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VOLUME CLX

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DETROIT, MAY 5, 1923

CURRENT COMMENT

A lot of work and no play will soon make Johnny a city boy.

Many who go to the cities, go from farm to harm.

In home activities the ripping comes before the sewing; in farm activities, the sowing comes before the reaping.

Highway Administration

IN his message vetoing the two-cent gasoline tax bill recently passed by the legislature, Governor Groesbeck severely arraigned the administration of the highway program in this state. He stated that "By July 1 thirty-two of the fifty million dollars voted for highway purposes will have been expended, to say nothing of the vast outlay by county and federal authorities. No important trunk lines have been completed. Pavements ill adapted to withstand the traffic conditions have been laid, poor engineering methods have prevailed and adequate safeguards have not been provided for the protection of the traveling public. With only eighteen million dollars remaining, it is of paramount importance that no portion of it be wasted or badly invested."

In addition to this direct charge of inefficiency in the administration of highway affairs in this state, the message also contains less direct, but more serious implications in the following language:

"Undoubtedly there is much room for legislative action designed to promote efficiency, vision and economy in this important branch of state service, to remove its operations from baneful political entanglements and safeguard its administration against the control of material men and contractors.

In this connection it may be well to note that the highway department is the only important executive branch of the state government which was not placed under the supervision of the State Administrative Board, under the law creating that body which was passed two years ago. Perhaps allowances should also be made for the presumption that the statements in this message should be construed in the light of arguments in support of the veto of the gasoline tax, which had sufficient popular support to pass both houses of the legislature by substantial majorities. But the charges should be carefully sifted by the legis-

lature, to the end that the situation may be clarified.

Boards of supervisors in the various counties would also do well to look carefully into the administration of highway affairs in their various counties, since there is undoubtedly a generally firm conviction on the part of taxpayers that they are not getting the full worth of their money paid in taxes for road improvement purposes. Improved highways are a necessity under modern motor traffic conditions. That mistakes should have been made in their early development is natural, if not inevitable. But continual inefficiency in any branch of highway administration is inexcusable, hence the desirability of having the governor's charges thoroughly investigated before the legislature adjourns, as well as a thorough review of highway activities by the legislative authorities of the several counties, to the end that public confidence regarding the administration of this most important of our public improvements may be restored.

Cashing In On Experience

IT is a well recognized fact that "experience is a dear teacher." Most of us pride ourselves upon our ability to do things because of the experience we have had. Experience is a good teacher as well as a dear one, but it works very slowly.

If each of us had to begin at the bottom and could never learn anything except by our own personal experience, there would be no progress for the human race; but, thanks to the ingenuity of man, there have been ways of handing down from generation to generation the experience of others. Thus each generation learns many things from its ancestors and adds thereto the knowledge gained from its own experience. In this way the fund of knowledge grows and civilization moves steadily forward; the people of each century, of each generation, of each year, profiting always by the experience of those who have lived before.

We may be loath to give credit to others for the knowledge we possess, but whether we believe it or not, our own personal experience has added but little to the total sum. By far the greater part of what we are is based upon what we have had handed to us by others. We have simply absorbed thousands of years of experience without knowing it.

When we go out to plow, we cannot take credit unto ourselves for perfecting that very efficient implement, nor for even discovering that plowing is worth while. We are simply cashing in, so to speak, on past experience. When we plant high-yielding seeds, or breed pure stock, we are again cashing in on what experience has taught. When we continue to repeat the things that, with us, have proven good, we are once more "cashing in" on experience.

With these thoughts in mind, it is evident that he who profits most from experience is he who learns the most from others, who puts into practice the things that he learns, and who keeps everlastingly at it.

Pride And Push

ONE evening recently, as we returned from work, our five-year-old girl came running with a basket which she had completed at school. It was shapely, neat, and the colors were arranged harmoniously. The teacher had spoken well of this piece of work.

The little girl was all absorbed in what she had accomplished. She certainly took pride in this little basket. Her heart was full of enthusiasm and her eyes sparkled as she explained the merits of her product and rehearsed what the teacher had said about it.

The very next day she was able to bring home another basket which had even greater merit than the one of the day preceding. It was her complete devotion and pride in her work that enabled her to do each day a little better than she had done the day before.

Now, pride in ourselves is almost certain to lead to snobbishness, but pride in our work furnishes a way to better things. When we become so absorbed in the things we are doing that we throw our very soul into our efforts, we are then on the only sure way toward gaining better things on the morrow. Whether we be master or servant, leader or follower, we need to be sold thoroughly on the idea that our task is worthy of our time and energy.

Today, there is a weeding out process going on in rural communities. Those who take no pride in farming and look upon it as a means, merely of making a little money, are now leaving for the bright lights. While those who are devoted to agriculture who feel that it is a real worth-while part of our nation's business are sticking. The hope of farming lies with the group who take pride in tilling their fields and who feel that it is a dignified occupation.

Applying The Rule

IN another column of this issue, Prof. Cox, of the Agricultural College, gives some wholesome advice to the farmer who is anxious to do all he can in making up for the backwardness of the present season.

The rule for a backward season is, after all, a very simple one. It resolves itself into two words, "speed up." Not only does the rule mean the speeding up of the cultural operations, but it also means the speeding up of the soil by supplying an abundance of plant food which will be ready to push the young plants through to maturity without a hitch.

It is in the application of this rule that we find our farmers arranged into two classes: Those who have had the forethought to remove all obstacles in order to be ready to bring every pound of farm power to bear upon the field work at this time, and who have followed year after year a constructive program of soil building, such farmers will be classed as progressive, while those who have failed to do these things must be listed in the other class.

More and more are our farmers climbing out of class two into class one. Class two is growing smaller, also, through migrations to industrial centers. The whole tendency seems to be to bring to the whole agricultural business better farmers. Incidentally, this means that our farmers are, as a class, better able to cope with unusual situations like the present backward season.

Making Farming Safer

IT may seem almost paradoxical that the world's most fundamental and most essential occupation should also be the world's greatest occupational gamble. In the spring we sow with faith and hope, we work through the season with diligence, and in the fall we reap what the fates give us.

Perhaps this uncertainty is one of the things which make farming so interesting. It is said the turns in the road of life are what make it worth living. When we can look forward and see the results we lose interest and curiosity. It is like "hunching" by turning to the back of the book to see how the story turns out.

But, business is becoming more certain all the time. This is for our general welfare as it enables business to give greater service. A part of the

greater certainty is due to our greater knowledge of business fundamentals; but to forestall our slipping up on these fundamentals, we can insure ourselves against the unexpected. We can insure against destruction by the elements, we can insure our income, the credit we extend, against losses through dishonesty, and most of the other uncertainties.

In farming we can make results more certain by good agricultural practices, but every now and then old Nature cuts capers and does the unexpected. That is what makes farming a hazardous occupation.

The losses resulting from Nature's antics, or her anger, should be distributed. It is unfair that the few upon whom Nature has played her tricks should stand the loss. Crop insurance may prove a possible means of distributing these losses.

Therefore, we hope that the investigation of the United States Department of Agriculture along this line will result in the development of some practical and efficient method of taking a great many of the uncertainties out of farming.

Knickers and Snickers

I'VE been readin' the Kids' dept. Sophie says I'm in what you call my second childhood, which makes it perfectly alright for me to read that said dept.

Anyhow, I'm glad I'm readin' it, 'cause I find a lotta interestin' things in it. For inst., I find that the young ones is often doin' better at the same kinda work what their folks has been doin' pretty near all their life. Seems like the best way to find out how to farm is to ask your young folks about it. If you ain't makin' farmin' what it ought to be, that's just what you ought to do. Or, if you are kinda bashful about that, just let the junior dept. of the family have a acre



or two and you kin learn a lot by observashun.

There's other interestin' things in this department of youth. For inst., there's been a discussun about knickers and bobbed hair. Now, I can't say nothin' about knickers from personal experience, 'cause I ain't never wore them

About bobbed hair I kin say something, 'cause I've had my hair bobbed quite short for quite a few years, and I like it pretty well. It's lots easier to scratch your head when your hair's that way, and you kin leave your hair mussed up and put your hat on and no one will know the diffrence.

Now, about snickerin' at knickers. I know folks would sure snicker if they see me wearin' them, 'cause they ain't been used to it. But if I wore them when Geo. Washington did, it would be all right. Gentlemen wore them in Geo.'s time, but now, I guess, gentlemen what wore them wouldn't be no gentlemen at all.

Another question is, is the one what wears knickers what you call modest? Geo. Wash, wore them and thereby exposed his shins to public view. But Geo. was a modest man, 'cause he was the man what manufactured the rules of conduct and showed folks how to use them.

Now Sam Smithers goes to bed with his clothes on. That ain't 'cause he is modest, but 'cause he is too lazy to take them off. He acts like he thinks rules of conduct is something the school teacher uses on the bad boys, and he knows he's too big to be spanked.

Kinda looks like the man what's in the clothes is gotta do more with modesty than the clothes what's on the man.

HY SYCKLE.

Offsetting a Backward Season

Overcoming a Late Start with Spring Planting

By J. F. Cox

Professor of Farm Crops M.A.C.

THE spring season, with plowing, land fitting and planting to be done, is always a busy one, but this year with the season two or three weeks late, Michigan farmers throughout the state will start the year under a "peak-load" of work.

At this late date, comparatively little plowing has been done and oat and barley planting, which should be largely out of the way, is just beginning. Those located on tile-drained or naturally well-drained lands are favored in that they are able to make an early start. Also, those who got a lot of fall plowing done can be listed among the fortunate.

Oats, barley, spring wheat, and the clover, alfalfa and grass seedings that go with them, are the first crops to be planted. All of these crops are benefited by early planting, and it is a general rule that the yields of oats, barley and spring wheat are greatly reduced during years of backward spring seasons, which delay planting to the extent of two or three weeks. April plantings of oats, under like soil conditions, almost invariably yield considerably more than May plantings. Special effort must be made to get these crops planted as soon as the land can be fitted.

The use of 200 or 250 pounds of acid phosphate or a like amount of a high phosphate carrying commercial fertilizer, such as a 2-12-4, is strongly to be urged under this season's conditions in the case of all spring-planted grain crops. The effect of phosphate and proper fertilization will not only increase yield but will hasten the maturity of the crop to the extent of several days or a week, a mighty important factor when spring grains are planted late. Late planted spring grains come into bloom and the filling stage at a time when the hot drouths of mid-summer prevail. The earlier

planted crops have a longer period of growth under cooler and more moist seasonal conditions.

The time for plowing and properly fitting seed-beds for beets, corn and early potatoes is greatly reduced. It will therefore be more difficult to prepare well settled, thoroughly surfaced seed-beds for these crops. The proper use of the roller and cultipacker, immediately after plowing, and of the disc, spring-tooth and spike-tooth harrows in thoroughly fitting the seed-bed, can offset largely the lack of time given before planting season for the natural settling of the seed-bed.

Better seed-beds for beets and corn can be prepared if land, which must be spring-plowed, is disced before plowing. The furrow slice turns over with a loose earth mulch at the bottom so that movement of moisture in

the lower part of the furrow slice takes place much more rapidly. A properly firmed, well-fitted seed-bed can be more easily prepared in a short time if this practice is followed.

Beets and corn are both benefited by planting as early in the usual range of planting season as seed-beds can be fitted. With the season late, it will pay to fertilize both of these crops more heavily than usual, using from 250 to 400 pounds of a complete fertilizer, such as a 2-10-4 or 2-12-4 on the beet crop, or if land has been previously well manured, 300 pounds of sixteen per cent acid phosphate. On the corn crop 250 to 300 pounds of acid phosphate will yield and hasten maturity.

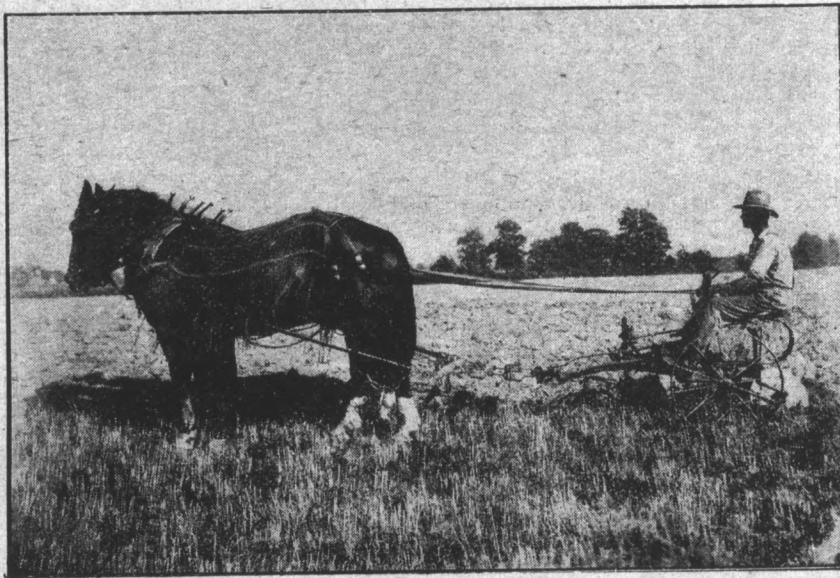
Unless fall plowed land is available, the early potato grower will have to "hump" in order to fit his ground and

plant the crop at an early date. Planting early is an important step in growing early potatoes successfully. For the late potato grower, the season has to date been favorable. Not only has the market strengthened, due to the freezing of early potatoes in the south and the extremely cold weather which has damaged potatoes in storage in the west, but the backwardness of the season in Michigan insures a high quality of seed stock for Michigan farmers. Certified seed is available in quantity this year and is of better quality than before produced. This seed will undoubtedly come from the pits in an unusually firm condition.

There is ample time for the proper preparation of seed-beds for late potatoes. The bean grower also will have time for preparing a good seed-bed, but it will pay, both for potatoes and beans, in cases where fall-plowed land is not available for beans, to plow as early as possible this spring so as to secure a firmly settled seed-bed and give time for working the surface into excellent shape.

Though the season will be short, no farmer in Michigan can afford to be so hurried that he neglects to treat his seed oats, barley and spring wheat with formaldehyde to control smut, to carefully select, test and grade his seed corn, if that has not already been done, and to treat seed potatoes with corrosive sublimate.

There will be a whole lot of plowing to be done in a mighty short time. Keeping the plow points sharp will help a heap. When spring is late in coming there is much satisfaction to be had in the scriptural guarantee of a planting time and a harvest, nevertheless, a tardy season should not be accepted with too much complacency, and certainly those who meet the situation with energy will receive the greatest rewards.



Dependable Power is the Hope of the Busy Farmer these Days.

How I Got Started with Soy Beans

Six Years Experience Has Made Me An Enthusiastic Grower

MY first crop of soy-beans I raised in an experimental way six years ago. The results have been so satisfactory that it is now one of my regular crops.

In June I planted one acre of soy-beans in a hog lot just for the hogs, and they did so well that the next year four acres were planted, and since I have planted from five acres to fifteen acres each for seed and hay and hog feed together. I have planted in rows and cultivated, and drilled the beans with a drill, leaving all the holes open and find that the best yields are obtained when the beans are planted in rows and cultivated. The cultivated crops make a better growth, have a better color and have fewer weeds in them.

I have experimented with soy-beans and cow-peas and find the soy-beans will endure more extremes of drouth and wetness and withstand more cold weather than cowpeas. If the conditions of soil and temperature are favorable the cowpea will give a large yield of hay on a small acreage, but if the weather is cold and wet before the peas are up the crop is sure to be damaged. I have raised the two crops side by side and find the soy-bean the most desirable crop on my farm.

Soy-beans will thrive on any well-drained field that will produce good crops of corn and we have secured

fair crops on some of our thinnest soil. The best crops have been grown on heavy loam soils and I believe that the proportion of beans to hay is greater on such soils than on the richer black soils. If grown for seed the leaves fall off and remain on the land to be plowed under for fertilizer.

Soy-beans are an easy crop to plant and cultivate. I use a common hoe grain drill and stop up all but the middle and two hoes next to the outside. This leaves the rows twenty-eight inches apart. By following the wheel track back across the field I can plant

three rows at a time and the rows be properly spaced. I plant the beans about one and one-half inches deep. If the land is in good state of tilth I plant about two and one-half pecks to the acre. The first week in June is the best time to plant soy-beans in this section.

Soon after the field is planted I go over it with a weeder or light smoothing harrow with the teeth set well aslant, but care must be taken not to do this after the beans have sprouted or the plants will be killed. This is a great help in killing weeds and gives

the tender plants an opportunity to break through the crust and make a uniform stand. As soon as the plants are three to four inches high we cultivate them with a one-horse cultivator set about twenty-four inches wide. Two or three cultivations give the best results. It is an easy crop to cultivate if the work is done at the right time.

I plan to harvest a large portion of the crop when I am filling my silos and mix it with the corn crop when the filling is being done. By keeping the team employed so that I haul about one load of soy-bean forage to two of corn, I secure about the desired mixture in the silo. What I cut for hay for my sheep I harvest as soon as the pods are well-formed and before they have attained much size. As soon as the hay begins to ripen they are difficult to cure without the leaves falling off. Soy-bean hay is easier to cure than clover if proper precautions are taken.

If a crop of beans is wanted the crop should stand until the leaves nearly all fall off. I then cut and rake when the dew is on and leave in piles, turning occasionally for six or eight days. For feeding pigs we prefer to feed the crop from the mow without threshing. If the beans are threshed for seed a special type of threshing machine is required, as an ordinary thresher will crack too many of the beans.—R. Simpson.



Like Most Crops, Soy-beans Respond to an Abundance of Plant Food and Good Cultural Practices.

Comments from the State Capital

By Our Lansing Correspondent

THE law-makers, wilfully disregarding the eight-hour day, have been putting in double time in the legislative halls during the past week in an effort to save at least some of the bills out of the jam which has been piling up. Over nine hundred bills have been presented this session, probably more than at any previous session. Appropriation requests have had the right of way and have been passed in liberal quantities.

Life isn't all pleasant for the law-makers. While the public generally declares that we are suffering from an overdose of legislation and that it would be a marked relief if the legislature would meet and merely pass the appropriation bills and go home, still, when they don't pass many important bills they are heralded as a "do nothing" legislature.

Appropriations Are Normal.

Indications are that the appropriation totals for the next two-year period will not vary much from those of the last biennial period, which were approximately \$58,000,000. Most of the appropriation bills have been passed without much debate, although the senate and the house have experienced considerable difficulty in agreeing on the totals.

However, when the bill to finance the state department of public safety came up for final passage the representatives deviated from their rule and the bill slid through with only a narrow margin of three votes to spare. This vote expressed the hostility which has been developing towards the state police, or constabulary, and was an indirect attempt to put them out of business.

Tax Forms Only Relief.

With appropriation totals as big as ever, it seems that the only relief to be secured by the overburdened general property taxpayers must come through a re-distribution of the tax load. Several rather belated attempts are being made to carry out such a program. Bills to remove the exemption of municipal bonds from taxation, to tax all foreign and domestic bonds, to tax mineral reservations, to limit the amount of tax to be imposed on tangible property for local and state purposes and to secure the more complete listing of personal property are being considered, but there is some doubt that many of them will ever become law. The Byrum income tax bill has not yet escaped from the senate taxation committee and they do not seem anxious to report it out, unless with the understanding that it will be killed on the floor.

Farmers Not to be Vets.

Farmer members of the house of representatives were evenly divided over the issue of allowing farmers to vaccinate their own hogs for hog cholera, as proposed by Representative Charles Evans, of Lenawee county. The bill would allow farmers to take a short course of instruction to be given by the extension department of the M. A. C. and, after successfully completing such a course, to treat their own hogs.

Representative Evans, in support of his bill, stated that leading hog growing states such as Idaho, Kansas and Illinois allowed farmers to do this work under restrictions similar to those provided in his bill. He declar-

ed that in these states the results were very satisfactory and resulted in a great saving to the farmers and in a marked decrease in the disease. However, Representative John Espie, of Clinton county, seemed to voice a very popular sentiment when he said that he considered it a very dangerous bill and that it would probably result in a spread of this dread disease. The bill was finally defeated by a vote of thirty-nine to forty-seven.

Appropriations for M. A. C.

Fear of friends of the Michigan Agricultural College that the legislature was not going to make an appropriation for the support of this progressive institution was dispelled when the house passed with but one negative vote, Representative Ladd's bill allowing \$485,000 for each of the next two years for college building and extension purposes.

The items were as follows: Extension work, \$150,000; research work, \$35,000; horticultural building, including greenhouse and equipment, \$200,000; additions to power house and equipment, \$75,000; farm and miscellaneous buildings and additions to other buildings, \$25,000, making a total for each of the two years of \$485,000.

This important appropriation bill is now being considered in the senate.

Potato Price Discrimination.

Protection of farmers' cooperative elevators against unjust practices of old-line potato buying concerns, as provided in a bill sponsored by Senator Bernie L. Case, of Ithaca, receiv-

ed the unanimous approval of the senate.

This bill was drafted by the Michigan State Farm Bureau and had the active approval of the Michigan Potato Growers' Exchange and Michigan Elevator Exchange. Its passage would prevent the prevalent custom of potato buying companies of paying more than the market price where there is a farmers' cooperative elevator and then paying way below the market price where they have no competition. A difference in price paid by such a company for the same grade of potatoes on the same date, after allowing for the difference in transportation cost would be regarded as unjust discrimination.

Highway Program is Big Issue.

Now that the gasoline tax is dead, at least as far as the present session of the legislature is concerned, the lawmakers have been concentrating their attention on the governor's weight tax bill which he has proposed to take the place of the gas tax as a means of raising highway revenue. The senate spent nearly a week amending this bill and finally got it in such shape that it went through with a vote of twenty-six yeas as against six nays.

Opposition to the bill was largely due to the fact that it places the control of the revenue largely in the hands of the state administrative board and would remove it almost entirely from the state highway department. The bill in its present form would raise more money than would the Warner

two-cent gas tax coupled with its companion bill to reduce the auto licenses, although the governor favors this bill and opposed the gas tax bill on the ground that it would raise twice as much revenue as necessary. It is also interesting to note that \$1,000,000 a year is appropriated to the highway fund from the general fund under the terms of this bill, while the gasoline tax would have entirely removed the burden of highway support from the general property of the state.

Truth-in-Fabrics Defeated.

Another bill regarding which the farmers were disagreed was Representative Sanson's proposal to require the labeling of all the woolen goods sold within the state. The bill was modeled after the law now in force in Wyoming and after other bills which are receiving favorable consideration in many state legislatures during the present session.

Debate on this bill was somewhat one-sided and not very illuminating, for after all of its enemies had unburdened themselves and before its supporters had presented their arguments, someone moved the previous question and the motion carried, thus shutting off all further debate. The Sanson bill was regarded by all who had studied it as being one of the best state truth-in-fabrics bills which have ever been drafted and had the approval of the wool department of the Michigan State Farm Bureau.

Child Slavery Still Probed.

Charges of child slavery in the sugar beet districts of the state are being further investigated by the joint legislative committee which recently made a personal investigation of conditions in the Thumb district. During the week Miss Sarah Brown, of Washington, who was one of the investigators of the National Child Welfare Committee which broadcasted over the United States the charges of child slavery in the Michigan sugar beet fields, appeared before the legislative investigating committee and submitted some of the evidence on which the charges were based.

Documentary evidence was presented by Miss Brown to show that in 274 families visited in the sugar beet districts there were 894 children between the ages of five and sixteen years who were working in the sugar beet fields under the contract labor system, many of them spending from ten to fifteen hours a day in the fields. She declared that, on the average, in 115 school districts investigated, that 25.2 days of school were lost in the spring by children from 199 families who came out from the cities to work in the beet fields until fall, and that after the school session started in September an average of 29.7 days of school were lost by these children.

In spite of the evidence presented by Miss Brown, the legislative investigators feel that they have every reason to believe that the charges which were broadcasted over the nation were grossly exaggerated. In fact, Miss Brown admitted that their report might have created somewhat of a misrepresentation. She knew of only two cases where children had met with injuries while topping beets, while their report created the impression that accidents of this nature in the sugar beet fields were so common as to be almost the rule.

Believe in Legumes

Adopt Program of Three "L's" in their Farming

ON the outskirts of the city of Gaylord we find the old Bailey homestead, with its acres of alfalfa proclaiming to the world that here are some more farmers that firmly believe in the close relationship which exists between the production of legumes and success on the farm.

A cursory glance through the barns, and a brief confab with the Bailey Brothers informs us at once that these young men have adopted, in its entirety, the program of "Limestone, Legumes and Live Stock" for success on the farm.

Don Bailey says: "We are trying to make each acre and each cow an efficient producing unit and we have come to the conclusion that a cow can be fed most economically where alfalfa is used as the roughage; also, that an acre of land with a good stand of alfalfa is being used about as efficiently as it is possible. Providing the limestone for the crop simply insures us against a failure or poor stand and it is mighty cheap insurance."

Nor do we have to take his word for it. Last fall they had over thirty-five acres seeded to alfalfa and the stand throughout was very hard to beat. Last summer they had an average production of over three tons per acre. Although about thirty head of cattle have been trying to dispose of this hay during the winter, there are

going to be several tons of excellent hay for sale unless more cattle are purchased.

Bailey Brothers are not the only farmers in Otsego county that are raising alfalfa-hay, however. Over 700 acres were produced last year. Three years ago there were only 235 acres, and \$40,000 worth of hay was then being shipped into this county annually. This year less than \$4,000 will be shipped in, and probably as much will be sold out of it. Three years ago, the average yield of hay per acre was thirty-seven per cent less than it was during the past year, thanks to the substitution of legumes in the place of timothy hay.

Why did this all take place so rapidly? Because, three years ago, a county agent came to this county who believed thoroughly in the "Three 'L' Program," and he proclaimed the merits of alfalfa from the housetops. Incidentally, he brought into the county, through the farm bureau, enough guaranteed pure legume seed to sow 4,500 acres of land. To him belongs the credit for the thirty-seven per cent increase in yield per acre, the 300 per cent increase in alfalfa acreage, and the elimination of the annual hay bill of over \$30,000. To him and to his wide-awake farmers goes the credit for this marvelous development and what such a combination will do in the next three years will probably exceed our imagination.—E. J. L.



Our Champion Corn Grower

Mr. Smith of Mulliken, Produces 90 Bushels of Shelled Corn Per Acre

MORE than ninety bushels of shelled corn per acre, eleventh in a class of over one hundred entries at the International Grain and Hay Show, best hundred ears at the annual show of the Michigan Crop Improvement Association—this is the record of a seven-acre field of Duncan corn grown by P. A. Smith, of Mulliken.

The ninety bushels of shelled corn per acre is what really talks. The average Eaton county grower got thirty-seven, a little more than one-third of what Mr. Smith's Duncan produced. At seventy-five cents per bushel, a shade under present local elevator prices, that extra fifty-three bushels per acre are worth \$39.75, for the seven acres \$278.25. That's enough to buy certified seed and good fertilizer for several more good fields of corn.

Here is how Mr. Smith did it: The soil is a good clay loam and the field, the previous season, had been a clover pasture. To this sod there was added ten loads of barnyard manure per acre. The field was then fall-plowed six inches deep.

In the spring, as soon as the ground was workable, double discing of the field was accomplished. Then came a broadcast application of 200 pounds per acre of sixteen per cent acid phosphate harrowed in with the spike-tooth. This was made over the whole field except for one drill width, enough for two corn rows, to check the value of this fertilizer application. Operations with the disc and spike-tooth



Looking for the Good Ones.

were repeated just prior to planting and the seed-bed was finally firmed with the cultipacker.

In previous years Mr. Smith had been growing a large red corn coming from Illinois but desiring to get something better acclimated to Michigan and to Eaton county in particular, he turned to the Duncan corn. J. R. Duncan originally developed this variety on his farm at Vicksburg and he is

now continuing his corn breeding work at the Michigan Agricultural College.

The Duncan corn has been a southern Michigan leader for several years and Mr. Smith secured seed of the most improved strain of this variety directly from college increase fields. He planted it, three kernels per hill, May 16.

The cultivation of the growing corn was systematic and thorough. First, Mr. Smith used a shovel cultivator, then later more shallow working implements were used, keeping out the weeds but not going deep enough to injure the corn's surface feeding roots.

This field was ready for harvest on September 15. The corn had completely matured in 120 days. When kernels were in the early dented and glazed condition the field would have given an excellent yield of silage. The stalks were tall, vigorous and leafy.

An interesting lesson was given by the two-row strip which had not received the phosphate application. The plants in these rows were much less growthy. The ears were not so fully developed and the time of ripening was delayed.

Mr. Smith's corn had passed the field inspection of the Michigan Crop Improvement Association, so at harvest time he selected, from the best standing plants, over 300 bushels of good seed ears. Finding good seed ears in this field was not a difficult job. Every stalk was overdoing itself to come through with a prize-winner. This seed was stored in an airy room

and dried down to 13.5 per cent moisture. Final inspection made by the Michigan Crop Improvement Association of the entire lot of seed under storage showed it to be in excellent condition with a germination record of ninety-eight per cent. It was finally passed and registered by the association, the registered class consisting of the most desirable seed lots inspected in a given season.

The one hundred ears which gave this lot of corn first honors at the Michigan Crop Improvement Association show were excellent illustrations of good seed corn type. Mr. Smith, along with L. L. Lawrence, of Decatur, and other Duncan seed corn growers, has been following Mr. Duncan's own system of picking sixteen-rowed ears averaging about nine inches long. The kernels these men look for have good depth, a width of the kernel which carries well to the cob, and above all, the kernels must be glossy, and the germs lustrous and oily in appearance, indicating health and vitality. A moderately smooth indentation, not a rough chaffy kernel, is their ideal.

"M. A. C. Duncan is some corn," said Mr. Smith last fall as he was completing his harvest. "It's a bang-up good ensilage corn and a ripper for grain."

Having followed that seven-acre field from the start, and having looked over those stores of uniform golden-yellow seed ears, we agreed—"it's some corn."—R.

A Farmer's Experience with Quail

His Views are at Variance with Those of Other Farmers

By O. Ripley

TWENTY-FIVE years spent in constantly watching game birds have changed my opinion on many things, especially the tremendous value placed on quails by some agricultural writers.

My observations have been made on remote, poor, badly tilled lands where quails were plentiful, as well as on clean farms where very few were to be seen. It is these clean, well tilled farms which have done more to exterminate quails than all the sportsmen in the world.

A farmer who depends upon quails to keep his land free of insects and weed seeds will never make a success. I have accomplished more with a turning-plow in a day at the proper time to rid my farm of weeds and other pests than the quails on the place were able to do during a period of ten years.

I have successfully raised game birds in captivity, and twenty-five years' experience leads me to believe positively that game and other birds thin down weeds, wild grasses and other pests to an ideal stand. Were all the seeds left to sprout and grow weeds or grass like any other crop, they would very largely smother themselves out.

In no instance have I found that quails make headway against insect pests. I had twelve beves of quail in a crop of peas which the army worms attacked. After a day or two the birds refused to feed on them, and my peas were destroyed. I have had wheat destroyed by chinch bugs in a field where quails were plentiful. The birds didn't check their inroads in the least. To discover if they had fed much on them I killed a few and found one chinch bug in the craw of one

quail. When occasionally they picked up a few it was at a period when this was of no value to agriculturists.

As I review my interest in quails I regard it as time wasted, considering that I gained no profitable results on my farm. By prohibiting shooting I made a lot of enemies among my farm neighbors. One thing I noticed particularly after I closed my lands to sportsmen: My quails did not increase, while hawks and other predatory varmints which sportsmen destroy increased perceptibly. I figure that a reputable sportsman who appreciates the courtesy and privilege of shooting on a farmer's lands pays him by ridding his place of hawks and other destructive birds and animals.

Changing my tactics when I saw that quails were not increasing, I permitted moderate shooting on my place, upon getting a promise from sportsmen that after a bevy had been shot down to four or six birds it would not be molested further. The following year an increase was immediately noticeable, which I might have expected, on account of new blood being introduced. This has been not only my personal finding, but that of many other farmers of my acquaintance also.

If farmers think they have good reasons to protect quails, and are serious about it, believing them to be of such inestimable value, why do they cultivate their farms so that the production of quails naturally is almost impossible? They are not killed out by hunters, but by ditching, intensive cultivation, woven wire fences and the farmer's determination not to let a single weed mature its seed on the farm, as well as by close pasturing.

These are the reasons quail freeze to death in winter. They are not exterminated by hunters.

The true sportsman I have come to admire. The rowdy I run off the farm as soon as he puts in his appearance. The sportsman pays to help protect game, and should have a part of it for reward. One hog in a field has destroyed more quails' nests than many hunters.

I know a farmer who has one hundred acres of well-tilled land close to

a big tract of range land, which affords his live stock free pasturage each year. He would not let the owner of that wild land hunt on his farm for love nor money. Yet when he burns over that wild land every spring to produce better early grazing, he destroys more of that man's game than a hundred hunters.

How much wealth each year can we attribute to quails? Scientists tell us things which practical farmers know have little bearing on actual results.

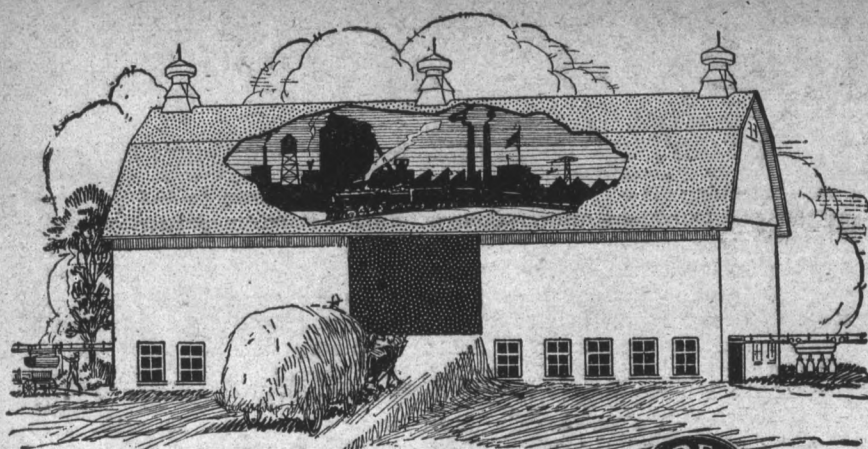
We can increase quails, if we really think they are as valuable to us as some agriculturists claim, only by becoming negligent farmers and allowing our farms to revert back to conditions under which quails thrive naturally. The thriftless, weed-grown and briar-infested farm will always produce more quails than the modern, well-tilled one. We are merely deceiving ourselves when we try to protect quails by farming in the modern way and expect the desired results through anti-trespass and game laws. The farmer who raises paying crops is not the one who attributes his success to game birds, but to proper plowing, soil fertility and the best farming methods for his community.

