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VOLUME CLXII

MICHIGAN FARMER

LIVE STOCK JOURNAL
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A Practical Journal for the Rural Family

MICHIGAN SECTION THE CAPPER FARM PRESS

QUALITY
RELIABILITY
SERVICE

NUMBER TWO

The Farmers' Marketing Problem

The Consumer Factor In Its Solution. By I. R. Waterbury

YOU fellows make me sick, talking about the quality of Michigan apples! I use large quantities of apples for baking purposes and can't get Michigan apples that will fill the bill."

The speaker was a member of the Detroit Farmers' Club, a group of Detroit business men who own farms in adjoining counties and seek to operate them on a practical basis. The statement was made in one of their weekly meetings in which the members discuss their agricultural problems and experiences, just like the rest of us dirt farmers. The man who made it is also one of the proprietors of the largest of the high-class restaurants in Detroit. In this case, he was speaking from the consumer's rather than the producer's standpoint.

Other members of the club knew, as we all know, that Michigan produces as good apples as grow anywhere. Most of us believe they are better than are grown anywhere else.

But this man knew his own problem. His restaurants are operated on the serve-self plan. Baked apples are a constant item on his menus. They must be uniform in appearance, quality and size. Michigan growers do not pack their apples that way. Western growers do. On this account they are

better adapted to his use, so the western product enjoys this important consumer market, as well as the fruit stand market and a very considerable portion of the general retail market, just because standard quality has attracted consumer demand. And these consumers are paying higher prices than the Michigan fruit, which this product displaces, can command in the same market.

The western product is sold cooperatively, but that fact in itself does not give it first call in the consumer market. That is due to its standardization as to pack, which can best be accomplished by cooperative methods, but without which no kind of selling methods would have accomplished these results.

On the menu cards of many good hotels and restaurants, Idaho baked potatoes will be found listed at a charge of fifteen or twenty cents each. That the patrons like these potatoes is evidenced by the fact that they are to be found on an increasing number of menu cards, also by the fact that Idaho potatoes are at all times to be found in our wholesale produce houses, where they command a fancy price.

They are good potatoes, but no better than can be produced in Michigan. Yet the Idaho growers have grabbed

off this special consumer market for them at a fancy price because they are well matured stock and graded as to size to suit the special demand for baking purposes.

The two products above mentioned reach the consumer through the regular channels of trade which the great bulk of all our farm products must traverse. They have displaced our own products in our own markets simply because their growers have marketed them in a form which made a special appeal to consumers.

Perhaps these western growers did not have a broader vision than did our own producers. It is certain that they labored under a greater handicap in marketing their product, with long hauls and high freight rates between them and the ultimate consumer. Necessity, in this case, may have been the mother of invention, but the result was a better solution of the marketing problem, and we may well profit by their experience.

An almost endless number of instances might be cited in proof of the established fact that a standard product of quality is the basis of successful cooperative marketing of farm products, whenever marked success in this line has been attained. It is true of the great cooperative marketing de-

velopment in Denmark, so often cited and which has been a strong factor in inspiring the development of American cooperative enterprises.

But we do not need to go outside our own state for evidence to support this idea. Among our cooperative developments in this state, none has been more striking than that of the seed department of the Michigan State Farm Bureau. While not strictly a cooperative marketing agency in all its functions, it serves the farmers of the state in this capacity in addition to being a source of supply of grain and grass seeds of quality. It is the example most often cited by the average farmer as the most beneficial development of the organization.

Evidently because farmers are no exception to consumers in general in appreciating standard quality in the goods offered them, and in being willing to pay a premium for quality if necessary.

We would, then, urge the reader to keep this idea in mind in his search for a solution of his personal marketing problem, whether he attempts to solve it for himself or in cooperation with his fellows. The evidence all indicates that it is a basic principle of successful marketing which it does not pay to overlook or neglect.

"Bill" Livingston---On the Hog

Thirty Years with Pure-bred Hogs and Some of the Things They Have Taught

By P. P. Pope

WHEN we begin to look around for an authority on any subject we like to find that authority backed up by experience. And when we find a man who has spent thirty of the best years of an active life raising hogs, we naturally conclude that he should be a good authority on the subject. Especially is this true, if, in that thirty years our party has not "gone broke" in his various feeding, breeding, buying, selling and pedigree building operations, but has steadily moved forward, always keeping in the forefront, consistently breeding prize winners year after year, and making it pay.

We take off our hats to that man, and the one we have in mind is W. E. Livingston—commonly called "Bill" by several thousand farmers and live stock breeders who enjoy a first name acquaintance with him—and he lives among the hills over in Jackson county. Take a good look at the accompanying picture and you will understand why it is so easy to call him "Bill." That genial smile of his is always with him and he has conferred it lavishly upon the Poland China breeders of many states. Hundreds of them have made the pilgrimage to his place, and, although most of them get lost among the hills before they reach there, they always find a warm welcome when they arrive.

Mr. Livingston does not depend upon hogs alone. He conducts a diversified farming business; and the appearance of the different kinds of live stock running upon his hills, and of the various good crops growing in his fields, would indicate that he conducts it well. He has the loyal assistance of a

wonderful daughter, who goes about things like her energetic sire, and a capable son-in-law who has purchased the farm next door and is head farmer.

Of all the activities of the farm, however, Mr. Livingston likes the hogs best. They are his hobby, his special interest that admirably supplements the affairs of the general farm, and helps him to keep young. Ask him a few questions and he naturally lets loose a flow of genial wit and homely philosophy that is good to hear and contains much practical common sense. Listen while he talks to you for a while.

"It does not pay to harp too much about your own hogs," he says. "If a customer comes and does not find just what he wants, don't be afraid he will go to your neighbor's and find something better, take him there, or direct him the best way. If the neighbor has got something better, that's what he ought to have anyway; and, if your eyes are too small to see any but your own stock, you are a disgrace to the hog business and will not likely be in it

long. You may be selfish and gain one sale today but lose two friends tomorrow. I have no respect for the "hog" in the hog business.

"In regard to feed, there is no use trying to raise good hogs without good feed; it can't be done. I like to feed my hogs a variety of feeds and a balanced ration. We don't have much

skim-milk for our hogs so we feed some tankage, some oil meal, and occasionally we get a barrel of semi-solid buttermilk. These feeds mixed with ground grains and fed with ear corn balance the ration in good shape and keep the hogs growing big and smooth and slick all over.

"What do I think about extremes in type? Now, you've started something. Do you want to know what I think of these extremes in type? I think if God wanted hogs to be elephants, he would have put trunks on them. If he had intended

them to wriggle along through the weeds like a snake, he would have left the legs off. If all he had aimed at was just a rainbow, he would have put in the sky for us to look at

instead of down here for us to eat. Don't get the idea that I do not like them big, or that I do not like them long, or that I do not like a nice uniformly arched back. But I insist upon lots of feeding quality. I want them big, but I want them to weigh it as well as look it; I want them long, but I want four good straight legs out under the corners so they can walk without interfering; I like a nice arched back, not a hump back, and I want the underline down where the pigs can reach it. These hogs that you have to help up and then hold while they eat: Not for me. These hogs that get the squeals and die before they are eighteen months old: The other fellow who has money to lose can have them. When we lose sight of the pork barrel in producing hogs, we are on the wrong track and that is all there is to it."

These and a whole paper full of other things are characteristic of the spicy remarks you will hear when Mr. Livingston talks. Hogs is his favorite topic of conversation and he concludes by saying, "The last thing I hope to do is to feed the hogs."

GREASE THE WAY.

AS a little axle grease applied to the point of a nail will make it drive much easier in seasoned wood, so will a little of the oil of human sympathy and interest make the ways of life more smooth for those whose yokes are heavy. Furthermore, as the grease tends to prevent the nail from rusting in the wood, so will the sympathy keep alive the fires of love and joy within our lives.



"Bill," Himself, in True Form.

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CURRENT COMMENT

One scrub bull will easily spoil the whole herd.

The owner who cares well for his cows, is well cared for.

Good crops can no more be grown from poor seed than high-grade calves can be produced from scrub cows.

Sam says: Folks who worry about getting credit for what they do, never seem to get anything done.

Paradoxical as it may seem, the man who is selling the best live stock and grains today is the man who in the past has followed the slogan of "Keeping the best and selling the rest."

Potato Varieties and Prices

THROUGH organized effort over a period of years the Michigan potato crop has been very largely standardized as to variety and type. The great bulk of our crop is now of the so-called Late Potoskey or Russet Rural variety. This is a strong, vigorous and good yielding variety, of good, though rather extreme russet type. It has appealed strongly to growers and has resulted in better average yields and a generally better quality of product in our commercial potato crop.

Standardization is an undoubted benefit to any industry. It has been a benefit to our potato industry, but there is some evidence to show that we may have adopted a too extreme type in this case for best market results, particularly in the eastern markets, where round white varieties or light russets seem to have the preference. This is also true to some extent in the Detroit market. One large operator is shipping Wisconsin round white stock to this market under a special brand name and this stock is bringing a premium of twenty-five to fifty cents per sack above the ordinary run of Michigan stock. Part of this difference, at least, is undoubtedly due to the fact that this brand is much more carefully graded than the average shipments of Michigan stock and that this high grade is carefully maintained in all stock marketed under this special brand. This fact, coupled with the better appearance of these potatoes, both as to color and maturity, is responsible for the premium which they command in this market.

The market for this special brand of potatoes is not confined wholly to special customers and the fancy grocery trade. One line of chain stores

operated on the "serve-self" plan, where the customer sees and selects his own goods is using considerable quantities of these potatoes at the premium which they command in this market, which is evidence that a considerable percentage of average consumers prefer them.

Just how much this preference is due to the superior grading and maturity of the stock and how much to the color of the tubers, is problematical. Both are undoubtedly factors in the selection.

Another similar evidence is to be found in the demand which has been developed for Idaho potatoes in this and other markets. While these potatoes are largely russet varieties, they have a much lighter skin than our Michigan russets. These potatoes command a still higher premium in this market than the brand above mentioned. Again this is in no small degree due to their superior grading and better maturity, but a marked difference in color is also a probable factor.

While it would not be desirable to abandon the idea of standardization in our potato-producing industry, or discount the progress which we have made through it, it is always good policy to keep an eye to all developments in market demand and take steps to meet them. Our certified seed growers would do well to experiment in the matter of lightening the russet coat on our standard variety, and to give thought to providing a vigorous white round type for their eastern trade and for local producers who lean toward such a type, who will doubtless rapidly increase in number if the indicated consumer preference should become permanent or more general.

The first mentioned expedient would seem to merit most thoughtful consideration, since a modification of type to fit this market demand would seem to be preferable to a course which would nullify previous efforts toward standardization.

Leaks in Standardization

THERE is no doubt but what standardization is the great need of agriculture, especially for such products as fruits and vegetables, for to standardize the grade, pack, package and even the name will take much of the grab-in-the-bag methods out of the merchandising of these products.

Especially is standardization needed for Michigan-grown products, as the fruits and vegetables of the west are capturing our markets, not because of their quality, but solely because of their standardization.

Michigan, however, has recently made great strides along these lines and the State Department of Agriculture, which has the enforcement of these standards under its control, is to be complimented for the way in which it has carried out the provisions of the law. But there are still loose ends to this standardization work which they can not get hold of, and which must be left to the grower's cooperation to maintain.

First, there is the bulk carlot shipments of fruit which does not come under the provisions of the present law. This permits buyers to come to our shipping points to buy all the poor stuff they want to, and ship it to consuming centers for sale as Michigan fruit. However, this practice may soon be eliminated, as the fruit interests of the state are now behind an amendment to the standards law to include the carlot as a closed package, thus making it come under the provisions of the law.

Another great leak in maintaining the present standards is the trucking business. Each season thousands of truck loads of fruit are carried out of the state to nearby markets without any restrictions as to grade.

The roadside market is also another opportunity for those who are not constructively inclined in establishing a

decent reputation for Michigan products.

These loopholes in the standardization work are just further indications that you can get around most any law if you are so inclined. Our plea is to Michigan growers that, when they are offered opportunities to sell through these loophole methods they offer nothing that is not in keeping with the Michigan standard grades. Thus they can help make a reputation for Michigan products by selling something which they are not ashamed of themselves.

Our Good Friends

OUT in the business world there is little opportunity for you to choose the persons with whom you associate. In social circles it is easier to be with those most congenial to your nature; yet, even there one is far from being master of the situation.

But in the library you are king and potentate. You can say to Scott, Browning, Longfellow, Shakespeare, or any of the great dignitaries of literature, "You are not for me tonight, I shall have a quiet time with Macaulay." And they will remain right in their place while you enjoy the richest companionship with the author you have chosen for the occasion.

God pity the person who, during the active years of his life, does not become intimately acquainted with a few good books. To experience the sensation of having the soul exalted to the skies, or buried under fathomless depths, gives life a zest and worthwhileness scarcely ever to be found in the ordinary hum-drum of life.

To aid those who desire to be supplied with good books, new and old, this journal started with the first issue of the year, a column to be devoted to reviews. We trust it will be of some real service to our thousands of readers.

Beans and Beets

Growers of these Crops to Hold Two Important Meetings This Month.

A MEETING of bean growers, representatives of the State Farm Bureau, and bean jobbers, has been called by A. B. Cook, president of the bean growers' association, for Owosso on January 18, both forenoon and afternoon. Every person interested in Michigan's bean crop, whether grower, jobber, cooperator, or what not, should plan to attend the session.

The purpose of this meeting is to find some way around difficulties now besetting the orderly marketing of this important Michigan crop. President Cook will lay before the meeting conditions, some of which he believes should be changed. President Breisch, of the Michigan Bean Jobbers' Association, has promised to contribute of his experience and observations, and render all the aid possible in getting the bean market upon a more dependable basis.

There will also be present R. L. Churchill, manager and secretary of the California Lima Bean Growers' Association. He is coming across the continent to tell Michigan bean men how the western organization is working out.

We are informed that two main objects will dominate the meeting: A move looking toward the more orderly marketing of Michigan's big cash crop of beans, and, second, a discussion of ways and means of advertising to the consumer the place beans should have in the diet of an American.

Sugar Factory Abandons Fifty-fifty Contract.

The fifty-fifty contract put out by the Owosso Sugar Company last year has, according to reliable authority, been abandoned. In its stead, the above company, together with the oth-

er members of the Sugar Manufacturers' Association of the state, has substituted a forty-five-fifty-five contract—the forty-five per cent of the income going to the grower. The new contract places upon the sugar companies the responsibility of securing labor, but, according to our information, places that labor under the exclusive control of the manufacturers.

A number of features of this contract, including the above and others, are being unfavorably criticised by some of the growers. Among these critics is C. E. Ackerman, of Durand, manager of the Michigan Sugar Beet Growers' Association. In a letter Mr. Ackerman urges that growers from every producing district send delegates or attend in person, a meeting of growers and manufacturers with representatives of the federal government at the Agricultural College, January 21-25.

The understanding is that on the first two days the federal representatives will hold a conference with the manufacturers and on the remaining days will convene with the growers regarding findings made this past summer in the sugar beet fields and factories of the state.

It is being urged that growers do not sign contracts with the sugar companies until after these conferences.

Tacks

I'VE been studyin' about birds, and that made me think about tacks, 'cause birds don't have to pay no tacks. They kin just fly around and sit on anybody's fence and eat anybody's cherries, corn, etc., without payin' no tackses. Gee! I wish I was a bird. Sophie heard me say that onet and she said, "Yes, you'd make a perty good goose."

Now, this here income tacks is somethin' new, but I can't figure why it's called a income tacks, unless it means

tackses is comin' in all the time. And seein' as tackses is comin' in all the time, your money is goin' out all the time, so it looks like to me that it ought to be the outgo tacks.

But they say this income tacks is better'n the others, 'cause when you ain't got nothin' comin' in, you don't have to have nothin' goin' out.

Just what the outcome of this here income tacks is goin' to be is somethin' I don't know nothin' about. But sometimes I don't see the point about this tacks business until I sit on it.

Jim Hudson says we oughtta be patriotic enough to pay tackses fer to run our glorious country. Well, I suppose maybe he's right, and we oughtta say like Pat Henry said, only different, "Give me tackses or give me death." But maybe most o' us like death better, 'cause it lets us go where there ain't no tackses, but we get both of them, 'cause there ain't nothin' more certain than tackses and death.

You know, tackses is the finest thing out fer the other fellow to pay. Fer that reason, I'm strong fer the income tacks, 'cause I ain't had no income fer a long time. And I believe them fellows what is makin' money doin' nothin' should pay more tackses than we what is makin' nothin' fer doin' somethin'.

The way the situashun is now, the more you do fer nothin' the more you get tacksed fer doin' it. It just seems like the tackses is on the outgo basis instead of the income basis, 'cause these fellows what is got big incomes is havin' lots o' fun gettin' tacks exemptions. What we want is tacks exemptions fer the ones what can't pay and tackses fer those who kin. Fer that reason I'm interested in the outcome of the income tacks.

HY SYCKLE.



Marketing Eggs Cooperatively

What Experience has Taught in Cooperative Distribution

By J. D. Harper

EGGs are a world commodity like wheat. They are distributed more uniformly throughout the world, however, and are produced by more people, perhaps, than any other commercially important agricultural product. Although eggs are a very delicate food commodity they are warehoused and shipped long distances and sold on a futures market the same as wheat.

Much has been heard recently about the marketing of both eggs and poultry through cooperative organizations, and a lot of good work has been done. However, before organizing to market all of the eggs and poultry of the country through cooperative agencies, it may be well to look at the elements of strength and the elements of weakness in these organizations.

First, let us look at some of the elements of weakness that have been recently observed in a number of poultry and egg marketing organizations.

Tendency Toward Price Control.

Most corn belt egg producers feel that they should have more to say about the price of their eggs. Not long ago the producers of every commodity wanted to get a monopoly of all of that particular commodity, place the commodity then under one control and make the consumer pay a price that would cover the cost of production, plus a reasonable profit.

When followed to a practical conclusion, "reasonable profit" will be determined by the producers themselves, and being a democratically controlled organization, the board of cooperative directors will be obliged to put the price high enough to keep the poorest and least efficient producers in business as well as the most scientific and most efficient. This naturally stimulates production of that commodity by attracting men into that business because profits are practically assured.

These facts are now being more widely appreciated and cooperative managers have been demonstrating to their boards of directors and to the producers, themselves, that supply and demand are factors closely related to the question of price control. These managers have shown that high prices and also low prices will curtail consumption. People won't buy when the price is too high and when the price keeps going down they wait to buy because it may go lower.

Extravagance and Inefficiency.

Incompetent management of cooperatives and lack of proprietary interest leads to extravagance and inefficiency because employees and even directors of cooperative organizations too frequently assume the same attitude toward the funds of the association that many public officials and others do toward public funds which are entrusted to them. Such money is more easily spent than other money. Producer members of the board of directors vote themselves a per diem of say \$10 per day and expenses for attendance at board meetings, and when work is slack at home it is convenient for the board to meet frequently, and so, funds are sometimes needlessly spent. There may just as likely be a fault in the opposite direction of lack of control of the organization by the board, by

too little supervision. In this instance the manager through lack of supervision leads the business out of the control of the board and very shortly the business is a stranger to the board and the board, likewise, is a stranger to the business.

Hastily Built Without Educational Foundation.

Whether a cooperative succeeds or fails depends upon whether or not it has the intelligent support and fullest cooperation of its members. This weakness usually results from an undue haste on the part of those far-seeing producers or promoters who want to make a big showing by handling a large volume of business the first year with as many members co-

operating as can be obtained. Time and effort is required to inform egg producers as to just what the organization can do and what it cannot do. All agree that cooperative egg and poultry marketing organizations must have a well informed, well posted membership to succeed. Egg producers must feel the pressure of need before they can hope to build a successful cooperative. The necessity for the organization must actually exist economically and the producers must see that it does. They must see that there are some serious obstacles that prevent producers from getting

Unstandardized, Poor Quality Product.

The first plank in a cooperative platform should be standardized "quality products." Business dealings and trade practices in all lines today require standard grades and uniform quality goods. The cooperative that fails to build a reputation for standardized uniform quality products has laid its foundation on shifting sand and is doomed to failure. Successful cooperative marketing of eggs and poultry begins with the production of uniform high quality products.

Lack of Volume.

The necessity of having a sufficient volume of business to take care of the overhead has been overlooked in starting some cooperatives. This constitutes a serious element of weakness. Most of the organizations could produce a larger part of the consumer's dollar to producers if their business were larger. When in operation for a short time all cooperative organizations realize that the fixed charges must be met and that a uniform production throughout the year of sufficient volume to distribute the overhead expense is essential.

Secondly, the essential requirements and the fundamental strength of cooperative poultry and egg marketing organizations as I see them are:

Orderly Marketing.

This is without doubt one of the greatest functions of a cooperative. As an Oregon banker put it, "if everybody knows that the producer can store his eggs through his own organization and borrow money on them to pay his bills, no buyer or combination (Continued on page 60).



The Outlook For Farmers In 1924

Prospects Indicate Improved Conditions for Rural People

By Our Market Specialist

A YEAR ago we stated that conditions and tendencies then prevailing indicated that "the farmer's position will become better in 1923 than it has been in four years, unless European affairs result in a smashup." That such a conclusion was justified is shown by a total value of \$8,322,695,000 for thirty principal crops based on 1923 yields and farm prices

amounts of each crop sold or consumed on the farm would not greatly affect the percentage of change in values.

Both Crop and Live Stock Values Gain.

Returns to producers for the principal kinds of live stock and live stock products in 1923 also were greater than in 1922. This statement is based on average prices at the farm as reported each month by the U. S. Department of Agriculture and the volume of sales or receipts at principal markets. The figures were not weighted according to months, however, in making the calculations. Hogs were an exception in this group as prices declined more than enough to offset the increase of about twenty-five per cent in the number marketed. The percentages of change in total returns from each kind of live stock or live stock product also are shown on the chart. The total from all live stock and animal products combined increased approximately ten per cent.

and hog producers were in the red again on the basis of market prices for corn and hogs. Many of the farm folks who had been hanging on by their eyelashes let go during the year, voluntarily or through compulsion from creditors. Secretary Wallace, of the Department of Agriculture, reports that in fifteen corn and wheat states over five per cent of farmers had lost their farms since 1920 through foreclosure or bankruptcy and 4.5 had turned over their farms to creditors without legal process. An additional fifteen per cent were holding on through leniency of their creditors.

Further Improvement in 1924.

Standing on the threshold of the new year and surveying the forces and trends which seem likely to dominate its character, it can be said with fair assurance that 1924 bears promise of being at least a little more of a money maker for farmers generally than was 1923. While the diagnosis of further improvement may not be quite as positive as last year, the question marks

may be a little larger, yet there is little to indicate that the general level of agricultural returns will fall below 1923.

Improvement in 1924 is not likely to develop astonishing proportions, however. No agricultural boom is on the horizon. More of those farmers who are hanging on by the courtesy of creditors will be obliged to liquidate and, if we read the "Indian signs" aright, the agricultural problem will not vanish altogether.

Urban Prosperity to Continue.

Prospects for industrial activity are in the forefront of any analysis of the agricultural outlook. Beliefs on this point are divided but those who expect a reasonably good business year seem to have the stronger argument. This means continuation of the high rate of employment and the maintenance wage scales in industry which assure the farmer of a broad demand for meats, dairy and poultry products, fruits and the finer vegetables. Potential demand for wool and cotton goods will not be restricted by a lack of public buying power, although actual consumption of both may be re-

DECREASE	COMPARED WITH 1922	INCREASE
FLAX	67%	
PEANUTS	45%	
ONIONS	39%	
BROOM CORN	36%	
COTTON	35%	
MILK	30%	
POTATOES	28%	
HORSES	29%	
CHEESE	28%	
SORGHUM GR.	25%	
SUGAR BEETS	22%	
BEANS	21%	
LAMBS	19%	
CALVES	18%	
COTTONSEED	18%	
WOOL	17%	
BUTTER	17%	
CORN	16%	
SW. POTATOES	13%	
OATS	13%	
BARLEY	12%	
CATTLE	11%	
EGGS	7%	
HAY	5%	
CHICKENS	4%	
TOBACCO	3%	
APPLES	4%	
HOGS	6%	
RICE	17%	
WHEAT	42%	
RYE		

on December 1, compared with \$7,449,804,000 a year ago, an increase of twelve per cent. Compared with 1921, the 1923 values have risen forty-eight per cent.

The values of twenty-three of these crops in 1923 were higher than last year, and only seven were lower. The percentages of increase or decrease for the more important are shown on the accompanying chart. The varying

Conditions varied greatly with the section, with the type of farming, with the individual farmer. Wheat farmers were in distress, more western cattlemen were obliged to liquidate, the Pacific Coast fruit growers did not fare very well, potato growers in the northwest had another disastrous season, bad weather and the weevil left but little cotton on some plantations to sell at the good prices prevailing,



duced by high prices resulting from shortage.

Business Forecasters Disagree.

Ever since the minor reaction in trade and industry started last spring, the business doctors have been in disagreement as to what the future held. On one side were those who believed that, owing to high wages, taxes, overhead costs, the farm depression, financial conditions in Europe, and too many automobiles, the foundations of industrial activity were unhealthy and that readjustment would be necessary. Others contended that expansion had occurred since 1921 in spite of such handicaps and that they constituted no final reason for terminating the period of industrial activity. This group placed easy credit conditions in the key position in forecasting the business future.

A recent expression from Babson runs to the effect that present conditions are not alarming, but readjustment of prices and costs must go further before any prolonged expansion can take place. Moody is ranged on this same side of the debate and states that indications are for a moderate fall in commodity prices, a slight decline in some wages, a moderate increase in unemployment, and a large fall in production costs. He states, however, that the unhealthy conditions of 1919-1920 are absent, that money promises to be easy and that, in general, we are in a trade reaction rather than a period of severe depression. As a result, improvement may take place long before 1924 is over.

The Harvard Committee on Economic Research takes the more hopeful view and states that "the outlook for the first half of 1924 is for a firm or moderately rising price level, the maintenance of a normal manufacturing output, and the continuance of generally good business conditions. An easing of money rates has recently occurred, and no adverse influences are now discernible which would render the money market an obstacle to the maintenance and improvement of the general level of business."

The Brookmire agency states that its forecast line points upward, indicating that both security and commodity prices are in the major upward move and that the volume of business activity is due to expand. The Analyst barometer line also has turned in significant fashion, although it has not gone far enough as yet to constitute a positive forecast of a renewal of business activity and expansion.

Building Activity a Big Factor.

Activity in the building and automobile industries were at the bottom of the large manufacturing volume in 1923. Iron, steel, lumber, hardware, paint, leather, house furnishings, the railroads and numerous other lines shared in the building boom. Another big year in the construction industry is the foundation of the forecast of continuation of urban prosperity in 1924. The decline in building costs since last summer has uncovered a latent demand and, as a result, building permits issued in the principal cities in October and November showed gains of thirty-one and twenty-three per cent, respectively, over the corresponding months of 1922. These projects will be carried out for the most part in 1924. Architects and contractors both report that a large volume of building is being planned for 1924. The railroads have not completed their repair and construction programs, huge developments in electrical construction are under consideration, and road building will go ahead on a large scale.

Federal Reserve a Factor.

A more abstract but none the less positive factor in the business outlook is the federal reserve system. Among many business observers, the opinion has been gradually shaping up that for the first time we are beginning to get the benefit of the stabilizing influence of the system which was put

in operation nine years ago for the specific purpose of preventing business crises because of money shortage. During the war period the system had but little opportunity to function normally. It may be that our booms and depressions hereafter will swing over a much shorter range from top to bottom than they have done heretofore and that the intervals between will be considerably longer.

Moderate Rise in Price Level.

The farmer's interests are closely bound up with the trend of the general price level because of its influence on prices of the products which he must buy as well as on his own commodities and the relationship of these to farm land values and costs of permanent improvements, the returns from which are distributed over a great many years. Some of the most thorough students of gold production and the relationship of the volume of money to price levels believe that no decided trend either up or down is to be expected in prices during the next four or five years, but that they will fluctuate around a level perhaps fifty per cent higher than pre-war. Those who were most positive that prices would trend downward during the next few years appear to be less certain of their position. So far as next year is concerned, if the prospects of business activity are correct, prices are likely to go moderately higher, in which movement farm products should share.

In this connection an underground belief that a definite effort will be made by strong financial interests to inflate prices during the coming year is worth noting. While a moderate advance in the price level will con-

tribute to business activity, it must be recognized that an extreme upturn would create an unhealthy situation which could only be corrected by a period of forced liquidation later on.

The present price situation is covered in the last report of the U. S. Bureau of Labor Statistics which shows the index number for all commodities in November at 152, compared with 156 in November, 1922. Farm products on the other hand, have gained the index figure being 146 compared with 143 a year ago. It would be unfair to the situation to overlook the fact that in the closing days of 1923, prices on a majority of the principal farm products were lower than at the same time a year previous. This constitutes probably the most unfavorable item in the array of signs and portents as to 1924.

Foreign Outlook Uncertain.

A year ago the outlook for exports of farm products was highly unsatisfactory. Nevertheless, ruined Europe proved to be a good customer for most of those farm commodities, of which there is a surplus which must find a market abroad. Both on the basis of the volume exported and the dollars paid, our sales abroad of the principal agricultural exports were larger than in 1922. Wheat was an exception, although this was due to the fact that Europe could buy more cheaply elsewhere, rather than because of failure to buy in as large volume as during 1922.

In view of the record of our foreign trade in 1923, there is little reason to assume a pessimistic attitude for 1924. While numerous bad spots exist in the foreign situation, most observers be-

lieve that fundamental conditions are improving. A settlement of the German reparations problem appears closer than a year ago, although few would have believed at that time that progress during the year would be so small.

Adjustment of Production Under Way.

