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FARM NOTES.

Grasses to Seed for Pasture.

In seeding land with a view to getting both pasturage and hay, and also to restore the fertility of the soil, would you advise mixing some alsike with the June (red) clover and timothy? If so, what proportion of these seeds would you use and what amount per acre? Does alsike mature as early as the June clover? The field will be used more for pasture than hay. It is well drained but only a trifle above a bordering marsh. Soil a mellow clay loam. Would alfalfa do well? Ingham Co. SUBSCRIBER.

Under these conditions it would certainly be a good plan to sow alsike with June clover and timothy for either pasture or hay but especially for pasture, as a larger amount and better quality of pasture can be secured from a mixture of grasses, than where but one or two are sown alone, and the alsike will prove more enduring than the red clover. The writer makes a practice of sowing about four quarts of red clover and one quart of alsike with two or three quarts of timothy per acre. In seeding down a permanent pasture probably more alsike should be used, and the pasture would be bettered by the use of some red top and perhaps some brome grass on this low lying, but well drained soil. The alsike will reach maturity at about the same time as the June clover, and the other grasses mentioned will also be at about the right stage to cut with the clovers if used for hay. The ground would not be so well suited to alfalfa as to the grasses mentioned since alfalfa needs a considerable depth of dry soil to thrive well.

Lime and its Application to the Soil.

Will some of your correspondents please tell me through your paper if air-slaked lime would be a good fertilizer to put on fall wheat in the spring? If not, what would be a good fertilizer? Mason Co. I. H. W.

While on some soils a noticeable benefit might be derived from the application of air-slaked lime in the spring on fall sown wheat, yet this is not the place to apply lime for best results. The liming of soils has not been practiced in this country to the extent which has prevailed in European countries, but the benefits to be derived from liming a good many of our soils are being demonstrated from year to year and the use of lime is becoming more common. There seems to be some difference in opinion as to the form in which lime should be applied to the soil, some advocating ground limestone, or carbonate of lime, while others favor hydrated lime or ground stone lime; either of these products have a caustic effect upon the soil and on sour soils are probably more beneficial than other kinds. Air-slaked lime should be applied in larger quantities than either of the above mentioned products, but not as much of it will be required as of the ground limestone. The writer contemplates applying about one ton per acre to ground intended for alfalfa this spring and will also try it on other crops leaving a check plot in each field for purposes of comparison. Probably the greatest benefit derived

A FEW LEADING ARTICLES OF THE WEEK.

- Breeding Pure-bred Swine.**—The first of a series of articles on this subject, now of more than usual interest owing to the high price of pork.....301
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from the application of lime is in making the soil better adapted for the multiplication of beneficial soil bacteria by giving it an alkaline re-action. Lime is also an essential ingredient of plants but it is generally considered that there is enough lime in our soils to supply this need. However, it is a fact sufficiently well established that beneficial results are secured from its application in at least a large proportion of cases especially where leguminous crops, or root crops are planted. But the best method of applying it is to sow it on the ground after plowing and harrow it in, mixing it with the soil, although the clover seeded in the wheat might be materially benefited by moderate application on fall sown wheat as suggested. However, lime is simply a soil corrector and not a fertilizer, and is not needed by all soils and for all crops any more than medicine is needed by all people. Lime will be used more extensively in Michigan during the coming season than ever before and we shall doubtless be in a position to give our readers more specific information with regard to the results which may be expected from its use after these trials have been completed, when those who have tried it can

speak in the light of actual results secured under their local conditions.

Seeding Alfalfa.

I intend to sow about two acres to alfalfa this summer without any nurse crop. The ground is of a gravelly nature with clay subsoil, is now corn stubble after timothy. Part of it is a little light in fertility but I am covering it by hand with manure from the sheep barns and cow stable. Would you advise inoculating the seed with this nodule forming bacteria? If so, how long before sowing? Will the roots of the growing alfalfa materially interfere with drain tile an average of two feet under the surface of the ground? Hillsdale Co. R. O. L.

It is impossible to tell where one has not previously experimented in the growing of alfalfa whether inoculation is necessary or not. On some Michigan soils it does not seem to be necessary, as good stands have been secured from the start without inoculation, which is proof that the bacteria was present in the soil, as without it it is impossible to secure and keep a good stand of alfalfa. Inoculation with soil from a successful alfalfa field is generally considered the best means of securing these necessary bacteria, but, where this is impracticable, it is undoubtedly a good plan to inoculate the seed

with the pure culture as suggested, and a good many growers have secured good results by this plan. It should be done, just before the seed is sown and care should be taken not to expose the seed to the direct rays of the sun after it is inoculated, and before it is sown. Thus, if it is sown broadcast, the ground should be harrowed to cover the seed at once, particularly if it is sown on a bright day.

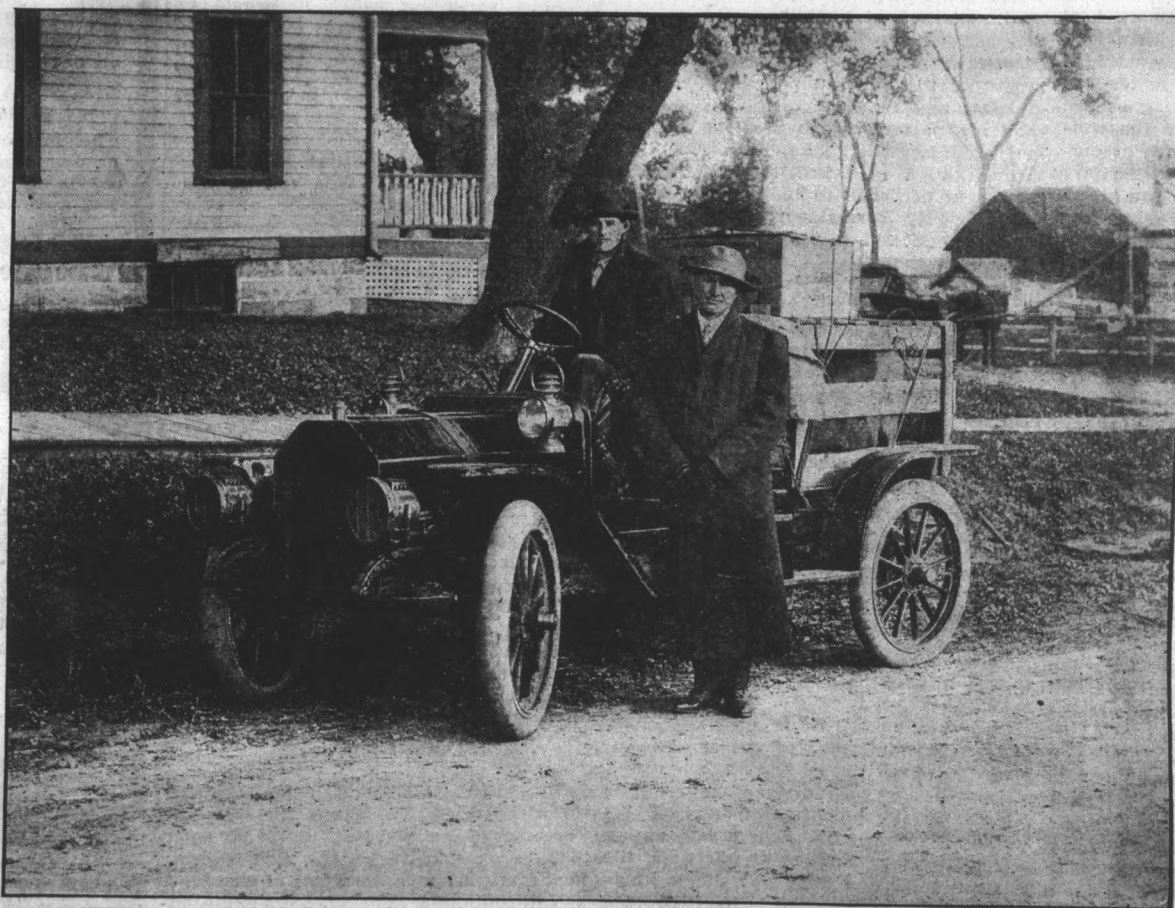
While it is possible that the roots of alfalfa might fill the drain tile so as to interfere with it two feet below the surface of the soil, yet it is not probable, and those who have grown it upon tile-drained ground have not found the difficulty from this source that some anticipate. There is not much, if any danger, of this result, and none should be deterred from sowing alfalfa on this account. The writer has seen alfalfa growing for several seasons on tile-drained soils, and the drains are still working perfectly.

Painting the Farm Buildings.

I was intending to paint all of my buildings this spring, but find that the price of oil and paint is so extremely high that I would like to have you advise me, through the Michigan Farmer, how to use buttermilk, or some other substitute instead of oil, and what they put with it to give it a gloss. Cass Co. F. E. W.

There is no question about the profit in keeping all buildings thoroughly painted, but while painting with poor materials is possibly better than not painting at all, yet by far the greatest profit will be derived by using only good materials in painting farm buildings. Really, the cost of the good paint is only a minor item in the keeping of buildings well painted, the cost of the labor required to apply it being the larger factor, so that where home labor is used to apply it, the greater expense in painting is eliminated. In any event, one can not afford to use any but the best paint on account of the time required to apply it, and the resulting cost of the application, since the good paint will last much longer and applications will not need to be so frequent as where the poorer grades of paint are used. The substitutes for paint, such as pigments mixed with buttermilk as mentioned in this inquiry, may give a good appearance to the job for a time, but will not preserve the wood as will paints mixed with linseed oil, which not only gives the paint a bright and glossy appearance, but acts as a preservative of the wood by keeping out the moisture and the germs which cause decay.

Where one has rough buildings to paint, the following method is advised by a practical painter as a means of giving a better appearance to the job when finished, and of reducing the quantity of paint which would be required. This method is to apply a priming coat prepared as follows: To one gallon of prepared paint add two gallons of soft soap, one gallon of raw linseed oil and two pints of dryer. If the soap is very thick, thin with a little water before using. Allow this priming coat to dry thoroughly, then proceed with the work as with a new building. Notwithstanding the fact that linseed oil is now very high, sub-



Theodore Buchanan, an Iowa Farmer, returning from a 28-mile Trip after Two Hogs and 17 Pigs, a Load of 700 lbs., Showing the Use Farmers are Making of Autos.

stitutes should not be used for it in the making of paint for the purpose of painting the farm buildings, and only the best of pigments should be used with it. Prepared paints are convenient, and where the painting is done by home labor, are generally preferred to paint that requires mixing, but where these are used only brands of known reliability should be purchased, since they will wear much better and give much better protection to the wood as well as a much better appearance to the job than will the poorer and cheaper kinds. Too many farmers neglect the regular painting of their farm buildings on account of the cost, yet from no standpoint does it pay to neglect this important work. The serviceable life and good appearance of the buildings is perpetuated thereby, and the value of the farm as well as the enjoyment of the home is proportionately increased.

Sowing Alfalfa for Hog Pasture.

I have a four-acre lot which I would like to divide in two lots for hog pasture. The soil was never plowed and dries up in July. I would sow one lot in alfalfa this spring and the other next spring. Would you advise me to mix the alfalfa with clover, for I can not get any soil which contains alfalfa bacteria?

Mason Co.

SUBSCRIBER.

Under these conditions, it would undoubtedly be a good plan to sow a little clover and perhaps some alsike with the alfalfa for hog pasture, since if the bacteria is not present in the soil, the clovers will make a good stand and the alfalfa will gradually develop the nodules from natural inoculation so that the next time it is seeded the alfalfa will grow successfully. Then it is not at all certain that the pasture would not be improved by this mixture of clovers. Alfalfa seems to grow well with other grasses when once established and while it is in a class by itself for hog pasture, the other clovers are undoubtedly good, and the hogs will appreciate the variety and probably get a larger amount of feed from the mixture than they would secure from the alfalfa alone.

Oats After Timothy.

Would there be any chance of getting a fair crop of oats on a piece of timothy sod I plowed last fall, and at the same time seeding it to clover? It is heavy soil. I just bought the farm last fall and it has not had much clover seeding. I want to get it seeded as soon as possible.

Wayne Co.

SUBSCRIBER.

On general principles it would not be a good plan to sow oats on a timothy sod. Theoretically, at least, the chances of getting a good crop of oats would not be good for the reason that most of the available plant food in this soil has been stored up in the roots and crowns of the timothy plant for the production of a crop of grass next year, and as the oat crop is one which matures in a short season, this stored up fertility would not be available for its use to any considerable extent. It is true that fertility is all the time being made available by natural processes. But for the reason given above, the oat crop could not make the same use of the fertility stored in this soil under average conditions as would a corn crop or any other cultivated crop with a long season, since the cultivation would help to make this latent plant food in the soil available and the longer growing season would give an opportunity for the timothy sod plowed down last fall to decompose, thus making the stored up fertility which it contains, available for the growing crop. However, in a case like the one cited where it is desired to get the land seeded at once, the practice might be permissible.

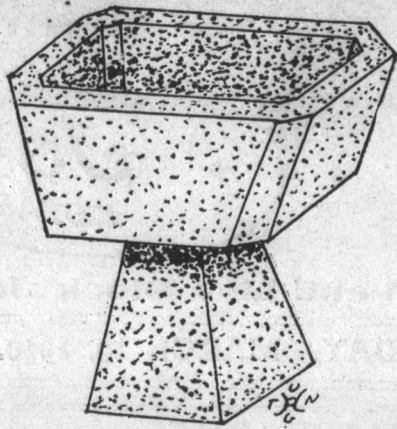
A CONCRETE PLANT URN.

This plant urn or box may be easily made of concrete by anyone and will be an ornament as well as of practical use upon the lawn.

The bowl or box is easily moulded by building a core of the size desired. This is made in a box form and with the four sides slanting; the nails at corners are driven into an upright so as to permit each corner to be beveled, as shown in drawing. The core is placed upon a plank, bottom side up and the four sides of outside form erected around same; these are cut so to fit together with the same slant in proportion to the core and with an allowance of two inches for the concrete to be placed between the forms, for the walls of bowl. At each corner of the outside from a triangular strip is placed, which is nailed to one side board only, yet so to fit closely into the corner of form; this permits the outside form to be hinged together at three corners and the fourth corner fastened with hook and eyelet, so the outside form can be folded back upon the completed work;

thus making the molding of work very simple.

The base or pedestal is molded from a square form that is hinged together in the above manner, and which is cut so that the sides of pedestal will be slanting,



as illustrated. The bowl of urn is placed upon pedestal as shown, thus enabling it to be easily removed for cleaning at any time desired.

Wayne Co.

A. A. HOUGHTON.

BENEFITS DERIVED FROM OTSEGO COUNTY ASSOCIATION.

Notwithstanding the discouragements mentioned in the last issue, there have been good results from the work of the Otsego County Potato and Clover Growers' Association, some of which may be enumerated as follows:

Some of us have met at least seven good men "from outside," to know whom is a distinct acquisition.

Some of us have begun to think about our business in a way that we would not before have thought possible.

The writer grew, for experimental purposes, sixteen varieties of potatoes for the Department of Agriculture, and has more faith than ever in the Rural New Yorker No. 2, and the Sir Walter Raleigh, for Otsego county.

The writer is growing a measured acre of hairy vetch with fall rye to test it as a soil renovator.

From the Department at Washington, and the Wisconsin experiment station, five bulletins bearing on potato production and other phases of northern farming have been sent to seventy-five or eighty men in Otsego county.

Though scarcely a farmer responded to the urgent request voiced on 300 postal cards to bring to the meeting his wife, who is a farmer, and his boys and girls whom he ought to wish to train to be better farmers, a large number of students from the Gaylord High School were excused from classes, and witnessed and participated in the demonstration of the Babcock test, and attended some of the lectures.

The students of the County Normal, which is training teachers exclusively for rural schools, with their two critic teachers, assisted Professors Smith and McDowell in measuring an exact acre, in preparing the hundred pounds of nitrate of soda, and in applying it last spring; they also attended the sessions of our meeting this winter, thus doing something through good agencies to hasten the movement of "back to the soil."

The County Normal now uses the government bulletins in its term's work in agriculture.

The stop of the Farmers' Institute train at Gaylord was very widely advertised and attended by crowds through the influence of the association.

As a result of the association and the interest aroused through the meeting held and addressed last spring by Prof. C. Beman Smith, and his subsequent articles in the county papers, the potato crop of Otsego county was never before planted so early, nor looked so thrifty and green in a long run of dry weather; and, despite the months without rain in the area around Gaylord, there would have been a fair crop as a result of better methods had not the frost of August 20 checked growth to so great an extent.

Considerable publicity has been given to the idea of breeding up seed, and of saving clear seed.

The sum of \$45 being generously advanced by a member of the association, Mr. Fred Stafford, of Elmira, we raised a sample acre of potatoes on the fair ground, in the outskirts of Gaylord, intending to have the experiment as an object lesson to be seen at fair time, the potatoes to be dug then with digging machines on exhibition, and then be sold at auction, not allowing any person to

secure more than a limited amount, say five bushels, that the clear seed might be used on the greatest number of farms.

Besides the \$45, Mr. Stafford furnished 1,000 pounds of a complete commercial fertilizer, and the seed, Rural, Potentate, and Late Petoskey, all clear.

All labor was hired. Because of the great demand for teams, our crop was planted very late, but not later than has been the common practice over large areas heretofore, on otherwise ideally fitted ground. The crop was well taken care of, including spraying for blight. The yield was small and cost us a prohibitive price per bushel. We will have some clear seed and the valuable experience that late spring plowing on old land is wrong, and that we failed on account of failing to conserve moisture by not plowing in the fall of 1908, and by not working the ground early and frequently in the spring of 1909.

We are satisfied that humus will help hold moisture in the soil, and that a commercial fertilizer can not do its best in a soil lacking in humus, and that an old timothy sod plowed under for potatoes late in the spring, too largely the Otsego county practice, is but a weak, poor substitute for a second growth of clover plowed under in the early fall before the crop is planted.

So, out of our misery and our many mistakes there may come to the open mind many blessings.

We have on foot a campaign to place one of our printed creeds in every store, postoffice, grange hall, bank, school house, in the county, and to hand one to each school child.

We made a mistake in not fixing the membership fee at one dollar instead of twenty-five cents, as the latter rate does not give us the necessary funds to operate with.

Those working in this organization give all their services in a missionary spirit. All whom we can enlist will learn more thoroughly the lesson of unselfishness, and that a few must strive in setting any new cause on its feet, that all may gain. In this spirit the heroes of the Revolution risked all without promise of gain for themselves.

Otsego Co.

R. D. BAILEY.

THE MANURE SPREADER FOR THE SMALL FARMER.

For some years the manure spreader has been recognized as not only a useful but a necessary implement in the equipment of the large farm. But the small farmer has generally hesitated to purchase a manure spreader because he has felt that he would not have sufficient use for it to make it a profitable investment in the equipment of a small farm. This, however, we believe to be a mistaken idea as a little careful figuring will show. The farmer for instance, who only has say 100 loads of stable manure each year, will be able to cover only five or six acres by hand spreading, while he would be able to cover at least twice that area by using the manure spreader with a much larger net result in the increased yield of the succeeding crop, which in many cases might in itself be sufficient to nearly or quite pay the cost of a manure spreader in a single season for just this limited use. Then there is the saving of time which is an important factor of every farm in present day labor conditions, which would easily pay the interest on the investment to say nothing of the saving in hard labor which this saving of time implies. Unquestionably the small farmer can well afford to own a manure spreader and will find it a profitable investment. These implements have been perfected to a high degree and their durability has been demonstrated so that when once the investment is made, it will not have to be duplicated for many years upon the small farm, where the manure spreader is kept under cover during the large part of the year when it is not in use. This is the season of the year when the average farmer will be considering the advisability of purchasing a manure spreader and it is the writer's opinion that if he decides a question in the affirmative, that his decision will be a matter for future self congratulation rather than of regret from whatever standpoint it may be viewed.

FREE SCHOLARSHIPS FOR EVERYBODY
Rochester, N. Y., March 2, 1910.—The Directors of Franklin Institute, today voted to prepare candidates for the next Railway Mail Clerk Examinations free of charge. A postal, containing the applicant's name, addressed Dep't R 48, is sufficient application.

WHAT'S THE USE Sticking to a Habit When It Means Discomfort?

Old King Coffee knocks subjects out tolerably flat at times, and there is no possible doubt of what did it. A Mich. woman gives her experience:

"I used to have liver trouble nearly all of the time and took medicine which relieved me only for a little while. Then every once in a while I would be suddenly doubled up with an awful agony in my stomach. It seemed as though every time I took a breath I would die. No one could suffer any more and live.

"Finally I got down so sick with catarrh of the stomach that I could not turn over in bed, and my stomach did not digest even milk. The doctor finally told me that if I did not give up drinking coffee I would surely die, but I felt I could not give it up.

"However, Husband brought home a package of Postum and it was made strictly according to directions. It was the only thing that would stay on my stomach, and I soon got so I liked it very much.

"Gradually I began to get better, and week by week gained in strength and health. Now I am in perfect condition, and I am convinced that the whole cause of my trouble was coffee drinking, and my getting better was due to leaving off coffee and taking Postum.

"A short time ago I tasted some coffee and found, to my astonishment, that I did not care anything about it. I never have to take medicine any more. I hope you will use this letter for the benefit of those suffering from the poisonous effects of coffee."

Read the little book, "The Road to Wellville," in pkgs. "There's a Reason."

Ever read the above letter? A new one appears from time to time. They are genuine, true, and full of human interest.

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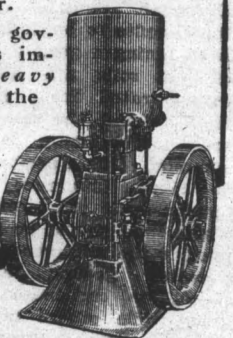
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IMPROVING THE CORN CROP.

It is conceded that the corn crop is one of the most important crops with which we have to do upon the farm, and there is probably no other crop that has been so thoroly discussed as this particular one. As we stop to consider this question, it seems that all points have been previously covered, and nothing has been left unsaid. But when we come to realize that our average yield is only about one-half of what it should be, it seems that there must be something said or done to overcome this great deficiency. When we know that the average yield is only 26 bushels per acre, and a great many of our farmer friends are getting from 50 to 80 bushels of shelled corn per acre, we must come to the conclusion that the larger per cent of corn growers are getting so small a yield that there cannot possibly be any profit derived.

Where does the trouble lie? Is it because we are not schooled along the proper lines, or because we have been putting too much stress upon some of the details, and overlooking many of the others; or is it not because we are not practicing what we already know? I believe the latter idea is the correct solution of the problem. A great many people attend institutes, and read articles on the subject, but that is as far as they go. There has been a great deal said about the selection of seed, which is very important, and should not be overlooked, but this alone is not sufficient. A certain professor in summing up this question says: "The most important thing in corn culture is the fertility of the soil."

We cannot grow a good crop of corn unless we have our soil in a high state of cultivation. In the first place, we want to see well to the draining of our land, because corn will not germinate and grow if it has too much water, and I believe that we ought, if possible, to prepare our land so as to withstand either flood or drought.

In the next place, we want to have our soil fertile, so that the plant food is available, or in a soluble condition. Before the young plant can feed upon the plant food in the soil, it has to be in a liquid form or decomposed, so that it becomes a part of the moisture in the soil. It is conceded by all that a clover sod well manured produces the most suitable land for corn. Why is this the case? Because, they help to bring about the conditions above mentioned. Corn is an acclimated plant, having originally been brot from the south, and it is also a plant that requires much heat. The clover sod and the manure, while in the state of decomposition, produces this heat, which is very essential, and as the sod decomposes, it sends the required liquid manure into the soil also, thus meeting all the requirements necessary to a satisfactory crop.

It is right along the line of soil fertility that is the cause of the low average yield in the western corn belt, where they grow corn year after year, on the same land, without any regard to the replenishing of the fertility of the soil.

Having obtained good seed, and with the land in proper condition, the next important thing is the planting. Carelessness in this particular alone, is often the cause of a partial failure. I have seen corn fields, marked both ways with a corn marker, where men were planting with hand planters, plunging them in, without any regard to the depth at which they were planting. I know a very successful corn grower, who will not allow a man to plant corn with a hand planter unless he is with him. Corn, if conditions are right, should not be planted over 1½ inches deep, as it requires heat and air to sprout, and if we get it too deep, it excludes both, and the result will be a failure. The horse planter is the ideal method of planting corn, as you can get it a uniform depth with very little trouble.

Cultivating should be done with two objects in view. First, the destroying of weeds, and secondly, the retaining of moisture. Cultivate deep enough to destroy the weeds, and still shallow enough so as not to injure the corn roots. Never let the weeds get the start of you. How much seed should we plant to the hill? That depends upon what we are going to do with the corn. If it is for the grain, three kernels to the hill is enough. I usually plant more, and then thin, leaving the three best stalks, and I am satisfied that it pays to do this.

I am also satisfied that the majority of us plant too late in the season.

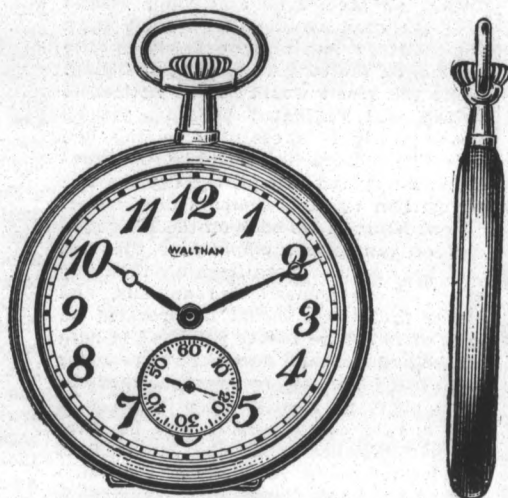
I would rather have a week in the spring than two in the fall to hasten the ripening of the corn.

Sanilac Co.

W. A. ELLIS.

WALTHAM WATCHES

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It is universally acknowledged that the United States has produced the best machinery in the World. American agricultural implements, electrical machinery, locomotives, clocks and Waltham Watches lead in the markets of the World. As long ago as the Centennial Exhibition in 1876, the Commissioner from Switzerland visited the Waltham Watch factory and picked out a watch at random from a lot of others. When he returned to Switzerland he told the Swiss Watch Manufacturers that not one Swiss watch in 50,000 would compare with that Waltham watch he had picked up haphazard at the Waltham Factory. A statement even more true now than then.

We advise you to buy a Waltham Watch *adjusted to temperature and position* and to buy only from a jeweler because he can regulate it to your personal habit and occupation. Never buy from Mail Order Houses. They cannot have the thorough knowledge or the equipment for regulating high grade watches.

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LIVE STOCK

BUILDING A CONCRETE HOG HOUSE.

When an efficient system of ventilation is provided, as it is contemplated in this case, we do not believe that there would be any noticeable dampness in the hog house if built entirely of concrete. The moisture which is observed in tight hog houses, or stables of any kind, results from the condensation of moisture from the moisture laden air exhaled by the animals on the cold walls of the building. While the result would not be noticeable in the well ventilated building, yet as plenty of light is essential in the hog house, its construction would be somewhat simplified by the plan of making the upper portion of the building from lumber.

Prof. King, in his book on the King system of ventilation, emphasizes the fact that hogs require more fresh air than any other of our domesticated animals, and states that there should be provided an area of 26 square inches per head in both intake and out-take flues where the latter is 15 feet high. He recommends that the main shaft be located centrally when it will answer every purpose and be more cheaply installed while the intake flues are located about the walls of the building and their combined area being made equal to the area of the main ventilation shaft. With this basis in mind, it will be easy to figure the capacity of the ventilating flues which should be installed as this should depend more upon the number of hogs which may be kept in the building than upon the size of the building itself. Thus if the fifty hogs were to be kept in the building, an area of 1,300 square inches would be required in the main ventilating shaft which would require a shaft approximately three feet square. In like manner the requirements of the area of ventilating shafts for a less number can be easily ascertained, it being kept in mind that the dimensions given are sufficient to furnish an abundance of pure air for hogs of a matured size. The intake flues should be arranged so that the volume of air admitted can be controlled by closing a portion of them if desired as may be required in case a strong wind prevails from any direction.

FEEDERS' PROBLEMS.

Amount of Potatoes which May be Fed.

How many potatoes can a cow eat without hurting her, and how many can a horse eat? Why I ask this is the fact that potatoes are cheap. J. L. K.

As noted in a recent article on this subject in some foreign experiments conducted to determine the amount of potatoes which might be fed to cows, it was found that good results could be secured when potatoes furnished as high as 50 per cent of the total dry matter of the ration. However, not more than 40 or 50 pounds of potatoes should be fed per day to a cow of average size in connection with other feeds for the best results, the future health and condition of the cow being taken into consideration. Horses, especially if at work, should be fed a less amount, probably not more than 25 to 30 pounds per day being about all they can be fed with profit. This, however, is a question which can safely be left with the individual feeder, if he is a close observer of the animals he is caring for, as there is undoubtedly considerable difference in individuals with regard to the proportion of the ration which may safely be made up of roots of any kind or potatoes in particular. This succulent feed should, of course, be fed in small quantity at first, the feed being increased gradually until the maximum is reached.

TREATING SHEEP SKINS.

Would like to ask through The Farmer if there is any way to prepare sheep skin so that the wool can be pulled off instead of clipping it off. Not particular about the skin; no sale for them here. E. A. Chippewa Co.

The wool on sheep skins may be easily loosened if a liberal sprinkling of ashes is put on the flesh side as soon as the pelt is removed and if the same is folded together, and a few days' time is allowed for the ashes to act on the hide. An occasional examination will denote when the wool is loosened and may be readily pulled. Whether this will work satisfactorily on dried pelts or not, the writer can not say, but these may be easily clipped by rolling them to a barrel and little wool will be lost by leaving on the pelt.

THE SPRING MANAGEMENT OF THE WORK HORSES.

As the season for active field work approaches, the farm horses should come in for a share of the farmer's thoughtful consideration. Almost every spring some farm horses, and particularly young horses, in every community are put to work in an unfit condition, with the inevitable result that their value is decreased and their period of usefulness shortened. This is due to several causes. First, they have not generally been properly exercised during the winter season and their muscles are soft and their hair long, a combination which makes them unequal to the hard work to which they are sometimes put without any preliminary period for getting them into proper condition.

For some weeks before the hard farm work begins, the horses should be better fed and better groomed in order to put them in good "heart" for the hard work to come. Then they should be worked in moderately at the start in order to get their muscles properly hardened for the more severe tasks which follow. It is not an uncommon thing in spring, when the horses are put to heavy plowing, to see their shoulder muscles quiver, the result of the severe strain placed upon them and many a young horse has been sweened or otherwise injured because the driver did not appreciate the necessity of working him moderately until he had gotten into a physical condition to endure the heavy work without such injuries.

Another frequent cause of injury to horses is poorly fitted harness. Possibly the collar may have fitted fairly well before the horse was put to work, but the inevitable shrinkage in flesh which results from the strain of the hard spring work soon makes the collar loose and sore shoulders, sore necks or galls are the natural result. These are too often allowed to develop without applying the proper remedy of a better fitting collar and are at best difficult to heal when once started. As a consequence the horses are unfitted for work and in many cases are left with unsightly scars which no future treatment can remove. Aside from the humanitarian standpoint, it is good business policy to give attention to these little things in getting the farm horses worked in properly during the spring season.

A proper ration for the horse is another point which should receive the careful attention of every farmer at this season of the year. Where oats are available they make, either alone or in combination with corn, a very satisfactory ration for the work horses, but where corn alone is available it will pay to supply some other ingredient in the ration which will help to balance up this feed, as the horses can be kept in good condition more cheaply when a fairly well balanced ration is fed. Another little thing which is too often neglected with horses, is to provide them with salt. This may best be done by keeping it before the horses in a little box at all times, so that they may satisfy their natural appetite without eating too much salt at one time which will increase their thirst and keep them in discomfort while at work. Another thing which is very beneficial to horses, especially during the spring season is the feeding of some roots. This gives a desirable succulency to the ration, and has a cooling effect which offsets the heating tendency of the liberal grain ration which must be provided to keep horses in condition while at hard work. Often the roots are not available, but in a season when potatoes are plentiful and cheap, as they are this spring, it is well to feed the horses as many as they can utilize with economy in the ration. Too many farmers allow their horses to become thin in flesh during the hard work of the strenuous spring season, with the result that they remain thin throughout the year or until the fall work is over. It is the experience of good horsemen that it costs no more to keep the horses in good condition throughout the year, provided they are fed and worked judiciously, than it does to allow them to become thin and then be obliged to put them into condition again, and besides, a horse that is thin in flesh and broken in spirit will not give as good returns for his feed as one that is kept in good condition throughout the work season. The farm horses are worthy of as careful feeding and attention as the farm stock which is maintained as a source of profit, and good care and attention will pay as well or better when bestowed upon them as when bestowed upon any other class of farm stock.

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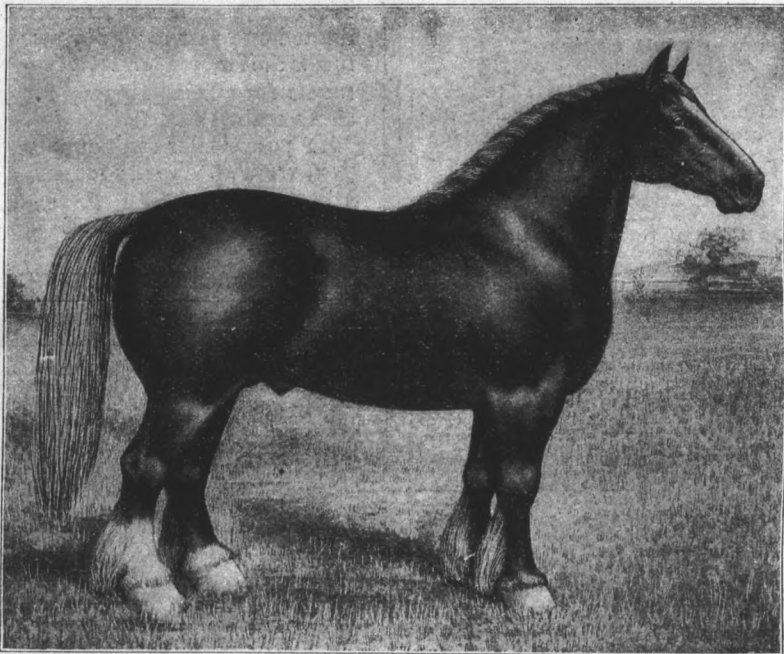
To become a successful breeder of pure-bred swine a man must possess certain qualifications, the first and foremost of which should be honesty and an unimpeachable reputation for square dealing. The discriminating buyer of registered swine will study the pedigree and individuality of the breeder fully as carefully as that of the animals he buys. Reputation is the expression of character and is built up by hard work, patient waiting and severe tests of his moral qualities. A good reputation is an asset of incalculable value to a breeder of registered swine.

Every man understands whether or not he is a strict teller of the truth, or given to prevarication, misrepresentation, or evading the cold straight facts. All I can say to you, if you are of this class, is "Keep your hands off from the business of breeding pure-bred swine." One mistake and your business is likely to be ruined and you will be left with a herd of swine, that every reputable buyer will regard with suspicion, tho the animals may be individually good and worth many times what you are asking for them. It is a mistake for a breeder to allow his commercial cleverness to dull his moral sense.

If he is to become famous and have his stock much sought after he must not only be a judge, but a prophet, always keeping one eye on the present and the other looking far ahead into the uncertain

of great value. One that tells of quality and digestive power, or the contrary. In all show rings we find animals with flanks cut up and twists as open as those of a dog. The well let down full flank of the hog is of special importance to him over any other meat producing animal, since the lower cut of the side has become one of the high-priced cuts, under the skillful uses of all parts of the carcass by the packers. The ideal side must carry its thickness well back. This is only one of the many utility points that can be improved by intelligent breeding.

It requires concentration of effort to stamp his individual trade mark upon his stock. Such characteristics cannot become fixed and permanent by jumping from one ideal to another and bringing together animals from unrelated families of the breed. Nature varies widely when such shot-gun methods of breeding are practiced. Successful breeders keep their ideals well in mind and by concentrated effort aim to develop them by selection and mating. The true breeder's mind is constantly occupied by such questions as selection, mating, feed and care in order that he may come as near as possible to approaching his ideals. His ideal is never reached, for the more nearly he comes to approaching it, the more clearly he notes the deficiencies of his animals, and he is spurred on to higher and better ideals. He is in the business because he loves his animals and he has given his work such a prominent place in his mind that he quietly pursues his chosen path until na-



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future. It is a perennial source of joy and pleasure to follow the course of pigs growing up and anticipate in that the developments that are likely to take place. It is a genuine pleasure to have one pig grow and develop as he wished it to. It is the pure ecstasy that comes from playing the role of a prophet that leads him on to make a closer study of the future requirements of the breed in years to come and how best to meet them.

Obviously, breeding cannot be an easy business. Success means a tremendous amount of hard work, many failures and much disappointment. The foundation must be good to begin with, and if a mistake is made the way must be retraced to correct it and repair the damage. To the man with a clear cut conviction of just what he wants and who has the necessary ability to stay with the business until it is accomplished the field of breeding registered swine offers inviting inducements.

Success and fame are reached only thru turning out a class of animals that possess individual merit which differentiates them from the great mass of animals of the breed to which they belong. It is the increased value of his herd as influenced by his individuality which forms the criterion by which the value of his work is measured. Success and fame do not always come from "creating lines of beauty" or establishing "points pleasing to the eye," but rather from breeding in a manner that will display his individual trade-mark which makes for the increase in value from a commercial point of view. The field for breeding along practical utility lines is wide. There is abundant opportunity for every breeder to employ originality and to try and perpetuate some particular feature that shall add commercially to the value of his herd.

For instance, there is the flank, a point

ture gently whispers that his life's work is nearly done. The true breeder who devotes his life's work to improving and perfecting his favorite breed deserves respect as a public benefactor.

Many who are not breeders have made money handling registered swine. There are multipliers and speculators whose whole end and aim is making money without adding to the mundane value and knowledge of the material with which they have worked. Men who multiply inferior swine and undersell the more painstaking breeders obtain no pleasure from pure-bred swine thru their eyes and are a draw-back to the business. The stock they disseminate is a libel to the breed and to the herd from which their ancestry came. They seldom pay a good price for an animal to strengthen their herds, unless compelled to buy one occasionally to delude their mail-order customers by making them believe that their herd possesses good lines of blood.

