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HOMeward.

Across the meadow comes the night
Like tides from out the sea
To break upon the twilight's shore
With murmuring harmony.

And o'er the roads through dusk and dew
From fields where toil is done,
The workers of the day return
With toil's contentment won.

They hasten where, like harbor lights
The sailors love and know,
Bright through the shadows cheerily
The home lights gleam and glow!
—Arthur Wallace Peach.

Enriching Farm Life

By J. T. Horner

As time goes on, the farm is becoming more and more a place where things are produced to be sold. There was a time when most of the things needed to satisfy the wants of the farmer were grown on the farm. In those days when transportation was expensive and communication difficult the farmer was almost compelled to produce most of the things he wanted. Wants were limited more than they are today. Living was not as full and complete. The simple things sufficed. Luxuries were few. Of food and warm clothing there was usually an abundance; but of those things which came from distant market places there was a dearth.

The development of rapid transportation made it possible to bring more things to the farmer's home and permitted shipping long distances the things which he produced in excess of his own needs. Along with this cheap transportation came the newspaper, magazines, telephone, and other means of dissemination of information. In recent times the automobile has made it possible for the farmer to widen his scope of experiences and learn of new things. This increased knowledge has caused his wants to expand and necessitated a greater money income to meet his new requirements.

It seems that everything is working toward the demand for a greater money income for farmers as well as city people. The wants of all of us are expanding at a very rapid rate. The only way to keep pace with this increase in our wants is to increase our money income. This the farmer is attempting to do in every way possible.

Specialization in agriculture is one of the ways in which this is attempted. There is a great effort being made to increase the quantity of things which can be sold off the farm. It is thought that the welfare of the farmer depends upon the amount of his money income. This is not always true.

There is a great difference between money income and real income. Money income is the amount of money which is received. Real income is the amount of economic goods which this money income will buy. A man's money income might remain the same, but if prices went up his real income would be lowered. During the war many persons who worked on a fixed salary had their real income decreased because of the rise in prices. These increasing prices made it impossible for the same amount of money to buy as much as it formerly did. In June, 1924, wholesale prices were about forty-five points above the general level of 1913. A man earning the same money income now as in 1913 would certainly not have as great a real income.

We should not be led too far astray, in considering money income. It is natural for us to secure all the money we can. However, we should not forget that standard of living does not depend entirely upon the amount of money we have. This is particularly true in agriculture.

There are many things which add to (Continued on page 319).

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

QUALITY
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NUMBER FIFTEEN

Japanese Beetle Invades Michigan

What It Looks Like and How It Lives and Works

By J. C. Gilbert

THE Japanese beetle, a crop pest introduced to this country from Japan, is reported from Lenawee and Washtenaw counties, Michigan. This insect, a native to Japan, was introduced into the United States at Burlington county, New Jersey, probably prior to 1916. The exact date of its introduction into this country cannot be definitely determined. It has been working for some time in the state of Pennsylvania but the recent Michigan report is the first from a western state.

The beetles appear about the fifteenth of June and are most abundant and active from the last of June to the first of September. They are most conspicuous and injurious in the adult stage by reason of their injury to foliage and ripening fruit. The insect is practically omnivorous, feeding on the foliage of weeds of many kinds, small fruits, such as blackberries, raspberries and grapes, fruit trees, such as apples, sweet cherries and many kinds of ornamental shrubs. They also devour such field crops as corn, soybeans and clover blossoms and timber and shade trees, including the birch, oak, elm, linden, horse chestnut and willow.

The female lays her eggs in the ground in the summer, from thirty to sixty in number during the season. These eggs hatch into larvae which stay in the ground and feed on roots of grasses and other vegetation. They are especially injurious in fall and spring to pastures and grasslands. During the winter the grub remains dormant in the ground. In late spring they change to pupae, which develop into the destructive parent beetles.

The Japanese beetle is about the size of a potato bug but more elongate.

The head and thorax are shining bronze green and the wing covers are brownish, tinged with green at the edges. On the sides and at the tip of the abdomen are conspicuous white spots, which distinguish this species from all others of the same size and habits occurring in the country where

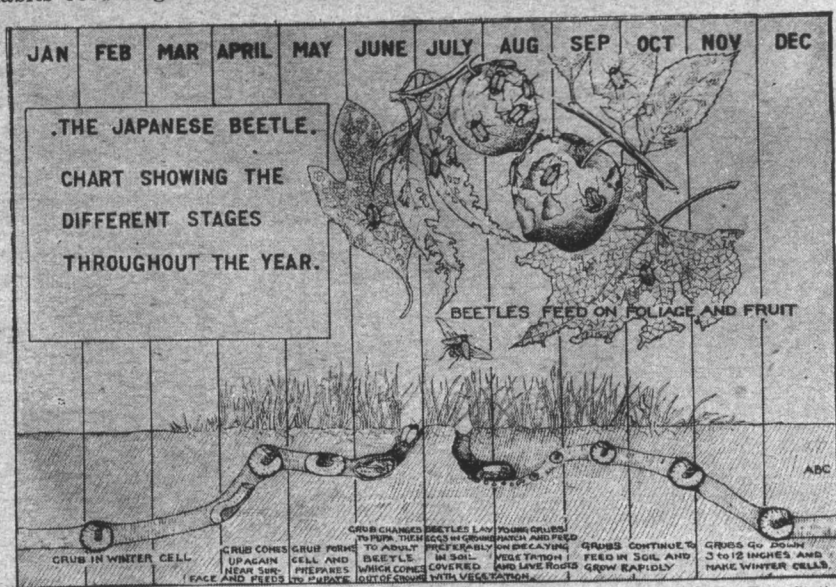
tacks the fruit of early ripening varieties of apples, peaches, early plums, and to a certain extent, sour cherries. There are over two hundred different species of plants that are known to be the victims of this destructive insect.

In the eastern United States we have several kinds of beetles, some of

imported pest. However, the two natives lack the conspicuous greenish head and thorax and the greenish abdomen with white spots as described heretofore.

At one time actual extermination of the insect might possibly have been accomplished. Now complete extermination of the insect is no longer within the realm of possibility because of the great area infested. All we can do is to prevent the spread of the pest over long distances. A ray of hope is discernible in the proposition to introduce from Japan and other Oriental countries natural enemies of the insect, which are likely to be effective in holding down the pestiferous insect to within reasonable bounds much as the lady bug keeps in check to a certain extent the aphid. In fact, several shipments of parasites have already been sent to this country for study, reproduction and liberation in the territory infested with this unwelcome immigrant. Such species of parasites are in no case dangerous to the production of crops in this country. That was fully and definitely determined before their introduction into this country by government authorities. The parasites mentioned are not vegetation-feeding types. Another control method is the good old reliable arsenate of lead or Bordeaux mixture.

The insect found in Washtenaw and Lenawee counties has been identified by the Michigan Agricultural College, entomology department, as a "true" Japanese beetle, and as a result both state and federal authorities are starting a careful investigation to determine whether or not the dangerous crop pest has entrenched itself to such an extent that it will be impossible to eradicate it from the vicinity in which it was found.



How the Japanese Beetle Passes It's Annual Cycle.

the insect has succeeded in establishing itself.

The feeding of the beetle is characteristic and compares with the eat-done by native leaf-chafers. The foliage is skeletonized and when severely ravaged the leaves turn brown and drop. When the beetle attacks flowers the petals are eaten and the blossoms riddled as by the rose beetle. It at-

which are closely related to the Japanese beetle (*Popillia japonica*) and which have often been confused with it. Two of our leaf-chafers (*Strigoderma arboricola* and *Anomala lucicola*) are somewhat closely related to the Japanese beetle. Both feed on grape foliage and riddle it, as does the Japanese beetle, and are about the same size or slightly smaller than the

Does It Pay to Plant Potatoes Early?

These 1924 Experiences Indicate that Some Michigan Farmers Can Make It Pay

DOES it pay? That is the final test of all agricultural practices.

Measuring the efficiency of farming methods by the profit standard brings decisions from which few appeal. And it is the method whereby progressive men will determine the economy of growing early potatoes in Michigan.

The outlook of the movement to produce early spuds is not discouraging. This has been the first season in which many actual field tests have been made. Since the past summer proved a most unusual one from the standpoint of weather, final decision must be delayed till early crops are tried over a number of seasons.

The men, whose experiences are reported in the following paragraphs, undertook the planting of spuds early because, in this latitude, September usually is the best month in the year to market potatoes. During that month there is less competition from other sources. The old crop is out of the way and the southern, western and New Jersey crops are gone or are past their peak. Naturally, under such circumstances, prices are most attractive, and, as suggested above, it is the

net profits we get out of a thing that causes us to stop or to go on.

In respect to the price, the season has not been an exception. Through most of September, quotations, while

not quite as high as some years, were satisfactory. The cool weather played us a trick and brought on the crop so perfectly that we will have nearly a record yield. The result is that prices

started tapering off a little early in anticipation of big offerings during October and November.

However, the majority of the growers of early spuds in the Detroit area were able to market their crop before the price had skidded to rock bottom. The bulk of these tubers were taken on the Detroit markets at an average of about a dollar per bushel. Where yields are not too bad this price keeps the bookkeeper from using red ink. So, the practical grower naturally asks, "Can one grow enough good early potatoes to make a profit?" The growers whose farms we recently visited have answers to this pertinent question.

Take, for instance, Mr. McKinny, who lives south of Belleville in Wayne county. From a field of Cobblers planted on sod, he harvested better than 200 bushels per acre, while from another field, treated in the same manner and planted with the same kind of seed, except that the field had been oat stubble instead of sod, the output was but 100 bushels per acre. His Petoskeys, he thought, would not go

(Continued on page 302).



Proper Grade is an Essential Part of Marketing Both Early and Late Spuds.

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CURRENT COMMENT

Leaving
An
Estate

THE life insurance companies are fond of gathering figures regarding the uncertainty of life, especially with reference to the accumulation of wealth. It is well that these companies do this for it brings to us a realization of what the life history of the average individual is. The one who gets interested in these figures becomes more cautious in the management of his finances, and endeavors to plan ahead. These statistics show that only three men out of every hundred leave estates of \$10,000 or over; fifteen others leave between \$2,000 and \$10,000, while eighty-two of every hundred leave no income producing estates at all. In other words, the chances are better than four to one that you and I will die poor; we won't leave the world with any more than we entered it.

These figures almost scare a fellow, but the farmer need not take fright as much as the city fellow. The farmer who owns a farm, has an estate to leave; it is an income-producing estate at that; at least it should be. If that farmer sells out and goes to the city the chances are that his money will get away from him, and he will be numbered among the eighty-two who die poor.

So, from the standpoint of having something in old age and of being in a position to leave relatives at least a little remembrance, it seems a wise thing for a fellow to hold onto the farm. Apparently a good farm is good insurance.

The
Tragedy
Of It

THE aim of the practical farmer is to increase his net profits. That is what the majority of us are in the farming business for. In this respect, many references have been made in these columns to the advantages of high yields. The recent examination of costs of, and incomes from crops has emphasized once more the direct relation of yields to profits.

Invariable high yields have as a chief basic condition a rich soil. The farmer who attempts to grow big crops on soil that lacks an abundance of potential plant food, as well as proper mechanical conditions, is taking a very long chance. As a practice, such an attempt has over and over again proven a failure. Thoughtful farmers everywhere have abandoned the idea.

High-producing land is not only well supplied with all the chemical elements required in plant growth, but it houses those elements in such form and condition as to make them readily available, provides an optimum supply of moisture, favors organic activities which replenishes the plant food supply as the season advances. It also absorbs sunshine readily, and breathes in the gases of the air. In all, the soil conditions for the growth of maximum crops are extremely complex. Were they more simple, fertility would not be the big problem it is. But, since it is complex and also essential to successful handling of agricultural land, the farmer who fails to give attention to its solution will soon be a back number.

The tragedy of it is that so few farmers actually succeed at increasing the productive capacity of the land they farm. It is high time that more of us deliberately set about this big problem of providing a better soil for our crops.

Doubles
His
Crop

A CENTRAL Michigan farmer reported to us this week that a field of beans grown from common seed yielded him eleven bushels per acre, while the yield from a similar field planted to the Robust variety gave him a twenty-two bushel crop.

Perhaps this is a larger difference than usually obtains between crops from the average seed and those from good seed, but it all the more emphasizes the necessity of good seed in growing good crops. The forward-looking farmer will take advantage of this fall season to provide himself with the best seeds for 1925. Seed can be chosen with more intelligence now that next spring and there is opportunity for the farmer to give this seed special protection against the vicissitudes of extreme weather conditions.

A
Business
Enterprise

FARMING is unique among life's activities. It is a sort of three-in-one affair, whereas other life works are usually one-in-one propositions. A doctor is a doctor; his home life is elsewhere; his social activities are still in another place. An auto mechanic puts in eight hours at the shop, probably eight in bed and eight in amusement and social activities. But, the farmer spends twenty-four hours, sometimes it seems like twenty-five on the farm. The farm is his business, his factory, his investment, his home and the scene of most of his social activities. Farming is a whole life, because it involves all of life's activities.

As a business, farming is the backbone of the country's prosperity. And furthermore, the individual farm is not a small affair when compared with other businesses. The averages show that each farm represents an investment of \$12,000. That is a big average investment when compared with a lot of "shoe string" ventures in other lines of business. The farms, including equipment and stock, comprise our greatest national asset.

So, as the economic side of farming involves business fundamentals, it seems that it should be managed like a business man would conduct it. That means cutting wastes and leaks by cow testing, chicken culling, proper feeding of both live stock and soil, using good seed and doing the other things which every farmer knows constitutes good farming. In other words, good farming is good business.

Bobbing
Up
Again

THE eternal question is continually coming up in some form or other. It's, how should women conduct themselves; what should they wear, etc.? In the past few years it has taken the form

of the question, "to bob or not to bob?" Young girls discuss it and do it, as indicated by our boys' and girls' page. The old girls discuss it and do it, according to general observations. Men of all ages discuss, and some cuss it.

Women are apparently eternal subjects of conversation among themselves and among men. It just seems natural that it is that way. That's why we talk about what they do and what they shouldn't do. But why not talk about the men once in a while? Is it the double standard that makes men undiscussable, or perhaps pardonable for what they do?

If men and their ways were censured as much by the public in general as women and their ways, perhaps we would have less crime, less bootlegging, less graft, fewer toughs and more gentlemen.

It is said by a noted psychologist that woman reflects man; that man is the sun and woman the moon. So why always bark at the moon? Wouldn't it be a good thing to turn around once in a while and see what the sun is doing?

Modesty, refinement and decency are commendable attributes in men as well as in women.

A
Cold
Winter

ON another page prediction is made by an official attached to the federal weather bureau that we shall have a cold winter. He has his professional reasons for making the statement. But, whether or not his prophecy comes true, the fact remains that we should always prepare for the worst.

Should it be cold, then the family living in a warm house will be kept warm with less expense for fuel, will suffer less from ill health and will be better able to go about winter tasks with a normal supply of energy than those occupying a cold house.

Further, the live stock in comfortable stables turns feed into animal products more economically than stock requiring additional feed to maintain the bodily temperatures for the proper functioning of the organs.

In other words, two objects will be attained, particularly during a cold winter, by having warmly constructed homes and stables. The occupants enjoy normal conditions and the expense of feeding and heating is reduced.

Some time during the weeks before cold weather is due, a building repair campaign should be carried out on every farm.

The
World
Series

THE talk of the town has been baseball during the past week. Newspapers have had special reporters engaged to report on the scientific, the human and the humorous side of baseball. All this ado has been because of the world series in which two teams battled for the world's championship.

One humorous writer has called this series the "world serious." But is he right?

While this "serious" has been going on, farmers have been busily engaged in gathering the fall harvests, storing away the results of their season's labor, or carrying it to the market. This is an annual affair just the same as the baseball world series. But it is not acclaimed by the press; it has no front page position in the papers. The human and humorous side are left untouched. The business side is only referred to on the market pages.

No, the autumn harvests are the real world "serious." It means bread and butter, and shoes for the kiddies. It means tax money, warmth and protection from the elements and perhaps the enjoyment of some of the good pleasures of life. To the city man it means higher or lower cost of living.

He grumbles when it is high, and feels pleased when it is down. Meanwhile, thousands of them will pay five to ten dollars to see a world series baseball game.

The "world series" is the world pleasure bent, full of hilarity and enthusiasm. It is perhaps the froth on the draught of life. Meanwhile the "world serious" is bending its back to gather what nature and man have cooperated to produce so that we all might survive.

Is not this another indication that the big, deep and important forces of life are the ones which work with the least ado?

Objections are often made to the holding of elections on the ground that they interfere with business. But on the other hand, the influence of the nearness of elections upon a certain type of office holders, who, being seekers of another term, are for the time being enforcing the law to the limit, leads us to the conclusion that it might be advantageous to have elections every six months.

Books

TA some folks books is just some printed pages between two covers. They're nice things to give to somebody when you have to give 'em somethin' and don't know what, and they're also nice to have around to make folks think you're what you call intelligent.

There's some books what is as entertainin' as a funeral, and etc., like; fer inst., a report of the Undertakers' conference, or a Investigashun of Early Blight Fungus, *Cercospora apii* Fres, what was sent to me the other day. I got real excited when I got that book, but my english and what the book was rote in was differunt. So I couldn't make out what it meant.

But some books is otherwise. They is life itself, the deep and good in life, and even sometimes the shallow and bad. Books is often companions and they is good ones, fer they never argue with you and when you get tired o' them you kin lay them aside. You can't do that when you got friends visitin' you and it's past bedtime. Our Sammie did it once; he said, "I wish the company'd go home so I could go to bed." He just said what lots o' us think sometimes.

Books give you a inspirashun. You know, when I read some books, I get real ambishus. I just wanta take the world by the tail and make it go my way, but when I lay the book aside and wake up, I hear Sofie sayin', "You lazy lubber, why don't you do somethin'." Then my ambishun gets less ambishus 'cause I find I'm just old Hy and not a bold knight in the mornin'.

There's lots o' books what ain't printed what give you inspirashun. Fer inst., a bank book is a nice thing to have, but you got to have somethin' in it to make it interestin'. But there's some satisfacshun in havin' a bank book to put somethin' in when you get somethin' to put in it.

A pocketbook is a nice thing, too. Fer inst., a empty pocketbook in the pocket makes you feel richer than no pocketbook at all and nothin' else in the pocket. My pocketbook interests Sofie more'n anythin' else. It ain't packed full o' thrills or bills, either, but its the best she kin get along that line.

But, when I feel blue I take a look at a good book and lose myself; when I find myself again I'm feelin' better. The cheapest way to go away fer a change is to read a good book.

HY SYCKLE.

Orchard and Garden

SOME APPLE BUYING SUGGESTIONS.

HERE are some suggestions the horticulturist of the New York State Agricultural Experiment Station at Geneva gives to consumers on buying apples for winter use. We are glad he gives this advice, because he recommends good Michigan varieties.

"If you desire a fancy eating apple for use in November and December, ask for McIntosh," says this authority. "This is perhaps the finest dessert apple grown, being juicy, crisp, white-fleshed, and of pleasing aroma. Then, the Rhode Island Greening is about the best apple, both for eating and cooking during December, January and part of February, while the ever-popular Baldwin is in season from January to March. The Northern Spy, although often more expensive than other varieties, is usually in strong demand and

pages may be hung from the ceiling by their roots in moist sandy loam. Celery should be pulled and packed upright in boxes with their roots in moist sandy loam. Parsley plants may be potted in the fall and placed where they will receive partial sunlight. Slat crates make the best containers for strong onions because they allow free circulation of air. Apple or soap boxes make desirable containers for the root crops.

Keep the storage room clean and well ventilated, and handle the vegetables that are to be stored very carefully.

PROTECT TREES FROM MICE IS WARNING TO ORCHARDISTS.

OCTOBER is the month when the far-sighted orchardist makes preparations to guard against possible injury to his trees by hungry field mice



A Dual-purpose House—Apple Storage Below—Living-rooms Above.

is rated as perfect for eating or for cooking.

"Other varieties for winter use are Delicious, Jonathan, Yellow Newtown, and for extremely late in the season, Rome Beauty.

"Using the variety best suited for a given purpose, such as eating out of hand or for pie or other cooking purposes, is much more satisfactory than buying 'just apples.' Also, it is well worth while to keep in mind the season of the year, for varieties vary so widely in their season."

VEGETABLE STORAGE HINTS.

THE most important factors in the proper storage of vegetables are temperature, moisture, ventilation and the maturity of the crop.

Vegetables should be full mature, yet not over-ripe. Good ventilation should be supplied but different vegetables vary in their requirements of temperature and moisture. The majority of them require cool, moist conditions. All vegetables will keep better when planted so that they will mature just before it is time to store them.

Storage space may be provided in outdoor pits, separate cellars, or in the house cellar, but certain vegetables, such as cabbage and onions, are likely to cause a disagreeable odor in the house when stored in the cellar. However, this is the most convenient place and is usually used. Outdoor pits are not as convenient and accessible as the house cellar.

Root crops should be stored in boxes with a covering of moist sand to prevent wilting. Squash and pumpkins should be stored on shelves in a frost-proof, medium dry room. Onions keep best at a low temperature (thirty degrees F.), and a dry atmosphere, while the best temperature for squash is about forty-five degrees F. Cabbages

which gnaw the trunks and roots. Such injury is liable to occur at any time after November 1, although most of it usually is inflicted in mid-winter or very early in spring under cover of heavy snow and when the more favored food supply is running low.

That serious injury to orchard trees by mice occurs only at irregular intervals makes the menace the greater, for it usually catches the orchardist unprepared and wholly unaware of the damage being done until the melting snow in spring uncovers the girdled trunks, or the wilting trees in mid-summer betray the hidden work of the mice on the roots.

Preventive measures cost little in comparison with the protection afforded, and although frequently a girdled tree may be saved by timely bridge grafting, an ounce of prevention is worth a pound of cure. Many progressive fruit growers realize this truth and each fall and several times during the winter, examine their orchards carefully for mouse signs. If mice are present they prepare to destroy them or take steps to prevent their attacks upon trees.

Methods of preventing mouse injury vary according to the species of mouse and the cultural practices followed. In much of the eastern United States pine mice are present and their injury is usually inflicted below the surface of the ground. It is necessary to destroy such mice unless they are driven out by deep and clean cultivation of the whole orchard. Where meadow mice only are concerned, such methods as mechanical protectors and repellent washes are practicable, although the destruction of the mice is preferable.

