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Home Improvement is Profitable.

An Illustration of the Real Estate Value of Beautifying the Farm Home and Eliminating Advertising Signs from the Buildings.

THE poorest property in the city is reserved for the gaudy advertising sign and the building which is decorated with the virtues of summer tonics and hair restorers is not usually located in the most desirable section of any town. A Michigan man who understood the real estate value of developing a business-like appearance for his farm home told the story of how his friend accumulated the money paid for a two-hundred acre farm.

Sorenson was out driving one Sunday afternoon and passed a farm with the "For Sale" sign tacked on the hitching post. Inquiry found that the price was only \$1,500 for 20 acres of fairly good clay soil, a small seven-room house, and a good substantial barn. The barn was a wonderful sight to behold and ornamented in bright yellow letters that proclaimed the advantages of trading with a druggist who guaranteed a remarkable cough cure. It may have been profitable advertising for the shop-keeper, but what about the farmer who allowed the best part of his farming business to lose in real estate value because it looked like a circus poster? Would the owner of a modern office building or prosperous manufacturing institution allow the walls of his property to be placarded with ugly handbills? He would never consider such a proposition even though the offer of a small financial return would sound like the promise of a fakir at the fair who is always giving "something for nothing."

This farm was located where it would have made an excellent suburban home for some city man if there had only been a homelike appearance around the house and barns. The big yellow signs were not in harmony with the beauty of the fields and orchards and, like an ugly scar on the landscape, they drove away friendly investigation of the property.

The owner of the farm was enthusiastic over the remarkable possibilities of his place and only wanted to sell because of ill-health and the itching to own an orange grove down in Florida. He explained with self-evident pride that even the wall of the barn was a money-maker and stated, "I get \$10 per year for those advertising signs and they are so big that the painter has to cover nearly the whole barn to get them on. Think of the money that you can save every year on the cost of paint."

The "For Sale" sign had been up several weeks before the buyer had been attracted to this farm by accidentally thinking of the latent possibilities of the place. The owner never considered that the \$10 remuneration for the use of his barn as a billboard had cheapened the appearance of the farm home and reduced its real estate value several hundred dollars. Prospective buyers of small farms would not be attracted to a place that seemed at outs with all the forces of nature because of the blemish that clashed rudely

with the natural beauty of the country. The Home Grounds Influence the Buyer.

Sorenson knew the money value of good looks and so bought the place for \$1,500. The advertising contract ran out the next month and the sign painter found that the new owner was going to do some scarping on the barn, but that his artistic ability was unnecessary. The barn front yard good and tight at the slightest provocation and then repainted with good quality of red paint and looked as if it had a more retiring disposition than

his berry farm on the edge of the back woods and moved over on the main road. His wife was a lover of flowers and the next spring the front of the house was brilliant in its array of color, and climbing vines were gradually creeping around the windows and hiding the storm scarred woodwork. Sorenson mowed the front yard good and tight at the slightest provocation and laid out some nice flower beds along the roadway that curved gently toward the main auto track to the

some time the travelers on the main road had been watching the progress on the little farm and they speculated on why a man should wish to sell such a homelike looking place.

The first inquirer found that the price of Sorenson's farm was \$3,500, and soon decided that he wanted a country place worse than dividends from his automobile factory. The deal was closed on the spot.

Sorenson had 30 days in which to leave and this was ample time to drive around the country and make a few observations. About two miles down the road lived an old man and his wife who had passed the age of efficient service and were living by the kind permission of their rather arrogant hired man. They told about a desire to go to the city and wanted \$6,500 for their 120 acres of run-down land. Sorenson bought the farm.

Cheap Looking Signs Reduced the Value of this Farm.

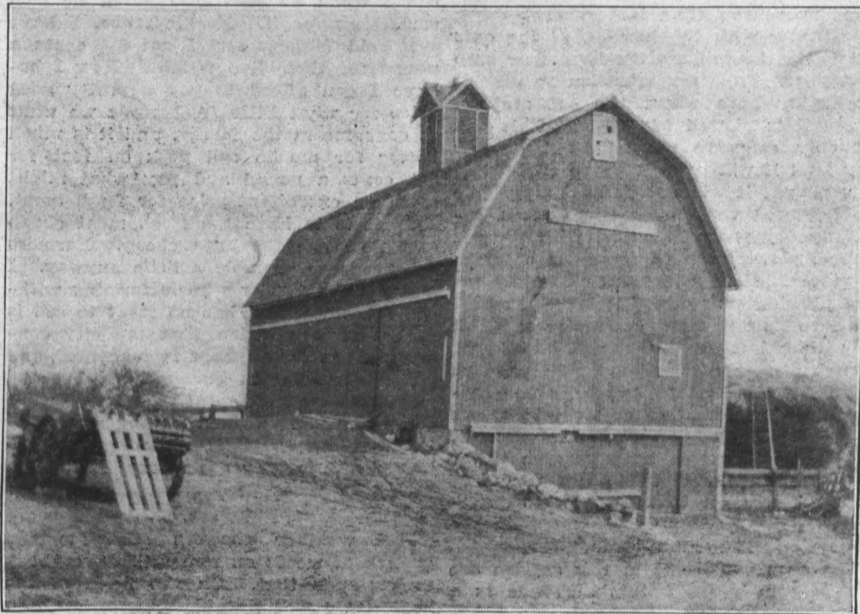
The barns on the place were arrayed in glorious colors and looked like the billboard that often protects the city dump from close inspection. A row of beautiful oaks were growing along the farm where it fronted on the road, and nearly every tree was placarded with a tin or wooden sign heralding a coming auction or describing some soothing brand of tobacco.

The nearby fence would have been suitable for the display of signs and handbills, but every one had been securely spiked into the venerable oaks. The bark showed many scars where previous signs had been pried off and more up-to-date announcements substituted. The general impression of the place was unfavorable and the beauty of nature was being outraged for a small gain. The reaction struck the purse of the owner who was unconscious of the unkempt appearance of his farm home.

Sorenson had read an article on tree surgery and loved a beautiful tree better than anything on the farm, except his family and a spirited horse. The first day all the signs were removed from the trees and the rough scars and gaping wounds were smoothly cemented. The mowing machine cut down the grass

along the edge of the highway and the farm had assumed a more business-like appearance. The entire cost of the day's work, counting labor, cement, and the use of the team and mowing machine was about \$5, and the general opinion of the farm had favorably increased about 50 per cent in the minds of travelers on the main road.

The next job was to hunt up the druggist who was advertising some fake nostrums all over the barn and the carriage shed. Arrangements were made to scrape off the grimy white letters and some good paint harmonized the buildings with their natural surroundings. An over abundance of ever-green trees obscured the veranda and gave the house a gloomy and



One of the Barns on Sunnyside Farm, Oakland Co.—An Attractive Improvement.

when glaring toward the road in an array of gaudy yellow letters.

Sorenson loaded the front porch into a wheelbarrow and knocked it to pieces behind the chicken coop. Then he proceeded to dig out the lumber stored in the attic and after spending a few dollars at the planing mill, hired a carpenter to help him at \$2.50 per day. The new veranda only cost \$7.50 for outside labor and changed the appearance of the house to such an extent that it now looked to be a comfortable home, and Sorenson sold

big city. The old fence was wheeled out behind the hen house and dumped in the kindling pile with the remains of the front porch.

Sorenson was not an old man and he was slicking up the farm home because he wanted to make some money. The next spring the place was looking better than ever and the expense of development had been small, outside the cost of labor. The proper time for disposal had arrived and the "For Sale" sign was again tacked on the hitching post. For



Good Barns Over the Hill, but Nothing Shows from the Road Except the Gaudy Advertisements.

foreboding aspect. They were removed and ornamental flower beds soon replaced the promising crop of plantain and dandelion seed.

Sorenson farmed this place for three years and just about made expenses, as the land was partially exhausted and the addition of fertility was a costly operation. His profit was all in the increased value of the land. Finally he located a 200-acre farm which was on the opposite side of the city, and was on the market because the progressive and industrious traits of the owner had fallen to zero. The "For Sale" sign was stuck in the front yard of his own farm and a small liner inserted in the local paper. This time the paper brought the buyer to the place but the appearance of the surroundings sold the farm. The price was \$10,000, and with this money Sorenson bought the 200-acre farm which was one-half mile nearer the city but in the same need of rejuvenation as all of his other ventures.

Sorenson expressed his method of success as a combined farmer and real estate dealer as follows: "Buy at the right price and after cleaning up the place, sell promptly when the buyer comes along with a good offer. Appearances mean money and never allow the man with over-developed commercial instincts to make a billboard out of your finest buildings and shade trees. I know several good farmers who are allowing their buildings to be placarded with advertising, but they do not realize that it cheapens the farm and leaves a bad taste in the mouth of every country-loving citizen in the community. When I buy a farm, I know the value of the soil and the buildings and then I find that the owner always knocks off several hundred dollars from what the place is worth. The reasons for the diminished value are the gaudy advertising signs on the buildings, cheap placards on the trees, no flower beds in the front yard, no vines on the veranda and a general lack of appreciating the landscape possibilities of the farm home.

I pay the owner as much as he could get from anyone else but I know that it does not cost much for the simple improvements that make the farm home more homelike. He thinks that it costs a lot of money to make a few simple improvements and is willing to depreciate the value of the entire farm and let some man with progressive ideas reap the reward of intelligent labor. When I see a farm building that combats the harmony of nature by glaring toward the road in its coat of brilliant colors, I know the significance of the sign. There is a farm that can be bought for less than it is worth and it will not cost much money to improve its appearance and derive a good return from the investment."

Ingham Co. R. G. KIRBY.

RECORDING AMOUNTS OF RAINFALL.

Some time since Mr. Lillie said he wished he knew how much rain fell upon a certain occasion.

Having had quite an extensive experience in the volunteer weather service, I know that Mr. Lillie, or any other, or all, readers of the Michigan Farmer may know, with approximate accuracy, how much rain falls at all times, at trifling expense and very little trouble.

If you have access to a tin shop have your tinner make you a cup of tin or galvanized iron 12 inches deep and about four or five inches in diameter. On the closed or bottom end of this have him attach an open extension about six inches long, to fit on the upper end of a post, to hold your gauge in an upright position. Or take a section of eavetrough conductor pipe about 20 inches long. File off the smoothest and straightest end so it is straight across, and then six inches from the other end insert a stopper that will hold liquid cement. Set this in an exactly upright position and pour in about two inches of cement. Use clear cement and it probably will be water tight, but if not pour in half a pint of asphaltum roof paint or coal tar. (By the way, if you ever have a cement tank that does not hold water treat it with these, applied hot, and you will have no more trouble. The asphaltum, if pure, will not taint the water, but the coal tar will).

Now remove the stopper from the lower end and fit it loosely to the top end of a post that will stand at least seven feet above the surface when set. Set the post in the center of an open space, not near large trees or buildings, at least 20 feet across. The larger the better. Let your gauge, when in place on top of the post, stand exactly perpendicular. After a rain lower your gauge and insert a

thin, slim spatula of unpainted wood that will show how deep the water is in the gauge. Measure depth on a rule, and you have the rainfall in inches.

If a record of each rainfall is made you have, at the end of the year, data that it is at least a satisfaction to have, and that may be of great use in comparing with the rainfall of other years. Barry Co. SUBSCRIBER.

LILLIE FARMSTEAD NOTES.

We are beginning to see the end of the season at last. Today, July 31, we have started in to cut the last field of oats. This, of course, is pretty late, but the season is pretty late. The haying and wheat harvest are done, and with a few more days of fair weather the oats will be harvested. The corn is practically all cultivated, the last cultivation, the cultivation after harvest. It now shades the ground so that it will not dry out very much, practically no weeds can grow, and I do not think cultivation from now on will be profitable. It has been exceedingly dry and yet in the last cultivation, before the last rain, which came this evening, the cultivator brought up moist dirt. A few fields of corn have rolled the last few hot days, and showed the effect of dry weather, but this is about the first. Some fields of beans that have not yet been cultivated as well as they ought to have been show some yellow leaves, and the result of dry weather, but our section here has stood this dry season very well indeed. Of course, the pastures have not yielded as they did last year, the old meadows did not yield as well and even in new meadows the clover was short. And yet, take it all in all, it is a much more satisfactory season than last year.

And now with the hauling of the oats will begin the preparation for a new crop next year. It is my intention to disk it thoroughly both ways, the oat stubble, before it is plowed for wheat. This will not only conserve moisture but on our clay land it will chop it up so that when it is plowed it will not be as lumpy. We are bothered very much some years, especially dry years like this, with the oat stubble plowing up in quite large lumps in places. Now a thorough disking before plowing prevents this largely, and I am sure that it conserves moisture. Not only that but the land will fit almost enough better after plowing to pay for the disking before, and there is one satisfaction in having a heavy investment in a traction engine and engine tools, and that is that we have got the power and a willing horse to do this work. If it is hot weather it will make no difference.

The Corn Crop.

The corn conditions in this section are the best in years I think. There is a better stand. Corn has a better color. It is growing nicely. It hasn't been stunted by wet weather nor by dry weather as yet. Two years ago we had a good corn season. Corn matured and was thoroughly ripened, but extremely wet weather early in the season made poor stands. This year we didn't have those conditions. Last year it was extremely dry when the corn was planted and then it came too wet and you could not cultivate the corn. We didn't get a good stand and we had a miserably poor crop. We didn't get any growth. It looks this year now as if I was going to have ensilage enough to fill all three silos, and if I do that means plenty of good feed for next year for the dairy cows. And while I have a short crop of hay, if I can get an abundance of ensilage, enough to feed through next summer, it will help matters very much and lessen the feed bill in summer feeding.

The New Seeding.

One thing that has suffered the most severely I think this year is new seeding of clover. I hear complaints from all the neighbors that their clover seeding is not as good as it ought to be. On my wheat stubble there seems to be enough clover but it is exceedingly small. You have to look pretty sharp some places to see any at all, but there are real small plants there. A good shower tonight may revive this, now that the wheat is removed, so that it will live. I have faith that enough of it will live to make a good catch because I haven't lost a catch of clover in the history of my farming, and I don't hardly believe I am going to lose it this year. If I do it will be the first time and will be a serious loss.

A Catch Crop of Rape.

Despite the dry weather we got a good catch of rape in the oat field which we intend for hog pasture after the oats are removed. The oats are not a big crop.

They are not a good stand, that is, they are thin on the ground. I sowed the usual amount of seed per acre but the conditions were such that oats did not stool this year and consequently we have not as heavy a crop, but they are splendid oats, just as clean and pretty as you ever saw, and they seem to be well filled. The oats not being so thick has been favorable to the rape and there is a splendid stand of rape all over the field. I am encouraged that we are going to have plenty of rape for pasture for the 100 spring pigs which we will turn off this fall, and this will help to make cheap pork. You can talk all you are a might to about alfalfa for a hog pasture but I don't believe that hogs will do as well on alfalfa as they will on rape pasture. Dwarf Essex rape is well worth the consideration of any man who raises hogs or sheep. There is no trouble about getting it to grow on good land.

The High Price of Meat.

It is amusing as well as interesting to hear farmers complain about the high price of meat. The butcher now days, of course, brings some meat around at your door two or three times a week. He asks pretty good prices, there's no question about that. But is the farmer interested in cheap meat? Is it not better for the farmer to have dear meat than it is cheap meat? The farmer, of course, now days buys fresh meat, but the farmer is the seller of meat rather than the consumer of meat. That is, what he consumes amounts to comparatively little to what he sells. One can easily understand why the city consumer should grumble at the high price of meat, but the farmer it seems to me ought to feel pleased that meat is high in price, because when he sells meat then he gets something for it. For instance, I have just sold 74 hogs and I got 8½ cents a pound for them live weight. Now I believe I can afford to pay a pretty good price for what little fresh meat we want to consume in the family, and it is much better for me to sell pork on foot for 8½ cents a pound and pay what might seem an exorbitant price for fresh meat, than it is to have the fresh meat cheap and then sell the hogs cheap. Farmers are prone to grumble a little anyway. I suppose the farmer who is farming without live stock and has no meat to sell is in the same position that the city consumer is so far as meat is concerned, and he is interested in cheap meat, but the most farmers have meat to sell, and what they consume in their family compared to what they sell, is exceedingly small, and therefore they are interested in high prices for meat products.

Weeds.

Hot weather showers stimulate the growth of weeds on rich soil. Everybody understands that. On the fields of the home farm where stable manure has been used for a good many years the land is full of weed seed, there is no doubt about it. Hot weather showers this year have caused these to germinate. I had a field of lima beans and a field of sweet corn intended for the canning factory. I was in hopes to get these through to market without hand hoeing, but the red root came up in the rows of beans and in the rows of corn and grew so rapidly that the only thing to do was to hand hoe it, and we have had a gang of seven or eight men for over a week taking the red root out.

SEEDING LOST—WHEAT AFTER WHEAT.

I lost my seeding in my wheat this year, in fact, all of my seeding, and my wheat and rye was the best I ever raised. I want to know if it would be the best to put the wheat ground back to wheat again? The land is clay loam and I want to know about the fertilizer. Our county farm expert told me last spring that my land needed phosphate and I would like to know what kind to use and how much per acre. I also have a piece of corn on sand, fairly rich, quite low. Would it be advisable to sow to clover and timothy at the last cultivation? Is this very successful? Would I get hay another year? Would it be advisable to sow oats with the clover?

Allegan Co. T. W. K. Usually it is not advisable and not considered good farming to seed wheat after wheat, that is, to put wheat in two years in succession. Where one, owing to the conditions of the season, however, loses a catch of clover it might be the proper thing to do. If the land is in splendid condition it might stand another crop of wheat and then with a favorable season get a good catch of clover. But it takes good land to raise two crops of wheat and have them profitable. If T. W. K. is after a catch of clover as soon as he can get it, my advice would be to disk this

wheat stubble where he lost the clover, or work it up with a spring-tooth harrow, any tool, in fact, perhaps it might be the roller and the harrow. Get a firm seed bed, and sow it to clover in August. Any time in August will do. I would prefer to seed before the middle of August or by the middle of August if possible, but if there is not enough moisture at that time it can be deferred until well towards the last of August. Here is a good place to use a good commercial fertilizer. In this way you can get undoubtedly a good catch of clover which will make a good crop of hay next year. It will be a little bit later to cut than as though you had not lost your seeding in the wheat, but in this way you can maintain your rotation of crops and not seed wheat after wheat. Of course, I am not afraid to seed wheat after wheat on good strong land where good applications of fertilizer are used, because you can keep up the land and raise good crops, but as I say, it is not considered good farming. It is pretty exhaustive of vegetable matter or humus in the soil. It would be much better farming and much safer to work up this wheat stubble and seed to clover alone than it would be to put it into wheat again and then seed to clover next year.

Kind of Fertilizer to Use.

Most all soil in the state of Michigan needs phosphoric acid. We are deficient in this essential plant food. On the other hand, very much of our land needs potash and nitrogen as well, and so I think it is safer to use a complete fertilizer than it is to use simply acid phosphate. If you are sure you have got a sufficient amount of nitrogen and potash in your soil to raise a good profitable crop of wheat then you can get along with simply phosphoric acid. In this case you use phosphoric acid to help balance up the plant food in the soil and get more out of your land. I would use a fertilizer that was comparatively rich in phosphoric acid, but I would like to have a little nitrogen to give the plants a good start, and a little potash also for fear that wasn't a sufficient amount of available potash in the soil to raise the best crop. If you could use a fertilizer containing one per cent of ammonia, 12 per cent of phosphoric acid and two per cent of potash it would be a splendid fertilizer for you. Or a 1:9:2, or a 2:8:2 ought to give you splendid results.

Seeding Clover in Corn.

Some years you can seed clover at the last cultivation of corn and get a good catch, but it is risky. If you have got a good corn crop, the corn is taking all of the moisture from the soil and the clover stands a mighty poor chance. On the other hand, if we have plenty of moisture and warm weather the clover will germinate and come up and make a live of it until the corn is cut and then it will come on and make a good crop, but conditions are not always favorable and more times you will lose your seed than you will have a good crop. In seeding clover at the last cultivation of the corn, or in seeding wheat stubble to clover, I would not think of using oats as a nurse crop. You don't need any nurse crop. You are better off without it. The oats will take part of the moisture which the plants need, and as this is the time of year when very few weeds make much of a growth, a nurse crop is not necessary. We sow a nurse crop in the spring time so that it will germinate quickly and shade the land and prevent noxious weeds from growing, but at this time of the year we don't need a nurse crop, and under no consideration sow oats in seeding that is seeded the latter part of the summer, in August for instance.

COLON C. LILLIE.

CONCRETE FOR GRANARY FLOORS.

Concrete granary floors can be made waterproof by the following method: Lay concrete about two inches thick and level, then cover with two thicknesses of tarred felt, taking care to break joints, (No. 1 or No. 2 felt may be used,) then lay two inches more concrete and finish. This makes a water-tight job with little added expense.

I have repaired concrete water tanks by laying concrete over the broken parts and extending each way and while yet green imbedding iron rods to reinforce it, leveling the surface and pasting tarred felt over the green surface and covering with an inch or two of concrete. Cement mortar sticks to tarred felt so that it can not be removed when dry. The felt can be used in any work where a water-tight job is required.

Hillsdale Co.

W. G. BOYD.

SOME SANITARY PROBLEMS INCIDENT TO THE WASTE OF FARM MANURES.

BY FLOYD W. ROBISON.

While we are discussing the evils of the waste of farm manures and considering in general the economical side of farm life, it is well to pause and consider for a time some of the sanitary phases of the problems.

Sanitation Comes First.

Sanitary considerations force attention from two viewpoints: First, from a standpoint of health, and second, from a standpoint of economy. During the time which we have devoted to public problems and the consideration of agricultural interests, we have tried to convey at the same time to the farmer the importance of sanitary considerations. There is no single farm problem which has its sanitary relationship so conspicuous as the problem of the conservation of soil fertility. It has usually been considered very difficult by farm lecturers and farm writers to impress upon the farmer the importance of any new move without it has been found possible to show a decided advantage from the economical point of view. This was the case a few years ago much more pronouncedly than at the present time and yet we find that farmers will still give much closer attention and much more careful consideration to a problem if it is apparent that it presents a pronounced economic aspect. This is not an unusual or exceptional condition of affairs. Neither is it peculiar to farmers alone for it has been our experience that the only way to secure the attention of business men on most any improved project is to show a decided benefit from the financial point of view.

Considerations of Health and Economy go Hand-in-Hand.

We have purposely kept the economical consideration in the background more than most agricultural writers have done. This has been done not without a fixed purpose, for the writer has contended that it is possible to awaken the farmer's interest from standpoints of health and other considerations as well as financial. We have, therefore, in the discussion which we are about to undertake, relative to the sanitary problems incident to the waste of farm manures, placed consideration of health in the foreground. It is impossible, however, to draw at all times sharp lines of division between problems of health and problems of economy, for, of course, health considerations to man and animals carry with them, and intimately connected with them, financial considerations as well.

The Farm Unit is Getting Smaller.

In this country farms are growing smaller. This must necessarily be, as the value of farm lands increases as the population increases and as the demand for farm lands likewise increases. The unit of operation on a farm is consequently becoming smaller and smaller, and intensive agriculture, or intensified farming, is being forced to the front. With the consequent reduction in size of the unit in farming the question of the pasturing of stock on the small unit farms presents an aspect which calls for careful consideration. We have held with others, that the best results in the conservation of animal manures is obtained by removing the excrement, both liquid and solid, to the field as soon as possible after it is produced. It would seem advisable, then, that pasturing stock on a field would solve this problem in the best way possible. Certain it is that the opportunity for the conservation of that manure is greatest under pasturing conditions.

Rotation of Crops Applied to Pasturage.

Most farmers are familiar with the great advantages of the rotation of crops and the evils of continued cropping of one particular crop on a single field. Aside from the evil effects upon the soil caused by the tramping of stock while continually pasturing on one single field, we have, however, to take into consideration the effect upon the vitality of the stock itself from this continued pasturing on especially a small permanent pasture.

The natural habitat of many worms and other organisms is the intestinal canal of animals. It is common knowledge that as far as sheep, horses, cattle, hogs, etc., are concerned a variety of life of this low order are contained in the excrement of these animals and one of the decided advantages of composting of manures has been to destroy the larvae and the eggs of this insect life. On a small common pasture they pass freely from the intestines of the animals; the

incubation period of the eggs and the larvae is passed in the grass and on the weeds in the pasture and is again taken into the animal system when the grass in the pasture is consumed as before. In this way many insects, together with many forms of disease, become literally inbred in the stock on the farm and the vitality of the stock becomes of necessity very much lower because of this condition. Especially is this true in the case of sheep and swine. Sheep are close feeders and swine particularly quite readily manifest the evidence of the evils of constant pasturage and its accompanying soil pollution.

A rotation of crops including the breaking up of the pasture, followed for two or three years, destroys in a large degree these insanitary evils. A continual pasturing on the same field furnishes every opportunity for the continuation of these evils. The economic aspect of this matter therefore, as well as health considerations in the stock, necessitates the careful watching of this condition and guarding against its evils. But more particularly than all, the above is the effect on human beings because of the prevalence of the conditions here enumerated.

SOME OF THE HANDICAPS OF THE FARMER.

In all departments of industry, mankind is subject to limitations. The farmer suffers from these limitations as much, if not more, than many who are engaged in other occupations. He is constantly meeting them, and it is beyond his power to avoid them. Farming, even when most expertly directed, is not an exact science, and between the known and unknown there is much uncertainty.