I cannot say conscientiously that I have helped to protect quails when I cleaned my fence runs, drained my flats and pastured my woodlots. I knew this was paying me a higher profit than quails, and I was getting rid of enemies to agriculture by other means more paying and dependable. My records show no decrease in weed and insect pests when quails were abundant, and I have kept records on this subject covering a long period, much more consistently than has the average farmer.

Grown in Otsego



A field of corn near Gaylord on the fifth of August. This shows a remarkable growth for that time of the year. Mr. Lytle, county agent of Otsego, has been, and is, "the man behind the gun" in the big development which has taken place in this county during the past three years.



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OWNERSHIP OF FEE IN ROAD.

A. and B. and families were out car riding and there was a nut tree by the road outside of C's fence. A. and B. were picking up the nuts. C. said A. and B. had no right to pick up the nuts. B. told him the tree belonged to the road. C. said he owned out to the middle of the road. Is C. right?—F. K.

C. is right.—Rood.

CITIZENSHIP BY MARRIAGE.

In a recent issue it was stated in answer to a question, that the wife acquired the citizenship of the husband by the marriage, whether he be alien or citizen. Another attorney has called my attention to the change in the law in that respect at the last session of congress, providing that the American woman marrying an alien shall not thereby lose her citizenship without express renunciation of it by her; and that an alien woman shall not acquire American citizenship merely by marrying a citizen, but only by due application and court order.—Rood.

PRIVATE FOREST RESERVE.

I read in a recent issue of the Michigan Farmer about the Woodland Act, which provides for exemption of woodland lots from taxation. I have thirty acres of young Norway Pine, not fit to cut for a good many years. What can I do to have them placed on the exemption list?—R. G.

Public Acts of 1917, No. 86, provide that upon filing with the county treasurer of a contract on forms to be provided by the State Board of Agriculture any owner of a tract of land not exceeding 160 acres, at least one-half of which is under cultivation, may upon stocking not over one-half of the tract with approved trees to the extent of 1,200 to the acre, or planting enough in an original forest to make the trees not over six feet apart each way, and keeping the tract stocked according to rules of the board of agriculture, and excluding all live stock until the trees are all at least four inches in diameter, and cutting no trees without license from the township assessor and payment to him of five per cent of the assessed value of the tree removed, and otherwise complying with the other and numerous provisions of the act, an exemption from taxation may be had of the tract so reserved and kept, except \$1.00 per acre.—Rood.

DRAINING LAKE.

There are five farmers whose farms border on a lake. One has a recreation park with bathing and rowing, which means his living. One farmer became angry at one of the others and had a culvert put across the road so as to drain the lake, which it is now doing. This particular farmer is not injured in any way by the lake being high. Not one of the other four wish to have the lake lowered. Has this farmer the right to do this to please himself?—M. H.

Either of the other owners may have the draining enjoined.—Rood.

FERTILIZERS FOR ONIONS.

Can you give a good fertilizer formula for onions? Do you think this is good? One bushel of lime, one bushel of poultry droppings, one bushel wood ashes, twenty pounds of sulphur, ten pounds saltpeter, five pounds of table salt per acre? In using wood ashes as potash how much would you advise per acre?—A. C. M.

The best fertilizer for onions on muck soil is one analyzing 2-8-16. Your formula would probably be satis-

factory; however, the materials would be hard to mix.

Wood ashes are a very good source of potash and also contain a small quantity of phosphorus and some lime. The amount depends largely on the wood. Hardwoods give a higher per cent of potash than the softer woods. The amount would vary from 200 to 500 pounds per acre. Sources of wood ashes are very limited.—C. P. Lewis.

FERTILIZING GARDEN BEETS.

I would like to know which is the best fertilizer for small garden beets when manure is also used. And how much must be put on an acre with rows twelve inches apart, and also whether to drill the fertilizer in rows, or broadcast?—J. K.

Root crops such as early beets, respond very readily to applications of nitrate of soda in the early part of the season. A complete fertilizer consisting of 4-8-10 is very satisfactory. This should be applied at the rate of 500 to 1,000 pounds per acre, either with the fertilizer attachment on an ordinary seed drill, or it may be broadcasted.

Listen! Bean Growers

HAVEN'T you discovered, in your experience in planting, cultivating or harvesting beans, some little short cut which has saved you time and money. The readers of this journal would like to know what your time and money saver is.

All that you need to do, is to describe briefly on a post card or in a short letter, your short cut and mail to me, The Handy Man, Michigan Farmer, Detroit, on or before May 9. I'm the guy who will do the rest. And, I am going to do something more. To each of the five who send in the best suggestions, I will mail, postpaid, a pair of those unspeakably useful high-class combination pliers. They will serve you in a thousand ways.

If additional applications of nitrate of soda are to be made, they may be applied with any fertilizer drill after the plants are up.—C. P. L.

TEACHERS' PAY AND RESPONSIBILITY.

What would be the result in case a teacher did not terminate her school year to correspond with her contract? Providing she put in time at the school house without a notice from the board, could she collect pay for the time? May a teacher be responsible for misuse of buildings, furniture, apparatus, library books, etc., by the pupils while under her control?—X. Y. Z.

The teacher is entitled to her pay for teaching if she is at the school house ready to perform her part of the contract. In other words, the teacher is entitled to pay for time lost if the fault does not rest with her. In order to be more specific in answering a question of this kind, we would need to know all the facts that enter into the question.

A teacher is not responsible for the misuse of buildings, furniture, apparatus, library books, etc., by the pupils while under her control. The parent is responsible for any damage that might result because of misconduct of the pupils, at least so far as the items that you have mentioned are concerned.—W. L. Coffey.

THE FARM WORKSHOP.

I WOULD not consider a farm properly equipped that did not have a repairshop upon its premises. Hardly a day passes but what it proves itself an almost indispensable helpmeet. The class of repair work to be done, together with the farmer's mechanical ability, should be taken into consideration in the equipment of the workshop.

Well do I remember my first outfit of tools, for I sure did love to tinker. I had a cold chisel that came with the mowing machine and I believe was made from malleable iron, with the business end hardened enough to chip out every time I tried to cut anything harder than lead. An assortment of wrenches that had outlived their parent machines that they had accompanied. A saw, given as a prize with baking powder and with which one could, with the expenditure of huge quantities of energy and absolutely no regard for time, wear a board in two. These, with a jackknife, hammer and a few other miscellaneous articles,



Getting His First Lesson in the Fox Raising Business.

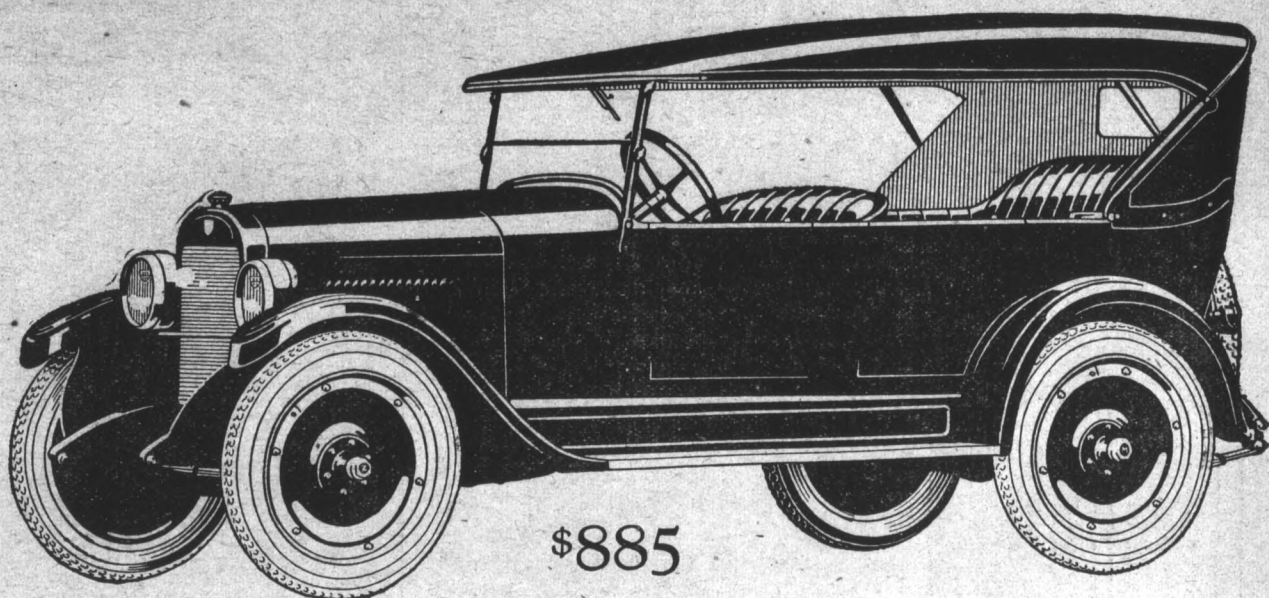
constituted my entire equipment of tools.

The farmer who is mechanically inclined and loves to devote his spare moments to mechanics and scientific experiments would do well to purchase a substantial screw-cutting, engine lathe, for they are the king of tools. But for ninety-nine per cent of the farmers this would be a fruitless expenditure of money. The farmer should always avoid increasing his overhead expense by avoiding tying up capital in expensive machinery for which he has little use, or knows practically nothing of its proper operation. He should, however, see that each unit of his tool equipment is of the very best quality. For no artisan is skillful enough to accomplish meritorious work with inferior tools.—Greeley Everitt.

FAIL TO GET CANNING FACTORY.

THE effort to secure a pea-canning factory for Sault Ste. Marie has failed. After a strenuous campaign among the farmers to secure in advance the necessary pledged acreage, the concern which was expected to locate at the Soo, brought forward a hitherto unrevealed proposition calling for the local financing of the enterprise, the Soo Times reports, and this put a quietus on the undertaking. Having ascertained that Chippewa county farmers are willing to do their part in providing the peas, the Soo commercial club will seek another plant for the city and thus insure that the preliminary work already done shall not be in vain and that Chippewa farmers will gain this additional market for their product.—Chase.

The Good



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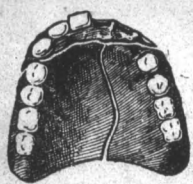
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New Corn for Our Farmers

LAUGHLIN'S Golden Dent, a variety of corn resulting from twenty-seven years of selection work carried on by the Laughlin family is to be first distributed for general field use this spring by Charles Laughlin, of Dansville.

Originally coming from Reid's Yellow Dent, a famous corn belt variety, the Laughlin corn has been smoothed up, made earlier and adapted to seasons and soil conditions of southern Michigan. The present strain has been maturing with safety in northern Ingham county. It is a bright golden yellow in color, with glossy moderately dented kernels of good depth and carrying their breadth well in to the cob.

Mr. Laughlin's yields with this corn have been very favorable. In the 1922 variety tests conducted by the Michigan Agricultural College, the Laughlin corn proved slightly superior to the Duncan variety for grain production, though not quite so desirable for ensilage. Duncan corn, it may be said, has for years maintained a very high standard of excellence both in quality and productivity in Michigan's southern three tiers of counties.

Laughlin corn has thus far been grown only by Charles Laughlin himself and a few of his neighbors to whom Mr. Laughlin furnished seed in order to avoid cross-pollination with

inferior varieties. Despite this limited production the new variety has established an international reputation for quality. In the 1920 International Grain and Hay Show, Laughlin's corn won sweepstakes over all corn grown in regions of similar climate and in the 1922 show, second, third, fifth and seventh places in the ten-ear class and a championship in the single-ear class, added still more to its laurels in the show ring.

Finally, satisfied that his corn breeding work had reached a point where the results would be of real benefit to Michigan agriculture, Mr. Laughlin this spring has made his first offer of seed for general distribution. The Michigan Crop Improvement Association in its desire to foster such work has given recognition to the Laughlin variety and is listing the seed in the Elite class on its 1923 corn list.

Corn qualifying for this highest Michigan seed standard must be the results of very careful breeding and selection worthy of a special nature and must have demonstrated, in tests conducted by the Michigan Agricultural College, that it possesses exceptional merit for Michigan conditions, both as to quality and productivity. The new variety will undoubtedly play an important place in the future corn growing industry of southern Michigan.

How to Treat Seed Potatoes

Will you please send me directions for treating potatoes, and would it be possible to treat them now and dry and lay aside until planting time?—L. C. D.

The diseases of potatoes which can be controlled by seed treatment are scab and black scurf (Rhizoctonia). These diseases live on the skin of the tubers. The most effective treatment for scab and black scurf is the soaking of potatoes for thirty minutes in a solution made by dissolving four ounces of a corrosive sublimate in thirty gallons of water. If seed potatoes are affected only with the scab disease, they can be treated by soaking in a formaldehyde solution, the strength of which is one pint of formaldehyde in thirty gallons of water. The time of treatment is thirty minutes. Since the black scurf is the more serious of the two diseases, the treatment most generally recommended now is that of the corrosive sublimate because the formaldehyde does not control black scurf disease.

In handling corrosive sublimate, one should be very careful to follow the directions closely and should always remember that this material is a very deadly poison. Be sure to dissolve the corrosive sublimate crystals in a quart or so of very hot water before adding it to the thirty gallons of cold water.

Seed potatoes can be treated several weeks before planting them if, after treatment, they are kept in a cool, well ventilated place where they will be exposed to sunlight. The floor of a lighted cellar or barn is a good place on which to spread out the potatoes in a thin layer. Withing a few weeks under this treatment the potatoes will develop short green sprouts which will aid materially in producing a satisfactory stand.

After the potatoes are taken from the treating solution, they should be spread out immediately so that they will dry quickly. If potatoes are placed in piles or in bags when wet, they are very apt to heat and their sprouts will be seriously injured.

Green sprouting is a term ordinarily applied to this method of handling seed potatoes. Potatoes that are green sprouted will remain quite firm and

generally produce more vigorous plants than those that wilt down in a warm cellar.

After the potatoes are treated care should be taken not to reinfest them with the scab or black scurf disease by placing them in a contaminated sack, crate or bin. Oftentimes the green sprouting of potatoes helps to increase the yield and hastens the time of ripening.—H. C. Moore.

UP-TO-DATE BARNs SAVE TIME.

I WOULD like to tell you of my experience in old-fashioned and up-to-date barns. About three years ago my barns were struck by lightning and were burned to the ground. This was in the fall, and all my hay was burned. My neighbor wanted to sell out, so I bought his land. He had old-fashioned buildings and, the winter being hard, I and my three sons had all we could do to take care of the cattle.

The next year I built up-to-date buildings, and now I can handle all the work myself. I go to the barn at five and get through at seven. I then have time to do blacksmithing and pruning. With the use of the feed carrier and feed alley I save feed and time. Instead of going behind each cow with hay, I can do it in one row.—Edward Franczek.

RAILROADS AND INTERURBANS TO COOPERATE.

A RECENT ruling of the Michigan Public Utilities Commission will make it necessary for steam railroads to enter into reciprocal freight transfer relations with the electric lines of the state. By this ruling, the railroads are compelled to issue joint rates for freight from towns which have only interurban connections.

In the past, the railroads have maintained that they did not have to deliver freight to electric roads; and if the shipper wished to have freight transferred, he would have to come to the point of transfer to pay the railroad freight, and then turn it over to the electric road.

Francisco Farm Notes

By P. P. Pope

Sowing Grimm Alfalfa.

OUR plans this spring call for the sowing of ten acres of alfalfa. It will be sown on a field that grew sugar beets last year. The ground is quite clean and will not require plowing. The tandem disc and the spring-tooth harrows behind the tractor will make short work of the fitting. We shall sow Wisconsin pedigree barley at the rate of two bushels per acre and apply along with it a twenty per cent acid phosphate at the rate of 200 pounds or more per acre.

As stated last spring in these notes, after comparing our severe case of winter-killing of the common variety with the slight damage to a neighbor's stand of Grimm, it is Grimm for us this time. This same neighbor is trying out some of the Michigan seed from Monroe county this year. I see no reason why it should not prove equal to the Grimm as this variety has become quite thoroughly accustomed to our Michigan climate. We will compare the results with interest the coming year.

Little Pig Losses.

Reports are coming in from all sections of the state telling of severe losses of the spring pig crop. It has been a cold, hard spring for baby pigs. Scores of litters have given up entirely, some of them in spite of what sounds like good treatment. Others because of the carelessness or ignorance of their attendants. Many thousands of little pigs are annually doomed to a brief sojourn with life. It seems it must be ever so. But when the time comes, if it ever does, that people who aspire to raise hogs, will give some time and careful study to hog nature and provide the conditions which that nature demands, then, and perhaps not till then, will the high percentage of death losses be reduced.

Using Commercial Fertilizer.

Based upon careful trials begun nearly twenty years ago, and carried on through several years, it has become our regular practice to use commercial fertilizer quite liberally. Phosphorous has undoubtedly been the limiting element in our soils but, at the stage of fertility in which we have found them here on Francisco Farm, we have gotten a great deal of satisfaction from the use of a little nitrogen and we have been quite convinced that a reasonable application of potash pays.

As the soil becomes more liberally supplied with humus, as a result of growing heavy crops of legumes—which the fertilizer has helped to make possible—and frequent applications of barnyard manure, we are gradually substituting a high-grade acid phosphate for some of the complete fertilizer.

A Long Program.

This silo building program, like paying off the mortgage, is a long drawn out affair, especially if we must make the farm pay dividends while doing it. We believe, however, that most every farmer can work out his own salvation right on his farm if he sticks tenaciously to a proven system of diversified farming and does not allow his fertility to lapse. We believe in keeping faith with the farm and carrying out the program that has proven best in the past, regardless of the fact that it has not paid in dollars and cents for three years. The time will come when the farm will pay and we want to be in a position when that time comes to get all that is coming to us.

Following this line of reasoning we are continuing our fertilizing and crop-

ping program as usual, using a complete fertilizer with plenty of potash (2-10-4) on the sugar beets, and a twenty per cent acid phosphate on the grain crops.

UTILIZES BARREN SPOTS IN WHEAT FIELDS.

HERE is a little lesson in efficiency. Robert Brauer, of Gratiot county, is going to give the land where wheat was killed out by ice or heaving, something to do. Last Saturday he took the grain drill and sowed barley on these barren spots. The barley should mature and be ready to harvest, if not as soon, shortly after the wheat is fit for the binder. Should the two grains become somewhat mixed, and this can hardly be avoided, they will be fed to the hogs.

There is a growing belief among leading dairymen that a real demand for a national brand of butter can be developed.

WATER-GROUND Means Common Sense In Our SECURITY Lightning ROD SYSTEM

Proper Installation is the Paramount Feature in the Purchase of LIGHTNING PROTECTION

A lightning conductor grounded in dry earth is worse than useless; it is dangerous. Our policy is to see that the property owner gets real protection. There is a very great difference between getting guaranteed protection and merely buying lightning conductors. Our guaranteed permanently Moist Ground connection insures a perfect operation of your lightning rod installation at all times, under all conditions. Any purchaser of a SECURITY SYSTEM can have an official Okay on his installation free of charge by writing us and describing it in detail. Our grounding system is only one of the many fine features of the



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An investment in a SECURITY SYSTEM calls for no risk on the part of the purchaser. His investment is held by us subject to demand if the SECURITY SYSTEM fails to protect. Don't invite disaster by further delay. Protect life and property. Write today for book of particulars in detail.

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Big illustrated book tells about the Johnson Dust Sprayer, which rids fruit, potatoes and truck of destructive pests. 7 times faster than spraying, half the cost. Simply send name for this interesting profit making book.

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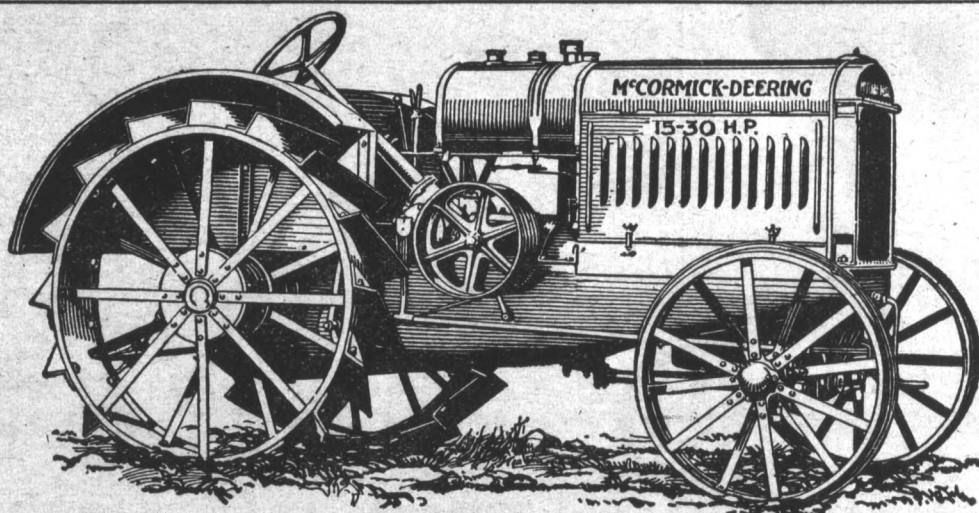
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Write today for free instruction book and "Evidence of Conception" blank. Send sketch or model for personal opinion.

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Mention The Michigan Farmer When Writing Advertisers



For the Man Who Is Buying His First Tractor

DON'T underpower yourself when you start tractor farming. Our dealers can sell you a 10-20 h. p. McCormick-Deering Tractor, but more than likely it will be far more practical to invest in the husky 15-30 h. p. size. Underpowering is a common mistake made on the farms today. If you could take a general canvass among tractor owners you would be surprised at the number who admit, "I ought to be pulling another bottom," or, "I can't touch that size belt machine," or, "I didn't realize how many more jobs I could have handled with a little extra power."

Don't make that mistake. Remember that when it is a McCormick-Deering Tractor you take home you are making a power investment to hold good for fifteen or twenty years, if you give it just ordinary good care. Be ready for all sorts of drawbar and belt power demands that will come along from now on. The extra power will pay for itself over and over again.

McCormick-Deering 15-30—the 1923 standard of farm power, developed by the Harvester Company's engineers—is a 3-plow tractor with liberal power in proportion for all-year-round farm work.

McCormick-Deering 15-30 Features

Ball and Roller Bearings at 28 points.

All wearing parts, including cylinder walls, replaceable.

Entire main frame in one sturdy unit.

All wearing parts enclosed, running in oil.

All parts easily accessible, easily removed.

Alemite lubricating system. Throttle governor.

Large belt pulley. Adjustable drawbar.

Three forward speeds. Water air cleaner.

Comfort and safety features, such as platform, wide fenders, adjustable seat and foot levers.

All these details and other features are built into the up-to-date tractor pictured above, and it is backed by McCormick-Deering quality assurance. You will agree that here is a practical farm power unit worth your close study. Stop at the McCormick-Deering dealer's store and get acquainted with the McCormick-Deering 15-30 Tractor.

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606 SO. MICHIGAN AVE. (INCORPORATED) CHICAGO, ILL.

EVERY DAY on YOUR FARM

there is a job
for this Sprayer—

You can get more days of profitable work out of this sprayer than from any other tool on the place. You won't neglect that important job of spraying, whitewashing or disinfecting when you can do it so quickly, easily and effectively with a

SMITH BANNER
COMPRESSED AIR SPRAYER

For spraying against insects and fungus on fruit trees, potatoes, vegetables, gardens, shrubs, berries, grapes, flowers; sprays whitewash, paint, Carbols and disinfectants in poultry houses, stables, barns, washes, windows, autos and buggies.

Built to stand hard service and strong chemicals. Heavy 4 gallon galvanized steel or solid brass tank; 2 inch seamless brass pump; all brass castings. Few strokes of pump compresses air to discharge contents of tank; fine mist or coarse spray; brass automatic, non-clog nozzle—no work—just press nozzle handle—acts "Quick as Lightning."

Ask your hardware or implement dealer—you will be surprised at the low price; to avoid disappointment, refuse substitutes; insist on the genuine Smith Banner—if he cannot supply you write us for price catalog of over 50 styles of sprayer.

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Manufacturers of Quality Sprayers Since 1886

40 Main Street, Utica, N.Y.
The name SMITH on a sprayer is a guarantee of lasting quality and satisfaction, or money back.



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When you get twice the heat at half the cost, by installing on free trial, in five minutes time, Uni-Hete Oil-Gas Burner in your range or heater. Uni-Hete generates gas from common kerosene—cheapest fuel known. Red hot fire instantly only as long as needed. Perfect valve control. Keep your kitchen cool this summer. Cooks and bakes in any stove. FREE TRIAL. Saves its small cost in 30 days. Lasts years. Made by factory making heating devices for 33 years.

Agents—Special Offer—Act Quick

The Uni-Hete comfort and money-saving features makes it a quick seller. Big profit. Write at once. Acorn Brass Mfg. Co., 532 Acorn Bldg., Chicago, Ill.

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For your home, barn, garage or other buildings—use hollow building tile. Glazed and unglazed tile, wood and cement stave silos. Write for special offer.

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Rich-Lustrous PEARLS
Ladies of refinement treasure perfectly graduated, matched pearls; Chamberlain's creations amaze experts; this beautiful 24-in. necklace fine plush case, only \$235. If it does not compare favorably with others postpaid at \$15, we'll refund price. R. GUTTER, Imp. Dept. 15 88 Chambers Street, New York



INVESTMENT
We have a plan whereby you can now participate in the immense profits being made raising SILVER FOXES. Fostered by U. S. Government. The most profitable branch of the animal husbandry in the world today. If really interested write for booklet. GREENVILLE SILVER BLACK FOX CO. Inc. Greenville, Michigan

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Ask us to send sample pair. Pay Mail Carrier \$1.23 when delivered. Guaranteed to please. Lady Agents wanted.

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Member of Grand Rapids Association of Commerce.

Kills aphis and similar insects

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NICOTINE SULPHATE
HALL TOBACCO CHEMICAL CO.
3951 Park Ave., St. Louis, Mo.

ORCHARD AND GARDEN

FRUIT PLANTING HEAVY.

REPORTS from the western part of the state indicate that there will be a heavy planting of fruit this year. In Kent county, over five carloads of trees have already arrived, and in the districts around Paw Paw and Lawton many more acres of grapes will be planted. The setting of peaches has started with renewed interest. According to the nursery orders, the J. H. Hale peach is the most popular variety, while the Alberta comes a close second.

CANADIANS WANT FRUIT TARIFF.

So much American fruit is going into Canada that the Canadian fruit growers are asking for a higher tariff against the United States product. The claims of these fruit growers are that the public's appetite for fruit becomes satisfied by the consumption of the earlier United States fruit. On this account, the home-grown crops of strawberries, peaches and cherries are thrown upon a curtailed and limited market. They say that the consumption of home-grown fruit has steadily declined because of the early invasion of the markets by American fruits.

GET SPRAY MATERIALS EARLY.

MR. J. W. WESTON, extension specialist at M. A. C. has issued a warning regarding the possible shortage of spray materials. There is a scarcity of arsenic, which is the base of practically all the insecticides. This will limit the amount of spray material made and will bring comparatively high prices for all arsenicals.

There is going to be a very big demand in the south for calcium arsenate, which is used in the control of the boll weevil. For this purpose, the south alone will use more calcium arsenate than all the rest of the country will use of any kind of arsenicals for insect control.

Because of this scarcity, fruit growers and potato growers are urged to lay in their supply early, or to make some early arrangements with a purchasing agency to supply their needs.

PLANT BREEDER GAINS FAME.

WORKING unpretentiously near Grand Rapids, Mr. Eugene Davis is getting results which means much for the greenhouse industry of the United States.

Mr. Davis is the man who crossed the black-seeded Simpson lettuce with a white-seeded British strain of head lettuce, which resulted in the Grand Rapids strain of leaf lettuce which is now the standard variety grown in all the greenhouses of the world.

Among other things, Mr. Davis has perfected the Davis kidney wax bean, the first white-seeded variety ever placed on the market and the Davis perfect cucumber, which promises to be a great benefit to the pickle industry.

Mr. Davis shares with Prof. Frank A. Sprague, of M. A. C., the title of Michigan's Burbank.

A FERTILIZER PRECAUTION.

I SUSTAINED considerable loss by the use of nitrate soda on trees which were just set. By experimenting I have found that cherry trees or apple trees the first year they are set should not have any commercial fertilizer. The second year they could

stand about four ounces per tree, but under no circumstances should the fertilizer be placed closer than twelve inches from the trunk of the trees. I fertilized 500 cherry trees with four ounces just before a rain, and lost 200 of them within forty-eight hours by putting the fertilizer within six inches from the trunk of the trees and also putting it on one-year-old nursery trees.—A. L. LaFranier.

CLOVER IN GARDEN WORK.

CLOVER is an established part of crop rotation work, and it is just as valuable in the garden. The fact is that we need it worse in the garden as it serves several purposes there. It will keep weeds down, discourage insects, and will build up the soil as well.

One season I sowed white clover very late and it came up at once and made a dense mat by winter. While I think it is better if garden space is not at a premium, to leave the clover one or two seasons, it may be sown after early garden or potatoes are off and yet make a good growth by winter and may be plowed under then or in the spring.

I have never had any experience with red clover, but I see no reason why red-clover might not be used in the garden if seeded in the spring and used two years, as they do with the wheat fields, but I can see no way to use it with another crop to advantage. I think I would prefer sweet clover if I wanted a heavier growth than white. It can be seeded in the summer or fall and left the next season and die after seeding time and the ground is easily plowed. You can mow very low when it has made a good growth the second year and it will not seed, and will die then, so it can be plowed for a late-planted crop that year.—Agnes Hilco.

REJUVENATING PEAR ORCHARD.

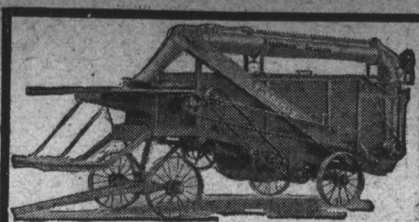
THE use of a nitrogenous fertilizer on apple orchards is now a common and approved practice, but it has not been customary to apply it to pear trees. An experience by Mr. C. F. Bobzien, of Burt, New York, indicates that pears may also profit by it. He had 450 pear trees, fifteen years of age, part Bartlett and part Kieffer, which had borne only one crop since they were set. They were in bad condition due to psylla, and looked about ready to die. Thinking that they were done for, anyway, and that any treatment he might give them could do no serious damage, Mr. Bobzien applied two pounds of sulphate of ammonia to each tree in the spring of 1922.

Instead of dying the trees took on a new lease of life. The leaves became a dark healthy green, and plenty of new wood was formed. Best of all, however, was a crop of one thousand barrels of pears from the 450 trees, which were sold for \$3.10 per barrel.

CANNING FACTORIES MERGE.

FROM three to five canneries have been purchased and merged under the name of the Bangor Canning Corporation with a capital of \$350,000. The board of directors is composed of leading canners, bankers and merchants in the vicinity of Bangor.

The plans of this organization include the growing, canning and selling of fruit. They also include the erection of a large cold storage plant to take care of surplus fruit during the rush season.



Clean Threshing With Farm Power

Grain must be threshed—from shocks, stacks or barn. The quickest and cleanest method is best and cheapest. That is why we have been asked to build the "Farquhar Junior" Thresher.

Some of its strong features:

Heavy Threshing Cylinder
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One-piece frame Straw Rack
Adjustable Chaffer
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Quiver Shaking Shoe
Cheat or Wild Seed Screen
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Not today's price but tomorrow's satisfaction; therefore, we ask you to send for Farquhar Thresher Information. Machines built in six sizes—one or the other will meet the demands in any community. New Bulletins just off the press.

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Catalog tells all—write. **Caution!** U. S. Bulletin 201 shows that vibration of the bowl causes cream waste! The Melotte bowl is self-balancing. Positively cannot get out of balance therefore cannot vibrate. Can't remove cream with milk. The Melotte has won 264 Grand and International Prizes.

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Runs so easily, bowl spins 25 minutes after you stop cranking unless you apply brake. No other separator has or needs a brake. Bowl chamber is porcelain lined.

Strong's Strawberry Plants
Dark red canners \$3.50—1.000
FRANK N. STRONG IONIA, MICH.

Apples—Peaches and other Fruits

State Experiment Stations, Horticulturists and Farm Papers now acknowledge that Nitrogen is the limiting element in successful Fruit Growing and are recommending the use of

Nitrate of Soda

2 to 10 pounds per tree to furnish this Nitrogen, because it is immediately available.

Your own station will advise you how to treat your own orchard. My Free Bulletin Service will give you much useful advice on fertilizing all kinds of crops. If you wish to receive it send me your name and address and to identify this advertisement add the number 1519.

