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## Why and How to Thin Fruits.

Thinning is one of the orchard operations which is often recommended but seldom practiced. Many think it one of the non-essentials, one of the frills of orcharding. They consider it a good thing for the man who wants to putter around and get rid of some time and money he has to spare. Others think it one of the most important operations of the orchard and one which will do much to bring out the good qualities of the fruit. They believe that for the time and money invested it brings as much profit as most anything that can be done

stunted in growth. Thinning is the main remedy for such cases.

### Increases Percentage of Good Fruit.

Commercial growers of plums and peaches who have tried thinning consider it very important in getting good fruit. Peach growers especially find it very profitable to thin. The difference in size in the peach makes great difference in the market value. Fruit from unthinned trees when heavily loaded is small and runty and is often a drug on the market when large sized fruit sells readily. Aside from increasing the size of the plums

packing and marketing. So with the average cost of 50 cents a tree we would get a dollar per tree profit on the thinning. This would amount to \$50 per acre profit, which is nothing to be sneezed at.

Thinned peach and plum often have as many bushels of fruit as they would have had they not been thinned, the size of the fruit making up for the lack in numbers. On apples, however, there is generally less fruit but the larger per cent of the better grade of fruit is what makes thinning profitable. Unthinned trees, experiments have shown, have about 20 per cent more culls than those thinned. There will generally be just about as much packable fruit on the unthinned trees as on the thinned but there will pack only about half as many number ones from the unthinned as from the thinned. The others will be of the lower grades. Culls and number twos are not producers of large profits.

Thinning needs judgment. It is hard to state set rules for it. A distance of about six to eight inches is the proper distance to thin apples. Peaches should not be left any closer together than four inches, five or six inches would be better, and for plums about four inches. If the variety of plum is large the distance should be greater. In all cases the clusters should be thinned out to one or two

fruits. No two fruits should touch each other. The largest and most perfect fruit should be left. Fruit at the ends of long growths had better be taken off so as to lighten the load of the tree. These terminal fruits are generally bruised so as to make a second grade fruit anyway. Often one side or part of a tree is heavily loaded while the rest of the tree has a light crop. Such heavy bearing parts should be thinned as the different limbs of the tree are independent of each other in the bearing and setting of fruit.

Thinning needs courage. It seems wasteful to most people to thin off one-half to three-quarters of a crop. The axiom, "look up, not down," is one which the thinner should keep in mind. Pay no attention to the fruit on the ground, it may weaken your courage. In the west the Japs are considered the best thinners because they do as they are told, regardless of what they think the consequences will be. The white men, they say, lets up a little on each tree because his conscience begins to hurt him.

The proper time for thinning is just as soon after the June drop as possible for apples and before the pit hardens in case of the stone fruits.

The human hands, well directed, are the best thinning tools known.

Van Buren Co. FRANK A. WILKEN.



Well-cared for Six-year-old Keiffer Pear Orchard. (See Article on Next Page).

in the orchard, excepting spraying. The latter are generally those who have investigated the matter most thoroughly.

### The Theory of Thinning.

The theory of thinning sounds good and practical. The prime purpose of fruit trees in their natural conditions is to reproduce their kind. Their main object is to produce seed, not fruit. The fleshy part of the fruit, carrying the seed, is for the protection of the seed; and incidentally, a little flavor tasting good to man and animals is given to the fleshy part so that they will eat it and thus aid in the distribution of the seed. A bitter or unpleasant taste is usually given the seed so that it will not be chewed but rather, swallowed whole or spit out.

The production of seed is a drain on the vitality of the tree. The seed contains concentrated essential plant elements. The fleshy part contains little besides water.

The tree generally tries to bear a lot of seed, and therefore the fruit is generally smaller than man would like it. Man cares little for the seed, in fact he is constantly trying to do away with it. The fleshy part is what he is after. The tree cares little for the fleshy part but puts forth all efforts to produce seed. To accomplish his aim man must thin out the fruit so that the remaining fruits will get larger size. When the tree is relieved of part of its task of producing seed it puts its energies into developing larger fleshy parts to the remaining fruits.

Nature uses no judgment in the production of fruit. A tree will bring to maturity so large a crop of fruit in one year that it will have to rest up a year before it bears again. By limiting the production in the productive years man can often bring the tree to annual bearing. Some varieties will overbear each year and so deplete their vitality that they will die prematurely. Thinning will lengthen the lives of such varieties. Some varieties will bear crops too young, and as a result will become checked and

thinning plays an important part in the control of the fungus troubles of the plum. Thinning so that no two fruits touch each other will greatly help to control the rot.

There is no doubt in the minds of those who know, as to the practical value of thinning of peaches and plums. It is profitable beyond a doubt. But as to the value of thinning apples there is some controversy. Some are very enthusiastic over it and others who have tried it find that it does not pay. It depends upon circumstances whether it pays or not. The market catered to is probably the determining factor. If apples are sold through the usual channels of trade, the commission house, and packed without any distinctive pack or mark which becomes a mark of reputation, it is very doubtful if it will pay to thin. There is not enough distinction made between the various grades of fruit in the way of price to make it pay for thinning. Thinning is one of the operations which belong to the fancy fruit business, and should be followed by other operations which belong to the same line of work. The apple grower who thins should work up a reputation for his fruit in the particular market he caters to. He should have his grades well established and stick to them. Then thinning will be profitable with a doubt. Thinning is considered essential and most profitable out west where they are careful about their grades and pack.

### The Cost of Thinning.

The cost seems to be the greatest bug-a-boo to the intending thinner. Thinning is expensive, the cost of running all the way from 20 to 80 cents a tree. Some figure that it takes just about as long to thin a tree as it does to pick it. The cost of thinning is somewhat offset by the greater ease of picking and packing at harvesting time.

Tests show us that for every cent put into thinning we generally get three back, that is, provided proper care is given in

## Apple Scab and It's Control.

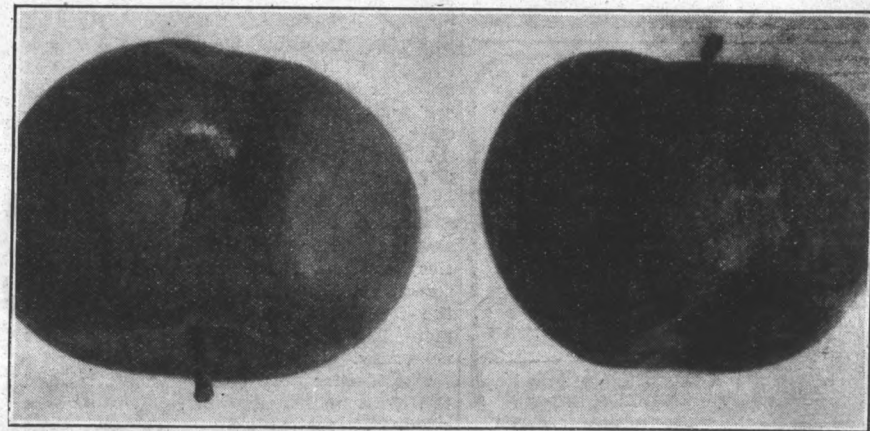
The disease known as apple scab is familiar to nearly everyone. It is probably the most serious fungus disease of the apple. It attacks both the foliage and the fruit, appearing first in the spring on the young leaves, where it produces velvety olive green spots of more or less circular outline. Later these spots become darker green, or brownish, and more irregular in shape. The leaves are frequently more or less wrinkled, and in bad cases fall prematurely. This exposes the tree to sun scald and often prevents the fruit buds from developing normally.

The more characteristic effect of the fungus is found upon the fruit. Typical specimens of the disease are shown in

ally more numerous around the blossom end of the fruit. Frequently the fruit is distorted while it is young by severe attacks of the fungus. Where the scab spots are numerous they often run together and then cause deep cracks in the apple. This allows the fruit to dry out. A good instance of this is shown in one of the apples in the photograph.

### The Nature of Apple Scab.

Apple scab is caused by a fungus known scientifically as *Venturia pomi*. The disease is spread by means of minute spores or germs which grow on the scab spot and are blown by the wind from tree to tree. When these spores are blown onto a leaf or fruit they germinate the same



Apples Affected with Scab. Proper Spraying is Best Means of Control.

the accompanying photograph. The fungus also attacks the stems of the young fruit at blossoming time, especially if the weather is unusually cool or moist. This causes the young apples to shrivel or drop, and often reduces the crop very materially. On the fruit the spots produced are circular and greenish black in color, appearing at first very much like those on the foliage. Later the outer layer of the skin peels off, caused by the working of the fungus under it. These spots on mature apples have a dark brown or blackish color with a narrow margin of a light gray color. They present a rough russeted appearance and are usu-

ally more numerous around the blossom end of the fruit. Frequently the fruit is distorted while it is young by severe attacks of the fungus. Where the scab spots are numerous they often run together and then cause deep cracks in the apple. This allows the fruit to dry out. A good instance of this is shown in one of the apples in the photograph.

The development and spread of the disease is very much influenced by weather conditions. Moisture on the surface of the leaf or fruit is essential to the germination of the spore. On this account the disease is spread mostly in the spring and early summer or in the fall. There are usually two bad infections during the year, one occurring in June shortly after the young apples have set, and another in August or September. The disease spreads very little during the



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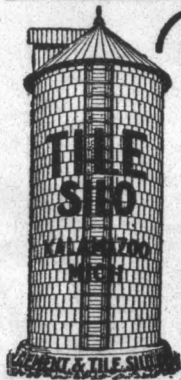
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hot dry weather of summer. It is not uncommon to find it developing upon apples in storage. If the fruit is affected with the spores before going into storage, the fungus will continue to grow. The spots render the apples very unsightly and unmarketable at fancy prices.

The disease thrives best during moist cool weather, particularly so when this prevails during the early part of the summer. Also, trees appear to be more subject to attack when crowded so as to shut off a free circulation of air and sunshine. Therefore the first preventative is to select a good location where air drainage is possible, space the trees at a proper distance apart, and then thin out by proper pruning. Another method of attack is by destroying the dead leaves. It has been found that the disease winters over on the dried fallen leaves. These are then the starting place for the growth on the next season. Therefore if they can be destroyed it will prevent some of the spread of the disease the following year. This can be done in two ways, either by raking up the leaves and burning them or by plowing them under.

The most important operation in its control, however, is spraying. This must not be neglected if the disease would be kept from doing harm. For this purpose either Bordeaux mixture or lime sulphur solution can be used, and at least three applications should be made. The first should be put on just after the buds have swollen and begin to show color. However, if the trees have been thoroughly sprayed with lime and sulphur for scale before the buds open this first application for scab can be omitted. Another should be made with dilute lime-sulphur or self-boiled lime-sulphur shortly after the petals have fallen, and a third application about the first part of August. Where the disease is very bad or the weather condition especially favorable for its growth, other applications may need to be made. This can be judged by the grower. If these methods are followed out the trouble will be kept under control.

Ingham Co.

A. C. MASON.

## THE KEIFFER PEAR.

The Keiffer pear is the standby of the masses and one prominent grower has said that this variety can be raised at a profit when sold for only 25 cents a bushel. There is no fruit that can be raised much cheaper than that and on the average it should be made a very profitable crop. It is a large golden yellow pear that becomes tinted with red on the sunny side, and though the quality is only fair, it is a profitable and desirable market variety. The Keiffer must be properly ripened in order to bring out its good qualities as an eating pear. They should be left on the trees until reaching full maturity and picked just before they begin to tint, which is at about the time that the leaves begin to fall. After picking they should be placed in a dark, cool storage room where an even temperature is maintained. Stored in the proper manner develops their quality and makes the Keiffer a far more desirable variety.

It is one of the most hardy of all our commercial pears and its resistance to blight is well known. It is not wise to plant a large number of one variety of pears in the same block but for cross-pollination, the Garber is recommended as a very efficient variety. In a large orchard about eight or 10 per cent of the Garber will be sufficient.

The big money in Keiffer pear raising is due to its value as a baking and canning pear. The canning factories demand a pear of good size and shipping qualities and make a fine market for large quantities of this variety. The large size and remarkable beauty make it a favorite on the fruit stands where attractive specimens having good keeping qualities are necessary.

The Keiffer pear tree is productive and the fruit will hang on well in a high wind. It makes a good-looking, ornamental tree for the front yard and serves the dual purpose of furnishing landscape beauty and good fruit for the table. The merits of this variety have not been appreciated because so many farmers have rushed them to market when immature and they have been purchased by the uninformed public and used for immediate consumption. When carefully handled and properly ripened, the average pear market will find little fault with the Keiffer. The combination of juiciness with the subacid flavor and the aroma of the Bartlett make it a variety that will receive more consideration from a select market every year, as its good points and limitations are understood. R. G. KIRBY.

## FARM NOTES.

### Seeding Alfalfa in Wheat.

I have 17 acres of land in one field near my barn which I would like to get seeded to alfalfa. It is sowed to oats now. I intend to sow it to wheat this fall. I will manure it good before I plow it this fall and lime it also. Now how should I apply the lime and how much to the acre? I intend to top-dress it this coming winter, then sow the alfalfa in the spring just the same as I would clover. Any advice you or any of the readers can give me will be greatly appreciated.

Saginaw Co.

J. R.

Where lime is to be applied as a preparation for alfalfa in the manner suggested by this inquiry, it will be best to sow same after the ground is plowed for wheat, and work the lime into the soil when the land is being fitted for the wheat crop. The best method of applying lime is with a lime or fertilizer distributor, although if hydrated lime or ground lime is used, a sufficient amount can be sown with a fertilizer drill to give good results on many soils.

The best authorities advise sowing from two to four or more tons of ground limestone per acre. It is the writer's experience that a lesser quantity will give equally satisfactory results, although the beneficial effects will doubtless not be as permanent where only a small application is made. We have just finished sowing a carload of ground limestone at the rate of one and a half tons per acre, and have had very good results where hydrated lime was used in quantities as small as 400 to 500 pounds per acre. Where applications of ground limestone are made, it can be distributed with a manure spreader or even sown by hand. The method of application will depend altogether upon local conditions.

Whether alfalfa can be successfully seeded with wheat on land where it has never grown is a point not thoroughly demonstrated. We have known of some very good stands of alfalfa secured in this way, but unless one is certain that the bacteria peculiar to the plant, is present in the soil, or unless the soil is liberally inoculated with this bacteria, this method of seeding might not be as successful as it doubtless will become when our soils become thoroughly inoculated with this bacteria, as they now are with that peculiar to red clover. The liberal manuring of the land and the application of lime will, however, go far to insure the success of any method of seeding alfalfa.

### Crops for Green Manure.

What crop should I sow in June for a green manure crop to be plowed down for corn next spring? Soil is sandy loam with clay sub-soil. I had thought of Hungarian millet or buckwheat, or possibly rape. Would like to sow what I can get most plant food from.

Cass Co.

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In the writer's opinion legumes, such as cowpeas or soy beans would be more profitable to use as a green manure crop on this land than would rape or millet or buckwheat or rye because it adds some plant food to the soil, provided the soil, or seed, is inoculated with the bacteria peculiar to the legume sown. One of these crops, if sown in rows and cultivated, a large growth of vegetable matter would be secured which would be in the best possible condition to plow down the following spring. Either the soy beans or the corn, or both, should be fertilized with a phosphoric acid and potash fertilizer, provided the ground is in need of added fertility in order to get maximum results with the corn. Rape or rye or buckwheat, or in fact, any cover crop will add vegetable matter to the soil and thus tend toward increasing its humus content, but will add nothing in the way of actual plant food which the soil did not already contain, simply leaving it in available form for the succeeding crop, while a leguminous crop will accomplish this same result and at the same time add a needed store of nitrogen in the soil for the use of succeeding crops.

## LILLIE FARMSTEAD NOTES.

### The Wheat Crop.

We have a good stand of wheat in this country but it is heading very short. The spring has been cool and dry and wheat has not made any great growth. The question is, what effect will this have upon the wheat? People who have been good observers all their lives say that this is going to be a splendid wheat year, that when wheat heads short, when it doesn't go all to straw it will go to head, and we will have a good yield of good plump wheat.

### The Season's Work.

At this writing, June 3, we have our ensilage corn nearly all planted, and one

field of lima beans. A field on which we will plant common field beans is all ready to be planted, and the ground is all fitted for the rest of the spring crops, with the exception of the potato crop, and that has been plowed and harrowed for some time. We hardly ever get our ensilage corn in before the middle of June and sometimes not until the last of June. We hardly ever plant our late potatoes until after the middle of June, so that we are very much farther ahead with our work this year than we have been in the last several years, and it is quite encouraging. It looks now as if we would be able to harrow the corn ground before the corn comes up and after the corn comes up. Some years it is so wet that we can't get onto our heavy land and the weeds get a good start and it is almost impossible to clean corn fields without hand-hoeing. It looks this year as if we could manage it without any hand-hoeing.

### Applying Fertilizer to Beans.

In planting lima beans and also in planting common field beans this year we planted them with a wheat drill, sowing three rows at a time. We used commercial fertilizer, stopping up the feed runs directly over the hoes that sow the seed so as not to have any fertilizer in the drill with the beans, as beans are very susceptible to injury from fertilizer when it touches them. They are very much more tender in this respect than corn or oats or wheat, and so we have just sown the fertilizer in the drill hoes on either side of the row, and I believe the best way is to go on and sow the fertilizer broadcast with the drill before you plant the beans, and harrow the ground and mix it thoroughly with the soil, but, of course, it takes more time to do this. As long as we have a drill with the fertilizer attachment we are putting on the fertilizer at the same time we plant the beans to save going over the field once. Probably, taking everything into consideration, it is the most practical way to use fertilizer.

### Rape Ready for Hog Pasture.

The rape and oats have made a remarkable growth the last few warm days and we are able to turn the hogs into one field.

## THE ALLEGAN COUNTY ALFALFA CAMPAIGN.

The alfalfa campaign in Allegan county turned out better than we dared to hope. In all there were 49 meetings held in the county during the week and in all, 5,925 people attended. Wayland and Allegan led with an attendance of over 300 each, while Plainwell, Burnips Corners, Martin and Hamilton cut between the 200 and 300 mark. This large number of meetings were held within the week by a system of relays that kept meetings going in three places at once—each speaker taking his turn at every meeting place. This system worked the speakers pretty hard but reached the people in every remote part of the country.

The following speakers addressed these meetings, four of them remaining throughout the week: Prof. P. G. Holden, Chas. W. Farr, W. R. Baughman, all of the extension department of the International Harvester Company. Dr. Eben Mumford, of M. A. C., John C. Ketcham, Master of State Grange, and C. B. Cook, of the Allegan Farm Bureau. Each meeting lasted from one hour to one and a half hours. The subject was divided by the speakers, so little ground was covered twice. A lively discussion at the close of each session bore testimony to the amount of interest taken by the farmers generally. A large motor truck carried a quantity of alfalfa literature for everyone interested and samples of seed. A partial list of those who are going to grow alfalfa this year gives the names and addresses of over 300 farmers in the county who will plant all the way from one to 20 acres each.

The alfalfa campaign has done much to arouse people on the farms of Allegan county to the splendid possibilities of a great crop that is growing rapidly in favor in all sections where it is given an honest trial. Alfalfa means more productive soils, better crops, an abundance of the best hay that can be grown and farming communities more alive to the best there is in farm life.

Allegan Co.

C. B. Cook.

Michigan is fast coming to the front as an agricultural state. It ranks first among all the states of the Union in the production of beans and rye, and is second in the production of apples and potatoes, and third in the production of pears, grapes and buckwheat.



## IMPROVING OUR POTATOES.—II.

In attempting to improve any of our varieties of potatoes, it is well to keep in mind the fact that some of the characteristics we can not change. If the variety is red, or flesh colored, the color is fixed and we can not change it. If there is a tendency toward deep eyes, we may modify this fault some by selection, but can not entirely eradicate it. If the potatoes are round, and when they grow large are hollow in the middle, it will be impossible to breed them solid all through and maintain large size and productiveness.

One of the first things to do in improving a variety of potatoes we wish to retain on account of desirable leading characteristics, is to keep in mind the faults and modify them, and if possible, eradicate them. If the round variety is inclined to grow too large, and are hollow, select the tubers from which to select the breeding sprouts, from among the tubers that are moderate in size, and put more seed in a hill, thereby changing the habit. There is not much danger from hollow middles where there is a large number in a hill. Eight or ten medium sized potatoes in a hill gives better results, both as to quality and yield, than three or four large overgrown ones.

If the variety in hand is inclined to grow long and coarse, select medium sized tubers for seed that are more oval and have a tendency toward a large number of eyes. Consumers dislike the large, prongy potatoes; they are coarse grained and lack the rich potato flavor that the medium sized potatoes have. On account of their poor quality buyers often throw out as culls the long, large, prongy potatoes, while the very large potatoes pile up well in the measure they are not profitable to raise, because both buyers and consumers discriminate against them.

By careful selection of seed from the right kind of tubers, the strength and vigor of the vines can be maintained and improved. The strong vines resist diseases, while those of a feeble growth readily succumb to diseases of various kinds. The kind of potatoes that have a strong root system and produce vigorous vines withstand summer drouths and the diseases which prey upon both vines and tubers, much better than those that have but a small root system.