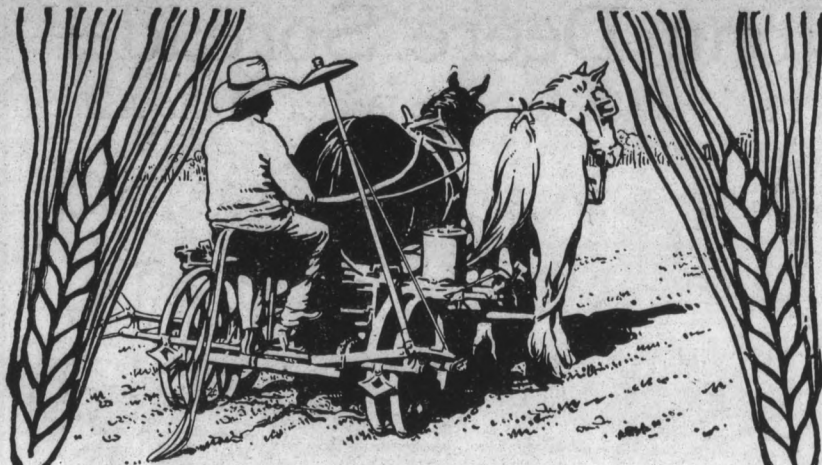
It is true scientists have given much time and study to agricultural problems, and have afforded much assistance by the discoveries which they have made. But notwithstanding all their efforts, they have left untouched many of the limitations by which the farmer is surrounded. The farmer of today is just as helpless in the presence of certain forces of nature, as was the farmer at any other time in the history of the world. He cannot prevent or divert the cyclone; neither can he control the lightning, so but that it is still a very destructive agent. Neither can he control the rainfall, or prevent drouths, early or late frosts or other injurious climatic changes. He cannot lengthen or shorten the growing season, so he is limited in the choice of the products which he wishes to raise. For he cannot raise products that are not suitable to the latitude in which he resides, no matter how profitable such products might be. There are many other things pertaining to his work which he would be glad to change, but which are beyond his control. We hear much about increasing the fertility of the soil, so as to keep producing better crops; and when the chemist announced that he could analyze the soil, and tell just what was needed to make the land very productive, it was thought one of the greatest difficulties of the farmer had been surmounted. While it is possible to tell by analysis just what elements are lacking in the soil and by specially prepared fertilizers to supply these elements, yet we cannot increase the productivity of the soil beyond a certain limit. So it is folly to talk about increasing the fertility of our farms by fertilizers or any other process, so as to keep on raising better crops year after year. Plants need something more than food; they must have a certain amount of moisture, sunlight and air, and in these requirements man finds a limitation which neither knowledge nor skill can overcome. For the average farmer to undertake to increase the fertility of his soil, and try to adopt and carry out many of the theories as advocated and recommended by some scientific agricultural writers, would prove so expensive as to involve him in hopeless bankruptcy. But notwithstanding the many drawbacks which the farmer has to contend with, he still has it within his power to get as much pleasure and comfort out of life as any other business man, because farming is a business as well as an occupation.

Ottawa Co.

JOHN JACKSON.

WANTED.

At once, a few men who are hustlers, for soliciting. No experience necessary. Good salary guaranteed and expenses paid. The work is dignified, healthful and instructive. In writing give references and also state whether you have a horse and buggy of your own. Address Box J. F., care Michigan Farmer, Detroit, Mich.



A Profitable crop of wheat on A. A. C. Co. Fertilizers puts more money in your pocket and makes more business for us. That is the reason why our factories never shut down. We have spent fifty years and a great deal of money to find out how to make the right kind of fertilizers for wheat and all other crops, and the farmer cannot go wrong when using

A.A.C. FERTILIZERS

While the supply lasts we will furnish this Season special compositions for wheat. **Banner Dissolved Bone**, 34% Available Phosphoric Acid; and our **Banner Bone Fertilizer with Potash**, 20% Available Phosphoric Acid, 4% Actual Potash, 24% Total Phosphoric Acid.

The best is none too good. About one thousand tons of surface soil is cultivated to the acre, and it is hard for some to understand why an application of a few hundred pounds of good fertilizer will make such a wonderful increase in the crop, but that is science. Our fertilizers are quickly soluble and are so compounded that they thoroughly enrich the soil on the same principle as a few drops of blueing will color a large amount of water.

If all the farmers knew A. A. C. Co. Fertilizers as they ought to know them not enough could be manufactured to supply the demand.

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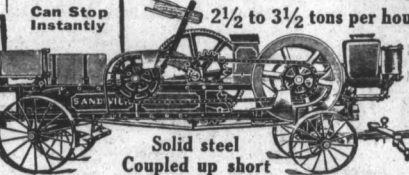
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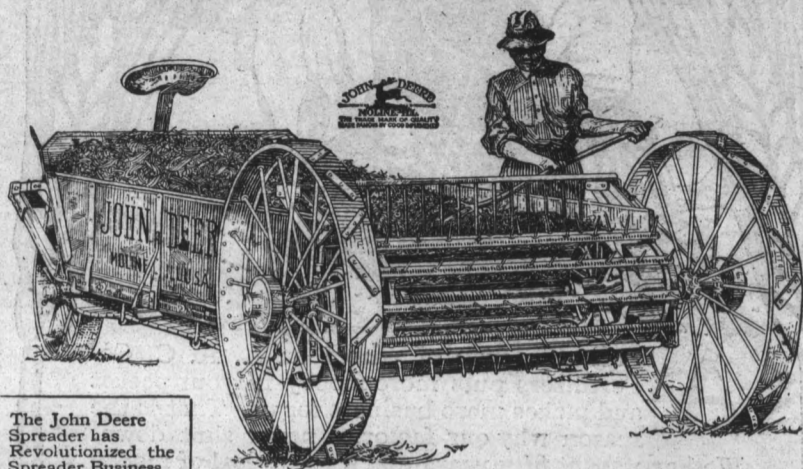
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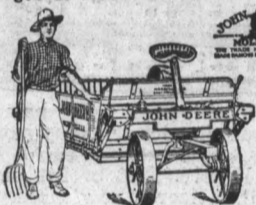
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Live Stock.

FEEDERS' PROBLEMS.

Rye vs. Corn as a Hog Feed.

As I am thinking of feeding my crop of rye to hogs, I would like to know how rye compares with corn; which will make the most pounds of pork, one bushel of rye or one bushel of corn? Which is the best way to feed it, ground or whole? At the present price of hogs and rye, which way can I make the most? Also would it pay to buy hogs to feed it to? I will greatly appreciate any information you can give in regard to this.

Washtenaw Co.

P. C.

In some extensive experiments made at Copenhagen Station as to the comparative value of corn, rye and barley, it was found that the gain on corn was slightly higher than that made on either rye or barley, but about the same as that on a mixture of the two other grains. Slaughter tests showed that the shrinkage was practically the same in each case and that corn made rather the softest pork, on the whole, which is contrary to the general opinion along this line. It may be concluded, however, that where rye is ground and fed in the form of a slop with skim-milk or other suitable combination of feeds, the same as corn, it will give approximately the same results which will be secured from the corn.

Thus the matter of the relative value of the two grains may well be the determining factor as to which shall be used for hog feed. It is well, however, to remember that a combination of grain feeds in the ration is superior to any one feed, both as to palatability and digestibility, which are prime factors in economic production.

Relative Value of Grasses for Hay.

I would like very much to know the relative value, ton for ton, of blue joint marsh grass, red-top and orchard grass as compared with timothy hay for feeding cattle and horses. I think an answer through your valuable paper would interest a good many readers besides myself.

Mecosta Co.

G. W. D.

Henry's Feeding Tables give two analyses of marsh or swamp hay. The digestible nutrients given in one case are 2.4 per cent of protein, 29.9 per cent of carbohydrates and 0.9 per cent of fats; in the other case 3.5 per cent of protein, 44.7 per cent of carbohydrates and 0.7 per cent of fats.

The digestible nutrients of timothy hay are in the same table given as follows: 2.8 per cent protein, 43.4 per cent carbohydrates and 1.4 per cent of fats.

It will thus be seen that one analysis of what is designated as marsh or swamp hay is somewhat less valuable, while the other analysis shows a larger percentage of digestible nutrients than is contained in timothy hay.

As compared with the above orchard grass contains 4.9 per cent of protein, 42.3 per cent carbohydrates and 1.4 per cent of fats, while red-top hay contains 4.8 per cent protein, 46.9 per cent carbohydrates and 1.0 per cent of fats.

As bluejoint is one of the better of the wild grasses it is probable that the higher of the two analyses given for marsh or swamp hay would approximate the digestible nutrients in hay made from this grass. If so the analysis would show it to be higher in its content of digestible nutrients than timothy hay, but lower than hay made from orchard grass or red-top which closely approximate each other in this regard.

It should be remembered, however, that palatability is a factor of no small consequences in the economic value of any forage and has much to do with the comparative value of different feeds.

KEEP THE SHEEP OR QUIT—WHICH?

It certainly seems strange that so useful an animal as the sheep should have so many natural enemies. From the time of the record of the doings of our first parents, sheep have been a necessary accompaniment or man, furnishing every year a fleece of wool, indispensable as an article from which clothing can be manufactured that will meet the needs of the infant in swaddling clothes, the well-dressed gentleman and lady, and the octogenarian who needs the comfortable flannels as a warmth-giving necessity in his declining years. Surely it is true that the products of wool are both a luxury and a necessity and that, too, during all the stages of life. It is also true that

the sheep furnishes a kind of meat that is toothsome, wholesome and nutritious.

Among the natural enemies of the sheep we might mention external and internal parasites, which include ticks, scab and worms that prey upon the sheep both externally and internally and retard the growth if they do not destroy the life of the sheep. Other natural enemies are the wolves and bears of the newer portions of country, the dogs of thickly settled portions, and the democrats of the virulent type who have an inherent as well as an acquired hatred for sheep generally, and the wool growing branch especially. Taken all together the enemies of the sheep are multiform and multitudinous.

Every four years the present dominant party meets in convention assembled and reaffirms allegiance to the principles and traditions of the party, which means that they hold the same hatred toward the sheep industry that their forefathers did in antebellum days, when they were determined to crown cotton king and make all other industries his subordinates.

When they by any means gain a dominant position and can influence and control national legislation, the first thing they do is to go to schedule K, the wool schedule, and do their best toward crippling the wool industry by bringing the American farmer who farms on improved lands of considerable value, and lives on a high plane of modern civilization, in close competition with the wool growers on cheap and public lands in Australia and Argentina. The present tariff bill before Congress puts wool on the free list, while on manufactured wools there is a duty of 35 per cent ad valorem. The plan speaks for itself; the American wool growers must come down to a level with the cheap lands and cheap labor of foreign countries, but the manufacturers must be better protected against foreign capital and cheap labor.

The question naturally arises as to whether the American farmers can endure and contend against such odds and enemies. As far as wool raising is concerned, considering the prices for labor, there was never a time in the history of the country when the American wool grower deserved a substantial protective tariff more than at present.

But notwithstanding the onslaught of the enemies of the sheep and wool industry, there are hopes of success and profit for the man who has a genuine love for the sheep business, and is so situated and located that he can follow it as well, or better, than other branches of farming. There is a shortage in both cattle and hogs, and the demands for meat from the consumers can not be met. The prices for both beef and pork are high and sure to remain there as long as the great army of workers can secure employment to earn money with which to buy meat to supply their wants. High prices are sure to prevail at most times of the year for a good quality of mutton, especially lambs of handy weights. All can not be supplied with beef and mutton must be substituted, and in some cases mutton is the first choice.

It certainly is a good time to plan to raise all the lambs one possibly can to consume the grasses in the pasture fields, and the cheap feeds of grains and forage feeds that can be garnered for winter use. The clover, alfalfa, silage, bean pods, shock corn and other forage crops can be used with cull and other grains of all kinds to good advantage in growing and fitting lambs and sheep for market. There will surely be good profits in the business. It is not worth the while to get discouraged on account of the low tariff rates on wool, and quit, for it will only be for a short period of time. Cling to the sheep—they are among the farmer's best friends.

Wayne Co.

N. A. CLAPP.

There is a good demand for high-class breeding boars and sows, and sales are reported at high prices. At a recent auction sale a Minnesota stockman paid \$415 for a two-year-old boar, the next best price for a boar, \$400, being paid by an Iowa stockman. The hogs offered were bought to go to Ohio, Indiana, Illinois, Iowa, Nebraska, Kansas and Minnesota. Twenty-seven boars brought in the aggregate \$3,232.50, making an average of \$119.71. Twenty-six sows sold for \$2,320, making an average of nearly \$90. Fifty-three sows sold for \$5,552.50, making an average of \$104.75.

Dairy.

CONDUCTED BY COLON C. LILLIE.

REMODELING A BASEMENT FOR COW STABLE. IS THERE DANGER OF MILK FEVER?

I wish to fit over a small basement, 22x32 ft. inside, for cows and young cattle. I would like to get as many as possible in this space, and still have it convenient and sanitary. I expect to have a silo ready to receive part of my corn crop this fall. I expect to put silo at either the north or south end of barn. In considering the question, you may consider both the model stall and the stanchion form of stall. My point is to put in as many head of cattle as I can in the space I have, and still have it quite convenient and sanitary. What do you think of a deep, wide gutter covered with a grate, keeping the cattle out of the gutter but having a place to hold both solid and liquid manure.

Barry Co.

SUBSCRIBER.

The inquiry does not say whether the rows of cow stalls are to extend across 32 feet or 22 feet. In other words, it is not stated what dimension shall be the length of the stable. This, of course, will make some difference in the amount of cattle that can be kept, but whichever way is used for the width or length of stable, neither dimension is sufficient to make a stable and have it the handiest possible. Thirty-six feet in width is the narrowest that you can have a stable planned for two rows of cow stalls. Then you have them face towards the outside of the building with an alley between the two rows of cows broad enough so that you can drive through with manure trucks or manure spreader to take care of your manure. This is the best way to have your stable. A 36-foot barn gives four-foot feed alleys and a ten-foot space between the rows of cows, and that is about as little as you can get.

With the basement described you will have to dispense with the broad driveway between the two rows of cows and use a little carrier or a wheelbarrow to take out the manure. This can be done so that you can keep two rows of cows. You could even keep two rows of cows in 22 feet. It would be a little bit crowded but if you took particular pains in putting in plenty of windows and see to it that you had a good system of ventilation installed properly, I think you could make it sanitary and have two rows of cows in a 22-foot stable. You could have the cows face outside and this would give a little broader alleyway between. One sufficient so that one litter carrier could be utilized for both rows of cows. If you had the cows face the center they would breathe into each other's faces. Not only that but you would have to have two litter carriers and two tracks, one behind each row of cows in order to take care of the manure.

I don't like to get into a discussion with regard to the merits of different ways of fastening cows in stables. No two people will agree, for it is largely a matter of fancy. "There is no use disputing about tastes," is an old Roman proverb. One man likes the model cow stall better, another man likes the swing stanchion. Personally, however, I like the model stall.

I know of a few large commercial dairies in this country that have the wide gutter with the grating over it, and it seems to be practical. Personally, I don't think I would like it, and still it is a good way to keep the cows clean. All the liquid manure and much of the solid manure passes at once through the grating into the receptacle, which is an extremely large gutter. The only trouble is in keeping this gutter sanitary, keeping it so that it won't smell. By using acid phosphate rather freely this can be done more or less successfully. I know of one man who has a deep gutter with a grate over it that made what seems like a convenient arrangement. He has a scraper run by power. This scraper nicely fits the gutter and when this is drawn along or pushed along by power the contents of the gutter are all forced out at one end, and he has it fixed so that the manure is forced into a manure spreader.

The trouble of it is, very little straw is mixed with the liquid and solid manure in this gutter. The manure is decidedly sloppy in condition, and one would have to get used to handling it in this way in order to properly apply it. But, of course, this could be overcome by a little experience on the part of the dairyman. Unless you could arrange

your barn so that you would have one free end to this gutter so that it could be scraped out, I prefer to have shallower gutters and then use a sufficient amount of straw as an absorbent to absorb all of the liquid manure. Then it is easily pitched onto the manure trucks and spread on the fields.

I have a young cow that will soon have her second calf. She should come in in ten days and she is giving a good mess of milk now. I tried to dry her up but the pasture has been extra good and she kept gaining instead of drying up. She is a Holstein, the only Holstein I have. Now what I want to know is, if there is more danger of her having milk fever by milking right up to calving, or not? I can't dry her up. What is the best treatment for her now? She is the only cow I ever had that I could not dry up, in fact most of my cows dry up too easy. When she came in before her bag caked badly and one of her quarters did not give more than half as much milk as the other, but now this quarter is giving as much as the rest.

Wayne Co.

J. T. B.

There is very little danger in a heifer having milk fever with her first calf, and a slight danger under ordinary conditions of her having milk fever with the second calf, but with this cow that is being milked right up to her second period of lactation I do not consider there is any danger at all of milk fever. Milk fever only comes when a cow has been dry for a considerable length of time and she is allowed to develop a splendid udder. Then when she freshens and the milk is all removed from the udder at once, there seems to be a collapse of the nervous system and milk fever, so-called, is the result. But where a cow doesn't go dry at all there is practically no danger whatever of milk fever.

Milk fever now days is not very much of a scourge to the dairyman anyway. We know how to handle it. We can let the cows go dry now and have a good vacation and rest up, store up energy for a big year's work, and when they come in if we are careful about milking we will have no trouble. At the first milking we milk out only a small portion; then the second milking a little more is taken out, and so on for two or three days, when there is little or no danger of milk fever and we milk the animal clean.

Should, from any cause, too much of the milk be removed at once, and we get a case of milk fever, then it is not very serious situation. All you have to have is an air pump and force air into the udder and distend it again as it was before the milk was removed and the cow, in 99 cases out of 100, is relieved at once, but the best way is to prevent it, as I have said, by relieving the udder of the pressure gradually and not take the milk all out at once.

With such a promising cow as this it probably would have been better if you could have dried her up and given her four to six weeks, or perhaps eight weeks vacation. She would have accumulated enough energy so that she would have been likely to have made a bigger record the coming year, but nothing serious has happened with the cow herself. Your calf probably won't be quite so strong as it would had the dame been dried off, but it may be that she has vigor enough so that she has continued to give a good flow of milk and develop a healthy, vigorous fetus at the same time. At any rate, the only thing to do now is to keep milking the cow and feed her well. Don't scrimp on her feed. Give her a full ration and thank your stars that you have the start for such a good animal.

EDUCATIONAL SCORING CONTEST.

With seven more entries of butter and one more of cheese than were shown in the first scoring contest, the second scoring held by the state dairy and food department at Detroit in July, indicated an appreciation by the butter and cheese makers of the state of the work being done by the department.

The scores showed considerable variation from those made at the previous gathering. In the butter department whole milk samples were marked up nearly four per cent above the average for May, while milk and cream samples were down a half of one per cent and hand separator exhibits showed a falling off of about one per cent. On the cheese side of the contest both the soft Michigan and the cheddar classes were running lower—the former averaging 93.20 per cent as against 96.5 per cent for the May averages, while the latter averaged 94 per cent as compared with 95 per cent for the earlier scorings.

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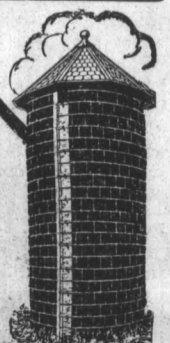
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DETROIT, AUGUST 9, 1913.

CURRENT COMMENT.

In the last issue we commented upon the parcel post situation and a movement which had been instigated in Congress to take from the Postmaster General the administrative power for changing parcel post regulations as provided under the present law. A communication from Prof. W. A. Henry, who has taken an active interest in the movement for an adequate parcel post in this country, gives the proposed change in parcel post regulations as proposed by Postmaster General Burleson as follows:

"On rural routes only, at a charge of five cents for the first pound, and a half cent for each additional pound, or fraction thereof. The first zone is increased to 150 miles, airline, from the receiving postoffice; and the carrying rate reduced to five cents for the first pound and one cent for each additional pound. When this ruling goes into effect, a farmer can send a 20-pound package for 15 cents to his postoffice, or to any person on his own rural route; or 20 pounds to any postoffice within 150 miles for 24 cents. Thus, the weight is almost doubled and the rate cut about in half. Thereafter, ordinary postage stamps are to be used, instead of the special stamps now employed. These changes will make the parcel post service ten times more valuable than now."

In his communication Prof. Henry intimates that the express companies and railroad interests are behind the movement to limit the Postmaster General's power in this direction and points out the desirability of the present provision of the law, intimating that it will be time enough to limit the power of the Postmaster General in this direction when it has been found that he is working against the wishes of the people in postal matters.

This opinion is in line with that of every thinking person who has studied the situation. And there is no question as to the attitude of the people upon this question. The present parcel post law did not satisfy them, but the prospect that it would be gradually broadened and improved as experience demonstrated the feasibility of such action made it more acceptable.

All that is necessary to have its present provisions retained is for the interested people—and country people especially—to write a courteous letter to their two senators and representative in the lower house of Congress expressing their opinion in this matter. Such letters, when they are numerous, always have a wholesome influence upon congressmen or legislators. If the reader is interested in the proposition of making the parcel post more adequate he should at least be willing to make a personal appeal to his senators and congressman.

Too often questions of Public Health economy are given more consideration than questions of health, a fact which is as true upon the farms of the country as in the homes of the city. But questions of health are vastly more important to the

public than questions of mere economy, since health is the one factor of our lives which makes them really worth living, and besides health and economy are so inseparably connected that the one cannot be considered without the other.

For these reasons the people of the state in general and those of the country in particular should take an interest in the fact that a special food and health train is traversing the state and will stop at many towns on the different railroads of the state, according to the schedule published in another column of this and succeeding issues. The exhibits on the train and the lectures or information given will be well worth while and the knowledge gained may easily aid in the conservation of that choicest of human blessings, good health.

Business and the Banks.

In previous issues we have commented upon the apparent stringency in the money market and the attitude of the bankers toward same. Of course, bankers generally show considerable reluctance to comment upon a situation of this kind, but in cases where they do express opinions they are likely to be as varied as are those expressed by the average man upon any subject which may be introduced.

In recently published interviews of Detroit bankers, various opinions were expressed regarding the cause of the apparent money stringency when reports show bank reserves to be well above legal requirements. One financial journal in commenting upon the situation after a careful study, expresses the opinion that the present difficulty is due to lack of confidence on the part of financiers, although some business men's opinions charge the apparent stringency in the money market to the influence of New York financiers.

All agree, however, that the situation is improving, and at points in the interior of the state as well as in industrial centers this appears to be true upon investigation. One influence which has tended to relieve the situation is the announcement by the Secretary of the Treasury that from \$25,000,000 to \$50,000,000 of government funds will be available to be distributed among the various depositories of the south and west to aid in moving the season's crops.

Along with this announcement comes one which is of no less interest because of the innovation which marks the government's first real participation in the commercial affairs of the country in that Secretary McAdoo expresses a willingness to receive prime commercial paper as security for the deposits made.

This is in line with the plan provided for by the pending currency bill, upon which there is apparently as wide a diversity of opinion among bankers as in Congress. A more careful analysis of this bill than had been given it before previous comments were made, would seem to intimate that it is not sufficiently liberal toward the banks to secure the general co-operation of the state banks and trust companies. Under its provisions, to identify themselves with the federal reserve banks, such institutions would be obliged to tie up one-fifth of their capital stock in the stock of the federal reserve association and would receive but five per cent dividends upon this sum, which is doubtless less than could be secured from the same funds in other channels at the present time. This feature, however, is one which has not been reached in the discussion of the proposition in Congress and it may be changed, along with many other provisions of the bill during its consideration, should it finally receive favorable consideration by Congress.

Government Regulation.

After an investigation which has occupied nearly six years and in which nearly a carload of books and papers have been filed with the Interstate Commerce Commission and become part of the proceedings in the case, that body has taken action in the matter of the regulation of express rates. It has ordered a reduction in rates to become effective on or before October 15 of the present year, which it is estimated will reduce the income of the express companies over \$26,000,000 a year, or approximately 16 per cent of their gross income. But one of the most important features of the order is that it includes notable reforms in practices and also an entirely new method of making rates.

As might be expected, the express companies have protested that it will be impossible for them to stand the cut proposed, especially in view of the fact that

the establishment of the parcel post has deprived them of much profit in carrying small packages, which they claim to be quite 30 per cent of the revenue they formerly received in carrying parcels of 11 pounds weight or less.

After a full investigation, however, the Interstate Commerce Commission does not believe that this is a legitimate reason for holding up rates for the express companies. The new rates established under the order are made for a period of two years only, on the theory that this period will give abundant opportunity for the testing of these rates under varying conditions amounting to a normal average which the commission believes to be the only way that an absolutely proper rate basis for the express companies can finally be determined. In the meantime the express companies will be at liberty at any time to bring forward new facts as a basis for a petition to the commission for a modification of the order.

Under this order the basis of classification prescribed is that all articles of merchandise of ordinary value are to be carried at first-class, or ordinary merchandise rates, while articles of food and drink, with a few exceptions, are designated as second-class matter to be carried at a rate approximately 75 per cent of first class. Certain commodities, such as newspapers and periodicals, bread and other articles for which especially low rates are now charged, are made substantially the same as under existing rates.

Another reform measure contemplated under this order is the appointment of a permanent committee to revise the routes of express carriers and eliminate the circuitous routes which are now a cause of considerable complaint on the part of shippers.

This action on the part of the Interstate Commerce Commission is an important one and is an added proof of the feasibility and desirability of government regulation of public service corporations.

Naturally, however, these corporations may be expected to make vigorous protest, due to the fact that they have so long enjoyed a monopoly of a kind of business in which they could levy as heavy a charge as the public would stand without interference.

THE MORAL RESPONSIBILITY.

You pay no more for advertised merchandise than for unknown brands, and you are far more certain of being pleased.

There is a moral responsibility upon the manufacturer who advertises, as well as a business reason, to deliver goods that are satisfactory. For he has virtually promised to do so, by his invitation in the paper, while the man who does not advertise has made no promise whatsoever.

Just remember that the manufacturer who takes the trouble to tell you about his goods is much more likely to sell you 100 per cent value than the manufacturer who has extended you no invitation.

Those who are asking for your business can be found in the Michigan Farmer.

HAPPENINGS OF THE WEEK.

National.

The strike of the copper mine workers in the upper peninsula of Michigan remains unsettled. Thus far there has been no serious rioting or disturbance, which perhaps is largely due to the troops ordered to that section by Gov. Ferris. It appears from reports that the miners stand ready to arbitrate differences with the operators, but thus far the latter have refused to make a statement of their side of the case or what they will agree to. It is declared that outside aid is now being asked by the miners to help finance the fight and it is probable that during the present week there may be developments of a significant nature.

The people of Detroit are watching with much concern the development of a concrete issue between the city officials and the Detroit United Railway. An ultimatum has been presented by the mayor to the common council, which body is committed to sanction same, to the effect that all persons riding upon cars using streets where franchises have expired, pay only three cent fares. The D. U. R. has declared that it will not continue to do business on this basis. The day set for enforcing the proclamation is Aug. 7. One man was killed, one probably fatally injured and a third badly hurt by a north-bound train on the Pere Marquette railroad near Erie, Mich., last Monday night.

Two Italians were taken into custody in Detroit Monday, being held as members of a gang of counterfeiters. A number of counterfeit 50-cent pieces has been in circulation in Detroit and through this means the detectives were led to arrest the two foreigners.

Five members of the West Virginia Legislature have been sentenced to prison for graft in connection with the election of a United States senator early in

the year. A stay of execution for 90 days has been allowed to permit the members to appeal their cases to the state supreme court.

