

# MICHIGAN FARMER

AND  
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## FARM NOTES.

### "Treating" Seed Corn.

During the past week or ten days we have received a number of inquiries from subscribers who were ready to plant corn and wished advice on the treating of their seed corn with some substance which would protect it from the depredations of gophers, crows, cutworms, wireworms, etc. To these the writer has made a personal reply giving his views and observations on this subject, but as a great deal of corn will be planted during the first days of June, on account of the extremely late season, a review of this problem will not be amiss at this time. These inquirers have mentioned having seen various substances advocated for this treatment, such as kerosene oil, turpentine and similar penetrating substances which would impart a disagreeable odor and taste to the corn. Now, it is a patent fact that careful experimental work along this line, extending over several trials is a safer guide in a case of this kind than the testimony of a grower who has tried it out with apparent success in a single instance and has come to the conclusion that such treatment of seed corn is the proper thing. In the treatment of seed corn with such substances the first vital consideration is whether or not it will injure the germinating power of the seed. Fortunately there is some experimental evidence on this point. The Kansas station has been studying this question from the standpoint of the prevention of the ravages of rodents, and after an extensive series of tests has recently published a circular stating that the use of kerosene, crude petroleum, fish oil, crude carbolic acid, spirits of camphor, copperas, etc., when used in sufficient quantities or strength to impart a lasting odor to the corn seriously injures the germinating power of the seed. They also conclude that the use of any of these substances in quantities or of a strength which will not injure the germinating power of the seed is worse than useless, as the little odor imparted is soon dissipated when the corn comes in contact with the soil. The most promising treatment of seed corn for this purpose tried by this station was with coal tar, the corn being first wet with a little warm water and then a teaspoonful of coal tar added to a peck of corn. With a thoro stirring and mixing of the corn this small amount will coat and color the kernels and when dried the corn is not sticky, will work well in a planter and retains a lasting gassy odor. Soaking the corn in a strong tobacco decoction for a few hours and then thoroughly drying also appear to promise some results, but notwithstanding the extensive nature of the experiments made this station still considers the proposition in an experimental stage so far as the effectiveness of such treatment is concerned in the protection of seed corn from rodents, the most troublesome of which in that state are field mice, which run thru the burrows of moles and destroy considerable corn and other seed grains after planting. But the negative results obtained are of a nature which should cause our Michigan farmers to exercise care and discretion in experimenting with "treated" seed corn as a protection of the seed from gophers and crows, to say nothing of worms.

In any event it is difficult to see how such treatment of the seed could prove any protection against cutworms. These attack the tender shoot at the surface of the ground, and it is hardly conceivable that the treatment of the seed could effect either the smell or taste of the blade of corn, even granting that the worms are epicurean in their habits.

Probably the most effective safeguard against the depredations of cutworms is to thoroly fit the ground, delaying planting a few days if necessary to this end. In the meantime, the worms will be just that much nearer maturity from the larval stage and when the corn is planted the conditions will be favorable for its quick germination and rapid growth. Then, too, when the planting is delayed until the soil is well warmed up it can safely be planted deeper than would be practicable if planted earlier and under less favorable conditions, and as the cutworms work at or near the surface of the ground, much of the corn will grow up again even if it is cut. There are two methods of handling the soil which promise about equal protection. The one above noted of plowing early and preparing a good seed bed being the better for the future development of the crop, but it will also be noted that where the corn ground is plowed just before planting time, the worms will be turned down with the sod and will continue to work on the green shoots of grass and the tender rootlets until the corn gets a fair start. Either of these plans would seem both safer and more effective than any plan of treating the seed could possibly be. The writer has tried various plans of

use of the latter in comparison with the highly poisonous corrosive sublimate. In the use of the formaldehyde or formalin treatment we have found it convenient to make enough of the solution to fill two or three barrels, setting these on a platform devised for the purpose and boring a hole near the bottom of each so that the solution can be drained out into a tub when each batch has soaked long enough. Then the tubers can be emptied out and the barrels refilled and the liquid again poured over them until the potatoes are covered. Of course, some fresh mixture will have to be added from time to time, and it is best to keep the barrels covered during the process of soaking, but the solution can be used several times. We have always used a mixture of 1 lb. of the common commercial 40 per cent formaldehyde to 30 gals. of water, soaking each batch 1½ hours. This is the mixture which has commonly been recommended for the purpose by experiment stations, and it has given us good results, altho perfect immunity has not been secured, probably because the soil has in some cases been infected, in which case the treatment can do little good. However, recent experiments seem to indicate that a stronger mixture can be safely used or the tubers soaked in a mixture of the

in an earthen vessel and then diluted to the desired proportions. The seed is soaked in this solution for 1½ hours the same as in the formaldehyde solution. Great care should be exercised in its use and in handling the potatoes after treatment on account of the poisonous nature of the material with which they are treated.

Another method of treating the seed which the writer used last year and will employ again this year is with formaldehyde gas. This was done in accordance with the formula recommended by the Maine station; three pints of formaldehyde being poured over 23 ozs. of potassium permanganate spread evenly over the bottom of a large crock for each 1,000 cubic feet of space in the cellar in which they were treated, the cellar being closed tightly for about 36 hours after treatment. Here again there is a difference in the quantity recommended by the different stations, the Wisconsin station recommending 24 ozs. of potassium permanganate and four pints of formaldehyde for each 1,000 cubic feet of space. However, the first formula given seemed to give us good results, and as the Maine station should be a first-class authority on this subject we shall use the same quantity this year. This method of treatment would be of questionable value to most farmers for the reason that the fumes would prove objectionable where the potatoes are stored in a house cellar, but in our case they were treated in a cellar under an outbuilding, with entire satisfaction. It is a peculiar fact that, while the potatoes did not seem to be injured in any way for seed, the weeds growing about the cellar wall were visibly affected by the escaping fumes. For best results the potatoes should be in crates as the gas will penetrate them more readily, but with a little longer exposure to it they will all be reached in a compact pile or in sacks.