The speculator who buys his stock from the breeders depends upon his ability as a salesman to create a boom for animals of a particular family of the breed and sell them for many times what he paid the breeders for them. He is in the business purely from a money-making standpoint. Many breeders think that he is a detriment to their business, but I believe in giving him due credit as being a sort of a necessary evil under the present system of selling registered swine. Breeders do not envy him his profits for they know that he will come back after more stock to strengthen his show or sales herd or to breed from so that he will have a good supply of stock on hand when the prices are favorable for him to sell out. He frequently gets together an excellent show herd and makes a circuit of the leading state fairs, depending upon his prize money and free advertising to create



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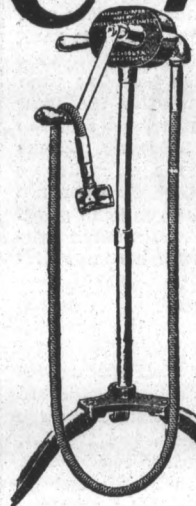
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stand on a raw spring day or on a chilly spring night with a heavy wet suit on. Neither do your horses. It pays to clip them and blanket, if necessary on cold nights. Your horses dry off much faster, they feel better, rest better, get more good out of their food and do better work. They are better all around. Is it the humane and profitable thing to do. The quickest, least expensive and most satisfactory way to clip is with

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a boom for his stock and enable him to sell out at a large profit.

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New York.

W. MILTON KELLY.

THE EWES AT YEANING TIME.

Every flock owner knows that the most critical period of a sheep's life is during the first few hours of its existence. The lamb that is strong and vigorous and able to get up from the start and care for itself is the most satisfactory and profitable. Nothing is more discouraging at lambing time than to have a large number of lambs dropped low in vitality that must be helped to nurse for a week or ten days in order to make them live. It is always a great pride to a flock owner and credit to his management to say that his lambs came strong and healthy and that it was unnecessary to get up nights in order to help a few puny weaklings nurse. Instances are not uncommon, however, where flock owners have kept their ewes in good condition and yet their lambs are dropped weak and puny and many come dead. The direct cause is not always easy to locate although improper care and feeding during the pregnant period is generally responsible.

Much of the success at lambing time is due to the care and attention the ewes receive the few months previous, and the first few days or weeks following. Every attention may be given the ewes during the yeanning period, but such care can not overcome conditions that have been gradually developing for several months previous. Many a flock owner becomes discouraged on account of the difficulty encountered with the ewes at yeanning. There is but one solution to the situation and that is to give the ewes thoughtful and careful feeding and care throughout the entire winter season. To secure strong, healthy lambs at birth the ewes must be kept in good flesh, not too fat, but in what is termed thrifty condition.

An important matter to be studied by flock owners that tends toward a successful lambing season is the performing of operations necessary to overcome abnormal conditions that frequently develop under the best management. When an operation seems advisable sentiment should be set aside and the work taken up in a businesslike manner, exercising prudent judgment in each step to perform the work with as little danger as possible. Not infrequently delay in offering assistance is dangerous and sometimes fatal. When assistance must be offered the patient should first be examined to note her physical condition. If the ewe appears weak and about worn out a stimulant should be given to save her from exhaustion. Do not under any circumstance apply cruel methods. If you are incompetent to perform the operation get some one who does understand the work and can go about it in a humane manner.

Many flock owners make a serious mistake in feeding their breeding ewes too sparingly rather than too heavily. Ewes, as they approach yeanning, generally lose flesh very rapidly and to endure the strain upon their vitality must be liberally fed and cared for. As soon as a ewe drops her lamb and is fully recovered she should be fed for milk production. Her ration, if properly balanced before lambing, need not be materially changed except perhaps the protein content increased. The flesh of the ewe will determine largely the amount of grain she ought to have daily. Liberal feeding is the keynote to giving the lambs a good

start, and when once well started they will take care of themselves.

Shiawassee Co. LEO C. REYNOLDS.

TRAINING THE HORSE.

Everybody appreciates the difference between well trained and an uneducated horse. Every owner and user of a horse would prefer to have him properly trained or educated. But he unfortunately in most cases, does not fully understand the principles which underlie the proper training and education of even an intelligent horse. These principles are all important and their proper observance enables horse trainers to accomplish wonders in their line of work. The writer has seen a trainer take a pair of young horses that had never before worn a strap of any kind, not even a halter, and inside of 24 hours lead them away behind a carriage without any difficulty or demonstration whatever. Many of these little things which should be observed in the breaking and training of horses are not at all appreciated by the average man who would be greatly benefited by practical instruction in their application. Many a good horse is spoiled by improper treatment which would have afforded its owner a long lifetime of usefulness had proper methods been employed in its early education and use. Horses have as distinct individuality and temperament as men, but the superior intelligence of man counts when applied to the task with an appreciation of the horse's intelligence, memory and personal spirit. Where the importance of these principles is not fully appreciated, they should be studied by the man who would acquire skill in the training and success in the education of horses just as the personality of the children must be studied by the teacher who would succeed in their training and education.

LIVE STOCK NOTES.

In the Chicago market the best outlet for stocker and feeder cattle is still thru eastern sections, with Indiana, Ohio and Pennsylvania buyers taking a large share of the offerings, while some good shipments have been made to Virginia. The Illinois stock feeders have shown a marked preference for good weight cattle which can be given a short feed and sent back to market quickly. These high-grade weighty feeder cattle sell exceptionally high, as they are all the time badly wanted by killers. In recent weeks numerous lots of 900 to 1,000-lb. feeder steers have been purchased at \$5.60@6 per 100 lbs., with some prime lots taken at \$6.10@6.60.

The rise in hogs recently in the Chicago market to \$10 per 100 lbs. and over, came about sooner than had been generally anticipated, the receipts falling off to unexpectedly small proportions. Buying orders have much exceeded the limited offerings, with a pressing demand for droves of hogs for the eastern markets, as well as a persistent call on local account for hogs for the fresh meat trade, as well as for cutting up into cured products. Hogs are commanding the highest prices recorded since the civil war, when gold was at a high premium and values for everything were on a greatly inflated basis. In 1865 hogs made the high record mark of \$12.75 per 100 lbs., and \$10 was the lowest price of that year. Packing plants went out of business on account of high prices and scarcity of money, leaving only a few slaughterers who had contracts to fill, to do any buying. These high prices did not last long, however, for hogs sold down to \$6 in 1866. Of course, provisions have been moving upward with hogs, and sensational advances have taken place recently, putting pork about \$8 per barrel higher than a year ago and lard, bacon, hams, etc., proportionately high. Stocks of provisions are everywhere unusually low in size.

Jose Ballen, of the City of Mexico, has been in the Chicago market purchasing a consignment of carriage horses for export. He reports that the introduction of many automobiles into the City of Mexico and other large Mexican cities has materially reduced the demand for light harness horses, just as has been the case in the United States.

It is natural that the peculiar conditions surrounding the cattle trade should conduce to the production of the cheaper kinds, as it is these that have been the prime favorites with killers for some weeks past. Slaughterers must have cattle that do not cost an extremely high price, in order to be able to meet the large demand for light cuts of fairly cheap beef, and of late not only good, fat cows and heifers, but even canners and cutters, have sold extraordinarily high. At the same time there must always be an assured demand for choice, heavy beefs for shipping to New York, Boston and other eastern markets, to say nothing of the demand in Chicago, and as stockmen have ceased to produce many of these, there has been a ready outlet at a high range of prices, and they have been selling in the Chicago market at the highest prices seen at this season in many years.

W. S. J. B. and B. Dunham, proprietors of Oaklawn Farm, Wayne, Ill., recently announced the arrival of a fresh importation of Percheron stallions and mares, many of the latter in foal, which form an important addition to their stables. They report record-breaking sales during the last two months, which is another evidence that farmers in all parts of the country are appreciating more than ever the profit to be derived from the breeding of good draft horses.



The Tick Question

Ticks do not develop wings in adult life, therefore never leave the animal except by accident. They not only sap the very life out of the sheep, but also destroy the wool.

Dr. Hess Dip AND DISINFECTANT

is sure death to all sheep ticks. It is also a guaranteed cure for Sheep Scab, Foot Rot and every form of Mange or other parasitic disease of the skin in horses, cattle, sheep, hogs, dogs and poultry. It is also excellent for disinfecting and deodorizing hog pens, chicken yards, cow stables, sinks, closets, etc.

One gallon of Dip makes from 70 to 100 gallons. Dr. Hess Dip and Disinfectant diluted one part to 70 of water meets the Government requirements for official dipping for sheep scab.

If your dealer can't supply you, we will. Write for circular.

DR. HESS & CLARK
Ashland, Ohio

"SAVE THE HORSE" SPAVIN CURE.



WAR DEPARTMENT.

Office Purchasing Commissary U. S. Army,
Saint Louis, Mo., Nov. 19th, 1909.

Troy Chemical Co., Binghamton, N. Y.
I have great faith in your medicine. I cured a bad tendon on a horse which had been fired and seemed beyond all hope. I also cured a sprained tendon in another horse within two weeks.

CAPTAIN J. N. KILIAN, 3d & Olive Sts., Commissary U. S. Army.

FREEMONT FIRE DEPARTMENT.

Troy Chemical Co., Binghamton, N. Y.
Freemont, I. I., Nov. 20, 1909. Enclosed check for bottle "Save The Horse." Every horseman around here thought horse was incurable, but don't think so now. Here is what I have done with "Save The Horse," and some of these cases were cured two and three years ago, as you know, and are cured to-day. In fact, I am not afraid to undertake any case without the guarantee.

The first case was a gray mare with bone spavin, over three years' standing. So lame everyone thought she would never go sound again. In six weeks' time she did not take a lame step. Let her to the Freemont Golf Club every week day.

The next case was a fine blooded horse with ringbone, belonging to a friend. In two months' time he did not take a lame step. Also cured a Polo Pony who was hardly able to get out of the stable, both hind legs affected with the worst bone spavin I ever saw. Bought him for ten dollars, and everyone said I would have to saw off his legs and have new ones made. The whole hock was affected. He had been fired and blistered three times. I used "Save The Horse," and in ten weeks' time you would not know that he had ever been spavined, except for the marks of the firing iron. Have also cured a fine saddle horse of thoroughbred. Will be glad to see anyone regarding these cases. DR. H. BARKENBERG.

\$5.00 Send for copy, booklet & letters from business men & trainers on every kind of case. Permanently cures Spavin, Thoroughbred, Ringbone (except low), Curb, Splint, Capped Hock, Windpuff, Shoe Blist, Injured Tendons & all Lameness. No scar or loss of hair. Horse works as usual. Dealers or Exp. paid.

TROY CHEMICAL CO., 20 Commercial Ave., Binghamton, N.Y.

You Are Feeding WORMS Get MORRIS' ENGLISH WORM Powder

and losing dollars. Night and day they eat, EAT your profits. They cause disease and often death to stock, also seriously retard growth—all at your expense. Get rid of them completely, quickly with Morris' English Worm Powder, the old reliable worm remedy. Tones the system, puts vim in the blood—makes horses, sheep and hogs look better—thrive better and keep healthier. No drenching—simply add to feed. Try it, 50c at druggists or sent prepaid.

WELLS MEDICINE COMPANY,
11 Third Street, LaFayette, Ind.

ABSORBINE

Cures Strained Puffy Ankles, Lymphangitis, Poll Evil, Fistula, Sores, Wire Cuts, Bruises and Swellings, Lameness, and Allays Pain Quickly without Blistering, removing the hair, or laying the horse up. Pleasant to use. \$2.00 per bottle at dealers or delivered. Horse Book \$1.00 free.

ABSORBINE, JR. (manuscript \$1.00 bottle.) For Strains, Gout, Varicose Veins, Vasculitis, Hydrocele, Prostatitis, kills pain.

W. F. YOUNG, P.O.F., 268 Temple St., Springfield, Mass.

HORSES

Going Blind. BARRY CO., Iowa City, Iowa. Can Cure.

MOVING PICTURES

OF DAN PATCH 1:55 MAILED STOCKOWNERS FREE WITH POSTAGE PAID.

THIS IS A SENSATION OF THE WONDERFUL WORLD CHAMPION AND GREATEST TRIUMPH IN THE MARVELOUS AND REALISTIC MOVING PICTURE ART.

It is a New Invention that you can carry in your pocket and show your friends instantly day or night, either once or a hundred times and without a machine, curtain or light. It is the most Attractive Novelty and most pleasing Dan Patch Souvenir ever Invented and shows Every Motion of Dan Patch 1:55 in pacing one of his Marvelous and Thrilling World Record Miles and it is Absolutely True To Life.

I want to assure you that it is the most successful Moving Picture ever taken of a world champion horse in his Wonderful Burst of Speed. If you love a great horse and want to be able to see him in Thrilling Motion Pictures at any time as long as you live **Be Sure And Accept My Remarkable Offer Before They Are Gone.**

I reserve the right to stop mailing these very expensive moving pictures without further notice, as this is a special free and limited offer.

A MILE OF THRILLING RACE PICTURES, 2400 MOVING RACE PICTURES OF DAN PATCH 1:55

and every one of the 2400 pictures shows the King of all Horse Creation as plainly as if you stood on the track and actually saw the mighty Dan Patch 1:55 in one of his Thrilling Speed Exhibitions for a full mile. Just think of it! 2400 Moving Pictures Taken Of Dan in 1 min. and 55 sec. means 21 pictures taken for every second all of the way around the entire mile track from the back seat of a high power automobile.

You Can See Dan Shake His Head To Let His Driver Know That He Is Ready And Then You Can Watch Every Motion Of His Legs As He Flies Through The Air With His Tremendous Stride Of 29 Feet. As A Study Of Horse Motion Alone This Is Better Than If You Saw The Actual Speed Mile Because You Can See Dan Patch Right Before You For Every Foot Of The Entire Mile And Not A Single Motion Of His Legs, Body Or Head Can Escape You.

You can see his Thrilling Finish as he strains every nerve and muscle to reach the wire in record breaking time, you can see his driver dismount and look at his watch while thousands of people crowd around, you can see his caretaker force his way through the crowds, uncheck Dan and then throw a beautiful woolen blanket over him to prevent catching cold and

MY NEW, POCKET MOVING PICTURES MAILED FREE TO ALL STOCKOWNERS

With Postage Prepaid---If You Are A Farmer, Stockman Or Poultry Raiser I Require A Correct Answer To These Three Questions. **Be Sure and Answer These Questions.**

1st. In what paper did you see my Moving Picture Offer? 2nd. How many head Each of Horses, Cattle, Sheep, Hogs and Poultry do you own? 3rd. How many acres of land do you own or how many acres of land do you rent? **I Personally Guarantee, Free To You One Of These Marvelous Moving Pictures, If You Write Me Today. You cannot buy them for \$5.00 each. Signed, M. W. SAVAGE**

IF YOU ARE NOT A STOCKOWNER AND WANT THE PICTURES SEND ME TWENTY-FIVE CENTS FOR POSTAGE, Packing, etc., In Silver or Stamps and I will mail you this wonderful Moving Picture of Dan Patch 1:55, the fastest harness horse the world has ever seen. -- If you send me Twenty-five Cents in Silver or Stamps--EVEN if you do not own any stock or land, I will mail it to you postage prepaid. It costs Thousands of Dollars to have these made.

Write At Once to -- M. W. SAVAGE, Minneapolis, Minn.

I OWN THE 5 FASTEST WORLD CHAMPION STALLIONS EVER OWNED ON ONE FARM IN THE HISTORY OF THE WORLD.

TWO WITH RECORDS BELOW TWO MINUTES.

On my "International Stock Food Farm" of 700 acres I own Dan Patch 1:55, Minor Heir 1:59½, Directum Jr. 2:10½, Arion 2:07¾, Roy Wilkes 2:06½ and also about 200 head of Young Stallions, Brood Mares and Colts and they eat "International Stock Food" every day. I will be pleased to have you visit my farm at any time and see my horses and their splendid condition. I feel sure that you never saw their equals at any Fair or Horse Show. **ACTUAL TEST IS WHAT PROVES EVERYTHING IN THIS WORLD.** If "International Stock Food" gives paying results for the highest priced horses in the world on my farm it certainly will pay you to use it for all of your stock. Remember that if it ever fails to give your Horses, Cattle, Sheep or Hogs, better assimilation and digestion, purer blood and perfect health with quick growth and fattening that it will not cost you a cent no matter whether you have used one hundred pounds or five hundred pounds and you are to be not only the user but also the sole judge of results. I will leave the entire matter for you to decide and accept your own statement. How the United States Government backs my claims that "International Stock Food" is strictly a medicinal tonic, blood purifier, etc. During the Spanish-American War, United States officials made a special examination and decided that "International Stock Food" was strictly medicinal and I paid \$40,000.00 patent medicine war tax. Can any honorable man deny this evidence? "International Stock Food" and label design is registered in Medical Department as a Trade Mark No. 52791 giving it commercial standing and rights as a distinctive

"TRADE NAME" FOR A MEDICINAL, TONIC PREPARATION
The United States Government issued me a Trade Mark No. 22386 on the world famous lines, 3 Feeds for One Cent - as showing how cheaply International Stock Food can be mixed with the regular grain feed - My label shows a list of the medicinal ingredients used and 250,000 Dealers have sold "International Stock Food" for over 20 years as a medical tonic preparation.

Write to M. W. SAVAGE, Minneapolis, Minn.

18 Acres of
Floor Space

Covers Over
A City Block



INTERNATIONAL STOCK FOOD FACTORY LARGEST IN THE WORLD OVER 800 EMPLOYEES

International Stock Food
International Poultry Food
International Compound Absorbent
International Pheno-Chloro
International Distemper Remedy
International Colic Remedy
International Louse Killer
International Gopher Poison
International Gall Heal
Silver Pine Healing Oil
International Heave Remedy

Dan Patch Stable Disinfectant
Dan Patch White Liniment
International Worm Powder
International Hoof Ointment
International Sheep Dip
International Cattle Dip
International Hog Dip
International Harness Soap
International Gopher Poison
International Worm Remedy
International Healing Powder
International Quick Blister

ASK YOUR DEALER FOR ANY OF THESE PREPARATIONS
and insist on having what you ask for. Beware of many cheap and inferior substitutes and imitations. High Class Dealers Sell My Preparations on my Spot Cash Guarantee to refund your money if they ever fail.

PRESENT SALES LARGEST IN THE HISTORY OF THE BUSINESS

Signed, M. W. SAVAGE, Owner of International Stock Food Co. -- and also -- International Stock Food Farm.

DO YOU EXPECT TO SEE THE DAY WHEN THESE WONDERFUL DAN PATCH 1:55 RECORDS WILL BE EVEN EQUALLED?

DAN PATCH 1:55 HAS PACED

1 MILE IN	1:55
1 MILE IN	1:55½
2 MILES IN	1:56
14 MILES AVERAGING	1:56½
30 MILES AVERAGING	1:57½
45 MILES AVERAGING	1:58
73 MILES AVERAGING	1:59½
120 MILES AVERAGING	2:02½

DAN HAS BROKEN WORLD RECORDS 14 TIMES

In addition to all these records Dan Patch is proving to be one of the Greatest Sires of both pacers and trotters in all horse history - Look up his large official list of Standard Performers.

Dan Patch 1:55 has gone more Extremely Fast Miles than the Combined Miles of All The Trotters and Pacers That Have Ever Lived. Be sure and remember these facts when you think of any Horse equalling Dan's Wonderful Performances.

For Seven Years Dan Patch has eaten "International Stock Food" every day mixed in his regular grain feed. It has given Dan Purer Blood, More Strength, More Endurance, More Speed and Perfect Health. It is constantly used and strongly endorsed by over Two Million Farmers and Stock Breeders, as the Greatest Animal Tonic, and has been for 20 years. No other preparation has such strong United States Government and practical Stock Breeders Endorsement, as has International Stock Food.

VETERINARY

CONDUCTED BY DR. W. C. FAIR,
CLEVELAND, OHIO.

Advice thru this department is free to our subscribers. Each communication should state history and symptoms of the case in full; also name and address of writer. Initials only will be published. Many queries are answered that apply to the same ailments. If this column is watched carefully you will probably find the desired information in a reply that has been made to some one else.

O. G. Stockbridge, Mich.—Your two ewes died the result of liver, and perhaps some bowel trouble. Drugs do not help such cases.

Heifer has Warts on Teats.—Our two-year-old heifer is troubled with warts on her teats. A. S. Gibson, Mich.—Cut them off with a sharp knife and apply Monsell's solution of iron to stop bleeding and to heal wounds apply borac acid and alum, equal parts.

Knuckling—Weak Kidneys.—We have a five-year-old mare that is a little ankle cocked at times; urinates too often and I believe has weak kidneys. A. R. Tuscola Co., Mich.—Apply equal parts turpentine, aqua ammonia and sweet oil to fetlock joints every day or two, or apply a blister using cerate of cantharides, once a week. Give 2 drs. lithia in a dose in feed two or three times a day.

Garget.—My three-year-old heifer came fresh 10 days ago. Now one quarter of udder is caked. C. J. L. Prattville, Mich.—Give one oz. fluid extract phytoacca root at a dose in a pint of water as a drench three times a day and apply one part extract of phytoacca and eight parts vaseline to caked udder twice a day.

Umbilical Hernia.—My ten-months-old colt has a navel rupture which is about one-half the size of a goose egg. Z. H. C. Leonard, Mich.—In order to effect a cure a surgical operation will have to be performed and the work should be done by a competent veterinarian. The operation is not dangerous and is usually successful.

Weak Ligaments and Tendons.—Have a horse that has weak tendons and the ligaments of fetlock are swollen; have blistered him twice and used white liniment. R. K. Marine City, Mich.—Blister fetlock and tendons with cerate of cantharides once a week for two weeks then apply equal parts turpentine, aqua ammonia and sweet oil lightly every evening.

Dislocation of Patella (stifle).—Last May my three-year-old colt threw her stifle out. I put it back in place; three days later I had to put it back again and it has remained in place, only I imagine the stifle ligaments are not strong. C. H. C. Coleman, Mich.—Apply one part aqua ammonia, two parts turpentine and seven parts sweet oil to stifle every evening.

Rheumatism.—My five-year-old horse had kidney trouble four weeks ago; since then he moves stiff and sore for a few minutes after he gets up. What had I better give him? A. R. Kings Mill, Mich.—Give two drs. citrate of potash and one dr. colchicum seeds at a dose in feed two or three times a day, and if the fore feet are hot and tender, stand him in wet clay one hour a day.

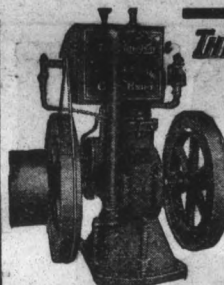
Injured Mare.—I have a six-year-old mare that accidentally stepped in poke which threw her in a pond of water. She remained there for some time; since then she has shown stiffness in one shoulder and the lower muscles are some wasted and I would like to know if this will disqualify her for breeding purposes. M. A. N. Watervliet, Mich.—I know of no reason why she should not be useful for breeding purposes and her shoulder soreness and atrophy will be helped by applying equal parts aqua ammonia, turpentine and sweet oil to shoulder three or four times a week.

Lice on Colts.—I have two colts coming two years old and one coming three years that are troubled with lice and I have applied lice powder which I bought at the drug store, but it fails to kill the lice. A. S. Carleton, Mich.—Put five ozs. of crushed stavesacre seeds in a gallon of boiling water, keep it simmering for an hour or two, strain it and fill with water to original quantity, then apply to lousy colts every day or two and it will soon kill the lice. If they are very rough coat- ed perhaps you had better clip them. One part carbolic acid and 30 parts water kills lice quickly, but it should not be applied too freely to rough coated horses; but I frequently apply it to lousy ones after clipping them.

Sharp, Uneven Teeth.—Contracted Hoofs.—I have a 10-year-old horse that eats fairly well, keeps thin, but does not appear to be sick; he also has badly contracted fore feet. G. D. Dow, Mich.—Float the sharp edges off outside of upper and inside of lower grinder teeth and stand him in wet clay. Apply lanolin to hoofs twice a day and blister coronets with cerate of cantharides every 10 days.

Dehorning—Cow Leaks Milk.—Will dehorning a heifer or cow produce abortion? I also have a cow that leaks milk from one teat. Can you suggest a remedy? J. I. C. Halfway, Mich.—Use a dehorning tool and to stop bleeding use Monsell's solution of iron or some tar and oakum and it will not cause your cows any inconvenience. Use a teat plug, which the Lawrence Publishing Company can supply you with.

Indigestion.—Six-year-old cow came fresh a week ago after being dry two weeks; she now gives only a pint or two of milk at a milking; formerly she was one of my best cows. I feed her corn stalks, hay, bean pods, carrots, bran and corn meal. How can I increase her milk flow? E. S. Sanford, Mich.—Give her 1 lb. of Epsom salts to clean her out, then give two tablespoonfuls bi-carbonate soda, two tablespoonfuls ground gentian and the same quantity of ground ginger at a dose in feed three times a day. She should have been dry from four to six weeks.



THE "New-Way" AIR-COOLED ENGINE

is replacing the old-fashioned water cooled just as surely as power is replacing manual labor on the farm.

Don't Buy a Water-Cooled Engine and have to fill and empty a big water tank and crank half the morning trying to start a well engine.

Ask the man who owns a "NEW WAY" he don't have this trouble. We will give you plenty of names. Use judgment. Profit by experience of others. **THIS BRAND** The only air-cooled engine guaranteed for all work.

WRITE US FOR CATALOG C.

THE "New-Way" MOTOR COMPANY

7 ASH STREET



Cured Six Ringbones

1011 Kaufman Ave., Dubuque, Ia., Feb. 11, 1900. Dr. B. J. Kendall Co., Enosburg Falls, Vt. Gentlemen:—Please send me your book called "Treatise on the Horse." I have used your Spavin Cure for years. At present I am doctoring a horse that has a Ringbone. This will make the sixth one we have cured with your medicine. It has given the best of satisfaction in all cases.

Yours truly, Frank Meyer.

Kendall's Spavin Cure

for 40 years has led the medical world in the treatment of Spavin, Ringbone, Curb, Splint, Swellings, Sprains and Lameness of all kinds. It is the one remedy that thousands of experienced horsemen have come to depend upon absolutely. Never causes blisters, scars or white hair spots. As good for man as for the horse. Keep it on hand for emergencies. \$1 a bottle, 6 for \$5. Buy of your druggist, and ask for "A Treatise on the Horse"—a valuable free book, or address

Dr. B. J. Kendall Co., Enosburg Falls, Vt.



"Cow Troubles"

Is the title of our Book 6-A that is sent free, telling how to relieve Caked Bag, Sore or Injured Teats, Spider in Teat, Cow Pox, Udder Troubles, and prevent Heifers from becoming hard milkers with

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Send \$1 for 30 Days' Treatment

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Impregnators for Mares and Cows

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The only thoroughly manufactured Silo on the market. Full length stave. Continuous door frame complete with ladder. Triple beveled silo door with hinges. Equipped with extra heavy hoops at bottom.

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Makes winter feed equal to June grass. THE ROSS will more than pay for itself in one season. Write today for catalog which gives facts that will save you money. Agents wanted. The E. W. ROSS CO. (Est. 1850) Box 14 SPRINGFIELD, OHIO

OSGOOD SCALE

Pitless Indispensable on every farm; saves the time and money you would spend on a public scale, and assures perfect accuracy always. Price with your ranch, good for a lifetime. Osgood Scale Co., Box 126 Binghamton, N. Y.

FOR SALE—Percheron Stallion eight years old, dark grey with extra good bone. Sure breeder, weight 2,000 lbs. Also a few two and three-year-old mare colts, black and greys. BERT TRAVIS, Port Huron, Michigan, R. No. 3.

For Sale—Horses, Cattle, Sheep, Hogs, Dogs or Poultry, nearly all breeds. Stires exchanged. Southwest Michigan Pedigreed Stock Association, R. B. Jennings, Sec., Paw Paw, Mich.

DRY BATTERIES renewed by anyone for 10¢. Will send this week for 35¢. FAIRMOUNT TELEPHONE CO., Leighton Corners, N. H.

HEAVES CURED!

A remedy for lung troubles, Cures Heaves, Coughs, Distemper and Indigestion. Veterinarians use and recommend. **PRUSSIAN HEAVE POWDERS** Druggists will get them. Price 50c at dealer, 60c by mail. Send for Free book.

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HEAVES CURED PERMANENTLY. DR. FRANK'S REMEDY CO., Detroit, Mich., tel. s how, FREE.

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WE WILL SELL ON

MARCH 22, 1910,

HOLSTEINS

Our entire herd of registered

consisting of 18 cows, 8 heifers and three yearling bulls. Just back of L. S. & M. S. depot.

RIPLEY BROS., Dimondale, Mich.

BREEDERS' DIRECTORY.

CATTLE.

Registered Aberdeen Angus Bull nine months old, Good one.

inquire of F. J. WILBER, Clio, Mich., Route 1.

Ayrshire Bull Calves. Berkshire swine. Eggs for setting. High bred stock. White & Buff Oringtons, White & Barred Rocks, Light Brahmas, White Leghorns and White Wyandottes \$1 per 15. Mich. School for the Deaf, Flint.

ABERDEEN-ANGUS.

Herd headed by UNULATA BLACKBIRD ITD 53836, one of the best sons of PRINCE ITO 50006, and Grand Champion Bull at the Detroit and Grand Rapids Fairs of 1907, 1908 and 1909. Herd consists of Erics, Blackbirds, Prides, etc.

WOODCOTE STOCK FARM, Ionia, Mich.

Maple Ridge Farm Breeders and Importers of high class Guernseys. Write us your wants. E. & J. T. MILLER, Birmingham, Mich.

Holsteins—Bull calves for sale from A. R. O. dams, at \$25 to \$50 each.

E. COLLIER, R. F. D. 5, Fowlerville, Mich.

BOARDMAN STOCK FARM, Holstein Cattle.

JACKSON, MICH. Has more imported Holstein-Friesian Cows than any farm in the Middle West. Registered BULL CALVES of the most fashionable breeding.

FOR SALE—Young herd of Holstein heifers, 7 yearling bulls, 3 calves—the oldest established herd in Ind.

W. C. JACKSON, 715 Rex St., South Bend, Ind.

TOP NOTCH HOLSTEINS.

Top Notch registered young Holstein Bulls combining in themselves the blood of cows which now hold and have in the past held World's Records for milk and butter-fat at fair prices.

MCPHERSON FARMS CO., Howell, Mich.

HOLSTEINS—Bull calves, sired by grandson of World's Champion

4-yr. old at \$25 to \$50. E. R. CORNELL, Howell, Mich.

Holstein Bull calf, grandson of Pieterje Hengereid's Count De Kol. R. C. R. I. Red eggs 75 cents for 13. J. W. DAVIS, Leslie, Mich.

Holstein Service Bulls.

Bull Calves. Yearling, two-year-old Heifers, bred, and cows, due to freshen in spring for sale. 50 head in herd. L. E. CONNELL, Fayette, Ohio.

HOLSTEIN FRIESIANS—Bull calves. Herd headed by Canary

Mercedes Royal King. W. B. Jones, Oak Grove, Mich.

HOLSTEIN BULL CALF from two best families of the breed. C. D. WOODBURY, Lansing, Michigan.

HEREFORDS—Both sexes and all ages for sale. Also Poland-China hogs. R. E. ALLEN, Paw Paw, Mich.

JERSEY BULL CALF born May 12, '09. Dam gave 10,950 lbs. milk, last year test 54. Sire's Dam's record 10,600 lbs. in 10 months, test 52.2. THE MURRAY-WATERMAN CO., R. 6, Ann Arbor, Mich.

Northern Grown Jerseys.

ROYCROFT FARM, Sidaaw, Mich.

BUTTER BRED JERSEY BULLS

CRYSTAL SPRING STOCK FARM, Silver Creek, Allegan County, Michigan.

JERSEY BULL 3 years old, gentle, sure stock getter. St. Lambert registered, right every way. S. H. PIERSON, Goodrich, Mich.

FOR SALE—Jersey cow Golden Pedro's Finest No. 21079 A. J. C. C. Year record on first calf 8076 lbs. milk, 675 lbs. butter. Price \$700. Also fine bull calf from her Oct. 1, 1909, by Fred Cordeiro No. 30153. J. S. BARTLETT, R. No. 10, Kalamazoo, Mich.

Pure St. Lambert JERSEYS and some nearly pure CLARENCE BRISTOL, Fenton, Mich. R. F. D. No. 5.

BLACK MEADOW FARM JERSEYS

ROYAL OAK, MICH.

Register of Merit Jerseys. Official yearly records.

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as valuable as 31 tons of potatoes, and in the same manner, one ton of wheat bran would be equal to 13 tons of potatoes and one ton of corn would be equal to nearly nine tons of potatoes. Potatoes contain about the same analysis as corn silage, which consists of the green corn plant containing its natural juices, and potatoes are a food of the same nature as silage, being of a succulent character. There is no question but that, with no other succulent food in the ration the succulency of potatoes should figure as of some value, because a succulent food in the ration seems to have a good effect upon the digestive apparatus of the animal, causing the stomach and the alimentary canal to secrete larger quantities of the digestive fluids, and consequently enabling the animals to digest more economically the dry food in the ration. At the price potatoes are now selling at throughout the greater portion of the state, I believe that a man with a good herd of dairy cows could well afford to feed a portion of them to his cows. They are worth present prices for food for the cow.

THE LATH AND PLASTERED SILO.

Read your article in The Farmer about the cement plastered silo, in which I am very much interested. We have a lot of logs—elm, maple and ash—which are going to be sawed next month or in May. Now, if it is not asking too much of your kindness I would like to know: 1. what is best to use, 1/2 inch by 2 inch or 3/4 inch by 2 1/2 inch lath? 2. will elm 2x4 be all right or will they warp too much after silo is filled? 3. will it be cheaper for me to plaster outside if I have lumber enough to clapboard it? If my lumber is not fitted for that purpose I could buy pine or hemlock quite reasonably. Have to haul sand 3, and cement 6 1/2 miles. 4. would it hurt the lath to pile them up with air space between them and leave them until August, for I will not have time to build it until then?

Ottawa Co. B. V. D.

Taking these questions up in their order, I think that lath cut three-eighths of an inch thick and two or two and one-half inches wide would be better than only one-half inch thick. It would make a stronger silo. With three-eighths inch lath there would be no trouble whatever about the strength of a silo. If this elm lath could be used and put on before they get too dry so they could be sprung around to fit the studding, it would be all the better. Elm lumber makes a particularly tough and strong material for building purposes.

Elm 2x4's would, I believe, be all right for the studding. Of course, if you don't use them soon after they are sawed, they ought to be piled up in such a way that they will not warp any more than possible. After you get them into the silo and get the lath on the inside and clapboards on the outside, or even lath on the outside, I don't think there will be any danger about their warping. In fact, I know of several lath and plastered silos built out of elm lumber and the elm did not warp.

I should think it would be a little cheaper to lath the silo and plaster it on the outside than it would to clapboard it, because very cheap lumber could be used for the lath and cement mortar would cost very little. However, I was talking with a party the other day in Ionia county who had plastered a silo like this on the outside, and he said he had trouble in having the plaster hold to the lath on the outside of the silo, while on the inside of the silo there was no trouble at all. He had an idea that the plaster would not stay as well on the outside as on the inside. I cannot understand why this is so. If he used just as good mortar and the cracks were not so far apart between the lath that the mortar wouldn't cling to them, I cannot see why it will not stay on the outside. In constructing modern buildings now, the partitions are made of cement, simply plastered on to a metal form, and these partitions are very solid and durable.

I should think the lath would be less apt to warp if they were piled up close together until you wanted to use them. If you pile them up with an air space between, and they dry out, I think that they will warp out of shape more than they would if piled up close together.

FREE BOOK ABOUT CANCER.

The Leach Sanatorium, of Indianapolis, Ind., has published a book on cancer, which gives interesting facts about the cause of cancer; tells what to do in case of pain, bleeding, odor, etc., instructs in the care of the patient, and is in fact a valuable guide in the management of any case. The book is sent free to those interested who write for it, mentioning this paper.

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of a good 160-acre Farm all fenced, about 50 acres under cultivation, good house, barns, tubular well and wind mill, good small orchard, berries, etc., 12 miles east of Grayling. Sale at Court House,

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For Sale or Exchange—134-acre Farm in Allegan Co., Well located and improved. Address **OWNER, Box 55, Route 8, Otsego, Mich.**

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I SELL FARMS IN OCEANA. The best county in the United States; fruit, grain and stock. Write for list. **J. D. S. HANSON, Hart, Mich.**

If You Want to Buy or Sell Property, any kind, any where, write the **Northwestern Business Agency, Minneapolis, Minn.**

FOR SALE—100 Cheap Good Improved farms. Nice buildings, adapted to fruit, stock and grain. For descriptions, prices address **W. E. BOWEN & Son, Middleville, Barry Co., Mich.**

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Three Cheap Farms—80-40-20 acres; good land, fair houses, good locality, easy terms. Address **I. BENTLEY, Bentley, Mich.**

READ THIS If you wish to buy Farm to write me for my 1910 land catalog, sent free to any address. **C. A. HAMER, Marion, Mich.**

Michigan Farms—Fruit, Grain and Stock Farms in Barry, Eaton and Kent Co's. Big bargains; low taxes, good schools, churches and roads, splendid water and climate. Write for list **No. 8, BUCKLES & MATTHEWS, Hastings, Mich.**

Farm For Sale, Best Bargain in Mich. 275 acres in Mecosta Co., right at station on G. E. & I. R. R. About 220 acres free from stumps, 30 acres timber, good buildings, good soil, raise anything that can be grown in Mich. or is a good stock farm. Time can be had on part of purchase price. Write for full description.

J. A. COLLINS, Howard City, Mich.

FOR SALE—High Grade Farm Lands in Osceola county near Tustin, Michigan. These are cut over hardwood lands, without pine stumps. The soil is gravelly or rich clay. Well settled country with schools and good roads. Write for literature.

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Farm For Sale—68 1/2 acres, clay loam soil, one mile from R. R. Station, big barn, good house, good well, big sheep shed, 2 corn cribs, hen house, plenty of timber, place has not been let or run. Will be sold at a bargain. **ROBERT SHIELDS, Jr., Holly, Oak Co., Mich.**

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mild climate, good and well watered soil makes her adaptable to the raising of all crops. Markets near, growing seasons long, farm work the year round. Ideal for General Farming, Fruit Growing, Dairying, Stock and Poultry raising. New "Hand-book of Virginia" (300) pages with photos, maps, etc., FREE.

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FACTS ABOUT MILK.

An understanding of the importance of milk as human food may be gained from the fact that about one-sixth of the total food of the average family is furnished by it and its products.

Milk contains bacteria of many kinds and in varying numbers. They cause the souring of milk as well as the ripening of cream and cheese, and produce many other changes in the appearance and flavor. The number present in freshly drawn milk varies enormously with the conditions of milking, and, as they are greatly increased with dirty and careless handling, cleanliness in all matters pertaining to the milking and marketing of milk and keeping it in the home can not be too strongly insisted on. Disease germs, notably those of typhoid, diphtheria, scarlet fever, and tuberculosis, may also be carried in milk, so that the purity of the milk supply is of vital importance to every family and community.

