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# MICHIGAN FARMER

AND  
**LIVE STOCK**  
PUBLISHED WEEKLY.

**JOURNAL.**  
ESTABLISHED 1843.

The Only Weekly Agricultural, Horticultural and Live Stock Journal in the State.

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DETROIT MICH., SATURDAY, MAY 7, 1910.

75 CENTS A YEAR  
\$1.50 THREE YEARS

## FARM NOTES.

### Seeding Clover Without a Nurse Crop.

I have a piece of rolling heavy clay soil that in 1907 was in wheat and through neglect of the owner was not seeded that spring. It came up to June grass and since that time has been pastured. It is not a good site for corn as it is now and I do not wish to plant to corn until I can plow under a clover sod. Although the 1907 wheat crop yielded 25 bushels per acre I prefer not to crop with wheat. Would it be practical to plow it the last of July or first of August, fit it and seed heavily to clover without a nurse crop, using it next year as a pasture or hay field and the following year for corn? The practice of fall seeding without a nurse crop I understand is quite common on light soil but I have no information as to how it would be liable to succeed on heavy soil.

Barry Co.

E. L.

It would seem to be a rather expensive method to plow this sod ground, fit it and seed to clover without a nurse crop. It is much more economical to seed clover when a grain crop is also used, as it is then a catch crop requiring no special preparation of the soil. In case this June grass sod were to be plowed and fitted for clover, it should be plowed early and worked frequently so as to prepare a good seed bed and give the sod time to decompose and make the plant food contained in it available. Another objection in plowing it early is the fact that the soil is apt to be dry in July or August and, if plowed then, it will be necessary to wait until the fall rains come before a proper seed bed can be prepared and before the soil is in a condition to insure the quick germination of the seed and the rapid development of the young plants. We have seen clover seeded successfully where sown in August on stubble ground, plowing after the grain crop was harvested, but this is not always a sure method of seeding and quite generally better success has attended the sowing of clover with some kind of a nurse crop which will give it some protection over winter instead of without any nurse crop. In the writer's opinion, a better method of seeding this field to clover, provided sheep or hogs in considerable numbers are kept upon the farm, would be to plow it this spring, fit it well and sow it to rape to be used as a forage crop, seeding it in the rape, which will furnish sufficient forage to pay the cost of the preparation of the soil. If rape is not desired, then a crop of buckwheat may be grown and the clover seeded in it. Generally speaking, clover seeded in either of these crops in the early part of the summer, will succeed better than that which is sown without any nurse crop the latter part of July or in August.

### Seeding Worn Land to Clover.

I have seven acres of light sandy soil which has been badly run and on which a very small crop of potatoes was harvested last season. I would like to seed it to clover but am afraid it would be useless in the condition it is now. How would it be to sow it to oats and clover in the early fall, the intention being to have the oats to protect the clover during the winter? Will have some manure to put on during summer and if it would be of any benefit to the seeding would purchase some fertilizer. Would 200 lbs. per acre be of any benefit and of about what proportion would be best? My neighbor across the fence got a fairly good catch of clover by seeding in buckwheat last season but his land has not been as badly run.

Allegan Co.

C. E. W.

In the writer's opinion, the better way to handle this ground to secure a good seeding, would be to prepare a good seed-bed and sow without a nurse crop this spring, using a good complete fertilizer at the rate of about 200 lbs. to the acre.

## TO WHOM IT MAY CONCERN:

And this concerns every farmer in Michigan who is not now reading the Michigan Farmer. Our proposition is to send the Michigan Farmer including this week's issue to Nov. 1st, 1910, for only 25c, and each subscriber will get free one of our Farmer's Account Books worth fully the price asked for the subscription. We expect to sell thousands of these Account Books and take this means to introduce them. It contains 72 pages including 7 pages of interesting matter, some of which are: The number of shrubs or plants for an acre, suitable distance for planting, spraying formulas, postal information, gestation table, helps in cases of accidents, antidotes for poisons, interest table and the 1910 calendar. The pages are suitably ruled for daily egg record, employees' time table, field and crop records, purchase accounts, sales accounts, individual ledger accounts, with complete instructions how to keep them.

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## NEW STORIES:

Beginning in this issue we are starting a delightful Maine woods story by Holman F. Day. For this general class of fiction Mr. Day has not a superior in the United States. There also appears the first installment of "The Romantic Life of Herbert Furlong," a true story of a soldier of fortune. This story alone would cost in book form \$1.00. Full outlines of it can be found on page 500.

With this issue we are sending a combined subscription blank and envelope. Please use it in sending your order. The 25c can be sent in stamps or silver or the \$1.00 by registered mail or Postoffice Order. There are blank lines on the flap of the envelope for your name and address and the money can be enclosed in the envelope which has our printed address.

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MICHIGAN FARMER.

Then, if you have some stable manure available, draw it out any time during the summer and top dress this field lightly with it. Of course, the sooner this top dressing can be done the better, as even a thin top dressing provides a mulch for the soil and conserves the soil moisture which is an important factor in the development of a new seeding of clover. If the season was a favorable one, you would be quite likely to get a catch of clover by sowing it in the early fall as suggested, using either oats or buckwheat as desired, for a cover crop. However, in a normal season, by sowing it in the spring and using the top dressing of manure, after the seed is sown, clipping off the weeds if necessary with a mowing machine, the clover plants will get a better development before winter and will be likely to endure the winter more successfully and afford a better crop next year.

### Handling Clover for Seed.

Kindly advise through your columns concerning the handling of mammoth clover for a seed crop. My land is new, a light sandy soil. I wish to pasture the crop some if it can be done without injury; at what stage should I turn stock on, and when should I discontinue pasturing it?

Isabella Co.

J. P. H.

In handling mammoth clover for seed it is entirely practicable to pasture it for a time in the spring if desired. The stock may be turned on it as early as the clover will make good feed, and it may be pastured moderately until about the first of June. Then it should be clipped with a mower to even it up as the stock will not pasture it evenly and unless clipped after being pastured the seed crop will not grow or mature evenly. It is not a good plan to pasture it too closely, and some growers favor clipping instead of pasturing. When it is not pastured, the time to clip it back will depend upon the nature of the season and the rapidity of the development of the crop. In an ordinary season this would be around June 1 for mammoth clover, but as this is a very early and forward spring it would probably be necessary to clip the field somewhat earlier than the above mentioned date. The clipping should be done before the clover gets sufficient growth to be a source of danger to the stand by smothering it out after the clipping.

### Where and How to Apply the Stable Manure.

A piece of heavy sod was in potatoes last year. Has 70 or 80 loads of manure on 1 1/4 acres—not spread evenly, but thick. What will be the result if planted to potatoes this year? I think enough was put on to spread over seven or eight acres. Do you favor such very heavy manuring and especially on land that has so recently been in good sod?

Berrien Co.

A. D.

Undoubtedly it is a much better plan to apply the manure evenly and thinly, spreading it over a larger area, especially where the supply is limited, than it is to apply it very thickly as described in this case. The result of plowing under such a heavy application of manure and planting the ground to potatoes will depend somewhat upon several factors. The nature of the manure, whether it contains much coarse litter or not, the time it was applied and when the ground is plowed and how fitted, also the character of the season which follows. If the ground is plowed very early and there is plenty of moisture, nitrification will occur to some extent before the potatoes are planted and the manure will gradually become converted into humus. However, if the season should be a dry one the result of such a heavy application of manure would probably be deleterious to the crop, no matter what the cultural methods employed, although the ultimate ben-



efit to the soil will be marked. Upon the average farm, in the writer's opinion, the better place to apply manure is to sod ground previous to the planting of a cultivated crop and if spread rather thinly and evenly over a considerable area, the results will prove more satisfactory.

#### Grain Smuts.

Will you please answer the following questions through your paper: Last year I put some smutty oat straw in the barn and my seed corn is covered with the dust. Will this smut injure my seed corn? Will I have to treat it before planting, and how?

Jackson Co.

F. C. W.

Corn smut is an entirely different fungus from the smuts which attack oats, and there does not seem to be any effective preventive for it. The only injury that the oat smut could do would be to live over in the soil and affect next year's crop of oats, which, however, it would not be very likely to do, hence it would not be necessary or profitable to treat this seed corn before planting on account of its having come in contact with the smut from this oat straw.

#### A Rotation of Crops for the Hog Lot.

I am thinking of fencing a field into three parts, rotating with clover, peas, and rye, running spring pigs on the clover and turning them into the rye and peas when ready. Should also like to plant winter apples on the field. Has this method of raising pigs proved profitable; have heard some dissenting opinions. I shall have some milk to feed. Also, will the apple trees make good growth under such conditions, and is there danger of the pigs gnawing or injuring them. Any information you or your readers can give will be very welcome.

Midland Co.

READER.

This idea of rotation of crops to provide green forage for the hogs is an excellent one and will, without question, reduce the cost of production materially. The clover pasture will be of great benefit during the spring months and if the peas are sown early, they will be ready to turn into when the clover pasture is at its worst and when the pigs are at an age and development when they can make the best use of the forage and grain to be secured from the peas. The clover and pea lots should be arranged, if possible, so that the hogs can have access to both after the peas are far enough along toward maturity to give a good degree of both forage and grain. The rye will make some fall and early spring pasture and also be a medium for the seeding of clover in the portion of the field devoted to it. There would perhaps be no better combination of crops for this purpose, although alfalfa, where used alone, will afford a desirable amount of forage and give excellent satisfaction in cheapening the production of hogs, when used in combination with liberal grain feeding. The mistake should not, however, be made in feeding too little grain in the ration simply because the hogs are on good pasture.

The plan of planting apple trees in the lot to be used for hog pasture is one of doubtful merit, since the trees would need to be protected from the hogs to prevent them from barking them.

#### Applying Lime with Manure.

I notice that you caution farmers against using lime as an absorbent in the stable because of the resulting loss of plant food from the manure. Would it be good practice to plow under stable manure and apply lime to the surface and harrow it in, or would the same advice apply in this case?

SUBSCRIBER.

While it is true that farmers have been repeatedly cautioned against using lime in the stable as an absorbent or in combination with manure when applied to the land, because of the fact that the nitrogen in the manure is liberated by the action of the lime and lost in the form of ammonia gas, yet this would not apply with the same force regarding the application of lime to soil that had been manured with stable manure. While perhaps there might be a little loss on account of the action of the lime on the manure in the soil when the manure is plowed down and the lime applied to the surface and harrowed in, yet it is probable that any such loss would be extremely small because the lime would not come in direct contact with the manure for some time and, in case it did, the resulting gases when liberated would largely be absorbed and held by the humus in the soil or converted into available nitrates through the chemical processes which are all the time going on in the soil. It is known that lime tends to consume the humus in the soil yet where a moderate application is worked into the surface when fitting the ground, it is the writer's opinion that it would be in keeping with good methods to previously plow down an application of stable manure as suggested in this inquiry.

#### ACIDULATED BONES AS FERTILIZER.

Being a subscriber to The Farmer I wish to ask a question in regard to some fertilizer I tried during the season 1909. I read a recipe in a book calling for 200 lbs. of water, 100 lbs. sulphuric acid, 200 lbs. bones and four times the bulk of road dirt or bog earth. This fertilizer was claimed to be worth 32 tons of barnyard manure. I tried a small mixture of this on some potatoes and cabbage with no good results. I put the mixture under some of the plants and four inches to one side of others, but the plants all died in a short time. They seemed to have a thrifty green look for awhile, then died. Is the sulphuric acid injurious to the soil? I put the bones and acid together until the bones were dissolved to a paste according to directions, then added the required quantity of rich dirt. Can you tell me through The Farmer where my trouble was?

Antrim Co.

P. E. BATES.

The fact discovered many years ago, that by treating phosphate of calcium, or animal bones, with sulphuric acid, would render the phosphoric acid in the bones, or in the phosphate rock, water soluble was the very foundation of the modern business of commercial fertilizers. Mr. Bates' recipe is probably correct and I am inclined to believe that the reason he did not get satisfactory results in the use of the fertilizer he prepared, or the acid phosphate, was because he did not have complete acidulation; or he used too much of the fertilizer near his plants. If he did not get complete acidulation then he had left probably a considerable amount of free sulphuric acid and free sulphuric acid in the soil would certainly kill plants, and this probably is what caused his trouble. On the other hand, we must remember that concentrated fertilizer is concentrated plant food, and that an overdose of a concentrated food is liable to work injury, rather than a mere benefit to growing plants, and I think that the death of his plants could have resulted from either one of these causes. I believe, however, that it would be more liable to be caused from the fact that he did not get complete acidulation and had a considerable amount of sulphuric acid free left in his product, which would be death to the plants.

COLON C. LILLIE.

#### MODERN HAYING EQUIPMENT ESSENTIAL.

Last year there was considerable discussion in the columns of The Farmer regarding the use of hay caps and in a recent issue I noticed an article advocating the use of small stack bottoms as well as caps for the hay cocks in curing hay. It is not my purpose to say anything against the use of these devices in the hay field. Indeed, they are doubtless all right under certain conditions and would be a valuable addition to the equipment of many farms. But upon the average farm when the haying season comes one must do business more rapidly than could be done by methods of curing hay such as those above referred to, since upon the average farm there is not sufficient available labor to keep the haying moving rapidly by this method. There will often be a week or more of settled weather in which it is desirable to push the haying as rapidly as possible, especially if it has reached the state of maturity when it ought to be cut and other work is crowding for early attention. Under these conditions modern haying equipment is essential to a degree of progress which will be satisfactory to the hustling American farmer. This includes the side delivery rake and the hay loader and, of course, a suitable equipment for unloading the hay in mow or stack. It is urged by some that not as good a quality of hay can be made in this way as by the old method of curing. While this may be true with regard to clover or alfalfa hay, if cut early or in catchy weather, yet when the hay crop as a whole is considered it can generally be secured in better condition upon the average farm where moderate haying equipment is used than where the old-fashioned methods are still followed, simply because haying can be rushed more rapidly in good weather. And where judgment is used in the handling of the hay in swath and windrow, good hay will result from this rapid method of curing which will be quite as acceptable to the stock and more profitable to the grower than where an additional amount of labor is invested in its making.

OBSERVER.

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## IMPLEMENT HOUSE.

Kindly give a plan for an implement building, to hold the implements of a general 80-acre farm. I thought of building of cedar posts and poplars for frame with a good siding, and shingle roof.

Huron Co. D. A. G.

If I were to make an implement house, I would simply make it wide enough so that I could back a wagon in, tongue and all. Don't make it so the tongue will stick out of doors. Have the house wide enough so that you can back the whole thing in. Then I would have it long enough to take in all the wagons, buggies and implements, and room for the binder, the drill and everything of that sort. I cannot tell how long you want it, but you want it larger than you think you do, because you have more tools on a farm eventually than you think you have. Now I would make this two stories high. It won't cost but a little more and then up stairs you will have room for your bob sleighs and small cultivators and small machinery that can just as well go up stairs as down, and be out of the way. Not only that, but you can have a carpenter shop up there and in the winter time when you have not much to do, you can paint some of your implements and you will find that this will be one of the most economical arrangements you can make, to make this wagon house two stories high.

COLON C. LILLIE.

## WHY ARE POTATOES SO LOW?

When all, or nearly all, other products of the farm are high, the question naturally arises, why are potatoes so low? I will advance four reasons, and the way, in my opinion, of regulating low prices and then leave the subject to my brother farmers, and other readers of the Michigan Farmer for the careful consideration to which it is entitled.

1. An extremely large crop of tubers during 1909. Approximately 100,000,000 bushels more than the 1908 crop; and yet this surplus should have cut a small figure when we consider that the low price kept foreign potatoes off of the market, and that potatoes, like other things, are consumed in much larger quantities when the cost to the consumer is correspondingly low. But the latter would increase the demand, and this would have a tendency to raise the price.

2. Buyers make an effort to keep the price low, because they aim at making a certain amount per bushel for handling them, no matter what the price. Besides they have less money invested in a car load until they get returns; and further, a sudden and large drop in the market is quite impossible.

3. The unusually early spring has given producers an opportunity to rush their tubers onto the market in very large quantities, lowering the then existing low prices to a degree from which they may not again even partially recover.

4. Last, but not least, our products pass through too many hands, each one expecting a living, lowering the selling price to us, and raising the buying price to the consumer. It is a well known fact that when potatoes were selling here for 25c or less, they were retailing in Chicago for nearly if not quite a dollar. The result was, that most people did not consume nearly as many as though the price had been reasonable; this, to my mind, is the principal reason for the glut in the market.

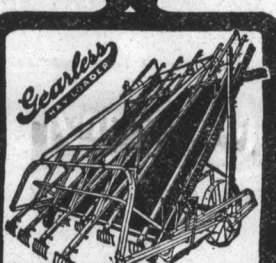
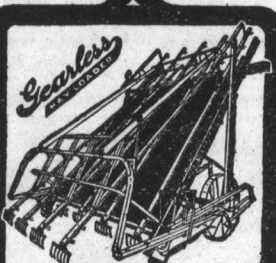
What is the remedy? The answer is—organization. There is hope! Wherein does the hope lie? In our believing in organization. We, as a class, are becoming ashamed of ourselves, because the government is urging us to organize. Trusts it is trying to regulate, troubles between labor unions and operators it helps to settle; but farmers it must urge to unite; a vast difference. Some of us farmers are graduates of agricultural colleges, some of us of other colleges, others of high schools, rural schools, etc., we do not need middlemen to do our business; so let us speedily do away with them, establish a trade direct between us and the consumer, better for both. Let us take the initial step and all others will surely follow. Let us become educated along the line of confidence among men which existed fifty years ago, by being honest and upright in our business, as well as all other relations with all people. May we have a desire to let live, as well as live.

Oceana Co.

W. D. KORB.

We received the teaspoons all O. K. and think they are fine. We couldn't get along without the Michigan Farmer. It is read the first of all our papers.—Mrs. W. H. Morris, Harbor Springs, Mich.

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## POULTRY

THE ELEMENT OF FEED IN CHICK RAISING.

The most important requirement in raising chicks is feed. The next is feed, and likewise the next. Anybody can make a chick live a week on pretty nearly anything, or on nothing, for that matter. But after that the feeding determines the results more than any other one thing.

I consider cooked food very necessary for the infant chick. A little lean, fresh meat run through a grinder and mixed with dry meal is the most valuable food for chicks of any age, that I have ever used. I once had a flock of 150 March chicks that, at the ten-day period, were dying off "like sheep." I fed lean ground pork, cooked and mixed with crumbs. The result was I did not lose another chick.

Screenings fed sparingly to chicks two weeks old, or older, are all right, but whole wheat is a very dangerous feed. When a chick has become well feathered he is a fairly tough proposition with a digestive apparatus not to be despised. But give him his fill of whole wheat a few times in succession and it will take more than dyspepsia tablets to save him. His little crop will swell up, and water will run out of his mouth. This condition is usually fatal.

Boiled rice is a well tried, well proved and safe feed. You can get the cheap cracked rice, so the cost is not prohibitive. After a few weeks, corn meal can be used as the main food, and as such it is a winner. A little oats ground in will make it still better.

Whatever you do, don't overfeed. Let them eat it up. If you change their feeding place every time, let it be for reasons other than that they can't wade through their left-over feed to get at the new.

Change their location every day where possible. Change it anyhow. Haven't you sometimes noticed a certain sour odor about a flock of small chicks. This should never be allowed to continue, as it spells disaster. Move them.

Provision should always be made for sudden showers, especially cold ones. The good work of weeks can be ruined by 15 minutes' exposure to the elements. I say this because I take it for granted that the chicks are kept out of doors in the fresh air, or with access to it, and full access to the bare ground. If the ground is wet and cold cover it thinly with some good absorbent, such as chaff or sawdust. It will make the chicks happy, for when you see a bunch of chicks standing around with their wings down and peeping for dear life, the chances are they have cold feet.

Have large, roomy pens. I have not much use for the little contracted toy brooders that are used by some would-be poultrymen. You cannot raise a flock of 200 chicks in a machine about the size and capacity of a Dutch oven. You must have room.

The value of a chicken to the grower depends largely upon its quickness of growth, either for egg-laying purposes or for "beef." A chicken of weak vitality, or poorly reared, whose growth is spread over a whole year, has no profit in it for the grower, so get all the early chicks you can, push them as fast as you can and get them on the market or into the laying pens as quick as you can. Don't forget to market the young roosters just as soon as possible. The first profit on these is the winner and, whatever you do, separate them from the pullets as soon as you can distinguish their sex.

Isabella Co. WM. J. COOPER.

FORCED TO ACCEPT 234½ PER CENT PROFIT.

Last fall after selling my farm I rented a place having an old, partly underground, poorly lighted henhouse. I had a flock of 82 hens and, under the circumstances, decided to sell or reduce the flock. I sold 30 of the hens to the man who bought the place, giving him the pick of the entire flock. To another party I sold 12 pure-bred S. C. W. Leghorns. This left me 40, comprising seven mongrels, 18 months old, some pure-bred White Leghorn pullets, and the remainder mongrel pullets, all the pullets being less than half grown. I tried to sell the Leghorn pullets at 25c each, but the neighbor who looked them over thought the quarter looked larger than a pullet, so would not buy. I would have sold the entire flock for \$10, but no one cared to buy. I con-

(Continued on page 505).

## Thrifty Chicks Make Paying Fowls

That's reason and common sense. What the chick is, the fowl will likely be. The important matter, then, for every poultry raiser is to give the growing chickens a *good start*. Not at all a difficult thing to do, either, if you get Dr. Hess Poultry Pan-a-ce-a to help you. This is a Tonic to mix once a day in the soft feed—a system known among poultry men as "The Dr. Hess Idea" of feeding. Only a little of it is needed, but its effect is surprising. You can almost see and measure the daily development of the little peepers, from tender weaklings to vigorous, growing young fowls.

## DR. HESS Poultry PAN-A-CE-A

Will carry them on from the growing stage to early maturity and pay you abundantly for the little extra attention you have given them. It cures Gapes, Cholera, Roup, etc.; it makes the pullets lay *early* and keep it up the whole season round, because it acts on the *digestive organs* of the hen and gives her power to assimilate large quantities of food and turn it into eggs. In the same way it helps to fat the cockerels and other birds you wish to sell. It gives strength to pass the moulting season and *good health* always. A penny's worth feeds 30 fowls one day. Sold on a written guarantee.

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Is a guaranteed animal tonic, formulated by an experienced live stock farmer (Dr. Hess, M.D., D.V.S.) for the sole purpose of bringing about an economical system of feeding. It acts on the *digestive organs*, keeps them healthy and *active* and relieves the minor stock ailments. The animal receiving it can consume and *put to use* a large ration. Thus it helps the cow to give more milk and the steer, sheep or hog to fat quicker. No live stock owner can afford to do without Dr. Hess Stock Food. Fed twice a day in small doses. Sold on a written guarantee.

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that make a horse Wheeze, Cough, Have Thick Wind, or Choke-down, can be removed with

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## LIVE STOCK

### BREEDING PURE-BRED SWINE.

#### The Show Yard and Sales Ring.

There is no better way for the new breeder to attract attention to the excellence of his herd than to select a few choice specimens and fit them for the fair. In this way, perhaps better than in any other, we will command the attention of prospective buyers. It is best to exhibit at county fairs first, where the stock will show to a better advantage and where a knowledge of the art of showing may be gained. Make the entries early and be on hand in time to secure good quarters for the stock.

Every animal should be properly conditioned, yet not overdone. The pens and surroundings should be kept neat and clean and the stock should be ready to present promptly and in their best condition when they are judged. Show the animals to the best of your ability and gracefully accept the decisions of the judge. If you fail to win, do not give up; study the reason, examine the winners and learn what it takes to win. A few years of experience showing your swine will give you an idea of the kind of animals it takes to win. This will enable you to come back stronger than ever next year and win your share of the coveted ribbons.

Stay close by your exhibit and be on hand to close a deal with every prospective buyer you meet. In this way you should be able to sell some of your stock for good prices and book a few orders for future delivery. Each year will add to your fund of knowledge and experience and increase your prize winnings and sales, as your acquaintance among buyers increases, your trade will grow and each year you will find more business coming your way. As the business increases and the herd improves you can enlarge your show herd and make an exhibit at some of the larger fairs and exhibitions. Here you will find the experience gained at the smaller shows of untold value.

It makes all of the difference in the world how you are going to get together your show herd, whether you are going to purchase it or breed it, a man with ample means can employ a good judge and buy up an excellent show herd. But if you are to become a true breeder, you will set to work and breed and condition your own show herd. Far more respect and credit is due to the breeder who breeds and shows his own swine, than to the man with more money than brains, who gets together a bunch of prize winners secured by agents who scour the country for the best animals money can buy.

The first requisite in getting together the show herd is the selection of the sire to head the herd, the one that is to beget the pigs that you are going to show. He must be an outstanding individual and from a line of good breeding. He is a most important factor in various entries. The group prizes usually go to the herd represented by the strongest head for the reason that every fair minded judge knows that the actual relative importance of the boar is greater than that of any single sow, although the group comprises four different animals, each a factor. It seems only logical that the boar which exerts his influence on every litter of pigs farrowed, should be of more importance than any single sow in the group. Another point of value in the show yard is his ability to beget show pigs. Few men realize the value of a sire that can beget even a small proportion of show pigs. The next problem is the selection of the herd that you are going to condition and show. It is no easy matter to look at a bunch of pigs and tell which ones are going to feed the best and come out and develop the best. You will meet with many disappointments. Just when you think they are just what you want, something turns up and they soon lose their form and new selections must be made. Care should be taken to have the pigs farrowed at the various times necessary to enable you to fill the various classes. When they are weaned or soon after, you should know which ones you want to put in the show herd and plan their feeding and management accordingly. Get them into condition gradually and plan their feeding so that they will be brought to the pink of condition for the first important show. Feed frequently and see that they clean up all of their feed.

