

MICHIGAN FARMER

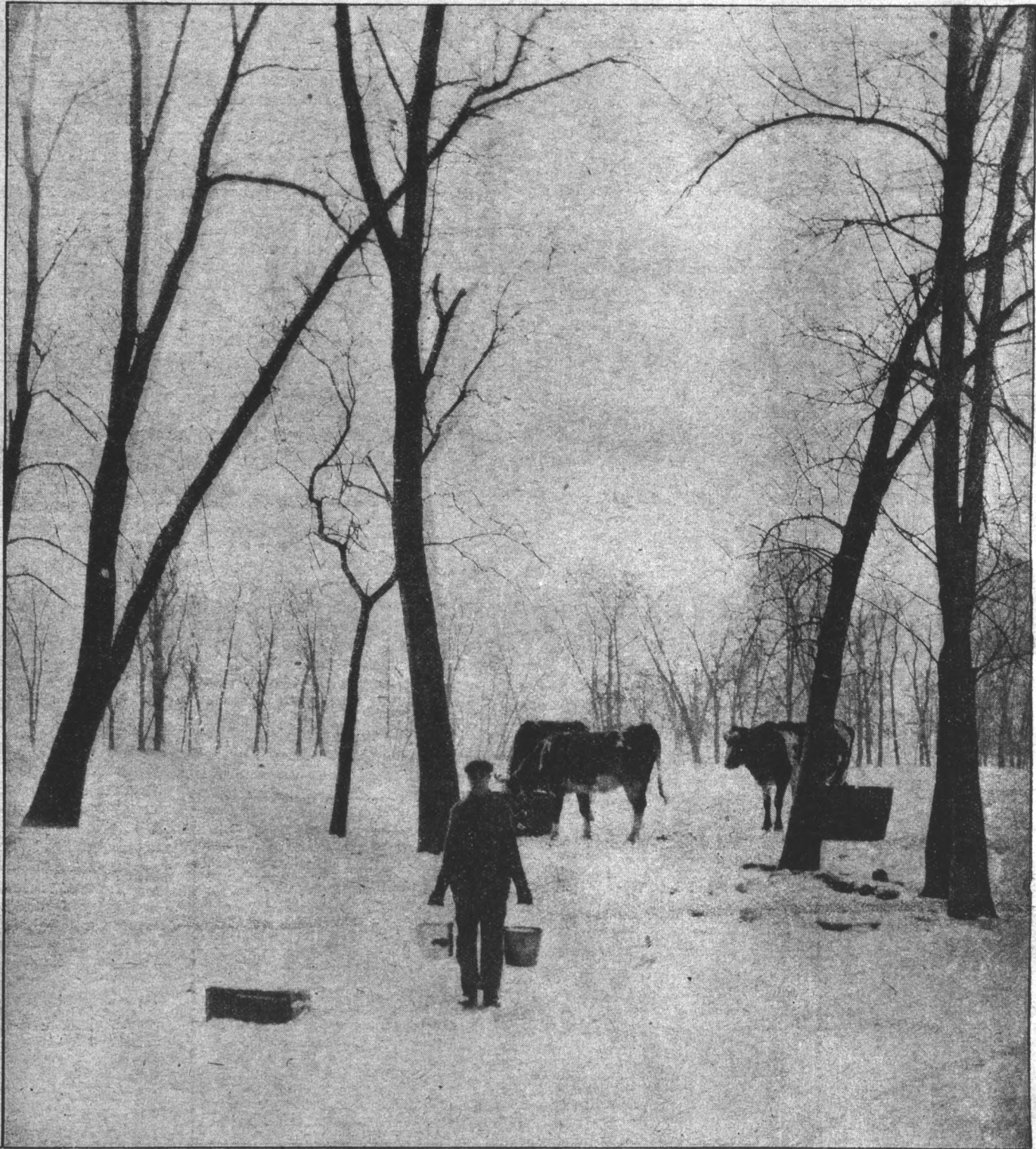
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DETROIT, JANUARY 19, 1924

CURRENT COMMENT

Meeting tax obligations taxes the ingenuity of most of us.

It is getting to be seed catalog time. Has the mail man delivered your supply of picturesque pamphlets yet? If not, it may be your fault for not having sent requests for them.

The cow-milking and wood-chopping contests in Washington got much publicity because such rural activities are so rare at our national capitol. On the other hand, milking the public has become so common as to lose all its news value.

When the winds are blowing, and the storm raging, then is the man fortunate who has a work shop with an ambitious stove in it, for he can spend many a pleasant hour tinkering around and incidentally getting things ready for another season.

Fixing Marketing Policies

IN discussions of the farmers' marketing problem in the columns of the Michigan Farmer, an honest attempt will be made to bring out the limitations and weak points in cooperative marketing organizations as developed in this state, as well as their undoubted benefits.

It is only through the general recognition of these limiting and weakening factors, and their correction so far as possible, that the most rapid progress along right lines can be made. For best results, or even satisfactory results, the entire membership of a cooperative marketing organization must be thoroughly well informed regarding the policies and methods of operation of the organization with which they are affiliated.

The very nature of these organizations makes their democratic control, so far as the fixing of marketing policies is concerned, an absolute essential to their highest success. When those policies are fixed in accordance with a majority opinion of a well-informed membership, the rest of the members will go along with the majority, at least until it is evident that the established policy does not give the results which its advocates expected. And in this event it will be easy to change the policy in accordance with a changed majority opinion of the membership. Any other method of fixing marketing policies is almost certain to defeat the larger aims of the organization through the disaffections of many of its members.

Cooperative leaders and managers are very apt to reach the conclusion

that, through their closer touch with the affairs of their respective organizations, they are better qualified to fix sound policies of operation than are the rank and file of the members. In many cases there may be a good foundation for this idea, which is one of the weaknesses of the system. It is a serious mistake on their part to believe that they can go ahead along new policy lines in advance of the intelligent approval of a majority of their membership. To do this is to court the ultimate failure of even sound policies.

On the other hand, the members of cooperative marketing organizations make an even greater mistake in failing to take an active interest in shaping the policies of the organizations with which they are affiliated. This is a responsibility which goes with membership in such an organization, and the member who shirks it has no license to complain about results.

Cooperative marketing organizations belong to their members, not to their managers or the directors who are delegated with powers for their actual operation. It is the duty as well as the privilege of individual members to attend all meetings of their organizations and take an active part in the deliberations in which their marketing policies are fixed. Without general interest of this kind there can be no worth-while results from attempts to solve the farmers' marketing problem by this means.

Every member of every cooperative marketing organization in the state should attend every meeting of the organization, familiarize himself with every possible detail of its operation and take an active part in the discussion of marketing policies. This will insure a crystallization of membership opinion along constructive lines, hold managers and directors within desirable bounds, and contribute to the success of cooperative marketing organizations in this state as nothing else can do.

Let The Children Lead

THE little girl had her playmates in a few nights ago. During the evening a basket of fruit was passed. As the basket

went by, each one took what appeared to be the best apple then remaining.

That was perfectly natural. These children did just exactly what we grown-ups do in our every-day life. We bring home from the store the goods that make the strongest appeal to us.

Right at this point seems to be the place where we have fallen down in the marketing of Michigan potatoes. There is general, in fact, unanimous, agreement among those who see our stock upon the marts of the country from an unprejudiced standpoint, that it lacks in grading and much of it is

too dark to appeal where lighter kinds are at hand to compare.

The children, perhaps, could lead us out of our dilemma.

The Farm Auto

out of 1,371, owned a total of 1,000 autos and trucks.

One, especially a city man, would be led to think after a cursory glance at those figures that, "By gum, them farmers is livin' high, with all them autos. It just shows they're makin' lots of money on what they're sellin' us."

Such would be the thought of surface thinkers, but a search below the surface would reveal an entirely different condition.

It was shown that nine-tenths of these cars were "farm business cars," two-thirds were of the low-priced touring-car type, and most of them were seven to eight years old. Next came trucks, which constituted about twenty-five per cent of the number. Roadsters, sedans and coupes, those which are used for pleasure and comfort, made up only one-tenth of the number.

It is surprising to us that more of the 1,371 did not have cars, as autos are as essential on the farm as any other piece of machinery. Time is one of the great elements in farm activities, and the auto is the greatest saver of it.

Most every farmer has a mowing machine because it saves him time in cutting grass, as compared with the scythe. Why should he not have an auto to save him time in going to town, as compared with Old Dobbin?

Nobody says anything when he possesses a mowing machine, but an auto, that's different. As far as we can see, one is as important as the other. The only trouble is that the farmer can not use his mowing machine to take his family on picnics occasionally, or to enjoy the roads and the fresh night air after a hard day's work. Perhaps it is unfortunate that the auto is so adaptable that it can be used for both employment and enjoyment, but we feel sure that most of us are glad to have such a misfortune to contend with.

Building On Sand

A CHURCH with boarded windows, and an unpainted schoolhouse, with unhinged blinds, broken glass, a crumbling porch, and outbuildings leaning, doorless and filthy, were located near each other in a rich agricultural section of this state.

The writer did not learn in detail the history of these institutions. But without doubt, the community had

been blessed some time in the past with good leadership and a community spirit which kept alive interest in the general welfare. Today there is every evidence that both the leadership and the spirit are gone.

We are satisfied in this particular instance that the neglect of these institutions was not a matter of ability to finance. The fine homes, well-kept premises, high-priced automobiles belie the suggestion. Rather, we believe that the spirit of fellowship and unselfishness had gone out of the people.

Communities change, some times for better, and again for worse. Usually when they grow less efficient the first evidence is seen in the schools and the churches. These public institutions tell quite accurately the condition of the soul of the community.

The growing of a generation of men without the aid of the school and the church is like building upon the sand. In due season the winds and storms of life will work havoc.

Kids

ME and Sophie is havin' quite a argument about kids, 'cause our kids is gettin' old enough so they know more about what you call disobeyin' us.

Now, Sophie thinks our kids is gotta stop their raskaddlin' around. She says by this time they is supposed to know better, whether they do or not. And if they don't, we gotta stop them anyhow. The main thing with Sophie is, we gotta make them stop.

Now, I thinks kids is kids, like colts is colts, and calves is calves. And I see colts and calves don't always behave.

For inst., when Mr. Jason Foster came out to see us from the city, he was goin' to tie our brindle calf by the road, but the calf kinda thought he was playin', so s he pulled him all over the forty-acre field without gettin' tied up.

Maybe the calf knew Mr. Jason Foster wasn't his parunt, so didn't behave for him, but I don't think so, 'cause kids generally behave for other kidse's parunts better than their own. That's 'cause they don't know the other kidse's parunts so well.

Now, when I was a kid I never liked to do what you call obey, 'cause it ain't what you call democratic, and that's sayin' lots fer a fellow whose father was a republican. If somebody was sayin' to me that if I was a good boy I would get another piece of cherry pie, I'd be good. Or if somebody says that if I do somethin' it would hurt somebody else, and then asked me if I'd like to be hurt that way, I'd think about it. What made me sit up and take notice more'n anything else was to have somebody tell me what I was doin' did to somebody else.

Obeysin' ain't no fun to nobody, specially when you don't know what you are obeyin' about. There is lots o' times when kids is asked to obey when they is just havin' a little innocent fun. The trouble is we old folks want our kids to walk around with their hands folded like the deacon of the church.

So, I just kinda feel I like to be my kid's paruntal advisor instead of their paruntal ruler. Seems like I tell them they are goin' to get their hands burnt by touchin' the stove, and then when they get them burnt maybe they will get a little what you call confidence in me and come to me about other things. Gettin' the kids' confidence is what counts. The whole trouble is, we old folks don't use what you call pashunce and tact. Sophie just says to me, "No wonder I ain't got no pashunce; I use it all up on you." Maybe it's so, 'cause I ain't over bein' a kid yet.

HY SYCKLE

Pack Your Grip

And Attend the Best FARMERS' WEEK Ever Put On
At The M. A. C.

BIDDIES, bugs, barns, brooms, brains and business will come in for their due share of consideration at Farmers' Week, to be held at the Agricultural College at East Lansing, February 4-8.

Every kind and combination of farming will receive very special attention. Thirty active state farm organizations will meet during the week. Crop improvers, breeders and feeders, beekeepers, potato growers, muck farmers, fruit men, dairymen, chicken men, and every other sort from the thirty-seven corners of Michigan will be there with questions and information.

Exhibits more varied than ever before—exhibits that silently talk and carry deep into the minds of men their unerring messages, will crowd every campus building.

Then over and above all will be the general sessions. Big men, broad men, specialists who have had the opportunity to get a long range on our day, will talk. They will diagnose the past and from it give us a look into the future—a real slant on what may be immediately ahead in the farming business.

It will be a pity, indeed, if you cannot arrange for the chores, bundle up mother, and spend the time from February 4 to 8 at the Agricultural College.

Why Not Some Honey Money?

Some Pros and Cons on Keeping Bees on the Farm.

By B. F. Kindig

IT is often remarked that the number of beekeepers is steadily growing smaller. Fairly accurate records show that in Michigan the number of beekeepers is considerably less than it was ten or twelve years ago. During the war when the price of honey was very high, there was a temporary increase in the number of beekeepers. A succession of rather hard winters since then has practically wiped out all of the gain that was then made.

While there are possibly eight or ten thousands of people in the state that keep bees yet, the most of the bees and by far the largest production of honey is with about one-tenth of that number. It might be interesting to analyze this situation and possibly answer the question as to why the number of beekeepers is growing less in the face of a steadily increasing consuming population.

The average person gets a feeling that they are always a mark for bee stings whenever and wherever they get within stinging range. This feeling naturally suppresses any natural desire to take beekeeping up as either a vocation or a side line. There are only two things, in my opinion, that prevent an over-production of honey; they are the fear of bee stings and the diseases of the bees. The fact remains that bees sting. This is the one big compelling reason for the absence of bees on most farms.

The turnover in beekeepers is tremendous. There are hundreds of people making a beginning in beekeeping in Michigan every year. Every fruit grower and seed grower realizes more or less clearly that bees in close prox-

imity to his farm is a big asset. With the one aim in mind, that of assisting in the pollinizing of his flowers, many farmers secure one or more colonies of bees each spring. Each following spring finds a large number of such colonies dead. Such persons usually ascribe the cause to winter-killing. Winter-killing covers a multitude of sins in beekeeping.

The greatest single handicap to success in beekeeping is not "hard luck" but just ignorance. Not that the persons who fail are ignorant or not capable of learning, but most of them are not informed regarding the simplest rudiments of successful beekeeping.

The average person cannot grow up

in the country or small town without absorbing quite a fund of knowledge regarding the crops and animals commonly kept on the farm. They learn of the proper time for sowing wheat, for cultivating corn, for spraying the fruit trees, for putting up silage and the how and when of most farm operations. They unconsciously absorb such information in the ordinary course of their experiences. But a farmer may rear a family to maturity on the next forty to a beekeeper and the children may become men and women without ever finding out that drones do not sting and that the queen lays all the eggs. With the advent of nature study in the schools some such

things are being taught, but there is precious little that the neighbors see and understand about what the beekeeper is doing. The result is that when such a young man takes a farm of his own and decides that a few colonies of bees would be of benefit, he is not in any way prepared to intelligently attack the task that is before him. He usually does what most of us would do—he flounders around for a season or two and quits in disgust because his life's experience has not taught him methods of beekeeping as it has taught him the approved methods of dairying, fruit growing or truck gardening.

All of which indicates that beekeeping is a very special form of agriculture. The specific causes of the failures and ways to prevent them are subjects worthy of consideration and in the weeks to come I will take them up in the detail that each one requires. Speaking in a rather general way, the errors that are frequently met with are general lack of care, permitting bees to starve, failure to protect in the winter, and disease.

The average farmer has his hands full with the major operations of his farm. He knows that if he neglects his plowing until sowing time has passed, that he cannot reap a crop, and so he plows and sows and hopes that the bees are getting along well without him. As long as bees are flying from the hive the colony is apparently prospering. Cows must be milked with regularity or the milk flow will suffer. Therefore the farmer tends to that duty religiously, forgetting that when the cows go on pasture and re-

(Continued on page 94).



The Abundance of Honey Crops Makes Michigan a Favored Bee State.

When Clover Fails, What?

How One Farmer Makes His Farm Produce Large Crops of Legumes.

By J. L. Justice

CLOVERS are wonderful crops. When I see them growing abundantly on a farm I feel somehow that that farm has been well kept and that clovers will continue to keep it. A field of fine clover is an inspiration, it is lively, it suggests an active soil, it inspires a vision of full barns, well fed livestock, a safe plan of farming.

Aside from "clover sickness" or a root rot infection that attacks the plant, and some insect attacks, there may be several reasons why clovers give only a fair stand which farmers may consider to advantage. A very important one is found in the use of inferior seed. Clover seeds deplete very rapidly when not stored in good condition. Many of our state seed inspection and labelling laws protect the farmers now in the purchase of their seeds, but cheap seeds may still be offered to the farmer, so it will pay him well to know the meaning of everything on the labels that must be attached to the bags of seed. It is best to buy only good seed that has a high per cent of purity and is above ninety per cent germinable. You don't take a big chance with this kind of seed if it is kept dry until sown. I have seen the results of inferior and cheap grades of seed too often.

A thin stand is often due to too light seeding. When seed is high in price and scarce there is often a tendency to make the few bushels of seed spread over too extensive an area. If the season is good, with plenty of moisture and rain, a desirable stand may result, but too often such seedings are inadequate and partial failure results. A little heavier seeding will not cost much more and it may mean the difference between a poor and a

good stand. Even though we have little trouble in getting good stands of clovers, we always sow enough to insure a full stand. Where clovers are seeded systematically in the rotation there is always a tendency for some clover to come as volunteer, from seed perhaps that has lain in the soil without germinating for two years or so. This seems to be especially true of alsike, red and sweet clover, the seed of which is hardy. I have seen alsike clover come in a field of volunteer where none had been sown for six years. Where seed comes this way lighter seedings may come or appear to come good and thus the farmer will believe that light seedings are satisfactory as a general practice.

Inoculation has been proven to be quite a figure in inducing clover stands to come satisfactorily. It has always seemed to me that where

clovers have been grown regularly in a rotation that the greatest success with them has been secured. However, when sowing alfalfa and sweet clover in a field where they have not been grown before, we always inoculate the seed thoroughly before sowing. This is much better, I believe, than spreading the inoculation on the soil. It is an easy and cheap way, and it insures inoculation on every seed when it is properly applied. We have tried inoculating the soil, but sometimes the work is delayed for other things. When applied to the seed it is put into soil where sunlight cannot destroy or vitiate it.

Another worth while measure that may be adopted is to get the seed into the soil so that moisture will reach it immediately and start germination of the seed. When clover is seeded with spring grains as a nurse crop, it

is a simple matter to get the seed covered by harrowing or working it into the loose seedbed at the time of sowing the grain. The practice of seeding clover on winter wheat and rye by broadcasting the clover in February or March and letting the late freezing and thawing work the seed into the soil has been pretty generally satisfactory.

However, those who have tried it say that the seed is better distributed and more evenly sown when applied with a regular disk clover seed drill. They maintain that they can get a better stand with one-third less seed for the reason that every seed is put into the soil at the right depth and properly covered up and that all the seed begins to germinate right away. It is a practice that will be adopted more generally in the future when it seems that more clover will have to be grown to supply the farmers' needs and to maintain the fertility of the soil. Some farmers in our section sow clover seed on the heavy clay soils during the late fall, making the seeding after any likelihood of its germinating that fall; that is usually in December. The seed will be well worked into the soil before it germinates in the spring. The chief objection to this method is that, should the fall sown grain on which the clover is seeded be winterkilled or flooded, the loss of the seed may result unless some spring sown grain is disked into the soil before the clover seed begins to germinate.

Excessive or abundant weed growth often holds in check or chokes out what might have proven to be a good stand had the weeds not offered such strong competition while the clover was young. The best method of hold-



The Lime Spreader is Important to Many Clover Growers.

ing either weeds or grass in check is to pasture the ground rather heavily during the spring or early summer, and judging from our experience, I think pasturing preferable to clipping. If the clover is clipped it will only set the grass and clover back a short time the same as it will the clover. Pasturing with sheep and cattle will kill out many of the weeds, keep the grass short, and while keeping the clover short, too, it will also permit the clover to make continuous growth of both root and top and make splendid pasture.

When I speak of grass I include timothy, as the majority of farmers mix timothy with their clover seed, believing that should the clover fail to come they will at least have timothy and something therefore to cover the ground. In most cases the timothy is sown so heavy as to secure a good stand of it should none of the clover come. If the clover comes good there will be a strong competition between the two crops as to which shall occupy

the ground. Of the two, timothy is the stronger competitor; it will crowd out the clover just like blue grass or other grasses do. A light seeding of timothy may be desirable, however, in some instances, when it would not come thick enough to offer such stiff competition to the clovers, though we have eliminated it entirely from our seedings, excepting where it may be sown along with sweet clover, because we have not been able to see where it was an advantage to grow it. I would as soon have good bright straw to feed along with the clover as to have the mixed hay of clover and timothy, and pure clover hay is far more desirable for all the livestock.

A little grass seed mixed with sweet clover may be desirable. Once established and inoculated, sweet clover produces a wonderful growth, and there is room beneath it for several tufts of grass to grow while the sweet clover is nearing maturity the summer of its second year. By the time the sweet clover has matured, the grass

will be providing fresh pasturage, though red, alsike or alfalfa clover may just as well be substituted in place of the grasses.

Soybeans have been hailed as a splendid substitute for our clovers, but the soybean has the disadvantage of being an annual crop. It does not provide winter covering for the ground.

But the root system of a clover crop is more extensive than that of the shorter-lived soybean, and a more complete opening and penetration of the soil is secured by the fibrous roots that have a growing period about twice as long as the soybean. I am making no attempt to depreciate the value of the soybean, for we believe in it so thoroughly as to include it as a regular yearly crop on its own merits, but I desire to make a comparison to show why clover should be a regular crop and to encourage growing it for the great possibilities there are in it for the farmer.

There was a period several years ago when we began to find it a little

difficult to get the good kind of stands of clover we wanted. The crop would be fine in places and thin in others, especially light on the high ground. We changed the system of handling the crop to see what advantage could be gained from it.

Instead of putting so much hay into the barns all the livestock was turned into the fields in May and left there for the summer. Cattle and hogs sought the heavier growth, the sheep stuck to the clay knolls. All manure was spread on the clover fields to stimulate the growth of the young clover, and it was evident that where clover followed again in the rotation it came thicker and more vigorously and showed the value of that plan of handling. We are still following that plan, but of later years have added sweet clover to provide a still greater amount of soil building material and to further encourage the growth and establishment of alfalfa. It is surprising how such a system will open the way to obtain better stands of clover.

The Farmers' Marketing Problem

Like All Worth-While Movements the Growth of Cooperation has been Slow.

By I. R. Waterbury

THE writer has a very vivid remembrance of his first venture in a cooperative enterprise. It was back in the early "nineties." Some Michigan Farmer readers will remember those strenuous days, compared with which present-day farm marketing problems seem easy of solution. I was just starting in the farming business on my own account, with heavy obligations to meet and on a farm of only fair fertility. Crops were not very good and prices were worse. Wheat was fifty cents per bushel, beans the same, potatoes were ten cents, and other products in proportion. Labor and goods were comparatively cheap and taxes were comparatively low, but dollars were very scarce and high and it was impossible to get enough of them to make ends meet.

It was very evident that something had to be done to improve this situation, which was typical of that of other farmers in the community. The thing we did was also typical of what might be expected of a bunch of farmers without much business experience.

A good salesman representing a progressive dairy supply house came into the community and sold some of the more progressive farmers on the idea that what we needed to remedy our situation was a cooperative creamery and cheese factory. The income from cows would be regular and dependable, and would solve our financial problems. Incidentally, he was an experienced organizer, and offered his services to sell other farmers of the community on the proposition. He made the details easy. His firm would sell all the equipment at a wholesale price. In addition they would build the factory on an efficient design and turn it over to us, all ready to begin operations, all for the sum of \$5,000.

The plan worked and a hundred of us farmers in the community contributed \$100 each to buy the plant and provide working capital for the enterprise, and we were ready to start, also much nearer the finish than we realized. When we were ready to start we found that our troubles had just begun. The first and main trouble was that we were not dairymen. We didn't have and didn't get good cows. We didn't know how to feed such cows as we had for best results. Our patrons were scattered so as to make the problem of hauling the milk a difficult one. Our product was of ordinary quality. Our management was inefficient. The net result was that after some two years of operation the business was closed down, the factory and equipment sold for what it would bring, and a score of us who stuck to

too unfavorable time to prove effective the finish chipped in \$125 each to settle the remaining indebtedness.

This was hard on us, but in the light of later developments an undoubted benefit to the community, as it was the beginning of the development of a profitable dairy business in a community which is now largely composed of efficient dairymen. And they are selling the product cooperatively, too, as will be noted later in this discussion.

Most of the other cooperative undertakings of a similar period were of like nature and sporadic in their inception. Many of them were much more successful, some of them enduring to this day. They were local organizations, operating independently and without any federation of interest. But they gave their members needed service, and were the real pioneers of the cooperative movement in this state, paving the way for the application of the principle of cooperative

selling in the same line. The Michigan Milk Producers' Association, which is perhaps the most successful cooperative selling organization in the state from the standpoint of recognized benefit to its members, was a logical and natural outgrowth of this scattered cooperative experience among dairymen, and a long step in advance in the matter of cooperative marketing of whole milk contributing to the milk supply of many Michigan cities.

Another important early development of cooperation in this state was along general, rather than commodity lines. Gleaner elevators were organized and operated at a number of points in the state with varying success, depending upon the quality of local management. Coordination of their activities was finally attempted, but unfortunately too late and at a time, and the movement failed. But again the plan did not fail, for there are more local cooperative elevators

now operating in the state than ever before, and more successfully, too, due to the advantage of their coordination through the medium of the Michigan Elevator Exchange, a department of the Michigan State Farm Bureau.

The organization of the Michigan Potato Exchange was the first attempt at coordinated cooperative selling at a central point for scattered local member organizations. It started off under flying colors, and has just about held its own as to volume of business in the five years of its activity. That it has accomplished certain benefits for its members in the stabilizing of the markets at local shipping points in the northern counties of the state is generally admitted. That it must either go forward to a greater usefulness to its members, or decline in importance as a factor in the solution of our marketing problem from this time is apparent. The results rests with its membership as well as with its governing board. But whatever the outcome the final solution of the marketing problem will have been advanced through the experience gained by its members.

Other local cooperative selling agencies were developed along different commodity lines. Then came the farm bureau movement, and the organization of the Michigan State Farm Bureau, with the history of which Michigan Farmer readers are generally familiar. This organization found a majority of the farmers in the state ready to lend their support. It started out to do the whole job all at once without proper business organization or supervision and was soon in deep water. More conservative policies were then adopted and its activities were limited to fewer lines, with better supervision and a greater degree of success, and other cooperative organizations were affiliated with it.

While the great marketing problem of Michigan farmers has not been solved by these various cooperative attempts, a purely abstract analysis of the situation would seem to indicate that an encouraging degree of progress has been made in that direction. There are, however, unmistakable indications that very many of the farmers who have been identified with these developments of the cooperative selling idea in this state are not as well satisfied with this progress as the leaders in the movements believe they should be. It is for this reason that this discussion has been undertaken at this time, to the end that a better mutual understanding of the problems involved may be reached and cooperative sentiment crystallized along constructive lines.

Have you an Electric Hen on your Farm?



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LATE AGRICULTURAL NEWS

AN EXPENSIVE EXPERIMENT.

THE government's experiment in railroad operation under the railway administration has cost the taxpayers of this country \$1,690,000,000, according to the report of James C. Davis, director-general of railroads. Mr. Davis says that all claims arising out of government railway control have been settled.

WOULD ENCOURAGE CONSUMPTION OF MILK IN ENGLAND.

AN Englishman, Major Arthur D. Allen, is in this country to find ways and means of getting English people to drink more milk. The milk sold in English cities is not as good as that sold in American cities, according to Major Allen, owing to lack of proper facilities for handling and distribution and poor transportation facilities.

POTATOES GRADE HIGH.

THE market specialists of the bureau of agricultural economics are pointing to the splendid quality of last season's potato crop. Of the potatoes produced last year in the nineteen surplus late potato states, about sixty-four per cent would grade as U. S. No. 1, or the equivalent state grade, according to reports received from growers and shippers. Last year the average for the same states was sixty per cent. The quality of this year's crop is particularly good in New York state.

BELIEVES THE YEAR AHEAD FULL OF PROMISE.

THE outlook for the farmer in 1924 is more hopeful, reports the committee of statistics and standards of the department of commerce in its re-

view of general business conditions. The price spread between agricultural products and manufactured articles is becoming less pronounced. The general liquidation of past obligations by farmers is an encouraging feature of the agricultural situation.

"Upon the whole, the situation seems healthy and strong, with conservatism strongly in evidence in all sections, and the general conviction that a continuation of the policy of 'staying in the middle of the road' and proceeding along constructive ways is the surest road to progress in the near future."

WOULD SIMPLIFY HAY GRADES.