### Seeding Low Land.

I would be very much pleased to get your opinion on what crop I should sow to seed down eight acres of low ground which was plowed last fall with the intention of sowing it to oats this spring and seeding it down to clover. This field has been to corn twice. The heavy rains have kept it too wet to think of sowing it to oats now.

Allegan Co.

J. H. B.

Where it is desired to get a good seeding of grass on low land, the best method of seeding it late in the season is to prepare a good seed bed and sow the grass seed without a nurse crop. If there is a prospect that the field will be dry enough to permit the pasturing of sheep and hogs on it during the summer it would be practicable to sow it to dwarf Essex rape for that purpose and seed to grass in this crop. But if the land should be wet at any time during the summer it would not be good practice to let the stock run over it and tramp it down. If sown alone as early as the ground can be properly fitted it would be possible to get a light crop of hay the first year, but for the best results with the stand of grass for a series of years it would be better to prepare the land well and seed, letting the grass remain on the land over winter if the growth is not too large. There is no grain crop except buckwheat with which this ground could be seeded late in the season. Alsike clover should be used on this low land in a mixture with timothy and red top, and a liberal amount of seed should be used for best results.

### Seeding a Sandy Hill.

I have a large hill where the wind has swept the sand and blown out holes here and there. Now, I wish to fill and even up and seed. The soil consists of high, red sand. Rye grows very good on this kind of soil; probably I could seed with it. Or how would it be to seed and spread



The Family Horse—One of the Luxuries which Make Farm Life Worth Living.

treating seed corn, but has never been satisfied that any benefit has resulted, but knows of farmers who are steadfast in their faith that such treatment has been the salvation of their corn crop. However, as above noted, we prefer to accept the conclusions reached at experiment stations as a result of many trials and careful observation, to the experience of a grower, which may have been due to factors which he did not carefully note and upon which he had no reliable check.

### Treating Potatoes for Scab.

Several requests are at hand for specific instructions as to how to proceed in the treating of seed potatoes for scab in the most effective and economical way.

As before noted in these columns, the writer has successfully treated his potatoes for the scab fungus many times, both with the corrosive sublimate treatment and with the formaldehyde treatment, and last year with the gas treatment. The corrosive sublimate treatment was discarded for the formaldehyde treatment because of the greater safety in the

strength above noted for a longer time without injury. A bulletin recently issued by the Michigan station recommends soaking the tubers in a mixture of this strength for two hours, and a press bulletin from the Wisconsin station recommends the use of one quart of formaldehyde, which would be approximately 2 lbs., to 30 gals. of water, soaking the tubers for 1½ hours. Thus it would appear that the quantity that may be used with safety is larger than that required for effective treatment for scab and that exact proportions need not be maintained for good results. The seed, however, should be treated before being cut and care should be taken to keep it separate from untreated seed and not to handle it in infected crates without disinfecting them.

However, some growers claim to have had more favorable results with the other treatment. The solution for this treatment is made by using 1 oz. of corrosive sublimate to 7 gals. of water. This should first be dissolved in a little warm water



manure on surface? This tends to keep wind from blowing both sand and seed away. What seed is best to use on this high, dry soil, and what time of year should I seed?

Monroe Co.

SUBSCRIBER.

While the writer never had any experience in seeding land of this kind, yet the plan of sowing without a nurse crop and topdressing with stable manure would seem to be the most feasible one. If the ground is plowed early and worked thoroly to prepare a good seed bed and the grass seed is sowed when the weather conditions are favorable to its quick germination and rapid growth, the chances of getting a good stand of grass would seem to be good by this plan. If the surface of the ground is left rough as it would be if rolled with a corrugated roller, or if harrowed after rolling with a smooth drum roller, the sand will blow much less freely, and the topdressing of stable manure will tend to further decrease the velocity of the wind at the surface of the ground. If June grass comes in freely on this land, a seeding of red and alsike clover and timothy should be sufficient. If June grass does not grow readily probably one of the best grasses to use as a soil binder on such land is brome grass (*Bromus inermis*).

#### PREPARE FOR THE BEAN CROP.

With the price of beans hovering around the \$2.25 mark, which is a record price for this commodity, probably, owing to this fact, a larger acreage will be devoted to this crop this season than in any one season in the history of the state, and while the price will probably be good during the coming season, for the reason that practically all of the old crop has been consumed, yet it is always wise in changing our farming operations to "make haste slowly," especially is this true with the novice or beginner. The man that is continually changing from one crop to another will usually find that he is just a little too late to realize the best prices on what he happens to be raising that season, for the reason that others, thinking that the price would be high, have also changed their plans and gone into what seemed a money-making crop, only to find that when their crop is ready to market there is a surplus and the market is far from what was expected.

While perhaps there is no great danger of this being the case with beans this year, it will seldom be found profitable to break up our crop rotation in order to increase the acreage of any one crop, especially if that crop is a cash crop, the profits from which are always more or less uncertain.

In preparing for the bean crop, the old adage that "what is worth doing is worth well," applies with unusual significance, for unless the preparation of the soil has been very thoroly the best results cannot be expected.

A clover sod turned under makes an ideal place for this crop. The plowing should be done as early in the season as possible so that the soil can be worked over several times before planting in order that the moisture may be conserved and also to kill all the weeds possible before the crop is planted.