The fact should be kept in mind that ancestral influences, both natural and acquired, can be retained by proper management. If the varieties raised are vigorous, that characteristic can be improved and be depended upon to assert itself each year if the conditions with which they are surrounded are favorable. The potatoes of the same variety that have not been bred up in vigor can not be depended upon to yield well in quantity or quality. It is the well bred strains of the varieties grown that yield best. The rule holds good with grains and vegetables as with the dairy cows and laying hens.

When we were using the then new variety known as the White Elephant, I had used them as a field potato for several years on account of the excellent quality as an eating potato, and also on account of their being good yielders. One spring I had laid out the ground I desired to plant, but found that I lacked about one-half bushel of seed to plant the whole patch. Rather than plant another variety in the same field I went about three miles to secure the same kind of seed. At digging time the difference in the potatoes produced from the half bushel of seed procured away from home was very pronounced; there was not the uniformity in size, nor was there anything like as good yield. As far as I know the conditions were equal. The seed procured lacked the breeding, or ancestral influences necessary to make a profitable crop.

I have a case in mind which shows that ancestral influence can, and will, be carried over during unfavorable seasons and reassert itself when the seed is surrounded by favorable conditions. A farmer in one of the great potato growing districts of the state sold some seed potatoes of a good variety to a man living on light, sandy soil. The seed was planted, but on account of a dry season and adverse conditions, the crop was nearly a failure. For some reason the man who sold the seed needed more for planting the following season than he had on hand, and rather than take such seed as could be secured in his immediate community, he went to the man to whom he had sold seed the previous year and bought some of his small potatoes, as those were all that could be secured. To his gratification and profit the ancestral influences were reasserted under favorable condi-

tions, and he had an excellent yield of good potatoes from the small seed.

We have good reasons for believing that if persistent effort and attention were to be given to improving our best and most popular varieties of potatoes, the quantities required by the consumers of the country could be supplied from one-half the usual acreage devoted to the crop, the quality would be improved and a larger profit remain in the producers' hands after the necessary expenses of the crop have been met.

Wayne Co.

N. A. CLAPP.

## THE BEST METHOD OF INOCULATING ALFALFA.

The adage, "If a little is good more is better," is the slogan that I have adopted when inoculating for alfalfa. Why not? If you will stop and think about it a little you will surely see it as I do and if any of the readers of the Michigan Farmer will visit me I can convince them that my new method of inoculating is far ahead of any method they ever heard of and the cost is but a trifle as compared to the good it will do. One team with two wagons and one man to load the wagons and two men to spread the soil can inoculate, using two tons of soil per acre at a cost of not more than one dollar per acre. My method is to manure the ground quite heavily with well rotted manure, or what is better, with fresh manure that has but very little straw in it, and on a cloudy day (and if it rains a little it is all the better), draw from two to three tons of soil from a well inoculated alfalfa field and spread it right onto the manure and disk it thoroughly at once. You should have one team follow with the disk and if that is not convenient do not spread more than one wagon load before disk-ing it in. If it should happen to be raining a little it won't do any harm to inoculate two or three acres before disk-ing but be sure to disk it before the sun shines on it, for if the sun shines on it even for only a short time it will kill the bacteria and your work will be wasted, and much worse than wasted, for you would think inoculating does no good and you would not try it again. Then plow as soon as convenient.

On May 3, 1912, I sowed a field of alfalfa with peas for the canning factory. A small part of it I did not inoculate; on part of it I sowed a half ton of soil per acre, and on part of it I sowed one ton and two tons per acre. Where I sowed it at the rate of two tons per acre and plowed it under with the manure the alfalfa is so much better than where I sowed a half ton per acre after plowing and dragged it in, that I would like to have everyone that intends to sow alfalfa come and see it.

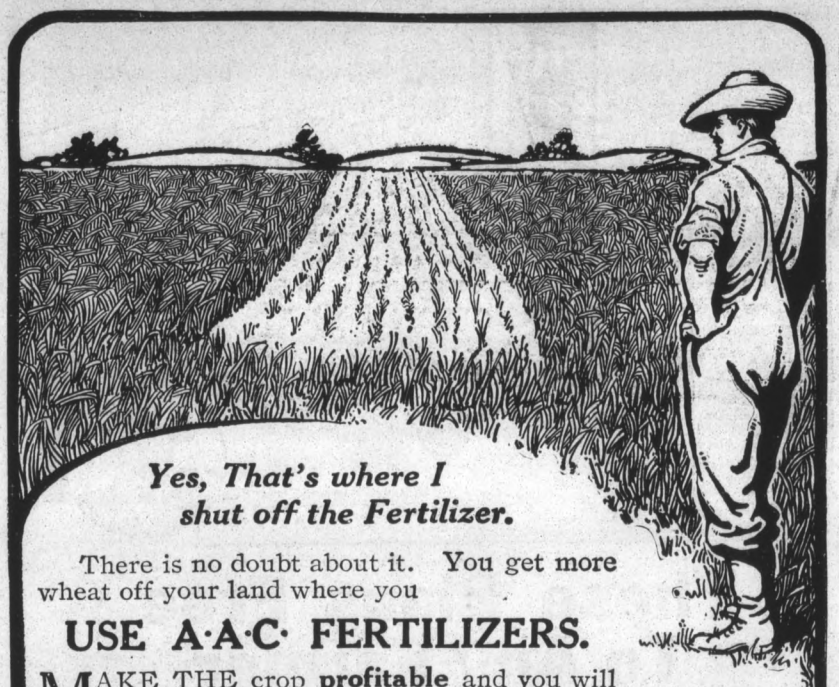
I was much interested in the article in the Michigan Farmer of May 4, from Mr. Colon Lillie, in which he tells how he inoculated for alfalfa, and I think it is all right as far as it goes, but if I did not use more soil than he did I would not expect much result on my farm. Perhaps his land does not need as much inoculating as mine does. Now if Mr. Lillie will come and see my field of alfalfa and tell the readers of the Michigan Farmer exactly what he thinks of my method of inoculating and how much more hay he thinks I will get per acre by my method than I will from the old method of inoculating he will do more to put alfalfa on the map of Michigan than all of the alfalfa campaigns have done in the state this year, for they do not advocate heavy inoculation and heavy inoculation mixed with manure and plowed down is the foundation on which we must build if we make a grand success in raising alfalfa. Therefore when inoculating don't forget that "if a little is good, more is better."

Oceana Co.

H. K. BRANCH.

## ALFALFA AFTER EARLY POTATOES.

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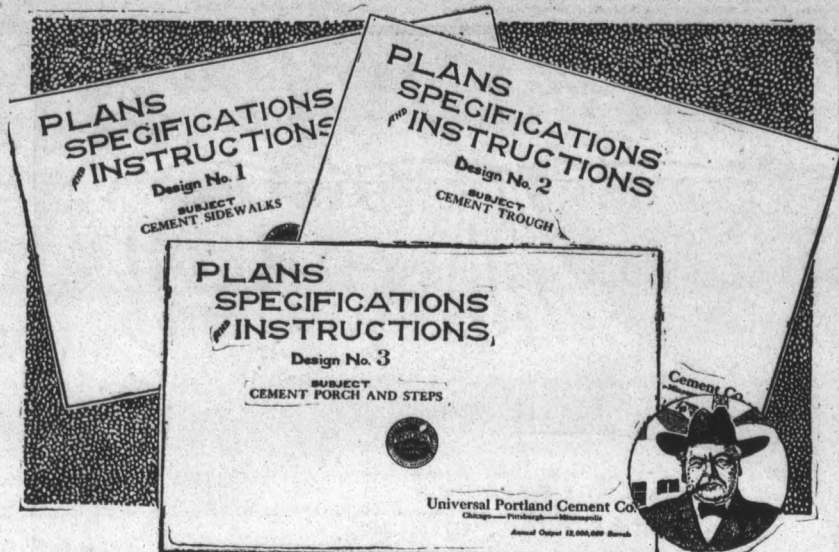
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## Live Stock.

### KEEP NURSING EWES THRIFTY.

With the heavy draft from nursing their lambs and the gradual decline in growth of pasture there is every danger that the ewes will become reduced in flesh and unthrifty. No time of the year is more vexing to both sheep and flock owner than the summer season when drought and excessive hot weather retards pasture growth. Meadow lands particularly are very apt to evidence the effect of hot dry weather and especially if having been well pastured during the early part of the season. It is unsafe to rely altogether during the summer months on meadow pasture as very few farmers seed their land to grasses that have the ability of supplying a constant growth of forage.

Strong milking ewes must have an adequate supply of nutritious and palatable feed in order to maintain good physical condition and also produce a uniform flow of nourishment for their rapid growing lambs. When pasture becomes short and sun-parched and the area upon which the ewes are confined limited, a decrease in milk flow soon becomes apparent while later the ewes themselves fall off in flesh. It is a serious matter and not easy to remedy to recruit ewes that become low in flesh while nursing their lambs. It has been the general experience of most flock owners that it is much better to safeguard against the development of such conditions than to endeavor to correct them after they have once got foothold.

Where a flock owner has a large area of pasture land properly fenced so that the flock can be frequently alternated from one field to another, pasture growth can be greatly stimulated. On the average farm, however, where sheep are kept in conjunction with other live stock the supply of pasture is invariably limited and other sources of supply must be relied upon. As soon as the grain producing crops are harvested the stubble can be very profitably turned over to the flock and will supply a large amount of excellent pasture. I always like to turn my sheep into stubble fields as soon as possible after the crops are removed as the sheep immediately destroy millions of weeds that otherwise would go to seed.

To allow the ewes to become unthrifty while nursing their lambs invites disease and impairs their future breeding usefulness. A large number of good ewes are ruined every season because of improper care during the nursing period. Disease always finds fertile soil to thrive in when the system is low in vitality and unable to ward off attacks. There are numerous parasitic diseases that are readily transmitted to the lambs from the ewes and unless every care is exercised to keep the ewes strong and healthy, the nursing lambs are very likely to become infested.

To keep the ewes thrifty and in good flesh condition is largely a matter of affording plenty of nutritious pasture along with a light ration of grain. The amount of grain advisable to feed largely depends upon the kind of pasture the flock is grazing upon. When pasture is abundant it is not necessary to feed grain as when insufficient to meet the needs of the flock. The grain ration can be materially reduced by giving attention to the growing of supplemental forage crops that can either be fed by soiling or pastured. It is by all means more satisfactory and economical to pasture forage crops, but the soiling method affords a larger quantity from a smaller area.

Shiawassee Co. LEO C. REYNOLDS.

### COST OF RAISING HORSES.

Reports have been received from about ten thousand correspondents of the Bureau of Statistics of the Department of Agriculture upon the cost of raising colts on farms to the age of three years. The average for the United States is found to be \$104.06; or, if we deduct the value of work done by the horse before he has passed his third year, namely \$7.52, the net cost is \$96.54; this is 70.9 per cent of the selling value of such horses, \$136.17.

The cost varies widely by states, from an average of \$69.50 for New Mexico, \$71.59 for Wyoming, and \$82.47 for Texas, to \$156.60 for Rhode Island, \$149.98 for Connecticut, and \$141.80 for Massachusetts.

Itemized, the cost is made up as follows: Service fee, \$12.95; value of time

lost by mare in foaling, \$10.06; breaking to halter, \$2.22; veterinary service, \$2.04; care and shelter, first year \$4.98, second year \$5.36, third year \$6.35; cost of grain fed, first year \$4.98, second year \$7.14, third year \$9.56; hay, first year \$4.14, second year \$6.61, third year, \$8.48; pasture, first year \$2.56, second year \$5.41, third year \$6.21; other costs, \$5.01; total, \$104.06.

The total cost for all feed is \$56.30, being \$21.68 for grain, \$19.23 for hay, \$14.18 for pasture, and \$1.21 for other feeds. The total cost of care and shelter is \$16.69. Of the total cost, 54 per cent is charged to feeds, 16 per cent to care and shelter, and 30 per cent to other items, as enumerated above.

As more than half the cost of raising a three-year-old horse on the farm is chargeable to feeds, it is readily observed how important is the influence of variation in prices of feedstuffs upon such cost.

### ALFALFA HOG PASTURE.

Last year we sowed out first alfalfa, 10 acres in four small fields, using different amounts of seed and sowing at different times, to learn a little about the plant and the way best suited for our farm. We used nitro-culture obtained from M. A. C. on all but a small strip for comparison. We obtained excellent results and we have been pasturing one field with hogs. We turned them into another in which the alfalfa is nearly waist high this morning. In the one from which we turned them, the alfalfa is beginning to start from the crown again but none of it is in blossom and some weeds are coming in it. When should we clip it, and will it do harm to leave the growth on the ground or must it be removed? We want to use that field for pasture again when it gets sufficient growth.

Shiawassee Co.

G. J. F.

Alfalfa can be cut as soon as the new growth is well started from the crown of the plant. It should be cut before this new growth gets tall enough so that it is clipped off with the mower. If the new growth is cut off it seems to injure the growth. On the other hand, they tell us that if alfalfa is not cut when the new growth starts it doesn't seem to do well. Now the proper thing for you to do is to turn the hogs out of this pasture and cut the balance for hay. Then as soon as the new growth starts up nicely and is five or six inches high you can turn the hogs back in. Without any question the way to pasture alfalfa is to not have too many hogs for the alfalfa field, and then when it comes time to cut, save what the hogs have not eaten for hay. In this way if you will cultivate the alfalfa with a spring tooth harrow every year, either early in the spring or before the alfalfa starts to amount to anything or directly after it has been cut for hay, go over it thoroughly both ways, you will not injure the alfalfa and you will root out the June grass and other weeds. Then by properly fertilizing it you can keep it down to hog pasture for almost an indefinite period of time. Of course, it will do no harm to clip this field of alfalfa and leave the clippings on the ground, but if you have got any growth it is well worth saving for hay.

There is a beef famine on the Pacific coast, causing San Francisco and Los Angeles to import large quantities of Australian beef, as well as frozen mutton, despite the high duty that has in years past been prohibitory. The beef imported from the antipodes has been retailing for around five cents per pound below prices paid for choice domestic beef, it grading much under American corn-fed beef and more resembling American grass-fed beef of the western range country. A drought extending over a long period on the Pacific coast has made such an unprecedentedly great shortage of beef that it became necessary to look to other sources for a beef supply, and it has been brought in from states as far east as Colorado, Montana and Texas, while an enterprising Los Angeles packing firm has been fattening cattle for supplying its own beef trade. The high railroad freight rates are very high, and this causes California dealers in meats to look to Australia for supplies, water rates being comparatively low. The federal authorities in New York are enforcing the law prohibiting men engaged in interstate commerce from selling beef or mutton or veal that lacks an ante-mortem and post-mortem examination inspection by the government official inspectors, and this prevents bringing in any of these Australian frozen meats. The Australian porterhouse steaks retail in San Francisco for 20 cents per pound, or five cents under prices paid for the domestic article. The California production of beef cattle has never amounted to much, and their grade has always been only fair to middling.



## Dairy.

CONDUCTED BY COLON C. LILLIE.

### PLANTING SOY BEANS IN CORN FOR SILAGE.

Seeing an article in the Michigan Farmer some time ago on planting soy beans in corn for ensilage, would like to have you tell me how and when to plant the beans. Would it be practical to plant enough to fill a 12x30-ft. silo?

Monroe Co.

J. S.

Personally I don't think very much of the idea of mixing soy beans with seed corn and planting it for silage, because I like to grow the ensilage corn pretty thick. Corn is a very vigorous grower and when you have a good crop of corn on the land you will get a very small growth of soy beans. In other words, you can't grow two crops on the same ground in the same season and have both of them good crops. I have tried this and most every year I try it over again, and always meet with the same results. I think it is much better if you want to grow soy beans to mix with the corn silage to grow them on a separate piece of ground. Put them in rows 28 inches apart and plant about a bushel of seed to the acre and then cut them at the same time you cut your ensilage corn and mix them in with the ensilage corn. Put in three or four loads of corn to one load of soy beans, run them through the ensilage cutter and mix them as thoroughly as you can with the corn silage. The cows relish them and they furnish a cheap source of protein, and I think the plan a good one, although there is a question as to whether you cannot supply the protein in grain cheaper than you can to grow the soy beans as a forage in this way. Corn is about as cheap a crop as we can grow. We want this to furnish the carbohydrates. It is necessary for best results that we feed some grain in connection with the clover or alfalfa hay and corn silage, and we can have this grain contain a good per cent of protein to balance up the ration. I am of the opinion that if we grow the soy beans and allow them to ripen, and harvest them and thresh them and grind the soy beans and feed a little soy bean meal in connection with the corn silage that we will get better results than we will if we put them into the silo, as long as we have Indian corn silage as the great silage crop.

### BEST SILO CORN FOR MONROE COUNTY.

After reading much of your writings, I would like your advice on the best corn to grow in Monroe county for a silo and general feed. We expect to feed all the corn we grow.

Monroe Co.

J. W.

As I have often stated in the Michigan Farmer, I think the best silo corn is the largest variety of dent corn that will mature sufficiently to make good silage in any given section. There is no best variety. Ensilage corn is nothing more or less than common field corn grown for the silo. Some people have a specific name for ensilage corn, but it simply means dent corn that is grown a good ways south and has the habit of taking a long time to mature because it has been grown in a climate where the seasons are long. When that corn is brought north it requires a longer season to mature than our climate, it grows very large, but does not contain a very large per cent of digestible nutrients. You can grow an immense amount of fodder or bulk of this sort of corn on an acre, but you can't get as much dry matter per acre as you can with a corn that matures in a shorter season. I believe the best ensilage corn or the best corn to plant for ensilage is any good variety of dent that is grown for about 100 miles south of us, and I am of the opinion that it will pay a man to buy his seed corn from a point 100 miles south of him every year where he wants the crop for the silo. It makes little difference what the name of it is as long as it is good vigorous corn. Of course, one wants prime seed, seed that has been harvested before frost and that has been kept from freezing all winter. We want it to grow and to grow vigorously. Corn grown in a given section tends to acclimate itself to that section and becomes earlier, and when it becomes earlier it doesn't grow as large. Now what we are after in silage is to get the largest amount of digestible nutrients to the acre. The food nutrients which we get out of the cornstalk in silage is

just as important as that which we get out of the ear. One is just as digestible as the other, and we don't care whether we get these nutrients in the stalk and leaves or in the ear itself. The purpose is entirely different than it is when we raise corn to husk and simply sell or feed the grain and consider the stalks of little account. Now when the corn plant properly matures, not dead ripe, but glazed and dented and not yet ready to cut up because it would shrink some, then the chemist tells us is the time it contains the largest per cent of digestible nutrients. Now the largest variety of corn that we can get that will properly mature will yield for us the largest number of tons of digestible nutrients per acre and that is what we want; we don't care what the name of the corn is. As I say, when we take corn farther south where the season is longer and bring it north it will grow luxuriantly but it usually will not properly mature. It hasn't the maturing habit for such a short season. When returning from Cuba I brought home some Cuban corn. This corn down there only grew to a moderate height. It was good vigorous corn. I planted an ear of it in the garden. It grew to an extreme height, some of them reaching 15 feet high, and became great large stalks. And when killing frosts came it was just nicely tasseled and silked out. You see, in Cuba it grew in a climate where it could have the whole year to mature in and when it got up into Michigan it had to hustle up and grow in about 90 or 100 days and it hadn't acquired this habit. Now that corn was not properly mature and would not make good silage, although there would be an immense bulk to the acre. And so I repeat, that I believe that the best seed for ensilage corn is a good vigorous variety of dent corn that is grown about 100 miles south of us. That corn will undoubtedly mature sufficiently to make good silage and will produce the largest growth of dry matter per acre.

### HOW TO CURE A KICKING COW.

Can you give me a cure for a kicking cow? She is both ugly and nervous. Kalkaska Co. SUBSCRIBER.

There is one thing certain, you can't cure a kicking cow by beating her with the milking stool or abusing her in any way. Cows resent this kind of treatment. This will not subdue a cow any more than threshing subdues a balky horse, the more you whip them the balkier they get. The only way I know of to cure a kicking cow is through kindness. Try to get on the right side of the cow. Make her believe that you are her best friend. And I think after a time the right man with the right knack can get the cow so that she will not kick. Usually there is a cause for kicking. It is usually the result of pain or injury. Perhaps the man who milks the cow has long fingernails or perhaps he has hard callouses on his hands. Perhaps he does not know how to squeeze the teat of the cow without giving the cow pain. All she knows is to resent this pain by kicking. It is her only way of defense, and consequently if the cow is caused pain by milking the thing to do is to remove the cause. Very often a cow has chapped teats, the same as a man has chapped hands. The teats get chapped in the cold dry winds, or sometimes a teat is injured by scratching it on a barbed wire or something of that sort. If this is the case, when you go to milk the cow it is going to hurt, and the cow is going to kick, and you can't blame her for it. In such cases as this a healing salve should be used, or vaseline, to soften the teat and make the injury as light as possible. Sometimes the cow gets a teat injured so that you cannot cure it with anything of this sort and only time will do the healing. In such cases it may be necessary to tie the cow's legs so she cannot kick, until the wound heals.