The problem of keeping milk sweet is one of checking the growth of the bacteria; and as they are inactive at a temperature below 50 degrees F., milk should be kept in a cool place. Two common methods for preserving milk are pasteurization and sterilization. In the former the aim is to apply heat in such a way as to kill most of the bacteria without producing undesirable changes in the milk; in the latter, to apply enough heat to kill all the bacteria, but with the least possible undesirable change. Chemical preservatives in milk are considered injurious to health, and are forbidden by pure-food legislation in many states.

Mother's milk is best adapted by nature to the nourishment of infants. Cow's milk is the most common substitute, and when necessary is artificially modified to make it resemble human milk.

The value of milk for adults is in combination with other foods; not as a beverage merely, but to supply in part the material needed for the body.

Unless exceptionally high prices are paid for it, milk is fully as economical a source of nutrients as other animal foods, but dearer than most staple vegetable products. Milk, however, requires no preparation, has no waste, and is more thoroughly digested than most vegetable foods. As a source of protein, the most expensive of the nutritive ingredients, it is especially economical. Skim-milk, which is whole milk minus part of its fat, and which costs only half as much as whole milk, furnishes protein about four times as cheaply as beef. Foods prepared with either skim or whole milk are much more nutritious than those prepared with water.

THE HEIFER'S FIRST CALF.

Is there any valid reason why a heifer's first calf should not be a good animal to keep for stock purposes? I find an opinion prevails among farmers here that it is not, but can find no good reason for this. I am new in the business. I purchased two full blood Jersey heifers, bred one at 13 months and one at 15 months to a registered Jersey bull. They have both dropped heifer calves. I am desirous to increase my number of Jerseys. Is it advisable to keep these heifer calves I would like to know why.

Otsego Co. "Scott."

There is absolutely nothing in the idea that the calf of a heifer is not worth raising. If the heifer was well grown and the calf fully developed, it should contain all the vigor that growth and health can impart to it. I would as soon have the calf from a good, well developed heifer as from an older cow. Jerseys are precocious and will do to breed to drop their first calves at two years of age. I would not care to breed them younger than this; but feed them liberally and give them good care.

ENSILAGE HEATING IN WINTER.

I built a silo last fall but did not get it completed until my corn was over-ripe. Some of the corn was down badly and the stalks dried up, also frosted some, but was well eared, and of good quality. We used a large amount of water while filling, and after. Now, for the last two months the silage in the center heats considerably, but not the outside. Should it do this if keeping all right? I was afraid that it would be all spoiled when I got further down. Would it do it any good to put water on now, and if I should want to save some over for summer use, do you put water on when done feeding? If so, how much? I hear quite often about ensilage not keeping good around here; there must be a cause for it, as I have what I think is a splendid silo. I also think I should have good silage. My silo is studded up, cement lined, tarred felt and galvanized sheet metal outside and roof.

Tuscola Co. E. J. Nowlin.

It is unusual to have silage heat so long after filling, but I have had the center of a silo stay warm for nearly three months

and the silage was all right when fed. Mr. Nowlin does not say the silage is mouldy as it sometimes gets if the corn is too dry when filling. I am inclined to think that he used plenty of water when filling and that that is one cause of the silage staying warm so long. My opinion is that the silage will not spoil but will come out all O. K. I never knew this to fail when the silage generated considerable heat, if sufficient water was used on the dry stalks. I think by the time you get ready to leave your silo for summer feeding, it will be difficult to get the oats to grow sufficiently to prevent decay of the silage. This would have been practical last fall when the silo was first filled and you had plenty of heat and moisture, but I apprehend that by May 15 you will have no way of making the oats grow. It would be a good plan to cover the silage with chaff or cut straw, say four inches deep and wet thoroly, or you can wet the silage and put nothing on top. The probability is that the silage will not decay more than four or five inches at the most.

BLACK PARTS IN JERSEYS.

I saw in your paper some time ago that in buying a Jersey, see that she has a black tongue and switch. Is it possible for a thoroughbred Jersey to have a white tongue and switch? I would like to know for I am about to buy a so-called thoroughbred Jersey cow with a white tongue and tail.

Osceola Co. B. P.

A black tongue and switch is not necessarily a characteristic of a pure-bred Jersey. Many of them have white tongues, also white hair in switch. White is liable to occur on any part of the body or legs, quite often on the belly and hind legs, and also on the forehead. Many of the best and most productive Jerseys are broken in color. Some breeders prefer solid color with black points, but the best dairymen pay little or no attention to such things. They are really of no importance whatever.

WHAT GRAIN TO FEED WITH ENSILAGE AND CORN FODDER.

Please give me a balanced ration for cows fed on silage. I have fed with the silage sugar beet feed and buckwheat bran, also gluten feed. My silage is rich for the corn was ripe and went 100 bu. to the acre. Now the cows look well but do not give much milk. Had ensilage ought to freeze from one to one and a half inches deep when it is zero weather?

Van Buren Co. E. A.

Give the cows all the ensilage and hay and corn fodder they will eat up clean twice each day. I suppose by sugar beet feed is meant dried beet pulp, and by buckwheat bran is meant what is left of this grain after taking out the flour, that is, the bran and middlings are left together. If this is correct, then I would mix the grain in equal parts by weight and feed as many pounds per day to each cow as she produces pounds of butter in a week. For instance, if a cow produces seven pounds of butter-fat in a week, give her seven pounds of grain a day in two feeds, half in the morning and half in the evening on her ensilage.

PROPER SIZE FOR SILO.

I would like to ask a few questions in regard to building a silo. I will keep 20 head of cattle, four head of horses and colts and 18 sheep. How large should I build? I have hemlock enough to build it. Should I build it of hemlock? If so can I spring 12 ft. patent lath and 12 ft. novelty siding. I thought of building 12x30 ft. and 8 ft. in the ground. Please tell me if it will pay me, as I am in debt, and about how much will it cost?

Osceola Co. D. WHITE.

For this amount of stock I would build the silo about 14 or 15 feet in diameter and then of good depth, 36 to 40 feet deep. If you get it higher than you need at first, it will come handy later for, in all probability, you will increase your stock later.

I don't think you can spring hemlock boards for lath without breaking. If only one-half inch thick, perhaps you can. Don't get the lath boards too thin. You want them of sufficient strength to make a strong silo. The one-half inch siding will spring on the outside all right.

I would not put the silo so deep in the ground. It will be too hard work to get the ensilage out. It can go in the ground two or three feet, but not more, and I would prefer to have it on a level with the ground, and get capacity by going up in the air. You have power to elevate it when you fill, but it must be pitched out by hand.

If you have your own lumber and gravel for cement, the silo can be built almost entirely by yourself at a small outlay of cash and hired help.

THE ONLY QUALITY SEPARATOR BUILT!



We can prove to you that the IOWA DAIRY SEPARATOR is positively the best separator made — that it stands in a class by itself — that there is as much difference between it and other separators as there is between silk goods and cotton goods, or between day and night.

THE IOWA IS ABSOLUTELY THE CLOSEST SKIMMER

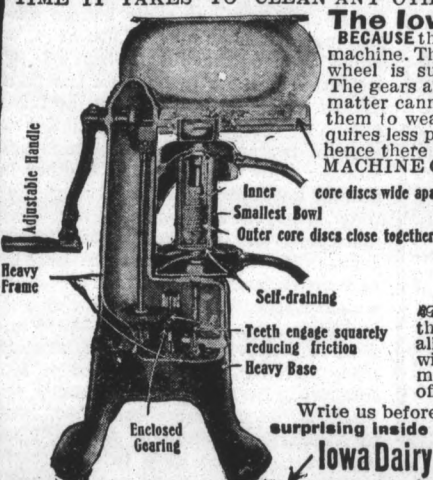
BECAUSE the double core gives a larger skimming surface in our small bowl than in the big bowl on any other machine. The discs on the inner core are wide apart, giving a free and open passage for the thick cream. In the outer part of the bowl, where the last particles of butter fat are skimmed, the discs are close together, dividing the milk in very thin layers, thus giving the largest possible skimming surface. WE SELL YOU THE IOWA SEPARATOR ON A POSITIVE GUARANTEE THAT IT IS THE CLOSEST SKIMMER MONEY CAN BUY.

THE IOWA SEPARATOR IS THE LIGHTEST RUNNING MACHINE

BECAUSE it has the lightest bowl of equal skimming capacity of any machine, and you know it takes less power to keep 3 lbs. in motion than 6 lbs. Our gearing is so arranged that it does away with the old worm principle used on other separators. Note the slant given the wheel which drives the bowl. This eliminates the friction of the old style worm wheel. Each bearing has a reservoir of oil, in which no dust or dirt can collect. This is different from any oiling system used in any other separator. THE IOWA MACHINE HAS PROVEN IN ALL EXPERIMENT STATION TESTS TO BE THE EASIEST RUNNING MACHINE MADE.

THE IOWA IS EASIEST AND QUICKEST CLEANED

BECAUSE it is the only machine in which the skimming device can be washed by centrifugal force. The washing is done by simply running water through the bowl. It has a self-draining bowl and all milk drains out of it at the end of the run. The skimming device consists of only two pieces. The heaviest piece a woman has to lift in washing this machine weighs only 3 lbs., while in other machines she has to lift from 10 to 15 lbs. THE IOWA SEPARATOR IS CLEANED IN JUST ONE-HALF THE TIME IT TAKES TO CLEAN ANY OTHER MACHINE.



The Iowa is the most durable.

BECAUSE the frame is heavier than that of any other machine. There are no overhanging bearings, every wheel is supported by a bearing on each side. The gears are tightly enclosed so that dust or other matter cannot get to them to clog them and cause them to wear. The IOWA bowl being lighter, requires less power to maintain its proper speed and hence there is less wear on the gears. NO OTHER MACHINE CAN LAST SO LONG BECAUSE NO OTHER MACHINE CONTAINS THE ABOVE FEATURES.

We have the largest separator factory in the world and it is a fact that you cannot buy a separator anywhere at any price that will equal the IOWA in all the above points.

If you can find any other separator that will skim to its rated capacity under all conditions as closely as the IOWA, we will make you a present of one of our machines. There are no strings to this offer and it is not limited in any way.

Write us before you buy and we will give you some surprising inside information on separators.

Iowa Dairy Separator Co. 108 Bridge St. Waterloo, Iowa.



Wm. Galloway President
Wm. Galloway Company, of America

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643 Galloway Station, Waterloo, Iowa

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"OK" By the Farmers and Dairymen of America

NEVER BEFORE in the History of High-Grade Separators could you buy the latest standard, highest-grade machine like the Galloway at such a low direct price as I can make to you now—because I am making so many of them. Only \$33.50 and upward, freight prepaid to you on 90 Days' Approval Test and 20 years' guarantee.

—Any capacity, from 200 to 950 pounds per hour, according to your needs, and I'll save you from \$25.00 to \$50.00 on the price.

—The only Separator whose gearing runs in a "Bath of Oil" like a \$5,000 automobile, and all other modern machines.

—The only Separator that automatically oils itself.

—The only Separator into which you can pour oil at the top once a month from your oil jug or can, and have it oil itself without danger of running dry, or ruining itself like others. This feature alone worth \$50.00 more than separators built the old way. Cost nothing extra on Galloway.

—No oil cups to remember to fill or turn up twice a day.

—Dust-proof—Danger-proof—All gears enclosed—Simple but standard built and absolutely dependable.

—Has the only revolving supply tank. Worth \$15.00 more on any machine. Costs nothing extra on a Galloway.

—Easiest to clean and the few parts come out easy and can't get back out of place.

—Easiest to run—high crank—low tank. With no high lifting and no "back-breaking" cranking.

—Gets the finest quality cream, and all of it—no lumps or churning, as Nature's true principle is followed without forcing either the milk or cream the wrong way up or down.

—Skims closest in any climate or season, no matter whether your milk is warm or cold.

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The Lawrence Pub. Co.,
Detroit, Mich.

DETROIT, MARCH 19, 1910.

OFFER TO NEW SUBSCRIBERS.

We are making a special offer of the Michigan Farmer four months for 25 cents and giving with it free one of our Michigan Farmer pocket account books. This offer is to new subscribers only and is made in order to get the paper introduced to new readers. Should the subscriber desire at any time during the four months to renew for a year or more, he may do so and the 25 cents will apply on his renewal, and he will also be entitled to any of the free premiums allowed for the period he renews for.

The account book we send free, postage paid, is 64 pages, has record for hired help, daily egg record, cash receipts and expenditures; in fact, it is a complete farmers' account book and retails for 25 cents.

Readers, tell your neighbors. We also want agents.

CURRENT COMMENT.

Hog Prices and Prospects.

With hogs bringing the highest prices ever known since the Civil War, a careful study of the situation and analysis of the cause will prove profitable for every farmer, since there is no class of farm live stock so wide in its range of adaptability to farm conditions, everywhere in the country, as the hog. The hog is a factor in the production of every farm, but evidently at present to a less extent than is desirable, either for the farmers themselves or for the consuming public, who must look to the farm for the source of their supply. To the student of present conditions it is not particularly surprising that in a state like Michigan, which does not produce corn enough to satisfy her needs, the production of hogs should fall off materially during an era of high prices for corn such as has prevailed in recent years. But one would scarcely look for like conditions in corn belt states, where corn is the principal staple grown for market, instead of being grown almost wholly for feed as is the case in Michigan. It is, then, a matter of surprise that in at least one, if not all of the principal corn belt states similar conditions are found to exist.

The statistical report of the Illinois State Board of Agriculture, issued December 1, 1909, shows this to be the case in Illinois. This report shows the number of hogs on the farms of that state, at the

time of taking the assessment of farm property in 1909, to have been 1,480,269, of which it is estimated that 83 per cent were marketed, or a total of 1,228,629, the average weight per head of those marketed being 213 lbs. By way of comparison with former production in Illinois, we find that in the year of largest production, viz., 1888, there were 4,035,733 hogs on Illinois farms at the date of the annual assessment, of which 3,349,646 were marketed at an average weight of 233 lbs. Following that date, there was a gradual decrease in the number of hogs maintained upon Illinois farms to the present time, with a few exceptions when the number went up a few thousand for two or three years, but taken by five year periods there has been a steady reduction in the number of hogs maintained upon Illinois farms since that date, which marked its highest production of hogs. These statistics, being the result of an actual enumeration of the hogs in the state at the date of taking the annual assessment, would seem to come nearer to the true facts regarding the hog population than a mere estimate such as other statistics are based upon.

The statistical report published in the Crop Reporter for February, 1910, estimated that there were in the state of Illinois on January 1, of the present year, 3,772,000 hogs, while on January 1, 1909, the figures from the same source gave an estimated number of 4,438,000 hogs, which shows a considerable falling off in the estimated number of hogs on the farms of Illinois between Jan. 1, 1909, and Jan. 1, 1910. The fact that actual enumeration of hogs in the spring shows a much smaller number than the estimated number in the fall, is accounted for largely by the fact that the year's crop had not been all marketed on the latter date and, of course, the latter figures are based upon estimates rather than upon an actual count of the hogs. In Iowa the estimate for January 1, 1910, was 6,485,000 and for 1909, 7,908,000. In Indiana, January 1, 1910, 2,578,000, and on January 1, 1909, 3,033,000. In Kansas on January 1, 1910, 1,942,000; on the same date 1909, 2,397,000. In Nebraska on January 1, 1910, 3,201,000, and on the same date in 1909, 3,904,000. Unfortunately we have not at hand statistics showing an actual enumeration of the hogs in other corn belt states mentioned at the date of the spring assessment, but the decreased number on hand according to the estimates for January 1, 1910, in all of these states would seem to show conclusively that the breeding herds, which would be represented by such an enumeration, have decreased almost proportionately with those of Illinois, since it is certain that surplus hogs have not been marketed in the past year in sufficiently increased numbers to have made this comparison show anything less, as the receipts of hogs at all of the big markets have been smaller than usual, and, in fact, so small that the packers have found it impossible to accumulate a surplus of provisions and have been compelled to pay the extremely high prices which now prevail for such hogs as come to market at a season of the year when there is a smaller demand for pork and pork products than any other time during the year.

The reason for this great falling off in the production of hogs in the corn belt states is no doubt the fact that corn prices have been so attractive that corn belt farmers have chosen to get quick returns from their crop by marketing it as raw material, instead of converting it into pork to the extent which they have formerly done. This, in turn, is due to the increased demand for corn as a food-stuff for home as well as foreign consumption, and to the many new demands which are made upon the crop for manufacturing purposes. But in this situation there is a lesson for Michigan farmers which should not be allowed to pass unheeded. Unquestionably the present season's pig crop will be smaller throughout the country than has been the case in recent years, and every indication points to a continuation of high prices for hogs throughout the whole of the coming market year. In fact, if every energy were directed toward increasing the hog supply, it would be impossible to again reach a normal production, so as to bring market receipts up to a normal basis, before the fall of 1911, so that barring any unlooked for complications, good pork prices may confidently be predicted for at least two years, since stocks of provisions can hardly increase with the scant marketing which is sure to obtain during the coming year. Without question, more hogs could be grown with profit upon Michigan farms, and with modern methods of production, including the judicious use of

forage crops, it will prove as easy to make two hogs grow where but one grew before upon our farms, as to make "two blades of grass grow where but one grew before." And while we would not advise any farmer to overstock during a season of high prices, the doubling of the hogs maintained upon Michigan farms would not involve overstocking in any sense of the word, and would undoubtedly prove a source of increased profit in the near future.

HAPPENINGS OF THE WEEK.

Foreign.

The United States government is demanding of Canada the same tariff rates that the Canadian government is extending to France. Recently a commission was sent to Ottawa to adjust the tariff relations on this basis. The Canadian officials did not see their way clear to grant the demands. As a result the Washington representatives have returned to this country and are now in consultation with President Taft regarding the situation. The Canadian officials are aware of the gravity of the situation since they realize that if the demand is not accepted, that Canada will be placed on the list of countries upon whose goods the maximum tariffs of the Payne tariff law will apply. The situation can only inaugurate a trade war, but just at this time such a conflict would be disadvantageous to both countries, but especially to Canada, owing to the recent opening of her large western territory.

As the result of a riot started by an attempt of Turkish parents to recover their daughter who had been married to a Bulgarian official, 15 persons were killed and 30 injured at Rustchuk, Bulgaria. Some of the leading residents of the town were among the victims.

Khartoum is celebrating the coming of Col. Roosevelt who is returning from his African hunting trip. The Colonel and his son, Kermit, will be met in the city by Mrs. Roosevelt and daughter. The city has gone to much expense and made extended preparations, that the event might be properly celebrated.

Timothy Harrington, a member of the British house of commons and three times lord mayor of Dublin, died in London, Sunday.

The returns thus far from the Brazilian elections held March 1 indicate that the electors have selected Hermes Fonseca as chief executive of that country.

The anti-American feeling in Columbia appears to be subsiding according to the most recent reports from Bogota. The trouble there with the tramway company was largely a personal matter which promises to be settled in the courts.

The Cuban veterans of the war of Independence, of Havana, have extended to Colonel Roosevelt an invitation to visit Cuba before he returns to the United States.

James A. Patten, the American speculator and recent wheat and cotton king, did not receive a hearty welcome in a recent visit to the cotton exchange in Manchester, England, his presence almost starting a riot. His reception at other English cities was not so embarrassing. J. P. Morgan, the American capitalist, is about to submit to an operation in Italy.

An Aztec idol pronounced to be the figure of the goddess of the falling harvest, was unearthed at Mexico City by workmen who were excavating for a water plant.

National.

Toledo, Ohio, is having difficulty in collecting the money to pay for work done to free the Maumee river from ice the past winter to prevent floods.

The car ferry which sank in Lake Erie off Port Bruce, last fall during a storm, when 32 men were drowned, has been located 14 miles from Port Stanley.

French aviators are sending attorneys to the United States to defend them in suits brought by the Wright Brothers for infringement of inventions claimed to belong to the American aviators.

President Taft is favorable to the plan for raising the old battleship Maine from Havana harbor.

The big reservoir belonging to an irrigation concern at Julesburg, Colo., broke loose last week, washing out about two miles of the Union Pacific railroad tracks and doing \$150,000 worth of damage.

Senator Tillman, of South Carolina, who was recently stricken with paralysis, shows slight improvement, according to the most recent report of his condition.

The business men of Omaha are protesting against the announcement that the Wabash railroad intends to increase railroad rates for meat between Omaha and Chicago. It is claimed that the new rates will discriminate between meat shippers of Omaha and those of Kansas City in favor of the latter.

Successful flights were made by Paulhan in his aeroplane at New York the past week in which a speed of 70 miles an hour was attained and an altitude of 400 feet was reached.

Dr. Frederic A. Cook wires from South America that he expects to arrive in this country about the first of April.

It is announced that the Illinois mines will close down about April 1 until a new agreement can be reached between the operators and the workmen.

During the past week a strike has been on at the paper mills at Corinth, N. Y. The mills have been protected by the state militia and an effort to start the mills with strike breakers is about to be attempted.

A race war threatens Palmetto, Fla., where two white men were killed by negroes.

The Russian government has shown itself more liberal than the duma regarding the disabilities against Jews in that country. Everywhere the Jews are handicapped because of their race proclivities and the duma which is supposed to reflect the spirit of the people does not appear to modify the attitude which a more aristocratic government took when a leg-

islative government was not enjoyed by the citizens.

Announcement is made by the brotherhood of locomotive firemen, that a strike has been called on practically all the railroads between Chicago and the Pacific Coast. The exact hour of the "walk-out" has not been determined, but presumably will be before the end of this week.

For the first time since the great strike in Philadelphia was called, the labor representatives and the operators have gotten together and reports indicate an early settlement of their differences. The transit company announces that the door is open for conciliation, and the labor leaders appear to be anxious to submit their propositions.

The appellate division of the supreme court for New York, held in a case decided this week that proprietary medicines which contain sufficient alcohol will be classed as liquors under the liquor tax law, and may not be sold for medicinal purposes, but as a beverage, and can not be handled under the so-called druggist liquor tax certificates.

An order has been filed requiring meat packers to submit their books to the grand jury sitting in Jersey City.

The proposed traction ordinance which has been under advisement by the "committee of 50," of Detroit, has been adopted by that committee and will now be submitted to the common council of the city.

The hotel Ericks at East Jordan, Mich., burned Tuesday morning, causing a loss of \$8,000.

MICHIGAN CROP REPORT.

Wheat.—In answer to the question, "Has wheat during February suffered injury from any cause?" 134 correspondents in the southern counties answer "yes," and 208 "no;" in the central counties 11 answer "yes," and 146 "no;" in the northern counties 2 answer "yes," and 141 "no;" in the upper peninsula 22 answer "no" and in the state 147 "yes" and 517 "no." Several correspondents in the southern four tiers of counties are of the opinion that wheat has been severely damaged by ice.

Snow protected wheat in the southern counties 3.83 weeks; in the central counties 3.91; in the northern counties 3.98 weeks; in the upper peninsula 4.00 and in the state 3.89 weeks. The average depth of snow on February 15th in the southern counties was 7.64 inches; in the central counties 10.70; in the northern counties 20.07; in the upper peninsula 23.56 and in the state 11.62 inches. On the 28th the average depth of snow in the southern counties was 3.88 inches; in the central counties 8.43; in the northern counties 21.55; in the upper peninsula 23.63 and in the state 9.76 inches.

The total number of bushels of wheat marketed by farmers in February at 140 flouring mills is 198,671 and 127 elevators and to grain dealers 172,279, or a total of 370,950. Of this amount 296,926 bushels were marketed in the southern four tiers of counties, 62,333 in the central counties and 11,686 in the northern counties and upper peninsula.

The amount of wheat yet remaining in possession of growers is estimated at 4,000,000 bushels. Eighty-seven mills, elevators and grain dealers report no wheat purchased in February.

The average condition of live stock in the state is reported as follows, comparison being made with stock in good, healthy and thrifty condition: Horses and sheep 95, cattle 94 and swine 96.

NATIONAL CROP REPORT.

The Crop Reporting Board of the Bureau of Statistics of the United States Department of Agriculture estimates, from the reports of correspondents and agents of the Bureau, that the quantity of wheat in farmers' hands on March 1, 1910, was about 23.5 per cent, equivalent to 173,344,000 bushels, of last year's crop, as compared with 21.6 per cent (143,692,000 bushels) of the 1908 crop on hand March 1, 1909, and 23.8 per cent (152,571,000 bushels), the average for the past ten years of the quantity on hand on March 1. It is estimated that about 59.3 per cent of the crop will be shipped out of the counties where grown, as compared with 59.2 per cent of the 1908 crop, and 56.6 per cent, the average for the past ten years, so shipped out.

The quantity of corn in farmers' hands on March 1, 1910, is estimated as 37.9 per cent, equivalent to 1,050,865,000 bushels, of last year's crop, as compared with 39.3 per cent (1,047,763,000 bushels), of the 1908 crop on hand March 1, 1909, and 38.2 per cent (925,386,000 bushels), the average for the past ten years of the quantity of the crop on hand March 1. It is estimated that about 23.1 per cent of the crop will be shipped out of the counties where grown, as compared with 21.3 per cent of the 1908 crop, and 20.0 per cent, the average for the past ten years, so shipped out. The proportion of the total crop which is merchantable is estimated as 82.6 per cent of the 1909 crop, as compared with 88.2 per cent of the 1908 crop, and 83.6 per cent, the average of the past ten years.

The quantity of oats in farmers' hands on March 1, 1910, is estimated at 36.1 per cent, equivalent to 363,159,000 bushels, of last year's crop, as compared with 34.6 per cent (278,847,000 bushels) of the 1908 crop on hand March 1, 1909, and 36.4 per cent (310,763,000 bushels), the average of the past ten years of the quantity of the crop on hand March 1. It is estimated that 32.7 per cent of the crop will be shipped out of the counties where grown, as compared with 30.3 per cent of the 1908 crop, and 28.7 per cent, the average for the past ten years so shipped out.

CROP AND MARKET NOTES.

Kalkaska Co., March 12.—Winter still in evidence. Southern slopes and exposures begin to show bare ground, but plenty of snow in roads and highways for sleighing yet. Did not have a thaw to settle snow this winter until the first week in March; 18 inches to two feet deep in the woods now and heavily crusted.

Magazine Section

LITERATURE
POETRY
HISTORY and
INFORMATION

MICHIGAN FARMER
AND **LIVE STOCK**
JOURNAL
PUBLISHED WEEKLY
ESTABLISHED 1843

The FARM BOY
and GIRL
SCIENTIFIC and
MECHANICAL

This Magazine Section forms a part of our paper twice a month. Every article is written especially for it, and does not appear elsewhere

WAYNE'S TRIUMPH at FALLEN TIMBERS.

BY CLYDE A WAUGH.

THIS is a mighty historic place when you know it," said the motorman, as a broad sweep of his arm took in the majestic Maumee, the old town which bears the same name, historic Fort Miami, and the grass-covered outlines of the walls of Fort Meigs. My opinion coincided with that of the motorman. Then he added, "It's a mighty crooked road, ain't it?" And I, looking up at the point from whence the British batteries had poured leaden hail upon Fort Meigs in the memorable siege of that place, the earth-

crank three notches and continued, "There was a mighty big Indian fight there once. Hundreds of 'em killed. But we beat. After the fight they found that Chief Turkey-foot was dead. They thought so much of him that they put that rock there—chiseled the turkey's foot on it to remember him by." The controller went over three more notches. "Had an awful time about that stone a few years ago. You know when they was

that the hero of Stony Point, Gen. Anthony Wayne, called by the Indians, "the chief that never sleeps," defeated a force of two thousand warriors, fortified in a position naturally favoring their mode of warfare, with a force of less than nine hundred Americans, in a battle which settled Indian disputes in Ohio for all time. After making many efforts to conciliate the Ohio tribesmen, the government, in desperation, sent Gen. St. Clair after them. St. Clair resembled the British General Braddock, and was surprised and defeated in the same manner. Gen. Wayne was then given St. Clair's command. In July, 1794, he built Fort Defiance, several miles up the river from Presque Isle hill, upon the site now occupied by the city of Defiance.

Wayne was an example of ceaseless vigilance. Indeed, he merited the name the Indians gave him. If the General slumbered he made sure that his outposts were awake. Indeed, many a night did he surprise sleepy sentinels as he made sure of his guards by making the rounds of the sergeant of the guard. Scouts scoured the country in advance of the army. He profited by the examples of his predecessors and camped in a hollow square.

The French visited the valley in the early part of the seventeenth century, and hence thru their long association with these people they had gained considerable agricultural knowledge. The fertile valley needed but their hands to turn it into vast fields of corn and other vegetables. The Indians had also planted great peach and apple orchards. The waving fields and loaded fruit trees extended up and down the river for forty or fifty miles.

When Wayne came to Fort Defiance the corn was in the roasting ear and the troops grew fat as a result of their forays. From Fort Defiance the cavalry scoured the country in every direction, laying waste the corn fields, destroying the fruit trees, and burning the villages. With famine staring him in the face, the

stood far within the territory which that treaty granted the Americans. Besides being strongly built it was equally well equipped, mounting some ten large guns in addition to mortars. The attitude of the British toward the agreement which they signed was displayed when they sent 450 regulars to garrison the place. Without a doubt it was constructed solely with the purpose of helping along and furnishing arms to the hostile Indian confederacy which was then being formed against the Americans.

After receiving the American commander's offer for peace, a council of the chiefs was called. At this council three of the most notorious renegades of the western border were present. McKee, Elliot, and the infamous Simon Girty urged the Indians to battle. Little Turtle, of the Miamis, and Blue Jacket, of the Shawnees, were in command of the Indians. Little Turtle knew the Americans were advancing against them and was averse to fighting. "We have beaten the enemy twice under different commanders. We cannot expect the good fortune to always attend us," he argued. "The Americans are led by a chief who never sleeps. The day and the night are alike to him. During all the time he has been devastating our fields we have never been able to surprise him. Think of it. Something whispers to me that it would be well to listen to his offers of peace." But Blue Jacket leaped up and called Little Turtle a coward. Little Turtle simply replied, "Follow me to battle."

Many years before a hurricane or a tornado had swept over the land about Presque Isle hill, throwing the trees to the ground in all manner of confusion and making it literally a field of fallen timbers. From that fact the battle took its name. The Indians took up this seemingly impregnable position, impregnable because the cavalry, upon which Wayne depended, could hardly operate in such a tangle.

Wayne halted his force at Roush de Boeuf, an Indian landmark near the present town of Waterville. Then he built



Roche de Boeuf, an Indian Landmark and Old Council Ground of the Red Men.

works of which fortification even yet seemed to frown down upon me in their very desolateness, answered with the one word "Yes."

The railroad was certainly crooked. It made me think that I was seeing the Maumee Valley by a snake railroad. In spite of the placard before me to the effect that passengers were not allowed with the motorman, I nevertheless kept my vantage point, though over my head a still more sweeping mandate read, "Passengers not allowed to talk to the motorman." Yet I, following the course of the historic old stream, did talk. "We had a washout here," said the motorman. "Bad place," I answered, thinking of how Mad Anthony Wayne's 900 troops pursued the 2,000 flying Indians over that very ground.

I noticed a flag upon a hill to the right. The wind caught it up and the stars and stripes waved bravely over the hill of green. Thinking of a national park or some other work to mark the historic locality with some degree of fitness, I asked the loquacious motorman, "What's that pretty place up there—where the flag is?" "Oh, that's the H— beer farm." Noticing the rather quizzical expression which, I suppose, came over my face, he added, "Nice place up there, though."

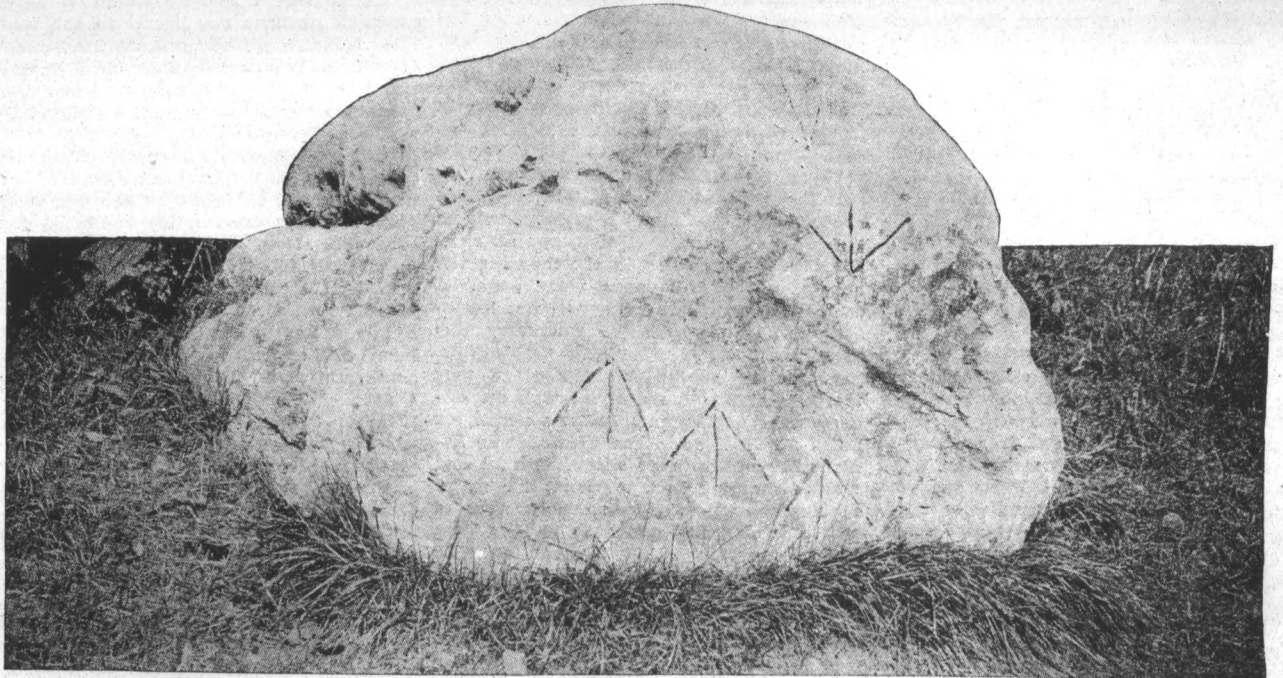
The car went on, and upon our right another hill loomed before us. Not much taken aback by the other answer, I asked, "What hill is that?" "Oh, that's Turkey-foot rock." The elevation didn't look like a rock—it was a hill. But the reason for the name soon became apparent. As the car neared the ridge we espied a rather ordinary bluish looking boulder resting half-way up the hill. An iron fence surrounded the stone upon which were inscribed some rather queer looking lines which, when rightly viewed, resembled a turkey's foot.

We stopped at Turkey-foot station. From the front vestibule of the car we got a glimpse of a road running up the hill under trees on each side of the way. This is Presque Isle hill, and it is beautiful, yet one would not think that about it raged the fiercest Indian battle ever fought in the middle west.

The motorman turned the controller

going to have that exposition at Toledo? Well, someone loaded it up and took it to town. Wanted to start a side-show. They've hauled it away three times, but they won't any more. See that fence? Take some pretty good men to heave it over, wouldn't it?"

A passenger signaled a stop. The power was shut off and the brakes applied. The man alighted and the haze of the early twilight spread itself over the river. The conductor called "Waterville." We alighted, and the car sped back to Toledo. Yet, the man's speech, "This is a mighty historic place when you know it"



Turkey-foot Rock—Unique "Monument" Marking the Hill from which General Wayne Routed the Indians.

would run through my mind. It was, but the motorman didn't know it.

It was about the second hill that the battle of Fallen Timbers was fought—a contest which has very few equals in the history of American border warfare. Indeed, when compared with the other historical events in the great northwest it stands out in bold relief. Here it was

red man might more easily be brought to terms. Before further pressing the campaign, Wayne made one more formal offer of peace to the chiefs who were encamped about the British post, Fort Miami.

The British had built the stronghold but a year before, under the direction of the Canadian Governor Simcoe in open violation of the Paris treaty of 1783. It

a fort in which he left his baggage, naming it Fort Deposit on account of that fact. On the morning of August 20 he proceeded down the river past the site of Waterville, on toward Fort Miami. He knew that a battle was about to take place and consequently sent a force of Kentucky cavalry in advance of the main party. The cavalry, upon discovering the

Indians, were to feign a retreat and, by so doing, increase the enemy's confidence and perhaps draw them from their hiding places.

The Kentuckians went far enough ahead to give Wayne plenty of time to form his line of battle. In order to prevent the savages from crossing the river, a force of cavalry was placed on the right wing of the line of advance. About that time Major Price, who had been sent in advance, received such a fire from the savages in the tall grass that he was compelled to fall back on the main force. The force was ordered to charge with trailed arms and, after having once started the red men from their position, were to take their guns and pour a well-directed fire upon the backs of the savages. Then they were to follow them so closely with their bayonets that the fugitives might neither have time to reload their guns nor to form a second line of defence.

Facing a most deadly and well-directed fire from the lurking savages, the first American line was upon the Indians before either friend or foe realized the fact. In their haste, the troops heedlessly charged among the hidden enemy, driving the painted warriors from among the fallen logs at the bayonet's point. The cavalry stationed on the right wing kept the fleeing horde away from the river which they otherwise would have crossed. Thus the Americans drove the foe before them, chasing them from their covert as we start a rabbit in standing corn. Indeed, Wayne's men advanced like a whirlwind, sweeping everything before them. One hour found them two miles from Presque Isle hill.

The cavalry followed the fleeing Indians to the very walls of Fort Miami. The chiefs expected the British to open the gates of the fort to them, but the latter held their promises to the Indians in the same light that they held their treaties with the Americans, and not a hand was turned to aid the fugitives of the fight

which the British themselves had instigated. They were grossly abandoned and had to run to the near-by forest to escape American bayonets, while their supposed friends upon the battlements of Miami looked down upon their humiliation with apparent unconcern.

Wayne, in his anger at the duplicity of the British, intended to storm the place. However, a close inspection showed the post to be a very strong one. To attack it would immediately precipitate a war between the two nations—a matter not to be lightly considered. In storming it his force would naturally sustain a heavy loss. So the hero of Stony Point wisely abandoned his plans. But he did not withdraw without making a display of his force. The troops sacked and burned everything in sight about the fortification. Private houses, officers' quarters and store-houses suffered alike. It is said that while the ravaging was going on the British gunners stood by their primed weapons, lighted torches in hand, ready to fire. Yet they, perhaps fearing the possible results, held their fire.