PUBLIC hearings on the proposed changes in hay grades will be held at the hay standards' laboratory in the department of agriculture in Washington, January 22. Everybody interested in the subject is invited to come. It is proposed to eliminate some of the classes by slightly increasing amount of clover in the timothy class, and cutting out one clover mixed and two grass mixed classes. Color determinations will also be simplified.

WOOL GRADES WELCOMED.

EVERYBODY engaged in producing, handling or manufacturing wool, including college wool specialists, favors the federal wool grades, according to letters being received by the Federal Department of Agriculture.

A prominent wool growers' association writes that every one of the 210 members have been benefited by the samples, which have helped to bring about a grading system to be used in 1924.

The wool specialist at the Ohio State University says he has used the sample grades each year with a class on

the subject of shipper, dealer and management. The samples have also been used during farmers' week in connection with demonstrations in wool grading.

URGING BETTER GRADING OF FARM PRODUCTS.

THE American Railway Association has been conducting a campaign to eliminate losses in shipment. Employees have been instructed as to the necessity for better handling of perishable farm products. Producers have been directed to the advantage of the standardized products, carefully graded, and packed in substantial containers.

The results of this campaign have been very satisfactory. In 1921 the loss and damage claims paid by the railroads on fruits and vegetables amounted to \$14,000,000; in 1922, \$9,000,000; butter and other dairy products in 1921, \$820,000; in 1922, \$403,000; eggs, 1921, \$1,000,000; 1922, \$711,000; live stock, 1921, \$3,500,000; 1922, \$2,000,000; grain, 1921, \$6,000,000; 1922, \$2,750,000.

Of the claims for fruits and vegetables, white potatoes were largest, eighteen per cent of the total, and apples came next.

WANT LOANS CANCELLED.

THE northwestern wheat growers are not only asking for a federal appropriation to set them up in the dairy business, but they want relief from payment of the funds they have already borrowed from the government to enable them to buy seed grains, where the crops were cut short by drought. A yield of five bushels or less per acre of wheat or rye, ten bushels of barley, or three bushels of flax grown in the drought-stricken reg-

ions from seed purchased with money borrowed from the federal government is defined as a crop failure in a bill introduced by Representative Sinclair, of North Dakota. The borrower whose yields are not above these figures is released from repayment of loan, and if he has already made payment on his loan, the money shall be returned to him.

SENTIMENT FOR DIRT FARMER IS GROWING.

THE movement to secure the appointment of a "dirt farmer" on the United States Shipping Board is growing. Senator Willis, of Ohio, has presented to President Coolidge the names of three farmer candidates for the position, any one of whom he thinks would be acceptable to the farmers of the middle west. They are J. R. Howard, of Iowa, late of the American Farm Bureau Federation; H. L. Keefe, of Nebraska, and W. F. Hill, of South Dakota. It is argued that as the United States Shipping Board is to become an advisory regulatory organization, occupying practically the same position with ocean shipping as the Interstate Commerce Commission holds in regard to the railroads, it would be right and proper to have a farmer on the board to look after the producers' interests in ocean transportation.

SEEK INFORMATION ON GRAIN

THE senate has adopted the Ladd resolution directing Secretary Wallace to determine through the grain futures administration the extent to which the wheat market is manipulated by professional speculators and members of the large futures commission houses of the Chicago Board of Trade.

OUR SERVICE DEPARTMENT

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

HIRE INDEPENDENT CONTRACTOR.

I expect to build a barn in the spring, and will hire by day. If any of the men meet with an accident, will I be liable for damages?—A. H.

Building of a barn is not farm labor. It is the character of the work done, and not the occupation of the employer that decides the question. The remedy is to insure or contract the building to an independent contractor.—Rood.

WANTS FENCE RESTORED.

I bought 160 acres of land. There is no fence on the north end of line, the south end is fenced, and that belongs to the 160 acres. What would you advise? The north end is all gone, and I want to turn cattle there this spring.—F. J. B.

Unless the land against which you wish the fence is "enclosed," the owner cannot be compelled to contribute to the cost of the fence till he uses it. The answer is to be found in the condition of the other sides of the opposite tract.—Rood.

SAVING ONION SEED.

Is it necessary to have a special drill for sowing onion seed? Do they have to be thinned by hand, or is it true that the seed is planted so thin that cultivation is all that is necessary?—E. F. A.

Onion seed is usually sown with an ordinary garden seed drill. However, there are special onion drills on the

market which sow several rows at a time. Regardless of the type of seeder, great care should be taken in regulating the seed drill before starting, as success depends to a large extent upon a uniform stand of plants. A heavy seeding means extra expense in thinning, while a light stand means a lighter crop. A good method is to run the seeder over white paper until a uniform drop is obtained. The usual rate of seeding is four to five pounds per acre. This would require thinning, but insures the grower of a perfect stand. In order to reduce the labor, many growers plant three and one-eighth to three and one-fourth pounds of carefully tested seed and do not thin. This method results in smaller and less uniform bulbs, but is a great saving in labor. To dispense with thinning and get a good start, the seed should be germinated accurately.—E. P. Lewis.

REFUSES TO PAY.

In 1922, a contractor purchased gravel of me to the extent of \$250. I was promised immediate payment for same but when I tried to collect he put me off, saying he would pay when he received payment from the state, as it was used on a state road. I now hear he has made affidavit to the state that all his materials were paid for, and he has received payment from the state and will not settle, and I cannot collect. What steps should I take?—M. J.

Undoubtedly the contractor is liable personally. Perhaps payment might be induced by complaint to the prose-

cuotr for the perjury in his affidavit. If his responsibility was doubted, notice should have been given to the highway commissioners at the time of furnishing the material.—Rood.

WHO GETS THE STRAW?

A. puts in a field of wheat for B., furnishing everything, paying for all expenses and doing all the work, and received two-thirds of the wheat. Can A. hold any of the straw, there being nothing said about the straw? There was no written contract, only verbal agreement about everything.—O. H.

A. is entitled to two-thirds of the straw in the above case, if the understanding was that he should receive two-thirds of the crop. The general practice is for the landlord to stand his share, one-third of such expenses as seed, fertilizer, twine and threshing bill, and receive one-third of the crop.—F. T. Riddell.

INDORSER OF NOTE SHOULD BE NOTIFIED.

A. lends B. \$100 for one year. B. gives common note. At end of year A. fails to present note for payment until six months afterward. B. refuses to pay note and is not worth it. A. notifies the signer and he refuses to pay, saying A. should have notified as soon as the note was due. A. secured the note for only one year. Is it necessary to take a new note each year if time is extended?—J. S.

It is not necessary to take renewal when the note becomes due, but in order to hold any indorser, it is necessary

to present the note at the place specified for payment at the date it is due, and if not paid to notify the indorser of such default at once unless over his indorsement he waves presentation and notice.—Rood.

PREVENTING LOCUSTS FROM SPROUTING.

In regard to your question on the cutting of locust, would reply that the best time in the year to cut locust in order to prevent their sprouting is in the summer so that the sprouts which spring up will still be succulent in the fall and hence be killed back by the frost. Locust, however, has great sprouting ability and the stumps will push out new sprouts in the spring which, however, will not grow nearly as vigorously as the first set of sprouts.

To prevent absolute sprouting of locust it is suggested that after the trees have been removed that the stumps be painted with a solution of arsenic, which should kill them and thus prevent sprouting. This solution is prepared by adding one pound of arsenic and three pounds of soda to one gallon of water. First dissolve the soda in boiling water and then slowly stir in the arsenic and allow it to boil for about a half hour. Arsenic is a deadly poison and care should be taken to see that people and animals are kept away from the poisoned stumps until the rain has washed the surplus poison away.—Paul A. Herbert.

HARDIGAN ALFALFA SEED
EXHIBIT.

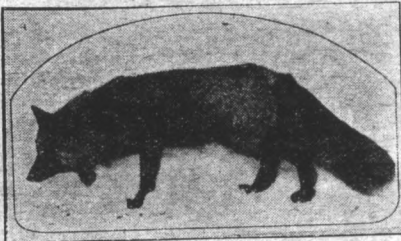
MICHIGAN growers of the new Hardigan alfalfa have an unusual opportunity at the coming show of the Michigan Crop Improvement Association during Farmers' Week at M. A. C.

The Solvay Process Company is offering 20 tons of Pulverized Limestone for the best peck of Hardigan alfalfa exhibited at this time. This amount of the Solvay product will properly lime 10 acres of ordinary sour land and make it suited to alfalfa growing, and is worth considerably more than \$100 to the farmer who grows alfalfa.

Hardigan is the new variety of alfalfa developed by M. A. C. plant breeders. It ranks with Grimm and other of the hardier varieties in its ability to produce forage abundantly and withstand severe winters, two years testing at the College finding it right at the top.

It combines with this productivity a very profuse blossoming habit, which makes it the most dependable variety for Michigan seed production.

More than fifty farmers of this state have made a start with Hardigan



The Silver Fox is Fast Becoming a Part of Farm Live Stock Raising.

for seed production, and most of them will exhibit their seed at Farmers' Week. Interested farmers will have considerable opportunity to learn more of alfalfa seed production during the Farmers' Week activities.—R.

SWEATING ROOT CELLAR.

Will you please tell me how to keep my root cellar from sweating? I have built a cellar in a hill, with 3.6-inch pipes in roof, and leave the door open all the time, but the water drips from the walls.—A. W. F.

Moisture on the walls and ceiling of a root cellar may result from one of two causes. It may be that the roof of the cellar is not thoroughly waterproof, and you have some seepage from the soil above. The remedy would be to remove the soil, wash the roof thoroughly, give it a coat of hot asphalt or give it a thin coat of a rich mixture of cement, using one part of sand and one of cement. Carefully troweling the surface would help to make this layer water-proof.

It is more probable that the moisture is the result of condensation on the walls. This is caused by the walls of the cellar having a lower temperature than the air in the cellar. The openings in the roof are probably not large enough to permit a sufficient escape of air to carry out the moisture and keep the humidity low. Also, if the entrance to the cellar is not at or below the ground level there would be condensation.

An out-take flue one square foot in sectional area is sufficient to ventilate a storage cellar with a capacity of 2,500 cubic feet. If doors and windows are not used for intakes the intakes should be of somewhat greater capacity.—F. E. Fogle.

WANT FARMER ON SHIPPING
BOARD.

MANY persons have been asking the President to appoint a farmer on the United States Shipping Board. It is their idea that a farmer who has a fair understanding of transportation problems, would become a useful member of the Shipping Board, inasmuch as agricultural products form so large a part of the cargoes of Shipping Board vessels.

Superior Grain Drills



No farmer can afford to slight—in any degree whatever—the vitally important work of planting. When prices are high a bumper crop means bumper profits. When prices are low, more reason than ever to make every acre produce its utmost.

Play safe on the seeding job! Start right—or you cannot possibly realize full profits on your long days of preparation, cultivation and harvest. A worn-out grain drill—an inefficient planter of any kind—robs you of bushels—and dollars—you cannot afford to lose!

YOU get a perfect seeding job with any Superior Grain Drill—whether you select the largest machine for team or tractor or the one-horse, five-disc outfit, the "baby" of the family.

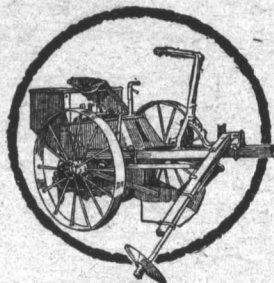
The right depth; the right distance between rows; the right kind of trench; proper covering for each individual grain—every factor for successful seeding is assured when you use the world's standard grain drill. The Superior Drill sows evenly, accurately, uniformly—always. And it is ruggedly well built—for lifetime service.



Superior Seeding has meant better seeding—for more than fifty years. Write for valuable booklet, "Drilling for Gold," and get the complete story.

Superior Potato Planter

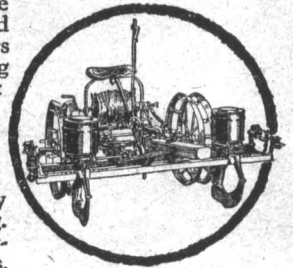
WHAT the Superior Drill is to the grain farmer, this planter is to the potato grower. Sturdily built for long hard service—and does a clean, efficient planting job. It is a one-man picker-planter and because both ground wheels drive the feed, steady, continuous planting is assured under all conditions. Works perfectly on hillsides.



The Superior will plant from five to eight acres per day—dropping seed from 10 to 36 inches apart. Steel hopper. Steel bottom with agitator to insure even seed-flow. Steel wheels with wide-face tires. Hyatt bearings. Write for descriptive folder.

Superior Corn Planter

LIKE all Superior machines this Corn Planter is thoroughly well built, extremely simple and exceptionally accurate. No feed rod clutches to get out of order. Either flat drop or edge drop plates can be used without changing hoppers—and as plates are moving steadily at all times almost perfect filling of cells is assured.



Row adjustment 28 to 48 inches—two-inch spacings. Double marker. Instantly adjusted for drilling. Special plates can be furnished for planting Beans, Peas, Peanuts, Kaffir Corn, Beet Seed, etc. Write for full details of this truly Superior corn planter.

THE AMERICAN SEEDING-MACHINE COMPANY, Inc.

SPRINGFIELD, OHIO

Check Items In Which You Are Interested	— Grain Drills	THE AMERICAN SEEDING-MACHINE CO., Inc.	Mail Coupon or Letter for Full Information
	— Alfalfa Drills	Springfield, Ohio.	
	— Beet & Bean Drills	Gentlemen: Please send full information covering	
	— Corn & Cotton Drills	machines checked.	
	— Corn Planters	Name _____	
	— Potato Planters	Address _____	
	— Lime Sowers		
	— Buckeye Cultivators		
	NOTE: Complete Buckeye line includes one and two-row, horse and tractor, walking and riding cultivators.		



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

THE BIG SECRET OF SUCCESS

In the fox raising business is getting the right foundation stock from reliable breeders. We have the finest stock in the country—animals with show records—Don't take chances—get your foundation stock from us and be on the safe side. Let us start you right. Write today for full particulars.

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Big Profits Selling Hardy Michigan Grown Trees also grape vines, berry bushes, roses and shrubs, spring delivery. Our stock is fast selling, healthy and true to name. Write now for our handsome color catalog and liberal Agency proposition Prudential Nursery Co., Box 306 Kalamazoo, Mich

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Low steel wheels (plain or grooved wide tires) make loading and hauling easier. Steel wheels to fit any axle; carry any load. Make any wagon good as new. Reduced prices Catalog Free EMPIRE Mfg. Co., Box 889 Quincy, Ill.

THIS LOG AND TREE SAW \$21.95

Fitted with Atkins Silver Steel Guaranteed Saw

RUNS EASY NO BACKAGES WEIGHT ONLY 45 LBS. EASILY CARRIED

SAWS DOWN TREES

9 Cords in 10 Hours by one man. It's King of the woods. Catalog V44 Free. Established 1890. Folding Sawing Machine Co., 1005 E. 75th St., Chicago, Illinois



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Many of the most successful farmers in America will tell you that their prosperity is largely due to the better, more timely work they are doing with Case tractors because:

They speed up farm work. A generous reserve of power and unfailing dependability keep the Case tractor going steadily as fast as good work can be done, day and night, if need be.

They are adapted to many kinds of work. Heavy plowing, seed bed preparation, weed killing; the rush of harvesting; the grind of threshing and silo filling—Case tractors excel at all these operations because of their adaptability and unusual efficiency.

You can do more, better and more timely work with a dependable, durable Case tractor. A new book "Modern Tractor Farming" tells you how. **Write for it TODAY.**



NOTE: Our plows and harrows are NOT the Case plows and harrows made by The J. I. Case Plow Works Co.

White Blossom SWEET CLOVER \$3.00 Per Bu.
Unhulled. Grow Sweet Clover. Cheaper and better than Red. Grows anywhere. Best fertilizer, wonderful pasture and hay. Big money maker. Crop often worth \$60 per acre. Sow our superior acidified seed.
A. A. Berry Seed Co., Box 931 Clarinda, Iowa

SPRAY FRUIT TREES
Destroy fungi and worms; insure larger yields of perfect fruit. 25th successful year.
STAHL'S EXCELSIOR SPRAYING OUTFIT PREPARED MIXTURES
20 models. Catalog containing full treatise on spraying FREE. Reduced prices.
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Five Packets ISBELL'S SEEDS 10¢

Five Favorites
Radish
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45 years of experimenting, of scientific culture, of careful selection, have made Isbell's Seeds harder, certain and heavier yielders. 200,000 farmers have proved them best by test and plant them year after year. We want you to know that no other seeds are so adapted to soil and climate—so certain of a profit-making, bumper crop—as Isbell's; so we'll send you, full-sized packets of five of Isbell's most popular varieties (regular price 35 cents) for the cost of handling and postage.

Forty-Five Years of Breeding Quality

For nearly a half century Isbell's have been producing better strains; have selected and bred only the best varieties; have developed greater resistance to cold and draught; have perfected methods of cleaning and sorting seed. Forty-five years of work to make your yield bigger and more certain.

Send Today for This Valuable Book—FREE

Isbell's 1924 Seed Annual tells of all varieties of field and garden seeds—gives cultural directions—tells how to prepare soil and care for crops—how pure bred seeds are grown and prepared for your use. It quotes direct-from-grower, money-saving prices. Get your copy today—whether you order the five packets or not.

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Send me your 1924 Seed Annual, quoting direct-from-grower prices on pure bred seeds. If I enclose 10¢, you are to send also the five full size packets of garden seeds. (55)

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Praise & Reproof For Us

Michigan Potatoes Arouse Comment Of Potato Association Of America

AMONG the 3,500 scientific men all over the United States and Canada, who met in Cincinnati last week to discuss all the sciences from astrology to zoology at the annual meeting of the American Association for the Advancement of Science, were a large number of the leading potato experts in the country.

In separate sessions, the various problems pertaining to the potato business were carefully analyzed and discussed. Almost every important potato-producing state from Maine to Minnesota was represented by some of its experts, buyers, and growers. The matter of fertilizers and control of diseases received some attention, but by far the greatest part of the discussion was devoted to the marketing problem.

To a quiet listener from Michigan this meeting presented the experience of "seeing ourselves as others see us." We in Michigan have been boosting our potatoes so much that we have failed to observe what other folks think of our product and we have missed some very pertinent facts—facts such as were presented at the Cincinnati conference, as well as those revealed in the discrimination of prices against our potatoes. We can do this gracefully by accepting this outstanding fact that Michigan produces some of the best potatoes in the world, and also some of the poorest. By mixing them up and trying to get the consumer to take all of them, we are receiving less for them than growers from other states, compelled by state law or adverse circumstances to separate the poor from the good, receive for the good ones. The consumer determines the price and he will not buy the mixture except at a great reduction.

When methods for securing higher prices for potatoes were discussed it was surprising how closely three speakers, representing three distinct selling agencies, agreed. A representative of a corporation in Boston which handles hundreds of carloads a year said, "If our growers furnish us with high-quality potatoes we can always make a sale that is satisfactory to producer, consumer and ourselves. It is the poor stuff that wrecks the market." The representative of a cooperative association said, by orderly marketing we can get the price, provided we can keep the quality up." A large potato producer from New York said, "I always get from fifteen to twenty-five cents more per bushel than my neighbor because I make it a point to grade better than is required for U. S. No. 1." In other words, they all agree that proper grading provides the quality for which the consumer pays a price that brings profit to the producer.

Naturally, the question arose as to why Michigan lagged behind her sister states in enactment and enforcement of proper grading laws. We were told that "we understand that some forces were bitterly opposed to such a law in 1918 and they built up public sentiment against it." Mr. C. W. Waid, now of Ohio, but formerly of Michigan, confirmed this.

From all this it would seem that the Michigan potato has fallen into disrepute because of improper grading. The most powerful factor in the world—the consumer—has decreed that either the producer must keep his poor potatoes at home or accept a discount as well as paying the extra handling charges. This fact was confirmed at the convention at Cincinnati, and pointedly applied to Michigan.

Some bouquets, however, were handed to Michigan when the certified seed was discussed. Dr. E. L. Nixon, Potato Specialist of the State College of Pennsylvania, commented very gener-

ously on northern Michigan's seed potatoes. Mr. E. C. Hardenburg, of New York State, spoke highly of the exhibits of seed potatoes seen at the Grand Rapids show. Favorable mention of the Top o' Michigan Potato Show was also made.

Where an entire afternoon was devoted to the discussion as to the menace of scab on potatoes, several citing cases of seeing acres of potatoes dug without a single bushel salable on account of scab, it was pointed out that Michigan's Rural Russet was practically immune to it. Naturally, that makes our seed more popular.

The impression here made was that Michigan can produce as good potatoes as can be grown under the sun, and when the shippers leave the poor ones at home, the buyers and consumers will recognize it and we will have an equal show with the rest of the states in markets of the country.

AFTER THE HIGH SALARIES.

A BILL to amend the Federal Farm Loan Act, introduced by Senator Borah, of Idaho, promises to develop some interesting discussion in committee hearings. Its aim is evidently to "get" Judge Lobdell, who resigned from the Federal Farm Loan Board with its \$10,000 a year salary and soon after was appointed counsel of the board at a salary of \$25,000 a year.

The bill would supplant the present Federal Farm Loan Board with a newly created board, including the secretary of the treasury and four members to be appointed by the President. The members shall devote their entire time to the business of the board and shall receive an annual salary of \$8,500. It also provides that no salary of any official, employee, attorney or agent of the Federal Farm Loan Board, Federal Land Banks or the Federal Intermediate Credit Banks shall be in excess of \$8,500 per annum, and that all employees of the board who receive an annual salary in excess of \$3,500 shall hereafter be appointed by the President with the consent of the senate.

FARMERS PETITION FOR LOWER TAXES.

A PETITION two miles long and bearing the signatures of 345,516 farmers asking that congress cut government expenditures so that taxes may be thereby reduced, was presented in the house on January 7, by Representative George P. Darrow, of Pennsylvania.

Of the signers to this petition, 67,970 were from Ohio, 30,739 from Indiana, 29,073 from Iowa, 23,780 from Pennsylvania, 22,000 from Kansas, 21,472 from Wisconsin, 20,594 from Minnesota, 19,362 from Texas, 17,408 from Michigan, 16,469 from Nebraska, and 14,114 from Kentucky.

There is an insistent demand coming from all parts of the country for economy in government and tax reduction. The administration's plan for a cut in taxes, is a clean-cut, workable proposition that would accomplish this object.

Senator Capper undoubtedly voices the sentiment of a large number of farmers when he says that "tax relief should come first to those upon whom the burden bears the heaviest. The man who works for his income, farmer or laborer, and the man who derives it from his ability, initiative and capital invested in his business, factory or farm, should be given real relief. He should not be penalized by securities and stock dividend melons."

President Coolidge is opposed to the compromise proposals on the ground that they discourage investment in business enterprises rather than in tax-free securities.

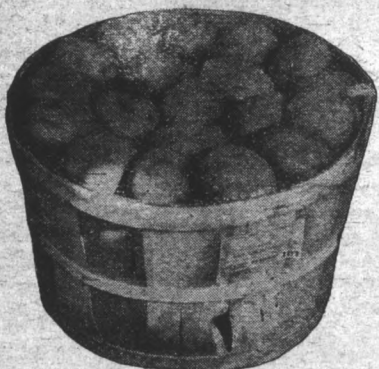
DOES DELAYED HARVESTING
HELP QUALITY OF BEANS.

THE opinion held by many that the harvested beans, those that were cut after the heavy rains that prevailed during the early fall months, would be greatly superior in quality to those cut during the wet weather, has not been substantiated by facts.

While the beans that stood upright and bushy undoubtedly did benefit by being left standing until dry weather came, the same was not true of those that spread over the ground in a viney manner. The pods on these grew on or near to the ground where the rain washed the soil up and around them. These have proven to be the heaviest pickers to come onto the market. Beans of this sort, were they ripe during the rainy season, would have fared much better if they had been cut, for they could have been turned, keeping them at least out of the ground.

Beans raised on low ground tend to spread over the soil like pusley. A great many of the pods on vines of this type are close to or directly upon the ground and are badly damaged during excessive rainfall.

On this type of soil a strain of bean should be planted that possesses as far as possible a tendency to develop an upright bushy stalk. The chemical composition of the soil can be improved by adding elements that contribute to the developing of a firm upright stalk.—G. Everitt.



Michigan-grown Spuds of Real Quality.

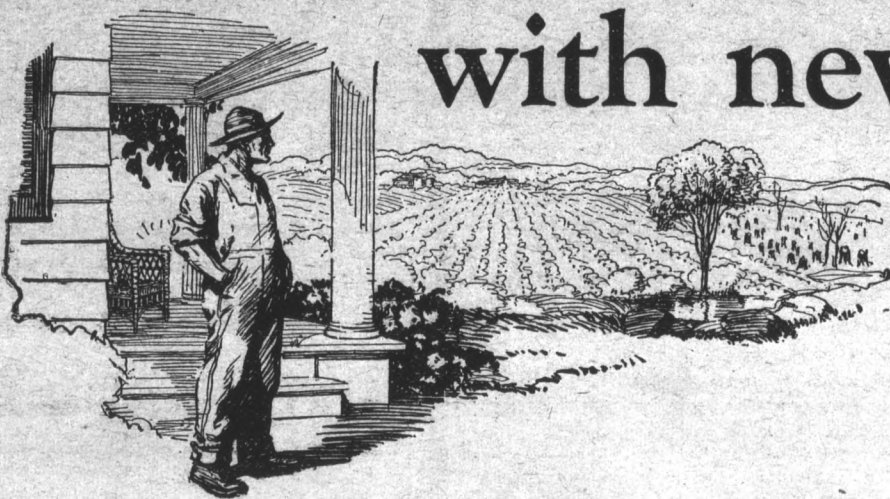
LIKES WATER SYSTEM BEST.

MY husband has bought and made several household conveniences for me, but the one I enjoy the most is a water system, including washing machine and wringer run by a two and one-half horsepower gasoline engine. He has piped both hard and soft water into the basement and kitchen so that I have no carrying of heavy pails when washing or doing other housework. The system is supplied with two thirty-gallon hot water tanks so that an ample supply is always at hand when we have a furnace fire. In winter the furnace heats the water and in summer a laundry stove with a hot water jacket is used. As he put in the furnace and did all the piping himself the cost was not great.—M. E. Skelton.

HOW INCREASED ACREAGE PRODUCTION CUT COSTS.

HERE is a specific case of reducing costs by increasing per acre yield. The Cornell experiment station investigators found a wide variation from a first-hand study of accounts made on farms growing peas. The returns for man labor on 80 farms growing an average of 2,989 pounds of peas per acre was \$1.59 per hour; on 101 farms averaging 2,138 per acre the returns were 83 cents per hour, and on farms averaging 1,492 pounds per acre the returns for man labor were but 31 cents per hour. While the group of farms giving the largest acreage yield produced crops at an average cost of two dollars above the cost of production with the group of lowest yielders, the income on the largest yielding farms was \$52 per acre greater than on the lightest yielding farms.

Look at Your Farm with new eyes!



LOOK at your farm as a factory. Is it turning out enough of the profitable crops to pay you a proper return on your investment? Or are you burdened with "loafer" land that ought to be earning money?

Farmers who are planting more of the right crops are making good money today. In 1923, crops brought, on the average, 21% more than in 1922, according to Government figures.

Increase your profits by reclaiming your waste land—and partly cultivated land—removing stumps and boulders and draining swamps. More crops on more land mean more cash in the bank.

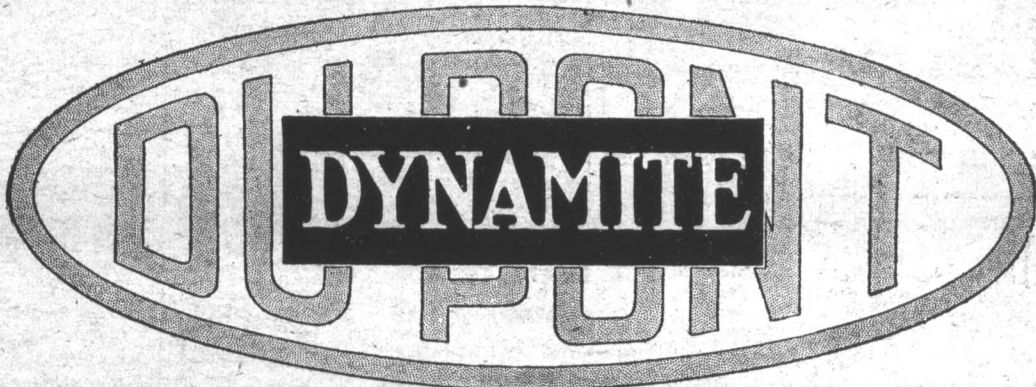
Du Pont provides the most efficient tools—explosives, made for agricultural work, the result of 122 years' experience—Dumprite or Red Cross Extra for stump blasting, 50 or 60% Straight Dynamite for ditching.

Let your local hardware or general store estimate the cost of your work, and write us for free 110-page, "Farmers' Handbook of Explosives," giving full instructions.