### A VALUABLE REFERENCE.

In connection with the veterinary advice given in the Michigan Farmer, every reader can use to excellent advantage one of the Michigan Farmer Anatomical Charts. This chart illustrates the horse, cow, sheep, hog and fowl, the perfect animal, the bones, the muscles, the blood system and the internal organs, also giving the name and location of each bone, muscle, vein and organ. Dr. Fair, our veterinarian, recommends the use of this chart and believes it will help you greatly to make your questions better understood and also enable you to better understand the answers.

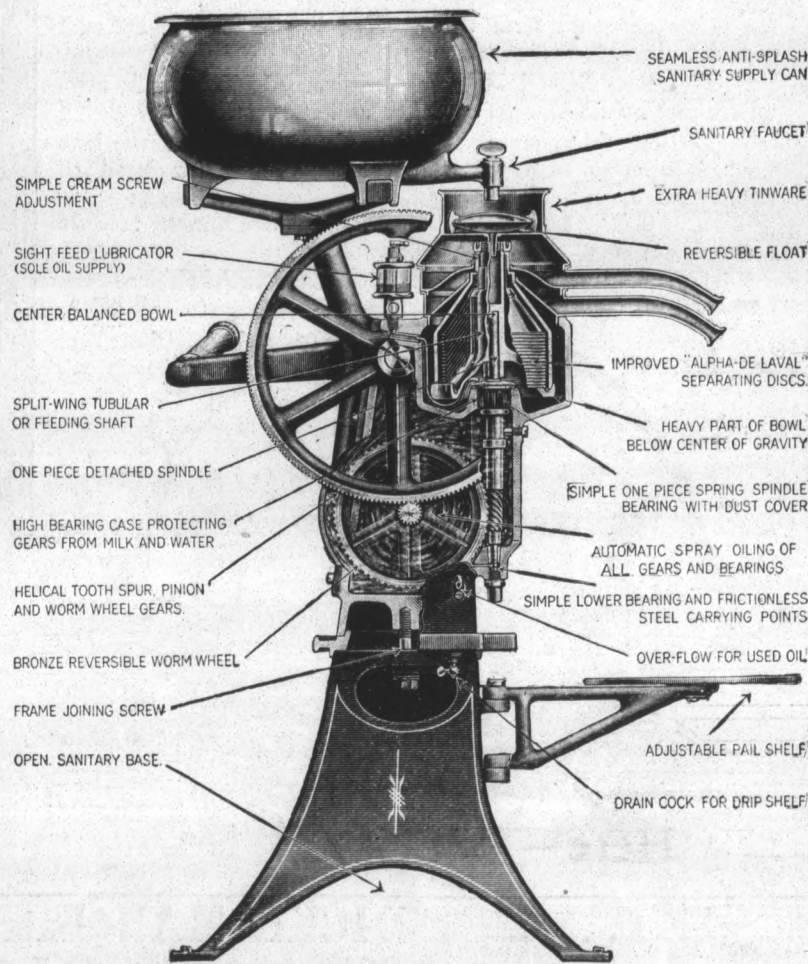
This chart is only one of the features of our six-page collection of charts which also contain maps of Michigan, the United States and the world, and many other valuable features. The entire collection will be sent postpaid, for only 30c. The Michigan Farmer, Detroit, Mich.—Adv.

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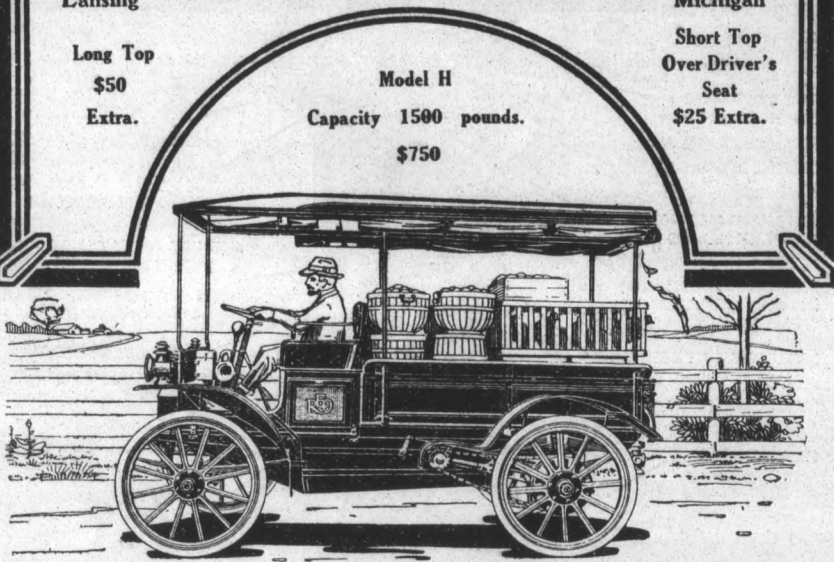
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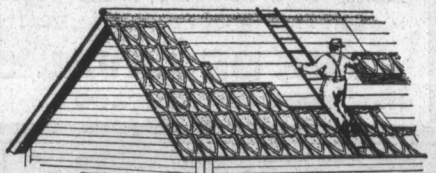
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# Poultry and Bees.

## PREPARE TO CAPONIZE THIS SEASON'S SURPLUS COCKERELS.

Everyone desires to realize the greatest amount of profit possible from the surplus cockerels but is puzzled as to which is the best method of disposing of them. Selling them as broilers will, of course, bring in a profit, but unless one has a good market for them this is not satisfactory. In order to secure highest prices they must be in prime market condition, and this entails quite a bit of labor unless one is properly prepared for the work.

The best method of disposing of them for the farmer and poultryman alike, is selling them as capons. Cockerels that have been caponized bring a price per pound that compares favorably with that of broilers. Some markets quote them at 30¢@50¢, and as they weigh from 8 to 12 lbs. each, according to breed, it will at once be seen that caponizing is profitable. A large capon will bring about as much as a good-sized turkey, and from a smaller amount of feed consumed. No special feed or feeding is necessary in growing capons. In fact, they will eat anything. They will eat feed that the other fowls will not touch. Hence, the small feed bill in raising capons.

A capon is an unsexed male bird. A capon shows no inclination to crow or fight. He is quiet and docile. The comb and wattles of the capon cease to develop. Capons are also easily fattened. One of their characteristics is a fondness for little chicks. They can be taught to care for a brood of chicks and make the best of mothers. Cockerels caponized in the fall will be right to brood chicks early in the season when broody hens are unavailable. They are especially of value to the breeder of a non-sitting variety of chickens, as chicks can be hatched in an incubator and given to the capons to be cared for.

Caponizing can be learned by anyone, and a little experience will enable one to become quite expert in manipulating the instruments. Procure a good set of instruments—they can be purchased very reasonably, and the work is much more easily done with a full set—follow the directions that accompany them and you will have very little trouble. Of course, your first operation may not be a success, but this should not discourage you. You are acquiring experience, and that is what is needed. It is a good plan for the beginner to watch an experienced person perform the operation if this is possible. Lacking this, the next best thing to do is to experiment on a dead cockerel, one that has been killed for table or market.

The heavy or meat breeds of chicken are better than the light or egg breeds for making capons. They should weigh from 1½ to 3 lbs. and be in good health at time of operating. It is best to perform the operation early, if possible, before hot weather sets in. While the work can be done successfully in hot weather, the results are usually not so good as earlier or later. Do the work in a room where there is plenty of light, and select a day that is bright and clear.

For the operating table a barrel or box may be used, as preferred. It should be of the right height for the operator to work well. A barrel turned on end answers the purpose nicely and is usually of the right height. The fowl should be laid on its side, a cord tied around the feet and a weight attached to the end, which is allowed to hang down the side of the barrel. This is to keep the feet still and hold the fowl in position. Another string is fastened around the wings and a weight attached to this also.

Cockerels intended for caponizing should have no food for about 24 hours previous to the operation. Now, follow the directions that accompany the instruments. After the cut is made and held open by the spreaders, the male organs will be in full view. In size and shape they resemble navy beans, and are of a yellowish color. Some remove the upper one first, but it is better to remove it last. If the upper one is removed first, and a loss of blood occurs, the view of the lower organ would be obstructed and its removal made more difficult. Do not sew up the cut after the operation; it will close of itself. When the capon is released the ribs will close up the wound and it usually heals in ten days.

Care must be exercised to remove the organs entirely or "slips" will occur. Of course, when this happens the fowl will

not be a capon and cannot be sold for such. It often happens that the organs develop again and the cockerel becomes fit for breeding purposes.

The fowls are ready to be fed as soon as the operation is over with. First they should be provided with water, however. They should not be put on fattening food. The object is to keep them growing until they are about a year old. Then, a few weeks before marketing, place them in small yards and feed three or four times a day, on fattening rations. This will put them in prime market condition. Indiana. O. E. HACHMAN.

## HOW TO MAKE AND USE A SWARM CATCHER.

I will describe how to make a swarm catcher, with which a swarm clustered 30 feet high can be hived nearly as quickly and easily as when near the ground. It requires only a short time to make one. The material, which is worth but a few cents, consists of a large bag made out of any kind of stout, coarse cloth—such as sack as binding twine comes in is excellent. To hold the mouth of this sack open, a piece of smooth wire, as large or a little larger than telegraph wire, is used. It is bent to a circle with the ends overlapping some inches, so that they can be tied together with small wire or stout cord. The mouth of the sack is then securely sewed around this wire hoop. A crocheted stick, the prongs of which naturally stay as far or a little farther apart than the diameter of the wire hoop, is used, and with stout cord the end of each prong is tied to the wire hoop at points directly opposite each other, so that the sack swings free. Now the open mouth of the sack will always point upward, no matter at what angle the pronged stick may be held. The stick below the prongs should be at least two feet long, so the small end of a long light pole can be attached to it by allowing the two to overlap a couple of feet, and binding them together with two short straps. Different length poles can be used, as they can be attached or detached in an instant.

When a swarm is clustered on a small limb, the catcher can be pushed up around them, then quickly raised up, jarring the limb so that the whole swarm falls right into the sack. If they are clustered on a large limb, the mouth of the sack can be raised up under them and, by moving it one side, the bees are brought into the sack. Thus a swarm can be picked right off the body of a tree, for, by letting the mouth of the sack catch on the body of the tree below the bees, then gradually raising it up, the bees will be brushed in. Carry to the hive and invert the bag, or rather turn it inside out, and the bees will drop in front of the hive and run into it, and the hiving is done. Until tried, no one would believe from what apparently inaccessible places swarms can be secured with one of these, when rightly made. I have tested quite a few swarm catchers, but have found none to give such thorough satisfaction as this simple device, which any bee-keeper can make.

New Jersey.

F. G. HERMAN.

Bee-keepers who do not keep queens for more than two years clip the right wing of queen in even years and the left in the odd years. The age of queen can thus be told.

Don't bother with starters of comb foundation in your breeding or extracting frames, but put in full sheets of foundation and prevent bees from building the worst nuisance of the apiary—drone comb.

Don't use second-hand packages for your comb or extracted honey. You not only bear down the price of honey on the market, but you indirectly raise the freight rate.

Don't try to winter weak colonies. If you are anxious to save all you can, feed them syrup made from granulated sugar as soon as harvest commences to close, so that breeding will be kept up until they are strong in bees. These often make your best colonies in the spring. If you cannot do this you had better unite two or more in the fall, for a weak colony in the fall is usually a dead one in the spring.



## Practical Science.

### TUBERCULOSIS.—(Continued).

BY FLOYD W. ROBISON.

#### Symptoms by which Tuberculosis is Recognized.

Before describing the symptoms or signs by which tuberculosis is recognized or suspected in a living animal, it is well to say that there is no symptom which can be relied on with certainty. Any of the symptoms may sometimes be caused by some other disease and not one of them is characteristic of tuberculosis alone.

Many of the symptoms that are relied on by the human physician in reaching his opinion are not available in examining cattle. The thickness of the skin and the chest wall, for instance, makes it difficult to detect a diseased condition of their lungs by listening to the sounds made in breathing, whereas this is comparatively easy in human beings.

It must also be clearly remembered that cattle may be very badly diseased and yet show no symptoms of ill health. They may be fat and sleek, looking the picture of health, while their lungs and other organs are full of tubercles. Such cases can only be detected by the tuberculin test.

As tuberculosis may attack almost any organ of the body, we may have in each case the symptoms connected with the part affected as well as those affecting the general state of the body as a whole. We will take up in detail each of the more important symptoms suggestive of the disease.

#### Unthriftiness.

The animal is not doing as well as it should for the care and feed it is getting. Its coat is rough and its skin has lost its suppleness and feels harsh and thick.

Along with the unthriftiness is noticed a gradual loss of flesh as the animal gets thinner from week to week. It appears to be pining away, and such cows have been known to dairymen for a long time under the name of "piners," or "wasters." After a time they are reduced almost to skin and bone. Some cows show clearly the symptoms of unthriftiness and loss of flesh, being very weak and thin, but are heavy milkers and even in their weak condition continue to give an abundant quantity of milk. Cows of this kind are, unfortunately, too numerous in dairy herds. The temptation to keep such cows and to use their milk is greater than some persons can resist. Such cows are a great danger to other animals that may come in contact with them, and the use of their milk in a raw state is very apt to cause tuberculosis alike in young persons and lower animals.

#### Cough.

This symptom is only present when the disease is attacking the lungs or some part of the breathing organs. It is not a loud, sonorous cough, but rather a subdued and infrequent one, and may be heard only at such times as when the stable is first opened in the morning or when the animal is driven. At a later stage of the disease it may be heard at any time of the day. Cows do not usually appear to cough up anything. This is because they do not spit. Most of the material coughed up from the lungs is swallowed, but many tuberculosis germs escape from the mouth in the form of spray or are discharged from the nose.

#### Enlarged Glands.

Enlargements in the region of the throat, especially when they cause difficulty in breathing, are very likely to be due to tuberculosis.

#### Loss of Appetite.

This symptom is not seen until the later stages of the disease, when the animal is evidently wasting.

#### Bloating.

Diseased glands in the chest sometimes prevent the usual passage of gas from the paunch to the mouth by pressing on the gullet. In this case the cow suffers from bloating, and the paunch is often distended with gas. This, however, is not a very frequent symptom.

Looseness of the bowels, or "scouring," is seen in cattle affected with the disease in the bowels. This kind of diarrhea can not be cured by any known treatment.

When tuberculosis attacks the udder no change can be detected at first, but after a time hard lumps can be felt in some parts of the organ after it is milked out. Milk from such an udder must not be used, as it is almost certain to be teeming with germs of the disease.

# Coming Features

By R. E. Olds, Designer

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Center control—  
Oversize tires—  
Set-in dash lights—  
Free entrance in front—**

Right-side drive has been abandoned by the leading cars. Hereafter drivers will sit close to the cars they pass.

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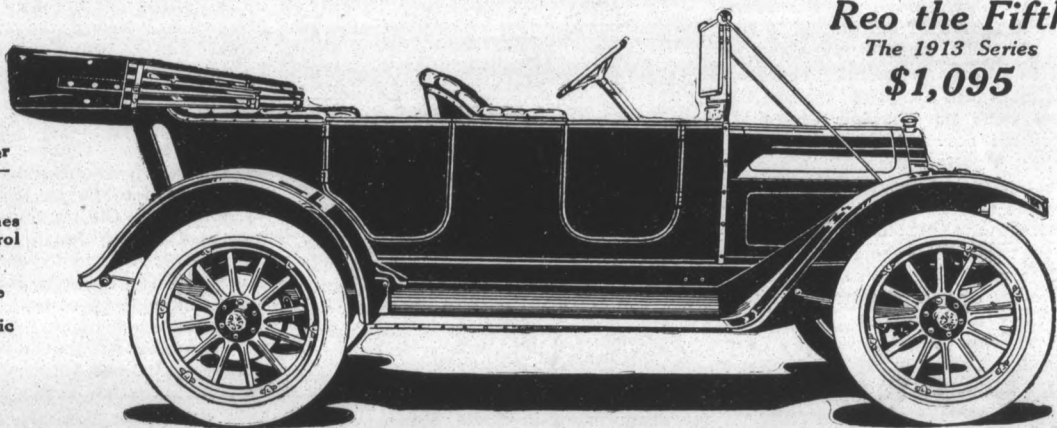
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DETROIT, JUNE 7, 1913.

## CURRENT COMMENT.

There has ever been a difference of opinion among good farmers as to the unit of land which is most profitable. According to a recent Washington report the farm management bureau of the United States Department of Agriculture has attempted to settle this much mooted question by an investigation of many farms in Michigan and other states to determine the relation between the size of the farm and the profit derived from it. This report states that a minute study of some 600 farms in Newaygo county revealed the fact that many of the owners of small farms were not making expenses, and the general conclusion was reached from the investigation that 160 acres is the smallest unit of land upon which farming can be made a profitable venture. The supplementary statement is made, however, that "as a general thing the farms in Newaygo county are of fair size and their operators are earning a fair return on their investment."

This report was published in the form of an interview from Dr. Spillman, head of the Farm Management Bureau of the United States Department of Agriculture, written by a leading Washington newspaper correspondent and published in a Detroit paper. The interview was referred to Dr. Mumford, state leader in farm management and field studies and demonstrations in Michigan, for an opinion as to its accuracy. He replied with the following statement: "To my knowledge there has been no such investigation in Newaygo county, but there was made, last summer, by the Office of Farm Management, a study of about 630 farms in Lenawee county. We have not yet received a tabulation of these results so that it is difficult for us to comment upon them at this time. \* \* \* I do not know what Professor Spillman's statements were, other than what is reported in the article which you sent me but I am inclined to think that he would qualify those statements in such a way that they would be made to apply to particular types of farming rather than to farming in general."

It thus seems probable that this report which has been circulated in the Michigan press in a semi-official form may be erroneous as to facts which will appear in the official report of these investigations in Michigan. If so it is to be regretted as tending to discredit the farm management work which is being undertaken in this state and which already promises much in the way of benefit to Michigan agriculture.

It appears that similar investigations are being made in several states and that the results are soon to be published as a warning to city people who formerly put their money into mining stocks but who are now buying small tracts of land

which they never have seen in the belief that farmers are making money so rapidly that they cannot go wrong on such an investment. If the publication of statistics resulting from this investigation accomplishes the result of disabusing the public mind of the impression that the farmers of the country are coining money, a result worth while will have been accomplished. It would appear, however, that the conclusion above referred to, that farming on less than 160 acres of land is an unprofitable venture is ill advised, else it is a sad commentary on Michigan agriculture. The last census figures show the average size of all Michigan farms to be 92 acres, including unimproved land, and a fraction over 62 acres each of improved land. If the assertion accredited to Dr. Spillman in this press report were true, it must logically follow that agriculture in Michigan has, on the whole, been an unprofitable venture for the farmers of the state.

The trouble with investigations of this sort, and the reason why they cannot be expected to settle a problem of this kind definitely, is that the personal equation of the farmers themselves is not taken into account. Probably a majority of the more capable farmers who began with small farms have added to their holdings until the factor of the personal equation is on the side of the larger farm, yet there are thousands of successful farmers in Michigan who are operating on 80, 60 and even 40 acre farms who will not accept this settlement of the question of the relation of the size of the farm to the profit from it as final and authoritative.

The Money Market. comment was made in the last issue on the advance of interest rates on good farm loans which was revealed by an investigation of this proposition in two of the best agricultural counties in central Michigan. Another evidence of the present tendency of financial institutions and capitalists to hoard money is found in a recent report from western Michigan, in which the statement is made that an installment of \$100,000 of an authorized bond issue for the construction of good roads remained unfloat because of the fact that no bids were received on the date set for the receiving of bids. As a result it is predicted that road construction in this county will be delayed for the want of available funds, although a similar amount of the same authorized issue of bonds was easily floated when previously offered. When bonds of this character do not find a ready sale at this season of the year it would appear to be evidence of a restricted money market the legitimate cause of which is difficult to analyze.

While it is but reasonable to expect a degree of conservatism on the part of both banks and capitalists as a precaution against any business disturbance which might result from the enactment of pending tariff legislation, it is entirely possible that the decline in average prices for agricultural products has contributed to the present apparent scarcity of money. A recent computation by the United States Department of Agriculture indicates that average prices for farm products were about 28 per cent lower on June 1, 1913, than on the same date in 1912, 5.1 per cent lower than in 1911, 9.2 per cent lower than in 1910 and 17.3 per cent lower than in 1909. If this is a contributing cause to the present situation, however, there is hope in the fact that prices for agricultural staples appear to have reached the low mark and are now in the process of reaction, since the same report states that the average prices received by producers for staple crops increased about 4.3 per cent from May 1 to June 1 of the present year, as compared with an increase of 1.2 per cent during the same period a year ago and an average increase of 3.4 per cent during the same period of the last five years.

## Eliminating the Rat Nuisance.

The annual loss from the depredations of rodents is enormous. The waste caused by mice would seem large if it could be shown in the aggregate, but the waste caused by rats is much larger. It is a sufficient argument for the elimination of the rat nuisance in itself, to say nothing of the sanitary reasons for such a course.