An ideal ration for feeding pigs for the show yard is made up by mixing with sweet skim-milk equal parts of ground oats, with the hulls sifted out, and heavy white wheat middlings. Add to this a handful of old process linseed oil meal and mix rather thickly and give each pig all that he will clean up with a relish three times a day. After he is twelve or fourteen weeks old add to this ration some corn meal, making one-third each of the corn meal, ground oats and wheat middlings. This, fed in connection with a little clover or alfalfa, will promote the most rapid growth and development possible to obtain if good judgment is exercised in feeding and handling the pigs.

For conditioning older swine a more economical ration may be made up from such feeds as clover, alfalfa, corn, oats and mill-feed. These feeds may be varied according to the condition of the animals and the amount of flesh you want to have them carry into the show ring. It seldom pays to highly condition the herd for exhibiting at a small county fair, as the danger of impairing the breeding qualities of the herd is too great, but at the larger fairs condition counts fully as much as character. The fine old boar who has had his day and proven his ability to beget show pigs is frequently turned down in favor of some highly fitted young animal, that possesses little more value as a breeding boar, than some prize barrow. If your animals possess the true breed character and a satisfying quantity and quality of flesh you will ordinarily obtain the ribbons you are entitled to, but where the skill of the fitter is pitted against solid worth the decision of the judge frequently leans toward the lure of mere outward finish. The question of condition vs. character has always been a live one among judges and exhibitors and one that requires discriminating judgment on the part of the man who is placing the awards to solve satisfactorily to all concerned.

In selecting the swine for the public sale, only good animals should be catalogued, for the sale and these should be properly fitted though not as highly conditioned as animals for the leading fairs and exhibitions. The man who holds a public sale for the purpose of cleaning out a bunch of undesirable breeding stock is sure to be a disappointed and wiser man.

In conditioning swine for public sale every animal should be fed and handled in a careful and painstaking manner and brought to the desired condition about the time of the sale. It is difficult to hold animals in just the right condition without overdoing them when they are brought to condition very long before the day of the sale. Feed them such foods as will promote the best development without putting on an excess of fat and impairing their breeding qualities. Every animal that goes out from your sale this year and proves its value as a breeder will contribute largely to the success of your succeeding sales.

In preparing swine for a public sale every animal should be plainly labeled with a number corresponding with the catalogue number and every convenience should be made for the crowd to examine the stock carefully and to look over your breeding herd to see the kind of breeding animals from which the sale stock originated. Plan to have the animals handled properly; have good, competent help about the sale and everything kept moving smoothly and rapidly while the sale is going on. Never make a promise in the catalogue that you are not ready and willing to fulfill. Never make a guarantee that you are not willing to make good if you are in the wrong. The public sale conducted year after year on honest and upright principles is one of the best methods of disposing of high-class breeding swine.

New York. W. MILTON KELLY.

### EXAMINING HORSES FOR SOUNDNESS.

Probably more horses change hands during the early spring months than at any other season of the year and to those who are not familiar with the blemishes which are not particularly noticeable on the animal, a discussion of this subject will perhaps prove interesting. It is a fact, we are sorry to say, that very few men when selling a horse, will tell the whole truth about the animal. There is probably more deception practiced in horse dealing than with any other animal, due, no doubt, to the fact that horses are heir to more blemishes than other animals and also to the fact that they command a much higher price, and as every blemish lessens the price, sellers resort

## A FEELING OF SECURITY.

You naturally feel secure when you know that the medicine you are about to take is absolutely pure and contains no harmful or habit producing drugs.

Such a medicine is Dr. Kilmer's Swamp-Root, the great Kidney, Liver and Bladder Remedy.

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A sworn statement of purity is with every bottle of Dr. Kilmer's Swamp-Root.

If you need a medicine, you should have the best.

If you are already convinced that Swamp-Root is what you need, you will find it on sale at all drug stores in bottles of two sizes, fifty-cents and one-dollar.

Sample Bottle of Swamp-Root Free by Mail.

Send to Dr. Kilmer & Co., Binghamton, N. Y., for a sample bottle, free by mail—it will convince anyone. You will also receive a booklet of valuable information, telling all about the kidneys. When writing be sure and mention the Detroit Michigan Farmer.

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## DEATH TO HEAVES

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## Symptoms of Worms

Your horse has worms if he has any of these symptoms: Nervousness, itching, rubbing tail, rough coat, hide-bound, dandruff, unthrifty condition, bloating, dusty rectum and passing worms.

## DR. FAIR'S NEW WORM REMEDY

is given in feed—it kills worms in two ways: by suffocation or absorption, but never hurts the horse or brood mare.

**60 Horse Doses Delivered \$1.00**  
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Has no equal. One dipping kills ticks, lice and mites. Increases quantity and quality of wool. Improves appearance and condition of flock. If dealer can't supply you, send \$1.75 for \$2.00 (100 gallons) packet to

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I was helpless and bed-ridden for years from a double rupture. No truss could hold. Doctors said I would die if not operated on. I fooled them all and cured myself by a simple discovery. I will send the cure free by mail if you write for it. **Capt. W. A. Collings, Box 555, Watertown, N. Y.**



to all kinds of methods to deceive the buyer.

We do not wish to be understood that all farmers or horse dealers are dishonest or practice deception, but as it is impossible to tell when a man is telling the truth, unless we are personally acquainted with him, it is best for a purchaser to rely on his own judgment rather than on what the seller has to say about the animal.

After having found a horse that is satisfactory in general conformation the next step is to examine him for soundness and if he is in the stable begin right there by examining his disposition. If you find the stall all kicked to pieces look for a kicker, or if the manger is all chewed up you are apt to find that he is a "cribber." Next take the currycomb and brush and see if he resents being groomed. Then pick up each of his feet to see if any difficulty is encountered in shoeing, and at the same time look for corns. After having satisfied yourself about his disposition ask the owner to hitch him to a wagon or carriage and request him to drive at a brisk gait. Immediately on stopping go to his head and put your ear to his nose to ascertain any unsoundness of wind, and while examining his head notice his teeth to determine his age. Notice his eyes to see that they are perfect, then take one side of the horse at a time, looking at his shoulders to see if they are perfectly sound. Then run the hand down the outside and the inside of the front leg, being careful to notice if there are splints, sidebones, ringbones, etc. Then pass the hand down the hind leg to see if there are any windpuffs, spavins, curbs, splints, capped hocks, thoroughpins, ringbones, etc. Pass around to the other side and examine in the same manner. Then step back and notice how he stands on his feet, noticing if he is inclined to be weak in the knees and fetlocks. Also notice how he holds his head and neck.

A good way to examine for "roaring" is to make a movement as if going to strike him on the side with a whip and if he makes a grunting sound, look out for a roarer. Then request the driver to drive him off at a rapid gait while you stand and look to see how he handles his feet and legs, noticing whether or not he interferes. When he gets back examine again for soundness of wind. Next take hold of the lines and back him up to see whether he is inclined to back rapidly, and notice how he handles his feet when backing. Now put him back in the stable and in a couple of hours take him out again and drive him a short distance, for by this time he will show lameness if present. If he satisfies you after making this test you are pretty safe in making the purchase and you can rest assured that in case you do not get a sound animal, you have done all that the best horseman could do to determine his soundness.

Livingston Co. C. C. O.

#### MAKING CORNCOB CHARCOAL.

Please advise me how to construct a kiln for making charcoal from corncobs and how to care for the kiln after it is built. I have a quantity of corncobs. Do you think the charcoal made from them would be beneficial to the hogs?

SUBSCRIBER.

It is unnecessary to construct a permanent kiln to convert corncobs into charcoal. Simply make a hole in the ground about three feet in circumference at the top and three or four feet deep, tapering the sides sufficiently so there will be no danger of its caving in. Then build a fire of corncobs in the bottom of this pit, adding more cobs to the surface until the whole mass is ignited and partially burned. The cobs will settle somewhat so that a considerable amount of charcoal can be made at one time. After the cobs have become well burned cover a portion of this pit with a piece of sheet iron or boiler iron secured for the purpose and throw dirt on it about the edges to exclude the air. Then leave it until the fire is exhausted and the mass is cooled, when the cover may be removed and the charcoal be taken out. Charcoal is valuable in keeping the hogs' digestive system in good condition, corncob charcoal being a favorite by many breeders as especially well adapted to the purpose and where made by the method above outlined is inexpensive.

An Iowa farmer and stockman says: "The high price of feed and the scare our wise men have been giving us in regard to tuberculosis have caused thousands of cows and heifers to be sent to market which otherwise would be with us yet. Now we are facing one of the worst famines in meat and dairy products we have ever seen, and the consumer must pay all the bills."

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WITH BIG MILK RECORDS. TUBERCULIN TESTED BY STATE VETERINARIAN. **ROYCROFT FARM, Sidaaw, Mich.**

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**Oxford-Down Sheep** and Polled Durham cattle for sale. **A. D. & J. A. DEGARMO, Muir, Mich.**

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Will import one hundred yearling ewes and 15 rams in June for Michigan and the same for Boise, Idaho, Branch of this Farm. Will make a fair price on yearling ewes or rams, also on some aged ewes with lambs at side, for 60 days. **L. S. DUNHAM & SONS, Concord, Michigan.**

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**FOR SALE—BERKSHIRES**—Two choice Sept. boar pigs, and a few fall glits, sired by Handsome Prince. **A. A. PATULLO, Decker, Mich.**

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The peer of any in America. Spring pigs for sale. **WILL W. FISHER, Watervliet, Michigan.**

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**Durocs For Sale**—A few fall glits bred for summer farrowing. Also a few spring pigs. **M. A. BRAY, Okemos, Michigan.**

**DUROC JERSEYS.** **CAREY U. EDMONDS, Hastings, Mich.** Nothing for sale at present.

**DUROC JERSEY SWINE.** Shepherd Dogs. B. for 15. **J. H. BANGHART, Lansing, Mich.**

**WALNUT HILL FARM** Herd of Durocs. Bred sows all sold. 35 fine fall sows, 15 fine fall boars ready for service, 100 spring pigs to date. Write **J. C. Barney, Coldwater, Mich.**

**O. I. C. bred sows all sold.** Have a few boars still on hand. **GEORGE P. ANDREWS, Danville, Mich.**

**O. I. C.**—A few bred sows. Orders booked for spring pigs from very choice stock, pairs not aktn. **S. J. COWAN, Rockford, Michigan**

**O. I. C. REGISTERED PIGS,** 10 to 12 weeks from World's Fair winners. **Glenwood Stock Farm, Zeeland, Mich. Phone 94.**

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**30 P. C. Fall Pigs**—by two champion boars. Book orders for weaned pigs by 10 different boars. **WM. WAFFLE, Coldwater, Mich.**

**MULE FOOTED HOGS**—Greatest vitality of all breeds. All ages for sale from 5 big boars. Send stamp for information. **J. H. DUNLAP, Williamsport, Ohio.**

**HEAVY BONED POLAND-CHINA PIGS** at reasonable prices. Eggs from big, business Barred Rocks \$1 per 15. **ROBERT NEVE, Pierson, Mich.**

**Prize Winning POLAND CHINAS.** Japanese Pekin Ducks. Embden Geese and Buff Turkeys. **Zach Kinne, Three Oaks, Mich.**

**MICHIGAN'S GREATEST HERD** of big Poland-China Hogs. Big Bred, Long Bedded, Big Litters. The farmers' hog, a bigger, better and more profitable Poland-China. Write for what you want. Bull phone. **J. C. BUTLER, Portland, Mich.**

**POLAND-CHINAS**—Booking orders for spring pigs. Nothing else to offer. **WOOD & SONS, Saline, Mich.**

**Large Improved English Yorkshires.** The hogs that make good. September glits bred to farrow next August or September. Spring pigs of either sex. Pairs not aktn. Satisfaction guaranteed. **COLON C. LILLIE, Coopersville, Mich.**

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## SUPPLEMENTARY PASTURE FOR THE SHEEP.

Notwithstanding the high price of lambs at the present time, it is very questionable if there is as much profit in the lamb that has been carried through the winter and fattened on a grain ration that goes to market at this season of the year weighing around a hundred pounds, as would have been derived from the same lamb had it had proper feed during the early portion of its life and come to the same stage of maturity months earlier and at a much less cost of production. There is really no excuse for taking from ten months to a year for bringing lambs to a marketable weight and condition. Plenty of suitable forage for them during the summer months will make this entirely unnecessary, and the lambs will gather it for themselves. But where many sheep are kept upon the farm, this desirable result will hardly be attained unless some preparation is made for suitable supplementary pasture for the lambs after the weaning season. This is just the time of year to consider this problem. A moderate area sown to rape will afford just the tender, succulent pasture needed to bring the lambs along rapidly. It is not an uncommon thing to see a flock of sheep grubbing out a bare existence on pastures that would not afford cover for the smallest bird, but fortunately this is not as common a sight as it was a few years ago. No man can afford to allow the growth of his lambs to stop just when they should be making their best and cheapest strides toward maturity, and no matter what the breed of sheep, it is entirely practicable to keep them growing during the summer on cheap feed and finish them without a long period of grain feeding, the first period of which must be devoted to regaining lost ground where the lambs have been checked in their development by running them on poor pasture during the hot summer months. Rape seed is cheap, and there is no better feed for sheep than the abundance of forage which it will produce where sown on good land. The soil should be well prepared to make a good seed bed and to kill the weeds which germinate near the surface and the seed sown at the rate of four or five pounds per acre. No further attention will be required, except to accustom the lambs to it gradually when they are first turned in. The result will be cheaper and more rapid gains than can be secured in any other way, unless fresh clover pasture is available, and this can hardly be depended upon on the average farm.

There is another advantage in supplying supplementary pasture of this nature, and that is the benefit to the farm. Nothing is worse for the fields than to pasture them so closely that all vegetation is literally eaten into the ground, and that is the inevitable result on the farm where sheep are kept in any considerable number without making preparation for supplementary pasture in midsummer. Rape can also be used as a catch crop in the corn to provide late fall pasture, and rye will serve the same purpose with the added advantage that it will also provide a covering for the soil over winter and again afford excellent pasture in the spring. The farmer who has never tried it will be surprised at the profit and satisfaction that will be derived through the growing of a limited area of supplementary pasture crops for the benefit of his spring lamb crop.

Reports issued by the Missouri State Board of Agriculture show a great shortage of live stock. Only 48 per cent of the usual number of cattle and 38 per cent of the usual number of hogs are on feed, and farmers have only 64.5 per cent of their usual holdings of brood sows.

There has been a remarkable increase in average weights of hogs received in Chicago and other markets in recent weeks, the unusually mild spring weather having been favorable for fattening swine. The season is at least thirty days ahead of the average of former years, and hogs have made the greatest gains ever known in March and April. Heavy hogs are comprising an unusual share of the marketings.

A good many stock feeders have been marketing young cattle this spring, finding it much more profitable than maturing old cattle. Stockmen generally are learning that as a rule the most money is made by turning it over quickly.

At the recent Maryville, Mo., sale of Angus cattle one of the best buyers was Robert McEwen, of Ontario, who purchased four cows, three calves and one bull for adding to his Angus herd. It is something new for breeders of eastern Canada to come over the line to invest in Angus cattle. Heretofore American breeders have gone to Canada to buy Angus cattle breeders. Angus cattle bred in the United States have been bought in the past by western Canada breeders, but the demand from eastern Canada is a new feature.

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

**Stocking.**—Several of my heifers that came fresh a short time ago are stocking in their hind legs. What had I better do for them? A Subscriber, Marine City, Mich.—Give a tablespoonful of powdered rosin, a teaspoonful of powdered nitrate of potash and two tablespoonfuls of ground gentian at a dose in feed three times a day.

**Obstructed Teats.**—I have a cow that is growing harder to milk every week. It seems to be almost impossible to draw milk through the teats, the obstruction being at upper part of teat. E. K. Saline, Mich.—Give your cow one dr. iodine potassium at a dose in feed night and morning and apply iodine ointment to upper portion of teat once a day. If the udder secretes milk, and much of it, you had better use milking tubes when milking.

**Inflamed Udder.**—I have a heifer that is troubled with an inflamed udder, but she does not appear sick and is in good condition. G. R. S., Tower, Mich.—Dissolve ¼ lb. sugar of lead in a gallon of water and apply to udder three times a day. Give enough epsom salts to open her bowels, if they are not loose enough, one pound daily will be enough at a dose until the desired effect is produced. Also give one tablespoonful of powdered nitrate of potash at a dose in feed or water three times a day.

**Partial Paralysis.**—Have several pigs six months old that seem to be weak in their hind legs. The trouble begins by the toes turning over at the first joint and they finally get so that they have but little use of their hind legs. They also cough a great deal as if they had something in their throat. Can you advise me how to remedy this ailment? S. L. B., Middleville, Mich.—You had better feed them less corn, more oats and vegetables, also give them some air slaked lime with their food, a teaspoonful is about right for two hogs their size.

**Cracked Heels.**—Heifer Leaks Milk.—My three-year-old filly is troubled with sore heels. I wash her legs night and morning and apply carbolic acid and water, after which I apply healing salve, but they are gradually getting worse instead of better. I also have a young heifer due to freshen any hour; her udder is not very large, but she leaks milk. What can be done to stop this leakage of milk? A. McD., Sault Ste. Marie, Mich.—Discontinue washing her legs. Apply peroxide of hydrogen first, then apply the following lotion, which is made by dissolving 1 oz. acetate lead, 6 drs. sulphate zinc and 2 drs. carbolic acid in a quart of water. Give ½ oz. fluid extract of buchu at a dose in feed three times a day. Use teat plugs to prevent your cow leaking milk. The Lawrence Publishing Company can supply you if you have none.

**Cow Gives Stringy Milk.**—Have a cow that is giving stringy milk and very little at a time. Our veterinarian is at a loss to know why she is in this condition. She has been fresh about six weeks. E. S., Dansville, Mich.—The udder of your cow has become infected perhaps through teat openings. Keep her stable and udder as clean as possible and if you are equipped with a suitable syringe her udder should be washed out with a two per cent solution of carbolic acid daily for a few days. Perhaps the best thing you can do with her is to dry her as she will prove unprofitable for dairy purposes. Give 1 dr. creosote in a quart of water as a drench daily.

**Sprained Fore Leg.**—Ophthalmia.—While driving my mare she became frightened and must have injured her fore leg for she has gone lame ever since. The leg swelled below knee. I applied liniment which blistered it lightly and lately have been using a preparation of lard and black pepper. I also have three cows that are all troubled with sore eyes. What shall I apply to cure them? W. H. A., Fennville, Mich.—Apply one part turpentine and four parts camphorated oil to fore leg once a day. Dissolve one grain protargol and ½ grain sulphate atropia in 1 oz. clean water and apply to eyes twice a day. If they continue discharging after ten days' treatment, blow some calomel into the eyes once a day.

**Yeast Treatment for Barrenness.**—I would like to know the meaning of the yeast treatment, how it is made and applied. V. V., Albion, Mich.—The yeast treatment is effective in curing barrenness in cattle and horses when the disorder is due to an acid condition of the genital tract. In cases where the animal does not come in heat it has no value. The solution is made as follows: Put two heaping teaspoonfuls of yeast in a pint of boiled water. Set the solution near the stove and maintain at a warm temperature for about five hours, then add three pints of boiled water and keep it warm for another five hours. By this time the solution will have a milky appearance and is ready for use. Flush the parts with warm water and inject the yeast. The animal should be mated from two to eight hours later.

**Rickets.**—I have a sow with several pigs three weeks old, but they are gradually losing the use of their hind legs; one of them is unable to follow the mother and we are giving it milk, which seems to nourish it. One of the young pigs died. I might say that the sow has appeared to have some stomach trouble, for

(Continued on page 511).

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THIS means better protection than you think. It means that to guarantee Congo in this way we had to make it so good that it would meet all the exacting requirements of the National Surety Company. It was tested as to its durability, pliability and anti-rust and anti-rot qualities—all these had to be demonstrated beyond a question. After that, they issued the bond. Every man who buys Congo is assured ten years of protection, and this is what you need when buying a roofing. You don't buy for a week or a year, but for as long a time as possible.

Along the lines of making Congo as good as we can, we supply free in the center of each roll, galvanized iron caps, which cannot rust. This also is exclusively a feature of Congo Roofing.

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## Save Your Spring Lambs



## Get Rid of Deadly Worms

DON'T let stomach and intestinal worms kill off your spring lambs. Get the best of these deadly pests early—BEFORE they get a foothold.

NOW is the time to deal them a "death blow"—before they get a "death-grip" on your lambs and ewes.

Don't wait until they have multiplied by the million—until your lambs are being eaten up alive—until they begin to die by the dozens—NOW is the best time to kill worms—just when they are breeding.

"A stitch in time saves nine"

Take steps to prevent this costly loss—before it happens. I'll tell you how. If you are already losing lambs—I'll stop the loss for you—I'll stop it quick with SAL-VET and I'll do it before you pay me a cent. All I ask is a chance to put Sal-Vet where your lambs and sheep can get it at will. At the end of 60 days if you are not satisfied with the results, you need not pay a cent for it.

Sal-Vet is a wonder worker. It is a medicated salt, containing seven medicinal elements that are sure death to worms. It not only kills them BUT—expels them—cleanses the stomach of all parasitic infection and then puts the digestive organs in perfect condition. It quickly tones the digestion—enables the animal to get more nutrition out of the same amount of food—increases the appetite—enriches the blood and works a wonderful change. It is a powerful tonic and conditioner. Makes bigger lambs—healthier, thriftier sheep.

## I'll feed all your stock 60 days before you pay

I'll prove to you on your lambs, sheep, hogs, horses and cattle—Sal-Vet's wonderful merit before you pay me a cent of money. You have nothing to risk—everything to gain. I let you be the judge. Simply fill out the coupon, and I'll send enough Sal-Vet to feed all your stock 60 days.

If you could sit at my desk for one day and read the letters I get from grateful farmers, thanking me for sending them Sal-Vet you would not hesitate to send for a supply.

## Send no Money

Remember, if it fails to do what I say it will, you pay me nothing.

Here are a few sample letters I get:

The S. R. Fell Co., Cleveland, Ohio.

"I have used Sal-Vet as a preventative for worms in my flock of Oxford Sheep, and can truthfully say that my sheep have no worms. Before I used your Sal-Vet I was tormented to death with the worms in my sheep, and had tried most everything else as a preventative. I have also used your Sal-Vet for other stock and have been well pleased with its effects."

B. F. Miller, Breeder of Oxford Sheep, Flint, Mich.

J. F. Crum, Shelby, O. writes: "I have not lost a single lamb since I placed Sal-Vet before my flock."

Mr. Geo. Allen Lexington, Neb., member of Executive Committee American Shrop. Ass'n, writes: "I have used 'Sal-Vet' for over a year, and ever since then my lambs have been absolutely free from worms. I attribute their satisfactory condition to the 'Sal-Vet' which I keep before them all the time. I heartily recommend 'Sal-Vet' to all sheep and hog men."

That's convincing proof, isn't it? But remember, I prove it on your lambs, and sheep before you pay a cent. That's better proof. That leaves no doubt whatever. Therefore, fill out the coupon—NOW—delay may cost you several lambs.

Sidney R. Fell, Pres.  
The S. R. Fell Co., Cleveland, O.

Prices: 40 lbs. \$2.25; 100 lbs. \$5.00; 200 lbs. \$9.00; 500 lbs. \$21.00. Send me enough Sal-Vet to feed my stock 60 days. If not, you are to cancel the charge. Name \_\_\_\_\_ P. O. \_\_\_\_\_ Shipping Sta. \_\_\_\_\_ No. Sheep \_\_\_\_\_ Cattle \_\_\_\_\_ Hogs \_\_\_\_\_ M. F. May 7, '10



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The Lawrence Pub. Co.,  
Detroit, Mich.

DETROIT, MAY 7, 1910.

## OUR GRAND RAPIDS OFFICE.

In order to better care for our interests and those of our subscribers in western Michigan, we have established a branch office in Grand Rapids, No. 5-6 New Hawkins Bldg., with Mr. H. J. Slade, as manager. This will place us in closer touch with our subscribers in western Michigan who will be the gainers thereby. We desire to co-operate with the movement inaugurated for the development of Western Michigan, and want the farmers of that section to know that we aim to make the Michigan Farmer broad enough to represent and conserve the agricultural interests of Western Michigan as well as those of other sections of the state. We invite communications and reports from them, regarding their crops and work.

## CURRENT COMMENT.

In another column Organization as a of this issue appears Remedy.

an article commenting on the low price of potatoes the present season and the causes therefor, in which the conclusion is reached in summing up the situation that the remedy lies in organization of the producers for the elimination of the middlemen. The writer of the article referred to, approaches the question in a broad minded manner, stating that we should be willing to let live as well as to live, but maintains that we, as a class, have not lived up to our opportunities in the way of organization for our own good. This is right in line with the advice which Michigan Farmer readers have received through these columns in pleas for organization along lines of community production, for some years. Unquestionably there is a good field for the organization of potato growers in this state. Undoubtedly such organizations would result in marked benefit in the marketing of their product. The single object lesson which the potato growers of Michigan have had in the successful conduct of the Greenville Co-operative and Supply Co., which has been mentioned and described in these columns on various occasions, has demonstrated that fact. Organization is, however, a progressive undertaking. It must be developed to a comprehensive system through the cumulative experience of its membership. If there were a considerable number of co-

operative marketing associations for the handling of the Michigan potato crop in existence, then it would be entirely feasible and practicable to invade our big markets for the distribution of the commodity. But this work of distribution to the consumer should not be undertaken prematurely. There are very considerable benefits to be derived from local organizations under existing conditions. When local organizations have become numerous, then existing conditions relating to distribution can be grappled with successfully. Undoubtedly the present cost of distribution is too high, but the place to begin to eliminate is on the producers' end of the line. Let us have more co-operative organizations in Michigan for the marketing of this great cash crop and, when we have developed these, let us undertake collectively to better the present system of distribution to the consumer, thereby retaining for our own benefit a larger share of the cost price to the consumer.

