes, 10¢. Packing charge, 35 lbs., 25¢; 50 lbs., 30¢; 100 lbs., 35¢. Smoked Tullibee White, 10-lb. basket, \$2.00; Smoked Bluefish, \$1.00. Write for complete price list. JOHNSON FISH CO., Green Bay, Wis.

### FARMS & FARM LANDS

PAY NO ADVANCE FEE; don't give option or tie up real estate for any kind of contract without first knowing those you are dealing with are absolutely honorable, responsible and reliable.

FOR RENT—Farm 120 acres 20 miles south Detroit, good buildings, on electric line, for information address, I. S. Miller, Rockwood, Mich.

Will Sell or Exchange for small farm, a home, nearly two acres. MRS. T. LAVELL, Novi, Mich.

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**For Quick Sale** 80 Acres, tiled, fenced in 10 A. fields, clay soil, 12-room house, hardwood floors, basement, 3 porches, shade. Big cement basement barn and other buildings, windmill and orchard, 6 miles from town, good schools and churches. \$5,500.00 with good terms. For particulars address, C. H. RIDGLEY, Whittemore, Mich.

**Chicken Ranch** inside the corporation of Ewart, Michigan, 10 acres, good loam land, good 7-room frame house with basement, excellent soil for fruit and chicken raising, price for immediate sale, \$900.00 cash, lots of work for laborer in Ewart. Write W. F. UMPHREY, Ewart, Michigan.

**HOMESTEAD FOR SALE** Price attractive, 120 miles from Tecumseh, Michigan. Big brick house suitable for Overnight Inn. Fine location for Roadside Stand. Land will grow anything. Write Mrs. C. A. Payne, Watkins, N. Y.

**Would you Buy a Home?** With our liberal terms. White people only, good land, healthy progressive country. Write for list, Mills Land Co., Booneville, Ark.

**Now is the Time** To buy your farm, and own your home. Let me prove this to you. Write for list, \$6 to \$100 per acre. J. H. Strang, Lakeview, Mich.

**IF YOU WANT TO LIVE** in California write Kings Commerce, Hanford, California, for free booklet.

**WANT TO HEAR** from party having farm for sale. Give particulars and lowest price. John J. Black, Copper St., Chippewa Falls, Wis.

**For Sale or Trade** 80-acre farm near Birch Run. Inquire or write. J. A. SUBER, 1511 5th St., Detroit.





# Woman's Interests



## Dress the School Girls Appropriately

### School Girl Charm Is Lost by Expensive Clothes and Accessories

**T**O expect the modern high school girl to revert to the simple modes of dress of the days of their grandmother's, is quite unreasonable. But to permit her to dress as a woman of fashion is also unreasonable. It is this latter impression one often receives of the pupils when visiting some of our modern high schools.

It is true that the standard of dress of the whole nation has advanced rapidly during the recent years. Women in every walk of life spend more thought, time and money on clothing than ever before. But this tendency is often found in an exaggerated form

material will be warm and will look well for at least two years.

"Plain oxfords or some similar shoe should be worn, not low-cut sandals which furnish no protection for the feet in bad weather. A medium military style of heel is best for all times, but consistency in height is the main point to keep your arches strong." Wool hose should be worn in cold weather, but it is better to wear silk or cotton every day than wool one day and silk the next.

#### Avoid Vulgarities.

"Gaudy jewelry and strong perfumes are out of place at all times and most decidedly at school. Powder and rouge should never be used so one can detect them."

"Some cities insist on a uniform dress, middie or some similar costume for school girls. Their greatest advantage is in creating a better feeling among the students."

#### TESTED RECIPES.

These recipes are from readers anxious to pass on their good things.

#### Delicious Buns.

1 large cup of bread dough  
1 cup lukewarm water  
Pinch salt  
1/2 cup sugar  
Lard size of egg

Mix enough flour to make a nice dough and set aside in a warm place to rise. When light pinch off in biscuit size and place in a well-greased baking pan. When light bake in a moderate oven.—Mrs. E. C.

#### Dropped Doughnuts.

1/2 cup milk  
1/2 cup sugar  
Grated rind of one lemon  
1 egg  
1 1/2 cups flour  
1-3 tsp. salt  
1-3 tsp. nutmeg  
1 heaping tsp. baking powder

Mix together and drop in hot fat. Hold the teaspoon of batter close to the fat so the dough will come up in round balls and will not spatter.—Mrs. E. S.

#### Layer Fruit Cake.

1 cup sugar  
1/2 cup butter  
2 tb. molasses  
1 cup buttermilk  
2 cups flour  
1 tsp. soda  
1/2 tsp. nutmeg  
1/2 tsp. cinnamon  
1/4 tsp. cloves  
1/2 cup chopped raisins

Bake in three layers. We like the following filling for this cake. It may be kept in fruit jars and used as needed.

3 lbs. finely chopped pears  
2 1/2 lbs. sugar  
2 lbs. raisins  
2 cups nut meats

Cook the pears until tender, add

sugar and boil until it is thick. Add raisins, ground, and bring to a boil. Add nut meats just before putting in fruit jars.—Mrs. F. E. L.

#### Hand Lotion.

1/2 pint rainwater  
5c worth ground quince seed

Let stand twenty-four hours and strain through cloth. Add five cents worth of benzoin and fifteen cents worth of glycerine. Keep in bottles well corked.—Mrs. R. E. M.

#### EASY WAY TO FILL RESERVOIR.

**I** USE about six feet of round eave trough and one elbow in filling my reservoir. I attach the elbow to the mouth of the cistern pump and the trough carries the water directly to the reservoir. It can all be done in a few minutes.—Mrs. A. M.

#### WHEN IT'S TIME TO GET UP.

**M**Y little girl ten years old, was in no hurry to get up mornings, but would wait for the second, and sometimes the third call. With my help she usually got to school on time.

I thought it was time she learned to plan her own mornings, so when one morning I called and she didn't get up, I determined to let her remain as long as she wished and suffer the consequences. It was eight o'clock when she arose and found she had fifteen minutes to dress and eat breakfast and allow thirty minutes to walk one mile to school. She made it, but it was a warning against oversleeping in the future.

#### USES FOR A CHILD'S GARDEN RAKE.

**I** FIND a child's garden rake purchased at the ten cent store, is a very handy convenience for my kitchen. I use it to draw the hot pies out of the oven, or hot baked potatoes and other dishes. It saves me many burns. When the fruit jars are placed at the back of wide shelves rather high up, I can use my little rake to draw them where I can reach them. When anything rolls under the stove or the cabinet it is an easy matter to "fish" it out with this little rake.—Mrs. H. M.

## To Be Beautiful

**E**VERYONE ought to be interested in an appearance which is attractive and pleasing to others. Why should we presume to be a blot on a landscape of so much natural beauty? It is a personal satisfaction to know that we are making the most of ourselves.

To radiate a truly beautiful spirit, and to be sure of a sincere manner and charm of presence, we must be kindly in our thoughts as well as our words. The beauty which lasts must be more than skin deep.

No one can be beautiful or interesting who does not get sleep enough. Scientists have proved that the brain cells possess a vital element which is exhausted during our waking hours, and renewed during sleep.

The brain cells of an individual killed, or who dies after suffering great

fatigue or strain, are so lacking in this vital element that they cannot be stained different colors readily by laboratory work; whereas, the brain cells of a rested and alert individual will take on a bright stain or tint readily. Students and other workers who fail to get sleep enough are short-sighted and stupid. They are trying to make bricks without straw or clay, and it cannot be done.

The individual who is decidedly over-weight or under-weight has sacrificed symmetry and beauty. Health is not at par, and efficiency and enjoyment of life are both lowered. The person of determination and strong will, will keep watch of his or her weight and will use safe and logical means to keep it at normal.

One important element of personal attractiveness, is what may be described as "trigness" in a woman, or "careful grooming."

There are two sisters who are twins, and naturally almost identically alike in form and feature. One has stringy hair which always looks ragged and poorly cared for, sallow skin, stubby nails, and collar awry. Her clothing is of good quality, but inclined to be mussed, and often to lack brushing. Shoes and gloves show the evidence of neglect. This woman's social position is an indifferent one, for people do not value her for what she really is.

The other sister is "trig" from head to foot. Her hair is shining and always beautifully combed. Her skin is clear, her eyes sparkling, her hands and nails in good condition, and her garments becoming and beautifully cared for. As a matter of fact, this sister accomplishes twice as much as the careless one. Her social position corresponds to her appearance, because her mental processes keep step with her culture and painstaking nature. She is frequently described as "a very beautiful woman."—Emma G. Wallace.



Little Anna Dell is Washing Her Dog's Face for Breakfast. (Prize Winner).

in the dress of modern high school girls.

In many cases these girls are not even well dressed, for society demands that to be well dressed our clothing must be suited to the occasion. For the school girl the simple, practical frocks are more appropriate than the fancy expensive ones and add much more of the real school girl charm.

Here are some suggestions of a home economics specialist on appropriate dress for the high school girl.

"Dark colored tricotine, serge, or poiret twill, which will not readily show soil, are all good materials for school dresses. They should be made with removable linings which may be washed frequently. The lining is a protection for the dress, and if laundered regularly will wear as long as the dress. Washable collars, cuffs, and vests will make one dress look like several. The dainty summer frocks in any material that washes well are always appropriate for warmer days.

"Avoid extremes in style; medium length and width skirts are far easier to walk in. "A plain straight sleeve looks well, is warm, and slips under a coat smoothly. Evening dresses should not be worn to school. Girls' evening dresses should be made on youthful lines, not with elaborate drapings."

"Fur coats are not appropriate for high school girls because they tend to create petty jealousies and leave nothing for a girl to look forward to when she gets older. An expensive fur coat for a young girl is not wise because she is often careless with it, and wardrobes at school are generally inadequate. A cheap fur coat is shabby in its second year, while a good cloth coat with a durable fur collar of the



Mrs. L. L. S., of Onondaga, Found Her Time Profitably Spent in Raising these Motherless Lambs. (A Prize Winner).



## Roaches Have Gypsy Nature

THAT roaches have a gypsy nature is declared by R. L. Webster, entomologist.

"In towns roaches may move from house to house," said Mr. Webster. "They have even been known to leave one house in large numbers and migrate to another. But whether they enter in bands or singly they are a pest that is especially repulsive.

They are probably the most annoying of the common insects, according to Mr. Webster, and some time in the history of nearly every home they make their appearance and cause the housewife no end of trouble.

Damp localities, such as the neighborhood of the kitchen sink, is their favorite habitat. They are night prowlers and usually remain hidden during the daytime. Roaches may be recognized by their brown or black color and their size, which is usually a half inch or more in length. Their flat bodies are well fitted for hiding away in cracks under baseboards.

Roaches reproduce by means of eggs and the young roach is similar in appearance to the mature forms, excepting in size and in the absence of wings that indicate the full grown insect.

"Probably the most effective method of controlling roaches is by the use of sodium fluoride," Mr. Webster explained. "This is a white powder that may be purchased at almost any drug store. The powder should be dusted in liberal quantities into all locations in the house frequented by the insects, especially in pantries and under sinks. Sodium fluoride should never come in contact with any foodstuffs, however, since it is poisonous."

"On the market there are a number of preparations for the control of cockroaches. Many of these contain borax or boric acid, which may be purchased as such from the druggist and applied in the same manner as the sodium fluoride previously mentioned."

Any treatment for cockroaches must be continued for several weeks, if success is to be attained. Persistence is necessary, regardless of whatever measure is used against these trouble-

some insects. Special care should be taken never to allow bread crumbs or other food of any description to remain exposed about the house, since this encourages the insect.

### CHRONICLES OF A FARMER'S WIFE.

5:30 to 6:00—Preparing breakfast.  
6:00 to 6:20—Eating breakfast.  
6:20 to 6:30—Clearing table.  
6:30 to 7:00—Putting up school lunches for four.  
7:00 to 7:30—Reviewing lessons for the day at school.  
7:30 to 8:15—Getting the children ready for school.  
8:15 to 8:30—Getting car out and taking children one and one-half miles to school.  
8:30 to 8:40—Sorting clothes to wash.  
8:40 to 8:50—Getting first boiler full of clothes on to boil.  
8:50 to 9:10—Washing breakfast dishes.  
9:10 to 9:15—Sweeping kitchen.  
9:15 to 9:30—Putting dining-room and living-room in order for the day.  
9:30 Started to wash.  
11:00 to 11:15—Getting vegetables on for dinner.  
11:15 to 11:45—Hanging out some clothes.  
11:45 to 12:00—Putting dinner onto table.  
12:00 to 12:20—Eating dinner.  
12:20 to 12:30—Washing dishes.  
12:30 to 1:30—Finishing washing.  
1:30 to 2:15—Scrubbing woodshed and porches.  
12:15 to 4:00—Washing windows.  
4:00 to 4:15—Going after children.  
4:15 to 5:00—Dampening clothes.  
5:00 to 5:15—Entertaining caller.  
5:15 to 5:50—Preparing supper.  
5:50 to 6:20—Eating supper.  
6:20 to 6:40—Washing dishes.  
6:40 to 8:00—Spent with children.  
8:00 to 8:15—Putting children to bed.  
8:15 to 9:00—Reading.  
9:00 To bed, and ready for it.—Mrs. E. W. W.

## Interest Your Children In Books

A FEW days ago I drifted into one of the large book stores in this big city. My attention was immediately drawn to the number of people crowding around a certain department. Instinct told me there must be a bargain, and a woman's inclination toward bargains led me directly to that part of the store.

This large book store was promoting a sale on children's books. The eagerness and thoughtfulness with which these mothers, and I grant also grandmothers and aunts, were selecting books to develop along constructive channels the minds of the children in which they were interested, were entertaining.

I paused by one of the counters with more than ordinary interest in the situation. One prospective customer, drawing upon the opinion of a kindly saleslady, said, "I want a book that is easy for a ten-year-old girl to read."

This mother undoubtedly did not make this specification because she was afraid of giving the child something hard to do; but rather to instill in her youthful mind that reading is a pleasure.

It is essential also, that the books we select for children be interesting to them, as well as easy to read. Stories within the child's sphere of experience in life are most appreciated and leave their impression. Stories of imaginative happenings and unusual incidents are always entertaining and have their part in developing the imaginative nature of the child.

Mother and father may do much to lead the little folks to love the right kind of books. One mother recently told me of her experience in developing the reading habit in her young son. "His father and I often read the books he reads," she said, "so we can discuss it with him afterward. In some stories we try to see who can find the most hidden lessons. If we have other books that will help him to understand more thoroughly the one he is reading, we leave them lying on the library table where they will be sure to catch his eye. When he finds something himself, that connects up with what he has previously read in a story, it is much more interesting to him than as if we called his attention to it."

In working with children I have found that dramatizing certain scenes or a part of the story impresses the lesson upon the young mind almost indelibly. Months afterward the child will give voluntary reference to the story.

The child's mind is easily molded, and molding in the early days has a lasting effect upon the mature life of the child. If the child can be led to develop the reading habit as a pleasure, concentration in his later school work comes easily. Wise is the parent who sees to it that their children read the right kind of books, and plenty of them. The right reading habit developed in a child will cling to him when his school days are memories.

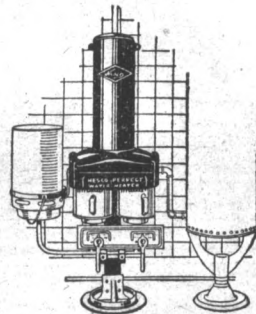


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### FACTS FOR FARMERS

Things Our Readers Want to Know

Farmers have found it is well to wash  
out troughs and pens thoroughly once a  
week with a strong solution of Red Seal  
Lye, as it instantly kills worm-eggs, lice,  
insects and vermin.

Scale on fruit trees is removed by  
spraying them with a solution of Red  
Seal Lye.

Any article (except aluminum) that  
comes into contact with oil and dirt—  
such as lamps, gas-stove burners, farm  
machinery and tools—can be quickly and  
thoroughly cleaned with proper Red Seal  
Lye solution.

Floors, walls and steps are made spick  
and span by washing them with a strong  
Red Seal Lye solution. No scrubbing is  
necessary, as the Red Seal Lye loosens  
the dirt and cuts the grease like a knife.

## Household Service

Use this department to help solve  
your household problems. Address  
your letters to Martha Cole, Michi-  
gan Farmer, Detroit, Michigan.

### TO PREVENT LEATHER CHAIRS FROM STICKING.

Could you tell me how to keep leather  
upholstered chairs from sticking in  
warm weather? Have tried soap and  
water, also gasoline, but this does no  
good.—N. P.

If you have used soap and water on  
your chairs, it may be hard now to  
prevent them from sticking.

However, if the soap has not been  
strong enough to injure the leather,  
rub them well with gasoline and then  
apply neat's-foot oil. Rub this well  
onto the leather, and do not wipe off  
for a day or two.

Apply this treatment every three or  
four weeks, until the finish hardens.

### GRAHAM BREAD FOR HEALTH.

I would like a recipe for making  
raised graham bread.—Mrs. C. O. B.

Put one cup of molasses and one  
teaspoon of soda over fire and stir  
until it foams, then add one pint of  
sweet milk, one teaspoon of salt, four  
cups of graham flour sifted with two  
teaspoons of baking powder. Stir  
well. Put into greased tins. Let stand  
two hours to raise, and then bake.

It makes a good proportion for gra-  
ham bread to use half white flour and  
half graham flour with the regular  
bread recipe.

### CHILI CON CARNI.

Please send me a recipe for chili  
con carni.—Mrs. C. R. H.

The following is a recommended  
recipe for chili con carni which one  
of our subscribers says is very good.

#### Chili Con Carni.

1 lb. hamburger 1 can red kidney  
Salt, pepper beans  
3 medium-sized onions 1 can peas  
1 qt. tomatoes

Fry the onions until straw-colored.  
Add the hamburger and fry until brown.  
Season to suit the taste. Put toma-  
toes, kidney beans and peas into a ket-  
tle, then add meat and onions. Allow  
to simmer about an hour. Chili pow-  
der may be added if desired.

### REMOVING PRINTING FROM CLOTH.

Would you please tell me a good  
way to take the advertising stamp out  
of the cloth flour sacks. I have been  
washing them after soaking in sal  
soda, but it takes several washings  
before it disappears.—Mrs. D. J. D.