Where the ground has been plowed early and harrowed frequently and the ground is reasonably free from weeds, drilling in rows 28 in. apart is preferable to planting; but where there is danger of the weeds getting the start planting is better, as more thoro culture can be given the crop. In drilling, the writer has found that from 20 qts. to 24 qts. per acre is about the right amount to sow, depending on the season and the soil. Before the beans come up the ground should be gone over with a spike-tooth harrow to loosen up the soil and kill the weeds that have started and after the first cultivation they should be gone over cross-wise of the rows with a weeder, which will loosen up the soil in the rows and also kill the weeds that may have started. This should be done in the middle of the day when the sun is shining, as the young plants are very tender in the morning and are easily broken off. Frequent cultivations should be given the crop during the growing season and especially after each rain in order that the moisture may be conserved, for quite often it happens that just at the most critical time, when the pods are "setting" we have a dry spell and unless there is plenty of moisture in the soil the yield is sure to be greatly lessened. Upon good soil where good cultural methods have been employed, 20 bu. per acre is only a fair yield and with prices ranging from \$1.50 to \$2.00 per bu. there is no crop that will yield a greater profit for

the time expended than the bean crop, and considering the fact that it only requires about four months from the time the crop is planted until the cash can be realized upon it, and also that where the ground has been kept clean the soil requires but little work to fit it for wheat, beans make a good cash crop for many farmers whose soil is adapted to the raising of this crop and, with the advent of modern machinery for handling the crop it is one of the easiest crops to handle that is raised on the farm.

Livingston Co.

C. C. O.

#### AFTER THE CORN IS IN.

The most important work at this time is to spray the fruit trees and berry bushes. The principal spraying for the codling moth, or apple "worm," also the cherry "worm" and plum curculio comes at this time, and it is also a favorable time to cover the foliage with Bordeaux mixture for the scab. This is important on young trees not yet in bearing, as well as older ones that have blossomed. An application of Bordeaux mixture (three pounds blue vitriol and five or six of lime to 50 gallons), to which is added two to three pounds of arsenate of lead, will work wonders with the fruit crop. The general farmer can at least afford to give this one spraying even if he gives no more. Leave a few trees unsprayed and compare the fruit with the sprayed ones and see for yourself whether it pays or not. Notice the thriftiness of the foliage also, and how the sprayed trees behave the next season. Every farmer should read Prof. Taft's article on page 568 of the Michigan Farmer of May 22.

Those who take enough interest in fruit to spray the trees will probably give more care to their orchards and small fruits in the way of pruning and cultivation. This will be a good time to prune trees and clean out raspberry and blackberry plantations. These fruits are getting more scarce, and prices will never be down where they were a few years ago, so it stands us in hand to take care of our trees and bushes or go "fruitless."

Garden truck, potatoes, pop corn, sweet corn, squashes, pumpkins, melons, etc., should be put in now. We have to do a little figuring to keep the new corn, pop corn, and sweet corn from mixing, but with a little planning it can be done. The early sweet corn should be near the house, but that used for drying or canning may be farther away if necessary. The vine plants should be where they will not smother out other plants in late summer, and where they will not bother in cultivating, as in a corn field that is to be sown to wheat.

Calhoun Co.

S. B. HARTMAN.

#### ALFALFA SEED IN MICHIGAN.

There has been, from time to time, attempts made to make alfalfa a success in the state of Michigan and a large percentage of these attempts have failed outright. The main cause of this failure is in the seed that has been planted. Now, there are as many varieties of alfalfa and families of alfalfa as there are of clover and some of them are adapted to this state and others are not. Right here lies the solvent of the alfalfa problem in Michigan. The seed that is planted in this state must be raised in the state, or at least come from the same families that are doing well in this locality.

To illustrate the point made in the above paragraph, I will sight the work that is being done at the state experiment station. A few years ago it was realized that in order to make alfalfa a success in this state it must be bred here and the seed distributed of the family that was the best for the state. To that end the station has been working. Some 43 families were started in the experimental plots and after the second year those withstanding the winter show that over half of these families are not good for this state, and yet the seed of this family of alfalfa has been sold by seed companies to farmers of the state and they have failed to get results. Is there any wonder?

To make the example concrete, take the Arabian alfalfa that has been recommended for the northwest. There were two long rows of Arabian alfalfa started and it was cut last fall just before the killing frosts. It grew practically all winter at a very low temperature, but this spring during the severe freezes it was killed. The plant characteristics of Arabian alfalfa are a little different than that of other alfalfa, as the leaves are about twice as broad as the Russian and three times as long. Of the numerous

families represented in the nursery are those which present a great contrast to their sister families. Some of the plants show thrift, large stalks, and an upright pose, while others resemble pursley in its tendency to sprawl out over the ground, while still others seem to be stunted in their growth and prefer the bush form. The contrast in shape brings vividly to mind the inherent characteristics which are either desirable for this state or not wanted.

In Michigan there are only two places where alfalfa seed is successfully grown to any extent—that is to the writer's knowledge. One of these places is in Antrim county and the other in Ionia. In the northern county some of the farmers are even bringing alfalfa seed to the fairs. This seed, however, is not as soon as it is for sale and makes one of the best seeds that the farmer of this state can buy, simply because the plant has demonstrated that it will grow and produce seed in this state.

In what is known as the alfalfa belt in the south there is no trouble about getting a stand of alfalfa the first seeding. The seed is sown in the fall and two cuttings are realized the first season. Alfalfa in the belt will produce four to five cuttings and about a ton to the acre each cutting. It brings at the alfalfa mill at least \$8.00 per ton when it is first cured, and the price some times in the year goes up to \$12 or \$14 per ton. But the seed used in this belt is of a different family than that which will grow in Michigan. The plant leaves and stems are of a different size than that which is doing the best in this state.