There is being A Wise Public Policy, agitated at the present time,

among public men who are interested in the civic problems connected with out penal institutions, prompted, in some cases, by the interest and knowledge of the situation gained from long experience through official connection with such institutions, and in others by purely philanthropic motives, a proposition looking toward the application of the earnings of convicts to the support and maintenance of their families during their terms of penal servitude. Surely this is a public policy which will meet with the hearty support and approval of practically all classes of our citizens. Naturally it will be a good deal of a task to figure out the details of such a plan in a practical way so as to provide for an equitable division of the proceeds of the prisoner's labor between the state which assumes the burden of protecting society from his depredations and punishing him properly for his crimes, and the family, that is more often than otherwise in indigent circumstance and must be further humiliated by accepting public charity because of the misfortune which has overtaken them and for which they are in no way to blame. However, it should not be very difficult to devise a scheme which would be far superior to the contract system, which has outlived its usefulness in Michigan, and provide, through some productive industry, as great a revenue for the state as it derives from the labor of prisoners employed on contract and at the same time leave more than a pittance for the benefit of the prisoner's family. Aside from appealing to the humanitarian instincts of all classes of citizens, a plan of this kind would appear to remove in a large degree, the objections of organized labor to the employment of prisoners in any industry which would bring them into competition with free labor. If a liberal portion of the prisoners' earnings were devoted to the support of their families, instead of going toward the enrichment of contractors who are able, through the cheapness of the labor secured on such contracts, to undersell the manufacturer who employs free labor and at the same time the prejudice against prison made goods would be largely removed for the same reasons.

This plan would seem to be in accord with good public policy, and worthy of the careful study of every public spirited citizen, to the end that he may be in a position to use his influence toward a practical working out of the plan, and its early incorporation into our statutes.

We specially invite Good Story Matter. attention of readers to the excellent stories beginning in this issue. "A Flash from Black Embers" is a stirring Maine woods' story, complete in three issues, by a writer of standard magazine caliber. The hero of the tale is an educated young Indian who is disposed to forget the white man's unjust treatment of his own race, but treatment which vividly recalls that dark page in our country's history to which no true American likes to refer, arouses in him, like a flash from black embers, his forefathers' hatred and resentment of the white man. Thus aroused, he adopts the methods of his would-be oppressors and fights his battle to a successful issue.

In the "Romantic Life of Herbert Furlong" we are presenting a series of unusual but remarkably interesting experiences which have marked the career of this true soldier of fortune. At the advanced age of 89 years this eccentric character is well and strong, and but recently related the incidents covered in

this series to the author. The series will continue for several months, taking the reader through various countries and acquainting him with the life of a Russian soldier, with the dangers of Indian warfare and ranching in the far west, with the duties of one of Uncle Sam's detectives, and describing other experiences equally thrilling and instructive.

## OUR FIRST PAGE LETTER.

We are sending several thousand extra copies of this week's issue to farmers who are not now subscribers. We trust that each person who receives this copy will read our offer on the first page and take advantage of it and send us their order now, before they forget it. We ask that our present readers will see that their friends not taking the paper be given an opportunity of subscribing. Tell them about the very liberal offer and suggest that they send us their subscription at once.

## THE PONY CONTEST.

Master Levant Snyder, R. 3, Munith, Mich., is the winner of the Pony and Outfit. He has 461 points to his credit and we have written him for shipping directions. As soon as we hear from him with this information we will immediately ship the pony and outfit.

## HAPPENINGS OF THE WEEK.

### Foreign.

This week the announcement that an English inventor has succeeded in controlling an airship in the air by the means of an electrical current transmitted from a distance, has awakened promoters to new possibilities in the airship, especially in war circles, where it is asserted that with this new idea it will be possible to send up a ship alone and have it drop explosives wherever desired.

President Roosevelt has been visiting the land of his ancestors this past week and the Hollanders have been most liberal in bestowing upon him honor for his achievements in the western country.

A steamer sailing under a British flag left New Orleans May 1, with a cargo of guns, cannon and ammunition consigned to the former administration party of Nicaragua. The purpose of the steamer is, first, to break the blockade on the Atlantic coast of the country and then to drive the rebels away from the capitol. The outcome of the revolution will depend largely upon the success of this boat. There was much litigation before the boat was released from New Orleans by representatives of Estrada, the president of the revolutionists; but before the clearance orders could be demurred to the ship had departed.

Beginning the program of sending her battle fleet to foreign waters for a few months every summer the United States fleet will visit the Mediterranean Sea this coming season.

A movement has been organized by American capitalists to promote the wood-pulp business in Newfoundland.

Emperor William of Germany, has been much disturbed by a balloon having been struck by lightning when in mid-air. He has called scientists' attention to the incident and has asked for precautions that can be used by the pilots to prevent the recurrence of such accidents.

Contracts have been signed for the construction of a gyroscope line of transportation from the Matemiska coal fields of Alaska towards Fairbanks, over a distance of 100 miles. This will be the first practical test of the mono-rail road.

The federal district court of the Mexican government sentenced 13 out of 70 prisoners to terms of from four to six years in prison, for aiding in a revolutionary movement started in 1906. The plot for the revolution was planned at St. Louis, Mo.

Troops in Quintana Roo, Mexico, were attacked by Indians, three of the soldiers being killed and one taken prisoner.

Two missionaries of the Presbyterian church were the victims of cannibals on Savage Island, one of the group of Tonga Islands in the south seas.

Bjornstjerne Bjornson, the great Norwegian writer who has been designated as the "Victor Hugo of the North," and was awarded the Nobel prize a few years ago for the best essay on the subject of Peace, died last week. Norway declared a national holiday in honor of the distinguished writer.

Commander Robert E. Peary is now in London, Eng., where he appears before the Royal Geological Society.

The Cuban house of representatives passed a bill changing the elections from July to December when the congressional elections are held. The body also put through a measure refusing to recognize parties organized upon racial lines. President Gomez signed both bills.

Many persons were killed and many others wounded by a cyclone which passed over the unfortunate city of Messina, Sicily.

Germany has frustrated an attempt by the Turkish government to secure \$3,000,000 deposited by Abdul Hamid, former sultan, with a German bank. The money was to be released only upon the presentation of a secret seal and as the Ottoman government was unable to produce this seal the banking institution would not give over the money.

### National.

A complaint has been filed against 19 express companies by the board of railway commissioners of the state of Kansas with the interstate commerce commission

asking for a change in the rules of the companies regulating the shipping of poultry. The industry is suffering greatly under the present rules and rates according to the complaining parties.

Both the house and senate of our federal congress have passed a bill establishing a bureau of mines in the department of the interior. Besides carrying on the work formerly done by the geological survey the bureau will have charge of the investigation of mine explosions.

Edward Payson Weston, the 71-year-old pedestrian who has accomplished some remarkable walking feats during his life, finished a trip of 3,611 miles from Los Angeles, Cal., to New York in 77 days, or 13 days less than scheduled time, on Monday. The average daily walk for the entire trip was over 46 miles. His longest day's journey was 70 miles.

Buffalo will entertain the united convention of the Irish league next September, when John Redmond, member of the English parliament and leader of the Irish party, will attend.

A decision by the court of claims at Washington, renders a tax upon certain legacies made under a statute passed by congress during the Spanish-American war, void, and as a result the \$5,000,000 collected will be returned.

The Columbia grand jury having in hand the inquiry into methods of bucket shop operators, has increased the number of indictments to 29 and others are said to be forthcoming.

Prince Tsai Tao, who is at the head of the Chinese army and is now making a visit to this country to secure information to aid him in remodeling the Chinese army. He is now in the east looking over Sandy Hook, West Point and other places of military interest.

Allan N. Armstrong, former warden of Michigan state prison at Jackson, and who confessed to accepting a bribe, was fined \$5,000 and sentenced to a term of one year in the Detroit House of Correction by the Jackson county circuit court, Monday.

The United States senate is considering the administration railway measure this week.

Congress has empowered the states of Michigan, Indiana, Illinois and Wisconsin to determine the jurisdiction of the courts of the different states as regards crimes committed on Lake Michigan.

The higher cost of materials, advance in wages and increased taxation rates are given as the reason for the conference of representatives of trunk line railroads doing business between the Mississippi and the Atlantic coast where increased rates are under consideration. Both water and rail routes are concerned. After the recommendations of the road are ready it will be the duty of the interstate commerce commission to pass upon the propriety of the changes.

The United States supreme court ordered the dissolution of the Grenada lumber company of Mississippi on the ground that it was organized in restraint of trade.

## CROP AND MARKET NOTES.

Emmet Co., April 26.—The weather for April has been ideal, both for the progress of farm work and the growth of vegetation. There has been sufficient precipitation to maintain ideal moisture conditions, but not enough to interfere materially with the work of fitting ground and seeding. Do not remember of a season in which winter grain and new seedings started out better than is the case the present season. Indications are that we shall have a good hay crop once again after several seasons of comparative failures. So far as I have heard, there has been good results with spring pigs, but the supply is entirely inadequate to the demand. Prices paid, \$6@8 per pair. Some turned stock out as soon as the snow was off but the grass has only just attained sufficient growth to yield much feed. Oats and pea seeding about finished and some potatoes planted. No fruit buds open yet and will not be for several days yet. One snow storm and some freezing during the month, but no injury observed so far. Fruit trees of all kinds are showing up well with fruit buds. Pork, 11½¢; chickens, 17¢; butter, 28¢@30¢.

Iosco Co., April 25.—Spring opened the first of March and many farmers got their oats sowed. Wheat and rye came out in excellent condition. A few light frosts did no serious damage. Many farmers have their seeding nearly done. We have been getting plenty of cold northeast rains the past two weeks. Market quotations are: Hay, \$12; potatoes, 15¢; eggs, 18¢; butter, 25¢; oats, 50¢; cows, \$40@50; horses very scarce and high.

Northern Isabella and Southern Clare Co.'s, April 27.—A fine downpour of rain which was needed. Spring work four weeks ahead of former years. Oat sowing practically done and peas mostly sown. Sheep shearing is being done and the wool market about 2¢ lower than a year ago. Potatoes a drug on the market. Hay \$2 to \$4 cheaper than a month ago. Beans 75¢ a bu. cheaper than a year ago and less acreage will be planted this year. Lots of barn building being done and the round roof the kind being built. Carpenters scarce, also farm labor. Horses and milch cows in good demand.

Gratiot Co., April 27.—The first heavy rain of the season fell on the night of the 16th and though the ground was dry enough rain fell to soak below the plow. The following week was cold every day with searching wind and snow flurries on Saturday and Sunday night, the 23rd. Heavy rain fell Sunday night and all day Monday, the 25th and 26th. Too wet to work ground that is plowed and even to plow on heavy soil. This morning, the 27th, it has cleared and warmer without a freeze during the ten days of weather. Fruit trees, i. e., apples, seem ready to burst into full bloom, as they have for several days. They seem wait-

(Continued on page 510).



# Magazine Section

LITERATURE  
POETRY  
HISTORY and  
INFORMATION

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

The FARM BOY  
and GIRL  
SCIENTIFIC and  
MECHANICAL

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

## A FLASH FROM BLACK EMBERS.

BY HOLMAN F. DAY.

DAVE MURTHA, game warden, found a head wind cuffing white-caps toward him down the length of Telos when he paddled from the shelter of the dead-water into the lake. He pulled his canoe ashore, brewed his noon-day dish of tea, ate his lunch and slept in the sun all the warm September afternoon. Those whose business takes them daily in canoes along the northern lakes are accustomed to this owl-like mode of living. They sleep daytimes and let the head winds pipe. They paddle night-times under the stars, when the winds are hushed and the waters are still.

He was away again at dusk, skirting the dim shores so closely that he could hear the lap of expiring waves splashing the rocks. It was merely canoe-man's habit that sent him edging the shore line. He was not "gum-shoeing" the north country. The new state law required him to visit all lumber camps and confiscate the guns and rifles that he found in the possession of non-residents. The faithfulness of his quest was attested by a dozen weapons stowed away in his canoe. That same faithfulness caused him to halt at sight of a camp fire flickering near him on the shore when he rounded a headland; it sent him ashore to investigate.

A man crouched near the fire, feeding fagots to it. The warden promptly noted that it was not an ordinary cook fire. A little funnel of hemlock bark led its smoke to a sort of box, also built of bark.

He sniffed the odor of flesh in the smoke that eddied and wreathed from the crannies of the bark box. His quick eye saw a portion of a deer's carcass hanging from a tree near by. And when the man lifted his head at sound of the warden's approach, the firelight showed the unmistakable swarthy of an Indian. He stood up and replied courteously to Murtha's rather gruff greeting.

Murtha thought he knew most of the Penobscots. From time to time he had met those men of the tribe who came north as guides in the game season. He did not know this young man, lithe, tall and neatly garbed in corduroy. It was plain that the young man did not know the warden, either, for he showed no signs of the culprit detected. Murtha's little blue badge was well hidden under the lapel of his waistcoat.

"Pas'maquod, eh?" inquired Murtha, with that half-contemptuous inflection of pidgin-English in his tone that so well characterizes the attitude of the white man toward all those whose skin is darker.

"No," replied the young man civilly; "Penobscot."

"How it come no see 'um at Old Town?"

"I have been away at school and at college ever since I was quite young," said the Indian gazing down on the sturdy warden from his six feet of erect young manhood. "My church has been very kind to me." His voice had that even tone of assurance that education gives. The quick ear of Murtha noted that much and his equally quick eye had seen the flicker of amusement that played over the young man's countenance when he had put that question in patois.

"Oh, Injun loaded with books," he growled resentfully, feeling suddenly inferior, and surprised and ashamed because he felt so.

"Some people who do not care very much about book-learning are interested in the more common topics of

sport," said the young man. "You have heard about me when I played base ball in the National league."

Murtha narrowed his eyes, puckered his brows and squinted at the Indian.

here beside me," he said hospitably, "you may help yourself to some fresh venison. There are some good cuts left on the carcass. I am smoking the rest of it."

Warden Murtha looked at the arms



"I Believe they Did Call me That."

studying him as he stood there in the flare of the little fire.

"You mean to tell me you're the chap the papers called 'Big Thunder'?" he demanded.

"I believe they did call me that. My name is Francis Nicola," replied the Indian, quietly.

He squatted and began to feed his fire again. "If you are thinking of camping

and shoulders of the young giant and decided that he was not yet ready to show his badge and attempt arrest. He had arrested educated men, who had promptly paid, with appeal that the matter should not be made public. He had arrested Indians who had not paid and who had meekly gone to jail. But the combination before him—an educated Indian who seemed so entirely at ease about his

illegal business—made him want to study the temper of his destined prisoner. He looked at the Indian's rifle and stared into the night about them and reflected that education and civilization did not always make good Indians.

"Are you in the woods on business or pleasure?" asked Nicola, and added with a bit of chuckle, "I suppose it is the blood of my French Canadian mother that makes me gossipy. She was an Acadian and was descended from the Cyrs who escaped from the English at Grand Pre and fled up the St. John to the Madawaska country. I suppose you have read 'Evangeline'?"

"No, can't say I have," replied the warden. "I ain't no hand to read novels. Timber explorin' is my line, and I calculate when I tote along enough to eat I ain't got no room for books." He had determined to lie about his business. "I'm cruisin' for the Great Northern Pulp Company."

"My father says that company is taking everything large enough to hold up a spruce bud, and is robbing the squirrels!" There was bitterness in the young man's tone. "The saw mills were bad enough as forest hogs. The pulp mills are worse."

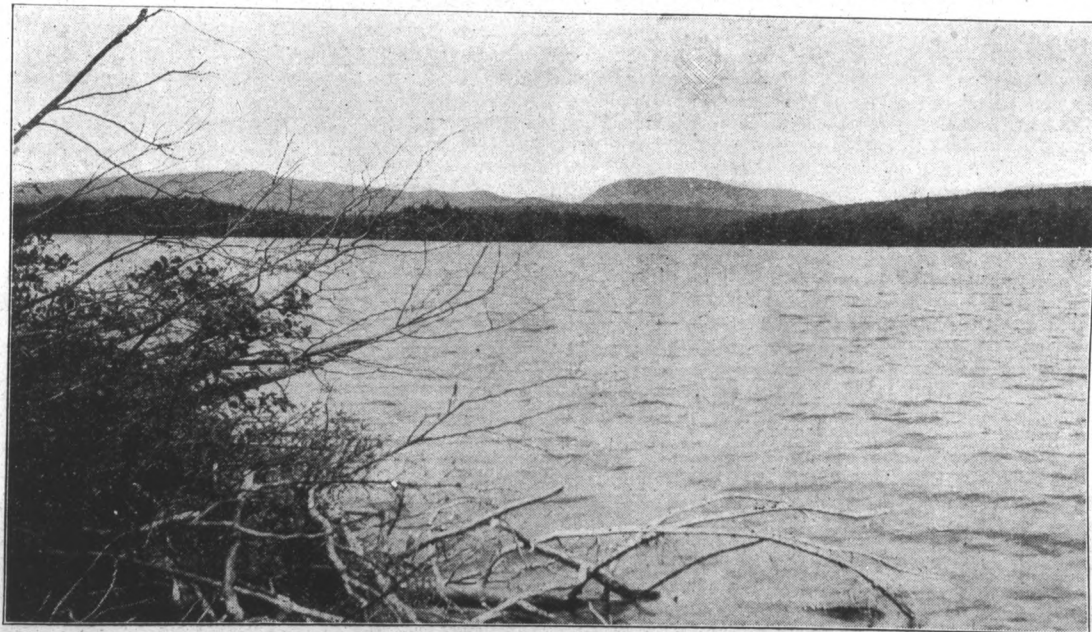
"I suppose if Injuns had their way," retorted the warden, "there wouldn't be anything cut except to make bows and arrows and basket stuff. There wouldn't be much enterprise in this world if it was left to Injuns to make it."

"Probably the white men and the Indians will never agree on what makes this world worth living in," the young man replied, sighing. "It's not worth while for us to argue it. My fathers were here in these woods when yours came—and they argued—and the last state census gave five hundred thousand white population, and less than three hundred Indians. These figures would seem to settle the argument. But during the last ten days I've been thinking about it as I have tramped through the wreck of woods. I have promised to make for a friend in the city who has been kind to me a canoe of birch bark, as my great-grandfather Polysusep made them. I have walked ten days to find a birch large enough. I have not found one. I shall walk more, for I made the promise. I came with food for a week. I went hungry three days. So I have stopped here to prepare more food. I shall search until I find the tree—but it seems hard that when the Indians gave all to the white man and have asked for so little from the woods, the white man has not even left one tree that is fit for the Indian's uses."

"There's something the matter with a man that wants to fool with a birch bark canoe in these days of canvas ones," snorted the warden. "I wouldn't swap my canvas canoe, there, for a whole carload of birch ones, and there's the whole difference between white men and Injuns right there in that canoe proposition. Your old bow and arrow grandfathers"—He was plainly ripe for disputatious contention, but the other checked him gravely.

"I don't care to argue the question from the standpoint of utility for it will not be profitable. You had better frizzle some of the venison, sir."

"How comes it, Mister Nicola, that you are shooting deer in close time?" asked the warden. There was anger in his voice and the



On Telos.



young man gazed at him with some wonderment.

"I needed the food," he answered.

"That ain't defense in law," declared Murtha.

"Seeing that an Indian is not allowed to vote and assist in making the laws of this state, that he controlled before the white man came and took it away from him, I have not decided in my mind that the Indian is bound to accept the law. But that is a bit too broad a question for us to discuss, Mr. Explorer. I simply suggest it, seeing that you mention law. But I base my complete right to this deer on something more definite." The warden sat down and stared at him over the little fire. "My father has the leather bag of our tribe that holds all the papers. There is a treaty in it between the Algonquins and Colonel John Allen, acting for the government of the States, whereby the right is conceded to the Indians of our tribe to fish the waters and hunt the woods of this state forever and at any time. Therefore, I have the right to shoot a deer for food whenever I see fit."

"But—I've"—the game warden choked back the damaging ego and blurted, "There've been Injuns arrested and put in jail by the dozen for killing game in close time."

"I know it—and the treaty has been broken thereby," said the Indian. "If we had been more powerful, the treaty rights would have been understood and we should have been protected. If we had had money to carry the case to the high courts or to the government at Washington we should have won, or the government would have stood convicted of being a dishonorable cheat."

"I never heard anything about Injuns bein' allowed to hunt and fish when they wanted to," insisted the warden, "and if there was any such writin' I reckon the folks who make the laws would have heard of it."

"There is plenty of true justice in this world that is never heard of," said the young man.

"So you are goin' right on and kill a deer any time you want to?"

"I shall not kill a deer for wanton sport, like the city men to whom this state sells the right," declared Nicola. "But when I am hungry, I shall do as my fathers did before me. I shall kill the game that the Great Father put into these woods for us."

"P'raps you'll be tellin' the other Indians about that treaty?" suggested Murtha.

"The older ones know about it. I shall advise the younger ones to use their rights, and if harm comes to them I hope to be able to help them make enough noise in the world about it so that the white man will listen and be ashamed. And if I can do that much I will thank God for my education and for the friends in high places that I have made."

Murtha drew back from the circle of the fire's radiance for he feared that his thoughts at that moment might tell a story on his face. The equipage of this Indian, his calm assumption of superiority, his bold declaration of outlawry infuriated the warden who had long made fetish of duty. And in order to compose himself he went to his canoe and brought his blankets and spread a bed for the night at a respectful distance from Nicola's fire.

The Indian suddenly became saturnine, crouched and fed his fire with fagots and dry fungi. The warden simulated slumber.

After a time Nicola banked his smoke fire with damp moss, buttoned his jacket closely and lay down with his head upon his knapsack and went to sleep with the stolidity of his forbears.

Murtha had planned his coup. He had no intention of shirking his duty. A poacher who boasted that he himself should kill and should encourage others to kill would be a capture worth bringing to the attention of the chairman of the State Game Commission.

Moving with the noiselessness of a cat, in his moccasins, the warden secured two pieces of rope from the little stock in his canoe and carefully arranged them with slip noose and catch knot. He crept close to the Indian. Nicola lay on his back with feet close together. Murtha looped one piece of rope on his arm, its noose ready. He softly slid the end of the other rope under his victim's legs, the unevenness of the ground allowing this, made his noose and then, standing astride the young man's body, brought the rope taut with a violent jerk. As he had reckoned, Nicola came into a sitting posture with a snap, and Murtha dropped his other noose over his body to his elbows and drew it close, with foot against the Indian's breast. He had his man!

"Who am I?" he shouted, breaking upon Nicola's amazed questions; "I'm Dave Murtha, the game warden, and we'll see how much poachin' you'll do for the next few months after the judge gets done with you."

"Then you lied to me, white man fashion," said the Indian. "You would not have arrested a city sportsman in this way, Warden Murtha."

"Dealin' with Injuns—even booklearned Injuns—ain't like dealin' with white men; never was and never will be," returned the officer brutally. "Now you can either hop down to that canoe of mine, with me a-holt of you, or you can be dragged down and your clothes spoilt, either way you pick."

"If you will help me to stand up, I will go to your canoe. If you will take off these ropes I will give you my word to go with you to town. It is time to test

the matter that I spoke of you to you. I would like to know whether the white man's court will deny the white man's treaty."

"Them ropes stay on," said the warden doggedly. "An Injun has got to take Injun medicine."

"Then," gritted the young man, "if you will not accept me as a gentleman and take my word as such, I give you fair warning that I shall play this game on your own dirty basis. If a white man forgets that these are not the days of King Philip's war, then an Indian can forget, too."

"I'll risk you," retorted the warden scornfully. "By the time I've fixed the rest of these knots you can start in and play any kind of a game you're a mind to. Now will you go to that canoe by yourself or be sacked there?"

(Continued next week.)

## ROMANTIC LIFE of HERBERT FURLONG.

### Thrilling Experiences of a Soldier of Fortune, Ranchman and Federal Detective.

Hale and Hearty at 89, he is Living the Life of a Recluse within the Confines of the Peninsular State.

BY J. W. GRAND.

Alone in a little cottage, near the bluffs, six miles from South Haven, secluded from view by a closely wooded bush, lives Herbert Furlong, a white haired and venerable man, once well known and of an adventurous spirit. Through misfortunes not his own, and mistrust of humanity, he sought the seclusion of the cabin which he now occupies. One day, a few years ago, it became rumored about that the old man had money, and robbers visited his cabin. In the struggle with them the recluse was severely injured. Shortly after this a huge black dog strayed into the cabin. The animal was given some meat, and thenceforward became the inseparable friend and companion of the aged man. The dog, like Mr. Furlong, is getting pretty old, but almost any day can be seen standing on the top of a chicken coop, which commands a view in every direction. At the approach of a stranger, the animal sets up a growl of anger, which always brings the old man to the door of his cabin with a gun concealed behind him. He is ever on the alert for robbers since his first experience with them, and declares that if another encounter ever takes place the bandits will most certainly come out second best. Since he moved into his dreary home, Mr. Furlong declares he has not once found it necessary to summon a physician, nor has he suffered from any serious illness in spite of his waning years.