Total volume of production of farm commodities is not likely to be much greater than during 1923. The drift from the farm to the cities as a result of high urban wage levels is still under way, the number of farms which will not be operated may increase slightly, and high prices for farm labor will tend to cut off any material expansion in output.

On the other hand, a good deal of adjustment as between different kinds of farm products is likely to take place. This is shown already in the decline in wheat and rye acreage planted this fall. Corn, flax and hay and pasture will tend to replace the acreage in bread grains which have been selling at extremely low prices. Hog production will probably be cut down more nearly on a par with the size of the corn crop. Sheep will replace cattle to some extent in the west and hogs in the middle west. More acreage may go into cotton in the south than the record area planted this year. In general, the tendency will be to diversify, particularly along the lines of dairying and poultry production. It is possible that poultry men, dairymen, and sheep and wool growers will be obliged to operate on a narrower margin than last year. In general, agricultural income is likely to be more uniformly distributed among all farmers than in the last year or two.

Little Chance for Lower Costs.

Costs of production are not likely to be much lower than they were last year, although a good deal of the outlay for machinery, fertilizer and farm labor during the first six months of the year was made at a time when a labor shortage existed and when commodity prices were close to the peak. This year markets may be a little bit more in the buyer's favor during the first half of the year, with a rising tendency in the latter half. So far as taxes and interest are concerned, 1924 threatens no greater burden than 1923. On the other hand, a large volume of farm indebtedness which held over from 1920 and 1921 has been paid during the last twelve months so that the total interest charge to be paid by farmers should show some diminution.

Not to be overlooked in a survey of future possibilities is the political factor. While this may tend to restrain business expansion, there can be no question of a desire by the party in power to bring improvement in the agricultural situation so far as possible. A government corporation to export wheat and hog products, a food loan or a gift to charity to Germany, official encouragement of cooperative marketing and of diversification in agriculture, reduction of freight rates on agricultural commodities, and modification of the rural credit laws to make them more workable are some of the legislative possibilities. Some reduction in national taxation is probable although this touches farmers less directly than general business. The effect of a bonus will be to cause inflation in the early future, although its long distance effects involve liquidation and further taxation.

Instead of the mild improvement in agriculture outlined in the foregoing, it is possible that more radical changes will take place. The psychological reaction of the public to good business prospects, to an abundance of investment funds and to the failure of the present trade recession to develop serious proportions might result in a run-away movement. On the other hand, 1924 may prove to be a dull year, but even the more pessimistic do not look for real depression.

OUR SERVICE DEPARTMENT

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

DRAINING SEWERAGE.

Can an incorporated village dump its sewerage through an open ditch across adjoining farming land? If not, how is one to proceed to stop it?—G. W. R.

Such acts constitute a trespass and a nuisance, and will be enjoined by a court of chancery.—Rood.

DOWER RIGHTS.

When a man's wife dies and leaves six children and he marries again, what share in the husband's property can the second wife hold in case the husband dies leaving no will?—S. M.

The second wife takes dower in the husband's property and is one of his heirs if he leaves no will, regardless of how he acquired that property.—Rood.

DITCH TAX.

Do we farmers, who are taxed on a certain drain, have to pay taxes this year? The ditch job was let as a clean-out job. It was let last February and was to be finished by May 15, and is not done yet.—C. C. S.

See Compiled Laws 1915, Sec. 4903, 4916, 4917.

The statutes require the drain commissioner, at the time the drain is let, to announce what per cent of the drain is to be spread on the tax for that year, and within ten days from the determination to compute the amount of the cost, and on or before the last Wednesday in September file with the town clerk a special assessment roll of the ditch tax. The tax may be collected before the ditch is finished.—Rood.

TOWNSHIP LIABILITY.

Is a township liable for accidents where there is a grade fifteen or twenty feet high, the road itself about sixteen feet wide, and no fence or guards on the side?—C. M.

By Compiled Laws 1915, Section 4586, it is made the duty of the town-

ships, villages and cities, "to keep in reasonable repair, so that they shall be reasonably safe and convenient for public travel, all public highways, streets, bridges, sidewalks and culverts that are within their jurisdiction and under their care and control." What is reasonably safe is a mixed question of fact and law to be determined on the circumstances of each particular case.—Rood.

SHARE PROPOSITION.

I am letting my fields out to be worked to B., and B. furnishes all the seed and does all the work. He gives me one-third and cuts the hay and gives me one-half of the hay. I furnish all of the clover seed. Now, if B. cut the clover seed what share should he give me?

The big difference in expense between the hay crop and the clover seed crop is the cost of hulling. A fair method would be to divide the hulling costs equally between the landlord and tenant. Thus dividing the seed equally between the two parties.—F. T. R.

OUSTED WITHOUT CAUSE.

I rented a farm two years ago, and have a year more. But the owner of the farm has discharged me. I have done lots of plowing. Could I collect for same? How much is it worth per acre? Also, I have given a note to an insurance company. Could I refuse to take the policy and not have to pay? Could I be forced to pay?—J. F. C.

The note being given for value, the insurance company is entitled to be paid, regardless of matters between the insured and other persons. The lessor cannot terminate a lease without the consent of lessee and without cause before the term expires. If the lessee voluntarily surrenders, he has no claim for damages. If he is ousted for cause, he has no claim for damages. If ousted without cause, he is entitled to recover the value of the rest of the term.—Rood.

Standardizing Michigan Fruits

Its Progress and Economic Value

By W. P. Hartman

Director Bureau of Foods and Standards, State Dept. of Agriculture

STANDARDIZATION is the key-stone of successful merchandising.

It is the very foundation upon which farm marketing organization and advertising must build. Though the American farmers did a \$1,000,000,000 business through their cooperative marketing associations last year (1922), no cooperative association has ever advanced, nor long survived, that failed to adhere to standard grades in the growing, sorting, packing, shipping and selling of its commodities.

During the past twenty-four months, a greater number of permanent and tentative official grades for farm products have been written into the laws, or promulgated by vested federal and state authorities than ever before in the history of agriculture. The grades apply on practically all fruits, potatoes, dairy and poultry products, hay, grain, beans, wool and live stock.

For the most part, if not entirely, the establishment of these grades is the natural outcome of farm organizations. When the grower quits dumping his collective production at a flat "buyer's price," and begins to merchandise his crops through organized, intelligent channels, the benefits and the dire need of standardization becomes instantly apparent.

It was the Michigan State Horticultural Society that took the initiative in the writing of the State Apple Grading Law in 1917. Standardization—in the variety and the quality of the product—is just as essential as in sorting, grading, packing, container used, and branding when shipping. Recognizing this, this society, in cooperation with the Horticultural Department of the College, several years ago endorsed a restricted list of varieties of apples for commercial planting. The Potato Growers' Exchange and Producers' Association are recom-

mending a limited number of varieties of potatoes—suiting varieties to soils, sections and market demands.

Last year, grape growers, through their local organizations, requested the commissioner of agriculture to exercise the authority and responsibility vested in him by Act No. 91, P. A. 1915, in the matter of promulgating grades for grapes and providing means for the enforcement thereof. The growers' associations paid the entire salary and traveling expenses of nine inspectors working under the direction of a supervising inspector of the department. The grades made mandatory proved a success. The growers then caused the grades to be written into basic law by the last legislature. Again, this year, they defrayed part of the inspection cost.

At the request of the peach and potato growers, grades for these commodities were promulgated this fall by the commissioner of agriculture. The pear growers have petitioned for grades, and the onion, cantaloupe, celery, cabbage, and other growers have indicated a desire for official state grades. Wherever consistent, the state grades should be identical to U. S. Grades. Nationally uniform standards promote marketing efficiency. This was not possible for grapes—we are the only state now having grape grades and the U. S. authorities have not yet put out tentative grades on this crop. We can very easily apply the United States grades for potatoes, peaches, pears, onions, and many other commodities. With the apple, we have to reckon with certain peculiarities in production and sales not so common with many other products, so that whether or not Michigan will be ready by the convening of the 1925 legislature, or ever, to adopt the U. S. Grades, is entirely up to this society to determine.

T. A. Farrand

By Granger Whitney

When the snows upon the hillsides melt beneath the spring time sun
And the gathering waters glisten as to stream and brook they run;
When the fruit tree buds are swelling, when they later burst in bloom,
And to kindly tillage yielding one can see the harvest loom,
As the patient horses, plodding, till the fertile orchard soil,
There's a kindly spirit present with me in my daily toil.
In the green and blooming orchard where the thrush and warbler lurk
There's the shade of T. A. Farrand close beside me as I work,
Gentle shade of T. A. Farrand at my elbow as I work.

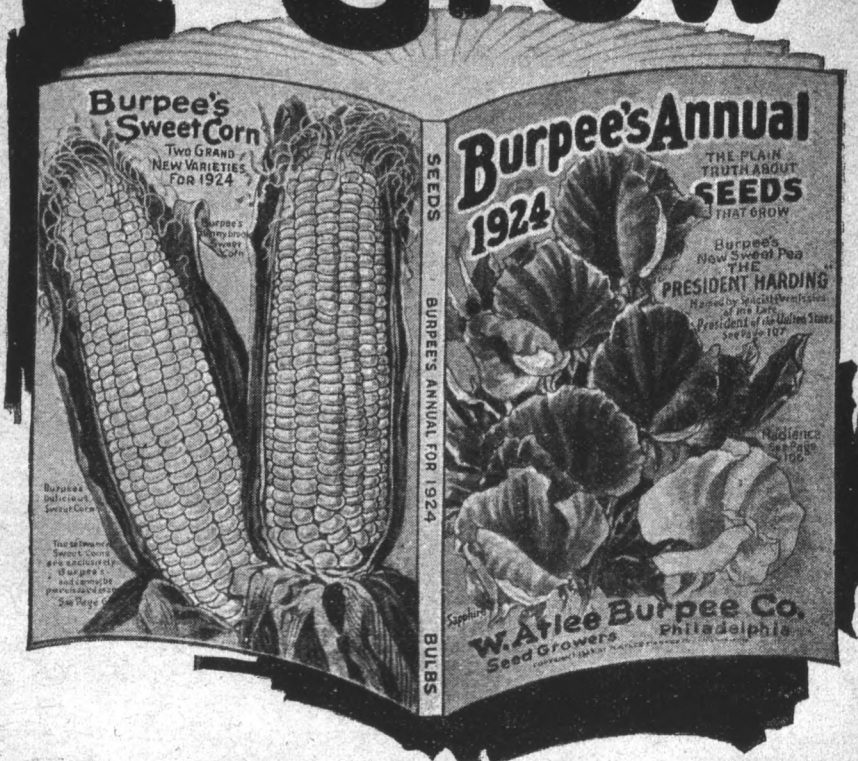
All the countryside is haunted by the memory of this man;
By his patient earnest efforts bloom the hills of Michigan,
And our daily life is sweeter from the friendship we have known,
And our orchards bear the stronger for the aid that he has shown.
Where the peach trees of Grand Haven pink and fragile blossoms fling,
On the rolling hills of Traverse where the cherry blossoms spring,
Where the fragrant apple blossoms draw their beauty from the soil
We are haunted by a presence at our pleasant fruitful toil,
Kindly ghost of T. A. Farrand at our elbow as we toil.

When the harvest season's over we will gather once again
To discuss our wide experience and report our orchards' gain.
Men of wisdom there to aid us with the knowledge they have found,
Kindly friends again will greet us from the countryside around.
We will miss his sturdy action, helpful, sacrificing, strong,
Miss this man who gave his service with devotion deep and long.
Gathered in the busy city once again old friends we greet
We will miss his friendly presence as again old friends we meet
Kindly shade of T. A. Farrand at our elbow as we meet.

If I live to please my Maker till the harvest time of life
When I'm gathered to my fathers from this world of love and strife;
When the great divide is traversed this would be my great reward
That I have the boon to labor in the garden of the Lord.
And there may be orchards blooming when we reach the other side
And there may be fields to harvest, woods and pastures green and wide
If there are I'll meet a soul there, one who knows not how to shirk
Who'll be a guide and aid to me if this may be my work
Kindly soul of T. A. Farrand at my elbow as I work.

NOTE:—Most of our readers knew Mr. Farrand as the genial horticultural extension specialist from M. A. C., and as secretary of the Michigan State Horticultural Society. Mr. Farrand died suddenly a few weeks ago after an operation in a Detroit hospital.

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Farm Economists Peek Into Future

The Washington Meeting Brought Out Much Interesting Data on American Farming in the Years Ahead

THE fourteenth annual conference of the American Farm Economists' Association, held in Washington during the week ending December 29, was largely attended by economists from every part of the nation.

In outlining a national agricultural program, Secretary of Agriculture Wallace emphasized several outstanding points, among which were the development of good farming in a broad sense, including the use of high quality seeds, and the best methods and culture; good farm management, including proper organization so as to make it profitable from every point of view making available knowledge of finance, of government functions and of economic conditions the farmer cannot obtain for himself; speeding up the use of credit facilities to tide the farmers over the present critical period at lower rates of interest, reduction of freight rates and increased transportation facilities.

It was predicted by Secretary Wallace that unrestricted operations of economic laws would better conditions for the farmer and that the demand for food will eventually bring a fair price to the farmer for his products. He condemned the present demand of certain interests for land reclamation in the far west by irrigation.

Believes Farm Profits Should Increase.

Discussing a paper by Roger W. Babson, entitled the effect of business upon agriculture, A. B. Genumg, of the Bureau of Agricultural Economics, pointed to the fact that imports of agricultural products last year for the first time exceeded the exports, as an indication that within the next ten years, when we shall have a population of 125,000,000 in this country, of whom 90,000,000 are non-agricultural, the increased demand will insure the farmers a more profitable home market.

Thinks Facts Regarding Production Important.

There is a close relationship between prices and acreage of crops harvested, according to G. C. Haas, also of the Bureau of Agricultural Economics, who declared that farmers in common with business men, attempt to make production adjustments to meet price conditions, but the process is necessarily slower, and they sometimes go too far. He thought the best remedy was to keep the farmers informed as to the present world supply and demand, changing conditions of trade and crop production, and probable trend of prices. They cannot have full control of crop production, but of live stock they have absolute control.

General Price Trend Downward, Says Warren.

An attempt to determine the future trend of farm prices was considered by Dr. G. F. Warren, of Cornell University. Taxes and interest are both practically fixed, says Dr. Warren. The farmer is concerned with the purchasing power of his products in relation to tax receipts. Falling prices will decrease the farmer's ability to pay taxes and interest. He predicts that there is to be an adjustment of prices to pre-war levels. That means a decline in prices of farm products, but prices of most other commodities will decline more because they are now higher than agricultural products.

During this decline which may cover a period of eight or nine years, there will be fluctuations and recurrent agitations, with labor dissatisfied and frequent periods of unemployment.

Farmers who are out of debt may continue to operate their farms as usual, feeling that in time a reward will

come. Other farmers who have loans and can extend them over a thirty-five-year period, by means of home help, and a favorable market, may do fairly well.

Those engaged in agriculture will work harder, because the more the farmer has to sell the more he will get. As a result of low, but fluctuating prices, farmers will rush from low to the higher priced products, and thereby lose much that they gain from increased labor. The importance of saving labor by the use of better equipment and the advantage of raising home food and feed will become more apparent. Farmers on poor land will do more outside work, and all farmers will confine their labor and efforts to the more fertile parts of their farms. The expansion of agriculture will be checked and cooperative marketing associations will be subjected to severe strain.

The price of export farm products must be low. Wool prices may not remain high as at present, but may be

relatively higher than other farm products. Horses will be higher in about ten years, beef cattle in seven years, and hogs will reach a higher level within two years, according to Dr. Warren's predictions.

As Dr. Warren based his predictions of price declines upon conditions following the Civil War, some exceptions were taken to his views on the grounds that prices after the Civil War were paper prices which shrank as the country turned to a gold basis, while we are now on a gold basis.

English Agriculture Declining.

Some interesting lessons from the present land situation in England were contained in a paper by J. I. Falconer, of Ohio State University, who has spent some time investigating farming conditions in the British Isles.

The landed aristocracy of England is rapidly being crushed out, according to Mr. Falconer. The breaking up of the large estates began in 1906, when not over 4,000 persons possessed an area equal in size to the state of

Ohio. In 1913 only ten per cent of the farms were occupied by their owners, while in 1918 the percentage had increased to twenty.

The cause of the breaking up of large estates in England is that they are not economically profitable. Many landlords receive no returns from them, and agricultural land has become less profitable since the war. Taxes have increased 100 per cent since 1914, but there has been little increase in rentals.

The English labor party, which is coming into power, is committed to a policy of land nationalism and cheap food. It has opposed every bill that would benefit agriculture, which makes the outlook almost hopeless for English agriculture. The former tenants who have purchased land are not as well off as the tenants, as they are suffering from the same condition that is driving the landlords off the land.

Mr. Falconer thinks the situation is being shaped for land nationalism by the labor party.

During the World War the British government undertook to establish profit sharing farm colonies and settlements of small landholders to take care of the war veterans. These small farm settlements have since been declared a failure and the operating losses of profit sharing colonies have been very heavy.

Harking back to the reform act of 1830 in England, to give the laborers the vote, Dr. B. H. Hibbard, of the University of Wisconsin, said it was then predicted that if the laborers were given the vote they would loot the landlords. After nearly 100 years, this looting is taking place, there is not much left of the landlord class. English agriculture is in a bad way.

These conclusions are in line with those of the American Farm Bureau Federation delegation, who report that the English farmers are losing money on their tilled land, and the tendency is to let the fields revert to grass. "It seems strange," they say, "to see farmers within hail of the greatest markets in the world finding the same difficulty that our more distant farmers do in making their incomes correspond to their outgoes. Parasites in all lands prosper while the indispensable farmer struggles for existence—except where national policy deliberately concerns itself with him."

Holds Forecasting Real Service to Farmer.

Closer commodity cooperation was urged by H. E. Erdman, of the University of California, and "Agricultural Forecasts, their Use and Value," was the subject of a paper by Dr. H. C. Taylor, chief of the Bureau of Agricultural Economics, who said:

"The purpose of agriculture forecasting is the wise guidance of production in order that there may continue to be proper balance between the various lines of production and between agriculture and other industries. Agricultural prosperity in general depends primarily upon the ability of farmers to anticipate the future. While wheat today holds the center of the stage in that play of economic forces which constitute the agricultural situation, it may soon be hogs and even tobacco. Cotton and corn may again be found in the foreground if great wisdom is not used in making readjustments."

The American Farm Economic Association elected the following officers for 1924: President, Dr. E. G. Nourse, of Ames, Iowa; vice-president, W. I. Myers, of Ithaca, New York; secretary-treasurer, J. I. Falconer, College of Agriculture, Columbus, Ohio.

LATE AGRICULTURAL NEWS

SECRETARY OF WAR BACKS DOWN.

THOUSANDS of farmers from the northern states have parked their cars in the Washington tourist camp on the Potomac flats. Secretary of War Weeks recently ordered this camp closed, but owing to the efforts of the American Automobile Association and the Washington commercial organizations, the secretary of war has withdrawn his order, and the camp will remain open until another suitable camp site can be found for the use of tourists visiting or passing through the Capital city.

WATCHING DAIRY INTERESTS.

THE American Dairy Federation, the new overhead organization of which Ex-Governor Frank O. Lowden, of Illinois, is president, has two working committees functioning in Washington for the purpose of looking after legislation and other matters affecting the dairy industry. The committee on the dairy tariff consists of John D. Miller, of the Dairymen's League; A. M. Loomis, secretary of the National Dairy Union; C. W. Holman, secretary National Milk Producers' Federation, and Henry N. Woolman, representing the Philadelphia milk dealers.

The first work of this committee will be on the casein tariff, and the second on the relationship of cost of skim-milk to that of whole milk.

The other committee, which is on imitation dairy products, consists of John D. Miller, R. W. Balderson, of Philadelphia; H. N. Woolman, C. W. Holman, and A. M. Loomis.

THE ALIGNMENT ON FEDERAL TAXES.

TAX reduction promises to be a live issue in congress from now until the end of the session. Secretary of the Treasury Mellon says he is convinced that "if the tax reduction proposals are enacted into law and the sound policy of retrenchment in expenditures is continued, the coming year will witness a steady improvement in the favorable conditions which have already begun to make themselves felt, and this country will enjoy prosperity in 1924."

Notwithstanding this optimistic prediction by the secretary of the treas-

ury, it is apparent that his proposal for a uniform cut in income taxes will have a rocky road to travel through congress.

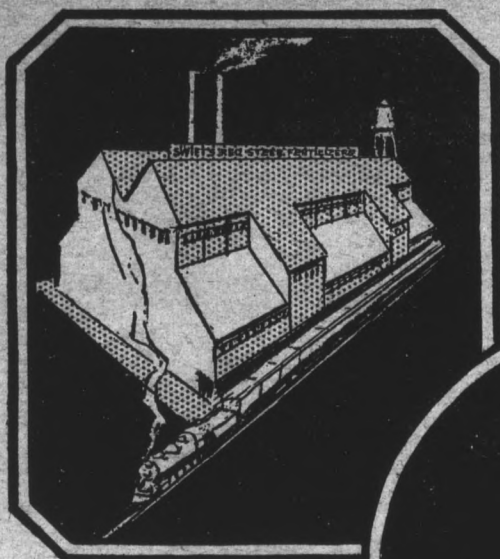
It is evident that the radical group led by Senator La Follette will oppose any cut in surtaxes. The house farm block shows indications of a willingness to make concessions, compromising on a reduction in surtaxes from a maximum of fifty per cent to around forty per cent. They will also insist upon an increase in present personal exemptions of \$500, for the purpose of giving additional relief to the farmers. It is estimated that by making such an increase ninety-five per cent of the small farmers would pay no income tax. An increase in inheritance taxes, a tax on gifts and on undistributed earnings of corporations is popular among the representatives from agricultural sections.

SOME FARMERS OPPOSE FEDERAL TAX CUT.

IT is indicated by letters from farmers to the Washington office of the American Farm Bureau Federation, that many farmers do not want a reduction in federal taxes. They seem to feel that it would be better to pay the debts while dollars are comparatively cheap, instead of waiting until there is a further drop in price levels. Their reply to the argument that under the present law rich men escape taxation is that rather than reduce the taxes the government should enact legislation to put a stop to tax evasions.

LACK OF HARMONY ON TAX-EXEMPT SECURITY SITUATION.

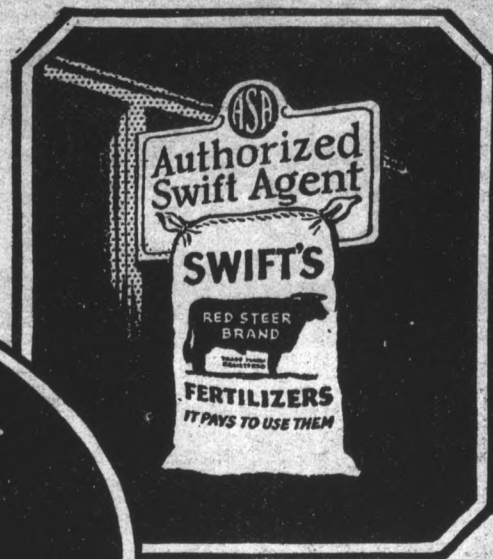
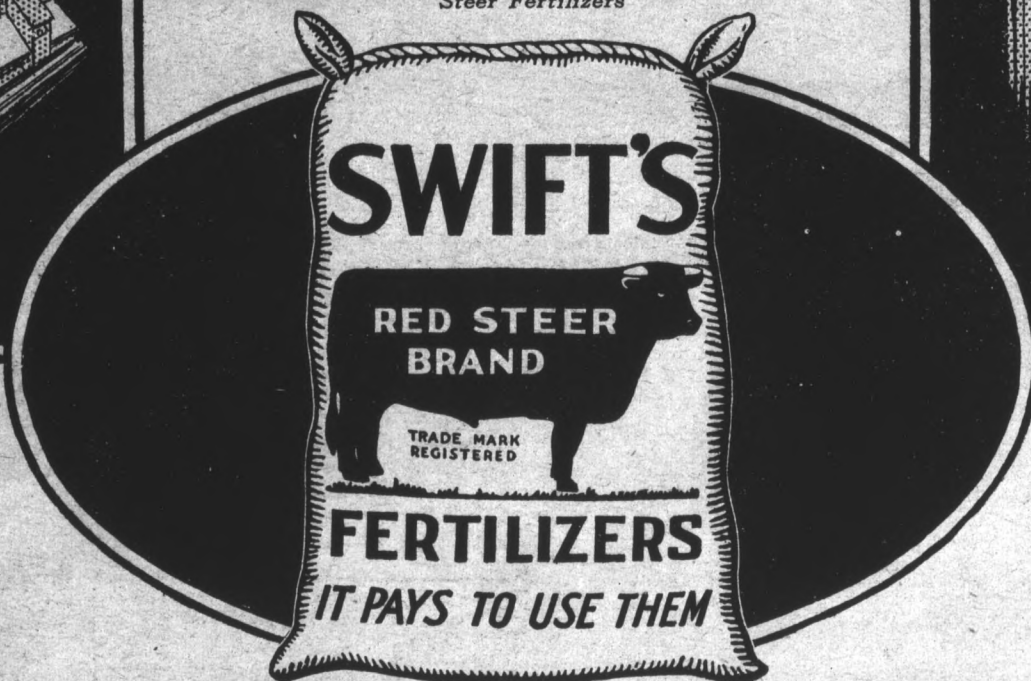
SENTIMENT is divided in regard to tax-exempt securities. As the federal farm loan system and the intermediate credit banking system are based upon tax-exempt securities, some farmers have grave doubts as to the advisability of eliminating these securities. This agitation against tax-exempt securities is believed to be a move to destroy the federal farm loan system. Senator Smoot has already introduced two bills in congress, one providing that there shall be no more joint stock land banks established, and the other providing that the joint stock land banks now in operation shall go out of business at an early date.



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Twenty-four Swift factories, equipped with the most modern machinery, are

engaged exclusively in the manufacture of Swift's Red Steer Fertilizers. Every step in the manufacturing process, from the buying of the raw materials to the mixing and testing and shipping of the finished product, is carefully supervised by experts—experts in chemistry and agriculture and manufacturing.

Only the highest grade and most productive sources of plant food are used in the manufacture of Swift's Red Steer Fertilizers. Every bag is properly processed and combined to furnish each plant its proper proportion of plant food.

Your guarantee of quality

These are the things to consider when you buy your fertilizers this season. When you do consider them, you will buy Swift's Red Steer Fertilizers—fertilizers that are backed by Swift & Company, its twenty-four modern factories and its 7,000 Authorized Swift Agents, and endorsed by thousands and thousands of practical, successful farmers.

For fertilizers of highest quality, for service of genuine worth to you, look for the sign of the Authorized Swift Agent in your community. Discuss with him your fertilizer requirements—now. If you do not locate him readily, write to us and we will gladly put you in touch with him.

Swift & Company
Fertilizer Works, Dept. 41
Hammond, Indiana

Fertilizers for Michigan

It pays to use fertilizers—high analysis fertilizers. This is the message which goes out to the farmers of the land from the agricultural colleges and experiment stations in many states—with definite recommendations, based upon years of research and experiment, as to the fertilizers which will give best results on individual soils and crops.

For Michigan, the Michigan Agricultural Experiment Station recommends the following analyses:

Corn—Sands, light sandy loams: without mixed meadow, manure or green manure, 4-12-0; with mixed meadow, clovers, alfalfa or soybeans or with manure, Acid Phosphate. Heavy sandy loams, silt loams, clay loams: Acid Phosphate. Muck: 0-12-12, 0-8-24, Potash.

Oats, Barley (with spring seeding of alfalfa or clovers)—Sands, light sandy loams: without mixed meadow, etc., 0-12-6, 4-8-6; with mixed meadow, etc., 0-14-4; with manure, Acid Phosphate. Heavy sandy loams, silt loams, clay loams: without mixed meadow, etc., 2-16-2; with mixed meadow, etc., or with manure, Acid Phosphate. Muck: 0-12-12, Potash.

Alfalfa, Clover—Sands, light sandy loams: without mixed meadow, etc., 0-12-6; with mixed meadow, etc., 0-12-6, 0-14-4; with manure, 0-14-4, Acid Phosphate. Heavy sandy loams, silt loams, clay loams: without mixed meadow, etc., or with mixed meadow, etc., 0-14-4, Acid Phosphate; with manure, Acid Phosphate. Muck: 0-12-12, Potash.

Potatoes—Sands, light sandy loams: without mixed meadow, etc., 3-12-4, 3-8-6; with mixed meadow, etc., 2-16-2, 2-12-6, Acid Phosphate; with manure, 0-14-4, Acid Phosphate. Heavy sandy loams, silt loams, clay loams: without mixed meadow, etc., 3-12-4, 3-8-6; with mixed meadow, etc., 2-16-2, 2-12-2, Acid Phosphate; with manure, 0-14-4, Acid Phosphate. Muck: 0-8-24, Potash.

Sugar Beets—Sands, light sandy loams: with mixed meadow, etc., 3-12-4, 2-12-6, 4-8-6; with manure, 0-12-6, 3-12-4. Heavy sandy loams, silt loams, clay loams: without mixed meadow, etc., 3-12-4, 2-16-2, 2-12-6; with mixed meadow, etc., 0-12-6, 2-12-6, 2-16-2; with manure, 2-16-2, 0-14-4, Acid Phosphate. Muck: 0-8-24, Potash.

As Authorized Swift Agent for the sale of Swift's Red Steer Fertilizers, we are co-operating with the Michigan Agricultural Experiment Station by handling the brands recommended above which apply to local conditions.