Representative bankers of 59 large cities in the agricultural regions of the south, middle west and Pacific Coast have been invited to Washington to consider the distribution of the \$50,000,000 of government funds about to be deposited in national banks to facilitate the marketing and movement of the nation's crops.

Following the decision of the United States Supreme Court the railroads of the state of Minnesota will soon put into effect the two-cent rate on lines within the limits of that state.

The Saginaw Humane Society adopted a resolution calling upon the Michigan State Live Stock Commission to rescind an order providing that all dogs without muzzles or unchained be killed.

The board of education of Wyandotte has arranged to provide the school children of that city with text books at 10 per cent above the actual cost.

Educators of New York city are complaining of an insufficient number of qualified teachers to fill positions in the high schools of that city. There are approximately 100 positions now open.

M. R. D. Owings has been elected Director and Vice-President of the M. Rumely Company. Mr. Owings all his life has been associated with the development of American agriculture. He was secretary of the Milwaukee Harvesting Company up until 1898, and for eight years back has been advertising manager of the International Harvester Company. It was through his enterprise that the International Harvester Company Service Bureau, which has done so much educational work along agricultural lines, was established and developed.

Foreign.

The federal administration seems determined on its Mexican policy. Henry Lane Wilson, for several years ambassador to Mexico, who was recently called from Mexico to Washington, insisted on the recognition of the Huerta administration, and has resigned because he and the government could not agree with regard to a definite course. President Wilson has selected former Governor John Lind, of Minnesota, to be the personal representative of the President and adviser to the American embassy at Mexico City. Mr. Lind is now en route to Mexico to urge the Huerta government and the representatives of the rebels to lay aside their differences temporarily and proceed to a peaceful election of federal officers. There is an understanding that the United States government will recognize an administration brought into being in this manner.

It is reported through Belgian sources that an exceptionally rich gold field has been discovered in the province of Katanga in the Belgian Congo, Africa.

The new Chinese Republic is disturbed by a rebellion in the southern provinces, the province of Kwang-Tung being most prominent in the revolt. The latest advances seem to show that the federal government will be fully able to overcome the rebels and restore peace. General Lung Chi-Kuang, the commander of the government troops has been made governor general of the above province to succeed the rebel governor.

What promises to be an important discovery is announced by directors of the Pasteur Institute before the Academy of Science in session at Paris. It consists of a serum which has been proved to be a successful remedy for cholera in monkeys, and from this it is inferred that the remedy will prove effective in the case of humans affected with the malady.

Seven persons were killed in a fire caused by an explosion of a lamp in a cottage located 15 miles east of Quebec. Twenty-two coal miners perished in a fire in a mine near Glasgow, Scotland. Only one man escaped alive from the shaft in which the fire occurred.

A revolution is on in Venezuela. The rebels are reported to be acting under former President Castro. The government forces report two victories over the rebels, one at Uren and the other at Espinozo.

FOOD AND HEALTH SPECIAL TRAIN.

The Michigan State Board of Health and the State Dairy and Food Department are running a special educational exhibit train over Michigan railroads during August. Special demonstrators accompany the train to explain the exhibits and answer questions. Visitors, and especially high school pupils, are asked to bring their note books and cameras if they have them, and compete for the prizes which will be offered for photographs of the train and reviews of the exhibits. The itinerary of the train for the ensuing week is as follows:

Rockford, Aug. 9, 7:30 to 9:00 a. m.
Cedar Springs, Aug. 9, 9:20 to 10:20 a. m.
Howard City, Aug. 9, 10:50 to 12:20 p. m.
Big Rapids, Aug. 9-10, afternoon and Sunday.
Reed City, Aug. 11, 7:55 to 10:00 a. m.
Cadillac, Aug. 11, all afternoon.
Manton, Aug. 12, 7:45 to 9:30 a. m.
Kingsley, Aug. 12, 10:20 to 11:20 a. m.
Traverse City, Aug. 12, all afternoon.
Northport, Aug. 13, 7:50 to 10:00 a. m.
South Boardman, Aug. 13, 12:45 to 2:15 p. m.
Kalkaska, Aug. 13, 2:40 to 6:30 p. m.
Mancelona, Aug. 14, 7:30 to 10:00 a. m.
Elmira, Aug. 14, 10:40 to 11:40 a. m.
Petoskey, Aug. 14, all afternoon.
Brutus, Aug. 15, 7:50 to 9:00 a. m.
Pellston, Aug. 15, 9:15 to 10:15 a. m.
Mackinaw City, Aug. 15, 10:50—balance of day.
Cheboygan, Aug. 16, 8:22 to 2:00 p. m.
Wolverine, Aug. 16, 3:00 to 4:00 p. m.
Gaylord, Aug. 16-17, 4:45 p. m. to over Sunday.

Magazine Section

LITERATURE
POETRY
HISTORY and
INFORMATION

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

The FARM BOY
and GIRL
SCIENTIFIC and
MECHANICAL

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

A Day's Ramble on the Chickamauga.

By ROBERT SPARKS WALKER.

I T must have been a peaceful day when I first heard the noise of the rippling waters and the voice of the winged songsters that lived upon its banks. That first time was the day of my birth, for I was born in sight of the Chickamauga—a beautiful name, musical, but to one who has heard it all his life it becomes somewhat common—an every-day word. Perhaps if Nature had not demanded that I remain by the side of my mother, I would have strolled away, and have explored this stream of water, named for and by some Indian tribe years before.

I would have strolled away,
On that my natal day,
But Nature bade me stay.

To me the waters chuckled, instead of rippled. They seemed to coax me away from my home, and to shed tears in an effort to win my friendship. After winning my friendship, I discovered a kinship existing between me and this lovely stream. The Chickamaugas had spent many years in growing maize, running down deer, indulging in the green corn dance and other festivities along its banks. Its beauties were diversified; it was charming.

My first adventure was when I crawled upon my knees an eighth of a mile in babyhood and, when reaching the dense growth of canes, my father had foiled my plan by stealing softly away and hiding in the undergrowth, there imitating the noise of a bear, which was repulsive to me. Instead of retreating with my legs in a horizontal position, I stood erect and bade the creek a hasty good-bye.

I courted the stream by first wading in its waters, and splashing near the banks, where the family washing was done. My friendship increased and, naturally, the stream drew my attention to its inhabitants. Consequently my sporting senses were soon developed. I discovered that the fish would eat most any fresh meat. Like an Indian, I took the first that was in my sight. I caught a toad, which was chopped in twain with a mattock. This acted like a charm, for, without removing it, I landed three catfish.

Leaving the pole in the water, I went out on the hillside and discovered a large chicken snake, about six feet long, and heavy. It was killed and tied to the tail of my half-grown mongrel dog. The dog was of a gentle disposition, and had never refused to lick my sores. He was brave, but still a coward. He started off down the road, his feelings much injured; hearing something crawling behind him, he looked around. His eyes bulged on seeing the snake close at his heels. He yelped and set off down the road at break-neck speed, yelping at every jump. At frequent intervals, he, not slacking his speed, would look back. The snake was following. He reached the end of the road. He reversed his framework and traveled over the same ground as before until he reached the other end of the road. Here he reversed his body again and became more frightened each time that he ran the race. He was perspiring freely. The poor fellow was suffering for breath. I nailed him by his long ears while in rapid transit, and removed the snake, throwing it out of the way. He was my plain old Rover again and soon forgot my boyish prank.

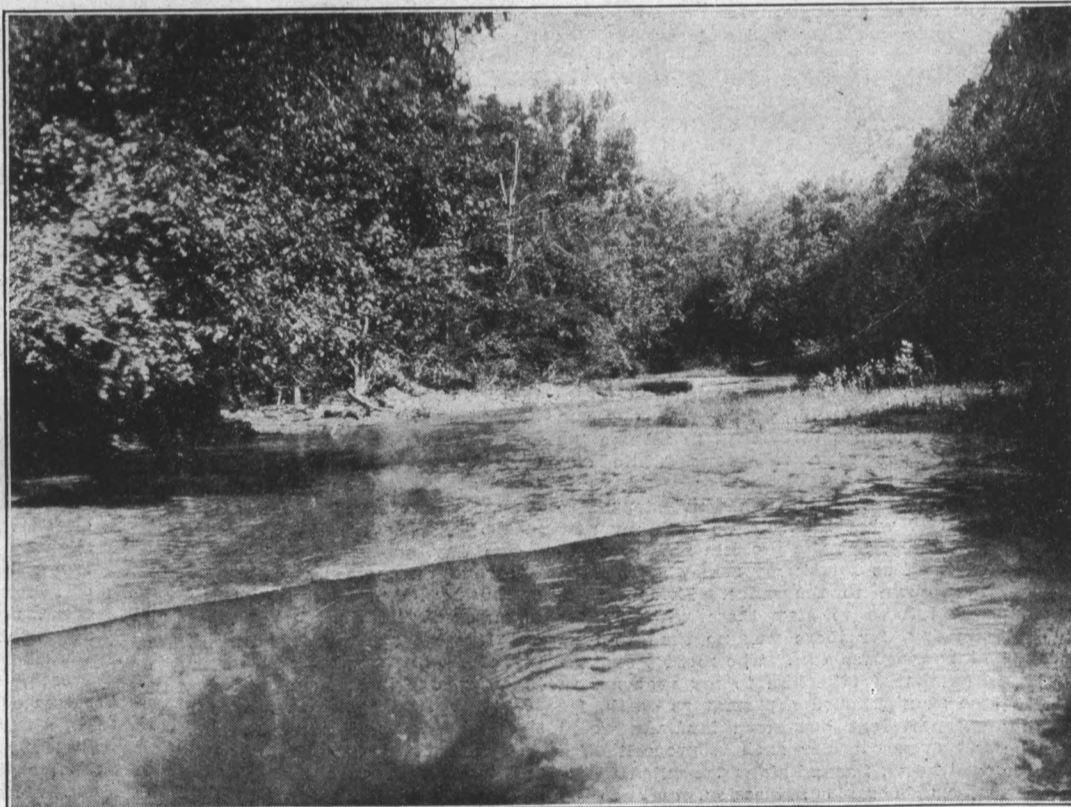
About this time I ran up a few feet

above the stream and assisted my father in lowering the skeleton of a giant Indian. There were many of these, and it was no uncommon sight to me. The skeleton outlined the body of a man who would doubtless stand more than six feet high. The job completed, I returned to the stream, which continually haunted me.

A little later a youngster joined me and we went down oyster fishing. Our oysters were mussels, but we cooked and ate them just the same. They would have been better if we had had some salt to season them with. We removed them from the shells and then cooked them. Without telling my father what I had done I calmly asked him, the following evening, if mussels were good to eat. To this he replied, "No, my boy, they are poisonous." Well, I made no response, and he never knew that I had already been eating them.

I managed to leave the stream long enough to plant some corn. The field was in sight of the stream, and I could plainly hear the rippling of the waters over the stony bottom. While dropping this corn a black cloud slipped up on us

has a natural affinity for water. In crossing a stream you had better keep spurring him in the side or he will deposit you in the bottom of the stream. I had seen this old horse wet my father's Sunday trouser legs a sufficient number of times to know that it was wise to keep an eye on him in crossing a stream. A neighbor told us to ride him up into the deep water and, when he was in the act of lying down, to jump across his head and give him a good ducking, which would forever cure him of this bad fault. We were born experimenters, so we rode the old horse up into deep water. He broke down at the knees immediately, and my brother, like a frog, leaped over between his ears. He succeeded in baptizing the animal perfectly, but the old horse shot his head high up, throwing my brother six feet into the air. He came down with a splash, went to the bottom of the stream, and came near losing his woolen hat. He clambered back on the old horse's back, drenched, but a much wiser boy. The old horse evidently chuckled to himself, as this never changed his disposition one whit,



The Chickamauga.

and huge streaks of lightning lit up the sky. My brother mounted a horse and tucked me up snugly behind. We galloped off down the road at full speed. The horse became frightened at the lightning and our hired man's bulldog chased us. We were barefooted. The dog frightened the horse the more by biting at him. All was in a state of turmoil. The dog made another lunge and bit my brother through the foot.

The horse made his way to the barn. In the shelter was a large boat. The horse ran under out of the storm and reared up on his hind legs. My brother pitched off headlong, and I took a tumble, my side striking a decayed end of the boat and splitting it. The horse let down his front feet but, seeing my brother would be crushed, threw himself around and my brother was not touched.

Our other old horse, they said, was a May colt; that is, he was born in the month of May. A May colt they say

and he was just the same old horse, with the same old habits, and of the same congenial disposition.

I moved on down this stream. I knew not where it had its source; made no inquiry, for I didn't care. As far as I knew, this stream only extended a few hundred yards above my father's farm and a little below it. This was all that was required to meet my demands, and my fancy, so I concerned myself only about those things which were furnishing me pleasure, and laughter.

I moved on down the stream. I was growing older every day. In walking a slick inundated log one day I slipped and fell right headlong into the stream; necessity forced me to swim and I have been swimming ever since.

It was one day that the older folks were clearing some land along the creek. I always had an eye open to pleasure, with the creek, my brothers, or my dogs. A long sycamore tree projected from the

bank, eight feet above the water, to the middle of the stream. I thought my dog needed a ducking. Taking him out on the end of the log I showed him the beauty of the stream, up and down. I tried to call his attention to some autumn leaves which were passing under us but he seemed to confine his thinking and attention to the purpose for which I had brought him out on the log. "Well," I said, "I must give you a nice little bath this morning, so here's to your good health, old boy," and just as I was in the act of throwing him in the log broke at the bank and there was an awful splash. I had joined the dog in the baptism before he had reached the water. Log, dog and I—all in one big heap—and the waters rushed upon us.

And still I moved down the stream, growing older every moment. It was autumn. The leaves were brown, and the scent from the growing fields of corn evidenced the approaching harvest. The golden grain was scarcely ready to put into the bins. We were making an inspection of the fences. Live stock often stealthily entered our fields at this time of the year and destroyed a part of our crops. We heard a noise near the creek. It was an old roguish sow tearing down the corn. We had a large yellow dog, as sensible as he was long. We asked him if he heard the hog. He nodded his head and was immediately off. He chased her up and down the banks of the creek, through the dense growth of bull weeds, but she would not get out. She jumped into the deep creek and swam across. We waded in with poles and followed her. We inflicted bodily punishment all along the way across the stream. The dog was swimming by her side, continually nabbing her on the neck. My brother on one side, and I on the other, were pounding her with poles. We had little sympathy for a rogue, either two-footed or four-footed. Reaching the other side, she could not scale the high bank and resumed her swimming toward the starting point. We gave chase as before and seized the opportunity of whipping her. The dog stood right by us, seeming to realize that this animal was destroying what we had made that year and what we had to depend upon to keep our bodies heated until the next spring. She was soon off at the other bank, where her owner came running up and took her home.

It was October, and we were cold and wet. We thought nothing of it, but examined the fence. We repaired it and, in the dense undergrowth, never lost our senses but were still taking every opportunity to investigate.

We discovered on this steep hillside, covered with a mass of large trees and shrubs, a tree which my brother said was a cottonwood. He examined it, and then I followed his example. While I examined it he had disappeared into the undergrowth. I heard him give a shrill cry but thought he was doing it purposely. Pretty soon I went the way that he had gone, our other little Spitz dog trotting at my feet. I carried an axe. In a moment I was walking astride a small bush that supported a large hornets' nest. They swarmed out; I threw away the axe and took out through the bushes, running up the steep hillside where the dense bushes kept them off. I saw the little dog coming with his ears laid back and

snapping at every jump at the half dozen or more hornets that followed him. I scolded him, and tried to divert his course. He came steadily on towards me. I threatened to hit him with a stone, but he came right ahead and jumped into my lap. He, if any, was the only one that was stung. Looking down the hill, I spied my brother crouched behind a large poplar tree, hiding from the hornets that had previously given him chase.

And then I never forsook the Chickamauga. I moved down the stream on another occasion, to set out a fishing hook. I traveled down the side of a steep hill, through the leaves and undergrowth, until I came to a little peninsula about two feet wide, which extended into the stream at least fifteen feet. Instantly I heard a great rustling in the leaves of undergrowth and in the direction from which I had just come. I listened, and pretty soon was enabled to decide positively that it was the noise made by the crawling of blacksnakes. I didn't get my pole anchored on the little peninsula, but turned my attention to the demons which apparently were on my trail. I held up one foot and listened as a dog does when he is anxious to discern the direction of his master's voice in the distance. In a moment the snakes were in view. Their heads were close to the ground, and they were running—almost flying in motion—side by side in my footsteps. The came to the small peninsula, held a momentary consultation, and then one remained on the bank while the other crawled twelve feet below and jumped into the water. Both were vicious looking vipers, and were evenly matched in this respect. My first boyish thoughts were to jump into the creek, make for the other side and thus escape. So I began to lower my right foot into the water. The bottom I knew was stony, as it was just at a point where the stream ran over a large ledge of stone. Reaching no bottom, I concluded my only opportunity to escape lay in putting up a fight. The snake that had crawled into the water was now within reach and I began to whip him with the pole which I held in my hands. I was succeeding admirably in giving him a severe beating, at the same time keeping an eye on the rascal that was lying in wait on the bank. But the snake was wise. He might have been older than I, for he displayed some wonderful sense. In the thickest of the fight he dived into the water, which was semi-transparent, but came on towards me. Just what he intended to do with me, if I allowed myself to remain on the stone peninsula, I could not well make out, but instinctively I cared not to remain to ascertain. I continued my unmerciful pounding, but this was unsatisfactory. I could deal him no heavy blows. My pole was a weak one and bent at every stroke. The licks I gave the serpent were nothing. I tried to gouge him with the sharp end of the pole and, in the near melee, my pole was lost in the water. The snake was then at my bare feet and his head was almost out of the water. My pole, the only weapon, was lost. It was now time to resort to the safety appliances, and the only ones nature had endowed me with were two good strong healthy legs, legs that I understood thoroughly, safety escapes that had been tried on parents and live stock and they had never failed me. Would they do so on this occasion? That was the vital question I desired to ask but hadn't the time. It was time I was moving, but the thing that worried me was the snake on the bank which I had either to jump over or kill before I could make my way out. He was lying motionless, a big black fellow, as sleek and shiny as a polished ebony stick. All at once I ran out on the bank, made a long leap and landed three feet beyond the dangerous looking fellow.

I took no time to see what his actions were at my rude passing without salutation. I retraced my footsteps through the deep old leaves, sticks and undergrowth. In an instant, he was at my heels. I imagined I could feel his breath on my bare feet. I had heard that when snakes chose to run you a race, if you happened to get in front, or happened to be the one in the lead, turning back would cause the serpent to turn coward. I thought of this but chose not to experiment in this lonely spot. I lengthened my steps and raised my gait to the highest notch. It was difficult to get through the undergrowth. The ground, although covered with a deep layer of autumn leaves, was stony and rough. It was difficult to keep from stumbling. The snake had the advantage of me here. His rate of travel was not slackened, nor

was his path obstructed. He kept up the hot chase. If I had had just one moment for rest I should have been extremely frightened, but my main object was to get out of that undergrowth where I could have an equal chance with the viper—a chance to run an honest race.

The cleared land was what I was seeking, and I found it, and here is where I met fortune and misfortune. A large dead tree was lying down the hill directly across my pathway. It was closely hugged by many small shrubs in the underbrush. The snake was still pursuing. I leaped the log. I was active. Where did I land? I could see daylight ahead, but when I landed I saw the stars. This log was lying just where the hillside gave way to a bluff. When a hill turns abruptly to level ground there is always a bluff. This spot was where the hill turned to level ground. The log was lying on the crest—the dividing line. The undergrowth concealed this fact from me.

The Lost Opossum.

By MRS. F. NISEWANGER.

"Want to buy a 'possum, don't you, Mister?"

"I didn't know that I did, Sambo, but—" I hesitated a little, looking down at the small, eager descendant of the family of Ham; "how much do you want for him?"

The darkey's bright eyes narrowed shrewdly as he fenced ingratiatingly. "Young and tender, Mister; make a mighty fine dinner. Ought to be worth four bits."

"Dinner!" I ejaculated; "I don't want to eat him, you young cannibal. If I buy him it will be for a pet."

"Oh, 'scuse me, Mister," the boy apologized, with a broad grin and eyes that danced with what I now believe was joyous anticipation of imaginary adventures in store for myself, but he only concluded, "Four bits is the price, anyway," in a voice that intimated regret that he had not asked six.

"Is he perfectly well and sound? You didn't hurt him when you caught him?"

"Not a scratch on him, Mister."

"All right, guess I'll take him," I acquiesced, "but where'd I better keep him till I tame him?"

The boy's grin was a broad one. "If you don't keep him pretty tight," he cautioned, "he won't stay long enough to get tame."

"And what does he like to eat?" I further questioned, as another thought struck me.

"Anything you do, Mister," the boy assured me. "Won't be any trouble at all." Thus did I, a lone, peaceable Cincinnati business man, become owner and director of one small, bright-eyed opossum that sometimes threatened to assume the proportions of a full-grown white elephant.

Before buying him I had not stopped to consider what I should do with my new possession, but the problem now presented itself as I took my somewhat belated way down to the office. Evidently he would have to stay there with me for the day, for there was no time to take him any place else. The mental suggestion that I take him to my rooms with me at night died a premature death, for my provident but stern landlady would not even consider such a proposition. I well knew. Several plans presented themselves in rapid succession, only to be discarded until, by the time I had reached the office, I was forced to the conclusion that it would probably be the home of Jerry—as I had promptly named my prospective pet—for an indefinite length of time. That, at least, was mine, and if I wanted to convert it into a menagerie there was no one but myself to consult about it.

At the door I accosted my "office hop" with, "Bob, I need some help. I wish you would go out to the store-room and roll in that small barrel and a piece of wire netting to cover the top."

"Sure," Bob replied obligingly, smiling understandingly at my meek-looking protégé. He returned promptly with the barrel, staples, netting and hammer.

"The darkey I bought Jerry of," I volunteered, depositing the opossum in the barrel, "intimated that he was some persimmons in the matter of making get-aways."

"So I've heard," Bob grinned.

"Think I can fix him, though, so he'll stay till I can get him a wire cage," I

learned it, though, through experience. I leaped the log but didn't land on a level with my starting point. I took a tumble, rolled over and over, then landed several feet below on a large slanting stone. On striking the large inclined stone I tore my clothes, my arm was cut, and blood began to gush from my wound. But I didn't stop there. The large stone inclined into the water and I was hurled by momentum into the Chickamauga. A big splashing of the water and I went under. I was not drowned, you know, else you would not be reading this. I struggled and finally was soon again strolling on the bank. What had become of the snake? I did not know. Possibly and undoubtedly when I leaped the log, throwing it between us, he reversed his course and gave up the chase. I was bloody, muddy, wet, and my clothes torn, but in half an hour I had joined my brother where snake chases are never known—hoeing corn.

(To be concluded next week).

EXPERT NEEDED.

BY JOHN QUILL.

I've been readin' in the papers
Now for quite a little spell,
'Bout the high-browed farmin' experts
That are sent around to tell
All us poor, benighted farmers
What to raise, an' how, an' why,
So's there'll be more grain, and such-
like,
For the middleman to buy.

'T seems that we've been sort o' lazy,
And must hustle 'round quite spy—
Raise more corn, an' wheat, an' barley,
'Taters, beans, an' fruit, an' rye,
So's the prices will be lower;
An' they've got the nerve to tell
That we don't know how to "manage,"
An' we're livin' most too well!

We're not claimin' that we're perfect,
But we wish they'd tell us why
They don't educate the merchant
How to sell, an' how to buy;
Or give lessons to the banker,
So's we wouldn't have to pay
Twelve per cent, or more, per annum,
With a "bonus," too, they say.

An' the middleman's big profits
Hurt the folks of farm and town;
An' the railroads, too, are needin'
An expert to call them down.
So they'd better send an expert
That can show us all the way
To be broader, kinder, people
In our dealin's, day by day.

Show us how to be unselfish
An' to help our fellow man
Over places rough an' stony,
Doin' good wher'er we can.
Yes, I guess we need an expert,
An' his salary he'd earn,
For to do as we'd be done by
Is a lesson hard to learn.

on my desk, showing that a very uneasy Jerry had at some time held sway.

A thorough search failed to disclose him and I was forced to choose between two conclusions. Either someone had deliberately borrowed my pet opossum or he had escaped and run away. Jim Warren, a young attorney across the hall, and Miss Watson, a stenographer employed by both of us, occasionally enlivened the tedium of office hours by harmless practical jokes, and it occurred to me that one or both of them might have smuggled Jerry away to have the pleasure of seeing me hunt for him, so I decided to lie low, thinking that if I showed no uneasiness and made no inquiries there would be little satisfaction in keeping my pet and he would presently be voluntarily returned.

The hours slipped by uneventfully. Jim ran in to see me and I was later in his office. In fact, on one pretext or another, I managed to be in all the offices on the floor during the day, but was forced to pass up everyone as apparently guiltless of Jerry's disappearance and finally decided that he must be gone for good.

Late in the afternoon I got my work in pretty good shape for the day and rang for Miss Watson to take some dictation. I glanced at her critically several times as she worked and decided that she, too, was a first-class actor or was innocent of any connection with Jerry's disappearance.

The dictation finished, Miss Watson closed her notebook, went to my desk, slightly opened the drawer in which typewriter paper was always kept, reached in for a sheet of the paper—and sprang erect, uttering one blood-curdling shriek after another.

With shrieks continuing at every breath, and eyes wide with horror, she retreated to the hall and took a tiptoe pose there while I rushed to the desk, carefully pulled the drawer wide open, and, as I intuitively suspected with the first shriek, found Jerry curled up, sound asleep, his soft body rising and falling regularly with his breathing.

Having had plenty to eat and nothing to worry him, he had gotten into the desk through its open front and, by slipping back and under one side, had been able to reach this snug, dusky drawer for his long nap. But to this day I think Miss Watson believes that I put him there for her express benefit, knowing that, after dictation, she must get paper from that particular drawer.

Every man likes to pretend to know something about farming, but this fellow carried it too far. Said he to his seat-mate:

"Did you raise a good crop of wheat?"

"Fine."

"Oats do well?"

"Never better."

"Corn crop satisfactory?"

"Prime."

He should have stopped there, but he didn't. The next question gave him away. "Do you plant much succotash?"

THE TILLERS OF THE SOIL.

BY J. A. KAISER.

Behind the glamor and the glare
Of courtiers and kings,
Of martial ranks and victories,
Of coronets and rings

Has ever stood the sun-browned host
Of delyers in the soil,
The horny hands and brawny limbs
Of hardy sons of toil.