"I follow mental science," he declared in explaining his good health. "It has saved my life many a time. People have often come to me and asked that I use my methods on them for their ailments, but I am powerless to give them aid. They must concentrate their own minds on their sufferings if they ever hope to be cured."

"I may be taken for an old man, and indeed, I am. But I want to tell you that I am as active as most young fellows. Whenever I get excited my nerves get as strong as steel. I can feel my muscles fairly swell."

"Why, yes, I have had a romantic experience in life. I will relate to you a little bit of my history. I am an Englishman by birth and was born in Sussex, England, August 22, 1821, and came to America in 1849. I was left an orphan at the age of five and through the assistance of a distant relative I received a college, military and civil engineering education, and secured a position in a Lancashire cotton weaving establishment which I retained two years, marrying in the interval. But a natural love for a nomadic life, together with a strong desire for adventure, has led me to many strange places in my own land. Adventures I had had, which at the time were exciting enough, but afterwards seemed to lack that very spicy spell of hair-breadth escape which had pervaded almost every narrative of adventure which I had read. I had reached a conclusion, "Nothing new under the sun," when the bright idea occurred to me that perhaps in another hemisphere I might meet with adventures rare and new, besides adding to my knowledge of men and manners. Accordingly I booked as second engineer on one of the steamers plying between Liverpool and New York.

"Nothing occurred to mar the delightful voyage until we were three days out, when the chief engineer came down and told us that a stowaway had been found on

board. I didn't wait to hear any more, but was on deck like a skyrocket; there I did see a sight, and no mistake. Every man-Jack o' the crew, and what passengers we had aboard, were all in a ring on the fo-castle and in the middle stood the first mate looking as black as thunder. Right in front of him, looking a regular mite among all those big fellows, was a little bit of a lad not ten years old, ragged as a scare-crow, but with bright curly hair and a bonny little face, if it hadn't been so woefully thin and pale. But, bless your soul, to see the way that little chap held his head up and looked about him, you would have thought the whole ship belonged to him. The mate was a great hulkin' black-bearded fellow with a look that would have frightened a horse, and a voice fit to make one jump through a key-hole; but the youngster was not a bit afraid. He stood straight up and looked him full in the face with those bright, clear eyes of his, for all the world as if he was the Prince of Wales himself. Folks did say afterwards," lowering his voice to a whisper, "that he came of better blood than he ought; and for my part I'm rather of that way of thinking myself, for I never saw a common street Arab (as they call him now) carry it off like him. You might have heard a pin drop as the mate spoke. 'Well, you young whelp,' he said in his grimmest voice, 'what brought you here?' 'It was my step-father done it,' replied the boy in a weak little voice, but as steady as could be. 'Father's dead and mother's married again, and my new father stowed me away when nobody wan't lookin', and gave me some grub to keep me goin' for a day or two till I got to sea. He says I'm to go to Aunt Jane at Hartford; and here's her address.'

"And with that he slips his hand into the breast of his shirt and brings out a scrap of paper, awfully dirty and crumpled up, but with the address on it right enough.

"We all believed every word of it, even without the paper; for his look and his voice and the way he spoke were enough to show that there wasn't a penny's worth of lying in his whole body. But the mate didn't seem to swallow the yarn at all; he only shrugged his shoulders with a kind of grin, as much as to say, 'I'm too old a bird to be caught with that kind of chaff;' and then he said to him: 'Look here, my lad, that's all very fine, but it won't do here—some of these men o' mine are in the secret, and I mean to have it out of 'em. Now you just point out the man as stowed you away and fed you, this very minute; if you don't it'll be the worse for you!'

"The boy looked up in his bright, fearless way (it did my heart good to look at him, the brave little chap) and said very quietly, 'I've told you the truth; ain't got no more to say.'

"The mate said nothing but looked at him a minute, as if he could see clear through him; then he faced around to the men, looking blacker than ever. 'Reeve a rope to the yard!' he sings out, loud enough to raise the dead, 'smart now!'

"The men all looked at each other as much as to say, 'What on earth's a-comin' now?' But aboard ship, of course, when you are told to do a thing, you've got to do it! so the rope was rove in a jiffy.

"Now, my lad," says the mate, in a hard, square, kind of voice, that made every word seem like fitting a stone into a wall, 'you see that rope? Well, I'll give you ten minutes to confess,' and he took out his watch and held it in his hand, 'and if you don't tell the truth before the time is up, I'll hang you like a dog.'

"The crew all stared at each other as if they couldn't believe their ears. I didn't believe mine, I can tell you. Then a low growl went up among them like a wild beast awaking out of a nap.

"Silence there!" shouts the mate in a voice like the roar of the nor'easter. 'Stand by to run for'ard,' and with his own hand he puts the noose around the boy's neck. The little fellow never flinched a bit; but there were some among the sailors (big chaps that could have felled an ox) as shook like leaves in the wind. As for me, I bethought myself of my little curly lad at home, and how it would be if anyone was to go to hang him. At the very thought of it I tingled all over, and my fingers clenched themselves as if they were a gripping somebody's throat. I clutched hold of a hand-spike and held it behind my back all ready.

"Herb," whispers the chief engineer to me, 'd'ye think he really means to do it?'

"I don't know," said I, through my teeth; 'but if he does, he shall go first, if I swing for it.'

"I've been in many an ugly scrape in my time, but I never felt half as bad as I did then. Every minute seemed as long as a dozen; and the tick of the mate's watch pricked my ears like a pin. The men were very quiet, but there was a desperate look on some of their faces and I noticed that three or four of them kept edging forward to where the mate was standing, in a way that meant mischief. As for me, I'd made up my mind that if he did go to hang that poor little chap, I'd kill him on the spot, and take my chance.

"Eight minutes!" says the mate, his great deep voice breaking in upon the silence like the toll of a funeral bell. 'If you've got anything to confess, my lad, you'd best be out with it, for yer time's nearly up.'

"I've told you the truth," answered the boy, very pale, but as firm as ever. 'May I say my prayers, please?'

"The mate nodded, and down goes the poor little chap on his knees (with that infernal rope about his neck all the time), and put up his little hands to pray. I couldn't make out what he said (fact, my head was in such a whirl that I'd hardly have known my own name), but I'll be bound God heard it, every word. Then he up on his feet again and puts his hands behind him, and says to the mate, very quietly, 'I'm ready.'

"And then, sir, the mate's hard grim face broke up all at once, like you see the ice on the Baltic. He snatched up the boy in his arms and kissed him and burst out crying like a child; and I think there was not one of us that didn't do the same. I know I did for one.

"God bless you, my boy," says he, smoothing the child's hair with his great hard hand. 'You're a true Englishman, every inch of you; you wouldn't tell a lie to save your life. Well, if so be as yer father's cast yer off, I'll be yer father from this day forth, and if I ever forget you, then may God forget me.' And he kept his word, for I corresponded with the mate for ten years afterward.

"I did not make the return voyage but remained in New York to look around a bit."

(The second installment in this series of remarkable experiences will appear in our next Magazine Section, and will describe a thrilling incident in this interesting character's brief farming experience in New England.—Eds.)

### SOME MORE HIGH LIVING.

BY GERTRUDE MC KENZIE.

Secretary Wilson is quoted as saying that the toad will eat \$19.40 worth of insects. Wonder if the toad suffers from the increased cost of living, too?—News Item.

The little toad  
Can eat a load  
Of bugs and flies that's quite immense.  
Just try to count  
The cost—amount—  
It's nineteen dollars forty cents!

I wonder, now,  
Exactly how  
Our Secretary knows this sum?  
Do Bradstreets dwell  
Mid flies, to tell  
Their valuation as they come?

The toad, say I,  
Lives far too high—  
He lives at an expensive pitch;  
Eats costly flies,  
And plainly tries,  
I think, to toady to the rich!



## THAT BOTHERSOME BOY.

BY DORA H. STOCKMAN.

With a shout, at first day-break, he climbs on my bed,  
And jumps up and down on my chest,  
Just as I turn over to get a short snooze,  
To steal the last few moments' rest.

After breakfast he uses the dining-room chairs  
For his locomotive and cars,  
And he takes the new pie-tins to slide down the stairs  
Regardless of scratches and mars.



The windows show prints of small buttery hands,  
On the porch are his little mud pies,  
A horse on three legs, and a wheel-less cart,  
A doll minus both of its eyes.

His toys are scattered from basement to roof,  
A rubber cat yawns in the dark  
When, to humor his whim, I meander about  
For his drink, as a midnight lark.

My rich neighbor's house looks as neat as a pin.  
It is quiet as quiet can be,  
What wouldn't she give to change places awhile  
And hear his glad frolicsome glee.

Go to sleep, little lad. And to happiest dreams  
With angel playmates, a harp for a toy;  
But be sure to come back, for life would be drear  
Without that dear bothersome boy.

## LOUISA MAY ALCOTT, A FRIEND OF CHILDREN.

BY MAE Y. MAHAFFY.

On March 6, 1888, twenty-two years ago, in good old Boston town, the noble life of Louisa May Alcott came to a close, and hundreds of homes were saddened by the thought that no more of her charming, wholesome stories for children would be forthcoming.

Miss Alcott was born Nov. 29, 1832, at Germantown, Pa., the daughter of Amos Bronson Alcott, cultivated but penniless teacher, philosopher, lecturer and writer, who had married the only daughter of the May family of Boston, a couple of years previous. Three other daughters followed Louisa into the humble home of the Alcotts. Struggling vainly against poverty and criticism, the father found it impossible to satisfactorily care for his little brood. His ideals were high—too high to be appreciated by a majority at that time, though slowly but surely many of

them are being recognized now as of genuine worth. At last the family moved to Concord, and among such gifted men as Emerson, Thoreau and Hawthorne, Mr. Alcott reared and educated his daughters.

Despite their poverty, their lives were never given over to sadness or despair. There was ever a cheering word from the little mother when times seemed particularly bad, and many a sorrowful experience was forgotten in the joys of preparing some makeshift for a stage upon which to conduct plays for the amusement of their own and neighboring families. Everything which could be turned into merriment was eagerly grasped, and Louisa grew up with a bright face, a keen wit, and a readiness to make the best of life under whatsoever circumstances.

At an early age she began telling imaginary tales to her playmates, and writing them out in the hope of some day being able to earn her living in this manner. However, she began this role in what seemed a more practical mode, that of teaching, which she followed at various periods, along with nursing, acting as governess, sewing and writing until her 30th year. Her writings up to this time had been largely florid or sensational, and were useful from a financial standpoint only, but she was determined to write something really worth while, and tired in mind and body as she must have been from the tenseness of her struggles with poverty and misfortune, she still clung to her ideals and would not admit defeat.

About this time the civil war broke out, and her sympathies were so stirred by the reports of the sufferings endured by the soldiers that she offered her services to the government as nurse, and was soon mingling her tears and smiles with the injured and dying soldiers. Here she told her cheery stories and sang her songs to hearts which warmed at her coming, and here it was that she gained the inspiration and material for her "Hospital Sketches," published in 1865, after ill health, brought on by overwork, had compelled her to return home. In an effort to regain her strength through change of scene and occupation, she went abroad as companion to an invalid woman and spent many delightful days in England, France, Germany and Switzerland.

Not long after her return, more determined than ever to make for herself a name in the literary world, she began "Little Women" at the request of a firm of publishers who wished a story for girls. Into this tale she wove the life of herself, "Jo," and her three sisters in their Concord home, and no sooner had it been published than she found herself famous. And how well this overworked teacher and kind-hearted nurse appreciated and rejoiced at her own success is shown by the lines she wrote to her publishers:

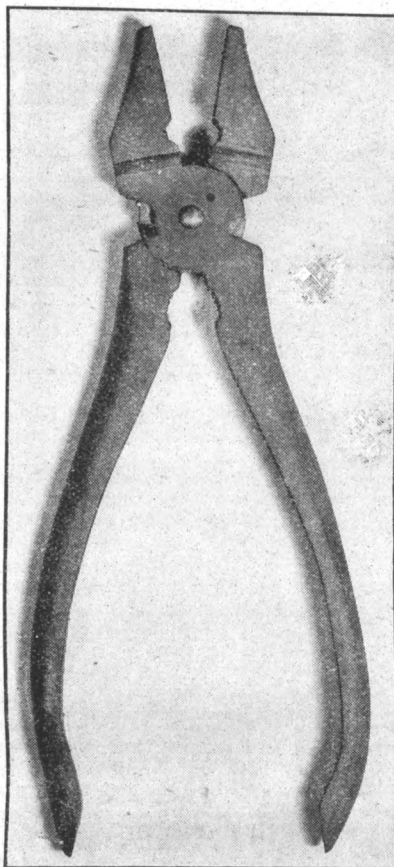
"This year, after toiling so many years along the uphill road, always a hard one to women writers, it is peculiarly grateful to me to find the way growing easier at last, with pleasant little surprises blossoming on either side, and the rough places made smooth."

How sweet and unassuming such words! How full of earnest thanksgiving!

Following "Little Women" came "Little Men," "An Old-Fashioned Girl," "Under the Lilacs," etc., all winning new friends and renewed praise for their author. Boys and girls everywhere, as well as their parents, learned to love the sketches which came from the brilliant mind of

## ARE THEY OF STEEL OR WOOD?

Several very excellent examples of whittling, no doubt the result of interest created by our "Suggestions for Whittlers," published during the past winter, have been received. They are good examples of how a mere hint or suggestion will oftentimes start an intelligent and ingenious boy or young man on the road to proficiency in some particular line. The pliers pictured below are the work of Mr. Edward J. Archer, of Allegan Co., an enthusiastic whittler and a staunch friend of the Michigan Farmer. In pattern this tool is a vast improvement over the comparatively simple and rather clumsy affair, pictured and described in The Farmer of March 5, which, however, probably led Mr. Archer to attempt this piece of work. These pliers are 11 inches long and were whittled from a nice piece of whitewood, although from the picture



this tool, which is merely a toy, might easily be mistaken for the genuine steel article.

this woman who knew not the word "fail," and now, though a fifth of a century has passed since her pen was stilled, these same stories are read and re-read with eyes kindling with laughter at one moment and the next brimming over with tears.

Life even yet was by no means all sunshine to Miss Alcott. In 1877 her loyal mother, for whom she had provided with an unselfish devotion, was called home. A few years later her youngest sister, May, the "Amy" of "Little Women," who had married in Paris, followed her mother, leaving her infant daughter to Miss Alcott's care. In 1882 the gifted father, proud of his daughter's accomplishments, and "riding in her golden chariot" as he oftentimes said, was stricken with paralysis and became her constant care.

Always planning and working for others, it is little wonder that her face took on the happy, contented look which was noticeable to everyone, and which made it possible for her to say: "As I turn my face toward sunset I find so much to make the downhill journey smooth and lovely, that, like Christian, I go on my way rejoicing with a cheerful heart." And this when at times her work was wearying almost to the end of her strength. It was not unusual for her to write fourteen hours out of twenty-four, with scarcely a pause for food or rest, when her mind was filled with fancies which she was eager to place on paper.

But the life of toil and struggle was all too soon to end; the feeble body could no longer withstand the strain of care and overwork, and only a few days after the death of her distinguished father she, too, passed through the golden gates, leaving us a heritage upon which no value can be placed, a heritage of double worth because of the ambitious struggles from which it was evolved.

"The tree grows best when the dirt is oftenest stirred about the roots; perhaps the best in us comes only from such stirring."



A Bright Young Michigan Farmer who Clearly Understands that the Larger Horse Should Always be Hitched on the "Off" Side.

## It Slugs Hard

## Coffee a Sure and Powerful Bruiser.

"Let your coffee slave be denied his cup at its appointed time! Headache—sick stomach—fatigue like unto death. I know it all in myself, and have seen it in others. Strange that thinking, reasoning beings will persist in its use," says a Topeka, Kansas, man.

He says further that he did not begin drinking coffee until after he was twenty years old, and that slowly it began to poison him, and affect his hearing through his nervous system.

"Finally, I quit coffee and the conditions slowly disappeared, but one cold morning the smell of my wife's coffee was too much for me and I took a cup. Soon I was drinking my regular allowance, tearing down brain and nerves by the daily dose of the nefarious concoction.

"Later, I found my breath coming hard and frequent fits of nausea, and then I was taken down with bilious fever.

"Common sense came to me and I quit coffee for good and went back to Postum. I at once began to gain and have had no returns of my bilious symptoms, headache, dizziness, or vertigo.

"I now have health, bright thoughts, and added weight, where before there was invalidism, the blues, and a skeleton-like condition of the body.

"My brother quit coffee because of its effect on his health and now uses Postum. He could not stand the nervous strain while using coffee, but keeps well on Postum.

"Miss F., I know personally, was incapable of doing a day's work while she was using coffee. She quit it and took up Postum and is now well and has perfectly steady nerves."

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

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

## AUTOMOBILE SENSE

YOU CAN SAVE ENOUGH ON THE PURCHASE PRICE OF YOUR CAR TO MAKE THE GAS AND OIL FREE FOR SEVERAL YEARS, AND GET FROM US

ANY STANDARD Reliable High Grade MAKE

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Send for our instructive and interesting Bulletin giving prices and description of hundreds of cars.

**TIMES SQ. AUTO CO.**  
LARGEST DEALERS IN THE WORLD.

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NEW YORK.....215-17 W. 48th St.  
PHILADELPHIA.....238-40 N. Broad St.

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Handy, Automatic HAME FASTENER  
Do away with old hame strap. Horse owners and teamsters wild about them. Fasten instantly with gloves on. Outwear the harness. Money back if not satisfactory. Write today for confidential terms to agents.  
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I will furnish the advertising matter and the plans. I want one sincere, earnest man in every town and township. Farmers, Mechanics, Builders, Small business men, anyone anxious to improve his condition. Address Commercial Democracy, Dept. D 30, Elyria, Ohio.

**Wanted—Agents to sell Farmers' Account Book.**  
Quick sellers, big inducements, exclusive territory. Address L. L. SYMPHERS, Ft. Wayne, Ind.

**Beat Everybody Catching Fish**  
Get a box of Marvel Fish Lure and a Patent Marvel Automatic Hook. Write for Special Free Bait & Hook Offer now and help introduce them.  
JAPANESE NOVELTY Co., Dept. 39, Clinton, Ia

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No. 86 West Fall St., Seneca Falls, N.Y.

Always mention the Michigan Farmer when writing to advertisers.

### SMILE PROVOKERS.

Rivers—How do you pronounce that word, "taxicab?"

Brooks—The emphasis is on the "tax."

Myrtle—Papa doesn't favor your calling here at all, George.

George—Why, that can't be! Your father gave me a cigar a moment since as I came in the door.

Myrtle—All right, just wait till you smoke it!

"Your new automobile seems to be thoroughly up-to-date in every particular."

"Yes; I've got everything that goes with a first-class machine except a receipt in full from the dealer."

The conjuror was performing the ancient trick of producing eggs from a pocket handkerchief. Said he to a little fellow:

"My boy, your mother can't get eggs without a hen, can she?"

"Of course she can," replied the boy.

"Why, how is that?" asked the conjuror.

"She keeps ducks," replied the boy.

My daughter was a very little maiden and she thought that Jimmy Rye, whom she met at a party, was the very nicest boy she had ever seen.

"Mummy," she told me the morning after the party, "I want to write every day to Jimmie Rye; you know I said I would."

"All right, my dear," I answered cheerfully.

A very inky letter went off that day to Jimmie Rye. But the next day, when the small damsel had finished writing her missive, she looked up at me. "Must I pay two pennies every time I write a letter to Jimmie Rye," she asked plaintively.

"Why of course," I said.

"But if I pay two pennies every day to write to Jimmie Rye I won't have any pennies of my own."

"No, that is very true."

"Mummy," she said in a pleading voice, "won't you give me two pennies for my letter?"

"No, dear," I said, "I don't care to write to Jimmie Rye. Why should I spend my pennies on him?"

"Then," with a sigh, "I think I won't write any more letters to Jimmie Rye. He's not worth it and I'd rather have my pennies."—M. A. P.

### KINKS.

#### Kink I.—Half Duplicates.

These are all two-syllable words, and the last syllable of each forms the first syllable of the next:

1. Part of a barn.
2. An attachment of this part.
3. A part of this attachment.
4. A cover for a water supply.
5. The women's part of farm management.
6. The part of a harness that fastens to the thill.
7. Part of an old-fashioned fire.
8. A logger's tool.
9. A good apparatus for drawing water.
10. Part of a pump.
11. Food for farm animals.
12. Used in feeding animals.
13. A hard wood tree.
14. A worm injurious to trees.
15. An old-style fence.
16. Necessary part of modern fence.
17. Where to put your answers to these kinks.

#### Kink II.—Fourteen Queer Cows.

1. Kind of a cow that is despised.
2. Some have this one in their hair.
3. It was burned in Europe in 1812.
4. This one shrinks down in dread.
5. Is found in the name of a poet.
6. Lives chiefly out west.
7. Boston's first streets were built on these.
8. Is worn on the head.
9. This cow is pretty tough.
10. This cow always travels in a boat.
11. This one travels on a locomotive.
12. This one browbeats you.
13. This one burned Chicago.
14. This cow was in a famous battle.

Prizes for Straightening Kinks.—To the sender of each of the ten nearest correct answers to all of the above Kinks, we will give choice of a package of 50 post-cards of general interest, an Atlas of the World, or a book, "A Trip to the North Pole." Where contestant or some member of his family is not a regular subscriber a year's subscription (75c) must accompany answers. Answers must not reach us later than May 27, as correct solutions will be published in issue of June 4. Address answers to Puzzle Dept., Michigan Farmer.

#### Answers to April 2 Kinks.

Kink I.—Ornithology.—Jay, dove, robin, thrush, oriole, albatross and nightingale.

#### Kink II.—Double Acrostic.

M i l d e W  
A l b a n I  
R a t t a N  
C a n d i D  
H a r a S S

Kink III.—Reversions.—1. Eel, Lee. 2. Mar, ram. 3. Pins, snip. 4. Emit, time. 5. Den, Ned. 6. Ear, Rae. 7. Liar, rail. 8. Gip, pig. 9. Leek, keel. 10. Mile, Elim.

#### April 2 Prize Winners.

Only two sets of correct solutions were received. Awards are accordingly made to E. J. Archer and Mildred M. North.



## Kill Off The Crop Thieves and Poultry Pilferers

Gophers  
Weasels  
Rabbits

Hawks  
Crows  
Skunks

Wood Chucks  
Blue Jays  
Sparrows

A big family of farm pests. The four-footers outrun your dogs—the others laugh at your scarecrows. But there's one thing they can't get away from, and that is a bullet fired from a



Made by the makers of the famous Stevens Favorite single shot rifle. More Stevens sold because they shoot straighter, carry farther and hit harder on account of the extreme care used in our system of accurate rifling.

If your dealer hasn't it, we will send, (express prepaid, on receipt of List price \$8.00. Ask for Number 70.)

With this wonderfully accurate Rifle (which only weighs 4½ pounds) you can send a hailstorm of lead into the boldest weasel or the craftiest fox that ever robbed a hen coop.

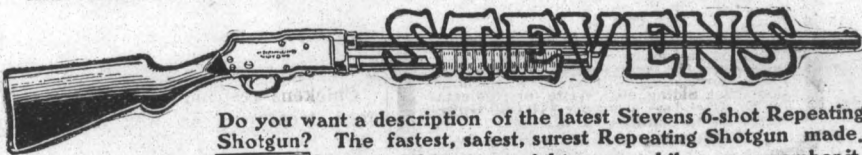
#### Two Models:

The first takes fifteen .22 Short cartridges only. The second takes any one of three cartridges—.22 Short, .22 Long and .22 Long Rifle, but the greatest accuracy is obtained in this model by using only .22 Long Rifle cartridges.

You see the cartridge go into the chamber—you know when the rifle is loaded. You don't have to think whether you have another shot or not! Each cartridge as it comes out of the magazine shows plainly before it passes along into the chamber.

We guarantee this Rifle to be the most accurate

After the first shot remember you have fourteen more lightning shots without reloading.



Do you want a description of the latest Stevens 6-shot Repeating Shotgun? The fastest, safest, surest Repeating Shotgun made. (No. 520.) List Price \$27.00. Write now; right now—while you remember it.

#### Points for the Sharpshooter, Hunter & Trapsooter:

Write us and tell us what kind of shooting you are most interested in and we will write a letter of advice with many valuable pointers for the Hunter and Sharpshooter. We will give you

short cuts to expert marksmanship, which will not only make you a better shot than you already are but will cut down your ammunition bills as well.

J. STEVENS ARMS & TOOL COMPANY, Dept. 345, CHICOPEE FALLS, MASS.

#### THE FACTORY OF PRECISION.

#### LIST PRICE OF STEVENS RIFLES

Little Scout No. 14 ..... \$2.25  
Stevens-Maynard, Jr., No. 15 ..... 3.00  
Crack Shot No. 16 ..... 4.00  
(For Young Shooters. Accurate, and made for real work).

Favorite No. 17, (the Only Boy's Rifle used by Men) ..... \$ 6.00  
Visible Loader No. 70 ..... 8.00  
Ideal Rifle No. 44 (Man's Heavy Single Shot Rifle) ..... 10.00



Benjamin Franklin taught the world what lightning really is and how to control it.



Prof. West Dodd through his invention perfected the system of lightning control.

### Prof. West Dodd's Wonderful Invention—

D. & S. Woven Copper Cable Lightning Rod and System of Installation affords the only safe and reliable protection to life and property against the terrible ravages of lightning. This positive endorsement is made by the Mutual Insurance Companies of the United States and Canada (over 2000 leading fire insurance companies).