When the experiment station finally secures seed for distribution to the farmers in the state, the success of the legume will be practically established. One of the best things that the farmer can do who has any alfalfa that will produce seed, is to plant it until he has enough to profitably sell to his neighbor.

Allegan Co.

E. B. REID.

#### A LATE SPRING AND THE PRICE OF HAY.

The price of hay in the middle of May in the state of Michigan is double what it was last fall and winter. Early in the season hay was a drug on the market. Much of it was sold for five and six dollars in the barn and seven or eight dollars was a good price for baled hay delivered at the station; but a late spring has changed the market. The hay has all been used up. There is scarcely any hay in the country and the price just the very last of feeding just before grass, is double what it was in the fall. Several supervisors say that they never found so little hay and grain in farmers' hands the first of May, when they usually take their assessments, as there is now. This will probably mean high priced hay early next fall and cheap hay next spring, because farmers will be saving of it.

If you have wool to sell or manufacture it will pay you to write WM. LAMBERT, of the WOOLEN MILL, Reed City, Mich.

#### Make Home Homelike.

The way to make home homelike is to make it pleasant and comfortable for every member of the family. The home should not demand incessant work on the part of wife or any other member to make it homelike. Yet how many do. Keeping the home neat and clean is often another term for drudgery. Starting up kitchen fires, cleaning greasy, sooty pots and pans, and filling smoky lamps often means hours out of a woman's day that could better be devoted to other duties or even to needful rest. In the "F P" Gas Machine, The Incandescent Light & Stove Company, East Pearl Street, Cincinnati, Ohio, offers a solution of the lighting and cooking drudgery. This machine is an actual gas plant, household size, that supplies gas for lighting and cooking purposes. The cost to install is not excessive, and once in the home the operating expense is gratifyingly small—guaranteed not to exceed 1/4 of a cent an hour for each light, or 1 cent an hour for each burner on the stove. The cleanliness, simplicity and absolute safety of the "F P" machine are features that will appeal to the mistress of the homelike home. A typical homelike kitchen equipped with a "F P" gas machine, stove and light is shown in the illustration. Notice the convenience of every arrangement. Anyone can run a "F P" gas machine, often children, without danger to themselves or others. The "F P" gas machine—"F P" by the way, means fire proof, fool proof—is totally different from other lighting plants. It has no dangerous hollow wires, leaky valves or other contraptions that make life and property unsafe. The readers of this paper, particularly the ladies, should write to The Incandescent Light & Stove Co., for a copy of their book, "Make Home Homelike," which tells all about this safe and satisfactory system, shows different styles of stoves and a variety of lights adapted to every use in the home.

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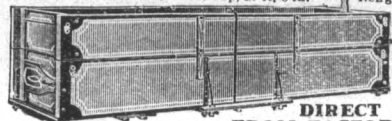
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## LIVE STOCK

### THE RAISING OF VEAL.

There are hundreds of farmers who keep just enough cows to keep their families in milk and butter or who try to keep the house in groceries out of the milk sold. Most of these farmers make no pretensions along the line of dairying, they never think of a silo, of a test, or of a cream separator. Many do not even attempt a well balanced ration. They rarely, especially when work is rushing, try to milk at regular hours.

The natural result is forthcoming. Hardly one-half of the cows pay for the feed consumed and the other half do not make their owners rich. As a further result of this lack of interest, the sires used are of an inferior type and are hardly worthy of the name. They are not Herfords, or Jerseys, or Shorthorns, but simply "bills." So it is that the calves produced are of no particular class or breeding and show no signs of ever developing into either beef or dairy animals. The early death of such animals is indeed a boon to the stock interests of any community, and so the practice of vealing such calves is far from being a detriment to the breeding interests of the country.

Having proven that in such cases the vealing of calves is not a slovenly practice, and having made the statement that a majority of these cows do not pay out at all, it is certainly all right to suggest a means by which these cows will pay better, and which will be a time and labor saver to the farmer. The means of accomplishing this end is to raise veal for market. An ordinary calf is the best milking machine ever invented, needs no sterilizing, and but little attention. Besides saving yourself and the women work, he is a profitable animal.

In no case, when we have vealed calves have we been unable to buy our butter and still have a good profit left, when on the other hand, we usually have a hard time to keep ourselves in butter. Such is the case not only with ourselves but with many of our neighbors as well. We have sold calves six weeks of age for \$11.25, our butter account during the same length of time being \$5.00. We were able to steal enough from the cow to keep us in milk during the time. Indeed, when we are not selling milk we almost invariably keep calves. In some instances it is about the only way to profitably utilize the poor cow.

Calves can be obtained from milkmen, who want to sell the milk, and from people who don't want to bother with them. As a rule, it is not at all desirable to allow the calf to run with the cow; but is much better to pen the calf and to let the cow to it twice daily. Of course, circumstances alter cases, but the probabilities are that if you are included among a large class of non-dairying farmers, veal-growing will prove profitable for you.

Ohio.

CLYDE A. WAUGH.

### AN EXPERIMENT WITH HOGS.

Feeling that possibly some of the readers of the Michigan Farmer would be interested in an experiment which I conducted last fall, I will, as best I can, give the results obtained. It might be well to say that I was led into making the test because of so much "talk," and principally among farmers, that it was a losing proposition to attempt producing pork at a profit, when new corn was bringing 80c per cwt. on the market. I had considerable faith in the teachings of our experiment stations, and agricultural papers, also in some of the men who made the assertion that hogs would fail to make good as the "mortgage lifter," with corn at the prevailing price. Having no particular desire to grow pork at a loss, I must confess, was "kind-o" on the fence as to know just what to do. After figuring for a number of days as to the probable outcome, I decided to make the test and at least satisfy myself on the question.