There have been hundreds of struggles in which more men have been engaged, a great many in which there have been more casualties; nevertheless it was a spectacular, memorable and well merited victory, and one in which the generalship of the commanding officer is to be highly praised. We measure a man's worth by what he does, not by what he might, could or would have done. It is so in judging the importance of Wayne's victory on the Maumee. It settled Ohio Indian affairs forever and put a damper upon the forming of a great confederacy of the western tribes. It prepared a vast empire for the great westward emigration which was to follow. Indeed, the populating of a great territory, the spreading of civilization and the development of the natural resources of vast tracts of the richest land on earth, all hinged upon the fearless charge of the nine hundred in the fallen timbers on Presque Isle hill.

GRANDMOTHER'S STORIES.

"Perquah, the Little French-Indian."

BY HARRIETTE V. DAVIS.

It was a stormy night. The wind howled about the house, shaking the casements, the snow sifted into every crack and crevice, making the big fire, leaping and crackling in the fireplace, seem all the more cheerful by contrast.

Grandma, comfortably seated, with knitting needles flying, glanced over her spectacles at us children, remarking, "This weather reminds me of our first winter in this state."

"The atmosphere seems charged with a story," chuckled Grandpa, winking across the checker board at me. Bennie and Dorothy sprang to their feet, eagerly exclaiming, "Oh, tell us about it, do Grandma."

"This is our hard luck story—not as pleasant as some of them." But, earnestly importuned, Grandma began: "The first winter is always a hard one financially on new settlers in a timbered region, especially more so if they move there in the spring as we had done. So father planned to work on the new plank road that was being built by the state that winter."

"The children and I had been alone about a fortnight when, one cold stormy night, your Uncle John, who was in his thirteenth year and the eldest, helped me roll a back log into the fireplace, which in those days extended across the end of the cabin. After piling in several smaller logs we blew out the candle and went to bed."

"I was awakened from a light slumber by the lifting of the latch. A squaw with a papoose on her back stepped noiselessly into the room and lay down in front of the fire. It was my first sight of a squaw. Although I knew the poor thing was perfectly harmless, only wanting a place to sleep where it was warm, I did not sleep again until almost morning. When I awoke she had gone as noiselessly as she came."

"The next night the storm still raged. We had hardly gone to bed when again the door opened and six squaws filed into the room, each bearing a papoose. I noticed one in particular, she being slight and girlish looking, seemingly not more than sixteen years of age. They seemed weary, and quickly arranged themselves for the night. I, too, slept. In a short time I found myself sitting up in bed, half asleep, listening to a hoarse croupy cough. I leaned over the bed rail to catch the breathing of the two boys who were asleep in the trundle bed. I was just dropping back on my pillow, think-

ing I had dreamed it, when the cough was repeated from the fireplace. Glancing in that direction I saw the young squaw sitting up, holding her papoose in her arms. The little thing was struggling for breath.

"I bounded from the bed, stirred the fire to greater activity, ran to the cupboard for a bottle of croup medicine and poured out a dose which the squaw administered to her papoose. Then I hung the tea kettle on the crane. As soon as the water was hot we applied cloths wrung from the water to the child's throat. The other squaws awakened enough to roll out of our way, then dropped asleep again."

"All night the mother and I worked faithfully to save the infant's life. In the early morning hours its breathing became easier and it dropped asleep."

"When the other squaws awoke and prepared to go the young squaw began, in a very reluctant manner, to wrap up the sleeping papoose. I took the papoose from her arms gently but firmly, drew the curtain aside from the tiny window, pointed to the drifting, whirling snow, and shook my head. Then, bringing out the cradle, I placed the little papoose in it and motioned the mother to lie down and sleep."

"Two days and three nights the squaw and her papoose remained with us. The second night there was a slight return of the croup, but the third night we all slept soundly. On awaking in the morning the squaw and her papoose were gone. I felt badly about her going without leave-taking, and decided she was very ungrateful."

"A trader stopped at our place that morning and told me there was an encampment of Saginaw Indians about six miles north of us in the woods. The Indians came here every winter to hunt and trap, remaining in the spring for sugar making, as this was one dense forest of maple trees. He also said he had just come from camp; that Perquah and her papoose had been away while he was there."

"On my describing her he decided that it was Perquah who had visited us. She was the daughter of a French father and an Indian mother. Perquah was a corruption of porquoi, the French for why. Her father called her little porquoi, because she was so inquisitive as a child, and the name always stuck. 'She will never forget your kindness and if she ever has a chance she will repay you in full,' concluded the trapper."

"One afternoon a few days later I heard the cracking of a sled on the hard, frozen snow, and through an opening of the trees I saw Buck and Bright coming

up the road. Seated on the sled were two of our nearest neighbors who had gone to work on the road with father. A third man lay in the bottom of the sled. Filled with dire forebodings I knew not what, I ran and threw the door wide open. The third man was father, with both feet swathed in bandages. He called out cheerily, 'Don't be frightened, Nancy; it is only a frost bite.'

"The comfortable footwear of today was unknown then. Long hours of exposure in the cold and snow frequently resulted in frost bites which were greatly dreaded. For days father's feet were so painful that I had little time for anything but caring for them. After he began to rest easier the ugly thought would obtrude itself, how will we manage to live through the winter? Father would not be able to work on the road again that winter. The neighbors were in no better circumstances than ourselves, I knew."

"There was plenty of marsh hay for the oxen, and a few bushels of corn which they would not need if they did not work. The corn I divided in halves after carefully counting out enough ears for seed in the spring. John and I shelled the remainder. I then sent the corn to mill by a neighbor. The order for father's work on the road had also been turned over to him. He exchanged it at the store for the bare necessities of living."

"Days crept into weeks and, in spite of the ointments and dressing applied, father's feet healed very slowly. One day in the latter part of January I was feeling very blue and trying hard to conceal from father the fact that our provisions were low again. We were just sitting down to our frugal mid-day meal when Perquah entered with her papoose. I place a plate for her. After dinner she followed me about the cabin, peering into boxes and barrels, much to my annoyance. I decided she was rightly named, porquoi."

"The next morning on the doorstep I found a basket of cornmeal and a saddle of venison. In the freshly fallen snow were the tracks of a squaw's moccasins. It was Perquah's footprints, and this accounted for Perquah's inquisitive manners of the day before. To think that she had walked that distance and carried that heavy load!"

Tears stood in Grandma's eyes and trembled in her voice as she told it.

"I carried the provisions into the house and realized for the first time what a strain the past few weeks had been on father, as well as myself, when I showed him Perquah's gift. This did not end the squaw's good offices for our family. Three times during the next few weeks we found a basketful of meat and meal left by her on our steps."

"When the days began to grow warmer father became able to move about the house a little. Your Uncle John and I arose very early one morning, hitched Buck and Bright to the sled and drove the long distance over the rough trail to the little settlement called town, taking the last of the corn to be ground."

"On arrival there we found a letter awaiting us from our people in the east. They had thoughtfully prepaid the postage of twenty-five cents. The joy I experienced when I found it contained plenty of money to tide us over until another harvest can never be told."

"Our neighbors, who were from the same vicinity, had written home of our misfortune. I sat down at the dry goods box used as a desk in the combined post office and store, and poured out my heart in a letter to our people in the east."

"Then I selected the gayest red print I could find for dresses for Perquah and her papoose. After doing the trading I had not expected to do, we set out for home and arrived a little after midnight. I spent the following day fashioning a little dress and a big one from the red print I had purchased. John begged the privilege of carrying the garments to Perquah, and as he was familiar with the forest in that direction I let him go."

"The next day she and the little papoose visited us, looking very resplendent in their new dresses. Perquah silently and gravely held up the little papoose for our inspection. Again she stayed to dinner, then followed me about the house. I showed her the barrels filled with flour and meal. I filled a sack with the flour and made Perquah understand that it was for her to carry back to her wigwam."

"Perquah came just once more before the breaking up of camp, bringing a wicker covered basket filled with maple sugar, and a pair of moccasins beautifully embroidered in beads and porcupine quills for father. That was the last time we ever saw her, as the influx of settlers the following year, and the clearing of the land, drove the Indians farther north."

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THE BLUEBIRD'S SONG.

BY MAY ELIZABETH WHITE.

As he sings and lifts his wings,
Pensive is his eye;
Memory clings to distant things
Seen in field and sky.

Hints of pain in that sweet strain
Linger in my ears,
Minor strain in Joy's refrain,
Like unbidden tears.

Frail as flower from sheltered bower,
Floats the dreamy song;
Yet it has power to guard an hour,
Help a soul grow strong.

THE DATE OF EASTER.

BY EMILY L. RUSSEL.

All know that Easter is a movable feast, but very few seem to understand why it is sometimes in March, but oftener in April.

By decree of the Council of Nice, in 325 A. D., Easter was fixed as the Sunday "following the full moon on or next after the 21st of March." If the moon falls on that date and the next day is Sunday, that will be Easter. In the last century the date fell on March 22 but once—in 1818—and will not occur again until in 2000. The next earliest date will be March 23, 1913.

If the moon falls just before the 21st it brings Easter late in April; the limit is the 25th, which was reached in 1886, and will not recur until 1943. We may have several Easters in succession in April but never in March, not even in two succeeding years. We have it in this month the present year, and in 1913, 1918 and 1921, then not until 1929, recurring at about these intervals during the remainder of the century.

"To open" is one of the meanings of "Eastre." Eastre in ancient times was the Anglo-Saxon goddess of light and spring, whose festival was celebrated in April, called the "Easter-monat." And we still look upon the day as the opening of springtime, hence when it comes in March people naturally think it means an earlier "opening" of the season.

In the last half century there were but eleven March Easters to thirty-nine in April. The last time it fell on the same date as this year was in 1864, when many a homesick soldier sighed for peace and home. The next Easter there was peace, but a mantle of mourning had fallen over the country. Next year it will be on the 16th of April and the following year on the 7th of that month.

Easter is now recognized throughout the United States as a church festival, even by the descendants of the grim Puritans who endeavored to strip the worship of the sanctuary of everything the Lord had made of grace and beauty. The lilies of the field and the cedars of Lebanon were alike under ban. No flowers at Easter, no evergreens at Christmas.

"Fill the Easter font with care,
Heap the roses rich and rare;
Round the stately calla set
Heliotrope and mignonette;
From their fragrance comes a voice,
Bidding Christian hearts rejoice:
Whispering through their lips of bloom
'Christ is risen from the tomb.'"

OLD EASTER CUSTOMS.

BY M. B. R.

In the ancient town of Chester, England, peculiar customs long prevailed. At this festival might be seen the mayor

lover, knowing well that her father was too busy with his own part at the festivities to interfere, entered what was called the "Pepper gate" and carried off the fair maid, whereupon the angry father, when he discovered the loss, ordered the gate closed, giving rise to the proverb, "When the daughter is stolen, shut the Pepper gate," which reminds us of our own saying, "When the horse is stolen lock the stable door."

The practice of archery was not forgotten, the reward for the best shot being provided by the young men whose first year of married life had not expired.

On Easter Monday a crowd of young gallants carried about a chair lined with rich white silk and adorned with garlands



Pets will have their Play—even in Housecleaning Time.

of flowers and ribbon streamers. As they met a fair damsel she was requested to seat herself in the chair. The chair was then lifted as high as the young men could poise it in the air and, on its descent, a kiss was demanded by each and a fee must also be paid.

On Easter Tuesday the women took their revenge and went about in the same manner. If a young man was seen and pursued, his escape was in vain. Three times must the luckless wight be elevated. This custom was called "lifting." On one occasion a staid clergyman was passing through a town in Lancashire on Easter Tuesday, and, having to stop an hour or two at an inn, was astonished by three or four lusty women rushing into his room, exclaiming that they had come to "lift" him.

"To lift me? What can you mean?"
"Why, your reverence, we have come to lift you 'cause it is Easter Tuesday."

"Lift me because it is Easter Tuesday? I don't understand."

"Why, don't you know? All us women was lifted yesterday and us lifts the men today in turn; 'course its our rights and duties to lift 'em."

Needless to say the reverend compromised with his fair visitors for half a crown and thus escaped the honor.

In some parts of England on Easter Monday the men claimed the privilege of taking off the women's shoes and the next day the women retaliated. How strange that these coarse and vulgar customs were in memory of the resurrection. The "lifting" might have originated in the thought of the rising from the grave, as both words hold the idea of ascent, but the removing of footwear seems too re-

In a certain part of the Tyrol bands of musicians, for which the Tyrolese have always been noted, traversed every valley singing beautiful Easter hymns to their guitars, calling the people to the doors, who joined them in the choruses and rejoicing. Their wide-brimmed Spanish hats were decorated with flowers, crowds of children accompanied them, and as night came on they bore lighted torches of pine wood which threw odd shadows over the spectators and picturesque wooden huts.

The paschal eggs were not forgotten. These, boiled hard and dyed in bright colors, were brought out by the good wife, and when the children presented their baskets they were freely given. At the better class of farmers' houses other refreshments were offered and the singers repaid for their carols.

HOME OF HOOSIER HORNETS.

BY ALONZO RICE.

The accompanying illustration shows the home of the Hoosier hornet. It is a busy domicile, being filled with lively little inhabitants. The nest is fifteen inches in length and thirty-six inches in circumference. It is suspended on some little bushes about three feet high.

This insect is of the wasp kind, but much more formidable, and considerably larger. It has four wings, the first pair being by far the largest, and with these it flies with great velocity. The head is oblong, and yellowish; the eyes are prominent and semi-luminated, and between them are two falciform antennae. The body is united to the shoulders by a slender filament; the middle of the fore part is of a dark brown hue, marked with a deep yellow belt, and the hinder part is wholly of that color, except that it is variegated with eight brown spots. The hornet, like the wasp, is extremely voracious and preys on almost any kind of fresh animal substances which it can obtain, as well as on honey, fruit, etc. Its sting is greatly to be dreaded, and is often productive of serious consequences.

The hornet's nest is generally built in the cavity of some decayed tree, or immediately beneath its roots. Not unfrequently it is found in timber yards and other similar situations. It is of a rounded form, made of coarse materials, and of the color of faded leaves. The materials of which the nest is composed are prepared from particles of old wood or bark, reduced, by means of the insect's mandibles, to a kind of soft pasteboard. With this, after the nest has been thickly plastered on the inside, they make horizontal combs suspended from above by strong columns, the central being the largest; the cells are hexagonal, with the opening downward.

A few females, or perhaps a single one, having escaped the rigors of the winter, being neuters, which, when perfect, help their eggs in the spring, the first broods being neuters, which, when perfect, help their mothers in the domestic economy of the nest. The larvae are footless, each enclosed in a separate cell, where it is fed on insects and honey stolen from bees. When the larvae have acquired their full growth they line the cell with silk, cover the opening, and in this undergo their metamorphosis. The neuters aid in building the other nests and in feeding the successive broods of larvae. As the family increases, new cells and additional platforms are constructed.

The young females and young males come forth about the beginning of autumn, and all larvae which cannot become perfect before cold weather are destroyed by the neuters. The males perform no labor. Both sexes meet on the trees in autumn, feeding on saccharine juices, and soon perish from the cold. There are about 150 individuals in a nest.

A well-known naturalist writes: "The hornet is a very pugnacious animal. They will fight desperately with each other at times, when they meet in pursuit of prey, biting each other's body and trying to get their mandibles under the head of their opponent, to snip it off. I one day con-

finer, under a glass, two of these creatures which had been fighting. One had evidently the mastery, but both had been so injured in the contest that they soon died. It is most probable that they fall victims to each other's voracity in the cold damp season that usually terminates the autumn of our year."

A DUCK HUNT IN THE EVERGLADES.

BY C. R. ROSS.

Several years ago I became tired of the hum-drum life of a city salesman and decided to go in quest of adventure. I started out with no place in particular in view, and finally found myself, after a few weeks of drifting, in that peculiar region, the Everglades. My trip, taken simply to satisfy my curiosity, aroused my interest and I decided to throw in my lot with the few adventurous settlers who loved the Glades and the pine forest and who became the vanguard of civilization in that place.

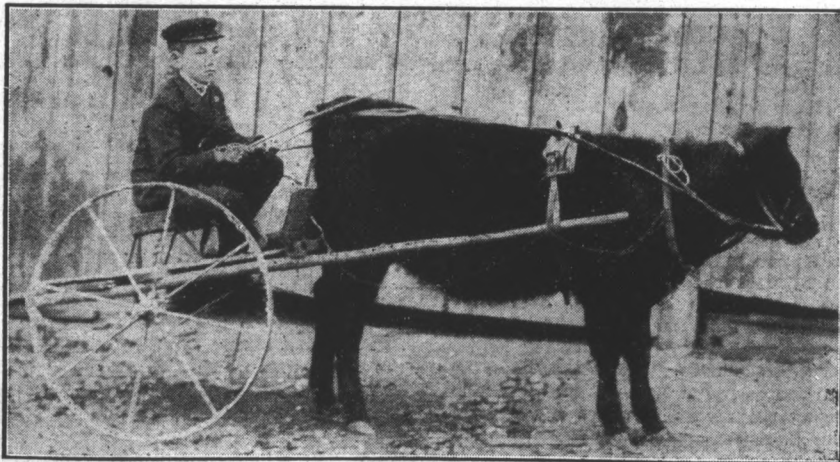
At that time this was a most lonesome land. Even now there is a strange blending of the wilderness with civilization. While the steam yacht of some northern millionaire courses swiftly along among the keys, or lies at anchor in some sheltered cove, the Seminole Indian, in dug-out cypress canoe, pushes his way through the saw grass waterways of the Glades, a few miles inland. The tourist in his



glistening motor car may stir up the dust of the rock roads along the coast, but in passing some dark stream he may be quick enough to see the startled 'gator sink into the water, leaving a circle of ripples behind.

The land just back of the ocean beach is a kind of muck prairie of varying width and with a dense covering of vegetation. In some places there are long shallow gulfs or bays, which run into this prairie and extend up and down parallel with the coast for ten or fifteen miles at a stretch. Lake Worth at Palm Beach is one of these. It is really not a lake as its name implies, for it is still connected with the ocean and is influenced by the tides. In other places, deposits have been made at the mouth of these bays, forming true lakes of brackish water and in most places of very little depth, but with deep deposits of mud and slime. In some places the surface has filled up and hardened, forming a crust something like India rubber.

At the time of which I am writing, the East Coast canal had been completed, connecting these gulfs and lakes, and forming a continuous passage inland parallel to the coast line. The banks were overgrown with grape vines and creepers. In many places the mangrove had taken root and, with the native rubber tree, formed a thicket. Here and there cocoanut palms and fan palmettoes grew tall and stately above the lesser shrubs. Here and there, adding a touch of color to the scheme, were the African Hibiscus with bright red and crimson blossoms and immense clumps of oleander. This canal, with its variations, was an ideal place for wild ducks. Almost every kind was found there, from the unedible fish duck, with its red serrated bill, to the Mallard and Blue Bill. In the reeds along the bank the mud hens were at home and the



All Ready for Beautiful Spring and Dry Roads.

and other dignitaries of the town sallying forth to play at football on the beautiful meadow lying between the city and the river. The women, also, had their share in the sport and had their own game in a quiet way.

As the mayor's daughter, with other maidens, was engaged at the game, her

motely associated to afford any explanation.

Anciently both clergy and laymen used to play at ball in the churches for tansy cakes. These little cakes had a mingled sweet and bitter taste in memory of the bitter herbs eaten at the passover, which festival was also observed in the spring.

The Wagon That Saves Farm Labor

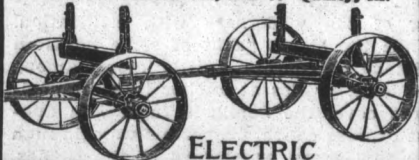
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with its all-steel wheels that last a lifetime. It gives you the low lift instead of the high lift and saves your strength thousands of times a year. You can have wheels any height—20 to 60 inches—and any width or tire. The Electric Handy Wagon is a wagon for all work.

Write for the Free Book
and see how the Electric Handy Wagon is made. It explains how cheaply you can fit your old running gears with Electric Steel Wheels and turn them into a handy wagon. Address to-day,
ELECTRIC WHEEL CO., Box 35 Quincy, Ill.



HERE IS \$10

Saving on Every Suit or Overcoat You Buy.

I am shipping clothing every day to farmers all over the country, letting them try the suits on and examine them in every detail in their own homes. I want to tell you how I can sell you better clothes than you have ever worn for less money than you have ever paid before. Only two prices on my suits and overcoats—\$10 and \$15—I don't want a single penny down.

SEND ME YOUR NAME TODAY.
On a postal card and I will gladly mail you my big circular, order blanks and tape-measure. I have no schemes or fakes in selling you direct, I take all the risk, I want one farmer in every neighborhood to know how I do business. Write me today.

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Perfect Tackle Blocks 70c Up

The Burr self-locking tackle block will positively not slip on wet, greasy or dry rope. Yet it has no teeth or claws to injure the rope as all others do. It has no springs of any kind to get out of order. It is as adjustable as a differential chain block. It will lock positively at any angle—even up side down. One man can do the work of four with this marvelous little farm help. Lasts a lifetime and pays for itself on one job. (Prices only 70c to \$4.25, according to capacity of 600 lbs. up to 5,000 lbs. Write today for catalog and full information about the one practical rope tackle block on the market.)



**Burr Automatic
Safety Tackle Block
BURR MFG. CO.
133 Viaduct Cleveland**

BOWSHER

(Sold with or without elevator)
CRUSH ear corn (with or without shucks) and **GRIND** all kinds of small grain. Use Conical Shape Grinders. Different from all others.

LIGHTEST RUNNING.

(Our Circular Tells Why.)
Handy to Operate. 8 Sizes—2 to 25 h. p. One size for wind-wheel use.

Also Make Sweep Grinders,
both Geared and Plain.
**D. N. P. Bowsher Co.
South Bend, Ind.**



FEED MILLS

THE LARGEST AND BEST LINE OF WELL DRILLING

MACHINERY in America. We have been making it for over 20 years. Do not buy until you see our new Illustrated Catalogue No. 14. Send for it now. It is **FREE**.

Austin Manufacturing Co., Chicago

Just Say "Saw your ad. in the Michigan Farmer" when writing advertisers

shy alligator basked in the sunny openings. In short it was a hunter's paradise.

When I first went to Florida I hardly knew a shotgun from a rifle, but life in the Everglades will sometimes make a hunter out of very unpromising material and I soon acquired some skill with both and enjoyed a hunt as well as the old woodsmen.

At the time of this incident I was living at Delray, a little settlement not far from the lower end of Lake Worth. The canal was dredged out through the flat lands for several miles and then widened out into a series of large mud lakes. Here and there were channels diverging from the canal and meandering aimlessly out through the muck lands, sometimes ending in blind pockets and again opening back into the canals.

One of my neighbors was an old Irishman whom we will call Mike. He had been a great hunter in the marshes of New Jersey and on a chance trip had fallen in love with the streams and lakes of Florida. Dr. Ashley, a young fellow from Arkansas, was a mutual friend, and the three of us enjoyed many a hunt together, sometimes going to the lakes in the doctor's automobile, and sometimes rowing down the canal in a light duck boat.

At the time of this hunt we planned that Mike and myself should row down the canal and the Doctor would come in his auto and join us at the mud flats. We got everything in readiness the night before. Our guns were always kept clean and in first-class condition, but we got out plenty of shells and packed our lunch so that we could get an early start. At a few minutes before three we launched our boat and started on our five-mile row to the hunting grounds. There was a dim light from the moon, and the murky water of the canal glowed with a phosphorescent light, while the drops from our oars glistened like minute electric lights. The mullet seemed to be in a festive mood and leaped out of the water by the hundred. One of them, either stronger or more adventurous than the others, landed in our boat, but we were after ducks not fish, so we threw him back into the water.

Just before daybreak we reached the place where the canal widened out into the mud lakes and, entering one of the channels or bayous, we crept stealthily along with silent oars, hugging the bank and trying to be as inconspicuous as possible. This was the ducks' feeding time and we were likely to find a bunch at any time. As we rounded a little island we saw a large flock swimming and feeding ahead of us. They had not yet noticed our approach and we gave a quick pull with the oars, hoping to get within range before they took flight. This time, however, luck was against us, for we grounded on a mud bank and the birds rose just out of gunshot. After much tugging at the oars, we got afloat and tried again. We had better luck next time, both Mike and myself getting several. During the morning we shot several on the wing, but they became shy and we determined to try a new plan. I went ashore on a little island overgrown with brakes and large ferns. There was a large flock of ducks about half a mile off. Mike was to work around them in the boat and try to drive them up toward the island. In case they took flight, we hoped that they might pass over one or the other of us and give us a shot. Our hopes proved vain for the flock became alarmed and flew away quartering and not within range of either of us.

About this time I saw a number of coot in the reeds near the island and, despairing of better game, I shot at them, killing one. A few feet from the place where I was hiding, and separated from it by about three feet of water, was a little hummock rising out of the water. It looked solid and I decided to chance it and try for another shot. I jumped, and, instead of landing on ground as I supposed it to be, found myself in a floating mud bank with nothing between me and the bottom but some twenty or thirty feet of liquid mud, too thick to swim in and not thick enough to bear my weight. Here was a dilemma. My jump had landed me in the mud up to my knees. At every move I sank in deeper and I began to think that this was my last duck hunt. Mike was half a mile off, so there was no help in that direction. By this time I was in up to my waist and if anything was to be done it must be done quickly. I had been trying to support my weight with my gun laid crosswise. So far it had proved ineffectual, but finally I found a place which was firm enough to bear my weight. In floundering about



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—the Kind with
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always bears this
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None other is Genuine.

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I know what I
want and I want
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Kellogg's TOASTED CORN FLAKES

The name—Kellogg's—and the signature
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The flavor and goodness are equally impossible
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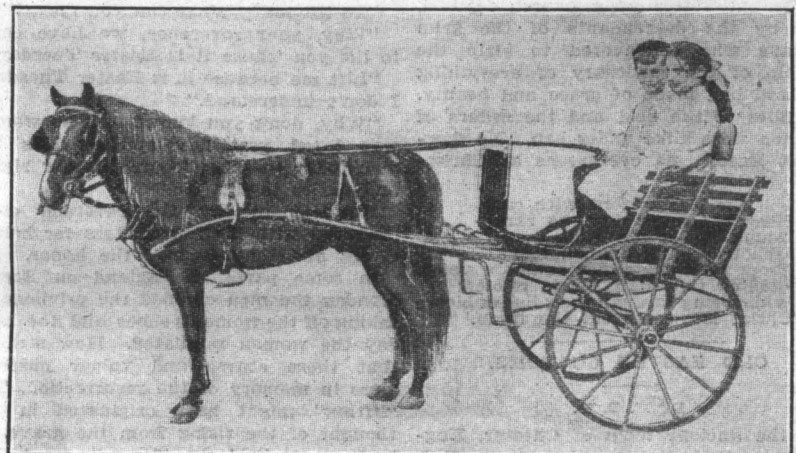
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appetizingly crisped — wonderfully wholesome
— Insist on the genuine for your own protection.

Made of
the Best
White Corn
Only



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This is the Pony, Cart and Harness. The Saddle Appeared in our Last Issue.

A Complete Outfit FREE!!

Here is that chance you have been looking for. An opportunity to secure for yourself a

REAL LIVE SHETLAND PONY

together with the Cart, Saddle, Harness and Bridle. The best part of this is that it won't cost you or your parents one cent. It is absolutely FREE. We are not going to sell this Pony and Outfit, but are going to give it away.

HOW TO WORK TO WIN "BEAUTY."

If you want this dandy Shetland Pony and Outfit, simply send us your name and address today, just as soon as you can. Our plan is absolutely fair and we give no child any advantage over any other child. All will be given the same opportunity. Just imagine the fun you can have driving to school, to the post office and everywhere with this clever little pony. You must surely send us your name and address today, because we can't give the pony unless we know your name and address. It won't cost the winner anything but a little of his or her time during the next few weeks. We pay all charges for crating, shipping, etc.

Send us your name and you will hear something which will please you immensely.

Cut out and sign this Coupon or copy on a Postal Card and Mail Today.

Pony Contest Editor, Care of the Michigan Farmer, Detroit Mich.

Please send me Certificate of Entry and pictures of "Beauty". I haven't any Shetland Pony and want to own "Beauty".

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THE right way and time to guard your crops from the ravages of insects or parasites is to get ready long before the need comes.

C. T. Reynolds Paris Green will protect your potato crop from bugs; it's a pure, strong, unadulterated green that kills.

Devoc Arsenate of Lead for spraying is the best thing made for the purpose. Comes as a paste, to be dissolved in water; does no harm to foliage; just destroys parasites; a sure thing.

Be sure what you buy;
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Largest makers of pure paints in the world

Easter Prize Offer

A prize for 100 persons who write a reason for preferring

SHIRLEY PRESIDENT SUSPENDERS

Your letter giving reason "Why a Man Should Prefer SHIRLEY PRESIDENT SUSPENDERS" may win one of the 100 prizes.

THE PRIZES:
1st prize, \$50.00 4th prize, \$25.00
2nd prize, 40.00 5th prize, 20.00
3rd prize, 30.00 6th to 10th prizes, 10.00
11th to 20th prizes, 5.00

21st to 50th prizes, One pair of Shirley President Suspenders, with gift trimmings, value \$1. 51st to 100th prizes, 1 pair of Shirley President Suspenders (regular 50 cents.)

This contest is open to everybody. Write in 200 words or less. The One Best Reason "Why a Man Should Prefer SHIRLEY PRESIDENT SUSPENDERS."

Sign your full name, address, and the name and address of your clothing dealer. We must have the dealer's address, for the prizes will be distributed through him whether he sells Shirley President Suspenders or not.

Contest Closes April 15th

No attention paid to letters thereafter. The winners will be announced and prizes awarded about May 10th. Write your letter today.
The C. A. EDGARTON MFG. CO.
756 Main Street Shirley, Mass.

10 BEAUTIFUL FREE POST CARDS

These are the kind that sell in the stores for cents each. We want to send you a sample package and all we ask is that you send us six stamps to cover cost of postage and packing. They are the grandest cards you ever saw. All in colors, showing rich flowers on gold and silk finish background. We also send you full particulars of our easy plan for getting hundreds of others from us absolutely free. Address

POST CARD CLUB, 74 Bagley Ave., Detroit, Mich

WONDER OIL LAMP

Sent To Your Home
We want you to try in your own home, without risk or expense, our marvelous new, 100 candle power Wonder Oil Lamp, generates its own gas from common coal oil—burns on incandescent mantle. Six times cheaper than old style lamp and far more brilliant than electricity or gas. 40,000 families now using. The price of this lamp is \$6.00, but to introduce it quickly, we will make one person in each locality a Special Free Offer. Remember, if you send the Wonder Lamp, express prepaid. We want to place one for demonstration purposes in your home and ask that you recommend it to your neighbors. Let the Wonder Lamp light your home. Simply send your name and address today.
Factories Sales Co., Dept. 15, Kansas City, Mo.

WANTED.

Farm Hand with Family,
on Dairy Farm in Central Michigan.
House furnished. Send full particulars.
Address F. S. KENFIELD, Augusta, Mich.

MARVEL FISH BITE
MARVEL makes BAIT makes
Marvel Automatic Hooks land them every time. Best everybody catching fish. Write for FREE box and Sample Hooks for helping to introduce them. Write
JAPANESE NOVELTY CO., Dept. 39, Clinton, Iowa.

I had not noticed that one of the gigantic ferns bent over toward me. It was almost within my grasp and, by resting my weight on one arm, I was able to get the end of it in my fingers. A drowning man will grasp at a straw, and indeed this seemed almost as frail. By pulling gently and steadily I got my hand on the stem and with that help was able to draw myself to the bank. For a time I lay muddy and exhausted but it was not a great while before Mike came along with the boat and I was glad to leave the scene of my disagreeable adventure.

A short time after this the doctor joined us and soon had a similar experience, though not as serious as mine. While we were pushing through the shallow water near the shore we ran hard and fast into the mud. It was only a few feet to the shore where the grass grew rank. The doctor volunteered to jump out to lighten the boat. Taking a run he landed all right, but the grass proved to be as deceptive as my mud bank, for he went right through. However, the sod was thick enough to afford some purchase and after floundering about, to the great amusement of Mike, he finally got his feet and legs out of the mire.

The doctor started out that morning in a new hunting suit with yellow leggings. When he got out of the mud he looked even worse than I did in my old clothes somewhat the worse for wear. It was a bedraggled lot of hunters that went home that night, but we had a bunch of ducks, and I, at, least, was thankful to be alive.

KINKS.

Kink I.—Rhyme Rebus.

RHYME PUZZLE For the dashes supply one syllable and ten words. All of them must rhyme with one another.



There was a young fellow whose first name was —
Who took an umbrella; his face not to —
He carried a — and some ice in a —
And said, "I'll keep cool if I possibly —
He met a young lady, the beautiful —
She said, "So much softness becomes not a —
— felt that his comfort was under a —
So turned on his heel, and away fairly —.

Kink II.—Tree Knots.

1. Which part of a tree is of use to a traveler? 2. Which part does every dog have? 3. Which does every flowering plant have? 4. Which part is found in a book? 5. Which, when beheaded, is useful to a bald-headed person? 6. Which part do you use when you meet an acquaintance? 7. Which does every river have? 8. Which parts are in your mouth? 9. Which part is chewed by some people? 10. Which makes a delicious sweet?

Kink III.—Four Letter Square.

Part of the body.
Measure of land.
Stomach of a bird.
Retained.

Prizes for Straightening Kinks.—To the sender of each of the ten nearest correct answers to all of the above Kinks, we will give choice of a package of 50 post-cards of general interest, an Atlas of the World, or a book, "A Trip to the North Pole." Where contestant or some member of his family is not a regular subscriber a year's subscription (75c) must accompany answers. Answers must not reach us later than April 9, as correct solutions will be published in issue of April 16. Address answers to Puzzle Dept., Michigan Farmer.

Answers to Feb. 9 Kinks.

Kink I.—Fruits and Plants.—1. Raspberry. 2. Dewberry. 3. Nightshade or blackberry. 4. Hackberry or dates. 5. Dog fennel. 6. Cane. 7. Sumac or wax-plum. 8. Bachelor's buttons. 9. Milk-weed. 10. Phlox or shepherd's purse. 11. Bleeding heart or Job's tears. 12. Smilax or balsam.

Kink II.—1910 Magic Square.—There can be various combinations. This is the set given by one of the winners:

380	393	376	389	372
373	381	394	377	385
386	374	382	390	379
379	387	370	383	391
392	375	388	371	384

Kink III.—Numerical.—Salt, Vine, Ten—St. Valentine.

Feb. 19 Prize Winners.

Only three sets of correct solutions were received. Prizes are awarded to D. R. Hall, Wm. Campbell and E. J. Archer.

Stock Up with Fresh Soda Crackers

Instead of getting a large package of loose soda crackers that soon grow stale—stock your pantry with small tight packages containing

Uneededa Biscuit

Fresh soda crackers every time you eat—the last as fresh as the first—because they are placed in moisture proof packages the moment they leave the oven.

5¢

(Never Sold in Bulk)

NATIONAL BISCUIT COMPANY

Don't Pay Tribute to a Trust

High Grade Rubber

LIVE RUBBER GOLD CROSS NO SHODDY CENTURY BOOTS



are made of the strongest rubber in the world. They're made on honor, by people who know how, on a special plan of construction that experience has demonstrated a success. The duck vamps are made by forcing the highest grade rubber into the best quality of canvas duck by powerful hydraulic pressure instead of by hand. As a precaution against cracking at the ankle, we use an extra ankle reinforcement of pure gum, while most others use a strip of cloth. Cloth is cheaper, but it cracks. Century Soles are made from the toughest compound known, and will outwear the soles of the average rubber boot two to one. Here we reinforce again by running a strip of pure gum all the way around the edge of the sole, making a connection so firm and lasting as to absolutely prevent breaking. It's not easy to tell a good rubber boot by appearances, and even the dealer gets fooled occasionally. More often he yields to the temptation to make what looks like a little "easy money" by stocking up on a "cheaper" article on the representation of some smooth salesman that "it's just as good" as the Century. Why take chances on goods of doubtful quality when you can have Century Boots, backed by years of success, at no greater cost? It has paid thousands of people to insist on having the Century. It will pay you. Gold Cross Rubber Footwear is "always the best for the money"—best for wear—best for style and fit. Ask your dealer for it, and if he can't supply you write us, giving his name, and we will see that you are fitted out.

The Beacon Falls Rubber Shoe Co.
New York Chicago Boston



YOUR BOY CAN DO AS MUCH WORK AS A MAN if he has a KRAUS PIVOT-AXLE SULKY CULTIVATOR.

He simply steers it—the machine does ALL the work. A slight pressure of the foot moves the wheels and shovels simultaneously to the right or left at the will of the driver, while the width between gangs and depth of shovels are instantly and easily adjusted while machine is in motion.

Hillsides, Uneven Land and Crooked Rows as Easily Cultivated as Level Ground.

Simple in construction—nothing to get out of order. Made entirely of steel and malleable iron—every part interchangeable. Built for wear and work. Light draft. High or low wheels or Pivot-gang. Also Clipper Hammock Seat. There is just one Kraus—if your dealer does not have it accept no other—but write us. Send today for free catalog.

AKRON CULTIVATOR CO.
DEPT. 12 AKRON, OHIO



WESTERN CANADA

What Governor Deneen, of Illinois, Says About It:

Governor Deneen, of Illinois, owns a section of land in Saskatchewan, Canada. He has said in an interview: "As an American I am delighted to see the remarkable progress of Western Canada. Our people are flocking across the boundary in thousands, and I have not yet met one who admitted he had made a mistake. They are all doing well. There is scarcely a community in the Middle or Western States that has not a representative in Manitoba, Saskatchewan or Alberta."

125 Million Bushels of Wheat in 1909

Western Canada field crops for 1909 will easily bring \$170,000,000.00 in cash. Free Homesteads of 160 acres, and pre-emption of 160 acres at \$3.00 an acre. Railway and Land Companies have land for sale at reasonable prices. Many farmers have paid for their land out of the proceeds of one crop. Splendid climate, good schools, excellent railway accommodation, low freight rates, wood, water and lumber easily obtainable.

For pamphlet "Last Best West," particulars as to suitable location and low settlers' rates, apply to Sup't of Immigration, Ottawa, Can., or to the Canadian Government Agent.

M. V. McInnes, 176 Jefferson Ave., Detroit, Mich.; O. A. Laurier, Marquette, Mich.

WOMAN AND HER NEEDS

THE FARM OR THE "WORLD"?

Your Children Will be Helped to a Decision by What They Read.

WHAT Does Your Daughter Read?" was the striking headline which caught my eye recently above an article in a daily paper. It set me to wondering how many mothers really know what their children read, or give themselves the slightest concern over the matter. Of course, you can not know all your daughter reads. No matter how vigilant you may be, she is sure to read occasionally something you can not know about. A newspaper, a book at a friend's house, an article passed around in school, circulars sent through the mail or dropped on your doorstep, all are likely to find their way into your child's hands without your knowledge, and it is barely possible that your daughter has already absorbed a great many things you did not want her to learn for awhile.