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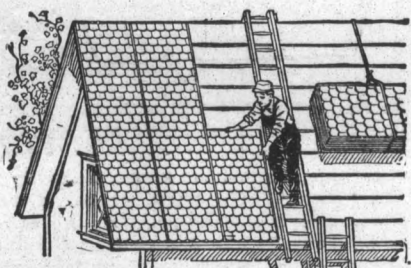
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is a wonderful food-medicine for all ages of mankind. It will make the delicate, sickly baby strong and well—will give the pale anemic girl rosy cheeks and rich, red blood. It will put flesh on the bones of the tired, overworked, thin man, and will keep the aged man or woman in condition to resist colds or pneumonia in the winter.

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Send 10c., name of paper and this ad. for our beautiful Savings Bank and Child's Sketch-Book. Each book contains a Good Luck Penny.

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An Edwards "Reo" Steel Shingle Roof will outwear four wood roofs and six composition or tar roofs. It will save from four to five times its cost. Furthermore, it is fireproof and reduces insurance rates from 10 to 20 per cent.

### Edwards "REO" Steel Shingles

require no soldering. You can lay it yourself. Need only hammer and nails. Comes in stamped sheets of finest Bessemer Steel, 5, 6, 7, 8, 9 and 10 feet long, covering width 24 inches. Furnished painted or galvanized. Factory Prices—Freight Prepaid. We are the largest makers of iron and steel roofing and pay the freight on all Steel Shingles; Plain, Corrugated, V-Crimp Roofing; Imitation Brick Siding, etc. Write for free catalog No. 450 and ask about our \$10,000 Guarantee Bond Against Lightning. (14)

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is an aid to beauty. A skin whose natural loveliness is spoiled by unsightly eruptions, pimples and blotches, is made smooth and clear by Heiskell's Ointment. Cures eczema, tetter, erysipelas, blackheads, ring worms and all other disfiguring skin diseases. After the cure use Heiskell's Medicinal Toilet Soap constantly—it keeps the skin healthy. Sold by all druggists. Write for our new booklet, "Health and Beauty."

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

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FOR BLUE LODGE FREE. Send for circular.  
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**WANTED**—Brass Molders, boys for grinding brass castings, and Helpers in brass foundry. CLAYTON & LAMBERT MFG. CO., Beaubien & Trombley Aves., Detroit, Mich.

**JUST SAY "Saw your Ad. in the Michigan Farmer"**  
when writing to our Advertisers.

(Continued from page 496).

sidered it next to a crime to sell them for market at the prices then ruling.

Hearing frequently such expressions as, "Hens eat their heads off during winter," "the poultry business is not a profitable proposition," and "unless you get pullets started to laying before cold weather sets in they will not lay before spring," I was somewhat doubtful of success. The hen-house, too, proved to be very damp all winter. The flock was practically snowed in for 100 days. I fed all of them as though they had been laying. The pullets developed wonderfully fast. They began to lay during February, when the weather was coldest and the snow deepest. Today the flock is worth any man's \$20, as against \$10 last fall.

Of course, the few 18-mos.-old hens laid all winter. The entire flock has produced, from Dec. 1, to April 15, or 4½ mos., \$27.15 worth of eggs, besides adding \$10.00 in growth. The cost of feed (charging nothing against the hens for clover hay and vegetables) was \$13.70, leaving a net profit of \$23.45, which is 234½ per cent on last fall's investment, during 4½ months.

Oceana Co.

W. D. KORB.

### SOME POULTRY OBSERVATIONS FROM THE FAR WEST.

I have been observing since I came to California, and I have also asked a great many questions whenever the opportunity offered. As a result I have learned some things that may benefit others as well as myself. One thing, it seems that poultry should be a paying project here, for at the present time ranch eggs are selling for 45 to 50 cents a dozen.

One of the first things my observation has shown me is that nearly all poultry raisers here confine themselves to one breed of fowl, instead of keeping mixed breeds. I never could see how a farmer could keep a mongrel mess of fowls around him and expect to get as good returns as his neighbor who has a fine flock of full bloods. They do it though, at least they did back in Michigan, and when you attempted to argue they insisted that the breed did not matter. Yet the very same farmer would be very particular about the breeding of his horses, and probably owned a fine herd of Jerseys.

Chickens respond to good breeding and good treatment as well as anything I have ever had experience with, and it seems to me rather weak for a farmer to breed everything as he should excepting his chickens, and then say that it doesn't matter about them. It does matter, and I think any person who will give it a fair trial will acknowledge that it does.

The breed that is kept fully as much if not more, than any other out here is the Leghorn. I have been unable to learn just why this is so. While I favor the Leghorn myself, and the white variety in particular, I have never had much experience with them where they had to be kept in yards. They are of rather a roving, restless, disposition, and it seems that there might be other breeds that would do better where they have to be confined to runs, but of this I hope to be able to speak with more authority when I have given it a trial.

One thing I have also learned is, that most of the poultry raisers here feed a mixed diet, more so, it seems to me, than other farmers I have known. I think that is one reason farmers fail with poultry. They feed whatever they happen to have a surplus of instead of taking pains to provide a variety. I have known farmers to feed their fowls corn the year around and nothing else, and they wondered why their hens did not lay. They did lay in summer, when they could run out and secure other food for themselves. It would seem as if enough had been said on this subject so that everyone would understand it, but I suppose there are farmers who do not take the pains to read their farm papers.

For green feed, during the long dry season here, many grow a patch of alfalfa. This is cut and fed to them and a small patch will provide food for quite a flock, as it grows fast. But whatever it is, fowls that are confined in runs must have something green if they are to do well, and they must have it every day and not in a haphazard manner.

Another form of poultry raising out here is pigeon farming, but I am not prepared as yet to speak of that. I hope soon to be able to get authentic information as to the methods and profits and will then endeavor to give the facts, as I learn them, for it seems as if this would be as good a business elsewhere as here in California.

IRMA B. MATTHEWS.

# Amatite ROOFING

## A Frank Statement

How many manufacturers of ready roofing will tell you frankly how their goods are made?

Mighty few.

They will talk about "secret formulas," "special waterproofing compounds," etc.—all nonsense.

They don't tell you what the goods are made of because they don't dare.

From the start we have never hesitated to tell the buying public just what Amatite is made of and just what it will do.

## How Amatite is Made

Amatite is made of two layers of Coal Tar Pitch—the greatest waterproofing material known.

Alternating with these two layers of pitch are two layers of coal-tar-saturated felt to give it tensile strength.

On top of these four layers is a real mineral surface—five layers of protection.

The mineral surface is permanent, fire proof, and absolutely requires no painting.

## It Needs No Painting

Roofings that require painting are a worry and an expense. Every year or two you have to climb up and give them a coating with some special compound sold by the manufacturers, or you are pretty sure to have a leaky roof.

## Amatite is Making Good

We are constantly receiving letters from customers telling us how satisfied they are with Amatite—how much better it is than the old-fashioned roofing.

Year after year, in all weather, Amatite will give perfect service without any painting or attention of any kind.

Surely this is the kind of service that wins and keeps customers.

## Free Samples

Before you go to your dealer and buy a roofing, we should be very glad to send you a sample, so that you can see for yourself just what we are talking about—what a solid, substantial, reliable roofing we are offering to the public.

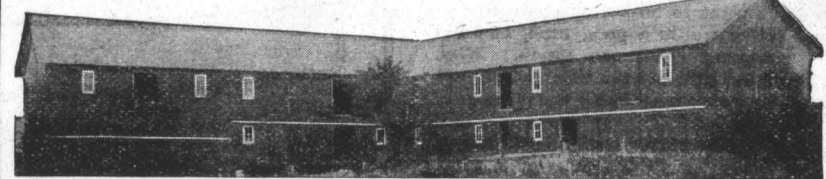
## Something Back of It

Remember, in this connection, that Amatite is made by the largest manufacturers of roofing materials in the world, and that when you buy this roofing there is something behind it. We stand back of every roll. We know we are offering the best and the most economical ready roofing on the market.

For the sample and booklet address our nearest office.

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for small farm. 150 acres, surface level, soil rich clay loam. \$3,500 worth of buildings, painted and in good condition, good fences, 25 acres of timber, remainder of farm all plow land, on a milk and mail route, telephone if desired. One mile and a quarter from village, grist-mill and etc., will leave \$6,000 on the farm at 5% if desired. Write W. E. ROBB, Howell, Michigan.

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GEORGE KOINER,  
Commissioner of Agriculture,  
RICHMOND, VA.





## WOMAN AND HER NEEDS

### Are We too Selfish to Entertain Our Friends?

"Enid, the good knight's horse stands in the court;  
Take him to stall, and give him corn, and then,  
Go to the town and buy us flesh and wine;  
And we will make us merry as we may.  
Our board is little, but our hearts are great."  
He spake: the Prince, as Enid past him, fain  
To follow, strode a stride, but Yniol caught  
His purple scarf, and held, and said,  
"Forbear!"  
Rest! the good house, tho' ruined, O my Son,  
Endures not that her guest should serve himself."

So spake the old spirit of hospitality, according to Tennyson. The present day spirit is different. Witness:

"Well, I think she had a nerve to come landing here on me and expect me to wait on her. She might know with all the work I have and two mischievous children besides. I have plenty to do without waiting on company," says the twentieth century woman. "What do folks want to go visiting for, anyway? They might know it puts the hostess out, makes her extra work and like enough extra meals. If people want to go gallivanting around let them go to a hotel and pay their board, or else work where they visit. Let them get out in the kitchen and help wash dishes and get the meals and not sit around in the parlor and play lady."

"Yes, we got a flat with only one bedroom," chuckle the newly married couple. "We don't want to be bothered with company. Wifey wants a good time, and besides, company costs too much. Why, Bill Simpkins said his relations nearly ate him out of house and home the first year he was married."

"I'm going to move next month into a smaller house," says the man of a family. "Say, as soon as summer comes they begin to arrive and as fast as one leaves another comes. Last summer we didn't eat a meal alone from May until October. Actually, our friends took possession of the house and all I did was to pay rent and grocery bills. I hadn't any rights which any of them were bound to respect. This year I'm going to take a house without an extra bedroom and if they do not take the hint, I'll break up housekeeping and we'll all board next year."

"Farmer's wives do not visit back and forth as they used to a few years ago," says one of them. "Why, ten or fifteen years ago we thought nothing of hitching up the team and the whole family starting off in the morning for an all day visit

Some of us blame the telephone, which makes it so easy to talk without exerting ourselves to travel and to cook for guests. I do not think the telephone is to blame. The spirit of selfishness and self-seeking which possesses the age is at the bottom of the matter. Many women do not want to be bothered with company, and resent the extra work which entertaining entails. They are not at all backward about saying how they feel, and from these selfish ones the disaffection has spread until everyone is tainted. A few women would

like to entertain, but their friends never visit them for fear of "putting them out." These hospitable ones feel that no one wants to visit them and, because no one ever "drops" in, they refrain from making advances for fear of a rebuff. So the heaven has worked until city and country alike are bereft of the old spirit of neighborliness, which is the charm of any country.

"It is no wonder we are growing into a nation of nervous, dyspeptic, discontented people. If we spent less time growling because other people inconvenienced us, and a little more time in being helpful and hospitable we would be healthier and happier. To be sure, we have our clubs and our parties, but they do not make up for the old-fashioned visits where two or three friends could exchange secrets and have heart to heart talks. In the words of F. Hopkinson Smith, 'Let us go back.'"

DEBORAH.

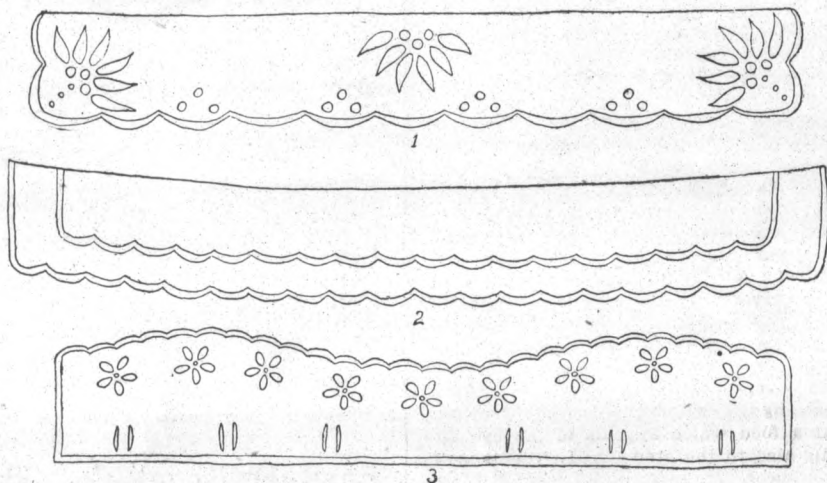
### Dainty Styles in Handmade Neckwear.

Varied and lovely are the neck fixings which dextrous fingers are turning out for wear with blouses and odd waists this spring, and which every one may possess for herself if a little time is given the subject.

As to the collars, aside from the sewed-on stock, used, as a rule, with the lingerie waists, and ordinarily composed of tucks and insertion or hand embroidery,

object. Lead pencil size is fine for the disks.

Jabots are of such numerous styles that it is difficult to choose between them, but I have endeavored to select those which could be copied without the use of patterns, and which are practicable for more than one style. Nos. 5 and 6 go together nicely, yet are complete in themselves, and may be used separately or to-



there are several shapes in use with the odd and tailored waists. The Dutch collar is still popular for young girls and matrons with plump, attractive necks.

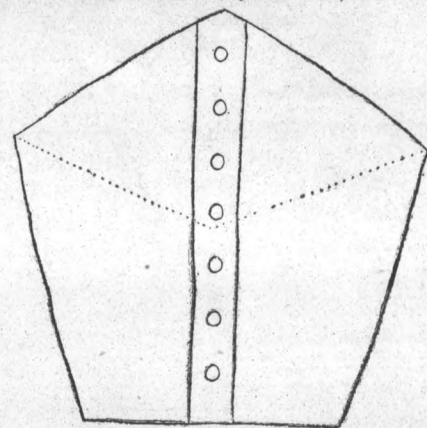
The regulation deep turn down collar, used alike with jabots, bows, ties and large brooches is shown in No. 1. The designs show only the simplest kinds of embroidery patterns, necessitating but a short time for the work; there is also the possibility that some workers may care to copy the designs offhand, or use others of similar appearance. Embroidery may be omitted by leaving the edges straight, turning the lining and front together and stitching two rows about a quarter of an inch apart. The ornamentation may then consist of medallions of embroidery or lace whipped down closely, and these may frequently be clipped out of scraps of allover or from partially worn bands. One must measure carefully the base of the neck, being sure the collars are of the correct length, two inches usually proves a good height. Set the turnovers into double bands of almost equal height.

The second collar, which fastens at the back, has a double turndown portion, opening the way for a two-color scheme, the upper being white and the lower any favorite color. Bias binding may be used instead of scallops or stitching. The upper section may be left free except where it joins the neckband, or it may be applied to the other portion.

If the edges are to be buttonholed in the stock at No. 3 place the two layers together and work through both. Buttonholes appear near the base of this collar, and are used to run string ties or narrow ribbon through, the ends being tied in prim little bows or in four-in-hand style in front. Buttonholes may be omitted and the collar worn with jabots, or even then a tie may be brought round the base. If embroidery effects are wanted but one has no time for intricate patterns, simple disks or dots worked solid, one for each scallop, or in rows, will be found quite as effective. Circles, too, worked in outline stitch, are quickly made and extremely pretty. These are sometimes interlocked and may be laid out around a thimble or other small circular

If the top is not wanted a double tab may be made by adding a shorter piece of the same shape at the dotted lines. The one shown is eight inches long from the dots to tip, two inches wide at the dots, and five inches at the widest portion.

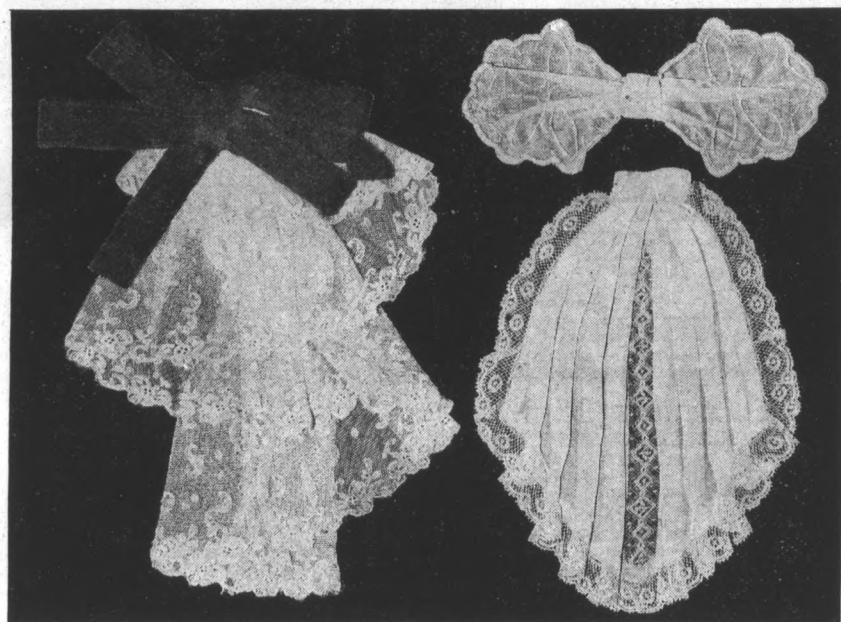
A good pattern to follow in making odd jabots is illustrated by No. 7. Any sheer fabric may be used, such as fine lawn, handkerchief linen, swiss, or bobbinet, and if handwork is out of the question as a decoration a strip of lace or embroidery insertion may be used through the center, the lawn cut away beneath, and the



No. 7.

edge finished with a frill of lace, not too full. The jabot may be of any desired size, but seven inches long and seven inches wide is good, the material tapering at the bottom to a point, or being cut upward into a shorter point at the center, as shown by the dotted lines, the top in either event measuring about four and a half inches across. A box plait is formed of the central strip, and four or five small side plaits laid away from it on either side. After basting the plaits into position iron them down well under a dampened cloth, so that they will not lose their shape readily. The top is held up close and bound with an inch-wide bit of the fabric. A complete jabot of this character appears at No. 8.

No other form of jabots seem quite so well liked as the cascades of lace or net. Soft lace three or four inches wide is used, and if bobbinet is to take its place it must be hemmed neatly or edged with narrow lace. A strip of plain muslin is needed for the background about ten inches wide, the lace is fulled slightly and sewed upon this strip, beginning at the pointed bottom and zigzagging toward the top, as shown by the dotted lines in No. 4. These may be long enough to reach nearly to the waist line or shortened, coming just to the bust. The top is hidden by a brooch, or a bow to match is worn. Sometimes many looped bows of velvet ribbon are used as in No. 9.



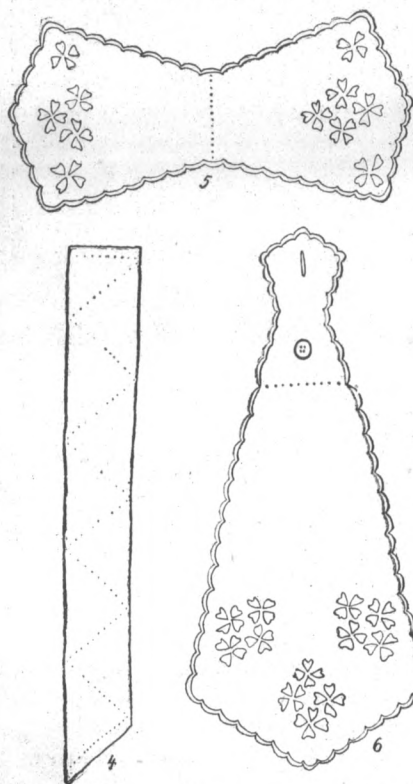
No. 9.

No. 10 Above. No. 8. Below.

Any of the decorations already mentioned may be used. Ovals of outlining similar to those in the bow pictured at No. 10 are good. If the scalloped edge is impossible make a narrow hem and finish with a narrow lace or edging or footing. Gather through the dotted line and bind with a strip of the material about an inch wide.

The jabot in No. 6 may end where the dotted lines are placed below the button or be extended to turn down and button over the bow in lieu of binding it with a straight strip. In finishing the edge this portion of the work should be turned so as to be right side out when buttoned.

Next in popularity just now one must mention the frill used to give the needed dressy touch to plain waists. These may be made of chiffon, net, lawn, fine linen, the waisting material itself, particularly when the lovely crossed barred dimities are used, or of lace or fine embroidery edging of sufficient width. They are sometimes made in double ruffles, one a trifle narrower than the other, and frequently the plain fabrics are buttonholed along the edge in some color or white. Or, they may be hemstitched or lace trimmed. They may be made to reach to the waist line or only part way, as desired, and be used straight down one



without sending word. Nobody took offense or felt put out. But now we never go without an invitation, nor we never have company without knowing it beforehand. I scarcely ever see any of the women I know except at church or at town. We telephone occasionally, but that is the extent of our visiting."



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side of the front, or along the edge of waists opening on the side. If for a buttoned waist the ruffle may be set into a straight strip with buttonholes worked to correspond to those of the waist, and it is then buttoned onto the waist before it is closed, the bosom piece fastening right over the strip afterward. Others have an ornamental strip or embroidered insertion, hand embroidery, or tucked strips of the goods, and these are usually placed over the waist fastening. Four inches wide at the top, tapering to two inches at the bottom is about the right proportions to follow in width.

MAE Y. MAHAFFY.

### SALAD VEGETABLES, THEIR VALUE AND PREPARATION. No. 14.

BY MRS. ALTA L. LITTELL.

**B**ESIDES the vegetables which are ment they contain, we eat many used principally for the nourishment which contain little or no nourishment, but which make our meals much more palatable by their pleasant flavor. A palatable meal is much more easily digested than one that we do not relish, so these vegetables would fill a great need of the human system had they no other value. They are valuable for another reason, however, and that is that they contain a large quantity of water, and also vegetable salts which the body needs. As they are most easily obtained in summer when the system needs more water to make up the waste by perspiration, these vegetables are very useful and at least one should be served daily.

They are often called salad vegetables, because they most frequently appear as salads. First, in the quantity used, would probably come lettuce and then follows watercress, endive, cucumbers and tomatoes. Besides these, which are used so much in salads, we have asparagus which is 94 per cent water, spinach, 92.3 per cent, and mushrooms, 88.1 per cent water.

The great fault of many housewives in serving salads is the lack of care to serve the vegetable crisp and cold. A leaf of crisp, fresh lettuce not only looks more tempting than a wilted one, but is more digestible, because of the principle that a food which appeals to the eye appeals also to the stomach. Lettuce should be allowed to stand in ice water if you have it, if not, in the coldest water obtainable until it is fresh and crisp, usually a half hour is long enough, then drained and dried before serving. A good way to dry it is to put it in a bag made from some thin white cloth, and allow it to hang where it will be cold, in the ice box if you have one, if not in a cold cellar.

Every housewife has her favorite way of serving lettuce. One of the best is with a dash of salt and pepper, and olive oil and vinegar. Allow twice as much olive oil as you do vinegar.

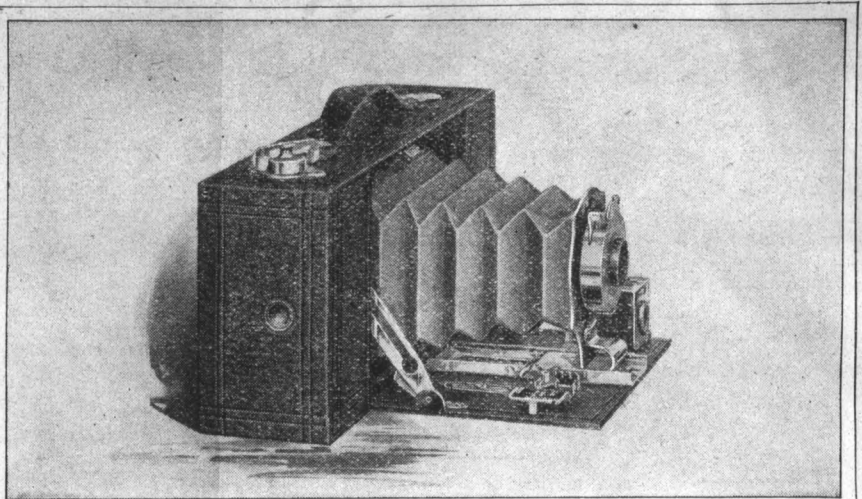
Lettuce is not only served alone, but with nearly every other salad known to woman. The leaf of lettuce on the salad plate is as inevitable as the butter on the bread. It is also used in cream soup.

Cucumbers are 81.1 per cent water and are valuable principally because of their cooling properties. Formerly it was thought necessary to soak the sliced cucumber in salt water before sending to the table, to remove its properties which were supposed to be harmful. Now cooks are simply removing thick parings from the cucumbers, soaking for a half-hour in ice-water to make crisp and fresh, and then arranging the salad.

There are countless ways of serving cucumbers, both alone and with other salad vegetables. A bit of cucumber with potato salad gives a pleasant flavor to that dish. Cucumber is also combined with fish salads, and, of course, this popular vegetable is made into all sorts of pickles and relishes for winter use. Ripe cucumbers are prepared by many housekeepers into tempting relishes for the cold weather season.