I selected for the test thoroughbred stock, using 5 Poland Chinas, age 7 mos., and 2 Duroc Jerseys, age 13 mos. All were very thrifty and placed in the same pen, and received the same care and attention. Each hog was numbered and weighed at the beginning of the test and at the beginning of every week thereafter. Hogs had been upon full feed for about two weeks previous to the beginning of the test. They were fed regularly all they

would consume of the feeds which made up the ration. The drink was nothing other than ordinary dish-water, given three times per day, before the corn. Alfalfa hay was given just as it came from the mow, morning and night, about 1 lb. to a feed. Corn was weighed at every meal, (three times per day), and fed upon a cement floor.

Breed.	No.	Weight at beginning.	Weight beginning 2nd wk., lbs.	Gain 1st wk., lbs.	Weight beginning 3rd wk., lbs.	Gain 2nd wk., lbs.	Weight beginning 4th wk., lbs.	Gain 3rd wk., lbs.	Weight beginning 5th wk., lbs.	Gain 4th wk., lbs.	Total gains.
Poland China	1	136	147.5	11.5	157	9.5	171	14	183.5	12.5	47.5
"	2	139	153.5	14.5	168.5	8.5	180	11.5	191.5	11	41
"	3	132	151	19	171	18.5	189.5	18.5	208	18.5	47
"	4	136	140	14	154	18	172	18	190	16	44
"	5	135	147.5	12.5	148.5	13.5	162	13.5	175.5	13.5	47
Duroc Jersey	1	205	229	24	253	24	277	24	301	24	77
"	2	174	192	18	210	18	228	18	246	18	72
Corn consumed: First week, 476 lbs.; second, 497 lbs.; third, 518 lbs.; fourth, 522 lbs.											
Total, 2,023 lbs.											
Recapitulation:—355.5 lbs. pork at 85c—\$30.08; 2,023 lbs. corn at 80c—\$16.18; profit, \$3.90.											

Weight and Feed Table.

The reader, by consulting the feed and weight table, will readily note the great difference in gains in favor of the Duroc-Jerseys, but it is reasonable enough to believe that they (the Duroc-Jerseys) consumed a greater amount of food than any two of the Poland Chinas. Taking the total gain of 355.5 lbs. for the lot, which was produced at a cost of \$16.18 for feed, leaves a balance of \$3.90 to pay for labor and the satisfaction of knowing that hogs can be profitably grown, even the corn commanded the very attractive price of 80c per cwt.

Ohio.

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### BREEDING, GROWING AND TRAINING MULES.

During the past ten years the demand for high class mules has been constantly increasing. There is a call for good sized mule teams from the city breweries and other heavy trucking centers, from the southern planters and farmers and from the rural free delivery men. The government is constantly buying mules for service in its island possessions and numerous foreign countries are looking to this country for their supply of mules. In the face of all of these demands the supply is inadequate.

In the practical language of the mule market and farm the term "mule" means the progeny of the "jack" and the mare, while the term "hinny" means the reverse cross, or that of the stallion upon the jenny, or female ass.

In the procreation of the mule the quality of the jack is of the greatest importance, as his influence is marked on every mule that is produced. Great improvement has been made in the mule since the importation of the Spanish jacks into this country.

It has resulted in giving us animals that reach maturity at an early age and that possess more size and action and have a better quality and finish.

#### The Market Mule.

In the breeding of mules for market purposes the jack should possess good size altho it is not always best to select a large jack that is deficient in other respects. An ideal jack is one from fourteen to fifteen hands high, with a good depth of chest, length of body and with a good strong constitution, which is indicated by a good round barrel. He should have heavy, flat boned limbs, a long thin face and fine under jaw, ears carried upright and not too thick. His temper should be kind and sprightly and his appearance good, for these qualities are certain to be transmitted to his progeny.

He should be fed and cared for at all times with a view of maintaining the

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greatest physical force and vigor, so as to produce an even lot of colts, and to this end he should rarely be allowed to serve more than fifty mares during a breeding season of three months. Feed him such food as will promote strength and vigor and not produce feverishness. Natural exercise with the run of a grass lot should be allowed him at all times. When a jack is being used for the purpose of crossing with mares he should not be allowed any intercourse with animals of his own kind, as he is quite apt to become useless for crossing purposes when allowed to come in contact with animals of his own species.

For the procreation of mules I would select mares that have good sized roomy bodies and short, strong limbs. They should have kind dispositions and the more good blood they possess the better, if the form and strength have been preserved. If I were going to make a specialty of the business I would take my time and select mares from some city dealers where I could find well-bred able-bodied mares that were disqualified for city uses, on account of being foot-sore or blemished. There are many excellent mares in every city that can be got for very low prices and these mares will go out to the farm or ranch and raise a number of fine mules before their days of usefulness are over. Now, I expect some scientific breeders will jump at me and say that I am giving my readers poor advice, but I am speaking from the practical and money making side of the question and I have personal acquaintances among the most successful mule breeders in Oklahoma and Missouri who are making a practice of doing just what I am advocating. We simply cannot afford to use the very best mares for mule breeding when we can sell them for from two hundred to three hundred dollars each.