Dr. William S. Myers, Director
Chilean Nitrate Committee
25 Madison Avenue New York

Alfalfa Experiences

What Farmers In Livingston County Have Learned

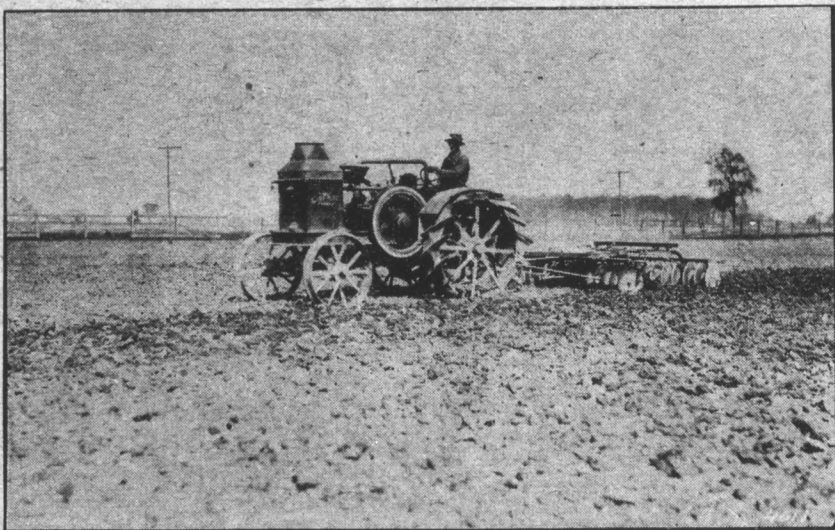
REAL alfalfa experiences gathered from the field during the recent alfalfa-dairy campaign in Livingston county furnish a safe guidance for those who as yet have not been successful with this crop. These progressive farmer-dairymen believe that alfalfa acres make dairy dollars.

At the seventy-seven day meetings held, 742 farmers attended, and at the ten night meetings held, 1,093 men, women and children attended. Practically one-third of the farmers of the county attended the day meetings at which there was collected some valuable data. Of these 742 farmers, 290 of them are growing alfalfa with a total acreage of 1,979 acres, or 56.8 per cent of the total alfalfa acreage in the county. Of the 290 alfalfa growers present, some of them have been at it for thirty years, not many of them being very successful until the

were unfortunate enough in the past few years to get some of the imported seed, or seed of southern origin, and the consequences were that all fields came up looking fine and the following spring would die down.

Sad to say, but yet true, many farmers are only recently learning that the additional investment of about two or three per cent more, which will buy the inoculation to take care of all the seed, has in many cases made the difference between a good and a poor stand.

As in one case, a farmer planted twenty acres and did not inoculate, and the results were that he will have to do the job all over again, where for about seventy-five cents or one dollar, he would have had a good stand. In cases where alfalfa has been grown before, this is unnecessary, but as has been experienced in this county, there



Poorly Prepared Seed-beds Have Been Real Cause of Alfalfa Failure Among Livingston County Farmers.

last five years. Possibly ninety-five per cent of the failures to get a good stand in the county are due mainly to the four points, poor seed-bed, soil deficient in lime, poor seed, neglect to inoculate seed.

Of the 290 growers, not one had a word to say against alfalfa and in nearly every case it was bringing nearly twice the amount when sold than the other hays, and those who bought were willing to pay it in every case.

On many of the lighter soils, farmers mentioned having failures to get good stands because of a poorly prepared seed-bed. This did not mean poor tillage methods, necessarily, but was mostly due to the seed-bed not being firm enough. For example, it was not uncommon to hear a farmer say the only place he got a good growth was in the wheel tracks, where the horses stepped, or where a horse had rolled over soon after seeding.

The failure to get a good stand because of the lack of lime and the expense of experimenting was very costly to many, as we found a large number who said they did not think it worth while, or that it was all foolishness, and would not take the time to bother to get a sample of soil tested, consequently losing the equivalent of \$5.00 per acre for seed, which in most cases would pay for the lime that would be necessary to correct the acidity. In these particular cases the farmer has learned to sow only half the acreage at one time and fix it up right.

The value of good seed can best be expressed by the experience of a number of farmers who have had failures previously and of the number who attended the campaign meetings. One hundred and thirty-five said that in this year's planting they were using Grimm alfalfa seed exclusively.

A number of these same farmers

are very few fields being plowed up where alfalfa is growing to date, better be safe than sorry and spend the dollar.

The question of drainage in the county is not very important unless it is to be grown on some of the marsh lands, so that the four important factors are those previously mentioned.—C. L. B.

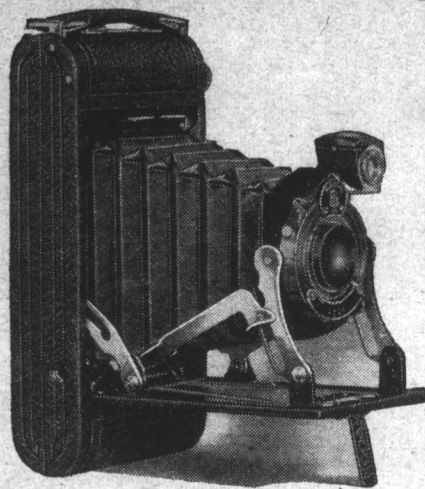
ELEVATOR EXCHANGE TO PAY DIVIDEND.

A PATRONAGE dividend of \$8,000 will be distributed among the customers of the Michigan Elevator Exchange, a farm bureau organization. The dividend will be pro-rated to the members of the exchange, numbering 107 local grain elevators, on business handled by the exchange April 1, 1921, to April 1, 1923. The Michigan Elevator Exchange is a sales organization with headquarters at Lansing.

MANY SOIL TESTS TO BE CONDUCTED.

DEAN R. S. SHAW, of M. A. C., has announced that soil experimental plots will be established in forty counties of the state. Authorization to establish additional experimental plots was given at a recent State Board of Agriculture meeting. The purpose of these test plots is to show the farmers in those counties how best to build up or restore the fertility of their soils.

The plots are to comprise about fifty acres to the county. But in order to have the plots well distributed, they will be divided into five or ten acre lots in various parts of the county. The entire program of this soil improvement work will be under the direction of Dean Shaw and Professor M. M. McCool.



Plenty of space in your pocket for this compact model—an unusual opportunity to use it on your farm.

No. 1 Pocket Kodak Series II

Fixed Focus Model

Pictures of ploughing, sowing and the growth of crops have worth while value not alone for immediate interest but for year to year record and comparison; while those that help sell live stock bring definite dollars and cents return. Pictures made the Kodak way are authentic records—you can date and title each film at the time through the agency of the Autographic feature.

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Guarantee. Then you can see the
fence, put it up, test it as severely
as you wish—if not better in every
way, return it at our expense and get
your money. Freight prepaid east of
Mississippi and north of Ohio rivers.
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from your own land

THE most economical cattle feed is that raised on your farm providing you get good yields per acre. One ton of alfalfa or clover is worth two tons of common hay as a milk producer. When preparing fields for grain, harrow in one to two tons per acre of SOLVAY and sow alfalfa or clover. The feed bills you save will pay for the SOLVAY many times over.

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It tells all
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lime.

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30x3 1/2 Oversize	14.50	"	2.78
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31x4 "	22.80	"	3.04
32x4 "	25.15	"	3.19
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34x4 "	26.65	"	3.45

Other sizes in proportion. Big Standard Brand Tires. Guaranteed 10,000 miles. Sent prepaid. Buy now. You will pay more later.

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Cal. 30

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That mild even flavor that merely tells you salt has been used, comes only from a perfect, instantly dissolving salt.

Hard, granular crystals or flakes are so slow dissolving that often grit is left or the flavor is uneven. But with Colonial Special Farmers Salt you get perfect results because of its soft, porous flakes, that dissolve instantly and completely.

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Akron, Ohio

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COLONIAL SPECIAL FARMERS SALT

For Stock Salt, Use Colonial Block Salt—Smooth—Hard—Lasting—Won't Chip
Made from Evaporated Salt

NEWS FROM CLOVERLAND

DEER MORTALITY EXAGGERATED.

THERE have been conflicting reports relative to the loss of deer in the woods this winter, because of starvation and the depredations of the wolves. The deputies reported that such rumors had been exaggerated, and that the department had itself placed hay in the deer-yards as forage for the deer.

OUR SEED POTATOES IN NEW ENGLAND.

THE value of good work done in Marquette county the past few years in persuading farmers to grow better grades of potatoes, has been revealed, this winter, when it became known that several carloads of high-grade Green Mountain potatoes had been shipped from Champion to Skandia in this county to New Haven, Connecticut, to be used for seed. Hitherto seed potatoes in Connecticut and on Long Island had been obtained from Maine, but of late Maine seed has proven unsatisfactory, it is reported, and northern Michigan has sought to step into Maine's place as a producer of pure seed for the New England growers. If northern Michigan can successfully maintain its position in this market, an advanced step of real importance has been taken for our farmers. It is understood that these Marquette county potatoes have brought a much higher price than is usually realized for the local stock. County Agricultural Agent L. R. Walker has been in charge of these eastern shipments.

ADVISES AGAINST HEAVY POTATO

MR. L. M. GEISMAR, agricultural agent of Houghton county, has advised farmers to plant less potatoes this season, and instead to plant more clover and grains. Instead of devoting some three thousand acres to potatoes in Houghton county, as formerly, the agricultural agent deems eight hundred to one thousand acres sufficient. This will take care of the home market and farmers should not count on the export trade, he believes. The acreage thus released can be used better to grow feed and forage.

INTERESTING PAMPHLET.

FROM time to time the Marquette County Historical Society comes into the possession of some book or pamphlet which sheds light on the history of the Upper Peninsula. Among a recent acquisition of this sort was a pamphlet entitled, "Michigan and its resources," prepared and published by the state commissioner of immigration in 1882. Mr. Frederick Morley, the author, includes in his account a statement about the agricultural output and possibilities of the Upper Peninsula, which, after forty years, makes interesting reading.

COUNTY AGENT NEEDED.

IN a recent issue of the Menominee County Journal attention is called to the serious need of an agricultural agent in that county. A series of forty farmers' meetings are to be held in the neighboring county of Delta, this month, under the auspices of the M. A. C. and the county agent. Menominee farmers would be entitled to the same consideration if they had an agent. In Delta county alfalfa is to be promoted as an aid to dairying by Mr. G. W. Putnam, of the farm crops department of the extension department of the college. The Journal believes that there will be much in these meetings that would benefit Menominee farmers, and calls attention to the loss sustained by a dozen Menominee county farmers last season, who planted certified seed potatoes and then failed to gain certification for themselves through being unable to secure the required inspection by the agricultural agent.

THE deadlock over legislation relative to the five-year program for eradication of bovine tuberculosis has finally been broken. The senate and house have reached an agreement over the amount of state indemnities for condemned animals and have sent the bill to the governor. Under the bill as amended the state will pay fifty per cent of the appraised value of the condemned animal, but the maximum state indemnity has been fixed at \$30 for a grade and \$60 for a pure-bred.

TUBERCULOSIS PROGRAM IS ADVANCED.

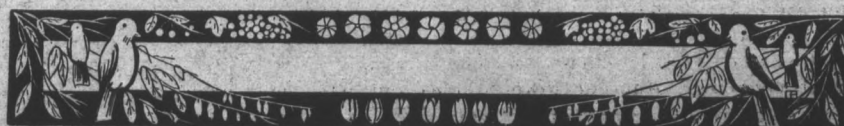
Pure-bred live stock breeders' associations had recommended that the amount of state reward might be reduced in order that the eradication campaign might be carried out on a more extensive scale, but the senate committee felt that this was hardly fair, inasmuch as some counties had been cleaned up under the higher indemnities. The bill contains provisions for allowing for county cooperation in carrying out the plan of eradication. There is small probability of the legislature appropriating sufficient funds to allow for carrying on this work, at the higher rate of indemnities, in all the counties that have appropriated funds for cooperation in such campaigns.

BOYS' AND GIRLS' CLUBS.

IN agricultural activities of Cloverland the boys' and girls' clubs have come to be a real factor.

Of the total number of clubs, 119 are designated "home-making clubs," and these enrolled 1,786 members. Of these, 1,509 reported. Their product was valued at \$13,000. This indicates that girls are taking quite as important a part in club work as the boys. The home-making clubs cover such lines of work as the making of clothing, home management, hot lunches, canning and cooking.

The work for 1923 is well in advance of that for last year, Miss Cresswell reports. Canning and cooking will be the leading features of this work this summer. Last summer, sixty girls were present at the club members' camp at the Michigan Experiment Station at Chatham. Out of this number, four teams of two girls each, with their leaders, won through competition a free trip to the State Fair at Detroit. Two Upper Peninsula girls won state championships in canning, last year. Several were also winners at the local county fairs.





RELATION OF DAIRY INDUSTRY TO ALFALFA CROP.

ALFAFALFA is one of the larger factors in the economical production of milk. Another essential is the animal that is consuming this palatable and nutritious roughage.

Statistics show that the average cow in Livingston county produces around 3,900 pounds of milk per year, which is far from an economical producer. Although the feed has an important part in increasing this production, it, however, does not tell the whole story.

In the districts where cow-testing associations have been working successfully, we find that in many cases, at least in about one-third, the cows pan out to be boarders or unprofitable producers.

There is no question that this is one of the things entering into Livingston county's problems and to overcome this, farmers were encouraged to get into cow-testing association work, which is the one medium whereby the boarder cow can be eliminated.

In the recent dairy and alfalfa campaign eighty-five farmers expressed their desire to join a cow-testing association during the campaign weeks. If the inferior half of Livingston county's cows were sentenced to life imprisonment there is no question but that the other half would be able, if properly fed and housed, to produce as much as the total number are now doing, and if such be the case, the farmer's labor on his dairy herd could be reduced by half.

In order that more constructive breeding might be carried on, or that the offspring of the good cows left in the herds may improve, it is necessary that better sires be used. As the average farmer in the county has only about eight cows, it makes it impossible for him to have a sire which would improve the offspring.

In this campaign sixty farmers expressed their desire to join and buy a better sire for association work. Farmers having larger herds and not located where they will be accessible to a bull association have volunteered to the extent that ninety are interested in getting better bulls.—C. L. B.

INTERESTING FACTS FROM KALAMAZOO.

TWO years' work of the Kalamazoo Cow-testing Association has been finished, and some very interesting facts come to light as the work goes on. We started with 305 cows. Of these, fifty-five went to market via the butcher, leaving 250 that finished the year. Of these, five produced over 500 pounds of butter-fat, the high point being 549 pounds, reached by Rosa, a grade Holstein owned by George A. Drake. Merce, her stablemate, was the high milk producer with 13,087 pounds to her credit.

The ten high cows produced an average of 500 pounds of fat; the ten high herds averaged 347 pounds of fat; the five low herds averaged 229 pounds, and the lowest herd 184 pounds per cow.

The feed cost of producing a pound of fat varied from eighteen cents to forty-four cents, and the feed cost of 100 pounds of milk ranged from ninety cents to two dollars.

Much was accomplished in the way of better feeding and dairy methods. One member cut his feed cost twenty-five per cent over the previous year, and then made two dollars more net profit per cow. Another lowered his cost of producing 100 pounds of milk

eighteen cents, and his annual production was 119,000 pounds. Another reduced his fat cost from twenty-three cents to eighteen cents per pound, and his production went from 287 pounds average to 369 pounds. Better feeding enabled S. J. Stanley, of Augusta, to raise his herd from 310 pounds average to 434 pounds, the highest in the association, if not in the state.

During the two years assistance has been given in placing fourteen registered bulls and seven registered females; organizing a breed association, and retaining more than half the original members in the third year of the association.—S. P. Sexton, Tester.

BUILDING A DAIRY COMMUNITY.

RECENTLY three excellent pure-bred Holstein sires were leased without charge by the Michigan Central Railroad to three groups of progressive farmers of Arenac county for an indefinite period of time.

The Standish Chamber of Commerce and the Arenac County Farm Bureau have been cooperating in the development of the dairy business for that county, and one of their constructive achievements was the enlistment of the assistance of the railroad, which has from time to time loaned well-bred dairy sires to deserving groups of farmers in the northern territory.

Every two weeks, the chamber of commerce puts on a program for the benefit of the farmers and all others, at which time noted speakers on dairying have the floor. Moreover, this chamber of commerce has offered to finance any farmer who wishes to buy good grade or pure-bred dairy cows. Already twenty-eight members have been signed up for a cow-testing association.

One need only look at these three bulls to be convinced that they will assist materially in the development of this county as a dairy community, but, if further evidence is required the pedigrees will furnish it. Two of these animals are from a dam which made 23.5 pounds of butter in an official seven-day test while the other one is from a dam which made 26.37 pounds of butter in the same length of time. The sire of one of these bulls is from a cow that produced over thirty pounds of butter in a seven-day test, while the other two are out of a sire whose dam made over thirty-two pounds of butter in the same time.

These animals were raised on the Grand River Stock Farm, of which Mr. C. J. Spencer is proprietor. That Mr. Spencer is a man of vision as well as a breeder, is shown by the fact that he is willing to sell these valuable sires for a very nominal sum of money because he believes in the future of the dairy business. His herd is headed by Model King Segis Glista.

It is expected that these three bulls will be moved from group to group as their period of usefulness is ended in each group, thus providing not only first-class breeding service, but also a chance for line-breeding. The care-takers are present are Messrs. W. S. Adrian, William Irvin and Noah Trombley.—L.

GRINDS WHEAT WITH OTHER GRAINS.

WHY do so many farmers sell their wheat and pay a higher price for bran and middlings? I have used wheat in place of the bran and middlings. I grind it with other grains and have had excellent results from it.—L. Klatz.



~Cow Testers Know that DeLaval Separators Skim the Cleanest

Statements from over half the cow testers employed by cow testing associations throughout the United States, reaching over 6000 farms, give additional proof of the superior skimming efficiency of De Laval Separators.

Cow testers know best of all what cream separators are used most, which skim cleanest and last longest, because they regularly test the skim-milk from the separators owned by their members. They say:

"I find on an average De Laval Separators skim cleaner—from a trace to .04 of one per cent. Thirteen out of nineteen separators here are De Laval." (.01 of one per cent equals one lb. out of every 10,000.)

"Out of 48 separator users 29 use De Laval. I've found them the best skimmers for the longest time."

"26 members have separators, and 23 are De Laval. They give the best satisfaction after considering all points."

"De Laval Separators have no equal for quality and efficiency. 15 out of 20 are De Laval."

"90% of the separators used by my members are De Laval. The majority skim closer than .02 of one per cent."

"The De Laval is a very close skimmer under any and all conditions. 95% of the separators here are De Laval."

"I have 25 members and 18 use De Laval. I have not had one test below .05 of one per cent."

*Authorities for these statements from cow testers, together with many others equally good, are contained in a booklet entitled "Cow Testers—What They Do and What They Say About De Laval Cream Separators and Milkers." Send for it—contains information about the value of cow testing associations.

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Breeders Ask for Court

SOME two months ago at a conference attended by representatives of the dairy cattle breed associations at the dairy division of the United States Department of Agriculture in Washington, resolutions were adopted providing that the breed associations appoint a committee to ascertain if there is a less expensive method of guarding test records than the preliminary milking; that each dairy breed association establish classes for cows milked twice a day and cows milked three or four times a day during tests; that the dairy breed associations formulate a code of ethics for public sales; that the breed associations take steps to get express charges reduced on animals more than one year of age; and that a committee present resolutions to the breed associations for closer cooperation in the promotion of the breeds.

At a two-day conference held in Washington, April 12-13, at which representatives of the Guernsey Cattle Club, American Jersey Cattle Club and the Ayrshire Breeders' Association were present, it was decided to refer the first resolution to the Dairy Science Association. It was given out, however, that by eliminating the preliminary milking it would be possible to save \$100,000 a year to members of each of the associations.

It was recommended that breed associations should print a memorandum with each record as to whether it was made by a two or three or four-times-a-day milking.

In regard to public sale ethics, it was decided to be not so much a question of ethics as understanding. It was recommended that a committee be appointed to define words and terms used in connection with public sales.

To develop closer cooperation in extension work, it was decided to ask each breed association to appoint one man to represent the association on a court of appeals of which the chief of the dairy division, Dr. C. W. Larson, should be one of the members and chairman, to which all matters in dispute referring to extension work of the different associations and all questions that might arise as to the activity of field men might be referred. They all agreed that the fact that there was such a court would tend to keep field men in bounds from unfairly working against the interests of any particular breed. This matter was much discussed, some of the representatives present holding the opinion that much more could be accomplished if more attention were given to the adaptability of breed to locality, environment and production, rather than the indiscriminate promoting of sales of cattle of breed in sections where another breed is already established and better adapted to the sectional or community requirements.

FARMERS BUY HERD SIRE.

FOUR farmers of Washtenaw county recently purchased a young herd sire which combines the blood of the three greatest long distance and high producing families of the Holstein breed. This sire's name is Meadow Holm Finderne Button. He is owned jointly by E. S. Spalding & Sons, Warren Spalding, R. B. Waltrous and A. B. Shutes & Son, whose combined herds comprise about 115 Holsteins. These gentlemen anticipate a great improvement in their herds by the use of this well-bred sire.

TOP-DRESSES CLOVER SEEDING.

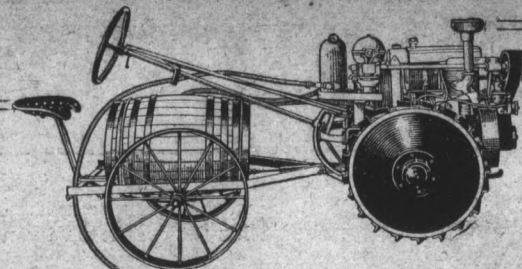
WE finished sowing cloverseed early in April. One field of fourteen acres we got top-dressed with stable manure during the winter. I like this

top-dressing with manure to assist good clover catches. I have been following top-dressing a field of wheat during the winter for the past ten years and I have never failed to get a good clover catch. This year I had plenty of clover seed so I put it on liberally at the rate of one bushel to four acres. I sow five paces or ten paces to the bout. I like to sow early in the day following a light freeze at night. This spring we hit ideal conditions.—L. R., Shiawassee County.

SHORTAGE OF RURAL HELP.

LABOR employment experts in Chicago state that the farm labor shortage of the country will be about fifty per cent. According to Charles H. Boyd, general superintendent of the Illinois Free Employment Service, this shortage will grow if present conditions do not improve. He believes that many farmers will be unable to put in the normal amount of crops during spring planting time.

His experience indicates that wages of \$40 to \$60 per month with board and room included, fails to secure more than half enough men needed to re-fill the nation's bread-basket.



The ARO Tractor can also be used independently of the spraying outfit. 3 H. P. at drawbar 6 H. P. at belt.

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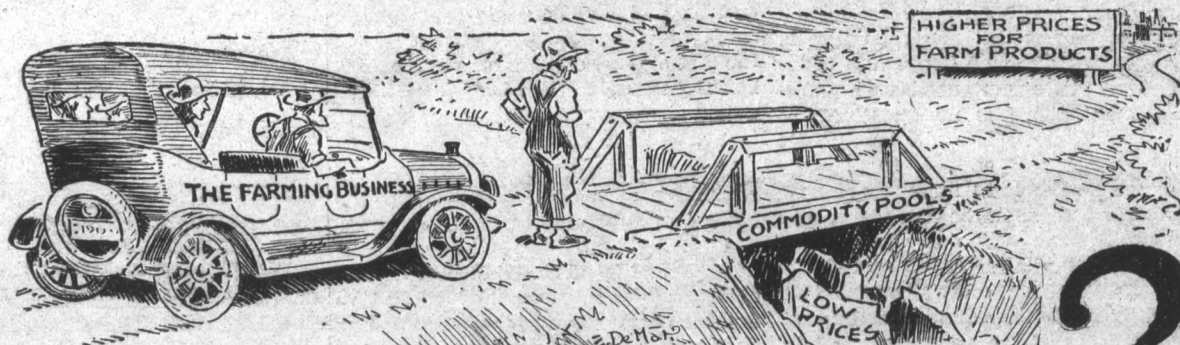
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Is The Bridge Safe?

CROP prices are too low. Taxes are too high. Farmers want more money for everything they sell. What shall they do? Many believe that commodity pools will bridge the way to higher prices. Others think cooperative marketing organizations are going too fast for safety. Prof. E. G. Nourse of Iowa in "Commodity Pools—Aces or Deuces" in The Farm Journal for May, warns of the dangers and points the road to real progress and permanent success. It's a straight-from-the-shoulder article every farmer should read. Don't miss it! Or the dozens of others in May.

"Will Black Giant Rival the Turkey?"

Because Turkeys are hard to raise few farmers can afford to take the time and trouble to raise them for market. Boyer writes in this article about the wonderful new breed of chickens—as big as turkeys, easy to raise and paying big profits. Every farmer and his wife should read this.

More Fine Articles for May

How and Where to Borrow Money
Farm Crop Prices—Past and Present
What to Teach Young Children
Farm Power From the Small Brook
New Outdoor Games for Young Folks
The Colorado River Compact
Helping the Help Problem
Want Your Wool Made Into Blankets?

Four Bars to More Farm Production
Testing Tells the Truth
National Service



Cartoon on High Taxes from May issue of The Farm Journal

Spring and Summer Hats
—and many others

"Breaking the World's Corn Record"

In a special interview, William H. Gilmore, the Ohio "Corn King", tells how he did it. He says among other things, "Most farmers don't give their corn land enough work." This article appears in the May issue and whether or not you grow corn read it—there is money in Gilmore's ideas.

Get This Big May Issue Quick

Written for more than 1,150,000 farm men and women, their boys and girls, and their hired help—The Farm Journal is full of snap, ginger and gumption; it's a practical farm, livestock, orchard, garden, dairy, poultry, home and household magazine, with pictures, cartoons and good fun for all.

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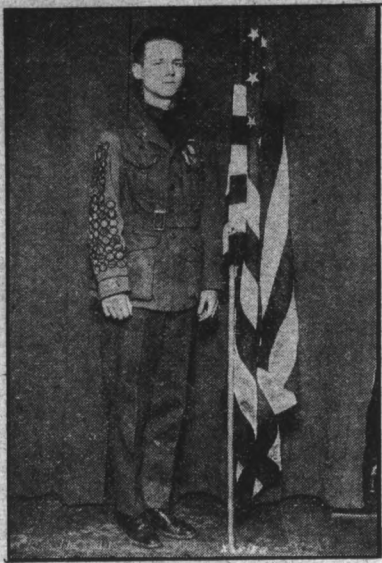
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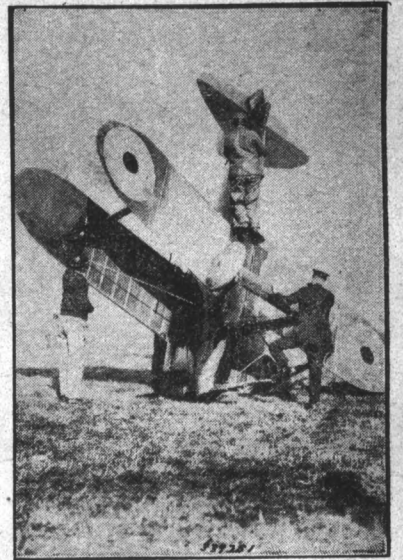
WORLD EVENTS IN PICTURES



Thomas McConville, age 17, and a true scout, has won a flag and 54 badges out of a possible 62.



First official photo taken of justices of the United States Supreme Court in their black robes of office, since the recent change in the personnel of the bench.



Lieut Lester L. Maitland escaped unharmed when his bi-plane skidded and stood on its nose.



A heavy snow fall failed to daunt the Cornell 'Varsity Eight oarsmen from beginning practice on Lake Cayuga, at Ithaca, New York, for the coming season.



With the presidential vacation party ended, all the members can do now is to dream over the big golf scores made at the Bonair Vanderbilt course down in Georgia.



Prince K., three years old, is all set for the soon-to-be-run Kentucky Derby on Churchill Downs.



"Mrs. King," noted English medium, has revealed her identity as Mrs. Alfred Lyttleton.



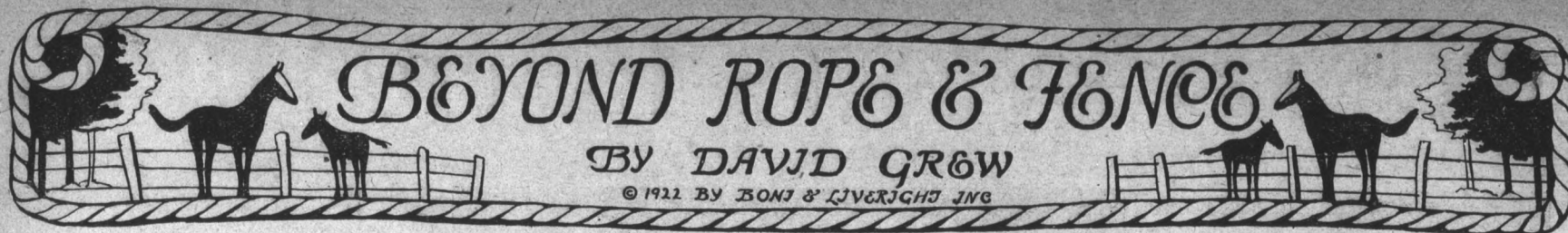
This gorgeous costume was worn by the queen of the festival celebrated at St. Augustine, Florida, the oldest town in the U. S.



The agricultural laborers of England have been considered the last people in the civilized world to go on strike, but they have struck and there is a threatening tie-up of foodstuffs.



One of the freak characteristics of a tornado which swirled over Alexandria, Louisiana, completely wrecked one building to matchwood, while across the street two small houses were unharmed.



SO, too, the woods interested her, though she had never penetrated them very far, because the woods were confining, and she loved the open where one could see and run in all directions. Yet she loved the trees because these new emotions which had mysteriously come to her made her more observant than she had been. She realized more fully than ever before that woods and plains and skies had moods in each of which they were different, and these revelations broadening her outlook upon her surroundings made her, in a way, more capable of joy.

To White-black she was a puzzle. Yielding to her desire to be alone and interesting himself in other friends, he nevertheless kept an eye on her. There came a period in which he missed her entirely. Day after day, he went looking for her and then one day he found her in the woods, on an open grassy spot, cut off from the plains by a small pond and a thin wall of poplars. She was licking a small black colt that was trying very hard to stand on its long, shaky legs.

White-black was so glad to see her he began to neigh excitedly and caper about the water's edge. Then, wading across the pond, he ran toward her; but she sprang between him and her baby with an angry whinny, ears down, eyes glowing and her lips curling threateningly. He stopped a few paces from her and whinnied placatingly; but she threatened him again and he was afraid to approach. He gazed at her from where he was for a few minutes, then like a man who, failing to understand, shrugs his shoulders, he lowered his head and began to graze, looking up occasionally to see if she had changed her attitude in any way. At last, discouraged, he walked to the pond, took a long drink, waded across and disappeared.

For several days Queen kept to herself in her own little pasture in the woods. She knew just where the herd was and what they were doing at all times for she watched them almost as anxiously as she watched over her little son. Her baby grew stronger every day, spending most of his time romping about the limited space, learning to use his awkward legs; and as he grew stronger, the desire to return to the herd began to make Queen restless.

At last she led the little fellow carefully around the pond, but just as she reached the open space she saw the herd gathering as if danger threatened. She stopped short, raised her beautiful head and with one long nervous

sniff took in the whole situation. Man again!

She could not see the horseman, but she heard the faint, far away patter of hoofs and the scent of man trickled through the air. She turned about and looked at her little one who was innocently indifferent to what worried her and extremely interested in the open space of which, being behind her, he had caught but a glimpse. She knew that if she attempted to join the herd and fly with them, he could not follow her. She could hear, as she tried to

the anxious searching of the plains often gave way to an absorbed study of her little neighbors. She came upon a mother duck, one day, who was waddling down the old buffalo trail with a brood of tiny little ducklings, only a few yards away from her. Queen slackened her pace when she saw that the mother duck was getting excited, and watched them. The old duck walked on as rapidly as she could, turning her head from side to side as she scrutinized Queen first with one eye and then with the other, and though she

the anxious mother duck come flying from the opposite direction. Queen turned from her to where the coyote had disappeared wondering whether he was coming back. The joyous peeping of the little brood who appeared in all directions at the first call of their mother, reassured her and she followed them down to the pond.

The duck and the little ones set sail as soon as they touched the water, and paddled away triumphantly to the center of the slough where among the rushes no foolish coyote could threaten them. The lesson of duck wisdom impressed itself deeply on Queen's mind in a series of pictures, and she sensed acutely the trick the duck had played upon the coyote. She hated the coyote because she feared him. The very sight of him made her uncomfortable and she did not let the little one out of her sight for an instant. Even when she drank, the image of the beast would come into her mind and between sips she would raise her head and stare all around her to make sure that he hadn't come back; for from that time on, she seemed to expect him to show up at any moment.

LONG as the days were at this time of the year, they succeeded each other rapidly and each day added to the weight of loneliness on Queen's heart. Ducks came in great numbers, returning from their sojourns into the land of motherhood with flourishing broods. Gophers appeared everywhere. The saucy little fellows would sit up on their haunches a yard away from Queen's head and defy her with their queer little barks, which betrayed much more fear than defiance. The colt would look at them with his large, round eyes, sometimes making an attempt to approach them but as soon as he came too near they fled. Coyotes began to show themselves more and more often, and every time Queen came upon one, even the clear memory of the duck playing her trick could not prevent her heart from throbbing with fear.

A variety of flowers appeared, one kind giving way to another, and the sloughs on the open began to shrink daily. The woods retained their ponds, cool and clear, and in the darker corners, among the tall poplars, there were still shrunken drifts of snow.

In spite of the abundance of food and water, in spite of her growing interest in her baby who played about her in perfect contentment, and played more and more delightfully, Queen's longings for her companions reached

FRAGRANCES

By LeRoy W. Snell

Some like the smell o' posies
'Neath the early springtime sun;
And some the smell o' clover bloom
When summer has begun;

And some the smell o' new-mown hay,
And some o' apple trees
That's flowered out an' teasing
The golden honey bees.

Each one has his special fragrance
Will boast and claim the best.
But to me the smell o' new-turned earth
Is sweeter'n all the rest.

When April's sun, or early May
Gets warm enough to lick
The dew, in early morning,
From the grass that's tangled thick,

Then to foller in the furrows
An' to breathe the scent that comes
From old Mother Earth, is sweeter
Than the breath o' sugar plums.

I ain't saying it ain't labor,
This here foller'n o' the plow,
But the perfume rising from new-turned sod
Is pay fer it, I vow!

decide what to do, the sudden clamor of hoof-beats as the herd broke into a race for safety. She did not even turn to see them go. With utmost haste she glided undercover.

She was not content with what safety the little pasture offered. As if she had been a creature of the woods, she picked her way through thorny shrubs and under heavy branches, till she came to a secluded spot that satisfied her and there she lay down to regain her composure.