A book might be written about tomatoes, and yet leave some to tell. None of us would sigh to go back to the good old days of our ancestors, were we to stop and think that those worthy people did not know the deliciousness of this edible, but regarded it as highly poisonous. Tomatoes in salad, with vinegar, sliced with cream and sugar, tomatoes canned, preserved, pickled, in relishes, in catsup, in soup and in sauces, form such a big part of the menu that we couldn't do without them. While the real lover of the tomato will tell you it is quite good enough eaten out of hand with a sprinkle of salt.

Tomatoes served as a salad lose three-



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Kindly send me \_\_\_\_\_  
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MFMAY10.

Yours truly,

Town \_\_\_\_\_ State \_\_\_\_\_

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## MEN

We believe the use of GOLD MEDAL FLOUR would prove a satisfaction and saving to every reader of this paper.

Therefore, we ask you to note carefully the above advertisement, study the wording of the brand, and when you next buy flour insist that your dealer give you Washburn-Crosby's GOLD MEDAL FLOUR.

In order that you may become thoroughly familiar with our brand, we would be glad to send to the men reading this advertisement one of our GOLD MEDAL FLOUR Watch Fobs. This fob is suitable for all occasions and will prove attractive as well as useful.

Fill out the coupon at the end of this page and mail to—  
Washburn-Crosby Co., Minneapolis, Minn.



fourths of their charm if they are not thoroughly chilled. The woman who runs out to her garden at a quarter of twelve, hurriedly picks a few tomatoes, takes them into the house, scalds them and removes the skins, and then slices the warm tomatoes and sends them to the table need not complain if her "men folks refuse to touch tomatoes." The tomatoes should be picked in the early morning and put in the ice chest or on the cellar floor to chill. If you are to serve them as a salad, never, as you value your reputation as a cook, scald them to remove the skins. Better send them to the table with the peeling on if you haven't time to remove it without scalding. A tomato just ripe enough, thoroughly chilled, served whole with a good salad dressing is a delicacy fit for a king, and he who turns up his nose at such a dish is missing half the joys of eating.

Stewed tomatoes are improved in flavor by adding a bay leaf which should be removed when the tomatoes are served. That is, they are improved if you like the flavor of bay leaf. An onion sliced with the tomatoes also makes a pleasant change. Fresh tomatoes contain 94.3 per cent water, nine-tenths per cent protein and 3.9 per cent carbohydrates.

#### SHORT CUTS TO HOUSEKEEPING.

This department is opened as a means of exchange of new and successful ideas in homemaking. If you have learned something in cooking, sewing, child raising, fancy work, economy, anything which is helpful, and new, send it in. Twenty-five cents will be paid for every article used, but none will be returned. Keep your suggestions short.

In making underwear, run up seams, then turn down once and stitch, instead of filling, or making French seams. It is more quickly done, washes easier, and is just as satisfactory to the busy woman with much sewing to do. I do very little basting, and find that with a little practice and care, I sew just as well as when I basted nearly everything, and save lots of time. Of course, some things, like sleeves, or skirt seams, must be basted.—T. F. C.

When having occasion to use medicine glasses, cut a piece of pasteboard the size of the top of the tumblers used, and fasten to the tumbler with a couple of hinges made from two small strips of adhesive. Keeps out all dust, insects, etc.—Mrs. C. L.

If you have no feathers for cushions, cut cotton batting into small squares, put in a baking pan, heat in the oven, being careful not to scorch them, about thirty minutes. Each square will puff up light as a feather.—Mrs. C. B. S.

#### RECIPES FOR MICHIGAN FARMER HOUSEKEEPERS.

##### Chicken Pie.

Select a plump, young fowl, and boil until tender, adding to the water in which it is boiled a little thyme and one small onion sliced thin. When done, skin the chicken and remove the meat from the bones and cut in small pieces. Strain the liquor and add salt and pepper to taste. Line a baking dish with rich pie crust. Have ready three hard-boiled eggs and put them between layers of chicken inside the crust. Pour in the liquor and one tablespoonful of rich cream. Cover the top with crust. Glaze the top crust with the beaten white of an egg and cut three long gashes across for the steam to escape. Bake in a moderate oven until brown. It is delicious hot or cold. If preferred cold, add to the liquor, while hot, one tablespoonful of gelatine dissolved in cold water, and when cold it will have formed a delightful jelly. This can be made one day and served the next, and will be found particularly nice for supper.

##### Cherry and Rice Trifle.

Cook until soft one-half cupful rice in one quart milk, to which has been added a pinch of salt and three tablespoonfuls sugar. Put alternate layers of rice and cherries in glass dish until half full. Pour over a boiled custard. Serve icy cold, garnished with whipped cream and minced cherries.

##### Pork Tenderloin.

Trim tenderloin of young pork into good shape and remove all the tough sinews, cut off the fat, but save it to lay over the top while cooking. The tenderloin may then be laid in a baking pan with some of the scraps of fat and a few pieces of onion underneath and on top. If short of fat put one tablespoon of but-

ter on top, put into a very hot oven, and cook until well done; baste it frequently with the melted fat, and when nearly done sprinkle with salt on each side. Put the tenderloin on a hot platter and pour over it the following mixture: One tablespoon of finely chopped cucumber pickles, one tablespoon of barberry jelly, two tablespoonfuls of melted butter, a dash of cayenne, and a little salt. Garnish with rings of fried apples.

##### Norwegian Cucumbers.

Peel your cucumbers. Slice fine and salt them. Take a little good sour cream, beat up with ground black pepper (fresh out of the mill), fine cut chives, and a little prepared English mustard. Squeeze cucumbers in napkins. Place in bowl. Mix with above dressing and serve.

##### Cream Puffs.

A half pound of butter, three-quarters of a pound of flour, eight eggs, two cupfuls of hot water. Melt the butter in the water, set over the fire, and bring to a gentle boil. Then put in the flour and boil it until it leaves the sides of the saucepan, never ceasing to stir. One minute is enough. Turn into a bowl to cool. Beat the eggs in, one at a time, beating each for a minute, and when all are in beat all together for two minutes. Set on the ice for an hour, then drop in great spoonfuls of equal size upon buttered paper laid in a broad baking pan, taking care not to let them touch one another. Bake for fifteen minutes in a good oven, by which time they should be golden brown. When cool, make a slit in the side of each and fill with a filling made by heating in a double boiler a cup of milk to which a pinch of soda has been added. Add two teaspoonfuls of cornstarch wet up in a little cold milk, and gradually one egg beaten light with a half cup of powdered sugar, and stir until thick. Remove from the fire, add a teaspoonful of vanilla, and when cold fill the puffs.

#### HOME QUERIES EXCHANGE.

Dear Editor:—In the Michigan Farmer under date of April 2, Mrs. D. H. tells about making hard and soft soap. Will she please send the formula so I can make some, and oblige.—Mrs. W. M., Pontiac.

Pork Cake.—Three eggs, two cups sugar, one cup molasses, one cup each of chopped fat pork and raisins, one cup of sour milk, four cups flour, one teaspoonful soda, one teaspoonful each of cinnamon and nutmeg. Makes two loaves. Bake in moderate oven.—A Reader.



Approved Street Costume.

No. 4870.—There is really no style of dress that is so youthful as a plaited model and short coat. For school and for general wear it is particularly good, as it can be effectively developed in rough-faced chevrons, serges and cloth. Pattern is in three sizes—14, 16 and 18 years. To copy the 16-year size, it requires 6½ yards, 44 inches wide. Price of pattern, 10 cents.

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# MARKETS

## DETROIT WHOLESALE MARKETS.

May 4, 1910.

### Grains and Seeds.

**Wheat.**—Until Tuesday of this week there was a regular market on last week's basis, but upon that day the bulls were able to get the trade interested in the news that the Hessian fly was doing an extensive amount of damage to the crop in the central states, especially Illinois, Indiana, Kentucky and Tennessee. Besides this there has been reports of harm from the chinch bug. Before the insect news was recognized, rains had visited the southwest and bears were feeling sure they had a grip upon the trade. But the damage, with the smaller receipts at primary elevators and the smallness of the visible supply, were all cards that counted in the game for those who wish higher values. There is, however, a large amount of cash grain in the hands of millers. One year ago the price here was \$1.45 for No. 2 red wheat. Quotations for the past week are:

	No. 2	No. 1	Red.	White.	May.	July.
Thursday	1.07	1.07	1.07	1.07	1.07	1.07
Friday	1.07	1.07	1.07	1.07	1.07	1.07
Saturday	1.07	1.07	1.07	1.07	1.07	1.07
Monday	1.07	1.07	1.07	1.07	1.07	1.07
Tuesday	1.10	1.10	1.10	1.10	1.10	1.05
Wednesday	1.10	1.10	1.10	1.10	1.10	1.05

**Corn.**—There is little to say on the corn market. The weather is delaying the work upon farms in the corn belt and the anticipated early planting along the Ohio Valley and to the west will soon be pushed along to the regular time for that work. Prices have improved during the week. The colder weather is favorable to the bulls of the trade. On Tuesday the firming of the wheat market and the advances in that grain were influences in corn circles for better prices. Michigan farmers are well up with their work and will generally be able to get their corn in the ground before the usual date, should the weather change and give them a chance to get in the fields. One year ago the price for No. 3 corn was 77c. Quotations for the past week are:

	No. 3	Yellow.
Thursday	60½	61½
Friday	60½	61½
Saturday	60½	61½
Monday	61	62
Tuesday	61½	62½
Wednesday	61½	62½

**Oats.**—Everything is favorable for the growth of the new crop and it is coming on splendidly. In spite of the better prices for corn and wheat the values here have remained steady with last week, because of the promise of the new crop. One year ago the price for No. 3 oats was 57½c per bu. Quotations for the week are:

	Standard.
Thursday	44
Friday	44
Saturday	44
Monday	44
Tuesday	44
Wednesday	44½

**Beans.**—No trading is being done over the bean counter. Prices are steady with those of last week. According to announcements from different sections of the state the farmers are looking forward to planting of a good acreage of beans, although it will not surpass the natural increase unless something should happen to prevent planting corn, in which event farmers would substitute beans to some extent. The nominal quotations are as follows:

	Cash.	May.
Thursday	\$2.05	\$2.06
Friday	2.05	2.05
Saturday	2.05	2.06
Monday	2.05	2.06
Tuesday	2.05	2.06
Wednesday	2.05	2.06

**Cloverseed.**—This market is getting down to a nominal basis for cash seed and prices have kept steady this week for those kinds. October went up five cents on Saturday and down again on Tuesday. New seedling generally looks well. Quotations are:

	Prime	Spot.	Oct.	Alsike.
Thursday	\$6.75	\$6.60	\$6.75	
Friday	6.75	6.60	6.75	
Saturday	6.75	6.65	6.75	
Monday	6.75	6.65	6.75	
Tuesday	6.75	6.60	6.75	
Wednesday	6.75	6.60	6.75	

**Rye.**—Market is dull and firm. No. 1 is quoted at 80c per bu., which is last week's quotation.

### Visible Supply of Grain.

	This week.	Last week.
Wheat	26,229,000	29,836,000
Corn	10,602,000	11,825,000
Oats	9,223,000	9,864,000
Rye	630,000	563,000
Barley	2,451,000	2,331,000

### Flour, Feed, Provisions, Etc.

**Flour.**—Market is easy at last week's values. Quotations as follows:

Clear	\$5.55
Straight	5.65
Patent Michigan	5.95
Ordinary Patent	5.75

**Hay and Straw.**—Prices are on a par with last week. Quotations: No. 1 timothy, new, \$17.50; No. 2 timothy, \$16.50; clover, mixed, \$16.50; rye straw, \$7.50; wheat and oat straw, \$6.50 per ton.

**Feed.**—Market steady at unchanged prices. Carlot prices on track: Bran, \$26 per ton coarse middlings, \$27; fine middlings, \$29; cracked corn, \$25; coarse corn meal, \$25; corn and oat chop, \$24 per ton.

**Potatoes.**—There is a decidedly easy tone to the local potato trade in spite of the improvement noted in some of the outside places. No change in prices. Michigan grown are selling in car lots at 25¢ per bushel.

**Provisions.**—Family pork, \$26.27; mess pork, \$24; medium clear, \$26; pure lard,

13½c; bacon, 19c; shoulders, 13½c; smoked hams, 16½c; picnic hams, 12½c per lb.

**Hides.**—No. 1 cured, 11c; No. 2 cured, 10c; No. 1 green bulls, 8c; No. 1 green calf, 15c; No. 2 green calf, 14c; No. 1 cured calf, 16c; No. 2 cured calf, 15c; No. 1 horsehides, \$3.50; No. 2 horsehides, \$2.50; sheepskins, as to wool, 50c@2.

### Dairy and Poultry Products.

**Butter.**—The trade is following the path of last week and prices are ruling the same on this market. The supply of good creamery butter is small and the market is very firm just now. It is anticipated that should the days come off warm there would be a sudden expansion of offerings and values will decline. Dairy goods are steady. Quotations are: Extra creamery, 29c per lb; firsts, do., 28c; dairy, 21c; packing stock, 20c.

**Eggs.**—The fraction has been lost from the price for fresh eggs. Liberal receipts account for the lower figure, although there continues to be a heavy consumption and the storage men keep busy gathering the crop for their purposes. Fresh eggs, cases included, are exchanged at 20c per dozen.

**Poultry.**—There is no generous marketing of poultry and the trade is extremely firm at the prices of last week, with quotations as follows: Live—Spring chickens, 18c; hens, 18c; old roosters and stags, 12@13c; ducks, 15@16c; geese, 12@13c; turkeys, 17@18c.

**Cheese.**—Michigan, late made, 15@15½c; Michigan, fall made, 18@18½c; York state, 19@20c; Limburger, Wisconsin, 17@18c; New York, 18@19c; bricks, 16@16½c; Swiss, domestic block, 21c; Swiss loaf, 28c.

**Calves.**—Steady. Choice to fancy, 11@11½c; ordinary, 9½@10c.

### Fruits and Vegetables.

**Apples.**—In good demand and firm. Spy, \$4.45; Baldwin, \$4.45; Steel red, \$5; Greening, \$4.45 per bbl.

**Onion Sets.**—Tops, 75c@81; white, \$1.75 @2; yellow, \$1.125 per bu.

**Onions.**—Domestic, \$1.25 per bu.

**Cabbage.**—Higher, \$3.50 per bbl.

**Vegetables.**—Beets, 60c per bu; brussels sprouts, 25c per qt; carrots, 50c per bu; cauliflower, \$2.25@2.50 per bu; celery, 45 @50c per doz; eggplant, \$2.25@2.50 doz; green onions, 10@12c per doz; head lettuce, \$3.50@4 per hamper; mint, 25c per doz; parsley, 25@30 per doz; radishes, 20@25c doz; spinach, 90c hamper; turnips, 50c per bu; watercress, 20@25c per doz; wax beans, \$3.50 per bu; pieplant, 35c per dozen.

### OTHER MARKETS.

#### Grand Rapids.

The egg market is showing signs of weakness, though prices continue for the present at 19@19½c. The egg supply is large. Dairy butter is worth 22c, and creamery 29c. In the meat line, dealers report a slow sale of veal, prices to farmers ranging from 6@9c. Dressed hogs are doing a little better, bringing 11½c this week. Live poultry is steady at the following prices: Fowls and chickens, 16c; old roosters, 10c; ducks, 16c; turkeys, 16c. No change in the potato situation, the buying price at loading stations being 10c. The bean market is looking better, the situation being the best experienced in the past month. White beans are quoted at \$1.75@1.85; red kidneys at \$2.50 @2.75, depending on color. Other grains are practically unchanged, with wheat at \$1.01; corn at 61c; rye, 70c; oats, 44c.

#### Chicago.

Wheat, No. 2 red, \$1.09@1.12½; May, \$1.11; July, 1.04½.  
Corn, No. 2, 60@61c; May, 60c; July, 63c per bu.  
Oats, No. 3 white, 40@43c; May, 42½c; July, 40½c.

**Butter.**—The market here declined in spite of the steady market reported at Elgin and other places. Dairy goods are steady. Quotations are: Creameries, 24 @28c; dairies, 22@26c.

**Eggs.**—A steady market prevails and prices are on a par with last week. Prime firsts, 20½c; firsts, 19½c; at mark, cases included, 17½@19½c per doz.

**Hay and Straw.**—Market steady. Quotations are: Choice timothy, \$17@18; No. 1 timothy, \$15.50@16.50; No. 2 do and No. 1 mixed, \$13.50@14.50; No. 3 do. and No. 2 mixed, \$12@13; rye straw, \$9@10; oat straw, \$6@7; wheat straw, \$6@6.50.

**Potatoes.**—There was renewed life injected into the potato deal here last week and prices took a jump upward. The advance amounts to around 8c per bu. Fancy and choice stocks are selling at 20@31c per bushel, while fair to good grades are quotable at 27@28c per bu.

**Beans.**—Market is higher for both common and red kidney beans. Choice hand-picked are quoted at \$2.16; fair to good, \$2.10@2.12; red kidneys, \$3@3.25 per bu.

**Wool.**—Values are being maintained and the trade is firm. For fine unwashed delaine, 25@27c is being paid.

#### New York.

**Butter.**—Creamery specials are higher. Market generally is steady. Western factory firsts, 22@23c; creamery specials, 30@30½c lb.

**Eggs.**—The trade here is regular with last week. Values are not materially changed. Fresh receipts quoted at 23@25c per dozen.

**Poultry.**—Dressed. Market is steady with last week. Western fowls, 15@20c; turkeys, 17@23c.

#### Boston.

**Wool.**—News from London indicates that prices are firmer than at any time during the present series. Here the stocks are badly broken up and it is hard for the manufacturers to get what they are after. Prices are, therefore, not to be taken as an absolute index of the condition of the trade generally; the market is, however, firm at about former values. In the far west the shearing is well along while in the central states it is nicely beginning. Buying is progressing slower than usual on account of buyers refusing to give the prices asked. Farmers are waiting and there is a general opinion

that they will profit by it; although many business farmers have contracted their clip according to reports. As compared with a year ago prices are ruling a shade lower, although some of the grades are higher, having advanced during the year. Following are the leading quotations for domestic grades:

Ohio and Pennsylvania fleeces—No. 1 washed, 36@37c; delaine washed, 35c; XX, 33@34c; ¼-blood clothing, 32@33c; ¼-blood combing, 29c; delaine unwashed, 26 @27c; fine unwashed, 23@24c. Michigan, Wisconsin and New York fleeces—Fine unwashed, 22@23c; delaine unwashed, 25 @26c; ½-blood unwashed, 31@32c; ¾-blood unwashed, 31@32c.

#### Elgin.

**Butter.**—Market firm at 29c per lb., which is the quotation of a week ago. The sales for the week amounted to 568,600 lbs., compared with 537,300 for the previous week.

### THE LIVE STOCK MARKETS.

#### Buffalo.

May 2, 1910.

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

Receipts of sale stock here today as follows: Cattle, 175 cars, hogs, 13,600; sheep and lambs, 14,000; calves, 3,600.

With 175 cars of cattle on our market here today and raining, and 24,000 reported in Chicago, all the good cattle from 1,150 lbs. up selling fully 25@35c per hundred weight lower. All others except cows, heifers and bulls, 15@25c per hundred weight lower. Cows, heifers and bulls strong at last week's prices.

We quote: Best 1,300 to 1,450-lb. steers \$7.65@8.15; good 1,200 to 1,350-lb. do., \$7 @7.50; best 1,100 to 1,200-lb. shipping steers, \$6.50@7.25; medium butcher steers 1,000 to 1,100 lbs., \$6@6.40; light butcher steers, \$5.25@5.75; best fat cows, \$5.50@6.50; fair to good cows, \$4.75@5.25; common to medium do., \$3.50@4.25; best fat heifers, \$6.50@7.25; good do., \$5.75@6.25; fair to good do., \$5@5.75; best feeding steers, \$5.75@6.25; medium to good do., \$5.25@5.75; stockers, all grades, \$4.50@5.50; best bulls, \$6@6.50; bologna bulls, \$5@5.75; thin light bulls, \$3.75@4.50; best milkers and springers, \$5@6.50; common to good do., \$2.5@4.5. A few extra prime bulls sold for \$6.75 today.

Our hog market opened this morning with 85 double decks on sale, and 30@35c per hundred weight lower than Saturday's best time, and closing easy at the opening, with a weak feeling and bidding lower prices. Heavy receipts in Chicago today; Chicago people wiring our packers they could ship them 200 to 210-lb. average at \$9.30; made them very bearish, and it was a long time this morning before any trading was done.

We quote: Mixed and mediums, \$9.80@9.85; few choice heavies bringing \$9.90; yorkers, \$9.70@9.80; pigs, \$9.60@9.75; roughs, \$8.70@8.85; stags, \$7.75@8.50. Nothing flattering in the prospects.

The lamb market opened slow today, with best lambs selling from \$8.85@8.90. Markets closed firm, all best handy weight lambs selling; few coarse and heavy lambs unsold. Look for little better prices balance of week. Sheep were strong 15c lower today. Most of the best wethers selling \$7.65@7.75.

We quote: Handy clipped lambs, \$8.85 @8.90; heavy do., \$8.35@8.50; clipped wethers, \$7.65@7.85; clipped ewes, \$6.75@7; clipped yearlings, \$7.75@8; clipped cull sheep, \$3@5.50; skip lambs, \$5@5.50; veals, choice to extra, \$8.50@8.75; fair to good do., \$8@8.25; cull to common, \$7@7.50; light thin calves, \$5@6; heavy fat calves, \$5@6.50.

#### Chicago.

May 2, 1910.

Received today: Cattle, 24,000; Hogs, 30,000; Sheep, 19,054. Same day last year, 19,054 41,897 11,435. Received last week, 54,714 63,333 48,702. Same week last year, 45,676 132,366 63,459.

Another week opened today with large supplies of live stock of all kinds and a general collapse in prices. Cattle moved off very slowly, and prices were called 15@25c lower. Heavy beefs were especially slow, and for choice steers \$8.25 was bid. Hogs took a fall of 20@30c, with a free movement at the decline, sales being made at \$9.10@9.42½. The average weight of last week's hog receipts was 227 lbs., compared with 215 lbs. a year ago, 220 lbs. two years ago and 235 lbs. three years ago. Provisions had a big decline in sympathy with hogs. Sheep were 25c or more lower, the market being characterized by extreme dullness. Clipped stock sold as follows: Lambs, \$6.50 @9.10; wethers, \$7@7.60; ewes, \$4@7.50. Eighty head of choice heavy wethers were taken at \$7.60 to export to Bermuda.

Cattle took a tumble of 15@25c on an average last week, owing to the restricted consumption of beef throughout the country and the almost total disappearing of the once important export trade. The extreme dearth of beef, in common with all other meats, both fresh and cured, is greatly curtailing its use, and after the cattle receipts are fairly large for a short period, packers get well stocked up with beef and begin to operate much less freely. Beef steers sold mainly around \$6.85@8 last week, with a marked increase in the tendency to purchase handy little and medium weights and to let the more costly heavy beefs alone, although the latter sold rather freely at times. It is clear that the time has come for marketing the long-fed heavy cattle, as they are almost certain to go lower. The poor to fair little killing steers have been selling at \$5.75@7, with a good outlet for pretty good killing steers around \$7.25 @7.50, while the choicer lots of fat shipping cattle have found purchasers at \$7.75@8.50. Prices have continued to rule very much higher than at corresponding dates in former years, and the same is true of cows and heifers, which brought \$4.30@7.90, although butcher stock shared

in the decline in steers during the latter part of the week. Canners and cutters were active at \$2.50@4.25, and bulls were lively sellers at \$4@6.75, while calves were bought freely at \$4@8.75. Milksters and springers have been selling at \$30@75 per head, Ohio buyers taking a good many, and a few prime cows landed at \$70@75, limited offerings of choice cows making firm values. Stockers and feeders were wanted at \$4.15@7, not many selling above \$6.50, and late in the week there was a slump in prices for the general run of these cattle, buyers being few. The demand as a rule is much the strongest for well-bred feeders carrying some flesh and weighing well, and these are scarce.

Hogs were held back to quite a general extent last week, as stockmen did not like the idea of parting with their remaining holdings at the recently reduced prices. The resulting lessened offerings enabled sellers to assert themselves on several days, and buyers were compelled to pay some good advances, although the extremely small operations of eastern shippers acted as a check on the upward movement. The scarcity of hogs in all parts of the corn belt is universally admitted, and all that stands in the way of almost unlimited advances is the greatly lessened consumption of fresh and cured meats and lard due to their dearth, for retail prices fail to participate in the decline in wholesale values. The average quality of the hogs marketed has been very good, although less so than a short time ago. Pigs are scarce, most of them selling with light hogs. Supply and demand may be counted upon to make hog prices in the near future, and it is generally believed that stockmen throughout the country are not going to be frightened into hurrying their immature hogs to market.

Sheep and lambs were not marketed in large numbers last week, but there were enough most of the time to supply the extremely small demand, and sharp declines in prices followed in quick succession. It was a week of extreme depression in Buffalo and other eastern markets, and the shipping demand in the Chicago market was a remarkably small affair, their daily purchases being restricted to a few hundred head. As usual, sheep made up an insignificant part of the receipts, most of the offerings consisting of clipped Colorado and western fed lambs, with a small display of spring lambs, which sold at good prices when good in quality. Sheep and lambs are still selling very much higher than in former years, notwithstanding such declines as have taken place, and the shortage in the number fed enables sheepmen to come out with substantial profits in most instances. The small "crop" of spring lambs points to high prices when they come on the market in good numbers.

### CROP AND MARKET NOTES.

(Continued from page 500).

ing to see how the weather is going to shape. Oats have done little the past 10 days. Grass is doing well.