The kings most absolute have known
And trembled at his power
Which has assailed and toppled thrones
In dark rebellion's hour.

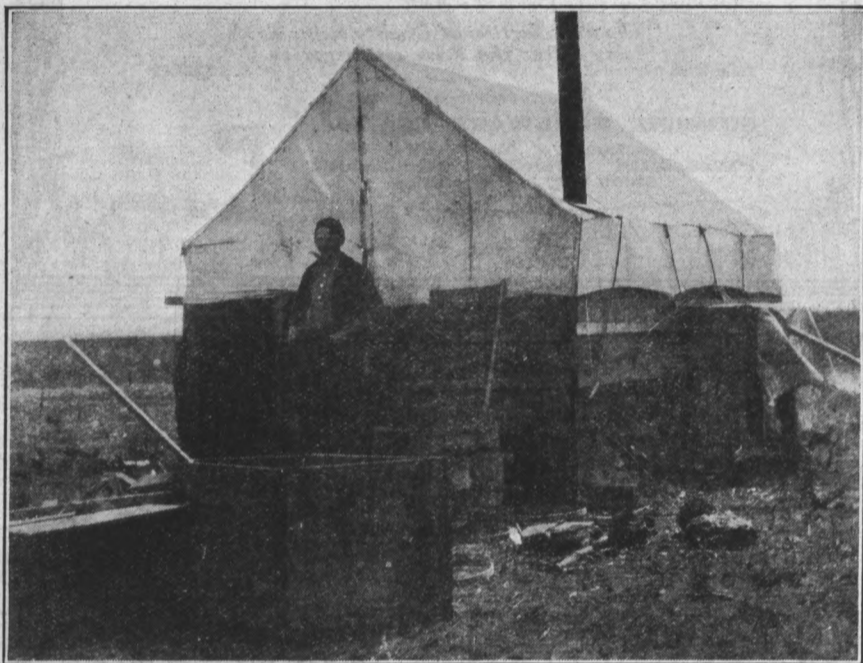
The liberators of the race
Have hailed these men of toil
And led them forth in Freedom's name
'Gainst ruin and despoil.

Woe to the nation that has not,
In peace or war's alarm,
A host of sturdy, sun-browned sons,
Of tillers on the farm.

A HOMESTEADER'S TENT.

BY W. F. WILCOX.

In those parts of the great west where
the land is still in the making the home-
steader does not possess many comforts.



The Primitive Abiding Place of a Western Homesteader.

The typical home is a shack—box-car-like affair—often not nearly as large as a car. In one room, without paint, paper, plaster or even a planed board, the homesteader and his family dwells. There are no outbuildings, no barns, no sheds or comforts for the cattle which roam the range the year around.

All of which proves that half the world knows not how the other half lives. The eastern farmer, whose farm has been developed for hundreds of years, with all its accumulations, has no idea of the hardships, privations and discouragements that beset the rancher on new undeveloped land in the Golden West.

There is a frontier today, with its pioneers, and their conditions and life are not so very different from those of the eastern pioneer of two hundred years ago.

JOSIAH'S HOUSEKEEPING.

BY VIVIAN ENGSTROM.

Josiah Heatherton was one of the most prominent farmers living around the village of Spencer. He was a man of good character and, by hard work and good management, aided and abetted by his industrious little wife, he had become fairly "well off."

His large red barn and fine buildings were sources of pride to him, representing as they did years of work and saving. Through skillful management his farm had become one of the finest and most productive in the country.

But, however, well he had fulfilled his own dreams, Josiah had done very little in the way of improving his own dwelling house, the domicile wherein his patient wife worked and planned. She had no labor-saving devices and her whole house was decidedly inconvenient. Josiah had never set any stock in "these hy-ar new-fangled contraptions," meaning washing machines, etc., although he himself had all the "contraptions" he could get for lightening labor on the farm. He did not appreciate his wife's work and believed that he had by far the harder time of it.

To her requests for some bit of furniture, or some other thing for the house, he always turned a deaf ear, saying that he had no money to spend for "sech

foolishness," and that his mother had gotten along without them. Once when she retorted that his father had gotten along without a self-binder and hay slings, Josiah had only grunted and hastily gone out to attend to the horses.

On the morning of our story Josiah and his wife, with their three younger children, were sitting at the breakfast table silently eating their morning meal, when Josiah broke the silence by recounting his troubles and the great amount of work he must do that day.

"Confound it," he began, "thet there hired man has got a day off ter-day 'n left me with all the work. I've gotter cultivate 'the corn, 'n fix the pasture fence 'n hoe those bloomin' Cannader thistles outen the 'taters, 'n—'n—Well, dang it all! I can't think where to begin. By jings, Mandy, a woman don't know what a man's got to do!" he finished abruptly.

"Mandy" said nothing. Then an inspiration seized her. She was an obedient wife and seldom questioned the ways of her husband, but she had decided that Josiah needed a lesson.

"Josiah," she began, "would yu' mind

length Mandy donned her "chore clothes" and went out to her work. Being a moderately strong woman and better versed in outdoor work than her husband dreamed, she succeeded fairly well. In fact, it is doubtful if the great Josiah himself could have done better.

How it went with Josiah we shall soon see. His first task was to wash the dishes, a task which he considered child's play, and somewhat beneath him. It was completed without special incident, except the breaking of a fine porcelain cup and the upsetting of the dishpan, when he went to empty it, which occasioned a deluge of hot water over the lower portion of Josiah's anatomy. This incident was not especially conducive to good humor and somewhat disconcerted him.

The next task which had been assigned him was to wash a few work shirts and the hired man's underwear. By the time he had rubbed all the clothes on the old cracked washboard he mentally decided that anyone who chose washing as a profession was a fool. Yet it did not occur to him that his patient little wife had washed year in and year out on the same old washboard, and little thanks she got for it, too.

He was just about to wring the clothes when it occurred to him that his wife generally put bluing in the last wash water. He immediately went to the cupboard in search of bluing, not knowing that it was not necessary for work shirts or hired men's underwear. At last he came across a bottle of liquid stove-blackening which one of the boys had mischievously labeled "Bluing." This he took to the tub and added a generous dose of it to the water containing the undeserving shirts and underwear.

At length he had the clothes hung out on the line and was surveying them with evident pride, although it seemed, even to his unpracticed eye, that the hired man's underwear was "kinder dark."

After emptying the wash water he went to feed the chickens. He did not notice the large Plymouth Rock rooster standing in the midst of his harem and watching the strange two-legged apparition with a belligerent eye; nor did he give the "mad rooster" a thought until there was a flash of spurs, accompanied by a warning "gr-r-r-r," and he made for the fence, with the infuriated rooster in hot pursuit.

When Josiah saw the cause of his ignominious retreat, and the spilled milk, which the chickens should have had, trickling down his pants' leg, a great rage surged through his emotional heart. Seizing a stick he cleared the fence and made for the wary rooster, who, seeing the purpose of the two-legged creature, made good his escape under the corn crib.

Josiah said something not very complimentary to Mr. Rooster, and then hastily sought the house. Soon he strode to the woodshed, seized the broom and began expending his wrath in vigorous strokes on the kitchen floor. He had almost finished, and had succeeded in raising a terrific dust, when there was a knock at the door. Josiah groaned.

He hastily set down the broom and called weakly, "Come in." The door opened and in stepped Mrs. Walton in all the glory of a new hat and spring frock. "Er-ah—How-d'ye-do," said Josiah



Scene After a Tornado had Passed Over the Farm of W. J. Morgan, of Indiana. The new circular barn in foreground was unroofed, windmill blown down and other outbuildings wrecked, leaving only the "Natco Imperishable" silo standing.

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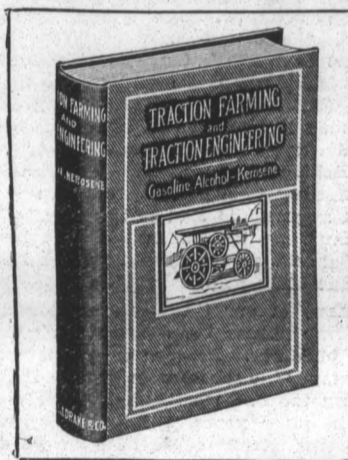
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faintly, wondering whether he'd get cut very much if he jumped through the window.

"Why, hello," said Mrs. Walton, surveying the dusty room and new housemaid. "What-er-are you doing in here?"

"Um-er-ah, well you see I just came in fer a drink, 'n-'n-Mandy was gone ter feed the chickens 'n wanted me to sweep the floor while she was out, 'n-'n-I did," stammered Josiah, seized with a brilliant idea.

"Yes, I see," commented Mrs. Walton, glancing about the room and wondering what on earth was up. "I'll wait for her, if you please."

Josiah foresaw calamity and glanced at the window. "Well-er-the fact is-er-she I guess won't be back for awhile. In fact, she was goin' to the woods to see if the gooseberries are ripe yet." He determined to brazen it out as best he could.

"Oh! I see," said Mrs. Walton, consumed with feminine curiosity as to Josiah's extraordinary behavior and knowing full well that he had not told her all.

"Well, I guess I'll go," she added, just as Josiah was calculating the size of the window sash. He was greatly relieved at her departure and determined to lock the door if he saw anyone coming after that.

He then looked at the clock and gasped. It was half-past eleven. "Waal, I'll be gummed," he ejaculated, having no idea it was so late.

Hastily he set about preparing dinner, but he was relieved of the arduous task by the opportune arrival of his wife who came in from her work, dusty but radiant.

"My," she exclaimed, "I like the change. 'You don't know how tiresome it is to work in the house day in and

day out, at the same old tasks. How do you like it?"

"All right, I s'pose," Josiah muttered. "Say, Mandy, d'ye want chicken fer supper?" he added.

"Why, I don't know. Why?" she asked.

"Oh, thought probably you'd like chicken fer a change." Josiah discreetly forbore to mention the incident of the forenoon which had prompted his remark, and in which he had not played a very heroic part.

Then they sat down to their midday meal—Josiah in gloomy silence, and Mandy smiling wisely to herself. After the meal she went out again to her work, leaving Josiah to wrestle as best he could with the problems of housekeeping.

We shall not dwell on his afternoon's experiences. Suffice it to say that, hurry as he might, he could find no leisure moments; everything went wrong with him, and therefore his humor did not materially improve. And when, at night Mandy came in after a good day's work and feeling better than she had for many a day, she found a somewhat gloomy and sorry looking hubby presiding over a supper table which bore the best fruits of his culinary art.

He brightened up a little, however, as the evening wore on, and the Josiah that wearily sought the bed that night was not the same Josiah who arose from it that morning.

Next day he drove to town and what was Mandy's amazement and delight when he returned with a washing machine and several other household appliances. "Why, Josiah," she exclaimed, "what—," but Josiah only grunted and went to the stable with the horses. But Mandy went about her work with a joyous heart, for she knew that a better day had dawned for both of them.

THE SCHOOLHOUSE A SOCIAL CENTER.

BY CHARLES H. CHESLEY.

As we grow older, most of us, I think, find ourselves looking back to those dear old days when a "little red schoolhouse"—or perhaps it was a white one—was sadly mixed in our youthful minds with such things as alder fishing poles, white circus tents in the distant village, and many other halcyon memories of boyhood. Possibly there are memories of a stout birch stick or a plant ruler that helped us to assimilate the rudiments of the three Rs., and, if some memories are painful, there are so many that are pleasant that the balance is strongly on that side. Perhaps I ought not to mention it (but remember this was long ago) there may have been for each of us some shy, blue-eyed maiden whose dinner pail we delighted to carry. If, with Whittier, "Memory to a gray-haired man

A sweet child face is bringing," then must we look upon the old schoolhouse almost as the devout pilgrim looks upon the Holy City.

In many of our thriving farm communities new houses have taken the places of old buildings. Perhaps we cannot say, "Still stands the schoolhouse by the road," meaning the one we loved, but our children in after years will look upon the house that stands there now as we did upon the old. For this reason let us make their memories as pleasant as possible.

But my purpose was not to deal with a matter of sentiment but rather to discuss briefly a phase of country life that is all-important. Many of our young men and women of the present day get a glimpse of city life—enough at least to make them dissatisfied with rural conditions. It is the part, and should be the aim, of the older people to recognize the needs of youth in this respect and endeavor to provide something to hold and keep them contented. To be sure, there is the church, and the church is a noble factor in rural life. Wherever the church is strongest there a greater percentage of the young people are remaining on the farms. There are, however, needs which the church cannot fill. The Grange hall, where there is one, becomes the social center, but many communities are a considerable distance from a hall which can be used for social gatherings. The schoolhouse, therefore, becomes the logical social center, where debating clubs, farmers' societies, sewing circles and such gatherings should be held. The fathers and mothers should see to it that wholesome meetings of some sort are frequently held. In the winter, when the evenings are long, much innocent enjoyment can be had at a neighborhood

schoolhouse social. I have lived ten years in the city but I have yet to find any enjoyment so keen and so pure as that of the old days in the neighborhood social.

In the poorer farming communities of New England, the middle and central states, a very small proportion of the boys remain on the farms of their fathers. When the old folks finish their earthly journey, the old place is sold to some city family desiring a summer home, or perhaps to an Italian or some other foreigner, who, with his numerous progeny, will soon make the barren hillside literally "blossom as a rose." The boys of the farm, if they are not specially gifted, become street-car conductors and motormen, clerks and salesmen, eking out an existence, but probably never owning a home in the city. Many of them, when it is too late, realize the mistake they have made. It is this class that should be saved to the country, and, I claim, it is the fathers and mothers who must make country life more attractive. Along with the introduction of new machinery and scientific methods of farming should be added social features that will appeal to the youth. In this the country schoolhouse should have a large part.

SMILE PROVOKERS.

Mrs. Nixdore—Why won't you let your Willie play baseball with the other boys?
Mrs. Greene—A part of the game, I understand, is stealing bases, and I'm afraid it might have a bad influence.

Buxom Widow—Do you understand the language of flowers, Dr. Crusty?
Dr. Crusty (an old bachelor)—No, ma'am.

Widow—You don't know if yellow means jealousy?

Dr. Crusty—No, ma'am; yellow means biliousness.

"What I don't ketch on to," said Mose Millerby, "is how ye managed to make that ottermobile feller pay ye thutty dollars fer spillin' a waggin load o' bad eggs. Ye can't spile a bad egg, kin ye?"

"Waal, ye see," said Uncle Jabez, "it come about this way. When the smash-up come, th' air got so full o' that pesky gasoline that the condition o' them eggs warn't hardly purrceptible."

A five-year-old boy had long been praying that he might have a bicycle as a birthday present.

His parents, however, thinking him rather small for such a gift, decided upon a tricycle instead. When the child awakened on his birthday morning and saw that thing at the foot of the bed, he inquired in disgust: "Oh, Lord, didn't you know the difference?"



Woman and Her Needs

At Home and Elsewhere



If You Would Be Popular.

IF there is one thing more than another that human beings desire, it is to be popular and have friends. It gets us at all ages, that wish to be liked. The baby "showing off" before visitors, the young girl just budding into womanhood, the politician after votes, and the woman faded and worn and past her prime, all have the same craving. Perhaps no question is more frequently asked of the "Aunt Jane's" and "Mrs. Blank's" conducting beauty columns in papers, than "How can I be popular?" It leads the request for freckle lotion by several hundred, and even vies with that other old friend, "How can I make my young man propose?"

The best way in the world to make yourself popular is to stand for something. The only woman of my acquaintance whom I can neither like nor dislike is one who is so tame she has no convictions of her own. She never knows whether to put the boys in blouses or Russian suits until she finds out what the neighbors are going to do. Her husband picks out the church to which she shall go and the books she is to read, because she can't decide. I am told that he even picks out her kitchen aprons, but I won't believe that until I see him buying them. Last summer she started to make currant jelly, and changed her recipe and methods three times in an hour, because three different women dropped in and told her just how they did it. Of course, the jelly didn't "jell," and she blamed her neighbors for bothering her. Needless to say, that woman isn't popular, she doesn't stand for anything.

There is another little woman whom everyone likes, because she is always contented and jolly. She has no particular education, no accomplishments of any sort. She can't even cook. She is neither pretty nor witty and she can't tell a story worth hearing. But she can laugh heartily at any story anyone else tells, no matter how old it is. In fact, she is usually laughing, and that is why people like her. Whether it blow hot or cold, she figures it out that the weather is probably best for that day, so she accepts it smilingly. And she is popular because she stands for contentment.

I know another woman who is just this woman's opposite, and yet she has hosts of friends. She is educated and handsome, and terribly witty, her wit has a sting that cuts. And she is discontented and restless and doesn't laugh at your jokes unless they are bran new. But she has a heart that beats responsive to human needs, and a purse that opens to every genuine want of friend or foe. Half her discontent is caused by the terrible injustice she sees about her, so those who know her overlook her sharp words and love her for her generosity.

Another friend of mine, the woman who is most popular of all in my acquaintance, is loved for her simplicity, friendliness and broad common sense. She is not extreme in either sense, she is neither always content nor always discontent, just satisfied when things are the best they can be, and dissatisfied if they can be righted and nobody attempts the task.

I shall never forget my first meeting with her. I had been two weeks on a city paper and had been sent out to "do" a swell society wedding. Never shall I forget the exact location of my heart that dreadful day. The size of the house gave me my first shock, the butler with his impassive face and silver tray for my card, set my knees to trembling, and when I was ushered into the awful presence of the bride and her mamma I wobbled so I had to lean up against a table to keep from toppling over. My future friend was there, a reporter for a rival paper. She might have ignored me, garnered up her facts and escaped, but she didn't. She didn't have to be told that I was new at the business. One glance

at my pallid face and the sound of a weak, small voice told everyone the story. She took me in hand, although I didn't know it at the time, and without any effort on my part I got my "story." We left together, and the few kind words she said to me on our way back down town made me her slave for life.

She is the same with everyone. The weak, timid, helpless, and the stranger, are her especial care. She numbers her friends in every walk of life. Laundresses, shop girls, stenographers, dressmakers, women of wealth, lawyers, doctors, and children are among those with whom she is popular because she has understood and has helped. And she never does anything big. Just the little,

thoughtful things that any of us could do, but don't.

There are a variety of ways of making yourself popular for a time. You can be the most popular person in town just by spending money, so long as the money lasts. And you can be the most popular girl if you are a good dancer, so long as you can go to dances. You may be popular by cultivating a form of cheap wit, or by being able to tell a good story, or by playing the piano well, or even by learning how to make the best bread or cake or shortcake in your neighborhood.

None of these ways, however, are very satisfactory. Your popularity is not apt to be lasting or of the real first water variety. The best and most lasting sort of popularity is that gained by living right, putting the other fellow first, or at least equal to yourself.

DEBORAH.

A Rural Women's Club.

By KATE BAKER KNIGHT.

It was my privilege to attend recently the meeting of a club of women in a rural district in the southeastern part of Michigan, and so favorable was the impression made upon me that it seems worth recording in the hopes that the women of some other community may be encouraged to undertake a similar enterprise.

This organization is strictly a rural one, its members all living in a farming district within a radius of five miles from the tiny country town which forms its center. Although the club is only a year old, it has a membership of 40 and it has already identified itself with the County Federation of Women's Clubs. It meets on two afternoons each month at the homes of various members, where a literary program is given and a social time enjoyed. Refreshments are not served, so the entertaining is not an onerous task upon the hostess.

As in the city clubs, so in this rural club, a neatly printed program shows the work mapped out for the year. On examining this, I noticed that a leader was appointed to take charge of the program at each meeting, and it was her duty, so I was told, to provide music and such additional features as she wished, to supplement the two papers which form the main part of each program. The topics which the club has been considering this year have not been confined to any one line, but have been of such a nature as to lead out and broaden the interests of its members, or to quicken their powers of observation. One topic that I recall was "Our Native Trees and Flowers," and for consideration with that was, "Some of our Native Birds." In September, at about the time our public schools open, the subject for discussion is to be "Our Rural Schools—what can we do for their Betterment?" The day of my visit, one lady presented the subject of "Child Labor in the United States," and another, "The Play-ground Movement." Both were carefully prepared papers and would compare very favorably with the work done by members of the city clubs.

Perhaps what most strongly impressed me in connection with the meeting, was the enthusiasm of the members and the general spirit of good fellowship which seemed to prevail. Possibly the former accounts for the fact that, although it was in the midst of haying and the beginning of wheat harvest—a busy time with farmers—over 40 persons were present. One lady told me that she packed her dinner dishes in the dishpan and tucked them away, to be washed at night when she did her supper work—"and I'll never know the difference," she added. Another enthusiastic member assured me that she would give up all the other organizations of the community, except the church, rather than their Woman's Club.

That the work of this organization has

some practical value aside from its social and literary features was proved by the action taken during the business session. The attention of the members was called to the case of a crippled orphan child who for over a year has been an inmate of the county poorhouse. A committee was appointed to investigate the matter and see if there was not some way in which the club might aid the child by securing for him proper medical care and an opportunity to receive an education. The annual school meeting to be held the following week was announced and many of the ladies pledged themselves to attend. The discussions concerning the needs of the school were lively and to the point and, if I mistake not, there will be something doing in the little red schoolhouse ere long that will add materially to the health and comfort of the children who attend.

Now this is not an unusual community nor are these women more capable than is the average woman of our rural districts today, but they have learned the value of team work. The mere fact of their organization gives to each individual member a feeling of power and calls forth her latent possibilities. What if it does require some effort to get out to the club meetings! Every member of this rural club will tell you that it fully repays her by giving her something to think about outside of her own interests, as well as developing a new power of appreciation. Are there not other localities where such work is waiting to be done? Who will be the one to take the initiative and start the ball rolling? It is work that counts socially, intellectually, and morally, and work that may be made to brighten and bless wherever its influence is made manifest.

IRONING-DAY HELPS.

By MARY MASON WRIGHT.

To do satisfactory work in ironing one needs to have irons of different sizes and shapes, heavy irons for table cloths and other large pieces, smaller irons for smaller pieces, and some small pointed ones for the sleeves, ruffles and such like; these irons should be kept in perfect condition, for it is impossible to do good work with rough, not perfectly clean irons. I find the best method is to clean them after using them, slip into paper bags and store away in a dry place. To clean irons scour with bath brick, and then wipe them over with olive oil to prevent rusting. Salt and kerosene oil are also excellent for cleaning irons. Before using them run them over a piece of cloth. When ironing if particles of starch should stick to the irons run them over fine salt or sandpaper until they are removed; but there is not much danger of the irons sticking if the starch has been made properly, and the irons are clean and smooth. I always add a tea-

spoonful of turpentine to each gallon of boiled starch, or a lump of alum, some use gum Arabic or paraffine. I also add a few drops of turpentine and a little borax to cold water starch with the best of results.

Sprinkling the clothes properly also helps much in ironing. If the clothes are too damp, or not damp enough the work will be tedious in the first place and unsatisfactory in the other. Not having them evenly dampened also has much to do with results. If one does not own one of the new patent sprinklers a whisk broom, or better still, a rubber atomizer such as is used for spraying flowers, will serve the purpose nicely. It is the best plan to sprinkle the clothes the night before, unless the weather is very warm and damp when there might be danger of the clothes mildewing. Stretch the table cloths both ways after sprinkling, then fold smoothly and roll up. All starched things will need to be more thoroughly dampened than the unstarched ones, and linen more than cotton goods. Line the basket or tub with a heavy towel, pack in the clothes, then cover with another heavy towel that has been sprinkled. Pongee should never be sprinkled but ironed perfectly dry, stockings, flannel and woven underwear of all kinds do not need dampening.

When one has no helper, and has large ironings to do it is necessary that everything be done to lessen the labor of ironing day that is possible. A small mangle that can be attached to a table can be obtained for a few dollars; through this all the plain clothes, such as, everyday sheets, towels, underwear, stockings and such like can be passed. The clothes that are to go through the mangle should only be slightly dampened, and should be carefully folded. A high stool is quite a relief to one when ironing. In hot weather one does not care to stay near the range while ironing, instead they prefer a cool room or outdoors, but the walking back and forth to exchange irons is quite tiresome, besides the irons cool off quickly. In our country homes it is not often possible for us to take advantage of the new electric or gas irons, since the electricity and gas are not available. There is an improved denatured alcohol iron that is highly recommended by those who have used it, and then there are the box irons in which charcoal is burned, and those which are heated by small bits of red-hot iron. These will retain the heat much longer than the common flat iron. Some use gasoline or oil stoves on which to heat their irons in summer, and these can be moved out on the porch if desired.

It is often not possible or convenient to send the men's good shirts or the tailored shirt waists off to a distant laundry to be done up, so the housewife on the farm generally has to do this herself. We have always considered this one of the most difficult parts of our ironing until we learned the secret of doing them up properly. If the collars, cuffs and shirt fronts are desired very stiff cold water starch must be used on them, and unless one has the starch made right, and the irons of the right temperature the irons are very liable to stick, or else scorch. In making the starch use about two tablespoonfuls of the starch to one pint of water. Dissolve the starch in one cup of water. Take a cup of boiling water, and dissolve in it one-half teaspoonful of borax, and add eight or ten drops of turpentine, pour this over the dissolved starch. This amount of starch should be enough for two shirts, and several collars and cuffs.

Separate collars and cuffs are much easier ironed than those attached to the garment. About an hour before you are ready to iron them dip the collars and cuffs in the starch, after stirring it well with the tips of the fingers, and fold up in a towel. It is very important that the irons should be of the right temperature—it is necessary to have them very hot, yet not hot enough to scorch. Test them on a bit of damp cloth before using

PANTRY CLEANED

A Way Some People Have.

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them on the collars or cuffs. Wipe over carefully with a rag dipped in hot water before beginning to iron, test your iron, then run it lightly and quickly over the wrong side, then lightly and quickly over the right side; then iron heavily on the wrong side until nearly dry, and then on the right side until perfectly dry. In ironing a starched front use the same method, first smoothing out all creases with a damp cloth, then iron downwards and sideways until perfectly dry and smooth. The collar band should not be starched as stiff as the collars and cuffs.