But in spite of this, every mother can exercise a supervision over her daughter's reading, and over her son's as well. Yet I really believe that for every mother who intelligently passes upon her children's reading, there are five who do it only in a perfunctory way and five times five who do not trouble themselves ever to enquire what that story is which Mary or Jack is reading.

A lack of understanding of human nature is in a great measure to blame for this. Mothers fail to realize how much young people are influenced by what they read. Everyone, at whatever age, is affected by the class of reading in which he indulges, but young people, being so much more susceptible are influenced to a greater degree. As we grow older we grow more discerning, we are able to balance one thing against another and to decide what is wise and what is foolish. Youth knows nothing of such judgment. It swallows everything, and if it is at all impulsive, proceeds to act upon everything it reads.

On this account it is not enough for us to know that our children do not read the trashy and light in books and papers. It is not enough to forbid our boys to read blood and thunder novels, and to burn the "His Only Love" sort of fiction our daughters admire. We must see that they read only what will influence them to be the sort of men and women we desire them to become.

A mother wanted her son to become a business man. He was very fond of reading, and the mother knew in a way that she must be careful of what she allowed him to read. But she made one mistake. Instead of surrounding him with books which told of the successes of men of affairs, stories of the brave struggles of men who began at the bottom of a trade or profession and mastered it, she bought him books of adventure, not wildly impossible tales but classics in their way, yet all telling stories of travels by land and sea. The lad read and read of strange countries and peoples until his one desire was to see the lands of which he read. When he grew up and was to decide his vocation, he chose the navy. His mother wept and importuned, pointed to the disadvantages of a life on the sea, and to the good to be gained by going into a business house. But it was too late. The impressionable youthful mind had already taken its bent, and the sea made the strongest appeal.

This mother had done her duty so far as she saw it. The trouble was that she did not see far enough. She had kept the impure and bad in literature away from her boy, but she had given him that which could only tend to create a roving spirit.

So with our daughters. We want them to be clean-minded, sensible, home-loving, industrious women. Then see what they read only that which will tend to dignify labor. Give them to read of the lives of women who have been workers, not queens but lay-women who have done ordinary things, such as bringing up children and keeping house and making homes for loved ones. Do not let them read the popular fiction which has to deal with idlers, where the women dawdle through a fashionable day and play bridge whist or dance all night, while the heroes, called men by courtesy, devise new ways of spending the money their hardworking

forbears amassed. Leave books of this sort to the people who are described in them and who could not become any more useless than they are now, no matter what they read.

Our daughters, the daughters of the great middle class, should read of better things. Let them read, if they must read fiction, such books as "The Minis-

ter's Wooing," where the heroine and her mother were capable housekeepers and loved the long, white seam. Poetry of the better class, essays, travels to some extent, history, and a good home magazine all may be included in their reading.

If you want your daughter to stay on the farm, see that what she reads extolls the beauty and comfort of life in the country. Let her read of what women have accomplished with a few acres of land, of the beauty and rest and peace of a life lived "far from the madding throng's ignoble strife." Do not fill her mind with fiction about the broadening influence of city life, of the advantages of living among one's fellows, of the plays to be seen, the music and lectures to be heard in a metropolis, the parties one may attend and the gay life generally, and then expect her to be a happy and contented country dweller.

DEBORAH.

ENTERTAINING AT EASTER.

BY MARJORIE MARCH.

THE calendar gives us Easter once more, when the rising of spring and its wealth of flowers bespeaks the glory of growth's reappearance. The hostess who plans some sort of festivity during the Easter holidays can not go far amiss, for there are Easter traditions aplenty to help her with novel ideas, and

makes a novel idea for the distributing of favors at an Easter function.

Suggestions for Tables.

Lilies and their leaves laid in an effective mass in the center of a spotless white cloth, look beautiful for an evening affair, tall glass candlesticks with white tapers rising from their midst. A single white

lily, real or artificial, can be at each cover, and an Easter card tied to the flower with white ribbon can show the guests their places. White baskets with frills of white paper make very pretty bonbon dishes, and ices, cakes and alal fancy touches to the feast may be served in white lily cases.

A Violet Table.

A beautiful luncheon table may be arranged by having lace doilies over violet tinted silk. In the center of the table a round mirror edged with smilax and small bunches of violets may reflect a "shower bouquet" of violets which hang from the chandelier. Long streamers of pale tinted violet ribbon may hold bunches of violets with their leaves, hanging to different lengths above the mirror but all, of course, reflecting their beauty. About the edge of the "pool" fairy paper dolls dressed in gold and violet

can be seated. Tiny vases as souvenirs

at each place may hold a small bunch of violets, and the bonbon dishes may be tall stemmed glasses resting on little violet edged mats, or on smaller doilies over violet silk.

A Nest Table.

A nest of pretty grasses filled with colored eggs makes an attractive center piece that will please the children as well as the grown-ups. If the decorations are desired elaborate, have strings of baby ribbon extending from the chandelier to the four corners of the table, these ribbons knotted at intervals to hold in place colored egg shells which have been emptied

The dessert may be a gelatine dessert which has been tinted different colors and moulded in egg shells. Turn out on a decorative platter and pile whipped cream about the edge. Pretty little Easter cakes may be served with this dessert. Ice small cakes and in the center of each stick half an egg shell, with a ragged edge, the ragged edge uppermost. In this little vase place a bunch of flowers, or, if preferred, a fluffy cotton chick or a candy chick can be placed therein.

Daffodil Table.

The table cover can be white over pale yellow silkoline, or if a hostess desires, may be of crepe paper variety with a daffodil design. In the center of the table have a golden vase filled with daffodils, the bunch tied with a bow of golden ribbon. As souvenirs at each place have little yellow and white baskets filled with bonbons of the same color. Have a pretty little yellow chick poised on the handle of each basket. Daffodil cases may be the receptacles for salted nuts, bonbons, etc. For an evening supper which is not to be elaborate this menu would be pretty:

Creamed chicken in puff paste cases

Yellow Rusks

Chocolate with whipped cream

Hard boiled egg salad with Lettuce and

Mayonnaise dressing

Custards and white and gold cake

Games to Play.

The old-fashioned donkey game can be utilized for an Easter game with success. Have a sheet decorated with a gay colored hen and some chickens. In the center of the sheet have a nest drawn. Give each person a paper egg and a pin and have them, while blindfolded, try to put their egg in the nest.

An Easter hat social is also fun for a group of ladies. Have little candy eggs hidden about the rooms which, when found are to serve as currency at the "millinery store." At this store, which is a decorated table, can be sold dolls' hats, tissue paper, ribbon, artificial flowers, etc., and if the shop keeper has a ready wit, and some one should be chosen who is gifted in this manner, the bargaining can be amusing indeed. When all have made their purchases, fingers will be busy fashioning the "Easter millinery" and afterwards a prize can be awarded to the one who has made the most fetching creation. The prize could be a cunning little doll's hat with ribbon strings formed over wire so that it makes it into the handle of a basket. In this can be a little flower pot with some growing flower, or the prize can be a box of candy, with a decorative cover of a pretty maid in a big poke bonnet. If a luncheon precedes this party the guests can be asked to come attired in head-gear that is unique, historical or effective in some manner. At a party of this sort the effect was very interesting. Quaker bonnets, Gainsborough hats, old-fashioned creations, sunbonnets and every imaginable style of headgear were worn, and the prize for the most striking costume was a dainty hat-pin.

Flower Contest.

Now that paper flowers can be bought ready to put together with ease a flower contest makes an amusing entertainment, particularly if the flowers can be used afterwards for decorating some festal occasion. At one table violets can be made, at another daisies, at another carnations, and at the head table, roses. Tiny rose



A Bunch of Spring Fairies.

Easter flowers and favors to aid her in decorating. For an Easter party of fun and pleasure the invitations may be sent out on cunning little cards cut in basket shape, the top decorated with water colors in violets, daffodils or Easter lilies. The wording of the bidding may be written on the basket which may be slightly tinted, or the whole may be made simpler by using some of the effective Easter cards. To be found in the shops at this season of the year, on which to offer ones hospitality. Another quaint idea would be to mail in a small box one of the dear little fluffy chicks made of cotton, tying a card about his neck on which the invitation may be written, or a small box of candy eggs mailed to a friend will prove a delightful puzzle if one word of the invitation is written on each egg so that they have to be arranged properly before one can read the message.

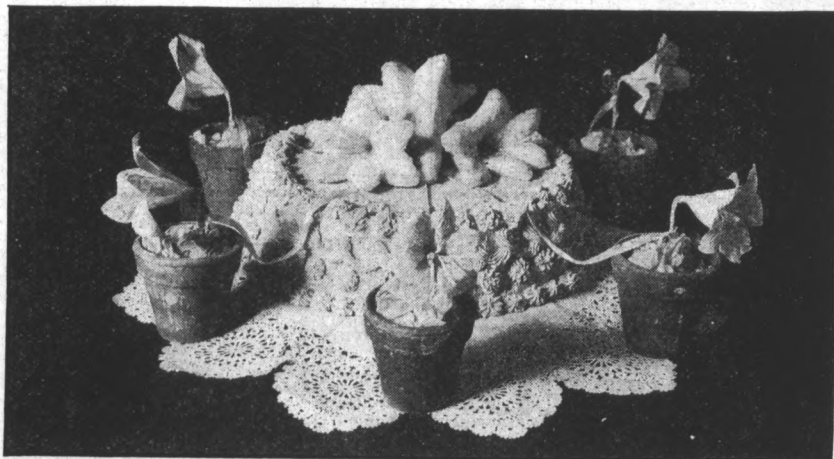
Decorations.

All the decorations of house and feast can bear some significant touch. The illustrations show a pretty center piece for an Easter luncheon, and a cake which may be used as a center piece or on a side table as preferred.

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If you wish to hang a poker near the stove and at the same time keep the wall clean, buy an asbestos mat. They can be had with one side sheet iron. Get two screw hooks, of brass or iron as you choose, the larger one large enough to hold the ring of the poker. Place the small hook below, so that the hot, sooty end of the poker will hang against the mat. If a door casing is near the stove the hooks can be screwed slanting into the side and the holes show very little when the screws are removed in summer.

M. M. N.

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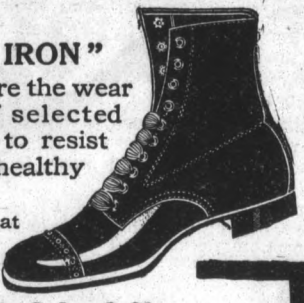
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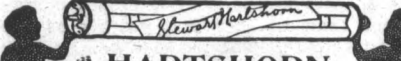
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WOMAN AND HER NEEDS

THE FARM OR THE "WORLD"?

Your Children Will be Helped to a Decision by What They Read.

WHAT Does Your Daughter Read?" was the striking headline which caught my eye recently above an article in a daily paper. It set me to wondering how many mothers really know what their children read, or give themselves the slightest concern over the matter. Of course, you can not know all your daughter reads. No matter how vigilant you may be, she is sure to read occasionally something you can not know about. A newspaper, a book at a friend's house, an article passed around in school, circulars sent through the mail or dropped on your doorstep, all are likely to find their way into your child's hands without your knowledge, and it is barely possible that your daughter has already absorbed a great many things you did not want her to learn for awhile.

But in spite of this, every mother can exercise a supervision over her daughter's reading, and over her son's as well. Yet I really believe that for every mother who intelligently passes upon her children's reading, there are five who do it only in a perfunctory way and five times five who do not trouble themselves ever to enquire what that story is which Mary or Jack is reading.

A lack of understanding of human nature is in a great measure to blame for this. Mothers fail to realize how much young people are influenced by what they read. Everyone, at whatever age, is affected by the class of reading in which he indulges, but young people, being so much more susceptible are influenced to a greater degree. As we grow older we grow more discerning, we are able to balance one thing against another and to decide what is wise and what is foolish. Youth knows nothing of such judgment. It swallows everything, and if it is at all impulsive, proceeds to act upon everything it reads.

On this account it is not enough for us to know that our children do not read the trashy and light in books and papers. It is not enough to forbid our boys to read blood and thunder novels, and to burn the "His Only Love" sort of fiction our daughters admire. We must see that they read only what will influence them to be the sort of men and women we desire them to become.

A mother wanted her son to become a business man. He was very fond of reading, and the mother knew in a way that she must be careful of what she allowed him to read. But she made one mistake. Instead of surrounding him with books which told of the successes of men of affairs, stories of the brave struggles of men who began at the bottom of a trade or profession and mastered it, she bought him books of adventure, not wildly impossible tales but classics in their way, yet all telling stories of travels by land and sea. The lad read and read of strange countries and peoples until his one desire was to see the lands of which he read. When he grew up and was to decide his vocation, he chose the navy. His mother wept and importuned, pointed to the disadvantages of a life on the sea, and to the good to be gained by going into a business house. But it was too late. The impressionable youthful mind had already taken its bent, and the sea made the strongest appeal.

This mother had done her duty so far as she saw it. The trouble was that she did not see far enough. She had kept the impure and bad in literature away from her boy, but she had given him that which could only tend to create a roving spirit.

So with our daughters. We want them to be clean-minded, sensible, home-loving, industrious women. Then see what they read only that which will tend to dignify labor. Give them to read of the lives of women who have been workers, not queens but lay-women who have done ordinary things, such as bringing up children and keeping house and making homes for loved ones. Do not let them read the popular fiction which has to deal with idlers, where the women dawdle through a fashionable day and play bridge whilst or dance all night, while the heroes, called men by courtesy, devise new ways of spending the money their hardworking

forbears amassed. Leave books of this sort to the people who are described in them and who could not become any more useless than they are now, no matter what they read.

Our daughters, the daughters of the great middle class, should read of better things. Let them read, if they must read fiction, such books as "The Minis-

ter's Wooing," where the heroine and her mother were capable housekeepers and loved the long, white seam. Poetry of the better class, essays, travels to some extent, history, and a good home magazine all may be included in their reading.

If you want your daughter to stay on the farm, see that what she reads extolls the beauty and comfort of life in the country. Let her read of what women have accomplished with a few acres of land, of the beauty and rest and peace of a life lived "far from the madding throng's ignoble strife." Do not fill her mind with fiction about the broadening influence of city life, of the advantages of living among one's fellows, of the plays to be seen, the music and lectures to be heard in a metropolis, the parties one may attend and the gay life generally, and then expect her to be a happy and contented country dweller.

DEBORAH.

ENTERTAINING AT EASTER.

BY MARJORIE MARCH.

THE calendar gives us Easter once more, when the rising of spring and its wealth of flowers bespeaks the glory of growth's reappearance. The hostess who plans some sort of festivity during the Easter holidays can not go far amiss, for there are Easter traditions aplenty to help her with novel ideas, and

makes a novel idea for the distributing of favors at an Easter function.

Suggestions for Tables.

Lilies and their leaves laid in an effective mass in the center of a spotless white cloth, look beautiful for an evening affair, tall glass candlesticks with white tapers rising from their midst. A single white

lily, real or artificial, can be at each cover, and an Easter card tied to the flower with white ribbon can show the guests their places. White baskets with frills of white paper make very pretty bonbon dishes, and ices, cakes and alal fancy touches to the feast may be served in white lily cases.

A Violet Table.

A beautiful luncheon table may be arranged by having lace doilies over violet tinted silk. In the center of the table a round mirror edged with smilax and small bunches of violets may reflect a "shower bouquet" of violets which hang from the chandelier. Long streamers of pale tinted violet ribbon may hold bunches of violets with their leaves, hanging to different lengths above the mirror but all, of course, reflecting their beauty. About the edge of the "pool" fairy paper dolls dressed in gold and violet can be seated. Tiny vases as souvenirs at each place may hold a small bunch of violets, and the bonbon dishes may be tall stemmed glasses resting on little violet edged mats, or on smaller doilies over violet silk.

A Nest Table.

A nest of pretty grasses filled with colored eggs makes an attractive center piece that will please the children as well as the grown-ups. If the decorations are desired elaborate, have strings of baby ribbon extending from the chandelier to the four corners of the table, these ribbons knotted at intervals to hold in place colored egg shells which have been emptied

The dessert may be a gelatine dessert which has been tinted different colors and moulded in egg shells. Turn out on a decorative platter and pile whipped cream about the edge. Pretty little Easter cakes may be served with this dessert. Ice small cakes and in the center of each stick half an egg shell, with a ragged edge, the ragged edge uppermost. In this little vase place a bunch of flowers, or, if preferred, a fluffy cotton chick or a candy chick can be placed therein.

Daffodil Table.

The table cover can be white over pale yellow silkoline, or if a hostess desires, may be of crepe paper variety with a daffodil design. In the center of the table have a golden vase filled with daffodils, the bunch tied with a bow of golden ribbon. As souvenirs at each place have little yellow and white baskets filled with bonbons of the same color. Have a pretty little yellow chick poised on the handle of each basket. Daffodil cases may be the receptacles for salted nuts, bonbons, etc. For an evening supper which is not to be elaborate this menu would be pretty:

Creamed chicken in puff paste cases

Yellow Rusks

Chocolate with whipped cream

Hard boiled egg salad with Lettuce and Mayonnaise dressing

Custards and white and gold cake

Games to Play.

The old-fashioned donkey game can be utilized for an Easter game with success. Have a sheet decorated with a gay colored hen and some chickens. In the center of the sheet have a nest drawn. Give each person a paper egg and a pin and have them, while blindfolded, try to put their egg in the nest.

An Easter hat social is also fun for a group of ladies. Have little candy eggs hidden about the rooms which, when found are to serve as currency at the "millinery store." At this store, which is a decorated table, can be sold dolls' hats, tissue paper, ribbon, artificial flowers, etc., and if the shop keeper has a ready wit, and some one should be chosen who is gifted in this manner, the bargaining can be amusing indeed. When all have made their purchases, fingers will be busy fashioning the "Easter millinery" and afterwards a prize can be awarded to the one who has made the most fetching creation. The prize could be a cunning little doll's hat with ribbon strings formed over wire so that it makes it into the handle of a basket. In this can be a little flower pot with some growing flower, or the prize can be a box of candy, with a decorative cover of a pretty maid in a big poke bonnet. If a luncheon precede this party the guests can be asked to come attired in head-gear that is unique, historical or effective in some manner. At a party of this sort the effect was very interesting. Quaker bonnets, Gainsborough hats, old-fashioned creations, sunbonnets and every imaginable style of headgear were worn, and the prize for the most striking costume was a dainty hat-pin.

Flower Contest.

Now that paper flowers can be bought ready to put together with ease a flower contest makes an amusing entertainment, particularly if the flowers can be used afterwards for decorating some festal occasion. At one table violets can be made, at another daisies, at another carnations, and at the head table, roses. Tiny rose



A Bunch of Spring Fairies.

Easter flowers and favors to aid her in decorating. For an Easter party of fun and pleasure the invitations may be sent out on cunning little cards cut in basket shape, the top decorated with water colors in violets, daffodils or Easter lilies. The wording of the bidding may be written on the basket which may be slightly tinted, or the whole may be made simpler by using some of the effective Easter cards. To be found in the shops at this season of the year, on which to offer ones hospitality. Another quaint idea would be to mail in a small box one of the dear little fluffy chicks made of cotton, tying a card about his neck on which the invitation may be written, or a small box of candy eggs mailed to a friend will prove a delightful puzzle if one word of the invitation is written on each egg so that they have to be arranged properly before one can read the message.

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HOUSEHOLD SUGGESTIONS.

Try three or four shallow boxes fitted into one of the draws of the kitchen cabinet for kitchen knives, forks, spoons and sharp knives. It is much easier than having them all mixed together. You can see at a glance the one you want, and when you become accustomed to the arrangement, even go for one in the dark if necessary.

If you wish to hang a poker near the stove and at the same time keep the wall clean, buy an asbestos mat. They can be had with one side sheet iron. Get two screw hooks, of brass or iron as you choose, the larger one large enough to hold the ring of the poker. Place the small hook below, so that the hot, sooty end of the poker will hang against the mat. If a door casing is near the stove the hooks can be screwed slanting into the side and the holes show very little when the screws are removed in summer.

M. M. N.



SCHOOL SHOES

"WEAR LIKE IRON"

They wear best where the wear is hardest. Made of selected leather specially tanned to resist exactly the kind of wear a healthy boy or girl will give them.

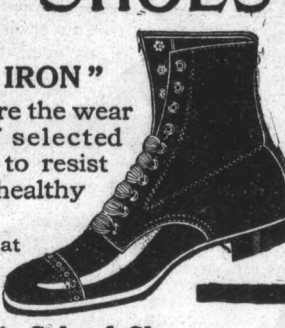
Two layers of leather are sewed in at the tip instead of one, to prevent the toes kicking out. The soles are of extreme toughness.

Mayer Special Merit School Shoes are made to fit a child's foot in a comfortable, natural way that will prevent foot trouble in later years, yet they are stylish and good looking. Only the genuine have the Mayer Trade Mark stamped on the sole.

FREE—If you will send us the name of a dealer who does not handle Special Merit School Shoes, we will send you, free, post-paid, a handsome picture, size 15x20, of George Washington.

We also make Honorbilt Shoes for men, Leading Lady Shoes, Martha Washington Comfort Shoes, Yerma Cushion Shoes and Work Shoes.

F. MAYER BOOT & SHOE CO.
MILWAUKEE WISCONSIN



THEY WEAR LIKE IRON





OPPORTUNITIES for YOU Out in The Union Pacific Country —California

Why stunt your life by working hard for a bare living when fruit growing in California offers such splendid opportunities?

Ten acres of fruit in California means a profit of \$5000 a year or more. Not every one can do it, to be sure, but the man who buckles down to his work can make every acre of this agricultural Eden yield more than any three acres he ever tilled in the east.

Men stand together out here and help each other, and every condition of social life and co-operative inspiration helps make the western fruit grower a success at his work and contented with his lot.

Go out and look the country over for yourself. Travel via

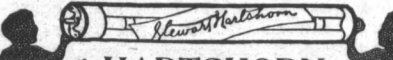
Union Pacific-Southern Pacific "The Safe Road to Travel"

Electric Block Signals. Standard and Tourist sleeping cars. Dining car meals and service "Best in the World."

Low Colonist fares in effect March 1 to April 15, inclusive, 1910

For information and literature about California fruit growing address

E. L. LOMAX, General Passenger Agent
Union Pacific R. R., Omaha, Neb.



HARTSHORN SHADE ROLLERS

Bear the script name of
Stewart Hartshorn on label.
Get "Improved," no tacks required.

Wood Rollers

Tin Rollers



THE "BEST" LIGHT

Gives 500 candle power. Casts no shadow. Costs 2 cents per week. Makes and burns its own gas. Over 200 styles. Every lamp warranted. No dirt. No odor. No grease. Agents wanted. Write for catalog, now.

THE BEST LIGHT CO.
280 E. 5th St., Canton, O.

Malt Coffee

Malted from choicest Montana Barley, shipped in strong airtight drums, at..... **6c per lb.**

Samples and Circulars Free

MILWAUKEE IMPORTING CO.
506 37th Street Milwaukee, Wis.

FOR A DAILY.

There is nothing published better than The Detroit Times. We send The Times and the Michigan Farmer a year each for only \$2.50, including a Class A premium. Send all orders to THE MICHIGAN FARMER, Detroit.

HOME QUERIES EXCHANGE.

Mrs. A. T., Elwell:—You should be able to purchase rennet in any good drug store. If the druggist hasn't it, ask him if he can not get it for you. To one gallon of milk use one cubic centimeter of rennet. This amount can be varied according as one wishes the cheese to ripen quickly or slowly, if quickly add more, if slowly add less.

Dear Editor:—Will some one please tell me what kind of goods to buy for a confirmation dress, and how it should be made to be worn in May?—L. N., Metropolitan.

Any pretty, thin white goods would be good, muslin, India linen, handkerchief linen, swiss, organdie or any soft, white, girlish material that you can afford. The style of making would depend on your age and size. Why not go in a store with your mother when you go to town and look in the style books and pick out what would be becoming to you? Use plenty of lace and insertion. If you are 13 or 14 years old and small, have the skirt two inches below the bend of the knee.

Mrs. K.:—No directions were given for making the "Chanticleer Egg Cozy." The article simply says a girl made them in the shape of a rooster's head, of two thicknesses of white flannel, cut double and wadded with cotton batting. Of course, the comb and wattles were scarlet.

Mrs. M. M. P., Mt. Clemens:—For your year and a half old baby, why not get one of the pretty straw bonnets? They will be much worn and do not need to be laundered. You can get a simple one with just a pleating of ribbon around the edge, or a more fancy one with rosettes of ribbon and small flowers. I would get a simple wash coat of pique, linen or some such cloth. My theory for babies who walk, or will shortly, is to buy clothes which may be tubbed every week if necessary. Then they can run and play and not be worried about "keeping out of the dirt."

Mrs. G. B.:—If it were me I would take a couple of packages of brown Diamond Dyes and boil them down like shoe polish. Go over the hat, let dry, and go over it again. I think you will find it all right. If I am not mistaken they have the dye for straw. To give your clothes a nice gloss, shave a little paraffine, about the size of a hickory nut, and a small pinch of powdered borax into the starch.—Mrs. W. H. M.

Reader:—First of all, have your carpet perfectly clean and tacked down. Have ready some Diamond dyes the color you prefer, about two packages for each color. Boil them down about like shoe polish. I think a nice wide stripe of brown helps to darken the carpet. That may take more dye. Take as many threads as you want the stripe in width and keep it all the way through your carpet so the stripes will be even. Boil each color by itself. I striped 25 yards like this and it looked fine.—Mrs. W. H. M.

THE HELPFULNESS OF POETRY.

BY MARY ROLOFSON.

"Such songs have power to quiet the restless pulse of care,
And come like the benediction that follows after prayer."

We all know what kind of songs these are, we have read them, we have memorized them, we have hidden them away in our hearts for safe keeping to be used when we needed them.

And we have needed them and have gone to our treasure-house and drawn them forth in all their undimmed beauty. How sweet, how precious, how comforting they were—these songs fresh from the soul of the poet, full of sympathy and tenderness, and peace, and strength. Some of them we learned when we were children and these are more beautiful than when we put them away because we understand them better now. Some we came across when we were particularly troubled and they comforted us, and we put them away gratefully, deeply conscious of how much we owed to them and to their author. Some we took to our hearts at a time of bereavement, when our sorrow lay heavily upon us, and we walked thru the valley of the shadow to their music, sweet, melodious strains that soothed and helped to heal.

And sometimes these poems will not stay hidden away waiting for us to seek them out. Now and then one comes straying forth like a timid child hoping for a welcome. Have you not been in the midst of your daily work—ironing, per-

haps—and all at once some helpful line or couplet comes feeling its way into your throat? Or, maybe, it is a bright, little fancy, with nothing to recommend it to your notice but its beauty, and that is quite enough, and it comes dancing and laughing, and smiles up at you from the ironing board. It cheers you like the smile of a friend and you are so glad it came to you. Your work goes faster and easier.

Let us get into the habit of using these helps as we go along. Many are the mechanical devices for making work easier and for making life more comfortable and enjoyable. Why should we not add to them the inspiring and uplifting influences of poetry—such poetry as has "power to quiet the restless pulse of care?" As you bend over the mending-basket, or the wash tub, tired, and perhaps disheartened, look into the storehouse of your heart and see if there are not some beautiful thoughts lying there that ought to be taken out and used. You will find them there, surely. If you do not, if that treasure-house is empty, begin as soon as possible to enrich it with the choicest thoughts that the poets have given us, and you will find your heart growing lighter and your step firmer. You will realize that you are being lifted up to a higher place where you can look down upon vexations and your burdens and up with humility and trust into the face of God.

THE NEW "NEATNESS" VS. THE OLD.

BY HELEN MORGAN.

WHO is entitled to be called a neat, tidy housekeeper?

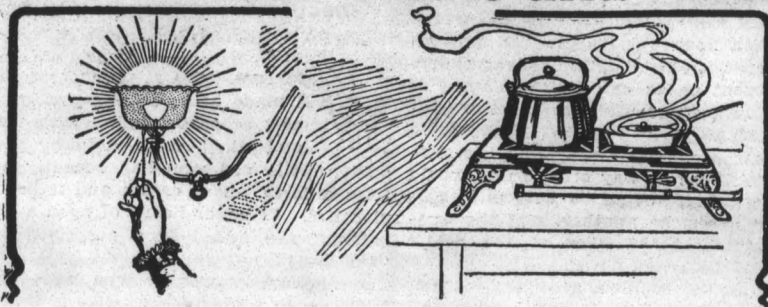
This question, if asked 40 years ago, would have elicited a reply somewhat like this: "The woman who gets her work done up and out of the way early in the morning, and isn't 'mussing around' all day with it; whose house is always in good order, with a place for everything and everything in its place; who keeps her tinware scoured and her stoves blackened and her kitchen floor scrubbed and spotless; the woman in whose home there is no dust nor dirt nor grime to be seen anywhere; such a one properly may be called a neat, tidy housekeeper."

The same question, if put to well-informed persons at the present time, would bring very different answers from the one given above and these replies would show how standards have changed, and how our idea of what is included in the words neatness and cleanliness have expanded. To merit the high title of a neat, tidy housekeeper is a more serious undertaking for the woman of today than it was for her mother or her grandmother.

When we say now that a house is clean and well-kept we mean that the sanitary conditions in it and around it are what they should be; that thorough investigation would not discover a damp, musty cellar, or a foul-smelling drain, or dark, unaired sleeping apartments. The old neatness concerned itself mainly with pleasing the eye and tickling the palate; the new neatness acknowledges the vigilant, sensitive nose as the highest master.

The new neatness condemns the old-fashioned carpet as a dust and germ holder, and favors matings or finished floors with rugs. The new neatness fears not the fading of upholstery and draperies, but freely admits the sunshine, which is nature's own disease router and disinfectant.

While striving to live up to the more exacting requirements of the new order, the modern woman of necessity rejects as unimportant certain tenets of house-keeping faith that her grandmother regarded as essential. It used to be considered the very acme of neatness to make a bed just as soon as the sleeper was out of it. The modern mind insists that a thorough airing is of far more consequence than so speedy a putting of the room to rights. The modern woman does not scrub and scour and polish as much as did the faithful devotee of the old order, but she is more strenuous in her insistence upon clean air and pure drinking water. The grandmother was neat because it was the thing to be neat; all nice, refined people were neat, and neatness and cleanliness were grateful to the aesthetic sensibilities of all such people. The granddaughter, who is the matron of today, is neat in a broader, deeper, and more thorough manner. The considerations which influenced her grandmother are still potent, and further, she realizes that intelligent neatness and cleanliness are vitally necessary to health and well-being.

Home Made Gas
From Crushed Stone and Water

JUST suppose, when company comes, you could pull a little chain and turn on a flood of light in a cluster of globes hanging from the parlor ceiling.

And suppose, a little later you could pull another little chain and turn on a beautiful light in a colored dome hanging over the dining room table.

Pull still other chains and turn on lights in your bed rooms, your kitchen, or your cellar.

Pull another and fill your barn with light that would show up every hair, straw or buckle as plain as these things would show by daylight.

And suppose you made all the gas for these lights yourself, right on the place.

Made it so easy that the work required only fifteen minutes of your time once a month.

Make it so cheaply that the light costs you no more than kerosene.

And suppose you actually used this same home-made gas as fuel for cooking on hot days, or when you are in a hurry.

In other words, suppose you had a little acetylene gas plant built for country home use.

A plant that would mean no more washing or breaking of chimneys—no soot or grease to fight with—no wicks to trim, no oil to spill or burn.

Picture the advantages in your mind's eye—stop and think of the safety, comfort, satisfaction and happiness it would bring to your family.

Do this and you will understand why it is that over one hundred and seventy-six thousand farm houses have been equipped with Acetylene gas to date.

Consider also that these one hundred and seventy-six thousand country home owners simply followed the lead of over twenty million city people who have used gas so long that they don't know what an oil lamp looks like.



CRUSHED STONE

Like these city friends, you wouldn't keep your oil lamps if city gas could be piped to your place, and this new rural gas, "Acetylene," beats city gas all hollow in forty ways.

Unlike city gas, your Acetylene will not be poisonous to breathe—you can sleep all night in a room with an open burner with no injurious effects whatever.

Volume for volume, your Acetylene will give ten times more light than your city cousin gets from the best city gas.

Then when you use it as a fuel, your Acetylene will be delivered right in your cooking appliance, where it will supply heat on tap that you can regulate with a thumb screw.

The crushed stone you will use in making your Acetylene is known commercially as Union Carbide, and is sold at factory prices and shipped direct to you from the company's own warehouse located in your district.

Union Carbide won't burn—can't explode, and will keep for years in any climate.

Once a month you will have to drop a few pounds of Union Carbide in one part and a few gallons of water in another part of a small tank-like machine that sets in your basement or in an out-building.

Genuine Acetylene is produced from just Union Carbide and plain water.

Won't you let us tell you how little it will cost to make this wonderful light and fuel yourself for your home and all the other buildings on your place?

Write us how many rooms you have, and we will send you free some mighty interesting booklets and give you an estimate as to the cost of a machine and lighting fixtures suited to your requirements.

Just address UNION CARBIDE SALES CO., Dept. C—34 Adams St. Chicago, Illinois.

Shoes of Quality Are Stamped M.D. Wells Company

For Mother and the Girls

Every shoe bearing this famous name on the sole, assures its wearer the greatest dollar for dollar value possible, whether style or comfort is looked for. No shoe, at any price, has more style—fewer shoes afford as much solid comfort and long wear.

There are **Wells Shoes** for every member of the family—mother, father and the children. They are conscientiously made by expert workman, of the best leathers money can buy—all leather, no substitutes—and the soles are genuine oak tanned.

If you are one of those who appreciate a hundred cents worth of shoe value for every dollar you spend, insist on being supplied with **Wells Shoes**.

If shod in WELLS' SHOES, you are "well shod."

Free We have laid aside a very interesting booklet for every reader of this paper, entitled "Mother, Father and the Children." Yours is waiting for you—send for it today.

If your dealer cannot supply you with **Wells Shoes**, you will be rewarded by writing **M. D. Wells Company, Chicago.**

For Father and the Boys

No. 750
Price, \$8.50

"ENTERPRISE"

BONE, SHELL AND CORN MILL

Just the mill for farmers, poultrymen and all who keep poultry. Cracked grain, ground bone and shell is the proper food to feed to increase the egg production, and with one of these mills you can turn grain and waste materials into food for your poultry.

The "ENTERPRISE" Mill is thoroughly reliable. Runs easily, is strong, durable and doesn't get out of order. Look for the name "ENTERPRISE" on the machine you buy. Mill shown in cut weighs 60 lbs. Grinds DRY bones, Oyster, and other shells. Capacity 1½ bushels of corn per hour.

Illustrated catalogue free. Our famous recipe book, the "ENTERPRISING HOUSEKEEPER," sent anywhere for 4c in stamps.

THE ENTERPRISE MFG. CO., Dept. 42 PHILADELPHIA, PA.

Potatoes now selling for 15c. Dealers claim over three-fourths of crop in this locality has been marketed; Considerable complaint of their not keeping well. Apples bring 75c; butter, 25c; eggs, 22c; dressed pork, 11c. Almost impossible to find cattle fit to butcher. Hay is retailing from feed stores at \$20 a ton.

Eastern Oceana Co., March 9.—Our winter still lingers in the lap of spring. We have had steady sleighing now for three months and people are still going with sleighs. March came in like the proverbial lamb, but has turned cold with the fields nearly all covered with snow. Where the ground got bare our wheat, rye and clover looks promising; also the alfalfa. Very few cattle and hogs on feed. Farm help rather scarce and wages high. Potatoes are a drug on the market, selling for 20c per bu. Corn scarce, selling at 45c per crate of ears; seed corn \$1.50 per bu; wheat, \$1.15; oats, 55c; rye, 72c; apples, 25@50c; butter, 20c; eggs, 17c. Farmers are still picking up a few logs for lumber, although this country is short of timber, many farmers having to buy wood to burn.

Branch Co.—Wheat came from beneath its winter coat of ice and snow early in March, looking fairly well, but the continued freezing and thawing of the past week has been anything but favorable for it. Auction sales are numerous and live stock and hay selling high. But little stock being fed for market and the local market for corn very low, millers being the only buyers and they offer but 52c for 70 lbs. of ear corn, but it is noticeable that they retail the same—according to their market reports in the local papers, at 80c per bushel, and coarse corn meal at \$30 per ton, bolted meal at 3½c per lb., while a bushel of corn will buy two or three lbs. of corn products in the form of breakfast foods. Still the former is blamed for the high cost of living. Wheat, \$1.14; oats, 44c; butter, 22c; eggs, 18c; cloverseed, \$6@6.50; hogs, alive, 8@9c; dressed, 11½@12½c.

Northern Isabella and Southern Clare Co.'s, March 12.—Snow nearly gone and the roads in bad condition for hauling loads. Wheat has wintered well, as it has been covered all winter with snow and good prospects for a crop. Hundreds of farmers are disappointed in the price of beans as they expected \$2.50 per bu., at this time of year after holding them all winter. Better demand for potatoes than a month ago. This locality is not considered a potato country. Auction sales numerous and everything selling well, especially horses, hogs and cows.

Kent Co., March 9.—March came in like a lamb all right, and has given us but two frosts to date, good ones to sow grass seed on. Fall sown grain and young clover proved the winter to have been an ideal one for these crops, though the winter was unusually cold and long. Stock is in good condition and selling high as ever. Milch cows and good farm horses are especially good sellers. No spring pigs to date and few hogs of any kind.

Gratiot Co., March 8.—This county experienced some of its coldest weather during the last week in February. The 26th dawned with a rising thermometer and the day was rainy. From Feb. 27 to March 6, p. m., extremely warm weather prevailed. The snow and ice disappearing as by magic, but without any very high water. Wheat is laid bare for the first time since early December, and is as green and fresh as though it had never seen frost. Coarse feed is in good demand. Stock of all kind sells at a high figure at auction, and hogs are always a premium.

Genesee Co., March 4.—With the beginning of this month warmer weather has prevailed and everybody seems pleased to see it. We have had sleighing since about Thanksgiving, with but very few days interruption. Indeed, some sleighs have been out continuously, altho there has been occasionally a day when the snow in the road was pretty thin. Judging from present indications a prosperous season is ahead. Farmers are encouraged from the past and are making no great complaint over the high prices. Farm help is as scarce as ever and comes at no less a wage. Land values are steadily advancing to keep pace with other things. Increasing difficulty in getting help is adding to the number of tenant farmers every year. Market quotations: Wheat, \$1.21; corn, 66c; beans, \$2.05; oats, 43c; potatoes, 45c; butter, 25c to 30c; eggs, 26c; dressed hogs, 11½c; dressed beef, \$6.50@7; baled hay, \$12@14. Loose hay reached the high water mark yesterday with \$20 per ton paid on the local market for choice timothy.