**Kent Co., April 26.**—A rain of 24 hours duration is well worth recording, much as it was needed on many farms where sod is yet to be turned for spring crops. Singular as it may seem, there has been no time this spring when stiff sods were sufficiently wet through to plow properly for either corn or potatoes. Local prices steady and little changed. Money easy and plentiful at 6 per cent in bank and 4 to 5 per cent on the farm.

**Marion Co., Southern Illinois, April 26.**—Weather is cool and cloudy; considerable snow fell on the 24th and 25th. The fruit is all killed, it being about one month earlier than common. Grass and oats are looking fine; wheat looking fairly well. Farmers well along with their work; some are most done plowing for corn and some corn is planted. Pastures are good, feeding time about over. Not many sheep in this country. Market horses scarce. Not much grain in farmers' hands. Corn is selling at 60@65c. Hay about all sold, about \$10@11; butter, 25c; eggs, 19c.

### REPORTS ON FRUIT PROSPECTS.

Inquiry has been made of prominent growers as to the effect of the recent cold and damp weather upon the fruit crop. The following reports are at hand:

**J. P. Munson,** a prominent grape grower of Kent county, states that grapes are not injured, the growth being too much retarded to be damaged. Some cherries were found to be quite badly hurt.

**Charles W. Wilde,** who has an enviable reputation as an apple producer and of the same county, reports that in his opinion the fruit of that section is not hurt much. It will be several days, however, before it can be definitely stated what effect the weather of the past two weeks has had.

**Hon. Robert Graham,** a fruit grower and prominent business man of the same county, states that near the lake shore of the Benton Harbor district there has been no material damage, but three miles inland the growers have suffered heavy damages by frost. About Grand Rapids and adjacent territory everything looks promising for a bumper crop of fruit except that the damp cool weather of the past few days may interfere with proper fertilization of the apples.

**Almond Griffen,** who has made special inquiry into the condition of affairs in the fruit circles, states that all news is to the effect that the fruit of that district has not been very seriously harmed by the frost, except in the case of early cherries. Orchards set in low lands without proper elevation have suffered badly. Plums, apples and peaches appear to be all right. Strawberries, and some of the small fruits have possibly been cut. Grapes are not far enough along to be damaged, except in a few cases.



## THIS IS THE LAST EDITION.

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

## DETROIT LIVE STOCK MARKETS.

## Thursday's Market.

May 5, 1910.

Receipts, 1,654. Market dull and 50c lower than last week on all grades; will close lower.

We quote: Extra dry-fed steers and heifers, \$6.75@7; steers and heifers, 1,000 to 1,200, \$6.25@6.75; steers and heifers, 800 to 1,000, \$6@6.75; steers and heifers that are fat, 500 to 700, \$5@5.75; choice fat cows, \$5.50; good fat cows, \$4.50@5; common cows, \$3@3.75; canners, \$2.75@3; choice heavy bulls, \$5.50@5.75; fair to good bolognas, bulls, \$5; stock bulls, \$3.75@4.25; milkers, large, young, medium age, \$4@5; common milkers, \$2.50@3.50.

Spicer & R. sold Schlischer 1 cow weighing 870 at \$4, 8 butchers av 760 at \$6.25, 4 do av 790 at \$6, 3 do av 560 at \$5, 7 do av 908 at \$6.15; to Breitenback Bros. 6 cows av 900 at \$3.75; to Kamman B. Co. 10 steers av 1,162 at \$7, 12 do av 671 at \$5.60, 1 cow weighing 1,170 at \$5; to Kull 23 steers av 865 at \$6.60, 2 do av 805 at \$5.65; to Sullivan P. Co. 1 bull weighing 1,330 at \$5.25, 1 do weighing 1,360 at \$5.50, 2 butchers av 725 at \$5, 1 cow weighing 1,250 at \$5.25, 3 steers av 1,043 at \$6.25; to Goose 3 cows av 1,093 at \$3.75; to Schlischer 19 steers av 953 at \$6.40; to Thompson 5 cows av 1,038 at \$4.75, 1 do weighing 1,200 at \$4.

Haley & M. sold Thompson Bros. 1 bull weighing 1,010 at \$5.50, 4 heifers av 457 at \$4, 8 butchers av 625 at \$4.90, 4 cows av 1,152 at \$5.35, 2 do av 900 at \$3.65; to Fromm 3 do av 900 at \$3.90; to Rattkowsky 4 heifers av 510 at \$4.40, 4 do av 620 at \$4.50; to Fleischman 1 stocker weighing 540 at \$4.75; to Kamman 1 cow weighing 1,020 at \$5.25, 1 do weighing 710 at \$3.50, 3 steers av 900 at \$7; to Breitenback Bros. 16 do av 856 at \$6.75; to Thompson 2 cows av 1,060 at \$5.25; to Fry 8 steers and heifers av 760 at \$6.35.

Roe Com Co. sold Fry 1 cow weighing 1,050 at \$5.75, 2 steers av 760 at \$6.50, 6 butchers av 773 at \$6.50, 2 do av 900 at \$6.50; to Kamman B. Co. 13 steers av 1,060 at \$7, 1 do weighing 1,060 at \$6.25, 1 do weighing 770 at \$5, 1 do weighing 1,050 at \$5.50; to Breitenback Bros. 2 cows av 850 at \$3.50; to Sullivan P. Co. 20 butchers av 829 at \$5; to Thompson 13 do av 625 at \$5.50; to Goose 6 do av 775 at \$4.50; to Erwin 5 stockers av 638 at \$5.50; to Newton B. Co. 3 steers av 833 at \$6, 1 bull weighing 1,430 at \$5, 20 butchers av 832 at \$6, 1 cow weighing 1,050 at \$5, 31 steers av 831 at \$6.25; to Mich. B. Co. 1 bull weighing 1,250 at \$5.75, 3 cows av 1,073 at \$4.50; to Newton B. Co. 5 butchers av 860 at \$4.25, 18 do av 777 at \$5.35, 5 cows av 1,070 at \$5.25, 8 butchers av 900 at \$6.25; to Sullivan P. Co. 1 bull weighing 1,270 at \$5.50.

Bishop, B. & H. sold Mich. B. Co. 2 cows av 825 at \$3, 2 do av 900 at \$5, 5 steers av 610 at \$5.25, 11 do av 673 at \$5.25, 4 cows av 850 at \$4.50; to Sullivan P. Co. 1 bull weighing 1,620 at \$5.60, 2 cows av 700 at \$2.50, 10 butchers av 963 at \$6.25, 4 do av 1,100 at \$5.25, 5 do av 822 at \$3.50, 1 bull weighing 1,300 at \$5.50, 1 do weighing 770 at \$3, 1 steer weighing 750 at \$5; to Kamman 3 do av 726 at \$5, 11 do av 845 at \$6.50; to Erwin 10 stockers av 718 at \$5.50, 11 do av 654 at \$5.35; to Kamman 3 heifers av 700 at \$5.50, 2 do av 500 at \$4.50, 1 cow weighing 930 at \$4.75, 1 do weighing 600 at \$3; to Breitenback Bros. 3 butchers av 733 at \$4.50; to Goose 5 cows av 1,000 at \$4.10, 8 do av 1,081 at \$5, 3 do av 1,026 at \$4, 3 do av 1,026 at \$5; to Fromm 2 do av 810 at \$3.25, 2 heifers av 575 at \$4.75; to Newton B. Co. 11 steers av 830 at \$6.25, 26 do av 1,038 at \$6.50, 15 do av 1,007 at \$6.50, 31 do av 831 at \$6.25, 8 do av 850 at \$6.25, 2 do av 1,225 at \$6.75, 1 bull weighing 1,250 at \$5.50, 2 heifers av 735 at \$6.25, 3 do av 800 at \$5, 4 steers av 975 at \$6; to Cooke 23 steers av 1,003 at \$6.65.

Weeks sold Sullivan P. Co. 1 bull weighing 1,320 at \$5.25, 2 do av 1,065 at \$5.50, 5 butchers av 520 at \$4.50, 3 do av 653 at \$5.25, 1 steer weighing 1,080 at \$6.50.

Sharp sold same 7 do av 783 at \$5.75. Weeks sold same 14 cows av 857 at \$3. Kendall sold same 1 steer weighing 910 at \$7, 3 do av 733 at \$5.50.

Jedele sold same 10 butchers av 877 at \$5.60, 2 cows av 965 at \$4, 10 steers av 1,208 at \$6.75. Weeks sold Regan 7 heifers av 683 at \$5.50.

Same sold Rattkowsky 6 cows av 950 at \$4.25.

Lowenstein sold Mich. B. Co. 33 butchers av 851 at \$6, 16 cows av 935 at \$3.75. Groff sold Hammond, S. & Co. 14 steers av 1,064 at \$6.50, 5 do av 810 at \$5.25, 1 bull weighing 1,350 at \$5.25.

Weeks sold Heinrich 21 steers av 1,120 at \$7.

Agerer sold Marx 6 steers av 951 at \$6.15.

## Veal Calves.

Receipts, 1,550. Market 75c@1 lower than last Thursday. Best, \$7.50@8; others, \$4@7; milch cows and springers, \$3@5 lower.

Haley & M. sold Parker, W. & Co. 20 av 125 at \$7.25; to Newton B. Co. 10 av 151 at \$8, 2 av 110 at \$5; to Sullivan P. Co. 7 av 110 at \$5, 25 av 130 at \$7.50; to Hammond, S. & Co. 6 av 150 at \$5.50, 32 av 130 at \$7.50; to Goose 22 av 130 at \$7; to Thompson 23 av 135 at \$7.

Bishop, B. & H. sold Prag 15 av 130 at \$8, 4 av 145 at \$8, 3 av 150 at \$8; to Mich. B. Co. 19 av 130 at \$8; to Parker, W. &

Co. 4 av 155 at \$5, 8 av 145 at \$8, 18 av 135 at \$7.75, 37 av 140 at \$7.25; to Nagle P. Co. 5 av 95 at \$6, 36 av 135 at \$7.50, 8 av 150 at \$7.50; to Newton B. Co. 11 av 150 at \$7.75, 8 av 145 at \$7.75, 8 av 120 at \$7; to Burnstine 13 av 130 at \$7.50, 5 av 150 at \$8, 9 av 150 at \$7.50; to Marx 2 av 120 at \$6; to Nagle P. Co. 3 av 125 at \$5.50, 44 av 130 at \$7, 2 av 100 at \$5, 32 av 135 at \$7.25, 26 av 133 at \$7.50, 30 av 135 at \$7.50; to Strauss & A. 18 av 125 at \$7.25.

Johnson sold Sullivan P. Co. 15 av 130 at \$7.

Kendall sold McGuire 23 av 130 at \$7.75. Adams sold Rattkowsky 14 av 130 at \$7. Weeks sold Nagle P. Co. 3 av 120 at \$6.50.

Same sold Hammond, S. & Co. 4 av 225 at \$4.50, 27 av 135 at \$7.

Johnson sold Friedman 15 av 135 at \$7.35.

Spicer & R. sold Rattkowsky 10 av 120 at \$7.75; to Nowhisky 14 av 135 at \$7.50; to Parker, W. & Co. 24 av 135 at \$7.75; to Breitenback Bros. 28 av 140 at \$6.50; to Mich. B. Co. 4 av 150 at \$7.75; to Thompson 5 av 160 at \$7.90.

Roe Com. Co. sold Barlage 24 av 130 at \$6; to Mich. B. Co. 26 av 135 at \$8, 6 av 135 at \$6.50; to Rattkowsky 3 av 150 at \$7.75; to Sullivan P. Co. 10 av 128 at \$6.

Calves closed very dull and \$1 per cwt. lower than last week's close.

## Sheep and Lambs.

Receipts, 3,471. Market dull at last Thursday's prices; quality very common. Best lambs, \$8.50; fair to good lambs, \$7.50@8; light to common lambs, \$4.50@6; spring lambs, \$9@10; fair to good sheep, \$6@6.50; culls and common, \$3.50@5.

Bishop, B. & H. sold Sullivan P. Co. 2 sheep av 125 at \$6, 2 do av 115 at \$6, 2 do av 160 at \$4.50, 6 do av 125 at \$4.50; to Mich. B. Co. 20 do av 95 at \$5.65, 43 do av 90 at \$5.65; to Hammond, S. & Co. 5 do av 100 at \$5.50, 98 lambs av 75 at \$8.50; to Parker, W. & Co. 145 do av 70 at \$8.25; to Sullivan P. Co. 44 mixed av 55 at \$4.50; to Nagle P. Co. 39 lambs av 50 at \$8.50; to Mich. B. Co. 11 sheep av 105 at \$5; to Young 21 do av 95 at \$6.30; to Breitenback Bros. 22 lambs av 77 at \$8.50; to Thompson 42 do av 75 at \$7; to Eschrich 38 sheep av 68 at \$5.50.

Roe Com. Co. sold Barlage 1 sheep av 130 at \$5, 3 do av 160 at \$6.

Noble sold Newton B. Co. 25 lambs av 65 at \$8, 6 do av 60 at \$6.50.

Wickman sold same 40 lambs av 70 at \$7.75.

Same sold Fitzpatrick 37 sheep av 85 at \$6.50.

Spicer & R. sold Sullivan P. Co. 9 sheep av 100 at \$4.50; to Mich. B. Co. 3 do av 110 at \$4.50, 13 lambs av 75 at \$8.25.

Haley & M. sold Newton B. Co. 16 lambs av 83 at \$8; to Sullivan P. Co. 2 sheep av 100 at \$5; to Breitenback Bros. 21 do av 90 at \$6, 4 do av 100 at \$4, 5 lambs av 70 at \$8.

## Hogs.

Receipts, 4,597. Market 5@10c higher than last Thursday.

Range of prices: Light to good butchers, \$9.65@9.70; pigs, \$9.25@9.40; light yorkers, \$9.60; stags 1/2 off.

Spicer & R. sold Hammond, S. & Co. 231 av 195 at \$9.75, 179 av 180 at \$9.70.

Haley & M. sold same 64 av 180 at \$9.75, 58 av 170 at \$9.70, 54 av 170 at \$9.65.

Sundry shippers sold same 360 av 180 at \$9.70.

Spicer & R. sold Sullivan P. Co. 177 av 175 at \$9.50.

Roe Com. Co. sold same 184 av 200 at \$9.75, 225 av 185 at \$9.70, 27 av 160 at \$9.60, 34 av 150 at \$9.55.

Roe Com. Co. sold Parker, W. & Co. 76 av 170 at \$9.50.

Bishop, B. & H. sold same 1,307 av 200 at \$9.75, 702 av 185 at \$9.70, 185 av 160 at \$9.65.

Market closed 10@15c higher than last Thursday.

## Friday's Market.

April 29, 1910.

## Cattle.

The market opened at the Michigan Central stock yards Friday morning with a light run in all departments. The cattle trade was active and everything offering found a ready sale at steady Thursday's prices. Milch cows and springers were scarce and good grades are in active demand.

Best steers and heifers, \$7.25; steers and heifers, 1,000 to 1,200, \$6.75@7; steers and heifers, 800 to 1,000, \$6.50@7; steers and heifers that are fat, 500 to 700, \$5.50@6.25; choice fat cows, \$6; good fat cows, \$5@5.50; common cows, \$3.50@4.25; canners, \$3@3.50; choice heavy bulls, \$6; fair to good bolognas, bulls, \$5@5.50; stock bulls, \$4@4.50; milkers, large, young, medium age, \$4@6; common milkers, \$2.50@3.50.

Bishop, B. & H. sold Goose 6 cows av 883 at \$4.30; to Sullivan P. Co. 1 bull weighing 1,340 at \$5.75, 1 do weighing 1,550 at \$5.75, 1 do weighing 1,820 at \$6, 1 do weighing 1,350 at \$6.50, 2 do av 1.275 at \$5.75, 2 cows av 1,070 at \$4.75, 1 do weighing 1,350 at \$5.75, 2 do av 815 at \$4.50, 3 butchers av 943 at \$6.50, 10 steers av 1,024 at \$7.35, 5 do av 1,326 at \$6.75, 27 do av 900 at \$7.25; to Starrs 3 cows av 747 at \$4, 5 do av 950 at \$5.40, 2 do av 910 at \$3.25; to Breitenback Bros. 5 butchers av 936 at \$5.50, 7 steers av 900 at \$6.75, 10 do av 885 at \$6.75.

## Sheep and Lambs.

The run of sheep and lambs was light and the market full steady with Thursday.

Best lambs, \$8.50; fair to good lambs, \$7.50@8.25; light to common lambs, \$5.50@6.75; wool lambs, \$9@9.75; fair to good sheep, \$6@6.75; culls and common, \$2.50@4.50.

## Hogs.

The hog trade was active and 5@10c higher than on Thursday, all the good grades bringing \$9.70.

Bishop, B. & H. sold Parker, W. & Co. 74 av 170 at \$9.60, 223 av 200 at \$9.70, 51 av 160 at \$9.65.

(Continued from page 499).

she has vomited several times. What had I better do? A. B. Swartz Creek, Mich.—The young pigs suffer from rickets. Their bones are weak. Give the sow a teaspoonful or two of air slaked lime at a dose in feed three times a day. Feed her oats and oil meal instead of corn and let her have some vegetables or grass. The young pig that you are raising by hand should be fed rich cow's milk as it is, with some cream and sugar, and a teaspoonful of lime water three times a day. The young pigs should be fed about every two hours during the day and it will be necessary to use cleanliness or the pigs will perhaps die.

Canker.—Our last year's lambs, when fed on timothy and alsike clover were troubled with sore mouths; besides, there were several sores above their hoof, but after changing their feed the sores healed and we fattened the sheep and sold them. Now our little lambs that are about a month old become weak in hind quarters, their mouth breaks out in sores, the gums around the teeth have the appearance as if they had canker. These lambs seem to quit nursing and grow gradually weaker until they die. The sheep are healthy and are fed on corn, oats, bran and oil meal. I forgot to say that the sheep are not troubled with sore mouths. R. J. S., Quincy, Mich.—Dissolve two ozs. borax in a gallon of water and wet their mouths and sores two or three times a day. Wet the sores on coronet with one part bichloride of mercury and 1,000 parts water twice a day.

Feeding an Unbalanced Ration.—Have seven sheep that have been fed chiefly on cornstalks, buckwheat straw, in which ragweed and pigeon grass is mixed in. Have been fed a grain ration twice a day of three pails of buckwheat bran and buckwheat middlings to one part corn. They were sheared ten days ago and next day after they all began to stagger around and seemed to lose control of their hind parts. This ailment does not affect their appetite in the least. Have taken good care of them and fed them in barn when it was cold. They seem to dislike to leave the barn. F. B. T., Flint, Mich.—I am inclined to believe that your sheep are suffering as the result of being fed an unbalanced ration. By giving them some ground oats, oil meal and corn and allowing them to have grass they will soon gain strength and recover. By giving them equal parts ground gentian, quassia and ginger a teaspoonful to each one at a dose twice a day will help to tone them up.

Sow Failed to Own Her Pigs.—I have a sow that refused to let her pigs suck and I made an effort to raise them on cow's milk diluted with water that had been sweetened. Will this sow ever get over her ugliness? F. W. S.—Your sow will perhaps always be ugly towards her young. She should not be used for breeding purposes. When raising pigs artificially on cow's milk it is necessary to add both sweet cream and sugar for the sow's milk is usually much richer in both fat and solids. It is also important to feed young pigs every two or three hours and unless their feeding utensils are kept very clean they are apt to sicken. I believe you either failed to give them enough rich milk or they became infected by eating or drinking out of foul bottles or dishes.

Retention of Placenta.—I have a cow that came fresh a few days ago and we were obliged to clean her. I am told by neighbors that she will always give me trouble every time she has a calf. M. S., Melvin, Mich.—Your neighbors are mistaken for I have known hundreds of cows that required cleaning only once.

Hernia.—Please tell me what can be done for a colt a week old that is ruptured in scrotum? A. W., Standish, Mich.—If the colt shows no pain leave him alone, but if suffering pain have him castrated, the French method. A great many colts are born with an ailment of this kind and permanently recover without treatment.

Eczema.—I have a cow that was dehorned last November and her head did not heal for 60 days; since then she coughs and breathes hard and also has an itchy condition of the skin. G. W. F., Montcalm Co., Mich.—Give your cow 1 dr. powdered lobelia and 1 dr. ground nuxvomica at a dose in feed three times a day. Wash your cow with soap suds "made with ivory soap, adding 1 oz. boric acid to each quart of water," twice a day and apply one part bichloride mercury and 1,000 parts water twice a day.

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## THE DAIRY

CONDUCTED BY COLON C. LILLIE.

### FOOD VS. BREED IN THE DAIRY HERD.

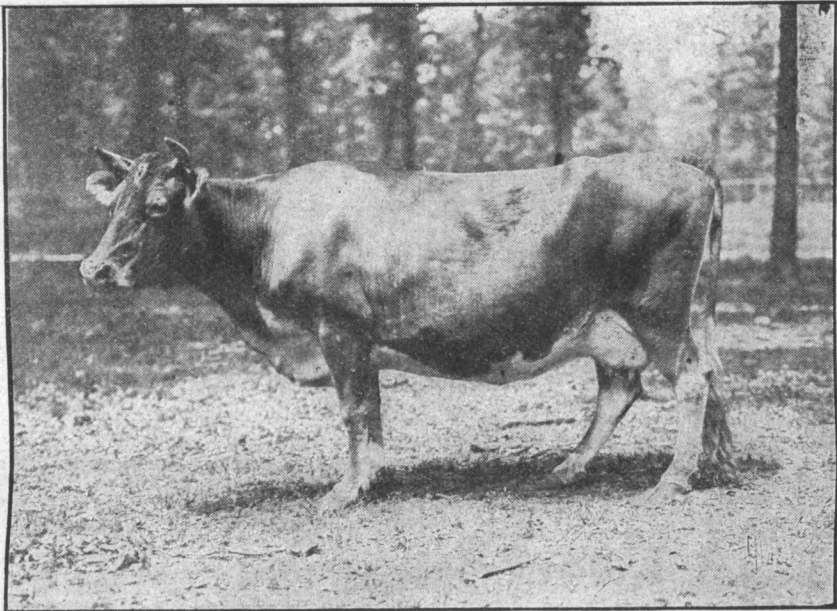
During the development of the dairy industry a question commonly discussed by the respective champions of its two parts was that of Food vs. Breed. Many dairymen entertained the belief that the dairy business could be made permanently profitable without the aid of the improved breeds of dairy cattle. A counter view equally fallacious held by a few over-enthusiastic breed advocates was that the improved breeds of dairy cattle could bring profit to a man who did not have the essential conditions of food and environment. Fundamental errors usually die young. Successful practice is the result of thoughtful experience. Nature's rigid statutes have proven that breed is simply care, food and environment, followed through successive generations, aided by careful selections, until an improved type is produced.

To set one branch of animal husbandry over against another, or giving it an impossible independence has been tried, and from the unwelcome results has come a growing recognition of the proposition that animal feeding and breeding, are economically inseparable. Their close re-

give heat and fat to the animal are but little needed to supply nourishment to the fetus. Simply material to build up bone, muscle and blood during its rapid development while the cow is dry, is needed to nourish the unborn calf. I think that I am safe in saying that ninety per cent of the dry cows are fed the odds and ends of hay and fodders and the kinds of supplementary feeds that can be supplied the most cheaply regardless of their actual needs.

#### Good Cows Come from Good Calves.

Any neglect in the care and food of the best bred dairy heifer during her development may impair her usefulness and value as a dairy cow. Nature has provided a complete food for the calf in the first milk, that is very essential in getting its digestive apparatus well started and I think it should be permitted to have it right from its original source for the first few days. Then comes the most critical time in the life of the calf, when we take upon ourselves its feed and care, and here is where we must exercise patience and intelligence in our management of them. Coaxing a calf to drink is easier than pushing its head into a pail and holding it there. I know because I have tried both ways. By wetting the fingers and coaxing its head into the pail it will soon drink of its own accord. The three most essential things to observe in feeding young calves are the quantity of the milk, the temperature and quality. At this age their little stomachs are tender



A Good Type of Guernsey Cow.

lationship has been firmly established in practice. How long could a superior type be held in control without good care, an abundance of food and favorable environment? My conclusions are that the animals would rapidly deteriorate, hence the deduction that food is of as much importance as the breed. Or, to speak concisely, we must provide suitable food and surroundings, which later reinforced by better breeding, would bring more satisfactory results.

#### Food First Essential of Profitable Dairying.

Acting upon this principle many dairymen are building up herds of economical producers. By good care, liberal feeding and a rigid selection of heifer calves sired by a pure-bred bull from one of the dairy breeds they have gradually increased the annual output of their herds from 150 pounds to 300 pounds and upward per cow. Surely this is nothing new or remarkable, but it proves my point—that food is the first essential of profitable dairying. How frequently we see some very promising young animal pass from the herd of some well known breeder of dairy cattle into the hands of some ignorant and incompetent feeder and for lack of proper care and nourishing food pass into oblivion. Is it not a fact that good breeding is dependent upon care and liberal feeding? The result of years and perhaps a lifetime of systematic selection and development is lost through the ignorance and careless management of the owner.

The feeding of the mother, who must nourish and build up the frame and give constitutional vigor to the young calf, is the true foundation, for a profitable dairy cow, yet the average dairyman feeds his pregnant cows the refuse of the farm. The clover hay, the wheat bran and linseed meal is fed to the cows that are giving milk. The very elements that are needed by the cow at this period to supply her unborn calf with nourishment are withheld. Carbonaceous foods, which

and every precaution should be taken. It often means the difference between unprofitable and profitable dairy cows. The quantity of feed and the temperature should not be determined by guess work. If possible, the separated milk should be fed before the animal heat has left it. For the first two weeks whole milk should be fed after which it may be gradually changed to skim-milk supplemented by oat meal and linseed oil meal mixed equal parts in the skim-milk. Such a ration fed with clover or alfalfa hay as soon as the calf is old enough to assimilate and digest it will promote a healthy growth and development. The first few months of the calf's life should be spent in the barn, as a more uniform growth will be obtained. The reason why fall calves make a better growth and more uniform development is because they are kept inside and properly fed instead of being turned out to eat grass, fight flies and exposed to the hot sun.