General information relative to the methods of coping with field mice is contained in Farmers' Bulletin 1397, "Mouse Control in Field and Orchard."



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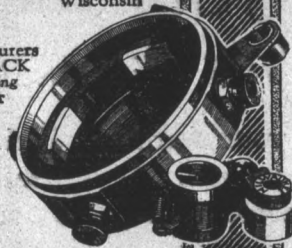
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Our patented "Galvannealed" process welds an extra heavy coating of zinc into and around the copper-bearing steel wire. The ordinary galvanized method used by others puts on only 1/4 or 1/2 as much zinc. Because "Galvannealed" Square Deal has 2 to 3 times more zinc than the galvanized kind, it lasts 2 to 3 times longer.

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A postal brings official Proof of Tests from Indiana State University, Burgess Laboratories and Hunt Laboratories. They show you that "Galvannealed" Square Deal must outlast all other farm fences. We'll also send Ropp's Calculator, figures interest, grain, and answers thousands of farm questions—and—the Square Deal Catalog. Write today, all three sent free to landowners.

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No Extra Price!



WOULD CURB LAW VIOLATIONS BY ALIENS.

THE government proposes to put a stop to persistent and widespread law-breaking by aliens. Chairman Johnson, of the house immigration committee, announces that deportation of aliens convicted of violating prohibition and narcotic laws will be proposed along with some other immigration legislation at the next session of congress.

LEADS IN CANNED GOODS.

IN announcing the week of November 8-15, as "Canned Foods Week," its promoters say that the United States now produces more canned foods than any other country, exports more, and yet consumes more in its homes. The great variety of foods used on the tables of American families is indicated by the fact that the canning industry in this country now produces 200 different kinds of canned stuff.

AMERICANS EAT MANY FOODS.

AN investigation of the cost of living of 12,000 workingmen's families, made by the United States Bureau of Labor Statistics, showed that 125 different varieties of food were being consumed in considerable quantities.

ONION GROWERS SATISFIED WITH GRADES.

SHIPPERS in the eastern onion districts are revising their opinions of the new United States grades for onions. They are finding them to be practicable. Their early opposition was based on misunderstanding of their requirements.

The new grades do not fix the minimum definitely at one and one-half inch, but merely places the minimum size at this point where no other minimum is stated.

RADIO SERVICE GROWS APACE.

FOUR years ago there were no radio broadcasting stations in the United States, said Secretary of Commerce Herbert Hoover, in addressing the Third National Radio Conference, which opened in Washington on October 7. Now there are 530 in operation, making radio available to every home in the country. The sales of radio apparatus have increased from a million dollars a year to a million dollars a day. It is estimated that over 200,000 men are now employed in the industry, and the radio audience probably exceeds 20,000,000 people.

AGRICULTURE SHOWS FURTHER IMPROVEMENT.

THE agricultural situation in general throughout the country is improving, notwithstanding the cattle depression in the range states. The general index of the purchasing power of farm products has moved up to ninety, the year 1913 being considered as 100. The last five months have witnessed the best sustained period of improvement since 1917, according to the department of agriculture economists, who give assurances that agriculture is working back to a reasonable balance urban industry.

PREDICTS COLD PERIOD AHEAD.

THE coming winter is to be a long and severe one with extreme cold, sudden extremes of temperature, and heavy snowfall in sections, according to Herbert J. Browne, ocean meteorologist, whose long-range forecasts for the past two years have been so nearly correct that he has acquired a favorable reputation for reliability in forecasting and as a weather scientist.

Following a hard winter will come a cold summer with lower temperatures than the past summer, with violent and sudden changes from extreme heat to extreme cold, from extreme drought to excessive rainfall.

In 1926-27 will come a summer similar to that of 1916, with frosts and ice in every month of the year, with little grain or other crops maturing north of the southern line of Pennsylvania.

In his researches Mr. Browne says

OUR SERVICE DEPARTMENT

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

FORECLOSURE LAW.

What is mortgage law? How long can I hold possession of farm? And how long do I have to redeem it?—E. W.

There is a period of one year after the sale by advertisement in foreclosing a mortgage.—Rood.

SURVIVORSHIP.

Husband and wife own land, having joint deed. It is worded—warranty deed, to tenants by the entireties. If husband dies first, can his relatives claim part of the land, or will the wife get all?—Mrs. M. D.

The wife will take all the land by survivorship.—Rood.

LIABLE FOR TRESPASS.

Has a neighbor the right to let his chickens run in his neighbor's crops? We have a nice field of alfalfa, and neighbor's chickens are in there the most of the time, making paths through it so it is bad to cut. If we ask that they take care of the chickens, they won't do it and get mad and won't speak to us. There are about thirty or forty hens and half-grown chickens.—Subscriber.

The owners of the chickens are liable in trespass on the case for the damage done.—Rood.

MAMMOTH CLOVER.

I am thinking of seeding where I have wheat, to late Mammoth clover in the spring for the purpose of trying to raise some clover seed. Would the Mammoth be liable to yield more seed than the Medium. Is it best to clip the Mammoth in June, the same as the Medium, or just save the first crop of the Mammoth for seed?—C. W. W.

Mammoth clover usually gives a little larger yield of seed than medium or June clover. There is usually very little difference in the price secured per bushel for Medium and Mammoth clover seed.

The first crop of Mammoth clover is harvested for seed. However, it is advisable, in early June, to clip or pasture the field in order that the amount of vegetative growth may be held in check. This practice usually increases seed production.

Mammoth clover is approximately two weeks later than June clover, so that the clipping made in early June will not be large enough for hay. If the season is somewhat backward and the growth produced is short, would not recommend clipping or pasturing.—C. R. Megee, Associate Professor of Farm Crops.

A JOINT DEED.

My mother's property consists mainly in bonds and real estate mortgages. In the event of her death, to whom would this go—to her children or her

he has found trustworthy records of similar extremely cold periods, known as the thimble winters, meaning winters without summers in the northern hemisphere, extending back at various times to several centuries before the Christian era.

WILL INVESTIGATE PROFITS OF GRAIN DEALERS.

AN investigation into margins and profits of terminal grain dealers is now being conducted by the federal trade commission at the request of the Illinois Agricultural Association. It will cover the last four wheat crops. The request was made in consideration of the desire of farmers to have up-to-date information regarding margins and profits of middlemen in terminal markets, as a means of reaching some definite idea of what savings may be expected from farmers' cooperative grain marketing organizations.

husband (she owned the property before she was married). Please explain a joint deed.—Mrs. M. P.

The proceeds of the mother's personal estate after payment of debts, would be divided one-third to her husband and the rest to her children. There is no such thing as a joint deed. There may be deeds executed by a number of persons as grantors, or to a number of persons as grantees; and they may take as tenants in succession in common, as joint tenants, or if husband and wife, as tenants by entirety. Joint tenants and tenants by entirety surviving take the whole estate by survivorship upon the death of the other tenants.—Rood.

SWEET CLOVER CUT FOR SEED.

Will sweet clover make hay the next year after it is cut for seed? There has also been a crop of hay taken off the field.—A. L. D.

Sweet clover is a biennial or two-year crop. The first season very little vegetative growth is produced unless conditions are very favorable. The second season, usually two crops are produced, the first frequently being used for hay and the second for seed production. However, the first may be used for pasture, or the crop may be pastured the entire season.

When the second crop is harvested for seed, all of the plants which produced seed will die immediately. If considerable of the seed scatters, a reseeding might occur which, under very favorable conditions is likely to produce a crop of hay the next season. The old plants, however, would produce no hay. Sweet clover differs from alfalfa in that old alfalfa plants oftentimes live a number of years.—C. R. Megee.

A CREDITOR'S LIEN.

If a person rooming at a certain place skips out, leaving clothes, can a person take the clothes for pay? Do they have to advertise it, or what must they do to hold the clothes for pay?—W. M.

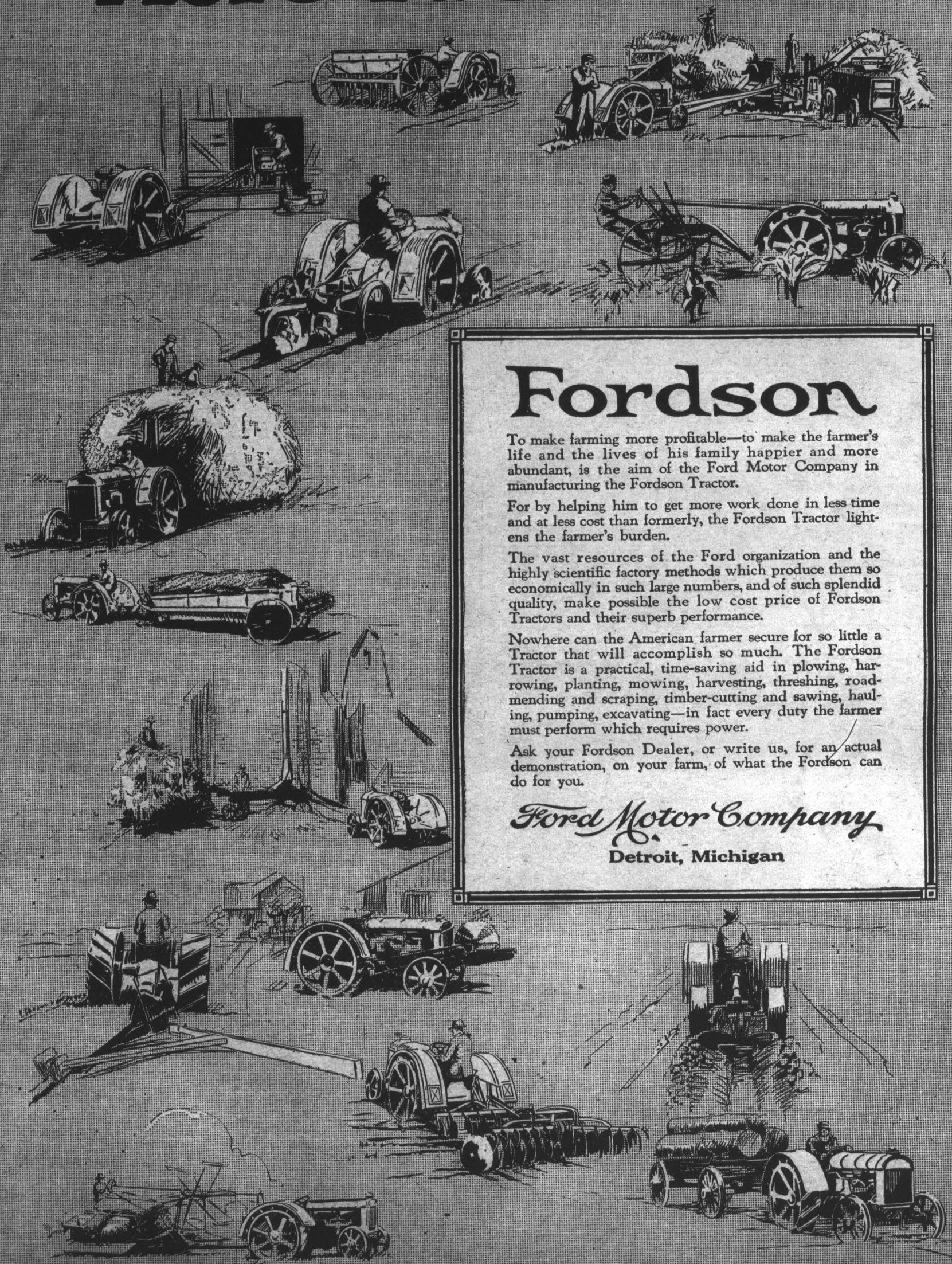
The creditor has a lien on the clothes, but can sell them only by pursuing statutory requirements.—Rood.

CARE OF STALLIONS.

My neighbor has four two-year-old stallions running in his pasture joining my farm. I am going to turn my horses out in my pasture. Can I make him take care of his horses?—J. R.

The owner of the stallions allows them to run in the pasture at his peril. He is liable for any damage they do by breaking through a lawful fence, but there is no means of compelling him to shut them up, so far as we are aware.—Rood.

To Make Farming More Profitable



Fordson

To make farming more profitable—to make the farmer's life and the lives of his family happier and more abundant, is the aim of the Ford Motor Company in manufacturing the Fordson Tractor.

For by helping him to get more work done in less time and at less cost than formerly, the Fordson Tractor lightens the farmer's burden.

The vast resources of the Ford organization and the highly scientific factory methods which produce them so economically in such large numbers, and of such splendid quality, make possible the low cost price of Fordson Tractors and their superb performance.

Nowhere can the American farmer secure for so little a Tractor that will accomplish so much. The Fordson Tractor is a practical, time-saving aid in plowing, harrowing, planting, mowing, harvesting, threshing, road-mending and scraping, timber-cutting and sawing, hauling, pumping, excavating—in fact every duty the farmer must perform which requires power.

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This is made possible through this co-operative type of financial institution.

Thousands of our shareholders are enjoying this advantage which may also be yours.

For 35 years we have been investing our patrons' money in gilt edged mortgages on the homes of thrifty people, repayable in monthly installments.

These mortgages are not permitted to exceed 50% of the appraised value when made, and as the principal is reduced monthly they are the best possible security.

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Your savings may be withdrawn at any time, and your money invested with us is not only as safe, but as liquid in case of emergency, as if deposited with any bank or trust company.

For 35 years we have paid all withdrawals promptly on demand.

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Thousands of farmers have pulled out of the rut and are saving time and money with the engine designed and built for farm work—The Edwards Farm Engine. I want to tell you how it is different from any other engine—how this one engine will fill your silo or run your washing machine; or do practically every power job on your farm—how it is changed from a 1½ H. P. engine all the way up to a 6 H. P. engine—how it saves fuel, how it starts without cranking, how it is never fastened down, does not vibrate, is light enough to be moved by two men, yet is rugged and durable—how it has made good in the hands of farmers for eight years.

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You risk nothing. Just send me your name and address, and without cost or obligation I will send you all of the facts about this remarkable engine and my free trial offer. Write today.

The Edwards Motor Company. 619 Main Street Springfield, Ohio

Keeping Up with the Corn Borer

THE following control methods should be religiously observed by all farmers in districts where the European corn borer is at work. It has been found quite generally in the townships from Port Huron to the Ohio line.

1. Cut corn close to the ground and as early as possible.
2. Cut and remove sweet-corn fodder from the fields as soon as the ears are harvested. Feed direct to live stock, place in silo, or destroy by burning.
3. Cut and remove field-corn fodder as soon as the ears are mature. Feed the stalks to live stock as soon as possible and destroy the uneaten parts before May 1, following. Shred or cut the fodder to increase its consumption.
4. Burn or otherwise destroy before May 1, of each year, all existing cornstalks, corncocks, corn-stubble and other crop remnants. These contain borers from the previous year.
5. All crop remnants from vegetable and flower gardens should also be destroyed, by burning or otherwise, as well as all weeds and large-stemmed grasses.
6. In all infested areas keep cultivated fields, fence rows, field borders, roadsides, etc., free from these weeds and large-stemmed grasses by mowing or treating with a weed killer before they go to seed, or by burning either in the late fall, winter or very early spring.
7. Plow under thoroughly in the late autumn, to a depth of at least six inches, all infested cornstalks, corn stubble or other waste material which it is impracticable to destroy by methods previously mentioned.
8. Early planted corn is most likely to become infested, whereas, somewhat later planting usually results in less injury. On the other hand, very late plantings of sweet corn in two brooded areas are usually badly infested.
9. A small area of early planted sweet corn acts as a trap crop when situated adjacent to fields intended for growing field corn or late sweet corn. When such trap crops become infested they should be fed or otherwise destroyed as soon as the ears are harvested, or preferably just before that period. CAUTION: Such trap crop plantings not destroyed at the proper time constitute a menace to later corn or other susceptible crops in the vicinity.
10. Native parasites or other natural enemies destroy only a small per cent of the borers each year. They cannot, therefore, be relied upon to hold the pest in check. Foreign parasites have been introduced, but several years will probably elapse before obtaining noticeable results.
11. It, therefore, becomes necessary for the individual to combat the borer by artificial and cultural methods as detailed above. Community effort is essential to success in this undertaking.
12. Your cooperation with the existing quarantines against the European Corn Borer is earnestly solicited. Bulletins giving a full treatise on the Corn Borer can be obtained from the United States Department of Agriculture, Washington, D. C.

DOES IT PAY TO PLANT EARLY POTATOES?

(Continued from page 297).

quite as heavy as did his best early stock.

On the farm of George Schmidt, who lives east of Plymouth, Irish Cobblers poured out at the rate of 230 bushels per acre. His potatoes were planted on heavier land than some other fields in that section and, as a result, did not suffer from lack of moisture during a drouth which visited the district during July and early August.

This drought in the immediate vicinity of the farm of L. Clemens was unusually severe, and his potatoes being on light sandy soil, did not get to the hundred-bushel mark; although on a former inspection of the field in July there was an excellent stand.

The record yield of early potatoes for the season is reported from the farm of Arnold Haener who conducts his operations near the village of New Boston. In July his stand was most promising and evidently continued so, for the astounding yield is given at above the 400-bushel mark.

Last week we saw the digger at work turning out a 200-bushel crop on the farm of I. R. Waterbury, in Oakland county. His nineteen-acre field gave a return of 3,420 bushels of No. 1 stock. These were Petoskeys, grown upon an alfalfa sod. His late crop of thirteen acres, upon soil where a good growth of sweet clover was turned under in May, is one of the healthiest

and most uniform potato crops we have seen.

These experiences strongly suggest that success can be made of the early potato growing in southern Michigan. To justify this statement, be it said that these men have indicated that they are going to continue. They contend that even if profits are no more, the early planting of, at least, a portion of the crop enables them to take advantage of the better distribution of labor—it not being necessary to crowd the work of harvesting into so short a period.

Freemont merchants are planning to cooperate in a display of home-grown fruit some time this fall.

Isabella County Farm Bureau opened their new cooperative elevator at Mt. Pleasant recently.

Canadian officials estimate that tourists brought over \$100,000,000 of business to the Dominion this last season.

Sheriff Smith, of Kent county, has issued instructions to his deputies to arrest all motorists stealing fruit from trees in the county, regardless of the quantity taken.

A potato growers' association has been organized at Hersey with William Thompson chosen as president, Bert Boyd, vice-president, and George McCoy, secretary-treasurer. The association has already purchased a potato warehouse.

NEWS AND SUGGESTIONS.

Charles Goodenow, of Ottawa county, sells his eighty-thousand-bushel wheat crop for \$9,100.

Wheat growers foresee an increased trade in flour with Africa since natives are rapidly adapting yeast bread made of wheat flour as a regular item of their diet.

Many melon fields became unprofitable this year due to blight, which, in many cases, destroyed fifty per cent of the crop.

The reciprocal trade agreements between Canada and Australia, recently concluded at Ottawa, will have a direct influence in restricting dried fruit exportations of the United States.

Senator Woodbridge M. Ferris, in speaking at a banquet of Michigan bankers at Grand Rapids, stated that "accounting will do more to help the farmers than congress can ever do."

At Freesoil, fields of Golden Glow corn on the farms of Voight Hauptstater, Mrs. Max Renish and H. L. Darr, have been passed on by the field inspectors of the Michigan Crop Improvement Association.

The United States Department of Agriculture is developing one of the world's largest cattle experimental farms at Fort Keogh, military reservation, in Montana.

Twenty-five wheat growers in northern and western states, who captured prizes on their samples at the 1923 International Grain and Hay Show, without exception used fertilizers.

It is possible that low prices, due to over-production of butter, may result in heavier consumption and thereby remedy, in part, at least, the situation now confronting dairymen.

A quarantine has been placed on all cattle, and against the importation of cattle into Kent county, except such as has been found free from tuberculosis through the application of the tuberculin test. The quarantine also excepts steers which can be properly isolated or cattle for immediate slaughter.

WILL TRAIN HELPERS.

A LARGE Minnesota creamery association has reached the conclusion that "the most urgent need in the cooperative movement is trained men and women. A cooperative undertaking can no more be managed by good intentions than any other business enterprise." Acting in harmony with this belief, the educational committee of this association is arranging for classes at its two plants for the study of cooperation and economics. It is hoped that a permanent school of cooperation may be established.

MAINE POTATO GROWERS GET INSTRUCTIONS.

INSTRUCTIONS regarding the warehousing of potatoes, issued by the Maine Exchange, require that table stock and seed stock be handled separately. Each member will be allowed to deliver his monthly quota of table stock for shipment, this quota to be based on the total quantity he has to sell. No potatoes, listed as certified or common seed, are to be shipped out as table stock except under orders to the warehouse department from the seed department. Potatoes stored in warehouses are to be stored in separate bins for each grower. Deliveries are to be recorded in pounds rather than in barrels, as was formerly done. All sales are to be made by weight and quotations are based on pounds.

Over Fifty Reasons for MORE DAYS WEAR In "Ball-Band" Rubber Footwear



Short Boot

Extra strength where strength is needed to withstand the strains of work and wear.

There are 61 operations in the making of a single "Ball-Band" boot.

Nineteen of these are simply preparing the rubber and cloth.

These 19 operations take place for all "Ball-Band" Rubber Footwear and when they are completed the workmen have before them rubber sheets of various thicknesses and rolls of cloth thoroughly impregnated with rubber.

From these they cut the pattern pieces which will be built up into Boots, Arctics, and other Rubber Footwear of all kinds.

Starting with the raw rubber just as it came from the East Indies—first it has to be washed until it is perfectly clean. Then it is dried—thoroughly dried—in a kiln so that not a trace of moisture remains.

The sulphur and all the other raw materials and even the cloth—are dried before the work on the rubber begins.

Before the grinding process, the raw rubber is in sheets and has a honey-comb or crepe appearance.

After being washed and dried it is

run through rollers again and again until it is a solid mass of gum, all the air spaces and crinkly surfaces being kneaded out of it.

It is then cut into loaves carefully weighed.

The sulphur and other compounding materials are also weighed into portions just right for each loaf or lump of raw rubber.

Then the rubber is kneaded again between rollers while the compound is added and thoroughly mixed.

After this it is run through hot rollers until the whole mass is properly warmed and softened.

It is then rolled out into sheets—some of it into sheets of rubber for the outside of Boots, All-Rubber Arctics, etc. Some of it is rolled through with sheets of cloth and the rubber pressed right into the fabric to make linings and reinforcements.

Now the materials are ready to be cut up into the various pieces for the different styles and sizes of "Ball-Band" Rubber Footwear.