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McCormick Bldg.,
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for Ford Trucks Warford AUXILIARY TRANSMISSION

Now you can afford real 2-ton truck capacity

No need to cramp yourself on hauling. Warford transmission in the Ford pulls 2 tons in gumbo, loam or up a mountainside. Gives you overdrive for high speed running light. You never saw such all-around performance. Costs you \$1500 less than any truck that does as much. Lowest upkeep. If your Ford dealer can't supply you, write to us.

Transmission Sales Co.
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6 Speeds Forward

\$900 from ONE ACRE

Martin FARM DITCHER TERRACER

Actually turned one flooded acre into this record crop payer. Makes thousands of dollars cash crop gains.

Send for Free Book and 10 Day Free Trial Offer. Works in any soil. Horse or tractor. All steel, adjustable, reversible. Does work of 100 men. Open drainage, tilling or irrigation. Low price. Owensboro Ditcher & Grader Co., Inc. Box 2015 Owensboro, Ky.

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It PAYS to GRIND ALL GRAINS

Look to the Grinders. They do the work! Bowsher's Cone-Shape grinders are the correct principle in Feed Mill construction. They mean larger grinding surface close to center of shaft; thus more capacity, lighter draft, longer life.

"Desire to express my appreciation of the long-lasting, trouble-proof Bowsher. Have used a No. 4 ten years with less than One Dollar per year for repairs." E. W. Watt, Jacobusburg, O.

10 sizes; 2 to 25 H. P. Write for free catalogue. D. N. P. BOWSHER CO., SOUTH BEND, IND.



A New and Better NEW IDEA SPREADER

THIS announcement is of interest to every farmer in America:—A new, and better NEW IDEA Spreader—the crowning achievement of twenty-five years of undisputed leadership! The NEW IDEA is the original low-loading, wide-spreading spreader. Practically every big improvement in spreader manufacture has originated in the NEW IDEA plant. And now—on the eve of its SILVER ANNIVERSARY—NEW IDEA offers greater dollar-for-dollar value than ever before!

All NEW IDEA dealers will soon have this new spreader on display. Its new features, such as its steel construction, will be a revelation to you—and it will be priced at a figure that will interest you.

THE NEW IDEA TRANSPLANTER

Here is another big achievement of the NEW IDEA organization—a new and better transplanter that takes the guess-work out of plant-setting. The NEW IDEA is the first and only transplanter with the driver's seat behind the plant setters. All the work is under the direct control of the driver. He engineers the job.



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"Spreader Specialists"
for 25 years

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Ohio

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_____ Spreader _____ Transplanter

Name _____
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\$24.95 Upward American CREAM SEPARATOR

On trial. Easy running, easily cleaned. Skims warm or cold milk. Different from picture which shows large size easy running New L.S. Model.

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MONTHLY PAYMENT PLAN
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AMERICAN SEPARATOR CO.
Box 7061 Bainbridge, N. Y.

The Eclipse Spray Pump is simple in construction, durable and efficient. Made in several sizes to meet the various needs.

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MORRILL & MORLEY WAY**
ASK FOR CATALOG
MORRILL & MORLEY MFG. CO.
Box 23 Benton Harbor, Mich.

Imported Melotte

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

\$7.50
After 30 Days
FREE TRIAL

Catalog tells all—WRITE
Caution! U. S. Bulletin 201 of the bowl causes cream waste! 30 days' free trial—then, if satisfied, only \$7.50 and a few easy payments—**and**—the wonderful Belgium Melotte Separator is yours.

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

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2843 W. 19th St., Dept. 1-01



Send No Money! Sent FREE For 30-Day Trial

NO deposits—No notes to sign—No obligation to buy! You try the imported Harp Separator entirely at our risk. The Harp is its own salesman. You are the only judge, and at any time during the 30 days can send the Harp back to us, at our expense, if it doesn't prove all that we declare it to be. What could be fairer?

The Standard in Europe for More Than 22 Years

You get a proven dependable skimmer around easier turning—easier cleaned machine. Has replaced hundreds of thousands of separators in England, France, Germany, Belgium and Denmark.

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Harp prices are lower because—European labor and materials are cheaper; we build in tremendous quantities; large shipments secure low freight rates; we sell direct to you from large warehouses in Chicago. Prices as low as \$3.80 (no money down). Or on easy monthly payments.

WRITE TODAY for prices and descriptive folder. Made in all sizes.

THE HARP SEPARATOR CO., Dept. 110 115 S. Dearborn St., Chicago



IS SAGINAW COUNTY FARMER BEAN CHAMPION?

M. R. W. E. DENNISON, Saginaw county farmer, is out with a claim that puts the record of Fred McCreary, Midland county farmer, out of the running for the state bean grower championship.

While McCreary had a production of 222 bushels from a seven-acre field, Dennison harvested 196 bushels from 5.11 acres. Robust beans were the variety in both cases.

McCreary's yield was 31.714 bushels per acre, while Dennison had 38.356 bushels, or 6.642 bushels more per acre than the former record. Who can beat this? Who is the champion bean grower of the state?—Mills.

HOW I SAVE TIME DOING CHORES.

AFTER walking through the feed room, I take fork and clean mangers. Our central feed alley is twelve inches higher than the bottom of the mangers, which have no partitions. With the fork I clean these mangers as fast as I can walk down one side and back on the other. Then I am ready to feed silage.

I fork the silage only once from the time it goes through the silage door till it is at the manger of the cows. This I am able to do through the use of a silage cart and a box with slanting-bottom located in the silo chute.

The cart has a box twenty-six inches deep and twenty-six inches wide, and five feet long on top and four feet at the bottom. It is supported by three wheels—two buggy wheels at the sides running on a drop-axle, and in front an old wheelbarrow wheel with the hub sawed off and fitted into a swine fork made by the local blacksmith. Didn't cost much, but with its aid I can feed my thirty cows in less than ten minutes.

The box in the silo chute is large enough to hold a second car load. It is so arranged that the cart can be placed along one side and both filled as the silage is pitched from the silo door. A piece of canvas prevents the silage from falling over the sides of the box.

One side of the box is a movable slat gate. When I have delivered the cart full of silage to the cows, I return, set the cart along the side of the box by the gate, raise it and the silage slides down the slanting bottom and fills the cart again. This provides enough silage to complete the feeding.

When the cows are fed silage, I go to the feed room with the cart, shove on a box of grain and march down "main street" again, giving each cow the portion of grain she deserves.

Every cow, calf and bull has a drinking cup so it requires no time to do the watering. I keep all the young stock in a pen on one side of the feed alley. These pens are supplied with stanchions. When the feed is placed in the manger and each calf has his or her head in a stanchion, I simply pull a chain and all are secured.

The gutters behind the cows are twenty inches wide, twelve inches deep on the side next the cows, and eight inches deep on the other side. The manure is taken from the gutters, thrown into the carrier which, when full, is shoved over and dumped into the spreader. It is then drawn directly to the field. The gutters are wide enough so that, in case of bad weather, I can allow the manure to collect for a day or so. I am now building a manure pit to use in rainy weather and during the busy weeks of the year.

By these conveniences I save a lot of time, enough to permit me to do considerable work in addition to looking after the herd.—L. Bradford, Kent County.

The news item telling that dog meat is being consumed in Germany has no terror for the American tourist whose travels and dreams abound with hot-dog signs.

The New Improved Walsh NO-BUCKLE HARNESS
No Buckles To Tear
No Rings To Wear

\$5 After 30 Days Trial

Send for my big new free harness book. Tells how I save time doing chores. Proves for yourself that it is stronger, easier to handle. Outwears buckle harness because it has no buckles to tear straps, no rings to wear them, no buckle holes to weaken them. Amazing success—thousands in use in every state.

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Saves repairs. Walsh special 900 steel test leather, which is explained in big free book. Easily adjusted to fit any size horse. Made in all styles: back pad, side backer, breeching, etc. \$5 after 30 days trial—balance is paid monthly. Return to me if not satisfactory. Write today for my big free book, prices, easy terms. Sold direct to you by mail only.

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"Reo" Cluster Metal Shingles, V-Crimp, Corrugated, Standing Seam, Painted or Galvanized Roofing, Siding, Wallboard, Paints, etc., direct to you at Rock Bottom Factory Prices. Save money—get better quality and lasting satisfaction.

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have great durability—many customers report 15 and 20 years' service. Guaranteed fire and lightning proof.

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Corrugated Metal ROOFING

\$3.45 per 100 ft.

Think of it. We can now sell Excell Metal Roofing, 23 gauge corrugated at only \$3.45 per 100 sq. ft. painted. Galvanized, only \$4.80. If you have been waiting for metal roofing prices to come down, here they are—direct from factory prices—lower than you can get anywhere else. Send for our New Catalog covering all styles Metal Roofing, Siding, Shingles, Ridging, Ceiling, etc., will save you money.

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Don't buy Roofing, Paints, Fencing, Gas Engines, Tires—anything you need until you get our latest catalog. You can see and try our roofing before you pay. All sold on money back guarantee. Write for Money Saving Catalog today.

The United Factories Co., 101 Marion Bldg. Cleveland, Ohio

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can be kept on their feet and working if owners give "SPOHN'S" for Distemper, Influenza, Shipping Fever, Coughs and Colds. Cheapest and surest means of escaping these diseases. Occasional doses work wonders. Give "SPOHN'S" for Dog Distemper. Used for thirty years. 60 cents and \$1.20 at drug stores.

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FORDS-34 Miles
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Starts Easy at Zero

And we guarantee all other cars nearly double present mileage, power and flexibility, make hills on high formerly difficult on low. Models for any car, truck, tractor, marine or stationary engine. Makes old cars better than new. See our wonderful mileage guarantees for other cars.

Ford	34 mi.	Reo	24 mi.	Chevrolet	32 mi.
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Buick	24 mi.	Olds	23 mi.	Nash	23 mi.
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If your car is not mentioned here send name and model for particulars and our guarantee on it. Agents wanted.

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You can drive any car in heaviest traffic without shifting gears. Starts off on high in any weather without jerking or heating—no jolting or choking. No more foul spark plugs or carbon in cylinders. No leaking of gas into crank case. Try it 30 days on our guarantee of money back if not entirely satisfied. No strings to our guarantee. **YOU ARE THE JUDGE.** Anyone who can handle a wrench can attach it. No boring of new holes or changing of operating mechanism. Write today. **AIR-FRICTION CARBURETOR CO.**

165 Raymond Bldg. Dayton, Ohio, U. S. A.

NEWS FROM CLOVERLAND

ADVISES FARMERS TO GROW SEED POTATOES.

REPORTING on an investigation of the method of growing certified seed potatoes employed by Mr. John De Longchamp of Champion, Mr. A. J. Lonsdorf, county agricultural agent of Dickinson County, says this grower has about the coldest spot in Michigan for a winter residence, but ideal for growing potatoes in the summer season, where there is good air drainage and where Lake Superior breezes can reach his fields and prevent unseasonable frosts.

The record the past season was about 421 bushels per acre on this farm, and Mr. Lonsdorf reports neither large nor small potatoes in the bins.

Mr. De Longchamp has practiced hill selection for years, taking hills that have from six to ten nice uniform seed potatoes and only hills that showed good health all summer. In this fashion he has developed a uniform type that run about eight ounces each.

Seed potatoes on this farm are placed from ten to twelve inches apart in the row, thus preventing over-sized potatoes on very rich soil. Flat cultivation is employed. Thus moisture is conserved and root-cutting prevented. Barnyard manure and phosphates on clover sod are used. Planting five to six inches deep in the early spring is the rule. This year, reports the agent, every seed potato yielded a disease free plant.

Mr. Lonsdorf is advising his farmers not to grow table potatoes for the Chicago market, but to grow seed potatoes instead, for which there is a strong demand, where northern Michigan stock is involved.

DISTRIBUTE GARDEN PRIZES

AT its annual distribution of prizes in the flower and vegetable garden contests, the Cleveland-Cliffs Iron Company, one of the largest corporations operating in the Upper Peninsula, recently distributed \$490 to residents of Ishpeming, Negaunee, North Lake, Republic, Iron River, Gwinn, Princeton and Alston. This is an annual event looking to the improvement of gardening in the district.

Some years ago Chippewa County established an agricultural school with private aid, under the name of the Dunbar Agricultural School. Under existing auspices it proved not to be a success and as a school it has been discontinued. An effort has since been made to interest the Michigan Agricultural College in a proposal to use this school as a preparatory school for the college. Work of the two lower years might, it is pointed out, be carried on at this and similar schools throughout the state, thus relieving congestion at East Lansing and permitting students to remain nearer home. Variety in local conditions could thus be recognized and smaller classes handled. It is stated that the College will reach a decision on the Dunbar project following a soil survey next spring.

WISH CATTLE TESTED.

IT is announced from Sault Ste. Marie that Rudyard dairymen have requested the State Department of Agriculture that about 200 of their dairy cattle be tested for tuberculosis. The reason given is their desire to protect their families and customers from infection. They point out that it will cost \$30 to \$35 to winter a tubercular cow, which meanwhile may infect well cattle in the herd. It was desired to clean up these herds because of the increased danger of communication of tuberculosis in the barns in winter. Rudyard farmers took this step voluntarily. They are establishing fine herds and developing a prosperous milk and cream business, which it is desired to protect. Dairy products instead of hay is becoming the basis of agriculture here.

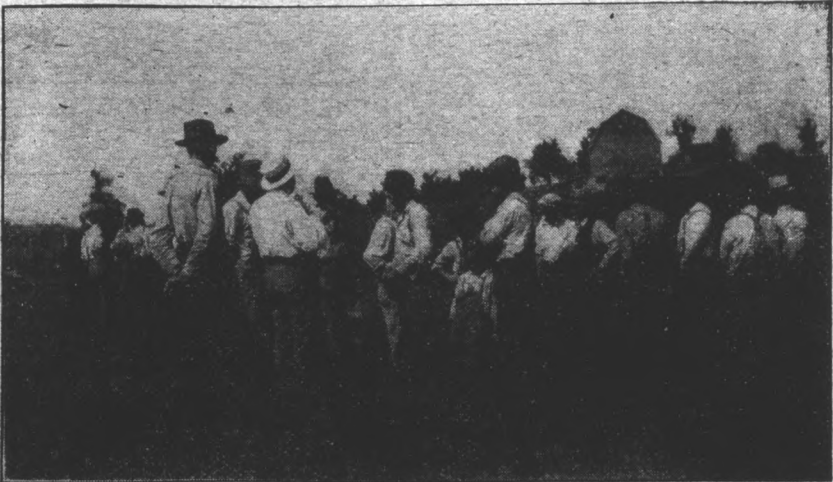
THESE RANCHERS ARE SUCCEEDING.

SEVERAL years ago, when western ranchers were in severe difficulties because of drought on the ranges, numbers of them moved into the Upper Peninsula to take advantage of the great extent of well-grassed range in this section. Some of these ranchers, it is well known, did not make good here, because western methods were not adapted to this section, and because many did not succeed in solving satisfactorily the problem of winter feeding.

An exception to this condition appears to be Mr. John Cassabone, of Kenton, who is reported to be wintering 900 ewes and is marketing 600 lambs. He reports the average per year cost of keeping these lambs to be \$3 per head, while the proceeds from the sale of them is expected to yield about \$6 per head.

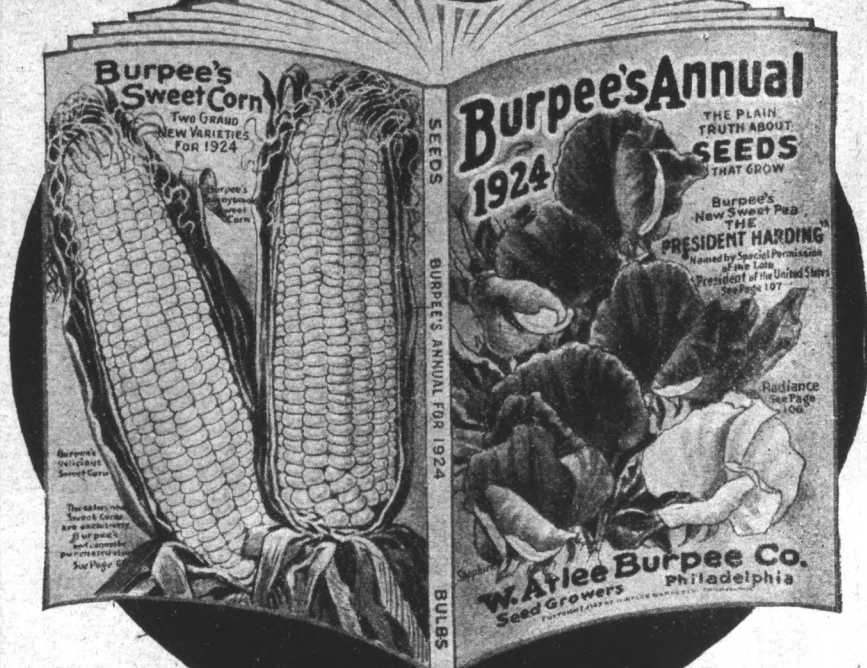
Meanwhile, an Ontonagon County farmer reports unusual success in disposing of two earloads of lambs and sheep on the Chicago market. He discovered that Upper Peninsula sheep have there a reputation for dressing out a higher percentage than is common with other sheep. He says his grass-fed sheep from the Upper Peninsula sold for a better price than corn-fed sheep from Missouri.

A worker is known by the condition of his tools. Where, and in what condition are yours?



The Melting Pot of Practical Farm Knowledge is Found in the Field and Barn Meetings Now so Common Over the State.

Burpee's Seeds Grow



Burpee's Annual

THE LEADING AMERICAN SEED CATALOG

PLANTERS in all parts of America are coming more and more to realize that it pays to sow good seeds. Burpee Quality Seeds are the standard by which others are judged.

It is well known that the House of Burpee has introduced more distinct new vegetables and flowers that are now in general cultivation than have any three other American Seed Houses combined.

For 1924 we are offering some of the finest new varieties that have been introduced in recent years. Amongst the Burpee Novelties is our wonderful New Sweet Pea, The President Harding, which was named by special permission of the late President of the United States.

In our new catalog we are also now offering for the first time the Philadelphia Bush Lima, which is the earliest and most prolific of all Lima Beans, and the two New Sweet Corns, Delicious and Sunnybrook, which are a new development out of our famous Golden Bantam. New Giant Snapdragons, New Zinnias, New Dahlias, New Gladioli, and a New Self-Pruning Tomato are some of the new creations which are offered this year exclusively by W. Atlee Burpee Company.

Burpee's Annual is our catalog. It is the catalog that tells the plain truth about the Best Seeds That Grow.

If you are interested in gardening Burpee's Annual will be mailed to you free. Write for your Annual today. Just tear out the coupon and fill in your name and address below.

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Seed Growers, Philadelphia

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How Federal Land Banks Help Farmers Get Ahead

THROUGH membership in a mighty cooperative loan system, nearly 300,000 farmers are paying off their mortgages. Through the twelve Federal Land Banks these farmers are securing better terms and lower interest rates. Besides, every borrower shares in the profits earned. Already, more than \$7,000,000 has been paid as dividends.

Money for these mortgage loans is gotten through the sale of Federal Land Bank Bonds. Money invested in these Bonds helps to build up the farming business by providing needed capital.

Federal Land Bank Bonds have all the safety of good farm mortgages, plus additional guarantees.

Federal Land Bank Bonds are free from all taxes, except inheritance taxes. Interest received from them is free from income taxes.

You can turn Federal Land Bank Bonds into cash on short notice or use them as security for a bank loan.

Federal Land Bank Bonds yield a regular income, payable twice a year. Price and interest rate on request.

Federal Land Bank Bonds may be had in denominations to fit your bank account: \$40, \$100, \$500, \$1,000, \$5,000 and \$10,000. Your choice of coupon or registered form, delivered by registered mail. Correspondence confidential. Remember, the words "The Federal Land Bank" appear at the top of every bond issued by a Federal Land Bank.

Should you desire a Federal Farm Loan, apply to the Secretary-Treasurer of the nearest National Farm Loan Association. Your County Agent can give his name and address.



Write today for free pamphlet, "Getting Together To Get Ahead." Address the nearest Federal Land Bank or the Fiscal Agent at Washington, D. C. Support your only national cooperative lending and investing system, by putting your surplus funds into Federal Land Bank Bonds.

Federal Land Banks are located at

Springfield, Mass.	St. Louis, Mo.	Louisville, Ky.	Columbia, S. C.
New Orleans, La.	Berkeley, Cal.	St. Paul, Minn.	Houston, Texas
Wichita, Kansas	Omaha, Nebr.	Baltimore, Md.	Spokane, Wash.

Fiscal Agent

FEDERAL LAND BANKS

Washington, D. C.

LET'S THE GAS MAN DO IT.

HERE is how I put it over the oil man. My supply tank for kerosene for the tractor is elevated eight feet. The oil man carries his five-gallon can up the steps and fills this supply tank. A pipe leads from this tank down to within reach so all I need to do when I want to fill the tractor is to insert end of hose in tractor tank, turn a valve and in due season the job is done without an effort on my part. Usually, I can have the tractor oiled by the time the tank is filled.—L. Bradford.

WANT BREAD LOAVES STAND-
ARDIZED.

IT is believed that much is lost by consumers owing to short weight loaves of bread. To remedy this evil, Representative Brand, of Ohio, has introduced a bill, known as the "Federal Bread Act," to establish standard weights for loaves of bread. It not only provides that each loaf of bread shall weigh one pound, one and one-half pounds, or a multiple of one pound avertupois weight, but shall be completely wrapped in a manner so as to exclude contamination.

FEDERAL TRADE COMMISSION
DEFENDS COOPERATIVES.

THE Minneapolis Chamber of Commerce, the largest grain exchange in the United States, has been ordered by the federal trade commission to cease unfair methods of competition in its efforts to destroy farmers' cooperative grain markets and to retain its monopoly of the grain trade in Minneapolis.

The farmers' organization concerned is the Equity Cooperative Exchange, and was refused business connection with the Minneapolis market because it returned the earnings in excess of expenses to the grain growers in the form of patronage dividends.

"False and misleading statements concerning the financial responsibility and methods of transacting business in grain by the Equity Cooperative Exchange," the commission found, were made "by respondent chamber of commerce of Minneapolis in trade and daily papers, including the Cooperative Manager and Farmer and the National Grain Grower. In these papers the Minneapolis Chamber of Commerce pretended to offer expert advice on cooperative marketing of grain at the same time conducting a campaign against cooperative terminal marketing," it is alleged by the federal trade commission.

WANT DAIRY DIVISION.

THE Federal Reserve Board bulletin gives a monthly summary of the agricultural situation which is outstanding in point of accuracy and practical conclusions. Leading dairymen are pointing out, however, that while grain, live stock, cotton, tobacco and other branches of farm production are given attention, no consideration is given the dairy industry. It is thought that this great industry, the largest in the United States, is worthy of more attention than it is receiving from the governmental departments.

A group of dairy organization leaders, headed by M. D. Munn, president of the American Jersey Cattle Club, have been in Washington in the interest of the proposal to advance the dairy division to a bureau in the department of agriculture. Mr. Munn considers the dairy industry the greatest stabilizing influence in agriculture. He says we have increased the consumption of dairy products in this country sixteen per cent in the last two years, and he predicts that the increase in consumption of milk will be larger during the next two years. To meet this increase he says the dairymen will have to produce more efficiently.

HAYES Fruit Fog Sprayers

Mechanically perfected—not only guaranteed to develop 300 pounds pressure year in, year out, but so simply in construction that there is little to get out of order. Every part is easily accessible. The pump is corrosion-proof.

Pay No More Than You Want

You can pay whatever you want for Hayes Sprayers. We quote them in sizes ranging from 3 1/2 to 16 gals. per minute, with or without trucks, engines or special equipment. Hayes Power Sprayers vary in capacity only. The smallest maintains same pressure and is as efficient and satisfactory as largest size.

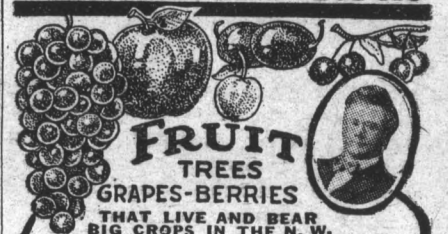
SEND FOR CATALOG showing power sprayers, for every spraying need. A full line of barrels, bucket, wheelbarrow and other hand sprayers at prices that are right.

Distribution and dealers in all principal cities.

HAYES PUMP & PLANTER CO.
Dept. 61, Galva, Ill.



57 Years of Success Northern Grown Nursery Stock



FRUIT TREES
GRAPES-BERRIES
THAT LIVE AND BEAR
BIG CROPS IN THE N. W.

The wonderful new fruit productions of the Minnesota State Fruit Breeding Farm make it possible to grow a California Orchard right in your own back yard.

Beta and Alpha Grapes are absolutely hardy, and stand on the trellis in Minnesota all winter. Monitor, Red Wing and Underwood Plums are as large and as good as California plums.

Zebra Cherry, large-sweet-July. Latham and Redpath Red Raspberries are the two greatest raspberries ever produced—berries 1 in. diameter. FREE CATALOG tells all about our wonderful Nor. Grown Nursery Stock. Oldest Nursery in Minnesota.

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KNIGHT'S

Strawberry-Raspberry-Blackberry
Currant-Gooseberry-Grape-Asparagus
Same high quality we have supplied for nearly 40 years, but we have made

A Big Reduction in Prices

Our catalog tells how to grow big crops of fine fruit from

Champion—The Best Everbearer and many standard varieties. Cultural directions make the book of great value—but we send it free, write today.

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BERRY PLANTS

More and Better

Home Grown Fruit

to eat and preserve.

Flowers

to beautify the grounds.

Our New Catalog

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

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STRAWBERRY PLANTS

Raspberry, Blackberry, Grape, etc. Complete line reasonably priced. Thirty years experience. Illustrated Catalog free. J. N. Rokely & Son, R. 6, Bridgman, Mich.

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Grow berries that bring top prices. Our select varieties are large in size, firm, wonderfully luscious, big yielders. Healthy, vigorous, deep rooted. Ideal for all soils. Cash in on our 50 years experience in developing big pay strains. Cooper, World's biggest berry. Champion, the ever-bearing sensation. Premier, earliest of all. Splendid line of Red and Black Raspberries, Blackberries, Currants, Dewberries, Gooseberries, Ornamental Shrubs, Gladioli, Tulip Bulbs, Roses.

Tremendous stock. All GRAPES at big savings. Satisfaction Guaranteed or money back. Send for large beautiful FREE Catalog in true colors. Tells how to plant, care for and raise big crops. Valuable book to own. STEVENSVILLE NURSERIES, Box 13 Stevensville, Michigan

GOOD SEEDS

Grown From Select Stock—None Better—54 years selling good seeds to satisfied customers. Prices below all others. Extra lot free in all orders I fill. Big free catalogue has over 700 pictures of vegetables and flowers. Send your and neighbors' addresses.

R. H. SHUMWAY, Rockford, Ill.

BARGAIN CATALOG

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

MORE MILK

from
Clipped
Cows

It pays to clip udder, flanks and underline of stabled cows once a month. Clip them all

over this spring. Keeps them in better condition. Clipped cows give more milk—more butter fat. Clip with Stewart No. 1 Clipping Machine Best made. Ball bearing. Easy running. Clips fast. Lasts long. Simple to use. At dealers \$12.75; or send \$5 and pay balance on delivery. Guaranteed satisfactory or money back.

CHICAGO FLEXIBLE SHAFT COMPANY
5576 Roosevelt Road, Chicago
World's Largest Makers of Clipping and Shearing Machines. Complete Catalog on Request.



Put in a garden

Time spent with a Planet Jr. seeder or wheel hoe in the garden pays the biggest cash return on the farm. Grow what you eat and keep that 40¢ at

home which the Department of Agriculture says is what the American farm home spends out of every food dollar for "store" food. Planting with the Planet Jr. No. 4 combination drill and wheel hoe is a matter of minutes. Use the horse hoe if you will, the wheel hoe for closer work.

Planet Jr. implements are made by a house specializing for 50 years on seeding and cultivation equipment, the largest manufacturers of field and garden tillage tools exclusively in the world. The new catalogue tells the story. Get one from your dealer or from us.

S. L. ALLEN & CO., Inc.

Largest Manufacturers of Specialized Field and Garden Tools in the World

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Look for "Planet Jr."

Planet Jr.

A Squint at the Tax Rolls

My Tax Receipt Reveals Some Interesting Information

By L. B. Reber

ALL aboard folks, jump right on for a free ride; I am going to ride my pet hobby and there is plenty of room for you. A nice storm has caused me to hole up for a while and I have spent some time analyzing my tax receipt. A rough but fairly accurate analysis of the little piece of paper shows the following results:

	Per Cent.
State tax	11.45
County tax	38.14
School tax	11.58
Township tax	40.33

This plainly shows that the major part of the tax is local and locally imposed. There is very little hope of cutting down the county expenses. For instance, we have a county treasurer, an assistant to the treasurer, an assistant to the assistant to the treasurer, and during the winter months, an assistant to the assistant to the assistant to the treasurer, all of these are drawing a county salary.

We also have an assistant prosecuting attorney, a superintendent of road maintenance who never saw a foot of road built, a county engineer with an assistant, and a whole room full of assistants to the assistant, and the other county offices are in about the same condition.