To take the advertising stamp out  
of flour sacks, if you will soak the  
sacks first in kerosene before wash-  
ing, the stamp will come out easily.

### RECIPE FOR WASHING FLUID.

I AM anxious to pass on my recipe  
for washing fluid because it has  
helped me so much to overcome Blue  
Mondays. To make this fluid I use  
one can of potash, ten cents worth of  
salts of ammonia, and salts of tartar.  
Over this I pour six quarts of hot wa-  
ter. Do not have this near the paint  
or varnish and do not inhale fumes  
when the water is added. When this  
liquid is cold pour into large bottle.  
This is wonderful to whiten clothes  
and takes the dirt out easily. I add  
one cup of this fluid to the water in  
the boiler before boiling.—Mrs. W. M.

A tasty salad which nearly every-  
one likes is the banana and peanut  
salad. For this salad the bananas, af-  
ter being cut in half, lengthwise, are  
rolled in the ground peanuts, placed  
on a lettuce leaf and served with  
dressing. Sometimes I vary it a little  
and use a spoonful of whipped cream  
instead of the dressing. This is also  
good when served with a spoonful of  
maple syrup poured over it.

## Milder Musterole for Small Children

Thousands of mothers tell us  
they would not be without  
*Children's Musterole*, the new  
and milder form of good old  
Musterole especially pre-  
pared for use on babies and  
small children.

In the dead of night, when they are  
awakened by the warning, croupy  
cough, they rub the clean, white oint-  
ment gently over the child's throat  
and chest and then go back to bed.

Children's Musterole, like regular  
Musterole, penetrates the skin with a  
warming tingle and goes quickly to the  
seat of the trouble.

It does not blister like the old-fash-  
ioned mustard plaster and it is not  
messy to apply.

Made from pure oil of mustard, it  
takes the kink out of stiff necks, makes  
sore throats well, stops croupy coughs  
and colds. In jars, 35c.

The Musterole Co., Cleveland, Ohio

CHILDREN'S

**MUSTEROLE**  
WILL NOT BLISTER  
MILD  
BETTER THAN A MUSTARD PLASTER

**STRAWBERRY PLANTS** Complete line  
Small Fruit Plants, Asparagus Roots, Roses, Gladioli, Peren-  
nials, Ornamental Shrubbery, Etc. CATALOG FREE.  
WATSON'S STRAWBERRY ACRES Grape Vines \$25 and up per  
dozen, Box 7, Grand Rapids, Mich.

**12 Apple Trees**  
4 ft. average  
\$3.15

**FREE CATALOG**  
IMOGENE Wonder Raspberry  
To Customers  
FREE Supply Limited

**BARGAINS**  
bargains like the following: 100 Straw-  
berries \$1, 20 Red or Black Raspberries  
\$1, 12 Blackberries \$1, 12 Concord Grapes  
\$1, 5 Indian Currants \$1, 8 Roses  
\$1, 5 Snowberry \$1. Many other  
wonderful bargains in free cat-  
alog. Write now for Raspberry offer  
Earl Ferris Nursery Co.  
606 Bridge St. Hampton, Iowa

Also contains  
many  
100 Evergreens  
Northern Growers  
Norway  
Spruce \$2.50

More and Better  
**Home Grown Fruit**

to eat and preserve.

**Flowers**

to beautify the grounds.

**Our New Catalog**

Illustrated in natural colors from actual  
specimens, is yours for the asking.

**CHASE BROTHERS COMPANY**

The Rochester Nurseries

Service Dept. D Rochester, N. Y.  
Sixty-seventh Year

# Aspirin

Beware of Imitations!



**Demand**

Genuine "Bayer Tablets of Aspirin"  
have been proved safe by millions and  
prescribed by physicians over twenty-  
three years. Aspirin is the trade mark  
of Bayer Manufacture of Monoacetic-  
acidester of Salicylic acid.



# Rural Health

By Dr. C. H. Lerrigo

## DON'T PUT PINS IN THE MOUTH.

ONE of the very first calls I received after hanging out my shingle was from a frantic mother whose baby had commenced a savings account in an irregular manner by swallowing a penny. All that I had to do in her case was to ask her to give it time to pass into currency again, but that was only the first of my experiences with wrong swallowings on the part of babies, and some older persons.

Usually a foreign body that is safely swallowed should be left alone; even open safety pins often pass through the entire alimentary tract without doing any harm. The anxious parent must please refrain from giving castor oil or any other purgative, as that increases the action of the intestines and makes it more likely that the pin or other object will cause damage. So long as no evil symptoms show, the only thing to do is to wait.

In my experience pins, both plain and safety, have been the chief trouble makers, but the trouble has not come after they have been swallowed, but when they have been drawn into the respiratory passages. Several times I have managed to locate the pins in the upper passages, so located that I could remove them with my fingers or a long-handled forceps. But there have also been times when it was quite impossible to reach them without a surgical operation.

The ordinary doctor has no business making experimental efforts at the removal of a foreign body that has disappeared from sight in the larynx or bronchial tubes. It is a job for a specialist equipped with special instruments and special skill. Such foreign bodies can be located with efficiency by the combined use of the X-Ray and a special instrument known as the Bronchoscope. Through this instrument a skilled operator can remove such an object as an open safety pin without doing any cutting or causing any great damage to the tissues.

## CIGARETTES.

My husband smokes too many cigarettes and would like some help to enable him to quit.—B. S. T.

He will get much help by using as a mouth wash a solution of silver nitrate in the strength of one-eighth to one-fourth of one per cent.

He may use this frequently for two or three days, being careful not to swallow any. Then use it once daily, after a meal. Chewing gentian root is also helpful in overcoming the tobacco habit.

## ROUND WORMS.

I believe that I have worms, "round worms," as I passed one. And sometimes I have pains or itching. Do worms cause one to cough? I would like to know what to do to get rid of them.—O. S.

Round worms often invade the lungs and create a cough. They may be driven out by taking santonin or oil of chenopodium. One must take great care about cleanliness of hands and nails, and avoidance of uncooked fruit and vegetables, to avoid recurrence.

## CARE OF HAIR.

My hair is long and quite heavy, but it is a great deal lighter on the ends than it is on my head. My hair is black, but toward the ends it is reddish-brown. Is there anything to do for that?—A Reader.

It is not unusual for hair to be lighter in shade toward the ends and not a matter that needs any attention. Some women, who feel that it detracts from their attractiveness, try to use dyes but only succeed in making the differ-

ence in color more conspicuous; for dyed hair never has the exact hue and luster of naturally tinted filaments.

## DIFFERENCES IN HEART TROUBLES.

What is the difference between valvular and organic heart disease?—K. T. K.

Valvular heart disease is always organic, but there are many forms of organic heart disease that are not valvular. Any organic heart trouble is serious, yet with careful attention to habits of living may help the patient to get along very comfortably through a long life.

## GASTRIC ULCER.

I have been told that I have a gastric sore in my stomach. What is a gastric sore and what can be done for them? I am too poor to go to a doctor.—Mrs. L. A. H.

Such sores are generally termed gastric ulcers. They are usually the result of acid dyspepsia. Treatment consists in giving the stomach as complete rest as possible, so that the ulcer may have a chance to heal. A gastric ulcer is too serious a matter for home treatment. It is a mistake to suppose that doctors will not treat poor people who are unable to pay. In my twenty-three years of practice I venture to say that a tenth of my work was of that character and many a doctor exceeds this proportion.

## TROUBLED WITH PIN-WORMS.

Would you please tell me how to rid my children of pinworms, and what causes them? My children range in age from sixteen to one year. Baby has them quite badly.—C. J. J.

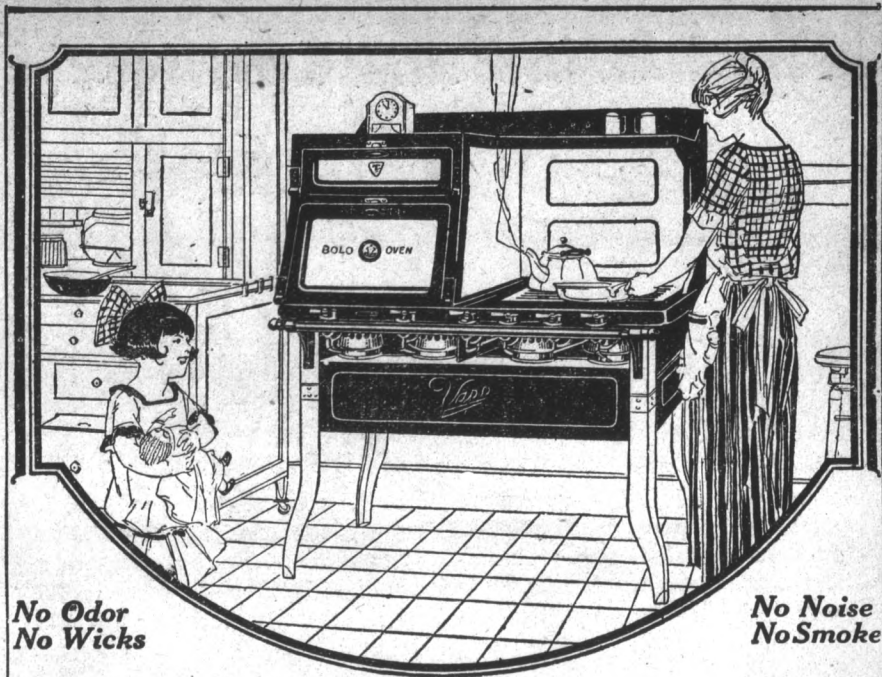
Sometimes pinworms demand the use of internal medicines but quite often they can be treated by the use of rectal enemata, as they are principally found in the rectum. First use a plain enema of water, or salt and water, to empty the rectum of fecal matter, and then inject several ounces of a decoction of quassia chips. This must be repeated twice a day for several days. I think it will pay you to ask your home doctor to supervise the treatment, especially since you have so many infected. It is not such an easy process as it may seem.

## HAS NUMBNESS IN ARM.

I have a sort of numbness in my left arm. It does not bother me while at work, but awakens me at two or three o'clock in the morning, and to relieve the unpleasant feeling I lie face downward with the arm hanging over the bed rail until it feels natural again. It does not bother me doing ordinary work, but work like handling a pick, and shoveling gravel, digging ditch, is what gets it. A local doctor told me that a chronic poisoning was coming from some source. I had my tonsils and adenoids removed three years ago, had my under teeth all out last October. My upper teeth seem all right, except one back one, and that might not be.—J. P.

Such symptoms in a person of middle age or older, are common enough and as you have done everything in your power to clear up the sources of infection that might be the cause, I think you need feel no apprehension. There is nothing that need make you fear paralysis or such results. You should finish your job by having the one suspected tooth removed.

Bandalene Jones has won the village beauty contest. Her fellow was one of the ballot counters and is accused of stuffing the box. She has already changed her name to Priscilla Throckmorton and bought a one-way ticket to Hollywood. Folks say that California is going to pick up one of the slowest dishwashers that our town has ever turned out.—Sunshine Hollow.



## Beautiful Vapo Oil Range looks and acts like a gas range

32-36 hours of smokeless, odorless heat from a gallon of kerosene

Vapo is to the ordinary oil stove what the electric light is to the candle. It solves every cooking problem. You can bake, roast, boil, fry or stew with a Vapo. Everywhere, people proclaim it the cleanest, most convenient, most beautiful oil range ever seen. At state fairs thousands saw it pass tests out of the question for ordinary oil stoves. Any Vapo will duplicate these tests.

## Burns gas made from kerosene

Each Vapo burner is a miniature gas plant. It generates hydro-carbon gas from kerosene and burns it with a hot, clean, blue flame ideal for cooking. Good baking and roasting are easy with the Vapo because the flame can be regulated from a low simmering heat to a heat intense enough for quickest cooking needs. Vapo has lever valves like a gas stove and these are provided with automatic safety locks preventing accidental shifting or moving by children.

## Wickless, chimneyless and troubleless

Nothing on a Vapo to fuss with. No wicks to trim or adjust. No chimneys

to burn out and fall into the burner. If kettle boils over, the liquid can't get into the burner and choke the flame. The Vapo burner is guaranteed for the life of the stove. Vapo heat does not smart the eyes nor soot up utensils.

## Bake slow and fast at same time in Bolo oven

Adjustable Bolo plate makes oven big or little as you wish. It concentrates the heat and gives you two ovens in one. Odors from one oven do not permeate the other oven. Perfect ventilation insures light baking and pastry. Vapo is the only oil range with the built-in Bolo oven. You can have right or left hand oven. Ask dealer to show you Vapo. Write for booklet.

## THE VAPO STOVE COMPANY

M.F. LIMA, OHIO.

Please send me complete information about Vapo Ranges.

Name .....

Address .....

Dealer's Name .....

The Vapo Stove Company, Lima, Ohio

**Vapo**  
LIMA OHIO

Oil  
Ranges  
Heaters  
Hot Water  
Heaters

Mention the Michigan Farmer When Writing to Advertisers

## CHAPPED HANDS CUTS SORES Burns Etc.

We want to prove to you what a wonderful healing ointment Corona is—for quickly healing Cuts, Wounds, Chapped Hands, Corns, Scalds, Burns, Piles, Skin Diseases, etc. You have never used any preparation equal to

**CORONA**

No other preparation like it—instantly soothes and quickly heals.

Send name and address and get large size can on 20 days Free Trial. If you find it the best healing preparation you ever used send 65¢ in payment at end of 20 days. No charge if you are not satisfied.

THE CORONA MFG. CO.  
14 Corona Block, Kenton, O.



Implements  
Cost Less  
under the  
**MOLINE**  
Plan

because all wastes are cut out. See your Moline dealer or write to us

**NEW MOLINE PLOW CO.**  
Moline, Ill.



# Why Should You Gamble?

When you know that thousands upon thousands of incubators and brooders are actually being thrown away every year to be replaced with

## Buckeye



More than 700,000 successful breeders are hatching 175,000,000 chicks a year in Buckeye Incubators, and raising 150,000,000 a year under the Buckeye System of Colony Brooding.

Big hatcheries, with capacities of 50,000 to 500,000 eggs, are using Buckeyes.

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Why gamble, then? Why experiment? Buy a Buckeye first, and know you'll be successful.

Buckeye Incubators are built in every size from 65-egg to 10,368-egg capacity. Buckeye Brooders are built in all sizes up to 1,200-chick capacity, to burn oil, coal or gas.

The best book of real information you can get on poultry raising for profit is the new Buckeye catalog. We want you to have it, and will gladly send it on request. Mention whether you are interested in incubators, coal-burning brooders or blue-flame brooders.

THE BUCKEYE INCUBATOR COMPANY  
814 Euclid Avenue, Springfield, Ohio, U. S. A.  
World's Largest Manufacturer of Incubators and Brooders

## New Low Prices On Miller Baby Chicks-Season 1924

Buy your chicks this season from an established hatchery. MILLER HATCHERIES is one of the finest in America. We hatch twenty popular varieties from stock which have been culled and bred for heavy egg production. 1,500,000 chicks via prepaid parcel post at the following low prices:

Varieties	50 chicks	100 chicks	500 chicks	1,000 chicks
Barred Rocks, R. and S. C. Reds, Anconas, R. C. Brown and S. C. Buff Leghorns	\$7.50	\$14.00	\$65.00	\$125.00
White and Buff Rocks, W. W. and Black Langshans	8.50	15.00	75.00	140.00
S. L. Wyandotte, White Orpington, S. C. Black Minorcas	9.00	17.00	80.00	150.00
Buff Orpingtons	8.00	15.00	70.00	135.00
Golden Wyandotte	11.00	20.00	95.00	175.00
Light Brahmas and W. F. Black Spanish	13.00	25.00	115.00	200.00
S. C. White and S. C. Brown Leghorns	7.00	13.00	60.00	110.00
Assorted	6.50	12.00	55.00	100.00

Order direct from this advertisement or send for our FREE CATALOG. 21st SUCCESSFUL Season. Over 12,000 pleased customers in United States and Canada. Member, Missouri State, Mid-West and International Baby Chick Associations.

MILLER HATCHERIES

BOX 651

LANCASTER, MISSOURI

## PURE BRED BIG VALUE CHICKS



Best paying standard varieties from healthy free range utility flocks, carefully inspected, culled, and Hogan tested. Quick maturing. High Egg Production. Each

	25 Chicks	50 Chicks	100 Chicks	500 Chicks	1000 Chicks
S. C. White L., B. L., Buff L.	\$3.25	\$6.25	\$12.50	\$60.00	\$120.00
S. C. B. Minorcas, S. C. M. Anconas, Barred Rocks, S. C. R. I. Reds	3.75	7.50	15.00	72.50	140.00
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
Mixed, All Breeds	2.50	5.00	10.00	50.00	100.00

Wolf Hatching & Breeding Co., Dept. 5, Gibsonburg, Ohio



**HUBER'S RELIABLE CHICKS**  
OUR 15th. YEAR  
1000000 for 1924

POSTPAID, 100 PER CENT LIVE DELIVERY. Give us your order for OUR RELIABLE CHICKS and we will prove to you, IF BETTER CHICKS COULD BE HATCHED FOR THE MONEY WE WOULD BE HATCHING THEM.

FLOCKS PURE BRED CULLED BY EXPERTS

FINE ILLUSTRATED CATALOG FREE. Tells how we produce RELIABLE CHICKS that have pleased thousands of customers. We hatch 13 Varieties. COMBINATION OFFERS. VALUABLE BOOK GIVEN FREE with each order. HUBER'S RELIABLE HATCHERY, East High St., Fostoria, Ohio.



**Great Northern Hatchery**  
Pure Bred Selected Flocks  
100% Live Delivery

Strong, Sturdy, Northern-grown Chicks. Selected, pure-bred stock. Healthy Flocks on free range insure strength in every Chick. Order from this Ad.	Prices on 50	100	300	500	1000
Leghorns (S. C. White and Brown)	\$7.00	\$13	\$38	\$62	\$120
Barred Rocks	8.00	15	43	72	140
White Rocks	9.50	18	53	85	165

Mixed Broiler Chicks, \$10 per 100 straight. 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.