RAILROAD INSTITUTES.

Supertintendent Taft, of Michigan Farmers' Institutes, announces the following "railroad institutes," from March 28 to April 2, inclusive:

Monday, March 28.—Holt, 8:05 a. m.; Mason, 10:00 a. m.; Leslie, 1:00 p. m.; Rives, 2:30 p. m.; Jackson, 4:00 p. m.

Tuesday, March 29.—Concord, 8:00 a. m.; Homer, 9:30 a. m.; Tekonsha, 11:00 a. m.; Union City, 1:10 p. m.; Colon, 2:30 p. m.; Centerville, 4:00 p. m.

Wednesday, March 30.—Three Rivers, 8:00 a. m.; Jones, 9:30 a. m.; Vandalia, 11:00 a. m.; Cassopolis, 1:15 p. m.; Barron Lake, 3:00 p. m.; Niles, 4:10 p. m.

Thursday, March 31.—Pokagon, 8:00 a. m.; Dowagiac, 9:30 a. m.; Glenwood, 11:00 a. m.; Decatur, 1:10 p. m.; Lawton, 2:30 p. m.; Mattawan, 4:00 p. m.

Friday, April 1.—Comstock, 8:00 a. m.; Galesburg, 9:30 a. m.; Ceresco, 11:00 a. m.; Marshall, 1:15 p. m.; Albion, 2:40 p. m.; Parma, 4:00 p. m.

Saturday, April 2.—Eaton Rapids, 8:00 a. m.; Charlotte, 9:30 a. m.; Nashville, 10:50 a. m.; Hastings, 1:30 p. m.; Middleville, 3:00 p. m.; Caledonia, 4:15 p. m.

The train will stop from 60 to 90 minutes for an institute at each of the places scheduled above. After a number of short addresses the exhibits in the baggage cars will be explained and demonstrated.

Our New Double Wing Drop Head Cabinet

THIS DOUBLE WING DROP HEAD CABINET is an entirely new patented feature, made exclusively for our Minnesota Model "A" Sewing Machines. A place for everything you use—the most compact and attractive of all sewing machine cabinets. Right wing velvet lined to protect tools and attachments. Left wing partitioned to hold thread, patterns, fashion books, etc. When closed these wings lock automatically over the four full size drawers. No key required.

The Minnesota Model "A" is a machine with the WORKS. The head is as perfect a piece of mechanism as a watch and is guaranteed by us for twenty years. It is the same size as all high grade family sewing machines for which dealers and agents ask from \$40.00 to \$60.00.

THE WOODWORK OF ALL OUR VARIOUS STYLES OF MODEL "A" SEWING MACHINES, as well as the style shown here, is of the very best grade of quarter sawed oak throughout. The stand of the Minnesota Model "A" is not only the best looking stand on the market, but is the easiest to keep clean and the lightest running.

OUR SPECIAL SEWING MACHINE CATALOG is a book you must have if you contemplate buying a sewing machine. It shows all our various models, many of them in colors just as they appear; illustrates the various parts, explains fully our twenty-year guarantee, our three months' trial contract, and describes the uses of all the special attachments. Fill out this coupon carefully with your name and address. The very day we receive it we will send you a free copy of our special Sewing Machine Catalog.

Sears, Roebuck and Co.
Chicago - - Illinois



Send us your order for No. 26T1102 Minnesota New Model "A" Drop Head Automatic Lift Sewing Machine. Shipped from Dayton, Ohio. Weight, about 125 pounds.
Price.....\$18.95

Complete Set of Attachments, 75 Cents Extra.

Sears, Roebuck and Co.
Chicago, Ill.

S. M.—O. & Mich. Farmer.

Name.....

Postoffice.....

R. F. D. No. State

P. O. Box No. Street and No.

Our Catalog describes Sewing Machines from \$8.45 upward. Fill out the coupon.

\$18⁹⁵

\$948 Profit from 4 Acres 3 Crops a Year Without Wearing Out Soil

An Alabama farmer planted four acres of land in Irish potatoes. They netted him \$468—or \$117 an acre. He then planted the same four acres in sweet potatoes which netted \$480. Total, **\$948 Profit on Four Acres of Land**, which yielded in addition a thrifty forage crop.

Come Now and See Such Crops Growing While Your Land is Still Frost-Bound

Learn what the energetic Northern farmer can do in a country where there averages 312 working days a year. No long winters to tax your resources—and land so rich that you can raise three crops a season without wearing it out.

Banner Grass Country of the United States—There is ten months' good pasture during the year. Stock thrives on grazing alone; there is always abundant water, no drouths and no blizzards. You don't need costly barns for winter housing—you needn't spend time and money raising feed to carry your stock through the winter.

Send for Our Booklets and read hundreds of

G. A. PARK, Gen'l Immigration and Industrial Agt., Louisville & Nashville R.R., Room 213, Louisville, Ky.

letters giving the actual experiences of men who have left the high-priced land and rigorous climate of the North for the fertile lands of Tennessee, Mississippi, Alabama, Georgia and Western Florida.

Low Round-Trip Rates are in effect the first and third Tuesdays of March and April. Your opportunity to see this beautiful blooming region while your farm is still in Winter's grip, and learn what great profits can be made on even a few acres in the Great Central South where the summers are not oppressive and the winters no colder than Northern October.

Dollars Made in Sawing

With this powerful two Horse-Power Fairbanks-Morse Gasoline Engine and Saw Rig. It is a wonderfully fast worker—saws through hard wood withease, and fairly flies through soft wood and poles. With this outfit you can saw about 15 cords or more of wood per day, and the only expense will be a few cents for gasoline—less than one-sixth of a hired man's wages. Then your neighbors must have their winter's supply of wood, and it's so quick and easy to make money with a reliable Fairbanks-Morse outfit that it's like throwing away dollars to be without one.

It's a high grade outfit, and you can depend on it under all conditions. No other engine has so much extra horse-power, or is so strong and durable, while the price is so reasonable that every farmer can own one.

Mention this publication and send at once for our 64 page Engine Book No. HA 601

Fairbanks Morse & Co.
Chicago Detroit

Or address nearest of our 27 Branch Houses



CURE DISCOVERED FOR CATARRH AND ASTHMA

Let Me Send You a
50c Package
FREE!



Write
me today

If one of these dreadful diseases has you in its clutches, if doctors, douches, smoke powders, inhalers, etc., have failed to cure you—if your days are one long agony and your nights sleepless torment—if friends turn away from your sickening, foul breath—than take heart and write ME. My wonderful "Home Treatment", discovered after years of careful study, has cured when everything else has failed. It will instantly cleanse your system of impurities, relieve dripping in throat and heal scabs in nose. It will set you free from racking coughs, awful fainting spells, frantic gasping, nauseating hawking and spitting, and it will kill consumption germs which breed rapidly in the foul slime of catarrh and asthma.

Send your name and address today and I will mail you a 50c package of my Remedy with book, in plain wrapper, both absolutely FREE. Don't put it off. Write today.

T. GORHAM,
601 Gorham Bldg. Battle Creek, Mich.

ALWAYS mention the MICHIGAN FARMER when you are writing to advertisers.

SAL VET

Destroys Worms—Aids Digestion

It's at marketing time that you reap the full benefit of feeding Sal-Vet. It rids your stock of worms and all worm troubles—prevents loss of lambs by parasitic infection—enables you to raise healthier lambs, finer sheep with more wool and better mutton. Especially effective against stomach worms in sheep and hogs.

We Prove it Before You Pay — Send No Money

Sal-Vet saves your shoats and enables you to raise big hogs. It makes bigger steers and puts cows in condition to give more and richer milk. It will keep the digestive organs of all your stock in perfect condition, so that what they eat goes to make profit for you.

Animals cannot fatten and thrive when they have worms. These parasites eat the feed that should go to nourish the animal. Get rid of the worms—Sal-Vet kills worms. It will put your stock in prime condition and keep them immune from parasitic infection.

Sal-Vet is a highly medicated salt that is easily fed—the animals take it so readily that with it they doctor themselves. Every cent you spend for Sal-Vet will be returned to you ten fold by your stock.

Feed it to your stock and get the big profits your hard work entitles you to.

PRICES—100 lbs., \$5.00; 200 lbs., \$9.00; 300 lbs., \$13.00.

From New Hampshire Agricultural Experiment Station.

"We have obtained wonderful success in the use of 'Sal-Vet' for destroying stomach worms. Since we began its use, our entire flock of sheep have become much healthier and more vigorous. I cannot praise it too highly."

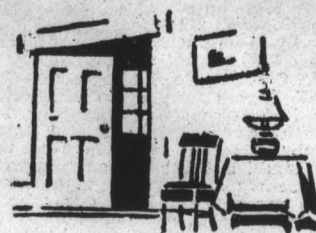
(Signed) T. R. ARKELL, Prof. Animal Husbandry.

We will send you enough Sal-Vet for sixty days use Don't pay us if it fails to do what we claim. Just fill in the coupon and mail it to us.

The S. R. Fell Company,
Dept. M.F. Cleveland, O.

CUT OUT—MAIL TODAY
Send me enough Sal-Vet to feed my stock 60 days. If it does what you claim I will remit. If not you are to cancel the charge. M. F. March 19, 1910

Name.....
P. O.
Shipping Sta.
State.....
No. of Sheep.....
Cattle.....
Hogs.....



SHERWIN

PAINTS & VARNISHES

S-W Commonwealth Barn Red

A bright, handsome red for painting barns, outbuildings, fences, corn cribs, etc. It works freely under the brush, has great covering capacity and wears well. Is put up full U. S. Standard Measure, and so is more economical than the many short measure, poor quality barn paints sold at a low price.

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Sherwin-Williams Paint (Prepared) S W P

is made of Pure White Lead, Pure Zinc and Pure Linseed Oil, with the necessary coloring pigments and driers. All combined in correct proportions with the aid of powerful machinery of our own special design. There is no better paint made than S. W. P. It will cover more surface, look better and last longer than cheap mixed paints or hand mixed lead and oil. Put up full U. S. Standard Measure.

S-W Wagon and Implement Paint

A durable oil gloss paint made especially to withstand hard usage. There is the greatest economy in keeping your wagons and implements well painted, to protect the wooden parts against dampness and cracking and the iron and steel parts against rust. It brushes out evenly, covers well and is very permanent in color. Your farm equipment will last twice as long if kept well painted and will give you better service all the time.

S-W Brighten Up Finishes

Under this label we put up a complete line of paints, varnishes, stains and enamels for every use or surface in and around the home. Not one product for all purposes, but a number of different products, each one made especially for a particular purpose and the best for its purpose. Tell your local S-W Agent what you want to finish and he'll give you a Brighten Up Finish that will do the work well.

PRICE Cut to **\$83.50**

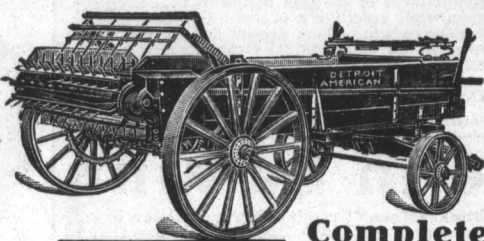
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Made in all sizes. More steel used than in any other spreader; cylinder all steel; steel rake and end gate; simplest feed—six changes made from seat; the only direct chain drive—no gears; lightest in draft. Prove it. Try one free. Our Wagon-Box Spreader, \$42.50 Freight Paid

Delivered in Michigan and only a trifle more



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in other states. The limit of big value in a box spreader. Guarantee, trial, credit, all go on this, too. **FREE BOOKS**—The best published on value of manure; how to spread, etc., and how to buy at the right prices on the right terms. Shows and prices the original Tongueless Disc and the finest line of Cultivators, too. Write for book today. American Harrow Co., 1013 Hastings St., Detroit, Mich.

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This is the Engine for Pumping Large Quantities of Water for Watering Stock, Irrigating, Draining, Pumping out Mines, Quarries, Excavations or other places where a compact, powerful and low priced pumping outfit is wanted.

This Back-Gear Pumping Engine with Stuffing Box, as shown, ready to receive pipe connections, and capable of raising 260 barrels of water per hour to an elevation of 25 feet, 66 barrels to an elevation of 100 feet, or proportionate quantities to any height. F. O. B. Chicago

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A complete pumping outfit assembled in one compact machine ready to receive the well connections and go to work just as soon as they can be attached. Cylinder, pipe and rod all fitted ready to screw together, for any lift from 25 feet to 100 feet, furnished for \$45.

This is an emergency outfit which can be shipped on an hour's notice and can be set up in complete working order within an hour after it is received.

This engine was specially designed for pumping. It can also be used for running a grinder, fodder cutter, saw or other light machinery; but where operating machinery is the principal work, our \$75.00 2-H. P. general purpose engine with fluted cooler is cheaper and more suitable. Larger sizes at proportionately low prices.

If you need a small engine to operate "any old hand pump" our \$37.50 pumping engine is just the thing. Remember that these engines are manufactured by the company which made the steel windmill business. Thousands of these engines are in use.

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Come in stamped sheets of finest Bessemer Steel, 6 to 10 feet long, covering width 24 inches, either galvanized or painted. Can be laid with hammer and nails. No soldering—no tarring—no trouble. \$10,000 Guarantee Bond Against Lightning. We will refund amount paid for our steel shingles if your roof is damaged by lightning. Buy at Factory Prices. We are largest makers of iron and steel roofing and pay the freight on all Steel Shingles: Plain, Corrugated, V-Crimp Roofing; Imitation Brick Siding, etc. Send for our lowest factory prices delivered, also for free catalog No. 250. Write today.

The Edwards Manufacturing Co. 220-250 Lock Street [11] Cincinnati, Ohio



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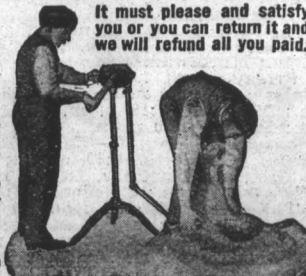
DON'T SHEAR SHEEP WITH HAND SHEARS

It is slow—you don't get all the wool—you cut the sheep—and you make hard work of it for yourself. Do your shearing with this **STEWART No. 8 SHEARING MACHINE**

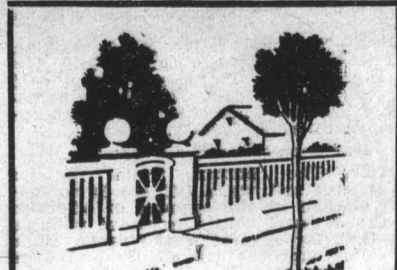
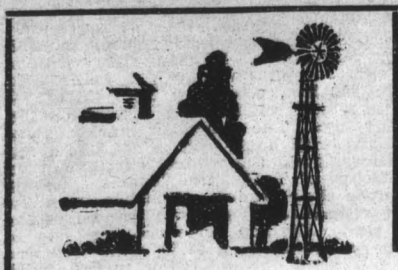
This is the great enclosed gear shearing machine you hear so much about. Every gear is file hard, is enclosed, protected and swims in oil, doing away almost entirely with friction and wear. This machine turns easy, shears fast and gets all the wool. IT MEANS 90 CENTS WORTH MORE WOOL FROM EVERY SHEEP.

Your dealer can supply this machine, or send \$8.00 and we will ship C.O.D. for balance. Write for our new 1910 book, "More and Better Wool." It is FREE. Send for a copy today.

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It must please and satisfy you or you can return it and we will refund all you paid.



WILLIAMS

FOR USE ON THE FARM



S-W Metalastic No. 2

A metal protective paint all ready to use. Is made of a combination of Graphite and other materials and Pure Linseed Oil, and has greater durability than many of the so-called graphite paints. It dries rapidly and gives a hard, impervious paint film that effectively protects the metal beneath. Just the paint to use on the metal parts of windmills, farm machinery, metal roofs, spoutings, iron fences and, in fact, on all metal surfaces exposed to the weather.

S-W Buggy Paint

will make your old buggy look like new. This is a Varnish Gloss Paint made to stand wear and tear and outside exposure. It colors and varnishes at one operation and vehicles finished with it can be washed without injuring the gloss or durability of the paint. S-W Buggy Paint is a high quality product and should not be confused with the many cheap mixtures on the market. Comes in full measure cans; nine handsome colors.

S-W Creosote Paint

is a moderate priced paint, just the paint for painting farm buildings, outhouses, fences, bridges, etc., in fact for protecting all kinds of rough wooden structures from the wear and tear of the weather. It is of splendid quality, spreads easily under the brush and wears well. It contains Creosote, which prevents the decay of the wood and has a very sanitary effect in buildings where poultry, horses and stock are kept.

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Write today for the one you need

"Paints and Varnishes for the Farm"

Full of valuable information as to the uses and economies of Paints and Varnishes.

"S-W Brighten Up Booklet"

Full of suggestions of how to use paints and varnishes to decorate and improve the appearance of the interior of your home.

Booklets on Insecticides

Get larger crops, get more fruit and better fruit by the judicious use of insecticides. Write for pamphlets on the following insecticides and their uses:

S-W Paris Green.
S-W New Process Arsenate of Lead.
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You have been seeing my ads all fall and winter—read some of them, may be. Meant some time to write me to find out what all my advertising was about. But you put it off—couldn't find a pencil maybe. Had to quit reading and go out to do some chore or other—and you clean forgot it.

Now—Right Now you're thinking about it again. Don't stop till you

Write Galloway today about a Manure Spreader



Lowest prices ever offered. Try it 30 days on your own farm.

Freight Prepaid

Made in 5 Sizes

Why? The best reason is that this is the year when you will need a spreader if you ever did. Manure in piles all around the barn and feed lots. Worth lots of money. Can't afford to waste a bit. Takes an awful lot of time. Get a spreader of Galloway. Best investment you ever made in machinery.

Galloway makes all his promises, all his statements, claims and challenges in black and white. A man can read 'em running. Now, what about the other fellow? Makes him write it in the contract. Does he say his spreader will beat the Galloway before breakfast? Make him write it in the contract. Does he claim his spreader is made of better material than the Galloway? Make him write it in the contract.

I will write any of my agreements—I do write 'em, every one of 'em. Ever think of that? Think it over then. If the Galloway were not exactly as good or better than I claim it is, could I hope to escape utter smash-up? You know I couldn't stay in business with my written claims and agreements if I didn't have the spreader to back me up.

Well then, won't you take my advice, accept my invitation, fix it any way you choose but get your name onto a slip of paper or a postal card and send it to me. Not next week—not next Saturday—not tomorrow. Do it quick. Now is the time—Now. Then you'll be ready for the spring work.

By the way, ask for my proposition. It might pay for your spreader before the year is half done.

WM. GALLOWAY President **WM. GALLOWAY COMPANY** 647 Galloway Sta. WATERLOO, IOWA



FREE This book contains barrelsful of good information about Manure Spreaders and how to make money with them. Ask us for one—they are FREE!

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are the best made, best grade and easiest riding buggies on earth for the money.

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we have been selling direct and are **The Largest Manufacturers in the World** selling to the consumer exclusively.

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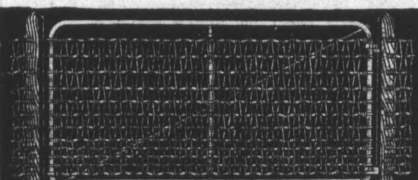
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Many Styles. Sold on trial at wholesale prices. Save 20 to 30 per cent. Illustrated Catalogue free. Write today.

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Cedar fence posts For Sale.
Write **CARR & BARRETT**, Butterfield, Michigan.

STUMPS—Farmers having stumps to blast this spring should write **THE MEREDITH POWDER CO.**, Richmond Ind., for prices on Dynamite, Caps and Fuse.



4.50 Buys Best All-Steel Farm Gate
Cheap as wood. Lasts a lifetime. 12 ft. long; 54 in. high. Resists all kinds of stock. Also Farm Fence, Ornamental Wire and Wrought Iron Fences. Catalogue free. Write for Special Offer.
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GET A BROWN RUST PROOF FENCE

Don't buy wire fencing with thin, cheap galvanizing. Brown Fences with all No. 8 Coiled Spring Double Galvanized Wires stands and wears like a stone wall. Easy to put up—Requires fewer posts—Won't sag or bag down. 160 Styles.

15 TO 35c PER ROD DELIVERED—WE PAY THE FREIGHT.

Fences for Hogs, Sheep, Horses, Cattle, Lawns, etc.

Special Poultry, Garden and Rabbit proof fences with extra close 1 inch spacings at the bottom.

You save money and get a better fence.

Send for Free Sample and test it with acid, or file it and see how thick the galvanizing, then compare it with any wire fence in your neighborhood. Catalog free

The BROWN FENCE & WIRE CO.

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14 1/2 Cents a Rod

For 22-in. Hog Fence; 15 1/2-c for 20-inch; 13 1/2-c for 18-inch; 12 1/2-c for 16-inch; 11 1/2-c for 14-inch; 10 1/2-c for 12-inch; 9 1/2-c for 10-inch; 8 1/2-c for 8-inch; 7 1/2-c for 6-inch; 6 1/2-c for 4-inch; 5 1/2-c for 3-inch; 4 1/2-c for 2-inch; 3 1/2-c for 1 1/2-inch; 2 1/2-c for 1-inch; 1 1/2-c for 1/2-inch; 1/2-c for 1/4-inch. Sold on 30 days trial. 30 rod spool idea! Best Wire \$1.55. Catalogue free.
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FENCE Strongest Made

Made of High Carbon Double Strength Coiled Wire. Heavily Galvanized to prevent rust. Have no agents. Sell at factory prices on 30 days' free trial. We pay all freight. 37 heights of farm and poultry fence. Catalog Free.
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Let us send you an actual sample of Page Woven Wire Fence and our valuable Quarter Centennial Catalog Free. See the real Page Wire! Examine the method of weaving the wonderful Page Knot—the Knot that can't come off! Study the many styles of Page Fence and the Panorama of Pictures showing extreme tests which this splendid fence withstands. Read how, in our great mills and factories, we put elasticity, tensile strength and durability into High Carbon, Basic Open Hearth Steel Wire. Learn what this means in economy. Specified by U. S. Government as standard of quality. Approved by a million farmers. Write at once for Free Sample of Page Fence and Grand Quarter Centennial Catalog.

Page Woven Wire Fence Co.
Box 2644 Adrian, Mich.

MARKETS

DETROIT WHOLESALE MARKETS.

March 16, 1910.

Grains and Seeds.

Wheat.—The trade largely depends upon weather conditions and so prices are fluctuating according as the weather favors the growing crop or damages it. The past week over a large portion of the winter wheat region the plant has suffered considerably because of a lack of moisture and as a result of this condition the downward trend of prices, noted a week ago, has been checked and advances made, the average price for the week being above that for the previous period. On Tuesday a slight reaction took place when the weather report promised rain for the more important wheat states. This with the heavy receipts caused a slight falling off. The bulls, however, were encouraged by the improved demand for cash wheat from millers who, a week ago, were slow for the first time since last fall in taking cash grain. The visible supply shows an increase of nearly a million bushels. One year ago the price for No. 2 red wheat was \$1.20 per bushel. Quotations for the week are as follows:

	No. 2	No. 1	Red.	White.	May.	July.
Thursday	1.19 1/4	1.19 1/4	1.20 1/4	1.08 3/4		
Friday	1.19 1/4	1.19 1/4	1.20 1/4	1.08 3/4		
Saturday	1.19 1/4	1.19 1/4	1.20 1/4	1.09		
Monday	1.20	1.20	1.21 1/4	1.10		
Tuesday	1.19 1/4	1.19 1/4	1.20 1/4	1.08 3/4		
Wednesday	1.19	1.19	1.20	1.08 3/4		

Corn.—Corn values have improved during the past week. The influence of the wheat trade is partly responsible for the change. Weather conditions are swaying the traders, however, because in the southwest as soon as farmers can go upon the land for spring work the delivery of corn will be checked. Generally, during the past week receipts have been liberal at primary elevators. The local trade is firm and quiet. One year ago the price for No. 3 corn was 67 1/2¢ per bushel. The visible supply shows a decrease of about half a million bushels. Quotations for the week are as follows:

	No. 3	No. 3
	Yellow.	White.
Thursday	61	62
Friday	61	62
Saturday	61	63
Monday	62 1/2	63 1/2
Tuesday	62 1/2	63 1/2
Wednesday	62 1/2	63 1/2

Oats.—This grain is being exchanged on practically the same basis as prevailed a week ago. The grain is scarce and there is a good demand for it, which demand will likely be augmented when farmers begin their spring operations. The receipts have not been large. The local trading is quiet. One year ago the price for No. 3 white oats was 55 1/2¢ per bushel. Quotations for the week are as follows:

	Standard.	No. 3.
Thursday	47 1/2	47
Friday	47 1/2	47
Saturday	47 1/2	47
Monday	47 1/2	47
Tuesday	47 1/2	47 1/4
Wednesday	48	47 1/4

Beans.—There is no trading in beans on the Detroit market. Transactions at smaller points in the state are reported and at prices higher than the local quotations. It appears that parties holding beans have a high opinion of their value and do not readily part with them. Cash beans were quoted on this market a year ago at \$2.40 per bushel. Following are the nominal quotations for the past week:

	Cash.	April.
Thursday	\$2.15	\$2.18
Friday	2.15	2.18
Saturday	2.15	2.18
Monday	2.15	2.18
Tuesday	2.15	2.18
Wednesday	2.15	2.18

Cloverseed.—In the past two weeks the price for prime spot seed has declined a full dollar per bushel and also has dropped off a quarter of that amount. The market is not as active as it usually is for this season, which indicates that less of the seed got away from the farmers and primary elevator men than usual. Prime spot seed a year ago was selling at \$5.35 per bushel, and also at \$8. Quotations for the past week are:

	Prime Spot.	Mar.	April.
Thursday	\$7.60	\$7.60	\$7.25
Friday	7.40	7.40	7.25
Saturday	7.10	7.10	7.00
Monday	7.00	7.00	7.00
Tuesday	7.00	7.00	7.00
Wednesday	6.90	6.90	6.90

Rye.—Market dull and lower. No. 1 is quoted at 80¢ per bu., which is a decline of 2 1/2¢.

Visible Supply of Grain.

	This week.	Last week.
Wheat	26,419,000	25,783,000
Corn	13,882,000	14,357,000
Oats	9,391,000	9,039,000
Rye	642,000	734,000
Barley	2,840,000	2,917,000

Flour, Feed, Provisions, Etc.

Flour.—Flour market is steady with the values given a week ago. Quotations as follows:

Clear	\$5.30
Straight	5.80
Patent Michigan	6.15
Ordinary Patent	5.95

Hay and Straw.—Hay is taking on a little firmer feeling while straw remains unchanged. Quotations are: No. 1 timothy, new, \$18; No. 2 timothy, \$17; clover, mixed, \$17; rye straw, \$8.50; wheat and oat straw, \$7 per ton.

Feed.—Prices are steady on last week's basis. Carlot prices on track: Bran, \$27 per ton; coarse middlings, \$27; fine middlings, \$30; cracked corn, \$27; coarse corn meal, \$27; corn and oat chop, \$25 per ton.

Potatoes.—The outlook for sellers is not encouraging. Prices are lower, receipts liberal and demand fair. Michigan grown are selling in car lots at 25@30¢ per bu.

Provisions.—Family pork, \$29@30; mess pork, \$26.50; medium clear, \$28@29; pure lard, 15 1/4¢; bacon, 18@19¢; shoulders, 15¢; smoked hams, 17@17 1/2¢; picnic hams, 13 1/4¢.

Hides.—No. 1 cured, 10¢; No. 2 cured, 9¢; No. 1 green bulls, 8¢; No. 1 green calf, 14¢; No. 2 green calf, 13¢; No. 1 cured calf, 15¢; No. 2 cured calf, 14¢; No. 1 horsehides, \$3.50; No. 2 horsehides, \$2.50; sheepskins, as to wool, 50¢@52.

Dairy and Poultry Products.

Butter.—The butter trade remains steady with last week. There is no material change in the amount of offerings and the demand continues about nominal with that for several weeks past. Elgin and other markets are steady and firm. It is not expected that prices will be materially lower until there is a larger production of milk. Quotations are: Extra creamery, 31¢; first do., 30¢; dairy, 21¢; packing stock, 20¢ per lb.

Eggs.—The price of fresh eggs, cases included, one year ago was 18¢ and two years ago, 15 1/2¢ at this date. The offerings now coming to the market are small compared with those of other seasons and accounts, in part, for the higher price now prevailing. The higher prices are also the outcome of a heavy demand because of the almost prohibitive prices charged for other food products. The quotation for fresh receipts, cases included, is 21¢ per dozen.

Poultry.—The poultry trade is not active and the stock in the hands of dealers is small. Prices for most kinds are higher. Quotations for the week are: Live—Spring chickens, 16 1/2¢; hens, 16 1/2¢; geese, 14@15¢; turkeys, 17@18¢. Dressed—Chickens, 17@18¢; hens, 17@18¢; ducks, 19@20¢; geese, 15¢; turkeys, 20@24¢.

Cheese.—Michigan, late made, 15@15 1/2¢; Michigan, fall made, 16 1/2@17¢; York state, 18 1/2¢; limburger, Wisconsin, 18¢; New York, 19¢; bricks, 18 1/2@19¢; Swiss, domestic block, 20¢; Swiss loaf, 22@23¢.

Calves.—Higher. Choice to fancy, 11@13¢; ordinary, 10@10 1/2¢ per lb.

Fruits and Vegetables.

Apples.—Market firm and active. Spy, \$3.50@4; Baldwin, \$3@3.50; common, \$2@3 per bbl.

Cranberries.—Cape Cod berries selling at \$2 per bu.

Onions.—Domestic, 70@75¢ per bu; Spanish, 1.65 per crate.

Cabbage.—1.75@2 per bbl.

Vegetables.—Beets, 60¢ per bu; brussels sprouts, 20¢ per qt; carrots, 50¢ per bu; cauliflower, 1.75@2 per bu; celery, 35@40¢ per doz; eggplant, 1.25@2.50 doz; green onions, 12¢ per doz; green peppers, 60¢ per bu; lettuce, hothouse, 12@13¢ per lb; mint, 25¢ per doz; parsley, 20¢ per doz; radishes, 25¢ per doz; spinach, 70@75¢ per bu; turnips, 60¢ per bu; watercress, 35¢ per doz; wax beans, \$5 per bu; pieplant, 50¢ per doz.

OTHER MARKETS.

Grand Rapids.

The potato market continues very slow, with prices about 2¢ lower than last week's quotations. Red kidney beans are a little firmer, farmers being offered \$2.70 this week. White beans are practically unchanged, machine screened bringing on a basis of \$1.90. No special change, except a 2¢ advance in wheat, is noted in grain prices, the mills paying farmers as follows: Wheat, \$1.14; corn, 62¢; oats, 48¢. Dressed hogs continue firm at 12 1/2¢. Poultry is firm and very scarce, prices for dressed stock ranging as follows: Turkeys, 18@20¢; chickens, 16@17¢; hens, 15@16¢; ducks, 16@17¢; broilers, 1 1/4@2 lbs. each, 30@32¢. The glass farmers report a 2¢ advance in lettuce.

Boston.

Wool.—During the past week there was a firmer tone in the local wool market due chiefly to the strength shown at the London auction sale. Farmers here and in the west are holding out for high values to dealers looking for their new crop. Some Michigan quarter-blood fleeces were sold last week at 23¢ per lb. Quotations for leading domestic grades are as follows: Ohio and Pennsylvania fleeces—No. 1 washed, 40@41¢; delaine, washed, 39@40¢; XX, 37@38¢; half blood combing, 36@37¢; three-eighths blood combing, 36@37¢; quarter blood combing, 35¢; delaine, unwashed, 29@30¢; fine unwashed, 27@28¢. Michigan, Wisconsin and New York fleeces—Fine unwashed, 25@26¢; delaine unwashed, 31@32¢; half blood, unwashed, 35@36¢.

New York.

Butter.—Creamery goods steady with last week. Western factory firsts, 22@23 1/2¢; creamery specials, 33¢.

Eggs.—The obstinate demand for eggs has put prices a little higher than last week. Trade is active. Western firsts quoted at 25¢ per doz.; do. seconds, 24@24 1/2¢.

Poultry.—Dressed, quiet, with prices on a par with those of a week ago. Western chickens, broilers, 16@17¢; fowls, 14@15 1/2¢; turkeys, 18@23¢.

Chicago.

Wheat.—No. 2 red, \$1.19@1.21; May, \$1.13 1/4; July, \$1.06 1/4.

Corn.—No. 3, 61@61 1/4¢; May, 64 1/2¢; July, 66 1/4¢ per bu.

Oats.—No. 3 white, 44 1/2@46 1/4¢; May, 45 1/2¢; July, 43 1/4¢.

Butter.—Creameries firm at last week's figures, while dairies are higher. Undergrades in best supply and hardest to move. They are: Creameries, 26@31¢; dairies, 22@27¢.

Eggs.—Receipts are heavy, and the effort to prevent an accumulation of stocks has brought a material decline in values. Prime firsts, 21 1/4¢; firsts, 20 1/4¢; at mark, cases included, 19¢ per doz.

Hay and Straw.—Hay strong at former values, while straw is unchanged. Quotations: Timothy, choice, \$18.50@19; No. 1, \$17@18; No. 2 and No. 1 mixed, \$16@17; No. 3 and No. 2 mixed, \$12@15.50; rye straw, \$8.50@9.50; oat straw, \$7.50@8; wheat straw, \$7@7.50.

Potatoes.—Receipts liberal and market slow at a price decline of 1@3¢. Choice to fancy quoted at 35@37¢ per bu; fair to good, 32@34¢.

Beans.—Unchanged. Choice hand-picked, \$2.20 per bu; fair to good, \$2.15; red kidneys, \$2.80@3.10.

Elgin.

Butter.—Market firm at 31¢ per lb., which is the quotation of a week ago. The sales for the week amounted to 432,200 lbs., compared with 432,900 for the previous week.

THE LIVE STOCK MARKETS.

Buffalo.

March 14, 1910.

(Special report by Dunning & Stevens, New York Central Stock Yards, East Buffalo, N. Y.)

Receipts of sale stock here today as follows: Cattle, 125 loads; hogs, 7,200; sheep and lambs, 9,000; calves, 1,400.

The cattle market today was active on all grades and prices ranged from 15@25¢ per hundred higher than last Monday. The market closed strong and we look for the trade to improve right along. The best fresh cows and springers sold strong but the common grades were only steady.

We quote: Best export steers, \$7.50@7.90; best 1,200 to 1,300-lb shipping steers, \$6.85@7.25; best 1,100 to 1,200-lb. do., \$6.50@7; medium 1,050 to 1,100-lb. butcher steers, \$6@6.35; light butcher steers, \$5.50@6; best fat cows, \$5.50@6; fair to good do., \$4.75@5.25; trimmers, \$3@3.50; best fat heifers, \$6.25@6.50; fair to good do., \$5.50@6; common do., \$4.75@5.50; best feeding steers, 950 to 1,000 lbs., \$5@5.50; best feeding steers, 800 to 900 lbs., \$4.75@5.25; 700 to 750-lb. dehorned stockers, \$4.50@5; 600 to 650-lb. do., \$4@4.50; little common stockers, \$3.50@4.50; best bulls, \$6@6.50; bologna bulls, \$5@5.50; stock bulls, \$4@4.50; best milkers and springers, \$55@65; fair to good do., \$45@50; common do., \$25@40.

The hog market today was fairly active with the best yorkers mixed, medium and heavy selling 25¢ higher and pigs and light yorkers 30@40¢ higher than Saturday. There are a few decks of the york weights going over unsold.

We quote: Heavy, mixed, medium, yorkers, pigs, \$11.20@11.25; roughs, \$10.10@10.30; stags, \$8.25@8.50.

The lamb market opened active with most of the best lambs selling at \$10.50. The market closed firm and if receipts are not too heavy we look for steady prices the balance of the week.

We quote: Best lambs, \$10.40@10.50; fair to good, \$10@10.35; culls, \$9.25@9.75; skin culls, \$7@7.75; yearlings, \$9@9.50; wethers, \$8.50@8.75; ewes, \$7.75@8; cull sheep, \$4@5; best calves, \$10@10.50; fair to good do., \$9@9.75; cull to common, \$7.50@8.50; heavy, \$4@5.50.

Chicago.

March 14, 1910.

Received today 22,000 34,000 12,000
Same day last year .. 27,547 63,503 21,214
Received last week .. 54,482 86,101 53,214
Same week last year .. 51,963 164,204 72,383

A new week starts off today, with cattle active at firm to 10¢ higher prices, the advance being in the choicer class, which are scarcer than ever. A sale was made of eight fancy 888-lb. heifers at \$6.90. Hogs opened about 5¢ lower, but soon firmed up and sold as high as last Saturday, heavy packing and selected shipping lots averaging 255 to 400 lbs. going at \$10.70@11, mixed packing and butcher hogs averaging 195@255 lbs. at \$10.55@10.95, light packing and selected shipping hogs averaging 140 to 195 lbs. at \$10.55@10.85, pigs at \$9.75@10.50 and stags at \$10.65@11.25. Sheep and lambs were scarce and 10@25¢ higher, woolled lambs selling at \$8@10 and clipped flocks at \$7.50@9. Woolled sheep were in strong demand, wethers being salable at \$7.50@8.25, ewes at \$4@8, bucks at \$6@6.75 and yearlings at \$8@9. Shorn wethers brought \$7.50.

Cattle were again in moderate supply and in strong general demand last week, and sales were made at the highest figures of the year, there being further advances of 10@25¢, shared in by butcher stock, as well as by beef steers. Steers went chiefly at \$6@7.65, the commoner class of light steers on the feeder order selling at \$5.20@6.25, while the better class of weighty shipping beefs brought \$7.40@8.40. Cattle of good weight, which had been selling nearer to the short-fed kind than usual, advanced the fastest, being wanted by local packers and eastern shippers. The feeder buyers purchased a good share of the cattle which had little flesh and could be bought at \$5.50@6, some going as high as \$6.15. A few common feeders sold as low as \$4.90, while stockers were taken at \$3.50@5.75. Most of the cattle taken for feeding went east, although there was a fair demand from Illinois feeding districts. Butcher stock had an excellent demand, cows and heifers being wanted at \$3.80@6.65, while canners and cutters were good sellers at \$2.50@3.75, bulls being active and higher at \$3.60@6.10. A noteworthy sale was that of 31 prime heifers that averaged 1,206 lbs. at \$6.65. Milk and springers were in moderate supply and demand at unchanged prices, sales ranging at \$25@65 per head. Calves were marketed only moderately and had a good outlet, buyers paying \$3.50@10 per 100 lbs. for inferior heavy to prime light vealers. As is apt to be the case, there was a reaction in the beef cattle market by Thursday, and slower buying caused weakness, many sales showing a decline of about 10¢. While there are exceptions to the rule, especially when cattle are scarcer than usual on Monday and Wednesday, the market is ordinarily more animated on those days than at other times.