A year ago we had a county nurse who drew a salary and expenses. Her bill for gasoline was submitted to the board of supervisors. Some curious person figured out that to spend that much for gas she must have averaged 178 miles a day with her Ford during every day in the year. She went some, also she went out of her fat job, but we have another. Nuff said on that subject. Possibly this will wake you up until you too will begin to wonder where all this county tax money goes.

We have our special quota of old skinflints whose children have grown up and who kick loudly at school expenses. No one really regrets school taxes, but even here there is an opportunity for retrenchment. There is no valid reason why young, inexperienced school mams should draw three times as much salary as they did "before the wah," while farmers draw thirty-seven per cent less for their produce.

Coming right home with this I find that my township tax is divided as follows:

Township expenses, including a sexton; expenses of the administrative board; board of review; elections; maintenance of the town hall, and all incidentals takes 12.39 per cent of the township tax; the other 87.61 per cent of the township tax is for roads. This year our local taxes are twenty-seven per cent higher than they were last year; last year our local taxes were twenty-two per cent higher than the year before, and two years ago they were seventeen per cent higher than the year before. During these three years the farm incomes have actually decreased, due to the lower prices received for all farm products. This increase in tax is entirely due to the road building. Now let us see how these road taxes are raised.

Our procedure is doubtless duplicated in every township in the state. Town meeting day, some one blessed (?) with gab mounts a chair and makes an eloquent plea for the improvement of a certain road; he winds up with a motion that ten, fifteen or twenty thousand dollars be raised to improve that road, the motion is seconded and the chairman puts it. Every person living along that road, every hired man and half-grown boy in the hall join in a loud yell of aye. If any man thinks that the burden will be excessive and dares to say no, the gang turns on him and makes him feel that he is a full cousin to a yellow dog.

Now for a bit of constructive criticism. Any proposition to raise more than \$500 for any one fund should be voted by ballot and never by acclamation. No one should be allowed to vote on that proposition unless he (she) is a property owner and taxpayer in the township.

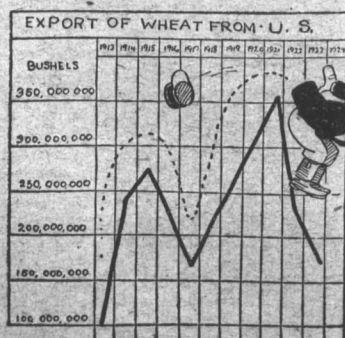
At our last two meetings, out of a voting strength of nearly 500 registered voters, about 100 were present; at least twenty-five per cent of these were non-taxpayers. Yet we voted a direct tax of \$12,000 for one fund, the macadam road fund.

Now, don't get me wrong. I am in favor of new road building and all improvements, but I favor going about it in a sane and lawful manner, instead of forcing a program of taxation which is rapidly leading to confiscation.

Have You Symptoms of Chartities?



IF YOU ARE TROUBLED WITH ZIG-ZAGS IN FRONT OF YOUR EYES!—



OR YOU DREAM STRANGE DREAMS LIKE THE ABOVE



-OR YOU FIND YOUR FEET TRACKING A PATH LIKE THIS TO THE BARN—



BE CAREFUL! DON'T READ MORE THAN ONE FARM GRAPH OR CHART A DAY OR YOU MAY END UP LIKE THIS!



The "U. S." Walrus can be washed clean instantly. Its surface is as smooth and waterproof as a boot

In the mire one minute— in the kitchen the next!

*But your feet are dry and
the house is clean when you
wear a pair of "U. S." Walrus*

Out to the barn a dozen times a day—
through muck and mire you don't want
to track into the house!

That is when you'll appreciate the convenience of the "U. S." Walrus. Waterproof as a boot—and you can slide them on and off over your leather shoes as easily as you slip into an overcoat!

And afterwards—it makes no difference how thick they're plastered with muck. One good douse under the faucet—and their smooth rubber surface is clean!

Cleanliness—convenience—protection—all these together make the "U. S." Walrus ideal for the farm.

Other "U. S." Footwear—
all built for long,
hard wear

"U. S." Boots, built so tough and rugged they're famous wherever boots are worn—Rubbers and Arctics, all styles and sizes for the whole family—"U. S." Bootees, the all-rubber lace shoe, for spring and fall use—every kind of rubber footwear you could possibly need is included in the big "U. S." line.

Every single one is backed by 75 years of skilled experience. It will pay you to look for the "U. S." Trademark—the honor mark of the largest rubber organization in the world.

United States Rubber Company



Easy to slip on and off! One of the big convenient features of the "U. S." Walrus



Trade Mark

Ask for "U. S." Walrus



"AA QUALITY." This Trade Mark on a bag of fertilizer gives the best assurance of crop-growing success. It means that the plant foods are selected for their *crop-producing value* rather than for their mere chemical analyses. It means that the fertilizers are properly mixed and are in the best mechanical condition; that the great organization manufacturing them stands squarely behind them with all its resources, all its experience and all its efforts to make them profitable to YOU.



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CHEMICAL CO.
Offices in 22 principal cities

*"Worth more per dollar because
they produce more per acre"*

Please Mention The Michigan Farmer When Writing Advertisers

Pay Less
for your implements
by buying them
under the
MOLINE
Plan
See your Moline dealer
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NEW MOLINE PLOW CO.
Moline, Ill.

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at our expense. We will send postage paid, this complete outfit including large box of belt hooks to lace every kind and thickness of belt together with a (Vise Tool) belt lacing machine. If you want the outfit after trying it, send us your check for \$5, if not return it at our expense. Laces belts for one cent an inch.



ASSORTED

Detroit Belt Lacer Co., Detroit, Mich.

GRAIN SHOW PREMIUM LIST OUT.

THE premium list for the thirteenth annual meeting and show of the Michigan Crop Improvement Association, to be held in connection with Farmers' Week at the Michigan Agricultural College, East Lansing, February 4-8, is now out. Copies will be sent upon request to H. C. Rather, secretary-treasurer of the organization, at the above address.

Judging from the interest of farmers throughout the state, and from the success in other states with seed developed through the association, there is promise that the coming show will prove of great educational value to the farm folks of the state.

TIPS FOR TAXPAYERS. No. 2.

EVERY single person whose net income for the year 1923 was \$1,000 or more or whose gross income was \$5,000 or more, and every married couple (living together) whose net income was \$2,000 or more or whose gross income was \$5,000 or more, must file an income-tax return.

Broadly speaking, gross income is all income received by the taxpayer during the year from salary or wages, business, trade profession or vocation, dealing in property, interest, rent, or dividends, or from the transaction of any business carried on for profit. Net income is gross income, less certain specified deductions for business expenses, bad debts, taxes, etc.

The exemptions are \$1,000 for single persons, \$2,500 for married couples (living together) whose net income for 1923 was \$5,000 or less, and \$2,000 for married couples whose net income was in excess of \$5,000. An additional credit of \$400 is allowed for each person (other than husband or wife) dependent upon the taxpayer for chief support if such person is under eighteen years of age or incapable of self-support because physically or mentally defective.

The normal tax is four per cent on the first \$4,000 of net income in excess of the exemptions and credits, and eight per cent on the remaining net income.

M. A. C. GRADUATES FARMERS.

FOUR-FIFTHS of the graduates and former students of the Agricultural Department of the Michigan Agricultural College, that the college alumni office is able to trace, are engaged in some line of agricultural endeavor. The list of graduates includes all but fifty-four students, while the non-graduate list is not so complete, data on the occupations of 315 individuals not being available.

There are 1,403 out of the total number accounted for by the college now associated with agricultural pursuits, while 357 followed other lines not connected with the farm. All but last year's graduating class are included in these figures.

Farming, of course, engages the largest single group of the graduates, while 116 individuals are teaching agriculture in high schools, and 257 are teaching the various agricultural subjects in colleges, connected with the United States Department of Agriculture being included in this number.

Twenty-nine M. A. C. men are special agriculturists for industrial concerns, while twenty-four help in the manufacture of dairy products. Eighteen follow the occupation of agricultural writing.

Attorneys and physicians lead the list of those who follow other lines of endeavor, with twenty-five men each. Fifteen are insurance men, ten are claimed by real estate, and thirteen have become merchants, seven ministers, two missionaries, two printers, etc.—B. V. H.

Biddy will do her best if she retires with a full stomach.

Use MYERS SPRAY PUMPS the Year Round

For Spraying Cold Water Painting, Whitewashing, Disinfecting

ORCHARD and vineyard, truck patch and citrus grove, cotton and tobacco, vines, shrubs and flowers must be sprayed. Barns, sheds, poultry and hog houses, fences, walls and outbuildings must be whitewashed, painted and disinfected. You can do any or all of these things quickly, economically and efficiently with a MYERS Spray Pump. There is a MYERS for every purpose, and each the best of its kind.

MYERS Spray Pumps handle with equal facility insecticides, disinfectants, white-wash or paints. Hand Pumps with easy operating cog gear handle—self-lubricating Power Pumps with enclosed working parts and automatic pressure control give powerful penetrating spray that reaches every leaf and blossom, every nook and corner.

The MYERS line includes Pumps for every purpose, Hay Tools and Door Hangers. Ask your local dealer about them or write us direct.

THE F. E. MYERS & BRO. Co. No. 291 Orange St. ASHLAND - OHIO

Manufacturers for over Fifty Years of MYERS HONOR-BUILT PUMPS FOR EVERY PURPOSE. WATER SYSTEMS FOR HOME FARM AND FACTORY. HAY AND GRAIN UNLOADING TOOLS. FARM AND GARAGE DOOR HANGERS.

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"HOOSIER SILOS" are proof against wind, fire, frost and decay, reinforced with every course of tile with galvanized steel cable, equipped with continuous doors with double sealing clamp. Doors set flush with inside wall allows even settling of ensilage. HOOSIER silos also in wood, same splendid value. Territory open for good salesmen. Get our prices before buying. HOOSIER BLDG. TILE & SILO COMPANY, Dept. A1-99, Albany, Indiana

Illustration of a Hoosier silo.

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Puts this Olde-Tan Metal-to-Metal Harness on Your Horses

We trust you wherever you live. Only \$7.50 down. Pay the rest monthly. Write for free harness book. Learn all about this improved metal-to-metal harness construction. Metal wherever there is wear or strain. No old-fashioned buckles.

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First Olde-Tan leather produced 70 years ago. Now known throughout America for its pronounced superiority. Olde-Tan harness is made by a tanner-manufacturer who follows every step from the raw hide to the completed harness.

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It seeds, it cultivates, it mows the lawn. It supplies power for operating light machinery. The BOLENS has a patented arched axle for clearance and a toll control for accurate guidance in close working and cultivating. A differential drive makes turning easy. All attachments have snap hitches and are instantly interchangeable. A boy will run it with delight. Send for full particulars. 315 PARK ST., GILSON MFG. CO. PORT WASHINGTON, WIS.

Illustration of a Boles Power Hoe and Lawn Mower Tractor.

Saws Logs—Falls Trees—Buzes Branches—Does Belt Work

One Man Saws 15 Cords a Day!

—Easy with the OTTAWA Log Saw! Wood set-line for \$3 a cord brings owner \$45 a day. Use 4 ft. P. Engine for other work. Wheel-mounted—easy to move. Saws faster than 10 men. Shipped from factory or nearest of 10 branch houses. Write for FREE Book today.

OTTAWA MANUFACTURING CO.
1501-U Wood Street Ottawa, Kansas
Room 1501-U Magee Bldg., Pittsburgh, Pa.

Illustration of a log saw.

WORLD EVENTS IN PICTURES



Few games require more nerve than ice hockey, but it does not daunt Mrs. M. B. Marshall.



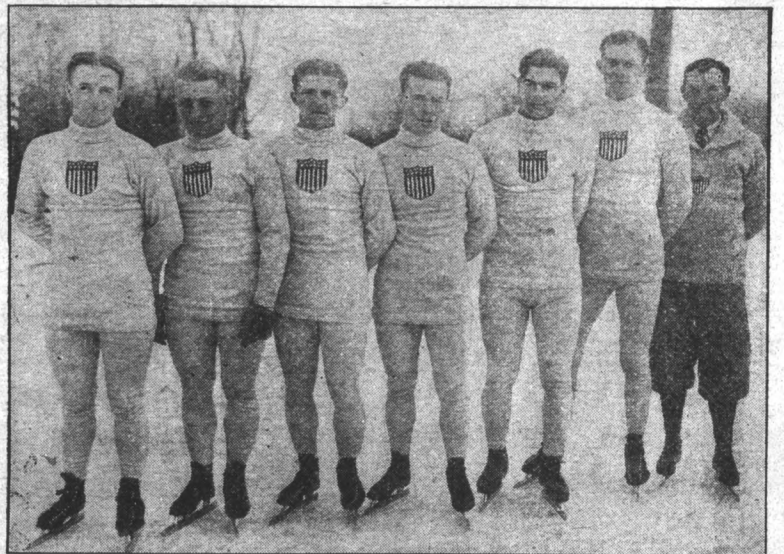
The officers of the bureau of the League of Nations recently met in convention at the Hotel De Ville, Paris. The fourth from the left is Branting, of Sweden, president of the session.



France has chosen Quentin Roosevelt, who was killed in action in 1918, "Ideal American Soldier."



When Howard Nickolson, famous American fancy skater, of New York, performed this thriller, it is a question as to which took the most nerve, to leap or to pose.



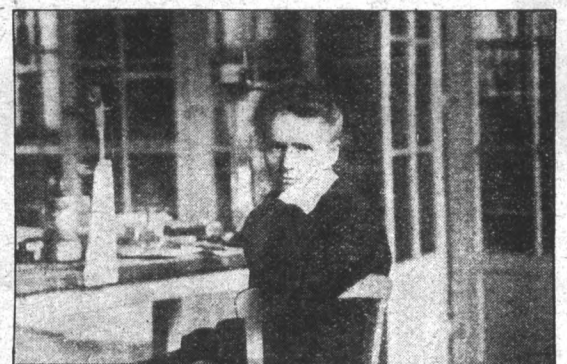
This is the sextette of American speed skaters at Lake Placid, New York, in the uniforms in which they will appear at the Olympic races at Chamonix next month.



This typical American girl is so fond of crisp winter air that she curls up in a snow-covered tree for an hour with the best authors.



The smile of a great courage! Though deaf, dumb and blind, Helen Keller is an author.



All France paid honor to Mme. Currie recently in a formal celebration of the twenty-fifth anniversary of her discovery of radium.



Lady Terrington, Liberalist member of Parliament, is much interested in the radio. She is listening to an instrument operated by H. Powell Rees, in London, which can reach New York.



Fire destroyed the tuberculosis pavilion at the Chicago State Insane Asylum. It is reported that eighteen patients met death, and about fifty others escaped or wandered away at the time.

DON'T you think," he asked, as they walked along, "that you had better be going back? This isn't just the place for a woman, Agnes."

"Why not?"

"Because—well, for one thing, this is a man's life out here, not a woman's. There's no place for you—nothing to interest you or hold you. I can't guarantee you any company except that of a cook—or some one like that."

"But Mr. Thayer—" and Houston detected a strange tone in the voice—"spoke of a very dear friend of yours, in whom I might be greatly interested."

"A friend of mine?"

"Yes—a Miss Robinette. Fred said that she was quite interested in you." Houston laughed.

"She is—by the inverse ratio. So much, in fact, that she doesn't care to be anywhere near me. She knows—" and he sobered, "that there's something—back there."

"Indeed?" They had reached the cottage and the subject was discontinued. Agnes lingered a moment on the veranda. "I suppose I'm never to see anything of you?"

"That's just it, Agnes. It makes me feel like a cad to have you out here—and then not be able to provide any entertainment for you. And, really, there's no need to worry about me. I'm all right—with the exception of this broken arm. And it'll be all right in a couple of weeks. Besides, there's no telling what may happen. You can see from the burning of this mill that there isn't any love lost between Thayer and myself."

"Why, Barry! You don't think he had anything to do with it?"

"I know he did. Directly or indirectly, he was back of it. I haven't much of a chance to talk to you, Agnes, but this much is a certainty: Thayer is my enemy, for business reasons. I know of no other. He believes that if he can make the going rough enough for me that I'll quit, lease him my stumpage, and let him go into business for himself. So far, he hasn't had much luck—except to tie me up. He may beat me; I don't know. Then again, he may not. But in the meanwhile, you can see, Agnes, that the battlefield is going to be no place for a woman."

"But, Barry, you're wrong. I think you've done an injustice to—"

"Please don't tell me that, Agnes. I put so much faith in your beliefs. But in this case, I've heard it from his own lips—I've seen his telegrams. I know."

THE woman turned quickly. For a moment she examined, in an absent sort of way, the blossoms of a climbing rose, growing, quite uninvited, up the porch pillar of the cottage. Then:

"Maybe you're right, Barry. Probably I will go away. But I want to be sure you're all right first."

"Would you care to go to the village tonight? There's a picture show there—and we could at least get a dish of ice cream and some candy."

"I think not," came the answer in a tired voice. "It's so far; besides, all

The White Desert

By Courtney Ryley Cooper

this excitement has given me a headache. Go back to your work and forget about me. I think that I'll go to bed immediately I've had something to eat."

"You're not ill?"

"Only a headache—and with me, bed is always the best place for that. I suppose you'll go to Denver in the morning for new saws?"

"Yes."

"Then I'll wait until you return before I make up my mind. Good-bye." She bent forward to be kissed, and Barry obeyed the command of her lips with less of alacrity than ever before. Nor could he tell the reason. Five

He stopped just at the entrance to the mill clearing and looked toward the cottage. It was darkened. Barry felt that without at least the beckoning of a light to denote the wakefulness of the cook, he could not in propriety go there, even for an inquiry regarding the condition of the woman whom he felt that some day he would marry. Aimlessly he wandered about, staring in the moonlight at the piled-up remains of his mill, then at last he seated himself on a stack of lumber, to rest a moment before the return journey to Ba'tiste's cabin. But suddenly he tensed. A low whistle had come from the edge of the woods, a

on. A mile—two. Then a figure came out of the woods just ahead of him, cut across the road and detoured into the scraggly hills on the other side, without noticing the approaching Houston in the shadows. But Barry had been more fortunate. The moonlight had shown full on the man's lean face and gangling form; it was undoubtedly Fred Thayer. He was still in the neighborhood, then.

HAD he been the man in the woods—the one who had stood silhouetted on the hill top? Barry could only guess. Again he chided himself for his inquisitiveness and walked on. Almost to Ba'tiste's cabin he went; at last to turn from the road at the sound of hoofbeats, then to stare as Medaine Robinette, on horseback, passed him at a trot, headed toward her home, the shadowy Lost Wing, on his calico pony, straggling along in the rear. The next morning he went to Denver, still wondering, as he sought to make himself comfortable on the old red plush seats, wondering whether the girl he had seen in the forest with the man he now felt sure was Fred Thayer had been Agnes Jierdon or Medaine Robinette, whom, in spite of her coldness to him, in spite of her evident distaste and revulsion that was so apparent in their meetings, had awakened within him a thing he had believed, in the drabness of his gray, harassed life, could never exist—the thrill and the yearnings of love.

It was a question which haunted him during the days in which he cut into his bank account with the purchase of the bare necessities of a sawmill. It was a question which followed him back to Tabernacle, thence across country to camp. But it was one that was not to be answered. Things had happened again.

Ba'tiste was not at the mill, where new foundations had appeared in Houston's absence. A workman pointed vaguely upward, and Barry hurried on toward the lake, clambering up the hill nearest the clearing, that he might take the higher and shorter road.

He found no Ba'tiste but there was something else which held Houston's interest for a moment and which stopped him, staring wonderingly into the distance. A new skidway had made its appearance on the side of the jutting mountain nearest the dam. Logs were tumbling downward in slow, but steady succession, to disappear, then to show themselves, hobbling jerkily outward toward the center of the lake. That skidway had not been there before. Certainly, work at the mill had not progressed to such an extent that Ba'tiste could afford to start cutting timber already. Houston turned back toward the lower camp road wondering vaguely what it all could mean, striving to figure why Ba'tiste should have turned to logging operations instead of continuing to stress every workman's ability on the rebuilding of the burned structure. A mile he went—two—then halted. A thunderous voice was booming belligerently from the distance:

"You lie—un'stan'? Ba'teese say

Keeping Father On The Farm

By Al. Rice

We eat the farmer's bounty,
But we've left him to his fate;
For his address is a county
Up th' State.
There was lots of agitation
When they tried to keep us down;
But we thought that our salvation
Was in town.
O, they ain't no way o' keepin'
Either lass or farmer lad,
But what interrupts our sleepin',
Is, how to keep Old Dad.

Young America is reachin'
For the city's golden charm,
And they ain't no use o' preachin'
'Bout the farm.
And you cannot keep 'em on it
When they want to go away,
For the city sings a sonnet
Bright and gay.
But the thing I wish to mention,
And the thought that's uppermost;
For it merits our attention:
Keepin' Father at his post.

O, it beats the very dickens!
For he's slow upon his legs;
But he keeps a lot o' chickens
Layin' eggs.
O, he's slow—he's just a plodder—
Doing all his age allows;
Putting up the hay and fodder
For his cows.
Sends us lots of eggs and butter
And a ham or two o' meat—
O, we won't know how to "cut 'er"
When Old Daddy quits the "beat."

Yes, we eat the "Old Man's" bounty,
But we've left him to his fate;
For his address is a county
Up the state.
When the winter wind is rearin',
Fore the sky-line meets the sun,
He has spent two hours a-shearin'—
On the run.
But a painful thought encroaches,
And it fills us with alarm;
For we know the time approaches
When our dad will quit the farm.

minutes more and he was back at the mill, giving what aid he could with his uninjured arm.

Night, and he traveled with Ba'tiste to his cabin, only to fret nervously about the place and at last to strike out once more, on foot, for the lumber camp. He was worried, nervous; in a vague way he realized that he had been curt, almost brusque, with a woman for whom he felt every possible gratitude and consideration. Nor had he inquired about her when work had ended for the day. Had the excuse of a headache been made only to cover feelings that had been deeply injured? Or had it meant a blind to veil real, serious illness? For three years, Barry Houston had known Agnes Jierdon in day-to-day association. But never had he remembered her in exactly the light that he had seen her today. There had been a strangeness about her, a sharpness he could not understand.

hundred yards away, and Barry listened attentively for its repetition, but it did not come. Fifteen minutes he waited, then rose, the better to watch two figures that had appeared for just a moment silhouetted in the moonlight at the bald top of a small hill. A man and a woman were walking close together—the woman, it seemed, with her head against the man's shoulder; the man evidently with his arm about her.

There was no time for identities. A second more and they had faded into the shadows. Barry rose and started toward the darkened cottage, only to turn again into the road.

"Foolishness!" he chided himself as he plodded along. "She doesn't know any one but Thayer—and what if she does? It's none of my business. She's the one who has the claim on me; I have none on her!"

And with this decision he walked

AL ACRES—Al Says The Pose Is Perfect

By Frank R. Leet



NEW LAMP BURNS 94% AIR Beats Electric or Gas

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

The inventor is offering to send a lamp on 10 days' FREE trial, or even to give one FREE to the first user in each locality who will help introduce it. Write today for full particulars. Also ask us to explain how you can get the agency and without experience or money make \$250 to \$500 per month. Address

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

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Strong, hardy, deep-rooted plants that are sure to grow. Grown on new ground assuring a good start, rapid growth, long life and bountiful yield.

B-W-A-N Plants are grown and marketed through the combined resources of America's three leading berry plant growers, now consolidated.

The 1924 Berry Plant Sales Book is now ready. Contains valuable information for berry raisers. Send for your copy today. A gift of a packet of choice Fanny Seed for the lady of the home goes with it without cost.

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Bridgman, Michigan

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All stock inspected. Guaranteed.

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worth 15c; Lettuce, 12 kinds, worth 15c;
Tomatoes, 11 the finest, worth 20c; Turnips,
7 splendid, worth 10c; Onion, 8 best varieties,
worth 15c; 10 Spring Flowering Bulbs,
worth 25c. 65 varieties in all; worth \$1.

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Write today; mention this paper.

SEND 10 CENTS
to cover postage and packing and receive this valuable collection of seeds packed together with my big instructive, beautiful Seed and Plant Book, tells all about Buckbee's "Full of Life" Seeds, Plants, etc.

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Buckford Seed Farms
Farm 43 Buckford, Ill.

This Year Try Stahelin's Big Yield Strawberry Plants

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Splendid variety, adaptable to any soil. Grow Stahelin's Strawberries this year—they will make Big Money—up to \$1200 per acre; the new varieties: The EATON, DELICIOUS, PREMIER, MARVEL, COOPER and the CHAMPION—world's greatest ever-bearing strawberry—are all robust, healthy, well-rooted plants, readily adaptable to your soil. Thousands of our customers are making big money in strawberries. So can YOU. START THIS YEAR!

GRAPE at special price, per thousand **\$30 and up**

Send for our BIG FREE full colored catalog of Strawberries, Raspberries, Blackberries, Asparagus, etc.

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Special Price \$250 and up

Our prices are very low for high quality stock. Every plant guaranteed absolutely healthy and as described or your money refunded. Write today for our **Full-Color FREE Catalog**

you lie—if you no like eet, just'—what-you-say—climb up me! Un'stan'? Climb up me!"

Houston broke into a run, racing along the flume with constantly increasing speed as he heard outburst after outburst from the giant trapper, interjected by the lesser sounds of argumentative voices in reply. Faintly he heard a woman's voice, then Ba'tiste's in sudden command:

"Go on—you no belong here. Ba'tiste, he handle this. Go 'long!"

Faster than ever went Barry Houston, at last to make the turn of the road as it followed the flume, and to stop, breathless, just in time to escape colliding with the broad back of the gigantic Canadian, squared as he was, half across the road. Facing him were five men with shovels and hammers, workmen of the Blackburn camp, interrupted evidently in the building of some sort of contraption which led away into the woods. Houston looked more closely, then gasped. It was another flume; they were making a connection with his own; already water had been diverted from the main flume and was flowing down the newly boarded conduit which led to the Blackburn mill. A lunge and he had taken his place beside Renaud.

"What's this mean?" he demanded angrily, to hear his words echoed by the booming voice of his big companion:

"Ah, oui! Yes—what this mean? Huh?"

The foreman looked up caustically. "I've told you about ten times," he answered, addressing himself to Ba'tiste. "We're building a connection on our flume."

"Our flume?" Houston gasped the words. "Where do you get that 'our' idea? I own this flume and this lake and this flame site—"

"If your name's Houston, I guess you do," came the answer. "But if you can read and write, you ought to know that while you may own it, you don't use it. That's our privilege from now on, in cold black and white. As far as the law is concerned, this is our flume, and our water, and our lake, and all our woods back there. And we're going to use all of 'em, as much as we please—and it's your business to stay out of our way!"

CHAPTER XI.

THE statement took Houston off his feet a moment; but recovery came just as quickly, a recoil with the red splotches of anger blazing before his eyes, the surge of hot blood sweeping through his veins, the heat of conflict in his brain. His good hand clenched. a leap and he had struck the foreman on the point of the chin, sending him reeling backward, while the other men rushed to his assistance.

"That's my answer to you!" shouted Houston. "This is my flume and—"

"Run tell Thayer!" shouted the foreman, and he turned for a cant hook. But Ba'tiste seized it first, and with a great wrench, threw it far out of the way. Then, like some great, human trip hammer, he swung into action, spinning Houston out of the way as he went forward, his big fists churning, his voice bellowing his call of battle: "Climb up me! Climb up me!"

The foreman stooped for a club—and rose just in time to be lifted even higher, at the point of Ba'tiste's right fist, then to drop in a lump. Then they were all about him, seeking for an opening, fists pounding, heavy shoes kicking at shins, while in the rear, Houston, scrambling around with his one arm, almost happy with the enthusiasm of battle, swung hard and often at every opportunity, then swerved and covered until he could bring his fist into action again.

(Continued next week.)

Hank Hopkins says what's the use of tying a bunch of money up in an aeroplane when you can get the same result from falling off the windmill and lighting kerplunk on a couple of milk cans.—Sunshine Hollow.



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TOP NOTCH

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Why Doctors Warn Against Coffee or Tea for Children

THE reason is simple. Coffee and tea contain drugs which tend to irritate the delicate nervous system of children, and so upset health.

The Federal Bureau of Education includes in its rules to promote health among growing school children, the warning that "children should not drink tea or coffee at all."

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Sold by grocers everywhere!



Moses' call to deliver Israel

Our Weekly Sermon—By N. A. McCune

THE call to deliver the people of Israel out of the hands of their Egyptian task masters involved three factors—the task, the leader and the leader's God. That the task was tremendous need hardly be stated. Six hundred thousand adult immigrants is a very respectable army. And the trouble was, they were not an army. They were a vast horde of undisciplined ex-slaves. Add to the six hundred thousand at least as many more children; indeed, there would be more than six hundred thousand youngsters, for the Hebrews were not a sterile folk. That Moses had difficulty



with this uncounted multitude of ignorant and superstitious people is not surprising. That he made any headway at all with them is well nigh miraculous. "The Revolt of a

Tartar Tribe," of which De Quincy writes with picturesque power, was no such vast undertaking as that which faced Moses, while the largest number of men in any of the famous Crusades of the middle ages, was one hundred forty thousand.