4-Buckle All-Rubber Excluder Arctic



Mishko Sole Letho Shoe

The Letho Shoe has a "Ball-Band" sole made of special compound. This Mishko Sole is not only waterproof but wearers find it is stronger than leather and tougher than rubber. The upper is of full-grain leather, soft, pliable and durable.

This shoe is highly recommended by wearers as the most economical work shoe made. It is giving unusual satisfaction to men and boys who are "hard on shoes."

And, best of all, it is comfortable. Workers who are on their feet all day say they never think of their shoes when they are wearing this "Ball-Band" work shoe.

After This the Real Work of Bootmaking Begins

In a single "Ball-Band" "Vac" Boot there are 36 parts and 42 operations following the 19 already described. In a 4-buckle Cloth Arctic there are 50 parts and 30 additional operations. In a 4-buckle Rubber Arctic there are 60 parts and 33 additional operations.

Over Fifty Reasons for More Days Wear

Just a little better in every one of 50 operations means a whole lot better in the completed boot or rubber.

Over Ten Million people buy and wear "Ball-Band" Rubber and Woolen Footwear because they know what results have told them. They know the wear; they know the comfort and they know the economy.

And the reasons—over 50 of them—are all because:

We make nothing but footwear and we know how

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Look for the Red Ball. It is on every pair of "Ball-Band" Rubber and Woolen Footwear. If your dealer does not handle "Ball-Band" write for dealer's name and the free booklet, "More Days Wear." It shows many kinds of Boots, Arctics; Light Rubbers, Work Shoes, Sport Shoes, Wool Boots and Socks—something for every member of the family.

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

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

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

The double gears run in oil in a tightly enclosed gear case. They are always flooded with oil and are protected from dust and sleet. The Auto-oiled Aermotor is so thoroughly oiled that it runs in the slightest breeze. It gives more service for the money invested than any other piece of machinery on the farm.

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

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

AERMOTOR CO. Chicago Kansas City Dallas Minneapolis Des Moines Oakland

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BIG 'C' LINE



The White Top Band and the Big 'C' on the white tire sole protect you against imitations.

'Ruff Shod'

Comfortable because it fits. Satisfactory because it wears. Wears and fits better because made on our "Foot-shape" last.

No shucking up and down at the heel with 'Ruff Shod.' No break at instep. The heavy white tire sole with wide extension prevents snagged or chafed uppers. Money spent for 'Ruff Shod' boots is real economy. Insist on seeing the White Top Band and the Big 'C' on the tough white tire sole.

Ask your dealer

He is glad to show you footwear with the White Top Band and the Big 'C' on the White Tire Sole. Try on a pair. Judge for yourself the fit—the comfort. Or write for circular and give dealer's name.

'Watershed' Waterproof Cloth Overshoe

The only cloth overshoe with a sheet of pure gum rubber between wool inner lining and fabric outer layer. Always warm and dry. Heavy extension sole. Accept no substitute!



'Caboose' World's Best Work Rubber

Don't go through the winter without 'Caboose' work rubbers. For heavy duty there are none better. Slip on easily and fit perfectly. Four-ply laminated upper and extra thick white tire sole. Built to stand hard knocks. Demand 'Caboose'.

Big 'C' footwear saves you money because it wears longer!



'Nebraska' All Rubber Overshoe

Gives maximum wear and comfort. Wool lined and warm. Gusset reinforced against chafing of buckles. Notice the 'Stubgard' toe and heavy extension sole. Ask for 'Nebraska'.

CONVERSE RUBBER SHOE CO.
Boston Chicago New York Philadelphia Syracuse

Factory—MALDEN, MASS.

STATEMENT OF THE OWNERSHIP, MANAGEMENT, CIRCULATION, ETC., REQUIRED BY THE ACT OF CONGRESS OF AUGUST 24, 1912, OF THE MICHIGAN FARMER, published weekly at Detroit, Michigan, for October 1, 1924.

State of Michigan, ss.
County of Wayne.

Before me, a Notary Public, in and for the State and County aforesaid, personally appeared I. R. Waterbury, who, having been duly sworn according to law, deposes and says that he is the Manager of THE MICHIGAN FARMER, and that the following is, to the best of his knowledge and belief, a true statement of the ownership, management (and if a daily paper, the circulation), etc., of the aforesaid publication for the date shown in the above caption, required by the Act of August 24, 1912, embodied in section 443, Postal Laws and Regulations, printed on the reverse of this form, to wit:

1. That the names and addresses of the publisher, editor, managing editor, and business managers are: Publisher, The Lawrence Publishing Company, Detroit, Michigan.

Editor, Burt Wermuth, Detroit, Michigan. Managing Editor, I. R. Waterbury, Detroit, Mich. Business Manager, I. R. Waterbury, Detroit, Mich.

2. That the owners are: (Give names and addresses of individual owners, or, if a corporation, give its name and the names and addresses of the stockholders owning or holding one per cent or more of the total amount of stock.)

The Lawrence Publishing Company, Cleveland, Ohio
Arthur Capper, Topeka, Kansas
Citizens' Savings & Trust Co., Trustee, for Mary and Mortimer Lawrence, Cleveland, Ohio
Mrs. C. B. Rogers, Cleveland, Ohio
Lillian Cotton, Cleveland, Ohio
Kate E. Munsell, Detroit, Mich.
F. H. Nance, Lakewood, Ohio
Neff Laing, Philadelphia, Pa.
I. R. Waterbury, Detroit, Mich.

3. That the known bondholders, mortgagees, and other security holders owning or holding one per cent or more of total amount of bonds, mortgages, or other securities are: (If there are none, so state).

American Life Insurance Co., Detroit, Mich.

4. That the two paragraphs next above, giving the names of the owners, stockholders, and security holders, if any, contain not only the list of stockholders and security holders as they appear upon the books of the company but also, in cases where the stockholder or security holder appears upon the books of the company as trustee or in any other fiduciary relation, the name of the person or corporation for whom such trustee is acting, is given; also that the said two paragraphs contain statements embracing affiant's full knowledge and belief as to the circumstances and conditions under which stockholders and security holders who do not appear upon the books of the company as trustees, hold stock and securities in a capacity other than that of a bona fide owner; and this affiant has no reason to believe that any other person, association, or corporation has any interest direct or indirect in the said stock, bonds, or other securities than as so stated by him.

5. That the average number of copies of each issue of this publication sold or distributed, through the mails or otherwise, to paid subscribers during the six months preceding the date shown above is (This information is required from daily publications only).

I. R. Waterbury, Business Manager.

Sworn to and subscribed before me this Twentieth Day of September, 1924.

Louis Koch, Notary Public.
(My commission expires November 20, 1927).

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

1924 → 1928
Benefits FOR 4 YRS.

IF YOU LIME YOUR LAND WITH

Guaranteed 95% Carbonates

THE SOLVAY PROCESS CO.
DETROIT, MICHIGAN

SOLVAY PULVERIZED LIMESTONE

Better crops the first year—and better crops for three to four years more—follow the spreading of

SOLVAY. Why bother with other forms of lime when their benefits are dissipated in a single season? Use SOLVAY—at much less cost—and get better crops and greater yields year after year. The truth about limestone is told in our booklet, sent FREE on request. Please write for it. Address

THIS IS THE GETTING-READY SEASON.

OLD fence posts may rot away and allow live stock to push down a fence and get into a field where one night's trampling will cost more than an entire set of new posts. The draughty hog house might be the cause of the death of a valuable animal for the lack of proper insulation.

The binder left standing in the field without protection lasts but a few years, while an implement shed which would preserve the binder indefinitely might be built at a cost less than the cost of the machine itself.



The United States Department of Agriculture estimates that millions of dollars worth of farm equipment alone goes to ruin every year through lack of proper protection against the elements. It is a loss which should be guarded against.

A small hole in the roof soon becomes a big hole if allowed to remain a hole at all. The roof with the small leak may soon cease to act as a roof at all and the interior of the building it should protect may be quickly ruined. Every day the repair job is put off adds a little more to the cost of doing it eventually. The delayed small leaks are those which cost the most. A new roof, or a necessary patch, is much like a coat of paint, it should be put on and not put off.

PREPARING TO CLEAR MORE ACRES.

MENOMINEE county farmers have placed orders for 32,000 pounds of pyrotol, the new war-salvaged explosive, to be delivered at Daggett this fall. It will be used for stump and rock blasting. Pyrotol runs 300 sticks to the hundred pounds. Because of the additional cost of cart-riding, the explosive is costing farmers here a slight advance on sales made last year.

INSECTS TROUBLESOME.

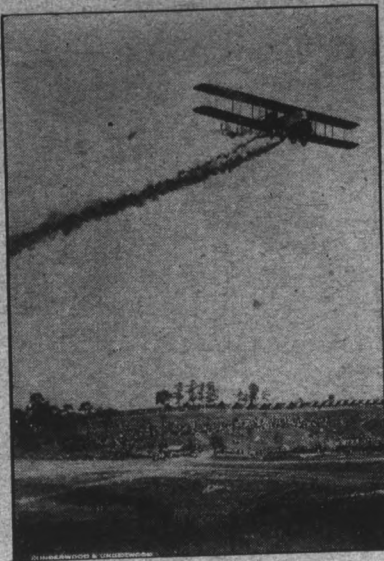
AMONG the outstanding attributes of the past spring and the summer that is now drawing rapidly to a close have been the appearance throughout Genesee county of an unusual number of voraciously inclined insect enemies of the garden, grain field and orchard. Through the late spring and early summer farmers and gardeners complained of the ravages of the cutworm. Farmers report, too, that not in years have crickets or grasshoppers been so numerous and destructive. In many unsprayed orchards limbs of fruit trees have been denuded by ravenous leaf worms; and many farmers say that they will not sow their wheat until late, as evidence points to a revival in the activities of the Hessian fly.—G. E.

FARMERS WANT ECONOMY.

THOSE who have been investigating the agricultural and political situation out in the open country in the various states report that they found little party interest; that the farmers generally are more deeply concerned about government economy and lower taxes than in any other issue. And it is evident that they are planning to vote for candidates who have shown their ability and determination to reduce government expenses and eliminate public extravagance and waste.

The Michigan Tariff League is in Washington to defend the more favorable rates established in connection with the Michigan tariff zone rate case, which hearing comes before the Interstate Commerce Commission.

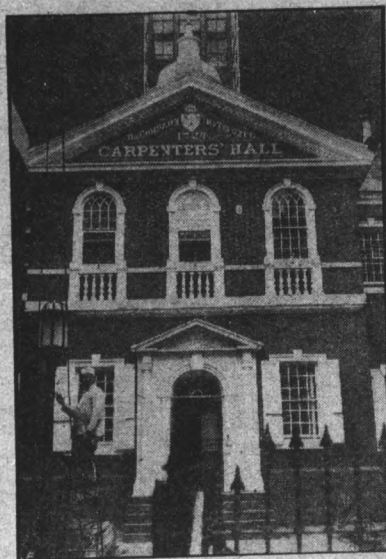
WORLD EVENTS IN PICTURES



One of U. S. Army's newest airplanes, in practice, discharges a smoke screen over infantry.



An estimated 25,000 people, among them the Prince of Wales, witnessed American Polo team triumph over England in the second and deciding game of the International series.



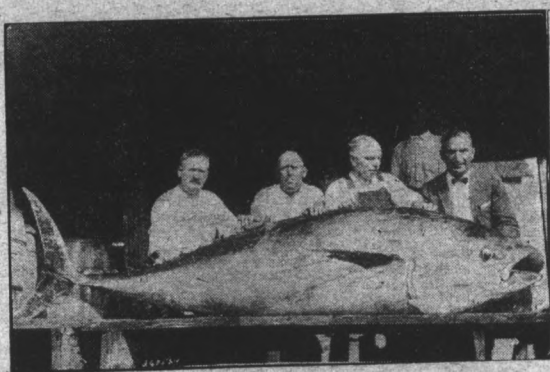
Pres. Coolidge speaks in Carpenter Hall on 150th anniversary of 1st Continental Congress.



The Muscle Shoals power project nears completion as the Wilson dam begins to function. There is a deafening roar and splash as this spillway section discharges through Coffey No. 2.



One of the largest families in the United States. Mr. and Mrs. Gus Dettbarn, of Schenectady, New York, surrounded by their sixteen grandchildren.



This 655-pound tuna fish, captured off Beach Haven, N. J., measured exactly ten feet long and six feet five inches in girth.



Captain Donald Baxter McMillan, famous Arctic explorer, spent 14 months in the Far North.



Retired Indian Commissioner Maj. Gen. Hugh Scott, of U. S. A., talks to Blackfoot Indian in sign language at Montana reservation.



East and West and North and South, the heroes of the barred field are turning out to practice and hope for a chance to earn their college letters on the Varsity Eleven.



Miss Ruth Malcomson, of Philadelphia, winner of the Atlantic City beauty contest, posed for her portrait to Nicola Michailow, court artist to the Czar of Bulgaria.

OLD Man King's bucksaw went up and down with the steady, rhythmic stroke that gnawed through many cords of four-foot wood during twenty years. Up and down, purring into the hard, green sticks, the saw went on oblivious of knots and cross grains. So Merton King, master of the saw, had gone through that part of his life which lay on this side his great disaster.

The old man's blue gingham shirt clung damply to his thick, bent shoulders in the warmth of a late spring day. Sweat ran down the furrows of his cheeks and into his white beard as he labored steadily on, the only figure of industry to be seen from the little public square of Greensboro, on the worn grass of which lay the four most important members of the Lake Gang.

Sprawled out behind a whittled bench, the four men were as much alone by reason of the reputé in which they were held, as though they had been miles back in the peaks of the Adirondacks. A silence fell on the group, and the four—all young and with the stamp of the out of doors on their faces—gazed at the rising and falling shoulders and the inscrutable face of Old Man King.

Bill Smith, leader of the gang by right of his brain and an arm with thickness and fiber matched by no man in that county, gazed with the others and at the same time took little glances at the faces of his companions. More particularly he watched the face of Black Pete Payshaw, the French-Canadian, whose lips still curled in the sneer that had gone with his last words. Joe Burk and Jack Carey, hard and lean six-footers, wore scowls of indecision on their weathered faces. Black Pete raised his barrel-like body from the grass and pointed a stubby finger at Bill.

"I told you Old Man King's got that money," he said with low-voiced vehemence. "Ten, twenty year he's got him hid somewhere. Gold, maybe. Them counterfeiters save up reg'lar good money for spend. Then, bimeby, what happen? They all go to jail. Two die there. But Old Man King come out right off quick. He have money! What for you s'pose he saw wood twenty years? For make folks think he's poor, that's why. He know where that counterfeiter gold is hid right now, you bet. Give me chance at him for one-half hour—I make him tell!"

As Black Pete finished there were grunts of approval from Burke and Carey. Already they had said they were in favor of extracting old King's secret by what means might be necessary. Bill Smith knew that the strength of his leadership was being sorely tried, even as his patience had been ever since Black Pete dug up that old story about the counterfeiters' hoard. His first impulse was defiance, but, as before, he checked it and made again the arguments that he had grown weary of hearing himself repeat.

"They ain't nothing to it, Pete, and the rest of you fellers ought to know it," he said, swinging his steady gaze

The Kettle of Rusty Gold

By William Merriam Rouse

from face to face. "Did you ever know of any man that would saw and split wood for twenty year when he had a fortune hid away somewhere? Not much, you didn't! I heard that old story that Pete's got hold of when I first come to York State. Every once in a while somebody thinks it's new, but it ain't. Ever since he come back from jail folks has been talking about how old Mert King had a lot of money hid somewheres. Even if it was true I wouldn't have nothing to do with taking it away from him. Running booze down the lake from Canada is one thing and robbery is another!"

That was a long speech for Bill

Black Pete had made a mistake. Burke and Carey, slowly and half-heartedly gathering themselves, were not playing up to his lead, and he turned his gaze full upon them. Bill Smith's arm flashed out and in a fraction of a second Payshaw, instead of being crouched and ready to launch his full weight and strength, was sprawled on his stomach with face ground suffocatingly into the sward and the great knee of Bill on his neck.

Smith, kneeling but with arms free and swinging, tried in vain to meet the eyes of the others. They shuffled uneasily. From the other side of the square a boy yelled: "Hey, fellers! The gang's a-fighting 'mongst them-

would be the first man between Lake Champlain and the farthestmost backwoods who had been able to do it. It was the weight of Old Man King's danger that lay heavily in Bill's thoughts.

He passed, musing, through the village and came to what was called the back road, leading down near his shack on the lake shore and on past Ledge Hill, where Merton King and his daughter, Eve, lived in a weather-beaten old house that looked out over many blue miles of water. It was no well-traveled road, and so, when a stone clicked beyond a sharp bend, Bill moved to one side and half into a clump of bushes, ready to disappear or come forth as the passenger ahead might be friend or enemy. Every man about Greensboro owned shotgun or rifle, and of late some had got out their weapons with mutterings against the Lake Gang and lawlessness that could be traced to no other source.

Bill waited. There was a glimmer of dull red through the leaves of a budding maple, and then a young woman, walking easily from the hips, her head thrown back in the spring sunshine, swung into view. Tanned almost to swarthinness, her face was shadowed by heavy masses of black hair and by a look portending unpleasant thoughts that made it seem dead and listless even in the sunlight. Her eyes fell on Bill. Lights struck through their brown depths, and suddenly she was beautiful. He stepped out of the bushes.

"Bill." In one word the girl spoke love, weariness, anxiety, intense longing. Her head went down against the shoulder of the big mountaineer, while his arms clasped her gingerly, as though they held some rare and fragile thing that might be crushed by too strong tenderness. For many seconds neither moved nor spoke. Then Smith held the girl at arm's length and looked at her worshipfully as his eyes traveled from the little dusty shoes, over the red dress, and rested on her face, flashing now with smiles and dimples. He, too, smiled until his face softened and lighted and was almost that of a boy.

"If your pa ketched us now, they wouldn't nothing make him believe we didn't meet up on purpose!" he laughed.

In an instant the brightness was swept out of the girl's face. She looked into his eyes so searchingly that his hands dropped from her shoulders and he took a step backward.

"Bill, I'm worried," she said.

"Now, Eve, don't you be worried at all!" he expostulated. "Some old woman's been talking to you again and saying I was born to be hung, and all that kind of truck!"

"It ain't so much that this time," answered Eve King slowly and still with the look of questioning. "They's something wrong with pa, and sometimes it seems like the whole thing—that Lake Gang and pa and what they say about you—was all connected up together."

(To be continued).

DAD AND I

By LeRoy W. Snell

When Mother's ill and I get up
In time to eat with Dad,
We have the bestest kinds of meals
Our family ever had.

Dad fusses up some toast and then
He hunts the pantry through
And finds the jam and cake and pie
And maybe cookies, too.

He just sets out all he can find
And right there me and him

Draw up and eat and eat and eat
'Till no more will go in.

Then he says, "Son, be good today."
And I say "Yup," like that.
And run and get his umb'rell
And overcoat and hat.

Oh, I like morning breakfasts when
The family all are there,
But with the ones that Dad gets up
They really can't compare.

Smith, and by the very fact that he used many words Burke and Carey were silenced, if, indeed, either would have dared to voice a protest unled. Not so Black Pete Payshaw. Rebellion smoldered in his half shut eyes as he squatted on his haunches, long arms hanging free, and regarded his chief with the deliberation of a ready but cautious snake.

"Ah, verree fine!" he exclaimed. "We wait, and maybe somebody come along and marry Eve King and get all Old Man King's money easy!"

Bill leaped to his feet. Then he remembered that the little square was in the heart of the village, with stores on two sides and homes of all the most respectable citizens on the other two. With a great effort he held himself in control.

"You leave her out of this!" he growled, thrusting out his chin at Pete. "We ain't talking about women!"

Bill saw Payshaw glance at the other men. Plainly they were vacillating. Suddenly the situation was clear to the leader. Pete had planned a quick, concerted attack here in the public square with the object of humiliating him before all the mid-afternoon loafers of Greensboro. The feared and unconquered chief of the Lake Gang was to be made a laughing-stock so that Pete Payshaw could take his place and try to uncover Old Man King's hoard!

selves." It was time to pass the affair off as a joke to the village.

"You fellers ain't going to do anything, I guess," said Bill. "You jest had your chance, and you didn't take it. I don't want to hear no more about this fool kettel of gold!"

He took his knee from the neck of the French-Canadian and leaped back to his feet, ready for possible attack. But Black Pete knew, apparently, that there was a time to fight and a time to wait. He got up stiffly, clawing grass and dirt from his face, and forced the caricature of a smile. The store porches, expectant a moment before, settled back to normal, and Bill noticed that Old Man King, who had held his saw poised over a stick of oak, dropped the blade and let it bite in.

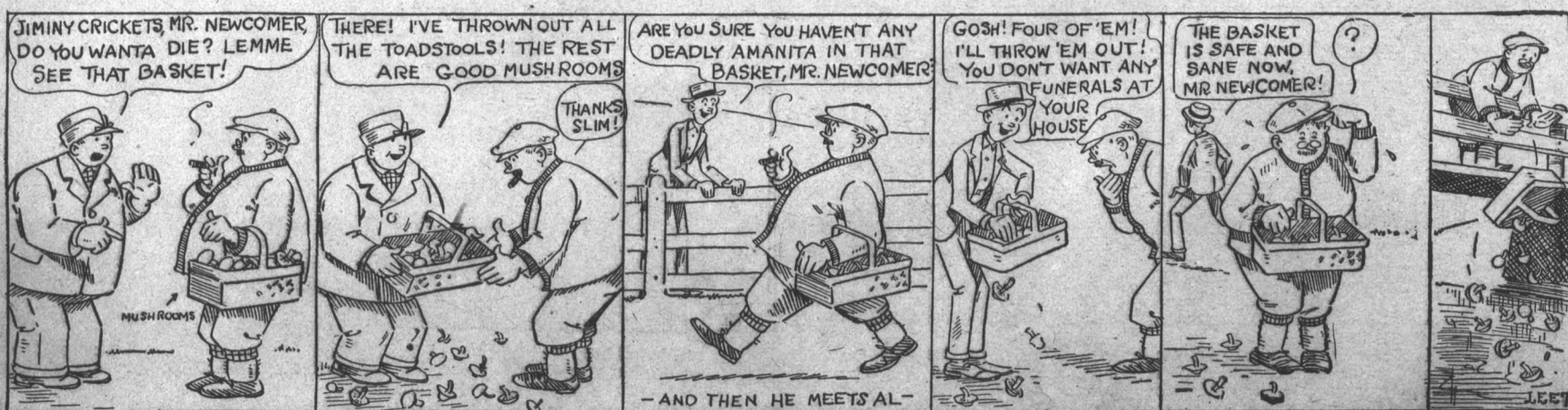
"You are verree strong mans, Bill Smith," said Pete; "verree strong when the other man look the wrong way!"