Hogs were in meager supply last week, and prices experienced the wildest advances imaginable, the market being greatly excited, with eastern shippers competing for the choicer consignments. Local packers were eager buyers, having great need of hogs for their fresh meat trade, as well as for converting into lard and cured meats, and the yard speculators also took a hand, being large buyers and sellers on the ups and downs of the market. However, it was mainly an advancing market, with the rise as much as 30

@35¢ in a single day, and the aggregate advance was the most striking ever recorded in a week. The recent showing of provision supplies was an extremely bullish factor, combined stocks in Chicago, Milwaukee, Kansas City, Omaha and St. Joseph on March 1 being only 170,293,332 lbs., compared with 157,742,940 lbs. a month earlier and 324,674,406 lbs. a year ago. The provision market sympathized with hogs, and prices had lively advances, amid the wildest excitement on the Board of Trade, the "shorts" rushing to cover their trades. This has been the most remarkable year ever known in the hog trade, the top price the first day of January having been \$8.50, while \$10 was the top price the following month, with the top so far for March at \$11. Hogs have been averaging in weight 211 lbs., compared with 203 lbs. a year ago, 211 lbs. two years ago, and 226 lbs. three years ago.

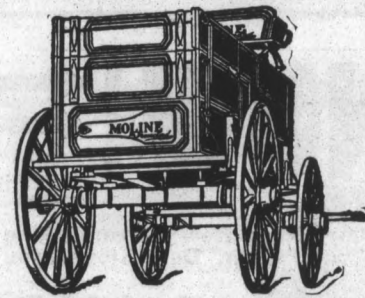
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THIS IS THE LAST EDITION.

In the first edition the Detroit Live Stock markets are reports of last week; all other markets are right up to date. Thursday's Detroit Live Stock markets are given in the last edition. The first edition is mailed Thursday morning. The first edition is mailed to those who care more to get the paper early than they do for Thursday's Detroit Live Stock market report. You may have any edition desired. Subscribers may change from one edition to another by dropping us a card to that effect.

DETROIT LIVE STOCK MARKETS.

Thursday's Market.

March 17, 1910.

Cattle.

Receipts, 1,421. Market 20¢ to 25¢ lower than last week on good grades. Common cattle of all kinds no higher.

We quote: Extra dry-fed steers and heifers, \$6.50@7; steers and heifers, 1,000 to 1,200, \$5.75@6.50; steers and heifers, 800 to 1,000, \$5.25@5.75; steers and heifers that are fat, 500 to 700, \$4.75@5.25; choice fat cows, \$4.75@5.50; good fat cows, \$4.50@5; common cows, \$3.50@4; canners, \$2.75@3.25; choice heavy bulls, \$5@5.75; fair to good bolognas, bulls, \$4.75@5.25; stock bulls, \$4.50; milkers, large, young, medium age, \$4@4.50; common milkers, \$18@30.

Bishop, B. & H. sold Newton B. Co. 4 heifers av 640 at \$4.50, 12 do av 744 at \$5.50, 5 cows av 926 at \$3.25, 2 bulls av 665 at \$4.25, 5 butchers av 834 at \$4.75, 7 do av 786 at \$5.75, 2 cows av 1,010 at \$3.75, 10 steers av 762 at \$5.65, 3 do av 800 at \$5.60, 2 cows av 875 at \$4; to Sullivan P. Co. 3 cows av 800 at \$4.50, 1 bull weighing 1,440 at \$5, 4 steers av 650 at \$5, 8 do av 644 at \$5, 5 do av 1,020 at \$6.25, 4 heifers av 782 at \$4, 6 cows av 1,100 at \$5.10, 3 do av 977 at \$3, 7 steers av 1,080 at \$6.25, 6 do av 961 at \$6.35, 5 cows av 1,000 at \$5.50, 2 do av 915 at \$4, 6 steers av 1,055 at \$6.40, 2 cows av 775 at \$4.25, 1 bull weighing 1,630 at \$5.50, 1 do weighing 1,800 at \$5.75; to Bresnahan 18 heifers av 535 at \$4.75; to Frons 4 cows av 1,035 at \$3.90, 1 do weighing 1,050 at \$3.90; to Mich. B. Co. 20 steers av 933 at \$5.35; to Sullivan P. Co. 14 do av 733 at \$5.40, 3 do av 977 at \$6.10, 3 cows av 760 at \$3; to Newton B. Co. 2 do av 925 at \$3, 7 do av 920 at \$5.15, 20 steers av 1,107 at \$6.40; to McCormick 5 do av 1,106 at \$6.65, 7 cows av 1,074 at \$4.65; to Sullivan P. Co. 1 bull weighing 1,280 at \$4.75, 3 cows av 1,033 at \$4.75, 1 steer weighing 1,130 at \$6.25; to Regan 7 heifers av 600 at \$4.65; to Hammond, S. & Co. 6 steers av 940 at \$6.10, 2 do av 725 at \$5; to Mich. B. Co. 2 cows av 1,160 at \$5, 1 do weighing 780 at \$3; to Sullivan P. Co. 1 bull weighing 1,750 at \$5.50, 1 do weighing 1,050 at \$5; to Newton B. Co. 3 steers av 1,033 at \$6, 5 do av 820 at \$5, 15 do av 760 at \$5.50, 7 do av 1,043 at \$6.25, 10 butchers av 753 at \$4.50, 5 cows av 1,018 at \$3.75, 5 do av 816 at \$2.75.

Spicer & R. sold Sullivan P. Co. 15 steers av 1,144 at \$6.75, 2 do av 835 at \$5.50, 3 do av 977 at \$6.75, 25 do av 1,200 at \$6.85, 14 do av 871 at \$5.60, 5 do av 834 at \$4.75, 1 bull weighing 1,200 at \$5.50, 4 do av 1,012 at \$4.75, 3 cows av 835 at \$3.25; to Breitenback Bros. 24 butchers av 716 at \$4.40; to Goose 8 do av 300 at \$3.85; to Mich. B. Co. 5 cows av 940 at \$4; to Cooke 25 steers av 868 at \$6; to Kamman B. Co. 15 butchers av 854 at \$5.50; to Fry 4 do av 555 at \$5, 6 do av 657 at \$5; to Regan 1 heifer weighing 580 at \$4.50, 1 do weighing 480 at \$4.25; to Newton B. Co. 22 butchers av 751 at \$5.50, 12 do av 730 at \$4.65; to Schlischer 1 cow weighing 700 at \$3, 3 do av 810 at \$3, 1 do weighing 950 at \$3.50, 5 do av 926 at \$3.85; to Hammond, S. & Co. 12 butchers av 754 at \$5.65; to Rattkowsky 5 cows av 840 at \$3.50.

Haley & M. sold Newton B. Co. 17 steers av 1,034 at \$6.25; to Sullivan P. Co. 4 do av 662 at \$4.75, 4 do av 832 at \$5.50, 16 butchers av 625 at \$4.85, 1 bull weighing 680 at \$5, 2 steers av 725 at \$5, 1 do weighing 1,250 at \$6; to Marx 3 do av 810 at \$5.90; to Mich. B. Co. 1 heifer weighing 990 at \$5.25, 1 cow weighing 1,030 at \$4.10; to Bresnahan 3 heifers av 443 at \$4.50; to Gerish 21 steers av 1,022 at \$6.50; to Goose 6 heifers av 313 at \$3.75; to Rattkowsky 3 cows av 977 at \$3.85; to Breitenback Bros. 13 steers av 954 at \$6.25; to Schlischer 1 heifer weighing 620 at \$5; to Sullivan P. Co. 1 cow weighing 900 at \$2.75, 4 do av 812 at \$4.

Weeks sold Sullivan P. Co. 2 bulls av 1,600 at \$5.25.

Same sold Marx 2 cow and steer av 1,025 at \$5.20.

Same sold Thompson 2 heifers av 725 at \$5.25.

Sharp & W. sold Bresnahan 2 cows av 785 at \$3.75.

Weeks sold same 3 canners av 877 at \$2.85.

Sharp & W. sold Newton B. Co. 2 cow and bull av 815 at \$4.80.

Breuer sold same 25 butchers av 740 at \$4.80.

Sharp & W. sold Kamman 3 steers av 800 at \$5.70.

Eddy sold same 16 steers av 856 at \$5.70, 3 butchers av 820 at \$5, 4 cows av 900 at \$3.

Tubbs & Son sold Lingeman 10 butchers av 852 at \$5.25.

Veal Calves.

Receipts, 844. Market steady at last week's prices on common. Best grades, 50¢ higher. Best, \$9.50@10; others, \$4@8.75; milch cows and springers dull and 5¢ lower.

Roe Com. Co. sold Nagle P. Co. 15 av 115 at \$7, 35 av 130 at \$9.50, 5 av 250 at \$5; to Hammond, S. & Co. 4 av 140 at \$7, 10 av 140 at \$9, 6 av 145 at \$9.50.

Sharp & W. sold Newton B. Co. 1 weighing 110 at \$9.

Tubbs & Son sold same 2 av 135 at \$9, 14 av 135 at \$9, 10 av 140 at \$8.50, 3 av 125 at \$7.

Spicer & R. sold Sullivan P. Co. 2 av 120 at \$5.50, 1 weighing 250 at \$4.50, 1 weighing 300 at \$5.50, 19 av 140 at \$9.25, 1 weighing 360 at \$4.50, 2 av 135 at \$9.25, 11 av 130 at \$9, 37 av 140 at \$9.25; to

Mich. B. Co. 2 av 100 at \$6, 7 av 125 at \$8.75; to Sullivan P. Co. 3 av 120 at \$5.75. Waterman sold Street 10 av 140 at \$9.75.

Lovewell sold Burnstine 9 av 140 at \$9.90.

Downing sold same 13 av 130 at \$9. Fenton sold same 4 av 130 at \$6, 7 av 125 at \$9, 7 av 120 at \$9.

Carmony sold Hammond, S. & Co. 10 av 144 at \$9.

Belheimer sold same 14 av 150 at \$9.75, 2 av 170 at \$7.

Bishop, B. & H. sold Nagle P. Co. 11 av 140 at \$9.50, 12 av 130 at \$9, 19 av 115 at \$8.50, 27 av 150 at \$10, 23 av 120 at \$8.50; to Mich. B. Co. 4 av 250 at \$5, 4 av 200 at \$5, 29 av 140 at \$9.25.

Bergen & W. sold Sullivan P. Co. 9 av 145 at \$9.25, 1 weighing 130 at \$6.

Duelle sold same 20 av 115 at \$8.50.

Sheep and Lambs. Receipts, 3,399. Market 50¢ higher than last week on all grades.

Best lambs, \$9.75@10; fair to good lambs, \$9.50@9.75; light to common lambs, \$8.50@9; fair to good sheep, \$7@7.50; culls and common, \$4.50@5.50.

Bishop, B. & H. sold Breitenback Bros. 22 lambs av 63 at \$9, 1 sheep weighing 80 at \$6, 3 lambs av 50 at \$6, 23 do av 70 at \$6; to Nagle P. Co. 60 do av 53 at \$9.25, 195 do av 94 at \$10, 23 do av 67 at \$9, 172 do av 80 at \$9.75, 53 av 82 at \$9.75; to Breitenback Bros. 28 do av 70 at \$8.50; to Eschrich 36 do av 55 at \$8.50, 20 do av 50 at \$8.50; to Fitzpatrick Bros. 11 do av 70 at \$9.50, 10 sheep av 100 at \$6.50.

Sharp & W. sold Newton B. Co. 38 lambs av 70 at \$9, 18 sheep av 80 at \$6.

Cheney & H. sold same 20 lambs av 65 at \$8.50.

Fenton sold same 7 lambs av 68 at \$9.

Bordine sold Nagle P. Co. 218 lambs av 78 at \$9.75, 261 do av 82 at \$9.85.

Dancer & K. sold same 122 lambs av 77 at \$9.80, 11 sheep av 80 at \$4.50.

Waterman sold same 111 lambs av 85 at \$9.40.

Roe Com. Co. sold Nagle P. Co. 28 sheep av 110 at \$7, 16 lambs av 60 at \$8.50.

Bergen & W. sold Sullivan P. Co. 22 lambs av 70 at \$9, 1 sheep weighing 100 at \$7.

Lovewell sold Parker, W. & Co. 51 lambs av 65 at \$9.50.

Spicer & R. sold Nagle P. Co. 120 lambs av 75 at \$9.50; to Mich. B. Co. 131 do av 77 at \$9.85, 26 do av 58 at \$8, 25 sheep av 90 at \$7, 160 lambs av 70 at \$9.85, 30 sheep av 92 at \$4.75, 37 lambs av 53 at \$8.25; to Sullivan P. Co. 142 do av 75 at \$9.80, 10 do av 64 at \$8.50, 5 sheep av 90 at \$5.50; to Nagle P. Co. 85 lambs av 90 at \$9.65, 2 do av 125 at \$9.50, 6 sheep av 120 at \$6.25.

Hogs. Receipts, 3,057. Market steady at last week's prices on all grades.

Range of prices: Light to good butchers, \$10.60@10.75; pigs, \$10.25; light yorkers, \$10.60@10.70; stags, 1/2 off.

Bishop, B. & H. sold Hammond, S. & Co. 74 av 140 at \$10.50, 414 av 165 at \$10.70, 119 av 165 at \$10.65, 749 av 190 at \$10.75, 42 av 150 at \$10.55, 97 av 160 at \$10.60.

Spicer & R. sold Parker, W. & Co. 140 av 190 at \$10.75, 50 av 165 at \$10.70.

Haley & M. sold same 112 av 190 at \$10.75, 80 av 180 at \$10.70, 120 av 170 at \$10.65, 40 av 150 at \$10.55.

Roe Com. Co. sold same 150 av 190 at \$10.75, 21 av 170 at \$10.70, 207 av 160 at \$10.65, 64 av 150 at \$10.60.

Bishop, B. & H. sold same 64 av 195 at \$10.75, 120 av 150 at \$10.55, 129 av 180 at \$10.70.

Friday's Market.

March 11, 1910.

Cattle.

The run of cattle at the Michigan Central yards Friday was very light and the market steady with Thursday on all grades.

Best steers and heifers, \$6@6.25; steers and heifers, 1,000 to 1,200, \$5.75@6; steers and heifers, 800 to 1,000, \$5.50@5.90; steers and heifers that are fat, 500 to 700, \$5@5.25; choice fat cows, \$5; good fat cows, \$4.50@4.75; common cows, \$3.25@3.50; canners, \$3; choice heavy bulls, \$5.25; fair to good bolognas, bulls, \$4.75@5; stock bulls, \$4@4.25; milkers, large, young, medium age, \$4@4.50; common milkers, \$25@35.

Bishop, B. & H. sold Sullivan P. Co. 20 steers av 939 at \$5.90, 2 cows av 925 at \$3.50, 2 do av 1,175 at \$5, 3 do av 773 at \$3.25, 5 do av 1,086 at \$4.50, 2 do av 790 at \$3, 2 do av 830 at \$4.50, 1 do weighing 1,110 at \$3, 3 do av 903 at \$3.50, 1 bull weighing 770 at \$4.50, 10 butchers av 820 at \$5.40.

Veal Calves.

The veal calf trade was full steady on anything good, but common thin grades were 50¢ lower and will continue to decline, as the butchers have no use for them. Keep them on the farm if possible. Best grades, \$8.75@9.50; others, \$4@8.

Stage & C. sold Hammond, S. & Co. 19 av 150 at \$9.

Lucke sold same 10 av 132 at \$9.25.

Bishop, B. & H. sold Breitenback Bros. 3 av 215 at \$6.50.

Same sold Rattkowsky 3 av 150 at \$9.40, 1 weighing 120 at \$8.

Sheep and Lambs. The run of sheep and lambs was light and the market strong at Thursday's prices.

Best lambs, \$9.25@9.50; fair to good lambs, \$8.75@9.25; light to common lambs, \$7.50@8; fair to good sheep, \$6.50@7.50; culls and common, \$3@4.50.

Haley & M. sold Breitenback Bros. 13 lambs av 70 at \$9, 1 sheep weighing 150 at \$5.

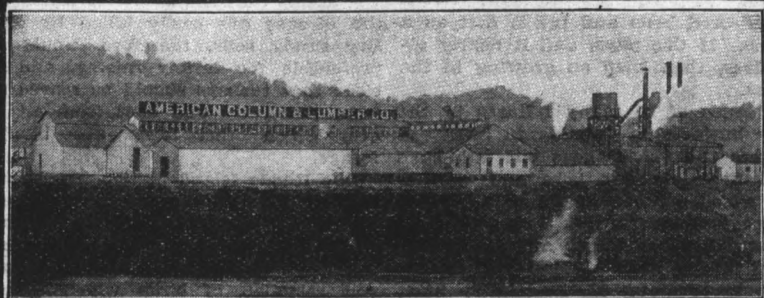
Hogs. In the hog department the trade was full steady with the opening on Thursday. The Sullivan Packing Co. took everything on sale but one bunch, which went to Parker, Webb & Co.

Light to good butchers, \$10.60@10.70; pigs, \$10@10.25; light yorkers, \$10.40@10.50; stags, 1/2 off.

Bishop, B. & H. sold Sullivan P. Co. 158 av 170 at \$10.60, 69 av 180 at \$10.65, 51 av 200 at \$10.70.

Lucke sold Parker, W. & Co. 64 av 170 at \$10.60.

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AMATITE is making good. Here is a typical letter about it. We get many such letters. They all tell the same story of satisfied customers. Read this one.

"Gentlemen:

We have in use about an acre and a half of *Amatite Roofing* on our plant located in St. Albans, W. Va.

We are thoroughly satisfied in every way with the Roofing. It makes a good tight, waterproof covering. We found that it was easily applied, and presents a nice bright appearance. It was only after careful consideration that we decided to use *Amatite*, as it is very important that our roofs be tight, owing to the large quantities of expensive lumber and turned mill work that we carry in stock at all times.

Yours very truly,

AMERICAN COLUMN & LUMBER COMPANY

W. W. Stark, President."

Notice the size of the roofs—an acre and a half. Imagine the work and the cost of painting that big area if an ordinary ready roofing had been used.

Amatite, has a mineral surface which needs no painting whatever. Year after year in all weather that roof will give perfect service without any care or attention. An ordinary ready roofing would have required painting at least four times during the next ten years; and it costs something to paint an acre and a half of roofing four times. Figuring over a period of 10 years, the Amatite roof probably will cost this Company from 1/2 to 2/3 less than ordinary roofing which requires regular painting.

This no-paint feature of Amatite is very important. It is just as important for the man who uses ten rolls as for the man who uses ten thousand. The proportion of saving is the same.

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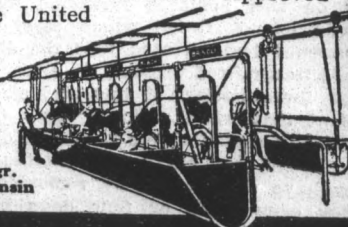
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POULTRY AND BEES

POULTRY AS A BUSINESS.

Of late I have frequently been asked the question, can I make a "go" of poultry? There is but one answer—it is in the business if it is in you.

The man who has only a theoretical knowledge of it had best go slow. Get a few well-bred hens and try it first as a side line. If this pays, and it nearly always does, then keep on growing in the business.

The cause of so many failures in the poultry business is "getting in bad." A man gets the "bee," goes out and buys an old flock of hens here and another there, which are usually for sale because they are poor layers. He thus gets a big flock of failures together and he usually quits with one trial.

Now, in speaking of the poultry business, I mean of keeping poultry for eggs as all the rest is more or less incidental. If forty well-bred hens of a good laying strain will produce \$200 worth of eggs in a year at a total expense of \$50 or less, it is easy to figure the result in gain. In my opinion this would not be an extraordinary yield of eggs. But if you get a big flock of "has beens," and harvest a big crop of cholera, bowel disease and other ailments incidental to old age and inbreeding, instead of a harvest of eggs, why—it is still easier to figure the result in loss.

You must start right and take care of the details. Be thorough. Don't be like a certain prominent judge in this state who once tried farming and he went out to hoe corn. When he came to a poor, weedy hill he said it was not worth hoeing, and when he came to a good one it did not need it, so he went up the row swimmingly. However, he quit farming and studied law.

If you will not tend to your hens when they are not laying, because it doesn't pay, nor tend to them when they are laying because you don't need to, you had better quit before you begin.

One thing experience has taught me: there is a time for laying and a time for rest with any flock of hens. If you force them to lay out of season you will pay for it two to one in a decreased season's yield. I say, breed well, feed well, house well, but leave egg stimulants alone. If you doubt this take two lots of hens and stimulate one and simply nourish the other. Then keep account of their egg yield in dollars and cents for a year and see for yourself.

Isabella Co. Wm. J. COOPER.

MUST THE TURKEY FLOCK BE ISOLATED?

Latest information touching the cause and spread of blackhead among turkeys would seem to make it clear that this disease threatens the future of turkey raising as at present conducted on most farms. It is now claimed that in some sections of the country considerably more than one-half of the total number of turkeys that are hatched succumb to this disease. This rather alarming condition has led to a careful study of this somewhat mysterious ailment and, while no very definite conclusions have been reached, it is now believed that blackhead is caused by the same germ or bacillus which is responsible for the trouble known as white diarrhoea in chicks. Assuming this to be true, the question is, do turkeys contract the disease from running with the chickens?

It is clear that if satisfactory evidence supporting this claim can be produced, the remedy, so far as turkeys are concerned, lies in separating them from the general farm poultry flock and growing them upon soil which has not been contaminated by chicks which have suffered from that form of bowel trouble known as white diarrhoea. Some evidence bearing on this point is furnished by the Rhode Island station where careful experiments demonstrated that the disease is not transmitted through the egg. From these investigations it was also strongly evident that while ordinary fowls (hens, guineas, pheasants, etc.), rarely die of the disease they carry and distribute it. They have shown that by removing the turkey eggs three or four days before hatching, wiping them with a cloth moistened with 90 per cent alcohol, finishing the incubation in a machine, keeping the poults for a few weeks on a clean board floor, and placing them in a location remote from ordinary fowls, the losses from blackhead prior to reaching maturity may

be reduced from a maximum of 80 per cent to about 15 to 20 per cent. This indicates that the turkeys must be kept away from ordinary fowls as much as possible, and, in view of the tendency of partially wild turkeys to roam and remain at a considerable distance from the farm buildings, it is possible that the supposed benefit from introducing wild blood is thus partially explained, and that it is not wholly due to greater immunity of the wild turkeys.

It seems that the parasites which cause the disease are easily killed by drying. Dry sandy soils, therefore, would seem preferable for turkey raising, and it is clear that turkeys should be reared away from the house and kept from all fields over which other fowls are likely to forage.

The Rhode Island station has been endeavoring to obtain a strain of turkeys which shall be highly resistant or immune to the ravages of this disease. It is endeavoring to attain this end by a continued selection of birds which evince a greater degree of resistance, by the preserving and perpetuating of such individuals as may show a marked natural immunity, or by the introduction and infusion of wild blood, in this way possibly increasing the vitality and resistance of the race. In order to identify the eggs it was found necessary to trapnest the laying hens. Three trapnests, constructed along practically the same lines as those used for other fowls, were used throughout the laying period with complete success, the turkey hens taking to them with great readiness. So long as the young turkeys were kept away from the regular yards there was little or no loss from blackhead, but when they were brought up to the breeding pens the disease soon began its ravages and many of the young birds died of blackhead, which continued epidemic throughout the winter. This showed that whereas the percentage is probably not quite so great in turkeys which are not exposed to the disease until they are several months old as when they are exposed immediately or soon after hatching, nevertheless they can not be said to become immune to the disease at any age.

DON'T NEGLECT SPRING CLEANING.

As early as the weather will permit there should be a thorough cleaning up of poultry houses and yards. Even though they have been well cared for during the winter, a general overhauling will be found advisable. Throughout the winter we may have cleaned out the droppings every day or two, changed the nesting material frequently and used insect powder freely. Nevertheless there is need of a more thorough cleaning when spring opens, and it is advisable to begin early. I like to do the job in one day, for the hens are always more or less disturbed by work in the houses and it is apt to affect their laying for a few days.

In cleaning up I begin with the nests. For convenience in moving them about they are made in sections of three each. To clean them they are removed to the yard some distance from the houses and the straw is lighted after a little kerosene has been poured over it. By this means any lice that may be hidden in the cracks will be driven out. Seldom are there any in my nests, but when I find them oil is poured along the entire length of the nest boxes where the boards join. A few minutes burning rids the boxes of all vermin. After they have been burned out a heavy coat of whitewash should be applied inside and out. Then put fresh clean straw in them, first placing a layer of air slaked lime or wood ashes in the bottom.

In the poultry houses there should be no unnecessary articles. Besides the roosts and nests nothing but the drinking fountain, dust, grit and feed boxes have place there, and through the summer these latter utensils are best kept outside. But sometimes the poultry house is made a store-room for odds and ends that accumulate and for which there is no immediate use. Tossed in a heap in the poultry house they are soon covered with filth and become infested with vermin. If there are any of these disease-breeding heaps in your poultry houses clean them out if you want healthy chickens. Sweep every vestige of trash from the houses, then give the whole interior a coat of carbolyzed whitewash. Applied by means of a spray pump it can be made to reach the cracks and crevices better than if put on with a brush.

Don't neglect the under side of the perches. There is where the hundreds of little red mites collect during the day. Unlike lice, they remain on the hens only at night, but from dark until dawn they

ARE YOUR KIDNEYS WEAK?

Thousands of Men and Women Have Kidney Trouble and Never Suspect It.

Nature warns you when the track of health is not clear. Kidney and bladder trouble compel you to pass water often thru the day and get up many times during the night.

Unhealthy kidneys cause lumbago, rheumatism, catarrh of the bladder, pain or dull ache in the back, joints or muscles, at times have headache or indigestion, as time passes you may have a sallow complexion, puffy or dark circles under the eyes, sometimes feel as tho you had heart trouble, may have plenty of ambition but no strength, get weak and lose flesh.

If such conditions are permitted to continue, serious results are sure to follow; Bright's disease, the very worst form of kidney trouble, may steal upon you.

Prevalency of Kidney Disease.

Most people do not realize the alarming increase and remarkable prevalence of kidney disease. While kidney disorders are the most common diseases that prevail, they are almost the last recognized by patient and physicians, who usually content themselves with doctoring the effects, while the original disease constantly undermines the system.

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If you feel that your kidneys are the cause of your sickness or run down condition, begin taking Dr. Kilmer's Swamp-Root, the great kidney, liver and bladder remedy, because as soon as your kidneys begin to get better, they will help the other organs to health. In taking Swamp-Root, you afford natural help to Nature, for Swamp-Root is a gentle, healing vegetable compound—a physician's prescription for a specific disease.

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Incubators are finished in natural colors showing the high grade lumber used—no paint to cover inferior material. If you will compare our machines with others offered at anywhere near our price, we will feel sure of your order. Don't buy until you do this—you'll save money. It pays to investigate the "Wisconsin" before you buy. Send for the free catalog today, or send in your order and save time.

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Wisconsin Incubators are made of California Redwood. Lamps are galvanized iron. O. K. Burners. Taylor Thermometers.

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Woodlawn, Mich.
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Western boundary line Minn., Iowa, Missouri, north of south line of Tenn., 100 lbs. or more.

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Each Roll 108 Sq. Feet

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We pay you the price on our list. No more. No less! Write for price list and tags. H. M. PETZOLD, 1038 S. Claremont Ave., Chicago, Ill.

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A man who has a weak and impaired stomach and who does not properly digest his food will soon find that his blood has become weak and impoverished, and that his whole body is improperly and insufficiently nourished.



DR. PIERCE'S GOLDEN MEDICAL DISCOVERY makes the stomach strong, promotes the flow of digestive juices, restores the lost appetite, makes assimilation perfect, invigorates the liver and purifies and enriches the blood. It is the great blood-maker, flesh-builder and restorative nerve tonic. It makes men strong in body, active in mind, and cool in judgment.

This "Discovery" is a pure, glyceric extract of American medical roots, absolutely free from alcohol and all injurious, habit-forming drugs. All its ingredients are printed on its wrappers. It has no relationship with secret nostrums. Its every ingredient is endorsed by the leaders in all the schools of medicine. Don't accept a secret nostrum as a substitute for this time-proven remedy of known composition. ASK YOUR NEIGHBORS. They must know of many cures made by it during past 40 years, right in your own neighborhood. World's Dispensary Medical Association, Dr. R. V. Pierce, Pres., Buffalo, N. Y.

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Don't Wait to Order eggs until you want them. Order early and avoid the April and May rush. A card will bring our mating list. I am booking orders now to be delivered later. **H. H. KING**, Willis, Mich.

EGGS—EGGS from my prize-winning Single Comb Brown Leghorns at very prices. Cockerels, hens and cock birds for sale. **CHAS. W. RUFF**, St. Clair, Michigan, Dept. M. F.

EGGS—Pure bred S. C. Brown Leghorns, 15, 75c; 50, \$2.50; 100 \$4. Let me book your order now. **MRS. ELNA OLMSTED**, R. No. 4, Nashville, Mich.

CROSS BRED—Thoroughbred Leghorn and Rhode Island Red crosses produces finest layers and Table Fowl in the world. 50c for 13. \$4 for 100. **Edella Farms**, Box 47, Grosse Pointe, Michigan.

My S. C. Brown Leghorns lay eggs, orders booked now. \$2.50 per 15. **WM. J. COOPER**, Mt. Pleasant, Mich.

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MY "REDS" are standard bred. Breeding pens are selected winter layers, both combs. Eggs \$1 and \$1.50 per 15. R. C. Cl's \$2 and \$3. Best African Geese in Mich., eggs 75c each. Guarantee results on early orders. **W. T. FRENCH**, Ludington, Mich.

S. C. BLACK MINORCAS—Some choice cock- 2. erels and a few yearling hens to spare. Eggs \$2 per setting of 15. **R. W. MILLS**, Saline, Mich.

R. C. R. I. REDS—Am now booking orders for eggs for spring delivery. Choice pens \$3 per 15; Utility pens \$2 per 15; \$5 per 100. **B. A. FRASER**, Fountain Farm, Rosebush, Mich.

Y. B. BRAND—S. C. W. Leghorns. Bred to lay. \$1. per 15; \$5 per 100. **C. W. YEITER**, Aito, Michigan.

DOGS.

TRAINED FOX HOUNDS and **Hound Pups** for hunting fox and coons. Also Collies. Inclose 2-cent stamp. **W. E. LUCKY**, Holmesville, Ohio.

Collie Puppies sable with white markings thirty on hand, more coming. Write to-day for prices. **W. I. ROSS**, Rochester, Mich.

are busy sucking the very life from the fowls. Burn off the roosts if necessary. Oiling them is a good preventive but I have discarded it and now depend upon whitewash, applying a thin coating twice a month. For this purpose it is not necessary to make whitewash of freshly slaked lime. I simply mix some old air-slaked lime with cold water, making a thin paste and applying it with a paint brush.

With the coming of warm weather it is necessary to give closer attention to the feed troughs. Soft feed left in them ferments rapidly and is very apt to cause trouble if eaten after it has soured. Half an hour after feeding time any feed remaining in the troughs should be removed. It is also well to scald and wash the troughs every week. Impure drinking water also is often a source of disease in the flock. Clean the vessels frequently, fill with fresh water daily, and have them covered or protected in some way to prevent the hens from fouling the water. Ohio. **N. S. GREEN.**

IN ANSWER TO INQUIRIES.

Cold in Head.

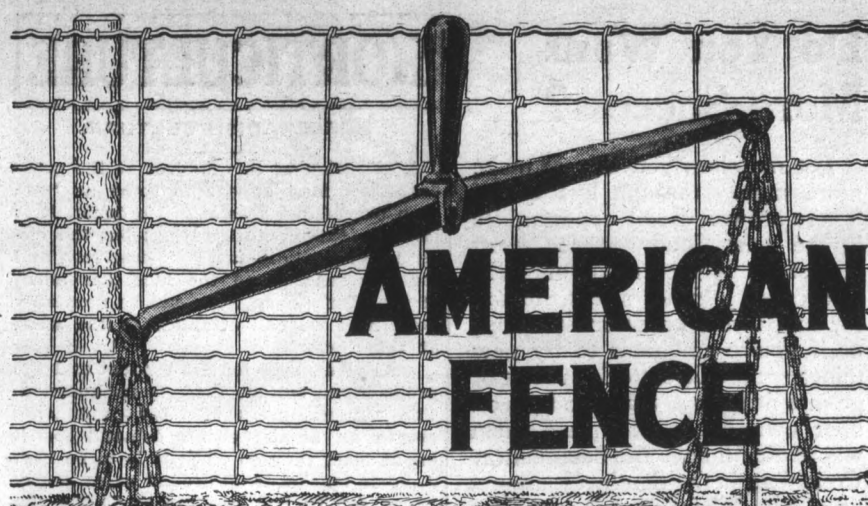
E. W. I., Van Buren Co.: The trouble which you describe no doubt comes from colds which are probably traceable to drafts or dampness in the fowls' quarters. If allowed to go on unchecked for a considerable time colds are likely to lead to catarrh or bronchitis or roup. If many members of the flock have contracted colds it would indicate that there is something wrong with the conditions under which they are kept. Their quarters should be dry, sunny and well ventilated. Their rations should comprise a variety of good wholesome foods given in such a way as to promote exercise and general activity. As a remedy for colds one poultryman has good results from the following: Mix equal parts of black pepper, ginger, flour and mustard and add enough lard so that the mixture can readily be rolled into pills of a convenient size for fowls to take. At the first indication of cold in any fowl give two or three of these pills at night. This is often sufficient to break up a cold but sometimes the use of the remedy must be continued for several days. It is important that the bowels be kept in good condition.

EARLY SPRING DUTIES OF THE BEE-KEEPER.

Let us bear in mind that nature in bee-keeping, as in other branches of farming, does the lion's share of the work. We simply guide her efforts in our channels and aid the bees mechanically. The first thing I do with my bees in early spring is assist them to clean up their house, no matter whether they were wintered indoors or on the summer stands. During the winter months the older bees die off, and, if they do not become wedged between the combs in their descent, they fall to the bottom-board, which, by the time spring comes around, generally is thickly covered with dead bees. Bees also sometimes die in patches on the comb, caused by their leaving the main cluster on some mild day and the weather turning very cold, so that they become chilled through before they can get back to the cluster. These and all other dead bees should be removed and a clean bottom-board put in place. All this is a great help to the colony, and it seems to appreciate this help, for one so treated will build up in numbers very much faster than one that is neglected.

Sometimes it is desirable to change the location of the hives, or to move them from one side of the yard to the other. This may be done any time before warm weather comes, for until then the bees fly so seldom that they will forget the old location and adapt themselves to the new one. In locating an apiary and arranging the hives much taste can be displayed, but a few general principles should always be observed. It is an advantage to have the hives facing east or southward, in order that the morning sun may shine in at the entrances. This induces the bees to fly forth early in quest of the nectar which collects in flowers during the night. Hives in this position will also give better protection from north and west winds. A hedge of evergreens or honeysuckle will be a further protection and make a splendid enclosure. A few fruit or shade trees in the apiary are an advantage, and invariably attract the swarms which issue at swarming time. New Jersey. **F. G. HERMAN.**

The more I see of the Magazine Section of your paper the better I like it. I was especially interested in "Down the Rhine in a Rowboat."—**E. T. Benedict**, Chicago.



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POULTRY AND BEES

POULTRY AS A BUSINESS.

Of late I have frequently been asked the question, can I make a "go" of poultry? There is but one answer—it is in the business if it is in you.

The man who has only a theoretical knowledge of it had best go slow. Get a few well-bred hens and try it first as a side line. If this pays, and it nearly always does, then keep on growing in the business.

The cause of so many failures in the poultry business is "getting in bad." A man gets the "bee," goes out and buys an old flock of hens here and another there, which are usually for sale because they are poor layers. He thus gets a big flock of failures together and he usually quits with one trial.

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You must start right and take care of the details. Be thorough. Don't be like a certain prominent judge in this state who once tried farming and he went out to hoe corn. When he came to a poor, weedy hill he said it was not worth hoeing, and when he came to a good one it did not need it, so he went up the row swimmingly. However, he quit farming and studied law.

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Isabella Co.

WM. J. COOPER.

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be reduced from a maximum of 80 per cent to about 15 to 20 per cent. This indicates that the turkeys must be kept away from ordinary fowls as much as possible, and, in view of the tendency of partially wild turkeys to roam and remain at a considerable distance from the farm buildings, it is possible that the supposed benefit from introducing wild blood is thus partially explained, and that it is not wholly due to greater immunity of the wild turkeys.

It seems that the parasites which cause the disease are easily killed by drying. Dry sandy soils, therefore, would seem preferable for turkey raising, and it is clear that turkeys should be reared away from the house and kept from all fields over which other fowls are likely to forage.

The Rhode Island station has been endeavoring to obtain a strain of turkeys which shall be highly resistant or immune to the ravages of this disease. It is endeavoring to attain this end by a continued selection of birds which evince a greater degree of resistance, by the preserving and perpetuating of such individuals as may show a marked natural immunity, or by the introduction and infusion of wild blood, in this way possibly increasing the vitality and resistance of the race. In order to identify the eggs it was found necessary to trapnest the laying hens. Three trapnests, constructed along practically the same lines as those used for other fowls, were used throughout the laying period with complete success, the turkey hens taking to them with great readiness. So long as the young turkeys were kept away from the regular yards there was little or no loss from blackhead, but when they were brought up to the breeding pens the disease soon began its ravages and many of the young birds died of blackhead, which continued epidemic throughout the winter. This showed that whereas the percentage is probably not quite so great in turkeys which are not exposed to the disease until they are several months old as when they are exposed immediately or soon after hatching, nevertheless they can not be said to become immune to the disease at any age.

DON'T NEGLECT SPRING CLEANING.

As early as the weather will permit there should be a thorough cleaning up of poultry houses and yards. Even though they have been well cared for during the winter, a general overhauling will be found advisable. Throughout the winter we may have cleaned out the droppings every day or two, changed the nesting material frequently and used insect powder freely. Nevertheless there is need of a more thorough cleaning when spring opens, and it is advisable to begin early. I like to do the job in one day, for the hens are always more or less disturbed by work in the houses and it is apt to affect their laying for a few days.

In cleaning up I begin with the nests. For convenience in moving them about they are made in sections of three each. To clean them they are removed to the yard some distance from the houses and the straw is lighted after a little kerosene has been poured over it. By this means any lice that may be hidden in the cracks will be driven out. Seldom are there any in my nests, but when I find them oil is poured along the entire length of the nest boxes where the boards join. A few minutes burning rids the boxes of all vermin. After they have been burned out a heavy coat of whitewash should be applied inside and out. Then put fresh clean straw in them, first placing a layer of air slaked lime or wood ashes in the bottom.