## Early Maturing Baby Chicks



Quality Type Dependability Production

Our chicks are from flocks selected for their early maturing habits. This means high-producing individuals. These flocks are headed by cockerels from high-producing blood lines. Culled by experts. Each flock personally supervised. Pure-bred. From \$10.00 per hundred and up. We have a limited number of superior grade chicks from special matings. 230-302 egg strain. B. P. Rocks, R. I. Reds, W. P. Rocks, W. Wyandottes, W. Leghorns, Anconas.

Write for description and prices. 100 per cent live delivery. Ref., Milan State Savings Bank. MILAN HATCHERY, Box 4, Milan, Mich.

## Farm Poultry

### CULLING AND SELECTIVE BREEDING.

BEFORE the Michigan Poultry Producers' meeting at the College, Prof. E. C. Foreman stated that the average farm flock usually has about thirty hens which cannot produce more than eighty-five eggs per year. They have one Rhode Island Red hen picked out of a farm flock which has laid 280 eggs and is still producing. This hen has not moulted up to February 7 and will be used to establish a strain of high-producing Reds.

Cold weather is not a handicap to egg production as it stimulates the appetite and a hen, to lay heavily, must be a heavy feeder. Endurance is necessary to stand up under the heavy feeding and make a good record for the year. The average hen of the heavy breeds goes broody four times per year and some may go broody nine



Their First Peep at the World.

times. A hen loses twenty days, or about a dozen eggs, every time she goes broody.

The four-finger spread means that the ovary of the hen is functioning. The two-finger spread indicates the bird is not laying, but may produce later. The Hoganizing of flocks must be supplemented with other tests. Some crow-headed birds will lay at a profit, while others lack constitutional vigor. The skull of a good layer is flat on top when the bird is viewed from the front. Hens with masculine heads should be culled out. Professor Foreman says he has handled close to one million hens and never found two heads alike yet.

Good layers are flat-backed, with deep flat ribs and they are close feathered. The close feathered birds are apt to be late moulters. A hen may moult a primary feather for each broody period. Up to September first you can count the new feathers and determine the times the hen has been broody.

Crow-headed birds may be caused by close breeding, over-crowding, or poor feeding. They throw slow feathering chicks, which means low winter production. That means low annual production. Over-refined birds lose weight rapidly, they often lay profitably, but mature too early. An early-maturing Barred Rock pullet at the college plant began laying when a little over three months old. The first sixty eggs she produced were without market value and weighed about an ounce each.

A good producing hen will have a waxy skin on the face and the eye will show femininity and character. An age of from five to six and a half months is about right for laying. The active busy hens have the laying temperament. The hens should hold the pigment, showing that they are receiving plenty of feed and do not have to draw on their reserves to produce the eggs.—K.

### HENS WITH BOWEL TROUBLE.

I would like to know what is the matter with our hens. We always have one or two with bowel trouble of some kind, usually old hens. They

## POULTRY

**PURE BRED CHICKS**

Tom Barron Imported and Hollywood strains S. C. White Leghorns, Sheppard's Famous S. C. Mottled Anconas and Park's Bred to Lay Barred Rocks. All Free range flocks, carefully culled and certified by experts and bred many years for high egg production. Pedigreed males from 250 to 280 egg strains and from hens that produced leading pen in Michigan's International Laying contest, head our flocks. Eggs from these famous strains hatched with scrupulous care in our Modern Mammoth Incubators produce strong, husky, peppy chicks that are easy to raise and become marvelous layers. Chicks are shipped postpaid, 100% live delivery guaranteed. Write for our big free illustrated catalog.

Silver Ward Hatchery, Box 29 Zeeland, Mich

## CERTIFIED CHICKS "BRED TO LAY" STRAINS

Best Quality Certified Chicks pay biggest profit. Our Chicks are from our own Free Range flocks of Sheppard's Famous 331 egg strain of Anconas, heavy winter layers of large white eggs; Hollywood and Tom Barron S. C. White Leghorns; and Everlay S. C. Brown Leghorns. Park's strain Barred Rocks. Carefully selected and rated by experts and certified by Michigan Baby Chick Ass'n. Bred for quality and high egg yield for 11 years on our own farm. Strong, vigorous, full of vitality. 100 per cent live delivery guaranteed. Low prices. Illustrated catalog Free. Townline Poultry Farm & Hatchery, Dept. M, Zeeland, Mich. Member Mid-West and International Baby Chick Ass'n.

## --CHICKS--

### Investigate



Our chicks are the kind that make good. Every flock is carefully culled and mated. We have been in business seven years and have been building carefully and consistently to a place where we can offer chicks more than worth the money we ask. SINGLE COMB, ENGLISH STRAIN, WHITE LEG HORNS, BARRED ROCKS, ANCONAS. 100 per cent live delivery guaranteed. Investigate our proposition before buying. A postal will bring full information.

STAR HATCHERY, Box 22, Holland, 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.

## Baby Chicks

Buy ready hatched Baby chicks from high egg producing free range flocks. Highest utility qualities, best for general purposes. Nine most popular varieties. Shipped postpaid. 100 per cent live delivery guaranteed. Send for catalog and prices.

### HOMER HATCHERY

Homer, Mich.

### Lee's Quality Chicks

Eight varieties, all from pure-bred, selected stock. We guarantee satisfaction and 100% live delivery. Write for our FREE catalog.

Lee's Poultry Farms & Hatchery  
Box B, Edison, Ohio

## Baby Chicks

Postpaid to your door. Guarantee 100 per cent live arrival. Heavy laying, pure-bred flocks. White, Brown & Buff Leghorns, 50, \$7; 100, \$13. Barred Rocks, Reds, Anconas, Minorcas, 50, \$8; 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.

### RELIABLE CHICKS

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. Leghorn males from trap-nested 280-egg hens. Free catalog. Write for prices. RELIABLE HATCHERY AND FARMS, 74 E. 16th St., Holland, 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.

### DAY OLD CHICKS

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.

**64BREEDS** Most Profitable Chickens, Choice, pure-bred northern raised. Fowls, eggs and incubators at low prices. America's great poultry farm. At it 31 years. Valuable 100-page book and catalog free. R.F. NEUBERT Co., Box 814, Mankato, MINN.

### ROSEWOOD CHICKS

Best Baby Chicks. Select heavy laying strains. White Leghorns, Anconas, Barred Rocks. Real quality, low prices. Postpaid. Full live delivery guaranteed. Write today. ROSEWOOD FARM, HOLLAND, MICH.



**For their first drink!**

"Raised 800 out of 825 chicks by feeding **Semi-Solid**" says L. F. Miller, Osborn, O. Diarrhoea and other chick diseases rarely attack the hatch that is fed **Semi-Solid Buttermilk**.

It builds vitality and disease resistance. Your flock grows faster and makes cheaper gains.

**Semi-Solid Buttermilk**

Is buttermilk pasteurized and condensed under our special process to point of greatest food value. For poultry, best results are obtained by feeding just as it comes in the package. Containers vary from one gallon cans to 500-pound barrels.

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**Start them Right and keep them healthy with DICKINSON'S Globe Chick Mash (With Dried Buttermilk)**



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For smaller capacity get my 80-egg Champion Belle City Incubator for \$9.95; my 80-chick Hot Water Belle City Brooder for \$4.95; or both ordered together for only \$12.95-Express Prepaid East of Rockies.

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That's what you'll get with a Champion Belle City Hatching Outfit. My Free Book "Hatching Facts" tells how—gives newest ideas and quick—est ways to make poultry pay big with my

**\$13.95 Champion Belle City 140 Egg Incubator \$21.95 230 Egg**

Double Walls Fibre Board—Hot Water Copper Tank—Self-Regulated Safety Lamp—Thermometer & Holder—Egg Tester—Deep Nursery. \$6.95 buys 140 Chick; \$9.95 buys 230 Chick Hot-Water Double Walled Belle City Brooder. Save \$1.95. Order both. 140 Size Incubator and Brooder, Only \$18.95 230 Size Incubator and Brooder, Only \$29.95

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East of Rockies & allowed West. Low Prices on Coal and Oil Canopy Brooders come with catalog. With this **Guaranteed Hatching Outfit** and my **Guide Book** you can make a big income, besides sharing in my **\$1000 in Gold** and other prizes. Save time—Order now or write today for my Free Book "Hatching Facts." It tells an interesting story.—Jim Rohan, Pres. Belle City Incubator Co. Box 14 Racine, Wis.



sometimes make a queer noise when bowels move, seems such hard work, and it is thin and watery and sticks to the feathers. They are that way a long time before they die. What can I do for them?—Mrs. J. S.

Digestive disorders among certain hens in a flock may be due to a variety of troubles, but the ration is a common cause. Hens that receive only hard grain but no dry mash or green food seem the most subject to bowel trouble. The bran and easily digested ground grains in the dry mash are a great help in preventing digestive disorders.

I would suggest that you give the hens a pound of epsom salts per 100 birds. This can be given in a moist mash. Then keep dry mash before them at all times. Also provide a hopper of charcoal and give green feed, such as sprouted oats or cabbages once each day. Perform a postmortem on any hens that die and note the condition of the internal organs, especially the liver. That may furnish some clue to the cause of the losses.

#### CAPON PRICES.

Why is the price of capons only three cents above the price of common chickens? Has the buying public gone back on them, or is it because the market is glutted?—F. L. H.

I think the low premium on capons in most cities is due to the fact that the general public have not been educated to ordering capons, and consequently it does not take a large number to supply the market. In talking with buyers of poultry meat I find that nothing is easier for them to sell than heavy hens. Most buyers for home use are well satisfied with plump hens for their chicken dinner and do not feel that anything superior is needed.

The best market for capons is undoubtedly in the east where they have been sold for many years on some of the best markets, and more buyers have learned to like them. I would suggest that you write the New York State Bureau of Markets, New York City, for their list of reliable commission men who would be in the market for capons and high-class poultry meat. You might also address G. Verne Branch, Municipal Director of Markets, Detroit, for information concerning the demand for capons in that city.

#### HENS OVER-FED.

We have 300 S. C. White Leghorn hens, two years, three years, one year, and pullets, all in one big coop. We keep a laying mash of equal parts of bran, middlings, cornmeal and ground oats with meat scraps in front of them all the time, also oyster shells and grit and charcoal the most of the time. We feed them wheat and corn nights and mornings in litter. Now, at noon they will all eat of a wet mash I stir up with sour milk and by night they may be two or three will be sitting down, seemingly unable to stand up, eyes closed, mouth open to breathe. There is no discharge from the nose. Combs will be just as red. We catch the dumpy ones and put in another coop, and maybe by the next morning we are unable to tell which one was sick, and then again, it will take a day or two to recover. They all get well but it stops them from laying. The hens that act this way are all the older hens. The pullets all seem to be O. K.—M. M. M.

The ration you are using for the hens is first-class, and many farm flocks do not receive as good variety of feeds. It may be that the use of the wet mash at noon causes some of the old hens to overeat and the resulting dumpy condition is caused by indigestion. When the birds are isolated on short rations their condition soon returns to normal.

I would advise cutting out the wet mash at noon and feeding green feed. Sprouted oats are the best, with cabbages as second choice. Any vegetables like mangels or carrots, help to furnish succulence and balance up for the more concentrated feeds. Some form of green feed during the winter is always necessary for the best results in egg production.

**Raise all the Chicks You Hatch**

Raise them the PAN-A-CE-A way.

Start them right—keep them growing right along without any backset.

PAN-A-CE-A gives chicks good appetite and good digestion—helps them develop rapidly—gives them vigor to resist disease.

PAN-A-CE-A prevents fermentation of the food; fermentation is where most of the bowel troubles start.

PAN-A-CE-A is a gentle tonic to all the little-chick organs—keeps the system in order.

PAN-A-CE-A contains the Salts of Iron, so essential to early chick life, and during the rapid growth of feathers.

PAN-A-CE-A prevents and cures gapes, indigestion, diarrhea and leg weakness.

PAN-A-CE-A your chicks and then watch them feather! A Pan-a-ce-a chick will out-feather a non-Pan-a-ce-a chick every time.

Tell your dealer how many hens you have. There's a right-size package for every flock.

100 hens, the 12-lb. pkg. 200 hens, the 25-lb. pail  
60 hens, the 5-lb. pkg. 500 hens, the 100-lb. drum  
For fewer hens, there is a smaller package.

**GUARANTEED**

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**Dr. Hess Instant Louse Killer Kills Lice**



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Investigate before you buy. Incubator made of Redwood covered with galvanized iron. Double walls with air space between. Every joint lapped with galvanized iron. Strongest and most durable incubator that can be made. Deep chick nursery, self regulating. Hot water heat. Copper Tanks, in both incubators and brooders.

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140 Egg Incubator with Brooder \$19.75  
260 Egg Incubator alone . . . 23.50  
260 Egg Incubator with Brooder 32.90

You can use the machine for 30 days and if not satisfactory we will refund your money and pay return freight charges. Both machines shipped complete with all fixtures. Set up ready to use. Write for catalog or order direct from this advertisement.

**IRONCLAD INCUBATOR CO. Box 91 Racine, Wis.**

**Certified Pure Bred Baby Chicks**

Trapnested direct from world champion layers; the famous Tom Barron and Hollywood strains of White Leghorns. Order these chicks from pedigreed stock now at bargain prices! Hatched in the largest and finest hatchery in Michigan at the rate of 150,000 eggs to a setting. Also get our prices on Barred Rocks and other popular breeds. Satisfaction guaranteed or money back. Write for FREE illustrated catalog and special DISCOUNT PRICES—today.

**SUPERIOR POULTRY FARMS**  
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**\$13.25 140 EGG**

Don't take any chances—find out what an incubator is made of before you buy. Wisconsin are made of Genuine California Redwood. We give 30 Days' Trial 10-year guarantee. This famous 140-Egg Incubator only \$13.25. With Hot Air Brooder both only **\$17.75**

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180 Egg Size \$15.75, with Brooder \$22.00  
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Incubators have double walls, air space between, double glass doors, hot water, copper tanks, self-regulating. Shipped complete with all fixtures. Set up ready to run. Order direct or send for our 1924 catalog, which shows larger sizes up to 1000 eggs.

**Wisconsin Incubator Co. Box 120 Racine, Wis.**

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—Inspected and Approved

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From Best Egg Laying Strains in the World  
Tancred, pedigree-sired and Tom Barron, S. C. White Leghorns, S. C. & R. C. R. I. Reds, Parks' Barred Plymouth Rocks.

**LAKEVIEW** Our flocks are all on free range, closely culled, inspected and approved by Michigan Baby Chick Association. Every bird is healthy, has size, type and color.

**Hatched in World's Best Incubator**  
Our chicks are strong, sturdy and healthy. They live and grow because they are hatched in the best incubator made. 100% live delivery to your door. Illustrated catalog sent FREE.

LAKEVIEW POULTRY FARM, R. 8, Box 6, Holland, Mich.

**PIONEER POULTRY FARM**

STOCK OF EXCLUSIVE ENGLISH ANCESTRY.

**CHICKS CHICKS**

Tom Barron Strain

Highest quality English White Leghorn chicks, deriving their notoriety from their ancestors, which were imported direct from England. Prices right, liberal discount on early orders. Write tonight for free illustrated circular. **PIONEER POULTRY FARM, Box A, R. 10, Holland, Mich.**

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The season of 1924 opens with some fine breeding pens in the 10 varieties of **PURE-BRED PRACTICAL POULTRY.**

Barred Rocks, Anconas, White Rocks, Leghorns—White, Rhode Is. Reds, Brown, Buff Orpingtons.

In the White Leghorns a Superior Egg Quality in the D. W. Young American type and in the English type.

It is now time to be looking after your Chicks for this season. Send for our descriptive matter and price list. You will be interested in the egg records our customers report.

Cockerels—A few unsold in Barred Rocks, and White Wyandottes. **STATE FARMS ASSOCIATION, Masonic Temple, Kalamazoo, Michigan.**

**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 and get chicks when you want them.

White Leghorns	50	100	500
Ed. Rocks, R. I. Reds	\$7.00	\$13.00	\$62.00
White Wyandottes, Wh. Rocks	8.00	15.00	72.00
	8.50	16.00	77.00

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.**

**WORLD'S CHAMPION LAYERS**

Hollywood and Improved English S. C. WHITE LEGHORNS. The American Business Hens: 250-300 egg bred line. Large White eggs. Winners at National Shows and Egg-Laying Contests. **HIGHEST QUALITY CHICKS** from certified tested hens mated to high power pedigree sires. Discount on early orders. Valuable instructive CATALOG FREE. **DEVRIES' GRANDVIEW POULTRY FARM, R.R. 6, Zeeland, Mich.**

**Baby Chicks S. C. W. Leghorns**

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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**

**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.**

**Wishbone Hatched CHICKS**

The finest day-olds money can buy. Strong, big from free-ranged stock. All popular varieties. Shipped by parcel post. Write for moderate price list.

**Wolff's Hatchery, R. 1, Holland, Mich.**

**Chicks with Pep**

Try our lively and vigorous chicks from bred-to-lay and exhibition hens. They will make you money for they have the quality and egg-laying habit bred into them. A trial will convince you. All leading varieties. Safe delivery. Prepaid. Prices right. Bank reference. Big, illustrated catalog free.

**Holgate Chick Hatchery, Box M, Holgate, Ohio**

**Baby Chicks** \$12.00 per 100 and up. We are listing 12 varieties of pure-bred fowls, chickens, ducks and guineas. Send for prices and circulars. **Clinton Hatchery & Poultry Farms, Wilmington, Ohio.**

**My Club Experience**

Success In Two Years of Club Activity

By Beatrice Marie Miller

**T**O state that I like club work, think it a very educational and constructive pastime, is putting it very mildly, indeed. It makes the farm life more attractive, because the boy or girl who belongs to a club will strive to win a prize, and in later years they will never forget that prize. Therefore, it will serve as a



Beatrice Marie Miller, Club Champion.

charm, to lead them on to be successful farmers or farmerettes.

I have completed four terms of club work, two of canning and two of sewing. I wouldn't part with all the knowledge I've gained in these two years for a great deal. I've been president of the club for three terms and certainly enjoyed the work. Last year, out of canning, we cleared \$17.50 and this year \$22. This was prize money won at the state and county fairs. Our club has six members.