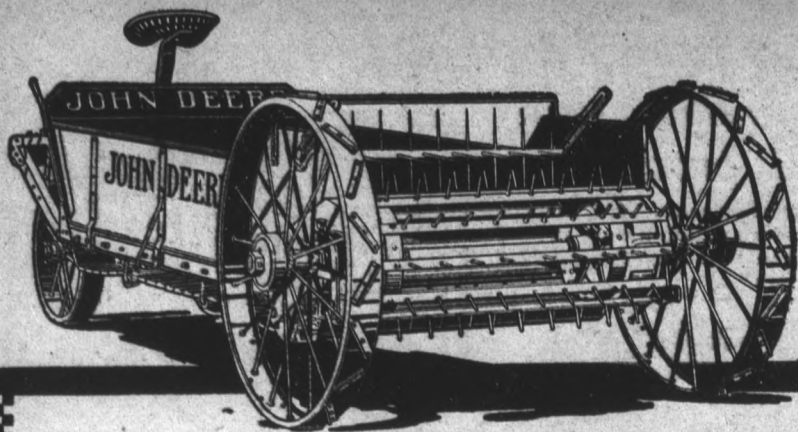
Come in and let us select the analysis that meets your own soil and crop requirements.



asa

Authorized Swift Agent

"IT PAYS TO USE THEM"



Low Box—Easier to Load— High Drive Wheels—Pulls Lighter

Users unhesitatingly say that the easy loading feature on the John Deere saves them about half the labor of loading. Think what this saving means to you and the boys who perhaps spread from 100 to 500 loads of manure every year.

It is only 36 inches to the top of the box on the John Deere—from 6 to 10 inches lower than on others. This extra height saved on the John Deere is where the hard part of lifting the manure comes.

And don't forget your horses. You know how much easier they pull a high wheel wagon than a low wheel truck. The drive wheels on the John Deere Spreader are high—from 4 to 8 inches higher than others. Furthermore, the load of manure in the box moves back to the beater on an endless apron mounted on 48 rollers—there is no drag.

Other Features that Result in Better Spreading and Longer Service

The beater is low to the ground—manure is not thrown high—side winds do not cause drifting. The spread is even the entire width of the beater—not heavy in the middle and light on the edges. Patented revolving rake prevents bunching—good work in all kinds of manure is assured.

There are no clutches, no chains, no adjustments to make—extremely simple. Repair expense is reduced and the years of

usefulness materially prolonged.

These important advantages on the John Deere Spreader are not found on other spreaders because the beater on this machine is mounted on the axle—a patented feature which has made these advantages possible.

Put this machine to work this spring and let it lay the foundation for bigger crops and larger profits. See your John Deere dealer.

**THIS BOOK
YOU WILL
WANT—FREE**

"Soil Fertilizers" contains a vast amount of information on manure and fertilizers. It's a book you will value. To get this free, write John Deere, Moline, Ill., and ask for Booklet S D-422

JOHN DEERE

THE TRADE MARK OF QUALITY MADE FAMOUS BY GOOD IMPLEMENTS

Steel Jackets

For Large Iron Kettles

If you have a large iron kettle we will make you a steel casing to fit, providing you as satisfactory a cooker as you could wish. Has large fire door; flue to distribute heat; re-inforced at bottom with heavy wrought iron band. Thousands in use.

Order Yours Now

Measure around outside of kettle in inches about one inch from top. If kettle has flange on top, measure under flange. Price according to size. Write today.



Heesen Feed Cookers

Make Stock Grow Faster; Handiest Article on the Farm

Cooked food for Hogs, Poultry, Cattle, Horses, Sheep goes farther and makes stock healthy. Use cooker also for heating water, rendering lard, scalding hogs, etc. Made in seven sizes. Famous the country over.

Write For Folder and Prices

HEESEN BROS. & CO., Dept. 1 TECUMSEH, MICHIGAN



Helps for Mother

AN obedient husband was the best convenience one lady had about her home. We agree with her, but husbands being of uncertain quantities the following letters were awarded the prizes offered in our last contest.

PUTS ELECTRIC HELPS FIRST.

MOST certainly the electric lights come first, and next the electric helps, such as the washer, wringer and iron. Then, I place running water in the house. The kitchen cabinet where one can make a cake or pie without moving is a great help, indeed. My dumb waiter saves miles of steps by avoiding the cellar steps. A soiled clothes chute runs from the bath room up stairs to the basement. On the first floor is a door through which the

is piped to the bath room and kitchen sink and the range reservoir.

3. A large kitchen cupboard, eight feet long and as high as the room. This cupboard is made in two parts with a space of eighteen inches between. The lower cupboard is ten inches wider than the upper one, making a large convenient shelf for setting things, this shelf being covered with aluminum. The lower part is fitted with a covered tin bread box, above which is a bread board which pushes in when not in use.

4. An enameled sink, seventy-two inches in length, with front apron, high back, and two drain boards, all cast in one piece. This sink has faucets for warm and cold soft water and for cold hard water.

It has taken many years to accomplish all of this, as we are in very moderate circumstances, but please do not talk to me about stingy husbands. —Mabel W. Howard.

CONVERTED BEDROOM INTO BATHROOM.

I HAVE several conveniences in my home which save me time and lighten my labor.

Some time ago I had a small bedroom refinished and converted into a modern bathroom supplied with hot water and cold soft water. My kitchen is also supplied with hot and cold water. At one end of the sink is a soft water pump and at the other end is a hard water pump.

Two or three steps from my back kitchen door, and on the level with it, there is a building twelve by sixteen feet. In this there is a gasoline engine which supplies power for my washing machine and wringer, churn and cream separator. My washer is connected with the main drain from the kitchen.

Other conveniences in this room are work tables, a large refrigerator and a four-burner oil stove. My gasoline flatiron is also a great labor saver. —F. J. Maya.

BUILT SPECIAL CUPBOARD.

MY good husband took a strip four feet six inches off one side of our medium-sized kitchen and in the middle of the strip built spacious cupboards from floor to ceiling with doors and two drawboards. At one end of this strip he fitted a full-sized door, the newly acquired space here opening into the cellarway. In here he put a number of cleats full of nails to hold kettles, frying pans, griddles and pails, and in back of the cupboards some open shelving for food, making a sliding door of a window screen, thus keeping out the mice and flies. An outside window gives light and air and its new wide ledge affords a safe place for pies to cool.

At the opposite end of the cupboard was put a narrow door into a "catch-all." This space has shelving room for boxes of caps, mittens, overshoes, sunshades, and much else out of season. A row of short shelves is fitted in here back of the cupboards, and cleats full of hooks line the rest of the wall space and hold hats, overshoes, coats, etc., in season. This room holds also laundry bag, ironing board, broom, carpet sweeper, boots, overshoes, and one thousand other things.

The kitchen is now very handy, and since my husband has provided a place for everything it is up to me to keep everything in its place. —M. C. Adams.

Doing Farm Work Now

WHAT are you doing, or going to do this winter that lighten your farm work next summer? The present farm labor supply and lack of funds causes almost every farmer to reduce the days of hired help to the lowest point. One way of eliminating much of the need of outside help is to get everything in readiness for the summer's campaign of work.

Tell us briefly in a letter what to do now that will help out in the busy season and mail to The Handy Man, Michigan Farmer, Detroit. To each of the writers of the five best letters we shall send one dollar. Letter must be mailed not later than January 16.

soiled clothes find their way down to the basement for wash day. An ironing board in the wall is another nice thing. Round glass blocks from the hardware store saves much awkward sweeping when placed under the stove legs. Castors on the woodbox, little hooks in the mop and broom to hang them up by, a covered garbage pail in the kitchen are among other things which the housewife will find extremely helpful in saving steps. —G. Lafree.

IN MODERATE CIRCUMSTANCES BUT HAS THEM ALL.

I DO not like this spirit of antagonism so often exhibited when the question of household conveniences comes up, so much stress being laid on the man's abundant supply of tools, etc. I find very often the wife is slow to put in improvements when she herself has the money. A hearty cooperation between husband and wife is the better way. I have never yet been obliged to ask for any kitchen convenience. Our house is equipped with:

1. Electricity. We have a power washer, iron, and vacuum cleaner, lights in all rooms, including closets and dark corners.

2. Two electric water systems, one for hard water, and one for soft. These systems have no storage tanks (except the cistern for soft water), and were installed by my husband himself, thus saving much expense. The hard water is piped to the kitchen sink and the bath room, besides three out-door hydrants for sprinkling lawns and cleaning porches and windows. It is also piped to the hen house and barn. The soft water, hot and cold,

CORN REACHES PEAK OF CYCLE
IN 1923.

TWO years ago an abundance of corn caused extremely low prices which, in turn, were responsible for reducing the amount sold from farms stimulating domestic consumption on a lavish scale, and greater exports, and furnished the motive for the marked expansion in hog production.

As consumption gained on the supply, prices advanced with only small interruptions until in October, 1923, they reached a higher point than most observers would have dreamed possible a few months before. For a few days, corn sold higher than wheat. As prices rose, corn was fed more sparingly, exports fell off, and the present tendency is to sell more from farms, curtailment of hog production has been started, and cattle feeding operations have ceased to expand.

The peak of prices probably was reached in 1923 unless a crop failure occurs next year. When new crop began to move freely in the closing weeks of 1923, prices dropped to about the same level as in the corresponding period in 1922.

Oats prices have been moderately higher than in 1922, partly in sympathy with corn. Rye has reflected the depression in the finer bread grain. Flax prices have held up remarkably well in spite of an increased crop. The demand for paint as a result of activity in the building industry is the chief explanation, together with the fact that we have been growing much less than our domestic requirements.

Old potatoes moved at extremely low prices early in 1923. The early new crop sold to good advantage but prices on the late crop dropped down almost to the same disastrous point as in the fall of 1922, in spite of a smaller yield.

BOOSTS POTATO INTERESTS.

T O A. C. Lytle, county agent of Otsego county, goes the credit for the success of the Top O' Michigan Potato Show.

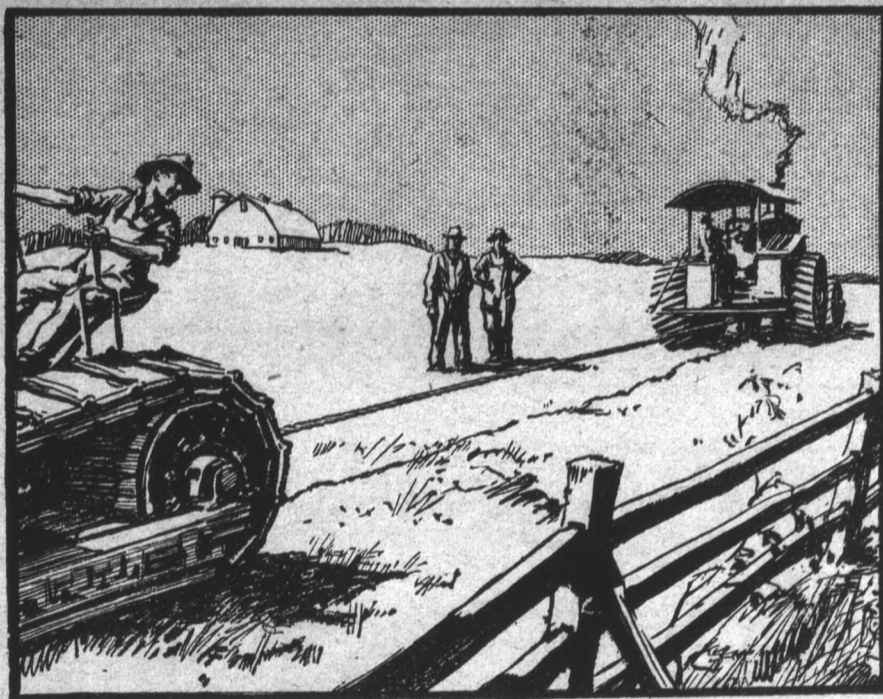
In the open-hearted nature of this genial county agent, Otsego county, in fact, northeastern Michigan found a man who had the ability and the resourcefulness to see the show through to a successful close. A true son of the soil, born and raised on a farm, with the interests of the farmers ever uppermost in his mind, the north-



country agricultural agent carried over the vision of helping his co-workers, the potato growers, realize greater returns from their farms and secure just returns from the growing of their staple crop.

He has been tireless in his work among the growers to help them better their conditions. He has rendered scientific advice wherever it has been needed. His visits to the farmers have resulted in leaving each time some new idea or a vital hint which always contributed to the farmer's success.

Why talk about poisoned "moonshine," when moonshine itself is poison? The only difference is that one often works quicker than the other.



Judge a rope by its endurance

If a new one-inch rope could stand the strain of two 60 horsepower tractors going in opposite directions, each 7,500 pounds pulling power—would it be a strong rope?

Yes, but in addition to having great strength, the rope you buy must last through months of hard wear on every kind of job around the farm. And because of its long endurance, such rope will actually cost you less.

To be sure of getting rope like this, ask for H. & A. "Blue Heart" Manila Rope. Untwist the strands before you buy. Look for a thin blue thread marker running between the strands—the "Blue Heart" pledge mark of long wear in rope.

What the "Blue Heart" signifies

The "Blue Heart" Marker means:

- (1) That the rope is genuine H. & A. "Blue Heart" Manila Rope—spun from high grade, pure selected manila fibre.
- (2) That it is spun by rope makers of the highest skill, possessed of the accumulated experience of more than half a century.
- (3) That, in any size, on any job,

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.



it will wear longer and deliver without fail the strength you have a right to expect.

Why it wears longer

Expert selection of just the right grades of pure, long manila fibre; the exact "drawing", "spinning", and "laying" which insure the smooth working of each fibre, yarn, and strand; the proper degree of lubrication without overloading—these things give to H. & A. "Blue Heart" Manila Rope its great strength and long resistance to wear and weather.

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



H & A "Blue Heart" Manila Rope

© 1924, The Hooven & Allison Company

Trade Mark Reg. U. S. Pat. Office

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.

The Hooven & Allison Company
"Spinners of fine cordage since 1869"
Xenia, Ohio

Gentlemen: M.F. 1-12
Enclosed is 25c for which please send me one H. & A. "Blue Heart" Manila Halter Lead.
My Name
Address
My Dealer's Name
Address



Saws Wood Fast

(Does the Work of 10 Men—1/20 Cost)

This one-man WITTE Log Saw burns any fuel and will cut from 15 to 40 cords of wood a day. Easy to operate and move. Trouble-proof. Fells trees—makes ties—runs other farm machinery. Fast money maker and big labor saver.

Free—Write today for my big Free Book and Low Easy Payment Prices. No obligation.

WITTE ENGINE WORKS

7193 Witte Building, Kansas City, Mo.
7193 Empire Building, Pittsburgh, Pa.



CLOVER

PER BU. LOWER TODAY THAN LATER

Act quickly, crop short, market advancing. Buy your grass seed now. Our prices are sensationally low. Have wonderful values in Guaranteed High Grade Tested Iowa Grown Clover. Also Sweet Clover, Timothy, Alfalfa, Alsike, Hubbard and all Farm and Garden Seeds. Buy direct from producing section. We can save you big money on seeds. All seeds guaranteed and sold on 60 days approval. Write for FREE SAMPLES, special prices and 116 page catalog. Eastern orders shipped by A. A. Berry Seed Co., Box 881, Clarinda, Iowa.

Please Mention The Michigan Farmer When Writing to Advertiser



Niagara

DUSTS and DUSTERS

Hand,
Traction
and
Power
Dusters
in various
Models
to meet
different
Crop
requirements.

Get the
right
Niagara
for your
farm.

Offer the easiest, quickest and most economical method of protecting fruit and crops from the ravages of insects and disease.

In the first place you use air instead of water to carry the fungicide and insecticide. This saves all the labor of pumping water—mixing solutions and hauling the water all over the farm as in the case of liquid spraying.

The chemicals used in dusting are fundamentally the same as in liquid spraying. You simply blow the right poison in the right place, and because thorough dusting can be done at the rate of 5 acres of mature apple trees or 4 acres of potatoes or low crops per hour, you can dust all the crops at just the right time. That is the big feature of the dusting method.

If you want to save time, work, and money, it will pay you to call on the Niagara dealer or write and find out just what model Duster and what Dusts are best for your use.

Send for
Free
Dusting
Catalog

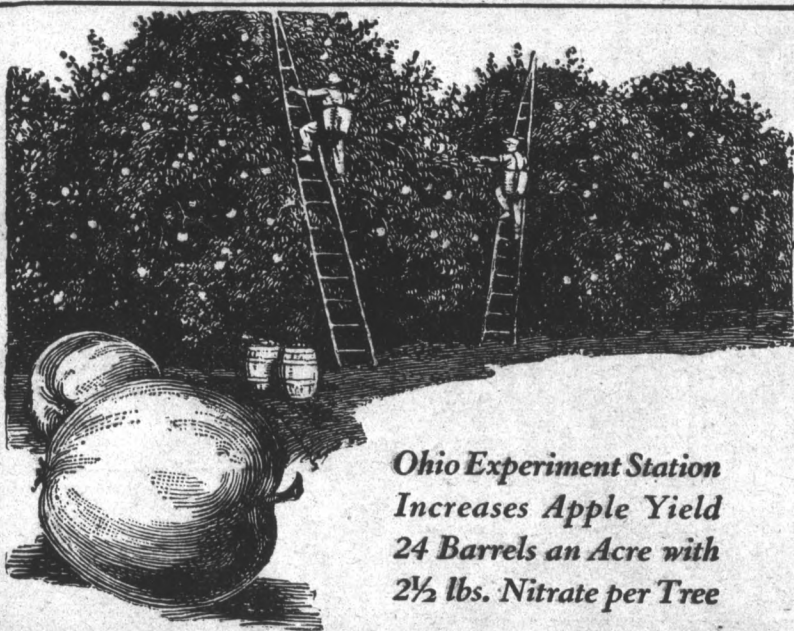
Niagara SPRAYER COMPANY

Middleport, New York

Implement dealers write for our sales



Please Mention The Michigan Farmer When Writing Advertisers



**Ohio Experiment Station
Increases Apple Yield
24 Barrels an Acre with
2½ lbs. Nitrate per Tree**

The Ohio Station found that where 2½ pounds of Nitrate of Soda, 5 pounds of Acid Phosphate and 2½ pounds of Muriate of Potash per tree were used the simple addition of an extra 2½ pounds of Nitrate of Soda per tree increased the yield of apples 24 barrels per acre.

Nitrate of Soda

Experiment stations throughout the apple districts report that the early spring application of nitrogen is necessary for the best growth and most abundant fruiting. They are, therefore, recommending Nitrate of Soda used in quantities of from 2 to 10 pounds per tree in the spring before blossom time.

My Free Bulletin Service gives practical information on the use of Nitrate of Soda for apples and all other crops. If you desire these Bulletins write me your name and address, and to identify this advertisement add the number 1527

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

NEWS FROM CLOVERLAND

TAKE FRUIT PRIZES.

APPLE growers of Ontonagon county are proud of the record at the recent State Apple and Potato Show held at Grand Rapids, where there were taken twelve first, eight second, six third and two fourth prizes in the apple exhibit. The varieties exhibited included the Northwestern Greening, McIntosh Red, Wealthy, Duchess, Wolf River, Snow, Gideon, Ben Davis, Pewaukee, Alexander, Hyslop, Hiberna, Northern Spy and a seedling.

SUGAR FACTORIES MERGED.

THE only beet sugar factory in the Upper Peninsula, at Menominee, has been merged in ownership with two sugar companies in northeastern Wisconsin. This will avoid duplication and result in large savings, it is stated. A representative of the company points out that it is possible to pay farmers in this section fifty cents a ton more for beets because of the larger sugar content of the beets. He attributes this to the cool weather of September and October, but probably the longer day and twilight period of the northern latitude has a good deal to do with it.

FULL-TIME DAIRY EXPERT WANTED.

THE Upper Peninsula Development Bureau has requested of Prof. R. J. Baldwin, director of the Extension Department of the Michigan Agricultural College, that a full-time dairy specialist be assigned to the Upper Peninsula to promote better dairying here. Ten of the fifteen counties of the peninsula were signed up for the pure-bred sire campaign by mid-December. Schoolcraft was the first to organize for the campaign. Other counties include Iron, Delta, Menominee, Gogebic, Dickinson, Alger, Marquette, Luce and Ontonagon. Local county committees are composed of bankers, manufacturers, lumbermen, mining-men, supervisors, grangers, and commercial clubs' representatives. These county committees consist of from fifteen to twenty members and a central committee representing the cooperating agencies has general supervision of the campaign.

A BETTER-STOCK GOSPEL TRAIN.

HOW the gospel of better stock and better dairying will be conveyed to the farmers of the Upper Peninsula was explained recently by Mr. J. A. Jeffery, land commissioner of the Duluth, South Shore & Atlantic Railroad, formerly of the Michigan Agricultural College. This train will be run on the lines of the principal railroads of the region at their expense. There will be sufficient passenger cars to take care of the speakers and other personnel, baggage cars for cattle, flat cars for equipment. With the train will go representatives of the railroads, of farmers' organizations, of local committees, and of commercial clubs. There will be about forty stops throughout the peninsula.

INTERESTING FACTS ON HOME EQUIPMENT.

REPORTING on dairy progress in Gogebic county, Mr. C. E. Gundersen, county agent, points out that of the county's cow-testing association, seventeen members own silos, twenty-one have cream separators, three own electric lighting plants, seven own acetylene plants, four have city elec-

tricity, thirteen have telephones, ten have cows in stanchions, seven have automatic drinking cups for cows, three have milking machines, thirteen have furnace heat in homes, three have city water, three have their own water plants, five have washing-machines, sixteen have touring cars, seven have trucks, eight have phonographs, four have pianos, three have organs, one has a radio.

There are twenty-six members of the association. All members have pure-bred or high-grade cattle. All use pure-bred sires. All weigh, test and keep a record of their milk production.

BIG PROGRAM AT ST. PAUL.

AT the fourth annual Tri-State Development Congress to be held at St. Paul, Minnesota, January 24-25, the principal themes will be forestry, transportation and taxation, it is announced. The program has been arranged and will be of interest to Upper Peninsula people, some of whom will be present at the meeting. The meeting a year ago was held at Menominee.

Raphael Zon, of the Lake States Forest Experiment Station, will discuss the place of forestry in the future of the lake states. Other aspects of forestry that will be considered will be its commercial features and taxation, presented by several experts in these problems. Mr. John C. Watson, of the Illinois Agricultural Association, will discuss the land's burden of taxation, while Mr. E. G. Quamme, president of the Federal Land Bank of St. Paul, will speak on taxation and land values. Taxation problems of undeveloped lands will be presented by the famous Wisconsin economist, Dr. R. T. Ely. Dean H. L. Russell, of the Wisconsin College of Agriculture, will discuss the interdependence of agriculture and industry.

Canadian and American viewpoints in regard to the Great Lakes-St. Lawrence Deep Waterway are to be heard from representatives of both countries. Railroad and highway experts will also have their say. There will be a "personally conducted" tour of the great Duluth Terminal Warehouse. A distinguished array of agricultural, forestry and transportation experts has already been secured, and Michigan is to be represented on the program.

ARE ACTIVELY INTERESTED IN PREVENTING FIRES.

OUT of the discussions of the forest fire menace, recently taking place at the sessions of the Congress of Michigan Game Associations at Marquette, came the adoption of a resolution recommending the appointment of a committee to investigate methods of forest fire prevention used in other states, such as Minnesota, Pennsylvania and New York, where, it was claimed, more efficient means are employed. It was also insisted that the fire fighting force should be enlarged during periods of special fire hazard.

Iron county sportsmen reported that 5,000 trees had been planted in devastated regions in that county, the past spring, and that 3,500 are still alive. This planting is said to have cost Iron county under \$150. It was stated that during the danger season the Iron county club had thirteen men in the woods on the watch for fires. It was reported that one of these men in following an automobile, put out several small fires started by men in the car who were from time to time throwing cigarette ends by the roadside, thus igniting the dry leaves and grass.

MUCH FALL-PLOWING HAS BEEN DONE.

IT was still plow weather up in this neck of the woods beyond the middle of December. Such a thing has seldom been known. Perhaps it is just to compensate us for the last start we got this spring. We have always been a believer in nature's laws of compensation, as Emerson describes them.

But, what puzzles us is to know whether this particular warm spell is making up for the bad weather we have had in the past, or whether we are to pay for these pleasant days with a "ripping cold" time in the future. However, we have learned that our controlling powers are very ineffectual when applied to the weather so we try to make the most of it, as we find it and keep ourselves in a mood with Riley, when he says, "Ain't no use to grumble an' complain, just as well be happy an' rejoice, when God sorts out the weather an' sends rain, then rain's my choice."—Pope.



This Grange Band Has Proven a Real Community Asset.

TIPS FOR TAXPAYERS.

No. 1.

JANUARY 1, 1924, marks the beginning of the period for filing income-tax returns for the year 1923. The period ends at midnight of March 15, 1924. Heavy penalties are provided by the revenue act for failure or wilful refusal to make a return and pay the tax on time.

Form 1040A, heretofore used for reporting net income of \$5,000 and less, from whatever source derived, has been revised in the interests of the largest class of taxpayers—wage earners and salaried persons. Reduced from six pages to a single sheet, Form 1040A is to be used for reporting net income of \$5,000 and less derived chiefly from salaries and wages. Persons any part of whose income is derived from a business or profession, farming, sale of property, or rent, though the amount is \$5,000 or less, will be required to use the larger form, 1040. The use of Form 1040 is required also in all cases where the net income was in excess of \$5,000, regardless of whether from salary, business, profession, or other taxable sources.

It being impossible to determine at this time which form is desired, copies of both forms will be sent taxpayers who filed individual returns for the year 1922, and may be obtained also at the offices of collectors of internal revenue and branch offices upon written request.

Harrison Muggins has been trying to trade in his old flivver for a new car. The Bon Ton garage have decided they will be willing to take the flivver by only adding \$50 to the price of the new car. The Bon Ton garage are offering a 1913 flivver free to anyone who will agree to come to them for all the repairs.—Sunshine Hollow.

How Cow Owners Can DOUBLE the Net Dairy Profit



Could you use double the expected profit from your cows this winter?

A startling thought, yet decidedly within the reach of nearly every dairy. So possible, so sensible, you'll wonder why you never fully realized your opportunity before.

Without following a difficult or expensive formula, this happy result may be yours. Just the same sound business principles as are applied by successful manufacturers in other fields of production will enable you to realize your goal.

10% More Milk Will Do It

Noted dairy experts say that in the average dairy one tenth more milk will double the net profit. They say this is conservative. It costs no more, for instance, to house, feed and care for a good milker than a poor milker. After these items of fixed expense are met, every quart of milk is net profit. What other effort on the farm will pay you so handsomely as intensive milk-production?

But start right. Remember one basic rule: Perfect health has more to do with big milk yields than breeding or feeding.

Keep the milk-making organs working full-speed—but at the same time strong, sturdy, vigorous. They must not only withstand forced production, but be able to throw off the diseases so common to dairy cows.

WHAT KOW-KARE WILL DO

Here Kow-Kare will help you in a definite, positive way. The same medicinal properties that have made Kow-Kare so popular as a cow medicine are doubly effective in promoting

milk-making vigor. Why? Because Kow-Kare acts directly on the genitive and digestive organs—the milk-producing functions of the cow. It enables the animal to properly assimilate Nature's foods and turn them into milk, without waste.

As an aid to big milk production, it is not necessary to use Kow-Kare continuously or in expensive quantity. Indeed, most dairymen feed only a tablespoonful twice a day, one week out of each month—a cost of only a cent a day per cow.

WHEN DISEASE CREEPS IN

The reputation of Kow-Kare for the treatment of Barrenness, Abortion, Retained Afterbirth, Scours, Bunches, Milk Fever, Lost Appetite, etc., has grown tremendously during its more than 25 years' use. No cow owner should be without it. Feed dealers, general stores and druggists sell Kow-Kare. Large size, \$1.25; medium, 65c. If your dealer is not supplied we will mail postpaid upon receipt of remittance.

WORLD'S CHAMPION AGNES WALLACE

Helped by Kow-Kare

M. G. Welch & Son, Burke, N. Y. write: Enclosed find picture of our four-year Ayrshire cow, Agnes Wallace of Maple Grove (25171), champion four-year-old Ayrshire cow of the world, with a record of 17,657 pounds milk and 966 pounds butter in one year. We have used Kow-Kare in our herd for years and would not think of getting along without it. We consider it the best cow tonic known.

"Our imported herd sire, Aucher-brain Brilliant Sun imp. 23664 now weighs 2100 pounds and eats Kow-Kare whenever I think him in need of a tonic."

DURING CALVING

Rollin H. Maxfield, Erie, Ill. says: "We have been using your Kow-Kare for over five years and think it the best thing for cows at all times to keep them in condition. We find it especially good when used about a month during calving time, two weeks before and two weeks after."

USED KOW-KARE FOR 22 YEARS

John Moser, Lisbon, O. writes: I have used your Kow-Kare for 22 years. I keep it in the barn all the time and I wouldn't be without it. I am about to feed it to my large herd of cows about one week out of every month to maintain a good, healthy condition."

RESULTS AFTER ONE WEEK

H. L. Kobb, English, Ind. says: "I fed a part of a small can of Kow-Kare to three cows, one week, and got wonderful results; especially from one old cow that had not been well for some time. I am telling the neighbors of the good it is doing"

Let us mail you our free book, "The Home Cow Doctor." Besides much general information of value to cow owners, it tells about the other popular Dairy Association remedies, Bag Balm, Garget Remedy, Horse Comfort—all fitting companions to Kow-Kare.

DAIRY ASSOCIATION CO., Inc.
Lyndonville, Vermont



A cent
a day per cow

DAIRY ASSOCIATION CO., Inc.
Lyndonville, Vt.