When breeding mules for market the breeders in the southwestern states breed their mares so that they will drop their colts early in the spring. At this time the colts will come when the weather is favorable and be well started when winter sets in, and if they are all weaned at the same time they will go into the stable or feeding yards in condition to make better growth. Avoid yarding in the fall until after fly time or they will suffer great annoyance, and perhaps serious injury.

Mules are timid animals, possessing a great amount of curiosity in their compositions. They are affectionate, but possess a habit unusual in most domestic animals, that of resenting an injury, and on account of this peculiarity they are shot by many to be ugly and stubborn. A careful study of their disposition and a good line of treatment from the beginning will overcome these evil propensities. It is much easier to take a mule colt and train it than it is to take an older mule that has been misused and overcome any bad habits or tricks arising from years of abuse and poor management.

New York.

W. MILTON KELLY.

## VETERINARY

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

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

Opacity of Cornea.—I have a valuable mare that has gone almost blind, very suddenly, a white film has come over her eyes and I would like to know what to do. W. L. Armada, Mich.—Put 1 gr. nitrate silver, and 1 gr. sulfate atropia in an ounce of either distilled or rain water and apply to eyes once a day. Also blow a little calomel into eyes once daily. Give 20 grs. calomel three times a week for three weeks. Feed grass, instead of grain and protect the eyes from a bright light.

Obstructed Teat.—I have a cow that seems to have an obstruction in one of her teats, making it almost impossible to milk her. It feels like a small bunch upon the inside—it is not sore and there is inflammation. What treatment do you advise? G. W. M., Greenville, Mich.—If the bunch is not growing any larger, you had better use a milking tube and leave the treatment to reduce bunch alone. By applying iodine ointment directly over bunch you might succeed in absorbing the bunch; however, it is doubtful.

Heifer Does Not Come in Heat.—I would like to know what to do for a barren heifer; she had a calf a few months ago and has not been in heat since. Would like to know how to manage the yeast treatment, if this will be suitable

for her case. J. K. Hilliards, Mich.—If you will dilate the neck of womb with the fore finger, or with a dilator, or subject her to a forced service she might come in heat. Perhaps when the weather warms up she will come in heat anyway. The yeast treatment will not do any good in her case.

Knuckling.—I have a heavy draft mare that is weak in ankles, caused, I think, from working when her hoofs were too long—she has been in this condition about a year. J. N. D., Dryden, Mich.—Blister ankles with cerate of cantharides or any one of the blisters that are regularly advertised in this paper, and fairly good results will follow; however, it is possible that the joint can never be brot back into place and the ligaments be as strong as they were originally.

Cracked Heel—Distemper.—My 4-year-old horse has sore heels and his bowels are quite constipated. I also have a yearling colt that is now suffering from distemper, his throat is broken open in three different places. What shall I do for them? D. M. T., White Cloud, Mich.—Apply peroxide-hydrogen to sore heels twice a day, ten minutes after each application apply to cracks equal parts borac acid, powdered alum and iodoform. At this season of the year grass is the best remedy for constipation. Inject some peroxide-hydrogen into throat wounds twice a day, ten minutes later inject carbolic acid and water, 1 part to 20 of water.

Dropsy.—I have a 3-year-old filly that I have been working on the farm some; she has a soft bunch on the under part of belly, situated pretty well back. This swelling is about 4 in. wide, by 12 in. long and perhaps 1 in. thick. J. B. R., Kingston, Mich.—Give your filly a teaspoonful of the following compound powder: Powdered digitalis, powdered gentian, ginger, nux vomica and rosin equal parts by weight; they should be mixed thoroly. Hand rub swelling and if you use any application it should be a little iodine ointment.

Tuberculosis.—Will you please tell me what the first symptoms are of tuberculosis and from the time an animal takes it, up to death? O. W. D., Hesperia, Mich.—To answer your question fully I should have to occupy several pages of this paper and then I could only partially cover the ground, as the history of tuberculosis is quite extensive; besides, animals may suffer from tuberculosis all their life and die from other causes. During the acute attacks an animal usually has chills and a slight rise of temperature; however, it may not be noticeable to the casual observer. My advice to you is, if you suspect having tuberculosis in your herd, have them tested with tuberculin by a competent veterinarian and abide by his decision and you will come out all right.

Acute Indigestion.—I have a 2-year-old colt that has been sick; I was obliged to call two Vets. to treat him a short time ago—they diagnosed his ailment as acute indigestion. He has these sick spells every few days. I have given him nitre, laudanum, aconite and other simple home remedies, but they do not always give very quick relief. J. E. H., Deford, Mich.—Acute indigestion is generally the result of a fermentation of food in the stomach; therefore a change of feed is very important as a preventive; besides, if you will give a teaspoonful of ginger, a teaspoonful or two of powdered charcoal and a teaspoonful bicarbonate soda and a teaspoonful hypo-sulfite soda at a dose in feed night and morning and it will perhaps prevent future attacks. Besides, when the grass gets a little more sun and matures a little more fully it will not be so apt to produce indigestion. Aromatic spirits ammonia, ginger, peppermint, salicylic acid, hypo-sulfite soda, charcoal, etc., are calculated to give a certain amount of relief when acute attacks come on, and if the bowels are constive give aloes, salts or oil as a laxative.