In sections of the country where there has been an epidemic of rats, organized rat hunts have been conducted with a view to reducing their numbers and the consequent annoyance to the inhabitants. Few farmers have not been so annoyed by the rat nuisance at some time in their experience that they have resorted to all

kinds of expedients to rid the premises of them, most of which, however, resulted in failure. In fact, there is but one certain method of eliminating the rat nuisance, and that is to starve out the rats. New buildings should be constructed so that they will be rat proof, and old buildings, especially where grain or other products which the rats can utilize as food are stored, should be made rat proof. Then, and only then, will the rat nuisance be eliminated. And the elimination of the rat nuisance by this means and by removing piles of old material or rubbish which harbor rats will be found a profitable and satisfying investment on any farm.

It appears that the system of prize farming used to stimulate interest in boys' and girls' agricultural clubs the country over has outgrown its original scope in some sections of the south where this movement originated. According to a recent estimate made by the Farmers' Educational and Co-operative Union, of Texas, over \$250,000 has been spent in prize farming in that state during the past five years. This has been done largely through the interest which business men have taken in the proposition, and this fact has caused the executive committee of the organization above mentioned to make an investigation of the proposition with a view to pointing out more practical lines of co-operation for those who desire to render effective aid to the agriculture of the state.

As a result of this investigation the system of prize farming which has grown up in that state has been condemned by the organization, on the ground that its educational value is too limited to be of any practical use; that it turns the mind of the child from practical to fancy farming, and that its effect is immoral where the art of growing a prize crop exceeds the value of the product. The assertion is also made that it gives the occupation of farming a childlike appearance and acknowledges the farmers as delinquent, feeble and incompetent. The conclusion is reached that the assembling of the best products of the farm in a community for study and comparison of educational value and in competition for small prizes offered after the crop is grown would not be so objectionable, but the offering of large prizes before the crop is grown is declared to be damaging to agriculture as an industry.

## The Gettysburg Anniversary.

As previously noted in these columns, the Legislature made an appropriation of \$20,000 for the purpose of paying the transportation of Michigan's Civil war veterans who participated in the Battle of Gettysburg on July 1-2-3, 1863, to the reunion which will be held on the battle ground on the fiftieth anniversary of that momentous battle. It later developed that the appropriation would not cover the cost of the transportation of all the applicants, and as discrimination between them was impossible this appeared an almost insurmountable obstacle to the participation of Michigan's veterans in the event. But a friend in need appeared in the person of Representative Weidenfeller, of Van Buren county, who interested himself in the task of undertaking to induce the railroads to transport the veterans and hold over their claim for the shortage until the Legislature could make another appropriation. This he succeeded in doing by personally guaranteeing the payment of same in case the Legislature fails to make the appropriation. Thus Michigan's veterans who participated in the Battle of Gettysburg are assured the opportunity to review this stirring period of their lives on the scene of action.

While the state pays the transportation of the veterans, the government furnishes sleeping tents and camp equipment, and the state of Pennsylvania feeds them while there. For them it will be a celebration of the National Holiday which will offer greater attractions, though accompanied by sadder memories, than any in which they have participated since the days of their youth.

Following a precedent first established in 1900, Governor Ferris has issued a proclamation urging all citizens of Michigan to display on that day "the most beautiful and the most significant of all the flags of all the nations of the earth," to the end that our youth may be encouraged to love and reverence the flag and what it symbolizes. This is an appeal which should be responded to by country people in making use of the Red, White and Blue for decorative purposes on June 14.

## HAPPENINGS OF THE WEEK.

## National.

Four persons were killed and two others fatally injured when a fast freight train plunged over an embankment at Blue Fields, W. Va., Sunday morning and struck a residence.

William Merritt, a resident of Redford, Mich., was run down and instantly killed by an interurban car at Monnier road and Grand River avenue, just outside of Detroit last Sunday night.

The United States Senate "lobby investigating committee" continues to take testimony this week. It is expected that the work of examining the senators will be completed by the middle of the week and that following this part of the program the calling of men supposed to be identified with the lobby itself, will begin. Just how long a time the committee will need to complete its task and what the effect of the effort will be, are conjectural.

The labor troubles of the Pere Marquette railroad are still unsettled, and it is possible that the dissatisfied workmen will extend the "walkout" to other branches of the company's interests than the shops, although it appeared at the meeting held in Grand Rapids, Sunday, that some of the unions did not favor calling a strike because they felt that the grounds advanced for such a move did not warrant the action. The engineers were most insistent upon remaining at work, while the boilermakers would have gone out eagerly. A meeting of the company's men was also held at Saginaw where the idea of arbitrating differences with the company seemed to prevail.

Glenn DuBois, editor of the Charlevoix Courier, and prominent Grange worker throughout Michigan, died at Charlevoix last Sunday morning at the age of 40. He had been ill for several months.

The weather station at Detroit reports that Sunday, June 7, was the coldest June day on record with two exceptions, they being June 7, 1875, when the mercury dropped to 38 degrees, and June 2, 1894, when it reached the same point. The lowest point reached last Sunday was 39 degrees F.

Members of the United States Senate committee selected to make inquiry into the strike situation of West Virginia are now in the district making a personal investigation of conditions.

Following the general invitation of Secretary of War Garrison to college students to enter special military camps at Gettysburg, Pa., and Monterey, Cal., where the rudiments of army life will be taught, about 500 college men have responded in spite of the fact that the announcement was made very late. The plan is novel and the response of the men of our colleges will go far toward making it a success.

An important decision was handed down Monday by the United States Supreme Court when it decided in what is known as the Minnesota freight and passenger rate cases, that the several states have power to fix reasonable rates on interstate roads, until such time as Congress shall choose to regulate such roads. In the same decision the court laid down some far-reaching principles governing the valuation of railroad properties for rate making purposes, and upon these principles the court decided that in certain specific instances the state of Minnesota had fixed rates at an unreasonably low figure and that these rates amounted to a confiscation of property; the state was, therefore, restrained from enforcing the measure in these instances. Many states are affected by the decision.

The people of northeastern Michigan are to be congratulated upon the success of the road "bee" held Monday of this week to construct a continuous roadbed from Bay City to Mackinaw City, a distance of 250 miles. It is estimated that 10,000 persons participated in the great event and that 150,000 cubic yards of earth and gravel were moved by 4,000 teams. The road passes through eight counties and 48 townships and while it is not completed at all points yet the work is so far advanced that a little additional attention and labor will practically finish it.

Col. Goethals, engineer of the Panama canal project, announces that on New Year's Day, 1915, the great canal will be ready to carry the largest ships afloat.

## Foreign.

The relentless campaign waged by women of England and planned to disturb political, business and social affairs as much as possible, has finally resulted in one of the women workers being killed while doing campaign work. Miss Wilding, Davison who has been active and prominent in the militant endeavors of the suffrage movement in England for some time past, died the result of injuries received when she attempted to stop the King's horse during a running race at the derby meet last Wednesday. Her skull was fractured and she was removed to a hospital where, after an operation, she died.

This week the house of commons will again consider the bill providing for the home rule of Ireland. A year ago the bill was passed by the commons but was vetoed by the house of lords. Should it be vetoed again by the house of lords and the commons should pass it the third time a year hence, the measure will become law—a route already mapped out by the supporters of the bill and made possible by the action of the government a few years ago when the power of the lords over legislation was restricted.

Affairs in Mexico remain unsettled. Rebels recently captured Metamoros and it is reported that Zacatecas, capital of a state by the same name, was also taken, but the federals deny this. The federals have failed in the attempt to win over the forces of General Blanco by bribery and the captain who tendered the terms was executed.



# Farm Commerce.

## FARMERS SHOULD CONTROL THEIR OWN CO-OPERATIVE ENTERPRISES.

When a stranger comes into your community and poses as working for the benefit of the people and begins to pave the way whereby the "shackles that bind you to an expensive system of distributing your farm products may be broken," watch him. If he is congenial, persuasive and what we are in the habit of calling "clever," then watch him all the more. There are too many wrecks of once hopeful ventures, over our state and country to permit us to withhold from our readers words of caution about men who are going the rounds promoting organizations purporting to aid in improving the marketing conditions of communities. In Michigan there can be found scores of old buildings that once housed creameries which have since failed simply because a promoter came along and enthused the people of a community over the dairy business, regardless of the fitness of the community for that line of farming, pointed out the advantages that would accrue if a co-operative creamery were built and conducted, and then in his most artful manner suggested that the contract for the building and the machinery be given to a particular firm at a price about twice the value of the property. Now there are other ways in which these men get money out of a community but this is the way that promoters of creameries got money out of Michigan men in years gone by. And so it is a safe principle to watch when a capable stranger comes into your town to urge the residents to undertake some business proposition, and conclude that he is not doing the work for his health. Had the farmers of the communities where the creameries failed made an investigation as to the cost of creameries and put their orders with some reliable dairy supply house it is safe to say that fewer of them would have failed, since there would have been only about one-half the capital to supply and pay interest on.

The fact that we are talking of strangers must not be lost sight of, for there are in our state and over the country many public spirited men who feel the true advantages afforded by the organization of farmers in large business units for mutual welfare, and are willing to sacrifice time and expense even, that those advantages may be brought to others whose business training does not enable them to understand the benefits of co-operation; but these men are not the kind that will thrust themselves upon you—they come as a guest and merit your closest attention and deepest consideration. These men are true apostles of the gospel of co-operation.

Regarding this whole matter the experiment station of Nebraska has published a bulletin containing some wholesome reading along this very line which we are appending. The information is as applicable to other business enterprises as to creameries and should be weighed carefully. The bulletin says:

As a result of efforts put forth by farm organizations for co-operation along various lines, there is now much agitation in favor of the building of small creameries, both private and co-operative. The creamery promoter, with a keen eye for business, has been quick to take advantage of the situation and he has made an effort to capitalize for his own benefit the sentiment already developed towards co-operation among the farmers.

All creamery promoters are not swindlers, nor are all creameries built by them failures. Frequently much good results from their efforts, but many of them are entirely too careless regarding where they build creameries. They have frequently placed creameries in localities and under conditions that could result in nothing but failure. Seemingly their interest in the creamery ceases very shortly after the last note has been collected. If the co-operative movement is at all worth while, it must start from within the heart of the dairy community instead of in the fertile brain of a creamery promoter.

There are promoters who are so ready and willing to help the farmers that they frequently offer to organize a creamery company in any neighborhood, solicit the stock, get out articles of incorporation, build and equip the plant and turn it over to an association of farmers for a certain

lump sum. This, of course, seems a very satisfactory way, as it relieves the members of the creamery association of all the preliminary work. One can, however, rest assured that no one is doing this work for nothing and that no outside party can do it as cheaply and effectively as the farmers of the community. These promoters are not working for their health; they usually get a good profit, which the farmers pay.

The organization is not as strong as if it had been created entirely by and for the community; therefore, again I emphasize—do your own organizing, and order everything needed direct from a reliable creamery supply house. The creamery organized by the farmers' own initiative not only is better and cheaper but is on a more substantial foundation from the very first and better able to weather successfully any little storm that may come. If the sentiment and interest in the community is not developed sufficiently to make possible the organization of a creamery by their own efforts assisted by disinterested outside help, such as that from the experiment station officials and others vitally interested in the permanent development and prosperity of the dairy industry, the chances are that the creamery promoter cannot develop enough interest and mutual confidence among the farmers to make the co-operative creamery a success after the promoter's influence is withdrawn.

## THE OUTLOOK FOR A GOOD CROP OF HONEY.

With the exception of California the outlook for the 1913 honey crop is promising in all the main producing districts of the country. Because of the liberal rains and the congenial weather early in the season, white clover got a good start and in spite of the cooler days and nights that have prevailed since the crop has made splendid development, which condition leads to the belief that there will be an abundance of nectar for the bees to gather. Even should dry weather continue it is the belief of well informed men that the clover is so far along that the influence on honey production from the plant will not be detrimental. In the southern part of the country there is every indication that a good crop will be taken from the hives, while the usual amount of honey will likely be produced by the bees of the alfalfa regions.

In California the conditions seem different. There one thing and another militated against the bee men and an absolute failure is predicted. Dry weather, cold periods and untimely frosts affected not only the plants upon which the bees work but the bees themselves were hindered from performing their labors. Oranges blossomed when it was too cold for the bees to fly freely.

## CROP AND MARKET NOTES.

Gratiot Co., June 7.—A much needed rain came last night. Excepting hay and wheat, farm crops are promising good. Corn was about all planted by May 31 and many are now cultivating. The bulk of the beans were sown the first week in June. Many beans are going onto the market at \$1.85. Owing to the fair cool weather farm work of all kinds is well in hand. Eggs, 18c; butter, 18¢@22¢.

Berrien Co., June 5.—The hard frosts the latter part of May damaged the fruit to a large extent. The weather has been so cool that crops are not advancing and farmers are late with their planting. The wheat prospects are very poor in this section; wheat heading out and some not a foot high. It is very short and will be hard to harvest. Hay, especially timothy, is not a good crop this year but clover is more abundant. Stock is in good condition, only a few are ready for market; there is not much demand for horses.

Mecosta Co., June 9.—So far June has not been very warm, and at this time the weather is quite cool. Farmers are farther along with their farm work than usual. Indications point to another good fruit year. All live stock is selling at a very high price. Butter-fat is worth 28c; eggs, 18c; hogs, fat, 8c; fat cattle, 6¢@8¢ for what can be bought.

Monroe Co., June 9.—It has been very cold and backward in southern Monroe county this spring. Fore part of April was somewhat wet, which retarded seedling oats. A great many fields were not seeded until in May. The latter part of April and the fore part of May were cold with the exception of now and then a warm day, and suddenly turned to cooler, with two or three light showers. May 26 on Monday, it began to rain and rained continually for two days and nights. This whole county was inundated, which de-

(Continued on page 667).

**WANT TO BUY** Registered Holstein helper calves of good breeding. W. H. H. WERTZ, Wooster, Ohio.

## BREEDERS' DIRECTORY.

### CATTLE.

#### Aberdeen-Angus.

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 CALVES, YORKSHIRE PIGS. Good Stock.

HICKS GUERNSEY FARM, Saginaw, W. S. Mich.

#### GUERNSEYS—Reg. Tuberculin Tested. Windsor Farm, Watervliet, Mich.

J. K. BLATCHFORD, Auditorium Tower, Chicago, Ill.

I have 2 Reg. Guernsey bulls left. Ready for service, the very best breeding, cheap if taken soon. Guarantee satisfaction. John Ebels, R. 10, Holland, Mich.

#### HEREFORD BULLS FOR SALE Also Poland China Hogs.

CHOICE Bull Calves from A. R. O. dams. Sired by our herd sire whose dam and sire's dam each made over 80 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.

HOLSTEIN BULLS—well bred, at reasonable prices. Barred Rock Chickens from 15 years breeding. Good layers eggs 15 for \$1. W. B. Jones, Oak Grove, Mich.

FOR Sale—Two reg. Holstein bull calves, 1 & 7 months old from good A. R. O. dams. Fine individuals. Price reasonable. Floyd F. Jones, R. 3, Oak Grove, Mich.

#### "Top-Notch" Holsteins.

Choice bull calves from 2 to 8 mo. old, of fashionable breeding and from dams with official milk and butter records for sale at reasonable prices.

McPHERSON FARMS CO., Howell, Michigan.

#### FOR SALE—HOLSTEIN BULL CALF

Born June 5, 1912, sire a son of the King of the Pontiacs from a daughter of Hengerveld De Kol. Dam of calf, an A. R. O. daughter of Sadie Vale Concordia's Paul DeKol, her dam a 20 lb. imported cow.

ED. S. LEWIS, Marshall, Mich.

Purebred Registered HOLSTEIN CATTLE The Greatest Dairy Breed Send for FREE Illustrated Booklets

Holstein-Friesian, Assn., Box 164, Brattleboro, Vt.

Reg. Holstein—Bull 8 months old, dark markings, little undersized but nice individual. Also good A. R. O. backing, rare bargain at \$50 delivered to your express office. HOBART W. FAX, Mason, Mich.

#### Service Bulls and Bull Calves

Sired by Johanna Concordia Champion, whose sire's dam and dam's dam average 34.06 lbs. butter in 7 days, average fat 4.67%. Also cows and heifers bred to him. I can offer you bulls at bargain prices. Try me and see, and do it quick.

L. E. CONNELL, Fayette, Ohio.

#### Bigelow's Holstein Farms

Breedsville, Mich.

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

Send for circular.

#### THIS HOLSTEIN BULL

was sired by best son of PONTIAC BUTTERBOY. Dam has official record of 24 lbs. as 4-yr.-old, 90 lbs. milk a day. Price \$100. C. D. WOODBURY, Lansing, Mich.

HATCH HERD HOLSTEINS—Choice sires from notable prices. HATCH HERD, Ypsilanti, Michigan.

#### HOLSTEIN BULLS.

3 to 8 months old, \$75 to \$300. Don't buy until you get our pedigrees and prices. LONG BEACH FARMS, Augusta, Kalamazoo Co., Mich.

#### BUTTER BRED JERSEY BULLS

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

#### 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.

For Sale—Registered Jersey Cattle, tuberculin tested; bulls and bull calves; heifers and heifer calves; cows with Register of Merit and Cow Testing Association records. IRVIN FOX, Allegan, Mich.

#### FOR SALE—JERSEY BULL CALF.

ready for light service, from high class ancestry. WATERMAN & WATERMAN, Meadowland Farm, R.F.D. 6, Ann Arbor, Mich.

#### Jersey Cows and Heifers

To reduce the herd we will sell 25 head of females at all attractive prices. Black Meadow Farm, Royal Oak, Mich.

They Keep It Up There are some cattle that give more milk when they are fresh than a Jersey, but there isn't any breed that gives as rich milk as

The Jersey at as small feeding cost, nor is there any breed of cattle that will keep it up like Jerseys will, year in and year out. That's why you ought to buy Jerseys to increase your herd's efficiency. Send for Jersey facts.

AMERICAN JERSEY CATTLE CLUB 324 W. 23d St., New York

#### COMPLETE DISPERSION SALE OF HOLSTEINS

On Thursday, June 19, I will offer at Public Sale my Entire Herd of 53 purebred Holstein-Friesian Cattle.

This herd consists of 27 choice females of milking age; 13 heifers and 13 heifer calves. Four of the 2-year-old heifers are from dams with A. R. O. records up to 24.34 lbs. The cows are large animals in good condition and of desirable type and breeding. All are heavy producers although only a few have been officially tested. They are capable of making good records if given the opportunity.

Catalog ready about June 5. All animals over six months will be tuberculin tested if desired. Sale begins at 10 a. m. Write for catalog.

F. W. SAVAGE, Belleville, Michigan.

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

**DAIRY BRED SHORTHORNS**—Bates bred bull 7-mo. old for sale. Price \$100. J. B. HUMMEL, Mason, Michigan.

**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.

### SHEEP.

**IT PAYS TO BUY** thoroughbred sheep of PARSONS, "The Sheep Man of the East," R. 1, Grand Ledge, Mich. (Write for descriptive price list.) Pay express charges. Oxford, Shropshire, Rambouillet, Polled Delaine.

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

#### SHROPSHIRE & DUROCS

KOPE-KON FARM, Kinderhook, Michigan.

### HOGS.

**Durocs & Victorias**—A Desirable Bunch of Sows of Either Breed due April and May. M. T. Story, R. B. 48 Lowell, Mich. City Phone 55.

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

**BERKSHIRES**—Male and female from one to 24 mos. Registered or eligible, served and ready for service. Some fine well bred young boars ready for service. F. D. & H. F. HOVEY, Imlay City, Michigan.

**Quick Maturing Berkshires**—Best breeding; best type. Satisfaction guaranteed or money refunded. O. S. BARTLETT, Pontiac, 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 Scott No. 1 head of herd. Farm 1/4 mile west of depot, OTTO B. SCHULZE, Nashville, Mich.

**O. I. C.'s**—A FEW BRED SOWS FOR SEPTEMBER FARROW. GEO. P. ANDREWS, Dansville, Ingham Co., Mich.

**O. I. C. SWINE** Write me for Pigs, pairs and trios, not akin. Have a number of service males of good type. Write me describing of your wants. A. J. GORDEN, R. No. 2 Dor, Mich.

**O. I. C.**—all sold. Orders booked for April and May pigs of the choicest breeding. C. J. THOMPSON, Rockford, Michigan.

**O. I. C.'s**—Bred sows, March pigs pairs and trios. Buff Rock Eggs \$150 per 15. 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.

**O. I. C.**—March pigs ready to ship, the long growthy kind with plenty of bone, at farmers prices. A. NEWMAN, R. 1, Mariette, 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**—Fall Gilts bred or open. Spring pigs pairs not akin. F. J. DRODT, R. No. 1, Monroe, Michigan.

**MALES ALL SOLD BUT ONE**—Fancy fall gilts for sale. JOHN MCNICOLL, Station A, Bay City, Mich. Route 4, Box 31.

**DUROC JERSEYS—BRED GILTS FOR SALE.** CAREY U. EDMONDS, Hastings, Michigan.

**DUROC JERSEY SPRING PIGS** of either sex for sale. Pairs not akin, also 2 Reg. Percheron mares, 2 years old, both grays. M. A. BRAY, Okemos, Mich.