Two years ago club work was new to our community then. I was asked to join a sewing club and certainly I am very, very grateful to the people who made it possible for me to enjoy all this, and in time I hope to be instrumental in helping others to enjoy club work.

That year I won first in the club and second in the county, in sewing. The next summer we had canning and I won first in the club, third at the Washtenaw county fair, and a five-year subscription to the Michigan Farmer.

As our first year was such a success, we decided to have second year work. That winter I was ill, so did not complete my sewing until the last week, and didn't finish my report. However, I won third in the county.

As yet, the second-year canning champion has not been decided. I won first at our fair and my club also won first. We had fifteen jars in the Washtenaw county canning exhibit at the Michigan State Fair, winning sixth place there.

Every girl is a potential home-maker, therefore these clubs help her to learn the household arts in a pleasing and scientific way. I now do all my sewing, even to my tailored dresses and suits. The canning is also all done by myself, as I keep house for my father on his farm.

Last summer my local leader, Mrs. Iva Wheeler, and myself were invited to M. A. C. during convention week. I couldn't help but notice the devotion these county leaders had to their work. If every club worker had the opportunity to see their county leader at that convention, I am sure they would work even harder to please them. We have a very congenial lead-

er, Mr. Watt, and he is thought much of in his county.

One event which makes our club work so enjoyable and attractive, is the club's camp. We have so many attending now that we have a week for boys and one for girls. It certainly is a big success. It is called Camp Brinkett, after the man who gave it to the Y. M. C. A., of Ann Arbor. We slept in tents, but had a club house for eating and cooking. It is a pretty building containing kitchen, pantry, "ball-

room," with a pretty stove fireplace and a screened-in porch with tables and benches for eating. We have regular hours for rising, exercises, eating, swimming, instructions, etc. Every night we enjoyed a camp fire, with songs and stunts, sometimes we had marshmallows to roast. Among the most interesting things we did was to weave reed baskets, judge canned fruit, enameling, sewing, and other things too numerous to mention. For enjoyment we had the lake, hikes, lectures, movies and a Victrola for dancing. We had one jolly good time.

All in all, I pity the young persons who are not 4-H workers. I undoubtedly will enjoy club work for many a day in the future—at least, I hope to be able to.

**OUR LETTER BOX**

Dear Uncle Frank:

Oh, dear, Uncle Frank, I wish those dishes that are looking at me would wash and dry themselves.

Uncle Frank, did you ever have to help your mother do dishes before you went to school?

Will close my jabberbox.—Your niece, Verda Haase, R. 10-A, White Cloud, Michigan.

You bet, drying dishes was often a daily duty for me, because there were no girls in our family. I dry them even now because there are no girls in my family. I often wished the same thing you do.

Dear Uncle Frank:

We have a dog called Capie, "some dog," I think. In the summer, if you should look down our lane about five o'clock you would see Capie coming up the lane with the cows. He knows that it is his job, and starts off without being told. Sometimes when I go after wood he keeps jumping on me



The One with the Straight Face is Bernice Sting, of Gagetown.

until I give him a stick. After he has put it in the woodbox, he goes to the cupboard and looks up at the cookie jar and begs for a cookie.—Your niece, Pauline Richards, R. 3, Milan, Mich.

Dogs do learn, don't they? It seems to me almost as quickly as some children. I think rewards help a lot in learning. That cooky made carrying wood interesting to your dog.

Dear Uncle Frank:

My school is different than any of those I have read about in "our page," so thought you would enjoy hearing about it.

I went nearly through the ninth grade in high school, which was eight miles away. But the tuition and other expenses were too much.

Last fall I started at a new school which is great. It certainly is fine, and I enjoy it so much. You have to be a real good student, though, for the passing mark is ninety. I've never had to do any lesson the second time, but I did get ninety once.

It is a correspondence school and I am taking the complete commercial course.

If there are any of my cousins whom you know are taking any kind of a correspondence course, wish you would give me their names and address.

Then I am not entirely devoted to

business, but have some thoughts for domestic things, for I also take a course in dressmaking and tailoring. Then my mother teaches me to cook.

Well, this letter is so long you will never be able to get through if I don't stop soon, so will stop now.—Your niece, Dorothy L. Sowles, M. C., R. 9, Kalamazoo, Michigan.

In correspondence study you have to recite every lesson, and that is a good thing, but you lack personal contact which the regular school provides. I wonder how many M. C.'s are taking correspondence courses.

Dear Uncle Frank:

I have "long" nut-brown hair and haven't dreamed of donning a pair of knickers. I live on a farm but I don't care a lot about farm work.

O! you said to "quit" the knicker question and discuss if most boys are rude to girls. No, I really don't think most of them are. Some do throw some awful hard snowballs. In high school they don't have very many chances to do that, although my head smashed one ball this fall before I quit school. I was a "Soph."—Yours niece, Ida Yoder, Ashley, Mich.

It's a good thing the snowball was smashed. It at least showed your head was harder. I wonder if girls like "rough stuff" from boys?

Dear Uncle Frank:

I wish you would have the ad-reading contest in the paper more often, as I think it's like studying some lessons. That's what I like, as I really love school.

Please have your picture put in the Michigan Farmer sometime, as I'd like to see just what you look like, Uncle Frank.—I remain, your want-to-be-niece, Tyne Kauppela, Ishpeming, Michigan.

Once in a while we do find one who really likes to study, don't we? My picture has appeared in the Michigan Farmer, so most of you know what I look like.



Hilda Baumeister and Her Dog, Both Live at South Rockwood.



# Merry Circle Doings

## THE WASHINGTON CONTEST.

I FIND that most of the Merry Circle boys and girls are good at straightening out jumbled messes. Hundreds had the answer correct, but lacked in neatness, but even so, the competition was very keen.

The correct answer to the jumbled words are:

"George Washington, Farming."  
"George Washington, the father of



First Prize, by Albert Alfredson, Whitehall, Michigan.

our country, considered farming man's most noble occupation."

I suppose many of you thought the title is rather peculiar. It is. It should have been "George Washington, Farmer," but in the mixup "Farming" got in instead of "Farmer."

## THE MESS CONTEST WINNERS.

THERE was nothing messy about the papers of the winners in this contest. They were just as neat as they could be and were, of course, correct. They had to be that way in order to win out in the strong competition.

The lucky ten this time were:

### Fountain Pens.

Helen Miller, R. 2, Allegan, Mich.  
Miss E. M. Southwell, of Coleman, Mich.

### Flash Lights.

Joe W. Wilson, 421 Charles Street, East Lansing, Mich.



Second Prize, by Mable Zimmerman, Reed City, Michigan.

Christine Dynes, R. 3, Box 115, Owosso, Mich.  
Clarence H. Knapp, R. 5, Owosso, Mich.

### Candy.

Florence Halpin, R. 2, Lapeer, Mich.  
Vera Stoudinger, R. 1, of Sherwood, Mich.  
Gertrude Verdon, Samaria, Mich.  
Merle Brunt, Samaria, Mich.  
Helen Shelby, Coleman, Mich.

## THE WINTER SPORT I LIKE BEST.

THE winter sport I like the best is spearing. In winter, when the water in the river is frozen about a half foot, at least, in depth, we put fish houses on in places where we think the fish run the best.

It is great sport to sit in a fish house, with a good warm fire like at home, and watch for the unlucky fish that come through to be speared at, and in most cases caught.

Last winter my brother and I went spearing every Saturday. We would take our dinners and stay all day, as

the place we go to is about three miles away. We also took some firewood for our stove, which we had to heat our house.

We would sit in our house till we saw a fish come through then we let our spear down slowly toward the unlucky fish. When about a foot or less we gave the spear a push and the fish was ours.

The fish we are allowed to spear are bluegills, sun fish, perch, calico bass, rock-rye bass, mud-bass, suckers, red horse, carp, and pickerel.

The place we put our fish house on was in a sharp bend of the river, a place with a few springs along its banks. At the far end of the bend the water does not freeze and the fish stay there. Often one of us would go up

## ENJOYING THE MICHIGAN FARMER



Fourth Prize, by Mary Wert, Laingsburg, Michigan.

to the far end of the bend with a pole and drive them down and the fish would come down very thick through the houses. We only speared the largest, and every Saturday we brought home our limit of bluegills and several other kinds.—Kenneth Munson, M. C., Constantine, Michigan.

## Correspondence Scramble

HERE is another of those Correspondence Scrambles for you to take part in. Join in and get a good Merry Circle boy or girl to correspond with.

Here is the way to do it:

Write a letter, addressing it "Dear Merry Circle," or "Dear Unknown Friend."

Address an envelope to yourself; that is, put your own name and address on it. Also put a two-cent stamp on it.

Put the letter and that envelope in another envelope, which should be addressed to Uncle Frank, Michigan Farmer, Detroit, Michigan.

If you are less than twelve years old, put "Correspondence Scramble A" in the lower left hand corner of the envelope. If you are between twelve and eighteen, write "Correspondence Scramble B" in that place.

Your letter will be put in someone else's envelope and the letter belonging to somebody else will be put in yours and sent out.

This scrambling will be done March 14, so be sure to get your letters in before that time.

## GOING AFTER PRIZES AGAIN.

MANISTEE county boys are again taking considerable interest in live stock club work and are looking forward to as successful a year as they had last, when one of their number, Ward Mallison, Bear Lake township youth, won a trip to the Grand Rapids fair, and also to the International Live Stock Exposition at Chicago, through his excellent work.

Such trips as he made to the fair and live stock exposition are indeed a valuable and broadening part of Ward's education, an influence that more farm lads need to make them appreciate the work on the farm.—Hen,

## KARSTEN'S QUALITY

### BABY CHICKS

FROM STOCK—THAT IS BRED WITH THE LAYING HABIT

Hollywood and Barron English Single Comb White Leghorns STRAIN MATINGS

250-300 EGG-BRED LINE

Careful breeding, typtesting and trapnesting has produced our world-famous Karsten's Quality Laying Hen—A Utility Bird With Standard Requirements

Our Leghorns are long, deep-bodied, wedge-shaped birds, with wide backs and low spread tails, big lopped combs and alert eyes. Birds that lay those large white eggs that bring the high prices on the New York Market.

**KARSTEN'S FARM** **Box Y** **ZEELAND, MICHIGAN**

## 750,000 CHICKS \$10.00 PER 100 AND UP

Select, culled flocks of heavy layers on free range and properly cared for to produce vigorous, sturdy chicks.

Varieties.	25	50	100	500	1000
White, Brown & Buff Leghorns, Anconas	\$3.75	\$7	\$13	\$62	\$120
White & Barred Rocks, Reds, Black Minorcas	4.25	8	15	72	140
White Wyandottes, Buff Orpingtons	5.00	9	17	82	...
Buff Minorcas, Silver Laced Wyandottes	6.00	11	20	...	...
Mixed	3.50	6	11	52	100

Postpaid, 100 per cent live arrival guaranteed. Order right from this ad. Bank references. Circular Free.

**TRI-STATE HATCHERIES** **Box 533** **ARCHBOLD, OHIO**

## Highest Quality Certified Baby Chicks

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. Sixteen years of experience in producing and shipping Chicks, giving absolute satisfaction to thousands. Write for valuable illustrated free catalog and price list. Get lowest price on best quality chicks before placing your order.

**W. VAN APPELDORN,** **R. 7,** **Holland, Mich**

## CHICKS

We can save you money on Ancona and White Leghorn Chicks. Send at once for catalog and prices. We insure your chicks for one week.

**M. D. WYNGARDEN**  
**R. 4, Box 80** **Zeeland, Mich.**

## Early Maturing Baby Chicks

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.

**The Keystone Hatchery and Poultry Farms,** **Lansing, Michigan**

## HUNDERMAN'S First-Class Chicks \$10 AND UP

We are heavy producers of first-class Chicks. Flocks on free range. Culled by expert. 100 per cent Live Delivery Guaranteed. Order today from this Ad. and get Chicks while you want them.

Prices on	50	100	300	500
English S. C. White Leghorns	\$6.50	\$12.00	\$36.00	\$57.50
Barred Rocks, S. C. Reds	8.50	10.00	48.00	77.50
Single Comb R. I. Reds	9.00	17.00	50.00	82.50

Mixed Chicks—\$10 per 100 straight.  
Blue Hen Incubators. Reference: Zeeland State Bank. Order today. You take no chances. Catalog Free. **HUNDERMAN BROS.' POULTRY FARM, Box 25, Zeeland, Michigan.**

## CHIX FREE CHICK OFFER

Our Tom Barron Strain White Leghorns pay big dividends. We breed and hatch only one kind—the best. Our pure-bred chicks are strong, husky and easy to raise. Get our circular and **FREE CHICK OFFER** before buying eggs, chicks or breeding stock. It will surely pay you. **PROGRESSIVE POULTRY FARM, P. Ver Hage, Mgr., Zeeland, Mich.**

## BABION'S QUALITY CHICKS

Varieties. Prepaid Prices on

	25	50	100	500	1000
Pure English White, Brown & Buff Leghorns	\$4.00	\$7.00	\$13.00	\$62.00	\$120.00
Barred Rocks, Reds, Anconas	4.25	8.00	15.00	72.00	140.00
Wh. & Buff Rocks, Wh. Wyandottes, Minorcas	4.75	9.00	17.00	82.00	160.00
Sil. Wyandottes, Orpingtons	5.50	10.00	19.00	92.00	180.00

Prices quoted are for chicks hatched from OUR GOOD UTILITY FLOCKS. Chicks from Stock of BLUE RIBBON PENS will be \$5.00 per 100 higher. Postpaid, 100 per cent live delivery guaranteed. Bank references. You cannot go wrong. Order from this ad. Thousands satisfied. Ten years' experience. Our Slogan, the best chicks are cheapest, not the cheapest chicks the best.

**BABION'S FRUIT AND POULTRY FARMS, Flint, Michigan.**

## Large, Husky Chicks

Pure-bred, high-quality chicks from certified, tested flocks on free range.

Varieties.	25	50	100	500	1000
S. C. White & Brown Leghorns	\$3.50	\$7.25	\$13.00	\$62.50	\$120.00
Anconas	3.75	7.25	14.00	67.50	130.00
Barred Rocks, R. I. Reds	4.50	8.50	16.00	77.50	150.00
Assorted Chicks	2.75	5.50	10.00	50.00	...

Extra Select Stock \$2.00 per 100 higher. Well hatched in modern machines. Each order carefully packed under our personal attention. Postpaid, 100 per cent live delivery. Bank reference. 1924 catalog ready.

**WINSTROM POULTRY FARM & HATCHERY, Box A-6, Zeeland, Mich.**

## "CLOVERLEAF" S. C. W. Leghorn Chicks

From carefully selected trap-nested stock that has years of good breeding back of it. The kind that produce the winter eggs. From highest producing stock, at a price that you can afford to pay. Why pay more? Buy "Cloverleaf" and see their superiority. 100 per cent live delivery guaranteed. Parcel Post paid to your door. Send for catalog. Special discount on early orders.

**CLOVERLEAF POULTRY YARDS, R. 2-M, Zeeland, Mich.**

## MEADOW BROOK One Of The Founders Of The Chick Industry

Henry DeFree & Sons. 21 years in business

Pure-bred stock carefully developed for years. Order from this ad and get chicks just when you want them.

Prepaid prices on	50	100	500
White and Brown Leghorns	\$7.00	\$13.00	\$62.50
Rocks, Reds, Buff Leghorns	8.00	15.00	72.50
Mixed Chicks (all varieties), \$10 per 100.	11.00	20.00	95.00

You take no chances. Ref: First State Bank, Holland. 97 per cent live delivery guaranteed. Wh. Leghorns headed by male birds of 285-303 egg record strain. Other breeds highly bred. Circular free.

**MEADOWBROOK FARM, HOLLAND, MICHIGAN**



## What Kind of Roughage Are You Feeding?

It makes no difference whether your roughage is Alfalfa, Clover, Cow Pea, Soy Beans or other hay, you can round out your ration for your dairy cows with

### SUGARED Schumacher Feed and Boss Dairy Ration

so that you get maximum milk production at very economical feeding costs.

Sugared Schumacher Feed contains a variety of unequaled body building carbohydrates while Boss Dairy Ration (24% protein) with its variety of high protein concentrates is a wonderful milk producer. To supply the mineral matter so essential to dairy cows, we have followed the advice of experiment station investigators and added Calcium Carbonate to both of these feeds. Sugared Schumacher Feed and Boss Dairy Ration furnish a variety of carbohydrate body building feeds that will keep your herd in good healthy milking condition and supply the necessary protein concentrates for heavy milk yields.

If your hay is  $\frac{1}{2}$  clover, alfalfa, cowpea, or soy beans, feed

200 pounds Boss Dairy Ration

100 pounds Sugared Schumacher Feed

If your hay is  $\frac{1}{2}$  clover, alfalfa or other legume, feed

100 pounds Boss Dairy Ration

100 pounds Sugared Schumacher Feed

If your hay is straight clover or alfalfa, feed

100 pounds Boss Dairy Ration

300 pounds Sugared Schumacher Feed

These feeds are making good with thousands of others—they will "make good" with you. Your dealer can supply you.

**The Quaker Oats Company**

Dept. 1658

Address Chicago, U. S. A.



## DAIRY FARMING



### Cow Tester Brings Hopes

*Discouraged Dairymen Take Heart, Finding their Old Organization the Way to Success*

By B. V. Halstead

THREE years ago the members of the West Allegan Cow Testing Association became disheartened and discouraged; dissolution of the organization seemed probable on account of the lack of interest.

For the year 1923 this same association, through its official tester, Leslie A. Wilcox, turned in the highest association average ever achieved in Michigan cow testing annals, according to A. C. Baltzer, dairy extension specialist of Michigan Agricultural College.

Learning of the difficulties facing the Allegan County Association, Prof. O. E. Reed, head of the M. A. C. Dairy Department, and Mr. Baltzer journeyed to that county. They soon discovered the source of the trouble to lie in the way the association work was being handled. A new tester was placed on

Baltzer, also is well above the average figures for Michigan cows, the figures being 6,700 pounds of milk and 252 pounds of butter-fat.

The averages of the four poorest herds in butter-fat in the West Allegan Association, ranged from 231 to 286 pounds, with an average of 257.3 pounds, as compared to the 160-pound average of Michigan cows, while the milk production for the same four herds was 5,218 pounds as compared to the 3,700-pound production of Michigan cows.