"You got a chance to fight right now!"

But Black Pete did no more than grin. Bill waited a moment, and then, turning sharply, walked away. He knew well that it had been no fair test of fighting strength and that, sooner or later, he would have to come to grips with the Frenchman in a manner and time of that wily fellow's own choosing. But the fight was not to be dreaded. If Pete thrashed Bill he

AL ACRES—Mr. Newcomer Decides to Stick to Beefsteak and Onions

By Frank R. Lect





"Beautify Your Home with Gold-Seal Congoleum Rugs," an interesting booklet showing all the beautiful patterns in their actual rich colors, will be sent to you free on request.

On the floor is shown Gold-Seal Congoleum Rug No. 516. The 6 x 9-foot size costs only \$9.00.

Six new and beautiful Congoleum Rug designs—

Gold-Seal Congoleum Rugs have always been renowned for the beauty and richness of their designs. And now—six new patterns, expressing the latest trend in floor-covering artistry, are ready for your inspection.

Especially interesting are the two new Chippendale designs, shown first and fourth at the right, which reflect the latest vogue in the most expensive floor-coverings. The small all-over floral motifs, illustrated third and sixth, come in soft tones that make them admirably suited for quiet, inviting guest rooms. A fascinating antique Oriental rug now exhibited in the British Museum inspired the second and fifth designs.

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Don't fail to see these new designs at your dealer's. He has in addition other beautiful Congoleum Art-Rug patterns for you to see in a variety of color combinations that are in perfect taste for any room.

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7½ x 9 ft.	11.25		3 x 3 ft.	1.40
9 x 9 ft.	13.50		3 x 4½ ft.	1.95
9 x 10½ ft.	15.75		3 x 6 ft.	2.50
9 x 12 ft.	18.00			

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

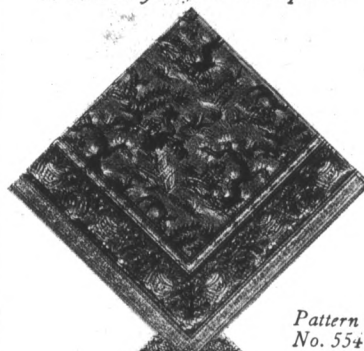
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Don't be misled into buying some other material represented as Gold-Seal Congoleum. Insist that the Gold Seal appear on the face of the goods you buy. It is the only way by which you can be sure of getting the genuine, guaranteed, nationally advertised Gold-Seal Congoleum.

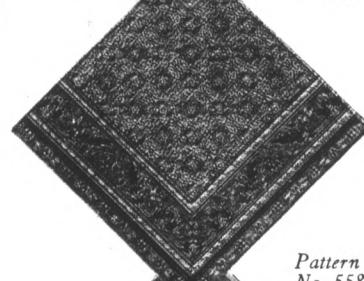
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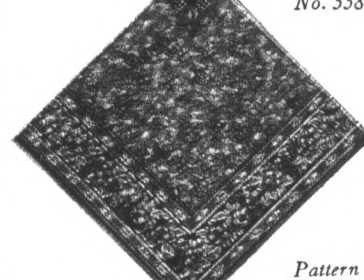
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Pattern No. 554



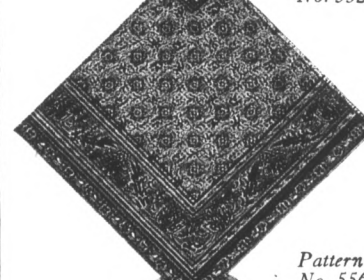
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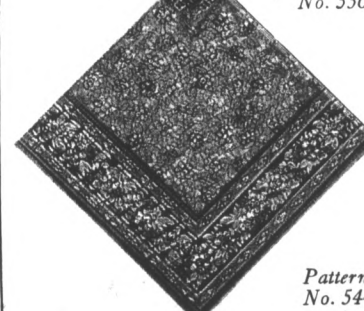
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Pattern No. 552



Pattern No. 556



Pattern No. 544

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You can be certain that Beaver Vulcanite Roofing will more than stand the tests of cold, heat, wind, rain, ice, snow, fire hazards—or any other natural strain a roof must endure. You don't need to take *anybody's* word for it. You can—and should—prove it for yourself before you spend a cent for any roof.

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Let us send you a sample of Slate-Surfaced Beaver Vulcanite. Then give it these daring tests: Twist it. Bend it. Throw it on the floor. Jump on it. Kick it. Scuff it. Lay it on ice. Then pour hot water on it. Leave it on a hot radiator. Lay burning

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Any reputable dealer can supply you with this better-looking, husky, fire-safe roofing for any type of roof or building—rolls, slabs, shingles in various colors or blended shades. Don't forget the tests you've made. Depend on your own judgment. You're the one who saves if you insist on Vulcanite—the one who loses if you don't. Mail the coupon now, for your sample of Beaver Vulcanite.

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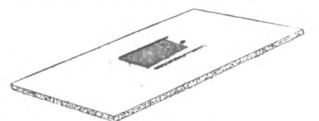
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A new car for \$2³⁰!

"So little trouble to apply that it's a joy to use it!" This is the verdict of Mrs. Miller* after refinishing her Ford with Valspar-Enamel.

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Any careful man or woman can apply Valspar-Enamel—it flows freely from the brush and spreads evenly. And it costs only a trifle when you do the job yourself.

There are lots of other things and places around the house and barn that would look better for a coat of Valspar-Enamel. Household furniture, woodwork, garden implements,

*Mrs. Laura T. Miller, Oswego, Illinois

tractors—in fact, all wood and metal surfaces, indoors and out—are protected against the weather, rust and accidents by a coat of waterproof Valspar-Enamel. Made of Valspar Varnish plus finely ground colors, Valspar-Enamels are extremely durable. Rain, mud, gasoline, alkali—none of them dim the brilliant lustre of Valspar-Enamels or cause them to check or crack.

In 12 beautiful standard colors—Red, *light and deep*; Blue, *light, medium and deep*; Green, *medium and deep*; Ivory; Bright Yellow; Vermilion; Gray and Brown. Also White, Black, Gold, Bronze, Aluminum and Flat Black.

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Postscript

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S. F. P. 10-24



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SALES 2½ TIMES THOSE OF ANY OTHER BRAND

The Sermon On the Mount

Our Weekly Sermon—By N. A. McCune

THIS week touches on the two best known passages in the New Testament—that of the Sermon on the Mount, and that of the Lord's Prayer. The two are inseparably joined, for one can understand the Sermon on the Mount only in the spirit of prayer, and the Sermon on the Mount tends to lead one into the attitude of prayer.

Blessed are the poor in spirit; blessed are the meek; they that hunger and thirst after righteousness, the merciful, the pure in heart, the peacemakers, and they are presented for the sake of righteousness. The word blessed here means happy. Those who have such attitudes as are here mentioned are happy people. Happiness in this case is attained by one when he strives after these spiritual ideals.

Let us take the first one; blessed are the poor in spirit. The man poor in spirit is open to receive help from God. He wants it and asks for it. He does not claim to know it all. He is not vain nor self-sufficient. Such a man is open to the best information, inspiration, heavenly help. He wants to grow. He does not say he has arrived. He is glad to be arriving. The kingdom comes to such men. They are open to the light. Christ illustrated this in his famous comparison of the publican and the pharisee. The pharisee was bursting with pride and complacency. He was surprised at himself, he was so good. He ran over the list of his own personal virtues. The publican, however, was so filled with the sense of his own sin and unworthiness that he could only ask to be forgiven. In that act he entered the kingdom. The pharisee was as far from the spirit of the kingdom as roses are from the snows of January.

PERSECUTION is a source of joy, says Jesus. If you do right and are persecuted for it, happy are you. We know little of that now. Perhaps if we lived closer to the ideal we would not be such strangers to persecution. They know it in foreign fields, where Christian practices come into conflict with pagan practices. The Indian Ghandi is not a Christian in profession, yet his teachings are largely Christian. He is against the caste system. Recently a large company of his followers resolved that on a certain day they would go to the temple where the "untouchables" were, and would mingle with them. We hardly know what this means. To deliberately associate with small pox patients would not cause as much comment here. But as they were about to do this, the government interfered. Ghandi desired to break down the imaginary barriers of caste that make his fellow countrymen hate each other. He was not permitted to do so.

Peacemakers were never more needed than at present. We are not fighting each other after the manner of savage tribes, burning down the houses of hostile villages and carrying off the women and girls. But much of our society is at war with the rest of it; labor against capital, unions against non-unions, and all the rest of it. We do not go at it as openly and bloodily (except in spots) as our ancestors did, but the various sections of society still retain their ancient pagan qualities.

JOHAN MUIR, in his "Alaskan Days," tells of an Indian peacemaker. For months two tribes had been at war. Finally one of them asked for some sort of peace terms. They said winter

was coming on. They could not go to the woods and pick berries and dry them, nor could they catch and dry fish, necessary for the winter's supply of meat. But the other tribe replied, "It is a pretty time to talk of peace. You have killed ten more of our men than we have of yours. When we have killed more of your men, we will talk of peace." Then an Indian chief stepped out and said, "Take me and kill me. You know my rank. I am the equal of ten common men. Kill me, and the account will be square." And that Indian chief stood there as the enemy tribe shot him to death, and peace was restored.

Doctor Charles Edward Jefferson has an article, "How to Pray," in one of the church periodicals. Here are a few sentences, without the quotation marks. If you wish to learn to pray, first of all select a place for prayer and keep it sacred. Of course, one can speak to God anywhere, but if you would come to pray with largest satisfaction, then pray habitually in one particular place. In time the place will help you, and one needs all the assistance one can get. Decide on fixed hours of prayer. One can pray at any time, but if you would make rapid progress in your prayer life, then pray at stated times. The body likes regularity, and so does the spirit. The clock will help you by and by, and no form of help should be neglected.

WHEN you have arrived at the place and hour of prayer, get down on your knees. No doubt one can pray in any posture—sitting, standing, lying down or walking, but one learns best to pray by praying on one's knees. On bended knees close your eyes. Undoubtedly one can pray with eyes wide open, but there are reasons why the eyes in prayer should be closed. The physical world rushes in upon us through the eyes. The eyelids are doors, and at the hour of prayer they should be closed. In order to come into communion with the invisible, the visible should be blotted out.

Pray in your own way. Be entirely yourself. If you are genuinely yourself, you will not pray like anybody else. In all your praying be specific. Do not confess sins in general, but particular sins. Ask forgiveness for the latest cruel word, for the last hateful thought, for the most recent mean act.

Having spoken, keep silence. Prayer is a dialogue. There are two persons engaged in it. Give God a chance to speak to you. He speaks in light and freedom and calm, in strength and hope and joy. I wish there were room in our bucket to hold more from this refreshing well of Dr. Jefferson.

It is hard to understand how some **J**ESUS says that if we expect to be forgiven, we in turn must forgive people, who harbor bitter feeling against others expect to be forgiven of God, when they have done nothing to meet the conditions.

Many prayers are uttered with no pure motives. If a man prayed that stocks might go down so that he could buy, and then sell again on a rising market, it would be a silly and selfish prayer. But not more so than many that are offered. Says another, "Prayer is either practical, capable of doing things, or it is absurd, even ridiculous. Either it means blessedness, enlargement of life, a real increase in spiritual power, or it is vanity and emptiness."

SUNDAY SCHOOL LESSON FOR OCTOBER 12.

SUBJECT:—The Sermon on the Mount. Mt. Chaps 5 to 7.
GOLDEN TEXT:—Thy kingdom come. Thy will be done.

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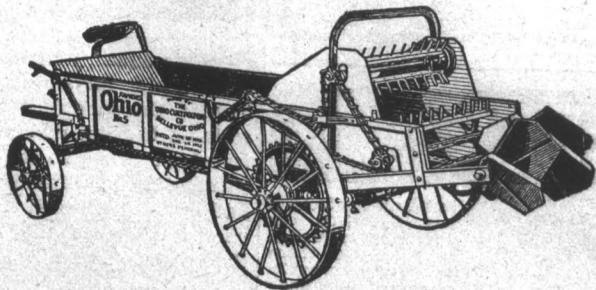
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Woman's Interests



Hallowe'en is Time for Frolicking

Plan Something Unusual This Year to Entertain Your Guests

THIS party is a little different from the usual Hallowe'en party. The invitations may be decorated with silhouettes of cats, bats and witches cut out of black paper and mounted on plain correspondence cards. Then ask the guests to come in either black or white costumes, and to be masked, and when all have assembled, you will find a gay company of witches, ghosts, hobgoblins and other characters representative of Hallowe'en. As soon as one's identity is of witches, ghosts, hobgoblins and much fun is obtained trying to prevent the guests from discovering one's real selves.

For the evening entertainment these games will prove interesting:

The Jack-o'-Lantern Scramble.

The following game is a pleasant way to start the evening, whether the party is for children or older folk. Out of orange crepe paper, cut a hundred or so little jack-o'-lanterns, first drawing a sample on stiff paper and marking it off on the crepe paper, which has been folded several times. It will be found that as many as ten may be cut at once.

Hide them under table covers, in back of pictures, in books, anywhere about the rooms, and at a given signal ask everyone to hunt for them, allow-



Two Mary's and Their Little Lambs. ing only a few minutes for the scramble, making it very exciting for those who wish to find the greatest number. Present a suitable prize, a skull stick-pin or witch doll, to the one who finds the most, and something equally surprising to the one who succeeds in finding none.

Stunts.

Carefully open seven English walnuts in halves. Remove the insides and insert in each a slip of paper on which there is a "stunt." Glue them together again, and hide. As soon as the guests have all assembled announce the fact that there are seven walnuts hidden, making a point to interest them all so they will hunt enthusiastically, thinking it fortunate to find one. Afterward they will be quite chagrined when they must perform their little "stunt."

Such things as blindfolding one of the seven and asking him to feed crackers to another blindfolded guest, or a race between two of the guests, one eating two crackers, the other taking a glass of water, a teaspoonful at a time, will provoke much laughter and tend to break the formality which so often spoils a good time.

The stunts may be given out after it is found who finds the walnuts, numbers being in them rather than the stunts themselves. In this way, each stunt may be selected and given out as suits the guest who must perform it.

The Old Witch.

The head of a witch is drawn upon heavy paper and pinned to the wall—that is, all but her nose. Each one in turn is given a numbered nose, blindfolded and asked to pin it in place, and he who succeeds in placing it nearest its position receives a prize.

Words.

Another restful game is "words." In this the guests have pencils and paper, and a word, "Hallowe'en," or two words, "fortune teller," is given out and each one tries to make as many words out of it as possible, using, of course, only those letters included in the words. Anyone who has never tried this will find to his surprise that a great many words can be found. A small prize should be given to the player with the most words and the winning paper read.

MAKE PLENTY OF CHILI SAUCE.

ANY rule for pickle that gives small enough proportions to use up the odds and ends of vegetables, as they accumulate, is a useful addition to the family cook book. This recipe for chili sauce calls for vegetables that are to be found in any garden late in the fall, and in such quantities as can be conveniently handled with other work. A jar or two, made every few days during the tomato season, will give a good supply for winter use.

Three quarts of mashed ripe tomatoes, six medium-sized green peppers, four white onions, one heaping cup of sugar, one-half cup of salt, two cups of vinegar, one even tablespoonful of cinnamon, one-eighth teaspoonful of cayenne pepper, one-half even tablespoonful of cloves and allspice mixed.

Skin the tomatoes before mashing. Chop the peppers and onions, but it is not necessary that they be chopped

very fine. If the pickle is wanted quite sweet more sugar will be needed. Unless the vinegar be sharp, more may be required to make it sour enough. Use ground spice in each case. Boil slowly for three hours. This will make between one and two quarts when finished. The same rule makes good catsup if six cups of vinegar instead of two are used. This sauce can be used any time of year that green peppers are in market by using canned tomatoes, and is, of course, less trouble than the other way.

GRAINING AND COMBING.

GRAINING is a finish for woodwork that has been largely displaced in recent years by plain painting, but it must be admitted that it is a very serviceable finish, since it does not readily show marks. Probably its disuse was due to an ultra-sensitive feeling concerning imitative work in paint. But there is not a bit of excuse for having graining of this sort. Instead, we can have combing of a kind that does not pretend to be anything other than what it is, and this combing has all the practical merits which graining possesses. The process consists in applying a thin finishing coat of any color desired, and then running through it a metal or other comb, so producing a patterned surface. An astonishing number of different effects can be produced with straight and wavy lines and by dots and dashes. This is a treatment that commends itself especially for the kitchen. One can have, for instance, dark blue painted woodwork combed in white, giving a grey effect. In painting a dresser the woodwork could be finished in a plain color and panels lined with a comb. The possible color combinations are indeed, infinite.—Mrs. J. W. W.

"Mother, Did You Buy Me Something?"

MOTHER, did you buy me something?" asked a little girl pausing from play as her mother came up the front steps.

Whether the mother did buy her five-year-old daughter something on that shopping trip is really unimportant. The simple question asked indicates, however, a point that should be considered in child training. Children are naturally eager and expectant, but parents, and mothers especially, might well ask themselves the question, "Am I training my child to expect too much?"

We owe it to our children to give them the necessities and as many of the comforts as possible. But "buy me something" can easily mean a luxury that is foolish and extravagant. That this little girl did not ask definitely for any particular thing, is a pretty certain indication that she did not lack any of the ordinary comforts of life. But "buy me something" had become a habit—to be indulged because a mother had been over indulgent! With the best of intentions, parents make a practice of bringing gifts to their children when they have been away. If it has been a long trip, and the youngsters have been lonely and have had to exert themselves to maintain certain standards of "being good," rewards are justifiable. But beware lest rewards degenerate into bribes!

If mothers encourage their children to do little favors for them, especially surprises, the children will enjoy the doing much more than receiving some expensive toy or game. But it is surprising how young a child can be taught to help make the home. A five-year-old boy in one family, for example, has as his special pride the task of putting out clean milk bottles from the kitchen to the front porch. Simple as such a duty is, it is meaningful as a character builder.

The disagreeable "buy me something" habit is also often indulged when children are taken away from home. Seldom does the child really long for any particular thing. Usually, he merely wants entertainment at that particular moment. If a mother opens her purse as soon as her boy points to a peanut stand, his demands are likely to be endless. The thoughtful mother who realizes that hunger may also be a reason when candy is teased for, supplies something from home that is wholesome, such as crackers or sweet chocolate. Or perhaps before she starts on an excursion, she gives the kiddies a last minute lunch of bread and milk. A full stomach is not apt to whine, "Buy me something, Mother!"



HOUSEHOLD SERVICE

COOKERS THAT WILL BAKE.

I am very anxious to know whether it is possible to bake bread in either a steam pressure cooker or a fireless cooker.—Mrs. K. J. C.

One can bake bread, or any other baked dish, in either a steam pressure cooker or a fireless cooker.

With the steam pressure cooker, you do not fasten the top down when baking, so that it does not cook under pressure but acts as an oven set on top of a stove and does very good work.

DIRECTIONS WANTED.

Will you please give directions for making baskets and the kind of material needed?—Mrs. A. M.

If Mrs. A. M. will send me her name and address I shall be pleased to forward these directions to her. Always enclose your name and address. It will not be published unless you request it.—Martha Cole.

ABOUT THE CHRISTMAS CACTUS.

Will you please tell us when to let a Christmas cactus rest, and for how long, so that it will blossom at Christmas? Also please send a recipe for grape juice.—Mrs. R. B.

If the cactus is kept in the sunniest corner of a bay window in the temperature of rooms such as we deem comfortable to sit in during winter in our varying climate, it will flower about the turn of the year. The time or date of flowering can be fixed with reasonable certainty by keeping it growing for a longer or shorter period of time, simply by supplying a moderate amount of water, thus lengthening the growing season. In doing this, it is well to consider wheth-

er the plant is pot-bound or whether it has recently been repotted. If the latter, water sparingly. Keep growing until the new growths are one inch or more in length, depending upon the age, size and vigor of the plant. All cactus plants should have a distinct period of rest, the major portion of the year, at least, and when wanted to flower commence by giving water sparingly, and then not oftener than once a week.

For grape juice, it is best to use grapes just before they are dead ripe. Remove stems, wash and put on to cook. Add water equal to one-half the volume of fruit. Cook just below the boiling point until the seeds begin to show. Strain through a flannel cloth, or two thicknesses of cheesecloth. To every eight cups of juice, add one cup of sugar; reheat, pour into sterilized bottles or fruit cans and seal. Other extractions may be made from the same fruit and the juice used for jelly. Another very satisfactory method which preserves the natural flavor of the fruit better, is to put two cups of washed grapes into a sterilized quart can, add one-half cup of sugar, fill with boiling hot water and seal.

APPLE MARMALADE.

Will you kindly give a recipe for apple marmalade?—Mrs. W. T. W.

For apple marmalade, pare, core and cut into small pieces any coarse-grained apple. Cook until soft, in barely enough water to prevent burning. Run through a sieve. Add an equal amount of sugar, boil until thick and put up in jars or glasses. Cover with paraffine. When cold it should cut like cream cheese. Lemon or orange juice may be added while cooking, if desired.



Doings In Woodland

Bruin Does a Good Turn

THE woodbox was empty and it was Bruin's job to keep it filled. So, bright and early this morning, he starts out into the Big Woods to gather wood.

Now, Bruin never did like to work hard. Perhaps he got tired carrying his big lumbering body around, but some of the folks in Woodland thought he was inclined to be a little bit lazy. Anyway, he would much rather gather the dead and broken limbs out in the



Rolly Found the Boy Crying.

Big Woods than cut the tree wood near by with an axe.

So it was this bright day that Bruin was hunting in the Big Woods for branches of wood to carry home, and he came upon a little boy sitting by a stump crying.

Bruin remembered the little boy

who had fed him and who finally unfastened the big chain, that Bruin might come back to his Woodland friends. This little boy looked very much like the other lad, and naturally Bruin's tender heart swelled in sympathy.