**POLAND CHINAS**—Both Western and Home Bred. Either sex, all ages. Prices right. W. J. HAGELSHAW, Augusta, Mich.

**Butler's Big Bone Poland Chinas** We have a few nice fall boars, also some big sows bred for fall farrow. Our hogs are all cholera proof. J. C. BUTLER, Portland, Michigan.

**Big Type Poland China Pigs** at close prices. Eggs from big business. B. F. Rocks, \$1 per 15. ROBERT NEVE, Pierson, Mich.

**Large Type P. C.**—Largest in Michigan. Bred gilts and sows, all sold, have some good Sept. and Oct. pigs that have size, bone and quality. Write your wants or come and see. Expenses paid if not as represented. Free delivery. W. E. Livingston, Parma, Mich.

**POLAND CHINAS**—Either sex, all ages. Something good at a low price. F. D. LONG, R. No. 8, Grand Rapids, Michigan.

**P. C. BOARS AND SOWS**—large type, sired by Expansion. A. A. WOOD & SON, Saline, Michigan.

**LARGE** Yorkshires—Choice breeding stock, all ages, not akin, from State Fair prize-winners. Pedigrees furnished. W. C. COOK, R. 42 Box 22, Ada, Mich.

**Lillie Farmstead YORKSHIRES** Spring bred gilts all sold. Gilts bred for next August farrow. September pigs either sex, pairs and trios not akin. Orders booked for spring pigs.

COLON C. LILLIE, Coopersville, Mich.



# Markets.

## GRAINS AND SEEDS.

June 11, 1913.

**Wheat.**—The decline in wheat values that started over two weeks ago has continued to the present time, the amount taken from the prices during the past week totalling 3c for cash and only a fraction for futures. While two months ago prices were largely dependent upon conditions in Europe, today crop prospects in this country seem to be the big item in making values, and the present decline is ascribed to the crop now growing which promises to be large. The government crop report places the condition for all wheat at 87.2 as compared with a ten-year average of 86.1. The average yield for the country is estimated at 15 bushels per acre. Of course, there are chances that the plant may be further damaged than it already has been in some western states, but each favorable day adds to the security of the claims now made. It seems to be the opinion of wheat merchants that the present trade has two sides and that prices under prevailing conditions ought to remain somewhere in the vicinity of those now ruling. With stocks in Chicago greatly reduced, buying of cash at Minneapolis and Duluth for foreign shipment, and accidents to the spring wheat crop to consider, there are chances for the price level to move upward as well as downward. One year ago the price for No. 2 red wheat on the local market was \$1.14½ per bu. Quotations for the past week are:

|           | No. 2 | No. 1 | Red. | White. | July. | Sept. |
|-----------|-------|-------|------|--------|-------|-------|
| Thursday  | 1.05  | 1.04  | 91½  | 91½    | 91½   | 91½   |
| Friday    | 1.05  | 1.04  | 91½  | 91½    | 91½   | 91½   |
| Saturday  | 1.04½ | 1.03½ | 91½  | 91½    | 91½   | 91½   |
| Monday    | 1.04  | 1.03  | 91½  | 91½    | 91½   | 91½   |
| Tuesday   | 1.03½ | 1.02½ | 91½  | 91½    | 91½   | 91½   |
| Wednesday | 1.04  | 1.03  | 92½  | 92½    | 92½   | 92½   |

Chicago, (June 10).—No. 2 red wheat, 99½¢; July, 90½¢; September, 89½¢; December, 92½¢ per bu.

**Corn.**—There has been enough strength in the corn deal to overcome the decline in wheat and at some points work to a fractional higher level. The cold weather has been discouraging to the growing crop and in many sections where the crop was well along damage is reported. It is probable, however, that the extent of this damage is not large, but observations lead to the generally accepted theory that corn having a slow start usually does not attain the size and give the yield that crops having a rapid growth from the beginning does, and so many dealers hold bullish ideas regarding the future. There is also good buying at present which, with short supplies, gives the trade a firm footing. The local price for No. 3 corn a year ago was 77½¢ per bu. Quotations here for the past week are:

|           | No. 3 | No. 3   |
|-----------|-------|---------|
|           | Corn. | Yellow. |
| Thursday  | 59    | 61      |
| Friday    | 59    | 61      |
| Saturday  | 58½   | 60½     |
| Monday    | 58½   | 60½     |
| Tuesday   | 59    | 61      |
| Wednesday | 59½   | 61½     |

Chicago, (June 10).—No. 2, 58½¢; No. 3 yellow, 58½¢; Sept., 59½¢; Dec. 57¢ per bu.

**Oats.**—This grain followed wheat rather than corn and prices have suffered a decline of a cent. The government crop report gives the condition of the growing crop as 91.1 as compared with the ten-year average of 88.4, and the acreage is placed at 1.1 per cent above that of 1912. One year ago the local price for standard oats was 57½¢ per bu. Last week's quotations are:

|           | No. 3 | Standard. | White. |
|-----------|-------|-----------|--------|
| Thursday  | 42    | 41        | 41     |
| Friday    | 41½   | 40½       | 40½    |
| Saturday  | 41½   | 40½       | 40½    |
| Monday    | 41    | 40        | 40     |
| Tuesday   | 41    | 40        | 40     |
| Wednesday | 41    | 40        | 40     |

Chicago, (June 10).—No. 2 white oats, 40¢; No. 3 standard, 39¢; Sept., 37½¢; Dec., 38½¢ per bu.

**Beans.**—The local market is doing nothing in the bean deal and the nominal quotations published by the board are the same as a week ago, or \$2.05 per bu. for prompt and June shipment and \$2.10 for August. The supply seems to be ample.

**Chicago.**—The condition of this trade remains the same as last week with prices unchanged. Pea beans, hand-picked, are quoted at \$2.35; choice, \$2.30; prime, \$2.20; red kidneys, \$2, and white kidneys \$2.50 per bu.

## FLOUR AND FEEDS.

**Flour.**—Jobbing lots in ½ paper sacks are selling on the Detroit market per 196 lbs. as follows: Best patent, \$5.70; second, \$5.20; straight, \$5; spring patent, \$5.10; rye flour, \$4.60 per bbl.

**Hay.**—No change is noted in hay values at this point. Carlots on the track at Detroit are: No. 1 timothy, \$14.50; No. 2, \$12; No. 3 and clover mixed, \$13.50; No. 1 mixed, \$12; No. 2 mixed, \$11.50; No. 3 mixed, \$11; alfalfa, choice, \$16; do. No. 1, \$14; do. No. 2, \$11; do. No. 3, \$10.

**Chicago.**—Values about \$2 lower. Choice timothy, \$16; No. 1, \$14; No. 2, \$12; No. 3 and clover mixed, \$13.50; No. 1 mixed, \$12; No. 2 mixed, \$11.50; No. 3 mixed, \$11; alfalfa, choice, \$16; do. No. 1, \$14; do. No. 2, \$11; do. No. 3, \$10.

## DAIRY AND POULTRY PRODUCTS.

**Butter.**—There has been little change in butter since this time last week. El-

gin declined ½c on Monday but the local market is steady at a fractional gain over last week's figures on creamery stock. Detroit jobbing prices rule as follows: Fancy creamery, 27½¢; firsts, 26¢; dairy, 22¢; packing stock, 20¢ per lb.

**Elgin.**—Market steady at 27½¢. Chicago.—In this market the feeling is a trifle easier all around and dairies are fractionally lower. Quotations are: Extra creamery, 27½¢; extra firsts, 26½¢; firsts, 25½¢; seconds, 25¢; dairy extras, 26¢; firsts, 24¢; seconds, 22¢; packing stock, 12¢ to 22¢ as to quality.

**New York.**—Fractionally lower figures are quoted on nearly all grades but the market is reported firm in tone. Quotations: Creamery extras, 28¢; firsts, 27½¢; second, 26¢; state dairy, finest, 27¢; good to prime, 25½¢; 26½¢; common to fair, 24¢; packing, 20¢ to 21½¢ as to quality.

**Eggs.**—While the general tendency of values the past week has been downward, no marked changes have occurred. In the local market a decline of ¼c is noted, current offerings, candied, being quoted at 18½¢ per dozen.

**Chicago.**—This market is steady with some improvement in the demand reported. Miscellaneous receipts, cases included, are quoted at 16½¢; do., cases returned, 16¢; ordinary firsts, 17¢; firsts, 18¢; storage packed, firsts, 22¢ per dozen.

**New York.**—Steady and unchanged. Fresh gathered extras, 22¢; western gathered, whites, 20¢ to 23¢ per dozen.

**Poultry.**—Business in the local market hardly sufficient to establish quotations. Broilers quoted lower and old hens higher. Quotations are: Live.—Broilers, 27¢; 28¢; hens, 17¢; No. 2 hens, 12¢; old roosters, 11¢; turkeys, 17¢; geese, 12¢; ducks, 17¢ to 18¢ per lb.

**Chicago.**—Chickens lower; ducks and geese higher. Quotations on live are: Turkeys, good weight, 15¢; others, 10¢; fowls, good, 16¢; spring chickens, 25¢; ducks, 16¢; geese, full feathered, 10¢; guinea hens, \$4 per dozen.

## FRUITS AND VEGETABLES.

**Apples.**—The volume of business is not large but the trade is highly satisfactory to sellers. Detroit quotations are: Fancy, \$4.05; ordinary, \$3.04 per bbl.

**Chicago.**—The best grades of apples are steady at last week's values. Standard varieties, \$3.50 to \$6 per bbl.

**Strawberries.**—Recent frosts have damaged the crop and prices are higher and firm with average stock going at \$4 per bushel.

**Potatoes.**—On practically every important market within reach of Michigan potato growers a heavy decline in prices is reported. This decline is due to heavy receipts—the predictions that the recent spurt in values had removed practically the whole surplus from farmers' hands, proved to be erroneous. Local prices have dropped to the figures that prevailed before the recent advance. Michigan stock now selling at 30¢ to 35¢ per bu. in car lots.

**Chicago.**—Market easier under heavy receipts. The offerings last week reached 558 cars compared with 321 cars the previous week and 177 cars for the corresponding week last year. Under such enormous supplies prices could not stand and consequently they suffered another heavy decline. Quotations range from 25¢ to 30¢ per bu.

## GRAND RAPIDS.

The strawberry crop in this section will be very light, the freeze of May 9-10 evidently having seriously injured the early crop, and it is feared the frost last Sunday night has hurt the late ones. Only one crate of home-grown berries was offered on the city market Tuesday morning, which readily brought \$3.50. Asparagus is up to \$1, as compared with 75¢ last week. Pieplant and spinach sell at last week's prices, 40¢ and 50¢ respectively. Lettuce is lower, selling at 50¢. Hay is selling on the market at \$11.14. Dressed hogs are bringing 10¢ to 11¢; live poultry 10¢ to 12¢. In the grain list wheat is lower, No. 2 red selling at \$1, corn at 62¢ and oats at 42¢.

## THE LIVE STOCK MARKETS.

### Buffalo.

June 9, 1913.

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

Receipts of stock here today as follows: Cattle, 160 cars; hogs, 110 double decks; sheep and lambs, 25 double decks; calves 1700 head.

With 160 cars of cattle on our market here today, and 21,000 reported in Chicago, the weighty cattle sold from steady to about 10¢ higher than last week, quality considered. There were a few loads of the best cattle here today that has been shown here in the last 60 days, and, of course, they brought considerable more money than any cattle sold last week. The difference in the quality and finish making the difference in price. The heavy butchering steers sold from about steady to 10¢ lower. A good deal of grassy stuff of all kinds coming now, and we have to quote that kind off from 15¢ to 25¢.

We quote: Best 1350 to 1500-lb. steers, \$8.25 to \$8.50; one fancy load at \$8.75; good to prime 1200 to 1300-lb. steers, \$8 to \$8.30; do. 1100 to 1200-lb. do., \$7.85 to \$8.15; coarse and plain weighty steers, \$7.50 to \$7.85; good to choice handy steers, \$7.80 to \$8.15; medium butchering steers, \$7.75 to \$7.90; light common butchering steers and heifers, \$7.15 to \$7.40; best fat cows, \$6.50 to \$6.75; good butchering cows, \$5.75 to \$6.25; light do., \$5.25 to \$5.75; trimmers, \$4.45 to \$4.75; best fat heifers, \$7.25 to \$7.75; medium butchering heifers, \$7.25 to \$7.50; light and common heifers, \$6.50 to \$6.75; stock heifers, \$5.75 to \$6.25; best feeding steers, dehorned, \$7.25 to \$7.50; light and common stockers, \$5.50 to \$6; prime heavy bulls, \$7.25 to \$7.50; best butcher

bulls, \$6.50 to \$7; bologna bulls, \$6 to \$6.50; stock bulls, \$5.50 to \$6; best milkers and springers, \$65 to \$85; common kind do., \$40 to \$55.

We had a liberal supply of hogs today, about 110 double decks. Demand was fairly good, although prices were 5¢ to 10¢ lower; general sales of mixed grades and yorkers 9c, with a few at \$9.05; one fancy load of hogs selling up to \$9.15. Pigs and lights, \$9 to \$9.10; roughs, \$7.50 to \$8; stags, \$6 to \$7. Market closed a little easy and a few unsold, but we do not predict much change for the near future.

The sheep and lamb market was active today, with prices about the same as the close of last week; most of the choice handy yearlings selling from \$7.40 to \$7.50. Spring lambs from \$8.50 to \$9.50. Best wethers mostly \$6; ewes, \$5 to \$5.50, owing to weight and quality. Look for about steady prices the balance of the week.

We quote: Choice spring lambs, \$9 to \$9.50; cull to fair do., \$6 to \$8.50; yearling lambs, \$7.25 to \$7.50; bucks, \$3 to \$4.50; wethers, \$6 to \$6.25; handy ewes, \$5.25 to \$5.50; heavy ewes, \$5 to \$5.25; cull sheep, \$3 to \$4.50; veals, choice to extra, \$11 to \$11.25; fair to good, \$7 to \$10.50; heavy calves, \$4.50 to \$6. We advise caution in buying heavy calves as buyers are discriminating against that kind.

### Chicago.

June 9, 1913.

Cattle. Hogs. Sheep.  
Received today ..... 21,000 55,000 15,000  
Same day last year.. 13,544 44,606 16,474  
Received last week... 45,277 155,276 96,710  
Same week last year.. 33,926 128,243 86,064

This week opens with a lively demand for cattle, with steers largely a dime higher and butcher stock active at firm prices. Hogs are active, but the liberal run makes prices 5¢ lower, the best going at \$8.65. Hogs marketed last week averaged 244 lbs., compared with 233 lbs. one year ago, 237 lbs. two years ago and 241 lbs. three years ago. Sheep and lambs are in very small supply and from 15¢ to 25¢ higher, prime fed shorn lambs bringing \$7.70.

Cattle had a broader general demand last week, and decreasing receipts helped sellers to maintain prices, especially for the more desirable offerings, with the call centered still on fat light steers, good to choice, handy-weight yearlings and fat cows and heifers. After Monday there were fewer heavy beefs than usual, and supplies of such this side of the Mississippi river are not over large, according to all accounts. Beef steers sold chiefly at \$7.60 to \$8.45, the cheaper class of light steers fetching \$7.10 to \$7.75 and the better class of weighty cattle taken at \$8.45 to \$8.75. Numerous sales of heavy steers were made at \$8 to \$8.25, while common to prime yearlings brought \$7.25 to \$8.75. Quite a number of sloop-fed cattle from distillery sections arrived and sold at \$7.35 to \$8.30. Butchering cows and heifers sold freely at \$5 to \$8.60, while cutters went at \$4.40 to \$4.95, canners at \$3.35 to \$4.35 and bulls at \$5.35 to \$7.50, a prime bull bringing \$7.75. There has been a large inquiry from several states for desirable stock steers and well-bred feeders, the excellent pasturage nearly everywhere making farmers anxious to utilize it, but the offerings were totally inadequate, while prices asked were apt to be higher than intending buyers felt like paying at this time. Packers and feeder buyers competed for the best lots, and these sold largely to the former. Stockers sold mostly at \$7 and upward, with the best class bringing \$7.80 to \$8 and inferior lots selling sparingly at \$6.25 and upward. Feeders found buyers at \$7.35 to \$8.10, while stock heifers brought \$6 to \$6.75, with not nearly enough offered. There was a lively demand for calves, and high prices prevailed, with not enough to go around, the better class of light vealers going at \$10 to \$11 per 100 lbs., and the commoner to fair lots of heavy calves taken at \$5.50 to \$7.50. Milk and springers had a good demand at \$5 to \$10 per head, the inquiry being mostly for choice ones. Stock steer calves brought \$7.50 to \$8. Prices for the greater part of the beef steers at the close stood 15¢ to 20¢ higher than a week earlier, stockers and feeders being 15¢ to 20¢ higher.

Hogs were in good demand most of last week, with a strong call at times for eastern shipment, but rather unexpected large increases in the receipts gave buyers opportunities to lower prices, placing the market on a cheaper basis. Rallies in prices took place, but sellers had to take considerably reduced figures for all sorts of hogs. The course of the market from now on will be governed largely by the volume of the receipts, and should liberal supplies be furnished, prices may be expected to drop considerably lower, although there is no probability that preparing hogs for the market will cease to be a profitable occupation for owners of healthy young stock. The summer months are usually ones when hogs come to market freely, and it is likely that many owners will have good supplies for shipment from now on. The wants of the fresh meat trade are extremely large, and cash trade in provisions is large also, while the Chicago stocks are down to 108,783,521 lbs., compared with 101,474,594 lbs. one month ago and 164,278,678 lbs. a year ago.

Sheep and lambs would have sold as a whole more satisfactorily to owners last week had the offerings averaged better in quality, for the proportion of well finished flocks was very limited, and lots of grassy and half-fat stock showed up daily. Demand was good enough for choice handy weights, these selling at a good premium, although even the best fed lambs had to go lower. The most important feature was the great increase in the supplies of southern spring lambs shipped direct from Louisville to the Chicago packing plants direct. Fed lambs make up the principal part of the offerings, with some increase in the supply of spring lambs offered on the market, while native ewes are numerous. Most of the fed western wethers come in large bunches. The sheep and lamb receipts

showed a great gain for the week, and prices were more or less lower except for fat stock, while spring lambs declined fully 50¢, selling at \$6 to \$8.50 per 100 lbs. Shorn flocks closed as follows: Lambs, \$5 to \$7.40; yearling wethers, \$5 to \$6.35; wethers, \$4.25 to \$5.75; ewes, \$3 to \$5.10; bucks, \$3.25 to \$4.25.

## NATIONAL CROP REPORT.

The crop reporting board of the bureau of statistics of the Department of Agriculture, from the reports of the correspondents and agents of the bureau report on the condition and area of the leading crops of the country as follows:

**Spring Wheat.**—Acreage, 18,663,000; condition, 93.5 per cent of a normal; indicated yield, 13.5 bu. per acre.

**Winter Wheat.**—Condition, 83.5 per cent; indicated yield, 15.9; production, 492,000,000.

**All Wheat.**—Area, 49,601,000; condition, 87.2 per cent; yield, 15; production, 744,000,000 bu., as compared with 730,000,000 bu. for 1912.

**Oats.**—Area, 38,341,000; condition, 87; yield, 28.8; production, 1,104,000,000 bu., as compared with 1,418,000,000 bu. in 1912.

**Barley.**—Area, 7,255,000; condition, 87.1; yield, 24.4; production, 177,000,000.

**Rye.**—Condition, 90.9; yield, 18.5.

**Hay.**—Condition, 87.5.

**Pastures.**—Condition, 89.2.

## MICHIGAN CROP REPORT.

**Wheat.**—The average condition of wheat is 83 in the state and southern counties, 81 in the central counties, 85 in the northern counties and 92 in the upper peninsula. The present condition of wheat is practically the same as reported on May 1. The condition one year ago was 58 in the state, 48 in the southern counties, 60 in the central counties, 73 in the northern counties and 94 in the upper peninsula. The per cent of wheat sown that will be plowed up because winter killed or otherwise destroyed is 5 in the state and southern counties, 6 in the central counties, 4 in the northern counties and 2 in the upper peninsula. The damage by Hessian fly is 5 per cent in the state, 8 in the southern counties and 2 in the central and northern counties.

**Rye.**—The condition of rye in the state and southern counties is 88, in the central counties 86, in the northern counties 90 and in the upper peninsula 94. One year ago the condition was 78 in the state, 76 in the southern counties, 74 in the central counties, 85 in the northern counties and 94 in the upper peninsula.

**Corn.**—The acreage of corn planted or to be planted as compared with last year, is 100 in the state, 99 in the southern counties, 101 in the central counties and 103 in the northern counties and upper peninsula. The condition of corn as compared with an average is 84 in the state, 82 in the southern counties, 87 in the central and northern counties and 105 in the upper peninsula.

**Oats.**—The condition of oats as compared with an average, is 90 in the state, central and northern counties, 89 in the southern counties and 97 in the upper peninsula.