The figure of Moses looms as one of the giants who will never be forgotten. His achievement would rank him as a very great leader. One never opens Exodus or Deuteronomy to any passage that shows him mean or bigoted or selfish. He had a royal temper that sometimes generated white heat, but that was only human. No man without temper could have endured. He lost all patience with the shallowness and fears of his followers, but who would not?

ANY way you look at him he is big. The legend of Hercules is, that the moment one saw him, he knew he was a god. "The moment my eyes fell on him," said Iole, "I was content. When I beheld Theseus, I desired that I might see him offer battle, but Hercules did not wait for a contest: he conquered whether he stood, or walked, or sat, or whatever thing he did." A writer said of Lord Strathcona that to shake hands with him was like shaking hands with a section of the British Empire. That describes Moses to a nicety. He knew nothing of the modern man's back-patting gospel, with its mottoes on the wall telling him to smile, to be brave, to be generous, and all that. He would not have known what to make of such rapidity.

It was characteristic of such a man that he was slow to accept responsibility. To hear his excuses when God called him to his heavy task was like listening to some people when they are asked to undertake church work. He wasn't well enough known, he said, he wasn't a good public speaker, there were others better qualified, and so on. But once he sets himself to his work he never lets go. His timidity vanishes, he is a different man. The education of this man was the best that could be devised. He was "learned in all the wisdom of the Egyptians." But he was more than that. For forty years he was a sheep herder, a wanderer in the hills and forests of Midian. There is something about the open spaces that develop a man. That is why so many men of brawn and brain have come from the farm. He had a chance to think. He was face to face with the forces of nature. He was in the presence of God. He must have prayed much, for later we find that prayer was a settled practice with him. His oppressed and suffering people were much in his thoughts. James Hastings says, "As he wanders through the round of successive sea-

sons over the blistering sands and up the grim wadies, whose silence is unbroken for weeks save by the bleating of flocks and the screaming of vultures, the passion, the self-will, and presumptuous recklessness of the first phase of character in which he has been presented to us die down to the roots, and this change in the man has changed the history of the world."

HIS problem was an economic one. His people were under the lash, but how liberate them? It is easy for a young man or two to run away, not so easy when there are several hundred thousands of people, many of them old, vast numbers of them children. Moses himself had made good his escape. He was a free man. He could live to a ripe age amid the hills, surrounded by his hardy children, and die and be buried where the setting sun would linger every night over his well-kept grave. But no. He could not do that. The cries of his oppressed fellow countrymen sounded in his ears. Sometimes he could not sleep, thinking of them. There must, he thinks, be a way out. When at last he heard the message at the burning bush, his heart must have leaped up: "I have surely seen the affliction of my people which are in Egypt, and have heard their cry by reason of their taskmasters, for I know their sorrows; and I am come down to deliver them out of the hands of the Egyptians."

ECONOMIC injustice has existed long in the world. In modern times it has been fought with some degree of success, yet its chief victories are yet ahead. Ebenezer Elliott, the corn-law rhymist cried out in 1830:

"When wilt thou save the people?
O God of mercy, when?
Not kings and lords; but nations
Not thrones and crowns, but men!
Flow'rs of thy heart, O God are they,
Let them not pass like weeds away,
Their heritage a sunless day,
God save the people!"

Bishop Grundtvig heard that cry in Denmark. The nation had sunk very low. The best provinces had been wrested away by Germany. A leading Danish educator said the people might as well talk German, and teach it in the schools. Then Grundtvig arose, declaring that the salvation of Denmark lay with Denmark herself. He established schools for the farmers, where they might attend during the slack winter season. Singing of national songs was taught as part of the curriculum, and the people were taught the beauty of knowledge and the dignity of work. And there appeared a new Denmark. "I have surely seen the affliction of my people," God will always work for the liberation of the people, when they will work for Him.

The general impression of the Exodus is one of largeness. Nothing is done on a small scale. One reads of the plagues taking place "over all the land of Egypt." The deliverance is for the whole nation, not for an individual here and there. It is all on a grand scale. How could it be otherwise, when the God, "I am that I am," was directing it? If religion today is on a petty scale, and there be a few at church, few in the community who practice it, the fault must be ours, for God works in a large way.

SUNDAY SCHOOL LESSON FOR JANUARY 20.

SUBJECT:—Moses called to deliver Israel. Exodus 1:1 to 12:36.

GOLDEN TEXT:—By faith, Moses, when he was grown, refused to be called the son of Pharaoh's daughter; choosing rather to share ill treatment with the people of God, than to enjoy the pleasures of sin for a season. Heb. 11:24,25.

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Our Little Folks

A MOTHER GOOSE PARTY IN WOODLAND.

ALL the Woodland folks were so glad to see Bruin back after his adventure with the man and the boy, that they decided to have a party in his honor. Never before had one of their friends had such an experience and lived to tell about it.

So the very next day after Bruin came home, the Woodland folks received invitations to a party at Rolly Rabbit's house that read something like this:

"Come with a whoop, come with a call; Come with good will, or not at all To a Mother Goose party at Rolly's home, At two o'clock Monday afternoon."

On the invitations each one was requested to carry or wear something representing a Mother Goose character.

Everyone was so excited about this new kind of a party. There was hustle and bustle throughout all Woodland as each one made preparations.

At the appointed hour they gathered at Rolly's house. And what a jolly time!

When the greetings were over, Rolly Rabbit came out all dressed up as old Mother Goose. What a funny picture he did make with his full skirts and white apron and a little white cap.

"Now each one must guess who the



"A Merry Old Soul is He."

other represents. The one who guesses the most right will get this," exclaimed Rolly, holding up a pretty red package. Then all the animal folks began to puzzle their brains.

Little Molly Woodchuck carried a toy sheep, and was Little Bo Peep. Benny Fox carried a little pie and was Little Jack Horner. But his pie was to tempting that before the game was finished, the pie was finished too. Mrs. Jackie Rabbit wore a long string of red hearts and was Queen of Hearts. There isn't room to tell you about the rest. But Little Mary Mink won the prize, which was a nice book of Mother Goose stories.

"If you went into a restaurant," asked Rolly, "what would you order for supper?" And he read these suggestions to help them:

1. What Tommy Tucker had for his supper.
2. What Queen of Hearts called for.
3. What the little pig had.
4. What Curly Locks fed on.
5. What the Man in the Moon burned his mouth with.
6. A dainty dish for a king.

Granny Fieldmouse guessed the answers all right like this, and won a pretty picture of Old Mother Hubbard.

1. Bread and butter.
2. Tarts.
3. Roast beef.
4. Strawberries and cream.
5. Cold peas porridge.
6. Bird pie.

Talking about good things to eat made them all so hungry that they sat down to a bountiful feast of all the Woodland goodies you could think of. After the acorn pie and cream cheese, Bruin told them all about his adventure with the man and the little boy.

"But I believe if we are kind to men and boys and don't try to harm them, they will not try to harm us," he said. And all the Woodland folks danced around him singing:

"Old King Bruin is a merry old soul And a merry old soul is he, Long may he live in our happy land, Just as happy as he can be." And each one went home saying he had had a fine time.



Nothing left but the inventory

Frequently farms are destroyed by fire so that nothing is left but the record of the farm's value and all too frequently no record exists. There is no way for you to prove the extent of your loss by fire to the insurance company and many unfortunate delays occur before you can make out the necessary proof of loss. If you do not have a good inventory of your farm values, send for the free booklet, "My Property". It is an easy way to make a record of everything of value on your farm—the buildings, their contents, live stock, your furniture, clothing, tools, machinery—everything.

Send the coupon in the corner of this advertisement for your copy of the booklet. It will help you plan your insurance and calculate any loss that may occur.

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Fred Dunder, Strathcona, Minn., says: "I certainly like my Edwards Engine. Runs an 8-inch burr mill full capacity. Has plenty of power and then some. It certainly works fine. I like its varying speed and power and its light weight. It is so easy to move from job to job. Best and handiest engine I have ever seen or used and wouldn't part with mine at any price if I couldn't get another one and I wouldn't go back to the old-fashioned heavy type engine to use as a gift. The Edwards does all the company claims for it."

"One of my neighbors was looking over my Edwards and I ran it for him and changed it all the way from 1 to 6 H. P. He will buy one right away. He is using a 4 H. P. at present but at times needs 6 H. P. so this would be the very engine he wants."

A. C. Lukehart, Dayton, Pa., says: "Well pleased with my Edwards and would not trade it for any other kind of engine that I know of as it is so handy to move from one job to another and the company has been fair and square to deal with."

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Woman's Interests

Clothing the family on \$277

Investigation Shows that the farm Family Exercises Thrift to Reduce Clothing Bill

THIS seems to be the day of standardization, of surveys, and investigations and comparisons.

The United States Department of Agriculture has been making a survey to determine something concerning the comparative value of the standards of living of city dwellers and farmer folk. The purpose of this is to find out whether those living in rural districts actually get adequate returns in comfort, increased health, and wholesome enjoyment for their expenditures.

In order to make the investigation referred to, an area in Livingston County, New York, was mapped out for intensive study. This particular territory was chosen because it was considered typical of average farming conditions and would present a fair view of average conditions.

In this part of the country, the main products are hay, corn, wheat, oats, beans, cabbage, peas, garden products, and some dairying.

It was found that the average expenditure by farm families in this locality, was approximately \$2,012 each year. About one-third of this was obtained from the farm, in the way of fuel, the use of the farm home, and food stuffs. Expenditures were as follows:

For food 39.5%
For clothing 13.8%
For health maintenance 4.1%

For education, recreation, religious and social activities.... 15.9%
For personal expenditures 1.2%

The clothing expenditures of 13.8% figured out to about \$277 per family for clothing. It would be extremely interesting to have comparative figures at this time, with percentages, showing the relative expenditures in the same lines, of city families.

If the above figures are based, as we assume they are, on the fact that the average American family consists of five people, the clothing expenditure for the family on the farm is a most reasonable one, figuring only \$55.40 each. Where there is a father and mother and children, the father and mother will usually use more than a fifth of the money for their own clothing, for the children are frequently dressed, in part at least, in neatly made-over garments of their elders, and father mends their shoes.

Nevertheless, it is obvious that thrift, economy and real resourcefulness is to be exercised constantly to furnish the average farm family with clothing for the different seasons of the year, at the figures mentioned.

Investigations of this character have a value, provided we think about them individually, and when the time comes act upon authoritative findings collectively. Work is very necessary, but we need to think, and to plan for the future as well as to work in the present.—E. G. W.

Designs you can make

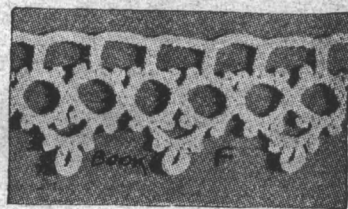
THE addition of a bit of crocheting or tatting gives a touch of beauty and charm to the household linen that amply repays one for the time spent in making them.

This tatted edging and corner is very becoming on a buffet set or small guest towels. Made in fine thread, it looks well on handkerchiefs.

Directions for Making:—Make upper half around outer corner and down as follows: Ring 5 d, p, 5 d, p, 5 d, p, 5 d. Tie on second thread, turn. Chain 5 d, then 5 p with 2 d between each, 5 d. Turn, ring, 5 d, p, 5 d, join to center picot, 5 d, p, 5 d, close. Chain 3 d. Repeat ring and chain and ring. Then start first ring of corner design, 5 d, p, 5 d, p, 5 d, p, 5 d, close. Then

sette or scrim.

Directions for Making:—Make a long chain. With another thread 3 sl sts over first 3 sts, ch 2, skip 9, sl st, forming rings. Second Row:—Lower, 1 tight sl st in center sl st, 4 sl st, 1 p, 5 sl st, 1 p, 4 sl st, over a half ring. A tight sl st in center of the 3 below,



4 sl st, 1 p, 3 sl st, now, ch 10, turn, fasten over center st of first ring, turn, 3 sl st, 1 p, 3 sl st in this loop, ch 9, take loop from hook, insert in sl st last made, draw loop of thread through and work 11 sl st in this new loop. Now in remaining loop, 3 sl st, 1 p, sl st, and 3 sl st, 1 p, 4 sl st in ring, right sl st over the 3 below. Upper Part—4 sl st, 1 p, 3 sl st over half of ring. Ch 6, start in second st from hook, working 1 sl st in each st for the little stem, then over the ring, 3 sl st, 1 p, 4 sl st and 1 tight sl st over the center of 3 sl st below. Second Row—Sl st in stem, ch 9 between. Third Row—10 sl st over 9 chs, 1 over sl st of stem.

Directions for this design are found in our Needlework Book No. F, which gives directions for making numerous crocheted edges and corners.

Any of these books will be sent upon receipt of fifteen cents at our Needlework Department, Michigan Farmer, Detroit, Michigan.

Before blacking the stove or working in the dirt, rub soap into the tips of the fingers, and it will not be difficult to clean the hands when the disagreeable work is done.

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Homemakers' Experiences

By Our Readers

EXPERIENCE teaches," says an old adage, and I wish there might be more space to pass on the results of the experiences with household conveniences sent in for the contest this week.

The postman brought us a generous response, and when totalled up was something like this: Thirty-seven per cent recommended running water; twenty per cent the power washer; sixteen per cent the ever-handy kitchen cabinet, and fifteen per cent the dish drainer. Among the miscellaneous group was the vacuum sweeper, the wheel tray, the mop wringer, linoleum, the bread mixer, convenient vegetable slicer, a food grinder, sewing machine, oil stove, recipe file and household scales.

The five leading letters appear here, and each was awarded a nest of mixing bowls.—Martha Cole.

Running Water Saves Labor and Steps.

Of all the dozens of conveniences that have been invented for the home, the one I have found to be of the greatest help is a constant supply of running water in the kitchen and basement.

The shining faucets above the kitchen sink are not very ornamental, but they have become a great joy and comfort to me. The canning season, commencing in June, and often ending in December with the canning and packing of the meat supply, calls for much water. With running water there is no extra carrying and lifting of water from the well to the kitchen. In the family laundry work, it is indispensable.

Running water in the kitchen really keeps the time spent there from running into hours.—Mrs. S. E., Three Oaks, Michigan.

Power Washer Does Good Work.

The power washer saves me the most time and labor of any of my home conveniences. It is run by gasoline motor, with wringer attached.

I do washing for a family of seven, and sometimes have as many as twelve shirts for the men. I put my white clothes on to boil the first thing in the morning, and when eight o'clock comes they are ready for the washer, and by ten-thirty everything is on the line.

The men buy what is needed for outside equipment, girls, let us buy conveniences for our work.—Mrs. B. E. M., Sparta, Michigan.

Cabinet Saves Steps.

The greatest invention for saving time, labor and shoe leather is the kitchen cabinet. With a kitchen cabinet and a little time and thought given to the arrangement of the kitchen equipment, two-thirds of the usual morning steps in the kitchen can be saved.

All food materials which do not have to be kept in the cellar, together with spices, cutlery, spoons, and the kitchen linen can be kept in the cabinet.—Mrs. J. W. L., Paw Paw, Michigan.

Dish Drainer Saves One-half Hour.

Considering price, I believe I derive most benefit from my wire dish-drainer. The one I have is large enough to hold dishes for a family of six and has a wire basket attachment for holding cutlery.

It saves at least one-half hour in drying dishes at each meal time. It might be employed as an incentive when little daughter is asked to do the dishes.—Mrs. E. B., Bear Lake, Mich.

Wheel Tray Does Many Things.

My wheel tray is my constant household companion. It is made from an old washstand, with wheels put on, and then enameled. On cleaning day I place on the tray brushes, furniture oil, dust cloths, dust pan, etc., and they are always handy. I always use it when I clean the cupboards, sew on the porch, put away the ironing, wash the windows, and always when clearing and setting the table.—Mrs. J. D. Coldwater, Michigan.

Hints from the Saltcellar

IT has oft been repeated that "salt is just salt," but the experienced housewife who gives careful consideration to the expenditure of the family food budget is convinced that there is a difference in salt. Through her personal experiences she has learned that because of its preserving and purifying uses, it pays to buy only the best.

In the proper curing and preserving of meat, salt is a principal ingredient. In this curing process, it is absolutely necessary to use a good grade of salt. Any adulterations or impurities will entail a great loss of a valuable food product.

Without salt, much of the real flavor of food is lost. Besides its use for preserving and flavoring, salt becomes a great convenience in solving many household problems.

The odor of onions lingers long on knives and cooking utensils. If they are rubbed with a damp cloth and then with salt before washing in warm water, the disagreeable odor will be gone. This same operation will remove the odor of gasoline from the hands.

When making cooked icing, if a pinch of salt is added to the sugar the icing will not grain.

If a berry pie or some other dish boils over in the oven, a handful of salt thrown in on it will help to avoid a disagreeable odor.

Apples that are too long out of the storage room will become withered. To freshen them, wash clean and place in crock with brine—one handful of salt to three gallons of water. Change the water every six hours until the apples are fresh.

To remove iron rust on white material, rub with salt and lemon juice and place in the sun to bleach.

Mix equal parts of salt and flour with enough vinegar to make a paste, for cleaning brass or copper. Let this paste remain on for an hour, and then rub off with a soft cloth. Wash with a soft brush and polish.

If salt is rubbed on china, it will remove tea stains and other discolorations.

Egg stains on silver can be removed by rubbing with a damp cloth which has been dipped in salt.

For polishing a mirror, sprinkle fine salt on a woolen cloth.

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A speedy cooker—bakes, roasts, boils same as a gas range.

This is the range people everywhere are talking about. It created a sensation at the State Fair. Thousands saw it subjected to tests that would cripple any other oil stove. Thousands of hardware and furniture dealers all over the country are now selling it. People everywhere are enthusiastic about it. Go and see it before buying any range. It is an all-year range.

Has Gas Range Advantages because it burns gas

You will like its beauty, its convenience, its cleanliness. It gives you a new and wider range of service. It will enable you to do better cooking, baking, roasting with less effort and no disappointments because you can regulate the heat—you turn the flame up or down with a lever valve same as a gas range.

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32 to 36 hours of heat from 1 gallon of kerosene

—And that by using burner turned on fully. You get 50 to 60 hours' service with burner regulated to simmering heat.

Lever valves of automatic locking type give perfect control of flame. You can tell whether "ON" or "OFF" at a glance. Safety lock prevents accidental altering of flame. Sight feed in our patented valve enables you to see oil feeding drop by drop. Oil tank is conveniently placed for easy filling. And Range sets flush against the wall.

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Other Important Features

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Take this advertisement to your dealer and ask him to show you a Vapo range. If he has none in stock, write us and we will see that you are supplied.

THE VAPO STOVE COMPANY, Lima, Ohio

Vapo
LIMA OHIO

Oil Ranges
Heaters
Hot Water
Heaters

Homemakers' Experiences

By Our Readers

EXPERIENCE teaches," says an old adage, and I wish there might be more space to pass on the results of the experiences with household conveniences sent in for the contest this week.

The postman brought us a generous response, and when totalled up was something like this: Thirty-seven per cent recommended running water; twenty per cent the power washer; sixteen per cent the ever-handy kitchen cabinet, and fifteen per cent the dish drainer. Among the miscellaneous group was the vacuum sweeper, the wheel tray, the mop wringer, linoleum, the bread mixer, convenient vegetable slicer, a food grinder, sewing machine, oil stove, recipe file and household scales.

The five leading letters appear here, and each was awarded a nest of mixing bowls. Martha Cole.

Running Water Saves Labor and Steps.

Of all the dozens of conveniences that have been invented for the home, the one I have found to be of the greatest help is a constant supply of running water in the kitchen and basement.

The shining faucets above the kitchen sink are not very ornamental, but they have become a great joy and comfort to me. The canning season, commencing in June, and often ending in December with the canning and packing of the meat supply, calls for much water. With running water there is no extra carrying and lifting of water from the well to the kitchen. In the family laundry work, it is indispensable.

Running water in the kitchen really keeps the time spent there from running into hours.—Mrs. S. E., Three Oaks, Michigan.

Power Washer Does Good Work.

The power washer saves me the most time and labor of any of my home conveniences. It is run by gasoline motor, with wringer attached.

I do washing for a family of seven, and sometimes have as many as twelve shirts for the men. I put my white clothes on to boil the first thing in the morning, and when eight o'clock comes they are ready for the washer, and by ten-thirty everything is on the line.

The men buy what is needed for outside equipment, girls, let us buy conveniences for our work.—Mrs. B. E. M., Sparta, Michigan.

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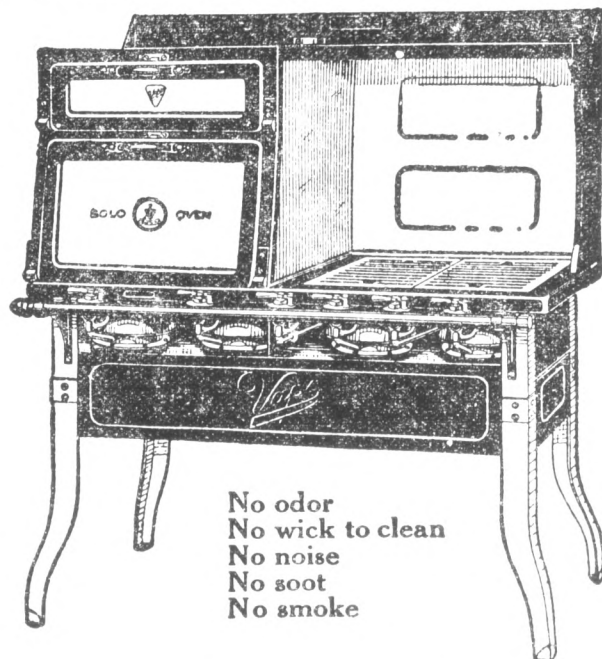
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THE VAPO STOVE COMPANY, Lima, Ohio

Vapo
LIMA, OHIO

Oil Ranges
Heaters
Hot Water
Heaters



Out goes that pain!

SPEEDY relief follows the first application of Gombault's Balsam. This 41-year-tested liniment penetrates without blistering—conquers the most stubborn pain or ache.

Sprains, bruises, burns, open cuts, severe strains, muscular and inflammatory rheumatism, lumbago, sciatica, sore throat and chest colds yield to the healing power of Gombault's Balsam. It's so effective that one bottle lasts a long time. Get a bottle today—keep it on hand.

\$1.50 per bottle at druggists or direct upon receipt of price. AS A VETERINARY LINIMENT Gombault's Balsam also is the remedy which years of use have proved effective and safe for most horse ailments. The Lawrence-Williams Co., Cleveland, Ohio.

GOMBAULT'S BALSAM
HEALING and ANTISEPTIC

Aspirin

Beware of Imitations!



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

Lake Land Fur Exchange, Salem, Mich.

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



SOUTHERN MARYLAND
where the climate is
WITH you

The weather is with you in this favored land of mild open winters and long growing seasons, with no extremes of heat or cold.

No long hard winters; no raging blizzards to keep you shut in for days at a time. No early frosts to ruin your crops.

Southern Maryland Summers are long, but no warmer than those you now experience. The mild winters make stock-raising very profitable, as little shelter is needed. Five cuttings of alfalfa possible in one year. Big money in intensive farming of few acres, in fruits, truck, tobacco; hundreds of dollars per acre profit; sell your crops on the farm. 14,000,000 consumers within 300 miles of your farm. Send for the whole story.

Southern Maryland Immigration Commission, College Park, Md.



Found in Our Letter Box

Some Interesting Merry Circle Letters

Dear Uncle Frank:

I don't get much time to write for I am at school so much of the time. I go five miles to high school and I ride horseback night and morning. It is not so very cold riding for there is enough motion to keep you warm. Say! Did you ever ride horseback? I have ridden a horse for about five years and I sure think it is great sport.

They have a high school orchestra of about twenty-five pieces. I play a C Melody saxophone. I always was fond of good music.

Well, I am taking quite a lot of space, so will close.—Culmer Peterson, M. C., Ionia, Mich.

Yes, I rode horseback once, and for a week I didn't find it comfortable to

and that we owe a lot to you, Uncle Frank, for making it so.

I am fourteen years old and a freshman in high school. I live on a farm for the present. Farm life is great, if you look at it the right way. I don't think very many girls and boys who live on a farm realize how lucky they are.

I fancy finding you yawn by this time, Uncle Frank, so will stop my chattering and remain, your friend, Beatrice Perkins, Argyle, Mich.

You said it about farm life. A lot depends on looking at things in the right way. Don't forget, I am having as much fun out of the Merry Circle as my fellow M. C.'s are.



Margaret and Helen Shelby, of Coleman, Mich., when they were Mother's "Boys."

sit down. I am glad you are interested in music. So am I.

Dear Uncle Frank:

I would like to be a Merry Circle girl.

I have one sister and one brother. We have a pig and four sheep. We bought our first sheep with thrift stamp money, \$5.00. Then they multiplied until we have four. We saved our money until we had \$4.00 and then bought a pig, which is very nice.

I have not had a standing below ninety-three. Is that very good? Will you write me and tell me how I can be a Merry Circle?

I must close. From Virginia Wall, Cedar Springs, Mich.

I would consider myself a good scholar if I had an average of ninety-three. If it wasn't for sheep and pigs being able to multiply, there wouldn't be much profit in them. Just answer the contests and you will become an M. C. before you know it.

Dear Uncle Frank:

May I call you Uncle Frank? I don't know how many uncles I've got, but you are the one I would take the most interest in if you will be my uncle.

Describing myself, I've got light brown hair, and eyes of the same color. I once had long curls but now I've got it bobbed. Don't scold me, Uncle Frank.

Say, Uncle Frank, let's have another contest on "My Greatest Scare."

Well, I will have to ring off. Your want-to-be niece, Alberta Brandt, R. 2, Munger, Mich.

I certainly will be your Uncle. How could I fail to be, with such an inducement? No, I won't scold because of your bobbed hair, as I like bobbies as well as the long-haired girls.

Dear Uncle Frank:

This was the first time I ever won a prize. I was glad that my name was to be in the Michigan Farmer. Many thanks for the box of candy.

I do not think Lu Eddie Blake could have expressed the thoughts on the W. B. much better.

Tonight we were changing pigs from one pen to another, and they got out and were hard to get in. We had lots of running to do. I did not know pigs were so contrary.—Your niece, Helen Shelby, Coleman, Mich.

Lu Eddie's poem certainly was a dandy, wasn't it? Yes, pigs as well as people are contrary at times.

Dear Uncle Frank:

I think the Circle is just a dandy,

Dear Uncle Frank:

Knock! Knock! Knock!

Well, well, if it isn't Uncle Frank himself answering the door. I am bringing my brother and sister this time. We hope Mr. Waste Basket feels as well as ever. (I give him my best wishes because he did me a favor by letting me pass it by).

I received my card and pin. Thank you very much for it. I was to school when it came, so papa opened and read the rules. He said I should try to follow them. I shall try. If I do I shall have to change my ways a lot. (My school teacher could tell you that. Ha! Ha!)

Armistice Day was our teacher's birthday. We had a surprise for her. (She is worth all the surprises we can give her anyway, because she is kind but stern, and best of all, she is jolly. You know when she really means anything, but it is hard for us to behave—especially me.)

We give our best regards to Mr. W. B., and hope that he will not be greedy—but what's the use of hoping?—Your would-like-to-be-niece-and-nephew, and M. C. niece, Alta, Elvern and Mary Fleury, M. C.

It pleases me to know that your father thinks the M. C. rules are good ones to follow. If it is hard for you to follow, then I would suggest that you change your ways. However, I don't think you are as bad as you want to make yourself. Glad your brother and sister came this time, too.

Dear Uncle Frank:

I have a Merry Circle button and card, and I thank you so much for them.

I tried in a correspondence scramble and received the nicest letter from a girl named Hazel Pearce. We live quite far apart, but that doesn't keep us from writing to each other.

I don't care if this letter finds its way into the paper or not, for I just wanted to thank you for my button and card.

I must close now as my letter is get-



Doris Truex, a Cornell, Mich., M. C., is an Outdoor Girl, I Bet.

ting long.—Your niece, Erma Churchill, M. C., R. 6, Brown City, Mich.

I am glad you have gotten such a nice correspondent through the Scramble. It also pleases me to have young folks write me without the thought of having the letter appear in the Letter Box.

Chase Pain Away with Musterole

When the winds blow raw and chill and rheumatism starts to tingle in your joints and muscles, get out your good friend Musterole.

Rub this soothing white ointment gently over the sore spot. As Musterole penetrates the skin and goes down to the seat of trouble, you feel a gentle, healing warmth; then comes cooling, welcome relief from Old Man Pain.

Better by far than the old-fashioned mustard plaster, Musterole does the work without the burn and blister Grandma knew so well.

For croupy colds, sore throat, rheumatism and congestion of all kinds, just rub on Musterole.

Don't wait for trouble; keep a jar or tube on the bathroom shelf.

To Mothers: Musterole is now made in milder form for babies and small children. Ask for Children's Musterole.

35c and 65c jars and tubes; hospital size, \$3. The Musterole Co., Cleveland, Ohio



BETTER THAN A MUSTARD PLASTER

Color Your Butter

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

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

Wells & Richardson Co., Burlington, Vt.