FOR almost a week she lived like a deer, hiding in the woods and coming out by night to graze and to seek the herd which she hoped would return. Then as the days went by and she had come upon no trace of man in the air of the open prairies, she ceased going back into the woods, and divided her time between her baby, feeding, and looking wistfully and hopefully over hill and hollow for her lost companions calling, calling, calling till the solitudes echoed with the anguish in her heart.

Her interest in the small living things that went about the daily business of their little lives revived and

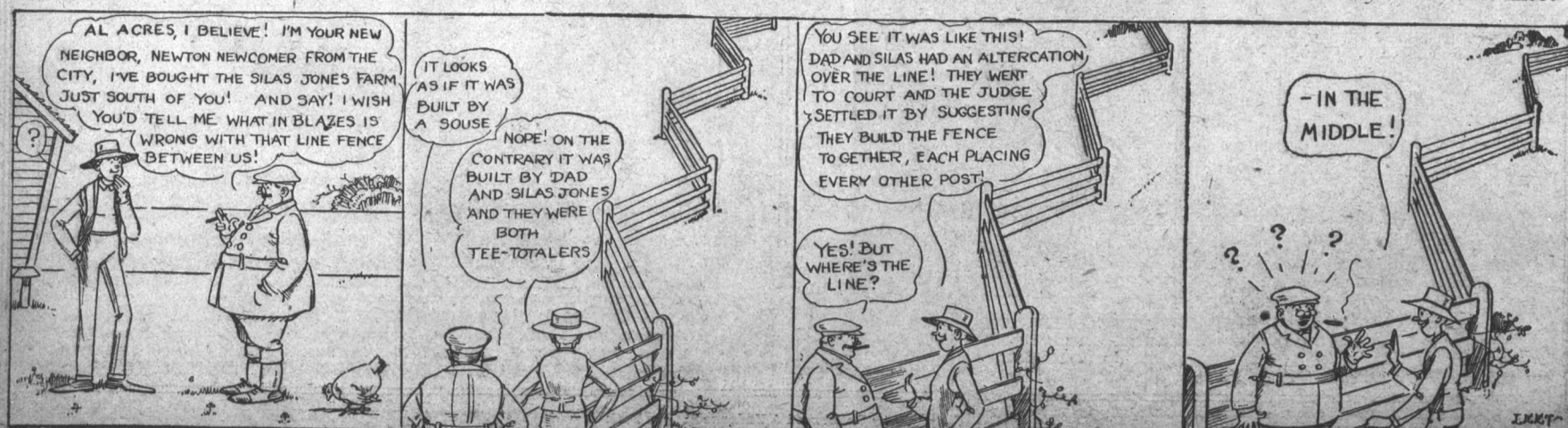
did not seem to consider her a very grave danger she called her little ones and swerved off the path. The old duck was apparently leading them to the slough, but she hadn't gone far when a lean and hungry-looking coyote shot out from a cluster of rosebushes.

Instantly there was a frantic whirl of wings and while the mother duck flew almost upon the coyote, the little ones scattered, dropping down under bushes or flowers or disappearing in gopher holes. Queen was too much worried about her own baby to notice at the time what happened to the duck. She sprang protectively toward her foal and then when she looked up she saw the coyote running eagerly after the duck, who acted as if one of her wings were broken. Flopping with one wing she cried with fright and half flew, half ran on ahead of him. The foolish coyote thought she was wounded and licked his chops as he ran, anticipating a good meal.

The old duck appeared to be losing; but always just as the coyote was about to seize her she flew off with a cry. Thus she led him far away out of sight. But before Queen had started off again for the slough, she saw

AL ACRES—Al Says The Line Splits The Difference.

—By Frank R. Lee



overwhelming proportions and at last she started away from those solitudes in search of the herd.

For several days she traveled toward the east along the wall of the woods. She came to where the woods ended and a vast treeless plain stretched away beyond vision. From the pointed end of the woods, an old, partially overgrown buffalo trail cut diagonally across the prairie, running comparatively straight southeast. There she remained for a few days as if unable to decide which way to go. Then, one day, when she had followed the buffalo trail for several miles she came upon signs of the herd. This puzzled her, for experience had taught her not to go south; yet here was unmistakable evidence that they had gone south; and they were her goal. Despite her disinclination to go in that direction, she went on eagerly, moving each day as far as her colt would go without protest, and resting when he refused to go any farther.

One evening, long after the woods had faded out of sight, when her baby balked at the daily increase in the distance she urged him to make and deliberately lay down on the path, she saw what seemed to be two horses, grazing. Queen broke the stillness with an impassioned whinnying that puzzled the little fellow. The fact that she was standing with her back to him and whinnying so frantically interested him. That she might be calling to anyone but himself was entirely beyond his experience. Feeling that she was looking for him, he got up and sidled up to her, touching her neck with his little nose. Queen bent down and covered him with caresses; but to his dismay, she soon returned to her calling, keeping her head high and looking away into the shadows.

THE darkness obliterated the two horses and Queen, unable to stand still, started away again, the little fellow complaining plaintively as he lumbered after her. When, however, he lay down once more, she yielded and there they spent the night.

Her night's rest was a troubled one. What with her emotions tormenting her, there was a strong scent of man in the air that kept her awake and watchful. When dawn came at last, she saw the two horses, still grazing but much nearer to her. Beyond them she saw two black mounds, like malignant growths on the body of the plains. In these mounds, she knew, lived man.

She was afraid to go any closer to the mounds so she called loudly to the two horses who finally responded by starting in her direction. When she saw them coming, she hastened to meet them, despite her fear. She whinnied loudly as she went and when the foremost of the two horses replied to her, his voice sounded familiar. Who it was she did not know but she started toward him on a gallop and as soon as she touched his nose, she remembered the old sorrel work-horse of the spring lake in the bowl-like valley of her childhood.

Where he had been, how he had got up there, what he was doing, these were facts Queen could not find out, nor did she experience any desire to find out. Life to her was somewhat of an abysmal night with beautiful, star-like gleams of understanding. The past to her was an ally of death not to be thought about and the future became important only when it turned into the present. The sole value of the impressions that she carried in her memory lay in the help they offered for the understanding of the impressions that the present was making and Queen never wept over them.

There was the old sorrel before her. The memory of what he had been to her, inundated by floods of time and other experiences, had gone out like the stars at dawn. But now, certain odors and sounds and qualities to del-

icate for words, like the evening that follows every dawn, brought the stars back to her sky and she strove to express the almost inexpressible satisfaction she experienced.

The other horse was a stranger and so Queen was wary of him. She sniffed noses with him suspiciously and kept away, refusing to allow him to go near her colt, whereas the old sorrel sniffed all over him without her protest.

But the pleasure she derived from the momentary satisfaction of the longing for companionship, inadequate as it was, had its price. Her excitement was so great that she did not notice the coming of another horse with a man on his back, till he was already dangerously close. With an anxious call to her little one she dashed away in the direction from which she had come. The two horses went with her.

IT was not long, however, before she saw the man through the corner of her eye, urging his straining horse, apparently to get ahead of her. Queen was not running as fast as she could, for she knew that her baby could not keep up with her. But the sight of the man at the side of her bewildered her. She leaped out of his way, leaving him a hundred feet behind only to realize at once that her colt was not with her. She swung off to the side and turned to see the man driving the old sorrel, his companion, and her own colt off towards the black mounds.

(Continued next week.)

MICHIGAN IS CALLING YOU.

BY C. E. GERBERICH.

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aires?
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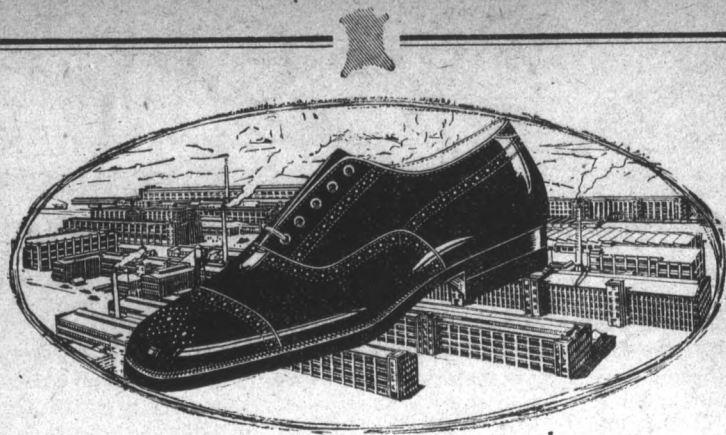
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And clear, running streams abound—
You'll be happy when you find these
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You will find our pasture lands are
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'Ere you plan your outing trip
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that's pure,
Make the circuit of our state
Those who've made it say it's great,
And you never will regret it I am sure.

If I wrote of all I think
I would use up all my ink
And would have to send and get a
fresh supply:
But you will understand
That if you're in need of land,
In Michigan is the only place to buy.



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Exit Clover---Enter Alfalfa

Fourth Oak Openings Article, Tells What Southern Michigan Farmers Have Learned

By Jason Woodman

WHY is it that even on our best managed sandy loam farms clover no longer catches with its old-time vigor? We are told that our soils lack organic matter, lime phosphorus and manure. When they are used more clover results, but even with their use clover will not start with the vim it used to show. Years ago drouths that would practically ruin a corn crop would not kill young clover seedlings. Now a period of dry weather that will not materially injure corn is sufficient to cripple or destroy clover sown the same year, even where lime, manure and phosphorus have been used. That is what happens on the lighter farms in this locality. Our experience is typical. Farmers in other counties tell the same story. The day when we can depend on clover is gone. Something is the matter besides the lack of plant food. The scientist may be able to diagnose the trouble. We face the fact, and every sandy land farmer in this part of Michigan knows it.

In portions of Germany where the land is similar to the lighter soils in this state I am informed that there are farms where detailed annual records of the fields have been kept by the successive owners, what crops have been grown, the yields, the amount of lime fertilizers and manure applied, the time and method of application. These farm histories often run back for a hundred years or more. The experience of these German sandy farmers has been, and their records show that where one legume is grown regularly

in a rotation, no matter how much lime fertilizer and manure is used, after a period of years that legume begins to fail. Then what? Another legume is substituted. Satisfactory results follow for another term of years, then in its turn this legume ceases to grow with its former vigor. For instance, clover in rotation fails. Vetch is substituted in its place. In the course of twenty or thirty years vetch fails to produce results. A third legume is introduced, or perhaps clover is again used, for it seems that where clover has not been raised at all for a long number of years it will grow as well as it ever did. Do we find in the experience and practices of these German farmers the solution of our sandy land problem? If so, what legume or legumes can take the place in our farming that has been filled by clover?

More than twenty years ago farmers on southern Michigan sandy lands began to experiment with crimson clover and vetch, a little later with alfalfa, cowpeas, soy-beans, lespedeza and sweet clover. While a number of these plants are valuable and are being used more or less in our agriculture, alfalfa for general purposes is proving to be not only much superior to any of the rest, but a more valuable plant to the sandy land farmer than clover ever has been, even in the day when it "grew to perfection on the openings."

Some of my elderly farmer readers,

remembering the part clover played in their farming forty years ago, may question this statement. Let us see. Clover, if it does well, goes into action quicker than alfalfa. One year's growth of clover, besides producing a crop of hay, renovates the soil, putting it into good condition for other crops; it is adapted to a short rotation and a clover sod is plowed without difficulty. These are the advantages of clover. On the other hand, clover only lasts one or two years. An alfalfa seeding lasts four or five years or longer. There are only a few days when clover is at its best. When ripe it deteriorates rapidly and soon becomes nearly worthless for hay. While there is a best time to cut alfalfa, its harvest may be prolonged for weeks if necessary and still the hay will be of good quality. If clover hay gets wet after it is cured, it is practically spoiled. Alfalfa, if properly managed after being rained on, does not suffer material injury as abundant experience has shown, and it can be handled in large areas easier than clover.

After alfalfa is established there is no crop grown on Michigan sandy loams that equals it for pasture. The first, second and third growth on seedings two years old or older can be fed off without damage to the plants. The pressing need for pasture, especially on our lighter farms, comes in the latter part of the summer and in the fall. Alfalfa is admirably adapted to

fill this need. After it is two years old an alfalfa field on our medium to light soils can be pastured late in the fall without injury. The quality of alfalfa hay and pasture is superior to clover. Chemical analysis shows this, and live stock agrees with the chemist. A fully developed alfalfa sod is superior to a clover sod for grain or potato production. I make this statement without qualification.

After a field has been occupied by one successful alfalfa seeding, which fully supplies the soil with the all-essential nitrogen-fixing bacteria future seedings of alfalfa can be made with small grains as we seed clover, but with this difference. If the alfalfa comes up it will stick, drouth does not kill it. In the years of 1918, 1919 and 1920, all dry years, the last a season of extreme drouth, I saw in Van Buren and Kalamazoo counties a considerable number of good stands of alfalfa secured from spring sowing with wheat, rye and oats on land where alfalfa previously had been grown. During these years there were partial failures of clover seedings on some of these farms, even on well-limed fields.

If the general use of alfalfa in crop rotations seeded with grain, as we used to seed clover, is practicable and becomes general on our sandy loams it means a revolution in the agricultural conditions of a large part of lower Michigan. It means prosperity in many sections where farmers are now finding it difficult to make a decent living. Is it practicable? On a farm (Continued on page 627).

The Child and the Man

Our Weekly Sermon—By N. A. McCune

THE story of the boyhood of Samuel, the prophet, never loses its meaning and beauty. It is perennially fresh. The old prophet was there, but the burning message was not delivered to him; it came to the ears of the child. Probably the old man was incapable of receiving such a message. He would not have believed it at all, or he would have philosophized and argued about it. The little boy heard it and accepted it. Christianity is the only religion that has for its symbol a child. "Of such is the kingdom of heaven." "He that will not receive the kingdom as a little child, he shall not enter therein."



The child is a being of power. Not long ago a man was suspected of the murder of a woman. He stood up under a police grilling of seventy-two hours, but collapsed when the victim's thirteen-year-old girl was led, tearful and pleading, into his presence.

A year or two ago, five hundred children from Vienna were brought to England for temporary adoption. There was no food for them in Austria. A Welsh Methodist minister had three children, and was not cursed with a super-income. But after talking it over with his wife, it was decided to take one of these "alien enemies." "We will take one for a year—a girl if possible," said he. Late at night she arrived, a card tied to her, to show her destination. Of course, she could talk nothing but German, but childhood has a language of its own. Very shortly the little Papist was established in the inner circle of this stronghold of Protestantism. The min-

isters three took to her as if she had been their long lost cousin. The chasm of language, race and religion was quickly bridged. One day a farmer near by watched this daughter of the late enemy as she raced across the fields to summon the old shepherd to supper. She was seen to throw her arms around the old man's legs, and presently the old man and the little girl were walking hand in hand toward the house. "There is more gospel in that," said the farmer, "than in the confession of faith." And the minister said, "Amen."

SAMUEL was happy in his choice of a mother. Not all the children are thus blest. She prayed for a son. When her prayer was answered, she was at great pains to teach him the religion of his fathers. A song that has been listened to by thousands and has awakened many a torpid soul, is entitled, "My Name in Mother's Prayer." A Scotch lad was once passing an open door, and he heard his name mentioned by his mother, in prayer. He never forgot it. Years afterward he was an American citizen and was making money. One night he wrote some verses and handed them to his wife. She gave them to a friend, who sent them to a noted Brooklyn minister. The minister read them in a sermon, and after that they were put in print, but no name was attached to them. Ten years later R. A. Torrey, the evangelist, was preaching in Aberdeen, Scotland, and announced that Mr. Alexander would sing a song entitled, "My Name in Mother's Prayer." The author, he said, was unknown. When the song was sung, one of the ministers sitting on the platform said that the author was his brother, a

banker in America. One verse runs: That kneeling form, those folded hands,

Have vanished into dust;
But still with me for aye will be
The memory of her trust.
And when I cross dark Jordan's tide,
And meet her over there,
We'll praise the Lord, who blest that word—

My name in mother's prayer.

It is very significant that two of the greatest religious leaders of modern times, Phillips Brooks and John Wesley, owe their start in the work in which they wrought so mightily, to the influence of their mothers.

IT is said that this attitude does not prevail as it once did. Mothers now, and fathers, too, are not so eager for their sons to become ministers. There is more money in something else. When father and mother visit their grocer son or their traveling salesman son, he meets them at the station with a big car. When father and mother visit their preacher son, he meets them at the station with a cheap car—but not always! The modern parent does not regard the ministry with the same reverence that Samuel's mother did, or many others since then. But if the church is to continue it must have trained ministers, and if the ministry is not worth desiring for one's son, it is not worth perpetuating. One reason for this decreased interest is, that many other similar lines of work have come to the fore. Where a few professions once lay before the young man, there are now many.

Samuel did not disappoint his mother or his elders. He became the uncrowned king of his people. His was a rule of personality. The man, not the office, held the people together. In process of time, Saul became the

king of Israel, a step of which Samuel did not wholly approve. And his fears were justified. It is a very stirring scene when the prophet rebukes the hot-headed king. "And Samuel said, 'Hath Jehovah as great delight in burnt-offerings and sacrifices, as in obeying the voice of Jehovah? Behold, to obey is better than sacrifice, and to hearken than the fat of rams. For rebellion is as the sin of witchcraft, and stubbornness is as idolatry and teraphim. Because thou hast rejected the word of Jehovah, he hath also rejected thee from being king.'" Some way, Saul could not get away from the overshadowing influence of the prophet during his entire official life. The prophet had probably been dead several years when the battle of Gilboa took place, and the night before the battle Saul consulted a witch, hoping to talk with the spirit of the departed Samuel.

THERE is another man to whom we may liken Samuel, and that was John Knox, the reformer and uncrowned king of Scotland. Unlike Samuel, Knox got his religious start in manhood, but he never relaxed his hold. His stormy interviews with Queen Mary have become famous. His moral power was so great that he held a large part of the people of Scotland together, in a common cause. When he died, it could be said of him that "here lies one who never feared the face of man."

SUNDAY SCHOOL LESSON FOR MAY 6.

SUBJECT:—Samuel: Judgment and Prophet.
LESSON:—1 Sam. 1: 1-4:1; 7:3-10:27; 11:12-13; 15: 15:1-16:13.
GOLDEN TEXT:—"Only fear Jehovah, and serve him with all your heart; for consider how great things he hath done for you." 1 S. 12:24.

Exit Clover---Enter Alfalfa

(Continued from page 626).

with which I am well acquainted, the soil a medium to light sandy loam, for three years alfalfa sods have been plowed for potatoes, followed the next year by corn, rye sown on the corn stubble, and alfalfa seeded on the rye the next spring. The yields of potatoes and grain have been unusually good, and fine seedlings of alfalfa have been obtained every year. I have observed the following rotations on other farms: Corn, oats; corn, oats, wheat; potatoes, oats; potatoes, oats, wheat; potatoes, corn, wheat; potatoes, rye. All these rotations were preceded by alfalfa and alfalfa was seeded with the final grain crop. On a majority of these fields, neither manure nor fertilizers were used with the rotations. In all cases, no matter how dry the weather, the seedlings of alfalfa not only lived, but grew with all the vigor that young clover seedlings used to grow.

The use of alfalfa as the main crop for hay, pasture and soil improvement means longer rotations than those used in the days of clover growing. Alfalfa will occupy the land three or four years, then there will be two or three years of other crops. More than half of the tilled land on a farm will be in alfalfa. This will mean less plowing, smaller acreages of grain and of potatoes, where the latter crop is grown much larger yields per acre, a steadily increasing amount of organic matter in the soil, more live stock and more manure.

At this stage of the discussion someone will arise and say, "This is all theory, it will never happen." It has begun to happen. I know of a few farms where this system is already established. I know of other farmers who have adopted the plan and who are working systematically towards its complete establishment. More farmers will fall in line as the experience of these alfalfa pioneers makes plain the way. Again someone arises and says, "If all our sandy land farmers have one-half or more of their land in alfalfa the hay will be so cheap that it won't be worth selling." Exactly. That has already happened in this neighborhood. Alfalfa hay sold here last summer for ten dollars a ton. Think of it. With potatoes at fifty cents a bushel, a ton of alfalfa hay cut down and left on the land as a mulch is worth at least twelve dollars a ton. Last summer we mowed sixteen acres and left it where it grew. We sold it to the land. When alfalfa hay is so abundant in a community that it is not profitable to sell it, real soil building has begun in that neighborhood.

It is not my intention in this article to describe methods of starting alfalfa on land that has never grown the crop. As has been said, some of the essential rules vary with localities and with different types of sandy loams. I do not mean light, thin sands that never were good grain lands. In using the term "sandy loams" I refer to the typical opening soils that for many years produced good crops and did not grow poor until after clover failures became the rule.

We have in the last few years made two important discoveries that I believe will apply to all the medium sandy soils in our southwestern counties. One already mentioned is that after the land has once grown alfalfa, future seedlings can be made with grain with a certainty of success. The second discovery is that it is not necessary, as we thought a few years ago, that our depleted sandy soils be made rich before a successful alfalfa seedling can be secured. If a field is not practically worn out, it will produce half an old-time crop of corn or rye, with proper management good seedlings of alfalfa can be established with-

out the use of manure or other fertilizer. I have seen this done so often that I do not hesitate to make the assertion. It is true that the first year's crop will be light, sometimes hardly worth cutting, but after the first year the yields will be satisfactory. In a future article I shall describe the experiences of farmers in successfully seeding such fields.

When land is being fitted for its first seeding of alfalfa the work on that field should take precedence. It is the most important job on the farm. When the time comes to perform any part of it let nothing get in the way. Last, and most important of all, learn the lessons taught by the successes and failures of other farmers who have had experience with alfalfa in your locality and on your type of soil.

We are just beginning to realize the possibilities of alfalfa on our southern Michigan sandy loams. It is the common belief of those who have had successful experience with it that within the next few years it will revolutionize the agriculture of these lands. The period of depression through which we are now passing, caused by excessive production of farm staples is remedying itself. Hundreds of thousands of farm people living in sections remote from consuming markets, or where the soil is too poor to maintain a profitable agriculture, or where climatic conditions are unfavorable and undesirable are moving to industrial centers. This migration, shown clearly by the last census, and which is increasing, is thinning the ranks of our competitors and swelling the number of consumers. It will continue till a balance is established.

But the "opening lands" of southern Michigan will not be deserted. Dry, decent and clean, beautiful to the eye, with exceptional climatic conditions, they are most desirable to live upon. They are in the midst of one of the greatest industrial regions of the world. A consuming population already great, and that is increasing by leaps and bounds, is at our doors. To us high freight rates have no terrors. They are a distinct advantage. With an assured knowledge that we possess continually enlarging markets close at hand, and with the problem of soil renovation and soil maintenance solved, it is not difficult to believe that the once famous opening lands of Michigan will again come back to their own.

SOWING SWEET CLOVER TO KILL THISTLES.

A PART of a field that goes to oats contains a very good stand of what one of my good Irish neighbors calls "Michigan Alfalfa," (the common name is Canada thistle). He says, "you want to feed it after dark for best results." For this reason we have been planning on seeding this field or a part of it, when the proper time comes, to sweet clover. We have never sown sweet clover before, except the annual variety, preferring alfalfa instead where it could be grown successfully. We do not need more alfalfa at this time, however, and this field, which is on the back side of the farm and a long ways from the manure pile, needs a thorough renovating and enriching. I have seen sweet clover by its rank and thick growth do a very satisfactory job of eradication of foul weeds, and it is one of the best of soil builders, so we aim to give it a trial on this field and see what the results will be.—Pope.

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Are You Interested For Sale or Rent. 700 acres heavy clay loam, fenced. Originally 4 farms, can be divided. 1 1/2 miles to town and railroad. State highway through town and farm. 300 acres under cultivation, balance hard-wood timber, wood lots and pasture. 10 acres bearing orchard. Best of deep wells and stocked spring lake. Good houses and 6 barns. Stock, full equipment machinery, blacksmith forge, lumbering tools, cream separators, gas engines, cider press, tanks and cookers. Soil is the best loam, clay bottom, never too wet, can always be worked. Raise anything. The soil is here. Investigate. Price and terms right. John Rasmussen, Johannesburg, Mich., Otsego Co.

FARMS WANTED

List your farm with the oldest established real estate agency between Detroit and Lansing. Fair dealing; quick results; no contract required.

Farm Dept.
R. A. WINGARD
746 Starkweather Ave. Plymouth, Mich.

Own a Farm
In Minnesota, Dakota, Montana, Idaho, Washington or Oregon. Crop payment or easy terms. Free literature. Mention state. H. W. Byerly, 71 Northern Pacific Bldg., St. Paul, Minn.

CHOICE LOT MICHIGAN FARM LAND
740 acres; 12 miles from city; 125 acres cleared; all fenced. Natural clover soil. Some saw timber and cedar; quantity fuel wood. New ten room house, modern; water, heat, light, telephone. Barn; cow barn; granary; root cellar; implements; stock; 1,100 young fruit trees, mostly apple, beginning to bear. Box 7, Alpena, Michigan

FOR SALE Southeastern Colorado—irrigated and non-irrigated farms and ranches. Write for free information. Gregg Realty Company, Lamar, Colorado.

Sell your property quickly for cash, no matter where located. Particulars free. Real Estate Salesman Co., 515 Brownell, Lincoln, Neb.

Poor Man's Chance \$5 down, \$5 monthly. productive land near town. Some timber. Price \$225. Other bargains. Box 425-Z, Carthage, Mo.

80 Acres Improved \$65 per acre \$1000 cash. 160 acres improved \$87.50 per acre \$1000 cash. THE ALLEN COUNTY INVESTMENT CO., Iola, Kansas.

WANT TO HEAR from owner having farm for sale. Must be a bargain for cash. ALBERT J. SHIRLEY, 703 South Rose St., Kalamazoo, Mich.

We Have Cash Buyers for farms at real bargain prices. Describe fully. Central Land Bureau, New Franklin, Mo.

CASH YOUR PROPERTY QUICKLY. Location important. Give best price. Universal Sales Agency, Box 43, N. Topeka, Kans.

Want to hear from party having farm for sale. Give particulars and lowest price. JOHN J. BLACK, Copper St., Chippawa Falls, Wis.

FARMS: If interested in an Ohio paying poultry farm fully equipped, write. Farms all sizes and prices. H. H. WEBBER, Agency, Atwater, Ohio.

WANTED to hear from owner improved or unimproved farm. Description. Price. JOHN LEADERBRAND B-45 Cimarron, Kansas

I Want Farms in Mich. for cash buyers. Describe and state price. R.A. McNow, 324 Wilkinson Bldg., Omaha, Neb.

WONDERFUL Bargains in Michigan Farms. Your railroad fare paid. Free list. ALBERT J. SHIRLEY, Rose St., Kalamazoo, Mich.

WANTED—To hear from owner of land for sale O. K. HAWLEY BALDWIN, WIS

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

Overalls
Coveralls
Work Coats
Work Shirts
Romper
Playsuits



Boys Like 'Em—

— And mothers, too, for Van Wert Excelsior Rompers and Playsuits fit well, wear well, wash well and hold their form and color. The same firm high quality materials are used as in our overalls for men. They are made with the same care and are fully guaranteed.

Sold by good merchants everywhere

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Van Wert, Ohio

VAN WERT EXCELSIOR WORK CLOTHES



**SOFTENS
HARD
WATER**

**RUB-NO-MORE
WASHING POWDER**

Easily and antiseptically cleans, purifies and sterilizes dishes, crocks, dairy vessels and farm utensils. It's economical, too! Ask your grocer for R. N. M. White Naptha, the perfect laundry soap!

**SAVE THE
TRADE MARKS**

BARGAIN \$1.98 Summer Dress

This exquisite, fashionable dress is made of a sheer quality voile with all-over pattern. The dress will wash perfectly. The round neck is adorned with three rows of white organdy ruching. Short sleeves and two loose panels on skirt are edged with the same white ruching. The broad white organdy sash ties gracefully in the back. Circular skirt is made full around bottom and the two loose panels make the dress one of the most desired styles. This dress would ordinarily sell for about \$4.

Colors: Navy Blue or Brown with white and tan small figure as pictured. Sizes to fit Misses—14 to 18; Ladies—32 to 46.

**DON'T SEND
ONE PENNY**

Just send your name and address—no money. When the postman delivers this dress pay him \$1.98 for it. We have paid the delivery cost. If for any reason whatsoever it is not better than you expect, return it at our expense, and we will cheerfully refund your money. Could anything be fairer?

Order by
No. 94
Walter Field Company Dept. F 1101
CHICAGO



Woman's Interests



Try Some New Vegetable this Year

By Nelle Portrey

FARMERS are supposed to be a progressive people, and yet we plant the same sort of gardens, year after year, with little or no variations. When a new vegetable comes on the market, or when an improvement to an old one is offered, we pass it by and order the same seeds our grandmothers used to use. Every spring my mother searches through the seed catalogs for something new; or, at least, something that is new to us. The vegetables I shall tell about in this article are all ones we have tried and know to be good, both for the busy home gardener and the man who raises for the market.

Spinach is a plant that has been grown by market gardeners for a long time, but it has never come into a very extensive use for home gardens. It is used for salads but its most popular use is for greens. There are several varieties but for general use the Long Season is perhaps the best, as one of the greatest faults that can be found with spinach is that it goes to seed so early. The Long Season variety does not go to seed till after the leaf is used like spinach, for greens.

It grows from two to three feet in height.

Chinese cabbage or celery cabbage preferred by many to cabbage. If planted early it runs to seed and for this reason should be planted about turnip planting time.

Swiss Chard or Spanish Beets are fine. They, too, belong to the cabbage family. Small cabbage-shaped heads grow the full length of the main stalk. These are broken off and cooked like cabbage. They are best for use during fall and early winter.

YOUR WINTER FURS.

If you have only one or two pieces of fur to pack away, and have no provision for taking care of these, get a clean pasteboard suit box. You can get one of these in a good heavy quality at a store or a tailoring establishment for five or ten cents. Clean your furs. Lay into the box; sprinkle with powdered tobacco. Put the cover on



The Perfume of Newly-turned Earth Retards the Progress of Spring Fever.

hot summer months are passed; and it does not lose so much bulk in cooking as most kinds do.

Kale is used for "greens" and belongs to the cabbage family. It is excellent for late fall and early spring use. For early spring it may be sowed in September.

Salsify or vegetable oyster is a very palatable vegetable. When cooked, its taste very closely resembles the taste of oysters. It is cooked in a great variety of ways. It may be served raw, sliced or in vinegar with salt and pepper. It is fine boiled and mashed, or boiled, sliced and fried. But perhaps the best way is to boil and when cool, mash and fry in little patties. The cultivation is the same as for parsnips and carrots. As the roots are perfectly hardy, they may be left in the ground over winter in the same way as parsnips. In fact, they are better after they have been frosted.

Cauliflower is liked by nearly everyone, but many amateurs do not succeed in raising it because they do not realize that to be at its best, cauliflower must be well-grown; and in order that it may be well-grown it must do its growing early, as cauliflower never does well during the summer months. We always do our planting during February, in cold frames, and thus they get through growing before hot weather sets in.

Brussel sprouts are exceptionally used in two ways. The ribs of the thick, fleshy leaves are used like as-

paragus, while the remainder of the the box and paste a strip of paper tightly over the opening. This will prevent any wandering insect crawling up under, and feeding on your valuables.

When you want to use the articles in the fall, all you have to do is to break the seal, shake out the furs, hang them in the open air for a little while, and they are ready for use.

HOW THE MEN FOLKS MAY HELP.

I AM passing on a suggestion to mothers, wives, sisters or hired girls, which my mother and I find saves many steps. The men after each meal carry out their dishes to the kitchen. One can't imagine what a help it is until it is tried.

If any reader finds this little suggestion of any assistance in lessening the daily work in the home, please let me hear from you through the Michigan Farmer.—A Reader.

(If any of the readers have tried this plan, or others, where men folks may help save some steps in the home, I would be very pleased to have a letter from you telling us about it.—Ed.)

"NOT THE CRANK THAT TURNS THE CRANK."

I WAS much interested in the replies to my query in regard to the bread mixers which appeared in the Michigan Farmer. To start with, I will say

there is no Mrs. A. L., and never was, but that is my misfortune, not my fault. I sent for one of the mixers, and it has been in use for several weeks now, but I am not the crank that turns the crank. The first batch of bread made with it left much to be desired, but I reflected that "Rome was not built in a day," and when the second trial was a great improvement on the first I was encouraged, and no one could ask for better bread than it produced at the third trial, so I think we can add our endorsement to the others. I say "We," I got the mixer for my sister, to lighten her work, but I help to eat the bread it makes. The sister says it is easier, and quicker than mixing by hand, and anyone could tell that it was more sanitary. Many thanks to those who wrote the letters.—A. L.

MAPLE SYRUP TIME.

JUST at this time of the year when sap is running, I will send a recipe for using that batch of dark or muddy maple syrup, that has been a favorite in our family for over twenty-five years.

Maple Syrup Cake.

One cup of sugar, two-thirds cup of drippings, or butter and lard mixed, three eggs, one teaspoonful of nutmeg, one cup of thick dark maple syrup, one cup sour or buttermilk, two-thirds of a teaspoon of salt and three cups of flour. I hope you will like this.—Mrs. E. M. T.

A SUNDAY DINNER IN MAY.

THIS is the menu which won third prize in our Dinner Menu Contest but lack of space prohibited it from being published before.

Cream of Celery Soup

Cheese Roast Potato Ribbons
Pickles Bread
Peach Shortcake with Whipped Cream
Coffee

The above menu looks rather small, but it is an unusually satisfying meal. Below I give the recipe for the cheese roast.

Cheese Roast.

One-pound can of kidney or navy beans; one and one-half pounds of cheese; one cup of bread crumbs; salt, pepper and paprika to taste; one tablespoon of butter; one onion chopped fine.

Run beans and cheese through the meat-chopper. Cook onions in butter and a little water. Mix all ingredients thoroughly, then mold in loaf or roll, moisten with melted butter and water, roll in bread crumbs. Bake in moderate oven till nicely browned, basting occasionally with melted butter and water, or good drippings. Serve with tomato sauce.