The condition one year ago was 87 in the state, 90 in the southern counties, 79 in the central counties, 86 in the northern counties and 97 in the upper peninsula.

**Barley.**—The acreage of barley sown or that will be sown as compared with last year is 89 in the state and northern counties, 92 in the southern counties, 83 in the central counties and 97 in the upper peninsula.

**Meadows.**—The condition of meadows as compared with an average is 83 in the state, 85 in the southern counties, 78 in the central counties, 81 in the northern counties and 91 in the upper peninsula.

The condition one year ago was 89 in the state, 85 in the southern counties, 90 in the central counties, 94 in the northern counties and 101 in the upper peninsula.

**Potatoes.**—The acreage planted or to be planted as compared with last year is 93 in the state and southern counties, 92 in the central counties, 96 in the northern counties and 94 in the upper peninsula.

The condition as compared with an average is 89 in the state and southern counties, 87 in the central counties, 92 in the northern counties and 94 in the upper peninsula.

**Sugar Beets.**—The acreage of sugar beets planted or to be planted as compared with last year is 84 in the state, 79 in the southern counties, 87 in the central counties, 83 in the northern counties, and 97 in the upper peninsula.

**Colts and Calves.**—The number of colts as compared with last year is 93 per cent in the state, southern and northern counties, 92 in the central counties and 95 in the upper peninsula. The number of calves as compared with last year is 96 per cent in the state, 95 in the southern counties, 94 in the central counties, 97 in the northern counties and 101 in the upper peninsula.

**Fruit.**—Fruit correspondents in 26 of the 28 counties in the southern four tiers of counties, 11 of the 13 in the central counties, 16 of the 27 in the northern counties and 4 of the 15 in the upper peninsula report serious damage to fruit by the heavy frosts on May 8 to 11, which has reduced the prospect of the various kinds of fruit considerably below the figures given in the May report.

The following table will show the prospect at the present time for a crop of the various kinds of fruit in the state and the different sections:

|              | State. | Sou. Co's. | Cent. Co's. | Nor. Co's. | Up. Pen. |
|--------------|--------|------------|-------------|------------|----------|
| Apples       | 65     | 71         | 76          | 80         | 89       |
| Pears        | 58     | 62         | 69          | 67         | 98       |
| Peaches      | 50     | 54         | 60          | 69         | 100      |
| Plums        | 55     | 58         | 60          | 56         | 97       |
| Cherries     | 55     | 61         | 64          | 69         | 98       |
| Strawberries | 63     | 69         | 76          | 73         | 98       |



## THIS IS THE FIRST 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.

June 5, 1913.

## Cattle.

Receipts, 857. Market steady with Wednesday or last week on all grades.

We quote: Best steers and heifers, \$8 @8.50; steers and heifers, 1000 to 1200, \$7.75@8; do. 800 to 1000, \$7@7.50; do. that are fat, 500 to 700, \$5.50@6.50; choice fat cows, \$6.50@6.75; good do., \$5.75@6.25; common cows, \$5@5.50; canners, \$3.75@4.25; choice heavy bulls, \$6.50@7; fair to good bolognas, bulls, \$6@6.25; stock bulls, \$5@5.75; choice feeding steers, 800 to 1000, \$7@7.35; fair do., 800 to 1000, \$6@6.50; choice stockers, 500 to 700, \$6.25@6.50; fair do., 500 to 700, \$5.50@6; stock heifers, \$5@5.75; milkers, large, young, medium age \$5@70; common milkers \$35@45.

Roe Com. Co. sold Kull 9 butchers av 727 at \$6.90; to Sullivan P. Co. 1 bull weighing 1130 at \$7, 2 cows av 1090 at \$6; to Kamman B. Co. 12 steers av 1010 at \$7.95, 1 cow weighing 850 at \$5.75; to Bray 2 cows av 895 at \$5.25, 8 do av 931 at \$5.25, 2 canners av 855 at \$4.25; to Newton B. Co. 2 steers av 810 at \$7; to Hammond, S. & Co. 2 heifers av 460 at \$6.50; to Snow 8 stockers av 452 at \$6, 2 do av 350 at \$5.60; to Bray 3 cows av 820 at \$5, 2 do av 925 at \$5.25, 2 do av 880 at \$5; to Wyness 4 do av 955 at \$6; to Sullivan P. Co. 3 bulls av 847 at \$6.35; to Newton B. Co. 2 do av 780 at \$6.

Bishop, B. & H. sold Bresnahan 3 cows av 933 at \$5.10, 2 do av 1120 at \$5.10; to Schuer 5 do av 984 at \$5.20, 7 do av 920 at \$5.25, 3 do av 823 at \$5, 1 do weighing 800 at \$5.50, 1 do weighing 1060 at \$5; to Newton B. Co. 2 steers av 940 at \$7.30, 1 cow weighing 1070 at \$6.25, 12 steers av 955 at \$7.60, 9 cows av 972 at \$5.90, 17 steers av 1160 at \$8, 24 do av 1010 at \$7.75, 3 cows av 1030 at \$6; to Mich. B. Co. 5 cows and bulls av 1140 at \$6.60; to Sullivan P. Co. 3 butchers av 753 at \$6.50, 4 do av 1015 at \$6, 9 do av 1058 at \$6.25; to Mason B. Co. 4 steers av 1045 at \$6.30; to Parker, W. & Co. 13 steers av 1247 at \$8.25; to Kull 3 cows av 923 at \$6.35; to Hammond, S. & Co. 7 cows av 1012 at \$6.25; to Marx 7 steers av 1006 at \$7.40; to Sullivan P. Co. 2 butchers av 950 at \$6.50, 2 do av 1015 at \$6.10, 9 steers av 1075 at \$8, 5 do av 800 at \$7.35, 2 cows av 1135 at \$6.75, 3 do av 900 at \$6; to Parker, W. & Co. 2 bulls av 1100 at \$6.50; to Mason B. Co. 10 steers av 772 at \$7.60; to Thompson Bros. 2 cows av 950 at \$4.25; to Sullivan P. Co. 3 butchers av 800 at \$6, 5 do av 950 at \$5; to Converse 8 cows av 900 at \$7.35; to Bresnahan 14 butchers av 580 at \$6.25; to Parker, W. & Co. 4 bulls av 1310 at \$6.50; to Bresnahan 1 bull weighing 1530 at \$7; to Marx 3 steers av 893 at \$7.75, 3 do av 940 at \$7.65, 1 do weighing 680 at \$7.

Spicer & R. sold Newton B. Co. 5 cows av 1080 at \$6; to Kull 3 do av 810 at \$7.25, 2 do av 790 at \$6, 1 do weighing 1100 at \$5.75, 1 do weighing 930 at \$5; to Breitenbeck 5 butchers av 808 at \$7.25, 2 bulls av 1000 at \$6.40, 2 cows av 1035 at \$6; to Mich. B. Co. 2 cow and bull av 1085 at \$6.50, 2 cows av 870 at \$5; to Kull 21 steers av 885 at \$7.75; to Mich. B. Co. 5 bulls av 778 at \$6.25, 2 do av 1400 at \$6.75.

Haley & M. sold Mich. B. Co. 2 bulls av 1020 at \$6.50, 2 do av 925 at \$6.60, 1 cow weighing 1220 at \$6.25, 2 cow and bull av 990 at \$6.70; to Heinrich 8 steers av 1090 at \$7.85, 1 cow weighing 1020 at \$6.75, 1 bull weighing 540 at \$5.50; to Bresnahan 9 bulls av 650 at \$6.35; to Mich. B. Co. 12 steers av 1104 at \$8.15, 1 do weighing 730 at \$7.

Lowenstein sold Goose 7 cows av 963 at \$6.

Same sold Bresnahan 7 butchers av 746 at \$6.75.

Robb sold Kull 2 steers av 910 at \$8, 2 do av 705 at \$7.50.

## Veal Calves.

Receipts, 1165. Market steady at Wednesday or last week's prices. Best, \$9.50 @10; others, \$5@8.75; milch cows and springers, \$5@8 lower.

Bishop, B. & H. sold Parker, W. & Co. 1 av 140 at \$9.75, 7 av 140 at \$9.50, 4 av 180 at \$9.50, 23 av 150 at \$9.50, 2 av 155 at \$10, 2 av 180 at \$7.50, 1 weighing 120 at \$9.50, 4 av 150 at \$9.75, 5 av 125 at \$9.50, 2 av 170 at \$10, 1 weighing 130 at \$10, 2 av 225 at \$10, 9 av 150 at \$9.50, 3 av 140 at \$7.50, 18 av 135 at \$9.50; to Sullivan P. Co. 4 av 140 at \$9.75, 6 av 135 at \$9, 1 weighing 120 at \$10, 8 av 140 at \$9.50, 2 av 145 at \$10, 15 av 140 at \$9.75, 21 av 145 at \$9.25, 5 av 150 at \$9.50; to Hammond, S. & Co. 21 av 165 at \$10, 3 av 125 at \$5, 5 av 140 at \$8, 2 av 145 at \$10, 5 av 125 at \$8, 16 av 150 at \$10; to McGuire 14 av 140 at \$9.75, 17 av 150 at \$9.50, 2 av 200 at \$6.50; to Nagle P. Co. 6 av 105 at \$8, 25 av 140 at \$9.75, 14 av 135 at \$9.50, 1 weighing 150 at \$10; to Goose 3 av 150 at \$10, 5 av 95 at \$7, 4 av 135 at \$6.50; to Thompson Bros. 12 av 140 at \$9.50.

Spicer & R. sold Mich. B. Co. 9 av 150 at \$10, 10 av 139 at \$9.50, 10 av 135 at \$8.50; to Applebaum 4 av 145 at \$9.25; to Goose 2 av 155 at \$9.25, 2 av 160 at \$9.50; to Applebaum 7 av 190 at \$9.35, 2 av 140 at \$9.75, 25 av 135 at \$8.50.

Haley & M. sold Newton B. Co. 10 av 151 at \$10, 2 av 105 at \$8, 16 av 150 at \$9.50.

Roe Com. Co. sold Hammond, S. & Co. 6 av 145 at \$9.50, 9 av 120 at \$8, 10 av 167 at \$10, 1 weighing 230 at \$10.50,

2 av 140 at \$10; to Goose 15 av 150 at \$9; to Barlage 4 av 155 at \$10, 11 av 175 at \$10.

Long sold Nagle P. Co. 4 av 155 at \$10, 1 weighing 130 at \$8.

Groff sold Goose 14 av 125 at \$10.

## Milch Cow Sales.

Bishop, B. & H. sold Bresnahan 1 cow and calf at \$55, 2 cows and calves at \$130, 2 cows and calves at \$95, 2 cows and calves at \$50, 1 cow and calf at \$60, 2 cows and calves at \$125, 3 cows and calves at \$171.

Same sold Converse 1 cow and calf at \$70, 2 cows and calves at \$140.

Same sold Hely 4 cows and calves at \$195.

## Sheep and Lambs.

Receipts, 2099. Market steady at Wednesday's prices or last week's close. Best lambs, \$7.35; fair to good do., \$6.50@7; common do., \$4.75@6; fair to good sheep, \$5@5.50; culs and common, \$2.50@4.

Bishop, B. & H. sold Parker, W. & Co. 14 sheep av 90 at \$4.25, 89 lambs av 68 at \$6.25, 147 do av 70 at \$7.25; to Mich. B. Co. 41 sheep av 75 at \$4.50, 4 do av 73 at \$2.50; to Newton B. Co. 147 lambs av 70 at \$7.35; to Thompson Bros 18 sheep av 115 at \$5; to Barlage 2 spring lambs av 60 at \$9, 10 sheep av 79 at \$5, 25 lambs av 55 at \$5; to Youngs 99 do av 78 at \$7.35; to Fitzpatrick Bros. 11 sheep av 83 at \$5, 16 do av 90 at \$5.25; to Hobbins 18 lambs av 63 at \$5, 65 do av 65 at \$5.50; to Thompson Bros. 25 sheep av 95 at \$4.50; to Mich. B. Co. 10 do av 103 at \$5, 23 do av 100 at \$5, 20 do av 110 at \$5, 14 do av 115 at \$5; to Sullivan P. Co. 75 lambs av 83 at \$7.35; to Thompson Bros. 26 do av 82 at \$7.35; to Fitzpatrick Bros. 34 sheep av 95 at \$5.25.

Roe Com. Co. sold Barlage 10 spring lambs av 47 at \$8.50, 18 sheep av 105 at \$5, 6 spring lambs av 63 at \$10, 6 sheep av 135 at \$5, 9 do av 120 at \$5, 14 do av 120 at \$5.

Long sold Mich. B. Co. 43 lambs av 65 at \$7.25, 15 spring lambs av 55 at \$8, 52 do av 60 at \$6.

Haley & M. sold Newton B. Co. 13 sheep av 100 at \$5; to Mich. B. Co. 12 spring lambs av 55 at \$9, 3 sheep av 140 at \$5; to Barlage 9 do av 120 at \$5, 14 do av 115 at \$5, 10 lambs av 81 at \$7; to Young 19 lambs av 85 at \$7.

Sharp sold Hammond, S. & Co. 16 sheep av 105 at \$4.

Spicer & R. sold Sullivan P. Co. 8 lambs av 68 at \$6.50, 13 sheep av 100 at \$5.25, 14 do av 75 at \$5.25, 18 do av 75 at \$3, 15 spring lambs av 55 at \$9; to Mich. B. Co. 44 sheep av 115 at \$5.

## Hogs.

Receipts, 5946. Market 10@15c lower than on Wednesday or last week.

Range of prices: Light to good butchers, \$8.50; pigs, \$8.50; light yorkers, \$8; stags one-third off.

Bishop, B. & H. sold Hammond, S. & Co. 3000 av 190 at \$8.50.

Haley & M. sold Parker, W. & Co. 480 av 180 at \$8.50.

Spicer & R. sold same 500 at \$170 at \$8.50.

Roe Com. Co. sold Sullivan P. Co. 425 av 200 at \$8.50.

## 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.

Loss of Vision.—I recently bought a fine ten-year-old mare that was sold to me as blind. I am inclined to believe that she can see some out of one eye and as the eye has retained its natural color, I thought something could be done for her. The eyeballs are smaller than natural. A man stated if I would let him take her for two weeks, he could cure her. I would like to know if it is unlawful to drive a blind horse in Michigan. H. S. Houghton, Mich.—Your mare is doubtless incurable. If given good care and carefully handled, I do not believe that any humane agent would interfere with your using her.

Founder.—My three-year-old filly has been stiff in front for the past two months, caused, I am told, by founder. She gets up with some difficulty and before doing so usually makes two or three efforts, frequently flopping over on side. W. B. Carsonville, Mich.—Apply one part red iodine mercury and eight parts cerate of cantharides to fore coronets every week or ten days. Give her 1 dr. of potassium iodide and 1 dr. sodium salicylate at a dose three times a day. Her fore feet should be kept moist.

Eczema.—My 12-year-old mare worked hard all last year, besides she raised a colt, which made her thin. Her skin itches, but it is not raw, and I am sure she is not lousy. B. B. Brighton, Mich.—Give your mare a dessertspoonful of Donovan's solution at a dose in feed two or three times a day. Apply one part bichloride of mercury and 1,000 parts water to itchy parts of body twice a day. If this does not correct itching, use lotion twice the above strength, one to 500. Or apply one part chinosol and 250 parts water twice a day.

Nasal Catarrh.—Roarer.—Garget.—I have a 12-year-old horse that was always well until early this spring, but since he had a sort of distemper he discharges some from the nose, rattles in throat and breathes heavy. I would like to know

what can be done for garget in cow. A. C. Bancroft, Mich.—Give 1 dr. powdered sulphate iron, ½ oz. ground gentian, ½ oz. ground cinchona, 1 dr. ground nux vomica at a dose in feed two or three times a day. Apply one part iodine and ten parts fresh lard to caked quarters every day or two.

Injured Navel.—One of my colts jumped over partition and scraped navel, making an ugly sore which I have been unable to heal. The remedy you prescribed for stocked leg soon effected a cure. W. A. B. Benzonia, Mich.—Apply one part iodine and ten parts boric acid, covering sore with some oakum and an elastic band around body to hold oakum pad on sore. It may not be necessary to use this appliance.

Weakness.—Have a four-year-old colt that is thin, has poor life, lacks vitality and when worked hangs head. I have owned this horse for only a short time. B. J. Grant, Mich.—Give him 1 dr. of ground nux vomica, 30 grs. quinine and a teaspoonful of salt at a dose in feed three times a day.

Sprained Fetlock Joint.—One year ago my two-year-old colt sprained fetlock joint and I have applied different kinds of liniment without much success. The joint is enlarged some, a hard bunch on each side of joint making him quite lame, but the joint is not much inflamed. T. E. N., Mancelona, Mich.—Apply one part red iodine mercury and six parts fresh lard to hard bunches on fetlock joint every ten days.

Weak Eyes.—Have an eight-year-old mare that has a watery discharge coming from one eye for the past twelve months. Our local Vet. tells me the optic nerve is affected. N. C. H., Lapeer, Mich.—Dissolve 40 grs. of boric acid and 40 grs. of borate of soda in 4 ozs. of clean boiled water and apply to eye twice a day.

Bone Spavin.—Sprained Back.—My 12-year-old mare is very lame, caused by bone spavin, or else severe sprain. W. P. Dryden, Mich.—Apply one part red iodine mercury and ten parts cerate of cantharides to hock every ten days.

Chronic Slaverling.—I wrote you a year ago about a mare that slaverled and she continued to do so until she dropped her colt on April 29; since foaling she is no better. Have had her teeth floated three different times and am giving her ginger and nux vomica. J. M. E., Otsego, Mich.—Give her 1 oz. of ground gentian, and a dessertspoonful of Fowler's solution at a dose in feed three times a day.

Acute Indigestion.—I have a bull calf three months old which I feed 6 ozs. of middlings, 2 ozs. of flaxseed, 8 lbs. of separator milk while warm, twice a day. He is also fed hay with a little molasses. This young bull seems to be subject to bloat and has it nearly every day. J. V. D. M., Grant, Mich.—Give your bull 1 dr. of salicylic acid at a dose in feed three times a day. Perhaps he would be benefited by giving him a pint of raw linseed oil occasionally to clean out the stomach and bowels.

## CROP AND MARKET NOTES.

(Continued from page 665).

layed farmers for a whole week in getting on to their fields to work. Some had just planted and the ground was so saturated with water and kept cool that the ground had to be refitted and planted. Some were just ready to plant and had to refit their ground, so here, the 7th, there is a good deal of corn to be planted yet. The fore part of May was too cold for making any amount of growth in grass, so hay will be a light crop though the heavy rain has helped the meadows some and has pushed the oats along. Cows are generally looking well, hogs and small pigs are bringing good money. Light frosts June 7 and 8.

## Indiana.

Laporte Co., June 9.—Heavy frost on the morning of the 8th and 9th; mercury 34 degs. before sunrise on the 8th; 36 degs. this morning. Keen cold wind during the day but still at night. Beans, corn and potatoes showed no injury yesterday and show no effect of frost now. How the wheat crop is a problem that time alone can solve. Early planted corn is being replanted. Cutworms and extreme cold wind did damage in most fields. Large acreage but not a strong stand. Cows are doing well. Butter, 35c; eggs, 20c; good demand. Cultivating corn and planting potatoes is the work at present. Fruit crop light.

## Ohio.

Carroll Co., June 5.—Sheep shearing is about over. Farmers busy cultivating corn and potatoes; corn came up nicely, and is growing well, but the potatoes were slow in coming up. The frost which we had about a month ago hurt the wheat and rye a good bit. Plenty of rain this spring.

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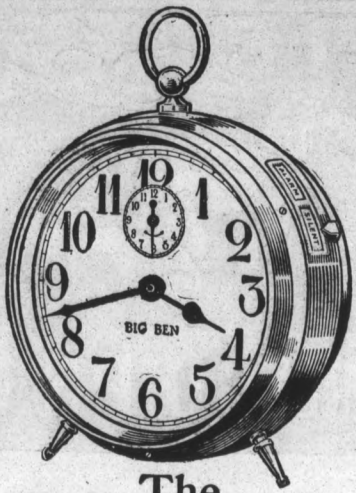
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## Home and Youth

### A BOY'S SOLOQUY.

BY CHARLES H. CHESLEY.

I wonder why I like to do the things Pop says are wrong;  
I seem to be a-hunting for trouble right along.  
'Tis easy to remember the things I should not say,  
And then I get a scolding—but there, I'm built that way.

I wonder why the apples in Johnnie Cres-sy's yard  
Are nice and sweet and juicy, while ours are sour and hard.  
Pop says they are alike, but I can't see it just that way,  
And so I get a scolding 'bout twenty times a day.

I wonder why I like to pull our tabby cat's big tail  
Until I get a scratching, and howl and cry and wail.  
Ma says she is "extracted," or something sounds that way,  
Because I'm up to mischief the whole long blessed day.

I wonder why I like to go a swimming with the rest;  
Ma says 'tis awful naughty, and I s'pose she knows the best.  
But all the kids are there, you know, 'most ev'ry summer day.  
I guess they all are naughty—boys must be built that way.