FREE MEAT CURING BOOK

To learn the best methods of curing meat, write to E. H. Wright Co., 843 Broadway, Kansas City, Mo., and get absolutely free a new \$1 Book, "Meat Production on the Farm", which tells all about meat curing. Free to farmers only. Send name today.



We Tan and make to your order from

your Cattle, Horse and all kinds of Hides and Furs, Men's Fur Coats, Robes, Caps, Gloves, Mittens, Ladies' Fur Coats and Fur Sets. Repairing and remodeling latest styles. Ship us your work and save one-half. New Galloway Coats, Robes, Gloves and Mittens for sale. We are the oldest Galloway tanners; 36 years continuous business. Free Style Catalog, prices and samples. Don't ship your hides and furs elsewhere until you get our proposition.

HILLSDALE ROBE & TANNING CO. Hillsdale, Mich.

HIDES TANNED \$3.50 to \$5.50

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



Young Mothers

Now Treat Baby's Cold With Muco Salve

Muco Salve is mother's favorite treatment for children's colds because it is applied externally. Nor do children have to be coaxed to use it; they actually like Muco Salve and soon learn to use it themselves. Applied in the nostrils, the vapors automatically reach the upper respiratory tract, soothing and healing the inflamed membranes. Very pleasant. Easy to use. Equally effective for adult's colds. Indorsed by physicians. Try it.

Muco SALVE

My Favorite Winter Sport

IN my office chair, surrounded by brick walls, and all the equipment of an office, I have enjoyed, I believe, about all of the winter sports agoing. Through the reading of the Sport Contest papers I have experienced all the thrills of gliding over a smooth expanse of ice on a pair of sharp skates. I have played hockey and seen stars when I took my bumps. I have felt the thrill of speed, the brush of the cold air against my face and the tumble into the snow while coasting.

I have gilded over hill and vale and through the air on skis. I have gone hunting, speared fish, played snow ball, built snow men and caves, and enjoyed many of the other winter activities.

I want to thank every writer of a Sport Contest paper for all the experiences I have enjoyed. It made me anxious to get out and limber up my old bones.

The contest papers were fine; it was hard for me to pick the winners. However, it helped me some because many did not tell the reason why they enjoyed the sport they preferred. A few of the prize winning papers are below. I will endeavor to run the others as soon as possible, so that you may read what thrill others are enjoying while you are enjoying winter thrills yourself.—Uncle Frank.

By Blossom Barrett, Davison, Mich.

It doesn't seem hardly fair to discriminate between the winter sports, because I like them all so much. But since it is necessary, I think the most people can get the most pleasure out of ice skating, and I'm sure that I can.

It doesn't take such expensive equipment as ice-sailing, toboggoning, ice-racing, with cars or horses, or even skiing, because, as a rule, you break several pairs of skis in learning. Of course, sleds for coasting don't cost so much as skates, but it takes more of them for the same amount of fun. For instance, my two brothers have so far had six sleds between them, and there is only one left of the six, and that one is not in good repair. While they wear their skates until they outgrow them; and they really seemed to me to get the most enjoyment from the skates.

Then when it comes to the number of people who can enjoy themselves all together, what can surpass skating? I'm not saying that there may not be one, but I have never seen a hill large enough to permit all the people who wanted to, to coast on it at the same time. While on Michigan's spacious lakes there is always room for everybody, and a few more.

But the reason why I like skating best is, well—just because I like it. With a pair of neatly-fitting, well-sharpened skates, I can get more enjoyment out of a sheet of ice than all the machinery in the world. It makes your blood race and tingle, gives you a keener, more sensitive view of life, and just makes you feel good all over, to get on a smooth expanse of ice and "strike out" with your friends.

By Mildred Miller, M. C., Sault Ste. Marie, Michigan.

Muffled from head to foot in warm, snug clothing, and ready for a coasting party is, I believe, one of the sports I like above all others. When, after hauling the toboggan to the top of a steep hill, and all are packed on it amid much shouting and laughter, the word "go" is given; like a flash the cold air rushes by, I hold my breath, and could shout for joy for the sheer happiness of living; then I may truly say that coasting is my favorite sport.

Many feel that the long haul of the coasters up hill takes the fun out of coasting, but I look forward with greater anticipation for the next slide, and feel that all the work is worth that which comes after.

Not only is coasting great fun, but

it is very good exercise, and also healthful. Many who have been working all day in an office or in a home, and are dead tired when evening comes, find that the cold, bracing air and walk uphill is just what they need to relax the body, drive the dullness from the mind and give them a restful, refreshing sleep.

Often I know older people envy the children, and wish they were back in their childhood days to have a good

Sunday Contest

SUNDAY is a different day than the rest of the week; it should have different activities, as it is a day set aside for different purposes. I believe that the use of Sunday should be thought of by all of us, so I am asking you to write in 250 words or less, on **How I Use my Sundays and How I Would Like to Use Them**. Here is a chance for an interesting discussion.

For the two best papers, we will give our handsome nickled fountain pens; for the next three best, our handy tubular flashlights, and for the next five, cute little boxes of candy. All who write good papers and are not Merry Circlers will get M. C. membership cards and buttons. Those who are M. C.'s should not forget to put M. C. after their name when writing.

The contest closes January 24. Send your papers to Uncle Frank, Michigan Farmer, Detroit, Michigan.

slide once more, but if, instead of dreaming, they would act, I am sure that they would find they are not too old or too stiff to enjoy it as well young people do.

By Olive E. McCloy, Fairgrove, Mich.

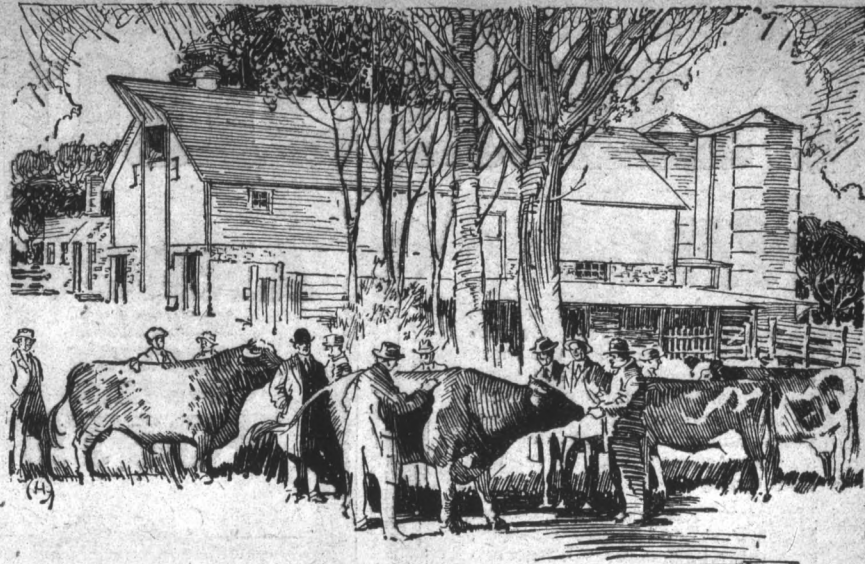
When the bright colored leaves of fall are covered over by a downy blanket of pure white snow, when the thermometer registers below zero, when Jack Frost bites your fingers and toes—and every vision that appears on the landscape speaks of "Old King Winter" announcing his arrival—then is when my heart is gay and my spirits light, for what does snow speak of or bring but a sleigh-riding party.

Isn't it wonderful to be skimming over the pure white snow behind a team of trotting steeds, to hear the frosty ground creak as the runners glide over it, to hear the bells chime out on the cold frosty air, and the young people's voices sending forth song after song into the starry night? Again, I repeat, what is more wonderful than such a sleigh-riding party in the country about five miles to a chum's home, where a cozy warm fire is awaiting you to warm your chilled hands and feet, where an evening's entertainment consisting of games, music, songs and jokes awaits you also, and where, just before you start on your trip home, your chum's mother treats the whole crowd to warm biscuits and maple syrup. Your mouth fairly waters and as you complete the appetizing eats you give three cheers for your chum's mother.

THE SPORT WINNERS.

The first two papers were selected for the fountain pen prizes, the other one wins a flashlight. The other winners are as follows:

Flashlight.
Caroline Ballantyne, R. 2, Evart, Michigan.
Margaret Buchanan, R. 1, Linden, Michigan.
Candy.
Richard Mouw, R. 5, Holland, Mich.
Francis Angell, 427 Young Street, Hastings, Mich.
LeRoy MacKellar, R. 2, Decatur.
Kenneth Munson, Constantine, Mich.
Mary Courtade, Conklin, Mich.



Cattle and the Soil

MEN who were brought up on farms in the very districts served by the New York Central Lines now compose the Agricultural Relations Department of this railroad system.

A thorough knowledge of the farmers' problems as well as those of the railroad enables these men to work for the common good of these two inter-dependent interests.

To improve soil conditions the Agricultural Relations Department has established 525 limestone demonstrations in cooperation with county farm bureaus and experts from various colleges of agriculture.

The department has materially assisted in establishing a Better Sire Campaign for the introduction and breeding up of dairy cattle.

It is the task of the department to foster co-operation between agriculture and transportation and to bring an ever-better service to the farmers of the country.



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Rural Health

By Dr. C. H. Lerrigo

THE COUNTRY DOCTOR.

VOLUMES have been written about the country doctor, some of them placing him on a very high plane; but usually the thought is that there is not much to be expected from him other than very common work. You folks in the country grumble a great deal about the class of doctors you have to wait upon you. Now and then I hear a good word for the country doctor; but your usual complaint is that you get nothing but the callow boys, fresh from college, or the old moss-backs who are too lazy to better themselves. It happens that I have a rather wide acquaintance among country doctors, and I know so many excellent men that it hurts me to think they should be held so lightly, though I am quite willing to admit that they are not all beyond criticism.

Are you satisfied with the service that your home doctor gives you? Let me tell you how you folks who depend upon country doctors can improve your stock if you so desire. Give the doctor a little encouragement to buy books and make occasional opportunities for additional study and post-graduate work. You can do this by paying your bills cheerfully, and refraining from grumbling if the doctor does run off occasionally to go to a medical society meeting or take some extra hospital work.

Give your doctor your full confidence in every case. Perhaps some special work is needed in your case for which he is not fully qualified. Do not slight him for that reason. The best city practitioners do not try to do all of their work, but make great use of specialists. Give your doctor the same chance. Let him call a consultant or refer you to a good specialist, which ever seems best to him. You will be a lot better off than if you try to pick someone for yourself, and your home doctor will still have the run of your case. There are many things that the specialist might say to him that you may be pretty confident will never be revealed directly to you, and it is to your great advantage that the home man know them.

Try to give your doctor a little spare time. Arrange to let him know of your need for his services early in the day whenever possible. Try to leave his evenings undisturbed so that he may have a little time for recreation and study. And if you expect to keep a really competent doctor, to serve your community faithfully, do not expect that he will be "cheap" in his services. If he is the man you want he will take care to be reasonable, but medical work in the country is worth just as much as in town.

I think there will come a time in the not very distant future when rural communities will maintain laboratories and emergency hospitals, making a complete health center available for the use of their own doctors, relieving them from the necessity of going to the city for every thing.

HAS RAPID HEART ACTION.

What is the cause of too rapid heart action, and can anything be done for it? My son, twenty-five years of age and apparently in perfect health, is refused by an insurance company as a risk, for that reason. He is a hustling farmer and likes the work, but I wondered if office work would be any better for him. He has a high school education and one year of college and could take a business course.—A. M. S.

I should be inclined to suspect some deeper trouble. Rapid pulse is not sufficient reason for refusal by a life insurance company. The excessive use

of tobacco often causes a rapid pulse and other bad habits may do so. I think he should have careful tests of blood pressure and heart action. I would not advise change of occupation.

DOES NOT RECOMMEND NUXATED IRON.

Is nuxated iron safe to take during pregnancy?—A. M. A.

Any drug taken into the system during pregnancy may react upon the child. I do not recommend this preparation at any time—certainly not during pregnancy.

HAS PYORRHEA.

My gums bleed when I brush my teeth, and are inclined to pull back from the teeth at the roots, and grow between the teeth almost to the top. Also are swelled, red and angry looking. What does it indicate? What can I put on them? I must be very careful as to what I use. I have a heart that does not tend to its business all the time. Also a stomach that gets off duty quite often. And I have rheumatism that affects the joints of my hands. Fingers on right hand are inclined to be stiff. This is all that ails me at the present time. Please tell me what to put on my gums, the lower jaw only—upper jaw has store teeth.—R. J. E.

You have pyrrhea and there is a good chance that it is responsible for your rheumatism and heart trouble. I am inclined to think that you should send the lower teeth to join those of the upper set and see if it will not clear up all your trouble.

WILL AGAIN APPEAL FOR REVISION OF PRIMARY SCHOOL FUND LAW.

IT will be remembered that at the last session of the Michigan legislature an effort was made to secure a new law which would apportion the state primary school interest fund on the basis of the ratio between school attendance and assessed valuation per district rather than the present basis of the school census only. Credit for the new plan is given to secretary O. I. Bantien, of the Escanaba Chamber of Commerce.

It was deemed unwise to attempt to secure consideration for the plan at the recent special session, but it is proposed to continue the agitation for the adoption of the new system by the legislature of 1925. It may be expected that Escanaba will be active in promoting this further effort. The matter was again brought to the attention of the Escanaba board of education recently by Mr. W. E. Olds, superintendent of schools, in submitting a discussion of the project formulated by State Superintendent of Public Instruction, Thomas E. Johnson. Under the proposed change more of the fund would reach rural school districts than at present.

The source of the primary school interest fund is the net proceeds from the sale of school lands donated by the United States to the State, the taxes on railroad and certain other transportation properties, the inheritance tax and some other minor revenues. Mr. Johnson desires an investigation to determine whether the state, and consequently the primary school fund, should not receive a larger revenue from railroad taxes than at present, it appears from a brief which was recently laid before school officials of the state.—Chase.

A man to whom three years of study have borne no fruit would be hard to find.—Confucius.

Poultry Notes

By R. G. Kirby

WHEN saving winter eggs for hatching, try and keep them in a temperature between forty and fifty degrees. Eggs that go below thirty-five degrees may be chilled. If they go about sixty degrees a rapid deterioration results. It pays to gather the hatching eggs often in winter, so that most of the eggs are taken from under hens. Visiting the laying pens every hour from nine until early afternoon, will usually save most of the eggs produced from being chilled.

Eggs that weigh close to two ounces each are the best for hatching purposes. There is a tendency for hens to lay eggs close to the size of the eggs that produced them. We do not wish to oversize eggs as it costs too much to produce them. Small eggs are not desired by the best markets. A standard two-ounce egg is just about right for both market and hatching purposes.

Dampness in the poultry house is reduced by frequent cleaning of the dropping boards. The droppings contain a large amount of moisture. Overcrowding of the poultry house soon contaminates the litter and makes the house damp.

Keep up the supply of green food for the hens that are laying eggs for hatching. The vitamins in both green feed and milk seem to enable hens to lay eggs with stronger germs. Many failures with early incubation are due to the quality of the eggs and not to the incubator. Breeding stock that lack green feed and exercise contribute many eggs that are either infertile or develop chicks that die in the shell.

Poultry Breeding Stock.

Nearly every farm flock, no matter how carefully culled, contains a few birds of much better quality than the general run of the flock. If these hens can be isolated during the breeding season and mated with the best cockerel obtainable, it is a great help in increasing the per cent of fine individuals in the flock. The large number of cockerels which can be raised from the special mating can be carefully culled and used as breeders for the free range flock the next year.

The records of the laying contests prove that 200-egg hens are rather scarce as far as flock averages are concerned. So it must be necessary for many farmers to keep a lot of hens which do not lay more than 140 to 160 eggs. Such hens can be profitably maintained as layers on the farm, although they may not be included in the special breeding pen.

For early hatching eggs this special breeding pen can be placed in a colony house, an old shed or in a part of the laying-house wired off from the remainder of the flock. When enough eggs have been obtained from the special mating all of the birds can run together on free range. It is not always necessary to have special laying houses and long fenced yards in order to do a little useful work in the improvement of the farm flock.

Home-grown Feeds.

A dry mash used by some practical poultrymen can be made largely of home-grown feed or grains bought in the community. It consists of 300 pounds of ground wheat, 300 pounds of ground corn, 200 pounds of ground oats, 100 pounds of bran and 100 pounds of beef scrap.

When poultrymen can buy grains in their own neighborhood they save a haul from the elevator for themselves and a haul to market for the neighbor. The deal may be beneficial to both parties concerned. The poultry farm is an egg factory requiring raw material in the form of grain. The poultry specialist seldom has the time or the acreage for extensive grain raising. In some sections the large, well-managed poultry farms are a benefit to the grain producers as they furnish a neighborhood market for a large amount of grain.

What some new neighbors taught an old Poultryman

Burt Lavin Gives Credit Where Credit Is Due



"Regulating Hens Was a New One to Me"

[By WILLIAM R. DURGIN]

ABOUT a mile north of Kansasville, Wisconsin, on the Bay road you come to a large poultry farm owned by Burt Lavin. When you view the well-designed chicken houses and long neatly fenced runs thickly populated with Barred Plymouths you sense that Mr. Lavin makes a business of poultry and eggs—and makes it pay. But how it has paid of late!

"The year just closed paid me twice what the same flocks netted me in 1922," says the owner. And when you attribute the gain to good judgment he smiles and says, "No—just a case of good neighbors." This is the story:

Eggs—and More Eggs

"When a young couple took the adjoining farm there was nothing remarkable about their small flock of chickens, except the large number of eggs produced. Every trip to town there were baskets and boxes of eggs for the store. Even when cold weather set in the daily dozens of eggs did not seem to diminish. It had Lavin puzzled, and the first time the newcomers dropped off to get acquainted he soon turned the talk to 'eggs.' It was the woman who revealed the secret of their luck with layers; 'It isn't entirely what hens are fed, or what they get from the soil,' she said. 'We regulate our hens, and Mother Nature does the rest.'"

What is meant by "regulating" hens? Simply the regulation of the birds' systems through their feeding. Not by changing their feed, but by putting necessary egg elements in with it. You can feed birds on the fat of the land and not add one egg to their usual lay. But add egg-making minerals, natural digestants, vitamins and other health aids—and their egg-laying tendencies never fail to respond like magic.

Mr. Lavin decided to give the regulating idea a trial. If a small amount of rare seeds, herbs, and barks gathered from foreign climes could provide

elements that would really make more eggs it was worth seven or eight cents a year per bird! Being a practical poultryman he kept close account of results, and this is what he found:

Some Startling Figures On Laying Costs

A flock of 150 hens was given regulator in with the regular ration for two months. The cost of their feeding, including the regulator, was \$71.60 and their eggs brought \$201.06—or a gross profit of \$129.46. Another group of the same size, fed the same mash but no regulator had a feed bill of \$67.25 for the same period but egg sales totalled only \$104.32—profit \$37.07 but showing nearly a hundred dollars loss through the lower production. Does poultry regulator pay? Burt Lavin says it does! He will wind up

the year with about \$6,000 clear after paying for some building and repairs, and with the largest and most vigorous flocks he has ever had. You can adopt the same plan with the same proportionate gain. Here's the way to go about it:

Get some Pratt's poultry regulator at any store selling poultry preparations. They all have it; you may have seen it and thought it was a remedy or tonic. Mix the small amount required with the feed or mash you now use. You'll soon see the difference! Those birds that may now be slackers will commence to lay eggs; the laying of your prize biddies will speed up. Your entire flock will radiate health.

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Pratt's experts will advise you without cost if you write them for practical suggestions on any poultry problem. This service gives you the benefit of more than 50 years' experience.

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developments on the huge experiment farm where the Pratt organization has reduced poultry raising to a science.

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Certified stock from famous strains Tom Barron and Hollywood White Leghorns—strong, healthy, vigorous baby chicks, hatched in the finest hatchery in Michigan—deliveries guaranteed—absolute satisfaction or your money back. Book orders now for early deliveries and get our attractive low prices.

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140 EGG Incubator
EXPRESS PREPAID \$13.85

Made of California REDWOOD, covered with galvanized iron, double walls, air space between, built to last for years; deep chick nursery, hot water heat, copper tanks. Shipped complete, set up ready to run. Express paid East of Rockies. 140 EGG INCUBATOR WITH BROODER \$19.75 260 EGG INCUBATOR, ALONE, ONLY \$23.50 260 EGG INCUBATOR, WITH BROODER \$23.90 30 days' trial—money back if not O. K.—FREE Catalog Ironclad Incubator Co., Box 91, Racine, Wis.

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Hatches a Chick From Every Fertile Egg
The DETROIT is scientifically constructed to give big batches of lustrous, fast growing chicks. Temperature is automatically regulated by a Miller type trip burner that acts directly on the flame. Heat is held in and cold kept out by double walls having dead air spaces between them. Every part of the hatching chamber is evenly heated—the hollow square hot water tank has rounded elbows that prevent cold corners. These are only a few of the features that make the Detroit such a big hatching incubator. Write for catalog giving full and detailed description and get the almost unbelievable bargain price.

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My record smashing combination offer is the talk of the country. Write for it today and learn what tremendous savings you can secure by ordering both machines at one time. Read my unconditional guarantee. Complete satisfaction or your money back is the only basis upon which I make a sale. Drop me a card to-night. I'll answer by return mail.

Keeps 140 Chicks comfortable and warm. Insures maturity of your flock. Same efficient durable construction as in the Detroit Incubator. The most practical brooder built.

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Dept. 11 Alliance, Ohio

SOFT moist HEAT
-the BIG,
Easy Hatching SECRET

Wonderful discovery!
Proved highly successful and now endorsed by thousands of users! Result of 30 years study and manufacturing experience of L. N. Porter, the incubator master. Mr. Porter has spent a lifetime in this work, producing one improvement after another until this, his crowning achievement, SOFT HEAT is superior by 26 distinctive points.

Porter SOFT HEAT INCUBATOR

Saves money, time, work, chicks. No lifting or removing trays. Eggs turn semi-automatically. Center lamp—equal heat. Exclusive patented moisture device. Automatic control of heat, moisture and ventilation. One filling of lamp for complete hatch. Eliminates crimples. Twenty other features. Four sizes. Oil or electric. Shipped PREPAID.

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FREE—Big illustrated book just out! Get yours now! Tells how to double poultry profits! Gives comparison of other makes. Send name and address on postal today.

PORTER INCUBATOR CO.
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The increase in the number of baby chick hatcheries may furnish a better spring egg market for many farmers who do not sell hatching eggs. In spite of the improvement in the farm flocks there are many sections where it is difficult for a new hatchery owner to line up enough good flocks to insure a steady supply of high-class hatching eggs. Every time you think that perfection is a trifle, and quality poultry is plentiful, just start out looking for it and you realize there is still room for more good flocks.

On pleasant winter days be sure the poultry receive their rightful share of your time. Clean the dropping boards and spray them. If you don't like to breathe the spray then paint the roosts with a strong solution of disinfectant. Keep the dry mash, oyster shells and grit hoppers filled and the litter clean. Then if storms arrive, or you are half sick with a cold, you can cut the poultry work to a minimum without danger of reduced egg production or injury to the health of the flock.

Separate Pullet Eggs.

It is best to separate small pullet eggs and sell them at a lower price per dozen rather than include them with standard two-ounce eggs. I know of one poultryman who sold pullet eggs for thirty-five cents per dozen, when the hen's eggs were bringing sixty cents. At the reduced price the customers who obtained them were glad to take pullet eggs. The pullets soon produce a larger sized egg that can be classed with hen's eggs and the customers of that breeder were not called upon to pay a high price for the small eggs. When undersized eggs are mixed with large ones it often lowers the price of a consignment so that the large eggs do not bring full value.

Hens like germinated oats. Fill a galvanized pail with oats and then pour on warm water until the oats bulge upward in the pail. After they have soaked about half a day, drain off the water and place the oats near the stove where the temperature will be near to seventy-five degrees. Stir once a day until germination starts. Then place the pail in the hen house and the birds will soon clean out the oats.

My hens like soaked oats that have not had time to germinate. After a couple of hours of soaking they swell up almost like plump kernels of wheat and seem much more appetizing to the birds than the papery hulls of dry oats. I still think that many farm hens receive too much corn in winter and not enough of the other grains. Corn is the best winter grain, but wheat and oats are also useful in the ration and help in egg production without making the hens too fat.

WHY NOT SOME HONEY MONEY?

(Continued from page 71).
quire more buckets for holding the milk, then is the beginning of tremendous activity in the hive, and more room is needed to hold the increasing family and the stores they are bringing in. But such neglect does not kill the colony, and later on when the hay is in and the wheat is shocked, and a day for fishing has been had, then the bees begin to hang out in great numbers in front of the hive and the farmer puts on some supers to hold the crop which has already been lost. Then in the fall, when the silo has been filled and the wheat planted and the apples picked, the farmer wraps himself in towels and sweaters and with many mittens on his hands he bravely goes forth some chilly day, and to the utter astonishment of all the family, he marches up to the hive and gives the super a jerk. Much to his dismay it sticks as though nailed and the whole hive is aroused by his hurried attack. After a time a chisel is secured and the unruly super is pried off, but not before the angry bees have found the vulnerable points around the shoe tops and their ancient foe retreats in disorder, forgetting to put

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

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Don't let ROUP, COLDS, CANCER, SOREHEAD, SOWEL, TROUBLE, etc., take your profits. Easy to cure or prevent. "The Way" Book, 64 pages, by GEO. H. LEE, tells about poultry ailments, how to detect, what to do, etc. Germoxone (75c and \$1.50 sizes) and this FREE book at drug or seed stores, or postpaid from GEO. H. LEE CO. Omaha, Neb.

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Hollywood and Improved English S. C. WHITE LEGHORNS. The American Business Hens: 250-300 egg bred line. Large White eggs. Winners at National Shows and Egg-Laying Contests. HIGHEST QUALITY CHICKS. From certified tested hens mated to high power pedigreed sires. Discount on early orders. Valuable instructive CATALOG FREE. DeVRIES' GRANDVIEW POULTRY FARM, R.R. 6, Zeeland, Mich.

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We have been carefully developing our flocks for eight years. Every chick pure-bred and from stock carefully culled, for type and production. Our chicks give satisfaction. Order today and get chicks when you want them.

Wh. Leghorns	50	100	500
Bd. Rocks, R. I. Reds	\$7.00	\$13.00	\$62.00
Wh. Wyandottes, Wh. Rocks	8.00	15.00	72.00
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Postpaid. 100 per cent live delivery. You take no chances. Rd. Farmers' & Mechanics' Bank, this city. No catalog. Order from this ad. WASHTE-NAW HATCHERY, R. 5, ANN ARBOR, MICHIGAN.

Baby Chicks S. C. W. Leghorns

Pedigreed Certified
Michigan's Largest S. C. W. Leghorn Farm, over 2000 Birds. Hatch our own eggs only. Supply limited. Order early. One trial will convince you. Free Circular.
SIMON HARKEMA and SON,
R. 1, Holland, Michigan

the lid on top. Next spring when the bees fall to fly at the proper time, the farmer investigates and the cause of the death is found about six months too late. The memory of the last harrowing experience is still fresh in his mind and the frames are kicked out and the hive is given to mother for a hen's nest. Hundreds of such bee hives are now serving a useful purpose.

The above narrative of a year's beekeeping on the farm is not as much overdrawn as one may think, and doubtless many readers will identify themselves as the chief actors in one or more scenes in the tragedy. The writer pleads guilty. It was his experience to inherit seventeen unruly swarms back in the late nineties and he still cherishes the memory of night attacks and hairbreadth escapes, and it was in such a way that he learned that you cannot sneak up on a colony of bees and tend to them when they are not looking.

The average farmer will not be a beekeeper because he has too many other things to do. If he will succeed, beekeeping must be made one of the major projects and must be given needed attention with the same regularity and care that is given to other animals of the farm. Further, the farmer must study beekeeping more consistently than he has studied most farm operations because his experience is less. He must make up his mind that he will make the necessary cash outlay for the equipment that is needed. He must set aside a definite time each week to tend to the bees, and he must stick religiously to that program. Sometimes it may take thirty minutes, and sometimes longer, but regular attention must be given. He should attend beekeepers' meetings and visit the apiaries of other beekeepers in order to supplement the knowledge that he gains by study and observation. He must learn disease and its treatment.

The above array of "musts and shoulds" may be appalling to the beginner, but if he hasn't backbone enough to tackle that, he will not have the perseverance to follow it to a successful conclusion and so had better not make a start. The logical persons to really take up this subject are those farmers who are now the owners of a few neglected colonies. Michigan does not need more beekeepers, but it needs better beekeepers among those already in the business.

POULTRY SURGERY.

Our pet hen, a beautiful full-blooded Rhode Island Red, has a swelling which continues to increase in size. It started about three months ago and is located between the ear and the bill. She eats well, sings and lays eggs. Her feathers are smooth and her eyes bright. Will you kindly advise us in regard to a diagnosis and a remedy?—B. A.

A lump of this type is often the result of a catarrhal cold which has caused the nostril to clog and a hard, cheesy pus to accumulate. The symptom may be similar in the first stages of roup and this condition may develop into roup.