Peach Shortcake.

Use your favorite short-cake recipe. Use canned peaches, well sweetened. Top with whipped cream, or jelly meringue.

Jelly Meringue.

One egg white, half cup currant or grape jelly. Beat together with egg-beater until stiff.—Mrs. J. B., Temple, Michigan.

Split open two short pieces of rubber hose, fasten them on the lower end of the stepladder. Turn them up on the sides of the supports, and nail them there. This prevents the stepladder from slipping on the bare floor.

Handiest Thing in My Home

By The Prize Winners

Mrs. M. A. M., Morley, Michigan.
First Prize.

The handiest thing in my home was put in this winter by my husband and son. We already had the windmill and water piped to the house, and stored in a three-barrel storage tank placed in the room above the kitchen and had water at the sink.

But they added more pipe, running it under the floor behind the range. At one end of the range a pipe came up through the floor, extending up by the warming oven high enough so the wash boiler would slip under it. By turning a little wheel on an angle valve the boiler was filled without lifting a bit of water. At other end of range another pipe came up through floor to reservoir. A small hole was drilled in top of reservoir in such a way as not to interfere with cover. The pipe extended over from the back with an angle valve to fill reservoir.

The cost for fixtures and pipes was about \$2.75, the men doing their own plumbing.

Second Prize.

Mrs. P. F. B., Centerville, Michigan.

The handiest thing in my home is a red-headed daughter of eleven, who springs down stairs three steps at a time and bounces into the kitchen with a cheery "good morning, everybody," and an extra smile for the cat.

Although she hasn't missed a day of school she has found time, without being asked, to keep the wood boxes filled, to feed and water the poultry, care for the plants, keep her own room

in order and dust the others; to wash breakfast dishes, to keep fresh flowers on the table in season, shake the rugs, to do most of her own mending and some ironing. She says she really likes to wash dishes because she can make them shine so.

She hangs out a washing quickly and neatly without missing a note, for she doesn't believe girls shouldn't whistle. This is her week to bake pancakes, and she does 'em up brown.

Yes, I know you didn't mean "girls," but I haven't another thing in the home that is half as handy.

I am quite an advocate of child labor, not heavy labor, but a child must be kept busy in order to be contented, so why not mix work with play?

Since my children were able to walk they have helped. Sometimes they were the grown-ups and I the child, and I've been the hired girl and the old gray mare; but we accomplished "heaps." I visited and told stories while we worked, and I know that all concerned are better because of the close companionship.

If you want a real handy "thing" in your home, just become a real "motherchum" at once.

Make a big game of living and you soon will like it, and so will those around you.

Lack of space will not permit of the third, fourth and fifth prize winners, Mrs. R. M. C., Big Rapids, Mich.; Mrs. L. G., Monroe, Mich., and Mrs. M. J. B., Ann Arbor, Mich., respectively, to appear until next week.



(Use this department to help solve your Household Problems. Address your letters to Martha Cole, Michigan Farmer, Detroit, Michigan.)

THE HORRID INK STAIN.

Will you please explain how to remove ink stains?—Mrs. R. M. A.

Ink stains are removed in various ways, depending upon the nature of the ink. Buttermilk or sour milk is excellent, changing the liquid as often as it becomes stained. Another method is to take a solution of peroxide of hydrogen, and soak the ink stains in this. Lemon and salt are also good for use on white material. Sometimes colored garments can be freed from ink stains by applying kerosene.

Indelible ink stains sometimes yield to a treatment of strong salt water, and then a washing with ammonia.

TO BLEACH YELLOW VOILE.

I have a piece of fine white voile that has become yellow from lying in the trunk. How can I wash this so it will whiten? I made myself a dress of expensive, imported organdie that was supposed to have a permanent finish. After it was washed, it became flimsy and soft as voile. Is there anything I can put in the starch to give the dress a permanent finish again?—Miss H. M.

To whiten the voile that has become yellow by lying in the trunk, would advise that you use Javelle water. The following is a recipe for making

One pound of washing soda, one quart of boiling water, one-half pound of chloride of lime, two quarts of cold water. Put soda in granite pan, add boiling water and stir until dissolved. Let cool. Dissolve the chloride of lime in cold water, let settle, and pour the clear liquid into the soda. Let settle

again and pour off the clear liquid. Bottle and put away in a dark place.

This makes an excellent bleach, diluting it with equal parts of water. Do not let the garments remain in it for more than twenty minutes. For your white voile I would advise using one part Javelle water to four parts clear water. If Javelle water does not whiten to the degree necessary, hang in the sun and keep well sprinkled.

I do not believe that the organdie you purchased as of an imported grade could have been properly graded, because imported organdies are guaranteed to stand washing. Starch your dress in a solution containing about five cents worth of gum arabic.

A DOUGHNUT LIFTER.

THERE are numerous small contrivances that one can invent that help with the household problems.

This is one of my own invention and I find it very convenient. Take the handle from a pail that has been discarded as of no further use, straighten it out

and curve it slightly at one end. On the other end place a handle made from a piece of pine. Friend Husband can either whittle this handle out, or perhaps there may be one at hand from a discarded cooking utensil. The doughnuts can easily be turned with this device, and when done the whole frying can be slipped on this wire and removed at one time. It is better and safer than a fork and does not pierce the fried surface so that the doughnut absorbs too much grease.—M. C.



Royal

Gasoline Irons have already abolished the drudgery of ironing for over 1,000,000 women.

They require no stove fires, gas tubes, or electric cords. The heat is generated in the iron itself.

Handsomely nickel plated. Attractively designed. Inexpensive to operate. Ready at a moment's notice.

ROYAL SELF HEATING IRON CO.
507 Wayne Street Big Prairie, Ohio

Michigan Farmer Pattern Service

Dainty Frocks for Sunny Days

No. 4085—Girls' Dress. Cut in four sizes, 8, 10, 12 and 14 years. A ten-year size requires $4\frac{1}{4}$ yards of 32-inch material. Price 12c.

No. 4350—Girls' Dress. Cut in four sizes, 6, 8, 10 and 12 years. A ten-year size requires $3\frac{1}{2}$ yards of 36-inch material. Price 12c.

No. 4337—Ladies' Apron. Cut in four sizes: Small 34-36; medium 38-40; large 42-44; extra large 46-48 inches bust measure. A medium size requires $3\frac{1}{4}$ yards of 36-inch material. Price 12c.

No. 4334—Ladies' House Frock. Cut in four sizes: Small 34-36; medium 38-40; large 42-44; extra large 46-48 inches bust measure. A medium size requires $4\frac{3}{4}$ yards of 36-inch material. The width at the foot is $2\frac{5}{8}$ yards. Price 12c.

No. 4359—Misses' Dress. Cut in three sizes, 16, 18 and 20 years. An 18-year size requires four yards of 44-inch material. The width at the foot is $2\frac{1}{2}$ yards. Price 12c.

No. 4338—Ladies' Dress. Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size requires $4\frac{7}{8}$ yards of 32-inch material. The width of the skirt at the foot is about $2\frac{1}{4}$ yards. Price 12c.

No. 3656—Ladies' House Dress. Cut in seven sizes, 34, 36, 38, 40, 42, 44 and 46 inches bust measure. A 38-inch size will require five yards of 36-inch material. The width of the skirt at the foot is two yards. Price 12c.

No. 4339—A Pretty "Rest Robe." Cut in four sizes: Small 34-36; medium 38-40; large 42-44; extra large 46-48 inches bust measure. A medium size requires $6\frac{1}{2}$ yards of 40-inch material. Price 12c.

No. 4343—Child's Dress. Cut in four sizes, 2, 4, 6 and 8 years. A four-year size requires $2\frac{3}{4}$ yards of 32-inch material. Price 12c.

White Diarrhea

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

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

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

Cause of White Diarrhea

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

Never Lost a Single Chick

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

Never Lost One After First Dose

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

You Run No Risk

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

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

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

Name

Town

State R. F. D.

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

Running an Egg Factory

By W. E. McMullen

EVERY flock of hens is an egg factory like any other factory. Like any other factory, the flock may be given the best materials in the world to work on and still fail to produce enough to pay for running the plant.

Good feed in sufficient variety is necessary for egg production, but the ability to manufacture eggs from feed must be there first. It pays to cull out the poor layers any time to save the feed and labor they cost, but to make a profit on them it is best to cull in late summer or early fall before the rush of spring chickens lowers the market price of old hens.

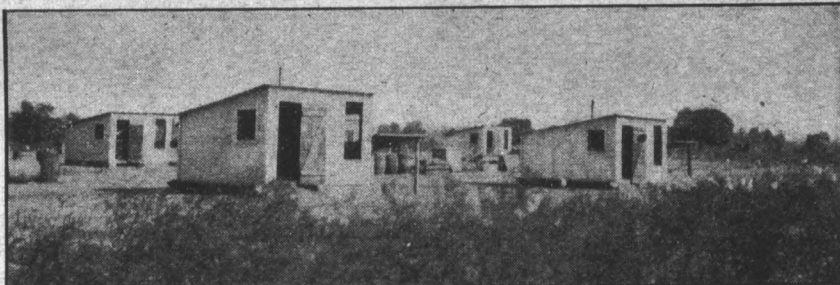
Shut up all the hens and pullets

they will put the poultry business on a practical business basis.—W. E. Mc-

CROP OF BROILERS LIGHT.

OWING to poor February and March hatches, the early spring broiler crop will be poor. The cold wave in March was also effective in making this crop light, because it caused a high mortality of chicks. Consequently the market remains firm.

There has not been any particularly large profits in the early broiler business this year, as the consumption of fuel in the brooders has been heavy and costly. The best incubator hatches in February and March ranged



W. C. Eckard Lacks Movable Colony some evening. Count them and decide just how many can be readily kept during the coming year without crowding, for this is very likely to hurt egg production and increase the danger of disease. The next morning the flock is ready to be culled.

Cull:

1. Poor layers and all old hens.
2. Cripples and hens with broken down abdomens or frozen toes.
3. The sick, quiet, inactive hens that spend much time on the roost.
4. All "crow heads" with long, slim heads and beaks.
5. The large, coarse-headed hens with sunken eyes.
6. All very short, stubby hens with feathers extremely heavy for their breed.
7. All late-hatched immature pullets and those that are early hatched but much undersized.
8. All hens that moult before August 1.
9. The persistent sitter.
10. All hens with solid fat abdomens.
11. All hens having bad habits (cannibals, feather-pullers, (egg-eaters).
12. All cockerels not needed for breeding purposes.

Keep:

1. Strong, healthy, vigorous hens with short neat heads and strong beaks.
2. The hens with long, deep, rectangular bodies and parallel top and bottom lines.
3. The hens with large, bright eyes, active appearance and short, well-worn toe nails.
4. The hens with dusty, worn feathers, especially worn tail feathers, but having a bright, healthy look.
5. The hens that moult late.
6. The noisy, happy, friendly hens.
7. The early risers and those late to roost.
8. The vigorous hens with the faded beaks and shanks.
9. The hens with the soft, pliable abdomens.
10. The hens with the thin pelvic bones spread wide apart.
11. The early-hatched, well-grown pullets.
12. Large, strong, active, quick-maturing cockerels of desired variety type and high-producing mothers.

There are five major factors in profitable poultry production—breeding, culling, feeding, housing, and care. These are the essentials; combined,

Houses for Developing His Stock.

around forty per cent, but the majority averaged a little more than twenty per cent. This made the first cost of the chick rather high, as eggs during these two months cost from thirty to thirty-five cents per dozen.

VETERAN BEE MAN TO RETIRE.

AFTER having been in the apiary business for over fifty years, Abner H. Guernsey, of Ionia, will retire this spring.

In 1866 Mr. Guernsey arrived in Ionia county from New York. That year he took a swarm of bees from a tree and by fall increased it to four colonies. By the end of the sixth year, he was selling about a ton of marketable honey each year. In 1921 he marketed over five tons, and last year he sold six and one-half tons of sweetness. His son will take over about half of the apiary, the other half having been disposed of to Grand Rapids people.

LAYING QUALITIES OF GEESE.

How many eggs should a goose lay, and when should it start?—A. M.

Ordinarily the geese will come into production the early part of March; however, this is usually controlled by weather conditions. The mating should be taken care of during the latter part of February so that under favorable conditions strong fertile eggs will be produced during the month of March.

The number of eggs laid by each goose will depend somewhat upon the quantity and quality of food given. Under ordinary conditions of free range, from nine to twelve eggs will be produced. This, however, can be increased from twelve to fifteen eggs by feeding a ration of ground oats, bran and table refuse or garden refuse. Some geese will lay more than others, however, and records show that from twenty-five to forty eggs may be laid in one season.

The Embden are more inclined to go broody after they have laid a few eggs, than the larger Toulouse which will continue laying well into spring.—E. C. Foreman.

FEEDING GREEN BONE.

I have 350 hens which are getting some kind of a sickness which makes it hard for them to walk. They step high and then seem to fall. I am feeding a well-balanced mash, and scratch grain of corn, wheat and buckwheat. Besides, I give meat scraps

Baby Chicks
from Strains you know!
What kind of chickens do you want to raise? If you want pure bred poultry, bred for high egg production, poultry that will show you a profit and give you the best of satisfaction, then you should buy baby chicks from us.

MILLER QUALITY GUARANTEED
We have been in the poultry business for the past thirty-five years and have hundreds of thousands of satisfied customers. Perhaps you have bought poultry, baby chicks or eggs for hatching from us during the past thirty-five years, and if you have, then you know the quality of our stock.

FROM HEAVY EGG PRODUCING STOCK
Our baby chicks are hatched under ideal conditions from parent stock that are guaranteed, and we ship nothing but strong healthy fluffy chicks that reach you in good condition and live. We guarantee 100% live chicks delivered to you. Miller Strains are winners at many egg laying contests, and if you want the best at the lowest possible price, guaranteed in every particular, write for our price list and catalog.

J. W. MILLER CO.
Write Box A Rockford, Ill.

STAR HATCHERY BABY CHICKS

From Select, Vigorous, Approved, Heavy Laying Breeding Stock. White & Brown Leghorns & Anconas, Single Comb Reds.

PRICES REDUCED
Hatched by modern methods in best machines under our personal supervision. Carefully packed and sent Postpaid and 100% live delivery guaranteed. Bank reference. You take no chances in ordering STAR BABY CHICKS. Place your order now and get them when you want them.

Star Hatchery, Box O, Holland, Michigan

Good Chicks—Fair Prices

Barron Type W. Leg., B. Rocks, S. C. Reds, Pedigreed Chicks from M. A. C. cockerel mating. Utility grade from pure-bred, heavy-laying, free range inspected flocks. Pullets laid at 4 mos., 20 days last year. Guaranteed delivery. Big discount on March orders. Instructive catalog. Bank Ref.

MICHIGAN HATCHERY & FARMS, Box C, Holland, Mich

Pedigreed State Approved S. C. W. Leghorn CHIX American—English Strain

Are you going to buy them from a hatchery or from a BREEDER? Buy from Michigan's Largest Leghorn Farm and insure success. We hatch our own eggs only. Supply limited. Prices reasonable. Satisfaction guaranteed. Descriptive circular tells all about them. It's free.

Simon Harkema & Son, R. 1, Holland, Mich.

DUNDEE CHICKS

Barred Rocks, R. C. Rhode Island Reds, Anconas and White Leghorns
One grade "The Best." Write for catalogue and price list.

THE DUNDEE HATCHERY
Box A. DUNDEE, MICHIGAN

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

Order Now For 1923
WHITE LEGHORNS AND MOTTLED ANCONAS Also Black Leghorns, Brown Leghorns, Buff Leghorns, Black Minorcas, R. C. Rhode Island Reds, Barred Plymouth Rocks, White Plymouth Rocks, Silver Wyandottes, White Wyandottes. WE HATCH eggs from Hatched flocks on free range on separate farms. Send for Price List.

CRESCENT EGG COMPANY
Allegan Michigan

Hardy Northern Bred CHICKS

Barron S. C. White Leghorns, Parks' Strain Barred Rocks. The greatest egg producers known. Heavy winter layers. See record of our pen 36 now at the Michigan International Egg Laying Contest. Get Quality Chicks at Reasonable Prices from HOLLAND'S PIONEER POULTRY FARM. Catalog free. PINE BAY POULTRY FARM R 4 Holland, Mich.

LOOK, CHICKS \$10.50 and up. From highest quality, proven layers. Can ship immediately. W. H. Br. Leghorns \$12.50 per 100. Anconas Buff Leg. \$13.50 per 100. Bar Rocks or Reds \$14.75 per 100. Wh. Rocks, Wh. Wyandottes, Buff Orpingtons, Buff Rocks \$16.75 per 100. Bl. Minorcas \$16.00. L. Brahmans, Bl. Langshans \$22.00 per 100. Add 35c extra if less than 100 ordered. Hatching eggs. Catalog. Good Bank reference. Box 9. Beckman Hatchery, 26 E. Lyon, Grand Rapids, Mich.

Baby Chicks \$12.00 per 100 and up

Hatching eggs, \$1.50 per setting to \$15.00 per 100. We are listing 11 varieties of pure bred fowls: Chickens, Geese, Ducks & Guinea, also breeding stock. Send for prices and circular. Booking now for early delivery. CLINTON HATCHERY & POULTRY FARMS, Wilmington, Ohio.

Sturdy Michigan Chicks

From the largest baby chicks center in the world. White Leghorns exclusively. Get our low prices. Safe arrival guaranteed. We put all our effort into one breed. Write today. Suburban Hatchery, Zeeland, Michigan.

Standard Chicks Satisfy!

S. C. English White and S. C. Brown Leghorn Chicks. Vigorous, Healthy, Early Maturing Chicks, at wholesale prices. We satisfy our customers, 100 per cent live delivery. Postpaid. Catalog free.

Standard Hatchery, Box B, Zeeland, Michigan

WORLD'S LARGEST WHITE LEGHORNS
Lay 265 to 301 eggs per year. Winners at 50 shows. Chicks, eggs, pullets, hens and males shipped C.O.D. at low prices. Write today for catalog and complete information to the World's Largest Leghorn Farms. GEO. B. FERRIS, 934 W. GRAND RAPIDS, MICH.

S. C. B. Minorcas. Pen 1, wonderful pen, eggs \$5 per setting. Pen 2, almost as good, eggs \$4 per setting. Satisfaction guaranteed. R. W. Mills, Saline, Mich.

HEART OF WORLD'S GREATEST BABY CHICK SECTION • CENTER OF AMERICAS POULTRY HUSBANDRY

LEADS THE WORLD IN BABY CHICK INCUBATION

ZEELAND

MICHIGAN

These Hatcheries, and more than fifty others, are members of the Michigan Baby Chick Association. For complete list of members write the secretary of the Michigan Baby Chick Association, Box 205, Zeeland, Michigan.

Michigan Baby Chick Association was primarily organized to protect baby chick purchasers against fraudulent brokers and unscrupulous operators. All members have the greatest faith in the perpetuation of Hatchery Incubation and that scientific incubation is safest, most convenient and economical factor in replenishing the farm flock. Their ethics require strictly honest business methods and truthful advertising.



Northern poultry for years preceding the advent of pedigreed poultry, due to severe winters was a product of natural elimination and a survival of the fittest. Zeeland's several hundred thoroughbred flocks through the preceding natural elimination plus scientific selection which was aided by the State Agricultural agencies are of the best, judged for egg production, and by the American standard of perfection.

Ten Reason Why Riverview Farm Products Excel

1. Because we have spared no expense to produce the highest quality egg-laying strain obtainable.
 2. Because our chicks are from Pure Bred English White Leghorns, culled type tested and Hoganized.
 3. Because all our breeders are tested for wonderful long, deep bodies (the mark of high record laying qualities) and looped combs (an indication of health and vigor).
 4. Because all our hens are mated to approved males, with mothers whose records range from 200 to 302 eggs per year.
 5. Because our endeavors have been successful in producing a strain that will mature early and develop into wonderful layers.
 6. Because our 12 years of experience in poultry raising have enabled us to become leaders in our line.
 7. Because our many repeat orders from satisfied customers prove our ability in producing high quality chicks.
 8. Because the hundreds of unsolicited letters in our files prove the high distinction in chick culture which we enjoy.
 9. Because our membership in the Michigan Chick Association assures our customers of honest business dealings, and chicks as represented in all our advertisements.
 10. Because we stand back of every transaction with our ironclad guarantee.
- Get our prices and catalog before you buy. It's free. We can save you money. Breeders of bred to lay Leghorns, Anconas and Barred Rocks. For May 21st and 28th delivery.
- RIVERVIEW POULTRY FARM, Route 2M, Zeeland, Mich.**



—BABY CHICKS—



From selected, heavy laying, vigorous hens. English and American White Leghorns, Brown Leghorns, Anconas, Barred Rocks. Our flocks are culled by expert poultrymen and are mated to large, vigorous, pedigreed males. All on free range and housed in well-ventilated and correctly constructed poultry houses. Well hatched in modern machines. All orders are correctly and carefully packed and shipped and have our personal attention. Postpaid. Full live arrival guaranteed. Bank reference and this guarantee make you perfectly safe in ordering from us. Get them when you want them. We want your business. Prices right. Catalog free.

WINSTROM POULTRY FARM & HATCHERY
BOX H-6, ZEELAND, MICHIGAN

Guaranteed Rural Chicks

From Extra Selected high producing stock that has been constantly bred for HIGH FLOCK AVERAGES. PURE BRED S. C. English White Leghorns or our Heavy Laying Brown Leghorns 100: \$15.00; 500: \$72.50; Select Anconas 100: \$16.00; 500: \$77.50; Special prices on 1,000 lots. Our flocks are scientifically culled and approved by experts. Customers report pullets laying at age of 4 months. Order some of these BIG VALUE chicks now direct from this ad and you will be convinced of the exceptional high standard of our stock. We ship postpaid, 100% live delivery guaranteed. A deposit of 10% will book your order for shipment on any Monday you may desire. Beautiful catalog free. Reference ZEELAND STATE BANK.

RURAL POULTRY FARM
DEPT. M-3, ZEELAND, R. I, MICHIGAN

Buy "Better Quality" Chicks

We are in a position to furnish chicks from some of the best flocks of English White Leghorns and Anconas to be had, regardless of price. We will be pleased to show any prospective customer the flocks from which we hatch our chicks and have them inspect our modern equipped hatchery. Chicks sent postpaid. 100% good live chicks and your absolute satisfaction guaranteed. Instructive catalogue and prices free on request.

QUALITY HATCHERY
Lock Box 43, Zeeland, Mich.

Egg Bred Baby Chicks Guaranteed to Satisfy



Selected breeders, inspected and approved and headed by large, vigorous males from high record hens. Eleven years of breeding and hatching experience assures you of good, strong chicks that are hatched right, shipped right, and will grow up into real money-makers. 100 per cent live arrival guaranteed. Parcel post paid. Write today for free catalog. Order direct.

PRICES FOR JUNE SHIPMENT

	Per 50	Per 100	Per 500
English Type White Leghorn	5.00	\$10.00	\$47.50
English Type White Leghorn (Extra Select)	5.75	11.50	55.00
S. C. Brown Leghorn	5.00	10.00	47.50
S. C. Brown Leghorn (Extra Select)	5.75	11.50	55.00

ROYAL HATCHERY & FARMS

S. P. Wiersma, Prop.

R. 2, Zeeland, Mich.

High Producing Vigorous Pure Bred Baby Chicks

Fully guaranteed, direct from Trapnested, Pedigreed Tom Barron and Hollywood Imported White Leghorns. World's champion layers. Not just a few 300-egg birds, but a high flock average egg production—that's where you make your profit. Hatched in the largest and finest Hatchery in Michigan, by those who know how. Bargain prices if you order now. We can also save you money on Brown Leghorns, Anconas, Barred Rocks, Rhode Island Reds and White Wyandottes. Satisfaction guaranteed or your money back.

Handsome, complete catalog free for the asking. Write for it today.

SUPERIOR POULTRY FARMS,

Dept. 101
Zeeland, Mich. U.S.A.

Dependable Baby Chicks

From World's Champion Layers
That Grow Quick, Lay Heavy, Pay Big Profits
S. C. White Leghorns Trapnested, Pedigreed, direct importation from Frank Snowden, England; Egg Records 250-291 Eggs.
S. C. Anconas, Sheppard's 331 Egg Strain.

GET BIG PROFITS IN WINTER LAYERS
My parent stock is bred for high egg production and is able to reproduce its kind. My Monarch Strain Chicks make wonderful heavy winter producers when prices are high. Strong healthy chicks. Real money makers. Thousands of satisfied customers order from me year after year because they get absolute satisfaction. Order direct from this ad.
"FREE"—My beautiful 32-page catalog tells all about my wonderful Monarch Winter Egg Strain. It is full of money-making information. Shows life-like photos of our high pedigreed breeders. Catalog is free. Send for it today.

256 Eggs in One Year



Lady Snowden

Frank A. Van Bree, MONARCH POULTRY FARM, Box 32, Zeeland, Mich.

Baby CHICKS

Quality and Prices
Strong and Healthy, 98%
Live Delivery Guaranteed

Order now, protect yourself.

A 10% payment insures your future booking at attractive prices.

West Michigan Poultry Farm & Hatchery 407 Main Street
Zeeland, Mich.

We specialize in breeding and hatching single comb Tom Barron English Strain White Leghorns. Have wonderful offerings in chicks from blooded Anconas and Brown Leghorns.

Flocks selected for consistent, heavy and early laying.

One of our flocks has been making some very nice egg production records. One day this flock, which numbers 203 hens, laid 191 eggs.

MICHIGAN POULTRYMEN Get your BABY CHICKS from the hatchery that is

REASONABLE IN PRICE
RELIABLE IN SERVICE
RESPONSIBLE IN QUALITY



Our wonderful producing flocks are headed with vigorous, pedigreed males of 260 to 280-egg strain. All flocks thoroughly culled by experts, and on free range, producing hardiness and vitality. Our hens produce chicks that are husky, healthy and full of pep. "They're as lively as crickets," our customers write us. No wonder. They come from quality stock, are hatched with utmost care, and shipped under most favorable conditions.

We emphasize quality, and our prices are reasonable. Give us a trial this year, and you'll secure a flock of laying and paying hens. Write today for our catalog. It's free.

Baby Chicks. Eggs. Pullets.

SILVER WARD HATCHERY, BOX No. 30, ZEELAND, MICH.

DAY OLD CHICKS

From Select, Hogan Tested Flocks on Free Range. Well-fed and handled to insure strong, vigorous chicks. Heavy Layers. WHITE and BROWN LEGHORNS and BARRED ROCKS Especially Priced. Hatched right and shipped right. Postpaid. 100% live delivery guaranteed. Bank Reference. Experienced and successful Baby Chick producers. Write for descriptive folder and get our new low prices.

BORST & ROEK
BOX M, ZEELAND, MICHIGAN



Egg Bred BABY CHICKS

The Best Laying Strains on Earth

Barron English White Leghorns, Brown Leghorns, and Anconas. During 1923 we will sell 30,000 strong, healthy, super-hatched chicks weekly, bred from strains backed by 18 years of actual egg breeding on our Farms. The enormous output of these quality chicks enables us to sell these money-makers at a price unequalled. Our flocks are culled out annually by poultry experts and are mated to large, vigorous 260-288 egg Pedigreed Males from Funk Farm direct.

Hundreds of Customers Report Big Profits

E. I. Beebe, St. Charles, Mich. writes: My 100 hens laid 193 eggs each and I made over \$300.00 clear profit last year.

Wm. Vivant, Harbor Spring, Mich. writes: We got 3528 eggs in January from 180 pullets.

A. Dall, Port Huron, Mich. The pullets began to lay at 4 1/2 months old and averaged 23 1/2 eggs each for one month.

F. L. Hess, Chicago, Ill. writes: I averaged 112 eggs a day from 140 hens and sold \$158.00 of eggs in February.

Raise Good Stock and Reap a Golden Harvest

We don't boast on a few high record birds but our extraordinary flock's average has attained our present high standard. Intelligent chick buyers look for these qualities and we assure you we have them. Get our 1923 large catalog now, it's free.

Wingarden Hatchery, Box M, Zeeland, Michigan

BUY HUBER'S RELIABLE CHICKS

Our 14th Year --- 1,000,000 for 1923

By Parcel Post Prepaid—100% LIVE DELIVERY. Give us your order for some of our RELIABLE CHICKS and we will prove that we give you better chicks for the money than you can get elsewhere. COMBINATION OFFER and SPECIALS OFFERED. Order early. Write for prices and Free Illustrated Catalog.

Huber's Reliable Hatchery, East High St., Fostoria, Ohio

50,000 PULLETS LEGHORNS ANCONAS B'D ROCKS

Get pure bred, fall and winter laying stock from Michigan's largest pullet producers. Our experience and facilities for raising in large quantities enables us to sell high grade stock at low prices.

Also Baby Chicks in above varieties. Get our catalog and price list at once. **ZEELAND POULTRY FARMS, Zeeland, Mich.**

BABY CHICKS Postpaid to your Door, \$11 per 100 Up

FROM HOGAN TESTED, FREE RANGE HEAVY LAYING FLOCKS. ALL VARIETIES. WHITE, BROWN and BUFF LEGHORNS and ANCONAS. \$13.00 BARRED ROCKS and R. I. REDS. \$14.00 WHITE WYANDOTTES, WHITE ROCKS, BUFF ROCKS. \$15.00 BLACK MINORAS, BUFF ORPINGTONS. \$16.00 EXTRA SELECTED FLOCKS. \$2.00 per 100 higher. All lots of 500, or more discounted Large Price List for return mail.

Postpaid full live delivery guaranteed. Hatched by the most modern method of incubation from good, vigorous, pure-bred varieties, carefully selected and safely packed. No catalogue. Order right from this ad and save time and disappointment. Reference, Chesaning State Bank or any business in Chesaning.

Address BABION'S FRUIT AND POULTRY FARM, Guy L. Babion, Prop., Chesaning, Mich.

MEADOW BROOK FARM

CHICKS ENGLISH WHITE LEGHORNS, BROWN LEGHORNS (Holland Importation Strain) 50, \$7; 100, \$13; 500, \$62.50; 1000, \$120. BARRED ROCKS; REDS, BUFF LEGHORNS, 50, \$8; 100, \$15; 500, \$72.50; 1000, \$140. WHITE WYANDOTTES (Heavy Laying Flocks) 50, \$9; 100, \$17. Postpaid, full live delivery guaranteed. All flocks composed of Selected Heavy Layers. Order now from this advertisement and get them when you want them. I have been producing good chicks successfully for the past 20 years and KNOW HOW. I want your business and will try hard to please you. Free Catalog, Bank Reference. Meadow Brook Farm, Henry De Pree, Proprietor, Route 1M, Holland, Mich. Member Mich. B. C. A.

Save Your Baby Chicks

Increase the live weight—reduce the death rate. Feed them SECO Chick feed and buttermilk Chick Mash, and secure better results. These feeds mean stronger chicks and increased profits. Give them a chance. If your local dealer cannot supply you—write to us direct. Special prices to quantity buyers.

STOCKBRIDGE ELEVATOR CO.

Jackson, Mich.

JUST-RITE LOOK! Baby Chicks

A Hatch Every Week All Year

POSTAGE PAID, 95¢ live arrival guaranteed. MONTH'S FEED FREE with each order 40 Bred chicks, 4 breeds ducklings, select and exhibition grades. Catalog free, stamps appreciated.

NABOB HATCHERY, Dept. 15, Gambier, O.

CHICKS

Price List Prepaid to You. Pure bred Stock. 100 \$5.75 \$3.50 S. C. White Leghorns. 50 \$3.00 \$1.50 Anconas. 14.00 7.25 Minoras. 17.00 8.75 Buff Rocks. 16.00 8.50 Barred Rocks. 15.00 8.00 Order from this advertisement. All first class pure bred stock. Prompt shipments made.

THE MONROE HATCHERY W. Third Street MONROE, MICH.

SUPERIOR CHICKS

We hatch Leading Varieties Standard Bred, vigorous, heavy laying stock. Postage paid. Live arrival guaranteed. Lowest prices. Best quality. Prompt deliveries. Send for our large, illustrated catalog. Superior Poultry Co., Box 339 Windsor, Mo.

CHICKS

All kinds, strictly purebred. Sent postpaid and guaranteed. Large illustrated baby chicks book free. Send for your copy today. We hatch the BEST for LESS. COMFORT HATCHERY, Box LFW, Windsor, Missouri

RHODE ISLAND WHITES

win over all breeds at the egg laying contest. 30 eggs \$5; 50 \$9; 100 \$15 order from this ad. Some chicks H. H. JUMP, 175 Prospect Blvd., Jackson, Mich.

BARRED PLYMOUTH ROCK Hatching Eggs, full blood \$2.00 per 15. Post paid J. A. BARNUM, Union City, Mich.

CHICKS THAT MAKE PROFITS Strong, vigorous, well hatched from leading breeds of heavy layers. Moderate prices. 100% live delivery guaranteed. Postpaid. Catalog giving full particulars free. Bank reference. BLUFFTON HATCHERY, Box M, Bluffton, Ohio.

Rosewood Farm Healthy, Hardy Chicks

Well-hatched, carefully packed, and shipped. Select, heavy laying WHITE LEGHORNS, 50, \$7; 100, \$13; 500, \$62.50; 1000, \$120. Select ANCONAS, 50, \$7.50; 100, \$14; 500, \$67.50. Select BARRED ROCKS, 50, \$8.50; 100, \$16.50; 500, \$80. Postpaid, full live delivery guaranteed. Our chicks will render you the best of satisfaction and you will COME BACK TO US. We have had long experience in producing good chicks and our flocks are second to none. Circular free.

Rosewood Farm, R. 12B, Holland, Mich.

WASHTENAW HATCHERY

following hatches: March 26th and Reds, 50, \$8.50; 100, \$16; 500, \$75. White Rocks, White Wyandottes, 50, \$9.50; 100, \$18; 500, \$85. White, Brown, and Buff Leghorns 50, \$7.50; 100, \$14; 500, \$65. Postpaid, full live delivery guaranteed. Our flocks are carefully selected and bred for high egg production. Order from this ad. Reference, Farmer's & Mechanic's Bank.