### AN UNSPEAKABLE AFFLICTION.

BY RUBY BAUGHMAN.

"I just wonder where they ever came from," complained Margaret rattling the old paint brush vindictively against the sides of an old tin can that smelled sickeningly of gasoline.

"I'm almost sure that I brought them home with me from the Lakes. The cottage was—I saw some in the cottage, I'm sure. Of course they could easily get into my things."

"I guess one is enough for a start," sighed Margaret looking anxiously along a mattress seam.

"I don't know how many I brought but I'm sure we got the start. If one could only ask somebody what to do! I've read the cook book and the files of the Medical Companion clear through, and from the unsympathetic silence they maintain I judge that the only people such a calamity ever befell. They're worse than a suicide in the family."

"I'm glad Mother's gone. She'd very much prefer suicide, I think."

"Everything seems so useless. Day unto day uttereth speech about some new scheme of assassin' n; night unto night showeth knowledge that murder has not been committed," poking sadly into the recesses of the creaking springs.

"The gasoline cure is decisive if it once touches them. But how can one be sure we've reached them—every one?"

"Things are pretty well drenched now in these rooms. They smell like Standard oil tanks. Now let's get the sulphur going next. It's a good thing we can sleep on the porch-roof. No human can sleep in these rooms for days."

Carefully planting an old iron kettle in the middle of the floor she put into it first some crumpled bits of paper; over these she poured a liberal measure of the delicately-tinted "cowers of sulphur."

"They're off," she laughed, setting a match to the death-dealing powder. "May they die in peace."

"They seem to die only in pieces and each fraction then rises to a speedy resurrection."

In each of the upstairs sleeping rooms the girls set the destructive fumes. Out of the cracks of doors and windows poured the pale blue smoke; even the key-hole puffed out jets of cerulean vapor. A pungent odor bit into the eyes and lungs and drove them down stairs.

"These last few weeks the house has felt like an inferno; now it smells the part," lamented Beth with a degree of satisfaction as she opened the windows of the sitting room and looked down the avenue of elms to the distant squares of vari-tinted oats, corn, and meadow fields.

"How good it is to get back to the country again. I dislike the city more every year."

"In that case, why remain there?" inquired the stay-at-home sister mildly.

"Because my work is there. I like to feel that I'm doing something worth while. I don't mean that I think you're doing nothing worth while staying here with father and mother. But there will be time enough for me to come home to live when you have gone to keep house for Robert," and she watched the pink

tinge creep up to the temples of Margaret's gentle face.

"But do you never—"

"Oh, I know very well that you think I ought to marry John. But I don't like this idea of being staked fast. I'm willing to admit that the tethered cow has the richest grass—usually,—but I'd rather have thinner picking over a wider range. When I run across a situation that I can't handle better alone than with a man, I'll be convinced and marry John. Look at Jennie Jenkins. I don't see that she improved her condition much. She was making good money teaching—advancing in years though, I'll admit, and alone. But now she's got a sick husband, two babies, no money—compelled to live with her mother-in-law—hemmed in like Caesar's army by the enemy and the nature of the place."

"At any rate she has the sympathy of the community and the satisfaction of knowing that Mrs. will be engraved on her tombstone. Was any odor ever so utterly unbearable as that combination of gasoline and sulphur!"

"I could stand John Reed, maybe," more warmly than Margaret's laughing comment would seem to warrant, "but his step-mother! I don't care if she is my own father's only sister. Why on earth John Reed's father ever drew a blank like Aunt Martha for his second choice, I can't see. And then to die and leave her on John's luckless hands—"

"That might be an argument for alleviating John's suffering, if you can."

"She's always suspecting somebody of something. You can always judge a woman by the motives she imputes to others. And when she can't confirm her suspicions she just insinuates things. It takes me a week to figure out what she means to imply and by that time I've forgotten what she said. She was in the drug store when I got the sulphur and followed me into the grocery and heard me order the gasoline."

"Well—?"

"Don't say 'Well,' just like that little mother-wren out in the lilac bush. She asked me what I was going to do with it."

"And you told her?"

"I said we were going to clean some gloves and bleach some hats—and we are," in reply to the reproach in Margaret's eyes. "I will not be quizzed by her; she'll be over to see what we're doing."

"Yes, but—"

"That sulphur is putting my eyes out; I hope it is slaughtering our foreign population upstairs. The more I think about Aunt Martha nosing after me, the madder I get."

"And the madder you get the more you think about it," chuckled the mild one.

"I'd never get on with her, never," in answer to her own unspoken thought.

"You're not fair to John's step-mother, Beth. You're not likely to be with people you don't understand," a stern rebuke for so gentle a judge.

"But I do see through her; that's just the point. She has a soul as stiff and straight in its emotions as the row of Lombardy poplars in front of her house. Her mind works in one dimension only."

"Just because she dared to criticize you for going to the city—"

"Aunt Martha belongs to the straightest sect of the Pharisees and I usually find my place among the publicans and sinners, but that surely makes it no affair of hers if I choose to try to jab out a living with a pen. If I ever knew her to own once to any of the mishaps that beset ordinary mortals—if I heard her say it once with her own lips—if I ever knew her to climb down from that dizzy pinnacle of perfection, I'd admit I've been wrong. After the awful affliction I've brought on this house meekness would be a more fitting garment for me than fault-finding," Beth admitted, stepping out on the porch. "Come here, sister mine," she called softly.

Over the gate at the end of the elm-lined lane gazed an elderly gray horse of personality and distinction, hitched to a low phaeton. On the comfortable cushions sat a gray-haired woman, also of personality and distinction.

"Behold our Aunt Martha, as I predicted. Though you cry to the mountains and rocks to fall upon you, still will Aunt Martha search you out. I'll wager the avenging angel will engage her for deputy in the day of—"

"Sh, Beth, Beth. It's a good thing you aren't so bad as you sound," but Beth was furtively watching, through her lashes, the tall man-figure striding up the lane beside the carriage. "Sometimes I think your work has made you a bit common in your way of—"

With no sign of the perturbation that

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An Ohio man writes:

"I am a teacher of mathematics and for 15 years prior to four years ago, I either took a lunch composed of cold sandwiches, pickles, etc., to school or hurried home and quickly ate a hot dinner.

"The result was that I went to my afternoon work, feeling heavy, dull of brain and generally out of sorts. Finally I learned about Grape-Nuts food and began to use it for my noon-day lunch.

"From the first I experienced a great change for the better. The heavy, unpleasant feeling and sour stomach caused by the former diet disappeared. The drowsy languor and disinclination to work soon gave way to a brightness and vim in my afternoon work, a feeling entirely new to me.

"My brain responds promptly to the requirements put upon it, and what is of more importance, the results have been lasting and more satisfactory, the longer I have used Grape-Nuts as a food.

"My wife had been suffering from weak stomach accompanied by sick headaches nearly all her life. She is invariably relieved of these when she sticks to Grape-Nuts, either eaten dry or with milk. Her stomach has gradually grown stronger and her headaches less frequent since she began to eat Grape-Nuts." "There's a Reason." Name given by Postum Co., Battle Creek, Mich. Read the booklet, "The Road to Wellville," in pkgs.

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shook their knees the two girls went down the steps past the glowing geranium border to greet their guests, Margaret cordial, Beth absent-minded.

As they reached the first veranda step the delicate nostrils of Aunt Martha's high-bridged nose quivered to the attack of the gasoline-weighted sulphur.

"You've been using the gasoline, I notice," to Beth who was nearest to her.

"Oh, yes," watching John's broad shoulders with a pre-occupied, perfunctory smile.

"Just how do you do it? I've been wanting to try it but did not know how to go about it."

"Oh, you just daub it on thick into every nook and corner. We put it in an old can and used an old paint brush."

"Why, I should guess that it would require a clean bowl. Someone has told me to use soap with the gasoline."

Beth's dreamy eyes looked far down the vista of elms.

"Oh, we didn't; we burned sulphur in the bedrooms afterwards, lots of it."

"Sulphur? What for?" and Beth's dream faded before the shrill surprise in Aunt Martha's voice.

"Why, to kill—"

Whatever woman fancies had been softening the edge of Beth's antagonism to the institution of matrimony were lost in the fright of her near disaster.

"To clean and bleach the hats, to be sure."

"You're so self-absorbed; I suspect you're working out one of your stories under our very eyes," accused Aunt Martha. "Not a love story, of course, with your prejudices. John, I want to talk to the girls about a matter—about a very delicate—very troublesome matter. Would you mind waiting for us on the north porch?" with a shade of anxiety to which Beth was not deaf.

Weekly, as befits a man in the minority, John started across the sitting room to comply with the request, then turned coughing.

"This house is full of smoke. Are you sure—I surely smell burning wool."

Beth ran for the stair. Even as she reached the top step, a tiny flame licked out at her from the keyhole of the first door. A cloud of smoke enveloped her as she pushed it open.

"John! John! John!" she called in a voice that shook as she had never known her voice to shake, "get the hose below the bay window, quick, from the outside—on the roof of the window! You can't get in up here," and she ran wildly down past the frightened, fluttering woman and pushed John before her to the porch. Quickly he grabbed the serpentine coil that wriggled and writhed along the grass in his grasp.

"Turn on the water, Beth, when I get up there. Don't try to go up stairs. Stay where you are."

Before Beth could quiet her gasping breath he had reached the roof, broken the pane, and sent the hissing stream into the blazing room. Ages long Beth waited, trembling, stripped of her feminine self-assurance, till this masculine person should announce that the danger was over.

"It's more smoke than fire," came the judgment of the sterner sex, as he clambered down. "I'll go up on the inside to be sure," and he took the stairs three at a jump. The women below heard doors opening and windows creaking.

"What in the name o' sense have you got up there? It smells like the day of judgment," as he wiped his eyes streaming with the sting of burning sulphur.

"Is everything—did you see?" and Beth quavered off into embarrassed silence.

John finally discovered that which should have been obvious from the beginning, and a slow smile spread from his gentle, gray eyes to his smoke-stained face.

"I don't believe the girls are reliable advisors on that point in household economics you wished to consult them about; their methods are rather too disastrous and exciting to become popular. I must go find Mike to help me get that mess cleaned out before your father comes back," and he disappeared, laughing, to find the man-of-all-work.

With an impulsive, almost un-Aunt-Martha-like swoop, that lady pounced upon the two girls. Beth felt the old barriers melt in some mysterious way before a great flame of common understanding. "So you have them, too? And you were using the gasoline to—"

"To assuage an unmentionable family sorrow," half-sobbed, half-laughed the penitent Beth.

"I can tell you more easily then, what I came over for. John brought some home with him from town—he may have got

them on the train—at any rate—" but Aunt Martha's tongue refused to formulate the disgraceful fact. "I didn't know what to do for them—I never had any—I couldn't ask—and in my trouble I came to you girls. I wouldn't even want your mother to know. I thought you girls, especially Beth who has seen more of the world, would be more generous in your judgment. Even when you've held yourself farthest from me," turning to Beth, "I've thought—" but Beth's arms, closely clasping her, tilted the gray bonnet to the last fraction of inconsequence over the soft, gray waves of hair.

"I'm sorry I've been so hateful, Aunt Martha. I'm sorry and ashamed. If I can make up in any way—"

"You can keep your agreement," interrupted Margaret's soft suggestion.

"Why, what—?" mopping a tear-washed face with a blue gingham apron corner.

"You said you'd give up your solitary independence just as soon as you found yourself in a situation where you really needed a man to help you."

"Of course," ruminated Beth, "if there hadn't been a man about, I could have—" but Margaret broke in on this perilous pondering.

"But you didn't; you called John. Furthermore you said if you ever heard Aunt Martha admit that—" continued Margaret, as Aunt Martha's gray silk arms folded over the last throb of rebellion against things as they were to be.

"Beth, Beth," interrupted John's voice from the back porch. "I wish you'd come and tie up my hand. I cut it on the window."

"Tell him, honey, tell him right now," whispered Aunt Martha. "He's waited long enough for two belligerent females to come to terms of peace, so we can both live with him in one house."

#### LITTLE FARM FABLES.

BY AUNT QUILLIA.

#### A Hapless Venture.

A witless calf, having become dissatisfied with the pasture in a fine meadow, conceived the idea of bettering his condition by scaling a fence into an adjoining field.

Friends, relatives, acquaintances, all joined in a protest to dissuade him from his foolish plan, warning him of the danger of the attempt and assuring him that the lot in question was the poorest on the farmstead.

Especially did his mother labor with him, citing instances of disaster that had come under her own observation.

"Bossie," said she, "it is a wild, impractical scheme. Strong, half-grown cattle, Bull Hereford, Bull Holstein, Bull Guernsey, for example, have been caught on those deadly barbs. Young Galloway so lacerated his hide, intended for a beautiful robe, that he was shot the next day and carted off to the butcher's, skin and all. Lady Jane Jersey tore her lovely udder completely from her body and met the same fate. I implore you to desist."

But of no avail. So wretched did he become over the opposition encountered that he nearly wore his mother out with his unhappy bawls. Indeed they so got onto her nerves that, at last, they arrested all lactic secretion and, one evening at milking time, she was ignominiously banished from the barnyard.

One night when the rest of the herd were dozing Bossie quietly stole over to the side of the pasture which bordered on the promised land. "Nothing venture, nothing win," said he, whereupon giving a desperate leap he landed squarely upon the summit of the fence. The more he struggled to release himself the more did the cruel barbs tear his hide and pierce the tender flesh beneath.

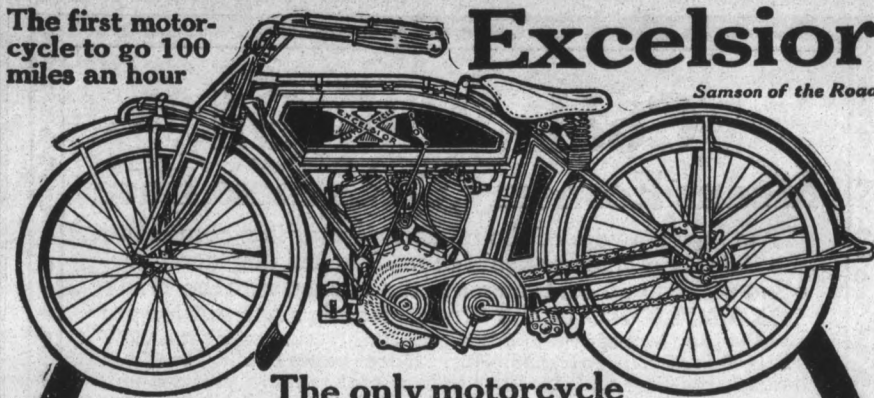
Setting up an unearthly bawl he soon brought the most of the herd to the spot. An old ox, taking in the situation, proceeded at once to extricate him. With his wide sharp horns he succeeded at last, and, tossing him without ceremony into the coveted field, he exclaimed, "There, simpleton, go your own way. Regale yourself if you wish on sand and gravel—providing those goats have left any. You have made night and day hideous with your bawls. You have disgraced your mother and well-nigh ruined yourself, all of which reminds me of what I heard a stock-buyer say the other day: 'Wise men profit by the mistakes of others, but fools by their own.'"

"I am to meet the Duke at the dock."

"But he has never seen you, girl."

"For means of identification, he is to wear a red carnation and I am to carry a million dollars in my left hand."

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|----------------|------------------|
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| 3 miles.....   | 1.50 3-5         |
| 4 miles.....   | 2.29 4-5         |
| 5 miles.....   | 3.07 3-5         |
| 10 miles.....  | 6.18             |
| 30 miles.....  | 20.18 1-5        |
| 50 miles.....  | 33.55 1-5        |
| 75 miles.....  | 50.55 2-5        |
| 100 miles..... | 68.01 4-5        |

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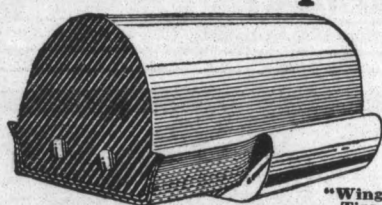
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No more carriages were sold in 1911-12 than in the previous season. Yet the sales of Goodyear "Wing" Carriage Tires increased 33 per cent in that same period. That means our sales of the preceding two years were practically doubled. And for 1912-13 we have estimated a still further increase.

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Goodyear "Wing" Tires have become the most popular carriage tires in existence.

All because thousands of carriage owners have used and tested them for 14 years and learned their superiority.

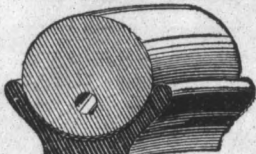
The Goodyear "Wing" Tire brings the same big saving to carriage owners that the Goodyear No-Rim-Cut Tire brings owners of automobiles. Stop and consider these facts before you buy rubber tires for your carriage.

### The Goodyear "Wing" Tire

Note this patented "Wing." How it presses against the channel, thus preventing mud, grit or water from getting in and quickly rusting the rim and destroying the tire base. This tire remains sound, won't creep or get loose. Gives utmost wear and will protect your carriage and greatly lengthen its life. Being of tough, springy rubber, it is exceptionally easy-riding.

### Our "Eccentric" Cushion Tire

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## Woman and Her Needs. At Home and Elsewhere.

### You Can't Move Away From Yourself.

**D**ID you ever get so out of touch with your surroundings and every person near you that you wished most heartily you could get 3,000 miles away, and never come back? Ever feel just as if everyone you knew was untrue to the heart? That you were the only good and true person in the neighborhood and were being spoiled by your surroundings? That if you could just get away you would be all right?

If you have, if you feel that way now, just stop it. When you get to that condition it is a sign that you are in pretty bad shape yourself and need a thorough overhauling. Better stop and take account of yourself and see honestly if you would be any better off in other surroundings than you are at present. Wouldn't you act under given circumstances, just the same in Portland, Me., as you would in Poreland, Ore.? And have you any reason to think that things would be different for you in the west from what they are in the east? Human nature is the same the world over. You wouldn't change if you changed your location, and as folks are folks whether east or west, if it is outside influences that are disturbing you, you would probably be disturbed just as much by others in one place as in another.

I remember the first time this was brought forcibly to my notice. I had been particularly annoyed by a neighbor's child who came to play with mine. Every morning before we left the table he was there and every forenoon there was a squabble for me to settle. I thought him particularly quarrelsome and firmly believed that if I could move out of the neighborhood my troubles would end. I remarked one morning to an older neighbor that I would like to move a thousand miles from Johnnie Smith.

"Well, you'd find another Johnnie Smith there to help you settle," she remarked placidly, "and he might be enough sight worse than this one. You'll find Johnnie Smiths any place you go, so why not stay right here and try to adapt yourself to this one you're acquainted with? Of course, I don't want to say anything about your boys, but I've noticed them quarreling between themselves once or twice when Johnnie wasn't around," and with this Parthian shot for Johnnie she took her departure.

Of course I sniffed at the time. We always do when someone tells us something we need to know. But the more I thought of it the more I saw she was right. There are extreme conditions when changing one's location will affect a great change in living generally. As when a boy has gotten into bad company, moving to an entirely different neighborhood and giving him good companions may work a change in him. But for ordinary everyday living, just getting in with new people will have no effect. If you are morbid, or quarrelsome, inclined to sulk in one neighborhood you will be in another. If you are not a success in business at home you are not likely to be broad, unless you change your line of business and try something to which you are better fitted. In short, if anything is wrong with you the thing to do is to stay where you are and fight it out. Don't blame Jones or Smith or the town, blame yourself. And then work to remedy your defects.

DEBORAH.

#### WASHING BLANKETS, QUILTS AND COMFORTERS.

To wash blankets, quilts and comforters choose a warm sunny day so that they will dry as quickly as possible. Use soft water if it can be obtained.

Blankets.—Woolen blankets should be washed in luke warm water, never in hot or cold water, as it shrinks them. Use a good white soap or some reliable woolen soap. Put the blankets to soak for 15 minutes in warm water, soaping the blanket as it is put in the tub, putting on a little extra soap where the blanket is most soiled. After allowing to soak, work the blanket around in the tub, rubbing between the hands and applying more soap where needed. Souse the blanket several times and wring into another warm water, going over blanket to see if any soiled places have been missed.

Rinse a second time, wringing the blanket as free from water as possible. Shake well before hanging up to dry. Roll each corner a trifle and pin with a small safety pin to prevent the corners from whipping out. When dry they will be fluffy and soft, ready to fold away for another winter. Another way is to stretch the blankets on curtain stretcher, putting them on double.

Comforters.—Never rinse comforters in cold water as it tends to harden the cotton batting. Comforters are washed in the same way as blankets, only the water should be fairly hot and they should soak a couple of hours in a good hot soapy water to loosen up the dirt. The ends or any parts may be rubbed on a washboard or washed in the washing machine. After the comforters are dry, roll and beat with a smooth round stick. This will loosen up the cotton and make the comforters more fluffy.

Quilts.—Wash same as the comforters, except that where the colors will not run they should be scalded to make them more clear and fresh.