I would like the assistance of your book, "The Home Cow Doctor," which please send without cost. Also please send me a free 2-ounce sample of BAG BALM (worth 15c) for which courtesy I am writing on the margin my dealer's name.

NAME _____

ADDRESS _____



BAG-BALM

For Udder and Teats

Penetrates and heals inflammation, soreness, congested or hardened tissues. Relieves Caked Bag, Bunches, Cow Pox. Quickly heals chaps, cuts, bruises. Ten ounces, 60c.

\$24.95 Sent On TRIAL
Upward
American
CREAM
SEPARATOR

A SOLID PROPOSITION to send well made, perfect skimming separator for \$24.95. Skims warm or cold milk. Makes heavy or light cream. Different from picture, which shows large capacity, easy running New L.S. Model. See our easy

Monthly Payment Plan

Bowl is sanitary marvel, easily cleaned. Whether dairy is large or small, write for free catalog and monthly payment plan. Western orders from Western points.

AMERICAN SEPARATOR CO.
Box 2061
Bainbridge, N.Y.



\$33 UP FARM ENGINES
Saved \$21 ordering direct from your factory save W. Price, Ind. You will save on our reliable engines. Built to do hard, heavy work. Kerosene, Gasoline, Easy to start—no cranking. Sizes 1-4 to 22 H.P. 3 Months Trial. Cash, Easy Terms: 10-Year Guarantee. Free Book—How to Know Better Engines. Write today. THE OTTAWA MFG. CO. 13612 King Street, 1900-1902, Magee Bldg., OTTAWA, KANSAS, PITTSBURGH, PA.

Only **\$2 DOWN** ONE YEAR TO PAY
\$44 Buys the New Butterfly Jr. No. 214 Light running, easy cleaning, EASY TO CLEAN, NEW BUTTERFLY Jr. guaranteed a lifetime against defects in material and workmanship. Made also in four larger sizes up to No. 6 1/2 shown here; sold on 30 DAYS' FREE TRIAL and on a plan whereby they earn their own cost and more by what they save. Postal orders Free Catalog Folder. Buy from the manufacturer and save money. ALBAUGH-DOVER CO. 2165 Marshall St. Chicago

Please Mention The Michigan Farmer When Writing to Advertisers

Color Your Butter

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

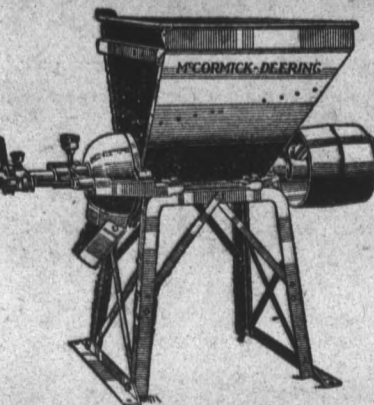
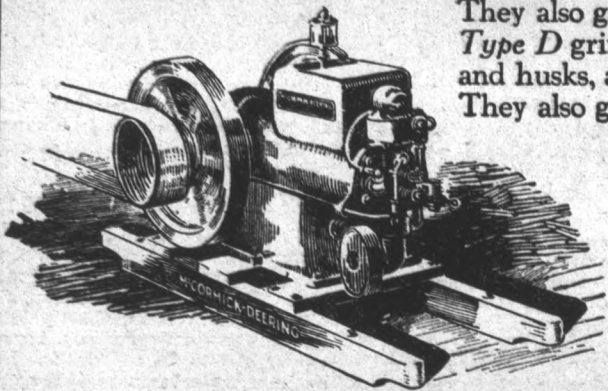
Before churning add one-half teaspoonful to each gallon of cream and out of your churn comes butter of Golden June shade. "Dandelion Butter Color" is purely vegetable, harmless, and meets all State and National food laws. Used for 50 years by all large creameries. Doesn't color buttermilk. Absolutely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

Feed Your Low-Grade Wheat

ON the advice of the best authorities, wheat is now being fed to make pork. Wheat at 75 cents a bushel [or less when it is low-grade, shrunken, and unsalable] has a hog-feeding value of \$1.00 a bushel—and it is from 8 to 10% more valuable than corn as a pork builder. It is nutritious and palatable and has more mineral matter and protein. Two objects are gained by wheat feeding—the low-grade surplus is turned into good money on the farm, and the price of No. 1 wheat will be pushed higher.

All authorities agree that, because of its hardness, wheat must be ground for feeding. Coarse grinding releases 10 to 22% more feeding value. Here McCormick-Deering Feed Grinders are especially well fitted to come to the aid of the farmer. Famous for years for their fast, many-sided work in small grain grinding, they are ideal for handling surplus wheat just as desired.

There are three types and sizes of McCormick-Deering Feed Grinders. The *Type C* handles small grains and shelled corn or a mixture of both. The *Type B* mills are for ear corn. They crush the cobs and grind cobs and corn together. They also grind small grains and shelled corn. The *Type D* grinds corn in the husk, pulverizes the cobs and husks, and makes a fine meal of the whole mass. They also grind corn on the cob and small grains.



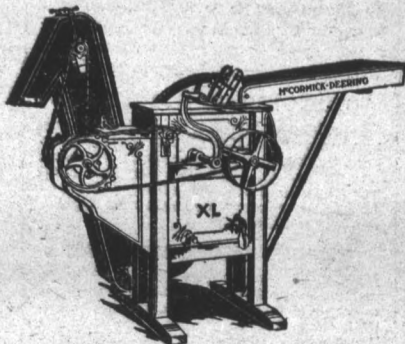
McCORMICK-DEERING—the grinder with double-faced, self-sharpening grinding plates. Ask for a demonstration at your dealer's store.

Ask for a demonstration of these general-purpose grinders at the store of the McCormick-Deering dealer. See what they will do for wheat or any other grain, or for corn in any shape. Let them show you how to get maximum food value out of grain when run by the most economical power—McCormick-Deering Kerosene Engines.

INTERNATIONAL HARVESTER COMPANY
606 S. Michigan Ave. of America Chicago, Ill.
(Incorporated)

McCormick-Deering Corn Shellers

DO not forget that now is the time to prepare for your corn shelling. McCormick-Deering shellers have made excellent records for clean work and durability. They are made in seven sizes and styles, covering hand shellers, hand and power shellers, and large cylinder shellers for single farms or custom use. Capacities range from 20 bushels up to 400 bushels per hour. Here again McCormick-Deering engines and McCormick-Deering Tractors provide the most satisfactory power.



ANOTHER WINTER JOB FOR THE FARMER.

A SUGGESTION comes from Ohio that could well be adopted by the farm wives of Michigan. This suggestion is to prepare a score card and have the husband to carefully go over the kitchen and measure its conveniences by points on the score card. For instance, fifteen of the 100 points of a perfect score card are awarded for kitchens having both hot and cold running water.

One husband when he arrived at this point, ordered the proceedings stopped and moved immediately that water be piped to the kitchen, and made arrangements to have available, both hot and cold. After that the scoring continued and other conveniences were added as time and finances made them possible.

The eight sections on the score card used allow the following points: The floor plan of arrangement, 15 points; light and ventilation, 16; floor and walls, 10; stove, 10; fuel, 9; water supply, 15; equipment, 15; storage, 10.

GET THE ICE HOOK.

ONE of the ways in which the farmer may employ winter days to aid during the hot busy weeks of the summertime, is to put up an ample supply of ice. Each summer a large percentage of farmers declare to themselves that the following winter they will certainly put in such a 'store. However, when winter comes this job is delayed until too late.

It is important to have everything in readiness when the water has frozen to sufficient depth to be harvested. Erecting loading platforms, repairing of the ice-house and providing an ample supply of dry hay or sawdust should be seen to at once. All tools, such as saws, picks, and other implements needed, should also be ready for use on a moment's notice. Ice, like other crops, must be harvested when it is fit.

HAY MARKET RULES STRONG.

FIGURES gathered throughout the United States by the department of agriculture show that fully one-half of the marketable surplus of the 1923 timothy hay crop has been marketed by December 15, compared with about twenty-five per cent of the 1922 crop to the corresponding time of 1922. With a seven million ton decrease in the last tame hay crop, present price levels are from five to six dollars higher than a year ago. Alfalfa prices are also on a slightly higher level than last year, with the trend since the beginning of the crop year being steadily upward. The problem of marketing the remainder of the 1923 hay crop should in no wise be difficult and of entirely a different type than that obtaining a year ago.

APPLE MARKETING PROBLEM NOT SOLVED.

ACCORDING to information just received, the apple marketing problem in Washington, Oregon, and Idaho has not been solved. Consequently, a meeting to form some sort of a co-operative marketing organization covering the commercial apple growing districts of the northwest is called to meet at Yakima during January.

THE WHEAT SURPLUS.

ACCORDING to a communication from the International Institutes of Agriculture at Rome, a survey of the world wheat situation shows a surplus of exporting countries over quantities required by importing countries of about 230,000,900 bushels of the grain.

Yes, we believe thoroughly that the foreign bootlegger should be booted to foreign shores.

EVERGREENS Hill's Hardy Tested Varieties
Fine for windbreaks, hedges and lawn planting. All hardy, vigorous and well rooted. We ship everywhere. Write for free Evergreen book. Beautiful Evergreen Trees at moderate prices. A. Hill Nursery Co., Box 230, Dundas, Ill.

FREE Wrist Watch
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.

We Pay \$8 a Day
taking orders for Insyde Tyres—inner armor for automobile tires. Positively prevent punctures and blowouts. Guaranteed to give double tire mileage.
We Want 2000 Representatives
Easy to get orders. Every auto owner a prospect. Old worn-out casings will give three to five thousand miles more service. Use over and over again. Demand enormous. Write quick and get started.
AMERICAN ACCESSORIES CO., 81859 Cincinnati, O.

THIS LOG AND TREE SAW \$21.95
Fitted with Atkins Silver Steel Guaranteed Saw
RUNS EASY NO BACKLAGES WEIGHT ONLY 45 LBS. EASILY CARRIED
SAWS DOWN TREES
9 Cards in 10 Hours by one man. It's King of the woods. Catalog Y44 Free. Established 1890.
Folding Sawing Machine Co., 1005 E. 75th St., Chicago, Illinois

FREE BIG Peerless BARGAIN BOOK

Gives you lowest prices ever quoted!

Send today for our new 104 page catalog showing amazing low prices. The matchless Peerless quality remains the same. Nothing changed or cheapened but the prices. Peerless Fence, galvanized as heavily as ever—Peerless Carbon Steel Farm Gates—Peerless non-rusting Steel Posts—Peerless Wondercote and Covermore Paints—Peerless Asphalt Roofing—all of these products now sold at prices much lower than dealers quote.

SAVE on FENCE, PAINTS and ROOFING

The entire output of the three mammoth Peerless factories is now sold direct to farmers—all "in between" profits have been cut out. This new selling plan has made our astonishing low prices possible. Look over the few sample figures at the right, and send immediately for the big bargain book. Mail a postcard for it today. We ship direct from Factories at Cleveland, Ohio; Adrian, Mich.; Memphis, Tenn.

PEERLESS WIRE & FENCE CO.
Dept. 2332 Cleveland, Ohio

Gives you lowest prices ever quoted!

Every page packed with amazing bargains

Steel Farm Gates, each	\$3.00
Steel Posts, each	24/2c.
Barb Wire, 80 rods	\$2.70
Lawn Fence, per ft.	7/4c
Paint, per gallon	\$1.28
Roofing, 100 sq. ft.	\$1.25

And so on, all through this great money-saving book, our low prices will be a revelation of what our new selling plan can do!

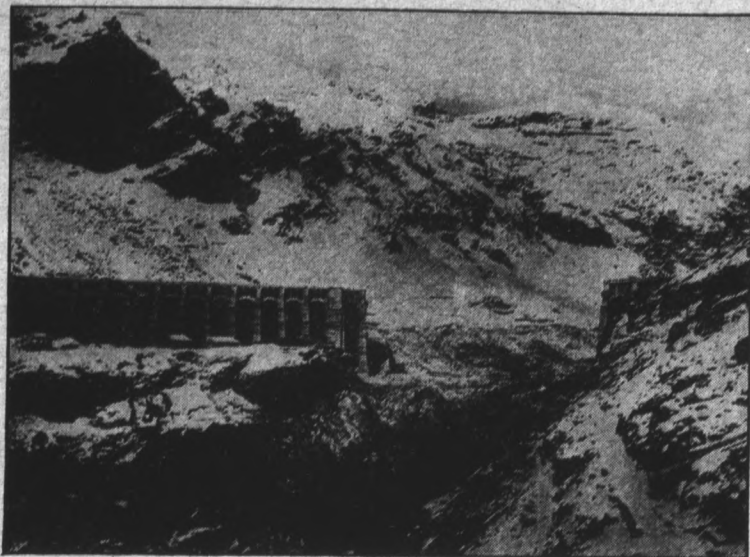
Get it now! and SAVE \$!

FARM FENCE as low as 19¢ a rod

WORLD EVENTS IN PICTURES



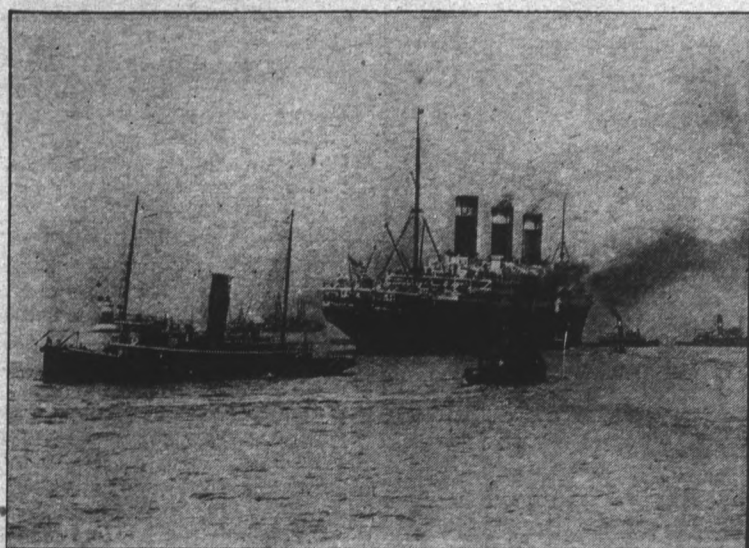
Mrs. John F. Francisco, world's champion woman horseshoe pitcher, trains for winter meet.



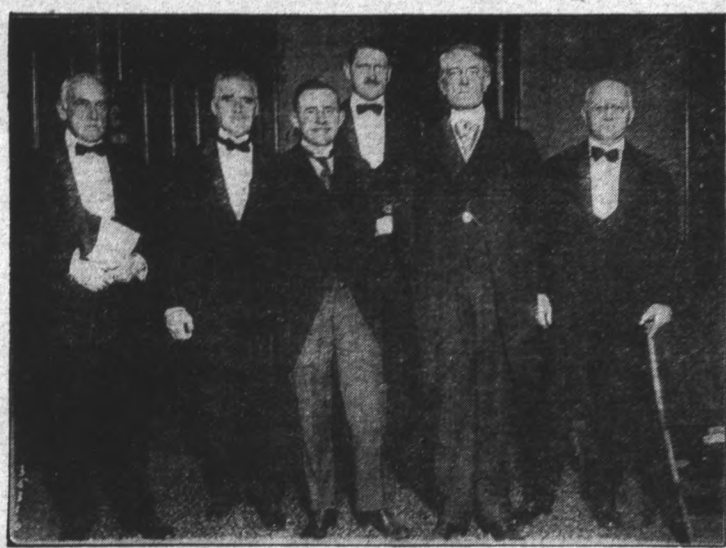
When this dam in the Dezzo Valley, Italy, crumbled, it caused a flood which resulted in a great loss of life, and millions of dollars of damage to property.



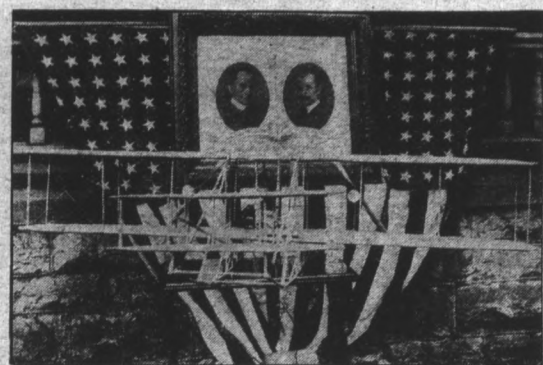
King George and Queen Elizabeth, of Greece, again lose throne and are in exile.



It took several tugs and many hours' work to release the queen ship of the American Merchant Marine, Leviathan, when she became grounded on Robbins Reef, in New York harbor.



These dignified looking gentlemen were the principals in a series of five debates on the absolute literal truth of the Bible, the virgin birth of Christ, and evolution.



Miniature airplane presented to Wright Bros., at Dayton, Ohio, on twentieth anniversary of their first successful flight.



Out of 60,000 teachers in the U. S., Teresa Lenney won first prize in highway safety essay contest.



The two sons of Halime Edib Hancum, leader of feminist forces in Turkey, are studying at the University of Illinois.



These boys are members of the Children's Regiment in Russia, a cadet school for young Communists from the age of six up, who are trained to become Red soldiers.



"Ready for action." This speed skating team will defend U. S. honors at Olympic games contest at Chamonix in the French Alps.

HOUSTON smiled at her. True, she had always been near in time of trouble and it was only natural that now—

"Of course," came his answer. "Come, I'll have you made comfortable in the cottage." Then, as he started away, "May I see you, Ba'tiste, sometime tonight?"

"Ah, oui." The Canadian was moving toward his wagon and the waiting dog. "In the cabin."

Three hours later, the last of the men paid off, Agnes installed in the best of the three little cottages in care of the motherly old cook, Barry Houston approached the door of Ba'tiste's cabin, the wolf-dog, who had picked him up a hundred yards away, trotting beside him. There was a light within in the shadows by the grate, a form moved—old Lost Wing. Medaine was there, then. Barry raised his hand to knock—and halted. His name had been mentioned angrily; then again—followed by the voice of the girl:

"I don't know what it is, Ba'tiste. Fred wouldn't tell me, except that it was something too horrible for me to know. And I simply can't do what you say. I can't be pleasant to him when I feel this way."

"But—"

"Oh, I know. I want to be fair, and I try to be. I speak to him when I meet him; isn't that enough? We're not old friends; we're hardly even acquaintances. And if there is something in his past to be ashamed of, isn't it best that we simply remain that way? I—"

THEN she ceased. Houston had knocked on the door. A second later, he entered the cabin, to return Medaine Robbinette's cool but polite greeting in kind, and to look apprehensively toward Ba'tiste Renaud. But the old man's smile was genuine.

"We have been talk' about you, oui, yes!" he said. "Eh, Medaine?"

It was one of his thrusts. The girl colored, then turned toward the door.

"I'm afraid I've stayed longer than I intended," she apologized. "It's late. Good night."

Then she was gone. Houston looked at Ba'tiste, but the old French-Canadian merely waived a big hand.

"Woman," he said airily, "peuff! She is strange. Eet is nothing. Eet will pass. Now," as though the subject had been dismissed, "what mus' Ba'teese do?"

"At the mill? I wish, if you don't mind, that you'd guard it for me. I'm going to Denver on the morning train to hire a new crew. I don't want Thayer to do anything to the mill in my absence."

"Ah, oui. It shall be. You will sleep here?"

"If you don't mind? It's nearer Tabernacle."

"Bon—good! Golemar!" And the dog scratched at the door. "Come, we shall go to the mill. We are the watchmen, yes?"

"But I didn't mean for you to start tonight. I just thought—"

"There is no time like the minute,"

The White Desert

By Courtney Ryley Cooper

answered the Canadian quietly. "Tonight, you shall be Ba'teese, oui, yes. Ba'teese shall be you."

Pulling his knit cap on his head, he went out into the darkness and to the guardianship of the mill that belonged to a man who looked like his Pierre. As for Houston, the next morning found him on the uncomfortable red cushions of the smoking car as the puffing train pulled its weary way through the snowsheds of Crestline

den cringing. In that moment as he stood outside the door of Ba'tiste's cabin, he had heard himself sealed and delivered to oblivion as far as she was concerned. He was only an acquaintance—one with a grisly shadow in his past—and it was best that he remain such. Grudgingly, Barry admitted the fact to himself, as he sat once more in the red-plush smoking car, surrounded by heavy-shouldered, sodden-faced men, his new crew, en route to

AT THE SIDE OF THE ROAD

By Harlan Babcock

Since the coming of the highways,
Such as builided in the past
By the wise and doughty Romans—
Made for centuries to last—
There has come along these speed-
ways,

First-hand service to afford,
Brother Farmer with his market—
And its little bulletin board.

By the roadside by the thousand
Are these rural marts of trade,
Where the farmer sells his produce,
All attractively arrayed.
Every section of the country
Pays its willing tribute toward
Brother Farmer's wayside market,
With its little bulletin board.

Thither flock the city people,
Out to flout the middleman,
Liking well the roadside market,
With its money-saving plan.

While the farmer sells his produce,
Adding thusly to his hoard—
Gives his wayside stand the credit,
Aided by the bulletin board.

Like a mighty wave these markets
Day by day are spreading out,
Serving both the town and country,
Putting Old Hi Cost to rout.
Furnishing a ready outlet
Through which tempting wares are
poured,
Hand in hand the front-yard market
And the little bulletin board.

Now the middleman no longer
Gets the profits of the soil—
Brother Farmer and his family,
Reap full payment for their toil.
Thank the roadside mart idea,
Which has confidence restored
To the farmer, who gave credit
Largely to the bulletin board.

Mountain, on the way over the range. Evening brought him to Denver, and the three days which followed carried with them the sweaty smell of the employment offices and the gathering of a new crew. Then, tired, anxious with an eagerness that he never before had known, he turned back to the hills.

Before, in the days agone, they had been only mountains, reminders of an eruptive time in the cooling of the earth—so many bumpy places upon a topographical map. But now—now they were different. They seemed like home. They were the future. They were the housing place of the wide spaces where the streams ran through green valleys where the sagebrush dotted the plateau plains, and where the world was a thing with a rim about it; hills soft blue and brown and gray and burning red in the sunlight, black, crumpled velvet beneath the moon and stars; hills where the pines grew, where his life awaited him, a new thing to be rem. . . . nearer to his own desires, and where lived Ba'tiste, Agnes—and Medaine.

Houston thought of her with a sud-

den cringing. It was best. There was Agnes, with her debt of gratitude to be paid and with her affection for him, which in its blindness could not discern the fact that it was repaid only as a sense of duty. There was the fight to be made—and the past. Houston shuddered with the thought of it. Things were only as they should be; grimly he told himself that he had erred in even thinking of happiness such as comes to other men. His life had been drab and gray; it must remain so.

PAST the gleaming lakes and eternal banks of snow the train crawled to the top of the world at Crestline, puffed and clattered through the snowsheds, then clambered down the mountain side to Tabernacle. With his dough-faced men about him, Houston sought transportation, at last to obtain it, then started the journey to the mill.

Into the canon and to the last rise. Then a figure showed before him, a gigantic form, running and tumbling through the underbrush at one side of

the road, a dog bounding beside him. It was Ba'tiste, excited, red-faced, his arms waving like windmills, his voice booming even from a distance:

"M'sieu Houston! M'sieu Houston! Ba'teese have fail! Ba'teese no good! He watch for you—he is glad you come! Ba'teese ashame! Ashame!"

He had reached the wagon now, panting, still striving to talk and failing for lack of breath, his big hands seeking to fill in the spaces where words had departed. Houston leaned toward him, gripping him by a massive shoulder.

"What's happened? What's—"

"Ba'teese ashame!" came again between puffs of the big lungs. "Ba'teese watch one, two, t'ree night. Nothin' happen. Ba'teese think about his lost trap. He think mebbe there is one place where he have not look'. He say to Golemar he will go for jus' one, two hour. Nobody see, he think. So he go. And he come back. Blooey! Eet is done! Ba'teese have fail!"

"But what, Ba'tiste? It isn't your fault. Don't feel that way about it? Has anything happened to Agnes?"

"No. The mill."

"They've—?"

"Look!"

They had reached the top of the rise. Below them lay something which caused Barry Houston to leap to his feet unmindful of the jolting wagon, to stand weaving with white-gripped hands, to stare with suddenly deadened eyes—

Upon a blackened, smoldering mass of charred timbers and twisted machinery. The remainder of all that once had been his mill!

CHAPTER X.

WORDS would not come for a moment. Houston could only stare and realize that his burden had become greater than ever. In the wagons behind him were twenty men, guaranteed at least a month of labor, and now there was nothing to provide it. The mill was gone; the blade was still hanging in its sockets, a useless, distempered thing; the boiler was bent and blackened, the belting burned; the carriages and muley saws and edgers and trimmers were only so much junk. He turned at last to Ba'tiste, to ask tritely what he knew could not be answered:

"But how did it happen, Ba'tiste? Didn't any one see?"

The Canadian shrubbed his shoulders.

"Ba'teese come back. Eet is done."

"Let's see Agnes. Maybe she can tell us something."

But the woman, her arms about Houston's neck, could only announce hysterically that she had seen the mill burning, that she had sought help and had failed to find it.

"Then you noticed no one around the place?"

"Only Ba'tiste."

"But that was an hour or so before."

The big French-Canadian had moved away, to stand in doleful contemplation of the charred mass. The voice of Agnes Jierdon sank low:

(Continued on page 53).

AL ACRES—Slim Starts A Gripping Tale

By Frank R. Leet



Belgium Melotte

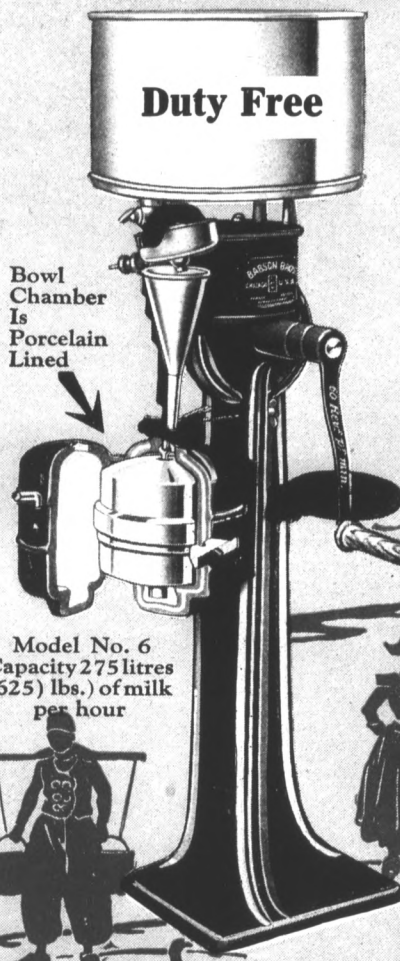
Imported Separator

Self-Balancing Bowl

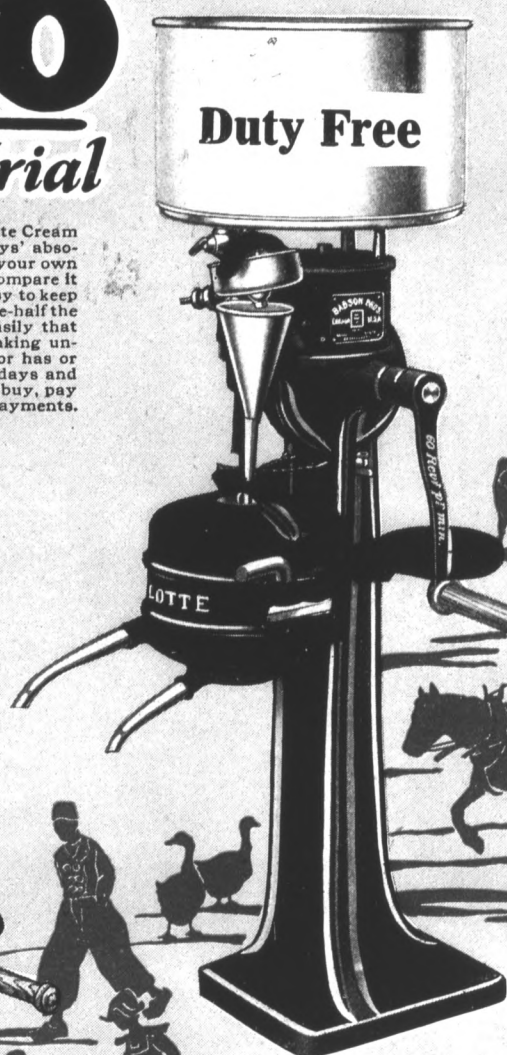
The Belgium Melotte contains the famous single-bearing, *self-balancing* bowl. This patent Bowl hangs from one frictionless ball bearing and spins like a top. It skims as perfectly after 15 years use as when new. Positively cannot ever get out of balance — cannot vibrate and thus cause cross currents which waste cream by remixing with milk. Send coupon today. Get the Free Book that tells about this great Melotte.

\$7.50
After Trial

We will send an Imported Belgium Melotte Cream Separator direct to your farm on 30 days' absolutely Free Trial. Use it just as if it were your own machine. Put it to every possible test. Compare it with any or all others. The Melotte is easy to keep clean and sanitary because it has only one-half the tinware of other separators. Turns so easily that bowl spins 25 minutes after you stop cranking unless brake is applied. No other separator has or needs a brake. After you have tried it 30 days and you know it is the separator you want to buy, pay \$7.50 down and balance in small monthly payments.