WASHTENAW HATCHERY, Ann Arbor, Mich.

CHICKS White Leghorns and Anconas. Our stock is scientifically called by experts, assuring you strong healthy, bred to lay chicks. That will live and grow. Live delivery guaranteed. Catalog free. Sterling Poultry Farm & Hatchery, Zeeland, Mich.

CHICKS from good selected heavy laying flocks of S. C. Buff Leghorns. We keep just the one breed. Write for circular. Willard Webster, Bath, Mich.

and bone that I grind myself.—C. H.

The birds may be too heavily forced for eggs with protein, if you are feeding a normal amount of beef scrap in the mash and then adding the green bone which you are grinding.

Green cut bone is laxative and sometimes produces bowel trouble. If used in large quantities it is a severe strain on the liver and in some instances has been found to produce a condition similar to gout in men. Not more than ten per cent of green bone can be safely used in the poultry ration. I think if you cut down the bone and give plenty of green feed and exercise that the condition of the flock will improve.

TURKEYS WITH GAPES.

Will you tell me what causes gapes in turkeys, and can you prescribe a remedy?—L. D.

Gapes do not usually trouble turkeys as much as chickens, but turkeys sometimes pick up the gape worms from ranging on soil which has become infected from chicken raising. One of the best methods is to try and keep the mother hen and the poults on soil far enough from the poultry buildings to keep them from becoming infected. Gape worms can be removed by dipping a looped horse hair in turpentine and twisting it around in the windpipe of the bird until the worms are dislodged. The gape worms seldom cause serious loss among birds over a month old. At that time they are strong enough to throw off the worms before they interfere with the breathing and devitalize the bird.

POULTRY FEEDING QUESTIONS.

I am feeding laying hens bran, tankage, cornmeal, oatmeal, equal parts by weight, also about eight pounds of cracked corn, six pounds of whole wheat, four pounds of whole oats. Are mash and scratch feed balanced? Will barley take the place of wheat in the above scratch feed?—H. C.

The feeds mentioned are all good for poultry. The quality of the tankage is important and only high-grade tankage should be used. A slightly better mash can be made of equal parts by weight of ground oats, ground corn, bran, middlings and tankage or beef scrap. And if plenty of sour milk is available you can cut the amount of meat scrap in two.

Local conditions and prices often influence what is used for poultry feed. If you are having good results with your home-mixed feeds, possibly no great change will be necessary. I think your scratch feed is balanced near enough for good results. An ideal scratch feed is two parts of cracked corn to one of wheat in the winter. The proportion can be reversed in the summer. Equal parts can be used spring and fall. When good quality can be obtained, two parts corn, one part wheat and one part oats are generally recommended.

Barley is not usually considered satisfactory in the scratch grain ration. When barley is used it gives the best results when ground and placed in the dry mash.

HENS LOSE FEATHERS.

We have in our flock of Rhode Island chickens something that makes the feathers drop off their necks and around their heads. It seems as though they break off. Some are quite ragged looking. I have heard it was a louse that ate the feathers. Is there something we can use as a dip?—E. E. H.

The loss of feathers around the head may be due to the activities of the male bird. If the trouble is due to depluming mites which sometimes destroy the plumage, try rubbing the parts with an ointment made of four parts lard and one part flowers of sulphur. Sometimes a cure can be made by washing with some commercial disinfectant.

White Diarrhea In Baby Chicks

Put this in the drinking water and stop it in 48 hours.

White diarrhea kills half of nearly every hatch of chicks. The strange thing is that so many people think this loss can't be stopped. But it can be stopped, without extra work, without troublesome dosing, and at almost no cost. For years, thousands have saved their sick chicks and raised nearly every chick in every hatch, by merely putting an Avicol tablet in the drinking water. These successful poultry raisers will



tell you there is nothing else like Avicol for quick, positive results. Chas. N. Kittinger, Willows, Calif., writes:

"Twelve of my chicks had diarrhea when the Avicol came. I immediately gave them some, and by the second day, the trouble disappeared and now they are all as lively as crickets. If I had only known of Avicol sooner, I would have saved lots of chicks." Your sick, droopy chicks—within 48 hours after they get Avicol—will be just as lively as Mr. Kittinger's were. No matter how fast you are losing them, you can stop them dying the very day you get Avicol in their drinking water.

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

Why sit back and let your baby chicks die? It costs nothing to try Avicol. Here's our offer: Send 50 cents to the Burrell-Dugger Co., 52 Columbia Bldg., Indianapolis, Ind., for a package by mail prepaid (or pin a dollar bill to your letter for the extra large size holding nearly 3 times as much). If it doesn't stop your chick losses immediately, if it isn't superior to anything else you ever heard of or tried, if it doesn't satisfy you in every way, your money will be promptly refunded. You don't risk a cent. Try Avicol and judge results for yourself.

BURRELL-DUGGER CO., 52 Columbia Bldg., Indianapolis, Ind.

POULTRY

BABY CHICKS

BEST LAYING, HEAVY LAYING, PURE BRED Tom Barron English White Leghorns, S. C. Rhode Island Reds, Park's Barred Rocks, STRONG HEALTHY CHICKS hatched from greatest and best incubator known. Chicks are given full twenty-one days and hatched under proper temperature.

Mr. Frank Fulkerson, Niles, Mich., writes as follows: "From the 66 pullets we raised from your stock last year along with the thirty which we had, we got 1610 eggs in December. Can you beat it?" We are the first and oldest importers of White Leghorns in this state. Watch our pen number 17 in the Michigan Egg Laying Contest. It's Coming Strong! All flocks thoroughly culled and properly mated to pure bred cockerels. Try Some Real Chicks This Year. Order Now at New Low Prices.

Instructive Catalogue Free **Brumer-Fredrickson, Poultry Farm** Box 20 Holland, Mich.

Whittaker's R.I. Reds

Michigan's greatest color and egg strain. Bred from winter layers for thirteen years. Customers report flock average of 24 eggs per hen for January, 2 pound broilers at 7 weeks, 2 1/2 pound broilers at 9 weeks. Write for free catalog quoting prices on eggs and chicks. Rose and Single Combs.

INTERLAKES FARMS

Box 39, Lawrence, Mich.

BRED TO LAY CHICKS

Direct from large modern 65-acre Poultry Farm. Result of ten years of careful breeding for heavy egg production. Winners at leading shows. M. A. C. inspected and approved. 100% live arrival guaranteed. Shipped Postpaid. Bank references. Order at once at these prices or write for Cat. Barron Eng. White Leg., Brown Leg., and S. C. Anconas. Extra select: 50, \$7.50; 100, \$14.00; 500, \$65.00; 1,000, \$125.00. Select: 50, \$6.50; 100, \$12.50; 500, \$60.00; 1,000, \$115.00. Townline Poultry Farm, Dept. M, Zeeland, R. 1, Michigan.

GREEN LAWN CHICKS SENT INSURED parcel post prepaid. Barred Rox, White Rox, Rhode Island Reds and Black Minoras, \$16.00 per 100. Brown Leghorns, English White Leghorns or Anconas, \$14.00 per 100. Extra Select \$2.00 per 100 extra. Heavy Broilers, \$14.00 per 100. Odds and Ends, \$13.00 per 100. 5% discount in 500 or 1000 lots. All varieties 1¢ each in less than 100 lots. Our 13th year producing high grade chicks that please. Our method of shipping positively prevents chilling or crowding and we guarantee 100% live delivery. May, June, July 1¢ per chick less. Order now and state when you wish chicks sent. A saving to cash customers. Deduct 5% if full cash is sent with order. Reference, Fenton State Bank. Green Lawn Poultry Farm, Route 3, Fenton, Mich. Gus Hecht, Prop.

CHICKS 10c

BARRONS S. C. W. Leghorn chicks from a high producing flock at 10c. Sheppard's Anconas 11c and Barred Rocks 12c, for June delivery. Special price on eggs for hatching. We prepare all shipments. Send for our free catalogue and order while they last.

BYRON CENTER POULTRY FARM BYRON CENTER, MICH.

Rural Health

By Dr. C. H. Lerrigo

WHAT TO DO IN ACCIDENTS.

WHAT is there that can be done by a person living on a farm, twelve miles away from the doctor, in case of a real bad accident? Please don't try to give a lot of rules that we shall never remember, but tell us some plain, common-sense facts."

The writer voices the dread of many a person who lives far removed from the air of doctors. It is true that at such critical times it is of little use to try to remember a lot of rules. What are some of the plain, matter-of-fact things that any person of intelligence can do? Are there any such things?

I suppose that the very first thing of importance is to try to keep one's head. It will help you to do this if you know and believe the fact that few accidents are beyond hope of relief, and few are as bad as they appear at first sight. Keep your head. Be brave. Conquer your shudders and go at once to see just how you can help. Send for a doctor, of course; but if the victim is in a state of collapse or is losing blood, don't even leave him to send for help until you have first given what aid you can.

You can almost always stop hemorrhage by pressure. Make uressure between the wound and the heart, first; but if you do not get quick results don't despair. Change your pressure to another likely place. Do it two or three times if necessary. You will soon hit the right spot, even though you know nothing of anatomy or physiology, and cannot tell the difference between an artery and a vein. Remember that the pressure required to check the bleeding of a big vessel is considerable, and that it is most effective when you have some bony point to press against. Do not be afraid to use a little force.

In case of collapse lose no time in reviving the patient. Make him comfortable and improve his circulation by the application of heat, either external or internal. Never try to raise a recumbent person who is unconscious. Nine times in ten the prone position is best. You cannot improve upon it. But you can straighten him out, cover him up, and apply heat. Do not attempt to force liquids down the throat of an unconscious person.

If there is a broken limb, do not attempt to set it if a doctor is anywhere available. But straighten the limbs out gently, without force, and cradle the injured member in a pillow supported by splints. This will help greatly. Then wait patiently for the doctor, keeping the patient in as good spirits as possible, stimulating him with hot drinks and doing all you can to keep up his courage.

LIVER TROUBLE.

I have a relative who has some enlargement of the liver and cannot be persuaded to consult a doctor. He is about sixty years old. Can you suggest any treatment?—B. M.

No, I would not venture. Enlargement of the liver may be caused by so many different things that it would be foolish to work in the dark. My experience has been that most cases

of this nature in elderly people have their origin in some heart weakness. The circulation fails and for that reason the liver enlarges. A lot of relief may be expected from proper treatment, but it would only be temporary.

GOING IN SWIMMING.

Why is it dangerous to go swimming when you are hot? Why do you get cramps that way?—F. M.

I don't think there is any danger in going swimming when you are hot unless you are also tired. It is not good practice for a boy to rush up to the swimming hole after a long hot walk and jump in without resting, especially if the water is very cold. He is much more likely to cramps. That is not because he is hot, however, but because he is tired.

GIVING BABY INJECTIONS.

Please instruct me in giving injections of water to a baby for diarrhea. —M. R.

You may use a quart of warm water containing a level teaspoonful of salt. The water is held in a fountain syringe. It is best to connect a small rubber catheter with the syringe tip, but if one is not available you may insert the hard rubber tip in the rectum, after oiling it. Hold the syringe bag only a little higher than the child's buttocks, so that the water will enter slowly. Test the water carefully to make sure of the temperature, and run a little out through the tube before inserting the tip into the rectum. You may safely use one quart, on a child a month old, and it may be repeated twice in twenty-four hours.

MANY RECOVER FROM INSANITY.

When a person has gone crazy and been sent to the asylum is there ever any hope of getting well?—G. H. P.

Decidedly. Going crazy is a dead term. These people are merely sick people. More than half of them get just as well as ever, exactly as they would following an attack of typhoid or pneumonia. With the improved methods used today the percentage of patients who go home cured is constantly increasing.

SUGAR FOR BABY.

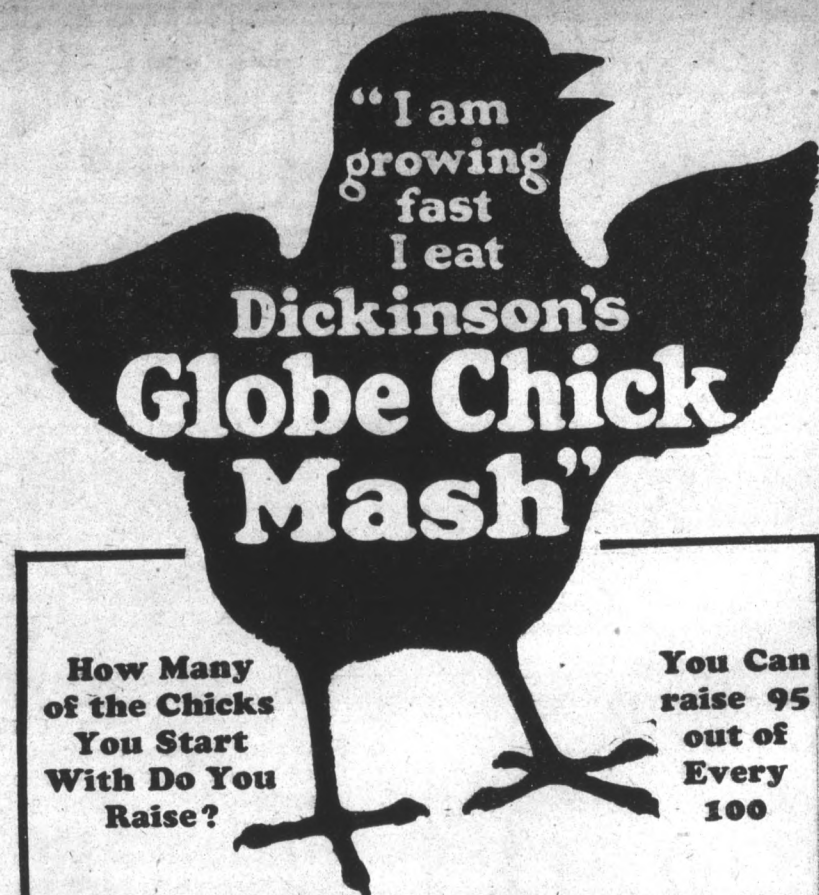
I would like to know if sugar is healthful to put in baby's nipple.—Mrs. W. R.

I suppose you mean just enough to induce the baby to take the nipple. It is a bad practice, as it takes very little cane sugar to induce intestinal fermentation. Such sugar as is used should be mixed in the milk.

WHAT BECOMES OF STITCHES?

When stitches are taken in the scalp and never removed by the doctor, what becomes of them? Are they not likely to make trouble later?—B. B.

The stitches that a doctor would take in a scalp wound would be of some material like catgut, which absorbs after a period of a few days. Whenever possible doctors use absorbent material so that the patient will not have to suffer the pain and trouble of having them removed.



How Many
of the Chicks
You Start
With Do You
Raise?

You Can
raise 95
out of
Every
100

Whether you raise chicks on a farm, or in town, you should start them with **Globe Chick Mash with Dried Buttermilk.**

This carefully balanced chick feed contains all the most necessary cereal, vegetable and animal proteins that should be supplied growing chicks to make bone, blood, muscle and feathers.



At eight weeks give them **Globe Growing Mash** to produce rapid growth.

If you start with strong, healthy chicks you can easily raise 95 out of every 100 when you follow the **Globe System of Feeding** and feed **Globe Chick Feeds.**

Write today for free folder: "How to Raise 95 Chicks Out of Every 100". Ask Your Dealer for **Globe Chick Mash.**

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Globe Feeds, Pine Tree Brand Farm Seeds
Chicago — Minneapolis

WOLF'S PURE BRED CHICKS Now Selling

	MAY 1st to 15th	MAY 15th to JULY 15th
White, Brown, Buff Leghorns . . .	12c each . . .	10c each
Barred Rocks, Reds, Anconas . . .	14c each . . .	12c each
W. Rocks, W. Wyandottes, B. Minorcas	15c each . . .	14c each
White and Buff Orpingtons . . .	16c each . . .	14c each
Broiler Chicks . . .	10c each . . .	10c each

Wolf Hatching & Breeding Co. Dept. 10, Gibsonburg, Ohio

Egg Bred White Leghorn Chicks

From our famous wintering English White Leghorns. Large, vigorous birds of fine utility type. Wonderful layers—the result of many years of breeding for increased production of large, white eggs. Our grade A chicks are from these selected females mated with pedigreed sires bred from 200 to 300 egg dams, descendants from Penna. Poultry Farm's egg laying contest winners, notably Lady Victory, 304 eggs and Keystone Maid, 306 eggs. Prices: 25, \$3.50; 50, \$7; 100, \$12; 500, \$57.50; 1,000, \$110.00. Full count and live arrival guaranteed by prepaid parcel post. Order direct from ad. You can do so with absolute safety, as you are fully protected by our guarantee of perfect satisfaction. Reference, Zealand State Bank. Catalog free.

PATER'S POULTRY FARM, R. 4 Hudsonville, Mich.

Big Value Baby Chicks
Are guaranteed to Live. Easy to raise, husky, healthy, vigorous. Write today for free catalog showing many breeds in full colors.

NEW LOW PRICES MAY 14th to JUNE 18th

W. Leghorn	11	Blk Minorcas	14
Buff Leghorn	11	W. Wyandotte	14
B. Leghorn	11	Silver Wyand.	14
Anconas	12	Buff Orpington	15
Br. Rock	13	W. Orpington	15
W. Rock	14	H. Broilers	9 1/2
Buff Rock	14	L. Broilers	7 1/2
R. I. Reds	13		

5% off on all orders of 500 or more.

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Box G MARION, OHIO

CHICKS

For June 5 and 12 delivery. Improved S. C. English type White & Brown Leghorns. \$10.00 per 100; \$50.00 per 500; extra selected \$12.00 per 100 or \$57.50 per 500. From all good profitable layers, and our selected are from our very best layers. This is our 12th year breeding, hatching and shipping chicks, and we are offering you chicks from the very best layers at a very reasonable price. We pay the postage up to your door and guarantee you 100% safe arrival. Order direct from this adv. to save time, for it pays to be a little ahead of time, or write for our 32 page catalogue.

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Zeeland, Mich. R. No. 2

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Don't let your baby chicks die. Most every disease can be prevented and in nearly every case the sick chick can be cured. Read **Geo. H. Lee's New 64 Page Poultry Book** (before hatching as well as after); how to avoid, how to remedy. Especially valuable information on care of baby chicks. Get a copy FREE at any drug or seed store handling **GERMOZONE**, the great poultry medicine, or from the **GEO. H. LEE CO., F-5 Harney St., Omaha, Neb.**

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For Chickens and Hogs, 24 oz. loaf 2c. Also once used egg crates, car load 15c each, less than car load 18c each, Detroit.

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CHICKS

You can now send your order for Chicks in 11 breeds of the Pure Bred Practical Poultry that is making egg records in the hands of our customers on their own farms. If you own stock that is guaranteed, stock that will make you real money, send for our description and price list. All stock guaranteed 100% post paid. We want you to try our stock this year. It is of the best practical stock you can buy.

STATE FARMS ASSOCIATION
201 Chase Block, Kalamazoo, Michigan.

OUR BOYS AND GIRLS

Some Good Money-Making Stunts

Which Suggest How Boys and Girls Can Make Pin Money

By Ruth Hamp, Burlington, Michigan.
Age Eleven.

Papa planted a field of potatoes just a little ways from the house. The chickens scratched them up so they wouldn't grow. So papa gave it to us girls if we would take care of it. All



Kenneth James Hider, Seven Months, Starts Early with Bike Riding.

summer we pulled weeds and took care of the potatoes. When fall came we dug them, and papa bought them from us. He gave us \$10 for them.

One other way I make money every summer is picking bugs. Papa always puts out a lot of potatoes. My sisters, brother and I pick the potato bugs and he gives us one-half cent a dozen. I most always make a dollar and a half or two dollars in that way.

By Hilda Wenquest, Metropolitan, Michigan.

Any farm boy or girl can earn money of their own in many ways. I know for my own part, if I try my best, that I can earn it in many different ways.

Last spring I planted many different kinds of vegetables. I sold many heads of cabbage, and lots of tomatoes. People bought cabbages and tomatoes of me every day. I was going to keep a part of my garden stuff, but when I had such good sale for it, I sold all.

I also had a small flower garden. I had the flowers planted in star shape, rainbow shape, triangle, etc. People in automobiles used to stop and ask if they could have some flowers. Sometimes I used to get money for the bouquets.

I also have a small apple tree of my own, and every fall I sell the apples. Last fall I received \$12 from that tree for apples.

By Reginald Robinson, Traverse City, Michigan. Aged Ten Years.

My father gave me a nice calf when it was two weeks old. I gave the calf all it could eat, until one day my dad saw me feeding it. He told me not to give so much. In two weeks it was poor, so I worked till I had two dollars. Then I bought some good feed, and the calf got nice and fat.

When fair time came, I took my calf to the fair and got first prize. Then I sold my calf for \$18.

By Miss E. Mitts, Powers, Michigan.

I have tried a few times to make money by being agent for different articles, but never made a success of

it, so I will tell you how I found a way to turn my spare time into small checks which have helped much toward getting many little things that I wanted.

About four years ago a magazine to which we subscribed ran a list of free advertisements each week. Being quite handy with a crochet hook I determined to run a short advertisement for a week.

As a result I received letters from several widely separated states asking about my work. I sold several pieces at that time, but the best part of it is that two ladies, one in New Jersey and one in Montana, still remember me when they have an order of crocheting to be done.

I also do tatting but am not quite as good at it as I am at crocheting. Still, I have filled as many as half a

dozen orders for tatted edging, baby caps and collars. In tatting I try to price my work according to the time taken in making, and in crocheting lace I charge according to the width of the piece.

However, with future orders I am going to try the plan of charging a reasonable price for each ball of thread used, as I think this way would be more satisfactory.

At present I have two orders waiting and am just finishing an order for crocheted lace.

By Clare McClow, Jenison, Michigan.

There are many ways of making money on the farm if a boy has the necessary "push."

We own a fruit farm and my experience in making money has been all in that line.

My best money-making stunt I think is picking raspberries. On our regular picking days I help at home, and the day after I pick for our neighbor, making about two dollars per day with



Manson Atkins and Brother, with their Pet.

just fair picking. I also pick strawberries and pick cucumbers and sell them.

This year I intend to raise some chickens and expect to make money at that.

My father pays me ten cents per row for pulling weeds from the berry plants, grape vines, garden, etc., and if I hustle and don't get thirsty every five minutes I think that is quite profitable, too.

I have two brothers that help work on the farm, so have to divide work with them.

By Clara Smarch, Ypsilanti, Michigan.

Five years ago I was given a strawberry patch and was told that if I took care of it and sold the berries all the money would be mine.

I worked earnestly and saw that no weeds would hinder them from growing. The first year I sold them, but as we live quite a distance from town, it was quite hard for me to sell them. So, the next year when the berries were gathered I borrowed some money from my mother and bought some sugar. And with mother's help, I made some jam and sold it to a lady who keeps a boarding house. I have been doing so, every year, and now I furnish all of my winter clothes, buy my school books and have some money in the bank.

As for picking the berries, that is a very simple matter. I have two cousins who are very glad to help pick berries.

By Ruth Jakeway, Rockford, Michigan.

Last summer after breeding time my mama gave me ten turkeys, which I tended to all summer. In the fall I counted seventeen turkeys.

I saved the turkeys until after Christmas and sold them to private customers for breeding purposes, and one person took four hen turkeys, and there were three gobblers left, which were taken for other breeding purposes.

Those turkeys were fed four bushels of corn and one bushel of wheat, which amounted to five dollars. I sold the turkeys for five dollars each, which amounted to thirty-five dollars, and my clear profit was thirty dollars.



Dear Uncle Frank:

I am not going to knock, but walk right in. How many eggs did you eat Easter, Uncle Frank?

Andrew Kalsma April-fooled his teacher just fine. I think if every girl and boy would fool their teacher every day that they would have a nice school. Don't you?

Well, I will close my chatter-box for this time.—Your niece and cousin, Reva Skinkle, Sunfield, Mich.

I think it was a mighty nice fool stunt. It helps both the fooled and the fooler.

Dear Uncle Frank:

I have written two letters already and I guess they have all reached the waste paper basket, (poor old thing, I bet it sees a lot of funny looking things), but I will try again, as many others have.

I have long hair. When it is down I can sit on it.

I agree with Gladys Clark about the knickers, and also with Rosalind Battered about the bobbed hair.

You were real cute when you were small.—Your niece, Eula Newell, Corral, Mich.

The try again habit is a good one to have. I'll admit the waste basket has a good appetite. The picture below shows that it has.

Dear Uncle Frank:

I will take this opportunity to say "thanky" for the map which I won in

the "April-fool Stunt" contest. I always had a lurking suspicion that I could win a prize in a "Fools" contest, but I had an idea sometimes that it would be first prize, at least, so was very much relieved when I found I was only a third-class fool.

My, what a long letter! Imagine what a talker I must be when I can write a long letter like this to a make-believe Uncle Frank. Well, I'll close my letter-writing mouth and put a "do not open till Xmas seal" upon it. So good-bye, from Ida Cryderman, Twinning, Michigan.

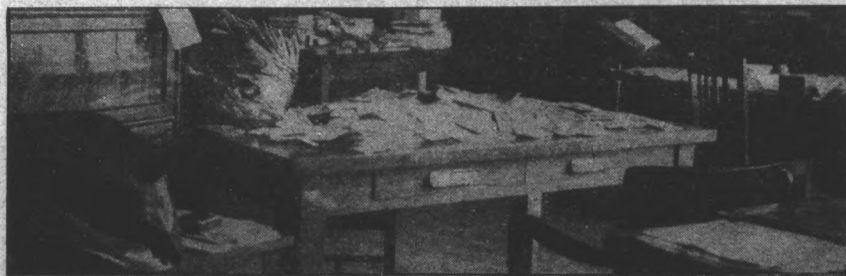
I hope you didn't put that seal on your letter writing "mouth" as you threatened. Don't you think our ambition should be to be first-class in everything, even a fool? That is, if we are going to be fools, we had better be first-class ones or none at all.

Dear Uncle Frank:

We came to Michigan a year ago last November. Before that we lived in North Dakota. My father was a Congregational preacher there, but is farming here, for the present, at least. We came here in our car and enjoyed the trip immensely, although it would have been nicer if we could have come earlier in the season.

In many ways we prefer living in Michigan, although this past winter has seemed about as cold as a North Dakota winter. There it really gets colder, but as the air is so dry one doesn't notice it so much as here.

We praised Michigan up so much.



Here is the "Horrid Old Waste Basket," Full and Overflowing.

that one of our old friends from there came last year and another is talking of coming this year.—Mary E. Faver, Scottville, Mich., R. 4.

I am glad you like Michigan, and are a booster for it. I think it is a great state. Many people are just beginning to realize it.

Dear Uncle Frank:

I have always been interested in the Boys' and Girls' page. Some of the letters are very interesting, and as others have joined the Merry Circle, I don't see why I have not written before.

I am a senior in the Ontonagon High School, and this makes my thirteenth successive year in school, though I wouldn't mind if I had thirteen more to go.

The woods and rivers interest me very much, and I can identify numerous things found in each of my rambles. It was my good fortune to find some wild ginger and a species of wild pea, and also a flower, for which I could find no name.—Fred Broemer, Jr., Green, Mich., Box 57.

You are lucky to like school so well. Many boys think about thirteen days of school are enough. A good knowledge of the woods is a good education in itself.

Dear Uncle Frank:

Now, Uncle Frank, I surely thank The fate that prompted you, To chose my sonnet, with the sentiment on it, For the fame you thought it's due.

You cannot know with just what pride, I hold this prize of mine. I can only say, "Old Scout," this day You're actin' mighty fine.

Spring Is Here

I KNOW spring is here because I have on my desk (April 27) a nice bunch of Mayflowers which Marion Stretch, of Adrian, sent in. Thanks, ever so much, Marion. The flowers came through in fine shape, and I appreciate them very much.

I suppose while Marion was picking the flowers some of our Merry Circle in the Upper Peninsula were watching

Your beautiful prize, came in the shape

Of a birthday gift to me. For the thirteenth day of old April, Is my birthday, don't you see.

I've never won a thing before, Not even an argument. Never had a thing in all my life That didn't cost a cent.

The old adage I'm sure is true,

"If at first you don't succeed,"

I'll try again, I'll tell the world,

Yes, sir, you bet, indeed.

—Your nephew, Ellis Cline, Richland, Michigan, R. 2.

You ought to win something with such poetic ability. I think it's my place to say, "Old Scout, you're actin' mighty fine," not yours. All I do is to give the prize to the best. Mine is the small part, you see.

Dear Uncle Frank:

Surely you're no crank.

So why not print my letters once?

And let me know that I'm no dunce.

If the writing is poor, the fault's not mine,

My pencil slips on every line.

My letters few, there were but two

I know into the basket flew.

But now I'm going to bravely ask it. Please keep this letter from the basket.

—Your nephew, Melvin H. Eggestedt, Fremont, Mich.

Another poet who doesn't know it.

You're not a dunce, so I run this once.

If your pencil slips, get non-skid tips.

Well, I guess this is enough of such stuff.

POTATOES BOON TO MANKIND.

THE lowly potato will now take on a new lease of life. Its position in the everyday standard of things must surely rise with the recent publication in Germany of a treatise on its many varied uses. Divers are the uses outlined.

The first use of the potato is for the nourishing of man—in a raw or cooked state one hundred pounds is sufficient for one person for ninety days, with additional and usual food. In the form of potato flake, one hundred pounds of raw potatoes gives twenty-three pounds of dry potatoes; the dried potatoes give 20.3 pounds of potato flour, 4.4 pounds of groats, and 3.3 pounds of waste.

The second big use of potatoes is for the nourishing of animals—one hundred pounds with other food feeding a hundred-pound breeding hog for twelve days. In the form of dried potatoes, calculated in starch values, one hundred pounds is equal to 1.15 hundred pounds of oats; therefore, they are sufficient for a working horse for nine days. Compared with corn as a stock feed, one hundred pounds of potatoes produces 4.8 pounds of pork fat, one hundred pounds of dried potatoes 18.2 pounds, and one hundred pounds of corn 20.2 pounds.

The third possibility for potatoes is for technical purposes. In the manufacture of starch, one hundred pounds of potatoes with twenty per cent starch gives thirty-two to thirty-four pounds wet, or twenty to twenty-one pounds dry starch, with an adequate residue of pulp. The pulp is used for stock feed; in the distillery one hundred pounds of pulp gives one liter of pure alcohol; for the manufacturing of paper, buttons, broaches, and as fuel. On the other hand, the dry starch is used as a foodstuff in bakeries, confectioneries, kitchens, and as potato grain for the manufacture of macaroni, noodles, chocolate, and for sausages. It also goes into vulnerary powders, paste bandages, pills, salves, and other pharmaceutical remedies.

In other industries, potato starch is used as an addition in the manufacturing of ferments, washing powders and soaps, and as thickening filling for corrosives and colors. In a distillery, a hundred pounds of raw potatoes produces five to six liters of pure alcohol and eighty to ninety liters of residuary liquors. The spirits are used for beverage purposes and for generating light. In the manufacture of dry yeast one hundred pounds of potatoes gives six pounds of the product.

WHEAT CROP IS GOOD.

THE wheat crop at Forest Grove Farm has come through winter in splendid condition. I have been rather worried over the wheat this winter as there has been a great deal of ice on the wheat, and very little snow. My crop this year is on rather rolling land that is well tilled. I have observed, however, this past winter that a considerable ice caused from standing water has hurt the wheat somewhat in low places, even where tilled. I think this must have resulted from the ground being frozen over the tile and the water could not get away. However, I do not think I shall lose more than an acre of wheat, of the thirty-six, from drowning out.—Leo C. Reynolds.



CHICKS \$10.50 AND UP From Hogan tested hens. W. Br. & Buff Leghorns, 50, \$7; 100, \$13; 500, \$62.50. Bar Rocks, Anconas, 50, \$7.50; 100, \$14; 500, \$67.50. Reds, W. Rocks, Minorcas, 50, \$8; 100, \$15; 500, \$72.50. Buff Orpingtons W. Wyandottes, 50, \$9; 100, \$17; 500, \$82.50. Mixed, 100, \$11; 500, \$52.50. Order now. Catalog Free. Eggs for Hatching, Ref. 4 Banks. Tel-Rt-te Hatcheries Box 512 Archbold, Ohio

5 to 6 lb. White Leghorns

Larger hens, better winter layers. Send for free catalog full of information. A. W. WAUCKER, Gobleville, Mich.

CHICKS Reduced Prices. Leghorns, White or Brown, Anconas, \$11. per 100; Rocks, Reds, Orpingtons, \$13. per 100. Live Delivery guaranteed. Eggs \$1.50 per 15. Circular free. BANKER & BANKER, Box H. Knoxville, Tenn.

Hidden Wisdom

WAY back in the old days there were wise men who expressed thoughts which were so good that they lived through the ages. Confucius was one of them; he was a Chinese philosopher. Here is one of his gems of wisdom in mixed English:

Eb ton cerneond at nawt fo calep, be nerconed taht hotu tands selthfy. Rorsow out ta nebig kunnwon, tub, esek ot be rothwy of tone.

The words are in the right place but the letters are somewhat mixed. It will be worth your while to straighten this out for the thought this expression contains. But to make it more interesting, we will give a pencil box to each of the two most neatly written and correct papers; a nicked pocket pencil to the next three, and a Michigan Farmer map of the world to the next five. These will also receive Merry Circle buttons and membership cards if they have not already received them. All other boys and girls who get this expression correctly written will also get Merry Circle buttons and cards. This contest closes May 10.

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

the last snow banks disappear. But by the time this is printed, I am sure the Time of Nature's Awakening will be all over the state.

BABY CHICKS

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SEX GUARANTEED

A 60% guarantee of sex, giving a majority of either cockerel or pullet chicks, as ordered, plus unsurpassed quality in high egg bred chicks, bespeaks Utility Hatchery & Farms success, and the satisfaction of its customers. Grade AAA flocks are sired by pedigreed males, sworn records from 250-287. Grade AA and Grade A from tested and selected flocks of exceptional merit.