As we mentioned before, heavy irons should be used for the table cloths, and the linen should be ironed until it is perfectly dry, or it will draw and have a puckered look when only partly dried with the iron; this is important in ironing all goods, but more so for linen goods. As few folds as possible should be ironed into table cloths, and do not have the irons too hot or the fiber of the linen will be harmed. Colored gowns should be ironed on the wrong side if you wish them to retain their fresh look, and never use a very hot iron on colored goods, especially delicate colors, for the heat is liable to fade them, or cause them to change color. When ironing white or light colored lingerie gowns or white skirts spread a bit of muslin or old sheet on the floor to insure them from getting soiled. When ironing thin or sheer goods of any kind keep near you a bowl of tepid water and a small sponge or bit of cloth, since the goods will dry out very rapidly, especially on hot windy days, and it will need to be dampened in spots where it has become too dry to iron nicely. Iron the lace, insertion, medallions and embroidery first, and on the wrong side, also the ruffles before the plain parts of garments. All embroidered doilies or centerpieces or embroidered waists should be ironed on a heavily padded board, a heavy soft towel folded in several thicknesses will answer the purpose. Now when dresses and waists are trimmed with so many buttons it is well to know that they can be ironed over without harm, by ironing on a soft padded board. The buttons will sink in, and the goods can be ironed without trouble.

When ironing baby flannels, instead of dampening the flannel cover with a damp cloth and iron over it; they will look like new. Any fine flannels can be ironed in this way. Light wash silks should be squeezed between the hands until the water is all out of them, then they should be shaken, spread on a clean sheet, rolled up tightly, and should be ironed at once. Never use a hot iron on silk or it will discolor it.

SHORT CUTS TO HOUSEKEEPING.

Save all the cord which comes on groceries. Cast on 50 or 60 stitches on knitting needles and knit back and forth, plain all the time so as to make it tight. Knit about four feet long. This makes a fine mop rag.—J. A. W.

To keep a new butter bowl from cracking warm or melt lard and with cloth rub it on the inside several times. Paint the outside with hard oil. I have been very successful since doing this way.—Mrs. E. S.

Rub your leather furniture about once a month with olive oil. It softens the leather and keeps it from cracking, as heavy, genuine leather often does. This not only makes the leather wear longer but softens it and gives it a finish like new.—Mrs. J. J. O'C.

When I am grinding dry bread for the little chickens I tie either a paper or cloth bag over the food chopper to prevent the crumbs from scattering. When the bag gets full I empty it and fill it again.—Mrs. O. J. W.

Try heating your lemons before squeezing and you will get double the amount of juice.—M. A. P.

The meat of a fat hen or goose may be preserved, by cooking it until nearly tender. Then remove from the kettle and set the broth with all the fat which has cooked out, away until it cools. Remove the thick layer of fat from the top of the kettle and set it on the stove to heat. Then put the meat in this fat and cook until tender and brown. Pack the fowl in an earthen dish, pour the fat over and around it and set away in a cool place. If you have more than one fowl it is preferable to eat the ribs, rump, neck, etc., and preserve only the breast legs and wings.—L. M. T.

After blacking a stove my hands were always a sight until I hit on the following scheme: Take a good soap that lathers freely. Make a thick lather as a man would use for shaving. Rub it into the hands thoroughly. Do not wipe

them but rub it all in, getting well under and around the nails. Then black your stove. When washing the hands afterward the soap in the pores carries the blacking with it.—Mrs. S.

Try toasting bread in the corn popper and save burned hands.—Mrs. E. V.

When mending stockings for children, try slipping a large roll of papers in the leg and see how much easier the patch is put on.—Mrs. E. V.

LETTER BOX.

When Troubles Trouble.

Dear Deborah:—As I have just finished reading your article in The Farmer, "Pushing on the Lines," I feel to compliment you, as you have fully described the way I feel so many times. As I read it I was led to question myself, "Does she really know me?" But feeling quite sure you do not, I am glad to know that there are other women just as foolish as I am who can fully sympathize with me.

Being a farmer's wife on a large farm with a hired man to do for, I so often worry over my many household duties, and as you say, "do the little things over and over in my mind," before I really get to them. My husband tries to talk to me, as he does not believe in worrying, but just the same, I think you know, that he does not know the many tasks I have to do.

I thought as I was reading your article of the words of our Blessed Master, in Luke 10:38-42, as he visited at the home of Mary and Martha. Martha was troubled about her sewing, but Mary was so anxious over the presence and teaching of Jesus that she didn't trouble herself about the dinner. So Martha spoke to the Master about it and notice the answer He gave her, and how tenderly He speaks to Martha:

"Martha! Martha! thou art careful and troubled about many things—but one thing is needful, and Mary hath chosen that good part, which shall not be taken away from her."

So you see the Master is not pleased with us when we worry over these temporal things, but would have us look higher. How many Martha's we find in the world today, and so few Mary's, I am sorry to say.

I am so glad you have written this article, Deborah, and feel it has been a great help to me and I hope there is not one farmer's wife who has not read it and who has not been benefited thereby.—An Interested Reader.

P. S.—Would someone give me, through the columns of The Farmer, a good recipe for home-made furniture polish?

SOMETHING FOR OTHERS.

BY MAE Y. MAHAFFY.

One of the most enjoyable events it has been the writer's privilege to attend was recently given by a Sunday school class to which she belongs. It was in honor of the aged people of the church, the inmates of a Home for Aged Women in the vicinity being included in the invitations.

All too often the older people are necessarily or unavoidably left out of a majority of the good times of the church and neighborhood. Either they are unable to get about, or the simple fact that they have passed the time of their greatest activities leaves them in the list of overlooked. It is not a difficult matter for a group of stronger men and women to give these "older grown" a memorable day, one they will never tire of talking over, and incidentally bring joy to their own hearts. It is an undeniable fact that the greatest satisfaction comes to ourselves when we are giving pleasures to others. It was one of our noted club women who, when appealed to by a musical club for suggestions as to how they could revive interest and keep their membership, which was gradually lessening despite their weekly meetings and rehearsals, sent this terse message: "Sing for others. Excuse brevity. My busy day." There is little doubt in my mind but that a dinner party and reception for aged people will bind together and revive interest for any group of younger people who will undertake it.

This special occasion was during the time of rambling roses, and the tables for the chicken dinner which was served were decorated with these beautiful flowers, a spray being placed at each cover also as a favor. Easy chairs, rugs, couches, pillows, stands, fans, and flowers in profusion gave the parlors of the church beauty and comfort.

Conveyances were provided for all who would otherwise be unable to attend, and

the program of toasts was largely provided by the old people, one of their number acting most delightfully as toast-master.

QUIETER COLORS IN FALL STYLES.

The early fall styles are already in. Think of it, when at the time this is written farm-wives are still picking berries and making currant jelly! This truly is a wonderful age, but I often wish they would let us finish up one season before they start to run another in on us.

Anyway, the styles are in, and thanks be those awful colors known as Bulgarian are either much toned down or not at all. Black and white is coming in strong in millinery, and promises to be good for garments as well. The milliners are showing street hats of black velvet and plush with bands of white or white cord with loops and ends. There are other hats of lavender and freak shades, but they will have few buyers among women of good taste.

In fabrics the coarser weaves promise to be good, with wool ratine a favorite. Velvet and plush will be popular.

The new suits show draped skirts and pronounced cutaway effects in the coats, which are three-quarter length.

HOME QUERIES.

Household Editor:—Some of our piano keys are turning yellow. I have tried several remedies but with no results. Can someone tell me of something to whiten them?—Reader.

Reader:—A piano expert advises wiping the white keys of the piano with a cloth dipped in wood alcohol every three or four months, to prevent turning yellow. You must take care not to touch the black keys. If the keys have already turned the only way to whiten them is to have them ground down on an emery wheel and repolished. You need not feel bad if the keys do turn yellow, as this shows they are real ivory.

Household Editor:—Will you kindly send me, through the columns of your Home page, some recipe for bleaching white clothes that have yellowed with age? I have tried bleaching in rain water, with but little effect.—Mrs. Wm. M.

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Poultry and Bees.

SQUAB RAISING.

When taken up as a fad, without previous knowledge or preparation, the raising of squabs many times proves an expensive disappointment; but when followed along practical lines, with good stock and substantial houses, it often proves as lucrative as well as a pleasant undertaking.

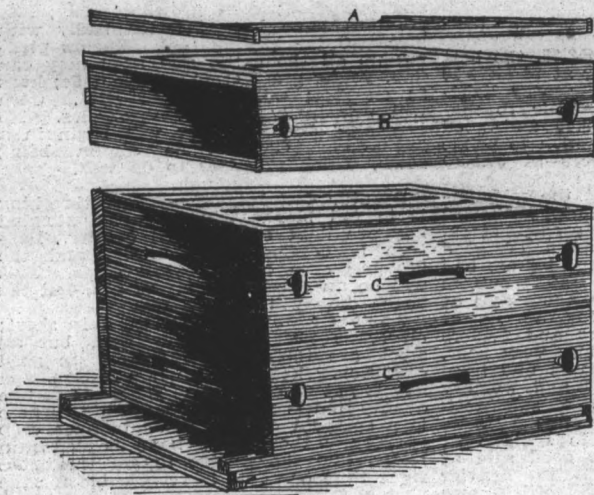
The prices which may be expected for squabs, which are pigeons four or five weeks old, run from \$2 to \$6 per dozen, and a pair of Homer pigeons will raise 10 pairs a year. To get these prices or this number of squabs, however, requires constant care.

Most of the failures are due to starting on a large scale with limited facilities, and no practical experience. It is far better to begin with 25 pairs and select breeding stock of your own raising until you have the required number.

There are a number of breeds, but straight Homers are best, since you can expect squabs to mature in four weeks. Dragons are larger, but do not mature so quickly. A cross between Homers and Dragons has given satisfaction, as the squabs are a little larger than pure Homers, and mature almost as soon.

In buying the birds from a breeder insist upon well mated pairs. In buying an equal number of hens and cocks it does not necessarily follow that they will be mated. To be sure of it, confine each pair in a coop having a partition to separate them for a few days, then turn them together and observe if they mate. If so they may be turned into the breeding pen. The same method should be followed in mating young birds of your own raising.

A loft has been made to do, but it will be much better to have a house on the ground. A dry place should be selected, and a house, large enough for 40 pairs, built of good lumber; it should be 8x12 feet, high enough to stand in when attending the birds, and well lighted and ventilated. For a house of this size there should be a fly eight feet wide, of the same height and 20 to 30 feet long, inclosed with wire netting of a mesh small enough to exclude sparrows, as these pests would otherwise eat much of the feed. Do not place perches or anything here against which the pigeons could fly and injure themselves; a six-inch board placed along both sides and the end, four feet from the ground, is the proper thing for them to alight upon. The nest boxes should be removable shelves two feet long arranged along the sides. These shelves are a foot wide,



and the same distance apart, being divided from the next tier by an upright board of the same width as the shelves. The reason for having the nest boxes of this length, is that it is necessary for each pair to have room for two nests, since they will be laying before a pair of squabs are matured. For these nests, small pans or crocks are used—two of them in each shelf. Straw should be put where the birds can get it for nest building. Never have a running board or alighting board within the house, since some of the more pugnacious are likely to create a disturbance among their neighbors. Perches are not necessary, as the birds will roost in the nest boxes which are easily cleaned by removing the shelf once a week.

In boxes on the floor keep a plentiful supply of sand and crushed shell, same as

you would for poultry. Plenty of water should be supplied every day, as pigeons require a daily bath as well as plenty of drinking water. The feed should consist of cracked corn, wheat and peas, with an occasional feed of millet or hemp seed. Feed them twice a day, at eight in the morning and again at four or five in the afternoon, giving to a pen of 40 pairs about three quarts at a feed. This should be put in a long shallow trough on the floor of the pen, and never outside in the fly. If any of the feed is left in the trough, cut down the feed, as they should not be allowed to eat stale food.

Pigeons are subject to roup and other diseases. For roup, camphorated oil injected into the nostrils after cleansing with warm water usually proves effectual. Tobacco stems placed in the nest pans, and other precautionary measures as practiced with poultry, will keep lice and mites in check.

If desired to extend the quarters it will be more economical to build one house that can be divided into five pens by partitions, with fly divided in the same way; than to build separate small pens. The pens are made eight feet high and of the same width for the reason that four-foot netting can thus be used to best advantage.

While the ordinary pigeon, as kept on farms in barn lofts is filthy, it does not follow that they prefer such surroundings in order to thrive. Their pens should be kept clean. Have drinking fountains washed every day, and once a week put a little carbolic acid in the water. When cleaning the floors sprinkle a little lime about, and otherwise disinfect.

Missouri.

H. F. GRINSTEAD.

THE USE OF THE HEDDON HIVE.

The object of this article is not to advertise this hive but to tell you how to use it if you have it. I might say further that if you have any of the standard hives in use now in your yard, are accustomed to them and like them, I should go mighty slow about changing for any other kind of hive, no matter what merits may be claimed for it.

While the Heddon hive is not so largely used as the dovetailed hive, which has come to be considered the standard hive of the country, it has come into quite prominent use among a certain class of bee-keepers, principally comb-honey producers.

As you will see by looking at the illustration, the hive is made up of three parts or sections; for this reason it is often called the sectional or the divisible-brood-chamber hive. As it is used more than anything else for comb honey, I will describe the usual method of using it for this purpose. The bees are usually put away for winter with three sections filled with honey, and in the spring the number of sections can be regulated according to the number of bees there are in the hive. If there is a good roaring colony there, the three sections may be left on just as they are, but if there is only a medium colony one section of the brood nest should be removed, thus giving

less space to keep warm in. If they are weak, they can be reduced to one section. Now you can watch them as they grow in strength and add sections as needed until the beginning of the honey flow, or until you wish to divide them, if you wish to increase.

The colonies which had three sections to begin with will probably have sufficient space to keep the queen busy till the flow is on. When you get ready to put on comb-honey supers you will find that those colonies having three sections of brood nest will be in about this condition: the two lower stories, or sections, will both be filled solidly with brood, but the upper story will probably be filled mostly with honey. Take the section filled with honey and, removing the middle section, put each in the other's place. Then put your comb-honey supers on top,

and you have an ideal condition for immediate work in the supers. What honey there is in the brood nest is right in the middle of it where the bees do not want it, and they will immediately begin operations to get it out of there. As the upper part of the brood nest is full of brood they cannot put it there, and so, as they never store it below the brood, there is no place to put it but in the supers, which is just where you want it.

Colonies having two sections of the brood nest will be handled much the same way except that as they have only two sections the sections are simply reversed, the top one put at the bottom and the bottom one on top. This gives you the exact conditions you found when you shifted the sections in the three-section colony. With only two sections the queen will have gone well up into the second section with her brood, and honey will be found only in the upper part of the section, so when we reverse the sections we again have the honey in the center of the brood nest.

If there are any colonies that have only one section filled at the beginning of the flow these had better be united. As the season progresses some colonies will gradually work back to the old condition, viz., lots of honey in the upper section and brood all below. As this is not very conducive to honey production they should be again reversed when these conditions appear.

If natural swarming is allowed, swarms can be hived on one section at first, with a super above, and work will then begin above at the same time as in the brood nest. These conditions should not be left for long, however, as it has been my experience that colonies so left will fill the first super above the brood nest full of pollen, which of course ruins the honey. As soon as comb building is well begun in both hive and super, slip an extra section between hive and super and you will get fine results.

If you wish to find the queen in one of these hives, instead of handling frames as you have to in the other styles of hives you handle whole sections at a time, shaking the bees out of them, or smoking them until the queen runs out on the bottom bars, or on the top bars of the frame below, or on the bottom board. It is claimed by those who advocate the use of this hive that this method of finding the queen is far ahead of having to look through all the frames for her. I could never find any advantage in it, however, and in fact have often found that I was compelled to go through the entire set of sixteen frames in order to find her.

Mecosta Co.

L. C. WHEELER.

SOME QUEER QUACKS.

I wonder if any other readers of the Michigan Farmer have had a similar experience with ducks in the variation of the number of days it takes the eggs to hatch. I have found that they seldom hatch as uniformly as hens' eggs, the latter hatching in from 20 to 22 days, usually 21 days. Pekin duck eggs are supposed to require 28 days for incubation. This spring I set some duck eggs under hens. In due time the ducklings appeared, but they continued to hatch, one or two each day for several days. Finally after the hens had been sitting 2½ days over five weeks, and no duckling had hatched for several days, I decided that the remaining eggs might as well be thrown out. I proceeded to give them to the pigs when "quack" went one poor little fellow; it was too late to save him and I am still wondering how long it would have taken him to hatch. I have had them hatch in other years when I thought they had been sitting for five weeks but was not absolutely sure. This year, however, I am certain of the time. The ducklings have been unusually strong and vigorous and have grown rapidly. I have not lost one and they are nearly full grown. I cannot account for their slowness in hatching, unless it is that I was very busy and neglected to sprinkle the eggs with warm water the last week of the incubation period.

Hillsdale Co.

CLAUDIA BETTS.

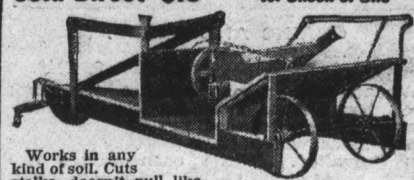
Keeping too many breeds is a poor way to succeed. One or two varieties given the best of care is best.

Contentment reigns in one of my pens since I sold a cock that was a genuine trouble maker. He kept the others in fear, and oftentimes the hens that incurred his displeasure suffered severely for it, being kept away from the feed until he had eaten his fill.

The PERFECT CORN HARVESTER

Sold Direct \$18

Can Be Adjusted to Cut for Shock or Silo



Works in any kind of soil. Cuts stalks—doesn't pull like other cutters. ABSOLUTELY NO DANGER. Cuts Four to Seven Acres a Day with one man and one horse. Here is what one farmer says:

Weldon, Iowa, Sept. 25, 1911.
Dear Sir—Your Corn Harvester was received and have cut fifty acres with it; it works good.

Yours, D. E. KNAPP.

SOLD DIRECT TO THE FARMER
Send for booklet and circulars telling all about this labor-saving machine; also containing testimonials of many users. Send for this circular matter today.

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Amazing "DETROIT" Kerosene Engine, 15 days' FREE Trial, proves kerosene cheapest fuel. If satisfied, pay lowest price ever given; if not, pay nothing. No waste, no evaporation, no explosion. Two pints of coal oil do work of 3 pints gasoline. Prices (stripped), \$29.50 up. Don't buy an engine till you investigate this grand offer. Write!

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FREE TUITION For 36 Weeks. Board and room \$2.00 a week. Books rented. Opens October 1st. **HUMBOLDT COLLEGE, Humboldt, Iowa.**

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on fowls and in the houses, use **PRATT'S POWDERED LICE KILLER** 25c and 50c per package and **PRATT'S LIQUID LICE KILLER** 35c quart; \$1 gallon. Each the best of its kind. "Your money back if it fails." 160-page poultry book 4c by mail. Get Pratt Profit-sharing Booklet. At all dealers or **PRATT FOOD COMPANY** Philadelphia Chicago

POULTRY.

BARGAINS. Best strains S.O.W. Orpington breeding stock at greatly reduced prices, also half grown cockerels and pullets. Mrs. Willis Hough, Pine Crest Farm, Royal Oak, Mich.

BARRED ROCK EGGS, \$1 FOR 15. W. O. COFFMAN, R. No. 6, Benton Harbor, Mich.

Prize Winning Barred Rock, R. I. Red, Mammoth Pekin and I. Runner ducks. Stock for sale. Eggs \$1.25, 3c per set. Utility \$5 per 100. **EMWOOD FARM, R. R. No. 13, Grand Rapids, Mich.**

COLUMBIA Wyandotte Winner at Chicago, Grand Rapids, South Bend and St. Joseph. Stock and eggs. **RICHARD SAWYER, Benton Harbor, Michigan.**

SILVER LACED golden and white Wyandottes. Eggs for hatching at reasonable prices; send for circular. Browning's Wyandotte Farm, R. 30, Portland, Mich.

LILLIE FARMSTEAD POULTRY B. P. Rocks, R. I. Red, and S. O. W. Leghorn eggs for sale. 15 for \$1.25 for \$1.50; 50 for \$2.50. **OOLON C. LILLIE, Coopersville, Mich.**

WHITE LEGHORN COCKERELS—Wyckoff Strain. Maple City Poultry Plant, Box C., Charlotte, Mich.

White Wyandottes—Noted for size, vigor and egg production. 1913 circular ready in February. **A. FRANKLIN SMITH, Ann Arbor, Mich.**

DOGS.

HOUNDS FOR HUNTING Fox, Coon, Skunk and Rabbits. **W. E. LECKY, Holmesville, Ohio**

FOX AND WOLF HOUNDS of the best English strains in America; 40 years experience in breeding these fine hounds for my own sport. I now offer them for sale. Send stamp for Catalogue. **T. B. HUBSPETH, Sibby, Jackson Co., Mo.**

Markets.

GRAINS AND SEEDS.

August 6, 1913.

Wheat.—The wheat market the past week has shown more or less nervousness. Prices advanced rapidly until Saturday since which time a bearish feeling has prevailed. While cash values are about steady with the previous week, futures show an advance. Weather conditions are important in price making. While the wheat crop of this country is sufficiently advanced in most sections to be secure from further danger, the influence of the drouth on the corn crop is so affecting that deal that dealers in wheat felt compelled to advance the latter cereal so long as there was no promise of rain to improve corn conditions. Russia's crop is also suffering from unfavorable weather. Should conditions there remain unchanged it is probable that the crop of that country will have a bullish influence on the world market. One year ago the price for No. 2 red wheat was \$1.05 1/2 per bu. Local quotations are as follows:

	No. 2	No. 1		
	Red.	White.	Sept.	Dec.
Thursday	88	88	89	92 1/2
Friday	89	89	90	93 1/2
Saturday	89 1/2	89 1/2	90 1/2	94 1/2
Monday	89	88	90 1/2	94 1/2
Tuesday	88	87	89	93
Wednesday	88	87	93	97 1/2

Chicago, (August 5).—No. 2 red wheat, new, 86 1/2@87 1/2c; No. 3 red, new, 85@86 1/2c; Sept., 86 1/2c; Dec., 90 1/2c per bu.

Corn.—Corn values continued to advance until Tuesday when there was a slight reaction owing to the promise of rains in certain sections of the corn belt. This grain has become the leader among the cereals, and because of the rapidly advancing prices, which have advanced fully 12c within a short period, other grains have been strengthened in their market position. The crop has been seriously damaged already; whatever may be the future weather conditions it cannot attain a normal yield. However, some good would be done by copious rains at the present time. A year ago No. 3 corn was selling here at 75 1/2c per bu. Quotations for the week are:

	No. 3	No. 3
	Corn.	Yellow.
Thursday	67	69
Friday	68 1/2	70 1/2
Saturday	70	72
Monday	71 1/2	73 1/2
Tuesday	70 1/2	72 1/2
Wednesday	71	73

Chicago, (August 5).—No. 2 corn, 69 1/2@70c; No. 3, 69 1/4@69 1/2c; Sept., 69 1/4c; Dec., 65 3/4c per bu.

Oats.—Although conditions surrounding this grain are not such as to advance the market, the influence of corn has improved prices over what they were a week ago. The market is easy with a fair amount of offerings. One year ago the price for standard oats was 55c per bu. Quotations for the week are as follows:

	Standard.	No. 3
		White.
Thursday	43 1/2	43 1/2
Friday	44 1/2	43 1/2
Saturday	45 1/2	44 1/2
Monday	44 1/2	43 1/2
Tuesday	44 1/2	43 1/2
Wednesday	44	43

Chicago, (August 5).—No. 2 oats, new, 40 1/4@41 1/4c; standard, new, 41 1/4@42 1/4c; standard, old, 42@42 1/4c; Sept., 41 1/2c; Dec., 44c per bu.

Beans.—Bean values show a further decline in cash sales, while bids for October deliveries remain on a par with a week ago. Prices for immediate, prompt and August shipment is \$1.80 and for October \$1.85 per bu.

Chicago, (August 5).—A substantial decline is also noted in bean values at this point with pea beans, hand-picked, quoted at \$1.90@1.95 per bu; red kidneys, \$1.65@1.80; white kidneys, \$3 per bu.

Rye.—This deal is lifeless and prices rule 1 1/2c below the figures given last week, the local price being 62 1/2c for No. 2. At Chicago No. 2 is quoted at 62 1/2@63 1/2c for new rye.

Barley.—This cereal has advanced during the week with quotations at Chicago about 2c higher, the figures being 50@55c per bu. The same price obtains at Milwaukee.

Clover Seed.—Both common and alsike seed have improved in price the past week. The outlook for the crop is declining. Practically all dealing is in futures. Prime October and December seed is quoted at \$8.65; October alsike, \$11. At Toledo, October is quoted at \$8.57 1/2, while October and December alsike are selling at \$11.40 per bu.

Timothy Seed.—This market remains unchanged from last week, with prime seed selling at \$2.50 per bu.

FLOUR AND FEEDS.

Flour.—Jobbing lots in 1/4 paper sacks are selling on the Detroit market per 196 lbs. as follows: Best patent, \$5.50; second, \$5.10; straight, \$5; spring patent, \$5.10; rye flour, \$4.60 per bbl.

Feed.—In 100-lb. sacks, jobbing lots: Bran, \$23; coarse middlings, \$23; fine middlings, \$26; cracked corn and coarse corn meal, \$26; corn and oat chop, \$24 per ton.

Hay.—Prices steady at last week's advance. Carlots on the track at Detroit are: No. 1 timothy, \$15.50@16; No. 2, \$12.50@13.50; light mixed, \$14@14.50; No. 1 mixed, \$11.50@12.50.

New York.—Large baled, No. 1 timothy \$21; standard, \$19@20; light clover

mixed, \$18@19; heavy mixed, \$15.50@17 per ton.

Straw.—Detroit.—Lower. Rye, \$8@9; wheat and oat straw, \$7@7.50 per ton. New York.—New, rye straw, \$17@18 per ton.

DAIRY AND POULTRY PRODUCTS.

Butter.—A better feeling is in evidence at all points, due to the pretty general opinion that the low point for the season has been passed. Elgin recovered a 1/2c on Monday and the local market made a like advance. Extra creamery, 26 1/2c per lb; firsts, 25c; dairy, 21c; packing stock, 19c.

Elgin.—Market steady at 26 1/2c. Chicago.—Values here show practically no change although the situation is regarded as more satisfactory than for some weeks past. Quotations are: Extra creamery, 26 1/2c; extra firsts, 25c; firsts, 24c; seconds, 23c; dairy extras, 25c; firsts, 23 1/2c; seconds, 22c; packing stock, 12@21c as to quality.

New York.—This market has a firmer tone. Values generally unchanged except the better qualities of creamery, which are 1/2c higher. Creamery extras, 26 3/4@27 1/4c; firsts, 25@26c; seconds, 23 1/2@24 1/2c; state dairy, finest, 25 1/2@26c; good to prime, 24@25c; common to fair, 22@23 1/2c; packing, 18@21 1/2c as to quality.