A considerable amount of credit is given by members of the college extension staff to the testers who handle the work of the associations. Very difficult conditions are often encountered by them, which in the majority of cases they surmount satisfactorily. An incident frequently recounted has to do with one tester, Merrick Johnson, who happened to be forty miles from his next appointment at the time of the recent heavy snowfall which halted railroad and automobile transportation. Appreciating the necessity of "being on the job," however, the tester walked the forty miles through the stormy weather and the drifted roads in order to fill his appointment.

#### Men Well Trained.

These official testers are carefully trained by members of the college extension staff before taking positions. They are taught that they must be of the most possible service to the association members, that they must have a keen interest in their work and in the upbuilding of the dairy herds of the state, and that these things, rather than the actual record-keeping, are the parts of their work of prime importance.

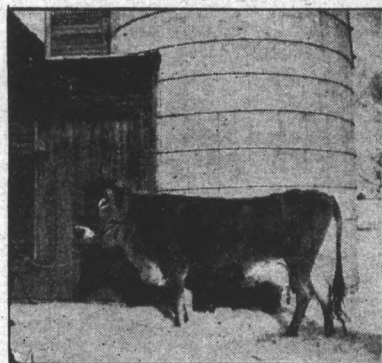
They also aid the farmers with whom they come in contact in matters of feed and rations, help them in more efficient crop production, encouraging the growth of alfalfa and other leguminous crops which serve the double purpose of providing excellent feed and at the same time renew and enrich the soil, and they attempt to improve dairy conditions in all possible manners. Besides the records which they keep of actual milk and butter-fat production, they also compute the amount of food used in relation to production, the value of the products, and the returns on a cash basis from different methods of dairying.

#### Work Shows Remarkable Growth.

Only eighteen years ago, at Fremont in Newaygo county, Michigan, the first cow testing association in the United States was organized. On January 1, 1922, there were eight associations in Michigan with a total of 162 herds and 1,827 cows. A year later there were twenty-five associations with a total of 609 herds and 6,877 cows. On January 1, 1924, seventy-five associations were operating with a total of 1,562 herds and over 22,000 cows under test.

In the West Allegan Association, seven pure-bred bulls were purchased during 1923, according to L. A. Wilcox, tester, while one scrub bull and nineteen cows were sold for beef purposes. These "visitor" animals were slaughtered because the testing work had shown them unprofitable and undesirable.

These improvements in the Allegan county herds are paralleled by the reports for all the associations in the state, in which thirty-eight pure-bred sires were purchased and 153 unprofitable cows were sold out of the associations during the year.



This Five-year-old Grade Jersey Led the West Allegan Association by Producing 601.5 Pounds Butter-fat.

the job and was given assistance for a day or two on the actual work, besides his two week's course in the work at the agricultural college. Steady progress from that time through a succession of testers has been the path of the association, with the making of the present record as the highest honor.

#### City Man Leads.

The average figures for the association during the last year were 7,170 pounds of milk and 335.9 pounds of butter-fat on an average of 253 cows for the entire year. A curious fact is that the owner of the high herd in butter-fat production, C. S. Methven, of Saugatuck, is a newcomer in the dairy business, having been forced to leave Chicago some years ago on account of ill-health. Mr. Methven's herd of seven high-grade Guernsey, Jersey and Holstein cows averaged 436.5 pounds of fat and 9,340 pounds of milk for the year, with a 4.67 butter-fat percentage. Mr. Methven also owned the high cow in butter-fat production, Bessie, a five-year-old grade Jersey, who checked in a record of 601.5 pounds of fat and 11,544 pounds of milk for a butter-fat percentage of 5.21.

Mr. Frank Lane, with a herd of twenty pure-bred and grade Holsteins, took high honors for milk production with an average of 10,357 pounds, while his cows also averaged 395 pounds of butter-fat. Lucille, a pure-bred Holstein also owned by Mr. Lane, was high cow in milk production, with a record of 16,504 pounds of milk and 546.8 pounds of butter-fat.

The standard reached by the association is shown by the fact that while the average per association cow was 7,170 pounds of milk and 335.9 pounds of butter-fat, that of all Michigan cows as shown by the 1920 census was but 3,700 pounds of milk and 160 pounds of butter-fat.

The average production of cow testing association cows, according to Mr.

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Samples Free—with lowest whole-sale prices. We expect much higher prices later. We can save you money on best tested seed. We bought early big stocks on lower markets. Our prices amazingly low. Don't buy your seeds until you write for our prices and samples on Clover, Alfalfa, Timothy, Sweet Clover or any seed needed. Our big Seed Guide Free.  
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**CLOVER AND TIMOTHY BARGAIN**  
Red Clover and Timothy mixed—the standard grasses cannot be surpassed for hay and pasture. Contains 10 to 15 per cent clover, just right to sow. Thoroughly cleaned and sold on approval, subject to government test. Ask for this mixed seed if you want our bargain. Have Pure Clover, Sweet Clover, Timothy and all Field and Grass Seeds. Buy now. Prices are advancing. Ask for SAMPLES and 116 page catalog FREE. Can ship eastern orders from eastern warehouse if desired.  
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Guaranteed Time Keeper. Given for selling only 30 cards of Dress Snap-fasteners at 10c. per card. Easily sold. EARN BIG MONEY OR PREMIUMS. Order your cards TO-DAY. Send no money. We trust you till goods are sold.  
AMERICAN SPECIALTY CO.  
Box 190-Z Lancaster, Pa.

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Made Fresh For Your Order, and Guaranteed For 5 and 7 Years  
Buy Direct At First Cost  
Has Full Life in It When Delivered  
I PAY THE FREIGHT  
You will be greatly pleased after you use it. INSTRUCTIONS for painting with each order. Write today for my FREE PAINT BOOK and Color Cards. Tells why paint should be FRESH. ESTABLISHED IN 1903.  
O. L. CHASE, The Paint Man  
Department 17 ST. LOUIS, MO.

## Wonderful Aid to Cows At Calving Time

You need not dread calving—once you learn how to help your cows through this dangerous period. Serious disorders—often of a permanent nature—can be avoided by seeing that the cow's genital and digestive organs are in top notch health before calf birth.

Thousands of dairymen write us of the splendid results of feeding Kow-Kare two or three weeks before and two weeks after calving. L. A. Richardson, Marine, Ill., writes: "I gave Kow-Kare to every cow, commencing one month before calving time and continuing one month afterward. It has also been a great guard against a tendency to abort when given during pregnancy. I have three dairymen on my farms and we never lose a calf or have a sick cow."

G. E. Moison, Clam Falls, Wis., says: "I find Kow-Kare to be one of the best things I can find to give my cows before calving. They are never troubled with retained afterbirth and the calves never have scours, when Kow-Kare is given."

J. E. Liberte, Newington, N. H., writes: "Am using my first box of Kow-Kare and find it is doing good work. A cow dropped her calf three weeks ago and didn't give four quarts of milk a day; she is now giving ten and one-half quarts."

Kow-Kare has medicinal properties that stimulate and strengthen the genital and

digestive organs—the seat of nearly all cow diseases. It is a reliable remedy for Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite and a sure aid in increasing the milk yield of healthy cows.

You can realize greater profits from dairying by the use of Kow-Kare. Send for our free book, "The Home Cow Doctor." It will help you to greater dairy success. You can buy Kow-Kare in \$1.25 and 65c packages from your feed dealer, general store or druggist.

**DAIRY ASSOCIATION CO., INC.**  
Lyndonville, Vt.

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Bag Balm, Grange  
Garret Remedy,  
American Horse  
Tonic and  
Horse Comfort



FREE BOOK



Close observation of the methods used by the association members who are making the best records, is securing valuable data as to proper feeds and methods of feeding, as a corollary to the testing work. Recommendations of the M. A. C. extension staff based upon such observations are that 100 pounds of water, or 12.5 gallons, daily are necessary for cows in milk, and often larger quantities for high producers. About three pounds of water are usually required for one pound of milk. The use of some means of heating the water, and of individual drinking cups has been found profitable in several cases among members.

It has also been found that one pound of grain should be fed for each three or three and one-half pounds of milk produced per day, depending on

the quality of milk produced and the roughage used. Ground limestone, wood ashes and steam bone meal are recommended as good sources of minerals for the ration. When non-legume roughage is fed, about two pounds of mineral mixture per hundred pounds of grain mixture should be used. Mixing one pound each of wood ashes or ground limestone, plus one pound of salt in the grain has been found to make a good home-made mineral mixture.

As an evidence of the commercial value of the cow testing association work, the extension men point out that at the fourth annual state sale of the Michigan Holstein-Friesian Association held February 4 at M. A. C., the cows with cow testing association records sold in every instance at higher prices than other cows without these records.

## League Buys Out Distributors

(Continued from page 343).

ferred them at their natural shipping points. Nor do they see why they should share the burden for farmers whose natural outlet is to more remote cheese and butter factories, etc., at lower prices. The non-cooperating distributors likewise think themselves justified in making the most profitable arrangement which the market affords, which is that of non-cooperating fluid milk.

The Dairy League, however, considers that these are both short-sighted and selfish views. Somebody must care for that lower-priced surplus, the butter, cheese, etc., which if dumped into New York as fluid would swamp the market and bring disaster to the entire dairy industry at the farming end. The distributors could sit easy. They can take their toll, whatever the farmer gets. The farmer bears the brunt. The league farmer, therefore is often somewhat bitter, (though less so than formerly), at his Non-pool neighbor who, while adding every day to the surplus, refuse to help share the cost it entails in lower-priced products. Under the circumstances the officers of the league feel that they are fully justified in invading the field of the non-pool distributors, and establishing country shipping stations in their territory, so as to provide league fluid milk outlets for farmers who will cooperate on the surplus.

All this has an immediate bearing on the recent purchase by the league, the Empire State Company being one of the non-cooperating distributors, (the most powerful in the field, in fact, next to Sheffield Farms), and one of those into whose territory the league has "carried the war" by buying or building country shipping plants in competition. This policy has crippled the Empire State Company rather severely, some country plants of the latter, which formerly shipped a hundred cans a day and upwards, being reduced to ten or twelve. The company has, in fact, been obliged for a considerable period to buy an important percentage of its supply from independent outside sources, at advanced cost.

At the city end the Empire State Company has suffered likewise through the keen competition of the Borden Company. The Borden Company, it is to be remembered, has cooperated in the league's pooling policy from the beginning, believing it to be the most practical solution for the problem of surplus, with justice to all concerned, producer, distributor and consumer alike. There can be little doubt that in these circumstances the Borden Company has increased its competitive pressure on Empire State to get it into line. The latter has thus been quite evidently suffering from unusually severe competitive conditions both at the city and country ends, and in each case from rivals far more powerful than itself. There would seem to be ample reason, therefore, why it might find it financially profitable to

sell out. In fact, it is reported that the league could have bought the Empire state property as far back as two years ago, had it been so disposed. At any rate, the sale has at length been made, and to the company's two most powerful rivals.

A suggestive sidelight is thrown by the fact that a day or two after the sale, a restraining order was sought, to stop it, by F. W. Fiske & Co., a New York City concern having contracts with the Empire State Company. Quite naturally, there are people who infer that other forces beside the Fiske Company are concerned in the action. It is not believed that the restraining order can be of serious effect.

Another important point needs to be made, in that the transaction indicates quite plainly that the league has no present intention of invading the field of retail milk distribution in New York City, as Cincinnati dairymen did in their field recently. The directors say that they are not able to do this as yet, for financial reasons. No doubt this is true. But there can be little doubt that they realize, in a way which many league members who favor such a step do not, what a tremendous, giant's job retail milk distribution in New York City is, on the scale the league would need to embark on, to make the move count. As it is, the league appears to have taken a long and sure step forward, which will put new energy and confidence into every member.

### ADOPTS NEW SELLING PLAN.

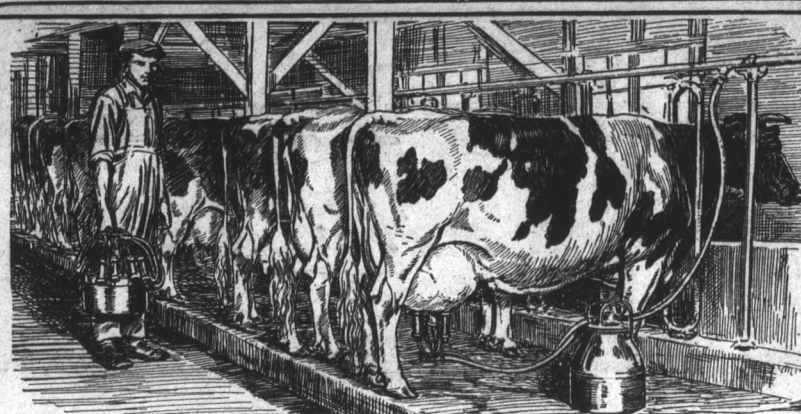
A NEW contract plan has been adopted by the board of directors of the Michigan Potato Growers' Exchange. The plan includes five-year contracts between growers and the local cooperative marketing organization, and, in turn, these local marketing agencies appoint the exchange their selling agency.

The plan was worked out by Hale Tennant of the M. A. C. It will, in the belief of its author, give the exchange a definite basis on which to estimate the supply of potatoes for disposal, and further, it can release cars as fast as favorable markets can absorb them.

The population of the world is increasing about twenty million a year, and of America about a million a year.

Price statistics indicate that it takes about as much money to equip a farm today as it did to buy the farm twenty years ago.

Rats fed meat, bread and potatoes in the laboratories of the Ohio State University, languished, lost the power to rear young, and died. But when fed milk and vegetables, containing minerals and vitamins, they recovered and thrived. The same thing holds for human diets, says J. F. Lyman, the experimenter.



## "The DE LAVAL MILKER A Blessing for Dairymen"—

So says Mr. Frank Cervenka, a De Laval Milker user in Illinois. He goes on to say:

"I certainly am proud that I discarded the old, laborious and disagreeable method of milking by hand. Never would I do without a De Laval again, and am sorry I didn't get one before I did."

This is not an exceptional instance of De Laval satisfaction. Read the following:

"If more farmers knew how much the De Laval Milker will save them, there would be more in use. I would not be without one for any money."—E. Lloyd Jones, Minnesota.

"To make a long story short, the De Laval Milker is absolutely the most wonderful piece of machinery ever invented."—W. T. Farris, Kansas.

"The De Laval Milker makes a pleasant job out of the most disagreeable work on the farm."—C. L. Reeves, N. Dakota.

"The De Laval Milker is fool-proof and trouble-proof—a joy every time it is used. No De Laval Milker, no dairy herd."—C. T. Oscar Schacht, Indiana.

"I have been using a De Laval Milker almost four years. It is sure a great labor-saver, making the job of milking a pleasure instead of a hard part of the day's work. A man milking ten or more cows can't afford to be without one."—P. W. Westbrook, Iowa.

"I would be strongly tempted to sell my cows before I would give up my milker. It is the best labor-saving device there is for a dairyman."—Geo. L. Burrell, Missouri.

"I have used another make of milker for five years, and until I installed a De Laval I would not have believed there could be such a difference."—E. J. B. Burgess, California.

"I have never felt better in my life since I put in a De Laval Milker and got away from the drudgery. The money I paid for it was well spent."—Herman Ebel, Illinois.

"I take a great pride in my place, for every dollar I have in it I made on it. I consider the milker the best investment I ever made."—Harry C. Wilson, Penna.

Thousands of other De Laval Milker users are just as enthusiastic in their praise. If you are milking ten or more cows by hand you can soon pay for a De Laval in time saved, and extra milk of better quality produced. Sold on easy terms.

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Send me your Milker ☐ Separator ☐ catalog (check which).  
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**POISON DEATH**  
Kills prairie dogs, ground hogs, ground squirrels, pocket gophers. Saves alfalfa. Experimental stations approve. 1000 tablets P. P. \$1.50. Warranted. Ask your druggist or send direct. Booklet free. Address  
FT. DODGE CHEMICAL CO., Ft. Dodge, Ia.

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"Your company has given me the best of satisfaction in test and promptness."  
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Thousands of B. V. B's (Blue Valley Boosters) will tell you it pays to ship your cream yourself direct to Blue Valley.

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**BLUE VALLEY CREAMERY CO.**  
Ship to Blue Valley Creamery in City nearest you:  
Detroit, Mich. Grand Rapids, Mich. Milwaukee, Wis. Duluth, Minn.  
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**BLUE VALLEY BUTTER**  
is good butter  
that's why millions use it

## MICHIGAN FARMER Classified Ads. pay well. Try one.

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You can make money by using Ryde's Cream Calf Meal. Sell the Cow's Milk and Cream, and buy Ryde's Cream Calf Meal for one-third of what you get for the milk and cream. Two-thirds of the price you get for the milk is clear cash profit. Ryde's Cream Calf Meal is an unequalled substitute for milk. It contains every element necessary for rapid and thrifty growth, for calves and other young live stock. Build better calves with Ryde's Cream Calf Meal, at your Dealers, or write

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Carbola is a white paint and a powerful disinfectant combined in powder form. Just mix it with water and it's ready to be applied. It will not clog the sprayer. It dries pure white. It does not flake off or peel off. It does not spoil, even after it is mixed. A pound of Carbola makes enough disinfectant paint to cover 100 square feet. The dry Carbola powder makes an excellent and inexpensive louse powder.

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The Disinfecting White Paint

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Highest Quality**

We specialize in grass and field seed. Located to save you money and to give quick service. We expect higher prices—Crops short—Buy now and save big money.

**FREE SAMPLES**  
Don't fail to investigate these bargains. Re-cleaned Tested Timothy, \$3.50 bu. Sweet Clover, white blossom, \$3.00. Alsike Clover and Timothy (10 to 15 per cent Clover), \$4.40 bu. Alfalfa, \$9.95 bu. Have high quality of Clover and other Grass and Field Seeds at low prices. All sold subject to State or Government Test under an absolute money-back guarantee. Send today for our big money-making Seed Guide, explains all. FREE.

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## SWEET CLOVER

Unbudded. Grow Sweet Clover. Cheaper and better than Red. Grows anywhere. Best fertilizer, wonderful pasture and hay. Big money maker. Crop often worth \$50 per acre. Sow our superior, scarified seed.