Delivery date guaranteed—100% live delivery guaranteed—60% sex guaranteed—Satisfaction guaranteed.

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Terms cash, except on advance orders, 25% down, remainder one week before shipped.

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Hatched from high producing two year hens that guarantee you big, strong, healthy, vigorous chicks from Aristocrat Barred Rocks, Tom Barron Eng. White and Brown Leghorns and Sheppards Strain Anconas. Get our prices before you buy as we guarantee to save you money. As thousands of satisfied customers report big profits. Live delivery guaranteed postpaid. Ref. Two Banks. Members of M. B. C. Ass'n. Big Catalogue free.

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THREE MILLION FOR 1923
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from pure bred egg type birds. Shipped Parcel Post prepaid. Barred Rocks and R. I. Reds, 50, \$8.00; 100, \$15.00; 500, \$72.50. S. C. White Leghorns 50, \$6.50; 100, \$12.00; 500, \$57.50. Buff Orpingtons, W. Wyandottes and W. Rocks at \$8.50 for 50; \$16.00 per 100; \$77.50 per 500. Extra Select High Grade Barred Rocks and R. C. R. I. Reds 100, \$18.00. Order direct from this ad. with full remittance and save time. Remit by Post Office Order, Bank Draft, or Certified check. 100% live delivery guaranteed.

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From pure bred stock English Strain White Leghorns \$12.00 per 100, \$57.50 per 1,000. Anconas \$12.00 per 100, \$57.50 per 1,000. Rhode Island Reds and Barred Rocks \$8.00 for 50, \$15.00 per 100, \$72.50 per 1,000. Order from this adv. and save time or send for catalog and price list.

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W. E. SCRIPPS, Prop. SIDNEY SMITH, Supt.

Registered Aberdeen-Angus 10 heifers, 6 bulls from eight to fourteen months. Best of breeding. The growthy kind that make good. Reasonable. Inquire of F. J. Wilber, Ohio, Mich.

FOR SALE 11 Registered Ayrshires. Entire herd consisting of herd bull, four cows, two fresh heifers, one bred heifer and three heifer calves for \$900. Federal tested. Must be sold at once. B. E. Lansing, Brooklyn, Jackson Co., Mich.

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A fine Bull ready for light service, special terms if you wish. J. M. Williams, No. Adams, Mich.

GUERNSEYS—REGISTERED BULL Calves. Containing blood of world champions. A. R. cows. Federal inspected. HICKS' GUERNSEY FARM, Saginaw, W.S. Mich.

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Young bulls from A. R. cows for sale. F. W. WALLIN, Jenison, Mich.

For sale Registered Guernsey cows, May Rose Breed. ing also bull calves \$50 each. Registered A. R. dams. JOHN EBELS, R. 2. Holland, Mich.

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Ask us about a Real Bull a
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JOHN H. WINN, Inc., Rochester, Mich.

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We have what you want in BULL CALVES, the large, fine growthy type, guaranteed right in every way. They are from high producing A. R. O. ancestors. Dam's records up to 30 lbs. Write for pedigrees and quotations, stating about age desired.

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READY FOR SERVICE

No. 1 30 lb. Grandson King of the Pontiacs' one year old $\frac{3}{4}$ white, second dam 29.9 lbs.

No. 2 Grandson of 37th One of the strongest Ormsby bred bulls, dam 28 lbs. as Junior 4 year old.

Send for Pedigree Federal Tested

JAMES B. JONES FARMS ROMEO, MICH

Holstein Friesian heifer and bull calves, purebred registered and high-grade. Price \$20 up. Splendid individuals and breeding. Write us your requirements. Browncroft Farms, McGraw, N. Y.

Wanted Twelve grade Holstein Cows. Must be young and good producers, also tuberculin tested. FRANK RUSSELL, Manistee, Mich.

FOR SALE KING SEGIS BREEDING

Born Sept. 28, 1922. His dam recently completed semi-official test giving 12,475.3 pounds of milk and 449,004 pounds of butter. Average figures recently given show 3600 pounds of milk in a year for Michigan cows. You will notice that this cow shows an increase of 400%. This milk production combined with show type is a decided asset as a future herd sire.

GRAND RIVER STOCK FARMS Jackson, Mich.
Corey J. Spencer, 111 E. Main St.

WHITNEY FARMS HOLSTEINS

Offering registered cows, heifers, bulls and bull calves at prices the average farmer can pay. Colanthe blood predominating. Pedigrees furnished upon request. Herd under Federal supervision.
WHITNEY FARMS, Whitney, Mich

If you want practically pure HOLSTEIN or GUERNSEY calves, write Edgewood Farms, Whitewater, Wis., before ordering anywhere.

\$500 gets 4 heifers at St. Johns. They must be sold quick. 4 yr. old by 30 lb. bull 21 lb. dam her 2 1/2 yr. daughter. 4 yr. old granddaughter of Johanna Korn, D. K. and a 3 months old heifer. Terms if wanted. J. H. SESSIONS, St. Johns, or M. L. McLAULIN, Redford, Mich.

A Good Note accepted in payment of finely bred registered Holstein bull calves. Quality of the best, and at prices within reach of all. Write GEO. D. CLARKE, Vassar, Mich.

HEREFORDS

10 extra nice Repeater and Fairfax heifers from 14 to 20 months old for sale, also 10 cows.

ALLEN BROS.

616 So. West St., Kalamazoo, Mich.

HEREFORDS

Young Cows with calves by side consisting of blood from America's foremost herds at prices that enable them under Earle's Hereford Beef Plan to pay for themselves within a year to 18 months. Bulls including prize winners at the largest shows at practical prices. Herd headed by Straight Edge 1169796, one of two sons of perfection. Fairfax out of a daughter of the Famous Disturber. T. F. B. Sotham & Sons, (Herefords since 1839), St. Clair, Mich.

Registered Herefords For Sale.

12 extra good heifers Repeater & Beau Perfection breeding, from 14 to 18 months old; also 20 good cows with heifer calves by side and our Repeater herd bull. We guarantee these cattle in every way. Write or better come and see these cattle; they will please you. A few good bull calves.

THE MARION STOCK FARM, Marion, Mich.

Meadow Brook Herefords Fairfax and Disturber Breeding. Registered breeding stock for sale, both sexes, any age. Call, phone or write, Earl C. McCarty, Bad Axe, Huron Co.

Maple Hill Farm, Herefords and Polland Chinas one choice gilt bred for May farrow left for sale. Two pleasing yearling heifers for sale. George R. Wheeler Mt. Pleasant, Michigan

Registered Herefords **FOR SALE, BULLS**
RALPH CALHOON COWS and HEIFERS
Bronson, Mich.

BROOKWATER JERSEYS

BULL CALVES FOR SALE

From Register of Merit dams and sired by Majesty's Intense 127191 and Brookwater Veda's King 169515. Write for Prices and description. Herd is on federal accredited tuberculosis free list.

BROOKWATER FARM, Ann Arbor, Michigan
H. W. Mumford, Owner. J. B. Andrews, Lessor.

BUTTER BRED **JERSEY BULLS**
CRYSTAL SPRING STOCK FARM,
Silver Creek, Allegan County, Michigan.

FOR SALE: Jersey bulls ready for service. All cows Register of Merit. Accredited herd.
SMITH AND PARKER, R. 4, Howell, Mich.

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

30 Head of Jersey cows and heifers for sale. Chance to select from herd of 70. Some fresh, others bred for fall freshening. Colon C. Lillie, Coopersville, Mich.

Shorthorns Sire, Revolution Jr. heads herd. Wood 3d, 2d Dam, Imp. Rosewood 96th. Now offering one good roan two year old bull out of a Marr Marigold dam, also a few cows and heifers safe in calf. Prompt attention to correspondence—visitors welcome. State Accredited herd. One hr. from Toledo, O. N.Y.C. Ry. BIDWELL STOCK FARM, Tecumseh, Mich., Box D

Richland Shorthorns

Special offer: Twelve Bulls from twelve to twenty four months old. Red, White, Roan. Good size, best of breeding from good milking dams. Priced for quick sale. Write for particulars.

C. H. Prescott & Sons,

Office at Tawas City, Mich. Herd at Prescott, Mich

Francisco Farm Shorthorns

and Big Type Poland Chinas. One 2 yr. old bred Heifer, \$20. Two choice yearlings, \$150. each. Three bulls, \$100. up. 3 hours \$25 each. Lots of spring pigs of March farrow. P. P. Pope, Mt. Pleasant, Mich.

Milking Shorthorns priced reasonably. An accredited herd selected for beef and milk. Beland and Beland, Tecumseh, Michigan

Milking Shorthorn Bull 11 Mo. old. Glenside breeding. Dark red. A good one.
IRVIN DOAN & SONS, Crosswell, Mich.

PUBLIC AUCTION May 31st Shorthorn cattle, Berkshire cows.
SIMON G. MAICHELE Middleville, Mich.

Steers For Sale

58 Herefords 880 lbs. 90 Herefords 800 lbs.
64 Herefords 720 lbs. 44 Herefords 640 lbs.
46 Shorthorns 550 lbs. 44 Herefords 575 lbs.

Know of other bunches. If in the market for real quality, dehorned, deep reds, good stocker order your choice one load or more from any bunch. Write stating number and weight preferred.

VAN BALDWIN, Eldon, Wapello Co., Iowa



THE WOOL MARKET.

THE foreign wool market after making proper adjustments for exchange duty and carriage, is higher than offered to Michigan growers at the present time. Western prices for large clips are also, after proper shrinkage, and freight to the east, proportionately higher.

Price making in Michigan today is not made by the local dealer who is, in most cases, doing a commission business, but is made for him. Any good clip of wool bought in Michigan below fifty cents per pound is below the prospective price within the next sixty days, and below that prevailing for large clips held by men who can judge the market.

One well confirmed report is that foreign and western wools will be used until the middle states' domestic clip is out of first hands, then wool will go higher than the proverbial cat's

of horse values from 1869 to 1922 we find that there were only six cycles in that time; three periods of rising values and a like number of falling values.

The following paragraphs tell the story of the fifty-six years included in the six cycles:

From 1867 to 1871, a four-year rise, prices went up 20.8 per cent.

From 1871 to 1879, an eight-year fall, prices went down 29.3 per cent.

From 1879 to 1887, an eight-year rise, prices went up 27.4 per cent.

From 1887 to 1897, a ten-year fall, prices went down 56.3 per cent.

From 1897 to 1911, a fourteen-year rise, prices went up 25.3 per cent.

From 1911 to 1922, an eleven-year fall, prices went down 36.1 per cent.

Evidence of the decreasing number of mares bred annually since 1914, can be obtained from a summary of the stallion enrollment during that period.



These Feeding Hurdles Save Feed. When the Forage is Consumed as Far as the Sheep Can Reach, the Hurdles Are Moved Ahead.

back. Sixty cents has been paid for choice delaine, while Ohio half-blood has brought fifty-three to fifty-seven cents.

Consumption of wool is enormous and cotton is high, offering little of opportunity to substitute at a price that makes competition with the preferred and usual uses of wool in fabrics. Clothing prices have been advanced to cover increased wool prices and the twelve and one-half per cent increase in wages, and people are buying heavily.

Automobile upholstery is using up more wool than ever before. Closed cars call for an enormous yardage. The medium grades of wool, both as to fineness and length of staple, are used largely for these lines.

Wool at fifty cents per pound to the grower is the mark to aim at and this finally becomes the market price. The growers have never participated in naming their marked price to their full extent. Hence, a departure from what originally was the marked or market price.—J. N. McBride.

WILL HORSE VALUES ADVANCE?

THE great problem before the horse breeder of today is that of the low price received for his products, but in reckoning the chances for more money we must not overlook the fact that horse production and values run in cycles, just as does production in many other lines.

The periods in horse values are fewer and therefore longer than in other live stock, because horse raising is a slower process. Summarizing the trend

Twenty-four states have stallion license laws and eighteen of these cover the period. These eighteen states have over two-thirds of the horses in the United States and raise about the same percentage of the foals. Therefore, a definite trend of the breeding industry is clearly shown by the reports of the registry boards from 1915 to 1921.

During that period, the total number of stallions licensed in the eighteen states for public service decreased from 46,121 to 21,026, or over sixty per cent; the drop, however, from 1920 to 1921 was much smaller than during any previous year, indicating that the low point had about been reached.

The decline in the production of stallions for service is indicated in the following: In 1914, thirty per cent of the stallions licensed were under six years, while only five per cent were over sixteen years of age. In 1922 only 15.3 per cent of the stallions licensed were under six year of age, while thirty-four per cent of the stallions were over eleven years of age, and twelve per cent over sixteen years of age.

INTERNATIONAL ALBUM.

A PROFUSELY illustrated, cloth-bound history of the last International Live Stock Exposition at Chicago is just coming from the press. Live stock men and grain growers who are interested can secure copies by addressing B. H. Heide, Secretary-Manager, International Live Stock Exposition, Union Stock Yards, Chicago, and enclosing \$1.00.

TO COMBAT VEGETARIANS.

MEMBERS of the National Live Stock and Meat Board, representing live stock producers, packers and butchers, announce a nation-wide campaign to educate the public in the food value of meat.

This board was organized a year ago when a decrease in meat consumption was noticed. Eleven members of the board represent farmers.

A late bulletin issued by the department of agriculture shows that there has been a per capita decrease in the annual consumption of meat of 25.4 pounds. The purpose of this board and these campaigns is to teach the people that the eating of meat does not produce disease, but that meat is a healthy and nutritious food.

FALL PIGS MAKE BIG GAINS.

A GOOD neighbor who joins farms with me, E. J. Woodin by name, dropped in recently to tell me about his pigs. He surely has made a record with fall pigs that he can be proud of.

It was a young Duroc sow's first litter by a Poland-China sire. They were farrowed on the fifth day of last October, and the day they were five months and five days old they were sold over the scales at an average weight of 241 pounds. This makes a daily gain of over one and one-half pounds from birth, which is remarkable, especially with October pigs.

Mr. Woodin says he was not trying to make a record, it just happened. The pigs were fed separator skim-milk and corn, and were allowed to sleep under the barn or around the straw stack, as they chose. There were but six pigs raised in this litter or it would have been a likely candidate for honors in the ton litter contest.—Pope.

BIG WOOL CONSIGNMENT POOLED.

ONE of the first large consignments of wool to this year's wool pool warehouse in Lansing for the 1923 pool was sent by Edmund Harrison, near Constantine. He shipped about 800 fleeces, weighing about 5,000 pounds. This year the wool poolers are getting twenty-five cents per pound cash advance for their wool, with final payment when the wool is sold.

THE EGG-LAYING CONTEST.

THE spring weather showed its effect in the egg production. The Leghorns again approached the sixty per cent mark, and other breeds also responded. The artificial lighting period is being gradually reduced and this may be retarding the hens some. The high production for the week was made by the three pens, Northland Farms, Alex. Klooster and Lewis N. Clark. Strick Poultry Farms and J. V. Vandenberg came next with fifty eggs each.

In the total scoring the W. C. Eckard and E. D. Taylor pens came in the counting of the five best Leghorn pens. The standing for the week ending April 24 was as follows:

E. E. Shaw, South Haven, Mich., (Leghorns)	1,078
Northland Farms, Grand Rapids, Mich., (Leghorns)	942
O. S. Thompson, Allen, Mich., (Leghorns)	920
Brummer's Poultry Farm, Holland, Mich., (Rocks)	916
Evergreen Poultry Farm, Greenville, Mich., (Wyandottes)	912
W. C. Eckard, Paw Paw, Mich., (Leghorns)	860
H. E. Dennison, East Lansing, Mich., (Rocks)	858
E. D. Taylor, Kalamazoo, Mich., (Leghorns)	857
W. A. Downs, Washington, Mich., (Leghorns)	854
George Ferris, Grand Rapids, Mich., (Leghorns)	852

Veterinary.

CONDUCTED BY DR. W. C. FAIR.

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

Eczema.—One of my horses is troubled with pimples, causing itching. A. L. D., Ubly, Mich.—Give one ounce of bicarbonate of soda at a dose in feed three times a day, and apply a two per cent lysol solution to itchy parts once or twice a day.

Boils on Top of Neck.—Just as soon as I commence to work my mare, boils form on top of neck. F. F. S., Ida, Mich.—Apply iodex to the upper part of neck only.

Indigestion.—I have a mare thirteen years old that is not thriving; had her teeth floated, but she don't gain. A. M.—Increase her feed, give her a teaspoon of powdered sulphate of iron, a tablespoonful of gentian at a dose in each feed of ground grain.

Cow Pox.—Our cows are suffering from cow pox and we would like to know how to treat them.—Subscriber.—Don't be afraid to sign your name and give your address when writing us. Dissolve two tablespoonfuls of hyposulphite of soda in one gallon of water and wet sore parts twice daily is all the treatment necessary to effect a cure.

Cow Sucks Other Cows.—We have a cow that sucks another cow. Had we better apply aloes to the cow's teats? E. F. S., Galien, Mich.—Yes, apply aloes or any other non-irritating drug, but you may have to stable her.

Septic Metritis.—My thirteen-year-old cow freshened a few weeks ago, since then she has considerable discharge from vagina; it is not unusual to find a quart of pus behind her in the morning and this nasty mucus drips from her all day. She has nursed two calves. Is this the cause of so much discharge? G. C. W., Breckenridge, Mich.—Examine uterus with speculum and you will find it badly inflamed. Treatment is purely local and takes time and money, but animals like her may recover on pasture. In my practice I irrigate uterus with a two per cent lysol solution daily. She should be well fed.

Young Pigs Die.—My neighbor has lost a few four-weeks-old pigs; their ears turn purple color at tips, when the disease reaches the head, which is in from two to seven days the animal dies. The pigs are dumpish, but their mother appears to be well. H. S. U., Sterling, Mich.—For want of sufficient symptoms I dislike to make a diagnosis of these cases, but I do not believe it an infectious of contagious disease, but bringing the sow to your boar for service should not be done until your veterinarian approves of it.

Hairless Pigs.—My Chester White sow will soon be two years old. Her first litter of pigs were normal, she raised eight. Now she had second litter of fourteen and they all came hairless and dead. The sow seems to be in good health. Shall I breed her again? H. M., Clio, Mich.—Yes, breed her right away, her next litter will be all right. Had you given her five-grain doses of potassium iodide daily during the later period of gestation, fed her some tankage, alfalfa, clover and roots her pigs might have been alive when farrowed, and well-haired out.

Eating Frozen Silage Killed Lambs.—Please tell me what is the matter with my sheep and lambs? I have twenty-three head of ewes. They had forty-six lambs, most were seemingly strong at birth, but soon acted as if suffering from a cold, lived only two or three hours. Some were dead when they came. One week before the ewes had their lambs I fed frozen silage to them, believing that this feed might increase the ewes' milk flow. H. S., Jackson, Mich.—Doubtless it was a mistake to feed your ewes frozen silage; furthermore, the lambs may have chilled soon after they came, and died as the result of acute congestion of the lungs.

Worms.—I have a young dog that is unthrifty and am sure he is troubled with worms. H. C., Minden City, Mich.—Mix equal parts of fluid extract of spigelia and fluid extract of senna together, shake and give dog thirty drops or more every morning until three doses have been given, after a let-up of ten days repeat the same treatment. Change his feed—one-third meat and two-thirds cereal and vegetable, but don't feed potatoes or corn meal.

PUBLIC SALE

34 HEAD REGISTERED HOLSTEIN CATTLE
6 HIGH GRADE HOLSTEIN COWS, (all females)

Sale Pavilion

Fair Grounds

HOWELL, MICHIGAN

Thursday, May 10, 1923 at 1:00 O'clock p. m.

Herds under State and Federal Supervision (60 day retest privilege)
Included in the sale is a cow that has twice made a record above 31 lbs. butter in 7 days, a daughter of a 30 lb. cow, two daughters of 25 lb. cows, a cow that has produced over 14,000 lbs. milk in one year at 28 months old, a daughter of a cow that has produced over 24,000 lbs. of milk in one year and others with good records. Catalogs ready May 1st.

McPHERSON FARMS CO., W. J. Witty, Howell, Mich.

DISPERSION SALE

of Entire Herd of

REGISTERED HOLSTEIN FRIESIAN CATTLE

At my Farm ½ mile West of WALLED LAKE, MICH. 1½ miles East of Wixom.

Tuesday, May 15th, 1923. at 1:00 p. m. sharp

My herd consists of 16 head, all bred by me except my Foundation Cow and my Herd Sire. 15 females of different ages and my Herd Sire. Some are fresh and some are due soon. A Breeder's Herd. Have never purchased but one female. (Pedigrees on day of sale.) GEORGE RATTENBURY, Auctioneer.

C. E. BONE, Proprietor.

Walled Lake, Mich.

HOGS

Woodlawn Farm Duroc Hogs meet present day requirements, length, size and quality. Young stock for sale at reasonable prices and fully guaranteed. Write your wants. W. E. BARTLEY, Alma, Mich.

I AM OFFERING BRED SOWS

fall yearling and spring gilts, bred for March and April farrow, that are tops. Mated to O. C. K. Col. 2nd and Orion Giant Col. Write for price list. W. C. TAYLOR, Milan, Mich.

DUROC Fall Boars Ready for service sired by Pathfinder Orion, \$50 each, registered and crated, one sow bred for June farrow at \$40. RUSH BROS., Romeo, Mich.

Duroc Jerseys 12 bred gilts, also 50 registered black top ewes. CAREY U. EDMOND, Hastings, Mich.

Duroc—Jerseys A few Pathfinder Gilts Bred to a good son of Foust's Top Col., E. D. Heydenberk, Wayland, Mich.

DUROC BOARS: Do you want a good growthy heavy boned fall boar to head your herd. One with size, type and quality, if so write us as we have them. Sired by outstanding herd boars. F. J. Drott, Monroe, Mich. R.F.D. No.

\$12.50 for a real Duroc pig. Woodford Sensation's Breeding. FRED BROS., Elwell, Mich.

DUROCS Fall boars and gilts of quality; prices low. Booking orders Mar. pigs, May Del. \$10, reg. Satisfaction or money back. B. E. KIES, Hillsdale, Mich.

Is It Worth While?

A real boar pig sired by Woodford Sensation, Dams of Defender or Pathfinder breeding.

If so, We have them of Sept. farrow, not only showing extreme quality, but greater size than you will expect to find. Follow M 29 to

Kope-Kon Farms, Coldwater, Mich.

Benjamin's BIG TYPE CHESTER WHITE'S

Early maturing, prolific, heavy weight, prize winner kind from bloodlines of Champions and Grand Champions, now making big money for thousands. Have started more breeders on road to success than any living man. Let me help you. Easy to start. Costs little. G. S. Benjamin R. F. D. 10, Portland, Mich.

Chester Whites, We are offering some choice fall pigs, also bred sows and gilts. Prices reasonable. Weber Bros. 10 Mile and Ridge Road, Royal Oak, Mich.

Chester Whites Herd headed by The Monster and Iowan's Jumbo. Two great Big Type boars of the breed. FRED L. BODIMER, Reese, Mich.

For Sale O.I.C. and Chester White Swine. Sept. sows bred for July farrowing, early March pigs sired by a son of "The Monster." Satisfaction guaranteed. Papers free. Bruce W. Brown, Mayville, Mich.

Chester Whites Choice March Pigs either Sex, also fall gilts. G. W. PORRETT, Lenox, Mich.

O. I. C's and Chester Whites

Gilts sired by Mich. State Fair Gr. Champion 1921, and bred for March and April farrow to Mich. State Fair Jr. Champion 1922, the common sense type and price. ANDY ADAMS, Litchfield, Mich.

21 Reg. O.I.C. SOWS bred August farrow. 2 yearling Boars, 2 Boar Pigs, 10 weeks old. All stock shipped on approval. FRED W. KENNEDY, Plymouth, R. No. 2

O. I. C. 20 large growthy gilts farrow in Mar also fall boar pigs. CLOVER LEAF STOCK FARM, Monroe, Mich.

O.I.C's March boars, bred gilts, July and Aug gilts. Young Brown Swiss Bulls. Milo H. Peterson, Elmhurst Farm, R-2 Ionia, Mich.

O.I.C. fall boars and gilts sired by Grand Champion Boar at W. Mich. State Fair. We ship C.O.D. reg. free. Geo. M. Welton & Son, Alto, Mich.

O. I. C's. Orders booked for late farrowed spring pigs at \$10 to \$12, each. Registered free. C. J. THOMPSON, Rockford, Mich.

O. I. C's. 1 gilt 12 mo. old, weight 360; due to farrow June 3rd. 10 last fall gilts to farrow next fall. 120 spring pigs. Recorded free. ¼ mile west of Depot. Citz's phone. O. B. Schulze & Sons, Nashville, Mich.

O.I.C. & Chester White Swine. ready for shipment June 1st. Good individuals for less money. Write, CLARE V. DORMAN, Snover, Mich.

RADIO GIANT

Represents the worlds largest strain of Poland China Hogs. Boars, Sows, Pigs at bargain prices from Mich. pioneer herd. We have bred them big for 30 years. We can furnish what you want. JNO. C. BUTLER, Portland, Mich.

Big Type P. C. some very choice boars double in mind, out 1100 lb. sire and mammoth sows from Iowa's greatest herds. E. J. Mathewson, Barr Oak, Mich.

L. T. P. C.

Choice Gilts \$25 to \$40. Boars \$30. Fall Pigs \$15. HART AND CLINE, Address F. T. HART, St. Louis, Mich.

Fall Pigs Either Sex Sired by HOVER'S LIBERATOR. Gilts will be bred to that first prize boar Tuscola Olanman for August and September farrow. They are as good as the breed affords. Come and see them or write. DORUS HOVER, Akron, Mich.

Large Type P. C. Largest in Mich. A few fall pigs for sale. Sired by "The Wolverine" a grandson of "The Rainbow and Big Bob" the greatest yearling boar I ever owned has size combined with quality. Come and see the real kind. W. E. LIVINGSTON, Parma, Mich.

Large Type P. C.

The Real Kind. A few of those big, smooth, stretchy, bred gilts for sale. Bred for March, April and May farrow. Priced right. N. F. BORNOR, Parma, Mich.

Large Type Poland Chinas

For sale Fall Boars, Gilts bred or open. Herd headed by two Grand Champion boars. A. A. FELDKAMP, Manchester, Mich.

Lone Maple Farm Big Type Poland Chinas. Nothing for sale at present. F. R. DAVIS & SON, Belding, Mich.

Large Strain P. C., a few choice gilts left. Bred for April farrow. You can't beat the breeding nor price. H. O. SWARTZ, Schoolcraft, Mich.

P.C. Choice gilts sired by a son World Champion Big Bob and 1075 Peter Pan. Bred to Model Olanman, also fall pigs. C. E. Garnant, Eaton Rapids, Mich.

Big Type Poland China Hogs from prize winning stock, fall pigs, either sex, eligible to Reg. W. E. LECKY, Holmesville, Ohio.

T.P.C. Two fall boars left, am now booking orders for spring pigs delivered in May at bargain prices. Write for price and plan of selling. They have made good and will again. M. M. Patrick, Gd. Ledge Mich.

Walnut Alley Big Type P. C. Gilts all sold. Thanks to my customers for their patronage of the past, and all that inquired. A. D. Gregory, R. 3, Ionia, Mich.

Hampshires spring boars and bred gilts from 25 sows to select from. Place your order now or you may be too late. 10th year. JOHN W. SNYDER, R. 4, St. Johns, Mich.

HORSES

Percheron and Belgian Stallions

At size and quality, including first prize winners. If your locality is in need of a good draft stallion, write me for my breeding plan, which will interest you. Fred G. Stevens, Breckenridge, Mich.

For Sale The Black Percheron mare Nora weighing 2000 lb. Foaled March 27, 1918, now 1523 lb. The proper Type for a brood mare Price \$250. R. G. PALMER, Belding, Mich.

MICHIGAN FARMER Classified Liners bring results. They cost little. Try one.



THE LATEST MARKET REPORTS



GRAIN QUOTATIONS

Tuesday, May 1.
Wheat.

Detroit.—No. 2 red \$1.34½; No. 2 mixed \$1.34½; No. 2 white \$1.34½.
Chicago.—No. 2 hard \$1.23½; May \$1.20¼.
Toledo.—Cash \$1.33½@1.34½.

Corn.

Detroit.—Cash No. 2 at 89c; No. 3 yellow 88c.
Chicago.—No. 2 yellow 83½@84c; No. 2 mixed 83c.

Oats.

Detroit.—Cash No. 2 white 51½c; No. 3, 50c.
Chicago.—No. 2 white at 46@46½c; No. 3 white 45¼@46c.

Beans.

Detroit.—Immediate and prompt shipment \$6.85.

Rye.

Detroit.—Cash 84c.
Chicago.—82½@82¾c.
Toledo.—82½c.

Seeds.

Detroit.—Prime red clover cash at \$11.50; alsike \$10.25; timothy \$3.30.
Toledo.—Prime red clover cash at \$11.45; alsike \$10.50; timothy cash at \$3.20.

Barley.

Detroit.—Malting 75c; feeding 72c.
Chicago.—66@70c.

Hay.

Detroit.—No. 1 timothy \$17.50@18; standard \$16.50@17; light mixed at \$16.50@17; No. 2 timothy at \$15.50@16.50; No. 1 clover \$13@14; rye straw \$12@12.50; wheat and oat straw at \$11.50@12 per ton in carlots.

Feeds.

Bran \$38; standard middlings \$38; fine do at \$38.50; cracked corn \$39.50; coarse cornmeal at \$7.50@38; chop \$34 per ton in 100-pound sacks.

WHEAT

Marked improvement in the undertone of the wheat market has taken place in the last six weeks. The primary cause has been the unfavorable outlook for the new crop in North America. Last week was featured by some improvement in weather conditions in the northwest which permitted seeding to proceed in most sections, although the planting season is quite likely to be somewhat later than the average. Present prospects are that a decrease in acreage greater than that shown by the government's estimate on April 10 will take place. The domestic consumption of wheat by the mills for two months has been running about 10 or 15 per cent above the average for this time of year. In addition, export sales from North America show distinct improvement.

RYE

The visible supply of rye is practically the largest ever known, but substantial export sales are being made right along and prices are keeping pace with the advance in the wheat market.

CORN

Corn prices advanced to a new high point last week. Feeders are outbidding terminals in the country and some feeding sections are compelled to buy at terminals, the country shows but little disposition to sell on the advance, the visible supply has declined about 20 per cent in the last six weeks and both eastern and export demand has improved recently. Planting is progressing in the southern part of the corn belt under fair conditions.

OATS

The cash demand for oats as well as corn has broadened and stocks at terminals are steadily shrinking. The seeding of oats is nearly complete in most sections with indications of an increased acreage, particularly in the abandoned winter wheat fields and in the northwest where the planting of spring wheat has been delayed too long. Both corn and oats, as well as wheat, appear scheduled for higher prices before the new crops are ready for harvest.

SEEDS

Another small decline on both clover and timothy seed prices occurred last week. Owing to the lateness of the season, shipments from the leading markets are holding up better than

at this time last year, but it is evident that the supply is ample and that a liberal quantity must be carried over. Receipts of red clover at Toledo, for the season to date, total 51,549 bags, the largest in at least four years, while shipments from the same point were only 38,973 bags; the smallest since 1920.

HAY

Eastern hay markets are fairly firm with prices slightly higher at some points. On middlewestern markets the demand for clover mixtures is extremely dull while the urgent demand for prairie hay has subsided and prices are slightly lower. Timothy hay, however, is in active demand at most points.

POULTRY AND EGGS

Receipts of eggs at the four leading markets were the largest of the season last week. During the preceding four years, the season's high point has been reached in the corresponding week or earlier, so that it is reasonable to look for some moderation in the supply hereafter. Total receipts at the four leading markets during April show much less than the usual increase over March and though disappearance into consumption has been less than usual, the increase in storage holdings during the month was considerably less than a year ago. Receipts of dressed poultry during April were a trifle larger than in that month last year but a larger reduction in stocks in storage than last year resulted from active consumptive demand. Storage stocks, however, remain considerably larger than at this time in previous years.

Chicago.—Eggs, miscellaneous 24½@25c; dirties 23c; checks 23c; extra firsts 31½@32½c; fresh firsts 25½c; ordinary firsts at 23½@24c. Live poultry, hens 25½c; broilers 50@55c; springers 30c; roosters 16c; turkeys 25c per pound.

Detroit.—Eggs, fresh candled and graded 25¼@26¼c; storage packed extras 29c. Live poultry, broilers 65c; heavy hens at 28@29c; light do 24c; roosters 19c; geese 18c.

BUTTER

Further declines in the butter market last week brought prices close to the level expected to prevail during the storage season. Storing has not yet started, however, as current receipts are not large enough to supply current consumption entirely and there are still moderate stocks in the coolers which are being liquidated. The market remains rather weak and unsettled as dealers shy away from any accumulation and buyers are purchasing only for minimum needs in the expectation that prices may go lower. The decline in prices has stimulated consumption. Production is heavy and gaining constantly while receipts at the four leading cities are steadily increasing.

Prices for 92-score were: Chicago In Detroit fresh creamery in tubs sells 40c; extras 41½c; New York at 42c for 41@42c.

POTATOES

Potato prices advanced to the high point of the winter season at the close of the third week in April but declined sharply last week. Shipments of old potatoes from producing sections were stimulated by the advance in addition, the movement of new potatoes is increasing rapidly. Northern round whites are quoted at \$1.15@1.30 per 100 pounds in Chicago and \$1.45@2 in other consuming markets. Intended plantings as reported by growers show an average production of about nine per cent as compared with last year. In some states the decline runs as high as 25 per cent.

APPLES

Apple markets were steady to firm last week with New York Baldwins quoted at \$5.50@6 per barrel. Shipments of apples from producing sections in the week ending April 21, totaled 661 cars as compared with 349 cars in the same week last year, and 615 cars two years ago.

BEANS

Bean prices dropped slightly again last week to \$7 per 100 pounds f. o. b.

Live Stock Market Service

Wednesday, May 2.

DETROIT

Cattle.