Eggs.—The situation in regard to eggs is similar to that in butter—the low point appears to have been passed and values are on the up grade everywhere. Local quotations are up 1 1/2c from last week. Current offerings, candled, quoted at 19c per dozen.

Chicago.—Nearly all qualities are somewhat higher, the better grades gaining 1c or more. Miscellaneous receipts, cases included, are quoted at 10@15c; do cases returned, 9@14 1/2c; ordinary firsts, 16@17c; firsts, 19c; extra, 22c per dozen. New York.—Good stock commanding an advance of a full cent. Fresh gathered extras, 25@27c; western gathered whites, 21@27c per dozen.

Poultry.—Offerings of young stock are increasing rapidly and prices are gradually declining in consequence. Locally all grades of chickens are off a full cent. Other kinds unchanged. Quotations are: Live.—Broilers, 17c; hens, 15 1/2c; No. 2 hens, 11@12c; old roosters, 10@11c; turkeys, 17@18c; geese, 12@13c; ducks, 15@16c per lb.

Chicago.—Chickens 1@1 1/2c lower; no other changes. Quotations on live are: Turkeys, good weight, 18c; others, 12c; fowls, good, 13 1/2c; spring chickens, 16@17c; ducks, 13c; geese, 10c; guinea hens, \$4 per dozen.

Cheese.—Steady. Wholesale lots, Michigan flats, 13 1/2@14c; New York flats, 15 1/2@16c; brick cream, 14 1/2@15c; limburger, 15 1/2@16c.

Veal.—Little doing; quotations largely nominal. Fancy, 13 1/2@14c; common, 10@11c.

FRUITS AND VEGETABLES.

Apples.—The increased supply has lowered values. Now being quoted at \$1.25 per bu., and \$3.50@4 per bbl.

Huckleberries.—Quoted at \$4@4.50 per bushel.

Gooseberries.—Not plentiful at \$2.50@3 per bushel.

Currants.—Higher. Ordinary, \$3.50@4 per bushel.

Raspberries.—The red kind are more plentiful and somewhat lower; blacks unchanged. Reds, \$4@4.25 per bu; black, \$2@2.25 per 16-qt. case.

Blackberries.—Selling at \$2@2.25 per 16-qt. case.

Potatoes.—On the markets here the offerings are bringing around \$1 per bu. Imported tubers are quoted at \$2.65@2.75 per 2 1/2 bu sack.

DETROIT RETAIL PRICES.

Eastern Market.—There was a large market on Tuesday morning. In spite of many wagons, however, buyers were proportionately more plentiful and produce was selling at prices quite satisfactory to farmers. For this season of the year the variety of produce was limited, there being scarcely any small fruits on sale. Potatoes were scarce and selling rapidly at \$1 per bu; tomatoes scarce, selling rapidly at \$4@5 bu; green peppers, \$1; cucumbers large, \$1.25; summer squash, 50c; green corn, 90c@1 per bag of 10 dozen; carrots were priced at eight bunches for 25c for small, and larger roots at 80@90c per bushel. Cabbage, 90c@1 per bu; thimble berries around \$3 per 24-qt. case; celery per bunch, 35c; lettuce, 45@55c per basket; eggs around 30c per dozen. Loose hay is still quoted at \$13@16 per ton and moving slowly.

GRAND RAPIDS.

Tuesday morning's city market was the biggest of the season to date, with an attendance of 540 and 335 loads of fruit and produce. First home-grown orange melons of the season were brought in, also first pears. Fruit prices were as follows: Apples, 40c@1.25; pears, \$1@1.40; blackberries, \$1.50@2; gooseberries, \$1.40; plums, \$2; huckleberries, \$2.85. New potatoes have the wide range of 40c@1, most of the early crop running the size of walnuts. The late crop of potatoes promises well. Hay continues at \$14@17. Eggs are worth 18@19c. Corn has advanced to 72c.

THE LIVE STOCK MARKETS.

Buffalo.

August 4, 1913.

(Special Report of Dunning & Stevens, New York Central Stock Yards, East Buffalo, New York.)

Receipts of stock here today as follows: Cattle, 200 cars; hogs, 65 double decks; sheep and lambs, 25 double decks; calves 1000 head.

With 200 cars of cattle on our market

here today, and heavy runs everywhere west of us, our market on everything except a few loads of prime heavy cattle weighing 1350 or up was fully 15@25c per cwt. lower than last Monday. A few loads of the heaviest cattle sold full steady with last Monday. The market closed very dull with at least 40 cars of cattle here unsold.

Best 1350 to 1450-lb. steers, \$8.60@8.90; best 1200 to 1300-lb. do., \$8.25@8.60; best 1100 to 1200-lb. do., \$8@8.25; coarse and plain heavy steers, \$7.75@8; choice handy steers, \$8@8.40; grassy 1000 to 1100-lb. steers, \$7.25@7.75; grassy 800 to 1000-lb. steers, \$6.75@7.25; best fat cows, \$6@6.50; best grassy cows, \$5.25@5.75; good do., \$5@5.25; light do., \$4.25@4.75; trimmers, \$3.25@4; best fat heifers, \$7.25@7.50; medium grassy heifers, \$6.25@6.75; common heifers, \$5.50@6; good to best feeding steers, \$6.50@7.50; fair to best stockers, \$5.50@6.25; best butcher bulls, \$6.50@7; best bologna bulls, \$5.50@6.25; stock bulls, \$5@5.50; best milkers and springers, \$5.50@8; common to good do., \$4.50@5.5.

Receipts of hogs today were light, about 65 double decks, and trading very slow and uneven. Light weights selling to best advantage; heavy hogs practically neglected at the close. Some choice lights sold at \$9.70@9.75, with the bulk of the mixed grades at \$9.55@9.60 and choice heavies quotable at \$9.40@9.50. Pigs sold right in with the yorkers as a rule. Roughs, \$8@8.25; stags from \$7.50@7.75.

The sheep and lamb market was fairly active today, with prices about the same as the close of last week; most of the choice lambs selling from \$7@7.35; yearlings, \$5.50@6.25. Look for about steady prices the balance of the week.

We quote: Choice lambs, \$7@7.35; cull to fair lambs, \$6@6.75; yearlings, \$5.50@6.25; bucks, \$2.50@3.25; wethers, \$5.25@5.50; handy ewes, \$4.25@4.50; heavy do., \$3.90@4; cull sheep, \$2.50@3.50; veals, choice to extra, \$11@11.50; fair to good; \$9.50@10.50; heavy calves, \$5.50@7.

Chicago.

August 4, 1913.

Cattle. Hogs. Sheep. Received today17,000 47,000 34,000 Same day last year..24,285 31,343 28,055 Received last week..47,857 124,153 111,292 Same week last year..50,565 120,967 121,604

Seventeen thousand cattle looks like a very moderate supply for a Monday, yet buyers are taking hold very sparingly and bidding a dime lower in quite a number of instances. At a late hour little had been done. Hogs are off on an average of \$8@9.30. Inferior lots of sows make up a big share of the daily receipts, and the average weight of the hogs received last week fell off to 238 lbs., being 8 lbs. less than a week earlier, and comparing with 241 lbs. one year ago, 236 lbs. two years ago, 254 lbs. three years ago and 229 lbs. four years ago. The best sheep and lambs are bringing firm prices, and some prime ewes sold for \$4.60, but bids are lower for the rank and file of the offerings. There was a bid of \$6.85 for a bunch of 7,000 feeder lambs from Idaho by a Michigan sheepman, but it was refused.

Sixty-one cars of northwestern range cattle arrived today and sold at \$6.30@7.35.

Cattle receipts were increased last week at a most inopportune time, for the hot weather greatly curtailed the consumption of beef, and naturally prices for the general run of cattle pursued a downward course, even the very best finished beefs sharing in the decline. The greater part of the steers declined all of 25c, with numerous instances of reduction of 40c, while cows and heifers averaged 60c@1 lower than the high time of the previous week, and the market for them was badly demoralized. The bulk of the steers crossed the scales at \$7.75@8.85, the best corn-fed heavy steers going at \$8.75@9.10 and the commoner lots of grassy light-weight steers at \$7@7.95. Fair to medium grades brought \$8@8.40 and good steers \$8.45@8.70, while common to prime little yearlings found buyers at \$7.80@9.10, but very good cattle sold near the top figures. As is usual at the midsummer period, the cattle offerings showed increased percentages of grassy stock, with a smaller representation of good beefs. Butchering cows and heifers had an outlet at \$4.70@8.60, and cutters brought \$4.20@4.60, while canners sold at \$3.25@4.15 and bulls at \$4.50@7.85. Lower average prices for stockers and feeders prevailed, as the demand was very poor, but prime feeders were scarce and firm. Stockers sold at \$5.50@7.60 and weighty feeders at \$6.60@8, while a sale took place of 22 head of extra fine 1,112-lb. Shorthorn feeders to go to Indiana at \$8.20. Veal calves had a good sale at \$9.50@11, with sales of the heavier weights of calves at \$5@8.25. Milch cows sold sparingly at \$5@7.50 per head, and a fancy Holstein springer brought \$125. A year ago the best beefs advanced to \$9.85. The first range cattle of the year arrived last week and sold at \$6.10@7.50 for steers and at \$5.25@6.50 for cows, the cheaper steers going for feeders. Fifty-four cars of rangers arrived from Montana and South Dakota.

Hogs continued in good local slaughtering demand last week, but there was a great falling off in the eastern shipping demand, and this enabled buyers to force some reductions in prices, especially for droves that failed to grade well. A good many brood sows, thin and skippy, have been coming on the market and selling at an extremely large discount, while the best light-weight hogs have continued to go highest of everything. With less doing on outside account, local speculators also curtailed their purchases, leaving local packers to do most of the buying, and on some days a good many hogs had to be carried over unsold. More swine have been slaughtered by the packers of the country since the first of last March than the corresponding time last year, yet the supplies were well absorbed and prices are far higher than in former years, while pork is more than \$4 per barrel higher than a year ago. Both fresh and cured hog products are having an extremely large consumption. The close of last week found hogs selling for \$8.25@9.35, compared with \$8.50@9.50 a week earlier. Pigs closed at \$7.50@8.65 and stags at \$9.10@9.50, with throwout packing sows bringing \$7@8.25.

Sheep, yearlings and lambs were rushed to market last week in such generous numbers that prices experienced sensational declines throughout the whole list, the general demand falling off and being unable to absorb the offerings. The Idaho, Montana, Washington and Oregon ranges shipped in flocks much more liberally, Idaho furnishing lambs mainly, and the proportion of feeders was extremely small, sheepmen finding it profitable to make their holdings fat before shipping. There were also a good showing of native lambs and native ewes, but the season for shipping southern lambs from Louisville direct to the big Chicago packing concerns has been drawing to a close.

The close of last week saw lambs sell \$1@1.25 per 100 lbs. lower than a week earlier and aged sheep 50@75c lower. Lambs sold at \$5.25@7, with prime range lambs quoted up to \$7.25 and feeder lambs firm at \$6.50@6.90. Yearlings were salable at \$4.75@6.50, wethers at \$3.50@5.25, ewes at \$2.50@4.50 and bucks at \$3@3.75.

Horses had a very limited general demand last week, and buyers were extremely particular in making selections, common and medium grades being discriminated against almost invariably. In fact, it was impossible in numerous instances to get bids. Sales were largely at \$150@250, inferior animals being slow at \$85@100 and prime heavy drafters almost nominal at \$275@350.

CROP AND MARKET NOTES.

Northern Isabella and Southern Clare Co.'s, July 28.—Good growing weather after a terrible downpour of rain which was badly needed. Haying nearly done and not more than half a crop. Oats nearly fit to cut and they are a good crop. Beans look fine and promise a good crop. Corn looks fine, also potatoes. Sugar beets will be a bumper crop. All kinds of stock selling well.

Sanilac Co., Aug. 2.—Haying all done and wheat harvest about completed. Very little threshed as yet; what has been threshed is a fine sample and yielding about 25 bu. per acre. The next ten days of dry, hot weather, such as we have been having, will find the oats and barley about harvested also. Corn is making fine growth. Late potatoes are getting a good start, but early ones are a poor stand, hardly ready for table use yet. Considerable highway repairing in progress. Weather prophets say we are going to have a dry August and September. Hay market is a little stronger.

Emmet Co., Aug. 2.—Except for being a little dry during the last half of the month, and this short drought was broken by a fine rain the last day of the month, weather conditions were very favorable for the growth of crops and for the prosecution of farm work. The hay crop was better than an average, and, in most instances, secured in prime condition. Wheat filled well and berry is plump. Oat crop said by many to be the best known in this section for many years. Paying prices at the stores: Butter, 25c; eggs, 24c; new potatoes, \$1. Pastures are looking good, and new seedings are coming on finely.

Kalkaska Co., July 30.—We are having some fine rains which are very beneficial to second crop clover, pastures and all growing crops. Hay a light crop; wheat and rye good; corn growing finely; late potatoes have been infested badly with bugs. Oats ripening fast. Buyers picking up all the cattle and hogs they can find, young grass stuff, at about 5c; hogs 8c on foot; milch cows, \$50@65. Corn will principally be put into silos. No threshing done yet but will begin in a few days. Considerable alfalfa being sown, which promises to do well.

Indiana.
Decatur Co., July 28.—Wheat threshing is in full blast; yield is good; oats and hay are light but of good quality. Pasture is coming along nicely, and the growing corn certainly looks fine. This will be an excellent fruit season, but the peach crop will only be fair.

Noble Co., July 29.—Pasture is short; clover is not doing very well, but all stock are thriving and keeping in good condition. The oats crop is a failure, and hay is not much better. Wheat is of fine quality and is yielding bountifully. There is a splendid outlook for a bumper crop of corn, although we have needed rain badly, and the failure to get it at the right time or at all is responsible for the poor showing.

Monroe Co., July 30.—Dry weather prevails; conditions are discouraging. Gardens, oats, meadows, pasture, all are no good. Corn has suffered immensely from the long drouth. The wheat has done well. Farmers are drawing on their capital, selling timber, and buying expensive corn to feed hogs. This is a bad season.

Wisconsin.
Pierce Co., July 30.—Wisconsin is not a wheat growing state. A large majority of the farmers buy their flour. The long June heat was not only detrimental to the farmers' crops but to business activities in all directions. Now the other extreme. Storm after storm, including large quantities of water, hail and wind. Oats and hay are normal if they can be saved. Corn during the hot, muggy weather tried its best to catch up to near what it should be, but has been badly beaten by the wind and completely wiped out by hail in strips.

W. E. Livingston, Parma, Mich., who has been advertising Poland-China hogs, writes that the results of his advertising in the Michigan Farmer have been very satisfactory.

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, the last edition Friday 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.

July 31, 1913.

Cattle.

Receipts, 1739. Market dull and 25c lower than last week; quality common.

We quote: Best steers and heifers, \$7.50@7.75; steers and heifers, 1000 to 1200, \$6.75@7.25; do. 800 to 1000, \$6.25@6.75; grass steers and heifers that are fat, 800 to 1000, \$6.25@6.75; do. 500 to 700, \$5.50@6.50; choice fat cows, \$5.50@5.75; good fat cows, \$5.25@5.50; common do. \$4.50@5; canners, \$3@4; choice heavy bulls, \$6.50; fair to good hognas, bulls, \$5.75@6.25; stock bulls, \$4.50@5.50; choice feeding steers, 800 to 1000, \$6.25@6.75; fair feeding steers, 800 to 1000, \$6.25@6.50; choice stockers, 500 to 700, \$6.25@6.50; fair do., 500 to 700, \$5.75@6; stock heifers, \$5.25@6; milkers, large, young, medium age, \$6@7.50; common do., \$4@5.00.

Bishop, B. & H. sold Jesse 13 stockers av 577 at \$6; to Sullivan P. Co. 2 bulls av 1000 at \$6, 2 steers av 910 at \$6.35, 4 do av 1050 at \$7, 13 do av 972 at \$7, 5 cows av 930 at \$5.50; to Thorburn 9 stockers av 550 at \$6.25, 14 do av 552 at \$6, 9 do av 736 at \$6.50; to Schumaker 7 bulls av 546 at \$5.25, 4 stockers av 545 at \$5.25; to Hammond, S. & Co. 16 butchers av 681 at \$5.85, 5 do av 512 at \$1.75, 7 cows av 1014 at \$5.25, 1 steer weighing 910 at \$7.25; to Mich. B. Co. 6 cows av 727 at \$5.25; to Parker, W. & Co. 3 bulls av 1097 at \$6.25, 3 do av 1017 at \$6.25, 5 do av 848 at \$6; to Breitenbeck 6 cows av 980 at \$4.75, 1 do weighing 1000 at \$4.50, 4 butchers av 612 at \$5.75; to Applebaum 3 do av 777 at \$4.75; to Hammond, S. & Co. 19 steers av 978 at \$7.25, 7 do av 900 at \$7.30, 3 cows av 880 at \$4; to Kull 3 cows av 1013 at \$5.25, 2 steers av 785 at \$7; to Sullivan P. Co. 2 steers av 1155 at \$7, 6 do av 583 at \$5.50; to Parker, W. & Co. 23 steers av 1044 at \$7.25; to Mich. B. Co. 14 butchers av 580 at \$5.50, 1 steer weighing 1620 at \$6.25; to Bresnahan 4 cows av 937 at \$4.25; to Hammond, S. & Co. 19 steers av 978 at \$7.25, 1 bull weighing 1330 at \$6.25, 1 do weighing 1180 at \$6.50, 2 heifers av 800 at \$6.25.

Spicer & R. sold Bresnahan 1 cow weighing 930 at \$4.50, 3 butchers av 840 at \$6.25, 2 cows av 1090 at \$6, 1 do weighing 970 at \$5, 8 do av 1031 at \$5.25; to Bracy 2 bulls av 590 at \$5, 2 heifers av 375 at \$4.50, 1 cow weighing 690 at \$3, 13 stockers av 471 at \$5.25; to Hammond, S. & Co. 11 bulls av 1013 at \$6, 7 heifers av 636 at \$6, 17 steers av 843 at \$7.25, 1 cow weighing 1220 at \$5; to Bell & L. 5 feeders av 826 at \$7.10; to Mich. B. Co. 19 cows av 976 at \$5.25; to Thorburn 5 stockers av 672 at \$6.25, 9 do av 610 at \$6; to Jesse 10 do av 500 at \$5.50; to Sullivan P. Co. 13 butchers av 822 at \$6.50, 6 do av 700 at \$5.75; to Lowenstein 20 stockers av 535 at \$5.75; to Kamman, B. Co. 5 butchers av 656 at \$5.60, 12 do av 850 at \$6; to Bresnahan 2 cows av 810 at \$4.25, 4 do av 807 at \$4, 20 stockers av 583 at \$5.75, 3 cows av 960 at \$4.25; to Grant 5 bulls av 534 at \$5; to Mich. B. Co. 6 butchers av 931 at \$5.75, 2 cows av 835 at \$4.20, 10 butchers av 750 at \$6.25, 1 bull weighing 1150 at \$6; to Kull 8 butchers av 670 at \$6, 10 steers av 998 at \$7.25, 6 do av 911 at \$7.35, 3 cows av 1083 at \$5.35, 5 bulls av 910 at \$6.

Roe Com. Co. sold Bresnahan 1 cow weighing 930 at \$4.15, 1 do weighing 1040 at \$4.10; to Sullivan P. Co. 15 steers av 1066 at \$7.40; to Newton B. Co. 15 do av 1020 at \$7.50; to Bracey 14 stockers av 495 at \$4.90, 1 do weighing 470 at \$5; to Mich. B. Co. 6 butchers av 811 at \$6, 24 do av 716 at \$6.35, 11 do av 790 at \$6.25, 5 do av 730 at \$6.50, 2 do av 820 at \$5.50, 2 heifers av 650 at \$6; to Merritt 10 stockers av 550 at \$6, 14 do av 486 at \$5.40, 4 do av 440 at \$5.40; to Sullivan P. Co. 2 cows av 1100 at \$5.50; to Kull 4 butchers av 737 at \$6.60, 2 do av 550 at \$5.75.

Haley & M. sold Hammond, S. & Co. 2 cows av 1125 at \$5.75, 8 butchers av 904 at \$7; to Bresnahan 1 cow weighing 1310 at \$5.50, 6 heifers av 641 at \$6.20; to Schumaker 17 heifers av 556 at \$6.25; to Sullivan P. Co. 2 bulls av 1285 at \$6.25, 6 cows av 1008 at \$5.40, 1 bull weighing 1090 at \$6.25, 3 steers av 683 at \$5.75, 1 do weighing 1170 at \$6.25; to Davenport 14 stockers av 503 at \$5.90; to Lowenstein 2 heifers av 630 at \$5.50; to Hertler Bros. 14 stockers av 557 at \$5.85, 21 do av 582 at \$6, 5 do av 504 at \$5.85, 11 do av 537 at \$5.85, 3 do av 627 at \$5.50; to Mich. B. Co. 4 bulls av 812 at \$5.90, 3 butchers av 840 at \$6, 2 heifers av 985 at \$7.25, 3 cows av 833 at \$5.25, 3 heifers av 700 at \$6, 2 bulls av 780 at \$5.25, 2 do av 1110 at \$6.25, 5 cows and bulls av 978 at \$5.75, 1 steer weighing 900 at \$6.75, 2 heifers av 520 at \$6; to Merritt 6 stockers av 680 at \$6; to Sullivan P. Co. 3 heifers av 777 at \$5.50, 3 do av 720 at \$5.50; to Mason B. Co. 13 butchers av 717 at \$6.35.

Sharp sold Mich. B. Co. 3 cows av 1087 at \$6, 3 do av 1093 at \$4.90.

Bjelow sold same 2 bulls av 755 at \$5.25, 6 butchers av 800 at \$6.

Johnson sold Hammond, S. & Co. 5 cows av 990 at \$5.50, 7 heifers av 653 at \$6.25.

Same sold Bresnahan 14 stockers av 555 at \$7.60.

Veal Calves.

Receipts, 738. Market steady. Best, \$10@10.75; others, \$7@9.50.

Roe Com. Co. sold Mich. B. Co. 3 av

150 at \$10, 1 weighing 100 at \$8.50, 5 av 145 at \$9, 12 av 160 at \$10.50, 4 av 215 at \$7, 3 av 160 at \$10.50, 13 av 150 at \$10, 1 weighing 360 at \$8; to Goose 3 av 250 at \$5.

Dancer & K. sold Burnstine 6 av 140 at \$10.25.

Long sold same 3 av 175 at \$10.50.

Groff sold Lowenstein 4 av 130 at \$10.50.

Spicer & R. sold Newton B. Co. 2 av 170 at \$10, 2 av 150 at \$10.50, 1 weighing 220 at \$7, 3 av 160 at \$10.50, 1 weighing 120 at \$6, 8 av 120 at \$10, 1 weighing 240 at \$10; to Mich. B. Co. 4 av 155 at \$10.50; to Applebaum 7 av 155 at \$8; to Rattkowsky 2 av 370 at \$5; to Browne 9 av 146 at \$7.50, 15 av 166 at \$10, 2 av 225 at \$5.50, 15 av 163 at \$8, 20 av 155 at \$10, 6 av 158 at \$10.50, 10 av 67 at \$8, 2 av 245 at \$5.50, 2 av 135 at \$9; to Burnstine 6 av 140 at \$10.50.

Haley & M. sold Mich. B. Co. 13 av 135 at \$10.50, 1 weighing 100 at \$9, 2 av 170 at \$9, 15 av 225 at \$6, 7 av 165 at \$10.50, 8 av 155 at \$10, 2 av 140 at \$10, 6 av 160 at \$10; to Newton B. Co. 8 av 150 at \$10.50, 2 av 250 at \$5, 1 weighing 140 at \$7, 1 weighing 230 at \$7, 2 av 250 at \$5, 6 av 165 at \$10.50, 4 av 150 at \$8, 8 av 150 at \$10.50.

Weeks sold Newton B. Co. 7 av 147 at \$10.50.

Bishop, B. & H. sold Mich. B. Co. 2 av 150 at \$10, 6 av 165 at \$9.25, 15 av 190 at \$8, 10 av 170 at \$10.50, 7 av 150 at \$10; to Applebaum 4 av 155 at \$10.50, 4 av 150 at \$10.25; to Goose 5 av 160 at \$10.50, 2 av 145 at \$8, 3 av 275 at \$5.50; to Thompson Bros. 5 av 145 at \$9.50, 5 av 130 at \$7.50, 3 av 170 at \$7, 4 av 140 at \$10; to Rattkowsky 12 av 180 at \$8; to McGuire 15 av 160 at \$10.50, 3 av 150 at \$10.75, 2 av 160 at \$9.75, 2 av 140 at \$10.50.

Sheep and Lambs.

Receipts, 3406. Market dull at last week's close. Lambs 25c lower than on Wednesday. Best lambs, \$7@7.25; fair do., \$6@6.75; light to common do., \$5@5.75; yearlings, \$5@6; fair to good sheep, \$4@4.25; culls and common, \$2.75@3.25.

Spicer & R. sold Newton B. Co. 21 lambs av 55 at \$7; to Hammond, S. & Co. 20 sheep av 125 at \$4.25, 29 do av 105 at \$4.25, 2 lambs av 70 at \$7.25; to Fitzpatrick Bros. 13 do av 50 at \$6.25, 21 do av 65 at \$6.75, 13 sheep av 110 at \$4.25, 22 do av 130 at \$4.25.

Weeks sold Newton 20 lambs av 65 at \$7.

Bishop, B. & H. sold Hammond, S. & Co. 63 lambs av 73 at \$7.25, 7 do av 80 at \$7.50, 8 do av 53 at \$5.50, 8 sheep av 140 at \$4.25; to Sullivan P. Co. 9 lambs av 40 at \$5.50, 43 do av 67 at \$7, 34 sheep av 95 at \$4; to Nagle P. Co. 65 lambs av 75 at \$7.25, 38 do av 65 at \$7.25, 10 sheep av 114 at \$4.25, 21 do av 115 at \$4.25, 9 do av 115 at \$4.25, 62 lambs av 65 at \$7.10; to Thompson Bros. 17 sheep av 100 at \$3.50; to Parker, W. & Co. 42 lambs av 60 at \$6.25; to Hayes 23 do av 53 at \$6.25, 21 sheep av 90 at \$3.50; to Sullivan P. Co. 57 lambs av 65 at \$7.10, 5 sheep av 125 at \$4; to Fitzpatrick Bros. 73 lambs av 60 at \$6, 17 do av 55 at \$6.15; to Hammond, S. & Co. 72 do av 67 at \$6.85, 47 do av 65 at \$6.75; to Fitzpatrick Bros. 15 do av 80 at \$7.25.