But Bruin was afraid that if the little boy saw him he would be frightened and run away, so he hurried back home and told Rolly Rabbit about him. Rolly Rabbit started out through the woods and soon found the little boy, still crying beside the stump. The little boy stopped crying as Rolly Rabbit tried to talk to him. It was nice to have such a companion trying to make friends with him after being alone in the Big Woods all the long, dark night.

Rolly Rabbit tried to tell the little boy about Bruin and the home where they would soon have a nice warm dinner. The little boy also tried to tell Bruin how it was that he became lost in the Big Woods when he had come to gather hickory nuts, but they couldn't understand each other.

Finally Rolly Rabbit pointed off toward and opening in the woods and rubbed his stomach. The little boy's stomach was so empty and he was so hungry that he quickly understood; so off the two trotted, hand in hand, toward the house where Rolly Rabbit and Bruin lived.



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OUR BOYS AND GIRLS

An Adventure

A Story from One of Our Story Contests

By Georgia Brown

THIS is the life!" sang out Bob as he steered the little sailboat to the south.

"You bet!" agreed Dick, heartily. "Lake Michigan and a new sailboat is the place for a good time."

Gaily singing and laughing, the ten inexperienced boys sailed on, keeping just within sight of the coast. A gay little breeze blew from the west, gently rippling the water.

"I say! Isn't this great?" exclaimed Donald, as the boat rocked on the tiny waves.

And so they sailed through the af-

easier said than done, and the sails—full blown—would not come down. Strange, but the boat wouldn't turn to the north. Instead it headed directly east.

"We can't land any old place," cried Don excitedly. "We're just about even with the girls' camp, and it's shallow near shore. We'd be turned over if we tried to land there. Whew! It's getting dark fast."

"Every fellow rack your brains for a way out of this," shouted Bob above the turmoil of the waters. "There might be a chance of being seen if we signalled."

"Signal! Signal!" echoed the other boys, as they ran for a light.

"Anybody got a flashlight?"

"One on deck."

They flashed for help until the batteries wore out, then peered eagerly towards shore.

"A light!" Madly excited, did their eyes deceive them? No. It was a light signaling to them—at last they might perhaps be saved.

After burning their sweaters and coats for signals, they waited with a faint hope for some other sign of help. None came but the repeated signal.

The boat rocked perilously and the boys rushed above the deck as though crazy. Every new wave threatened to capsize the boat, and the boys never expected to catch sight of home, mother, and dear old dad again.

Then—it came. With a roar the boat capsized, leaving the boys helpless in the foaming water. Luckily every boy could swim or float, and stayed on top for a few minutes. Just as Bill was about to sink, a blinding light was turned upon him, and he was hauled onto the lifeboat. One by one, the rest were found, and taken home safely.

The Camp Fire Girls had answered the boys' signals and telephoned the life guards. By untiring and trained muscles they were able to row swiftly and to reach the boys in time.



Helen Isles Enjoys Riding Her Horse, "Kit."

ternoon, and at last began to prepare for home. In their excitement and delight they hadn't noticed that the gay little breeze had become stronger, until the tiny waves were fast becoming big white caps. Too late they learned that they should have turned shoreward an hour before. The sun, like a great ball of fire, was sinking into a mass of dark clouds just above the horizon.

"You, Dick, and Bill, and the rest of you, hurry that sail down quick," ordered Bob. "Donald, come help me turn this critter around."

But, as usually is the case, it was

The purpose of this page is to bring about an interchange of thought between the rural young folks of this state. This interchange, we believe, is enjoyable and beneficial. We are not confined to the subjects you mention. We want to and have included more serious ones.

Dear Uncle Frank:

I also think it is time to stop discussing bobbed hair, knickers and "Are boys rude to girls?" I think books (as Helen Dunbar suggests) is a much better subject. Some good books are: "Cousin Maud," "Twenty Years of Hustling," and "Little Eada." I like to read very well and also like to go to school. I am in the tenth grade, and like algebra the best of all my subjects. I also take Latin I, English II and community civics.

Thanking you for my flashlight, I will close.—Your niece, Lucile Pearce, R. 4, Osseo, Mich.

It is nice that you like books, for books are good friends to those who know how to use them. They cheer, inspire and entertain.

Dear Uncle Frank:

I sure do like the boys' and girls' page. I don't know why girls think boys are rude. My daddy was a boy once and I sure think he is the best daddy in the world. I have no brother, but have four sisters. I also have a little nephew, I sure love him.—Your niece, Pearl Holmes, Decatur, Mich.

If your daddy was a boy once, certainly all boys can not be rude. That's right, stick up for your daddy.

Dear Uncle Frank:

I received my flashlight O. K. and you can bet I was tickled to pieces. I could hardly wait for night to come so as to try it out. I think quite a lot of it, even though I am a girl.

Shocking time is over at our ranch, and I'm not sorry, especially about the barley part of it. Am glad we don't have to shock beans.

Thanking you very much for the flashlight, I remain, another niece,

Ethel Boda, Carsonville, Mich.

I am sorry that you were tickled to pieces, and I hope you succeeded in getting all the pieces together again. I, too, am glad I don't have to shock beans, because I don't like to shock anything.

Dear Uncle Frank:

I am going to school in the morning. I think I will go through college when I get large enough.

Today I went to Torch Lake, and I saw two ducks swimming in the lake, tame ones, though. I looked through a field glass and saw over on the other shore, about two miles across.—From another M. C., Wayne Van Camp, R. 2, Rapid City, Mich.

You certainly did some long-distance looking. But, I think it is nice to see both sides of anything, don't you? I hope you don't go through college like a lot of folks do—walk through. Also, I hope you will keep your ambition to attend college.

Dear Uncle Frank:

Polly! Polly! What a sight, (I had a notion not to write) Saying that the boys are dead What's the matter with your head? A girl is just as rude as a boy. They have to have things to enjoy. They love to tease. I love to please, So I will please By letting them tease.

Really, Uncle Frank, I don't like to see a girl go in the school house and tattle on a boy who didn't hurt her; and as for the bobbed hair and knicker question, Margaret is right. If a girl wants to have her hair bobbed, it's her hair and she's not hurting anyone. My mother and I both have knickers for riding our pony.

Well, I believe I will close and ride the pony to the mail box to mail this letter.—Ruth Burkett, R. 2, Dowagiac, Mich.

I don't like tattle-tales, either. It may be all right to let them tease to please them, but sometimes boys admire best the girls who stand up for their own rights.

Pig Club Girl Shows 'Em All



Helen and Her Pigs. Helen is a Merry Circler.

HELEN COFFMAN, a pig club member of Coldwater, won more prizes on her pen of Spotted Poland-China pigs than any other exhibitor with a like number of pigs in the whole show at the recent State Fair. She made this enviable record against strong competition, showing in the open classes against two good herds from Ohio and two of the leading herds in our own state.

In addition to taking everything in sight in the club classes, she won prizes in the open classes as follows:

First, junior boar pig; first, junior sow pig; first, produce of dam; second, get of sire; second, breeders' young herd; third, exhibitors herd;

junior champion sow, and reserve grand champion sow.

Helen is entitled to be justly proud of the showing she has made. Her father, in commenting upon her success, says, "To me the really pig part of the winnings is because she is a club member and it was club work that helped her to choose the right kind of pigs and develop them to a winning point. When club work does that for a girl it means real progress. Every boy and girl should have a three-year course in club work. Of course, I am glad to have my daughter win, but I am more glad to know that every boy and girl in the state has a chance for the education that may be obtained through club work."

OUR LETTER BOX

Hello, Everybody!

You will be surprised to hear from Western Twins. We are from the state of Wyoming. I will tell you now how we happen to be in the state of Michigan. We have been spending our vacation traveling, and of all the states we have been through we like Michigan the best. We sure think you have a beautiful state, especially the northern part. We are visiting relatives here now and will stay for a while.

We have been reading the children's page in the Michigan Farmer for quite a while. I believe it is all right for a girl to have her hair bobbed and wear knickers. My twin sister does, and if she had long hair and wore long dresses, our vacation wouldn't have meant much to her. We are the best of pals, when one goes the other goes also. We can sew, cook, mend and do anything outside of the house. We live on a large ranch and like ranch life fine.

We can give no definite address now, as we stay only a few weeks at one place, but we think it would be nice if we could correspond with some Merry Circlers.

Hope we haven't taken up too much space.—From loving twins, Ruth and Rufus Grant.

I think we are all glad to hear from the western twins. We are also glad that they think that we have "some state." Ruth and Rufus, write again.

Dear Uncle Frank and Cousins:

My, but it seems that our vacation has been so short. I am twelve and in the sixth grade. I like to go to school; did you, Uncle Frank, when you were a boy? I'll bet you were a bad one, weren't you?—Your niece, Jewel Pinkston, M. C., Linden, Mich.

No, I was the "goodest" little boy that ever was (?) You can ask my teacher if you don't believe it.

Dear Uncle Frank:

I read the letters from Merry Circlers. Most of them seem to be about bobbed hair, knickers and paint, or about the Waste Basket. Now, most organizations have a purpose; is your page just a page on which boys and girls give their opinions, pro or con, on such questions as I have named above, or is there some higher motive? If so, I would like to know what it is.—With kindest regards, I am, Bernard F. Gaskill, R. 3, Kalamazoo, Mich.

Value of Bobbed Hair Discussions

By Bernard Alfredson, M. C., Whitehall, Michigan.

The bobbed hair question has been discussed in one form or other all through the ages. Of course, taken literally, this may sound strange, but by my first statement I mean that the age-old argument has always persisted on coming to the surface. To this generation the discussion has taken the form of bobbed hair.

One may readily see that there is a great deal to be said on each side. Yet all the energy, writing materials, etc., used by the con-bobbed hair warriors are a total loss; because the victory will never be won.

Picture in your mind's-eye the bobbed-haired flapper, arrayed in all her war gear, stubbornly maintaining her ground against the more conservative element, and you will see the magnitude of their task. Without this so-called conservative element there would be no trouble, but it exists and therefore the battle goes merrily on.

Having disposed of the hopelessness of this situation, we will now turn our attention to the valuable time that is being wasted in these senseless arguments. In the first place I believe that if some people would employ the time, otherwise used in discussing this topic, to some better purpose, they would be surprised at the results.

I will conclude by stating that this question will never be definitely settled as long as one soldier is left on each side.

BOBBED HAIR CONTEST WINNERS.

I WAS very much pleased with the results of the contest on the value of the discussion of bobbed hair. The number who responded did not please me as much as the opinions expressed. Another thing which made me feel good was the way the boys responded to this contest. As you will see by the results, the boys were very active

in the discussion of this subject. You will also notice that some of the old-timers are back on the job. I'm glad

School Contest

SOME of us go to school because we like to, but a great many go because they have to. Perhaps the reason so many do not like school is because they do not realize the value of an education. To get some thoughts along this line I am going to make the subject of this contest "What I get out of going to school."

The two best discussions of this subject will win for their writers, fountain pens; the next three best, flashlights; and the next five best, cute little boxes of candy.

Please write on one side of the paper only and put your name and address in the upper left hand corner of the first sheet. If you are a Merry Circle, put M. C. after your name. This contest closes October 17.

Send your papers to Uncle Frank, Michigan Farmer, Detroit, Michigan.

to hear from them. The winners of the contest are as follows:

Fountain Pens.

Bernard Alfredson, Whitehall, Mich.
Roscoe Bloss, Dunningville, Mich.

Flashlights.

Lulu Craven, Levering, Mich.
Mildred Merritt, R. 1, Ypsilanti, Mich.
Myrtle E. Walker, R. 2, Woodland, Mich.

Candy.

Dorothy Rake, R. 1, Mears, Mich.
Zona L. Amos, R. 7, Owosso, Mich.
Kenneth Dean, Ada, Mich.
Rex Ellis, R. 2, Box 35-A, Richland, Mich.
Alfred Green, Yale, Mich.

Rural Health

By Dr. C. H. Lerrigo

BEDS FOR THE TUBERCULOUS.

WHEN Doctor R. M. Olin, State Commissioner of Health for Michigan, asked the National Tuberculosis Association to send an expert to see how thoroughly Michigan is prepared to take care of her people who have tuberculosis, he did not expect anything startling. The National Tuberculosis Association sent their medical expert, Doctor H. A. Pattison, of New York. Doctor Pattison does not think that Michigan is up to the mark. It is his opinion that the state should have increased accommodations to the extent of one thousand beds.

The commonly accepted formula is that tuberculosis patients in any state require sanatorium beds in number equal to the average annual number of deaths from that disease.

Deaths from tuberculosis in Michigan in the past five years average 3,056 annually. The total number of beds now in this state for the care and treatment of those ill with tuberculosis is 2,305, according to Doctor Pattison, whose thorough report cannot be questioned. This leaves an absolute deficiency of 751 beds.

"One hundred and thirty beds are considered unsuitable for adequate modern treatment of tuberculosis and should be replaced. The net deficiency therefore, amounts to 881 beds.

If tuberculosis is to be kept down the state must not begrudge full and complete equipment. The problem can

be solved best by a county sanatorium in such of the better populated counties as are not already supplied, and sparsely populated counties should unite with their neighbors in the establishment of one first-class institution.

HAS SOFT LUMP ON BACK.

A woman sixty-one years of age wishes to know what to do for a lump which does not hurt and seems to be only soft flesh. Please tell us if it will keep on getting larger and if it will cause serious trouble. It is on her back.—Mrs. F. M.

There is a good probability that such a lump is a fatty tumor of benign character, and as she is sixty-one it may be wise to leave it alone. To be on the safe side, however, she should take the first opportunity of having it examined by a reliable physician who does not have to depend upon guesswork for his judgment.

USING CLOTHES OF TUBERCULAR PERSON.

A relative who died of tuberculosis left several good suits of clothes. How may they be made fit for use?—C. J.

Sunlight is the best disinfectant and hanging them out in the sun for a protracted period is as good a measure as any you can take. If the patient had tuberculosis of the lungs and the clothing badly soiled with his sputum you would best rip it up and boil or bake every stitch of it.



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October Poultry Notes

By R. G. Kirby

SOME poultrymen in Ohio are having good results by adding to the dry mash what is called the Ohio mineral ration. It consists of sixty per cent fine ground bone meal, twenty per cent fine ground limestone and twenty per cent salt. Four per cent of the mineral ration is sometimes added to the dry mash in place of the meat scrap. And it is also used when the mash contains less than ten per cent meat scrap.

Mineral Mash.

Pullets which are maturing too rapidly in the fall can be somewhat retarded by using the mineral ration in the mash instead of meat scrap. Then the young birds receive the elements to build sturdy frames but they are not stimulated so much to produce eggs as is the case when there is meat scrap in the mash. I have placed pans of oyster shells on the range for pullets and find they will quickly learn to eat some of the shell. When they form the habit it can be given in hoppers. If the oyster shells contain necessary lime for the hen's body, they must also be of value in the pullet ration although not so much is required as for laying hens.

If the pullets receive plenty of oyster shells in the fall they may be able to build up a reserve of lime which is useful when egg production begins. Then there will be very few soft shelled eggs and this reduces the danger of the egg-eating habit during the winter. Supplying the mineral ration to hens seems to give them something they crave. In return it reduces the prevalence of the common vices during winter confinement such as the feather, egg-eating and other habits of indolence.

Weight of Egg Shells.

One scientist has found that eight per cent of the average egg is composed of shell and it takes 1.6 pounds of shell to cover the eggs of a hen producing 160 eggs per year. This gives an idea of what a high powered shell factory the 200 to 300-egg hen must be. It means that oyster shells must always be present or the hen cannot manufacture enough shell to cover the eggs she is capable of laying.

It is not only soft-shelled eggs that result in loss. The thin-shelled eggs that are good enough for home use may be checked, cracked or entirely broken in transit and this injures the appearance of a crate of eggs. Weak-shelled eggs used for hatching are easily broken in the nests of setting hens. Many are broken in the laying-house or while being handled when gathered. I think the use of mineral matter in the ration as well as oyster shells in the shell hopper, is a coming thing with poultrymen who wish healthy stock and plenty of eggs.

English Day-old Chick Scheme.

According to a poultryman just returned from Europe the English sometimes sell day-old pullets by crossing Light Sussex hens with a Brown Leghorn male. As soon as the chicks hatch the sexes can be accurately separated. The males can be forced for early broilers and the females sold to poultry keepers who are not breeders but only wish them for egg production.

Of course, this can only be done by breeding the original stock as the second cross would be a queer mixture and possibly of little value. A breeder who sold these day-old pullets to other poultrymen would also have to breed his own Light Sussex and Brown Leg-

horns separately in order to have pure-bred stock of each breed for making the cross. Crossing pure-breds does not generally meet with favor in this country. And this is the only instance I have found lately where it seems to have any practical value. Generally

Buying Breeding Stock.

I think that pullets will be in great demand this fall if the corn crop matures as the outlook is still good for high-priced eggs. Buyers of pullets should inspect them if possible and obtain birds with firm meaty bodies that



RESULTS OF COW TESTING WORK.

THE September test of 283 of the 315 cows in the Marquette-Alger County Cow Testing Association resulted in first place going to twenty-eight cows belonging to the Bay Cliffs Farm, Big Bay, near Marquette.

There are twenty-four herds in the association. Of all the cows tested, twenty-nine cows produced between forty and fifty pounds of butter-fat, eleven cows over fifty pounds of fat; fifty-five cows produced better than 1,000 pounds of milk, and fourteen cows produced over 2,250 pounds of milk. The high individual record belongs to a cow of the Big Bay herd which produced 1,630 pounds of milk and sixty-four pounds of fat during the test period.

The average output of milk and butter-fat for each of the four cow testing associations in the Upper Peninsula during September is reported by the tester to be as follows: Delta, 525.2 pounds of milk, and 21.5 pounds of fat; Menominee, 480 pounds of milk and 18.2 pounds of fat; Iron, 662.7 pounds of milk and 26.9 pounds of fat; Marquette-Alger, 630.7 pounds of milk and twenty-four pounds of fat.

PREPARING TO MILL RYE.

ACCORDING to the operator of a Finnish flour mill in the copper country, farmers of that district have produced more rye than wheat this season. This has led the concern to contemplate placing a new rye milling machine in their mill at Salo, Houghton county. This is a farmers' cooperative enterprise, and it reports a good year, with sufficient wheat and rye to operate the mill.

FERTILIZER PLANT STARTS OPERATIONS.

AFTER a somewhat checkered career, including a destructive fire, the fertilizer plant at Klingville, Houghton county, is again in operation and reports unfilled orders amounting to forty-two cars. The plant utilizes the pea in the Sturgeon river bottom lands for the production of fertilizer. The plant is said now to be capable of producing some fifteen tons per day. The plant will close down when the winter freeze-up arrives.

The new plant is reported to represent a financial investment of \$200,000, including 7,000 acres of land. The soil treated in the plant is taken out

it works to disadvantage.

show they have been well fed. An early hatching date is not always a guarantee of quality in pullets. Birds which have been underfed and stunted are difficult to turn into profitable layers, even with the best of care.

Inexperienced poultry buyers sometimes try to pick up hens on the market which are sold for meat and try to use them for breeding stock. Sometimes very good individuals are noted in the market crates. But often they are the culls from farm flocks and older than they look. When it is possible to buy fine quality poultry for a low price there is little use in speculating on an uncertainty. Good stock multiply fast. There is so much good stock available now that a few birds do not cost a fortune. A lot of good ones are sold for little more than their value as meat if you know where to look for them. There is little gained by breeding culls when a little money and a year of patient care will develop a flock of good ones.

LAND NEAR TOP.

SCHOOLCRAFT county is proud of the record made by its girls' canning club team at the Michigan State Fair, this year. The team, composed of Misses Sophia Cherneski and Lillian Anderson, both living at Manistique Heights, took second prize in competition with clubs throughout the state. There were twelve teams in the State Fair contest, Ionia winning first. The Schoolcraft team had previously won first place in the Upper Peninsula contest between thirteen teams at the Upper Peninsula Farmers' Round-up at Chatham in August.

SUCCEEDS AT HONEY PRODUCTION.

IN Iron county near Iron River, live Mr. and Mrs. L. C. House, who are successful honey producers. They have 120 hives of bees and ninety colonies are producing honey. The bees secure their honey from the wild clover, raspberry and basswood. The local honey market is supplied by these producers, who expect to turn out about two tons of honey this season. During the winter the beehives are left in the open but are set close together and well packed, a small opening being left in each hive for the exit of such bees as may desire to "take the air." Mr. House is a M. A. C. graduate and science instructor in the high school at Stambaugh. He conducts his bee-keeping along scientific lines.

WEATHER CONDITIONS.

THE United States Weather Bureau has published its monthly report on weather conditions in Michigan during August. This shows that the heaviest rainfall in the state during that month occurred in the Upper Peninsula and the northwestern portion of the Lower Peninsula. At Sidnaw hailstones three and one-half inches in diameter fell on August 21, doing considerable damage to crops. Ewen had the lowest temperature in the state, where it was twenty-nine degrees on August 18.



Best Cows in 55 Associations

By A. C. Baltzer

BETWEEN the dates July 1, 1923, to July 1, 1924, fifty-five Michigan Cow Testing Associations have finished an association year.

The Oceana County Cow Testing Association, L. D. Leisenring, cow tester, had the highest butter-fat production average per cow of all Michigan cow testing associations. One hundred and sixty-six cows produced an average of 342.6 pounds of butter-fat and 7,058.8 pounds of milk for the association year.

The West Allegan Cow Testing Association, Leslie Wilcox, tester, stood second in butter-fat production per cow. This association averaged 335.9 pounds of fat and 7,170 pounds milk.

The Kalamazoo, Newaygo and Macomb No. 2 Cow Testing Associations ranked third, fourth and fifth, respectively, in highest butter-fat production per cow.

The Clinton-Shiawassee Cow Testing Association, H. V. Armstrong, tester, had the highest milk production average per cow of all Michigan cow test-had the highest milk production averaged 9,101.7 pounds of milk and 317.2 pounds of fat.

C. E. Burke, of Dimondale, Michigan, a member of the South Eaton Cow Testing Association (Hans Kadel, tester), owns the herd having the highest average butter-fat production in the fifty-five Michigan Cow Testing Associations. This honor stamps the Burke herd as the best among 1,435 herds representing 15,491 cows. Burke has seven pure-bred Holsteins in his herd. These seven cows averaged 513.6 pounds of fat and 14,472.4 pounds of milk. Here are the figures on Burke's cows.