The only way to save the bird is to make a wide and deep incision in the lump and take out the leathery pus which has gathered. Then wash the wound with commercial coal tar disinfectant by injecting the disinfectant with a medicine dropper. It is usually necessary to clean the wound several times, at intervals of two or three days and disinfect it thoroughly. The bird should be isolated from the flock until healing results and the nostrils are dry.

Severe cases of roup take so much time to cure that the hatchet is usually recommended. In a special case such as you have described you possibly can afford to give the bird careful treatment and save her.

During November it cost an average of approximately three cents per egg for feed in flocks under observation in Allegan county.



Since I have been Feeding My Hens Ful-O-Pep Egg Mash

That's the good news that comes from poultrymen, just as soon as they start feeding Ful-O-Pep Egg Mash.

We discovered long ago that a hen would lay in winter as well as summer, if she was provided with the right kind of feed to keep her well nourished and supply her with egg making materials. We combined such ingredients in Ful-O-Pep Egg Mash—now season makes very little difference to Ful-O-Pep users—they get eggs all the time and a lot more than they did before. The value of

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as an egg producer has been proven daily on commercial poultry farms and in the pens of thousands of back lotters all over the country. Hens raised the Ful-O-Pep Way have broken records in the Egg Laying Contests in Texas and Missouri in 1922-23.

You can get more eggs too if you will start feeding your hens this great egg producing feed. It is composed of materials that make eggs—it keeps hens healthy and makes 'em lay.

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Write today for free copy of our 1924 Ful-O-Pep Poultry Book and learn how you can get a lot more eggs right through the winter months when your neighbor's hens are not laying and when you can get top notch prices. This book tells all about Ful-O-Pep Egg Mash—how to feed it and why it makes hens lay more eggs and keeps them healthier. Also tells how to raise young chicks—grow 'em quick with less death losses. Tells also how you can get our FREE Poultry Correspondence Course. Write today.

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**Highest Quality Certified Baby Chicks**

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

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R. 7,

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Send for descriptive matter and price list of our

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10 LEADING VARIETIES.

Some fine breeding this year in improved egg quality stock; customers' egg records from stock of last year. Cookerels, a few unsold in Barred Rocks, White Wyandottes and R. C. Reds, \$3.00 and \$4.00. STATE FARMS ASSOCIATION, Masonic Temple, Kalamazoo, Michigan.

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

Big 5 To 6 Lb. English White Leghorns. Larger hens, better winter layers. Chicks, hatching eggs. Free catalog describes them in full of practical money-making poultry information. Send for it. A. Wauchek, Gobles, Michigan.

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Leghorn B-A-B-Y-C-H-I-X Heavies

Black, Brown, Buff, White, Reds, Rocks, Wyandottes, Anconas and Minorcas, Brahmas and Orpingtons. Allegan Hatchery on Highway No. 80. Send for 1924 price list. Crescent Egg Company, Allegan, Mich.

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For Sale Reg. Guernsey bull 3 years old, well marked, quiet and gentle, a sure breeder, excellent A. R. sire. Dams A. R. record 514.05 lbs., grandams A. R. records 599.82 lbs., and 598.6 lbs. butter-fat. Also bull calves and Reg. cows and heifers. L. L. Barney, Watervliet, Mich.

10 Reg. Guernsey cows, some A. R. Record May Rose breeding, \$2,600 for all; herd bull \$100. John Ebels, Holland, Mich., R. 2.

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

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Livingston's Big Polands

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

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

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

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

Large Type Poland Chinas Boars \$25 each. Satisfaction guaranteed, all stock shipped on approval. Bred Sow Sale Jan. 30. DORUS HOVER, Akron, Mich.

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

Hampshires Of Best Blood lines: 100 Bred Gilts and Sows, some fine Boars. Luckhard's Model Farm, Bach, Mich.

SHEEP

Registered Hampshire Ewes

I have for sale a few registered Hampshire ewes, all ages, bred for last of April and first of May lambs to an excellent heavy bred good woolled and short legged ram. A First Prize winner. C. U. Haire, Boyne City, Mich.

Choice Bred Ewes

400 for sale in carlots, yearlings to solid mouths, black-faced, in good condition, bred to lamb April 10th. Located 25 miles south of Detroit on Detroit & Toledo Electric, and on Dixie Highway. Telegraph Address, Rockwood. Phone Newport. Post Office, South Rockwood. ALMOND B. CHAPMAN & SON.

Shropshire Rams and Ewes

write or call on Dan Bocher, R. 4, Ewart, Mich

SHROPSHIRE—Am offering 10 young ewes of Buttar and Senator Bibby blood lines for \$20 each. C. J. Thompson, Rockford, Mich.

Live stock AND DAIRYING

GIVES SHEEP PLENTY OF FRESH AIR.

IN my experience in keeping sheep I find that fresh air is an inexpensive but important item in the comfort of the flock. So long as the sheep are dry they will scarcely ever of their own will and accord seek protection from chilling winds and cold weather.

Housing breeding ewes too closely is poor practice. Like many a flock owner, I have closed the doors of the shed on stormy nights and forgotten to open a few windows. The following morning the air in the shed would be stifling with the sheep logy from rebreathing the foul atmosphere.

In arranging for an ample supply of fresh air, I planned to prevent draughts from hitting the animals. This is easily done by opening windows on the side of the shed opposite the direction from which the wind blows.—L. C. R.

CUTS COST AND INCREASES INCOME 122 PER CENT.

THE herd of Everett Rockhill consisted of eleven cows. Each cow had been receiving twenty-four pounds of silage and thirty-five pounds of alfalfa hay. No grain was fed. The average production of milk was twenty-

balanced ration the milk increased over fifty per cent. The value of the product increased over fifty-three per cent. The feed cost decreased approximately ten per cent per cow. The income over feed cost increased 122.8 per cent.

The silage fed was valued at \$5.00 per ton alfalfa \$15 per ton, and the grain mixture was valued at eighty-three cents per bushel for ground corn; \$1.95 per 100 pounds for oats and \$3.10 per 100 pounds of cottonseed meal.

This ration, having been extensively tried out in Indiana with widely satisfactory results, has been adopted as a standard. It consists of a grain mixture of 400 pounds of ground corn, 200 pounds of bran or ground oats, and 100 pounds of cottonseed meal fed with silage and alfalfa.

TRAIN THE COWS TO EAT.

THE best milking cows in my herd are the best eaters. A good appetite seems to be a prerequisite to heavy performance at the pail. Since certain foods stimulate the appetite, I find that the good dairyman can have much influence over the milk output through the right sort of feeding.

When I feed the cows large



One Can Understand Why this Dairy Farmer is Realizing a Premium for His Milk. Quality is a Big Factor in Marketing.

three pounds per day. The animals were low in condition.

In this ration there was sufficient protein for the production of over forty pounds of milk daily after the maintenance requirement for each cow had been supplied, but the supply of total digestible nutrients would produce only less than half of this amount. The animal had to draw on their reserve stores of flesh to meet the deficiency.

This ration was losing money for the owner. Fortunately he belonged to a cow-testing association.

After studying the record, condition, live weight, pounds of milk and butterfat produced and the amount and kinds of feed fed each cow, the tester calculated a balanced ration and recommended that the consumption of alfalfa hay be reduced to ten pounds per day. The amount of silage previously fed was considered satisfactory. A grain mixture consisting of 500 pounds of ground corn, 200 pounds of bran and 100 pounds of cottonseed meal was recommended. This mixture was advised because the herd was somewhat low in condition. The grain mixture was fed at the rate of about one pound of grain for every three pounds of milk produced daily. This change in feed was made gradually.

As a result of the feeding of this

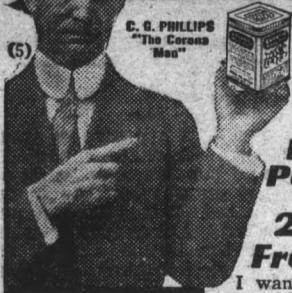
amounts of over-ripe hay, frozen corn fodder with much of the leaves shaken off, or other foods of low digestible value, then the appetites of the animals seem to become more or less sluggish. But when I place before the same cows some succulent food like silage or roots, improvement started in a very short time. They not only eat the succulent food more ravenously, but their appetite for the dry feeds is stimulated.

Plenty of good water, fresh air and a feed combination with a reasonable amount of succulency, have gone a long way in bringing up my milk yields. These provisions will do much for others, and since they are well within the means of nearly every man who keeps dairy cows, there is not much excuse for so many low-producing cows with the cost of milk above the income. L. R.

HOLSTEIN BOOK JUST OUT.

Announcement is just made of the publication of "Kriemhild Herd-A Chapter in Holstein History." This book deals with the betterment of dairy cattle, especially Holsteins. No trouble or expense has been spared in its preparation, and the number available is limited. The price is \$5.00 per volume. They are being distributed by Frank N. Decker, Syracuse, New York.

I Want to Send Every Reader of This Paper



a Big Can of CORONA

By Mail—Postpaid—on 20 Days' Free Trial

I want to prove to you at my risk that CORONA is the greatest healing ointment that you have ever used for all kinds of cuts, wounds, sores, etc., on man or beast.



Just Send Your Name and Address

and I'll send you this big can, postpaid. Use it for Chapped Hands, Ulcers, Cuts, Wounds, Bruises, Piles, Boils, Eczema, etc.—nothing like it for keeping the hands from chafing during winter season. Use it on your animals for Barb Wire Cuts, Collar Boils, Cracked Hoofs, Grease Heel, Sore Teats, Caked Udders, etc., then if after 20 days' free trial you are convinced it is the best healing preparation you ever used—then send me 65c in full payment. If you are not satisfied after giving it a trial—don't pay me a cent. I let you be the judge. Send name and address today for this big 20-DAY FREE TRIAL CAN.

C. C. PHILLIPS, "The Corona Man"
THE CORONA MFG. CO.
14 Corona Block, KENTON, O.
Note—If you have used Corona and druggist cannot supply you and you prefer larger can, order direct from ad. 20 oz. can postpaid \$1.25.

\$30⁷⁵

Down after Free Trial for this Complete Milker



But first, 30 days free trial. No money down, no C.O.D. At last!—the milker for the larger dairyman and also for the man with 5 or 6 cows! Does the work and does it right. No electricity, no gas engine. Try it—return at our expense if not satisfied after trial. If satisfied, 4 easy monthly payments of \$30.75—total only \$123.1

Run by Hand Comes complete and ready to use; Nothing to install, no expense, no bother. Simple, easy to clean. So easy to pump a child can do it, thanks to patent spring and vacuum. Tremendous improvement in machine milking. Special Offer—rock-bottom price direct.

SEND FOR FREE Book

Send for our free book on milking. An education in milking machines. Write while this special offer lasts. Burton Page Co., 661 W. Lake St., Dept. 9701, Chicago, Ill.

Why Not PUT THIS NEW MILL ON YOUR OLD TOWER

ALBION

Albion steel and wood mills are quiet and powerful. One-third the working parts of any other mill. Only one main bearing subject to wear. This is a oilless, and easily replaceable. Covers by dependable weight without springs. Fits any 4-post steel tower. Why not shorten your chore house noise with a good Windmill? This is your chance—F. O. B. Albion. Erect it yourself. Ask your dealer, or write direct to

Union Steel Products Co. Ltd.
Dept. 44, Albion, Michigan, U.S.A.

HEAVES

Use 2 large cans. Cost \$2.50. Money back if not satisfactory. One can at \$1.25 often sufficient. **NEWTON'S Compound for Worm Expelling, Conditioning, Heaves, Indigestion.** Distemper, Coughs. 65c and \$1.25 cans. At dealers or post-paid. **THE NEWTON REMEDY CO., Toledo, Ohio**

BIG TYPE POLAND CHINAS

E. J. MATHEWSON, BURR OAK, MICH.

Will sell 40 head of Bred Sows and Herd Boar Prospects

THURSDAY, JAN. 24, 1924

The sows are bred to four as good boars as will be found in any herd. Outcross Giant, Outcross Star, Peter the Giant, and Wriggles Great Giant Jr. No better breeding to be found in America.

Write for catalog.

Auctioneers: William Waffle and John Hoffman

Fieldman P. P. Pope

Trains will be met at Sturgis on N. Y. C. and Nottawa on G. R. & I.

WILL BUILD COOPERATIVE CREAMERY.

WITH a monthly shipment of 125,000 lbs. of cream from the Bruce's Crossing-Paynesville section of Ontonagon County, local farmers have taken steps for the establishment of a co-operative creamery that will take care of the product. At an organization meeting held in December it was reported that seventy-five farmers had agreed to invest \$50 dollars each in the enterprise. The building and equipment will call for an outlay of about \$10,000, it is stated. Farmers in other neighboring communities are said to be interested in the project and to have agreed to help finance it, because it will afford a good local market for their cream.

It is claimed that a co-operative creamery handling large quantities of cream can, if well managed, pay from one to five cents per pound more for butterfat than the city creameries getting their cream by rail. It is planned to produce ice cream as well as other cream products at this factory.

EVERYONE IS HELPING TO PUT OUT THE SCRUB.

A REVIEW of the Upper Peninsula press shows great local interest in all sections of the peninsula in the anti-scrub sire campaign which is being fostered, this year, by the Upper Peninsula Development Bureau in co-operation with extension workers and the railroads. Most of the counties have already signified their intention of co-operating in the effort that is now under way. The cash prizes amount to \$1,000. These consist of a first prize of \$500, a second prize of \$250, a third prize of \$150, and a fourth prize of \$100. The prizes go to those counties showing the greatest or greater number of scrubs-bulls replaced by pure-bred stock.

A REAL CONVERT.

THE experience of Robert Lantner, of the Leelanau Association, demonstrates that a Cow-testing Association saves money. The first month that Mr. Lantner was in an association his herd of thirty milking cows returned a net income above feed cost of exactly \$31. The next month, with the same thirty cows and one fresh one, the net income above feed cost was \$190. Of course, one extra cow didn't make the difference. It was simply a case of feeding the good cows more and the poor cows less. There was no difference in price received for product or paid for grain. It costs Mr. Lantner approximately \$55 to belong to the Cow-testing Association for a year. He saved over twice that amount in one month.—H. E. Dennison.

Bloody Milk.—One of my cows gives bloody milk from one teat. Is her milk fit for use? J. C. A., Elkton, Mich.—Apply equal parts of extract of witch-hazel and cold water to bruised quarter three times daily. No risk in using such milk. Rough milking is frequently the cause of a cow giving bloody milk.

Only the rich have time to walk these days—the rest must hustle around in automobiles to make money for tires and gas.

A Self Centering Bowl in the new De Laval

A Better De Laval For Fewer Pounds of Butter

\$660 to \$1430 Down the Rest in Easy Monthly Payments

Greater Value. Present-day purchasers of De Laval Cream Separators are getting more value than was ever before possible. In 1913 it took 231 pounds of butter to pay for a popular-sized De Laval. Now it requires only about 188 pounds (average prices for years 1913 and 1923) to pay for the same machine—43 pounds or 18% less butter. In addition, the present-day De Laval is at least 20% better, having 10% more capacity, a bell speed-indicator, self-centering bowl, and many other improvements and refinements.

Self-Centering Bowl. The De Laval Bowl is so designed as to center and balance itself when it attains separating speed, which causes it to run smoothly, without vibration, and adds to the efficiency and life of the machine. It also gives the least possible resistance in being revolved, which together with the automatic oiling system

and superior design and construction of the driving mechanism, causes the De Laval Bowl to require the least power (per pound of capacity) to drive.

All-Around Superiority. A combination of the foregoing features, together with superiority of De Laval design, workmanship and materials, enables a De Laval to separate more thoroughly under all conditions of use, deliver a smoother cream capable of making better butter, to separate a richer cream with less loss of butter-fat, and to separate with greater efficiency at lower temperatures.

Remarkable Record. Not only was the De Laval the first continuous centrifugal cream separator but ever since it has been first in popularity, in numbers in use, in efficiency and length of service.

Pays for Itself. There are many worn-out and inferior cream separators in use today, wasting enough cream to pay for a new De Laval in less than a year. You can buy a De Laval on such easy terms that you can use it while it is paying for itself.



The De Laval Milker.

If you milk ten or more cows, a De Laval Milker will soon pay for itself. Besides saving a great deal of time and drudgery, it produces cleaner milk and by its pleasing, uniform action usually causes cows to give more milk. More than 15,000 users will tell you so. Send coupon for complete information.

Ask Your De Laval Dealer For A Demonstration

Mail this Coupon to For Free Catalog

The De Laval Separator Company

New York, 165 B'way
Chicago, 29 E. Mad. St.

Send Separator ☐ Milker ☐
catalog (check which). Dept. 532

Name

Town

State.....R.F.D.....No. Cows....

Guard the Udder!



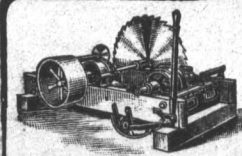
The ease of milking, and the amount of the yield is quickly affected by any external scratch, cut, chaf or inflammation. It is foolish and costly to neglect these apparently "small" hurts.

Apply Bag Balm to the injured part, and healing begins at once. The penetrating, soothing action of Bag Balm protects the wound, restores healthy circulation and promotes quick healing.

Soft, silky udders and teats, free from scars and hurts make easy milking and a full yield. Keep Bag Balm on hand for any emergency.

Large 10-ounce package, 60c at feed dealers, general stores and druggists. Write for free booklet, "Dairy Wrinkles."

DAIRY ASSOCIATION CO., Inc.
Lyndonville, Vermont



SAW YOUR OWN LUMBER

with a Howell Portable Saw Mill. Turn your standing timber into high priced building lumber at the mere cost of sawing. Big demand for lumber, lath and shingles. Keep your engine busy the year round making Big Money In Custom Sawing for your neighbors. Howell saw mills are made in several sizes suitable for tractors of any size. Also Edgers, Planers, Lath and Shingle machines. Write for free Catalog, 8-8.

R. R. HOWELL & CO., Mfrs.

Minneapolis, Minn.

Dairymen! Holstein Breeders! Fourth Michigan State Sale

45--Healthy Holsteins, Selected Stuff--45

Mon. Afternoon, February 4th, East Lansing

40 young cows fresh or ready to freshen and five young 30 pound bulls, one mature sire with splendid yearly dam. Good individuals, good A. R. O. backing, from clean herds under State and Federal Supervision. Sale under auspices and management Michigan Holstein Friesian Ass'n.

J. G. HAYS, Sales Mgr.,

East Lansing, Mich.

TRY a Michigan Farmer Classified Liner—They cost little and bring big results. See rates on page 67.



THE LATEST MARKET REPORTS



GRAIN QUOTATIONS

Wednesday, January 16.

Wheat.

Detroit.—No. 1 red \$1.14; No. 2 red \$1.13; No. 3 red \$1.10; No. 2 white \$1.14; No. 2 mixed \$1.13.
Chicago.—May \$1.09½ @ 1.09%; July \$1.07½ @ 1.07%; September \$1.06½.
Toledo.—Cash \$1.13.

Corn.

Detroit.—Cash No. 3 yellow at 84c; No. 4 yellow 81c; No. 5, 75¢@77c; No. 6, 72¢@74c.
Chicago.—May at 79½¢@79½c; July 80½c; September 81½c.

Oats.

Detroit.—Cash No. 2 white at 53c; No. 3, 51c.
Chicago.—May at 47½c; July 45½c; September 43½c.

Rye.

Detroit.—Cash No. 2, 73½c.
Chicago.—May at 70c; July at 75c; \$13.65; alsike \$9.50; timothy \$4.02.
Toledo.—74c.

Barley.

Barley, malting 72c; feeding 68c.

Buckwheat.

Buckwheat.—New milling \$2 cwt.

Beans.

Detroit.—Immediate and prompt shipments \$4.75 per cwt.
New York.—Choice pea at \$10; red kidneys \$7.25@7.50.

Seeds.

Detroit.—Prime red clover cash at \$13.65; alsike \$9.50; timothy \$4.02.

Hay.

Strong.—No. 1 timothy at \$24.50@25; standard and light mixed \$23.50@24; No. 2 timothy at \$22@23; No. 1 clover \$21.50@22.50; No. 1 clover mixed \$21.50@22.50; wheat and oat straw \$11.50@12; rye straw \$12.50@13.

Feeds.

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

Apples.

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

WHEAT

The wheat market keeps within much the same range as during the past few months, but displayed a fair degree of firmness last week. In several directions conditions appear to be more healthy. Export sales of Manitoba wheat have quickened decidedly and Liverpool prices have gained about three cents on Chicago in the last two weeks. Argentine wheat normally cannot reach Europe much before March 1 and wet weather in that country is delaying the movement and caused damp grain so that European buyers are compelled to buy in North America for a while. Arrivals of Russian grain also have been damp. Exports from the United States are confined largely to the Pacific Coast where the bulk of our exportable surplus is located. On this account, it is fortunate that non-European countries, especially Japan and China, are much heavier buyers this year than last. The restraint shown by producers in both Canada and the United States in marketing their holdings is an important factor in sustaining prices at Liverpool which is regarded traditionally as the price-setting point. Looking ahead, the situation is gradually becoming more promising. The factors include reduced acreage here and small reductions in several European countries and the probability that future yields per acre may not be so high as in the last two years in Canada or in the last three years in Argentina.

CORN

Corn prices advanced last week to the highest point in a month. The receipts at primary markets during January and February dropped off in January as compared with December. Weather conditions have not been a sufficient explanation of the light receipts or of the small offerings on bids made to the country from terminal points. These conditions point to heavy farm disappearance during the winter and continued heavy receipts of finished hogs and reports of numbers of cattle on feed confirm this impression. Cold weather has stimulated the demand for corn in commercial channels, the stocks accumulated in the visible supply are not large and a healthy expansion in exports has taken place in the last five weeks. The market may weaken during the next month but no serious decline in prices is to be expected.

OATS

Oats have strengthened with corn, although primary receipts are holding up fairly well, and the visible supply terminals has recovered all its loss during the fall. It now stands at the high point for the oats crop year, although it is small compared with the same time in either of the last three years.

SEEDS

The seed market advanced sharply last week under an improved demand. Country dealers are accumulating for their spring requirements which are expected to be fairly large because of a shortage of local seed in many sections, high prices for hay and the tendency to seed down some of the land which has been producing wheat. The foreign clover-seed market advanced sharply with indications that more has been sold for export than was available.

FEEDS

Feed markets are quiet with wheat feeds extremely dull. Western markets are pressing feeds now stored in late warehouses for sale. Storage stocks, especially of wheat feeds and oil meal, are reported heavy. New production of most feeds is at a fairly high rate.

HAY

Hay prices advanced further last week. Receipts were light at most points, while the demand was urgent at Chicago and Minneapolis. The south was reported to be a free buyer of timothy at Cincinnati and of alfalfa at Kansas City.

POULTRY AND EGGS

Fresh egg prices broke sharply last week under the depressing influence of heavy receipts, mild weather and reports of a continued good lay. Recent colder weather in producing sections may check the decline. Storage holdings of 1,920,000 cases of eggs on January 1 were shown by the preliminary report. These compared with 1,311,000 on the same date last year and are far beyond all previous records. Although storage eggs were unprofitable property last year for the most part, prices on eggs for April delivery are equally as high as in the corresponding period last year.

Chicago.—Eggs, miscellaneous 34 @ 35c; dirties 22@24c; checks 20@21c; fresh firsts 36c; ordinary firsts 32@33c. Live poultry, hens at 21½c; springers 19c; roosters 14c; ducks at 19c; geese 13c; turkeys 22c.

Detroit.—Eggs, fresh candled and graded 36½@38c; storage 24½@26c.

Live poultry, heavy springers at 21c; light springers 20@21c; heavy hens 22@23c; light hens 21@22c; roosters 14@15c; geese 12c; ducks 23@26c; turkeys 25@30c.

BUTTER

Butter prices declined last week as receipts were liberal, dealers were anxious to keep their stocks moving, and buyers were cautious. Quality of receipts was irregular and the better grades suffered in competition with foreign butter. Although there is little butter of good quality left in storage, it is being moved out in good volume. Holdings on January 1 as shown by the preliminary report were 30,549,000 pounds as compared with 26,819,000 pounds on the same day a year ago and a five-year average of 46,312,000 pounds. Large imports of foreign butter bought at attractive prices as compared with the domestic market, including 10,325 casks of Danish; 750 boxes of Argentina; seven cases of Italian and 29,400 pounds of Canadian, arrived in New York last week and more is due to arrive soon.

Ninety-two score creamery, Chicago 53½c; New York 53½c. In Detroit fresh creamery in tubs sells for 49@51c per pound.

POTATOES

Potato prices advanced last week although the trend was downward at the close as a result of increased shipments from producing sections and a moderate demand partly on account of the presence of considerable frozen stock on the principal consuming markets. Eastern round whites were quoted at \$1.85@2.10 per 100 pounds sacked and bulk in eastern cities, and northern round whites at \$1.35@1.50 sacked in Chicago.

APPLES

The apple market is dull and prices have remained in about the same notch for several weeks. Shipments from producing sections remain rather heavy but stocks in storage are located mostly in the states near the principal consuming centers so that prompt distribution should be promoted. Export demand which slackened in November has been increasing in the last few weeks. Total clearances to date are about 70 per cent heavier than to the corresponding time last year. New York Baldwins are quoted at \$3.50@4.50 per barrel in eastern cities. A-2¼-inch Northern Spies are quoted at \$5.50@6 in Chicago; Greenings at \$4.50@5.50; Baldwins \$4@4.50, and Jonathans \$5@5.50.

WOOL

The wool markets are strong everywhere. Seaboard markets reported a spotted demand last week as mills are waiting for the opening on the heavy-weight goods, but prices are slowly creeping upward. Australian auctions resumed after the holidays with values 5@10 per cent higher and New Zealand, South American and South African wools also are dearer. American buyers are taking moderate quantities but there is no likelihood of a repetition of the heavy import of the early part of last year. It is doubtful if wool consumption in the United States in 1924 will equal the pace of the last two years, but the strength abroad and the small domestic production assure the maintenance of prevailing or higher prices.

BEANS

Excitement has been absent from bean circles lately, with local demand easy and trading slow. No change is noted in eastern centers where holders are asking six cents per pound for choice hand-picked beans and making a few sales at that figure. Red and white kidneys have likewise evinced a tameness, with prices steady. The strong position of limas which are now selling in New York at 10½c per pound may assist a little in other types. This week a meeting of Michigan growers and jobbers is being held at Owosso to learn what can be done to aid the trade in pea beans.

GRAND RAPIDS

The potato market was weaker in Grand Rapids early this week. As prices began their downward movement in outside markets, farmers became free sellers here and as a result buyers lowered their bids to 55@65c per bushel as they became well stocked. The fresh egg market was fairly steady, with dealers paying 35@36c a dozen. The demand is picking up and this may tend to arrest the lower price trend for a time, or at least until the supply begins to exceed the demand at present prices. Poultry continues firm here, with fat fowls in demand at 20@22c a pound. Veal also is stronger at 15@17c a pound. Beans are unsettled as a result of heavy sales by growers to pay taxes. Other—

DETROIT CITY MARKET

Saturday's market was well supplied with produce, with offerings of potatoes and apples quite heavy. Buying was slow and there was not a strong demand for anything. There was a heavy supply of potatoes and selling was light with most moving for 90@95c a bushel. Apples were in abundant supply, but selling slow and light. The liberal supply of poultry had little demand, even for best stuff. There was a large offering of dressed hogs and the call was mostly for the light weights. Veal sold easily. Eggs and dressed poultry had little demand.

Saturday's prices were: Apples, fancy \$2@2.50 per bu; No. 1, \$1.25@1.75 bu; beets \$1.25@1.50 bu; cabbage red \$2@3 bu; late \$1.50@2 bu; carrots \$1.50@2 bu; celery 35@50c doz; onions dry \$1@1.50 bu; parsley 50@60c dozen bunches; \$1.25@1.75 per bu; potatoes 85c@1 bu; winter squash \$2 bu; turnips \$1.25@1.50 bu; parsnips at \$1.50@1.75 bu; horseradish \$4@5 bu; leeks 50@60c dozen bunches; bagas \$1 bu; kale 75c@1 bu; eggs retail at 50@60c dozen; old hens, wholesale at 25c pound, retail 27@30c; springers, wholesale 23@25c, retail 25@28c lb.; ducks, wholesale 25c lb., retail 25@30c lb.; veal 19@20c lb.; hogs 11@12c lb., light 13c lb.; geese 25c lb.

COMING LIVE STOCK SALES.

Holsteins.

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

Shorthorns.

February 19-21.—American Shorthorn Breeders' Association, J. L. Tormey, Secretary, 13 Dexter Park Avenue, Chicago, Ills.

Durocs.

Feb. 20.—Detroit Creamery Farm, Mt. Clemens, Mich.
February 11.—H. F. Cramton, H. B. Kelley and W. H. Schroy, Hillsdale Fair Grounds.

Poland Chinas.

Jan. 30.—Doris Hover, Akron, Mich.
Jan. 24.—E. J. Mathewson, Burr Oak, Mich.

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

Feb. 20.—E. A. Clark, St. Louis, Mich.

Chester Whites.

March 6.—Alexander & Bodimer, Vassar, Mich.

Live Stock Market Service

Wednesday, January 16.