Ringbone.—Sweeney.—I have a 6-year-old gelding that went lame on fore leg when he was three years old. One Vet. located the trouble in shoulder, the other in foot, shows symptoms of ringbone. Last spring he appeared to be over his lameness and went fairly good until the first of August, when he appeared to be sweened. Another Vet. looked at him and he thot his limb was fractured between knee and shoulder. He treated him the rest of the summer—he is now so he can bear his weight when he walks, but will let it hang and rest his toe when he stands. Have blistered his shoulder twice this spring. What had I better do for him? E. A. P., Munith, Mich.—I am somewhat inclined to believe the leg was fractured and that a fibrous union has taken place instead of a bony union, and if so the leg will always be weak and the horse unable to work. A fracture should unite perfectly in six weeks; therefore, it always looks suspicious if the horse does not recover from a fracture in that length of time. Continue blistering the shoulder with the same liniment you have been using, for it is all right.

Barren Mare.—I bot a 6-year-old mare last winter, which seems to be perfectly healthy, but fails to get with foal. She was bred twice last fall and has been bred the same number of times this spring. A. W. H., Goodrich, Mich.—You had better try the yeast treatment which is made by putting two heaping teaspoonfuls of yeast in a pint of boiled water. Set the solution near the stove and maintain at a warm room or outdoor summer 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. 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.

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**O. I. C.** swine very prolific. My herd is headed with a grand son of Jackson, the greatest O. I. C. boar in the world, also a Grand son of Tutey second, the world champion sow. Place your order now for spring pigs. **A. J. GORDEN, R. No. 2, Dorr, Mich.**

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## HORTICULTURE

### JUNE WORK IN THE GARDEN.

#### Pickling Cucumbers.

It is supposable that by the second week of June, the transplanted cucumbers are well under way; but preparations for the pickling crop are now in order. A safe guide as to time of planting is the old rule of putting in the seed when the blackberries are in bloom. There is nothing efficacious in said blossoms, but the conditions which bring them out are seemingly favorable for the cucumbers and planting at this time seems generally pretty safe. For best results, the ground should be very rich and the best fertilizer is well rotted manure applied directly in the hill. It should be well mixed with the soil just where the seeds are to be dropped. In growing for the market two ways of planting are practiced and as to results, my experience has been that there is little, if any, choice. A quick way of preparing the ground is to plow light furrows four feet apart and turn cross furrows at same distance. Where the furrows intersect drop the manure and do not be stingy with it. Work it well into the ground with the hoe and leave the hill somewhat higher than surrounding surface. Plant plenty of seed, fifteen or twenty seeds are not too much, for many fail to grow and they will do no harm until they begin to crowd. This leaves a surplus for beetles and when their onslaught is pretty well past it is but a slight job to thin to three or four thrifty plants. In large areas it is very convenient to omit say, every fourth row for easy access in gathering or fertilizing.

Another very good way is to furrow but one way and fill the trench with the manure and drill the seed and when well established thin to a foot or fifteen inches. The culture should be shallow and frequent until vines begin to run. For largest crops keep them closely gathered (always cut but never pull them). None should be allowed to mature seed as this practically destroys the vigor of the vines.

It is timely now to prepare the ground for the late crop of beets and carrots. Light soil made rich by previous year's manuring is best. A generous supply of these vegetables is always acceptable as they are at all times valuable for feed if market prices are too low for profit.

If not already out, the egg plants and peppers should be transplanted at once. The former should be shaded from the sun for a few days as they are tender at best, and require careful attention. A check is bad for them at any time, but especially so just at the time of transplanting. Potato beetles are especially fond of them and will work destruction among them unless kept off at some rate. For this trouble they can be handled the same as potatoes, or gathering by hand is effectual provided there are not too many plants to go over. The stem borers which work in tomatoes are also troublesome to the peppers; but fortunately they are not very numerous. I know of no remedy for them except they can be caught while at work and thus destroyed as they simply drill into the side of the vine and work in the pith. Their presence may be known by the chips around the stalks where they are at work and sometimes they can be caught by hand before doing much damage to the stalk. Their presence in the stalk will be known by a small round hole where they enter, or the vine will soon begin to wilt after they once get to work and then stalk and worm had better be destroyed at once as there is no remedy for the vine after they are once well at work.

#### Some Garden Requisites.

At this time of year some extra fertilizers are of very great advantage; and a timely application will often work wonders. A sack of nitrate of soda or bag of bone meal will often make many dollars for the user. They can be obtained of the seedsmen or fertilizer dealer in hundred pound lots at regular wholesale prices, and I know of no better investment. A barrel of liquid manure can be made at almost no cost and kept ready for use at all times and its value to growing crops can hardly be estimated. Another easily obtained and very valuable plant food is hoof parings. Go to the blacksmith shop and get a half bushel or more of them, put them in a barrel and fill with water, and after soaking for a few days the liquid is ready for use and is good for vegetables, flowers or house plants of any kind. When the liquid runs low fill up with water

again as they do not seem to lose their virtue for a whole season. Any good high grade fertilizer can be obtained in small quantities and some or all of the above will be, if kept on hand, a sure way out of many difficulties.

Wayne Co.

J. E. MORSE.

#### LIME-SULFUR SOLUTION AS A SUMMER SPRAY.

The benefits that have been derived from the lime-sulfur solutions when used as a remedy for the San Jose scale have led to its being tested as a summer spray for fruit trees to prevent the development of the various fungi upon the foliage and fruit.

During the last year it has been used upon quite a variety of fruit trees and seems to be about as effectual as any other remedy for the control of the leaf-curl of the peach. As this treatment must be given before the buds swell, the spraying given for the scale will suffice for both and the winter strength can be used. In the past, Bordeaux mixture has been commonly used as the summer spray for fungous diseases and combines cheapness with effectiveness and, for the most part, can be used without danger of injuring the tree. The foliage of the peach and the Japanese plums, however, is so tender that if used after June 1st there is danger of injury, unless the strength is considerably reduced, particularly in seasons when there are frequent showers. The same is also true with certain varieties of apples altho the injury in this case is very largely confined to the fruit, the skin of which is given a russeted appearance.