Model No. 6
Capacity 275 litres
(625 lbs.) of milk
per hour

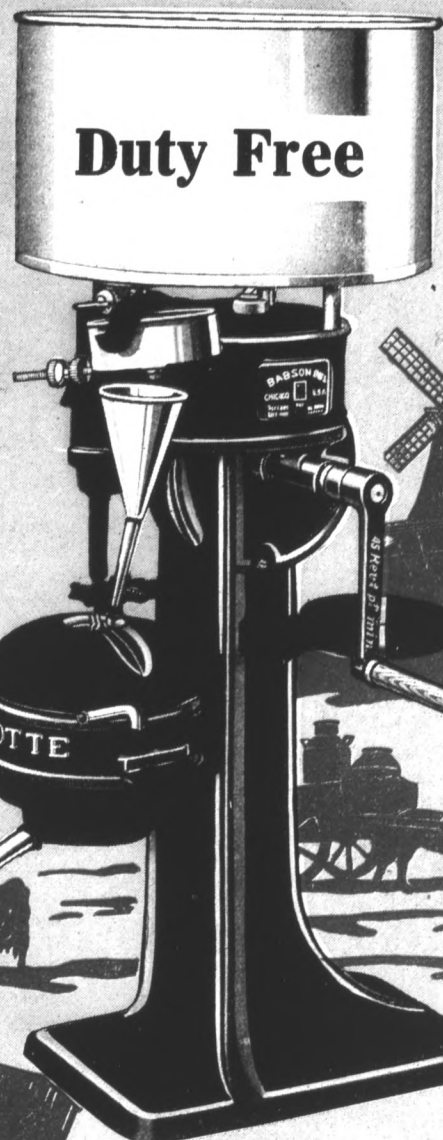


Model No. 7
Capacity 325 litres
(740 lbs.) of milk
per hour

Pine Tree Milker



AT LAST! Here is a milker with seven years' successful record back of it. A milker that is as supreme among milkers as the Melotte is among separators. Every owner of 8 or more cows can now afford to buy special Pine Tree small-herd offer.



Model No. 11
Capacity 500 litres
(1135 lbs.) of milk per hour.

Free Trial

Your choice of any of these three models. NO MONEY DOWN — FREE TRIAL — SMALL MONTHLY PAYMENTS — DUTY FREE. This wonderful Belgium Melotte Separator has been picked by a jury of thousands of farmers — picked by dairy experts throughout the world to be the "king" of all separators ever manufactured. It has broken all records of Efficiency of Skimming, Ease of Turning, Convenience of Operation and Durability. Send coupon below for Big Free Book.

Write

Mail coupon for catalog giving full description of this wonderful cream separator. Don't buy any separator until you have found out all you can about the Melotte and details of our 15 year guarantee. Don't wait—be sure and mail coupon.

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H. B. BABSON,
U. S. Manager
Chicago, Illinois

The Melotte Separator, H. B. Babson, U.S. Mgr.
2843 West 19th Street, Dept. 40-91 Chicago, Ill.
2445 Prince Street, Berkeley, Calif.

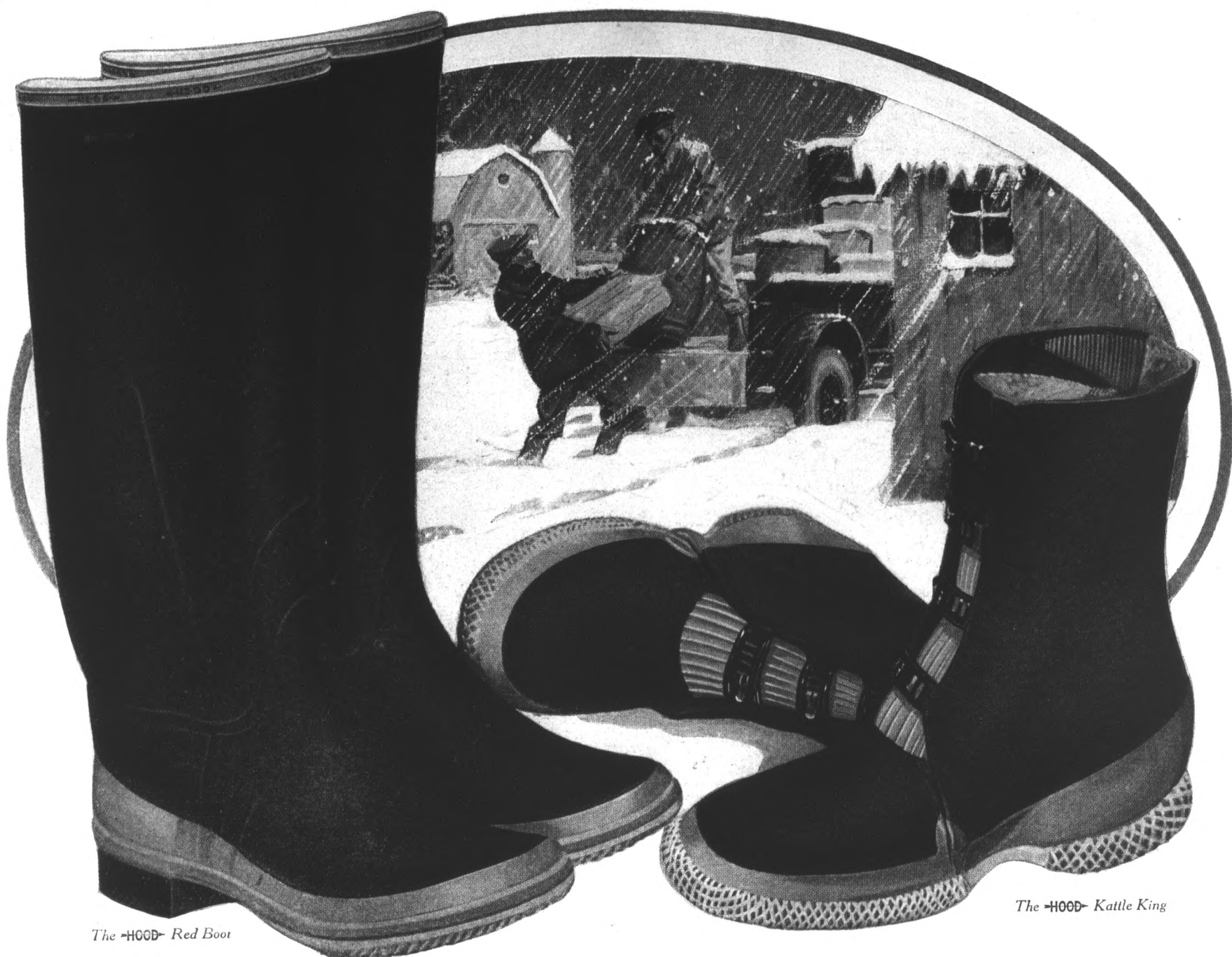
Without cost to me or obligation in any way, please send me the Melotte catalog which tells the full story of this wonderful separator and M. Jules Melotte, its inventor and hundreds of letters from American Farmers.

Name _____

Post Office _____

County _____ State _____

How many cows do you milk? _____



The -HOOD- Red Boot

The -HOOD- Kattle King

Long Wear with Balanced Weight -to save your strength as it saves your pocketbook

IF the problem had been simply to make you a boot or a shoe that gave you good wear; or if it had been to make you a comfortable boot without regard to the amount of wear it would give, we could have saved considerable of the time and money that was spent in perfecting HOOD Boots and Overshoes.

As for long wear, we will spend little time talking about it. It must be there, and it is there, in good measure.

But comfort is another story. Many designs tested proved comfortable in the try-on and in the first hour or so of use. At the end of the day they were heavy, and far from comfortable. A little weight off balance does

not amount to much until you have carried it for eight or ten hours.

Equal in importance to the proper balance of the boot, is the placing of all reinforcements, inside and outside. They must not in any way cramp the muscles of the foot or partially shut off any of the main arteries of the foot. Improper circulation is the cause of more foot troubles than the average man realizes. Neither do most men realize that the muscles and nerve structure of the feet tie in directly with the big leg and back muscles and with the entire nervous system. Many a back ache and "all in" feeling is due primarily to foot weariness.

We may have gone to some length in explaining these things. We want you to know how HOOD Boots are designed, and how much real comfort and satisfaction they are capable of giving you. Take our word for this to the extent of trying a pair of Red Boots or a pair of Kattle Kings. Put them on for the first long, hard day's work and at the end of such a day see what you think of the principles of balanced weight and scientific reinforcing.

Hood Rubber Products Co., Inc., Watertown, Massachusetts

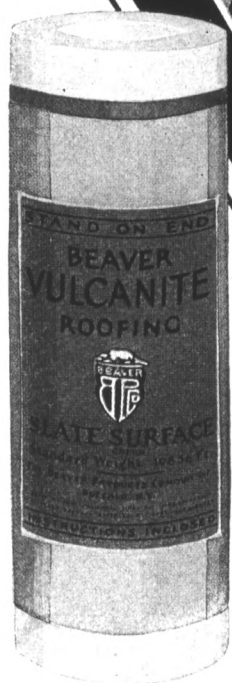
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Buying Guide



HOOD



for every member
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It pays in more ways than one when you put Vulcanite *quality* roll roofing on your barn.

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But there is a quick, easy way to test this remarkable quality yourself. Ask your dealer, or

mail coupon to us, for free sample of Beaver Vulcanite roofing. And then make the six tests listed here. They are simple, but daring, for unless Vulcanite was made of the best materials it never could "live through" these harsh tests.

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Beaver Vulcanite is so thick and tough that it is unequalled for laying right over your old roof. It does not require an expert to apply it. Full directions are included in each roll. Before you roof, learn all about Beaver Vulcanite. The coupon brings sample and full information. Mail it today.

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BEAVER VULCANITE

R O O F I N G



6

DARING TESTS

you should make before you buy *any* roofing

1 Heat test: Lay sample of Vulcanite 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.

Vulcanite slate-surfaced rolls and shingles are produced in Italian red, sage green or distinctive blue-black, and are made in a variety of weights. Rolls also may be obtained in mica, sand or talc surface.

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FREE
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Gentlemen: Please send me your two free books, "Vulcanite Roofing," and "How to Re-roof," and also a sample of genuine Vulcanite Roofing.

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First, are all who know from comparisons or through the experiences of friends that Chevrolet provides the utmost dollar value in modern, economical transportation of people or merchandise. This group constitutes our spontaneous market; its members walk right into our dealers' places of business and buy Chevrolets.

Second, the large group of people with modest incomes who have the false impression that so good a car as Chevrolet is beyond their means.

They do not realize that due to engineering excellence and full modern equipment, Chevrolet operating and maintenance costs average so low that during the life of the car, it delivers modern, comfortable, fast transportation at the lowest cost per mile, *including the purchase price.*

The tremendous growth of our business during the last two

years has been due to the shifting of thousands from this group to the first group.

Third, the smaller but very important group of people of ample means, able to buy the highest priced cars, only a small percentage of whom as yet realize that Chevrolet combines quality features of much higher priced cars with such operating economy that as an extra car it virtually costs them nothing, due to the reduction in their transportation expenses effected by it.

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This message, then, is addressed to all in the second and third groups. We respectfully suggest consideration, investigation and comparison of Chevrolet with any other car at any price. The result will be to our mutual benefit.

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Superior Sedan

Now Only \$795

f. o. b. Flint, Mich.

THE WHITE DESERT.

(Continued from page 48).

"I don't know, Barry. I don't want to accuse—"

"You don't mean—"

"All I know is that I saw him leave the place and go over the hill. Fifteen minutes later, I saw the mill burning and ran down there. All about the place rags were burning and I could smell kerosene. That's all I saw. But in the absence of any one else, what should a person think?"

Houston's lips pressed tight. He turned angrily, the old grip of suspicion upon him—suspicion that would point in time of stress to every one about him, suspicion engendered by black days of hopelessness, of despair. But in an instant, it all was gone; the picture of Ba'tiste Renaud, standing there by the embers, the honesty of his expression of sorrow, the slump of his shoulders, while the dog, unnoticed, nuzzled its cold nose in a limp hand, was enough to wipe it all out forever. Houston's eyes went straight to those of Agnes Jierdon and centered there.

"Agnes," came slowly, "I want to ask a favor. No matter what may happen, no matter what you may think personally, there is one man who trusts me as much as you have trusted me, and whom I shall trust in return. That man is Ba'tiste Renaud, my friend. I hope you can find a friend in him too; but if you can't, please, for me, never mention it."

"Why, of course not, Barry." She laughed in an embarrassed manner and drew away from him. "I just thought I'd tell you what I knew. I didn't have any idea you were such warm comrades. We'll forget the whole incident."

"Thank you." Then to Ba'tiste he went, to bank him on the shoulder, and with an effort to whirl him about. "Well!" he demanded, in an echo of Ba'tiste's own thundering manner, "shall we stand here and weep? Or—"

"Eet was my fault!" The French-Canadian still stared at the ruins. "Eet is all Ba'teese' fault!"

"I thought you were my friend, Ba'tiste."

"Sacre! I am."

"Then show it! We'll not be able to make a case against the firebugs—even though you and I may be fairly sure who did it. Anyway, it isn't going to break us. I've got about fifteen thousand in the bank. There's enough lumber around here to build a new saw-shed of a sort, and money to buy a few saws, even if we can't have as good a place as we had before. We can manage. And I need help—I won't be able to move without you. But—"

"Oui?"

"But," and Barry smiled at him, "if you ever mention any responsibility for this thing again—you're fired. Do we understand each other?"

VERY slowly the big trapper turned and looked down into the frank, friendly eyes of the younger man. He blinked slightly, and then one tremendous arm encircled Houston's shoulder for just a moment. At last a smile came, to grow stronger. The grip about the shoulders tightened, suddenly to give way to a whanging blow, as Ba'tiste, jovial now, drew away, pulled back his shoulders and squared himself as though for some physical encounter.

"Ah, oui!" He bellowed. "Oui, oui, oui! Bon—good! Ba'teese, he unstan'. Now what you want me to do?"

"Take this bunch of men and turn to at clearing away this wreckage. Then," and he smiled his confidence at Renaud, "make your plans for the building of a saw-shed. That is—if you really want to go through with it?"

"Ah, oui—oui!" The Canadian waved his arms excitedly and summoned his men. For a moment, Barry stood watching, then returning to Agnes, escorted her toward her cottage.

(Continued next week).

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75¢ each



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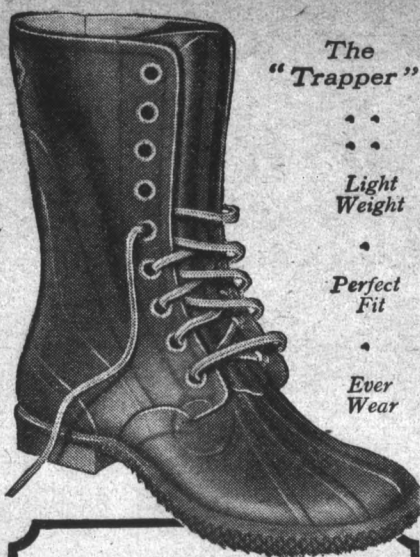
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Three Generations

Our Weekly Sermon—By N. A. McCune

ISAAC and Jacob were father and son. But in temperament they were as unlike as north and south. Isaac was the quiet, unimaginative type, "A simple, guileless, childlike man, Content to live where life began."

Not so his restless son. Jacob has stood for the aggressive, unscrupulous type through all the centuries. He would get ahead, at all costs. Fairly if possible, unfairly if necessary. Success was his god, as it is of many Americans. And for this he should not be too severely censured. He was trained in deception from childhood.

Rebecca was an ambitious woman. She wanted her twins to make a place in the world, and she was partial toward Jacob. On one occasion she resorted to a contemptible piece of deception, which involved taking advantage of her aged husband, blind and bed-ridden. If she was capable such a trick once, she was capable of it at other times. The fooling of Isaac which is told is simply an example of things which are not told. When Jacob says he is afraid that he will be detected in the theft of the birthright and will bring on himself a curse rather than a blessing, his crafty mother says, "Upon me be thy curse, my son; only obey my voice." We cannot help thinking of Lady Macbeth, when she whispers to her wavering husband, "Only screw your courage to the sticking-place, and we'll not fail." A man who has been schooled in trickery from childhood, and who rises at last to nobility of character deserves our admiration, for we are made by our childhood. Jacob was well-nigh unmade by his.



men who know how to drink deeply of life. Perhaps they do not know to drink deeply at all.

It is significant that this man Jacob was afflicted with the evil actions of his sons, when in old age. He who had deceived his blind father was in turn grieved and stricken by the deeds of his own sons. "The gods are just, and of our pleasant vices make instruments to scourge us." The twin brother of Esau reaped as he had sown.

The story of Joseph is one of the greatest stories ever written. All boys should be familiar with it, as they are with the story of Lincoln. In fact, it is the forerunner of the Lincolns and Lloyd-Georges and Garfields. There are men who seem destined to a life of adventure. They escaped in situations that would be the end of the ordinary man, and go from one dangerous and dizzy height to another.

The other day I read, "Beasts, Men and Gods," by Dr. Ossendowski. It is the record of his experiences in escaping from soviet Russia through Mongolia, Tibet, into China, two years ago. It is an almost unbelievable tale. Ossendowski went through experiences that killed off some of his most hardened companions, passing within an inch of death time and again. Yet he came at last to his destination in Peking.

The baker is hanged, but Joseph lives to see himself next the throne. "There's a divinity that shapes our ends, rough-hew them how we will." In the last analysis we must say that there is a Providence. Why He permits some to proceed and others to be cut down we cannot say. Yet the beauties of Providence are as manifest as

the mysteries. One man born in poverty will pass the whole array of educated men, wealth and prestige and arrive at the head of the nation. No one can explain exactly how he does it. Happy is the people he rules when it can be said of him as it was of the young Hebrew of Egypt, "The Lord was with him."

JOSEPH'S plan for saving the nation was a good one for those times. It has been much criticized because it tended to enslave the people, putting them at the mercy of the king. "And Joseph bought all the land of Egypt; for the Egyptians sold every man his field, because the famine prevailed over them? So the land became Pharaoh's." Hoover did not try anything like that when he brought over shiploads of supplies for the people of Belgium. It would not have worked if he had. We have learned to believe that such a line of action would not be right. We have advanced beyond the ethical ideas of even so good a man as Joseph. Another fifty years will see common practices of today ruled out of the business world.

Again the law of compensation is at work. The brothers of Joseph sold him into a foreign land. After some years a famine comes on. The same famine that lifts Joseph into the seat of prime minister of the empire sends his brothers into that land to buy grain, and there they meet. We cannot escape the consequences of our own acts, be they good or bad. "The mills of God grind slowly, yet they grind exceeding small; though with patience he stands waiting, with exactness grinds he all."

SUNDAY SCHOOL LESSON FOR JANUARY 13.

SUBJECT:—The long sojourn in Egypt. Genesis 37 to 50.
GOLDEN TEXT:—Jehovah will keep thee from all evil; He will keep thy soul. Ps. 121:7.



APPENDICITIS.

A SUBSCRIBER writes me that she fears she has appendicitis, but she is taking a medicine that has been recommended as a sure cure, and what do I think about it? I think that she is in about the same position as the old Irish watchman who sat on a keg of powder and smoked his pipe because he had to have something to quiet his nerves. The medicine answers the purpose of the pipe, in that it soothes her nerves, but while she is dallying with it an explosion is likely to come at any moment.

Let me tell you something that comes to me by personal observation. Recently I made a study of the death certificates of the state for a year. There are a great many deaths from appendicitis. Two-thirds of these certificates show that the patient was treated without surgical operation. For the other third, operations were performed, but not until pus had gathered or the appendix had become gangrenous. Deaths from appendicitis when early operation is performed, are so few as to be negligible. These are facts, and facts are stubborn things. I am not saying that no case of appendicitis ever gets well without surgical operation. Very many persons go through one acute attack, recover, and are never troubled again. But let it come back, even once, and you can never feel safe until that appendix is removed.

The first onset of appendicitis is an acute attack. In this attack there is always fever and pain. Usually the pain is in the right side of the abdomen, but not always. It is very com-

mon for the patient to locate the pain "right in the pit of the stomach." Often it runs down into the right thigh or scrotum. Vomiting is a common symptom of appendicitis but may be absent. Usually there is obstinate constipation and the patient cannot even pass gas.

This acute attack may be of brief duration or may last several days. If it passes away completely the patient is cured, but very often it leaves behind a low grade of inflammation or ulceration which gives constipation, much gas in stomach and bowels, regurgitations, and frequent periods of abdominal uneasiness. Nausea and even vomiting may be quite frequent. Such symptoms in a patient who has had one attack indicate chronic appendicitis. When the more definite symptoms of recurrent attacks are added the diagnosis is reasonably sure.

Chronic appendicitis is very dangerous, since it may flare up at any time and produce pus and peritonitis. Surgical operation is the only reliable treatment.

THE BEST TEST FOR TUBERCULOSIS.

Please tell me if a doctor can make a blood test and tell whether one has tuberculosis.—M. S.

Blood tests will not positively decide whether one has tuberculosis. An examination of the condition of the lungs is more reliable. If the germ of tuberculosis is found in the sputum, that is positive evidence, but it is quite possible that a person whose sputum shows no germs may yet have the disease. Chest examination is the safest way.



Doings In Woodland

A Happy Reunion

RIGHT, ho! We must not stand here idly. Let's get busy and become real detectives," said Rolly Rabbit, as soon as they found Bruin gone from the trap. "Who will help me?"

"I—I will—I," chorused Frankie Fox, Willie Woodchuck and the little squirrel.

"We will let wise Frankie Fox be our chief," said Rolly. "He is always so clever at finding out secrets."

After Frankie had looked everything over carefully and had made several trips out among the trees, he said: "It is just as Rolly Rabbit thought first. Bruin went in that direction," pointing off toward the east. "His tracks seem to follow a man's and he must have been led away with a rope. We will follow them until we find him, and then plan some way of getting him away from the man. I am sure Bruin did not go away without being forced."

"So am I," chirped the little squirrel. "He was dreadfully afraid the man would come before we got back,

All day long they wandered among the trees, and it was a weary and discouraged group that curled up on a bed of leaves that night.

Bright and early the next morning, just as the sun was getting up, the little squirrel got up too.

"I'm so hungry, I must find some berries," he said. "I'll slip out quietly and not get far away."

Nearby he found a fine patch of blackberries and when busily munching them right in the middle of the patch, he stepped on something that caught his foot and made him fall.

"Ouchie, ow!" said the little squirrel, rubbing his bruised knee. "What was that? Why! It is Bruin's handkerchief, for it has his name on it."

Scampering back to his friends, he told them of his find and soon they were all on the right trail again. It was just an hour before they came upon Bruin sleeping by a log.

"Buzz-zz-zz! Buzz-z!" He was snoring so he never heard them.

Frankie Fox got a long blade of grass and tickled his ear, and Willie Woodchuck tickled his nose with a little twig. But when the squirrel tickled his toe, he jumped up with a start.

"Well, where did you all come from?" blinked Bruin, rubbing his eyes.

Then Rolly told him all about the dreadful time they had finding him, and Bruin told them about the man and how the little boy had unfastened his chain. With his sharp little knife, Rolly cut off Bruin's muzzle and they all started home, happy to be together again.



When the Squirrel Tickled His Little Toe Bruin Woke Up.

and he did. But I ran just as fast as I could."

"You did your best, and if we are careful we may find Bruin before it gets dark," answered Rolly.

So off they started, Frankie Fox first, then Rolly Rabbit, then Willie Woodchuck, and trotting along behind was the little squirrel. Every few minutes Frankie would sniff the earth and nod his head, but they never stopped.

After a while it became dark, and they could go no further. So they all curled up in a little nest of leaves by a big tree and went to sleep. Early in the morning they started on their way again. But Frankie Fox had slept so hard he just couldn't remember how Bruin's tracks smelled, and soon they were off the trail and lost.

A NOTE FROM AUNT MARTHA.

Dear Little Folks:

The answer to the riddle was guessed to be "wind, breath," and several other things, but only two guessed the right answer, which is air. The two lucky ones were Alice Luchies, of Newaygo, Michigan, and Ali Jarman, of Farewell, Michigan.

Here is another one, sent in by James Milborn. What is that which everyone can divide but no one can see where it has been divided?

I am still receiving some fine letters telling how kind St. Nick was to many of our readers. Ali Jarman says he received a toy tractor. Now he will know how to run daddy's when he gets older.

Sincerely, Aunt Martha.

Good Reading

"Feet of Clay," by Marguerite Tuttle, \$2.00.

This book is a masterpiece of fiction. It reaches a high mark of artistry and has a much deeper value than a passing book of fiction in its reflection of modern standards and modern ambitions.

"Feet of Clay" contrasts the world of luxury and fashion, idlers and wasters, and the world of working folk, or those who struggle for near and dear dependents. This is a book most people will read more than once with much pleasure and profit. "Feet of Clay" can well be listed among good fiction.

"If Winter Comes," by A. M. S. Hutchinson, \$2.00.

If I had the necessary means, I would send a copy of "If Winter Comes" to every reading person on the face of the globe. I have personally read this book twice and have seen the film version of it.

No comment I can make about this book can do it justice, or can it reveal the fine humanity of this story. It is not a "mere" novel. It will live forever, I believe, as an immortal book of great beauty. If ever man was re-created—re-born—a spiritual man—it is indeed the hero of Hutchinson's story, "If Winter Comes." It reveals the many truths which make for fine living, making the book enjoyable reading from beginning to end, and it leaves with us the thought that, no matter what the care, the sorrow or burden one has, bringing winter to our doors, that spring is not far behind.

"Daniel Boone, Wilderness Scout," by Stewart Edward White, \$1.75.

Daniel Boone was the best scout that ever lived. A scout of the American frontier. It is written by a man who is the greatest living writer on frontier history. This is a story of abiding interest to all who love the romance of the American frontier.

A Test for Rest—

AFTER the sleepless night, and you wonder about the cause, has it ever occurred to you that it may be caffeine, the drug in coffee, that keeps you awake?

Suppose you try Postum as your mealtime beverage, for at least ten days—

Put it to the test!

At your first sip of Postum, you will understand why, by many, it is preferred equally for its delicious flavor and for its wholesomeness.

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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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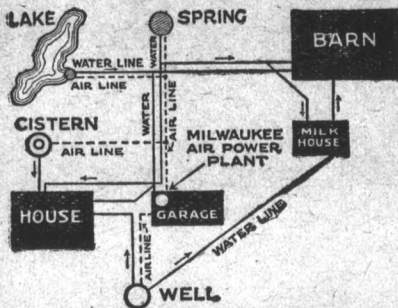
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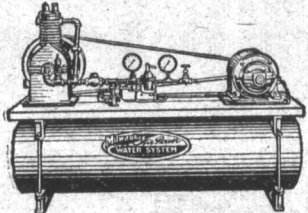
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Fresh Frozen Fish, 100 lbs. net weight. Round Herring, \$3.85; Dressed Herring or Bluefish, \$4.85; Pickered, headless and dressed, \$12.35; Salmon, \$14.35; Flounders, \$10.35; Smoked Fish, 10 lbs. net weight, Bluefish, \$1.00; Fancy Fat Lake Chubs, \$1.80. Write for complete price list all varieties, frozen, salted, spiced and smoked Lake and Ocean Fish. A satisfactory deal positively guaranteed.

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NEW LAMP BURNS 94% AIR

Beats Electric or Gas

A new oil lamp that gives an amazingly brilliant, soft, white light, even better than gas or electricity, has been tested by the U. S. Government and 35 leading universities and found to be superior to 10 ordinary oil lamps. It burns without odor, smoke or noise—no pumping up, is simple, clean, safe. Burns 94% air and 6% common kerosene (coal oil).

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J. O. Johnson, 609 W. Lake St., Chicago, Ill.



Woman's Interests

Tasty Eats for Winter "Sociables"

Cafeteria Style of Serving Eliminates Waste and Satisfies the Individual Appetite.

THE greatest value of the church supper lies not in the financial returns, but in the fact that it is an excellent means of getting acquainted with other people.

At any rate, that is the way a lot of people have sized it up, and these suggestions are passed along by our home economic specialists.

"Why not have the young boys and girls in the church do the serving?" asks one specialist. They will then take a more active interest in the supper, and the women will be free to attend to the kitchen work. If the crowd is not too large, often it is a good plan to have the guests line up in cafeteria style and serve themselves for the first course, and have the waiters just serve the dessert. As each person is the best judge of his own appetite this may eliminate considerable waste.

"Plan a menu which can be served easily and quickly. People do not want a cold meal. Veal birds or pork chops are particularly good because they do not need to be carved at the last minute. For a lighter supper, cheese fondue is easily served.

"Suet pudding or nut and raisin pudding, made several days before and steamed up, is very popular. Steamed Boston brown bread or nut bread has the advantage of not requiring jellies or other sweets which rob the home larder. The following recipes may prove especially inviting:

Pork Chops.

"Season each pork chop, cover with moist bread dressing, place half an apple (cored but not peeled) on top. Bake in a moderate oven until the apple is done. The chop is done at the same time.

Veal Birds.

"Cut thin slices of veal, the size for a serving, fold with savory dressing inside and fasten with a toothpick. Set close in a pan. Sprinkle with flour, pepper and salt. Bake in a hot oven until brown on top. Then put about an inch of water in the pan, cover, and bake for an hour and a half, slowly.

Cheese Fondue.

"Butter thick slices of bread and place in a pan until it is two-thirds full. Take enough milk to practically cover the bread. For each cup of milk add one beaten egg and one-half teaspoon of salt and one cup of cheese run through the grinder. Pour over the bread and bake until it rises in the middle, about thirty minutes.

Coffee.

"Something nice and hot to drink is always part of a good supper," points out one demonstrator.

"Cheesecloth bag. One pound of coffee for every fifty cups. Eight quarts of rapidly boiling water. Drop bag in boiling water. Pour water with cup over bag until soaked. Remove coffee from fire. Stir bag in it for five minutes. Lift bag and drain. Remove. Hot Chocolate.