Cow's Name.	Age.	Milk. Lbs.	Fat. Lbs.
Daisy	2	13,740	506.0
Ida	2	12,057	473.3
Susie	3	14,209	470.2
Rebecca Ida	4	16,148	623.2
Queen	4	17,463	549.3
Sadie	4	16,733	562.5
Rebecca	7	10,957	410.7

This is the only herd in Michigan Cow Testing Association history that has a yearly production average above 500 pounds of butter-fat.

A herd of six pure-bred Jerseys owned by Henry Myers, Oceana County Cow Testing Association, ranks second in butter-fat production. This herd produced 488.85 pounds of butter-fat and 9,198.3 pounds of milk. Wm. Knobloch, of the East Allegan Cow Testing Association had eighteen pure-bred and grade Jerseys that averaged 465.5 pounds of butter-fat and 8,752.7 pounds of milk.

The Newaygo Cow Testing Association—oldest in the United States—had two herds that ranked in the select circle of the five highest producing Michigan Cow Testing Association herds. A. C. Nelson and E. E. Price, of this association, ranked fourth and fifth respectively. Nelson's five pure-bred and grade Jerseys averaged 464.48 pounds of butter-fat, and Price's six pure-bred and grade Guernseys averaged 460.55 pounds of fat.

The following men are the owners of the five highest milk-producing herds:

In the South Eaton Association, C. E. Burke's seven pure-bred Holsteins gave 14,472.4 pounds of milk; in the West Kent Association, J. C. Buth's nineteen pure-bred Holsteins gave 12,836.3 pounds; in the Genesee No. 4 Association, E. N. Dunanols' six pure-bred and grade Holsteins gave 12,866.0 pounds; in the North Clinton Association, E. E. Sturgis' six pure-bred Holsteins gave 12,804.6 pounds; in the Livingston No. 2 Association,

Armstrong Bros.' seven pure-bred Holsteins gave 12,801.8 pounds.

T. C. Tiedebohl's pure-bred Holstein cow, Community Inka Queen De Kol, six years old, was the highest individual butter-fat producer of all cows in Michigan Cow Testing Associations. This cow produced 864.8 pounds of fat and 23,141 pounds of milk. Tiedebohl belongs to the South Van Buren Cow Testing Association.

Harry Williams, of the North Kent Cow Testing Association, has the second highest butter-fat producing cow. His six-year-old pure-bred Holstein produced 719 pounds of butter-fat and 17,447 pounds milk. Wm. Knobloch's eight-year-old grade Jersey made 715.3 pounds of fat and 19,473.5 pounds of milk. Sam O'Dell, of the Oceana Cow Testing Association, had the fourth high butter-fat producing cow. His pure-bred Jersey, six years old, made 689.39 pounds of fat and 11,121.4 pounds of milk. John Buth's six-year-old pure-bred Holstein made 686 pounds of fat and 19,473.5 pounds of milk. This cow ranked fifth in butter-fat production.

The five highest milk-producing cows out of the total of 15,491 cows in fifty-five Michigan Cow Testing Associations are Holsteins. Four of the five cows are pure-breds and one cow is a grade. M. L. Noon, of the Jackson Grass Lake Cow Testing Association owns the grade cow. John Buth had highest, and also the third highest milk-producing cow. T. C. Tiedebohl and John Calvert owned the other two pure-bred Holsteins.

OATS FOR THE DAIRY COWS.

OATS will be more largely fed this year than usual. Their abundance and the shortage of corn will induce farmers to depend more than usual upon their supply of oats to compound the dairy ration.

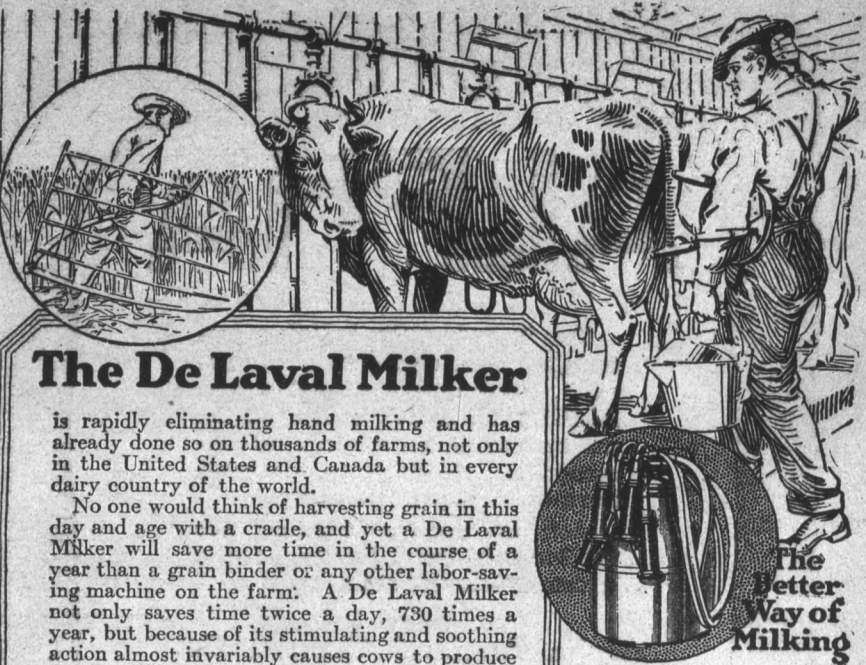
Oats are richer in protein content than corn. For this reason they make an excellent dairy feed. Best results are obtained when they are ground or crushed. The bulky nature of this grain, together with their richer protein content, admirably fits them for mixing with other feeds. Because of these desirable characteristics, and the fact that oat prices are on a lower parity than most other grains, farmers should not sell too closely of the grain, especially dairymen who desire to keep up a maximum flow of milk.—W. B.

AMOUNT OF CONCENTRATES TO FEED.

A COMMON rule for feeding grain or concentrate mixtures is to give the cows producing a milk relatively rich in butter-fat, one pound of the feed for every three pounds of milk produced. To cows producing milk testing low in butter-fat, the ratio should be one pound of the grain for every four pounds of milk produced. Where one knows the approximate amount of butter-fat produced by a cow each week, it is safer to feed as many pounds of grain daily as the cow produces pounds of butter-fat during the week.

A few exceptions should be observed to the above rules. Just before freshening, grain should be fed sparingly for a few days. Also, when the cows have reached a full flow of milk and fail to respond to additional feed, it is wise to reduce the amount to the point where the production of milk can be maintained.—L.

Hand Milking will soon be as Old Fashioned as Hand Harvesting



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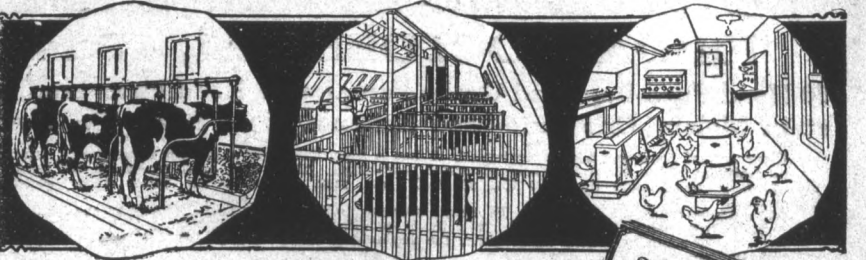
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tions. Send model or sketch of your invention for in-
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Lawyer, 654 Security Bank Building, directly
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Every Cow—Hog—Hen Farmer Can
Use JAMESWAY Plans and Equipment

You'll be surprised at how little it costs to own and enjoy a Jamesway equipped, work-saving dairy barn, a sunny sanitary hog barn, or a comfortable, ventilated poultry house to increase your earnings. Write and get our Jamesway "Pay from Earnings" Plan on stanchions, stalls, carriers, water bowls, etc. As little as \$10 to \$12 per month will give you the finest dairy barn equipment you could want on this plan. And think of the increased earnings, shortened hours of labor, and a more pleasant place to work in!

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Sent FREE—

will tell you how you can have these advantages. Also tells how increased earnings soon pay their cost—and yield clear profits afterwards. If building, or remodeling, be sure to get Jamesway plans first. Our local Jamesway man will be glad to call and help you. Write today and mention how many cows, hogs, chickens, etc. you keep.



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Dept. O, Elmira, N. Y. Fort Atkinson, Wis. Minneapolis, Minn.

This New Book Will Tell You—

How to get a good dairy barn.
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And many other helpful pointers on cow, hog and hen problems.



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The "best buy" in building materials. For, combined with just sand, stone or gravel and water, ALPHA CEMENT gives you the most enduring and substantial construction. Nothing to rot, rust, burn or to require painting.

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CEMENT

Dispersion Sale---Reg. Holstein Cattle

The Entire Herd of C. S. HEEG & SONS, Howell, Michigan

THURSDAY, OCTOBER 16, 1924

Sale Pavilion, Fair Grounds

SIXTY SIX HEAD IN SALE, Includes a Draft of Thirty Head from Other Good Herds

ALL HERDS ON THE ACCREDITED LIST--60-Day Retest Privilege

The highest record lot of cattle ever sold in Livingston County. The first 7 dams of our Herd Sire have records that average over 34 lbs. He is included in the sale. Weight 2,600 lbs. 3 other bulls, two from 30-lb dams. A 36-lb. cow, a 35-lb. cow and several daughters from each, a 30-lb. cow and several daughters from 30-lb. cows, also many other good ones. The Grand Champion Bull and Cow at the Livingston County Fair this year are included in the sale. A great opportunity to secure foundation stock. For catalogs, address,

F. J. FISHBECK, Howell, Mich.

CONSIGNMENT SALE

Of Cow Testing Ass'n Yearly Record Holsteins

FRIDAY, OCTOBER 24, 1924

50 Head Pure-bred and Grade Females; 5 Head Pure-bred Holstein Males; One Pure-bred Guernsey Sire Ready for Service.

Every animal consigned has either herself, or has a dam that has made the requirements established by the National Dairy Show, in yearly butter-fat production. The young sires consigned, all have dams that have produced more than 400 lbs. of B. F. per year, some having made these records in heifer form.

All animals consigned will be T. B. tested previous to the sale and sold subject to the 60 day retest privilege. Don't Forget Livingston Co. is a T. B. modified accredited County.

All records made have been made under the supervision of the Dairy Dept of the Michigan Agricultural College.

This is a rare opportunity for farmers to get started with foundation stock that has proven their value as producers.

For further information and catalogue write
R. G. Powell, Sales Mgr., Howell, Mich.

Eleventh Annual Public Sale

Howell Sales Company of Livingston County

80-Head Registered Holstein Friesian Cattle-80

Thursday, October 23, 1924

Sale Pavilion HOWELL, MICH. Fair Grounds

The oldest Sale Company in Livingston County and the only one to hold a sale each year since organized.

Good individuals, Good Breeding. 3 bulls from high record dams, ready for service. All the rest are females, nearly all of breeding age, and 65 will be fresh at sale time or due soon. Whole County on the Accredited List.

For Catalogs, Address

Guy Wakefield, Fowlerville, Mich.

BREEDERS' DIRECTORY

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

Registered Guernseys

LOVE PINE RANGER our new Herd SIRE has a Dam with an A. B. O. record 936 fat. When in the market for better Guernseys, write GILMORE BROS., Camden, Mich.; J. W. WILLIAMS, No. Adams, Mich.

Thirteen Registered Guernseys

2 A. B. Cows, one fresh, one Bull, ready for service, 4 Cows and 2 Heifers served; 4 Calves. Tuberculin Tested. Dr. Baker, 4800 Fort St. West, Detroit, Mich.

Guernseys For sale, Reg. yearling heifers, bull calves, May Rose breeding, prices very reasonable. W. W. Burdick, Williamston, Mich.

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



TIME TO CULL THE EWES.

EVERY flock has in it inferior ewes. A portion of these should be sold off every year and their places taken by the choice of the lamb crop. How many to cull out will depend upon the number of sheep the owner wishes to keep. If he desires to cut down the size of his flock then he should cull closely. If, on the other hand, he wishes to increase, then only the very poorest are eliminated.

Fall is a good time to do this work. The inferior animals can be readily picked out then. Ewes with unsound mouths, injured udders, or faulty type

ground remains frozen for weeks at a time, hogs often suffer for lack of sufficient mineral elements. This is especially true with animals that do not have a wide variety of foods. During the winter months when they cannot root in the ground it is advisable to supply these minerals in the form of wood ashes, salt, sulphur and bone meal. Often hairless pigs, rickets, and paralysis of the hind parts may be avoided by taking this precaution.

I would not change the ration at farrowing time, but carry it right through the suckling period. It is advisable, however, to feed lightly or withhold a feed or two at time of far-



This is R. C. Black, of Gratiot County, With His Senior Flock Ram Which Sheared Twenty-nine Pounds of Five-inch Staple Last Spring.

should either be put in the fattening pen or sent immediately to market.—L. C. Reynolds.

RATION FOR BROOD SOWS.

THERE are a great many rations that are good for brood sows. I do not know that there is any one best ration. The important thing to remember is that the ration be well balanced.

By a well-balanced ration we mean one that supplies only what is necessary of the elements essential for the health and normal growth of the sow and of the litter which she is carrying. This means not only a nutritive ratio of one pound of protein to six pounds of carbohydrates and fats, as we are in the habit of thinking of a balanced ration, but also the mineral elements and the bulky foods that are required for the normal building of new tissue and normal, healthful functioning of the vital organs.

Such foods as corn, barley and rye are carbonaceous foods and make too wide a ration. Skim-milk, tankage, and oil meal are nitrogenous foods and make too narrow a ration. Oats, wheat middlings and clover are well balanced so far as their nutritive ratio is concerned. We need not look for any other foods to balance them, but when we add corn, barley or rye we should also add skim-milk, tankage or oil meal in the proper proportion to balance them. One pound of tankage, two pounds of oil meal or fifty pounds of skim-milk should be added to ten pounds of these grains.

A good ration for a sow consists of corn and oats of about equal parts, with fifty pounds of wheat middlings, made into a thin slop with skim-milk and kitchen wastes. What she will clean up in twenty minutes is enough to feed. In addition, she should have plenty of fresh pasture, or, in winter, clover or alfalfa hay and a chance to look over the wastes from the stables. She will get lots of exercise in this way which is essential.

In our colder climates where the

rowing. It is usually safest to follow the demands as expressed by the sow herself at this time, and feed lightly until she lets you know in no uncertain terms that she is hungry.

Get Mr. Freeman's Extension Bulletin No. 26 on "Swine Feeding," from the Michigan Agricultural College. It contains much valuable information.—Pope.

RECORDS HELP AT CULLING TIME.

TO improve the flock inferior ewes should be replaced with the best of the lamb crop or by outside purchases. We find that a record book is a real aid in going about this work. With records of offspring and shearings, we are able at a glance to know the type of lambs produced and the weight and quality of the shearings of every sheep in the flock. With this information, a study of the type of the animal under consideration enables us to make an intelligent decision. At least, we find that the decisions made under this plan have resulted in gradual improvement.—E. R.

MEDALS TO COMMEMORATE 25th ANNIVERSARY.

CONGRESS, by special act, has authorized the issuance through the United States Department of Agriculture of appropriate medals in commemoration of the twenty-fifth anniversary session of the International Live Stock Exposition which will be held at Chicago, November 29 to December 6. These medals will be awarded to all first prize and championship winners in the live stock competitions as an encouragement for the breeding and feeding of better animals.

Every precaution should be taken not to stunt the young stock. They should be kept growing winter and summer. Calves and yearlings should gain from forty to seventy-five pounds during the winter.

ENRICHING FARM LIFE.

(Continued from page 296).
the comfort of home life on the farm which is not a matter of money. In many instances these added comforts are merely the matter of proper management and a few hours of properly directed labor. We all labor for money with which to buy things to make our lives more comfortable. Home surroundings and conveniences are of importance in making the home life more enjoyable.

The general appearance of the farm home is a factor which has an influence upon the enjoyment the farmer receives in living there. A nice lawn well kept is a thing of beauty and surely adds enjoyment to life. Flowers and shrubs planted in the proper place add to the general appearance. A clean yard without the litter of sticks, tin cans, pails, or old automobile tires is pleasing to the eye. Machinery placed in sheds instead of setting in disorder around the farmyard not only reduces machine cost, but also makes the farm home more attractive.

There are numerous things which can be done without adding materially to the money outgo which makes life on the farm more attractive and causes the farmer to be proud of his home. Then, there are things in the house which can add greatly to the comforts of living. Broken down steps or loose boards on the porch floor are not only unsightly but dangerous. Windows which will not open without a crowbar or axe do not add to the pleasures of house-keeping. Squeaking boards in the floors or stairway, and squeaking doors are not things which add to the comforts of home life or make the baby sleep longer. A properly placed wood shed, proper equipment in the kitchen, running water, a sink, and many other kitchen and household conveniences can be cheaply provided. Home conveniences are quite essential to the comforts of home and just as much attention should be given to making the work of the farm lighter and more pleasant as providing better equipment in the field or barn.

The right kind of home decorations which harmonize with the size of the rooms and the furniture can be provided just as cheaply as the wrong kind, and surely afford a greater satisfaction. Proper dress for men and women can be secured without a great outlay of money. In the matter of dress the farmer and his family have made great advancement within the past few years, and this has been due to their getting out among people more and learning about what is being worn. Beauty within and without the farm home and in dress is becoming a greater factor in farm life and is making this life more and more attractive.

The farmer can, with very little extra trouble, provide many delicacies for the home table. A dooryard garden to provide green vegetables and fruits for table is not a matter of expense. A better knowledge of variety of diets on the part of farm women will permit the family to keep in better health and enjoy their food more. A balanced ration should be of as much importance to the farmer's family as to his hogs or dairy cattle.

In addition to these things there is the manner of home life on the farm. The habit of reading good literature is very inexpensive and returns a great amount of satisfaction. A good book which can be enjoyed by all the members of the family and loaned to neighbors costs less than a tank full of gasoline. We need to know more about how to spend money and how to utilize our time so that the greatest amount of satisfaction will result. In the past we have been too busy making money to give thought to the problem of living.

In Michigan there are 8,549.24 miles of railroad, which is 326.61 miles less than the total for the state in 1916.

CATTLE

Grahamholm Colantha Lad 297376

Senior sire in the Newberry State Hospital Herd.

His sire was first prize aged bull at the 1921 National Dairy Show.

His sister holds a World's Record as a Sr. 4-yr.-old. She produced 1,426.75 lbs. butter and 34,291.8 lbs. milk in 305 days.

Another sister has a record of 1,238 lbs. butter and 33,100 lbs. milk in a year and will soon finish another phenomenal record.

His dam is a 35-lb. granddaughter of King Segis with a year record of 919.78 lbs. butter and 21,574.9 lbs. milk.

A few of his bull calves for sale.

Send for our list of bulls from Michigan State Herds.

Bureau of Animal Industry,
Department C. Lansing, Michigan.



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of course, are "Super-Zinc'd." Their natural sturdy construction and superior rust protection assure long and satisfactory service. Both Columbia and Pittsburgh Perfect brands of fence are "Super-Zinc'd" and include standard styles of farm, poultry and garden fence; also our attractive designs of lawn and flower fences.

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Book

improve your farm and increase farm profits; they COST NO MORE than ordinary galvanized fences. Be sure to write for Super-Zinc'd Fence catalogue and 72-page Farmers' Handy Manual, both sent free.

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about abortion in cows. Also let us tell you how to get the "Practical Home Veterinarian", a Live Stock Doctor Book, without cost. Veterinary advice FREE. Write tonight. A postal will do.

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Washtenaw County Holstein Breeders' Seventh Annual Consignment Sale
OF PURE-BRED HOLSTEIN CATTLE
Tuesday, October 21, 1924
10 O'clock Eastern Standard Time
At Fair Grounds, Ann Arbor, Mich.
For Catalog Address
W. L. SPANGLING, Chelsea, Mich.

AUCTION

Wednesday, October 15, 1924 at 10 O'clock
1 mile south of the second stop west from Holland on the Holland Interurban line. 8 head of registered Holstein milk cows and young stock. 2 high-grade Holstein milk cows T. B. tested Sept. 15, 1924. 1 Black Mare, 8 years, 1,450 lbs., and all farm tools, hay, straw, wheat and oats. Conditions presented on day of sale. **VISSER BROS., R. 3, Holland, Mich.**

FOR SALE—Maplehurst Holsteins. We offer for sale two young Bulls from 30-lb. Dams, also six Registered cows due to freshen in Nov. Cows have Records. **Whitney Bros., Onondaga, Mich.**

Jerseys For Sale Fresh Cows, Heifers, Calves.
LEROY KUNEY, Adrian, Michigan.

Wanted to Buy Eight or ten good Guernsey cows. Enwald Bros., R. 8, Muskegon, Mich.

Jerseys For Sale Bulls ready for service, also a few females. All from R. of M. dams. Accredited herd. **Smith & Parker, R. D. No. 4, Howell, Mich.**

For Sale: Polled Shorthorn Bulls, Cows and Heifers

with quality and breeding at farmer prices. 2 showing bulls and 3 heifers at slightly above. Write or come and see us. **GEO. E. BURDICK, MGR., Branch Co. Farm, Coldwater, Mich.**

SHORTHORN BULL Best Scotch-top, year old right and to breed. Herd federal accredited. Price \$125. Come look him over. **Ira W. Jayne and Frank Brown, Fenton, Mich. (Farm 3 miles south).**

FAIRFIELD Shorthorns—now offering a few choice young bulls ready for service. Priced right. **H. B. Peters & Son, Elsie, Mich.**

Shorthorns Best of quality and breeding. Bulls cows and heifers for sale. **BIDWELL STOCK FARM, Box D, Tecumseh, Mich.**

RED POLLED CATTLE M
Buy from Michigan's Leading Herd. Owned by L
WESTBROOK BROS., Ionia, Mich. K

HOGS

B ERKSHIRE BOARS of good type and quality. Ready for service. Will sell at market price. All eligible to registry. **B. B. Reavey, Akron, Mich.**

EVERY'S Large Type Berkshires. Reliable stock. Priced reasonable. **W. H. Every, Manchester, Mich.**

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

DUROC JERSEY Spring Boars and Gilts, also Hard Boar, all of Orion Sensation breeding. **Huron County Pig Club, Verna Willett, Secy., Bad Axe, Mich.**

Sons and Daughters of Michigan's Grand Champion Duroc Boar

Headquarters for Colonel bred Durocs. Shropshire Rams.
Lakefield Farm, Clarkston, Mich.