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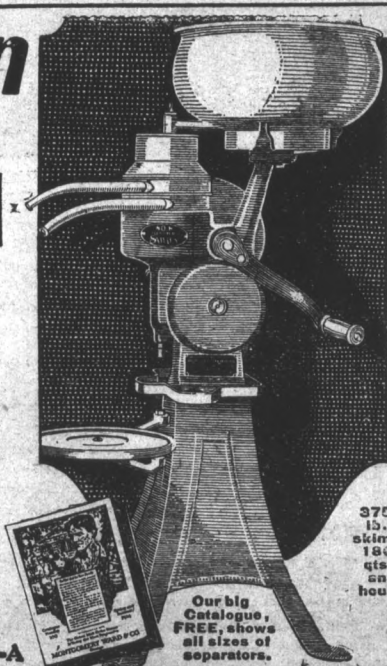
The Sattley Separator is made in our own factory—it is strong, firm on its base, smooth running, easy to turn and clean—and easy to buy. It stands up—and it bears our absolute guarantee.

Send \$5.00 only. We will ship you the separator. Use it for 30 days. If you are completely satisfied, you may pay the balance in 10 monthly payments. Write for the separator and ask for General Catalogue showing all sizes separators and complete line of dairy supplies.

Don't buy a separator until you investigate Ward's Sattley and learn how you save 1/3 or more through buying direct from the manufacturer.

No. 289M4615 . . . \$48.80 (Cash \$46.00)  
Pacific Coast States \$3.80 (Cash \$0.55)

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lb.  
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Our big  
Catalogue,  
FREE, shows  
all sizes of  
separators.

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

## Discuss Farmers' Problems

Board of Farm Organizations Hold Regular Session

**A**LARGELY attended meeting of the National Board of Farm Organizations was held at the Temple of Agriculture, Washington, D. C.,

The American farmer must look beyond the three-mile limit for solution of our agricultural problems, said Senator T. H. Caraway, of Arkansas, who asserted that the national position of isolation regarding intercourse with Europe should be abandoned and that the United States should aid Europe, if only for the selfish purpose of establishing a world market. He declared that the world was at war now just as much as in 1918. France and her dependent nations could put into action the biggest army ever assembled. And with this power she is determined to control the destinies of Europe.

### National Grange Plan.

The cooperative marketing plan now being considered by a National Grange committee was described by A. C. Goss, of Washington State Grange, who stated that the plan did not contemplate putting the government into business, but proposed an enabling act that would aid the farmers to get together and solve the cooperative marketing problems themselves.

A pooling system, a method of finance, and crop control are the three prime objects of the plan. When perfected it would include a nation-wide system of local cooperative marketing associations, and state marketing boards all correlated under a Federal Marketing Board, the aim being to secure and maintain the even distribution of farm products, thereby preventing dumping and glutted markets.

The present plan provides for financing through the intermediate credit banks. The committee has also decided that the Federal Marketing Board should be separate and distinct from the department of agriculture.

**Cooperative Marketing Requires Adequate Credit.**

Declaring that any cooperative marketing system will fail unless it includes a credit system of its own, Senator Smith W. Brookhart, of Iowa, said that there is no law in the United States that allows the establishment of a cooperative bank that receives deposits. In fact, the government has built up a banking system that prohibits the organization of cooperative banks. He advocated the Norris-Sinclair government financed government corporation bill, but urged that it be amended so as to make the corporation an agency through which farm cooperative organizations could market their crops.

The Farmers' Union was the first organization that ever marketed anything by commodities, Secretary A. C. Davis, of the National Farmers' Union, told the delegation. The union was the pioneer in the cooperative marketing of live stock, and is now doing an immense business in commodity marketing. In Kansas City alone the Farmers' Union does a live stock and jobbing business amounting to more than \$7,000,000 annually.

### Commented on Various Bills Before Congress.

Senator Arthur Capper gave his views on a number of important proposals now before congress. The committee of agriculture, of whom he is a member, has had an interesting experience, more than 200 representative farmer leaders having appeared before it. All conceded that something was wrong with agriculture, but the outstanding feature of the hearings was

the confusion of ideas, many at direct variance.

Of the several bills now before congress for the relief of agriculture, Senator Capper said the Gooding price-fixing bill was losing ground upon investigation. Some who once favored the measure now doubt its wisdom.

There is a fair prospect that the Norbeck-Burtness bill to encourage diversified agriculture in the northwest may be passed. The Norris-Sinclair bill providing a \$100,000,000 corporation to enable the buying and selling of farm products, Senator Capper thought had more merit than any of the other proposals, and would come nearer to working out a practical plan for benefiting both producer and consumer.

The McNary-Haugen bill has some merit and strong support. Senator Capper said there were some who favored the incorporation of the two bills into one system. Congress, he said, is going to try to work out with the aid of the farm organizations, a workable measure that will establish a fairer relationship between what the farmer receives and what he pays. It was disappointing to find farm organizations taking antagonistic views. If there could be unity of point of view it would help greatly.

Senator Capper said there was going to be a tax reduction program enacted by this congress. Taxpayers should have relief. He was in sympathy with Secretary Mellon's plan of cutting down taxes to the extent of \$325,000,000. But he would not go as far as Mellon in reducing the taxes of millionaires. Reduction of surtaxes from fifty to twenty-five per cent was unreasonable. There can be reductions all along the line. There is still some sales tax talk in congress, but Senator Capper thought it would be a long time before advocates of a sales tax can put it over on the people.

### Furnishes Round-table Opportunities.

It was the purpose in forming the National Board of Farm Organizations to provide opportunity for all farm organizations to sit around a common table and thresh out their differences and thereby be able to present a united front to congress, said John McSparran, master of the Pennsylvania State Grange. There never will be a real voice of agriculture until it comes from the farmers themselves, and is presented by the cooperating representatives of federated farm organizations.

Resolutions were passed favoring legislation providing for the creating of such agencies for marketing the exportable surplus in such a way as to give returns to the producers on a pre-war basis, and an amendment to the tariff act of 1922 relative to the flexible provision, so as to require the Federal Tariff Commission to base its findings of facts on information and recommendations on information presented only at public hearings.

Changes in the farm loan act to raise the loan limit on permanent improvements from twenty to fifty per cent on insured valuation, to restore the election of six directors to the board of each of the twelve land banks, and to limit intermediate credit banks' margin on debentures to one-half of one per cent and to put all profits in reserve were advocated.

When a man has a farm that is a credit to him, it is easy to get credit.





# WHAT THE COW TESTERS FOUND OUT.

THE summary of the cow testing association work in Michigan for the month of January shows that 1,504 herds were tested in the fifty-eight associations that reported out of the seventy-five associations operating. During the month's time 117 undesirable cows were sold to the butcher, twenty-five pure-bred sires were purchased by various members in the cow testing associations.

Holsteins predominate in the high-herd records and in the high-cow records. Mr. V. C. Wilkinson, in the Shiawassee Association, Mr. Hice, tester, had the highest herd in butter-fat production for the state for the month of January. His herd of six pure-bred Holsteins averaged 58.6 pounds of fat and 1607 pounds of milk.

The grade Jersey herd of L. Steig, in the Ravenna-Muskegon Association, follows with 5,802 pounds of fat production. William Hooper in the Traverse-Antrim Association has one of the high-producing Guernsey herds. Other high Guernsey herd owners for the month of January are: Earl Hemingway, of the Berrien Association, Melvin Lyle, of the South Van Buren Association, Guy Southwell, of the Jackson-Parma Association, and J. O. Dobson, of the Leelanau Association.

A new rule is going into effect regarding re-test on high-producing cows. Testers are requested to notify the dairy office immediately whenever a cow is credited with more than ninety pounds of fat in a testing period.

Other high butter-fat producing herds are as follows: I. Koenigs-knecht, of the North Clinton Association, with pure-bred Holsteins; Wm. Curtis, of the Ionia-Lake Odessa Association, with pure-bred Holsteins; C. W. Johnson, of the Kent-Alto Association, with pure-bred and Grade Jerseys, and Edward Alfien, of the Allegan Association, with grade Holsteins.

Holstein cows head the list in individual high cow butter-fat production. Four pure-bred Holsteins are credited with more than 100 pounds of butter-fat production for the January testing period. The owners of these cows are J. Bowlby, of the Clinton-Shiawassee Association; J. E. Post, of the Genesee No. 7 Association; William Schoof, of the Macomb Association, and I. Koenigs-knecht, of the North Clinton Association.

John Buth, of Kent-Alpine Association; W. Rundel, of the Washtenaw-Saline Association, and D. D. Aitken, of Genesee No. 3 Association, had high producing pure-bred Holsteins, and P. S. Jones, of the East Allegan Association, had a high producing grade Holstein. C. W. Johnson, of the Kent-Alto Association, and Alvin Balden, of the St. Clair Association, had the two pure-bred Jerseys that ranked in the ten highest butter-fat producing cows in cow testing associations during January.—A. C. B.

## DO BUSINESS AT LOW COST.

ACCORDING to the report of Manager Currie Christensen to members at the annual meeting held at Onokama, February 31, the Onokama Farm Bureau local did business in 1923 amounting to \$137,000 at a cost of only seven per cent. This, according to the state auditor of the farm bureau, is among the lowest costs of doing business in Michigan.

Unfavorable conditions in the raspberry season caused a slight drop in the total business as against 1922. Fred Bradford, of Arcadia township; John Gould, of Manistee township, and Edward Laisey, of Brown township, were re-elected directors from their respective townships. Ole P. Miller and Joseph Brunais were re-elected directors at large.—M. H.

Two slogans for the live stock man: "Feed or get fooled," and "Keep the best; sell the rest."

# A Correct Fence for Every Purpose

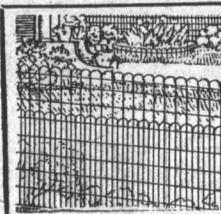
There's a "Columbia" Hinge-Joint or "Pittsburgh Perfect" Stiff-Stay Fence that exactly suits your purpose. Also there's a dealer near you who handles both of these fences and will help you choose the right type, weight and height of fence for every inclosure.

## "Columbia" HINGE-JOINT Fence

"Columbia" Hinge-Joint Fence is made of open hearth steel which is drawn to exact gauges of wire and heavily galvanized to resist rust. Strong, flexible stays of the same size as the line wires extend from top to bottom of the fence, gripping the line wires at every intersection by the Hinge-Joint that grips with grit. Made in standard farm and poultry styles.

## "Pittsburgh Perfect" STIFF-STAY Fence

"Pittsburgh Perfect" is one of the most widely used stiff-stay fences on the market. The one-piece stay wires are inseparably joined to the line wires by the electric welding process which we have perfected. The heavily galvanized, full gauge, open hearth steel wires insure durable and dependable fences. Made in many styles for farm, poultry and lawn. Fully guaranteed.



## Fence Your Lawn

—with one of our attractive designs of "Pittsburgh Perfect" Lawn Fence. It will add to the beauty of the lawn, keep out chickens and all farm animals, protect the grass, flowers and shrubbery, and provide a safe place for the children to play.

Improving your farm with good fences is a profitable investment. 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.

**Pittsburgh Steel Company**  
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## Quality Service Price

### France Agricultural Limestone Meal

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Simple, sanitary, efficient, safe milking features to work for you at once. The famous Pump-Pulsator type Milker with the "See-thru" teat cup. Action as smooth and natural as that of a calf. Write at once for descriptive folders and literature.

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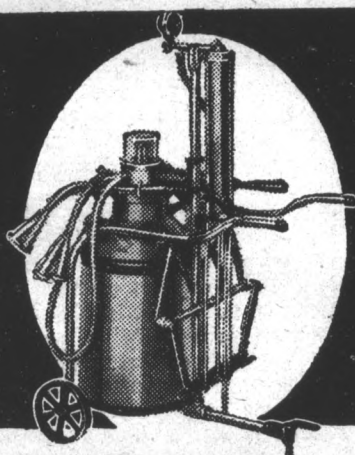
"Filled 40 silos this fall (1922) with an L-16 Papec Cutter, second season, and never had a plugged pipe." Ernest Kahler, Clifton Springs, N. Y.

The Papec is made in four sizes to fit any power. N-13 and L-16 sizes are ideal for Fordsons. Send today for our new catalog and U. S. Gov't Bulletin "Making and Feeding of Silage"—both free. Learn why a Papec soon pays for itself.

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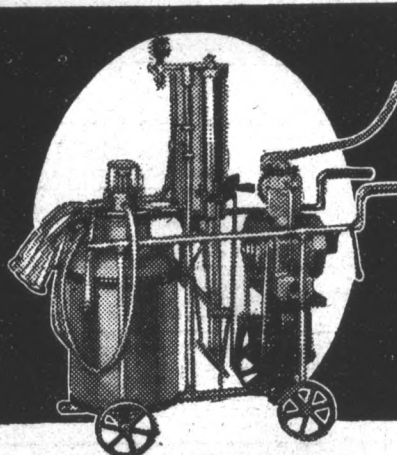


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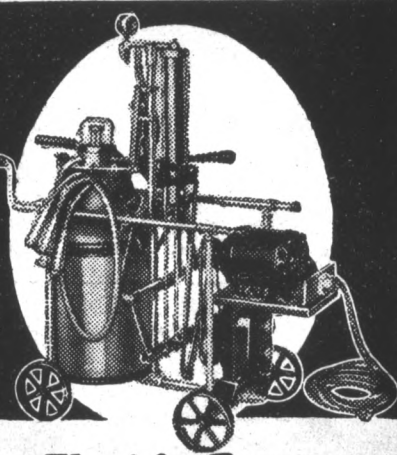
## Hand Power

Here's the milker for the man with as few as 6 cows. Does the exact work of a power milker, but run by hand; so easy to pump a child can do it, thanks to the patent spring and vacuum.



## Engine Power

A gas engine milker that does everything the big elaborate milkers can do, in one complete, compact, simple unit—and at a mere fraction of the cost. The sensible milker at last for the practical farmer.



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For the farmer who has electricity, here's the ideal milker. One-sixth horse power runs it. Can be run from the battery of an ordinary lighting plant without starting engine. Utmost simplicity; utmost service.

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Mr. Dairyman, here's your chance to find out on a **REAL Free Trial** what the milking machine will mean for you, on your own cows. A special offer good until we have a salesman or agent in the territory. There is nothing to install; nothing to build up or fit into your barn; just move the **PAGE** in and start milking! A real free trial, without risk, bother or expense. No money down, no C. O. D. You decide.

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down AFTER trial on the hand power model. **Astounding rock-bottom price, direct to you.**

**AT LAST! The Perfect Milker:** the wonderful New Page Milker! So simple! So simple!! SO ULTRA SIMPLE!!! So easy for you, so good for your cows—because it is so simple! And it costs a fraction of these big outfits—because it's simple! At last, the milking machine problem solved! Investigate! Write while this special offer lasts.

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Please send, without obligation on me, your free book containing the facts on milking machines and full details of your 30-day free trial, easy payment offer on the models checked. Quote me rock-bottom price direct on this new extra simple machine.

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## Brookwood Farm

Registered Guernseys of both sexes for sale at reasonable prices. Young stock from A. R. dams. Herd is Federal Accredited.

**JOHN ENDICOTT, Owner**  
BIRMINGHAM, MICH.

**Reg. Guernseys** We are offering at very quick sale some choice cows in milk, a two-year-old heifer soon to freshen, and a splendid young bull ready for service. Don't write but come if you want Guernseys. Farm located 1 mile north and 4 miles east of St. Johns. Wm. S. Ormston & Son, St. Johns, Mich.

**10 Reg. Guernsey cows**, some A. R. Record May Rose breeding, \$2,000 for all; herd bull \$100. John Ebels, Holland, Mich., R. 2.

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

**Wallinwood Guernseys**  
Young bulls from A. R. cows for sale.  
E. W. WALLIN, Jenison, Mich.

## Ready for Service

Holstein bull born February 15, 1923.

Sire—Echo Sylvia King Model, a 36-lb. grandson of May Echo Sylvia. He now has 34 tested daughters, including a 32-lb. Junior three-year-old.

Dam—A 25.7-lb. three-year-old daughter of a 31-lb. cow with 929.4 lb. butter and 22,445 lbs milk in 365 days.

A well grown, dark colored bull. His seven nearest dams average 31.86 lbs. butter in seven days.

Send for pedigree and price to

**BUREAU OF ANIMAL INDUSTRY**  
Department C.,  
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## Registered Holstein Bulls

Up to eleven months of age. Good individuals and good breeding, at low prices. Also a few young cows or heifers soon to freshen. A healthy herd. I. M. SHORMAN, Fowlerville, Mich.

**For Sale: Herd 20 Reg. Holsteins**  
33½-lb. male. R. B. PARKHAM, Bronson, 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.

## Brookwater Jerseys

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

## JERSEYS FOR SALE

Two Young Jersey cows, sired by the prize winning bulls, "Constance's Brookhill" and "Baron's Owe Interest." One freshened November 12 and one is due on March 4. Will also sell one 2-yr.-old, one yearling, one 3-mo.-old heifers. HAROLD F. KLEIN, R. 3, Birmingham, Michigan.

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

**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.

## Hereford Steers

78 Wt. Around 775 lbs. 84 Wt. Around 675 lbs.  
86 Wt. Around 550 lbs. 102 Wt. Around 625 lbs.  
44 Wt. Around 600 lbs. 48 Wt. Around 500 lbs.  
All dehorned, dark reds, good stocker order. One farm practically out of feed. You can buy your choice from either bunch. Real quality Herefords when finished are usually market toppers. Give number and weight preferred. VAN V. BALDWIN, Eldon, Wappello Co., Iowa.

## HEREFORDS

Bulls, Heifers and Cows with Calves by side. Most popular strains. Allen Bros., 616 S. Westnedge St., Kalamazoo, Mich.

## HEREFORDS

Registered Breeding cattle, T.B. Tested at practical prices for production of Hereford Baby Beves profitably, all ages. T. F. B. SOTHAM & SONS (Herefords since 1839) St. Clair, Mich.

**Thumb Hereford Breeders' Association** can supply your needs with outstanding, well-bred registered Herefords, either sexes, polled or horned at reasonable prices. Inquire of E. E. TWING, Sec-Treas., Bad Axe, Huron Co., Mich.