DETROIT

Market very slow.
Good to choice yearlings \$ 9.50@ 9.75
Best heavy steers 8.00@ 8.25
Handyweight butchers .. 6.75@ 7.00
Mixed steers and heifers 5.75@ 6.00
Handy light butchers.... 4.50@ 4.75
Light butchers 3.75@ 4.25
Best cows 5.00@ 6.00
Butcher cows 3.50@ 4.25
Cutters 2.50@ 3.00
Canners 2.25@ 2.50
Choice bulls 5.50@ 6.00
Bologna bulls 4.50@ 5.00
Stock bulls 3.25@ 4.25
Feeders 5.25@ 6.25
Stockers 5.00@ 5.75
Milkers \$ 45@ 85

Veal Calves.

Market 50c lower on good, \$1 lower on common.
Best \$ 14.00
Others 6.00@12.00

Sheep and Lambs.

Market 15@25c higher on good lambs; sheep steady.
Best lambs \$13.75@13.85
Light to common 6.00@10.00
Fair 10.50@12.25
Fair to good sheep..... 5.50@ 7.00
Culls and common 1.50@ 3.50

Hogs.

Prospects steady.
Mixed and heavies \$ 7.50
Pigs 6.75
Stockers 7.35
Stags 4.00@ 4.50

CHICAGO

Hogs.

Receipts 31,000. Market moderately

active, and around 20c lower than on Tuesday. Bulk at \$7; choice medium and heavy butchers \$7.30@7.35; tops \$7.40; bulk good 170 to 210-lb. average \$7.15@7.25; packing sows largely at \$6.65@6.85; killing pigs slow, mostly \$6.25@6.75. Big packers not buying.

Cattle.

Receipts 11,000. Market on most of killing classes steady to strong; 10@15c higher on yearlings and handyweight beef steers. Long yearlings at \$11.50; best heavy steers \$11; some 1,635-lb. average \$10.75; bulls steady; vealers largely 50c higher. Bulk is around \$10.50@11.50.

Sheep and Lambs.

Receipts 17,000. Market slow. Best feeding lambs strong; sheep around steady. Woolled lambs early \$13.25@13.50; some held higher; three good loads of feeding lambs at \$12.65; best handyweight fat ewes \$7.75.

BUFFALO

Cattle.

Receipts 10 cars. Market steady. Calves at \$14.50.

Hogs.

Receipts 50 cars. Market is strong. Heavy and yorkers \$7.85@7.90; pigs and lights \$7@7.50.

Sheep and Lambs.

Receipts five cars. Market strong. Top lambs at \$13.85; yearlings \$11@12.50; wethers \$9@9.50; ewes at \$7@8.50.

Galvanized Roofing!

\$2.75 Per Square

Lot WS-1. Reclaimed, re-finished galvanized roofing sheets; also new metal roofing sheets in all gauges and a large quantity of high grade government stock. Brick siding, beaded ceiling—all offered at lowest prices. Slate coated roofing in rolls, plain and shingle stamped style; smooth surface stock. Wallboard.

BEST PAINT!

Lot WS-2. Guaranteed best quality house paint, 26 colors, per gallon..... **\$1.85**
Garage and barn paint, per gallon..... **\$1.25**

NEW FENCING!

Lot WS-3. Write for our special new low prices of lawn, field and poultry fencing. Big money savings now.

NEW BARBED WIRE!

Lot WS-4. Four point, 3 in. heavy weight barbed wire reel, weighing 58 lbs., containing 700 ft. Per roll..... **\$1.40**

NEW FENCE POSTS!

Lot WS-5. Special 2 inch steel fence posts, 4 ft. to 8 ft. long with patented adjustable clamp. Priced as low as each..... **20c**

FREE! Complete Bulletin—Address Dept. WS-42

HARRIS BROTHERS CO.
35th And Iron Sts. CHICAGO, ILL.



Make Big Money in Tile Ditching!

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

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

Write for FREE BOOK

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

THE BUCKEYE TRACTION DITCHER CO.
171 Crystal Ave., FINDLAY, OHIO

German Almanac 1924

FREE

Containing over 100 pages fine German reading matter. We have several hundred copies to distribute to those sending their name.

SENT FREE TO YOUR

parents, relatives and friends by sending us 3c for the return postage.

DETROIT ABEND POST

Michigan's German Daily
1442 BRUSH, DETROIT, MICH.

UNBREAKABLE FIRE SHOVEL

25c By Mail

Patented locking corner makes it unbreakable. 19" long—heavy—will last a lifetime. Send 25c. G. W. Stallings, Mfr., 109 West Atwater St., Detroit, Mich.

Free Information On Fur Tanning



You furnish the raw beef or horse hides or raw furs; we do the tanning in our own plant. We make up coats, robes, gloves, mitens, caps, vests. The finest kind of fur work done on ladies' fine furs coats, capes, chokers, horse hide shoe leather, coats, finest of sheep lined coats.

Send for circulars, tell us what you have to tan. We answer.
W. W. Weaver, Reading, Mich.

NORTHERN GROWN FRUIT TREES

Small fruit plants, Grape vines, Ornamental trees, and shrubs of all kinds. Established a third of a century. Send for Catalog.

T.B. West & Sons, Maple Bend Nursery
Lock Box 142, Perry, Ohio

No Cold Brooders



Buy direct from factory and save money. We pay express charges. Write today for free catalog and new low prices. **Inter-State Sales Co.,** 305 Ash St., Tipton, Ind.

A Job That Will Pay You Well

FORDSON OWNERS AND FARMER AGENTS. Spare time work selling our line to Fordson owners through Ford dealers. Write fully about yourself. **DETROIT HARVESTER CO.** 6535 Livernois Ave. Dept. G, Detroit, Mich.

TRAPPERS Send For Free ANIMAL LURES

Sample sent to test at out expense. Highest prices paid for raw furs. Send your name in today. **The L. Frank & Sons Company** ZANESVILLE OHIO.

Ship Your **Hay and Grain** to the OLD RE LIABLE HOUSE
Geo. E. Rogers & Co., Pittsburgh, Pa.

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

MICHIGAN FARMER
Classified Ads. pay well.
Try one.

FARMS AND FARM LANDS FOR SALE

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

For Rent 102-acre Farm in Monroe County, Ash Township, nine miles north of Monroe, 25 miles from Detroit, on good roads (telegraph road). Good land and buildings. Inquire C. W. Grow, 739 Waterman Ave., Detroit.

FOR SALE—80-acre farm, free and clear, in Calhoun County, within 2 1/2 miles of Marshall. On very good gravel road, in good community. Offered by administrator at a real bargain price of \$4,500 cash to close estate, or terms with at least \$1,500 down. Russell A. Cole, 1538 Woodmere Ave., Detroit, Mich.

For Sale One of the best farms in Michigan. Best of Soil and Buildings. 10-room House with Furnace. Basement Barn, 40x64. All other buildings needed. 5-ton scales, and 20 acres wheat included. 40 rods to school, 3 miles to Lansing. 122 acres for \$19,000. Reason for selling, age and poor health. Stephen Henpy, R. 7, Lansing, Mich.

Pasture Land For Sale In southern Midland County, Michigan, in parcels up to 1,000 acres. Good roads and water. Shipping points, Shepherd, St. Louis, Breckenridge or Midland. Write W. S. Root, Mason, Mich.

WANT to rent 60, 80 or 100-acre farm, good land and buildings. Cash rent; 13 years on present farm. Gus Thomas, New Lothrop, Mich.

FOR SALE or EXCHANGE

Eight hundred eighty (880) acres of land, partly cut over, in Sanborn Township, Alpena County. This land is free and clear and is in one parcel, one-half (1/2) mile from the D. & M. Railroad, and on highway known as M-10. Considerable timber left, and the land itself is above the average for this section. **CITY SUBURBAN REALTY COMPANY,** 615 Oakland Building, Lansing, Michigan.

You Are Tired AND WEARY of the severe winters up there. COME TO STUART. You will be delighted with the climate here. A haven for farmers. For information write CIVIC COMMITTEE, STUART, FLA.

1916 Acres \$38,320 Improved, a part yielded 32 bu. wheat per acre. Near school, etc. Good well, 2 mi. lake frontage. **H. MILTON MARTIN,** Edmonton, Alberta, Canada.

Sell your property quickly for cash, no matter where located. Particulars free. Real Estate Salesman Co., 615 Brownell, Lincoln, Neb.

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

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

Cash Buyers want farms—various localities. Describe fully and give best price. **U. S. Agency,** Box 43, North Topeka, Kans.

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

Farm Wanted Near school; at spot cash price. Mean business. **Fuller, Wichita, Kas**

101 Acres Well imp. 55 acres bottom, well located. \$3,500. **Jenkins & Jones, Ava, Mo.**

160 A 120 under cultivation; 40 pasture; electric lights and running water. \$102 per A. **Guy R. Bell, Snover, Mich., R. 2.**

320 A Good Building, near school, with crop, tools, tractor, 9 head of cattle and one team. Will sell cheap if taken at once. **R. R. Phillips, Owner, Lachine, Mich.**

ONE CROP Pays for Land. Sold only to practical farmers. If interested write Chamber of Commerce, Hereford, Colorado.

CLASSIFIED ADVERTISING

This classified advertising department is established for the convenience of Michigan farmers. Small advertisements bring best results under classified headings. Try it for want ads and for advertising miscellaneous articles for sale or exchange. Poultry advertising will be run in this department at classified rates, or in display columns at commercial rates.

Rates 8 cents a word, each insertion, on orders for less than four insertions; for four or more consecutive insertions 6 cents a word. Count as a word each abbreviation, initial or number. No display type or illustrations admitted. Remittances must accompany order.

Real estate and live stock advertising have separate departments and are not accepted as classified. Minimum charge, 10 words.

Rates in Effect October 7, 1922

Words	One time	Four times	Words	One time	Four times
10.....	\$0.80	\$2.40	26.....	\$2.08	\$6.24
11.....	.88	2.64	27.....	2.16	6.48
12.....	.96	2.88	28.....	2.24	6.72
13.....	1.04	3.12	29.....	2.32	6.96
14.....	1.12	3.36	30.....	2.40	7.20
15.....	1.20	3.60	31.....	2.48	7.44
16.....	1.28	3.84	32.....	2.56	7.68
17.....	1.36	4.08	33.....	2.64	7.92
18.....	1.44	4.32	34.....	2.72	8.16
19.....	1.52	4.56	35.....	2.80	8.40
20.....	1.60	4.80	36.....	2.88	8.64
21.....	1.68	5.04	37.....	2.96	8.88
22.....	1.76	5.28	38.....	3.04	9.12
23.....	1.84	5.52	39.....	3.12	9.36
24.....	1.92	5.76	40.....	3.20	9.60
25.....	2.00	6.00	41.....	3.28	9.84

Special Notice

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

MISCELLANEOUS

WE ARE in position to supply you at all times with good second-hand egg crates, including fillers and covers, complete for shipping, at the following rates: Carload lots F. O. B. Detroit, 14c each; less than carload lots, 16c each. **Wm. Spitz & Sons, 2645** Chene St., Detroit, Mich.

GLADIOLUS BULBS—Order now for April 1st delivery. Mixed colors, \$5.00 per 100. Enjoy flowers all summer. **George Hunter, 412 Evergreen Ave., East Lansing, Michigan.**

WE WILL PAY YOU at the rate of \$8.00 per barrel selling quality lubricants to auto and tractor owners, garages and stores. Sell now for immediate and spring delivery. We have been in business 40 years. **The Manufacturers' Oil and Grease Company, Dept. 18,** Cleveland, Ohio.

TOBACCO

HOMESPUN TOBACCO—Five pounds chewing, \$1.75; ten, \$3.00; twenty, \$5.25. Smoking, five pounds, \$1.25; ten, \$2.00; twenty, \$3.50. Pipe and recipe free. Send no money. Pay when received. **Cooperative Farmers' Paducah, Kentucky.**

LEAF TOBACCO—Chewing, five pounds, \$1.75; ten, \$3.00; Smoking, five pounds, \$1.25; ten, \$2.00; pipe and recipe free, pay when received. **Cooperative Farmers' Paducah, Kentucky.**

TOBACCO—Extra Fancy Smoking, 10 pounds, \$2.50; Good Smoking, 5 pounds, \$1; 10 pounds, \$1.50; 20 pounds, \$2.75. Chewing, 5 pounds, \$1.50; 10 pounds, \$2.75. Quality Guaranteed. **O'Connor Smokehouse, 8133, Mayfield, Ky.**

HOMESPUN TOBACCO—Chewing, 5 lbs., \$1.75; Ten, \$3.00. Smoking, 5 lbs., \$1.25; Ten, \$2.00. Pay when received, pipe and recipe free. **Farmers' Union Paducah, Ky.**

PET STOCK

GERMAN Shepherd, Airedales, Collies, Old English Shepherd dogs, Puppies; 10c illustrated instructive list. **W. B. Watson, Box 35, Macon, Mo.**

FERRETS, for rats, rabbits, skunk, mink, etc. Book Free. **Thos. Sellers, New London, Ohio.**

REGISTERED COLLIE PUPPIES—Natural heelers, both sexes. **Silvercrest Kennels, Gladwin, Mich.**

BABY CHICKS

PURE-BRED BABY CHICKS—Barred Rock, Buff Orpingtons, White Wyandottes, Rhode Island Reds. February 15th to April 15th, \$15.00 per hundred. After April 15th, \$13.00 per hundred. 98 per cent live delivery guaranteed. **Brookdale Poultry Farm, Box 522, Paw Paw, Michigan.**

BABY CHICKS—Finest quality, Barred Rocks, White Wyandottes, Buff Orpingtons, S. C. Reds, Light Brahmans, White Leghorns, \$15.00 per 100, \$8.00 per 50. Hatch every Tuesday. Order from ad. Member International and Illinois Baby Chick Association. **Earlville Hatchery, 66 Ottawa St., Earlville, Illinois.**

BABY CHICKS—20 leading varieties hatched from heavy laying strains. Live delivery guaranteed anywhere in the U. S. Lowest prices ever offered. Write for catalog and price list. **Miller Hatcheries, Box 651, Lancaster, Mo.**

BABY CHICKS—100,000 Hollywood-Barron S. C. English White Leghorns. Vigorous. Free range. 100, \$14.00; 500, \$7.50; 1,000, \$13.00, postpaid. Live Arrival, Bank Ref. Liberal discount on early orders. Catalog. **Highland Poultry Farm, R. 9, Box C, Holland, Mich.**

CHILSON BARRED ROCKS—Hatching eggs and Baby Chicks. Winning pen all heavy breeds Michigan International Egg Contest 1923. Michigan's greatest egg and color strain. Write for price list today. **Mr. & Mrs. W. H. Chilson, R. 1, Grandville, Mich.**

CHICKS—Highest quality "Barron Leghorns." State approved. Wonderful layers. 100 per cent live delivery. Prepaid. Prices low. Catalog on request. **Montello Hatchery, R. 1-M, Holland, Mich.**

BABY CHICKS—Write for our new free catalog and price list. Eight years' experience. **H. H. Pierce, Jerome, Michigan.**

BABY CHICKS and Custom Hatching. Bred-to-Lay English White Leghorns. Also Barred Rocks and Reds from good farm flocks. Booking orders for March delivery. **Gore's Poultry Farm, Cornua, Mich.**

QUALITY CHICKS, eggs; fifteen standard bred varieties; best winter laying strains. Free delivery. Reasonable prices. Catalogue free. **Missouri Poultry Farms, Columbia, Mo.**

BABY CHICKS from heavy-laying strains. All leading pure breeds. Low prices. Prepaid. Live delivery guaranteed. Catalog Free. **Smith Bros' Hatcheries, Mexico, Mo.**

HAI LOOK! 100,000 chicks 12c and up, 15 varieties. From highest producing contest winners. Hatching eggs. Circular. **Lawrence Hatchery, R. 7, Grand Rapids, Mich.**

BRED-TO-LAY CHICKS from my own flock of Barred Rocks. Write for description and prices. Delivery Guaranteed. **Krueper Poultry Farm & Hatchery, Milan, Mich., R. 3.**

BABY CHICKS—White Leghorns, Anconas, Barred Rocks, Low Prices. Catalogue. **Oak Dale Hatchery, Box Y, LeRoy, Minn.**

BABY CHICKS—S. C. W. Leghorns, mated to Hollywood Pedigree Cockerels, 250-egg strain. Send for catalogue. **Snowflake Poultry Farm, R. 5, Middleville, Mich.**

S. C. BUFF LEGHORN Baby Chicks from good laying strain. **Willard Webster, Bath, Mich.**

POULTRY

QUALITY BIRDS CHEAP—Pure-bred Pullets, Hens, Cockerels, Turkeys, Geese, Ducks, Bantams, Guinea, Baby Chicks. Satisfaction Guaranteed. Catalogue Free. **Evergreen Poultry Farms, Hatcheries, Hampton, Iowa.**

SINGLE COMB REDS—Cockerels and pullets. March and April hatched. Reduced prices for quick sale. They win, lay, weigh and pay. **Harry J. Theis, 283** Hunter St., Battle Creek, Mich.

MAPLEWOOD FARM HATCHERY, Dept. 1, Wabash, Indiana. All our breeders have been blood-tested for bacillary white diarrhea, by accredited state veterinarians. Send for catalogue.

SINGLE COMB WHITE LEGHORNS—Trapnested. Pedigreed. Hatching Eggs, Chicks in 100 to 1,000 lots, and Pedigreed Cockerels. **W. C. Eckard, Paw Paw, Michigan.**

BARRED ROCK COCKERELS—Big, Vigorous Fellows from Hens with Official Contest Records. 200 to 295, \$5.00 and \$7.00 each. Also chicks and eggs. Order now. **G. Caball, Box M, Hudsonville, Mich.**

WHITE WYANDOTTES from my prize-winning, heavy-laying strain. Males \$3 and \$5. Females \$3 each, \$5 pair. **David Ray, Ypsilanti, Mich.**

S. C. R. I. RED COCKERELS—Pure-bred, dark, even color, \$3 and \$5 each. **Louis Morris, Mt. Morris, Mich., R. 1.**

10 Breeds Chickens, Turkeys, Ducks, Geese, Bantams, Guinea, English Bulls, Fox Terrier Pups; 300 Pekin Ducks. **Jesse Burnside, Judson, Indiana.**

68 VARIETIES of Fine pure-bred chickens, ducks, geese, turkeys, fowls, eggs, chickens. Large catalogue 5c. **A. A. Ziemer, Austin, Minn.**

RINGLET Barred Rock Cockerels. Exhibition and laying strains. Satisfaction Guaranteed. **Earl Murphy, Britton, Michigan.**

WHITE LEGHORN COCKERELS—Chicks. Eggs from best flock in country. Catalogue. **Oak Dale Farms, Box Y, LeRoy, Minn.**

BARRED ROCK—Cockerels, Chicks, Eggs. Chicago Winners. Great Layers. Catalogue. **J. A. Schneider, Box Y, LeRoy Minn.**

GIANT BRONZE Turkey Toms and Barred Rock Cockerels. Choice Stock. **Mrs. Geo. Robinson, Lake Odessa, Mich.**

MUSCOVY DUCKS—Breeders, drakes, hatching eggs and ducklings. **G. E. Heneveld, R. 1, Grandville, Mich.**

SILVER LACED and White Wyandotte Choice Cockerels. **C. W. Browning, Portland, Mich.**

MAMMOTH bronze turkeys from best breeding stock. **Mrs. Eugene Ramsdell, Hanover, Mich.**

FOR GIANT BRONZE TURKEYS—Toulouse Geese, Buff Orpingtons, write to **M. B. Noble, Saline, Mich.**

JUMBO BRONZE TOMS—Hickory Hill Strain. **Archie Bennett, Rockford, Mich.**

BOURBON RED turkeys; Regal-Dorcas White Wyandotte cockerels. **Chas. A. Beatty, Milford, Mich.**

BUFF WYANDOTTE COCKERELS for Sale. **J. G. Lange, Inkster, Mich.**

MICHIGAN'S BEST GIANT BRONZE TURKEYS—America's best strains. Vigorous breeders, both utility and fancy. Extra good values in young toms. **N. Evelyn Ramsdell, Ionia, Mich.**

WHITE HOLLAND TURKEYS—Large, vigorous birds. **Henry Griffin, Napoleon, Mich.**

PURE-BRED Bourbon Red Turkeys for breeding only. **H. O. Ruggles, Milford, Mich.**

GEESSE—Ducks, leading varieties. Free Circular. **John Hass, Bettendorf, Iowa.**

WHITE CHINA GEESSE, excellent layers, \$10.00 trio. **Mrs. Alice Bonow, Mattawan, Mich.**

GIANT BRONZE TURKEYS from prize winning birds. Large, healthy, unrelated stock furnished. **Mrs. La Verne Brownell, Belmont, Mich.**

MAMMOTH BRONZE TURKEYS—Toms, 20 to 23 lbs., \$12; hens, 12 lbs., \$7; good markings. **Mrs. Walter Dillman, Dowagiac, Mich.**

HONEY AND BEES

BEEKEEPERS' booklet. "Starting Beekeeping," very interesting, explains how to begin beekeeping, hunt bee trees, catch swarms, increase bees, make hives, etc.. Mailed free. **M. Spencer Apiaries, West Los Angeles, California.**

SITUATIONS WANTED

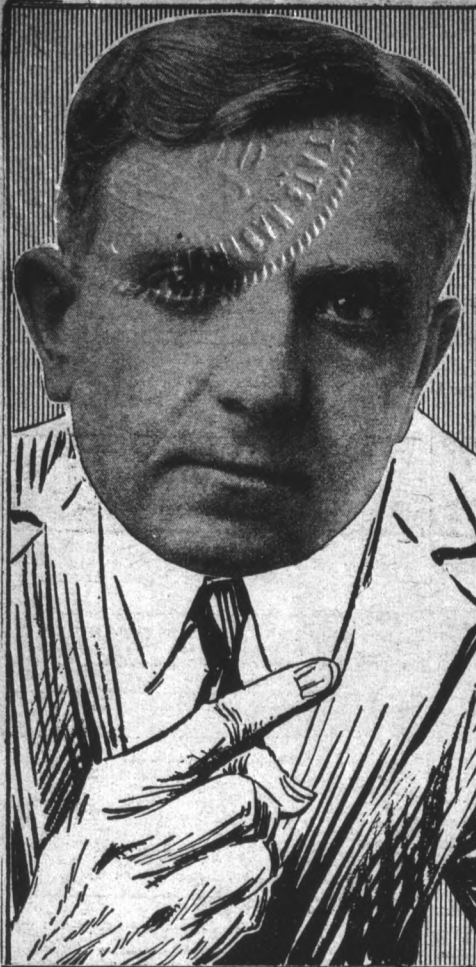
WANTED—Position as farm manager, either dairy or general farming. **G. C. Kinney, R. 1, Birmingham, Michigan.**

HELP WANTED

WE PAY \$200 monthly salary, furnish car and expenses to introduce our guaranteed poultry and stock powders. **Bigger Company, X683, Springfield, Illinois.**

TWO EXPERIENCED single farm hands wanted March 1st on modern farm. One to work with cows, hogs and chickens. The other to help milking and follow team. Must be experienced with modern farm machinery. Both must be hard workers. Good wages paid. Write, stating age, experience and nationality. **Olaf F. Sorenson, Harbor Springs, Mich.**

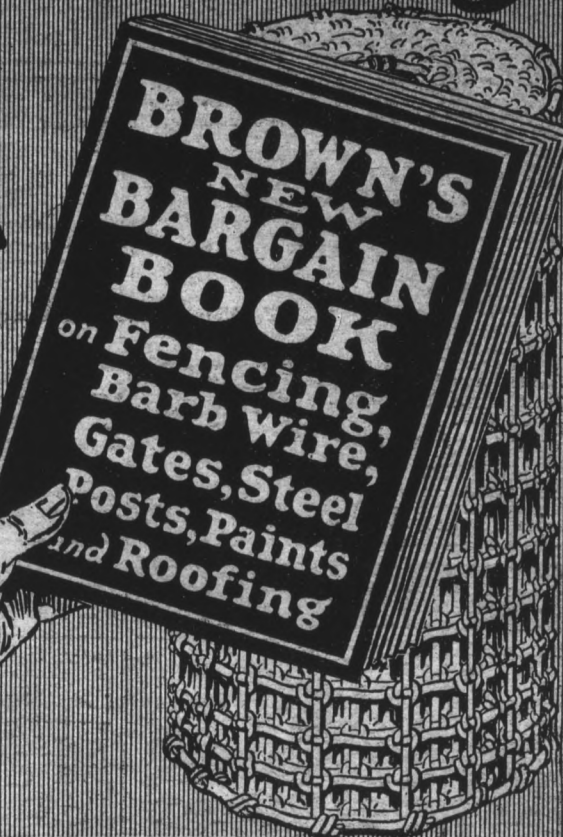
WANTED—Single man, reliable and experienced, to work on well equipped general farm. Good wages. **O. J. Feldkamp, Saline, Mich.**



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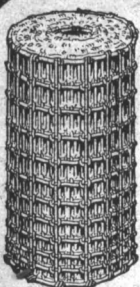
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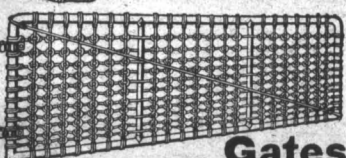
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on Fencing, Gates, Steel Posts, Roofings and Paint



Farm & Lawn FENCE

Over 100 styles to select from—a style for every purpose—prices rock bottom.



Gates

My catalog shows numerous styles of Farm and drive gates—made with Carbon Steel Rust-proof frames—the kind that never wears out. My prices show big saving.

Steel Posts

My Carbon Steel Fence Posts—both Angle and Tee posts are a real sensation in a "better quality post" heavier, sturdier, stronger.

My low prices make them cheaper than wood posts.

Also a Big Selection in Corner, End and Gate Posts

"Seeing is believing." Get my new 1924 catalog and see with your own eyes the extraordinary money-saving values I am offering this season.

When you get my big FREE 1924 Bargain Book, and compare my prices with what you have to pay for similar things elsewhere—then and only then will you begin to realize how much money you can save by buying from Jim Brown.

You see I manufacture these goods in my own big factories—the entire output is sold direct to my customers with only one small manufacturer's profit added and

I Pay the Freight Right to Your Station

This plan cuts the cost to you fully one-third. My three Big Factories, located at Cleveland, Ohio, Memphis, Tenn. and Adrian, Mich., also shipping points at Kansas City, Mo. and Davenport, Iowa, enable me to ship all orders promptly and make quick delivery. The saving and satisfaction that my 800,000 farmer customers get is expressed in hundreds of letters I receive every day—here's three—read what they say:

Saved \$58.43

"Received my order of fence promptly and am certainly well pleased with it. You save 10¢ per rod over local prices on hog fence and 75¢ per spool on barb wire, making a saving on the order of \$58.43. You can depend on it. I'll always order from The Brown Fence & Wire Co., whenever I need Fencing, Gates, Roofing or Paints. I like your way of doing business and it certainly makes a fellow feel good to be able to make such a big saving."

E. D. Matheny, Okolona, Miss.

Better and Cheaper

"I have one mile of your fencing on my place and am going to put up more of it. It is by far the best fence I can get and a lot cheaper. Your system of paying freight is good—no guesswork about what it will cost laid down at my R. R. Station. Your fence lasts much longer than other fence, because it don't rust so quick—your double galvanizing certainly does the trick."

Carl L. Erickson, Pierz, Minn.

Saved \$50.00 on Paint

"The Wearbest paint I received is more than satisfactory. The painter says is the best paint he ever used. I am located on the Interurban and State Highway where there is immense traffic and since I completed the painting there are numerous comments on the fine appearance. I have not seen a job that equals it and I saved \$50.00 on the paint by buying from you."

H. O. Pearce, Brazil, Ind.

Notice that my customers are not only pleased with the big saving in money but also in the quality, and that's just a point I want to impress on you. Price don't mean anything without quality.

I guarantee you the BEST quality that can be produced at the LOWEST cost. That's a combination of satisfaction-giving that has made such a big hit with my customers and I know you'll appreciate it too. Remember, everything you buy from Brown carries my personal guarantee—and that means satisfaction or your money back.

Don't Wait Another Day—Send for Free Book NOW

Don't put off sending for my Bargain Catalog—even though you are not in the market for Fencing, Barb Wire, Gates, Steel Posts, Roofing or Paints right now, send for the book anyway. I want you to have my catalog—sooner or later you are going to need some of these things and I want you to be posted on the big money you can save by ordering from my Bargain Book. Mail coupon or send postcard today. JIM BROWN,

The Brown Fence & Wire Company
Dept. 2814
Cleveland, Ohio

BARB WIRE

A big saving in every spool. You will find some wonderful bargains in my book if you need Barb Wire.



ROOFING

Choice of several grades, whether you want a roof for permanent or temporary buildings you can save a lot of money buying from my catalog.



Composition Shingles

Choice of single or strip shingles—also choice of color. My low prices will surprise you.

Paints

A complete line of House and Barn Paints—Varnishes, Enamels, etc. My catalog saves you fully 81-3 per cent.



Roof Saver

A special preparation for renewing old worn-out roofs, makes them good as new. My factory prices effect big savings for you.



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