Chester Whites Big, growthy, August pigs \$10 each. Prominent blood lines. Registered free. Shipped C. O. D. if desired. I am going into other business and will sell my entire herd. Your opportunity. No culls. Write **CLARE V. DORMAN, Snover, Mich.**

Chester White Boars Size, type, quality and price will please you. Registered free. **F. W. ALEXANDER, Vassar, Mich.**

O. I. C's Spring pigs. Sired by "Giant Boy" and "Jumbo Bell Boy," also Brown Swiss bulls. **MILO H. PETERSON, R. 2, Ionia, Mich.**

Francisco Farm Poland Chinas

Now offering good herd Boars with the best of breeding. Also gilts not akin to them. Prices are right. **P. P. POPE, Mt. Pleasant, Mich.**

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

LARGE TYPE Poland Chinas Spring pigs, either sex from Michigan's Champion herd. **A. A. Feldkamp, Manchester, Mich.**

Hampshire Bred Gilts and Boar Pigs, not akin. 12th year. Write your wants. **John W. Snyder, R. 4, St. Johns, Mich.**

Additional Stock Ads. on Page 321

Get These Facts on Fodder

Present Appleton owners as well as prospective buyers will like to have this new book showing all the latest Appleton improvements. The first machine husker and shredder built—these new improvements put Appleton further in the lead.

Save 100% of Your Corn

About one-third of the value of your corn crop is in the stover. If you and your neighbors raise as much as 30 acres of corn you need an Appleton to save the full value of your crops.

FREE: Fill in coupon below and send to the nearest Appleton branch. It will bring you full information on the new Appleton Huskers and Shredders, and interesting data on stover.

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The features that have made the Kalamazoo the World's Standard Cutter, will make it a profitable investment for you. It is safe, sturdy, fast, and unfailingly reliable.

Clean, Fast Cutting

This smooth, easy-running, non-clog blower will get your silage in at the right time and at low cost. One lever starts or stops it. Three sizes to meet every farmer's need. Special terms now. Write today for Ensilage Cutter Book and full particulars.

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If you have a large iron kettle, we will make you a heavily re-inforced jacket to fit it, providing you a complete feed cooker. Has large fire door, flue, handles, pipe. Price according to size. Send measurement of kettle around outside one inch from top. If kettle has flange, measure under it. Ask for chart of standard sizes.



If you have no kettle, you'll be interested in the

Heesen Stock Feed Cooker (Kettle and Jacket)

For cooking stock food scalding hogs, rendering lard, etc. Handiest article on farm. Seven sizes. Write for prices.

Heesen Bros. & Co.
Dept. 4 Tecumseh, Michigan



THE LATEST MARKET REPORTS



GRAIN QUOTATIONS

Tuesday, October 7.

Wheat.
 Detroit.—No. 1 red at \$1.51; No. 2 red \$1.50; No. 3 red \$1.47; No. 2 white \$1.52; No. 2 mixed \$1.51.
 Chicago.—December \$1.49% @ 1.49%; May \$1.54% @ 1.54%; July \$1.39.
 Toledo.—Cash \$1.53 @ 1.54.
Corn.
 Detroit.—No. 2, \$1.18; No. 3 yellow \$1.17.
 Chicago.—December \$1.13% @ 1.13%; May \$1.15% @ 1.15%; July \$1.16 @ 1.16%.
Oats.
 Detroit.—New, No. 2 white at 57c; No. 3, 55c.
 Chicago.—December 56% @ 56% c; May 61 @ 61% c; July 59% c.
Rye.
 Detroit.—Cash No. 2, \$1.33.
 Chicago.—December at \$1.30% ; May \$1.34% .
 Toledo.—\$1.31.
Barley.
 Barley, malting \$1.05; feeding \$1.
Beans.
 Detroit.—Immediate and prompt shipment \$5.40 @ 5.50 per cwt.
 Chicago.—Navy, choice \$6.20 @ 6.25.
 New York.—Choice pea \$6.25; red kidneys \$9.10 @ 9.25.
Seeds.
 Detroit.—Prime red clover cash at \$17.40; alsike \$12.50; timothy \$3.35.
Hay.
 New Hay.—No. 1 timothy \$19 @ 19.50; standard and light mixed at \$17.50 @ 18.50; No. 2 timothy \$16 @ 17; No. 1 clear mixed \$15.50 @ 16.50; wheat and oat straw \$11 @ 11.50; rye straw at \$12 @ 12.50.
Feeds.
 Bran \$32; standard middlings \$33; fine do \$39; cracked corn \$52; coarse cornmeal \$52; chop at \$44 per ton in 100-lb. sacks.
Fruits.
 Apples, Duchess \$1 per bu; Golden Sweet \$1.50 @ 1.75; Wealthies \$1.50; Jonathans \$2; Delicious \$2.25 @ 2.50; pears, Bartletts \$3 @ 3.25 bu; Keiffers, Flemish Beauties and Garbers \$1.50 @ 1.75; plums at 75c @ \$1 bu; peaches \$1.50 @ 2.25 bushel.

WHEAT

New high levels for bread grain prices last week reflected the anxiety of Europe as to its future supply. It is possible that some of the reports as to damage in Europe from wet harvests may be overdrawn, but there is no denial that it has been quite severe. The United States Department of Agriculture estimates that total import requirements of all countries will range from 713,000,000 to 610,000,000 bushels. Surpluses available for export to supply these needs range from 685,000,000 to 600,000,000 bushels. North America furnished 12,296,000 bushels out of total world shipments of 14,589,000 bushels last week, and the bulk came from the United States. Besides the unusual foreign demand, domestic mills are picking up good wheat right along.

RYE

Rye was the star performer again last week. This grain has advanced 45 cents in a little more than five weeks with foreigners buying at every step. The United States has the only exportable surplus of consequence and it is officially estimated at only 42,000,000 bushels. Import needs are 50 to 75 per cent more than that amount. The difference will have to be made up from wheat.—Last year, rye was an under dog and sold on a feed grain basis.

CORN

Corn advanced early last week when frost damage threatened, but ignored the injury afterwards until strength in other grains pulled it out of the rut. Killing frosts occurred over a large territory and moderate damage was done over much of the corn belt. Unofficial estimates point to a crop of about 2,450,000,000 bushels, not allowing for recent frost damage or abandoned acreage.

OATS

Oats have had a sudden spurt, chiefly because of a change in the speculative attitude. Export sales have been fairly extensive for the first time in several years, reflecting the feed grain situation abroad and the small surplus in Canada. Primary receipts are quite heavy and oats are accumulating at terminals in large amounts. This burden is probably close to its peak, however.

SEEDS

Unfavorable red clover seed crop reports continue to come from both at home and abroad. The domestic crop is not filling well and offerings from the country are not increasing as rapidly as usual at this season. France is said to have only one-fourth of a crop and both France and Germany are said to be trying to buy in this country. Timothy seed is coming forward freely but not as rapidly as last year. The sweet clover seed crop is likely to exceed that of last year because of better yields per acre and a larger acreage. The harvest is two to three weeks late.

FEEDS

Feed markets were generally firm last week. Part of the improved tone was borrowed from the grain markets. Consuming demand is still slow and less interest is being shown in prompt shipments than in future deliveries. Oil meal prices are unchanged, with supplies rather large.

HAY

Hay markets were uneven again last week. Alfalfa was stronger in most markets but timothy was weak. Low grades are not wanted even at big discounts. The marketable surplus of timothy is estimated to be about five to ten per cent more than a year ago in reports to the United States Department of Agriculture, the alfalfa surplus slightly larger, clover about the same and prairie the same to slightly less than a year ago.

POULTRY AND EGGS

Egg prices showed decided strength again last week, especially for the fresh article. November and early December usually represents the greatest pinch in supplies so that a further advance seems to be ahead. At this season, express shipments of strictly fresh eggs direct from the producer to big eastern markets bring the greatest premium over local prices. Broad consumptive demand for poultry puts that market in fairly good shape to receive the fall runs. However, prices will probably yield to some extent when

larger shipments arrive.

Chicago.—Eggs, miscellaneous 34% @ 35c; dirties 28 @ 29c; checks 26 @ 27c; fresh firsts 36 @ 41c; ordinary firsts 32 @ 35c. Live poultry, hens 23c; springers 24c; roosters 16c; ducks 18 @ 20c; geese 16c; turkeys 20c.
 Detroit.—Eggs, fresh candled and graded \$38 @ 43c; storage 32% @ 35% c. Live poultry, heavy springers 26 @ 27c; light springers 20c; heavy hens 27c; light hens 16c; roosters 16c; geese 16 @ 18c; ducks 21 @ 22c; turkeys 28 @ 30c.

BUTTER

Butter prices have regained part of their recent loss. Lighter receipts, reports of cold weather and a gradual falling off in production, together with a slight scarcity of fancy butter, have strengthened the market. As producers become more dependent upon high-priced concentrates to maintain the milk flow, production may decrease more rapidly. Consumption of butter is being stimulated by lower retail prices, but the supply of both fresh and storage butter is in excess of any apparent demand. Some butter is being exported. Exports may be fairly large in the next few weeks, after which southern hemisphere offerings will begin to reduce the present shortage in British markets. These conditions suggest that any rise in values will be slow.

Prices on 92-score creamery were: Chicago 37% c; New York 39c. In Detroit fresh creamery in tubs sells for 34 @ 35% c.

CHEESE

Cheese prices are rather unsettled. Recent advances at country markets have carried prices too high, according to many of the trade. Further upturns in the immediate future are not expected and buying is slow.

POTATOES

Carlot shipments of potatoes are not increasing as rapidly as they usually do at this season of the year. As a result prices were firmer, and even higher in some of the markets, including Detroit. On this market cars sold at \$1.90 @ 1.95 per 150-lb. sack of U. S. No. 1 stock.

WOOL

The wool market is strong, with the holders more reluctant to let go because of the difficulty of replacing. Domestic prices are but little above a free wool basis, so that little foreign wool is coming in, the fall Texas clip will not last long and new clip wools are six or seven months away. Holdings in this country are inadequate to last throughout the fall and winter, even for a subnormal rate of manufacture, so that a rise in prices to a point that will permit imports appears inevitable. The goods market seems to have improved as manufacturers have advanced prices on some lines, and the leading factor reports that the output of two of its mills has been sold for some time ahead.

APPLES

Apple shipments increased sharply and are up to seasonal volume. Prices have shown little change, with Illinois Jonathans bringing \$6.50 @ 7 per barrel at Chicago.

ONIONS

Onion markets have shown a lower tendency because of an increasing supply from the late crop state. Midwestern yellows are bringing \$1.50 @ 2 per 100-lb. sack in consuming markets.

GRAND RAPIDS

Peach and plum prices stiffened slightly in Grand Rapids early this week as the supply of these two fruits grew lighter. Potatoes improved slightly and grain prices moved to the highest levels of the year. Quotations follow: Peaches, Elbertas \$2.50 @ 3.25 bu; other varieties \$2 @ 2.75 bu; pears, Bartletts \$1.50 @ 2 bu; other varieties \$1 @ 1.50 bu; grapes \$2 @ 2.50 bu; jelly grapes \$1 @ 2 bu; apples, Wealthies at 75c @ 1.25 bu; other varieties 75c @ 1 bu; plums, Lombards 50 @ 80c bu; other varieties \$1 @ 1.50 bu; vegetables, potatoes 55 @ 60c bu; carrots, beets, turnips, rutabagas 60 @ 75c bu; tomatoes 75c @ 1.25 bu; spinach and outdoor leaf lettuce at 50c bu; cabbage, white 40c bu; red 65 @ 75c; buckwheat wheat \$1.29 bu; rye \$1 bu; buckwheat \$1.75 cwt; barley at \$1.08; oats 50c; beans \$4.75 cwt; eggs 42c dozen; butter-fat 38c; fowls 13 @ 22c; springers 15 @ 24c lb.

DETROIT CITY MARKET

Markets were well supplied and with selling brisk. A stronger market for apples was a feature. Pears and plums were scarce and moved readily. The supply of peaches was moderate. Crabapples were fair sellers and the moderate supply of grapes were taken slowly. There was a fair demand for cantaloupes and watermelons. Sweet corn was in better demand. Many tomatoes were soft and prices suffered some. The demand for potatoes was a little stronger. Live poultry and eggs were taken readily.

Apples \$1 @ 2.50 bu; cabbage 50 @ 75c bu; cantaloupes, No. 1, \$2 @ 2.50 bu; leaf lettuce 90c @ \$1 bu; head, \$1 bu; green onions 60c dozen bunches; dry \$1.25 @ 1.75 bu; potatoes 75 @ 85c bu; sweet corn 20 @ 30c dozen; summer squash at \$1 @ 1.25 bu; Hubbard squash \$1 @ 1.25 bu; tomatoes, No. 1, 90c @ 1.25 bu; plums \$1.50 @ 3 per bu; pears \$1.50 @ 2.50 bu; crabapples \$1.50 @ 3 bu; peaches \$2.50 @ 4 bu; grapes \$2.50 @ 3 bu; pumpkins \$1 bu; watermelons \$1 @ 1.25 bu; eggs, wholesale 48c; retail 50 @ 65c; springers, wholesale 30c lb; retail 25 @ 30c; ducks 27c lb; veal 19c lb.

The country has "shot its wad" so far as old hogs are concerned and the new crop is not yet finished, while the changes in the corn and hog situation are not precipitating the sale of unfinished hogs as rapidly as before. Receipts of hogs in the last two weeks were the smallest in more than two years, and nearly a third less than a year ago.

LIVE STOCK SALES.

Holsteins.

Oct. 16—C. S. Heeg & Son, Howell, Mich.
 Oct. 21—Washtenaw County Holstein Breeders, Ann Arbor, Mich.
 Oct. 23—Howell Sales Company, Howell, Mich.
 October 24—Complete dispersal sale. Spring Valley Stock Farms, Elisha, Bailey & Son, Pittsford, Mich.
 Oct. 24—R. G. Powell, Howell, Mich.
 Oct. 22—W. R. Harper, Middleville, Mich.

Live Stock Market Service

Tuesday, October 7.

CHICAGO

Hogs.

Receipts 17,000. Market is uneven, mostly steady. Light lights and killing pigs 25 @ 50c lower; tops at \$11.50; good 160 to 225-lb. average \$10.90 @ 11.40; bulk good 250 to 350-lb. butchers \$11 @ 11.30; medium choice 140 to 160-lb. weight \$10 @ 10.50; bulk packing sows \$9.85 @ 10.20; majority of good weight slaughter pigs \$9 @ 9.50.

Cattle.

Receipts 9,000. Market-fed steers and yearlings steady to 25c lower; practically all grades weighty steers showing decline, very dull; best yearlings \$11.75; she stock slow at Monday's down-turn; calves are 25c lower at \$11 @ 11.50; western grassers are slow, and fairly steady.

Sheep and Lambs.

Receipts 20,000. Market is active. Fat lambs are strong to 25c higher; sorting is light; early bulk natives at \$13.25 @ 13.50; to packers, tops \$13.75; few to city butchers up to \$14; choice Washington \$13.85; best rangers are held about \$14; fat natives are 25c higher; bulk fat ewes are \$5 @ 7; wethers \$7.50; feeding lambs are steady; early sales good feeders \$12.75 @ 13; fed clipped lambs \$11.60 @ 11.85.

DETROIT

Cattle.

Receipts 254. Market slow, about steady.
 Good to choice yearlings
 dry-fed \$ 9.00 @ 11.00
 Best heavy steers, dry-fed 7.75 @ 8.50
 Heavyweight butchers .. 6.50 @ 7.25
 Mixed steers and heifers 6.25 @ 6.50
 Handy light butchers ... 4.75 @ 5.50
 Light butchers 3.75 @ 4.50
 Best cows 4.50 @ 5.25

Butcher cows 3.50 @ 4.25
 Cutters 2.50 @ 3.00
 Canners 2.50 @ 2.75
 Choice bulls 4.25 @ 4.50
 Heavy bologna bulls 4.75 @ 5.25
 Stock bulls 3.75 @ 4.25
 Feeders 5.25 @ 6.50
 Stockers 4.25 @ 5.75
 Milkers \$45.00 @ 85.00

Veal Calves.

Receipts 340. Market steady.
 Best \$13.50 @ 14.00
 Others 3.50 @ 13.00

Sheep and Lambs.

Receipts 2,579. Market is steady to 25c higher.
 Best lambs \$13.00 @ 13.25
 Fair 10.50 @ 12.50
 Light to common 7.00 @ 8.50
 Fair to good sheep 5.00 @ 7.00
 Culls and common 1.50 @ 3.00
 Buck lambs 7.00 @ 12.25

Hogs.

Receipts 1,809. Market about steady.
 Mixed and heavy yorkers \$11.50 @ 11.55
 Roughs 8.75
 Pigs 9.75
 Yorkers 10.50 @ 11.50
 Heavies 10.00 @ 11.50

BUFFALO

Hogs.

Receipts 460. Market closing steady.
 Heavies \$11.75 @ 12; medium \$11.65 @ 11.85; light weight \$11.25 @ 11.65; light lights \$10 @ 11; pigs \$10; packing sows roughs \$9.25 @ 9.50.

Cattle.

Receipts 100. Market steady.

Calves.

Receipts 250. Tops \$13.50.

Sheep and Lambs.

Receipts 1,000. Best lambs \$13.75; ewes \$5.50 @ 6.50.

THE EGG-LAYING CONTEST.

LAST week ended the twelfth four-weekly period in the 1924 egg-laying contest. The production of the past week was 476 eggs higher than the same week last year. Mr. Eckard's pen, which leads the contest by a large margin, has produced 2,452 eggs to date; while last year the high pen had a total production of 2,090 eggs for the same period.

L. I. Heasley's Leghorns come second in the contest with a total production of 2,240. Mr. Eckard's other pen is not pressing Mr. Heasley's as closely, as it has a production of only 2,219 eggs.

Fourth in the contest come the Leghorns belonging to Charles Hefferan, which have produced 2,148 eggs, and fifth is the pen of Leghorns belonging to H. A. Keister, which has a production of 2,077 eggs.

Among the heavy breeds the Milan Hatchery R. I. Reds, lead with 1,977 eggs. C. M. Beckwith's pen leads the Anconas with a production of 1,785 eggs. The Evergreen Poultry Farm birds lead the White Wyandottes with 1,749, and the Barred Rocks belonging to J. V. Sheap lead that breed with 1,697 eggs.

The high pens for the week were Mr. Eckard's leading pen and the Arnold Egg Ranch Leghorns which tied for first place with forty-nine eggs. These were followed by Mr. Totem's Leghorns.

VETERINARY.

Nasal Catarrh.—I have a horse fifteen years old that caught cold; since then he has been troubled with cough, also has mucus running from both nostrils. This horse seems to be in good condition. We have tractor, and the horse does only light work. He may have incipient heaves.—E. G. Carleton, Mich.—Mix one part powdered nitrate of potash, three parts powdered gentian, five parts baking soda together, give him a tablespoonful at a dose in ground feed three times a day. Feed him a good quality of fodder, but no clover.

Shy Breeding Cows.—I have been having trouble with my cows getting with calf. Some of them have been served several times during the summer and fail to get with calf. A. L. D. Uby, Mich.—If your cows have no vaginal discharge, come in heat regularly, try the yeast remedy. This is prepared by dropping a cake of compressed yeast into one quart of tepid water, let it stand for two or three hours in warm room, strain, then flush vagina. Treat each cow daily for one week before the animal comes in heat.

Obstructed Teat.—Vomiting.—Have a five or six-year-old cow which seemed to have bunch in one teat. This was three years ago, one quarter of udder pained her. About a month ago

she began stepping around while milking as if it hurt her. I gave her half pound of salts in sweet milk at a dose, gave two doses, also gave her some baking soda. She vomited hard, then I called our local veterinary, who gave her salts, aloes and oil; this opened her bowels. Her milk yield increased some; she is due to freshen in November. Her bowels act well, but occasionally she vomits. Is her milk fit to use? E. J. G. Deckerville, Mich.—Rub throat and udder with camphorated oil once a day. Give her half ounce of dilute hydrochloric in one quart of cold water as a drench three times a day. Her milk is fit for use, but is she not unprofitable to you for dairy purposes?

COUNTY CROP REPORTS.

Newaygo Co., Oct. 2.—Owing to the blight, beans will be a small crop. Wheat and oats were excellent crops in this section, but there are not many apples. Live stock has been pretty well picked up at better prices than last year. Not many hogs raised. There is plenty of labor. Potatoes are good, selling at 90c. Butter 24c; eggs 35c. Cream seems to be the farmer's best bet. In this section they are going into the dairy business more extensively.—S. A.

Genesee Co., Oct. 1.—We are having fine weather for the late fall crops. Threshing shows good yields of both wheat and oats. Potatoes generally are good. Corn is late. Some fields are cut and in the silo. Selection of seed corn in the field is being followed to some extent. Beans were secured in good condition, as a rule, and the yield is generally satisfactory. Fall pastures are excellent, as rains have been very plentiful and no killing frosts to date. Wheat seeding is well along. About the usual acreage going in.—E. R.

Cathoon Co., Oct. 1.—All of the corn did not get ripe and farmers will have trouble in securing seed corn next spring. Potatoes are a fair crop. There are the usual number of hogs and lambs, but cattle are not so plentiful. Eggs bring 36c; butter 40c; wheat \$1.30.—J. H.

Holmes, Stuve Co., 2429 Riopelle St.
Commission Merchants. Dressed Beef, Hogs, calves, poultry, Live & Dressed, Provisions, etc. Correspondence Solicited. Ref. Wayne County & Home Savings Bank. Bradstreet. Detroit, Mich. Cherry 7654

SHEEP

BREEDING EWES

If right kind make more than 100%. Delaine wool now 60c. Offer 4,000 DELAINE, shear 10 pounds, that's \$6.00; produce lambs worth \$8.00 or \$10, that's \$14.00 to \$16.00 a head; one year. Many of my customers doing that well. Names on request. —Ewes cost \$10.00 and less. Car lots only. Going fast. Also two cars Delaine and cross-bred wether feeding lambs and two cars Delaine and cross-bred ewe lambs. Will shear present cost in wool next spring. That's 100%. All healthy. Can you beat it? Better wire when will come. Will ship mail or wire order, guaranteeing satisfaction.

George M. Wilbur, Oaklands, Marysville, Ohio

Shropshire Rams and ram lambs of the woolly type. Dan Boohar, R. 4, Ewart, Mich.

Pure-bred Shropshire Rams and Duroc Hogs
LAKEFIELD FARMS,
Clarkston, Mich.