Haley & M. sold Newton B. Co. 105 lambs av 65 at \$7, 44 do av 75 at \$7.25, 18 sheep av 100 at \$4; to Davenport 49 do av 110 at \$4.25; to Hammond, S. & Co. 45 lambs av 87 at \$7.25, 11 yearlings av 100 at \$5.25, 6 sheep av 100 at \$4.25; to Hayes 19 lambs av 50 at \$6.75; to Newton B. Co. 22 do av 80 at \$7.25, 33 do av 67 at \$7, 27 do av 55 at \$6.75, 7 sheep av 80 at \$3.

Roe Com. Co. sold Barlage 8 lambs av 67 at \$7.25, 13 lambs av 75 at \$7.25, 13 sheep av 165 at \$4.25, 8 do av 125 at \$4.25, 29 lambs av 70 at \$7.25.

Long sold Heek 50 sheep av 77 at \$3.25.

Hogs.

Receipts, 2023. Market 10c lower than on Wednesday.

Range of prices: Light to good butchers, \$9.30; pigs, \$9.35; light yorkers, \$9.30; stags one-third off.

Friday's Market.

August 1, 1913.

Cattle.

Receipts this week, 1782; last week, 1819; Market steady at Thursday's decline.

We quote: Best steers and heifers, \$7.50@7.75; steers and heifers, 1000 to 1200, \$6.75@7.25; do. 800 to 1000, \$6.25@6.75; grass steers and heifers that are fat, 800 to 1000, \$6.25@6.75; do. 500 to 700, \$5.50@6.50; choice fat cows, \$5.50@5.75; good do., \$5@5.25; common cows, \$4.50@5; canners, \$3@4; choice heavy bulls, \$6.50; fair to good hognas, bulls, \$5.75@6.25; stock bulls, \$4.50@5.50; choice feeding steers, 800 to 1000, \$6.25@6.75; fair feeding steers, 800 to 1000, \$6.25@6.50; choice stockers, 500 to 700, \$6.25@6.50; fair do., 500 to 700, \$5.75@6; milkers, large, young medium age, \$6@8; common milkers, \$4@5.00.

Veal Calves.

Receipts this week, 780; last week, 1056; market strong choice grades 25c higher. Best, \$10@11; others, \$7@9.50.

Sheep and Lambs.

Receipts this week, 3726; last week, 3993. Market dull at Thursday's decline. Best lambs, \$6.50@6.75; fair do., \$6@6.50; light to common lambs, \$3@5.75; yearlings, \$4.75@5.50; fair to good sheep, \$4@4.25; culls and common, \$2.75@3.

Hogs.

Receipts this week, 2196; last week, 3950. Market 5c higher. Range of prices: Light to good butchers, \$9.35; pigs, \$9.40; light yorkers, \$9.35; stags one-third off.

In recent weeks generous supplies of canner cows have been received in Kansas City and St. Louis, and beef trimmings experienced a decline of fully \$2 per 100 lbs. in a fortnight. Canning cows also sold off in the Chicago market. Cutters also sold considerably lower in the latter market.

Veterinary.

CONDUCTED BY W. C. FAIR, V. S.

Advice through 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 someone else. When reply by mail is requested, it becomes private practice, and a fee of \$1.00 must accompany the letter.

Condition Powder for Horses.—I would like to know a good formula for making condition powder for horses. W. W., Baroda, Mich.—In the preparation of condition powder it is largely a matter of cost; therefore, I take it that you would prefer a good common sense, and not too expensive, a formula. Mix together equal parts by weight, powdered sulphate iron, ground gentian, ginger, fenugreek, bicarbonate soda and salt. Give each animal a tablespoonful or two at a dose in feed two or three times a day. This I have used on the farm during the winter season, giving small doses of it to my horses, cattle, sheep and hogs with satisfactory results.

Scrotal Tumors.—I castrated several pigs early in June, two of them have now developed hard bunches where testicles were removed. Can you advise the cause and how should they be treated. R. B. C., Ithaca, Mich.—You may have used a dirty knife and infected wounds; or your hands may not have been free from infective germs; or the cord may have united to the skin of scrotum causing a tumor to grow on its end. Cast hog and remove these bunches, shortening cord, then apply to wound one part iodoform and ten parts boracic acid once or twice a day.

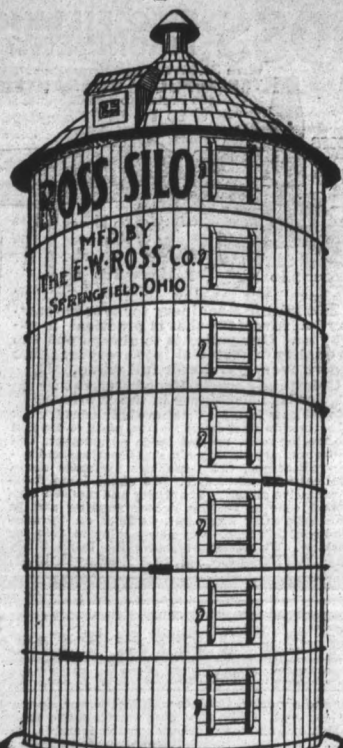
Enlarged Stifle.—I have a colt that has enlargement of stifle joint and our local Vet. advises me to have it fired. Another Vet. says to use an absorbent blister. I have done nothing but apply a liquid blister. F. B. N., Gaylord, Mich.—Clip the hair off stifle and apply one part red iodine mercury and eight parts cerate of cantharides every ten days. I do not believe it necessary to fire him and if he has to be fired, wait until cooler weather.

Infected Udder.—Our cow came fresh the tenth of May and for five weeks she did well, then suddenly checked in milk flow, three-quarters of her udder became inflamed and our local Vet. thought it the result of a snake bite. The milk from these three quarters is unfit for use. This cow has access to both low and upland pasture; the clover on upland contains a whole lot of seed and I forgot to say that I had applied turpentine and vaseline to udder under the direction of our local Vet. G. S., Reading, Mich.—I am inclined to believe that your cow will prove unprofitable for dairy purposes this season. However, you may try giving her 1 oz. doses of hyposulphite of soda three times a day for one week, then ½ oz. doses of nitrate of potash for the following week, then continue alternating treatment for some time to come. Apply one part iodine and ten parts vaseline to diseased portion of udder every day or two.

Diseased Udder.—As I have been a reader of the Michigan Farmer a long time and get such good information out of it, would like to ask a few questions. We keep three cows, all giving milk, two new milch this spring, one a year ago this summer. One of the two that came in this spring gave bloody milk a while shortly after she freshened and since then the milk seems to be stringy and clogs up the separator. We left her milk out and still the separator seems to be full of slime. Do you think it is catching from one cow to another? We have been troubled with our milk for a number of years. Had to keep selling first one cow then another, until we have only three left. They also fail to get in heat and when they do, don't get with calf. They have been running in woods pasture this summer. D. B., Mt. Morris, Mich.—Stringy milk may be caused by a fungi developing in the liquid, besides the spores are often present in the system of the cow. It is possible that your water supply may not be good, or it may be caused by their food supply. Give each cow 2 drs. bisulphite soda at a dose twice a day. Bloody milk is often the result of a bruised udder. Are you sure that your milk house is free and clear of milk contaminating influences? Give your cows that do not come in heat a teaspoonful of powdered capsicum and 1 dr. ground nuxvomica at a dose in feed night and morning.

Holstein Heifer Leaks Milk.—I have a valuable Holstein heifer that freshened some time ago, which leaks milk badly and I would like to know of a remedy. J. F. W., Ypsilanti, Mich.—Either milk her three times a day, or use teat plugs, and remember that teat plugs should be boiled five or ten minutes every time they are used, or dip them in a solution of carbolic acid and water; one to twenty. Lymphangitis.—Four weeks ago the hind leg of my mare swelled and became quite tender to pressure. She was treated by our local Vet. for lymphangitis or farcy, and he has succeeded in partially reducing swelling, but she is not right. (Continued on page 121).

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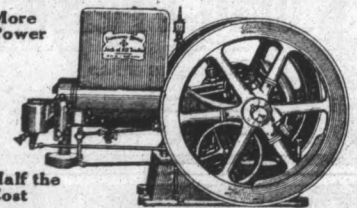
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Farm Commerce.

Voting Power in Co-operative Societies.

WE reached the conclusion in our last talk that the membership of a co-operative organization should be limited to those who would be benefited by it. Now we desire to go a step further and consider the authority that members have in the organization after it is affected, with particular reference to their voting power.

A word should be said in the first place, however, about the educational and cultural value of the ballot in co-operative institutions. Authority always carries responsibility, and responsibility properly shouldered makes strong men. Many a country lad who has perhaps a sick mother, or others to look after, struggle through youth into manhood and emerge into strong characters because they have stood under their responsibilities by using every talent in their possession to meet those responsibilities with power, courage and respect. Now the member of the co-operative organization should value his voting power, since it demands that he observe, think and decide—the elements that make the most fertile soil for brain growth. He should feel that he has an opportunity and he should study and watch that he may make the best of this opportunity. By devoting himself to the interests of the society he will some day, in the not distant future, find himself equipped with a fund of valuable information which, but for the membership, he would have been unable to have and enjoy. We should, therefore, count our voting power in our organization as a valuable asset.

Now there are two general methods of distributing the voting power in business associations. The most common one is to make the money invested the basis of voting; that is, for every ten, or one hundred, dollars, as the case may be, that a person has in the concern he has one vote. If ten dollars is the basis and a person had fifty dollars invested, then he would have five votes, or if he had five hundred dollars then he would be able to vote fifty times on every matter put up for balloting. This is the method employed in all stock companies or corporations. It makes money the basis.

There are modifications of this method of distributing the votes. The most important one is to establish it on the amount of dealing each member does with the concern. Under this arrangement the person who sold a co-operative concern 10,000 bushels of wheat would have more votes than the one who sold 1,000 bushels. Or the one who did \$5,000 worth of business would not have the controlling power that one who did \$25,000 worth of business. But these plans all make the unit for determining the number of votes a person has, a property one.

The second general scheme of determining the voting power of co-operative members is fixed on a personal basis. Here men, not money, form the ground upon which the organization is controlled. It does not matter whether a person has ten dollars or ten thousand dollars invested he will command only one vote on all matters that come before the association. And the same is true as to the amount of business one does. Here the man becomes the unit and the plan of distributing authority upon this basis seems to be more successful, so far as co-operative concerns go, than the first plan mentioned.

And on American soil this method should be the one most naturally adopted, for here we have been schooled in the idea of one man's equality with another, so far as rights and obligations may be concerned. Jefferson's declaration that "all men are created equal," has been wrought into the very fibre of American manhood and womanhood, and the plan of incorporating the same idea into the government of business associations as we have in our political communities and states, should meet universal favor.

The plan, too, ordinarily gives a fairly equal property representation. As a class farmers' sales and purchases are more nearly equal than are the business dealings of most any other class of producers or consumers. On an average the difference is too small to be of importance in an organization of the kind under consideration.

While some able and experienced or-

ganizers take exception to the idea of associating men for business purposes under a constitution that gives each member a single vote, regardless of the patronage or capital provided, the majority of students of co-operative business enterprises believe in the "one man, one vote" principle. Their contention, which seems to be a sound one, is that capital has a market value and that whoever furnishes it should be paid the usual rate of interest whether he be a member or an outside party, and this interest, these students hold, should satisfy the person or persons who supply the funds without granting additional voting power. Since commercial co-operation in its final analysis is for the purpose of equalizing business advantages and opportunities among its members without impairing individuality in property rights and obligations, it would appear that the single vote idea is the only logical way of working toward this most commendable and valu-



Delivering Fruit Ordered through a Farmer's Store Located Among the Commission Houses in Chicago.

able end. It frees men from the oppression of business autocracy and grants them full citizenship in an industrial democracy. And the success which has attended associations that give but a single vote to each member convinces thoughtful men that the plan works as well in practice as it sounds in theory.

We are confident, therefore, that the "one man, one vote" principle should be adhered to closely and that it might be deviated from only under extreme circumstances.

CONDITION OF GRAIN CROPS IN RUSSIA.

A cablegram dated July 23, 1913, from the International Institute of Agriculture, Rome, Italy, which has been received by the United States Department of Agriculture, gives the following estimates for European Russia: Production of spring wheat, 511,101,000 bushels; all barley, 530,297,000 bushels; all oats, 1,029,623,000 bushels; the estimated production compared with last year is for all wheat 26.5 per cent more, for all barley 16.3 per cent more, and for all oats 5.8 per cent more.

SULZER APPLE LAW NOW IN FORCE.

The federal law which establishes a standard barrel and standard grades for apples and known as the Sulzer law, went into effect July 1. While the statute does not require one to grade fruit and pack it in barrels according to the provisions of the law, it does require, under penalty, that all who pack and sell fruit as of "Standard Grade" must see that the fruit is graded and packed according to the stipulations. In the law the words "Standard Grade," are to take the place of the expression, "Number One," and the requirements for "Standard Grade" are: "Apples of one variety, which are

well grown specimens, hand-picked, of good color for the variety, normal shape, practically free from insect and fungus injury, bruises and other defects, except such as are necessarily caused in the operation of packing; or apples of one variety which are not more than ten per cent below the foregoing specifications." Such apples may be marked according to their size, "Standard Grade, minimum size, two and one-half inches;" "Standard Grade, minimum size, two and one-fourth inches;" "Standard grade, minimum size, two inches."

The penalty for violating the Sulzer law by misbranding packages is one dollar and costs for each barrel offered for sale.

TO FACILITATE THE HANDLING OF TRUCK CROPS.

An association of truck farmers in Cook county, Ill., maintain a selling store in South Water street, Chicago. The membership of this association exceeds 1,500 and represents farmers inside the city limits and close by on the outside.

One feature of this selling place is that any of the commission merchants on either side of the street are quickly supplied with various products within a short time after the order is received by telephone. An order is loaded on a truck like that shown in the picture, and it is

pushed on the sidewalk to the door of the commission merchant, whose place may be three or four blocks away.

A pedestrian in South Water street must take chances. What with rolling barrels, shifting boxes and crates, and the wheeling of trucks, makes it well nigh impossible to work through the veritable maze. Shins often are skinned, clothes are torn, and irate passersby say unprintable things, but up to this time no city authority has been able to induce the commission traders to take one inch less of the valuable space.

Illinois. J. L. GRAFF.

CANADA'S HAY CROP.

Compared with former years Canada's hay crop will be short for 1913. The acreage is practically the same as a year ago, but the condition, according to the government report, is 81 compared with 96 in 1912 and 91 in 1911.

YOU HAVE THE OPPORTUNITY

of getting one of the beautiful six-page Michigan Farmer Wall Charts for only 30c, postpaid, if you send your order at once.

It is the finest collection of charts ever put together. Contains a map of Michigan, showing congressional districts, counties, railways, etc., the latest 1910 census of all Michigan towns, 25 colored plates, showing the anatomy of the horse, cow, sheep, hog and fowls, and giving the name and location of each organ, muscle and bone. A treatise on each animal by the best authorities, treatment of common diseases of farm animals, map of the world, showing steamship lines, map of the United States, flags of all nations, rulers of the world. Panama canal, all our presidents, and several other features too numerous to mention.

These charts have been sold mostly for \$1.00 or \$1.50. They will decorate and instruct in any home or office. We offer them at this price to quickly get rid of them and after our present stock is exhausted no more can be had. Remember the price is only 30c, while they last. Send your order to the Michigan Farmer, Detroit, Mich.—Adv.

VETERINARY.

(Continued from page 119).

R. F. K., Newaygo, Mich.—Chronic lymphangitis is not easily treated successfully and external applications usually do harm. Give her 2 drs. potassium iodide at a dose twice a day; also give a desertspoonful of Donovan's solution of arsenic at a dose three times a day. She should be allowed to run in pasture nights, even if worked during the day.

Poll Evil.—Have been keeping my four-year-old mare in stable with low ceiling and I am inclined to believe she has bumped top of head on ceiling, for the upper part of neck is swollen and tender. Her poll is very tender and I would like to know what to apply. She is healthy. D. S., Bad Axe, Mich.—You are right, she bruised top of head and if you will apply the following lotion four times a day it will reduce swelling and subdue soreness. Mix 1/2 pt. tincture arnica, 8 ozs. tincture opium and 1/4 lb. sugar of lead in one gallon of water.

Bog-Spavin—Thoroughpin.—I have a three-year-old colt that came in from pasture lot the other morning with a puffed hock joint; these puffs show in front and both sides of joint, but he is not lame. I think this trouble must have developed quickly for I have worked him all summer and would have noticed puffs had they been on long. E. T., Camden, Mich.—Apply equal parts spirits camphor and tincture iodine to puffs three times a week.

Vertigo.—I have a mare that has dizzy spells which last for a few moments, then pass off. Yesterday while driving on the road she stopped and then commenced to rush ahead, then stopped again, trembling violently, then fell down. But as soon as I could loosen the harness she was up again apparently all right. C. N. B., Lake Ann, Mich.—Your mare suffers from vertigo (blind staggers) and if she is fleshy reduce her, keep her bowels open and active and give her 1 dr. of potassium bromide, 1 dr. ground nux vomica, and 1 oz. bicarbonate soda at a dose in feed three times a day.

Ridgling.—I have a three-year-old stallion that has apparently only one testicle, our local Vet. says he is a ridgling. In castration will the removal of the one testicle suffice? O. R. T., Otter Lake, Mich.—Removing the testicle that is in scrotum without removing the one in abdominal cavity which has not descended will not improve his disposition. Work of this kind should not be performed by any other than an expert who makes a business of castrating ridglings. Most Vets. are qualified to do this work and I advise you to have both testicles removed at the same time, and in nearly all localities there is an expert castrator who can do this work safely.

Rheumatism.—Have a cow seven years old that has been stiffened and acts as though she had rheumatism. She has been in this condition since last May and is growing worse. Can you tell me what ails her and if she is curable; give me a remedy; also inform me if her milk is fit to use. P. K., Minden City, Mich.—Your cow suffers from chronic rheumatism and it is not always an easy matter to differentiate between articular and muscular rheumatism for the constitutional symptoms are somewhat similar. If the joints swell, then it is articular; but if local, and affecting quite a portion of the body, it is doubtless muscular rheumatism. Give her 2 drs. sodium salicylate, 1/2 oz. ground gentian, 1 dr. ground nux vomica, and a teaspoonful nitrate of potash at a dose in feed two or three times a day. Apply equal parts spirits of camphor and soap liniment to sore parts once or twice a day, and if you are sure of its location, apply cerate of cantharides occasionally. Her milk can be used with safety.

Chronic Cough—Heaves.—I have a nine-year-old mare that our local Vet. has been treating for laryngitis, but with poor results. She has a nasal discharge, coughs considerable and breathes exactly like a horse with heaves. R. E. S., Woodville, Mich.—Give her 1 dr. powdered sulphate iron, 1 dr. tincture lobelia, 1 dr. fluid extract gelsemium at a dose three or four times a day for two weeks, then give 1/2 oz. Fowler's solution, 1 dr. of ground nux vomica and 1/2 oz. ground gentian at a dose in damp feed three times a day. Wet her feed and avoid giving her clover, or dusty, badly cured fodder.

Enlarged Glands—Cracked Heels.—Have a horse whose tonsils or glands behind jaw are enlarged. When eating she makes a snoring noise. Also what will cure scratches on colt? C. W. C., Laingsburg, Mich.—Give her 1 dr. potassium iodide at a dose in feed or water two or three times a day and apply one part iodine and ten parts fresh lard to enlarged gland two or three times a week. Apply one part oxide of zinc and four parts vaseline to sore heels once a day.

Distemper—Impure Blood—Bunches on Legs.—I have a brood mare that had distemper last spring; she has been in an unthrifty condition ever since, has poor life, and coughs occasionally. I also have a six-year-old gelding that is not thriving and his shoulders are covered with pimples. Our local Vet. examined his teeth and said they were all right. We also have a three-year-old heifer that seems to have several hard bunches on hind legs beneath the skin, which are moveable. E. H., Perrinton, Mich.—Give your mare plenty of nutritious food, avoid working her too much and give her 1/2 oz. of fluid extract cinchona, 1/2 oz. fluid extract gentian and 1 dr. fluid extract nux vomica at a dose three times a day. Give your six-year-old horse 1/2 oz. Donovan's solution of arsenic and 1 oz. of bicarbonate soda at a dose in feed three times a day. Apply one part iodine and ten parts lard to bunches on heifer's legs every day or two.

2 1/4 H.P. \$39.50
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Now I Am Making a Still Bigger Cut Just notice my new prices, only \$99.50 for my famous 5 H. P. engine and an engine this year at a price never before equalled—an offer made possible by my increased production. Act quick—these prices are good for 60 days only. Write me today for my big engine catalog and special 1913 offer that will help you get your engine partly or entirely without cost to you in the end. Don't wait. Don't put it off. Write to Galloway today.

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BREEDERS' DIRECTORY.

CATTLE.

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Herd, consisting of Trojan Ericas, Blackbirds and Prides, only, is headed by Egerton W. the GRAND CHAMPION bull at the State, West Michigan and Bay City Fairs of 1912 and the sire of winners at these Fairs and at THE INTERNATIONAL, Chicago, of 1912. WOODCOTE STOCK FARM, Ionia, Mich.

Guernsey Bull Calf—Rich in A. R. breeding. Fit to head any herd. A. GEE DANDY, G. A. WIGENT, Watervliet, Mich.

GUERNSEYS—Reg. Tuberculin Tested. Windsor Farm, Watervliet, Mich. J. K. BLATFORD, Auditorium Tower, Chicago, Ill.

HEREFORD BULLS FOR SALE Also Poland. ALLEN BROS., Paw Paw, Michigan.

CHOICE Bull Calves from A. R. O. dams. Sired by our herd sire whose dam and sire's dam each made over 30 lbs. in 7 days. E. R. CORNELL, Howell, Mich.

A FEW CHOICE Holstein Friesian Bull Calves for Sale. A. R. O. Stock. GREGORY & BORDEN, Howell, Michigan.

"Top-Notch" Holsteins.

Choice bull calves from 6 to 10 mo. old, of fashionable breeding and from dams with official milk and butter records for sale at reasonable prices. McPHERSON FARMS CO., Howell, Michigan.

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IT PAYS TO BUY PURE BRED SHEEP OF PARSONS, "the sheep man of the east." I sell and ship everywhere and pay express charges. I will start one man in each twp. Write for club offer and descrip. Oxford, Shropshire, Rambouillet, and Polled-Delaines. Kingsville, O. July 17, 1913.

Mr. R. G. Parsons, Grand Lodge, Mich.

Dear Sir: I received Oxford Sheep yesterday in good shape and will say he is a peach. When I got home with sheep a couple of my neighbors came over and looked him over. They said he was the biggest sheep they ever saw and the best around here. I will keep the crate. I paid the express agent \$2 for it. Thank you for your prompt delivery. I remain, Yours truly, Arthur L. Peck.

At one time men drove many miles in search of Rams: nowadays PURE BRED Sheep are ordered by letter of

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Have for sale several fine young bulls out of cows with high official butter and milk records.

Send for circular.

WANTED 10 HOLSTEINS.

Registered heifers between age of 12 and 20 mo. C. E. WINTERS, Cressy, Michigan.

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Over 40 head Registered Holstein cows & heifers of choicest breeding. Describe what you want or come and see them. O. D. WOODBURY, Lansing, Mich.

Holstein Friesian Cattle. A couple of young bulls for sale. We boast of quality not quantity. W. B. Jones, Oak Grove, Mich.

Thoroughbred DUTCH BELTED CATTLE For Sale. Z. VELDHUIS, 408 P. O. Building, Detroit, Mich.

For Sale—reasonable prices, choice registered HOLSTEIN Sires, ready for service. HATCH HERD, Ypsilanti, Mich.

FOR SALE—On Cornwell Farm, Clare, Michigan. Holstein new milch cows. Also good Dairyman wanted. Enquire of ERNEST PIETZ.

For Sale—2-yr.-old Jersey Bull—Dam's 5-yr.-old record 10551 lbs. milk, 533 lbs. fat, 604 lbs. butter. Sires dam's record—12997 lbs. milk; 600 lbs. fat, 706 lbs. butter. 2-yr.-old full sister's record—8610 lbs. milk, 435 lbs. fat, 513 lbs. butter. All authenticated, kind sound, sure. Waterman & Waterman, Ann Arbor, Mich.

Lillie Farmstead Jerseys

(Tuberculin tested. Guaranteed free from Tuberculosis.) Several good bulls and bull calves out of good dairy cows for sale. No females for sale at present. Satisfaction guaranteed. COLON C. LILLIE, Coopersville, Mich.

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Dollar for dollar invested, the Jersey will earn back the amount paid for her quicker than other breeds because her product brings a higher price per quart or per pound. For the home she is unsurpassed, and her low cost of keep makes her most desirable. Write now for Jersey facts. No charge.

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Jerseys—Bulls ready for service, bred for production. Also cows and heifers, Brookwater Farm, R. F. D. No. 7, Ann Arbor, Mich.

JERSEY BULL—Well bred, eighteen months old and a beauty. Will exchange for a Holstein Bull of the same value. T. E. HUNT, Boss Lake Farm, Route 5, White Cloud, Mich.

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 A few young Jersey Bull Calves at \$25 to \$45 each.

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SHORTHORN CATTLE—A few yearling and 2-year-old heifers for sale. Also Shropshire rams and ewes. M. A. BRAY, Okemos, Mich.

Dairy Shorthorns—Large Cattle—Heavy Milkers, Milk Records of all cows kept. No stock for sale at present. W. W. KNAPP, R. No. 4, Watervliet, Mich.

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Holstein Bull—month old. Sire has 10 A. R. O. daughters, his sire 97, 4 above 30 lbs. Dam A. R. O. 7 days 12.5 lbs., 30 days 61 lbs. at 22 months old, \$50, the \$100 kind. Hobart W. Fay, Mason, Mich.

The Ingleside Farm is offering more and better Shropshire Sheep than ever before. All stock recorded. Write what you want. HERBERT E. POWELL, Ionia, Mich. Citizen's Phone.

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SHROPSHIRE rams 1 and 2 years old, and some extra good lamb rams, wool and mutton type. GEO. F. ANDREWS, Danville, Ingham Co., Mich.

The Maples Shropshires We have to offer extra good yearling and two year old rams. Also a few ewes for sale. E. E. Leland & Son, Ann Arbor, Mich. R. R. No. 9, Phone 747 one ring.