"Twenty-five servings. One and one-half cups grated chocolate, three-fourths cup of sugar, three-fourths teaspoonful salt, three cups boiling water, one gallon of milk and two and one-half teaspoonsful of vanilla. Mix dry ingredients with boiling water and boil until smooth and glossy. Add scalded milk. Cook ten to twenty minutes. Add vanilla just before serving."

DRINK SEVEN GLASSES OF

THE man who weighs two hundred pounds carries in the fluids and tissues of his body approximately

eighteen gallons of water.

Anybody who wants to can figure their own water content. Just take three-quarters of your total weight and divide that by 8.34, the number of pounds in a gallon. The human body is three-fourths water.

The amount of water needed daily varies with the age and activity of the individual, and with the volume of other liquids taken, but in general six or eight glasses a day is not too much for an adult, advises nutrition specialists. The best times to drink water are on rising, in the middle of the morning, in the middle of the afternoon, and before retiring at night. A glass of water with each meal is now considered a good thing.

It is explained that water contributes to bodily well-being by softening food in the digestive tract, by keeping in solution waste materials of the body, by entering chemically into the composition of body tissues and fluids, and by helping regulate the body temperature. Too little water in the diet is said, further, to reduce healthful activities of the kidneys and of glands secreting digestive juices.

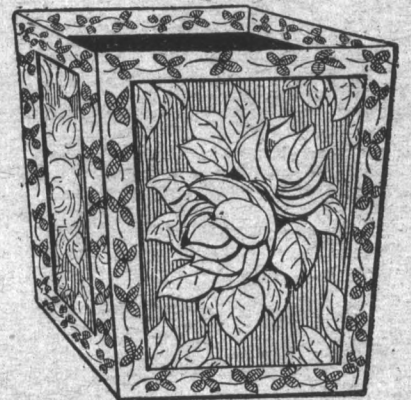
WINTER-BLOOMING PRIMROSES.

THERE are three primroses commonly grown as window plants, and all are pretty. They are catalogued as primula sinensis, or Chinese primrose, primula obconica, and primula Forbesii, the dainty little baby primrose. The Chinese primrose has been a popular window plant for many years, but the baby primroses not so long. While obconica has been grown some, it did not come into prominence until some twenty years ago, but the improvement has been rapid and now they are grown more than the Chinese primrose. All are easily grown from seeds or may be purchased of florists in the fall. Seeds should be sown in August for blooming after New Years, or sown earlier they will bloom earlier. Sown in May they will be blooming before Thanksgiving. Sow in a seed-bed composed of two parts of garden soil and one part leaf mold, with a liberal portion of sand. Press the soil and moisten it well, and when settled sow the seeds in rows, and press into the moist soil and sift a very light covering of leaf mold over them. Pot

up the little seedlings when large enough and repot as needed, and always keep in a cool window. The seed-box may better be kept in a shady window and the plants will grow at any time in much shade if they have a good light. Be very careful in all pottings to set the plants so the growth will be supported by the soil, but the crown must not be covered. This is no place for carelessness, for they need to be set just right to make good plants. The plants are perennials and may be kept over summer in a cool place, preferably outside in a shaded cold frame if given good care. Insect pests do not trouble primroses to any great extent, and they have the name of being poisonous to hands, but we have never had any trouble with this. —Agnes Hilco.

AN INEXPENSIVE WASTE BASKET.

I NEEDED a new waste basket for my guest-room, but all I coveted in the stores were expensive. Casting about for some expedient, I began with a stout pasteboard packing case about ten inches square and a foot high. I covered it inside and out with plain,



heavy wall paper, pasting the paper on neatly. Next, I cut some stout, bright-colored cretonne into strips an inch and a half wide and bound all edges and corners. The cloth also was pasted. Cut-out patterns add a pretty touch to the sides of the box. Wall paper border and designs may be applied in the same way.

Now I have a neat, attractive and strong waste basket at a very low cost. If you use care in selecting the color combinations these baskets would make pleasing gifts. —J. E. Toal.

HOME-SPUN HINTS.

CUT angel cake so as to preserve its delicacy of texture, divide angel cake by pulling it apart with two forks instead of using a knife. Sponge cake may be similarly divided.

Save bacon rinds for flavoring soups and dried peas and lima beans. Spread over the top of Boston beans while baking, they take the place of the usual piece of salt pork, imparting flavor and protecting the top layer from burning.

To remove bluing stains from fabrics soak in strong ammonia water, or soak in kerosene and wash with naphtha soap in lukewarm water.

When chocolate is melted, so much sticks to the sides and bottoms of the container as to cause considerable waste. This can be prevented by greasing the pan thoroughly before putting in the chocolate.



Tired out from making snow men and sliding down hill on her Christmas sled, this little Michigan Farmer miss took her afternoon nap where she could breathe the fresh air and enjoy the winter sunshine. She is the granddaughter of Thos. Martin, of Cadillac.

Michigan Farmer Pattern Service

Send twelve cents in stamps or coin to the Michigan Farmer Pattern Department, Detroit, Mich., for each of the patterns described here. To avoid delay be sure to mention size.

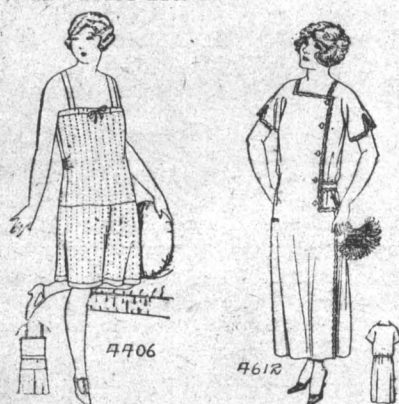
Send fifteen cents for up-to-date Fall and Winter Fashion Catalog.

No. 4621—Child's Dress. Cut in four sizes, 2, 4, 6 and 8 years. A four-year size requires 2½ yards of 27-inch material. Price 12c.



No. 4620—Boys' Blouse or Smock Suit. Cut in four sizes, 3, 4, 5 and 6 years. A four-year size requires 3¼ yards of 27-inch material. Price 12c.

No. 4406—Ladies' Under Garment. Cut in four sizes: Small 34-36; medium 38-40; large 42-44; extra large 46-48 inches bust measure. A medium size requires two yards of 36-inch material. Price 12c.



No. 4612—Ladies' "House" Frock. Cut in four sizes: Small 34-36; medium 38-40; large 42-44; extra large 46-48 inches bust measure. The width at the lower edge is two yards. A medium size will require 5½ yards of 27-inch material. Price 12c.

No. 4354—Juniors' Dress. Cut in three sizes, 12, 14 and 16 years. A 14-year size requires 4¼ yards of one material 32 inches wide. Price 12c.



No. 4633—Girls' Blouse and Bloomers. Cut in five sizes, 4, 6, 8, 10 and 12 years. A 10-year size requires 3¼ yards of 36-inch material. Price 12c.

No. 4614—Ladies' Dress. Cut in six sizes, 34, 36, 38, 40, 42 and 44 inches bust measure. A 38-inch size requires 3½ yards of 54-inch material. The width of the dress at the foot is 1½ yards. Price 12c.



No. 4626-4418. A Stylish Suit. Coat 4626 cut in three sizes, 16, 18 and 20 years for misses and small women. Skirt 4418 cut in seven sizes, 16, 18 and 20 years, and 31, 33, 35 and 37 inches waist measure for ladies. The width at the foot is 2½ yards. To make this suit for a medium size will require 5½ yards of 40-inch material. Two separate patterns 12c for each pattern.



HOUSEHOLD SERVICE

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

REQUESTED PRETZEL RECIPE.

This is a pretzel recipe which I have used for years, and we like it very much.

1 tsp. salt 2 tb. lard
4 tb. sugar

In the summer I used three cups of boiling water and turn over this. In the winter time I use only two cups. In the summer time I use three cups of milk and in the winter time only two cups; three cups of cold water in summer time and two in winter time. Dissolve one yeast cake in one-half cup lukewarm water and stir in enough flour to make a hard loaf. Let rise over night and in the morning knead down and let rise the second time. This dough is then cut for pretzels.—Mrs. F. H.

LIVER SAUSAGE.

Please send me a recipe for liver sausage. We don't like it fried.—Mrs. H. B.

The following is a well-recommended recipe for liver sausage:

For mild sausage add five pounds of well-cooked pork or beef liver and one pound of flour to eight pounds of well-cooked pork from bones, hogs' heads or jowls. Cut the meat into small pieces, mix thoroughly with flour and put through a food grinder. Spread out and sprinkle with six ounces of fine salt, two ounces of finely ground black pepper and one ounce of finely ground sage. Re-grind, adding one onion if the onion flavor is desired. Stuff in

meat into round casings or hog bunge and cook in boiling water ten minutes. Cool in ice, or very cool water, and hang up to dry.

RYE BREAD.

Would like a good home-made rye bread recipe.—Mrs. I. B.

For a good home-made rye bread the following recipe comes to me thoroughly tested:

2 cups milk ¼ cake yeast or 2 tb.
3 tb. shortening potato yeast
5 tb. brown sugar 3 cups flour
1½ tsp. salt Rye meal

Scald the milk and add the salt. When lukewarm add the yeast and beat in sufficient flour to make a thick batter. Cover and let stand over night in a warm place. Add the melted shortening and the butter in the morning. Stir in the remainder of the flour and sufficient rye meal to make a dough stiff enough to knead. Knead until the dough becomes smooth, elastic and no longer sticks to the hands or a clean board. Let rise, shape into loaves, let rise again, and bake.

PEAR CONSERVE WITH RAISINS.

This is a recipe for pear conserve I would like to forward to "A Reader."

1 peck pears 1 orange
2 lbs. or cartons of 2 lemons
raisins 2 or more cups of
12 cups sugar nutmeats

Pare and core pears and put through food chopper, together with raisins and orange, place over fire, add sugar and sliced lemons, cook slowly for two hours, stirring often to prevent burning. When done add nut meats. I used home-grown hickory nuts and the more one puts in the better it is.

This will keep in glasses like jelly.—Mrs. N. E. D.

Tempting the Convalescent

It is when your patient is first beginning to recover that you find it the most difficult to coax him to eat. And in this it is well to remember that the way to a convalescent's stomach is through his eye. A tray covered with spotless and dainty linen and set with attractive china will do more toward persuading your patient to eat than any amount of nourishing food, even though the best cook in the land has prepared it.

The first thing to select is the tray. The round ones are not nearly so handy for a convalescent to handle as a square one with rounded corners, though the oval ones are also suitable. If the tray is prettily enameled it will not be necessary to use a cloth that entirely covers it. Instead, a little square lunch cloth may be laid on, corner-wise. This may be decorated with bright colored embroidery or applique work. Large doilies are also suitable.

Aluminum trays are light and easily handled, or if a cheap tray is desired the paper mache ones may be used, as they are easily cleaned, though they do not last long.

If you even pretend to be a thoughtful nurse you will not ask a patient to balance a tray on his knees. In some households a bed-side table will be found, but lacking that a very good substitute may be made. I use a bundle of old papers, piled evenly and securely tied together. One of these piles is placed on either side of the patient and as close to his body as possible. Then the tray may be set across it.

The doctor will be apt to tell you just what foods the patient can, and can not have. Keeping this in mind, try to vary the menu every day, as a

convalescent's appetite is apt to be "finicky." And never tell your patient before meal time just what his meal is to consist of. It is the surprise that pleases. A few minutes' thought will wear off the novelty, if he is told of it before the meal is served.

Often a short, humorous skit or bit of verse will prove amusing to the patient.—Nellie Portrey.

LINOLEUM IS ECONOMICAL.

LINOLEUM is a very satisfactory covering for the kitchen floor. It is relatively durable, comfortable for the feet, and easy to clean. It is manufactured in a variety of colors, designs, and qualities the better grades will be found most economical in the long run. Varnishing or waxing linoleum is said to protect the surface and make it wear longer.

HOME-SPUN HINTS.

To prevent boiling over, grease the inner rim of the kettle or saucepan to the depth of an inch from the top, and the contents will not boil over.

When a hole has been made in a garment by the tearing out of a button, cut around a button on a discarded garment so as to leave it attached to a square of cloth larger than the hole to be repaired. Push the button through the hole from the back, the attached square of cloth forming a patch on the under side. Fell this down all around and catch down the torn edges of the hole. This method is particularly efficient for children's clothing and men's overalls and jumpers.

Aspirin

Beware of Imitations!



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.

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with the self-balancing bowl. Positively cannot get out of balance therefore cannot vibrate. Can't remix cream with milk. Runs so easily, bowl spins 25 minutes after you stop cranking unless you apply brake.

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Caution! U. S. Bulletin 201 shows that vibrations of the bowl causes cream waste! 30 days' free trial—then, if satisfied, only \$7.50 and a few easy payments— and — the wonderful Belgian Melotte Separator is yours.

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Send today for free separator book containing full description. Don't buy any separator until you have found out all about the Melotte and details of our 15 year guarantee.

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CONSUMERS FISH CO. Green Bay, Wis.

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

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Horse or Cow hide, Calf or other skins with hair or fur on, and make them into coats (for men and women), robes, rugs or gloves when so ordered; or we can make your hides into Oak Tanned Harness or Slaughter Sole or Belt Leather; your calfskins into Shoe Leather. Colors, Gun Metal, Mahogany, Russet or lighter shade. Calfskins tanned in the lighter shades of shoe leather, also make elegant stand and table covers; great for birthday, wedding and holiday gifts.

LET US FIX YOUR WORN FURS

freshen, repair and reshape them if needed. Furs are very light weight, therefore it would cost but little to send them in to us by Parcel Post and get our estimate of cost; then we will hold them aside awaiting your decision. If you say "go ahead," very well; we will do so and hold them free of storage until you want them. If you say "no," we will return them post-paid.

Our illustrated catalog and style book combined gives a lot of useful information. It tells how to take off and care for hides. About our safe dyeing process on cow and horse hides, calf and fur skins. About dressing fine fur skins and making them into neckpieces, muffs and garments. About taxidermy and Head Mounting.

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

Lake Land Fur Exchange, Salem, Mich

Write for four grade price list shipping tags, etc. Had no complaint from a shipper in over two years. Our treatment and prices are the cause, prices alone mean nothing.

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

PATENTS

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OUR BOYS AND GIRLS



Some Prize Short Stories

By Contest Winners

THE MEDFORD ROAD.

By Julia E. Hibbard.

THE old Medford Road wound lazily around the lake until modern efficiency straightened it and built it across the marsh. This became a fine highway for tourists, but it took the road from the old Nelson place. However, nobody lived there now but the sad-eyed old Mrs. Nelson. What mattered the road when she had known a great loss?

One rainy night when a fog hung over the marsh, a solitary automobile crept through the mist. Suddenly it stopped, and refused to start. The



Lela Cooley, Lansing R. 1, is the Largest One in this Picture.

driver got out to investigate—to find that he was fast in the mud of an abandoned road instead of on the gravelled highway of a half mile back. Bewildered, he looked about. On the hill glimmered a light.

His rap startled old Mrs. Nelson, nodding by her fire. Picking up the lamp, she opened the door and peered out into the darkness. A moment she looked up at him then she pulled him inside.

"Who are you?" she quavered.

"John Nelson," he said, glancing wonderingly around the room, a far-away look in his eyes.

"Where am I?"

"Home!" she exclaimed, clasping his hands and telling him of the boy lost years ago in the crowds of Detroit, and never found till now, when the fog had brought a man to her door with the look of the little boy's father in his face. Then the man knew why the room was so familiar. Once he had played there.

And so the road that had deserted the old mother's house put the happy light back into her old eyes.

HIS PROMISE.

By Zona L. Amos.

It is a beautiful morning in June. The sun has risen, but let us take a look into the home of the Lovejoy's.

Everything is silent except the sobbing of a ten-year-old boy, who is sobbing for his mother to come back.

For days she has laid between life and death, and now the boy is realizing how much he loved her, and how much he needs her to grow up as a good and useful man.

Often he had disobeyed his mother. Many times he has left the water pail unfilled, and the woodbox empty.

"Oh, Mother," he sobbed, "Come back to me and I'll never disobey you again."

Finally the cries reached his mother's ears, and slowly she came back to

her boy and life. Half an hour later the nurse told the boy his mother would live. It was weeks before she could leave the house, but the woodbox was never empty and the water pail was always full to the brim with pure water. He tended her garden and brought her choicest flowers and fruit.

Many years have passed, and the boy is a grey-haired man. After many years of hard work he has become famous, but still he never forgot that beautiful morning in June, and the promise made on his tenth birthday.

KINDNESS TO ANIMALS.

By Floyd Simons.

The wagon was heavily loaded with bars of iron. It looked too heavy for a single horse to draw. The patient creature had strained and tugged until

he succeeded in reaching the top of the hill. Now he must back the heavy load in at the open door of the barn.

"Back, Jim! back!" said the driver, pulling lightly at the reins. The horse braced his forefeet and pushed, but the wagon did not move. The man got down from the seat, went to the back of the truck and pulled.

"Back!" he cried. The horse strained every muscle.

"Back!" cried the driver again. The wagon moved this time at least a foot. Once more the driver pulled and the horse pushed together. "Back!" With the last command, the great horse shoved with all his might. There was a sound of splintering wood, and the wagon rolled back. Not a blow had been struck. Only gentle words had been spoken, and the horse had done the rest. The man went to the horse's head, took his nose in his hands, patted him between the eyes, and said:

"Good old Jim! You did it, didn't you? I knew you would." The horse rubbed his nose against the man's cheek.



OUR LETTER BOX

Dear Uncle Frank:

As I have never written to you, I expect this letter will find the waste paper basket.

I am going to the Milford High School and like it just fine. Ninety-six is my general average for the first two months.

Probably you will not read this letter from a Hoosier girl.

I must close. With best wishes to you and all M. C.'s.—From your would-be-niece, Gladys Weybright, Milford, Indiana.

I'm glad to hear from a Hoosier girl and to know that she is doing so well in school.

Dear Uncle Frank:

I've been away all summer, and now that school days are fairly on their way, I have so much to do. But at last I found a chance to visit Uncle Frank and my cousins of the Merry Circle.

Do you laugh very much, Uncle Frank? I do. I just love to laugh. But that isn't all I do. No, indeed. I help my mama and papa all I can, at least, I try to.

Well, I guess I'll close now, and give some other Merry Circle a chance.

Good-bye, for a little while, Uncle Frank.—Yours truly, Susie Lurtz, M. C., Fair Haven, Mich.

Glad to see you back again. Yes, once in a while, just for a change, I laugh. I'm glad you do something besides laugh, but sometimes laughing helps, too.

Dear Uncle Frank:

Say, Uncle Frank, I think that you are a nice one to tell what Aunt Martha's full name was, and not tell your own. Most boys, when asked what their name is, say, "Old John Brown. Ask me again and I will knock you down."

Well, I must close. Your hope-to-be niece, Elsie Cobb, R. 4, Williamston, Mich.

I wouldn't do such a rude thing and I don't think M. C. boys would either.

Dear Uncle Frank:

I wrote to you about a half dozen times but never saw any in print. I have also entered a lot of the contests already, too. But I never won anything.

I am in two clubs at school, the Hot Lunch Club, and the Garment Club. I like club work.

A want-to-be niece, Helen Duffrin, R. 1, Stephenson, Mich.

This time you win. Such a good club member should win once in a while. Write again, Miss Want-to-be.

Dear Uncle Frank:

I live in Indian Creek. Maybe you have never heard of such a place. But

it is a very beautiful place to live. There are many hills and trees here. In the winter we can slid down the hills, and skate on the ponds.

I made my first spending money in raising potatoes. I sell them to my papa, and afterwards I eat them, too.

Your nephew, Martin Ver Hage, M. C., Hudsonville, Mich.

I wish I could work the same scheme you do. I might become rich if I could sell everything I ate instead of buying it. I think you are a shrewd business man.

Dear Uncle Frank:

I think there are more boys and girls joining the department all the time.

Uncle Frank, what is your last name? Won't you tell us?

We have an Uncle Frank without a last name, isn't he a funny one, boys and girls? I think so.

Now, Mr. Waste Paper Basket, I want you to hide, this time, so I can not find you. Well, good-bye. Your niece, Dorothy Salsbury, M. C., Montgomery, Mich.

If you don't like Puddin' Tame and insist on my having a last name, why not call Uncle my first name and



Elaine Markey, of Bay City, R. 4, Enjoys Her Pets.

Frank my last one? Anyhow, my last name has nothing to do with getting M. C. after your last name.

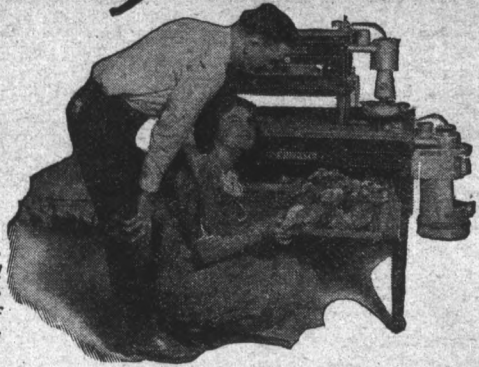
Dear Uncle Frank:

I told my friend about the Merry Circle and she wanted to write, so I read the contest to her over the telephone. So she wrote and got a Merry Circle pin. She was very glad to get it. The next week I took the paper to her.—Jessie White, M. C., Marne, Mich.

Your friend apparently became an M. C. by telephone. I hope she will become a real live member.

Perhaps Dorothy Ulrich, of Howell, Has Had Some Experience with Melons.

175 MILLION CHICKS a year are hatched in Buckeye Incubators



Yes—and 150 Million Chicks are raised every year by the Buckeye System of Colony Brooding

Thousands upon thousands of Buckeye users have discarded other machines of various makes—actually thrown them away and replaced them with Buckeyes. For Buckeye has restored their faith in poultry raising as a safe, sound, profitable business.

It has taken the gamble out.

Buckeye Incubators hatch every hatchable egg—every time, hatch after hatch, year after year—and bring forth the finest, strongest chicks you ever saw.

Buckeye Colony Brooders raise every raisable chick, saving millions of chicks yearly for Buckeye owners, at half the labor and expense.

More Buckeyes are sold yearly than

the combined total of the next three leading manufacturers. More Buckeyes are exported to foreign countries than the total of all other manufacturers. Almost every one of the great agricultural colleges use Buckeye equipment.

"How can I save my chicks from dying in the shell? How can I prevent the frightful mortality due to faulty brooders?" The Buckeye "Reason Why" Catalog answers these vital questions and many more. It tells why Buckeye Incubators hatch every hatchable egg and why Buckeye Brooders raise them all to maturity. Send for it today.

The Buckeye Incubator Company
World's Largest Manufacturer of
Incubators and Brooders
811 Euclid Ave., Springfield, Ohio, U. S. A.

POULTRY Big money. Mrs. Berry tells how in 144-page book, 215 pictures, years of experience. I START you with Poultry Eggs, incubators, BABY CHICKS, etc. Wonderful book mailed for only a nickel. Berry's Poultry Farm, Box 13 Clarinda, Iowa

S. C. WHITE LEGHORNS



Bred for egg production since 1910. Our 13 years of experience in hatching and shipping chicks gives you the big, strong, healthy chicks that grow to maturity in the shortest possible time. 100 per cent live delivery guaranteed. Let us mail you our 32-page catalog with price list.
WOLVERINE HATCHERY,
R. 2, Box 20, Zeeland, Mich.

JUST RITE BABY CHICKS
PEDIGREE, EXHIBITION and UTILITY MATINGS
20 popular breeds, high power layers, 20 rare breeds, 4 breeds ducklings. Nabob Quality, none better at any price. 97 per cent live arrival guaranteed; Postage Paid. Free Feed with each order. Catalogue free, stamps appreciated. Nabob Hatcheries, Ave. 20, Samster, Ohio. Member International Baby Chick Association

PURE BRED BABY CHICKS

Guaranteed, Certified Tom Barron and Hollywood White Leghorn and Barred Rock chicks now offered at prices that mean unusual savings. Fast growers that will soon earn big profits for you. Book orders now and receive liberal discount. Write for free catalog and price list today.
SUPERIOR POULTRY FARMS, Box 200, Zeeland, 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.

140 EGG INCUBATOR Only \$13.85
Made of California Redwood, covered with galvanized iron, double walls, air space between, built to last for years; deep chick nursery, hot water heat, copper tanks. Shipped complete, set up, ready to run, freight paid.
140 EGG INCUBATOR WITH BROODER \$19.75
260 EGG INCUBATOR, ALONE, ONLY \$23.50
260 EGG INCUBATOR, WITH BROODER \$32.90
30 days' trial—money back if not O. K.—FREE Catalog
Ironclad Incubator Co., Box 91 Racine, Wis.

DUNDEE CHICKS PURE-BRED CULLED FLOCKS

Our chicks are from pure-bred flocks, carefully culled by experts. Anconas are direct from Sheppard. Leghorn flocks headed by males from Michigan. Ag. College. Rocks are from a 230-302 egg strain. Reds are Liddicoat's best. Write for catalog and price list. It will save you money. Ref. Dundee State Savings Bank, this city. **DUNDEE HATCHERY, Box A, Dundee, Michigan.**

10% Discount on orders for chicks booked before Feb. 1st, to be delivered any time this season, strong, vigorous, pure-bred chicks, bred for egg production, 100 per cent live, postpaid. Leghorns, Rocks, Reds as low as \$12.00 per 100. Write for price list at once. **Connors Hatchery, 269 So. Parke St., Pontiac, Mich.**

64 BREEDS 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 514 Mankato, Minn.**

—Inspected and Approved—

Baby Chicks
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 5, Holland, Mich.

WYNGARDEN'S "EGG-BRED" BABY CHICKS

Are the best laying strains on earth. Genuine Barron English White Leghorns, Brown Leghorns and Anconas backed by 19 years' actual breeding on our own farms. Experts cull out our flocks yearly, and mate them with large, vigorous 260-288 Egg Pedigreed Males from Hollywood & Funk Farms direct. This guarantees—not a few high record birds—but an extraordinary flock average. During 1924 we will sell 30,000 weekly of these active, healthy, carefully hatched baby chicks—the kind that will keep your Egg Basket full. Hundreds of our customers are making Big Profits. It will pay you to buy our Egg-Bred Chicks. Our 1924 catalog tells the whole story, it's free—write for your copy tonight.

WYNGARDEN FARMS & HATCHERIES
Box M
Zeeland Mich. U.S.A.



MARKETING EGGS COOPERATIVELY.

(Continued from page 37).

of buyers is going to get those eggs below the market price with a competent manager on the job."

The great bulk of the eggs are produced during about one-third of the year, and when these eggs are being rushed to market and into storage the price always goes down. By putting the surplus in storage the producer makes a better market during the spring and summer season and thereby equalizes the market with the fall and winter months when the storage eggs are brought out to supply the market.

Standardization and Grading is Done Near the Point of Production.

Grading is absolutely essential and the cooperatives have used it to the advantage of the producers. Returns made to the producer on the basis of grade educate him most quickly as to market requirements and stimulates better production methods. Better production means higher quality products and these, of course, pay higher prices—the one big incentive to progress. By grading at or near the point of production economies are introduced by cooperatives because the cost of transporting and handling the low-grade eggs farther down the line on their journey to the consumer is an unnecessary expense. Egg dealers have been slow to buy on the basis of grade. Successful cooperatives do make a saving for the producer by so doing. The quality producers get more and the low-grade producers get less when eggs are bought on grade, this tends toward specialization and standardization in production.

Large Scale Operations which Reduce Overhead.

Economies are further introduced by having a sufficiently large volume of assured business so that wholesale methods may be employed. This takes care of many of the problems of transportation, wholesale purchase of supplies and economical use of labor, etc., factors which are not usually as efficiently handled by the small dealer in the egg business.

Controlled Production.

Service is rendered by cooperative organizations to both consumers and producers by encouraging the production of winter eggs. These winter eggs help supply the market for strictly fresh eggs when such eggs are scarce, they return to the producers a high price and enable the cooperative selling organization to maintain their organization economically. Winter egg production will, no doubt, be still further encouraged, according to the views of some leaders, by writing a production control clause in the cooperative contracts of the future which will still further tend to encourage uniform year around production. This clause will provide for rewarding the good poultryman in addition to the increased price he gets for winter eggs.

Earl W. Benjamin, manager of the New York office of the Pacific Egg Producers, and one of the leading egg marketing authorities of the country, says on this subject of cooperative marketing of eggs and poultry:

"No miraculous changes are brought about by cooperation; there is no Utopian condition which will be attained by the universal adoption of cooperative effort, as distinct from ordinary business effort; but there are gradual improvements in business methods which may be brought about by cooperation. On the Pacific Coast, many eggs are still being marketed by private dealers; in some instances, they are better than the "cooperative eggs," and in some they are poorer. The poultry cooperative organizations undoubtedly have exerted a wholesome influence upon the independent dealers and have been the means of raising the quality and the price of eggs and poultry for producers who are not members of the cooperative or-

Healthy Hens and More Eggs

Get them with
DICKINSON'S
Globe Egg Mash

The Albert Dickinson Co.
Chicago Minneapolis

DON'T LET THEM DIE!

ACT QUICK! SAVE THEIR LIVES BY USING
SMOKE-EM
CURE FOR THE GUARANTEE ROUP

SMOKE-EM, THE GUARANTEE ROUP CURE fills the poultry house with medicated smoke and is positively GUARANTEED to cure colds, roup, canker, diphtheria, and chicken-pox. Sold under a money-back guarantee. Sick chickens cannot be profitable. Write for low price and FREE CATALOG.
THE H. M. SPAHR BREEDING ESTATE, Dept. 38-K
Spahr Frederick Co., Maryland, Telephone Office, Thurmont, Maryland, (Live Dealers Wanted)

140 Egg Incubator \$13.25
30 Days Trial

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

140 Egg Incubator and Brooder	\$17.75
180 Egg Incubator Alone	15.75
180 Egg Incubator and Brooder	22.00
250 Egg Incubator Alone	22.75
250 Egg Incubator and Brooder	31.00

Made of California Redwood. Positively the best value on the market. Order direct from this ad, 30 days trial—money back if not pleased. If not ready to order now, don't buy until you get our 1924 catalog which shows larger sizes up to 1000 eggs. (3)
WISCONSIN INCUBATOR CO. Dept. 120 Racine, Wis.