In the poultry houses there should be no unnecessary articles. Besides the roosts and nests nothing but the drinking fountain, dust, grit and feed boxes have place there, and through the summer these latter utensils are best kept outside. But sometimes the poultry house is made a store-room for odds and ends that accumulate and for which there is no immediate use. Tossed in a heap in the poultry house they are soon covered with filth and become infested with vermin. If there are any of these disease-breeding heaps in your poultry houses clean them out if you want healthy chickens. Sweep every vestige of trash from the houses, then give the whole interior a coat of carbolyzed whitewash. Applied by means of a spray pump it can be made to reach the cracks and crevices better than if put on with a brush.

Don't neglect the under side of the perches. There is where the hundreds of little red mites collect during the day. Unlike lice, they remain on the hens only at night, but from dark until dawn they

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If such conditions are permitted to continue, serious results are sure to follow; Bright's disease, the very worst form of kidney trouble, may steal upon you.

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Collie Puppies sable with white markings thirty on hand, more coming. Write to-day for prices. **W. L. ROSS**, Rochester, Mich.

are busy sucking the very life from the fowls. Burn off the roosts if necessary. Oiling them is a good preventive but I have discarded it and now depend upon whitewash, applying a thin coating twice a month. For this purpose it is not necessary to make whitewash of freshly slaked lime. I simply mix some old air-slaked lime with cold water, making a thin paste and applying it with a paint brush.

With the coming of warm weather it is necessary to give closer attention to the feed troughs. Soft feed left in them ferments rapidly and is very apt to cause trouble if eaten after it has soured. Half an hour after feeding time any feed remaining in the troughs should be removed. It is also well to scald and wash the troughs every week. Impure drinking water also is often a source of disease in the flock. Clean the vessels frequently, fill with fresh water daily, and have them covered or protected in some way to prevent the hens from fouling the water. **N. S. GREEN**, Ohio.

IN ANSWER TO INQUIRIES.

Cold in Head.

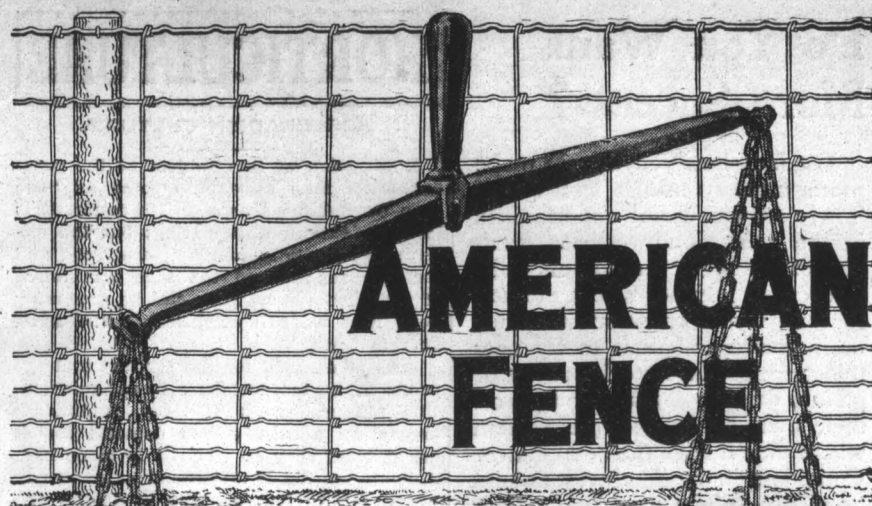
E. W. I., Van Buren Co.: The trouble which you describe no doubt comes from colds which are probably traceable to drafts or dampness in the fowls' quarters. If allowed to go on unchecked for a considerable time colds are likely to lead to catarrh or bronchitis or roup. If many members of the flock have contracted colds it would indicate that there is something wrong with the conditions under which they are kept. Their quarters should be dry, sunny and well ventilated. Their rations should comprise a variety of good wholesome foods given in such a way as to promote exercise and general activity. As a remedy for colds one poultryman has good results from the following: Mix equal parts of black pepper, ginger, flour and mustard and add enough lard so that the mixture can readily be rolled into pills of a convenient size for fowls to take. At the first indication of cold in any fowl give two or three of these pills at night. This is often sufficient to break up a cold but sometimes the use of the remedy must be continued for several days. It is important that the bowels be kept in good condition.

EARLY SPRING DUTIES OF THE BEE-KEEPER.

Let us bear in mind that nature in bee-keeping, as in other branches of farming, does the lion's share of the work. We simply guide her efforts in our channels and aid the bees mechanically. The first thing I do with my bees in early spring is assist them to clean up their house, no matter whether they were wintered indoors or on the summer stands. During the winter months the older bees die off, and, if they do not become wedged between the combs in their descent, they fall to the bottom-board, which, by the time spring comes around, generally is thickly covered with dead bees. Bees also sometimes die in patches on the comb, caused by their leaving the main cluster on some mild day and the weather turning very cold, so that they become chilled through before they can get back to the cluster. These and all other dead bees should be removed and a clean bottom-board put in place. All this is a great help to the colony, and it seems to appreciate this help, for one so treated will build up in numbers very much faster than one that is neglected.

Sometimes it is desirable to change the location of the hives, or to move them from one side of the yard to the other. This may be done any time before warm weather comes, for until then the bees fly so seldom that they will forget the old location and adapt themselves to the new one. In locating an apiary and arranging the hives much taste can be displayed, but a few general principles should always be observed. It is an advantage to have the hives facing east or southward, in order that the morning sun may shine in at the entrances. This induces the bees to fly forth early in quest of the nectar which collects in flowers during the night. Hives in this position will also give better protection from north and west winds. A hedge of evergreens or honeysuckle will be a further protection and make a splendid enclosure. A few fruit or shade trees in the apiary are an advantage, and invariably attract the swarms which issue at swarming time. **New Jersey. F. G. HERMAN.**

The more I see of the Magazine Section of your paper the better I like it. I was especially interested in "Down the Rhine in a Rowboat."—**E. T. Benedict**, Chicago.



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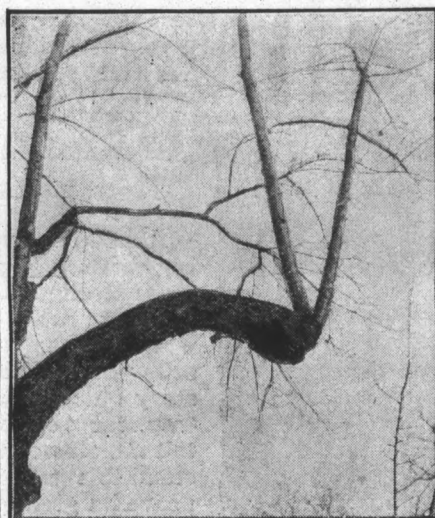
I have some Mammoth and some June Clover Seed For Sale. Price \$10 per bushel.
W. P. SAVAGE, Lovells, Michigan.

HORTICULTURE

HORSE RADISH CULTURE.

A discussion of this subject at the present time, may appear to some as "one born out of due season." No doubt, it is to some extent, anticipating; but the enterprise is little known comparatively, and for this reason and the fact that much of the preliminary work can be profitably done now we call attention to the work at this time.

As to demand for the product and the profit in its culture there is no question. The manufacturers of table condiments create an almost endless demand for it or, at least they do when it is to be had. A home market is all around us as nearly every family has use for it during the



Water Sprouts Make a New Top.

canning and pickling season, and there are many men making handsome profits out of bottling it for the grocery trade. To sum up, the profits of its culture are sufficiently large that the growers almost to a man are extremely reticent as to the detail of the work or the profits in the crop. Then, too, there is naturally much prejudice against growing it, as it is nearly always thought of as a noxious weed that cannot be gotten rid of. Now, this last objection is true when judged from the standard of the wild sort that infests the fence corners and is so tenacious of life that it is next to impossible to get rid of it when once it has gained a foothold. But when considered from the standpoint of the commercial sorts that are bred up and grown for profit then the objection is stripped of its terrors. And this last thought carries with it a precaution that in purchasing sets from which to grow stock, deal only with growers of known reputation and who are not afraid to guarantee their stock as to purity. With this safeguard and proper care while the crop is growing, there is little danger of it spreading and becoming noxious.

As to soil and its preparation, any ground that will grow a good crop of corn or potatoes will grow a fair, or even good, crop of horseradish. But mediocrity in crop growing is not what we are hunting; but it is the bumper crops we desire, so it pays to select deep, rich soil and by heavy feeding increase its fertility. Heavy clay subsoil is not good unless broken up with the subsoil plow. Rich sand or loam deeply worked so that the roots shall have ample opportunity to lengthen and enlarge, is the ideal soil. The best preparation is to apply a large quantity of manure at once, and if possible, plow it under very shallow; just enough to cover it, then as early in spring as the ground will work freely plow deeply and top dress with well cured manure. In spring, just as soon as soil conditions will admit, work the ground both deep and well and make sure of its fertility.

In setting, mark off the rows three feet apart, and set preferably, on slight ridges. When properly put up by the seedsmen the sets or small roots are put up in bundles with the top end cut slanting, so there shall be no danger of planting wrong end up. Plant eighteen inches in the row, and this is easiest done with a spade, set it quite slanting, then raise the handle sufficiently to push the set under the blade and deep enough that when the set is covered it shall be an inch or two deep. Withdraw the spade and tamp the ground slightly with the foot. In June, and again four or five weeks later, the roots should be uncovered very carefully so as not to disturb the top root growth, and rub off with the hand or re-

move with a knife all the small side roots. After removing these cover again. This work will require to be done twice; but it gives a clean root and throws all the growth to the main root, which in good soil will reach from one to two or more inches in diameter. The other culture is the same as for corn until the tops cover the ground when the crop may be laid by.

Sets of the ordinary, or American variety, can be obtained at reasonable prices; but it pays to get the best, and the Bohemian or Maliner-Kren is easily the best under cultivation. This has been thoroughly tested and is pronounced by the best authorities as the leading sort.

The roots can be fitted in fall same as potatoes or other root crops, and after the first year one can save their own sets. These suggestions are made thus early that those desiring can obtain the stock and make preparations in time, for the crop pays well if the proper precautions are taken, and an early start is made in spring so as to get all the root growth possible.

Wayne Co.

J. E. MORSE.

CARE OF THE OLD APPLE TREE.

Two cuts are shown on this page. They show work done on old apple trees. One illustrates a large cut where a decayed stub was removed and the other illustrates how new growth may be started in the top of an aged tree.

Where cuts have been improperly made it often happens that the heart of the tree at the cut decays because the cambium tissue or growing part of the tree has no chance to grow over the surface. If it grows over before any rot starts the surface becomes thoroughly protected by the new wood and bark. But where the cut surface is not in the course of the sap from the roots to the top of the tree, then it is impossible for the tree to cover the surface since it has no power to get the food there to build new wood and bark, and as a result the surface is exposed to decay, as was the situation with the limb removed from the tree shown in the cut. Now, the owner has removed the stub and finds that there is but a shell of wood. What can he do?

About the best course to follow in caring for a hole of this kind is to dig out all of the decomposed wood that can be conveniently removed and fill the space with cement. Whether this would be policy in all cases would depend upon the tree. If it is of a good variety, had exhibited a tendency to bear well during the preceding years, if one did not have many and the tree occupied ground that could not be used for other purposes then there would be more inducement to go to the extra trouble demanded than if other conditions existed. Nevertheless, the amount of labor required would not be



The Result of Former Neglect. Can it be Remedied?

large and one would, generally speaking, have a tree that would last enough longer to well repay for the care. It should be stated here that such conditions as this should be avoided by cutting off limbs close to the supporting branch and parallel thereto, covering the cut surface with lead paint and keeping it so until the bark has grown over.

Mistakes in pruning often "follow the tree to the grave." They cannot be fully corrected by judicious handling thereafter. These mistakes during the life history of Michigan orchards have made many of them difficult to bring back into

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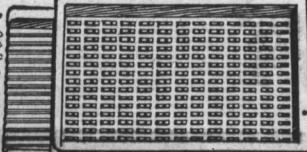
Do farmers eat the proper sort of food?

The farmer of today buys a much larger proportion of the food that goes on the table than he did ten years ago. It's a good thing that this is so because he has a great variety to select from. He should, however, use great care in selecting for the best results in health and strength.

The widespread tendency in the city to increase the amount of Quaker Oats eaten is due very largely to the recent demonstrations by scientific men that the Quaker Oats fed man is the man with greatest physical endurance and greatest mental vigor.

Farmers should give this subject careful thought and should increase the quantity of Quaker Oats eaten by themselves, their children and the farm hands.

The regular size 10c package is not as convenient for the farmer as the large size family package at 25c. 57



THE LOSS OF ONE EAR

from every second hill means a loss of 14 bushels to the acre; every third hill, 10 bushels; every fifth hill, 6 bushels.

How many bushels are you losing by sowing cracked kernels which cannot germinate; or small thin-tip kernels which plant too many to the hill; or large butt kernels, apt to be cracked in planting?

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leaves nothing to chance. Brings only the uniform kernels to the planter. Insures accuracy of the drop and a more perfect stand. Increases the yield.

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Send us a name for our new breed of corn before May 10 and it is accepted, you will win \$500 IN GOLD

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fruition again. To see a tree with long, bare limbs extending laterally and upward for ten or fifteen feet, having but a tuft of bearing surface at the extreme ends like a palm tree, is a barrier that discourages many courageous men who otherwise would take hold of the trees and put them in condition. But even such trees are not hopeless. The illustration shows how water sprouts may be taken advantage of. The two sprouts started near together. The owner cut off the main limb just above them to force all of the growth into the new wood. As was suggested some week ago in the columns of The Farmer, these limbs could have been given a more reclining habit by tying weights to them. A stick of wood, or a stone of sufficient weight to pull them down in the proper position is all that is necessary. Another precaution in working over the top of the tree is to get the dense bearing surface at the extreme ends of the long branches broken so that the new wood at the center of the tree can have a chance to use a sunlight—a necessary condition for growth.

ASPARAGUS CULTURE.

During recent years the culture of asparagus has received more attention than formerly and where it was once a luxury it is more commonly used, yet the supply does not nearly equal the demand, although there are many extensive beds, there is still room for more.

There is not a vegetable that pays better for the amount of labor and expense on the same amount of ground, and once a bed is started it is there to remain for several years without any expense, only for labor. For outdoor vegetables it is one of the earliest.

There are two methods by which plants can be secured from seed and from roots. If roots can be obtained from a reliable firm, one who grows them, this is the quickest way to start a bed, as it requires three years to get a crop from seed, and the earlier returns will more than pay for the roots. Roots should not be over two years old to make a thrifty bed.

The writer has had good success taking up the young plants that grew from seed in an old bed. They should be taken up after a rain, being careful to take up enough dirt so as not to disturb the young plants. If a clump of plants, leave them together, dig a hole large enough to set the plant in as if it had grown there, place in rows in the garden where it can be cultivated, but do not put into a permanent bed until two years old.

In selecting a bed a soil that is a little sandy, but rich, is preferable for early use.

The ground should be free from weeds and rubbish, plowed deep and well pulverized. The rows should be four feet apart and six inches deep, from one to two feet between the plants.

Asparagus should not be cut before the second year and the season's cutting should not be prolonged after the middle of June, as it injures the life and vitality of the roots.

In the fall when the tops have fully matured they should be cut and burned, then a dressing of manure applied. In the spring when the ground is dry enough, plow and pulverize the soil, being careful not to cut the crowns. Salt, if a fairly liberal quantity is used, will prevent the weeds from growing, although there is a question as to whether it is a benefit to the asparagus, if it is not injurious.

Minnesota. E. E. GRIMES.

SOD IN ORCHARD.

I have just purchased a nine-acre orchard which has a heavy June grass sod; would like to seed same to some kind of grass. What kind would be best? Would alfalfa grow all right in an orchard?

Charles Co. C. A. M.

If the subscriber wishes a grass sod in his orchard he had better leave the June grass alone. For should he sow to any other kind the probabilities are that, in a short time the June grass will be re-established since it is our most persistent and hardy variety. Alfalfa may grow all right in the orchard, but as it usually is with some difficulty that this crop can be started under the most favorable circumstances it would not seem wise to try it in the orchard. Our correspondent does not inform us whether he desires to make this orchard into a pasture, hay lot or fruit plantation. If the latter we would advise him to break the sod and keep it broken for a few years, at least, or to mulch with straw or manure beneath the trees to destroy the June grass and give the trees a chance at the plant food and moisture that the grass is now using.



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You can get a 160 or 320 acre farm free in Montana—but you'll have to hurry. Along the Great Northern R'y are several million acres of government land available under the homestead laws. The soil has proved remarkably fertile, producing 30, 35 and 40 bushels of wheat to the acre—proportionate yields of other grains and root crops.

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A. J. PLATT, Mfrg STERLING, ILL

MAKING LIME-SULPHUR SPRAY.

Will you kindly give information through these columns, on the best method of preparing the lime-sulphur spray? I have a two-barrel kettle to cook it in. I have read considerable about it, but the writers do not agree about the subject. Any reliable information upon the way of preparing, and the amount to use, will be gratefully received by the farmers in this locality.

Jackson Co.

F. C. S.

Our Jackson county subscriber perhaps has reason for becoming confused on the method of making lime-sulphur spray. During the past year or two much has been discovered about the manufacture of this material and as a consequence less lime is now being used, it not only making the preparation cheaper, but also better in that the spray can be kept indefinitely by simply sealing or closing the vessel in which it is kept so it will not evaporate. A large amount of lime causes crystals to form when spray cools off after boiling. As a result it was necessary to apply the spray hot, a disagreeable condition to use it in. Now we use less lime by nearly one-half and the crystals do not form, which permits the operator to apply cold.

The amount of materials now recommended is 8 to 10 lbs. of unslaked lime, 15 lbs. of sulphur, to 50 gals. of water. This strength material is to be used only when trees are dormant or before the leaves have opened to any extent. For summer spraying dilute to five times the above amount, or to 250 gallons.

Heat a little water in an iron kettle or in a barrel or other wooden vessel if steam is employed. Put in the lime and when nearly slaked, add the sulphur which has been made into a paste by the addition of a little water. Stir thoroughly, add water as it evaporates away and continue boiling for an hour. The mixture can then be diluted to the proper amount, i. e., to 50 gals., if for spraying before growth is well started, or to 250 gals. for summer spray.

We would advise those interested to read Mr. Hartman's article in our issue of March 12 and also one by Mr. Hutchins in the January 22 issue. It must be kept in mind that the preparation described above is not what Mr. Hartman speaks of as self-boiled lime-sulphur spray.

SAVING THE PEACH CROP.

For years the peach brown rot has been recognized as a most destructive disease of stone fruits. This is a fungous disease, and it is widespread, and very destructive to the peach crop. The loss which it inflicts on peach growers will easily average \$5,000,000 yearly. The loss to the peach crop of Georgia alone is estimated at \$1,000,000 a year.

Much work has been done with a view to discovering a satisfactory remedy for this trouble. Spraying with diluted Bordeaux mixture has been most commonly recommended, but its injury to the foliage has made it unsatisfactory, since the remedy must be applied during the growing season.

The peach scab (often called "black spot"), is another disease which seriously affects the peach crop in all sections east of the Rocky Mountains, although not causing such serious losses as brown rot.

As the result of experimental work by the U. S. Department of Agriculture, a cheap and simple remedy for this disease has been found in the self-boiled lime-sulphur wash. This can be applied during the growing season with very little danger of injuring the fruit or foliage, and it is very effective. Furthermore, by mixing arsenate of lead with the fungicide, the curculio can be destroyed at the same time.

ON NUT CULTURE.

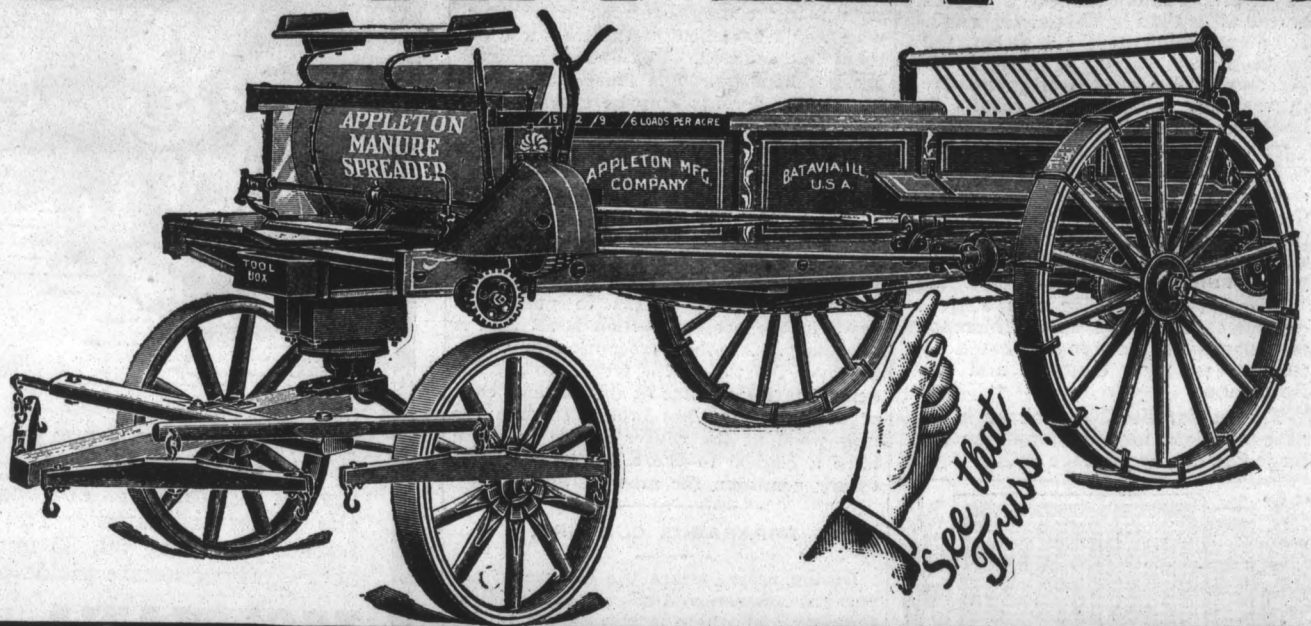
The beauty of the farm would be greatly enhanced by a judicious planting of nut trees along the fence rows. Any damage done to crops in the bordering fields will be offset by the value of the trees and annual crops of nuts.

With a limited knowledge of the needs of nut trees there is reason for not planting extensively, but considering the demand that is now being made for nuts there is every reason why farmers should encourage some trees to grow upon their premises.

Dame nature has so planned it that every locality is supplied with a kind of nut that will thrive. In the south the pecan is supreme, the chestnut rules along the Ohio valley, while the north enjoys the fruit of the hickory tree. Walnuts thrive everywhere; and all of the above are profitable for nuts, timber and shade.

G. E. M.

THE APPLETON!



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You, as a business farmer, are more interested in the service a manure spreader will give you than you are in the personal appearance or characteristics of the handsomest man in our employ, or in whether the fabled tortoise or the fabled hare holds the record for the fastest mile, or in the financial needs of struggling manufacturers, or in the childish bickerings of rival manufacturers, or in any outside consideration whatsoever.

That's why we show a plain picture of the machine we have to sell. We have nothing to sell except farm machines of known quality. We don't care whether the man who designs them is good looking or not, and we are sure you don't.

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You can try an Appleton manure spreader before buying it. It is honestly guaranteed, just as you would guarantee any article that you sold to your best friend, and back of that guarantee is the established reputation and the entire worth of a company that has been making farm machines of known quality since 1872.

Advertising sells goods. The more we sell the cheaper we can manufacture. It is merely a question whether it is more profitable to pay your dealer to advertise our goods or pay more to the publishers of some papers who can't do your town a bit of good. We find that we can save you money and sell more goods by working hand in hand with a dealer in your town. You can always get a better machine, and get better prices, quality considered, from an Appleton dealer than from anyone else, and you get his services for nothing, and it's service that counts!

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All we ask is a chance to prove to you that the Appleton manure spreader is as strong as steel, oak and common sense can make it; that it is so simple that any boy who can drive a team can run it as well as any man; that it is easier to load than an ordinary wagon; that it is more easily and more quickly set up than any other; that it is easier for the horses to start; that it never bounces the manure, but pulverizes it thoroughly and spreads it evenly and uniformly, thick or thin as desired; and it is easily worth every cent we ask for it.

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QUALITY
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Instrumental music, to which all march about the hall.

Cookery—II. Cakes, candies, custards. Reading, "A Choice Cake."

Men vote on favorite variety of cake. Young people pass samples of home-made candies and give recipes.

GRANGE AND RURAL LEADERS.—I.

It is my firm opinion that more of our country communities are languishing—where they are languishing—for the want of trained leadership than for any other reason. Where a Grange exists in such a neighborhood, the fault is not altogether "in its stars," if I may be allowed to say so, but because we have not looked far enough ahead and planned to discover, lead out and train young and new material for our Grange guides. We have been absorbed in self-development. It has been such a pleasure to talk and do things ourselves that, too often, we have let the possible future supports of our Grange cause slip away from our grasp. What is far more to the point, these same young people have slipped away from our farm communities without knowing that real opportunity stood beside them in their childhood homes.

The time is at hand when leaders, who would be real leaders in this work, must make it a part of their business to develop still other leaders.

In theory any Grange stands as a conservator and constructor of policies for rural improvement along all lines within its jurisdiction. To realize this theory, in practice it must constantly seek to establish and maintain a vitalizing force throughout its departments. This may be done by various means but, with our fast coming changes in farm methods and social customs, we can by no means feel assured that present measures are adequate and that they will work themselves.

The whole rural field offers most alluring rewards for efforts. These efforts, to avail, must be practical—such as will affect every officer; such as will lead him to husband his own time in order that he may read, think and prepare himself for greater efficiency as a Grange officer; such as will induce him to seek association with persons and occasions that will give him new visions and fresh suggestions in neighborhood work.

In future issues of The Farmer I purpose to touch further and more pointedly on this very vital duty of the Grange in the matter of developing rural leaders.

JENNIE BUELL.

GRANGE ACTIVITY IN OCEANA.

It has been my privilege to visit a few of the Granges in Oceana county of late, and a few of my observations may interest Patrons elsewhere. The Grange is on the up-grade in this county. Nearly everywhere there is marked improvement. The Grange at Perry is not large, but a few earnest workers are making it count in their interest. Elbridge Grange ought never to be forgotten by the writer as it was the first Grange organized by him. Sister Maggie Hill is an excellent lecturer and is supported by a large number of willing workers.

At a pleasant meeting of Fraternal Grange, in Shelby, on Saturday, March 5, the first and second degrees were conferred upon a class of five and an excellent program was rendered. Worthy Master Fleming is doing good work and the worthy lecturer is not a bit behind, so the Grange is prosperous.

Many subordinate Granges not mentioned here are holding good meetings and initiating candidates. Walkerville Grange, in the northeast corner of the county, fourteen miles from the railroad, is one of the liveliest Granges in Western Michigan. They are initiating candidates, holding good meetings, and doing good work in the local option fight. Cobmoosa Grange is composed largely of young people. They are greatly interested in their work and the Grange is accomplishing much good.

There are a number of invitations out for meetings of Oceana Pomona. The lecture work in this Pomona has always been of a high order. Sister Kellogg was most efficient in this capacity, and when she was succeeded by Sister Evans the programs were equally good. Upon Sister Evan's resignation, Brother E. B. Moore, of Blooming Valley Grange, was selected and he is demonstrating the wisdom of the Patrons who chose him for this responsible position.—W. F. Taylor.

AMONG THE LIVE GRANGES.

New Grange at Odessa Center.—A meeting of farmers was recently held at Odessa Center, Ionia Co., for the purpose of organizing a Grange. Zeno Carter was chosen master, H. H. Lyon, secretary and Lottie M. Durkee, lecturer, the election of other officers and the closing of the charter being deferred to a later meeting. Those in attendance listened to a masterly address by Bro. Ketcham, of Barry Co., whose topic was "Why I should join the Grange." He said that the principles for which the Grange stands are, faith in God, hope, optimism, honesty and earnest work. One strong point, the whole family may attend. The Grange stands for fidelity and equality. Live, progressive men are behind it and its history is one of accomplishment—the rural free delivery, for instance. Its mistakes will be outweighed by its accomplishments. The Grange takes its plan from the federal government—the subordinate, pomona, state and national Granges. The Grange commands respect in legislative bodies. The Grange is doing many things for the farmer and his family. It is learning him to do his own thinking and to put conscientious effort into his work. The Grange is on a solid basis, having a fund of \$50,000 invested in securities.

Lapeer Co. Pomona.—Both weather and roads favored the last meeting of Lapeer Co. Pomona which was held with Almont Grange. A fifth degree business session consumed the forenoon. After dinner a public session was held in the town hall, Almont Grange opening the program with music. Then came the leading program feature—an able address on Grange work by Former State Master Horton. He urged the strengthening of the Pomona through the building up of stronger subordinates. He also devoted some time to explaining the plan formulated at last State Grange for encouraging Granges to undertake experimental farming under the supervision of college experts. At the close of the program the Grange adjourned to the Grange hall, where the fifth degree was conferred upon a class of five. An evening session was held at the town hall, the principal feature of which was a very instructive talk by Fred Farley on curing, selecting and testing seed corn, the value of the talk being greatly enhanced by the presence of a box of sprouted seed which was used to good advantage by the speaker.—Secretary.

COMING EVENTS.

Pomona Meetings.

Clinton Co., with Ovid Grange, Wednesday, March 23.
Emmet Co., at Harbor Springs, Friday, March 25.

FARMERS' CLUBS

Address all communications relative to the organization of new clubs to Mrs. C. P. Johnson, Metamora, Mich.

CLUB DISCUSSIONS.

Observe Lincoln's Birthday.—The February meeting of the Ray Farmers' Club was held with Mr. and Mrs. C. J. Hartway. About 75 partook of the luscious dinner, after which the president, C. S. Priest, opened the meeting. Roll call was responded to by quotations from Lincoln. Two topics, "Are lightning rods a benefit to the farmer?" and "The farmer and the automobile," were so hotly that some of those present said "they could almost see lightning and also feel themselves spinning over the country roads in automobiles." These discussions were followed by a solo by Arthur Downs, after which the Club adjourned to meet March 10 with Mr. and Mrs. E. C. Tewksbury. Everyone went to their homes feeling that they had been well paid for leaving home cares for a while.

Discuss Alfalfa Culture.—The Ray Farmers' Club of Macomb, met with Mr. and Mrs. E. C. Tewksbury the second Thursday in March.—After a bounteous feast for which tables were laid for 60, the president called the meeting to order. An address by C. J. Hartway on "Everyday thoughts for the everyday farmer," was well written and discussed. Can we grow alfalfa successfully," was next thoroughly discussed, in which some thought it could be raised successfully, while others were in opposition. After these lively talks they went to their respective homes, decided on meeting again next month with Mr. and Mrs. Wm. Peters, where maple sugar will be had with the other good things.—Hazel M. Green, Cor. Sec.

Will Make Year the Best in its History.—The Marion Farmers' Club met Tuesday afternoon, February 22, at the home of Mr. and Mrs. George Nichols in Howell, and was called to order by the president, Henry G. Bucknell, who asked A. M. Wells to lead the devotions, after which the president delivered his inaugural address and outlined his policy for the official year, i. e., to make this year one of the very best in the history of the Club and asked for the hearty co-operation of all its members and friends. The topic, "The cost of living," was then taken up and many good things were said. The next subject, "The Parcel Post," was discussed in a lively manner by H. E. Reed, Miss Norton, Rev. H. Cansfield and Postmaster Smith. Mr. Smith gave a lot of valuable information on the topic, showing the advantages and necessities for the system, for which the Club tendered him a hearty vote of thanks. During the recess light refreshments were served, after which Miss Lillian Russell rendered a solo that was well received. Mrs. Electus Hadden read an excellent paper on "Woman Suffrage," which was commented on by Miss Norton and others. There was hardly time for all the discussions that the different papers seemed to call for, so after heartily thank-

ing the host and hostess, the Club adjourned.

The East Otisco Farmers' Club met Thursday, March 3, at the home of Mr. and Mrs. John F. Kohn. Forty-five partook of the fine picnic dinner. The meeting was called to order by President A. L. Benedict. After a short business meeting a good program was given. Following two good readings, came a paper on "The relation of the farmer to the high cost of living," by Jerry Spaulding. This was followed by a lively discussion, the consensus of opinion being that the farmer was not responsible for the present high prices. The middlemen were censured and the need of a farmers' organization was brought out forcibly.—Margaret K. Kemp, Sec. Pro. Tem.

Discuss Corn Improvement.—The North Shade Farmers' Club met in March with Mr. and Mrs. Bemis. They are charter members of the Club, which was organized some fifteen years ago, and have for several years had the pleasure of entertaining the Club for its March meetings. Valois Todd had the subject, "Improvement of Corn," but was unable to be present and Mrs. Nettie Todd read an article from the National Magazine, by J. Mitchell Chappell. It was a fine report of the Omaha corn convention and gave valuable information on improving the quality and yield of corn, the king of all our crops. In the discussion following the reading, J. M. Smith stated that if there could be raised two stalks to every hill of corn, and one ear to every stalk, it would make an increase of nearly one-third in our annual corn yield. Many people use corn as a breadstuff instead of wheat and it is our chief bread material. Walter Huyck recommended setting aside perhaps an acre of corn each year to develop for seed purposes. Cut out suckers and the barren stalks and cut off tops about one joint above ears that were not properly developing, and by such methods and careful tillage, develop an improved strain. E. C. Dobson spoke of picking ears that were well developed and ripened early for seed, so as to shorten the required season in this latitude.

"Postal Savings Bank" was assigned to A. L. Bemis. He said the word bank is used seemingly for want of another simple word to designate a place to deposit money, but that postal savings banks are in no proper sense banks in the many countries that are using them, and are not designed to be banks in this country. Their object is, first, to furnish a safe place of deposit for the wage earners and the poor for small savings to be deposited with the postmasters throughout the country, and secured by the government. Second, to help teach the saving habit to a class of people not now using the regular banks. Third, to draw back into circulation millions of dollars now hid away by people who fear the banks, and, fourth, to hold in this country millions that are now being sent in postoffice money orders annually to foreign countries by our immigrants who are familiar with the postal savings banks in their native countries. Postal savings banks are nothing new. England established them in 1861; Canada, 1868; Belgium, 1869; Italy, 1876; France, 1881; Austria, 1883, and Sweden, The Netherlands, Hungary, Japan and other countries are also in the list. Probably the first active movement in the United States for postal savings banks was begun by Postmaster General Creswell in 1871, when he made a recommendation to congress asking for their establishment. He kept up the agitation for the following two or three years. In 1880, Postmaster General Maynard took up the agitation. Postmasters General James and Howe continued it in 1881 and 1882. Wanamaker in 1889 and 1890, and so on down to Meyer in 1908, and with the struggle in the present session of congress over the matter, you are all familiar. The postal savings bank bill is the leading administration measure and President Taft is giving the whole weight of his influence in its favor. The measure has been more than self-supporting in foreign countries and we are assured that the same would be true here. The chief opposition has come from the banks, although the experience of other countries does not sustain the fears of the banks that postal savings would interfere with their business. But the banking interests seem to believe that by some inherited right they should have the sole privilege to receive your money on deposit with little or no interest and loan it out to your neighbors at the highest obtainable rate, and that in many cases, with a very limited security. The speaker thought that the establishment of postal savings banks might assist the people in getting better laws in regard to security on bank deposits. The government would be a preferred creditor in any bank where it deposited the postal savings fund, and the people would soon demand that they be given as good security as the government required. On the effect the postoffice banks in England have on the regular banks, Mr. Charles Didden, a leading English postoffice official, says: "We do not do any harm to the really well managed banks, but we are the means of shutting up the bad ones." Mr. Bemis made frequent reference to the last report of the United States senate committee on post-offices and post roads.

Wm. T. Hill took up the discussion of the subject and said that he had worked with gangs of foreigners on the railroads where it took twenty thousand dollars to pay them off every pay day and that as soon as they got their money they made a "B" line for the postoffice and bought a money order and sent it to their home country to be deposited in the postal savings bank for safe keeping. He said that until very recently our nearest genuine savings bank had for years been in Grand Rapids. He gave a good description of the practical working of postal savings banks in England and Canada. You can deposit in one postoffice and if you wish to travel or move, you can draw the money out at any other designated office in the same country. Other persons spoke briefly on the subject. The Club will meet the first Friday in April with Mr. and Mrs. E. C. Dobson.



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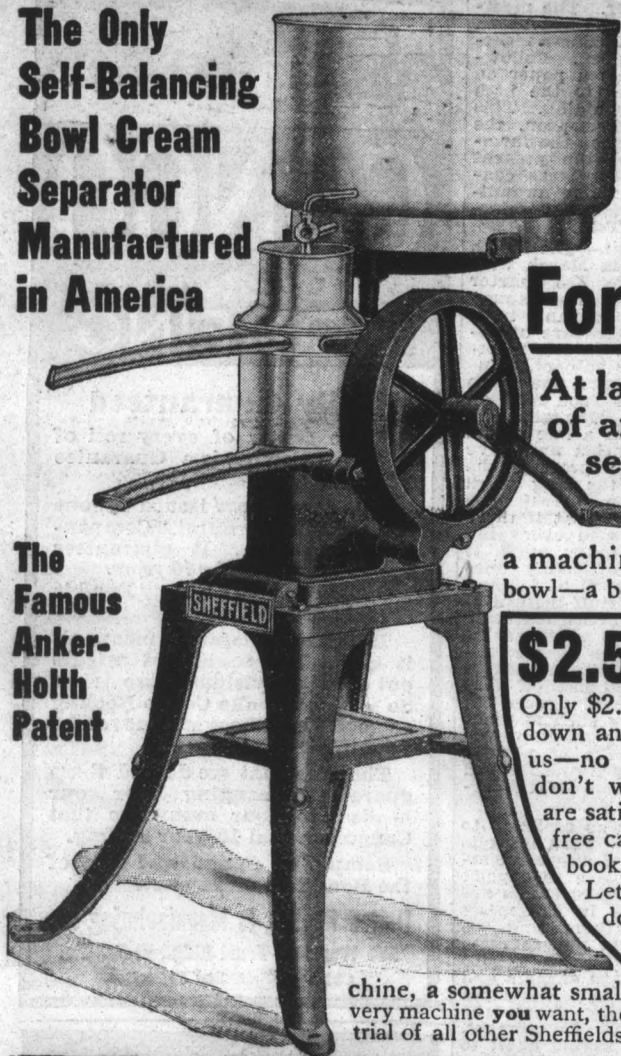
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