**BIDWELL SHORTHORNS** Revolution Jr. 573938 heads accredited herd 28917. Now offering 2 January roan bull calves of exceptional merit, reasonably priced. BIDWELL STOCK FARM, Box D, Tecumseh, Mich.

**Wildwood Farm** Milking Shorthorns. An accredited herd bred for beef and milk. Headed by King Sales, grandson of Glenside Dairy King. Fresh cows and heifers priced reasonably. Visitors welcome. Beland & Beland, Tecumseh, Mich. Paved Road No. 50.

**When In Need** of Red Polled Bulls, Cows or Heifers. Buy from Michigan's leading herd, owned by Westbrook Bros., Ionia, Mich.

**For Polled Shorthorns** Milk Strain, Either Sex. Paul Quock, Sault Ste. Marie, Mich.

**Redd Polle Cattle** for sale. Bulls ready for service. Cows with calves and heifers. G. A. Calhoun, Bronson, Mich., R. 1.

**Brown Swiss Bull Calves** For Sale, one ready for service. E. T. SPENCER, Safford, Mich., R. 1.

## HOGS

**Large Type Berkshires** Boar pigs farrowed August 10, 1923. Sired by "Baron Mastodon" and out of a 600-lb. yearling daughter of "Champion Superbus" 2nd. Price right. Visitors welcome. Lawrence A. Veite, Woodland, Mich., R. 2.

To be Popular  
Is to be Different  
That's the reason

Topmast Sensation  
Is So Popular!

He outmeasures and outweighs the best boars in the state. BEST of ALL, he transmits his individuality to his offspring. Bred Sows and Real Boar Prospects for sale.

## LOEB FARMS,

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## DUROC JERSEYS SOWS

Bred and open Sows of the finest practical type. Farrowed April 15 to May 15, 1923. Long, well-rounded body. Send for description and photos.

Fred Vreeland writes: "I am pleased with the Sows and assure you that they are satisfactory in every respect."

Every shipment guaranteed to be satisfactory. STATE FARMS ASSOCIATION  
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## Registered Durocs

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 size, type and quality combined come and see or write us—F. J. Drott, Monroe, Mich. R. 1

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

**Duroc Jerseys** Bred Sows, July and September gilts at prices that leave no excuse for breeding scrubs or grades. Reg. and guaranteed. JESSE BLISS & SON, Henderson, 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.

**Big Type** Chester White bred sows and gilts. Sired by and bred to State Fair prize winners. Lucian Hill, Tekonsha, Mich.

**O. I. C.'s** 15 spring pigs, pairs not akin, from 3 good sires, also fall pigs, recorded free. Otto Schulze & Sons, Nashville, Mich.

**O.I.C. & Chester Whites** Strictly Big Type with gilts with extra length. Bred for last March. Also a few Choice Sept. Pigs. NEWMAN'S STOCK FARM, Marlette, 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, 1923. Milo H. Peterson, R. 2, Ionia, Mich. "Elmhurst Farm."

**O. I. C.'s** 3 choice bred gilts for sale at \$30 each. Registered free. C. J. THOMPSON, Rockford, Mich.

**O. I. C.** 5 young service boars, 8 gilts for April farrow, and Buff Rock eggs, \$1.00 per 15 eggs. Clover Leaf Stock Farm, Monroe, Mich., R. 1.

## Hile's Good Polands

Big, easy feeding, quality Polands. That's the kind we like and sell. Bred gilts and sows for sale. A hundred years of constructive breeding back of them. WESLEY HILE, IONIA, MICH.

**SPOTTED POLAND** China yearling gilts, sired by our 1923 blue ribbon winner Chicago Int'l. Bred to son of Spotted Ranger. Boars and gilts all ages. High quality, low prices. Keller & Jackson, Ohio City, O.

**L. T. P. C.** Bred gilts. Fall pigs, either sex. Brown Swiss Bull, Calved 4-29-23. A. A. Feldkamp, Manchester, Mich.

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

**For Sale** Four bred Hampshire Sows and Herd Boar. Wonderful individuals from excellent breeding lines. Morley E. Osborne, Sun Haven Farm, Howell, Mich.

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

**Hampshires** Of Best Blood lines; 100 Bred Gilts and Sows, some fine Boars. Luckhard's Model Farm, Bach, Mich.

## SHEEP

## Choice Bred Ewes

400 for sale in carlots, yearlings to solid mouths, black-faced, in good condition, bred to lamb April 10th. Located 25 miles south of Detroit on Detroit & Toledo Electric, and on Dixie Highway. Telegraph Address, Rockwood. Phone Newport. Post Office, South Rockwood. ALMOND B. CHAPMAN & SON.

## Cotswolds—Bred Ewes

at farmer's prices. A. M. BORTEL, Britton, Mich.

**10 Head** Registered Shropshire ewes of exceptional quality. Bred for last of March and April. C. Lemen & Sons, Dexter, Mich.

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**Reg. Percheron Stallions** and Mares for sale. Okemos, (Ingham Co.), Mich. CHAS. A. BRAY.

**FOR SALE**—One imported Black Percheron Stallion, sound in every way, and a Sure Breeder. Ben Bickel, Frankenmuth, Mich.

**TRY a Michigan Farmer**  
Classified Liner. They bring results.



## DUAL-QUALITY CATTLE.

THERE has not been a period in the twenty-odd years of our experience with beef cattle when the demand for milking ability has been so insistent.

We attribute it mainly to the fact that the farmer generally is in need of ready money and wants something that will provide a quick turnover. The cow with the big milky udder helps to provide a regular income and at the same time plays an important part in sustaining the family. She has been a life-saver for many during the past few years.

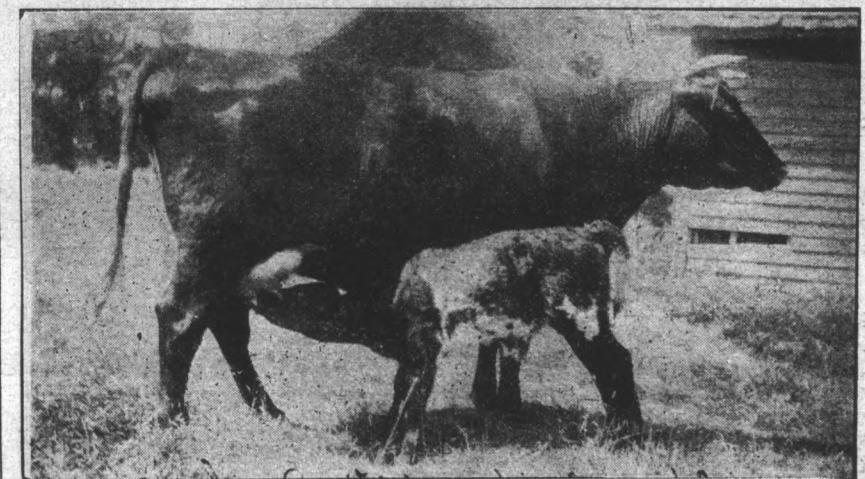
The strictly beef cow must have some time to turn her feed into cash. She requires little attention and demands little food, but withholds the returns until her calf grows to marketable age. Nevertheless, there are farm-

between hogs and feed may be much different.

Remember the essentials for strong pigs—exercise, some bulky feed, a balanced ration, and minerals. Give them alfalfa, clover or corn silage; let them work over the stable wastes for bulk to keep the bowels in a healthy condition and for the needed voluntary exercise; add a little tankage, not over half a pound per day, and keep a mixture of minerals, consisting of ashes, salt, sulphur, lime, and acid phosphate or steamed bone if no better is available.—Pope.

## GETTING COWS TO EAT WHAT THEY SHOULD.

COWS, like people, are creatures of habit. They eat most of what they like best, if they can choose their diet. It is very natural for them to consume



She Gives a Tolerable Flow of Milk and Raised a Good Calf.

ers all about us who prefer to stake their future largely upon beef production. It is well that this is so. It is not easy to preserve the proper balance between beef and dairy products. Beef cattle at the present time are too plentiful for the good of the industry. The greatest danger to the future of the dairy industry is overproduction.

As a compromise to changing times, and as a means of playing safe through all vicissitudes, comes the wide demand for good, big, beefy cows that are capable of producing prime steers, and that swing quality udders full of milk.

Skim-milk calves with beef quality bred into them, raised largely upon rough feed and pasture, and finished in their two-year-old form, make beef that commands high prices and the production of it is economical.

Dual-purpose cattle should not be confused with no-purpose cattle. They should have records of 6,000 to 8,000 pounds of milk, and look well, before they are worthy of the name. The country is full of the no-purpose kind and they are responsible for keeping the state's average annual milk production down around 4,000 pounds. They make no profits for their owners but their production, in the aggregate, if both beef and milk, is so great as to create the surplus that holds the market down. Economic conditions will eventually force both them and their owners out of business and the sooner the better for all concerned.—Pope.

## DO NOT NEGLECT THE BROOD SOWS.

TAKE care of the brood sows now and the pigs will take care of themselves next spring. Prices are not such as to encourage much interest in the hogs now, to be sure, but the crop of pigs that is now in the making will not be ready for market until next fall when the price relation

first the food that is most palatable. In searching for the finest morsels, a delicate feeder often throws her feed about in the manger until it has become soiled or matted up, and then refuses to eat the amount necessary to produce her maximum flow of milk.

The appetite of a cow depends upon the condition of the digestive tract. Often the digestion becomes sluggish from an excess of food low in digestible nutrients. The way to overcome this condition is to feed something that will keep the digestive organs active. Silage will do this. So will roots. Succulent food is, therefore, important when teaching the cow to consume the required amount of the foods she should have.—L. R.

## GIVE THE BREEDING EWES FRESH AIR.

SHEEP like fresh air and sunshine. If allowed to run at will they seldom seek protection from chilling winds and cold weather. So long as their fleeces are kept dry, they enjoy freedom.

My experience has been that there is danger of housing breeding ewes too closely during the winter months. Like many other flock-owners, I have on cold stormy nights closed the doors and neglected to open windows for ventilation. The following morning the air would be distressingly foul. This, I am thoroughly convinced, is not for the best health of the animals.

Breeding ewes need every advantage. Fresh air is not only essential to their well-being, but it costs little or nothing to provide. Opening the windows from the direction opposite to the prevailing winds generally will give the result sought. This arrangement prevents draughts which cause colds.—L. C. R.

Those who grow in ability and intellectual power speed up their progress by designedly choosing each day the most difficult tasks they can find.



## Wingarden Strain

### WHITE LEGHORN

### BABY CHICKS

EGG BRED for 18 YEARS

Here's what you get when you buy  
**Guaranteed Wingarden  
BABY CHICKS**

(1) Pedigreed stock, sired by males whose dams had records of 260 to 289 eggs per year, and grand-dams 298 to 304 eggs. (2) 100 per cent live delivery. (3) Chicks guaranteed to be healthy. (4) Absolutely pure-bred. (5) Absolutely no culls. (6) Stock that withstands winter cold as well as summer heat. (7) Free entry in our annual flock performance contest, whereby you may obtain 200 of our best Barron English White Leghorns free.

We know the quality of our stock because we maintain 42 hatchery farms of our own, instead of buying eggs wherever available. Sired by Hollywood and Funk Farms Males.

White and Brown Leghorns.  
Anconas.

Send for our catalog and read full particulars of the Wingarden Strain.

**Wingarden** ZEELAND, MICH.  
HATCHERY & FARMS Box M

### Breckenridge Chicks

#### Are Winners

Day-old chicks from strong, vigorous flocks which have been carefully culled and extra selected standard male birds. —Barred Rocks, R. I. Reds and White Leghorns. We guarantee 100 per cent safe arrival. Write us for price list and circular.

**BRECKENRIDGE HATCHERY, J. C. Barnse, Prop.**  
Box 351, Breckenridge, Mich.

### 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.

**COLUMBIA HATCHERY, HOLLAND, MICH.**

### BRED TO LAY CHICKS

#### Certified

100,000 Highest Quality Certified Baby Chicks. Improved Sheppard Strain S. C. Anconas—hard to beat. Winter and Summer. English Strain S. C. White Leghorns. All our Leghorns mated with Cockerels from E. E. Shaw Champion winning pen at M. A. C. 1923 laying contest. Personally culled and rated by experts and certified by Michigan Baby Chick Association. Guaranteed 100 per cent live delivery. Catalog Free. Take no chance with just as good, but get your best foundation pure-bred stock from The Reliable Poultry Farm & Hatchery, Paul De Groot, Mgr., R. I. Dept. P, Zeeland, Mich.

### 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.**

### 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 Layer. Plymouth Rocks and S. C. R. I. Reds. No better chicks anywhere at any price. Satisfaction and 100 per cent live delivery guaranteed.

**Brammer-Fredrickson Poultry Farm, Box 20 Holland, Mich.**

### FREE FEED "Just-Rite"

#### with 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.

**NABOB HATCHERIES, Ave. 20, Gambier, Ohio**  
Ohio Chicks are Better

### PURE BRED CHICKS

Real producers. Flocks culled by expert. Beautiful breeding stock. Barred Rocks, R. I. Reds, 50, \$8; 100, \$15; 500, \$72.50; WH. Leghorns, Anconas, 50, \$7; 100, \$13; 500, \$62.50. Leghorns are Barron stock. None better. 100 per cent live delivery guaranteed. Order from this ad and get chicks when you want them. You take no chances. Ref. McLachlin State Bank, this city.

**Petersburgh Hatchery, Petersburgh, Mich.**

### Whittaker's Reds Chicks

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.

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

#### LEGUMINOUS FORAGE.

IN these days of narrow margins it behooves us to look well toward the economy of production. We are thinking especially now of the hog business. We people who grow hogs as a part of our yearly program do not quit just because the price is low, neither do we like to produce them at a loss.

Fortunately, it happens that the most economical methods of pork production, are very closely allied to the practice that keeps the hogs in the best health and condition. Perhaps there is no one thing that means so much to the hog and to the hog grower, to the hog's health, and cheap pork production, as fresh leguminous forage.

It is doubtful, also, if there is any way in which such forage can be made to yield a greater net return than by pasturing it with hogs. A friend of mine found by keeping careful records some ten years ago, that after taking off the first cutting of clover and turning the hogs into the second growth from July until marketing time in October, they gave a net cash return for the clover of \$24 per acre, and left the field exceedingly rich besides.

Alfalfa is without a peer as a satisfactory forage for hogs. We shall make the greatest possible use of it this year. Clover is a close second. We try to plant a year or more ahead so that we will have available a fresh seeding of one of these choice forage crops that we can turn over to the hogs as early in the spring as the growth is well started. It often requires some extra fencing, but it pays.

You will note we said "fresh" forage. More and more we are learning the importance of sanitation in hog lots and buildings. Worms and lice, perhaps the greatest handicaps with which hogs have to contend, flourish exceedingly in filth. Worm eggs by the million abound in old hog lots, and they are fatal to young pigs. Two years is usually long enough for hog lots to stand without the plow.—Pope.

#### KEEP THE ANIMALS COMFORT- ABLE.

THE careful stockman will see to it that his live stock is comfortable. It is not always an easy matter with the mercury hovering low and the wind exceeding the speed limit.

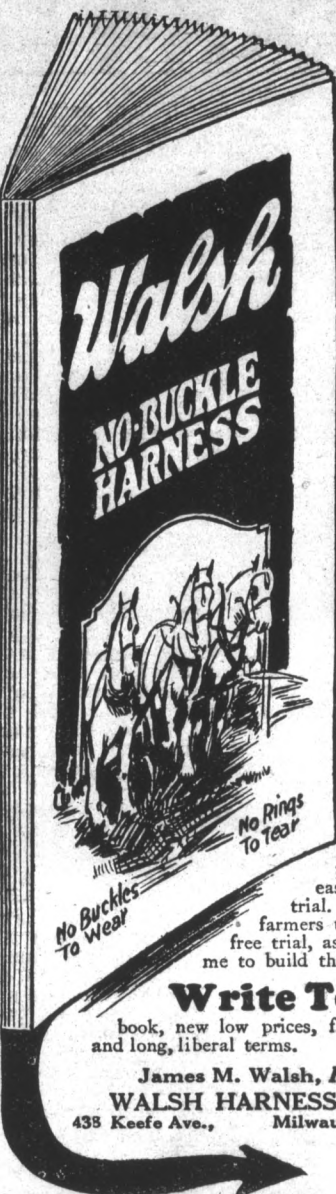
The man who has had his own best interests in mind has looked well to the little things that mean animal comfort before the cold arrives. Nevertheless, there are always plenty of things around a barn full of live stock that need doing from day to day.

We talk a great deal about quality in cattle, or hogs, or sheep, but it matters little what the quality may be if the animals do not get quality care, profits will be conspicuous by their absence. The margin of profit is small enough these days, even with a combination of good care and good live stock, but, of the two, good care is most important.

There are a thousand and one things that may be considered under the head of good care, but they may all be summed up in the one word, "comfort." The stockman who has a heart and an eye for business will look well to the comfort of his charges, and will not himself rest in comfort if they are not. In complete rations, damp beds, drafty living quarters, are not conducive to creature comfort. If you want to know the effect these things have on animals, try them yourself.—O. Dobbins.

If men understood domestic economy half as well as women do, then their political economy and their entire consequent statecraft would not be the futile muddle which it is.—Jas. Stephens.

# Send Me Your Name



I want every farmer, every user of horses, to receive my new, big, Harness Book. No matter what harness you buy, this remarkable book is full of valuable suggestions. Nothing like it has ever been published before.

## Get My FREE Harness Book

I send you this valuable 52-page book absolutely FREE. I want every farmer to post himself on the most wonderful harness of all time. Thousands testify that the No-Buckle harness principle, fully described in this handsome, illustrated book, is the world's greatest advance in harness making.

## Send No Money

Learn about the most liberal, easy long-time terms ever offered. You pay only \$5.00 after 30-days free trial, balance easy monthly payments, or cash if you wish, after trial. Sending my No-Buckle Harness out to farmers to try on their own teams for 30 days free trial, as I have for over eight years, enabled me to build the world's largest harness business.