Reg. Rambouillet Sheep, Pure Bred Poland China HOGS and PERCHERON HORSES. 2 1/2 miles E. Morrice, on G. T. R. R. and M. U. R. J. Q. A. OOK.

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Durocs & Victorias—A Desirable Bunch of Sows of M. T. Story, R. R. 45 Lowell, Mich. City Phone 55.

BERKSHIRES Choice spring boars and gilts, priced to move quick. Farmers stock. ELMHURST STOCK FARM, Almont, Mich.

A Yearling Sow—bred for July farrowing, also a choice lot of Spring Pigs for sale. Either sex. A. A. PATTULLO, R. No. 1 Deckerville, Mich.

O. I. C.—Big growthy type, last fall gilts and this spring farrow to offer. Very good stock. Scott No. 1 head of herd. Farm 1/2 mile west of depot, OTTO B. SCHULZE, Nashville, Mich.

O. I. C.—MAROH and APRIL PIGS, the long growthy kind, with plenty of bone. No cholera ever on or near farm. Satisfaction guaranteed. A. NEWMAN, R. 1, Marietta, Mich.

O. I. C's—all sold. Orders booked for April ready. 100 to select from. Attractive prices on young stock. H. H. JUMP, Munith, Mich.

O. I. C's—Bred sows, March pigs pairs and tris. Buff Rock Eggs \$150 per lb. FRED NICKEL R. 1, Monroe, Michigan.

O. I. C's—All ages, growthy and large. Males ready. 100 to select from. Attractive prices on young stock. H. H. JUMP, Munith, Mich.

THIS O.I.C. SOW WEIGHED 932 LBS. AT 23 MONTHS OLD.
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I have started more breeders on the road to success than any man living. I have the largest and finest herd in the U. S. Every one an early developer, ready for the market at six months old. I want to place one hog in each community to advertise my place and my plan. "How to Make Money from Hogs." G. S. BENJAMIN, R. No. 10 Portland, Mich.

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O. I. C. SWINE—I am offering 200-lb. gilts, bred, due to farrow the latter part of August and fore part of September. All who are interested write me. A. J. GORDON, R. No. 2, Dorr, Mich.

DUROC-JERSEYS—Fall and Spring boars from prize-winning strains. Sows all ages. SPECIAL BARGAIN in summer pigs. Brookwater Farm, R. F. D. No. 7, Ann Arbor, Mich.

Duroc Jerseys—Gilts all sold. Spring pigs of the large and heavy boned type. Pairs not akin. Satisfaction guaranteed. F. J. DRODT, R. No. 1, Monroe, Mich.

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LARGE TYPE P. C. FALL PIGS all sold. Have the spring pigs I ever raised. The greatest bunch of Come or write. Expenses paid if not satisfied. Free livery from Parma. W. E. Livingston, Parma, Mich.

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YORKSHIRE Swine—We have some nice spring pigs now ready for sale. Write for description and prices. OSTRANDER BROS., Morley, Mich.

Lillie Farmstead YORKSHIRES

Spring bred gilts all sold. Gilts bred for next August farrow. September sex, of finest breeding and individual quality. Orders booked for spring pigs. COLON C. LILLIE, Coopersville, Mich.

Horticulture.

FALL PLANTING OF ONION SETS.

Onions for bunching in the spring can be matured from two to three weeks earlier by setting them out in the fall just before freezing weather and after it is sufficiently late for no growth to take place. As both the demand is greater and the price higher for bunch onions first on the market, it is advisable to set out a few, at least, in the fall.

Even though one does not want to produce them for market purposes, it will be worth one's while to grow a few thusly for table use. It will give a supply long before spring planted ones can be gotten ready and while they may not be quite so finely flavored, being the first table vegetable, they will be relished.

For fall planting, the sets should be placed somewhat deeper in the soil than is customary in the spring. This is to protect them from excessive freezing. They should be placed one-half inch apart in the row and then covered with earth and firmed down. The rows may be spaced at any desired distance, but should not be spaced nearer than three inches.

A wise precaution which will have beneficial results, is to cover the onion bed with a thickness of manure. The covering will protect them from excessive freezes and at the same time enrich the ground. Rains will wash much of the available plant food out of the manure into the soil, and when spring comes, the bulky part of the manure can be raked away, leaving the surface free for the young plants to break through.

Fall-planted onion sets will have a substantial growth in the spring before the ground could be prepared for planting them then. They will begin to grow almost as soon as the frost is out of the ground. Having a good start they will grow much faster than those planted early in the spring.

Profit is greater from them because the selling price per bunch is generally higher and because fewer onions need be given in a bunch for the first on the market. Although the quality is not quite so good, the supply of green produce being very limited in the early spring, there will be a good demand and quick sales for all one can raise.

As soon as the ground can be worked in the spring, cultivation should be begun. A little quick acting fertilizer, such as nitrate of soda and muriate of potash, mixed in the soil around the roots will hasten growth. By trying a few quarts the first year, one can get an idea of how it is done and be better prepared to go into it on a larger scale the second season.

Pennsylvania. L. J. HAYNES.

THE SAN JOSE SCALE.

It is now several years since the San Jose scale has been distributed over the country yet the inquiries regarding it are evidence that it is not well known, even in localities where it has long been established. All kinds of scale insects are mistaken for it, some of them so unlike it that the wonder is how such a mistake can be made.

The oyster-shell bark scale is one. It resembles the San Jose just about as much as an elephant looks like a greyhound. Moreover, the oyster-shell scale was known as a common insect on apple trees long before the San Jose scale had crossed the Pacific.

The common wooly aphid is another. It is to be found on a variety of trees and has been known for generations. Yet there have been those who have in all seriousness accused it of being this new immigrant from China. It proves how little is seen by the great majority of persons, until their eyes are forcibly opened, and what wonders they see then.

The scale is much worse on some varieties of fruit trees than on others. It will kill a Maiden Blush, while a Gideon beside it may be little injured. A Rhode Island Greening will be covered with it, though a Duchess may be nearly free of it. So it is with pears. The scale picks out a Bartlett, a Flemish Beauty or a Sheldon, but avoids a Kieffer.

This apparent freedom of selection is explained as really a difference in the bark. The scale must depend for the most part on some external means of transportation. The female cannot fly,

it can only crawl, and not very far at best. But it gets on the claws of birds and on insects. The wind, also, is responsible for carrying it about. Obviously, it cannot choose the place where it is to go. It can only stay where it is left. If the place is favorable it lives and multiplies, otherwise it merely dies. One tree in an orchard is as liable to a visit from a scale-infested bird or beetle as is another. Then it is reasonable to infer that the scale starves on the thick bark of one tree, but finds a good feeding place on another.

While birds, insects and winds are distributing the scale and thus doing some injury, they ought to be given credit for being of some benefit. They may carry a few of these insects to uninfested trees, but these are as nothing to the millions that are killed by the same process. Think how many strong wind will whip off a tree and deposit on an adjoining meadow or grain field! Perhaps the wind is, after all, an important means of checking the scale. At least the fall brood is moving at a time when there are apt to be heavy winds. As there is frequently a great loss of fruit from this cause it is only fair that there should be compensation of some kind.

It is only for a brief time that the scale can move about. When they first appear they seem to be playful, running in under the stall of the parent and out again like chickens under the mother hen's wings. But this is for a short time only. Then they start out in search of breakfast. If they find a place in the bark where they can insert their beaks before they are exhausted they at once begin to pump the sap out of the tree. There they stay, form a scale for a house and send forth their young. Then, having done as much mischief as they are capable of, they come to an end.

The male scale is smaller than its mate. It is further distinguished by having five little dots on the skull, but these are to be seen only by the aid of a rather strong microscope. The common pocket glass is not powerful enough. The male has wings, but the female does not. However, these do it no good after the shell is formed.

The San Jose scale is viviparous. That is to say, it is produced alive. The mother scale is dormant through the winter and spring. In the latitude of southern Michigan the first brood begins to move the latter part of June, so the season of breeding is short.

The fecundity of the creature is beyond comprehension. Scientists claim that if all the progeny of a single pair should live it would be possible for them to number two billions at the close of the breeding season, or one summer and fall. Such figures mean little. Fortunately, they do not all live. Comparatively few of them produce young.

Oakland Co. F. D. WELLS.

HOLD PEACH TREES IN CHECK.

We have had a little experience of late in regard to the growth of peach trees that might benefit some fellow who is just trying to grow a few trees. The trouble with a good many soils is that that certain soil will produce more growth of wood than is needed for the tree and the result is a tender, unprotected, brash tree that will not stand the winter. A soil that ordinarily is rich in nitrogen or better, call it humus, is the worst for a tree of the peach sort because of the excessive growth that it will invariably promote. We have found that our most thrifty trees are the ones that we have planted along a fence row and where there is no cultivation of any kind. In this place there is nothing except a sod of long blue-grass that tends to hold back a tree if it does anything at all. By planting in this way we get a tree that does not kill back each winter and thus lose a part of the growth that it ought to have ahead for the coming year.

Ohio. R. E. ROGERS.

Orchard sanitation requires constant vigilance. The protection afforded by sprays is assured only when spraying has been done incessantly. The continual watchfulness for dying branches, decaying fruit and rubbish and their immediate removal, or destruction, is the price that successful fruit growers must pay for their reputation.



It's Cheaper to Build a Concrete Feeding Floor Than Waste Sixty Cent Corn

When you feed on the ground, much of the grain is trampled in the dirt and lost. That means more feed—and less profit on your stock. Concrete feeding floors save every bit of the grain. They are easy to build, and are permanent; free from rat holes, disease germs and dampness. Concrete floors save labor and keep the stock in healthier condition. Build them of

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ROCK PHOSPHATE

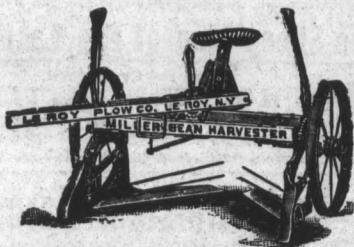
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LE ROY PLOW COMPANY, Le Roy, N. Y.

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Choice Selected Ginseng Seed

for fall planting. Grown in our own gardens. Thoroughly tested. \$1.50 per thousand. The best is always the cheapest. Order at once. Instructions for growing with order.

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Best Non-irrigated Seed—99.6% Pure 95% germination \$9.75. Absolutely guaranteed. Northern grown, extremely hardy. No seed better. Have Turkestan alfalfa, grass seeds all kinds. Ask for our Latest 60 p. Book on growing alfalfa, Catalog and Samples. All Sent Free. We can save you money. Write today. A. A. BERRY SEED CO., Box 131, CLARINDA, IOWA

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Wonderful new tested sorts that will increase your yield 20 to 50%. Hardy, vigorous, new blood, thoroughly graded, free from foul seeds. Satisfaction guaranteed or money back. Write today for price list 27.

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SEED WHEAT

GOEING WHEAT. A hardy variety of bearded red wheat. Stiff straw. Never lodges. Very productive. I have grown it for years. Write for sample and price. COLON C. LILLIE, Coopersville, Mich.

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LAKE SHORE STONE CO., Milwaukee, Wis.

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Cleaned and ready to sow at \$1 per bu. f.o.b. here. Bags extra. Yielded 50 bu. per acre this year. 15% protein, takes place of bran in the dairy ration. G. H. REDFIELD, Edwardsburg, Mich.

Seed Wheat—New Eldorado white variety, thoroughly cleaned, testing 59 to 60, \$1.05 per bu., sacks included, f.o.b. Lyons. Free sample by parcel post. EDWARD VANCE, R. 28, Lyons, Mich.

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Vice-President—C. B. Scully, Almont.
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Directors—C. P. Johnson, Metamora; H. W. Chamberlain, White Lake; Wm. T. Hill, Carson City; Jerry Spaulding, Belding; R. J. Robb, Mason; J. F. Relman, Flint.
Address all communications relative to the organization of new Clubs to Mrs. C. P. Johnson, Metamora, Mich.

Associational Motto:

The skillful hand, with cultured mind, is the farmer's most valuable asset.

EDUCATIONAL VALUE OF NOVELS.

Paper read by Miss Maud Smith at a recent meeting of the Columbia Club, of Jackson county.

Is the novel a real factor in education, or is it only a sweetmeat, pleasant to the taste, but not at all necessary to the mental or moral development? Assuredly no one would care to make a meal of sweets, realizing the need of strong tissue building material, but to eliminate the other would leave an unfinished sense of something lacking that we would soon acknowledge. In fact, scientists declare that the food value of candy is most important. That a pound of chocolate creams contains as much food value of a certain kind as a full meal. So we believe in the realm of literature the novel has a decided value as a mental food, notwithstanding the old time prejudice against it. Probably not more than half a century ago the novel in many homes was classed with certain other objects as belonging to those things that demoralize and degrade. I recall when we had the first neighborhood library in Jefferson, that "Ben Hur" was one of the books added, and one of the old members of the Club refused the same, saying he had lived all his life without reading a novel and he didn't think he would begin then, thus illustrating the old time feeling against the same. Perhaps much of this came from the word "novel" being associated with the flashy, weak style of writing such as the dime novel, known as an exaggerated tale of blood and warfare, of the purely sentimental and unreal style of Mrs. Holmes, Bertha M. Clay, E. P. Roe and others. Certainly the great novelists of the past won a recognition, tardy as it was, of the great world of thinking readers. Dickens' novels did more to reform the "debtors' prison" than any other force brought to bear. His characters are so well known that today they are commonly referred to in all phases of society. George Eliot's description of country life in England and the people of the same has made such novels as Adam Bede, The Mill on the Floss, and Silas Marner famous while her masterpiece Romola shows such keen insight into the moral nature of man and the insidious growth of evil until the moral sense is completely overthrown in the character of Tito. Of Victor Hugo's works the world is indeed the richer for these masterpieces. The character of Jean Val Jean is scarcely thought of as an imaginary one, but takes his place with the good bishop, as well he may, among the world's heroes. Kathleen and the Resurrection of Count Tolstoi have created a wonderful power of moulding thought as the great writer believed they might. One of the current magazines gives Jane Eyre, Vanity Fair and the Mill on the Floss credit for being among the greatest novels for character study. When Cooper's Tales were recognized in Europe as being worthy of notice, they gave the world the first accurate picture of frontier life, followed by the more polished descriptions of Washington Irving. Another phase of our people and country became pronounced, but not until the war clouds showed the great heart of Harriet Beecher Stowe and Uncle Tom's Cabin was given to the world, did our country have the honor of producing the one novel that has never been excelled for popularity or in its far reaching results. Next to the Bible this famous novel has been printed in more languages than any other book. Doubtless among American novelists none have reached greater fame than the recent Mark Twain. Just what the educational value of many of his novels are would be hard to determine, educators and teachers holding contrary opinions.

One purpose they surely have served to rebuke the snobbery of European aristocracy and those who affect it. He taught also the world wholesome laughter until its echoes encircle the globe.

Coming as they do from all ranks and conditions of life, the novelists bring material from various sources to enrich their readers. Notice the recent development of Marie Claire, the poor French seamstress, on the point of departure, having lost her eyesight with no means of gaining a livelihood, but whose novels and short stories are among the popular ones of the day. In contrast compare Winston Churchill, giving to us such valuable stories of our own country, such as The Crisis, The Crossing, etc. Of the novels or stories as we more frequently refer to them for juveniles, the value is almost inestimable, lasting impressions are given through the medium of the story whether read, or better still, related than could be given in any other way and surely we have a rich field in our clear, gifted, home-loving novelists, such as Louise Alcott, Kate Douglass Wiggins, Joel Chandler Harris, and a host of others. Finally one might say the educational value lies in selection, the amount we are satisfied to learn, the quality we are able to appropriate, and then only to mix it well with the more substantial so as to furnish a balanced ration for the best mental growth, and to further this end it would seem as if the circulating library furnished by the state could be used to better advantage or else more neighborhood libraries be established. The Tabbard Inn library, in many places where books are rented for five cents per number by the purchase of one book, is commended.

CLUB DISCUSSIONS.

Young People's Meeting.—The Indianfields Farmers Club was entertained at the pleasant home of Mr. and Mrs. Amos Andrews, July 17. Although the busy season of finishing haying and cultivating beans and beets was at hand, nearly all the members put aside the duties of the farm and met for an afternoon of social enjoyment as well as for rest, which our members are sure to find when they attend our monthly meetings. This being the annual meeting of the young folks in the Club, they took entire charge at the beginning. Musical numbers both vocal and instrumental, and recitations were given in abundance. At the close of the meeting the young folks escorted the members out to the beautiful lawn where we were greeted by the finest refreshments, and last, but not least, we were treated to a "surprise" in the shape of dishes of ice cream and cake galore. Miss Edith Andrews, assisted by Lucy Andrews were the refreshment committee. About 70 members were present to enjoy the young folks' treat, both intellectually and socially. In August a picnic will be enjoyed in what is known as Richardson's Grove, on the bank of Cass river.—Margaret Arnold, Cor. Sec.

Discuss County Agriculturist.—Deerfield Farmers' Club met at the home of Mr. and Mrs. George Killen, Saturday, July 26. Meeting was called to order by President Frank Eaton. Following the opening exercises a good musical and literary program was rendered, including a reading by Mrs. Frank Clark, "Fatherhood," which clearly showed not all depended on the mother but the father as well. Question, "What, if any, benefit would we derive from a county adviser?" Discussed by D. Glaspie, Wm. Jubb, Frank Clark, W. B. Jones, F. Eaton, and others. All seemed to thing no real benefit would be derived and would only have a tendency to make one more office seeker. Select reading by Mrs. George Evans, entitled, "If you can't help, don't hinder." Question box, conducted by Guy Hosley, contained many useful questions and brought out some lively discussion. Club then adjourned to meet with Mr. and Mrs. Eben Close, August 23, for a picnic. After which the crowd were all arranged and had their pictures taken, about 75 being present, and then partook of a bountiful supper to which everyone did justice, and departed for their homes, feeling it was indeed an afternoon well spent.—Mrs. Elsie Leonard, Cor. Sec.

Hold Annual Picnic.—The annual picnic of the Highland and Hartland Farmers' Club was held at Maxfield Lake on July 26. The following program was given: Music by the Hartland band. Male quartette of Highland: West Highland band; Invincible quartette. Address on co-operation through a county agriculturist, by Dr. Eben Mumford, of East Lansing. Music by the Hartland band. The August meeting will be held with Mr. and Mrs. Charles Muscin, the first Saturday in August.—Mary E. Opono, Cor. Sec.

Hold Social Meeting.—Ceresco Farmers' Club held a delightful meeting, July 30, at the pleasant home of Mr. and Mrs. A. W. Cronkhite, of Emmett. Sixty members and visitors were present. A bountiful picnic dinner was served at one o'clock and the whole day passed in sociability, there being no program. Mr. Brown, of Battle Creek, took a few snap shots to be used in moving pictures at the forthcoming home coming celebration to be held at Battle Creek in August. The Club will hold their annual picnic the first Wednesday in September in the grove of Mr. and Mrs. Frank Schmidt.—Mrs. P. M. King, Cor. Sec.

Grange.

Our Motto—"The farmer is of more consequence than the farm, and should be first improved."

THE AUGUST PROGRAMS.

Suggestions for Second Meeting.

Song, "Farewell to Summer," No. 132, Grange Melodies.

Why does it pay to attend Grange in summer? by four members.

Recitation, "A toast to laughter."

Can a city man go to a farm in your neighborhood with \$1,000 and make good? How?

Character song.

A farm girl of 18, with a common school education, wants to go to city to earn more spending money but father and mother object: 1. What advice would you give girl? 2. What would you do if you were girl's father? 3. What would you do if you were girl's mother? Question box.

The Grange Ginger Jar, opened by a "Surprise committee."

Music by orchestra.

HOME-GATHERINGS.

Paper presented by Mrs. Helen P. Wilson at the June meeting of Kent Pomona, held with Oakfield Grange.

The home is the index to the moral character of the individual, the foundation to the great commonwealth, and the masterpiece of Divinity! Without the home the nation would soon become extinct.

What, then, is more fitting than that the home-gathering should hold first place in the world of social entertainment? And, furthermore, that it should be made the faithful exponent of the social development of the family? What form of organized society can compare with the pure atmosphere of the home-gathering of a well constructed household? Its prompting motive is love, the first great gift of god to man! Here all meet on an equal footing. No strife for precedence dwarfs the soul nor casts its withering glance upon the sanctity of the home circle. And it is here especially, to the old farm home, that, after the lapse of long intervening years, the weary heart turns.

What memories cluster around the home-gatherings of our childhood days, and the days when grandfather and grandmother were coming! How we felt their hallowed presence! How we listened to catch their words of wisdom or sat with bated breath as they told stories of pioneer days and the hardships they cheerfully endured for the sake of making a home in the great new country. Home! That magic word! When the eye grows dim, when the step has lost its buoyancy and the hair is turned to silver, that word and its memories of happy home-gatherings has the power to cause the step, for a time, to grow elastic, and the eye to shine with unwonted brilliancy, as the spirit catches a vision of its ideal of eternal youth! Distance makes no difference, for,

Tho' broad ocean roll between,
It adds but beauty to the scene!

It is the memory of country vacation home-gatherings, and the attendant spirit of culture and refinement which lingers about them, that causes the city man, when he has secured a competency, to seek out for himself and family a home in the country. He remembers his own childhood and its narrow conditions, and determines that his children shall have better opportunities. For are not all great men born in the country? After the contracted walls of the city, the country seems, to him, so large and broad, and the poor people of the country seem to be in so much better condition than the poor people of the city, that he can scarcely wait for the day of his release.

Again, it is coming to be a recognized fact that there is no occupation which gives to man or woman so fully all the conditions of a happy and independent life as farming. Nevertheless, it requires both brains and skill to retain these conditions, and to keep abreast of the business and social progress of the farming class. And ought we not to be glad that this is so? That instead of being "a brother to the ox" we have it in our power to raise our business to the standard of the best, and to bring about us the highest elements of beauty and refinement. The people of the country today have no excuse for ignorance. Their facilities for education are just as good as those of the city people. Books, papers, electric cars, free mail delivery, and many other things have combined to bring the farmer out of his isolated con-

dition. In view of all this, why should not this country home-gathering hold first place in the social world?

The spirit of the times has been tending towards concentration in city centers for amusement and recreation, and the family or friendly gathering has almost been relegated to the past. While this has been the means of great pleasure to some, it has left others, who were unable to meet the demands of society at large, out in the cold.

Without a thought as to where this will lead, we have allowed ourselves to be drawn away from the one place most dear to the heart of the country man or woman who is true to the place of his or her birth. And when we take the social element from the country, we take from it that which is the true basis of civilization. And if, just at the height of social progress, we forget our duty to our own class, can we complain of the result? If we give our time wholly to city club meetings, can we complain if the country home-gathering is a failure? Can we conscientiously complain if country society deteriorates? Far be it from our desire to belittle the club movement, in a restricted sense, but let us have less of the club element, and more of the home element!

Again, the one deplorable result of the club element, as compared with the element of the country home-gatherings, is the class division of the sexes. It is coming to be more and more an accepted fact that this class division is productive of evid consequences, which can only be remedied through the medium of constant endeavor to bring back to the starting point the true social relations of the sexes. Fathers, brothers and sons, make your greatest effort to be at the home-gathering, for, aside from imperative duty which rests upon you, we need your presence. Not only that, but you yourselves will receive an incentive to right living which cannot be overestimated. A brighter day will dawn for the country when we bring our social pleasures home to good account.

What is more desolate than the country home whose fireside is never cheered by the presence of loving kindred and friends? What, indeed, is more unattractive, where the rooms never echo to the merry laughter of happy-hearted children; where brothers and sisters, uncles and aunts, never assemble to do honor to a kindly invitation, and where the table is never graced by the presence of those aged ones who have but a little time at most to bear us company? God pity the home that is thus unblest! But, better let there be no home-gathering whatever than one without a hearty welcome! Use economy, if you must, in all else, but let there be no economy in the hearty welcome.

About the home-gathering there lingers, at one and the same time, a delightful informality and restraint; here age and youth meet, with no thought of the disparity of years. Age needs youth, to cast about it that charm of informality, while youth needs age to give it that grace of quiet dignity and restraint which only comes through deep experience.

(To be concluded next week.)

Maple Row Grange, four miles from Manton, celebrated the Fourth of July in a safe, sane and happy manner. A program had been planned for the forenoon but a big display of fireworks and a downpour by nature kept most people at home until nearly noon. The fine dinner furnished by the Grange was well patronized. There were candy, ice cream, peanut and fruit booths. Swings were put up and seats placed in the beautiful grove that surrounds the Grange hall. There was a ball game and the usual sports, after dinner had been served, and the happy day closed with an address by the State Grange speaker, Mrs. Dora Stockman, of Lansing, on "Value of Grange Work to the Farmer." The meeting paid all expenses of the ball game and other sports and of the state speaker, besides leaving a fair profit to help on the Grange hall which this Grange is paying for. Also it afforded a day of pleasure for nearly 400 farmers and their families.

COMING EVENTS.

Picnics and Rallies.

Kent county annual picnic at John Ball park, Grand Rapids, Wednesday, Aug. 13.
Kalamazoo Co. with Richland Grange, at Richland, Wednesday, Aug. 13.

Pomona Meetings.

Ingham Co., with Aurelius Grange, Wednesday, Aug. 20. Picnic programs and baseball game.

Wayne County Pomona rally, in Joseph Waltz's grove, at Waltz, Friday, Aug. 29.
D. E. McClure, state speaker.

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by Kyohet Inukai

Looking Backward

The following is a sample of thousands of letters received by us during the year. We are proud of them all. Read this one and you will see why our customers have faith and confidence in their dealings with us. Here is the letter:

"May I extend the greetings of the season? I have been with you since 1878. Thirty-four years I have patronized your house. As a boy I sent you small orders. It would be interesting to look over all the orders I have mailed to you. Boyish things, the trimmings of a young man, my wife's engagement ring, the furnishings of a little home, the toys and playthings for babies and children, boys' and girls' books, tools, farm implements, groceries, drugs, clothing. A few years ago my home was destroyed by fire. The new one was equipped from your great store. The enclosed order is for a few presents for some of my children. If I had not received good treatment at your hands would I have remained so long a customer?"

(Name and address furnished on application.)

Looking Forward

Whatever we have done in the past for our customer is only a foretaste of future service. The best evidence of this will be found in our new catalogue of 1000 pages.

This immense volume is filled from cover to cover with over a hundred thousand real bargains—bargains in foods, bargains in furniture, clothing, drugs, farm implements—every requirement of man, woman or child.

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