Hatch Eggs by SOFT-HEAT

the New Method of Incubation

Result of 30 years study by L. N. Porter, the incubator master. Twenty-six superior features. Center-lamp equal heat. Exclusive patented moisture device. Automatic control of heat, moisture, ventilation. One filling of lamp for complete hatch. Eggs turn semi-automatically. Twenty-one other distinctive features. Thousands endorse it. Make good guarantee. Four sizes. Shipped prepaid.
FREE BOOK on SOFT-HEAT method. Includes comparison of other makes. Send postal today.
PORTER INCUBATOR COMPANY
133 Porter Bldg. BLAIR, NEBRASKA

Poultry Miller's Guide

tells all about chickens—care, feeding and raising for profit. Also describes IDEAL INCUBATORS, Hot Water and Electric IDEAL BROODERS. FREE
Egg—Cool and Oil Burning—Baby Chicks, Eggs for Hatching, Special LOW PRICES.
I. W. MILLER CO., Box 67, Rockford, Ill.

Send No Money

EXTRA EGGS

Soon Pay For This
SANITARY Self-Heating FOUNTAIN

Keeps water clean and pure. Heater prevents freezing. Uses less than one quart of oil a week. Requires little attention. Cannot accidentally tip over. Saves time, trouble and work. Made of galvanized steel. Won't rust. Lasts lifetime. Price 2 gal. size \$1.75, weight 6 lb. 3 gal. size \$2.25, weight 8 lb. 4 gal. size \$2.50, weight 9 lb. Postage extra. 200,000 already sold. Send no money. Order today. Postman delivers Sanitary Self-Heating Poultry Fountain. Pay him the price and the postage. Absolutely guaranteed. Every transaction backed by a firm of 29 years standing.
AGENTS! 8 Stein, Ill. made 1940. Mrs. Miller sold over two dozen in own neighborhood. Write for our big offer.
C.A.S. Forge Works Box 604, Saranac, Mich.

Blue Hen COLONY BROODERS

The best "life assurance" for every chick you hatch or buy.

The mother hen's only rival in warmth, regulated and controlled as the day's temperature demands; plus a capacity for numbers and a steadfastness of purpose, a constancy of care that can't be expected from hen nature.

Superior from its beginning to other brooders, its new improvements put it further ahead than ever—automatic control that is automatic—fresh air without floor drafts—and a stove which makes keeping a fire easy as rolling off a log.

Larger and Heavier—yet cheaper

Set side by side with other brooders, you'd call the Blue Hen a 20% extra value. Yet quantity production—due to the boosting of satisfied customers makes possible these low prices—

LANCASTER MFG. CO.
883 Janet Ave.,
Lancaster, Pa.



Write for Catalogue and User Agents Plan.

\$21.00 500 chick capacity (delivered)
\$26.00 1000 chick capacity (delivered)

ganizations. There is opportunity and need for both cooperative and ordinary business types of organizations. The cooperative organizations will continue to occupy the field only from necessity."

These impressions were gained from a survey by the Illinois Agricultural Association of egg marketing work as now being conducted in Missouri, Colorado, Utah, Idaho, Washington, Oregon, British Columbia, California and Texas. The writer spent more than a month and traveled 8,000 miles, visiting these states, interviewing their state officers, association managers, bankers, commission men, wholesale dealers, college officials, and actual producers, both members and non-members in organized territories.

WINS IN POULTRY JUDGING.

OSCAR W. BEHRENS, a disabled ex-soldier, who is taking vocational training at the Michigan Agricultural College, won first place as an individual poultry judge at the poultry judging contests which were recently held at Chicago.

High honors were taken by the team of the above mentioned institution at these contests, in which about twelve teams participated. The college was successful in having its team placed second. Behrens was also a member of this team.

Clarence Wright and George Allan, both disabled ex-soldiers who, like Behrens, are taking vocational training under supervision of the U. S. Veterans' Bureau, at the same college, were also members of the team which took second place.

DO MOULTING HENS LAY?

Do chickens moult every time the feed is changed? I was told that they did. Will they lay while moulting?—R. A. M.

Hens do not moult every time the feed is changed. Some hens will lay a few eggs during the moulting period but most poultry keepers do not count on many eggs from moulting hens. At that time their strength is needed to develop new feathers. Hens should receive their normal ration at moulting time to hurry the process and enable them to retain vigor and return to regular production as soon as possible.

Sudden changes in the feeding methods are not advised by poultrymen when they are already using a system that is proving satisfactory. Changes should be made gradually as this helps to acquaint the hens with the new ration and there is less danger of reduced egg production and digestive disorders.

EXAMINE INTERNAL ORGANS.

Can you tell me what disease my chickens have? We have lost several through the summer. They act as if they are paralyzed on one side, and their combs get black. Some of them live a week and some a very short time. It is catching, because we have not lost any for two months until last week we had two of them again. We give them wheat, oats, barley and corn for scratch feed, and we also give them laying mash and greens.—J. J.

Perform a postmortem on the birds that die, and note the condition of the internal organs, especially the liver. This may furnish a clue to the trouble and enable you to find some means of prevention.

When the comb turns dark it is often a sign of liver trouble which may be caused by too heavy feeding, a lack of exercise, or some disease. Lameness, weakness and rapid emaciation are signs of tuberculosis. The greyish spots on the liver are an additional symptom. Isolate any birds not in the best of condition.

In a large flock which is heavily fed for egg production it is not unusual for a bird to break down occasionally even though the flock are receiving good care.

Get Winter Eggs!

See to it that there is song and cackle, scratch and action, going on in your poultry yard.

That's when the eggs come.

Feed

Dr. Hess Poultry

PAN-A-CE-A

See them get busy. It gives hens pep.

Nux Vomica is what does it—that greatest of all nerve tonics. A Pan-a-ce-a hen can't hold still. It's her good feeling that makes her hop around.

Pan-a-ce-a has Quassia in it to make hens hungry. Great combination! One makes them eat—the other helps them digest what they eat.

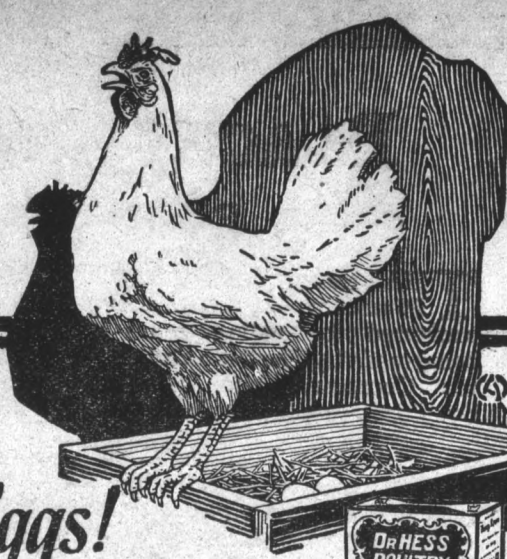
No dormant egg organs when that combination gets to work on a hen's system. You just get eggs—eggs.

A Pan-a-ce-a hen is always a hungry hen—an industrious hen. She gets off the roost winter mornings, ready to scratch for her breakfast.

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

DR. HESS & CLARK Ashland, O.



I spent 30 years in perfecting Pan-a-ce-a.
GILBERT HESS
M.D., D.V.S.

Dr. Hess Instant Louse Killer Kills Lice

SHIP EGGS

Easily Without Breaking

Farmers and Poultrymen make big profits shipping eggs the Cummer way. Customer returns case by mail knocked down, for it's a

"Humpty Dumpty" Folding Crate

Distinguished by Red Top Rails Capacity 3 doz up. Strong, durable. No tools required to set them up. Lower freight costs. No bothersome work in packing. Can be used over and over. Millions used by packers and shippers. If your dealer cannot supply you, write us for descriptive folder and prices. CUMMER MFG. CO. Dept. 107 Cadillac, Mich.



Highest Quality Certified BabyChicks

From Michigan's Old Reliable Hatchery, the best equipped and most modern Hatchery in the State. Pure-bred Tom Barron English and America White Leghorns, Anconas, Barred Plymouth Rocks and Rhode Island Reds. Strong, well-hatched Chicks from tested Hogshead free-range 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 Appledorn, R. 7, Holland, Michigan

FARROW CHIX FOR SUCCESS

Vigorous, Healthy, Certified, Early Layers
\$13 per 100 and up
Leghorns, Anconas, Barred and White Rocks, Reds, Wyandottes, Orpingtons, Minorcas.

Customers report our stock to lay 280 eggs in one year and Leghorns to lay at 3 mo. 8 days. Now is the time to get acquainted with our stock. We ship most anywhere. 95 per cent alive delivery. We are giving \$1,000 away to contestants, giving evidence of our early laying stock. You may win the \$1,000. Write for particulars today. Big catalog free. D. T. FARROW CHICKERIES, Dept. O, Peoria, Ill.

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. 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 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 All popular varieties. High egg production and standard qualities combined. Won 6 firsts, 5 seconds on 12 entries in production class Mich. State Fair. No better chicks available at same price. Now booking orders. Write for circular and prices. LITCHFIELD HATCHERY, LITCHFIELD, MICH.

Additional Poultry Ads. on Page 65

Make Big Money Raising Poultry With A Champion Belle City

The Hatching Outfit that has brought success and big cash profits to over a million satisfied users everywhere. Start a profit-paying poultry business of your own. My Poultry Book "Hatching Facts" tells how—it's Free—write for it today. You can't lose when you use my guaranteed

\$13⁹⁵ Champion Belle City 140-Egg Incubator
\$21⁹⁵ 230-Egg

With Fibre Board Double Wall—construction used for over 24 years—Copper Hot-Water Tank—Self-Regulated Safety Lamp—Thermometer and Holder—Deep Chick Nursery—Egg Tester. My Double Walled Belle City Hot-Water Lamp Brooders are guaranteed to raise the chicks. \$6.95 buys 140-chick size; \$9.95—230-chick size. Save \$1.95—order a Brooder with your Belle City Incubator—have a Complete Hatchery. 140-egg Incubator \$18⁹⁵ 140-chick Brooder \$18⁹⁵ 230-egg Incubator \$29⁹⁵ 230-chick Brooder \$29⁹⁵

Express Prepaid

East of Rockies and allowed to points West. If you prefer a large capacity Brooder, my Oil and Coal Burning Canopy Type are best for you to use. When ordering a Colony Brooder to come with your Incubator, deduct \$1.95. Save time—Order now. Thousands order direct from my advertisements every year. Share in

My \$1000 in Gold

and other prizes. Or write me today for Free catalog "Hatching Facts"—it tells all. Jim Rohan, Pres.

Belle City Incubator Co.
Box 14 Racine, Wis.



Oil Brooder

Stove-Wickless
36 In. Canopy 50 In.
300 Chicks 800
\$14⁹⁵ \$16⁹⁵



Coal Brooder

Burns either hard or soft coal; is gas proof. Self Regulating and economical. The most durable and practical.

42 Inch Canopy 500 Chicks \$19⁹⁵

52 Inch Canopy 1000 Chicks \$24⁹⁵



140 Size \$6.95
230 Size \$9.95

the results already achieved where there are now said to be ten times as many pure-bred sires as four years ago; but the end is not yet. There are now seventy pure-bred sires widely placed throughout the county, it is stated.

At Marquette plans for the campaign were laid at a meeting held at the Court House, on December 21, where arrangements were made for a committee that would assist in locating the scrubs, placing of posters, getting farmers out to meetings, assist in procuring the enforcement of the law against scrub bulls running at large, and work out a plan for financing the purchase of pure-breds. At this meeting there were present real farmers, representatives of the board of supervisors, the Marquette Rotary and Lion's Clubs, the county agricultural society, Michigan Agricultural College, the Grange and Farm Bureau, and the banks, which indicates the widespread interest in this movement. Resolutions were adopted invoking the aid of the board of supervisors in promoting the movement and enforcing the law in regard to bulls running at large.

The practice of permitting farm animals to run at large in the highways is more common here in the great cut-over region than in the old settled sections of the southern portion of the state. This makes the effort at building up herds of high-grade animals more difficult and progressive farmers have a real interest in seeing that the law is duly observed.

Dickinson county will also join the anti-scrub campaign, according to the county agricultural agent. It may be expected that eventually most, if not all, of the Upper Peninsula counties will go after the \$1,000 prize money which the development bureau is offering. This prize money must be used, it is announced, for the promotion of calf club work, giving a rebate on bulls bought, dairy tours, scholarships, and the establishment of a revolving fund for the purchase of improved dairy cattle. Meantime, Iron county has organized its cow-testing association.

THE BREEDERS OF BLACKS AND WHITES HOLD BANQUET.

THE Annual Banquet of the Michigan State Holstein Association will be held on the night of Monday, February 4. The annual meeting will be held the following day, Tuesday, February 5, at the Michigan Agricultural College, East Lansing. William Moscrip, of Minnesota, probably the best known dairy cattle judge of the United States, will be present to demonstrate dairy type and to hold a judging "school." It is planned to hold a high-class sale of selected Holsteins at the College during the afternoon of February 4.

MICHIGAN'S SECOND FORTY-POUND COW.

ONLY three other junior four-year-old Holstein cows in the United States have exceeded the seven-day production record of Eco-Sylvia Belle Pietje of the Carl E. Schmidt herd at Oscoda. Under the constant supervision of the Michigan Agricultural College this cow recently produced in one week 682.2 pounds of milk and 33.014 pounds of butter-fat—equal to 41.267 pounds of butter, according to the advanced registry department of the Holstein-Friesian Association of America. Among the three other cows with higher records is Michigan's champion producer in this class, Wandamere Belle Hengerveld, whose record is 42.65 pounds of butter. This cow is owned by E. L. R. Pelletier, Pontiac.

The best formula for successful dairying is to see that every cow in the herd is a profitable cow.

It's Results That Count

"We have used Sugared Schumacher Feed as the maintenance part of our dairy herd ration for years and find that when fed with cottonseed meal or other protein concentrate, it gives us the most satisfactory and economical ration we can buy. Our cows do splendidly on this feed, giving us maximum milk yield—stay in splendid flesh and physical condition and deliver well developed strong calves."

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Such is the gratifying experience of the thousands of dairymen who make

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the base of their herd ration. It supplies the energy—staying power and ideal physical fitness which is absolutely necessary if your cows give their maximum milk yield throughout their entire lactation periods. That's why it helps cows give more milk—it keeps them in perfect, vigorous health.

Feed Sugared Schumacher Feed as the carbohydrate or maintenance part of your ration. Feed it with Boss Dairy Ration, our new 24% Protein Feed, which contains liberal amounts of cottonseed meal, gluten feed, linseed oil meal and other valuable milk producing ingredients, and note the increased milk yield and improved health condition of your herd. You will be agreeably surprised with the better results and greater feed economy—and it's results that count.

Sugared Schumacher Feed and Boss Dairy Ration (our 24% protein feed), are for sale by feed dealers everywhere.

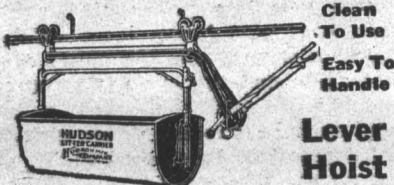


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Reg. Guernseys Two Nice Bulls, nearly ready for service. Special terms if desired. J. M. Williams, North Adams, Mich.

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We have for sale a few bulls ready for service, also bull calves sired by Financial King Sensation, son of Financial Sensation, the \$60,000 sire. These bulls are from R. of M. cows. Write to Coldwater Jersey Farm, Coldwater, Mich.

Jersey Cattle Hood Farm breeding. Cows and bred heifers, bull calf for sale. Herd under state and federal supervision. Address inquiries Ira W. Jayne, County Building, Detroit. Jayne Hill Farms, (one mile south), Fenton, Mich.

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

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

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

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Registered Breeding cattle, T. B. Tested at practical prices for production of Hereford Baby Bees profitably, all ages. **T. F. B. SOTHAM & SONS** (Herefords since 1889) St. Clair, Mich.

HEREFORDS

Bulls, Heifers and Cows with Calves by side. Most popular strains. Allen Bros., 616 S. Westnedge St., Kalamazoo, 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.

Milking Shorthorn Bulls 3 weeks to 8 mo. Sired by Countryman's King, a great son of Glenside Dairy King and out of Bessie Thorndale 3rd, record 12,759 pounds. From Daughter of General Clay, Glenside Bell Boy, etc. \$75 to \$150 each. Herd Tested. Irvin Doan & Sons, Crosswell, Mich.

Wildwood Farm Milking Shorthorns. An accredited herd bred for beef and milk. Headed by King Sales, grandson of Glenside Dairy King. Visitors welcome. Beland & Beland, Tecumseh, Mich. Paved Road No. 50.

When In Need of Red Polled Bulls. From Michigan's leading herd, owned by Westbrook Bros., Ionia, Mich.

For Polled Shorthorns Milk strain, either sex. Paul Quack, Sault Ste. Marie, Mich.

For Sale Registered Shorthorn Bulls, Tuberculin Tested. Yearling Berkshire Boar. Simon Y. Maichele, R. No. 5, Middleville, Mich.

HOGS

DUROC JERSEY GILTS

Especially long in body and well developed in form; a valuable, practical type. Send for photos and full description and price of this exceptional practical stock. **STATE FARMS ASSOCIATION**, 307 North Rose Street, Kalamazoo, Michigan.

Loeb Farms Duroc-Jerseys

Our herd contains the 1922 Junior Champion, Senior Champion, Grand Champion and Reserve Grand Champion Sows. In 1923 we won Senior and Grand Champion Sows, Reserve Senior Champion Boar, Reserve Junior Champion Sow.

Our herd is headed by TOPMAST SENSATION, the Premier Sire of the State. We are offering some exceptional fall pigs, either sex, sired by TOPMAST SENSATION. Write us your wants.

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The Home of Grand Champions
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FOR SALE—Young boars and gilts bred from the best herds in Michigan and Ohio, at reasonable prices and fully guaranteed. W. E. Bartley, Alma, Mich.

DUROC Spring boars sired by Brookwater Satisfaction 8th, Greater Duration and Sensation Boy. Prices reasonable. Write us your wants. Norris Stock Farm, Casnovia, 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 Bred Sows and Gilts, \$25 to \$40 each. Fall pigs, \$12. All Reg. and guaranteed. Walt's Top Col. breeding. None better. Write us. 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.

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Chesters Spring boars from prize winning stock, will ship on approval. Cholera Immuned. Fred L. Bodimer, Reese, Mich.

O. I. C.'s 25 choice young boars for fall service. Clover Leaf Stock Farm, Monroe, Mich.

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

Registered O. I. C. Service Boars and Bred Gilts. Also a few tried Sows, due soon, four Beagle hounds.—Joseph R. Van Eitten, Clifford, Mich.

REG. O. I. C. Yearling Boars. Extra Yearling and R Spring Sows. Satisfaction or no Pay. Shipped on approval. Fred W. Kennedy, R. 2, Plymouth, Mich.

O. I. C. Choice young boars for fall service and Red Polled bulls. Jacob Berner & Sons, Grand Lodge, 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."

L. T. P. C. Bred Gilts out of the most popular blood lines. They have always made good and will again. Write your wants, also for plan of selling. M. M. PATRICK, Grand Lodge, Mich.

Livingston's Big Polands

Our thanks to all those who helped make our first public sale a success. Our hat is still in the ring for bigger and better Polands. Come and see. W. E. LIVINGSTON, PA. 10A, MICH.

BOARS at half price. Big Type Poland China. The kind that pay a profit on high-priced feed. Our pig, in the Pig Club, gained 70 lbs. in 30 days on 98 lbs. of grain. Jno. C. Butler, Portland, Mich.

BIG T. P. C. Aug. and Sept. pigs sired by our herd boars, \$10.00 up. Also 2 herd boars at \$75 each. Winter sale Feb. 20, 1924. Order quick for choice. E. A. CLARK, St. Louis, Mich.

L. T. P. C. Boars and Gilts all go at private treaty. Service to Foxy Clansman, \$40. Michigan Champion herd for 3 years. A. A. Feldkamp, Manchester, Mich.

Large Type Poland Chinas Boars \$25 each. Satisfaction guaranteed, all stock shipped on approval. DORUS HOVER, Akron, Mich.

Shamrock Stock Farm Polands Spring Boars and Gilts, a few yearling sows. One of the breed's best boars heads herd. Geo. O. Strong, Burlington, Mich.

Hampshires Spring Boars and Gilts, and fall pigs. Pairs not akin; 11th year. 150 to select from. John W. Snyder, St. Johns, Mich., R. 4.

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 months, 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.**

Shropshire Rams and Ewes write or call on Dan Booher, R. 4, Evart, Mich.



Plan for More Sheep

Need for Expansion of the Sheep Industry Is Seen

THERE is need for a considerable expansion of the sheep industry in the United States. The future holds promise of much greater stability for it than it has enjoyed in the past, say workers of the department of agriculture. They believe its expansion in the future will be characterized by less violent fluctuations than have been common heretofore because there is relatively little unoccupied land to which the industry can turn, and the pioneer phase of mutton and wool production is rapidly passing.

Nevertheless, sheepmen in this country will always have to meet severe foreign competition. They must also compete with producers of other live stock, for land, labor and machinery of production. There is the further problem of getting an adequate place

ust they should be held a few weeks or shipped to feed lots.

The problem of increasing consumption in this country is an important one. Largely because of the dual character of the sheep industry, which requires a steady market for both meats and wool, the sheepman's marketing problems are more difficult than those of either the cattle or the hog producer. People in this country prefer strictly fresh, rather than frozen, lamb and mutton. But mutton can not be stored satisfactorily without freezing for more than a short time. It is therefore difficult to move sheep from distant points of production to consuming centers without deterioration. There is quite frequently heavy loss through shrinkage and other causes resulting from long hauls. Extension



Every Operator of a Diversified Farm will Find Sheep a Most Promising Factor in the Economy of His Farming Operations.

for lamb and mutton in the diet of the country.

Moreover, the recurring cycles of prosperity or depression that have been the bane of the sheep industry in the past can not be altogether eliminated. When prices for mutton and wool are low, producers naturally reduce their flocks. This action increases the number of sheep marketed and causes additional price depression. Later on when the supply of wool and mutton gets low prices rise again. Then producers once more enlarge their flocks until the demand is over-shot again and the cycle is repeated. The sheep industry reached a low point during the recent period of financial depression. It is now building up, but no early saturation of the home demand is expected because the market for mutton is continuing strong and our wool supply is half imported.

Scientific Knowledge Essential.

Eastern and midwestern farmers can now more readily meet the competition of the west range operators. The eastern men have good nearby markets and in many cases can raise sheep at a lower cost than is possible under some western range conditions. Rapid increase in the east seems, however, to be limited by lack of knowledge concerning the care of sheep, and also by the attractions of other branches of farming. In the west expansion is expected to be on the basis of higher operating costs than formerly.

One of the greatest problems in marketing lambs is that of avoiding congestion during the three months' period from August 15 to November 15. Lamb receipts at leading markets in this three-months' period are frequently much greater than can be readily absorbed. Such gluts always break prices. Autumn congestion is aggravated by the practice of marketing lambs of inferior quality at this time. These inferior native lambs have a depressing influence on the market. Besides hurting the sale of good lambs, they generally fetch prices below production costs. Sheepmen who can get their lambs to market earlier are advised to do so; but if the lambs are not suitable for slaughter before Aug-

of the domestic market for lamb and mutton, and improvements in the method of supplying it are thus vital needs of the industry.

Good Wool Demand Apparent.

Though the United States is the third country in wool production and has produced an average of 300,000,000 pounds a year for the last thirty-five years, it has never met the home demand. Imports for some years prior to the war averaged 200,000,000 pounds. They reached a peak at 453,727,000 pounds in 1918. Probably a normal annual amount which must be imported is around 300,000,000 pounds. American sheepmen have therefore no need to be afraid of overshooting the home demand for wool. Since 1921 wool prices have more than doubled. The problem of selling wool is not to create a market, but to take the best advantage of the one that exists.

MAPLE HILL FARM GROWS BEEF.

I HAVE just come from the beautiful country home of George R. Wheeler, known to passers-by as "Maple Hill Farm." This gentleman had the nerve to come to our house and captivate my youngest sister several years ago, but, he being a real good farmer, I forgive him. I have to go, however, now and then for a good square meal and a romp with the kiddies. There are three of them, fine husky boys from one to seven years, and when I arrive there are four of a kind, and Mother has her hands full.

Mr. Wheeler is working out a beef cattle breeding plan. He has recently purchased from the T. F. B. Sotham outfit a dozen or more head of registered Hereford females and a high-class sire. He figures, after a few attempts in trying to buy high-class feeders, that he can breed them on the farm just as economically as he can go into the general market and buy the same quality of cattle, shrinkage, freight, risks, etc., considered. He also believes that there is a good future prospect for gleaming a little "velvet" from the sale of the best of the young stock for breeding purposes.

SINCE 1889

The State of Michigan began breeding purebred Holsteins thirty-five years ago, when the Traverse City State Hospital herd was established in 1889. Now thirteen state institutions have herds made up at least in part of purebred Holsteins. Bull calves and service bulls for sale. Address all inquiries to

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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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Write today for free instruction book and Record of Invention blank. Send sketch or model for personal opinion. CLARENCE A. O'BRIEN, Registered Patent Lawyer, 65B Security Savings & Com'l Bank Bldg., directly across St. from Patent Office, Wash., D. C.

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POULTRY

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Strong, sturdy, heavy-laying strains, from large, vigorous yearling hens raised on our farms, and culled by expert poultry men, to a high quality of Certified Utility Flocks, also, Extra Selected Flocks and from Blue Ribbon Pens.

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Whittaker's R. I. Reds

Both Combs. Michigan's Greatest Color and Egg Strain. Best Pen of Reds at the M. A. C. Laying Contest. One customer reports 1,633 eggs from 30 pullets during December and January. Another, two pound broilers at 7 weeks. Another, 2 1/2 pound broilers at 9 weeks. Bred from 14 generations of winter layers. Breeding stock, hatching eggs and baby chicks. Write for free catalog.

INTERLAKES FARM
Box 39, Lawrence, Mich.

PURE BRED CHICKS

Real producers. Flocks culled by export. 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. McClachlin State Bank, this city. Petersburg Hatchery, Petersburg, Mich.

Early Maturing BABY CHICKS

These chicks are from flocks headed by cockerels of high producing blood lines. Culled by experts. Each flock personally supervised. Pure-bred. \$13 per hundred up. Special: We have a limited number of superior grade chicks from special matings. Write for description and prices. 100 per cent live delivery. Ref. Milan State Savings Bank. Milan Hatchery, Box 4, Milan, Mich.

EGG-BRED CHIX

200-egg Strain S. C. English Type White Leghorns and Brown Leghorns. Large tooped-comb, deep-bodied type. 12 years of breeding for high egg-production. Carefully selected breeders, headed by large, vigorous males, combined with many years of highly successful hatching methods, gives you chicks that will bring you success. 100 per cent live arrival guaranteed. Write for catalogue and prices today. **ROYAL HATCHERY AND FARMS,** R. 2, Zeeland, Mich. S. P. Wiersma, Owner.

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 17 1/2c. 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.

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

S. C. White, Brown and Buff Leghorns	14c
S. C. Anconas, S. C. B. Minorcas, Barred Rocks, S. Reds	16c
White Rocks, R. C. R. I. Reds, White Wyandottes	17c
S. C. Buff, S. C. White, Orpingtons	20c
Assorted Varieties Broilers	12c

Get our big illustrated catalog and prices on our Hi-Quality Chicks. It is Free. Bid Offer on Brooders.

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

June grass will be his main reliance for seven months of the year, and his cattle have come in off the pastures looking fine. For winter feeding his barns are stuffed to the limit with alfalfa hay, and the big silo is full to the top. There are also such cheap roughages as bean pods, cornstalks, beet tops and straw, the usual unmarketable accompaniment of diversified farming, that these store cattle make the best kind of use of. His equipment thus leaves little to be desired and the outcome of the trial will be carefully recorded and watched with interest.—Pope.

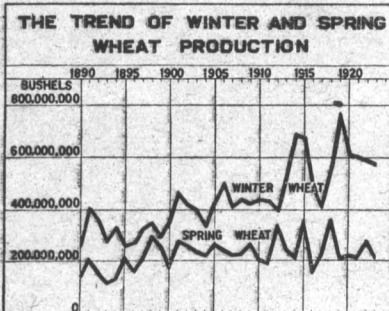
MUCH POULTRY MARKETED.

DURING the month of November there were 57,819,000 pounds of poultry marketed in the five largest markets of the country, as compared with 45,171,000 pounds for the same month of 1922. On the other hand, egg receipts at these markets showed a decline, the total this November being 568,000 cases as compared with 831,000 cases for the same month of the year previous.

WHEAT PRODUCERS START ACREAGE REDUCTION.

WHEAT prices have been trending downward since 1920, and averaged lower in 1923 than in 1922. The surplus producing countries had an increased amount to sell abroad and the surplus in the United States was a dominant factor in setting the price on wheat consumed at home. In the latter part of the year, the market displayed unusual stability in the face of depressing conditions, suggesting that rock bottom had been reached.

The most hopeful development of



the year was the recognition that expansion of wheat production in other exporting countries and, particularly, the probable revival in Russia, means a new deal in wheat growing in the United States. As a result, a moderate reduction was made in the winter wheat acreage planted during the fall.