**Write Today** for my free illustrated 52-page book, new low prices, free 30 days' trial offer and long, liberal terms.

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Name \_\_\_\_\_ P.O. \_\_\_\_\_ Sta. \_\_\_\_\_ R.F.D. \_\_\_\_\_

## DISPERSAL SALE of Registered Holstein Cattle

at Battle Creek, Michigan

ON THURSDAY, MARCH 20th, 1924

The entire herds of T. W. Sprague and John Rolfe comprising about 75 head of well-bred registered Holstein cattle will be dispersed at the John Rolfe farm near Battle Creek, Michigan, on Thursday, March 20th, 1924.

In this sale will be the 31-lb. cow, Princess Vale Pietertje. The 31-lb. yearling bull, Wolverine Prince Echo. The 30-lb. 3-year-old herd bull, Traverse Echo Sylvia King Segis. A daughter of the 30-lb. bull, King Korndyke Hengerveld Ormsby. Two daughters of the only Living Century Sire, Maple Crest Korndyke Hengerveld. Eleven granddaughters of King of the Pontiacs. Six daughters of the 30-lb. bull, Judge Walker Pietertje. Six yearling daughters and six heifer calves, out of the 30-lb. herd sire, Traverse Echo Sylvia King Segis.

Also numerous well-bred animals that space does not permit us to mention. If interested, write for a sale catalog to:

**JOHN W. ROLFE, R. F. D. No. 9, Battle Creek, Mich.**  
**WILBUR SPRAGUE, R. F. D. No. 9, Battle Creek, Mich.,** or to  
**W. R. HARPER, Middleville, Mich.**  
**Colonel D. L. Perry, Auctioneer, Columbus, Ohio**

**W. R. Harper, Sale Manager**  
Middleville, Michigan

## CHICKS From World's Greatest Layers

If you want pure bred chicks that are bred right, hatched right, and shipped right, that grow and will make you a profit, get our new low prices and free catalog before you buy.

**Tom Barron White Leghorns Heavy Type Brown Leghorns**  
**R. C. & S. C. Rhode Island Reds Park's Barred Rocks**

Flocks are carefully culled and developed on free range. All chicks are hand picked and inspected, no cripples or weaklings. Every one strong and healthy. Satisfaction and 100% live delivery guaranteed. Postage paid. Write now for our low prices and free catalog. White Leghorn and Barred Rock pullets after May 1, at low prices.

**KNOLL'S HATCHERY, R. R. 12, Box M, HOLLAND, MICH.**



## Royal Egg-Bred Chicks

S. C. English Type White Leghorns and Brown Leghorns

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.**

## Better Chicks & More of Them

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.

**DILIGENT HATCHERY, Holland, Mich.**

Additional Poultry Ads. on Page 383





# THE LATEST MARKET REPORTS



## GRAIN QUOTATIONS

Wednesday, March 5.

### Wheat.

Detroit.—No. 1 red \$1.14½; No. 2 red \$1.13½; No. 3 red \$1.10½; No. 2 white \$1.14½; No. 2 mixed \$1.13½. Chicago.—May \$1.11½; July \$1.11½ September \$1.12½.

Toledo.—Cash \$1.14@1.14½.

### Corn.

Detroit.—Cash No. 2 yellow at 83c; No. 4 yellow 80c; No. 5, 73@75c; No. 6, 70@72c. Chicago.—81½c; July 81½c; September 81½c.

### Oats.

Detroit.—Cash No. 2 white at 52c; No. 2, 50c. Chicago.—May at 48½c; July 46½c; September 42½c.

### Rye.

Detroit.—Cash No. 2, 71c. Chicago.—May 71½c; July 73½c. Toledo.—70½c.

### Barley.

Barley, malting 76c; feeding 72c.

### Buckwheat.

Buckwheat.—New milling at \$2.10 per cwt.

### Beans.

Detroit.—Immediate and prompt shipment 4.65@4.70 per cwt. Chicago.—Choice pea \$5.40; red kidneys \$7.60.

New York.—Choice pea at \$5.75@6; red kidneys \$7.60@7.75.

### Seeds.

Detroit.—Prime red clover cash at \$11.75, alsike \$8.80, timothy \$3.85.

### Hay.

Strong.—No. 1 timothy \$23.50@24; standard and light mixed \$22.50@23; No. 2 timothy \$21@22; No. 1 clover at \$20.50@21; No. 1 clover mixed \$20.50@21; wheat and oat straw \$11.50@12; rye straw \$12.50@13.

### Feeds.

Bran \$32; standard middlings \$33; fine do \$34; cracked corn \$33; coarse cornmeal \$37; chop \$35 per ton in 100-lb. sacks.

### Apples.

Chicago.—Barrels, "A" grade Greenings \$5@5.25; Jonathans \$5.50@6; Grimes \$3; Spies at \$5@5; Kings \$4@4.50; Baldwins \$4@4.50; Spitzenberg \$4.

## WHEAT

The wheat price level has shifted but little in the last ten days. Meanwhile, the process of merchandising the remainder of the crop continues and the conditions which usually bring about a spring advance promise to be operative in some degree later on. With wheat showing no pronounced upward trend, flour buyers see no reason to buy ahead. But, the current demand is sufficient to maintain mill operations at about the same rate as has prevailed since early in December. Choice milling grades of wheat are commanding substantial premiums. If the wheat market were to start upward, flour buying would probably broaden. Growing weather will be needed to show how well the crop has withered, although complaints are numerous. Conditions in Kansas and Nebraska are reported favorable but east of the Mississippi, and in Oklahoma damage undoubtedly has occurred.

## CORN

The corn market is full of uncertainties which afford both bulls and bears plenty of ammunition with which to defend their faith. It is believed to be holding back a lot of corn which will be fed on the market during the spring and summer.

On the other hand, it is pointed out that disappearance from commercial channels in the last four months has been so great that much less corn has accumulated at terminals than a year ago; that the heavy movement will be over in two or three weeks; that the cash demand is still absorbing all the good corn without difficulty; that farm disappearance has been heavy because of so much soft corn and so much live stock and that feeders are outbidding terminals in many sections.

## OATS

Oats prices are fluctuating with corn. Disappearance of oats from commercial channels since August 1 has not been quite as great as in the previous year, but farm disappearance has been heavier, if private estimates of farm reserves are correct. Heavier feeding of oats would mean some sav-

ing of corn. Seeding of oats is making slow progress in Kansas and Oklahoma owing to wet weather and the condition of winter oats in the southeast continues unfavorable.

## BEANS

Bean prices declined further last week as deliveries at elevators increased moderately and demand was light. Even at the decline sales were not increased a great deal as buyers were disposed to move their bids downward. Dealers believe that the market will not lose much further ground for the present, however. Choice hand-picked whites were quoted at the close of the week at \$4.75 per 100 pounds f. o. b. Michigan, with light red kidneys at \$6.85 and dark reds at \$8.25. Pintos are quoted at \$4.25 f. o. b. Colorado shipping points.

## SEEDS

The cloverseed market declined further last week, but a more stable undertone is apparent. Prices are more than \$2 a bushel below the high point of the season and this fact, as well as the arrival of the seeding season, has stimulated the cash demand. Shipments of red clover and alsike seed from producing sections were 25 per cent and seven per cent, respectively, less than in the preceding year. Timothy shipments decreased eight per cent but sweet clover increased 98 per cent and alfalfa 23 per cent.

## FEEDS

Feed prices are firmer than a week ago as lower prices attracted heavier buying. While spring-like weather has arrived in some sections, fairly heavy consumption of feeds will continue for another month. Stocks of most feeds and the rate of production are ample to prevent much advance in values; however, and the general trend is very likely to be downward.

## POULTRY AND EGGS

Egg prices declined persistently last week as receipts expanded rapidly. Eggs will begin to accumulate in storage in another week or two. Arrivals will treble in volume in the next two months, but the premium on fresh eggs over the probable storing level is so small that further declines in prices will be slight. Instead the market may have a moderate rally or two in the next month. At the low levels prevailing toward the close of the week, demand increased perceptibly.

Chicago.—Eggs, extras 29@30c; miscellaneous 22½@23c; dirties 22c; checks 21c; fresh firsts 23½@23¾c;

ordinary firsts 21@22c. Live poultry, hens 24½c; springers 26c; roosters at 17c; ducks 27c; geese 16c; turkeys 20c a pound.

Detroit.—Eggs, fresh candled and graded 25@25½c; Pacific Coast standards 30c. Live poultry, heavy springers 26@28c; light springers 22@23c; heavy hens 27@28c; light hens 22@23c; roosters 16c; geese 19@20c; ducks 26@30c; turkeys 25@30c.

## BUTTER

Butter prices declined further last week. The break was partly seasonal but was accelerated by a lack of confidence on the part of dealers. Production reports show a substantial increase over last year. Receipts at the leading markets are rather heavy and are increasing practically every week and further shipments of foreign butter arrived with additional quantities on the way. Consuming demand remains excellent but some reduction in the price level probably will be necessary to keep stocks moving, although there will be numerous upturns due to over-discounting the future. While the trend is downward the decline from this level should be an orderly one. Prices of fresh creamery butter were: Chicago, 92-score 48c; New York 48½c. In Detroit fresh creamery in tubs sells for 47@47½c.

## WOOL

The mills are not buying wool with freedom but are picking up occasional lots to take care of immediate needs and prices are fully steady. Apparently manufacturers will wait until the new clip is pressing on the market. Some contracting is reported in the west at prices ranging around 40 @42c for fine and medium clips. Both buyers and growers, however, are inclined to be conservative so that the volume of trading thus far has been small. Foreign auctions are still strong as a slight decline in the demand has been offset by smaller offerings in primary markets.

## POTATOES

Stocks of potatoes available for shipment on January 1, 1924, were 22 per cent less than a year previous. Since that date about 29,500 cars have been shipped, compared with 33,200 cars a year ago. On this showing, present stocks should be much lighter than a year ago. Potato shipments have expanded sharply in the last week. A substantial percentage consists of seed stock, however, and prices of table potatoes have held fairly steady with a little weakness in northern whites

which are quoted at \$1.15@1.25 per 100 pounds sacked in Chicago for U. S. No. 1. Bulk of round whites are bringing \$1.25@1.35.

## DETROIT CITY MARKET

Cabbage is becoming scarce. Carrots were ready sellers, while parsnips, turnips and beets were bought sparingly. Buying of horseradish was light. Potatoes were in liberal supply, but the movement was slow at 85@90c a bushel. The liberal supply of apples sold slowly. Poultry sales were mostly retail, and eggs sold slowly with prices lower. There was little demand for veal and hogs.

Apples, fancy \$2@2.50 bu; No. 1, \$1.25@1.50 bu; beets \$1.25@1.50 bu; cabbage \$1.50@1.75 bu; red \$1.50@3 bu; carrots \$1.50@2 bu; celery 50c a dozen; parsnips \$1.25@1.50 bu; potatoes 85@95c bu; root celery \$1.25@1.50 bu; rutabagas \$1 bu; turnips \$1 @1.50 bu; vegetable oysters 75c dozen bunches; eggs, wholesale 40c dozen; retail 40@50c dozen; hens, wholesale 28c lb; retail 30@34c lb; springers, wholesale 26@27c lb, retail 27@30c lb; veal 19c lb; hogs 11c lb.

## COMING LIVE STOCK SALES.

### Holsteins.

March 20.—Dispersal sale of T. W. Sprague & John Rolfe, at Rolfe farm near Battle Creek. W. R. Harper, Sales Mgr., Middleville, Mich.

### Why Plod Along

When you can become independent by raising DE LUXE Prize Winning strain of Silver Foxes. You can produce more wealth on one acre than from one hundred acres by dairying or growing any farm crop.

### Let Us Show You

How Silver Fox Farming will lead to your financial independence in just a few years. It requires only an initial investment of \$200 to \$500.

**THE BIG SECRET OF SUCCESS**  
Don't let the boys leave the farm or become discouraged. We give full instructions for starting you or the boys in this simple but profitable line of live stock farming and also offer consultation with our practical fox experts at all times. We will be glad to be host to you and your family at one of our modern ranches at any time. Let us help start you right. Write today for full particulars.  
**De Luxe Silver Fox Ranch, Manistee, Mich.**

## Ship Your DRESSED CALVES

Dressed Hogs and Live Poultry to

## DETROIT BEEF CO.

Oldest and most reliable commission house in Detroit. Write for instructions how to dress calves. Tags and market letter on application.

**Detroit Beef Co.**  
1903 Adelaide St. Detroit, Mich.

## Baby Chicks

Our own breeding flock of large type American White Leghorns. Laying and standard qualities combined. 13 years' experience in breeding, hatching and marketing. Also high quality Barred Rocks and R. I. Reds. All flocks culled and inspected. Modern hatching plant. 2 hatches weekly. Quality chicks at commercial prices. Write for prices and circular.

**DEAN** Egg Farm & Hatchery, Big Beaver. Mail address Birmingham, Mich., R. 4.

## Highest Quality Chicks

Feb.-March prices. Heavy broiler chicks 12c. Barred Rocks or Reds 17c; Anconas, Black Minorcas 16c; White or Brown Leghorns 15c; White Rocks, White Wyandottes, Buff Orpingtons 17½c. Extra selected chicks, built directly from contest winners, 4c per chick more. Add 30c if less than 100 wanted. Hatching eggs. Catalog. Good reference. Beckmann Hatchery, T.M.F., 26 Lyon St., Grand Rapids, Mich.

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

Our supreme quality Eng. W. Leg. and Ancona chicks direct from our farm, delivered 100 per cent alive at your door, at only 13c each. Write for catalog, or order from ad. **MODEL POULTRY FARM**, Zeeland, Mich., R. 4.

**CHICKS** White and Barred Rocks, White Leghorns, English Strain White Wyandottes, Buff Orpingtons, Reds. 100 per cent live arrival Guaranteed. Postpaid. Order from this ad and get the best. Durand Hatchery, Fenton, Michigan.

## Wishbone Hatched Chicks

From high-grade, heavy egg producing English strain S. C. White Leghorns. Strong and vigorous from free range utility flocks. Catalogue free. **HONOR-BILT POULTRY FARM**, Zeeland, Mich.

## Live Stock Market Service

Wednesday, March 5.

### CHICAGO

#### Hogs.

Receipts 29,000. Market fairly active; steady with yesterday's best kind. All interest buying. Bulk good 225 to 300-lb. butchers, \$7.40@7.50. Tops \$7.50. Bulk 160 to 210-lb. average \$7.20@7.50. Packing sows \$3.25@6.65. Killing pigs unchanged. Bulk strong weights \$5.50@6.15.

#### Cattle

Receipts 9,000. Beef steers higher. Live weights strong to 25c up. Practically all grades showing advance. Top matured steers \$12.00. Bulk \$8.45@10.50. Shippers demand for weighty bullocks. Stockers and feeders 10@15c up. Other classes steady. Vealers tending lower.

#### Sheep and Lambs

Receipts 10,000. Market very slow. Few early sales killing lambs steady. Few early sales good fat woolled lambs \$15.75@16.00. Odd lots common to medium lambs \$14.00. Good and choice ewes \$9.75@10.00. Choice shearing lambs \$15.50.

### DETROIT

#### Cattle.

Receipts 448. Market very slow. Good to choice yearlings \$8.50@9.50. Best heavy steers 8.00@8.50. Handyweight butchers 7.25@7.75. Mixed steers and heifers 6.00@6.75. Handy light butchers 5.00@6.00. Light butchers 4.00@5.00. Best cows 5.00@5.50. Butcher cows 4.00@4.50. Cutters 3.00@3.50.

Canners 2.50@3.00. Choice bulls 5.00@5.75. Bologna bulls 4.50@5.50. Stock bulls 4.00@4.75. Feeders 5.50@6.25. Stockers 5.00@6.00. Milkers 45@80.

#### Veal Calves.

Receipts 856. Market opened steady closing 50c lower. Best 13.00@13.50. Others 6.00@12.00.

#### Sheep and Lambs.

Receipts 1,079. Market steady. Best lambs 16.00@16.15. Light to common 10.00@12.00. Fair 12.25@14.50. Fair to good 9.00@10.00. Culls and common 3.00@4.00.

#### Hogs.

Receipts 2,863. Market steady to 5c lower. Mixed and heavies 7.60. Pigs 6.25. Roughs 6.00. Yorkers 7.25@7.60.

### BUFFALO

#### Cattle

Receipts, five cars; slow. Calves, \$14.

#### Hogs

Receipts, 25 cars; higher; pigs and yorkers, 7.85@8; pigs and lights 6@7.25.

#### Sheep

Receipts, 10 cars; steady; top lambs, \$16.40; yearlings, \$14@14.50; wethers, \$10.50@11; ewes, \$9@10.



## POULTRY

**FREE!**  
Our catalog shows why Z. P. F. stock costs no more than ordinary stock. Free

**ZEELAND POULTRY FARMS**  
ZEELAND, MICH.

## DUNDEE CHICKS

Are from pure-bred flocks culled by M. A. C. grad. uates. 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, Dundee, Michigan, Box A.

**CHICKS:** Strong, Healthy. S. C. Tom Barron Eng. White Leghorns, Brown Leghorns, 12c; Shepherd's Anconas, 13c; Assorted Chicks, 10c. Class A flocks therefore we sell no Class B, but Class A chicks only. 100 per cent safe delivery. Postpaid. No money down with order. Catalog free. **BOB HATCHERY, Zeeland, Mich., R. No. 2 M.**

A complete line of beekeepers' supplies ready for prompt shipment. Winter problem solved by the Inner Over Coat Hive. Send for 32-page illustrated catalogue, free.

**A. G. WOODMAN CO., Dept. M. F. GRAND RAPIDS, 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 8 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.....	\$2.40	\$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

**A HOME IN THE SOUTH** on good Florida land. Near Pensacola on the Gulf Coast northwestern Florida, due south of Chicago, on beautiful Bay. Cows, Hogs, Hens, Vegetables, Pecans and Fruits all do well. Save cost of Feed, Lumber, Labor and Winter Clothing. Enjoy Boating, Bathing, Fishing and Hunting. Climate delightful summer and winter. 10 and 40 acres for \$50 an acre. Easy terms. Write for our Free Map and Descriptive Folder No. 12. Brown & Sons, 5 N. LaSalle St., Chicago, Ill.

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