Receipts 8,449. Good butcher grades 25c higher; all others strong.
Fancy light yearlings.....\$ 8.75@ 9.25
Best steers.....7.50@ 8.50
Handyweight butchers .. 8.00@ 8.50
Mixed steers and heifers 7.00@ 7.75
Handy light butchers.... 6.25@ 7.25
Light butchers.....5.00@ 5.75
Best cows.....5.50@ 6.75
Butcher cows.....4.75@ 5.25
Common cows.....3.25@ 3.50
Canners.....2.50@ 3.00
Choice bulls.....5.50@ 6.00
Bologna bulls.....5.00@ 5.50
Stock bulls.....4.00@ 5.00
Feeders.....6.75@ 7.50
Stockers.....4.75@ 6.75
Milkers and springers... 40.00@80.00

Veal Calves.

Receipts 872. Market is steady to 50c higher.
Best.....\$10.50@11.50
Others.....5.00@ 9.50

Sheep and Lambs.

Receipts 192. Market steady.
Best lambs.....\$12.00@12.50
Fair lambs.....10.75@11.50
Light to common.....8.00@10.00
Fair to good sheep.....6.50@ 7.50
Culls and common.....2.00@ 3.00
Yearlings.....9.00@10.00

Hogs.

Receipts 3,611. Pigs 20c higher; others steady.
Mixed hogs.....\$8.60
Pigs.....7.85
Stags.....4.00@ 5.00
Yorkers.....7.80@ 8.85
Roughs.....6.15

CHICAGO

Hogs.

Receipts 28,000. Market fairly active; hold steady. Tops \$8.40; 160@225-lb average \$8.25@8.35; 240@245-lb butchers \$7.90@8.25; packing sows at \$6.40@6.75; 110@130-lb pigs at \$6.75@7.50.

Cattle.

Receipts 9,000. Beef steers active; strong to 50c higher. Tops at \$10.25. Several loads at \$10@10.15; bulk at \$8.40@9.65. Stockers strong. Other grades generally steady.

Sheep and Lambs.

Receipts 11,000. Market fairly active, strong to higher. Lambs of mixed quality selling at Tuesday's prices. Best wool lambs \$15.25; best clipped \$11.75@12.65.

BUFFALO

Cattle.

Receipts 175. Market is steady. Choice to prime shipping steers 1,400 lbs and up \$9.25@9.50; good to choice shipping steers \$8.25@8.50; heavy, fat, medium quality \$8@8.25; medium to good \$7.75@8; light native yearlings of fancy quality \$9@9.50; medium to good \$8.50@8.75; best handy steers \$7.75@8; plain \$7.25@7.50; handy steers and heifers \$7.50@8; western heifers at \$8@8.25; light Michigan butchering heifers at \$7.75@8; best fat cows \$6.50@7; medium to good \$5@5.50; grassers \$3.75@4.25; cutters \$3.75@4; canners good weight \$2.25@2.50; light fat bulls \$6.50@7; best heavy bulls at \$5.25@5.50; heavy bologna bulls \$4.50@5; common bulls \$3.50; best feeders 700 to 800 lbs \$7@7.25; medium feeders \$6.25@6.50; stockers good \$6@6.50; light common \$5@5.50; best milkers and springers \$60@80; common and medium \$37.50@45.

Calves, receipts 375. Market is 75c higher. Tops at \$4@11.75.

Hogs.

Receipts 2,400. Market is 15@25c higher. Heavy \$8@10; yorkers \$9.15@9.25; light yorkers \$8.50@9.25; pigs and lights \$8.25@8.75; mixed \$9@9.15; roughs \$6.50@6.75; stags \$4@5.

Sheep and Lambs

Receipts 800. Clipped lambs are 25c higher. Top lambs \$12.50; yearlings \$9@10.50; wethers \$8.50@9; ewes \$7@8; clipped lambs \$6@12.75.

Michigan shipping points for choice hand-picked whites. A little more buying is taking place and, in addition, growers are not delivering to elevators during the busy season so that the market may tighten up again. On the other hand, if elevators continue to push beans on the market it may drag lower. Advance reports on intended plantings indicate a greatly increased acreage for the 1923 crop. In New Mexico the increase is estimated at 112 per cent.

WOOL

Contracting the new clip of western wools is in full swing at prices fully steady with recent sales of large pools. Buyers are disposed to resist further advances, however, and it is probable that the rest of the clip will be sold at close to the prevailing level. Boston is inclined to go slow with many buyers claiming that wools are too steep, but foreign auctions are strong. The London sale opened at an advance of 7½@10 per cent, or slightly higher than expected. Woolen mills continue active with the leading manufacturer operating at 100 per cent of capacity.

CHEESE

Cheese, like butter, is gradually working down to a strong value basis. Both country and city markets declined last week and buying is still of a hand-to-mouth nature, although a slightly steadier undertone was evident at the close. Dealers are less inclined to make concessions than they have been for several weeks.

HORSES

The farm chunk season is waning, especially for those of lighter weight. Chunks weighing 1,400 to 1,500 pounds are eligible to \$110@135 at Chicago; 1,500 to 1,600-pound chunks to \$140@185; 1,600 to 1,700-pound light drafters to \$170 to \$225, while choice, heavy drafters are quotable up to \$300.

DETROIT CITY MARKET

The attendance at the market shows that farmers are busy in the field. Most all of the commodities sold on this market were in light supply. The leaders in the demand were apples, poultry and eggs. Of the specialty indoor stuff, radishes, leaf lettuce and rhubarb were the most asked for. Apples are bringing 75c@83.25; cabbage 75c@2 per bu; carrots 50c@1; eggs 26@30c; leaf lettuce 75c@1 per 6-lb basket; dry onions \$1.25@1.50 per bu; parsnips \$1@1.50; potatoes 50c@1.10; live poultry 30@35c; radishes 25@60c per bunch; indoor rhubarb 25c@1 per dozen bunches; veal 15c per pound.

GRAND RAPIDS

Old potatoes have turned draggy on the Grand Rapids market, liberal supplies moving slowly at 50@60c per bushel as compared with 60@70c a week ago. Other vegetables were lower. Prices follow: Parsnips 65c per bu; beets 50c bu; onions, dry \$1@3 per cwt; onions, green 15c bunch; carrots 50@60c bu; cabbages \$1 bu; outdoor rhubarb 10@12c pound; rhubarb, hothouse 10@12c pound; leaf lettuce 9@10c pound; poultry firm; receipts light; heavy fowls 24@26c per lb; light 20@23c per lb; broilers 50c per lb; eggs 23@24c; butter-fat 44@45c pound; pork 10c; veal 10@13c; cattle; sheep and lambs are unchanged; beans \$6.50 per cwt; wheat \$1.23 bu; wool 35@40c per pound.

COMING LIVE STOCK SALES.

Holsteins.

May 10—McPherson Farms Company, Howell, Mich.

May 15—C. E. Bone, Walled Lake, Mich.

May 10—George W. Ridgeman, Vassar, Mich.

Guernseys.

May 5—Oscar J. Winter, Sebawaing, Mich.

May 9—Bon Ayre Farms, Holt, Mich., Wierman & Surato, Owners.

May 8—Berrien County Breeders' Association, Eau Claire, Mich.

Jerseys.

May 31—Simon G. Maichele, Middleville, Mich.

WOULD STABILIZE POTATO MARKETS.

HOW to prevent Michigan, Wisconsin, Minnesota, New York and Maine potato growers from destroying each other's markets was a question before a conference of representatives of the American Farm Bureau Federation, the Michigan State Farm Bureau, the Michigan Potato Growers' Exchange and the marketing department of the Michigan Agricultural College, at Lansing, on April 23.

The plans contemplated the coordination of the cooperative agencies selling potatoes from these states. The aim of the plan being worked out is to keep each state agency informed on the movement and destiny of shipments from the other states.

This information alone would tend to stabilize the markets. At the present time when a market begins to display strength every agency heads carload after carload in that direction with the result that in a few days the market has more tubers than the dealers know what to do with and the trade finds itself upon its back. The suffering occasioned to consumers and growers alike would be largely obviated through an even distribution of the shipments over the season and over the marketing territory.

The Michigan Potato Growers' Exchange was represented at the conference by General Manager C. C. Wells, of Cadillac; the American Farm Bureau Federation by Walton Peteet, of Chicago, director of marketing; the Michigan State Farm Bureau by General Manager Clark L. Brody, of Lansing, and the Michigan Agricultural College by Hale Tennant, director of marketing.

COUNTY REPORTS.

St. Clair County, (April 27).—Wheat is above the average. Cattle about all sold, at from six to seven cents, live weight. Hay \$10.50, baled; eggs 24c; butter 22c. Farmers busy sowing the spring grains. Ground is working up in good condition. Some fencing is being bought. Farm labor hard to get. —W. A. K.

Newaygo County, (April 25).—General conditions have been unfavorable. Help is scarce. Not much grain was sown last fall and conditions for planting have been bad this spring. There will be a full acreage of beans and corn planted. Rabbits have destroyed a good many fruit trees. Otherwise prospects are good for fruit this season. Cream is selling at 48c; eggs 20c; potatoes \$1; beans \$7.50; hay \$14.—S. R. A.

Kent County, (April 26).—Rye is looking good and wheat fair. Some oats have been sown, while others are getting ready. Kent county cattle are all being tested for tuberculosis this month by state men at no expense to the farmers. As a result, the dressed beef market is being over-supplied. Young pigs are scarce and help hard to get.—S.

Newaygo County, (April 26).—Here in Ashland township, winter grains and new seedling are looking good, although small, due to the lateness of spring. Farmers are beginning to sow oats. Wheat \$1.20; potatoes 80c per cwt; eggs 22c. Cattle are very cheap. Farm labor very scarce.—C. R. E.

Midland County, (April 28).—Winter grains are damaged by the heavy ice. With farm help difficult to secure, the farmers are doing the best they can single-handed. Oats sell at 44c; beans \$6.75; potatoes 30@40c.—J. W.

Tuscola County, (April 26).—Weather is backward. Conditions of winter wheat seventy-five per cent of normal crop. Potatoes 50c per bushel; oats 48c; beans \$6.50 per cwt; butter-fat 43c; eggs 25c. Farmers are putting in oats and hauling manure. Not much labor to be had. Fifty dollars and board is the average price for month hands. Although low prices and high taxes makes the farmers feel anything but jubilant, they are taking off their coats for the fray.—J. T. B.

Berrien County, (April 24).—Winter wheat is looking fine, is selling at \$1.20 per bushel. Farmers are busy getting in oats. Most farmers are increasing the size of their dairies. Labor is very scarce and wages are high.—C. A. C.

Oscoda County, (April 24).—We are now enjoying beautiful spring weather.

Had 145 days of continual sleighing. Winter grains were well protected, and now look better than usual. Potatoes now sell at 50c; rye 60c; oats 60c; hay \$15; butter-fat 47c; eggs 20c. Farmers are hauling manure, sowing grass seed and getting ready for spring work. Labor is scarce with wages high. Conditions are generally favorable at the present time so far as crops are concerned.—M. S. S.

Mason County, (April 21).—Winter grains are not quite as good as farmers had expected. Potatoes and hay are the two products now being sold; potatoes are bringing 85c per cwt. and hay \$10 per ton. There will be some land lying idle this year on account of lack of help.—F. G.

St. Clair County, (April 23).—In Columbus township winter grains are good. Loose hay is bringing \$10 per ton; milk \$3 per cwt., less 60c for the hauling. Farmers are sowing oats with the ground in good condition. A good deal of land is being seeded, and a large amount of fertilizer is being purchased. Wages are high and men hard to secure. While the backward spring has caused late seeding, favorable weather from now on should give crops a good start.—R. S. P.

Calhoun County, (April 21).—Winter grains have suffered in this county. Wheat is worth \$1.26. Work is backward on account of the late winter, and there is practically no farm

help to be had. In my home township I only know of two month hands. Heaving by frost has been detrimental to much of the hay acreage.

Barry County, (April 21).—Wheat on the local market is bringing \$1.20 @ 1.15; rye 72c; oats 50c; corn 85c. Clover has winter-killed in some sections. Timothy has not started yet. Winter wheat looks better than could be expected after so much freezing and thawing. The labor situation is very tense.—C. V. V.

Fordson Tractors Used

We have 5 used Fordson Tractors for sale. All late models that have been overhauled and will be guaranteed by us. Prices will run from \$150 to \$200 each and may be purchased on the installment plan. If you want a good Fordson Tractor write us at once.

DETROIT MOTOR SALES
Authorized Ford Dealers
3633 Michigan Ave. Detroit, Michigan

CABBAGE PLANTS 2,000,000 25th May & on. Early & late var. Prepaid, 100, 400, 500, \$1.25; 1000, \$2.25. Express 5,000, \$7.50; 10,000, \$12.50. Cauliflower & Asper, 100, 600. Sure to please. List free. W. J. MYERS, R. 2, MASSILLON, OHIO.

BROWN EGGS Boston Market pays a premium for brown hen eggs. We charge no commission, send checks promptly. Have your name put on our quotation list. References National Shawmut Bank, Boston, Dun or Bradstreet Commercial Agencies.

MCARDLE LIVE POULTRY & EGG CO.
Boston, 16, Massachusetts.

300 STRAWBERRY PLANTS. Postpaid 150 Sen. Dunlap, 150 Warfield both for HAMPTON & SON, Bangor, Mich. \$2

Auction Sale

Wednesday, May 16th, 1923

60 Head of High Class Registered Holstein Cattle

Federal tested, and guaranteed as represented, 90 days retest given and guaranteed breeders, if kept in clean herd. Two 30 lb. bulls, some good A.R.O. cows. Bred heifers and heifer calves, from high record sires.

at West Michigan Fair Ground

GRAND RAPIDS, MICH.

For Catalogues write. E. W. McNITT, Howard City, Mich.

CLASSIFIED ADVERTISING

This classified advertising department is established for the convenience of Michigan farmers. Small advertisements bring best results under classified headings. Try it for want ads and for advertising miscellaneous articles for sale or exchange. Poultry advertising will be run in this department at classified rates, or in display columns at commercial rates. Rates 8 cents a word, each insertion, on orders for less than four insertions; for four or more consecutive insertions 6 cents a word. Count as a word each abbreviation, initial or number. No display type or illustrations admitted. Remittances must accompany order. Real estate and live stock advertising have separate departments and are not accepted as classified. Minimum charge, 10 words.

Rates in Effect October 7, 1922

Words	One time	Four times	Words	One time	Four times
10.....	\$0.80	\$2.40	26.....	\$2.08	\$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

MILLIONS "Frostproof" Cabbage Plants. Copenhagen, Wakefield, Succession, etc., 300, \$1.00; 500, \$1.25; 1,000, \$2.25, mailed prepaid. Express 10,000, \$15.00. Tomato and Sweet Potato Plants 300, \$1.50; 500, \$1.75; 1,000, \$3.00 prepaid. Express 10,000, \$20.00 cash. Guaranteed Safe arrival anywhere or money refunded. Don't take chances. Order from largest growers in Virginia. J. P. Council Company, Franklin, Virginia.

LEAF TOBACCO—3 years old. Extra fine quality. None better. Pay for tobacco and postage when received. Chewing, 5 lbs. \$1.75; 10 lbs. \$3.00. Smoking, 5 lbs. \$1.50; 10 lbs. \$2.50. Farmers' Union, Hawesville, Ky.

HOME GOODS, NOVELTIES, ETC., YOU NEED. Retail at jobbing prices. A general store at your door—we pay postage. Postcard brings Catalog. Agents invited. Acety Smith, Lightner Building, Detroit, Mich.

HOMESPUN TOBACCO. Chewing: 5 pounds, \$1.75; 10 pounds, \$3; 20 pounds, \$5.25. Smoking: 5 pounds, \$1.25; 10 pounds, \$2; 20 pounds, \$3.50. Send no money. Pay when received. CO-OPERATIVE TOBACCO GROWERS, Paducah, Kentucky.

BUILD YOUR OWN Phonographs. We can supply you with motors, tone arms, and all accessories at wholesale prices. Write for catalog A.K. Pleasing Sound Phonograph Company, 204 East 113th St., New York, N. Y.

TOBACCO—Extra Smoking, 5 lbs., \$1.00; 10 lbs., \$1.50; 20 lbs., \$2.75. Chewing, 5 lbs., \$1.50; 10 lbs., \$2.75. Quality guaranteed. O'Connor Smokehouse, S 133, Mayfield, Ky.

WANTED—Freak animals or poultry. Submit price and photographs. Charles Browning, Riverview Park, Chicago, Ill.

FOR SALE—One Buckeye Ditcher, 20-horse, four-cylinder motor. Machine in good condition. Reasonable price. Jenkins Brick Co., Montgomery, Alabama.

MONEY TO LOAN ON FARMS. 6% interest. No commission. No mortgage tax. Security Mortgage Corporation, 540 Majestic Building, Detroit.

FOR SALE—Minnetonka Home Creamery churn and worker combined, does fine work. Mrs. Jessie B. Dean, Mason, Mich., R. No. 1.

FOR SALE—Detroit Tractor Flow \$50; Bull Tread Power \$40; Tractor Tire Ditcher \$70. All excellent condition. Jobse, Mt. Clemens, Mich.

MONEY to loan on first class central Michigan farms. 5 per cent net to Oo. amounts of \$5,000 and up. Convis & Smith, Ithaca, Mich.

GREEN MOUNTAIN Seed potatoes \$1.25 bushel. Arthur Ranta, Calumet, Mich.

DOGS

HOUNDS, HOUNDS, HOUNDS. Fox, Coon, and Rabbit Hounds, broke to gun and field, started hounds and puppies all ages. Beagles and choice puppies, 10 cents for photos of hounds. H. C. Lytle, Fredericksburg, Ohio, Dept. Z.

GERMAN Shepherd, Airedales, Collies: Old English Shepherd dogs; Puppies; Illustrated instructive list. W. R. Watson, Box 35, Macon, Mo.

COLLIE PUPS—Heel driving parents, \$5. Arthur Bortel, Britton, Mich.

POULTRY

PULLETS. Barron English White Leghorns, eight weeks to maturity. May to October breeding flocks repeatedly culled by experts. Extra large and vigorous, wedge shaped bodies, big lopped combs. "Lay-bill" in every way. Also breeding cockerels. Satisfaction and more, or money back. Morse White Leghorn Farm, Belding, Mich.

CABALLS BARRED ROCKS—Lead them all. Leading hen Natl. laying contest, over all breeders laying 293 eggs. Official records 207 to 293. Leading pen over all breeds for winter months, Indiana Laying contest this year. Bargain prices, May, June and July. Order real money makers. Chick and eggs catalogue free. G. Caball, Hudsonville, Mich.

Evergreen Poultry Farm won the silver cup at the M. A. C. Laying contest for highest winter production with their (Bred to Lay) White Wyandottes. Put the lay in your flock with some of this blood. It will pay. Eggs \$3 for 15; \$8 for 50; \$15 for 100. 1/4 off after June 1st. Blanding & Sons, Dept. B, Greenville, Mich.

RHODE ISLAND REDS—Rose Comb Cockerels, hatched, farm raised. Big, thrifty dark colored birds from prize winning strains, \$4 to \$7.50. Two specials at \$10 each. Careful attention to mail orders. Bidwell Stock Farm, Tecumseh, Michigan.

RHODE ISLAND REDS—Rose comb, prize-winning strain. Mating List free. Ira J. Hiller, Bay City, Mich.

TEN PURE TOULOUSE GOOSE EGGS. \$4.75. Insurance and Parcel Post paid. Choice White Leghorn baby chicks, \$12.00 per 100. Amy Southworth, Allen, Mich.

ABSOLUTELY FREE—setting of Hollywood eggs free with every order of hundred grade H or S chicks for May and June delivery while they last. Eggs available upon receipt of deposit on chicks. Maple Haven Farm, Jackson, Mich.

S. C. BLACK MINORCAS, Northrup Strain, Heavy Stock Eggs, \$1.50 for 15; \$8 per hundred. Baby Chicks \$20.00 per hundred. C. J. Deedrick, Vassar, Mich.

EGGS—Mammoth Bronze Turkey, \$1.50 for 10 or 50c each less than 10. Mrs. Walter Dillman, Dowagiac, Mich.

SNOWY WHITE ROCKS. Fishel strain. Eggs \$1.50—15; \$3.75—50; \$7.00—100. Prepaid. Mrs. Earl Dehnhoff, Vanburen, Ohio.

ROSE COMB Rhode Island Reds. Hatching egg \$1.25 per setting. Postpaid, Mrs. Albert Harwood, R. 4, Charlevoix, Mich.

SICILIAN BUTTERCUPS—Excellent layers, good table fowl. Eggs \$1.50 per fifteen. Ida Frause, Maple City, Mich.

MARTIN W. Wyandotte eggs. \$1.00 per 15. C. H. Spooner, Rosebush, Mich.

50 Giant Black Minorca Cockerels \$2.25. Eggs \$8.00 per 100. Mike Schaefer, Essexville, Michigan.

BABY CHICKS

CHICKS GUARANTEED—Healthy, sturdy thriving chicks. Flocks that are mated with Michigan Agricultural College cockerels, Barred Rocks, S. C. Anconas, White and Brown Leghorns, pullets and breeding cockerels. Safe arrival, postage paid, catalog free. Fairview Hatchery and Poultry Farms, Route 2, Zeeland, Mich.

CHICKS—White Wyandotte and White Rock, \$18. per 100; \$9.50 for 50 and \$4.75 for 25. R. I. Reds and Barred Rocks, \$17. per 100; \$8.75 for 50, and \$4.50 for 25. White Leghorns \$12 per 100; \$6.50 for 50 and \$3.25 for 25. Order from this ad. Terms cash, with order. Reference, Bank of Mt. Morris, Mt. Morris, Mich. 100% live delivery guaranteed. Meadow Brook Hatchery, Mt. Morris, Mich.

PROFITABLE CHICKS—Reduced prices, high quality. Selected heavy laying strains—Leghorns, Rocks, Reds, Minorcas, Wyandottes, Orpingtons, Sheppard's Anconas. 100% delivery. Catalog free. Bank reference. Geneva Hatchery, Box 604, Geneva, Indiana.

BABY CHICKS—White Wyandottes, White Plymouth Rocks, Barred Rocks, Buff Rocks, Buff Orpingtons, R. I. Reds, White Leghorns. Durand Hatchery, Fenton, Mich., Box 404.

BABY CHICKS bargain prices. Barred Rocks, White and Brown Leghorn. Guarantee full 100% alive, free delivery. Hillview Poultry Farm Hatchery, R. 12, Holland, Mich.

QUALITY CHICKS, eggs. Sixteen standard bred varieties. Best winter laying strains. Free delivery. Reasonable prices. Catalog free. Missouri Poultry Farms, Columbia, Missouri.

BABY CHICKS from heavy egg producing strain. English and American S. C. W. Leghorns closely culled. 100% alive. Circular free. Montella Hatchery, Route 1, Holland, Mich.

BABY CHICKS. 15 Leading varieties. 2 1/2 Million for 1923. The kind that lay early. Large, vigorous, fluffy kind. Lowest prices. Send for large catalog. D. T. Farrow Chickeries, Peoria, Ill.

BABY CHICKS—Remarkable for size and strength. Reasonable prices. Leghorns, Anconas, Rocks, Reds, Wyandottes, Orpingtons, Minorcas, Spanish, Brahmas. Tyrone Poultry Farm, Fenton, Mich.

BABY CHICKS—Six leading varieties. Write your wants. Special prices on large, advance orders. Free catalog. H. H. Pierce, Jerome, Mich.

BABY CHICKS AND HATCHING EGGS Direct from our farm at greatly reduced prices, only 9c up. Barred Rocks, W. Leg. and Anconas. Write quick for particulars and special introductory offer. Model Poultry Farm and Hatchery, Zeeland, R. 4, Mich.

CHICKS—English S. C. W. Leghorn, \$12 per 100. Reds and Rocks \$16 per 100. 100% live guaranteed. Reduced price on large lots. Waterway Hatchery, R. 4, Holland, Mich.

QUALITY CHIX: White, Barred Rocks, Reds, \$14. White Leghorns, Anconas, \$12. Order direct. Bank reference. Silver Spring Hatchery, Box 97, Abingdon, Ill.

EGGS THAT HATCH: Chicks that live. Low prices. Won over 5,000 prizes. Furnished Government and schools. Catalog free. Sterling Poultry Farms, Box 80, Sterling, Ill.

STURDY CHICKS—Pure bred-to-lay flocks single comb White Leghorns, Anconas, Reds, White Wyandottes, Pekin Ducks; catalog. Sunnybrook Poultry Farm, Hillsdale, Mich.

BARRED ROCKS—Eggs and baby chicks from Silver cup winners. Eggs \$2.00 per 15 delivered by P. F. Circular free. Fred Astling, Constantine, Mich.

STERLING QUALITY CHICKS—14 varieties. Strong liveable chicks. Catalog free. P. F. Clardy, Box 6, Ethel, Mo.

BABY CHICKS—S. C. White Leghorns, carefully selected, heavy producers, \$12. Live delivery guaranteed. Ralph Wenig, Hudson, Michigan.

LOOK 75,000 Hi-Grade Chicks 12c and up. 10 varieties. Best ever produced. Hatching eggs. Circular Lawrence Poultry Farm, R. 7, Grand Rapids, Mich.

RICHARDSON'S ROCKY RIDGE pure Park strain Barred Rock Baby Chicks, \$16 per 100. Hatching eggs \$2.00 per setting. Hanover, Mich.

HELP WANTED

MAKE BIG MONEY QUICK—Selling "Fly-Kil." Have you heard about "Fly-Kil"? It is the wonderful new dairymen's fly killer and repellent that is always being used by the United States Government, many state institutions, and dairymen and farmers in nearly every state in the Union. "Fly-Kil" is sold on a written, money-back guarantee by an old responsible company. We want an honest, wide-awake man in each community to sell "Fly-Kil" this summer. Earnings from \$50.00 to \$300.00 per week sure. No capital or experience required. Just take some "Fly-Kil" and a sprayer and show farmers how it kills flies and keeps them away from cattle and horses. It sells itself. Write at once for our proposition giving age, reference and territory desired. Address: "Fly-Kil" Division 23, 61 Hampden Ave., Saint Paul, Minn.

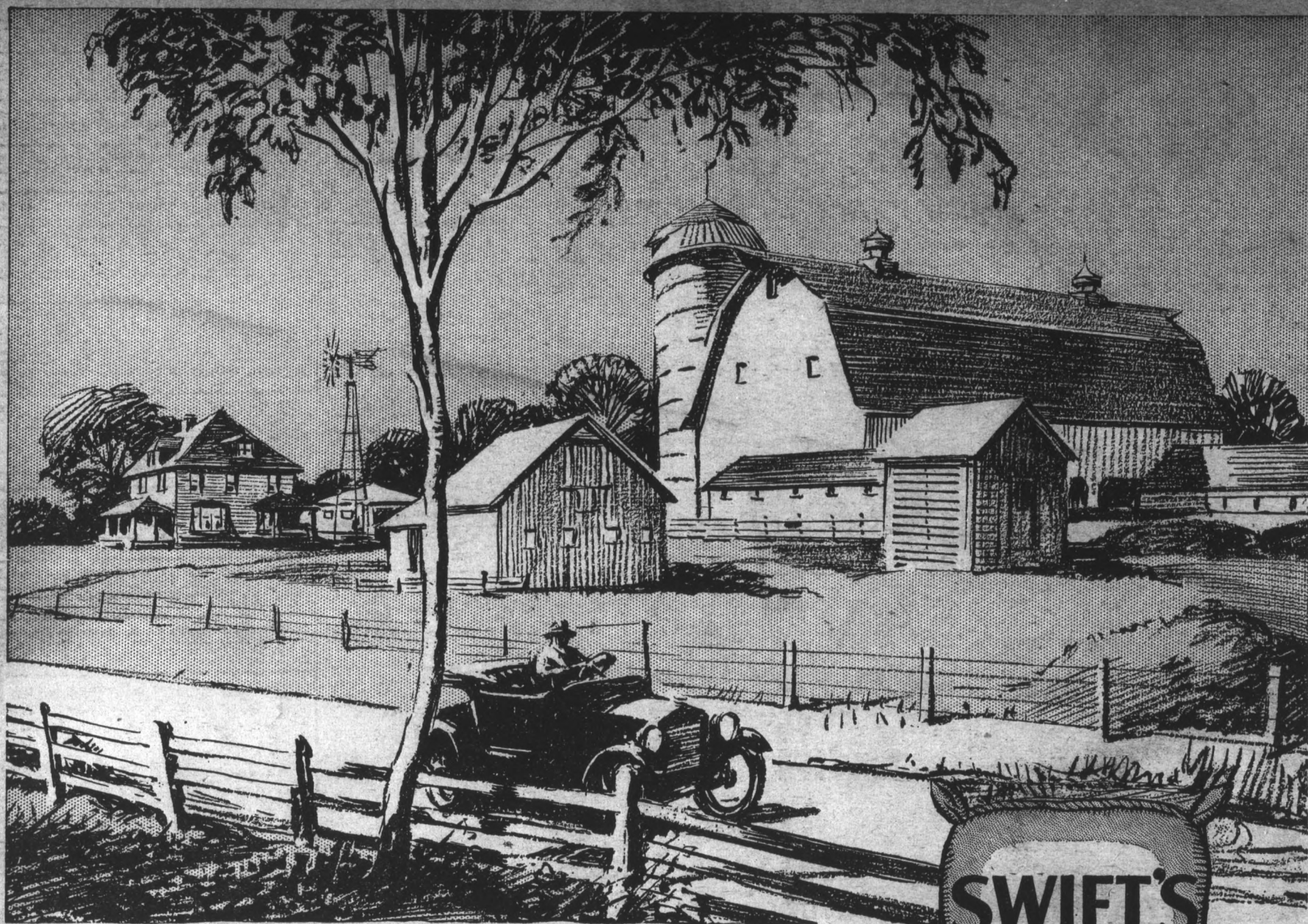
WANTED—Cow testers for Michigan Cow Testing Associations. Man with short course training, dairy experience and fundamental feeding knowledge, desiring to become Association Tester for the year, need only apply. Give full particulars, age, references, training, experience in first letter. Write or confer at your town expense with A. C. BALTZER, Dairy Department Michigan Agricultural College, East Lansing, Michigan.

WANTED—Man to milk Test Cows, yearly and 7-day work. Also a few good milkers. Bazley Stock Farm, Ypsilanti, Mich.

WANTED Farm Hands—Dairy and general farm near Detroit. Have milking machine, \$50 per month, board and room. Box 518 Michigan Farmer.

POSITIONS WANTED

A 15 YEAR OLD BOY, of good habits, likes horses and machinery, wants position with good farmer. Good home main object. Morris H. Hinkley, Lake City, Mich.



Meet the man who will help you to equip a farm like this

There are farmers in your community who apparently have succeeded in growing "two blades of grass" where only one grew before.

Almost always, they are the more prosperous farmers—the men who live in comfortable modern homes, with lighting systems and plumbing and other conveniences, with pianos and phonographs and fine furniture, with automobiles and tractors and silos and other adjuncts of up-to-date farming.

There is a man in your town who will help you, as he has helped others in the past, to have a modern farm equipment and the luxuries which make farm life more enjoyable.

Who is this man?

He will do this by helping you to make your farming operations more resultful. He will help you to grow more on less land, to increase your acre yields without increasing the acreage, to improve the quality of every crop you raise.

This man is the Authorized Swift Agent in your town—the man or firm or store selected by Swift & Company, after investigation, to supply the Swift's Red Steer Fertilizers required by the farming community.

Backed by the resources and reputation of Swift & Company, he is equipped to render a very real service to the farmers of your county. He will advise with

you as to your crop and soil requirements, and he will provide the Swift's Red Steer Fertilizers which are best adapted to those individual requirements.

"It pays to use them"

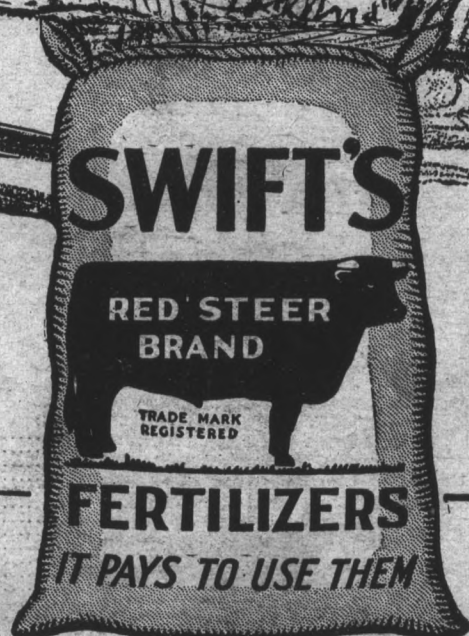
He recommends Swift's Red Steer Fertilizers because he knows that "it pays to use them"—and because he knows that back of every bag he sells are the vast resources, the supplies of raw materials, the manufacturing skill, the chemical and agricultural knowledge, of Swift & Company.

He knows that Swift's Red Steer Fertilizers are high in available plant food; that they are made of the right elements for each particular crop; that they are accurately and uniformly mixed; and that when properly applied they will return the farmer's investment many times over.

Meet the man who will help you to build a finer home—the Authorized Swift Agent. Talk over your fertilizer problems with him—he will give you the information you desire or will get this information for you.

Get acquainted with him now—it will pay you. If you cannot locate him readily, write our nearest sales division.

Swift & Company
FERTILIZER WORKS, DEPT. 44
Hammond, Ind.



A. S. A. says:

In a recent trip through a neighboring state I called, whenever possible, upon the Authorized Swift Agent in the towns I visited.

All of them seem to have the interests of the farmer very much at heart, and are making a very real effort to render service in their communities and to co-operate intelligently with the farmers in working out their fertilizer problems.

In a very few towns I found that there was no Authorized Swift Agent, and once or twice I pointed out to responsible merchants the opportunity offered in representing Swift's Red Steer Fertilizers in their communities.

Certainly there should be an Authorized Swift Agent in every town. And he should be the liveliest merchant in that town. If you can qualify, why not act on this tip and write to Swift & Company at once?

asa
Authorized Swift Agents

"IT PAYS TO USE THEM"