#### THE EASTERN WAR AND OUR NEW CLOTHES.

The high waist lines and tight skirts which have been with us so long seem doomed. In fact, no waist line at all seems to be the rule in most of the new coats and suits, and blouses and lingerie gowns are rapidly following. Just why a war over in a cluster of European states which none of us could bound and most of us had forgotten existed, should change the style of American women's inches below the waist line, and pulled clothes, is one of the unsolved mysteries of Fashion. But changed it is, and now all you can hear is "Balkan," "Bulgarian," or "Roumanian." Strange as it may seem, nothing is "Montenegrin," even since the capture of Scutari.

The sum total of the three new styles seems to be vivid colors and dresses and suits that look like a meal bag with a string run around the bottom about six up just enough to make a few gathers. "Sloppy," is the way one bold young man expressed his opinion of his sister's new white dress. And though the young woman was highly indignant, most of us agree with him. After the trim, scant, tight-fitting attire of the past two or three seasons, the new things look "queer," to say the least. However, they are here, together with draped skirts, and are likely to stay. So we might as well accept them and pretend we like them, as we did the hobble when it appeared.

There will be many a sigh, though, over the increased amount of material required for the new clothes. For, where a suit with a hobble skirt could be gotten out of a yard or so of cloth, the new ones will require more.

#### SHORT CUTS TO HOUSEKEEPING.

Substitute one teaspoonful of baking powder for one egg in griddle cakes. Soda must also be used for the buttermilk as usual.—Harriet.

To Clean Feathers and White Plumes.

—Make a suds of half a bar of naphtha soap or some other hard white variety, shaved into a pint of soft, clean rain water. When it is like a jelly, dilute it with warm rain water. Soak the plume or feathers in this for ten or fifteen minutes, occasionally drawing it rather loosely through the hands to strip out the dirt with the suds. Rinse in water of the same temperature. If there is any soiled streaks left, lay it on a smooth surface and with a soft toothbrush rub gently with soap and water, working outwardly from the stem. Rinse in clear, warm water, and afterwards, if a white plume or feather, in bluing water. Draw through the palm of the hand to squeeze out the water, but without twisting. Pin or stitch the stem to a cloth and hang up to dry with the thick end of the stem up and the plumage hanging down. If there is time enough, shake it near the stove until dry. It can be dried out doors in a gentle breeze, but care must be taken not to allow the wind to break it or tear the plumage.—Z. I. D.

### Buy your wife and daughters these tools

Women folks are never done mending, patching and sewing. Your duty is to see they have good scissors, shears and sewing outfits. Specify Keen Kutter when you buy these articles; then you know you have bought the finest quality.

### KEEN KUTTER Scissors and Shears

cut clean and snip true. They have sharp edges and tight joints. The shears have a patent lock nut and screw which positively prevent any looseness or play between the blades. Keen Kutter scissors and shears last many years and they are fully guaranteed, because if you find a flaw, or are not in every way satisfied, your dealer will hand back your money.

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## Farmers' Clubs

### OFFICERS OF THE STATE ASSOCIATION OF FARMERS' CLUBS.

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Vice-President—C. B. Scully, Almont.  
Secretary-Treasurer—Mrs. C. P. Johnson, Metamora.

Corresponding Secretary—Mrs. Wm. T. McConnell, Owosso.

Directors—C. P. Johnson, Metamora; H. W. Chamberlain, White Lake; Wm. T. Hill, Carson City; Jerry Spaulding, Belding; R. J. Robb, Mason; J. F. Reiman, 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.

#### Associational Sentiment:

The farmer, he garners from the soil the primal wealth of nations.

#### THE JUNIOR CLUB.

The Junior Farmers' Club, so-called, has proven to be a method by which the young people could be interested in Club work in many communities in Michigan. Such an organization has, at the same time, proven of great benefit in interesting the boys and girls of the Club community in the possibilities of the farm, where this work has been directed along right lines.

This is the age of boys' and girls' Clubs. In the south these organizations have been even more popular than in the north but they are becoming popular everywhere, many of them having been organized in Michigan during the past year. Generally these Clubs engage in some competitive contest, such as the growing of corn or potatoes by the boys, the canning of fruit or vegetables or in the practice of culinary art by the girls. The result is educational as well as inspiring to those who participate in the contest.

At least one County Association of Farmers' Clubs has promoted corn contests among the boys of the county this year. This is a commendable work, which might well be undertaken under the auspices of the organization itself, just as a Junior Farmers' Club might be organized and given similar interesting work by each local Club in the state.

It is perhaps too late to go into a scheme of that kind this season, but there are other interesting lines of work for the junior organization. For instance it might be given charge of the work of promoting a Club fair, where such a special feature has not been inaugurated by the local Club. This would prove beneficial to both young and old, and it would doubtless be a matter of surprise to the older members that the young folks could develop as good an event of this kind as they undoubtedly would if given the opportunity to try. This is but one of many ways in which the young folks could be interested in the work. There are undoubtedly great possibilities in the junior organization, and every local Club would do well to develop them in an original way.

#### CLUB DISCUSSIONS.

**Hold an Enjoyable Afternoon Meeting.**—The Hadley and Elba Farmers' Club held a very enjoyable meeting at Homestead Dairy Farm, May 15, in spite of mud and rain. The roll call response, "My Favorite Flower," was followed by general discussions on what can be said in favor of parcel post and the influence of the Club on a community, and a reading by Mrs. James McDougall. After a bounteous supper the Club adjourned to meet June 19 at Stony Creek Farm with Mr. and Mrs. James McDougall, and the Annual Children's Day program is in charge of a special committee.—Mrs. C. P. Johnson, Sec.

**Have Picnic Dinner.**—Mrs. Thad Joy and Mrs. L. L. Joy very pleasantly entertained the Charleston Farmers' Club in May. Owing to the busy season but few of the men were able to attend but the ladies endeavored to make up for the deficiency. Following the picnic dinner the usual business program was carried out. In the absence of both the president and the vice-president, O. F. McClary, occupied the chair for the day. A song service was also enjoyed with Miss Iva Maxson, piano, and Mr. Joy violin, acting as accompanists. The Club members had an interesting time viewing Mr. Joy's gentian beds and learned many things concerning the plant's cultivation. The Club has accepted the invitation of Mr. and Mrs. Walter Flanders and both the senior and junior Clubs will meet with them on the third Saturday in June. Mrs. Olin Bera, Mrs. J. Bateman and Mrs. A. J. Atkins have been appointed to assist the hostess. A literary program will be given.

**Opposed to Free Wool.**—The May meeting of the Wixom Farmers' Club was entertained by Mr. and Mrs. Eugene Freeman at their pleasant farm home and proved to be a very successful meeting. After dinner the Club was called to order by President B. T. Nicholson. America was sung by the Club. The question box contained 15 questions and were all thoroughly discussed. They were varied, some on the farm products and the question regarding "free wool" provoked a warm discussion, nearly all agreeing that they did not have any use for it.—Mrs. R. D. Stephens, Cor. Sec.

## Grange.

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

#### THE JUNE PROGRAMS.

##### Suggestions for Second Meeting.

Song.  
Roll-call responded to by each giving a favorite verse of poetry.  
Reading, "The best will ever written."  
Soil cultivation? 1. Why cultivate? 2. When cultivate? 3. How cultivate  
Song.  
Stunts in tongue twisters.  
Results of teaching agriculture in our schools this year, by an eighth grade pupil, a teacher, and school officer or parent.  
Mock school meeting, conducted by the women.

#### TWO-DAY MEETING OF GRAND TRAVERSE POMONA.

Seven of Grand Traverse county's ten subordinate Granges were represented at the Pomona meeting held at Old Mission on Wednesday and Thursday of last week. The quarterly reports showed that there had been a gain of 19 in total membership since the first of March, the number now on the rolls being 803. The reports also showed that 43 meetings had been held during the preceding quarter, and that programs had been carried out at 35 of these meetings. The present value of the property of the several subordinate Granges is \$14,825. East Bay Grange had the largest gain in membership.

It was reported at this meeting that Long Lake subordinate is about to erect a hall upon its lot near Long Lake town hall. The building will be 30x50 feet in size, with a basement and ground floor. The new hall will be the seventh Grange hall in the county, the Granges already having halls being Grand Traverse, Elk Lake, Peninsula, East Bay, Fife Lake and Summit.

A big mid-summer rally was decided upon, and a committee assigned the task of making the necessary arrangements and the Granges of the surrounding counties are to be asked to help plan a celebration that will remind the people of the region that the Grange is one of the principal factors in the wonderful development going on in the Grand Traverse region.

Among the topics considered during the program sessions were "Alfalfa," "Agricultural School," "The Farmer's Worst Enemy," and "Lower Taxes." Recitations, readings and songs were contributed by Scott Woodward, Mrs. E. A. Evans, Mrs. E. J. McMullen, Mrs. Arvilla Gardner and Chas. H. Drake. Mrs. J. D. Mills contributed instrumental numbers.

The alfalfa discussion was a most profitable one because it was by men who are actually growing this valuable forage crop. Calvin Spangler, of Monroe Center, opened the discussion by relating his experiences since he made his first sowing some years since. He had for exhibition an alfalfa root that proved convincingly that the plant goes deep into the ground for its food and moisture. Among the many who spoke upon this subject were Peter Zimmerman, E. O. Ladd, Henry Broadhagen, E. J. McMullen, M. J. Gilmore, Chester Lewis, S. M. Kingsley and Frank Grubb. From the many remarks it was clear that only a few of our farmers have yet discovered the full secret of alfalfa growing.

The subject of lower taxes was handled by E. O. Ladd, who urged that property be assessed at its true cash value, believing that in this way it is easier to get a square deal between man and man. He also mentioned the advantages of a more complete separation of local and state taxes, and he gave it as his opinion that one of the very best ways to reduce taxes is to reduce the dependent class by the establishment of legal, social and moral conditions that will make it easier for people to do right than wrong. The cost of maintaining the poor, operating jails and hospitals is one of the chief reasons for high taxes. He felt sure that much poverty and much wrong doing could be prevented by the adoption of higher moral standards.

A prominent feature of a most excellent evening program was an illustrated lecture entitled "The Economic Geography of the Grand Traverse Section of Western Michigan," by R. H. Elsworth, assistant secretary of the Western Michigan Development Bureau. Over 100 lantern slide views of farm and orchard scenes in this section were shown. The Granges were first in this region to begin a systematic development of the resources of the region, and it was a pleasure to the members to see what a big gain had been made in the last five years.

#### COMING EVENTS.

##### Pomona Meetings.

Wayne Co., with West Road and Willow Granges, in Willow Grange hall, Friday, June 13.

Montcalm Co., with Langston Grange, Thursday, June 19.

Charlevoix Co., with Barnard Grange, at Barnard Grange hall, Thursday, June 19.

Shiawassee Co., with Center Grange at the farm home of Mrs. Julia H. Henderson, Friday, June 20.

Genesee and Lapeer Co.'s (joint meeting), at Thread Lake park, Flint, Friday, June 20. Picnic dinner.

Eaton Co., with Northwest Walton Grange, Saturday, June 21.

## HOMESEEKERS CANADA LOW FARES TO CANADA

Come to Canada now and let us help you pick a choice farm before the best are taken. The Canadian Government is now distributing 135,000 FREE fertile farms along or near the Canadian Northern Railway—Wheat Farms, Poultry Farms, Dairy Farms, and farms adapted to cattle, hog, sheep and horse raising.

Even if you have already located your farm you should travel to it over the Canadian Northern Railway and have the added advantage of traveling from 1,550 to 2,500 miles through Canada's richest farming country.

Just glance over these low rates—tickets are first-class, round-trip, good for twenty-five days, with stop-over privilege. Excursions every first and third Tuesday, via Duluth and Ft. Frances, or via St. Paul and Winnipeg.

| To                   | From | Chicago | Duluth  | Des Moines | Kansas City | Omaha   | Minneapolis (or St. Paul) | St. Louis | Sioux City |
|----------------------|------|---------|---------|------------|-------------|---------|---------------------------|-----------|------------|
| Dauphin, Manitoba    |      | \$37.50 | \$24.15 | \$67.35    | \$42.05     | \$36.45 | \$27.85                   | \$46.10   | \$38.15    |
| Regina, Sask.        |      | 35.00   | 30.00   | 37.50      | 43.50       | 37.50   | 30.00                     | 44.00     | 34.50      |
| Saskatoon, Sask.     |      | 37.50   | 32.50   | 40.00      | 46.00       | 40.00   | 32.50                     | 46.50     | 37.00      |
| Prince Albert, Sask. |      | 37.50   | 32.50   | 40.00      | 46.00       | 40.00   | 32.50                     | 46.50     | 37.00      |
| W. Battleford, Sask. |      | 39.95   | 34.95   | 42.45      | 47.50       | 42.45   | 34.95                     | 48.95     | 39.45      |
| Edmonton, Alberta    |      | 46.50   | 39.50   | 46.50      | 47.50       | 46.50   | 39.50                     | 50.50     | 45.50      |
| Kindersley, Sask.    |      | 41.30   | 36.30   | 43.30      | 47.50       | 43.30   | 36.30                     | 50.30     | 40.80      |

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## CANADIAN NORTHERN RAILWAY



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**FARM FOR SALE**—140 a. dark sandy loam, 90 a. plow land, balance fine pasture with running water, 10 a. timber, new 8 room house, good barns, fine location, 2 miles north of Clinton, Mich. Inquire of G. R. Newsom, Tecumseh, Mich.

**FOR SALE**—Eighty acre farm, sand and clay loam, new nine room house, hot air furnace, basement barn 40x36, good water, small orchard, near railroad, with or without farm implements. Will sell cheap on account of age. JONATHAN WIGGINS, Hullman, Mich.

#### MICHIGAN FARMING LANDS

Near Saginaw and Bay City, in Gladwin and Midland Counties. Low prices: Easy terms: Clear title. Write for maps and particulars. STAFFED BROTHERS, 15 Merrill Building, Saginaw, (W. S.), Michigan.

**FARM** Containing 390 acres, located on Railroad at station. Good dwelling, 100 acres cleared. Price \$4500. R. E. L. WATKINS, Franklin, Va.

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**Fertile Farms** and unimproved lands in Delaware, diversified farming, live stock, delicious fruits and ideal homes. For information address, State Board of Agriculture, Dover, Delaware

**TEXAS STATE LANDS**—\$1.50 to \$5 acre; one-fortieth down, balance forty years; information and Texas map free. JOURNAL PUB. CO. Houston, Texas.

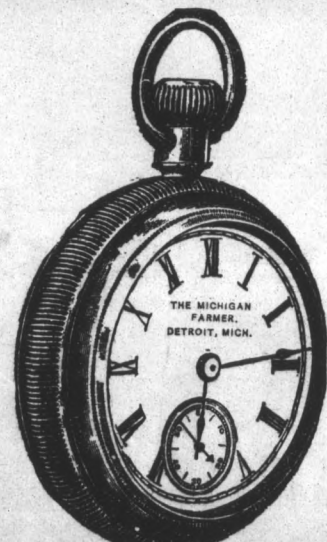
**OUR NEW YORK IMPROVED FARMS**—are great bargains at present low prices. Send for free list. McBURNEY & CO., 703 Fisher Bldg., Chicago, Ill.

**VIRGINIA FARMS.** Write for literature describing great bargains in Virginia farm lands. VENABLE & FORD, Lynchburg, Va.

**FREE** Literature will be sent to anyone interested in the wonderful Sacramento Valley, the richest valley in the world. Unlimited opportunities. Thousands of acres available at right prices. The place for the man wanting a home in the finest climate on earth. Write to a public organization that gives reliable information. Sacramento Valley Development Association, Sacramento, CALIFORNIA

**Money-Making Farms**—13 States, \$10 to \$50 an acre; live stock and tools often included to settle quickly. Big Catalog No. 36 free. E. A. STROUT FARM AGENCY, Station 101, Pittsburg Pa.

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Boys, here is the best chance that ever was offered to get a good time-keeping watch without it costing you a cent. Read this over and then get busy, if you haven't got the watch as good as in your pocket in a couple of hours, it's because you don't want it bad enough.

The watch is the real thing, 16-size, nickel case, stem-wind and set, second hand, fine watch movement, and keeps absolutely correct time. It's fully guaranteed and if you don't hammer tacks with it or take it apart, in fact, if you will treat it as the friend it will prove to you, the manufacturer will keep it in repair for one year without charge. That's fair, isn't it?

#### HERE IS HOW YOU GET IT.

Go to three of your neighbors who are not subscribers to The Michigan Farmer, or whose time has run out, tell them that you will have sent to them the Michigan Farmer (the best farm paper in America), every week for a year (52 copies) for only 50 cents. Collect 50 cents from the three of them and send us the \$1.50 you collect, together with the three names and addresses, and the watch will be sent to you at once, post paid.

Easiest thing you ever did. The Michigan Farmer used to be \$1.00 a year and now you only charge 50 cents, (less than one cent a week), and by telling the neighbors that you are after a watch you will likely get the first three you ask. Start right away, the sooner you start the sooner you have the watch ticking in your pocket and telling you at a glance the hour, the minute, and the second of the day. Send your order to THE MICHIGAN FARMER, Detroit, Mich.



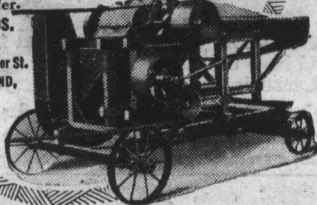
### Put this Cutter to the Hardest Test

then you'll know why Experiment Station Officials—and thousands of farmers, as well—unanimously agree that for power, speed and capacity, the

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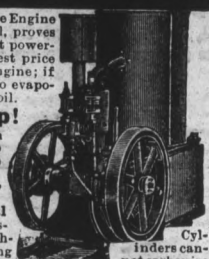
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—only engine running on coal oil successfully; uses alcohol, gasoline and benzine, too. Starts without cranking. Only three moving parts—no cam—no sprockets—no gears—no valves—the utmost in simplicity, power and strength. Mounted on skids. All sizes, 2 to 20 h. p., in stock ready to ship. Engine tested before crating. Comes all ready to run. Pumps, saws, threshes, churns, separates milk, grinds feed, shells corn, runs home electric lighting plant. Prices (stripped), \$29.50 up. Send any place on 15 days' Free Trial. Don't buy an engine till you investigate money-saving, power-saving "DETROIT." Thousands in use. Costs only postal to find out. If you are first in your neighborhood to write, you get Special Extra-Low Introductory price. Write! (138) Detroit Engine Works, 149 Bellevue Ave., Detroit, Mich.



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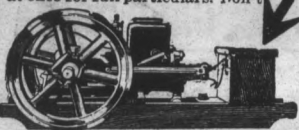
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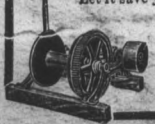
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## 11% Less This Year

Rubber has dropped a little. And our factory cost, because of multiplied output, has dropped a little more. Our new factories are completed, and we've equipped them with the latest labor-saving machinery.

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As a result, No-Rim-Cut tires are costing about 11 per cent less than last year.

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You save, by using these new-type tires, all the ruin of rim-cutting. And that is what wrecks 23 per cent of the old-type clincher tires.

You get extra capacity. No-Rim-Cut tires are 10 per cent larger than the same rated size in clinchers. And that oversize, under average conditions, adds 25 per cent to the tire mileage.

And now you save on price—11 per cent under what these tires cost last year.

#### No Extra Price

No standard tire of any type costs less than No-Rim-Cut tires today.

Hooked-base tires—tires which rim-cut—now cost the same as these new-type tires which don't.

Tires just rated size now cost as much as these oversize tires.

Consider how it pays to insist on these savings when they cost you nothing extra.

#### Their Records

No-Rim-Cut tires, when they cost more than clinchers, came to outsell all others.

The demand for these tires has doubled over and over. It has become the sensation of Tiredom.

More Goodyear tires were sold last year than in the previous 12 years put together. And car makers alone have contracted this year for 890,680 of them.

Now No-Rim-Cut tires cost no more than old-types, and our demand from users so far this year has jumped 85 per cent.

#### Just Be Fair

All we urge is fairness to your-

self. Test the tires which, on countless cars, have shown the lowest cost per mile.

One glance will show that these tires can't rim-cut, that they are over rated size. Find out how this lowers tire bills.

Hundreds of thousands of men who have done that now use Goodyear tires.

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Now comes this 11 per cent reduction. Doesn't this record, in your estimation, call for a test of these tires?

Write for the Goodyear Tire Book—14th-year edition. It tells all known ways to economize on tires.

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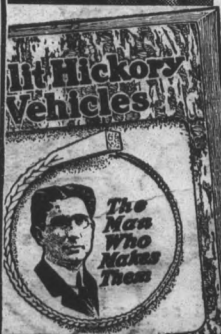
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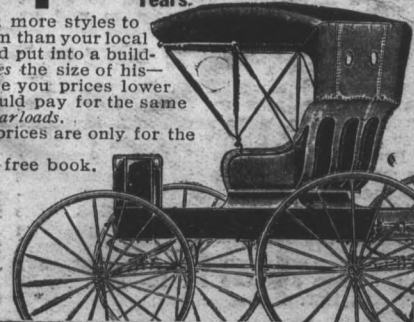
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