The exportable surplus of the United States reached an extremely high point in 1921, from which a sharp decline has occurred in the last two years, but we are still about seventy-five per cent above the pre-war average. Canada has shown rather steady growth since 1918 and in each of the last two years more than two and one-half times the pre-war amount was exported from that country. Argentina shows a fifty per cent gain, although rather marked irregularity from year to year is noticeable. Australia is not exporting so freely as in the three years 1919-1922, but is above pre-war. India's population is consuming more of the home crop, and India is gradually losing her importance as a competitor of the American wheat grower. From a pre-war average surplus of 162,000,000 bushels of wheat, Russia faded from the exporting map in 1916. She is gradually coming back, how-

ever, and exports in the last half of 1923, based on incomplete data, totaled about 13,000,000 bushels. Rumania exported about 52,000,000 bushels in pre-war years, and has come back to the extent of 10,000,000 bushels in 1923.

Pre-war exports from the chief surplus countries averaged about 616,000,000 bushels, and in 1923 they approximated 670,000,000 bushels. This shows the extent to which increased production in the United States, Canada and the southern hemisphere offset the loss of Russia, Rumania and Bulgaria. The effective demand for wheat in importing countries as based on their purchasing power is not much, if any, greater than in pre-war days. Some duplications ignored in the foregoing due to exports from Canada to the United States, would reduce the increase shown in 1923 as compared with pre-war by about 20,000,000 bushels.

In order to promote their trade in manufactured products, it is believed that the wheat importing countries of Europe will be inclined to buy their requirements in Canada, Argentina and Australia, and in Russia and Rumania as fast as those countries return to the exporting column, rather than in the United States. Higher costs of production in the United States than in the newer countries of the world also will handicap our wheat farmers in furnishing a surplus for export.

Veterinary.

CONDUCTED BY DR. W. C. FAIR.

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

Sore Neck.—My horse is troubled with sore neck, but not raw. E. H. B., Romeo, Mich.—Dissolve quarter pound of acetate of lead, three ounces of sulphate of zinc, half ounce of alum in one gallon of cold water and apply to sore parts three times a day.

Worms.—I have forty-eight hogs of all ages which are not doing well. I am sure they are troubled with worms. Have given them several commercial worm remedies with poor results. They cough as though they had something in their throat, and they are thin. D. C. G., Paw Paw, Mich.—Fast a 100-pound hog for twenty-four hours, give one fluid ounce of oil of chenopodium and either give two ounces of castor oil before or soon after, and you will succeed in destroying many of the worms. However, you must collect all their droppings and either lime or burn them. This is removal of cause and, of course, does much good in preventing reinfection. Spread powdered lime on pen floor.

Young Pigs Root.—Will you kindly tell me what to do to prevent young pigs from rooting or rubbing one another, as they do their mother while nursing? These pigs were weaned when four weeks old, supposed to be the proper time, if there is anything in signs. They have rooted each other so much as to make sores and remove the hair. F. H. C., Applegate, Mich.—I have observed that pigs thrive best that are not weaned too early, six or eight weeks old is better than four; by this time they usually eat well, but not always when four weeks old. Apply vaseline to sore parts twice a day. Are they kept clean and dry?

Convulsions.—About a week ago I lost a calf. When it came it was stupid, refused to suck, so I fed it by hand. I placed milk in pail, then let it suck my finger, and I believe it got too much milk. It took sick, ran in a circle, and died of spasms. The cow seems to be in perfect health. A. H. B., Marlette, Mich.—When a calf fails to get the first milk of its mother, it is generally necessary to give castor oil to open the bowels and in some cases to keep giving occasional doses of either castor or mineral oil to prevent constipation, which may lead to indigestion or fits, resulting in death. If you attempt to raise another calf by hand, use great cleanliness and don't overfeed calf, but feed often.

Rheumatism.—I have cow ten years old that is showing considerable stiffness in hind quarters. What had I better give her? W. H. W., Kingston, Mich.—Give her one dram of sodium salicylate at a dose in soft feed three times a day. Rub hind quarters with camphorated oil twice a day. Keep her in a dry warm place.



Ingersoll Radiolites

Tell Time in the Dark

UP early and at it! A Radiolite, that tells time in the dark, is a convenience—and a necessity. First, while still in bed, to know the time without striking a match or putting on the light. Then all the time till sun-up. With sun-down the wonderful Radiolite dial goes to work again. Times you at the chores. Spends the evening with you. And goes to bed with you.



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25 Bulbs for 25 Cents

We make this offer to introduce our flower and garden seeds. Only one set to each person. Must be ordered before April 1st, 1924. These bulbs will bloom the first year. Bulbs grown on our northern farm bloom early, are hardy, produce bigger, better blossoms.

Garden Cultivation Book Free!

Explains the cultivation of our big line of Northern-grown, field, flower and garden seeds. Our peas, beans and potatoes insure big money-making crops. Used everywhere by professional growers. Write for our book today.

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\$100 Dollars Cash Prizes

For the Largest Tomatoes
You can share in this money—it is open to all our customers. The only condition is that the tomatoes be Isbell's Colossal—the finest quality and largest grown.

12 Cash Prizes

There are twelve prizes—all cash. Have a bumper crop of this finest variety—big yielding, delicious tomatoes, that bring top prices and are prize winners at county and state fairs—and share in these cash awards.

Details in Free Catalog

All details of these Prize Awards are given in the big Isbell's 1924 Seed Annual—the most complete and authoritative book of its kind. It tells you how to choose garden, field and flower seed, gives information on soil and cultural directions for all crops and is brim full of money-making suggestions on choosing seeds and caring for crops. It's FREE! Send for your copy today.

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10 Cents

worth of ordinary fuel will keep this Sunray lamp or lantern in operation for 30 hours. Produces 300 candle power of the purest, whitest and best light known to science. Nothing to wear; simple; safe; 10 days' trial.



FREE Lantern

As a special introductory offer, we will give you a 300 Candle Power Sunray Lantern FREE with the first purchase of a Sunray Lamp.

Lights up the yard or barn like a search light. Write today for full information and agency proposition.

KNIGHT LIGHT CO., Dept. 31-01 Chicago, Ill.



THE LATEST MARKET REPORTS



GRAIN QUOTATIONS

Wednesday, January 9.

Wheat.

Detroit.—No. 1 red \$1.14; No. 2 red \$1.13; No. 3 red \$1.10; No. 2 white \$1.14; No. 2 mixed \$1.13.
Chicago.—May \$1.08½@1.08¾; July \$1.06½; September \$1.05½.
Toledo.—Cash \$1.11½@1.12.

Corn.

Detroit.—Cash No. 3 yellow at 81c; No. 4 yellow 78c; No. 5, 72@74c; No. 6, 69@71c.
Chicago.—May 76½@77c; July 78@78½c; September 78½c.

Oats.

Detroit.—Cash No. 2 white at 50c; No. 3, 48c.
Chicago.—May 46c; July 44c; September 42½c.

Rye.

Detroit.—Cash No. 2, 73½c.
Chicago.—May 69½c; July 74½c; September 75½c.
Toledo.—73½c.

Barley.

Barley, malting 72c; feeding 68c.

Buckwheat.

Buckwheat.—New milling \$2 cwt.

Beans.

Detroit.—Immediate and prompt shipments \$4.75@4.80 per cwt.
Chicago.—Choice \$5.30; red kidneys at \$7.30.
New York.—Choice pea at \$5.50@5.75; red kidneys \$7.25.

Seeds.

Detroit.—Prime red clover cash at \$13.70; alsike \$9.50; timothy \$4.05.

Hay.

Strong.—No. 1 timothy at \$23.50@24; standard and light mixed \$22.50@23c; No. 2 timothy at \$21@22; No. 1 clover \$21@22; wheat and oat straw \$11.50@12; rye straw \$12.50@13.

Feeds.

Bran \$35; standard middlings \$34; fine do \$35; cracked corn \$37; coarse cornmeal \$35; chop at \$33 per ton in 100-lb. sacks.

Apples.

Chicago.—Barrels, "A" grade Greenings at \$5@5.50; Jonathans \$5@5.50; Grimes \$4; Spies \$4.50@5.50; Kings at \$5@5.50; Baldwins \$4@4.50; Spitzenberg \$4@4.50.

WHEAT

Wheat prices were rising at the close of last week. This level may represent the basis on which the crop can be merchandised, although there is some evidence pointing to artificial support. Domestic flour trade was practically up to normal for the holiday season. Canada is selling wheat below the United States and Argentina is below Canada. Russia is not pushing sales vigorously at present. World shipments have dropped rather sharply in the last four weeks and the quantity on ocean passage has declined about thirty-five per cent. The new crop is making fair progress although reports are not uniformly favorable as drouth, cold weather without snow, and the Hessian fly have done damage in spots. Fall wheat in Europe as a whole has obtained only a fair start and there are indications of a decrease in acreage. Average yield per acre for the world as a whole was 15.9 bushels in 1923, compared with 14.5 bushels in 1922, and a five-year average of fourteen bushels. Probably the wheat situation will be partly corrected next year by lighter average yields.

RYE

Rye is influenced largely by wheat. The visible supply is too large and export sales too small for a strong rising market. Russian shipments have not borne out the large sales reported during the fall.

CORN

Corn prices were buoyant last week and advanced to the highest point for several weeks. Since November 1, the primary receipts have been only about the same as a year ago and, in spite of the reports of a slower demand, the amount disappearing into consumptive channels has been about the same as last year. The visible supply is gaining but is smaller than last year or two years ago. The large quantity of live stock on farms and the high percentage of soft corn probably offset open weather and the tendency to use corn more economically so that farm disappearance during the winter is bound to be heavy. Lower prices have resulted in a moderate increase in exports.

OATS

Primary receipts of oats since August 1 have been heavier than a year ago and disappearance from commercial channels has declined slightly but reserves at terminals are smaller than at this time a year ago and constitute a constant source of strength.

BEANS

Good bean weather and passing of the holiday season broadened the demand and helped the bean market last week. Choice hand-picked whites advanced to \$4.95@5 per 100 pounds f. o. B. Michigan shipping points, while the Great Northern beans were quoted at \$5.80 for hand-picked and \$5.50 for choice recleaned. Dealers do not look for any big advances from this level during the next month or two, as there appears to be a good supply of beans available.

SEEDS

The seed market has been relatively firm for several weeks and present prospects are for higher prices. The department of agriculture reports that only about thirty-five per cent of the marketable supply of red clover seed, and thirty per cent of the alsike remained in growers' hands on December 11, 1923. The timothy seed crop is still more completely marketed. Foreign seed markets also have been firm recently and the margin below our prices is not large enough to stimulate substantial purchases for import.

FEEDS

Feed prices were practically steady last week although production in most cases is in excess of the demand. The stormy weather caused a stronger feeling among distributors last week, especially at western markets, but it remains to be seen whether buying by consumers will increase. Canadian mills are offering bran in the east below western mill prices.

HAY

Hay prices during the last few days have recovered practically all of the loss during the holiday period of dullness. Receipts are light and demand is fairly good for the better grades, with some urgency shown at a few markets. Dairy alfalfa especially is wanted.

POULTRY AND EGGS

Egg prices advanced last week, reacting to the general cold weather. Receipts at the leading markets have shown no apparent decrease but the movement into consumption is large enough to absorb supplies. Receipts will begin to increase before long, however, so that much higher prices are not likely. Receipts of fresh eggs at the four leading markets during De-

cember were fifteen per cent heavier than in December, 1922, and as the weather this year was favorable to egg production, it is probable that a larger proportion than usual of the movement into distributing channels represented fresh eggs. Withdrawals from storage during the month were much smaller than a year ago and holdings in the entire United States on January 1 probably passed the 2,000,000 mark.

Chicago.—Eggs, miscellaneous 41@42c; dirties 26@27c; checks 24@25c; fresh firsts 43@43½c; ordinary firsts 37@40c. Live poultry, hens at 23c; springers 20½c; roosters 13c; ducks 23c; geese 15c; turkeys 24c.

Detroit.—Eggs, fresh candled and graded 39@41c; storage 24@27c. Live poultry, heavy-springers 24c; light do. 23@24c; heavy hens 24@25c; light do. 23@24c; roosters 14@15c; geese 19@20c; ducks 23@26c; turkeys 25@26c.

BUTTER

Butter prices advanced slightly last week as supplies of fancy butter were limited, production reports showed a decreased make and consumption was excellent. With stocks of fine storage butter being cleaned up rapidly, medium and lower scores of fresh found a more active demand. The decrease in production is probably only temporary and will be decidedly reversed with the freshening of many cows in winter dairy sections. Consumption, which was considerably heavier during 1923 than in 1922, shows slight falling off so that prices probably will not go much higher. Lower Danish prices make offerings from that country very attractive. During the week 7,875 casks of Danish and 91,200 pounds of Canadian butter arrived at New York. A large shipment of New Zealand butter is due to arrive January 21.

Prices are: Ninety-two score Chicago 55c; New York 55c; Boston 55c; Philadelphia 55½c; 90-score centralized carlots, Chicago 51½c. In Detroit fresh creamery in tubs sells for 44@49c per pound.

CHEESE

Cheese prices were unchanged last week but a more confident tone was apparent as dealers felt prices had reached their low point. Trading showed some improvement and with colder weather delaying shipments from producing sections, an advance would not be surprising.

POTATOES

The carlot movement of potatoes from producing sections declined again last week and is down to normal size for this season of the year. Demand is good at most centers and shipments from producing sections have been light for the last five or six weeks so that the shipping demand at the large

distributing markets has increased. Prices have advanced, with U. S. No. 1 northern round whites quoted at \$1.25@1.40 per 100 pounds sacked in Chicago, and \$1.35@1.50 in bulk. The eastern round whites are selling at \$1.75@1.90 sacked and bulk in eastern cities. Since the carlot movement up to the present time from the leading late potato states has been about the same as a year ago, and since the crop in those states was materially less than in 1922, it is probable that the supply remaining to be marketed is much lighter than at the beginning of 1923.

WOOL

The total consumption of wool by mills in the United States for the calendar year was about the same as in 1922 when it was at a record level. The decline in the rate of consumption in the last six months was offset by exports of about 25,000,000 pounds and lighter imports which totaled only 113,000,000 pounds in the six months ending October 31, compared with 164,000,000 pounds in the same months of 1922 so that the supply of wool left in this country is not at all heavy. Foreign wool markets are buoyant but on this side the tendency of manufacturers is to await the opening on heavy-weight goods excepted around January 21. Some inquiries are in the market, however, and values are firm. Sheep are wintering well in the west and the new clip promises to be a good one unless unfavorable weather develops in the next three months. Stocks of old clip wools in first hands are small and are quite firmly held.

GRAND RAPIDS

The cold wave has strengthened all potato markets and prices to growers have advanced materially. Farmers are now making sales in Grand Rapids at 50@60c a bushel, but owing to the weather conditions, offerings are very light, mostly potatoes that were placed in storage here last fall. At Greenville shippers early this week were paying 70@80c per cwt. Little improvement has yet been noticed in the demand for onions but a continuation of low temperatures will have some influence on prices, the trade believes. The furniture season which has brought hundreds of buyers into Grand Rapids has bolstered the poultry market and prices on heavy fowls and springers have been marked up 2@4c a pound. Heavy fowls were in demand this week at 20@22c a pound. Eggs were stronger, produce houses bidding 38@40c a dozen early in the week. Individual poultrymen were able to get 45@50c a dozen for their selects, sold direct to consumers.

DETROIT CITY MARKET

The let-up in the cold snap and the increased strength in the market for some products brought in a good number of farmers to Tuesday's market. Buying on the whole was quite active and supplies of all, save of some potatoes and apples, were practically cleaned up early. The market for potatoes was stronger and early selling was active at 85@95c per bushel, with some bringing \$1. Cabbage, carrots and beets sold readily, but the movement of parsnips, turnips and greens was slower. The small offerings of squash moved readily at \$2.50 a bushel for the best grade. Apples were in heavy supply with sales slow, even for the better grades. Few chickens were offered and the small supply of dressed pork was slow to sell. Eggs were slow sellers.

Apples, fancy \$2@2.50 bu; No. 1, \$1.25@1.75 bu; beets \$1.25@1.50 bu; cabbage, late \$1.75@2 bu; carrots at \$1.75@2.25 bu; celery 65c dozen; onions, small \$1 bu; green 60c dozen; potatoes 85@95c bu; winter squash at \$2@2.50 bu; turnips \$1.25@1.50 a bu; parsnips \$1.50@1.75 bu; horseradish \$3@4.50 bu; eggs, wholesale 50c doz; retail 60@75c; springers, wholesale at 23@25c pound; retail 23@28c; hogs 11@12c pound.

COMING LIVE STOCK SALES.

Holsteins.

Feb. 4.—Michigan State Holstein Association, East Lansing, Mich.

Durocs.

Feb. 5.—Detroit Creamery Farm, Mt. Clemens, Mich.

Poland Chinas.

Jan. 30.—Dorns Hoyer, Akron, Mich.
Feb. 20.—Detroit Creamery Farm, Mt. Clemens, Mich.

Live Stock Market Service

Wednesday, January 9.

BUFFALO

Cattle.

Receipts 10 cars. Market is slow.

Calves at \$16.

Hogs.

Receipts 70 cars. Market is lower.

Heavy and yorkers \$8@8.10; pigs at \$7.75.

Sheep and Lambs.

Receipts 40 cars. Market is lower.

Top lambs \$14.25; yearlings at \$11@12.50; wethers \$9@9.50; ewes \$7@8.50.

DETROIT

Market slow and weak.

Good to choice yearlings \$9.50@9.75
Best heavy steers 8.25@8.50
Handyweight butchers 7.00@7.25
Mixed steers and heifers 5.75@6.25
Handy light butchers 4.75@5.00
Light butchers 4.00@4.25
Best cows 5.00@6.25
Butcher cows 3.50@4.50
Cutters 2.50@3.00
Canners 2.25@2.50
Choice bulls 5.50@6.25
Bologna bulls 4.50@5.25
Stock bulls 3.25@4.25
Feeders 5.25@6.25
Stockers 5.00@5.75
Milkers 4.50@80

Veal Calves.

Market slow.
Best \$15.50@16.00
Others 7.00@14.50

Hogs.

Market 20c lower.
Mixed and heavies \$ 7.40
Pigs 6.80

Roughs 6.25
Yorkers 7.40
Stags 4.00@4.50

Sheep and Lambs.

Market steady.
Best lambs \$13.50@13.75
Light to common 6.00@10.00
Fair 6.50@12.25
Fair to good sheep 5.50@7.00
Culls and common 1.50@3.50

CHICAGO

Hogs.

Receipts 48,000. Market slow. Mostly 10c lower than Tuesday's average. Good and choice 150 to 200-lb. average \$7@7.15; better grades of 225 to 300-lb. butchers \$7.20@7.25; tops at \$7.30; packing sows \$6.55@6.75. No purchases by big packers. Tops 15@25c lower. Good and choice weighty pigs at \$6.25@6.75.

Cattle.

Receipts 17,000. Market moderately active. Better grades of beef steers and yearlings steady, 10@15c lower in spots, some kinds selling at \$9 and below. Long yearlings at \$12. Handyweights \$11.65; bulk choice steers at \$7.75; fat she stock 15@25c off. Other killing classes slow, about steady.

Sheep and Lambs.

Receipts 20,000. Market slow. Few early sales. Fat lambs weak to 25c lower. Sheep steady. No early sales of feeding lambs. Top fat lambs to city butchers \$13.85; medium to good kind to packers around \$13; good yearling wethers \$11. Wethers ranging from yearlings to aged stock.

LESS DAIRY PRODUCTS DELIVERED.

SHIPMENTS of butter and cheese to five of the big consuming centers of the country were less this past November than for the same month of 1922. The figures are 41,316,000 pounds of cheese for November of 1923, and 45,703,000 pounds of butter and 21,091,000 pounds of cheese for that particular month of 1922.

A FARM CENSUS IN 1925.

CONGRESS has already passed the basic law for taking farm census in 1925. This is important, inasmuch as the 1920 census figures fail to reflect normal agricultural conditions. This action of congress has been heartily endorsed by farm leaders throughout the country.

PERFECT PROCESS FOR FIXING FREE NITROGEN.

AN important step in the development of a chemical agent used in recovering nitrogen from the atmosphere, has been solved by government chemists. As far as we have been able to learn, says a report from the government, there is no country in the world which now has a process superior to that worked out by these men. A method developed for manufacturing this material, gives the necessary chemical control of the product, and makes large scale production of nitrogenous fertilizer possible.

MORE ABOUT HARDIGAN ALFALFA.

WE have written from time to time in these notes about the progress of our experiment with Hardigan alfalfa. It has been encouraging to watch its development.

To review briefly: We planted it in the spring of 1922 in rows thirty inches apart. It was cultivated several times and cut once the first year. This year there was a prodigious growth, with a liberal accompaniment of grass and weeds. Our object was a crop of seed and judging from the profuse blossoming this first crop would no doubt have produced heavily, but in spite of our efforts there would have been mixed with it a great deal of weed seed. So this first crop was cut for hay and immediately thereafter the ground was worked thoroughly with the spring-tooth harrow. The new crop came on rapidly, made a strong growth and set nicely with the little spiral seed pods. The few weeds that remained, whose seeds would bother, were pulled by hand and carried off the field.

The seed was cut with the mower and carefully bunched, and when thoroughly cured and put through the threshers we had a full bag of good quality seed. There was one and one-quarter acres in the piece. We had expected to sell it as the seed is worth well toward a dollar a pound, but we have also been wanting to try it out under field conditions. We will sow one long narrow field of about twelve acres along the road, the field that grew sugar beets this year, to barley and alfalfa in the spring. The field, all but the remains of an old orchard at one end, has grown alfalfa before so the soil is well inoculated, and we have quite made up our mind, instead of selling our Hardigan seed, to sow it upon this field.

Hardigan alfalfa is really a strain of Grimm, especially hardy, and with an inherited tendency to seed heavily under Michigan conditions. Many of us are finding it easier to get a stand of alfalfa on our farms than of red clover and the acreage of it is bound to increase. As this takes place and the second crop is not so badly needed for hay it will be a great advantage to have a variety that is a dependable seed producer. Hardigan, at this stage of development gives rare promise of

being just what is needed in Michigan, a very hardy, long-lived, vigorous-growing, dependable variety for both hay and seed.—Pope.

INTERESTS CLASH ON IMMIGRATION RESTRICTIONS.

HEARINGS on the immigration bill limiting the ratio to two per cent are now in progress. Union labor leaders are arguing for the complete stopping of immigration, the industrial interests are demanding a more liberal immigration policy, and the farm organization representatives are taking a middle ground position.

Resolutions from many state and county farm bureaus have been received at the American Farm Bureau Federation headquarters, the tenor of which is in favor of inspection at port of embarkation and a two to five per cent ratio based upon the figures of 1890. The farmers evidently would welcome a larger immigration from northern Europe and the British Isles.

WHEAT AVERAGE REDUCED.

A DECREASE in acreage of winter wheat seeding in United States, Canada and Roumania as compared with last year, is reported by the Federal Department of Agriculture. The area seeded in the three countries is estimated at 44,273,200 compared with 51,384,900 acres reported the same date last year. The fall wheat acreage in the United States is about twelve per cent less than last year, and in Canada it is about nineteen per cent less. The area of fall-sown wheat in Canada, however, is small compared with that in the United States.

The exports of wheat from the United States in December were 4,750,000 bushels, compared with 9,700,000 bushels in December last year.

Holmes, Stue Co., 2429 Riopelle St.

Commission Merchants. Dressed Beef, Hogs, calves, Poultry, Live & Dressed, Provisions, etc. Correspondence Solicited. Ref. Wayne County & Home Savings Bank. Bradstreet. Detroit, Mich. Cherry 7654

MISCELLANEOUS

SALVAGE OATS AND BARLEY.—For carload buyers of feeds we have a lot of 30 cars of salvage oats and salvage barley, and some rye. If you are a rye feeder or hogs or sheep, write us at once for samples and prices on economical feeds in carloads. Oats and barley for sheep, dairy and fat cattle, or you can grind it for hogs. Write at once if you are going to feed now or next month, as the supply won't last long. C. E. Dingwall Co., Milwaukee, Wis. Economical feeds for feeders.

WE ARE in position to supply you at all times with good second-hand egg crates, including fillers and covers, complete for shipping, at the following rates: Carload lots F. O. B. Detroit, 14c each; less than carload lots, 16c each. Wm. Spitz & Sons, 2645 Chene St., Detroit, Mich.

LARGE OREGON PRUNES DIRECT: 100 lbs. prepaid \$11.99; special 12 1/2 lb. sample prepaid \$1.95. Kingwood Orchards, Salem, Oregon.

OIL MEAL.—Stock and chicken feed, wholesale. E. G. Beuler, 2963 Ashland Ave., Toledo, Ohio.

TIMBER for sale. Also White Orpington Cockerels. R. W. Anderson, Clarkston, Mich.

TOBACCO

HOMESPUN TOBACCO.—Five pounds chewing, \$1.75; ten, \$3.00; twenty, \$5.25. Smoking, five pounds, \$1.25; ten, \$2.00; twenty, \$3.50. Pipe and recipe free. Send no money. Pay when received. Kentucky Tobacco Company, Paducah, Ky.

LEAF TOBACCO.—Chewing, five pounds, \$1.75; ten, \$3.00; Smoking, five pounds, \$1.25; ten, \$2.00; pipe and recipe free, pay when received. Cooperative Farmers' Paducah, Kentucky.

TOBACCO.—Extra Fancy Smoking, 10 pounds, \$2.50; Good Smoking, 5 pounds, \$1.10; 10 pounds, \$1.50; 20 pounds, \$2.75. Chewing, 5 pounds, \$1.50; 10 pounds, \$2.75. Quality Guaranteed. O'Connor Smokehouse, 5133, Mayfield, Ky.

PET STOCK

FERRETS trained for hunting Rats, Rabbits and other game, have white or brown, large or small. Males, \$5.00; females, \$5.50; pair, \$10; will ship C. O. D. anywhere. J. Younger, Newton Falls, Ohio.

GERMAN Shepherd. Airedales, Collies; Old English Shepherd dogs; Puppies; No illustrated instruction list. W. B. Watson, Box 35, Macon, Mo.

FERRETS, for rats, rabbits, skunk, mink, etc. Book Free. Thos. Sellers, New London, Ohio.

BABY CHICKS

PURE-BRED BABY CHICKS.—Barred Rock, Buff Orpingtons, White Wyandottes, Rhode Island Reds. February 15th to April 15th, \$15.00 per hundred. After April 15th, \$13.00 per hundred. 98 per cent live delivery guaranteed. Brookdale Poultry Farm, Box 522, Paw Paw, Michigan.

BABY CHICKS.—Finest quality. Barred Rocks, White Wyandottes, Buff Orpingtons, S. C. Reds, Light Brahmas, White Leghorns, \$15.00 per 100. \$8.00 per 50. Hatch every Tuesday. Order from ad. Member International and Illinois Baby Chick Association. Earlville Hatchery, 66 Ottawa St., Earlville, Illinois.

BABY CHICKS.—20 leading varieties hatched from heavy laying strains. Live delivery guaranteed anywhere in the U. S. Lowest prices ever offered. Write for catalog and price list. Miller Hatcheries, Box 651, Lancaster, Mo.

Farms and Farm Lands For Sale

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.

10-Acre Orchard, 6 Cows, Crops, Tools with 80 Acres; All \$5000

Right at edge of flourishing city, profitable milk route now in operation, improved road passes; 60 acres tillage, 20-cow pasture, woodlot, 10-acre bearing apple orchard, cherries, grapes; comfortable 2-story 8-room house and bath, electric lights; 64-ft. basement barn, silo, garage, granary, poultry house, etc. Owner called away; low price \$5,000, city milk route, horse, 6 cows, gas engine, implements, tools, crops, etc., included. Part cash. Details and picture page 39 New Illus. Catalog Bargains through, out Mich., Ill., Ind., many other states. Copy free. **STROUT FARM AGENCY, 427KH, Marquette Bldg., Chicago, Ill.**

For Sale 40 Acres Bottom Land. Not on Clay Bottom. All can be cultivated. No stones. 15 acres cleared, rest easily cleared. A small 3-room house. Located 3 miles south of Houghton Lake, a popular summer resort. Can grow anything, and sell all you grow. Sale Price, \$1,000. Address **CHARLES BORGESON, Houghton Lake, Mich.**

3500 Acres of Cut-over Land For sale at bargain prices. Will sell any part. Most of the land is well watered but not swampy. Well adapted for cattle or sheep pasture. Crowl Lumber Co. For information write F. W. Crowl, Harbor Springs, Michigan.

Pasture Land For Sale

In southern Midland County, Michigan, in parcels up to 1,000 acres. Good roads and water. Shipping points, Shepherd, St. Louis, Breckenridge or Midland. Write **W. S. ROOT, Mason, Mich.**

You Are Tired AND WEARY of the severe winters up there. COME TO STUART. You will be delighted with the climate here. A haven for farmers. For information write **CIVIC COMMITTEE, STUART, FLA.**

WANT to rent 60, 80 or 100-acre farm, good land and buildings. Cash rent; 13 years on present farm. Gus Thomas, New Lothrop, 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	One time
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11.....	.88	2.64	27.....2.16
12.....	.96	2.88	28.....2.24
13.....	1.04	3.12	29.....2.32
14.....	1.12	3.36	30.....2.40
15.....	1.20	3.60	31.....2.48
16.....	1.28	3.84	32.....2.56
17.....	1.36	4.08	33.....2.64
18.....	1.44	4.32	34.....2.72
19.....	1.52	4.56	35.....2.80
20.....	1.60	4.80	36.....2.88
21.....	1.68	5.04	37.....2.96
22.....	1.76	5.28	38.....3.04
23.....	1.84	5.52	39.....3.12
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