Given proper care and nourishing feeds the heifers at from 24 to 30 months of age will be capable of taking their place in the herd and producing more milk than their dams. Special care and judgment is always needed prior to parturition. The bowels should be kept moderately loose and the animal in a thrifty, flesh-forming condition. Laxative foods, such as bran and linseed oil meal and ensilage, with a good quality of early cut hay, are the best foods for the young cow at this time. Under these conditions and comfortable housing very little trouble will be experienced from garget, milk fever, retention of after-birth and other difficulties so common in the average herd during the calving period.

#### Soiling Crops a Help.

After parturition is over we now have a cow to feed. The first difficulty usually comes during the late summer when the pastures are failing and can be avoided by sowing soiling crops, such as oats and peas, corn, clover, alfalfa and millet. Our feeding must be uniform throughout the

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is the best on earth, you would say, maybe it is and maybe it isn't. You would be generous enough to say that it was our baby and that we doubtless thought it the finest, but that didn't prove it.

But see if you can get any other separator manufacturer to make you this same proposition. If you can you will either get his machine or ours free of all cost. If you can't, you will know what machine is conceded to be the best by all manufacturers—men who ought to know.

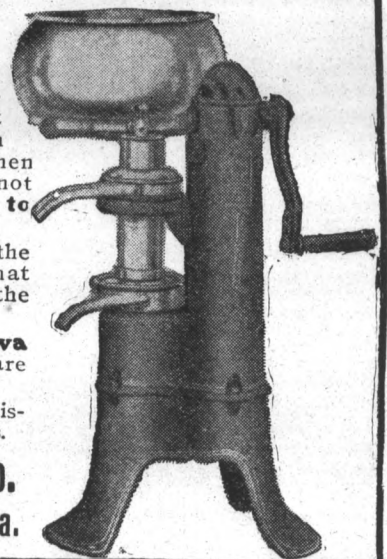
The Iowa actually does skim closer than any other. It skims cold milk to a trace. It is easiest to clean because the milk drains out of the bowl at the end of the run and water run through cleans it so that a piece of clean linen rubbed over the bowl any place will not show the slightest soil. It is easiest to turn and it is the most durable.

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year and every year from the birth of the calf until its dairy work is ended and it is sent to the shambles.

As yet we have no established American standard of feeding and owing to the diversity of our dairy breeds and the varying conditions under which they are bred and reared I doubt very much if it would be wise for us to approximate a national standard of feeding. However, during recent years the various breeders of dairy cattle have been shaping their favorite breeds toward one type and standard. Whether this kind of breeding will eventually result in an American type of dairy cattle or whether the importations of fresh blood from year to year will hold the types of our present breeds in control I am unable to say. If our breeders would all work toward one type that they considered best adapted to the needs of the practical dairymen, then it would be practical for American dairymen to adopt a national feeding standard. Present results depend upon our ability to study the individuality of the animals under our immediate care and the effect of foods upon their milk yields, condition and health and to determine which are the most efficient and economical foods.

Carefully conducted experiments show that the difference in the capacity of dairy cows to digest and assimilate food is very great. It varies in some instances between 50 and 100 per cent. If this is true, and I think it is, obviously there are cows that are capable of making more milk from home-grown foods than others, that have been developed upon more highly concentrated feed-stuffs. Or, to speak more concisely, the breeding and individuality of the cows is an important factor in determining the variety of foods to use for the herd.

New York. W. MILTON KELLY.

#### HEARING ON THE BURLESON OLEO BILL.

The National Dairy Union, which has been watching the threatened oleo legislation in congress, had looked the ground over and arrived at the conclusion that there would be no moves made by the oleo people during this term of congress. What was their surprise then, to suddenly learn that the committee on agriculture in the house of representatives had granted a hearing to the oleo people on the Burleson Bill on the 20th of April. This was indeed a surprise to every dairyman. The secretary of the National Dairy Union at once issued a call to many of the leading dairymen throughout the Union to appear at this time and present their side to the committee. Some 45 representative dairymen from every section of the country assembled in response to the call. On the 20th the oleo people presented their case partially and on the 21st the dairymen presented theirs. Neither side finished and the hearing was adjourned until the 29th and 30th which dates are to be given to the oleo people. Then an adjournment will occur again until the 11th of May, when the oleo people will again be given a chance to be heard, and the 12th, 13th and 14th of May will be given over to the dairy industry. Then on the 16th the oleo people will have one half of a day and the dairy people the other half to complete their arguments before the committee. It is not anticipated that the committee will be ready to report this bill during the present session although the unexpected usually happens in such cases; but there seems to be an opinion among those interested that this hearing having been ordered, the bill will not be reported until the next session of congress. Then the fight will be on in the house of representatives. The dairymen's case is in the hands of the National Dairy Union and every move of the opposition is being watched carefully. Dairymen should avail themselves of the opportunity to present their ideas on why the ten cent tax on oleo should not be repealed, to this committee. If you cannot go in person, write your argument and send it to the National Dairy Union, Normandy Hotel, Washington, D. C., or direct it to the committee on agriculture of the house of representatives. What is wanted is to show this committee that there is justice in the claims of the dairymen, and all the facts that tend to show this justice, are needed. The dairymen of the country must stand shoulder to shoulder on this question and fight for a square deal.

A feeding standard should be used as a guide. There are other requirements than mathematical ability in fitting one's self to become a feeder of dairy cows.

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It is easy to clean, because there are no loose heads, journals, stuffing  
boxes or other places that are hard to get at. The butter stays all in one  
piece, so it is easy to take out. Shelves on the side of the churn work the  
cream always toward the center. That makes it the lightest running churn  
made. The shelves, working roller, barrel heads and staves are made of  
the best quality of Washington Fir. The door is made of  
California Redwood. All metal parts coming in contact  
with the cream are hot process galvanized. Made in  
three sizes—30 Gal. for \$50—40 Gal. for \$60 and 50  
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## HORTICULTURE

### PLOWING AROUND THE APPLE TREES.

Plowing about fruit trees is a job that is avoided wherever it is possible. The work is not only objected to by those who are called upon to perform it, but if the trees could put in their say, it is certain that many times they would object more strenuously than those who have to do the work, for the bruising of the trunks and the lower limbs is often sickening, to say the least. Mr. F. C. Horn, a subscriber, submits to us his method of doing this work. He maintains that both of the above objections are generally overcome by it. If the furrow is being thrown toward the trees when his equipment is called into use in breaking out the lands. Where the earth is backfurrowed away from the trees, then it is used to finish up the plowing. The equipment consists of the plow, a spreader, some eight, ten or twelve feet long, depending upon the size and shape of the trees, and a stoneboat. One end of the spreader, or even, is fastened to the plow with the necessary clevises and ring, while the other is fastened in any convenient manner to the stoneboat. The team is then hitched to this spreader about half-way between the plow and the stoneboat. Then the equipment is ready. Enough stone is piled upon the boat to counterbalance the plow when the team

disease after it once gains entrance to the twigs through the terminal buds, except cutting out the affected twigs and destroying them by burning. Carefully performed spraying can do no more than prevent the little germ of life from starting and it is not an easy matter to keep the growing tip of limbs covered so as to be immune from the active bacterium of this trouble. Trees that are well sprayed for other troubles with fungicides such as Bordeaux mixture and diluted lime sulphur, ought not to be so readily attacked but it is useless to try and keep down the disease in that way. Removing the affected twigs whenever and wherever they may be found is all that can be done, at least, all that fruit growers are now aware that can be done. The twigs should be cut back six or seven inches below where the disease shows so that all the affected wood might be removed. The trees should be inspected systematically, in the fall, winter and spring just before the blossoms open, close inspections should be made of every part of every tree. After a limb has been removed the tool used should be wiped with a cloth moistened in a five per cent solution of carbolic acid to destroy any germs that might be adherent thereto.

### A WELL-FORMED YOUNG APPLE TREE.

It is a matter of pride with many orchardists to point out trees that they have carefully nurtured from the beginning into shapely trees of bearing age. We are sure that the grower of the tree illustrated in the accompanying cut has reason to feel proud of what he has produced. Some of us would have started our top perhaps a little nearer the ground, but aside from this possible criticism, we certainly would not be ashamed to have such a tree conspicuously located on our premises. The laws of distribution have been worked out to a nicety. Every large limb is soon lost in valuable bearing surface. Fruit spurs not only cover the outside of the top, but are distributed throughout its bulk; and so properly have the tips of growth been handled that this inside bearing wood is free to sunlight and air, thus giving an appropriate environment for the production of high quality fruit in all parts of the top. As this tree develops it will not be a difficult task to keep the bearing parts within



A Fine West Michigan Product.

is pulling. With such an arrangement the team can be kept away from the trees while the plow is run as close as is necessary. The same spreader can be used to harrow the ground afterwards if one has a harrow built in sections so that one section can be attached to one and the other section to the opposite end. With an arrangement of this kind it is perfectly easy to do this rather unpleasant job and do it better and with much less harm to the trees than when done after the common way of hitching the team directly to the plow. The low headed tree is no horror to one with this rig.

### PEAR BLIGHT DOES DAMAGE.

The pear trees in this section are suffering from a peculiar disease. They bloomed out splendidly but in a short time the blooms fell off; the buds turn black and fall off leaving the twig dead. Some times this blight extends a foot down the limb, killing the bark on one side and leaving it green on the other. As this is a pear section the loss is serious.

Virginia. D. PORTER.

The description given leads us to identify this disease as the pear blight. This blight is found over a large territory, and makes itself known wherever present by the deadened twigs and blackened leaves and buds which follow its attacks. The disease is hard to fight and while it seems to be influenced much by the seasons so that in certain years it is hardly to be seen and in other years it is very prominent, persistence is the one way to keep it down. Nothing can be done with the

bounds. Many of our old orchards suggest that appalling tragedies have been committed in them with the saw and axe. The bearing part of the trees has been driven as far from the source of its food supply as possible, and when nature favors with a bounteous crop, the trees break under their heavy load. But this tree need not be so deformed. It is now started right and can be kept so. The specimen grew in Van Buren county, and is an example of thousands of trees of that part of the state that were developed under the hand and eye of pruning artists. Men who are able to produce such trees are the men who are winning for Michigan her merited reputation as the leading fruit state of the union. A good, thrifty, productive tree is the foundation of our fruit industry and men who are skilled in the art of growing such trees and who do grow them, deserve our deepest respect. Michigan is in the front because she has such men. But she needs more of them.

### FREE TO FARMERS.

By special arrangement, Ratekin's big 1910 seed catalogue, with a sample of "Diamond Joe's Big White" seed corn that made 153 bushels per acre, will be mailed free to every reader of this paper who is interested in the crop he grows. This big book tells how to make the farm and garden pay. It's worth dollars to all who plant or sow. Write for it and mention this paper. The address is Ratekin's Seed House, Shenandoah, Iowa.



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What a sense of security it would give you to know absolutely that lightning **could not** damage your buildings. The man who rods his buildings with National Cable has no fear of this ruthless destroyer, which slays its thousands and destroys millions of dollars worth of property every year.

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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 GOLDEN AGE OF AMERICA.

Paper read by Mrs. A. E. Hartshorn, of the Maple River Farmers' Club, before the State Association of Farmers' Clubs. (Concluded from last week.)

Let us compare our glorious America of today with the Golden Age of ancient Rome. First, in government, we have reached a high state of civilization. As our illustrious emancipator has said, "This government of the people by the people, and for the people shall not perish from the earth." The extent of our dominion is great, it being said as of England, "the sun never sets upon American soil."

Our industries are varied and many. Nothing necessary to the comfort or even luxury but what is made in our land. Our imports as compared to our exports, are in the ratio of one to ten.

In the mineral kingdom we have every range of mineral from the tourmaline of Maine to the gold of California, from the square miles of coal beds in Pennsylvania to the unexplored salt deposits of Utah.

We have cattle upon a thousand plains and our streams run rampant with fish. Nor is any requisite of the builder lacking for, with the granite girded hills of New England, the forest-fringed shores of the Great Lakes, and the beautiful finishing woods of the south, we have ample material from which to choose.

In art and sculpture we are making great progress. Our literature may well claim its "Golden Age." What more lasting names could we have than Washington Irving, Emerson, Lowell, Longfellow, Bryant, Howells, Mable and Van Dyke!

In science we have made great discoveries and inventions. What did those early Romans have to compare with the telephone, telegraph, cable, electric lights and cars, automobiles, and aeroplanes!

Our surgeons and doctors are among the best in the world. They are able to perform successfully the most delicate operation on the eye, to the repairing of a broken bone—they are masters of any disease—death need be looked upon now by us only as a natural change.

Educationally, today America stands as one of the most civilized nations of the world. This has been brought about in a great measure by our compulsory school system. On education we spend annually \$200,000,000, more than the entire sum spent by five leading European countries, including England.

We, too, thoroughly understand the need of physical development as well as that of the mind. Sports for that purpose are introduced into our schools, gymnasiums are built, and associations formed—all for the sole purpose of developing a more perfect man.

The amusements of today tend also for broadening as well as amusing mankind. Operas given by great artists, illustrated lectures carrying us to every point of the earth, and the theatre with its Shakespearian plays.

Our spiritual views also have had a great influence in bringing about this great advance in civilization. That which brought our forefathers to this land was that they might worship God as they chose.

America of today surpasses the idea of our forefathers of 1620, in that we have added to liberty and justice and their fear of God the humanitarianism of life. No cry of distress from any quarter but what we are quick to respond. No class distinction bounds the American people—we have taken up the "white man's burden"—our sympathy and help reaches to all classes and our aim is that we may better our less fortunate brother. That we are humane can no better be illustrated than in the fact that more than \$15,000 was raised in our neighboring city, Detroit, on Blue Star Day to wage war on the tuberculosis germ and the whole city is now interested in the raising of a \$2,000,000 fund with which to build a sanatorium to fight this gigantic evil.

Someone has said America is another word for opportunity. Surely today every man has an opportunity to work out his

eternal birthright—to be the most complete being he is able to be.

Wherein we surpass the Roman Golden Age in all points mentioned and that we claim to be the happiest people on earth because we are the most prosperous, the freest and the best educated and enjoy, in the highest degree, all intellectual and spiritual pleasures and that we are the most humane of all people, whether upon the physical, intellectual or moral plane, the conditions of today of living in America make for happiness, more so than anywhere else, we can well speak of this as the "Golden Age of America."

"If the Romans thought the muddy Tiber the favored river of heaven, and the Chinese pity everybody born out of their flowery kingdom, shall not we, in this land of glorious liberty, have some thought of love for country."

Edward Everett Hale's motto expresses in homely phrase the American watchword—

"Look forward, not backward,  
Look up and not down,  
Look out and not in,  
And lend a hand."

### CLUB DISCUSSIONS.

**Have Informal Discussion.**—The East Otisco Farmers' Club met on Thursday, April 7, at the home of O. A. Nummer and had a very enjoyable meeting. A bountiful dinner was served and after a short social time, the business meeting was called. In the absence of President Benedict, Mrs. Margaret Kemp proved to be a most acceptable chairman. On account of the busy season of the year, a number placed upon the program were absent and this resulted in an impromptu discussion, which called nearly everyone out. "The agricultural possibilities of Michigan" was treated in an optimistic view by R. S. Hawkins and O. A. Nummer and Mrs. M. L. Howe supplemented by interesting comparisons with her native Texan home. A question box followed, which brought up a variety of topics, including educational problems, division of labor in the home, butter and cake making, and the latest comet. The remainder of the time was given to reports and business. These club meetings are the pleasantest of social gatherings, besides being a place where up-to-date methods and questions are discussed. No progressive farmer can afford to miss them.

## GRANGE

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

### THE MAY PROGRAMS.

#### State Lecturer's Suggestions for First Meeting.

"The kitchen and dining-room have as much to gain from science as have the dairy and the orchard."—K. L. Butterfield.

#### Ten-minute song service.

In the Home—II. Helpful Yeasts.

#### Short dialogue.

The Halley Comet—Where, what, when?

#### A paper, or talk.

Care of little things on the farm:—

1. Lambs. 2. Pigs. 3. Calves. 4. Colts. Some things we can get along without. Discussion led by a man and a woman.

Songs interspersed throughout this program from "School Song Knapsack," selected by a teacher or pupil of some school.

### THE GRANGE A CONSTRUCTIVE FORCE IN RURAL AFFAIRS.

Time was when the Grange stood more as an offensive than as a constructive force in rural affairs. It was necessarily so. A way had to be blazed to a recognition of mere rights for a great class of people. Its aggressiveness was unavoidably destructive, destructive of fixed notions and customs which hedged about countrymen and their business relations with other classes.

Time came when, as a whole, and for the most part as local organizations, the Grange was recognized as a factor in the working out of every problem touching country life. It has become an acknowledged influence to be reckoned with. From this position, here and there, it is actually an instrument for initiating and bringing to pass real things; a forum upon which crude plans are discussed and remodeled; a machine by which new projects are launched; an anvil whereon spears are hammered into pruning hooks.

It is not enough to oppose; we must propose. It is not sufficient to simply approve; we must differentiate, point out what is good and show what will be better. This is a practical work that needs doing in nearly every project that arises in every neighborhood. It is not enough for the Grange to bluntly refuse to endorse a state legislative measure, a county building project, or a neighborhood social club; it must seek to suggest a better way if it disapproves of any or all of

these. Strength does not lie in always merely holding one's ground; it comes through forging ahead in untried fields and beating out fresh paths. The right to leadership comes through the practice of leading, of taking the initiative.

In the mobile, unsettled state of country life at present, the Grange has a remarkable role open to it. Having attained recognition as an established element of power in rural affairs, it lives beneath its opportunities wherever it does not pre-empt this province and take a building part in growing projects and undertakings. It should be on the alert to formulate plans for the future welfare of its rural people and not protestingly follow after others who propose schemes for their improved conditions. This does not necessitate that the Grange be hot-headed and, taking the bit in its teeth, hold counsel with none. On the contrary, it means it shall strive for a wiser, more considerate weighing within the Grange of the plans and propositions of others, selecting their good, rejecting their bad and bringing forth from all available sources the best possible plan of action. It means counseling with other organizations and individuals which have similar aims. It means seeking to coalesce such agencies into a unit of power for efficiency in country betterment. In a word, the Grange's mission as a constructive force lies in Rural Uplift.

JENNIE BUELL.

### LECTURERS' CONFERENCES SUCCESSFUL.

The Lecturers' Conference, at Kalamazoo Normal School Building, May 12, 1:00 p. m., will close the series of district conferences for southern Michigan. Thus far the interest and attendance have justified the plan which is being tried of getting lecturers together for purposes of inspiration and conference concerning methods and plans; but it is expected that those who attend the Kalamazoo meeting will have some privileges impossible to secure for the others. All who attend this conference are invited to remain for the lecture on Rural Progress, by Hon. Henry Wallace, of Iowa, who was a member of the Country Life Commission. An opportunity to meet Mr. Wallace will be afforded at a reception tendered him by the rural school department of the Normal. Several officers of State Grange, including Master Hull, and officers and representatives of other rural organizations, besides goodly delegations from the Granges of southwestern Michigan are expected to be in attendance.

Charlevoix County Pomona.

The ideal spring weather prevailing April 21 brought with it such a rush of farm work that many Patrons were prevented from attending one of the most enthusiastic Pomona meetings ever held in Charlevoix county. The attendance, however, was good, eight Granges being represented. The lecturers' program, in all its parts, proved a very strong feature, some of the discussions reaching a very high and inspiring strain of thought. The topic for general discussion, "How to make our homes and school grounds more attractive and healthful this spring," was discussed by Brother Mears, who advocated the beautifying of the farm home as well as the school grounds. Brother Stacks, who believed home could be made attractive by the avoidance of intemperance in all things and by placing the home above the intemperance of striving to do too much on the farm and forgetting the farm home. Sister Creyts believed in the housewife getting out of doors as much as possible, and in making the back yard as attractive as the front so the housewife could enjoy the beauty while at work. Also in quitting farm work early enough so the family could spend the evenings out of doors. Brother Jones would make the health of the home the first consideration and advocated building on a high point of ground and letting the sunshine into the home.

Permanent committees for the present term were appointed, and the fifth degree was conferred on seven candidates. The Grange voted in favor of making an agricultural exhibit at the next meeting of State Grange and all Patrons in the county are urged to aid in getting up the exhibit. Examination of the reports of 13 subordinate Granges for the second quarter of the Grange year showed Deer Lake Grange again in the lead with a score of 310 points, with Ironton second with 260 points. Deer Lake was therefore declared the banner Grange of the county for the second quarter. By unanimous vote the Grange expressed satisfaction with existing conditions under local option, as compared with previous conditions, and adopted a resolution urging all friends of local option not to sign any petition for re-submission of the question next spring, the idea being that longer time than two years is necessary to a complete and satisfactory test of local option.

### COMING EVENTS.

#### Pomona Meetings.

Shiawassee Co., with Owosso Grange, in Owosso, Tuesday, May 10.

Gratiot Co., with Star Grange, Saturday, May 21. L. W. Oviatt, state speaker.

Benzie Co., with Thompsonville Grange, Tuesday and Wednesday, May 31 and June 1.

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Wallace's Farmer, Des Moines, Ia.	60,000	.30	.27½
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This engine can be connected to "any old pump" in 30 minutes. After you have watched it pump water for five minutes you will wonder how you ever got along without it. The longer you have it, the better you will like it. It is right on the job all the time. A turn of the fly-wheel and it is off. A child can operate it. The ladies often start it to pump a pail of water. They rest while it works.

It is shipped complete with walking-beam, supporting frame and everything ready to set it up in complete working order, except three stakes for driving in ground. Next to a windmill, this is the most economical outfit for pumping. We are selling many thousands of them every year, but our sale of Aermotors is still increasing.

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Buy direct from the biggest spreader factory in the world. My price has made it. No such price as I make on this high grade spreader has ever been made before in all manure spreader history. I save you \$50. Here's the secret and reason: You pay me only for the actual material and labor at cost and one small profit based on my enormous factory capacity of 30,000 spreaders a year. And I pay the freight right through to your station. Any farmer can afford to have a spreader when he can get in on a wholesale deal like this on a



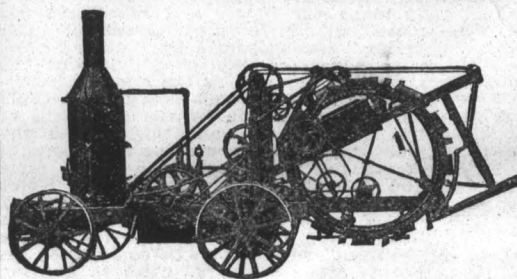
## GALLOWAY

position! You know if I didn't have the best spreader. I wouldn't dare to make such an offer. 40,000 farmers of America have stamped their O. K. on it. They all tried it thirty days free just like I ask you to try it. Get out your pencil. Drop me a postal saying, "Galloway, send your new proposition and big spreader book free." Ask about the new, complete steel gear 70 bushel spreader.

H. Gutherson, Gladbrook, Iowa, "Works fine. Spreads T. F. Stice, Oswego, Kans. "Often pull it with my small buggy team. Does good work. Have always used the Galloway much the best. If going to buy a dozen more they would all be Galloways."

**The William Galloway Company, 649 Galloway Station, Waterloo, Iowa**

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Built in many sizes. Steam or Gasoline power. Five days' free trial allowed. Send NOW for new Catalog "F" telling about this money-making device. Address all correspondence "Sales Department."

**THE BUCKEYE TRACTION DITCHER CO.,**  
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The Dain way is to air cure hay with the Side Delivery Rake by turning it into continuous fluffy windrows through which drying wind and air will freely pass. The Dain Side Delivery Rake insures that every smatch of juice and goodness, nutrition and dollar and cent value will be dried right in. It's the rake that handles the hay gently without bruising or breaking off the tender leaves. It sends the hay dry to the barn with all its natural green color and richness.

### This is the DAIN WAY to Air Cure Your HAY

More than making top-price hay, the Dain Side Delivery Rake is the most durable, simple, practical, easily operated rake on the market. It is built by specialists, who for 25 years have done nothing but build hay tools, rakes, mowers, stackers, loaders, presses. That's why more Dains are used. Ask your dealer to show you the Great Dain Line, or tell us what hay tool you are interested in, and we will send you complete information and valuable book—"All About Hay"—it's free.

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Exclusive Features  
Teeth may be raised or lowered.  
Teeth turn with gentle motion harmless to tender products.  
Rakes clean, leaves trash and dirt.  
All jars absorbed by cushion springs.  
Easy regulation of bevel gears.  
Easily adjusted to handle light or heavy hay.

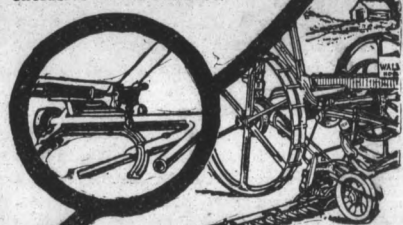


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No galled necks and shoulders if you do your mowing with **WALTER A. WOOD "ADMIRAL"**

As the pole is not rigidly connected to the frame, the vibration of the gearing is not carried through the pole to the horses' necks.

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