The Maples Shropshires

For Sale—Choice yearling rams and a 2-yr.-old Shropshire stock ram. Also large ram lambs. C. R. LELAND, Ann Arbor, Mich. Phone 7134-F 13, R. 5.

Registered Shropshire Rams

yearlings and lambs. Also a few good ewes. D. L. CHAPMAN & SON, So. Rockwood, Mich.

Sheep For Sale

Rams, Ewes & Lambs—Cottswolds, Tunis, Lincoln, Oxford & Karakulcs. LEROY KUNEY, Adrian, Mich.

Shrop hires

Am offering 11 show and breeding rams at reasonable prices. C. J. THOMPSON, Rockford, Mich.

Registered Shropshire

yearling rams and ram lambs of exceptional quality. Also a few ewes. C. LEMEN & SONS, Dexter, Mich.

Registered Shropshire Rams,

Yearlings and lambs at farmers' prices. RALPH SHERK, Caledonia, Mich.

FOR SALE

3 Yearling Oxford Rams; 7 Oxford Ram Lambs, also Herd Sire. Write John Foster, Sears, Michigan.

For Sale

Registered Oxford Rams and Ewes. Satisfaction guaranteed. Geo. T. Abbott, Palms, Mich. Phone 78-5, Deckerville, R. 2.

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 5 cents a word, each insertion, on orders for less than four insertions; for four or more consecutive insertions 6 cents a word. Count as a word each abbreviation, initial or number. No display type or illustrations admitted. Remittances must accompany order. Real estate and live stock advertising have separate departments and are not accepted as classified. Minimum charge, 10 words.

Rates in Effect October 7, 1922					
Words	One time	Four times	Words	One time	Four times
10.....	\$3.00	\$2.40	35.....	\$2.00	\$1.60
11.....	3.30	2.64	36.....	2.16	1.72
12.....	3.60	2.88	37.....	2.32	1.84
13.....	3.90	3.12	38.....	2.48	1.96
14.....	4.20	3.36	39.....	2.64	2.08
15.....	4.50	3.60	40.....	2.80	2.20
16.....	4.80	3.84	41.....	2.96	2.32
17.....	5.10	4.08	42.....	3.12	2.44
18.....	5.40	4.32	43.....	3.28	2.56
19.....	5.70	4.56	44.....	3.44	2.68
20.....	6.00	4.80	45.....	3.60	2.80
21.....	6.30	5.04	46.....	3.76	2.92
22.....	6.60	5.28	47.....	3.92	3.04
23.....	6.90	5.52	48.....	4.08	3.16
24.....	7.20	5.76	49.....	4.24	3.28
25.....	7.50	6.00	50.....	4.40	3.40

Special Notice All advertising copy discontinuance orders or change of copy intended for the Classified Department must reach this office ten days in advance of publication date.

MISCELLANEOUS

GET MORE FOR YOUR EGGS.—Let us sell them for you on the Boston market. Prices are higher than in your town. Freight very small when divided at the rate per dozen. Start shipment now. Produce Commission Company, 34 Chatham Street Boston, Mass.

SEND ONE DOLLAR to Home To-Day Magazine, 415 Maller Bldg., Chicago, Ill., and receive year's subscription to a real interesting home monthly magazine. Also gratis a book of beautiful building plans for city and country homes.

WHIRLWIND SILO FILLER. Model "T" at a bargain. New machine, easy terms. The McClure Company, Saginaw, Michigan.

FREE! Winter's supply of coal absolutely free for a few hours' spare time. Write today. Popular Coal Company, 1972 Coal Exchange Bldg., Chicago.

FOR SALE. McCormick Deering 6-roll husker, used about 20 days, also 12-25 Tractor and 3-bottom 42-inch gang. Leon Peacock, Paw Paw, Mich.

WHIRLWIND SILO FILLER. rebuilt, in good condition. For sale cheap. The McClure Company, Saginaw, Mich.

ALL WOOL YARN for sale from manufacturer. 75c to \$2.00 per lb. Free Sample. H. A. Bartlett, Harmony, Maine.

USED INCUBATORS for sale; No. 7 Buckeye; 14,000 Blue Hen. For prices and detail write C. M. Lower, Bryan, Ohio.

TYPEWRITERS.—\$20 up. Easy payments. Free trial. Payne Company, Rosedale, Kans.

REAL ESTATE

72-ACRE FARM Near Detroit—3 Horses, 5 Cows, 300 Hens—23 Acres corn, oats and wheat, other crops, valuable machinery, vehicles; adjoining farms held \$100 to \$125 acre; only 33 miles Detroit; 50 acres level cultivation, good wire fences, 7-acre woodlot; variety fruit; pleasant 2-story 8-room house, good barns, other buildings, insured \$4,400. Called away by business, \$6,500 takes all, part cash. *Worth coming to see. E. O. Loveland, Milan, Mich.

MICHIGAN LANDS.—One tract 1,280 Acres Schoolcraft Co., ditched, 800 Acres or more ready for crop. 60 Acres Timothy; on railroad; sufficient timber for buildings. Time. Snap price, 3,800 Acres Alger Co., one tract on state highway, 2 miles from station; good soil, 3 brooks, 1,000 or more Acres meadow; Bargain price, long time if desired. Jesse Greenman, Pioneer Bldg., St. Paul, Minn.

SOUTHEAST MISSOURI.—Where Everything Grows. Population increased 50% past year. A wonderful valley of alluvial soil and untold opportunity for the farmer and investor. We sell our own land in any size tracts. Write Dan and Leo Becker, 5130 South Broadway, St. Louis, Mo., Dept. C.

FOR SALE.—200 acres of rich level land, 100 acres under cultivation; 10 acres of timber; splendid buildings; finely located one mile west of Crosswell on state reward road, \$60 per acre. James Ragen, Crosswell, Mich.

TOBACCO

HOMESPUN TOBACCO.—Chewing, five pounds, \$1.75; ten, \$3.00; twenty, \$5.25. Smoking, five pounds, \$1.25; ten, \$2.00; twenty, \$3.50. Pipe Free. Money back if not satisfied. United Tobacco Growers, Paducah, Ky.

Homespun Tobacco, chewing, 5 lbs. \$1.75; 10 lbs. \$3.; smoking, 5 lbs. \$1.25; 10 lbs. \$2.; satisfaction guaranteed. Farmers' Tobacco Union, Sedalia, Ky.

OXFORDS Rams, Yearlings and Ram Lambs. H. W. MANN, Danville, Mich.

Oxford and Tunis Rams Red Poll Cattle, Yorkshire Swine. DON P. CARR, Homer, Mich.

OXFORDS Ram Lambs and yearlings. Shipped to please. Wm. Van Sickle, R. 2, Deckerville, Mich.

Registered Hampshire Rams and Ewes. Best of Breeding. W. W. CASLER, Ovid, Mich.

30 Reg. Rambouillet Rams for sale. One and for wool and mutton. A. & F. Farmer, R. F. D. No. 1, Durand, Mich.

Breeding Ewes

For sale, in lots of 50 or more, telephone Newport, telegraph Rockwood, P. O. So. Rockwood. ALMOND B. CHAPMAN & SON.

50 Delaine Rams as good as grow. Photos free. F. H. RUSSELL, R. 3, Wakarusa, Ohio.

FOR SALE Black top Merino Registered Rams, 30 ewes, lambs, J. Meachams, Millington, Mich.

Delaine Rams Your choice for \$30. Come or write. CALHOON BROS., Branch Co., Bronson, Mich.

FOR SALE.—American and Delaine Merino Rams, having size, covering, quality. Yearlings and one stock ram. Write S. H. Sanders, R. 2, Ashtabula, O.

PET STOCK

FOR SALE.—High-class Foxhounds; Beagle hounds, Coonhounds; Bloodhounds; and Setters; partly and well-broken; puppies of all breeds; no money in advance, ship C. O. D. Stamp for booklet, Landis-Kennels, Mohnton, Pa.

FERRITS.—I specialize in raising ferrits. Thirty years' experience. October prices, females \$5.50 each; males \$2.75 each. One dozen \$30. Yearling females special rat catchers \$5.00 each. Will ship C. O. D. Instruction book free. Levi Farnsworth, New London, Ohio.

FERRITS for sale, Herschal Pock, Box 854, Des Moines, Iowa.

FOR SALE.—Good fox, coon and skunk hounds. John Atchison, Harrisville, Mich., R. 3, Box 100.

QUALITY HOUNDS Cheap. Trial C. O. D. Beck's Kennels, M. F., Patoka, Ill.

AIREDALE PUPS.—Write for description and prices. Clark Cosgrove, Bellevue, Mich.

FERRITS.—Ratters and hunters. Booklet free. Thos. Sellers, New London, Ohio.

FOR SALE.—Spotted coon hound, 1½ years old, \$25. J. E. Nelson, Shipshewana, Ind.

POULTRY

SELLING OUT.—Toulouse and Brown Chinese Geese, \$5 each. Pekin ducks \$2.50 each. Mallard ducks \$2 each. Won all first prizes at West Mich. State Fair, 1924. Mrs. F. D. Campau, Grandville, Mich.

WANTED.—One Thousand S. C. White Leghorn Pullets, good utility stock. Give age and price. Box 335, Michigan Farmer.

200-EGG STRAIN White Rock Cockerels, \$2.50 to \$5. Woodsroad Place, R. 3, Buchanan, Michigan.

FOR SALE.—S. C. Buff Leghorn cockerels. Willard Webster, Bath, Mich.

FOR SALE.—Golden Seabright Bantams, not related. Jackson Bantam Farms, 110 W. Wilkins St., Jackson, Mich.

"TANCRED" WHITE LEGHORNS.—Barred Rocks, Buff Orpingtons, Winners. Write Fenner Bailey, Montgomery, Mich.

WHITE WYANDOTTES exclusively, cockerels \$1.75 each. Raymond Eash, Shipshewana, Ind.

AGENTS WANTED

WANTED.—FRUIT TREE SALESMAN.—Profitable, pleasant, steady work. Good side line for farmers, teachers and others. Permanent job for good workers. Write for terms. I. E. Igenfritz Sons' Co., The Monroe Nursery, Monroe, Mich. Established 1847.

AGENTS.—Be independent, make big profit with our soap, toilet articles and household necessities. Get free sample case offer. Ho-Ro-Co., 2761 Dodier St., St. Louis, Mo.

BIG MONEY selling new household cleaner. Washes and dries windows. Sweeps, scrubs, mops. Complete outfit less than brooms. Over 100% profit. Harper Brush Works, 173 3rd St., Fairfield, Iowa.

HELP WANTED—MALE

WANTED.—Single man to care for pure-bred Jersey herd. Must be of good habits, kind to animals, and energetic. This is a modern Dairy Farm, with milking machine and all modern machinery. Farm located only ½ mile from thriving city. Give references and state wages expected. Address Box 888, Michigan Farmer.

EARN \$110 to \$250 monthly. expenses paid as Railway Traffic Inspector. Position guaranteed after completion of 3 months' home study course or money refunded. Excellent opportunities. Write for Free Booklet, G-121 Stand, Business Training Inst., Buffalo, N. Y.

SITUATIONS WANTED

WANTED, POSITION by experienced man on large Stock or Dairy Farm in barn as helper. A-1 hand-milker. Address Box 456, Michigan Farmer.

TRY a Michigan Farmer Classified Liner. They bring results.

CONSIGNMENT SALE REGISTERED HOLSTEIN CATTLE Wednesday, October 22, 1924

At the Cattle Barn, Kalamazoo Fair Grounds

Kalamazoo, Michigan

77--Head of Selected Cattle--77

Inspected at the farm where owned before being accepted for This Sale and undesirable animals rejected. There will be several High Class Bulls, New Milch Cows and Springers, Choice Two-year-old Heifers, fresh or nearly ready to freshen, a few good Yearling Heifers and about twenty good Heifer Calves, suitable for Boys' Calf Club work or desirable for starting New Holstein Herds. We have entered in this Sale

A Grandson of King of the Pontiacs out of a 32-lb. Dam, a Desirable Young Bull Ready for Service. A Four-year-old Bull out of a 37-lb. Sire and from a 32-lb. Dam with a milk record of 745 lbs. of milk in 7 days. A Bull calf 8 months old of 30.84-lb. Dam. A Bull calf 7 months old out of a 25-lb. Senior two-year-old daughter of a 31-lb. cow and a 34.71-lb. Sire, and Sired by a Bull out of a 31.90-lb. four-year-old daughter of a 34-lb. Bull. A few A. R. O. Cows and daughters of A. R. O. Cows and High Class Sires. Two desirable daughters of a 30-lb. Son of King of the Pontiacs.

20—Good Two-year-old Heifers—20 fresh at time of Sale or nearly ready to freshen. A few Good Yearling Heifers. 20 Good Heifer Calves that will be desirable for Foundation Stock.

All these Cattle will be Carefully Tuberculin Tested and a Certificate of Health furnished with each animal. Remember the Time and Place, Wednesday, October 22, 1924.

If interested, write for a Sale Catalog.

W. R. Harper,

Sales Manager, Middleville, Mich.

Col. D. L. Perry

Auctioneer, Columbus, Ohio

R. AUSTIN BACUS, Mexico, New York, Pedigree Expert



He threw away his butter-fat

*Let this Iowa story throw some light
on your farming profits*

A PROMINENT farm paper tells about a Corn Belt farmer who purchased a separator at public auction for \$11.00. He was congratulating himself on his thrift, when along came an Association Tester. The "bargain" was tested. The test disclosed that \$7.60 worth of butter-fat had slipped by into the skimmed milk.

No State or Government inspector comes around to test the lubrication of your automobile, truck or tractor. If there were lubrication inspectors there certainly would be even more farmers who use Gargoyle Mobiloil.

"Bargain price" oils or low-cost lubrication?

Cheap oils are just as uncertain and expensive to use as cheap separators. That is why practically every manufacturer of automobiles, motor trucks and tractors endorses the Gargoyle Mobiloil Chart of Recommendations.

These experts have inspected thousands of automobile engines. They know that over half of all moving parts wear out prematurely because of incorrect lubrication. They know that millions of horsepower are lost

every year because of incorrect oil. They know that correct lubrication would save millions of dollars of farm profits which now get away because of unnecessary repairs and replacements.

Consumers, too, have discovered that Mobiloil is the cheapest oil at any price. "Suppose it does cost more by the barrel," they say, "It also costs less by the year."

Gargoyle Mobiloil is made by a company which for more than 58 years has specialized solely in lubrication. That is why the Chart of Recommendation is the accepted scientific guide to low cost lubrication.

The chart is shown here in part. If your automobile, motor truck, or farm tractor is not listed in this partial chart, see the complete Chart which hangs on the dealer's walls. Or write our nearest Branch for our booklet "Correct Lubrication."

Tractor Lubrication

The correct engine Lubrication for the Fordson Tractor is Gargoyle Mobiloil "BB" in summer and "A" in winter. The correct oil for all other tractors is specified in our Chart. Ask for it at your dealer's.



Mobiloil

Make the chart your guide

Domestic Branches: New York (Main Office) Philadelphia Indianapolis Des Moines Milwaukee Oklahoma City Portland, Me. Detroit Minneapolis Dallas Buffalo Peoria Springfield, Ill. Boston Pittsburgh St. Louis Kansas City, Mo. Rochester Albany New Haven Chicago

VACUUM OIL COMPANY

Chart of Recommendations

(Abbreviated Edition)

THE correct grades of Gargoyle Mobiloil for engine lubrication of both passenger cars and motor trucks are specified in the Chart below.

A means Gargoyle Mobiloil "A"
B means Gargoyle Mobiloil "B"
BB means Gargoyle Mobiloil "BB"
E means Gargoyle Mobiloil "E"
Arc. means Gargoyle Mobiloil Arctic

Where different grades are recommended for summer and winter use, the winter recommendation should be followed during the entire period when freezing temperatures are experienced.

The Chart of Recommendations is compiled by the Vacuum Oil Company's Board of Automotive Engineers, and represents our professional advice on correct automobile lubrication.

NAMES OF AUTOMOBILES AND MOTOR TRUCKS	1924		1923		1922		1921		1920	
	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter	Summer	Winter
Anderson	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Apperson (6 cyl.)	A	A	A	A	A	A	A	A	A	A
Auburn (Model 6-3)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Autocar	A	A	A	A	A	A	A	A	A	A
Buick	A	A	A	A	A	A	A	A	A	A
Cadillac	A	A	A	A	A	A	A	A	A	A
Case	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Chalmers	A	A	A	A	A	A	A	A	A	A
Chandler	A	A	A	A	A	A	A	A	A	A
Checker Cab	A	A	A	A	A	A	A	A	A	A
Chevrolet (Models EB & F)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Chrysler	A	A	A	A	A	A	A	A	A	A
Cleveland	A	A	A	A	A	A	A	A	A	A
Cole	A	A	A	A	A	A	A	A	A	A
Columbia (Det.) (Con't Eng.)	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" " All Other Models	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Cunningham	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Davis	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Dodge Bros.	A	A	A	A	A	A	A	A	A	A
Doris (6 cyl.)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Dort	A	A	A	A	A	A	A	A	A	A
Duesenberg	A	A	A	A	A	A	A	A	A	A
Durand Four	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Eclair (4 cyl.)	A	A	A	A	A	A	A	A	A	A
" " (6 cyl.)	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Flint	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Ford	BB	BB	BB	BB	BB	BB	BB	BB	BB	BB
Franklin	A	A	A	A	A	A	A	A	A	A
Gardner	A	A	A	A	A	A	A	A	A	A
Garford (114, 136 ton)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	A	A	A	A	A	A	A	A	A	A
G. M. C. (Con't Eng.)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	A	A	A	A	A	A	A	A	A	A
Graham Bros.	A	A	A	A	A	A	A	A	A	A
Gray	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Gray Dorr (Canada)	A	A	A	A	A	A	A	A	A	A
Haynes (6 cyl.)	A	A	A	A	A	A	A	A	A	A
" " (12 cyl.)	A	A	A	A	A	A	A	A	A	A
H. C. S.	A	A	A	A	A	A	A	A	A	A
Hudson Super Six	A	A	A	A	A	A	A	A	A	A
Hupmobile	A	A	A	A	A	A	A	A	A	A
Jewett	A	A	A	A	A	A	A	A	A	A
Jordan	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Kaiser	A	A	A	A	A	A	A	A	A	A
" " All Other Models	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Lincoln	A	A	A	A	A	A	A	A	A	A
Locomobile	A	A	A	A	A	A	A	A	A	A
Mark (Con't)	A	A	A	A	A	A	A	A	A	A
McLaughlin-Buick (Cam)	A	A	A	A	A	A	A	A	A	A
Marmion	A	A	A	A	A	A	A	A	A	A
Maxwell (Con't)	A	A	A	A	A	A	A	A	A	A
Moon	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Nash Four & Six (Con't)	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" " (Quad)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	A	A	A	A	A	A	A	A	A	A
National (Ind.) (Mod. 6-31)	A	A	A	A	A	A	A	A	A	A
" " (Mod. 6-51)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	A	A	A	A	A	A	A	A	A	A
Oakland (Mod. 30)	A	A	A	A	A	A	A	A	A	A
" " (Mod. 30)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	A	A	A	A	A	A	A	A	A	A
Overland	A	A	A	A	A	A	A	A	A	A
Packard (Eight)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	A	A	A	A	A	A	A	A	A	A
Paige (Con't Eng.)	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" " All Other Models	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Paterson	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Peerless (8 cyl.)	A	A	A	A	A	A	A	A	A	A
Pierce Arrow (2 ton)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	BB	BB	BB	BB	BB	BB	BB	BB	BB	BB
R. & V. Knight	A	A	A	A	A	A	A	A	A	A
Reo	A	A	A	A	A	A	A	A	A	A
Rickenbacker	A	A	A	A	A	A	A	A	A	A
Roamer (Mod. 40)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	A	A	A	A	A	A	A	A	A	A
Rollin	A	A	A	A	A	A	A	A	A	A
Rolls Royce	A	A	A	A	A	A	A	A	A	A
Sayer & Scoville (S&S)	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Stat.	A	A	A	A	A	A	A	A	A	A
Stearns Knight	B	B	B	B	B	B	B	B	B	B
Stephens	A	A	A	A	A	A	A	A	A	A
Stewart (N.Y.) (6 ton)	A	A	A	A	A	A	A	A	A	A
" " (Mod. 7 X 10 X)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	A	A	A	A	A	A	A	A	A	A
Studebaker	A	A	A	A	A	A	A	A	A	A
Stutz (4 cyl.)	A	A	A	A	A	A	A	A	A	A
" " (6 cyl.)	A	A	A	A	A	A	A	A	A	A
" " (Mod. 20)	A	A	A	A	A	A	A	A	A	A
Westcott (Mod. D-48)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
White (Mod. 15 & 20)	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
" " All Other Models	A	A	A	A	A	A	A	A	A	A
Willys-Knight	B	B	B	B	B	B	B	B	B	B
Winton	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Yellow Cab	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.

Makes of Engines

When Used in Passenger Cars and Motor Trucks

(Recommendations shown separately for convenience)										
Buda (Mod. RU, WU)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	A	A	A	A	A	A	A	A	A	A
Continental (Mod. B5)	A	A	A	A	A	A	A	A	A	A
" " (Mod. B7)	A	A	A	A	A	A	A	A	A	A
" " (Mod. 12XD)	A	A	A	A	A	A	A	A	A	A
" " (Mod. B7)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Falls	A	A	A	A	A	A	A	A	A	A
Hercules	A	A	A	A	A	A	A	A	A	A
Herschell-Spill	A	A	A	A	A	A	A	A	A	A
" " (Mod. 15, 41, 80 & 91)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.	Arc.
Hinkley	A	A	A	A	A	A	A	A	A	A
Lycorn	A	A	A	A	A	A	A	A	A	A
" " All Other Models	A	A	A	A	A	A	A	A	A	A
Rochester	A	A	A	A	A	A	A	A	A	A
Waukegan (Mod. Y, YakZ)	A	A	A	A	A	A	A	A	A	A
" " (CJ, DU, EU, FU)	A	A	A	A	A	A	A	A	A	A
" " All Other Models	A	A	A	A	A	A	A	A	A	A
Wisconsin	A	A	A	A	A	A	A	A	A	A

Transmission and Differential

For their correct lubrication, use Gargoyle Mobiloil "C," "CC" or Mobilolubricant as recommended by complete Chart available at all dealers.