For this reason the use of the lime-sulfur solution as a substitute has been suggested and was tested under the direction of the writer upon a variety of fruits last year. It was found that when the ordinary home-made mixture was reduced to one-fifth the usual winter strength, or 15 lbs. of sulfur and 15 or 20 lbs. of lime in 250 gallons of water, little or no injury was done, but with the same quantities in 150 to 200 gallons the foliage was more or less injured. The applications were made at the same time as when Bordeaux mixture is used and care was, of course, taken to thoroly cover the trees.

Fairly good results were secured against the mildew and leaf blights of currants and gooseberries and the brown rot upon the early varieties of peaches, plums and cherries was greatly reduced. The results against the scab of the apple and pear were less satisfactory and particularly where the varieties are not much injured when Bordeaux is used, the benefits from the latter are so much greater that its use is preferred. In wet seasons, however, it might be safer to rely upon the diluted lime-sulfur solution for such varieties as Jonathan, Wagener, Greening and others that are russeted by the Bordeaux mixture. Where grape vines were sprayed with the lime-sulfur mixture for black rot the results were noticeably inferior to those obtained with the Bordeaux mixture.

In all cases where the lime-sulfur solution was used the foliage seemed smaller and less healthy in appearance than where it had been sprayed with the Bordeaux, but just how much the effect would be could not be told in a single season.

Experiments were also tried with the self-cooked lime-sulfur solution, using 5 lbs. of sulfur and 10 lbs. of lime in 50 gallons of water; and also with two of the commercial brands, diluted at the rate of one part to 50 parts of water, with practically the same results as were obtained with the home-made solution of lime-sulfur diluted to one-fifth the winter strength.

The cost of the commercial solutions diluted as above is practically the same as of Bordeaux mixture while the home-made solution would cost somewhat less. The lime-sulfur solutions do not seem to be adapted for use with arsenate of lead and other arsenicals as does Bordeaux mixture, and in fact, from our present light upon the subject, the combination is inadvisable.

From last year's experiments we cannot recommend the lime-sulfur solution as a summer spray except under the conditions mentioned above and even then we are of the opinion that it would be better to use Bordeaux mixture of half strength or weak copper-sulfate solution.

Agrl. College, Mich. L. R. TAFT.

Question.—Will any of your readers give a receipt for canning corn and peas without using acids.—L. H. George.



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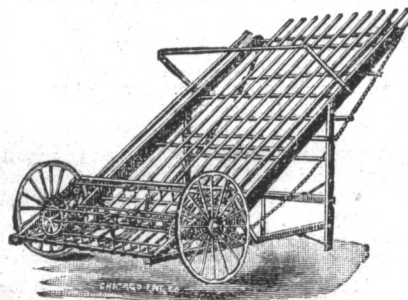
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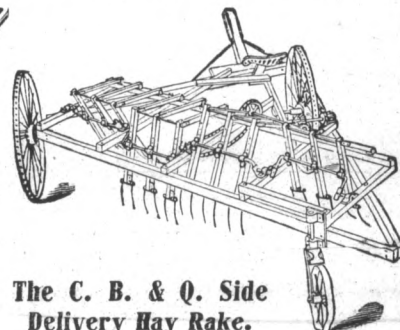
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The Lawrence Pub. Co.,  
Detroit, Mich.

DETROIT, JUNE 5, 1909.

### SOME THINGS WE DO NOT DO.

While it is our chief aim and object to so conduct the Michigan Farmer as to make it of the greatest possible value to its subscribers, yet the very number of those subscribers and their varying needs which we undertake to satisfy makes it imperative that our office force conform to certain rules in ministering to the wants of subscribers, else the above mentioned object and aim would be in a measure defeated by the complications which would arise. This being true, we have thought best for the benefit of our readers to tell them some things that we do not do.

We do not furnish the postoffice address of correspondents. We are often asked to furnish them to people who wish to buy something of them which they may have mentioned in an article, and more frequently by those who wish to establish private correspondence with them for other reasons. We cannot supply addresses to the first class mentioned for the reason that our reading columns are not available for advertising purposes. Our advertising columns are provided for that purpose, and in cases where indirect advertising in our reading columns may be unavoidable, we cannot in justice allow our readers to benefit from it in a direct personal way. We cannot supply addresses to the second class mentioned for the reason that it would be manifestly unfair to our correspondents to permit them to be burdened by the receipt of many letters referring to articles which they have written for publication. It would be an imposition on the contributor who has furnished the readers with valuable information to burden him with letters requiring further facts by mail. The reader has no right to make such private demands on him. When additional information is desired send requests direct to the Michigan Farmer and we will endeavor to have a reply published for the benefit of all our readers. Of course, if requests come weekly for information which has been published recently, but overlooked by the reader, we cannot give such request precedence over others of a more timely or important nature, but we will do our utmost to give reliable information or advice at a seasonable time. To insure such attention, however, it is necessary for the subscriber to give his name and address. The address will not be pub-

lished, nor will the name when the request is made for its omission, but we do not answer unsigned inquiries.

We do not advise as to choice of breeds or families of live stock. Information regarding any breed and its adaptability to any conditions will be published, but the Michigan Farmer is not the partisan of any one breed or class of live stock. All have a place in our agricultural economy and all are worthy of our support, else they could not have attained to prominence in competition with others.

We do not recommend makes of implements. We put our readers in touch with reliable manufacturers and dealers, and keep them informed touching the latest inventions and improvements in farm implements, tools and equipment, but we cannot advise them with regard to a selection between two or more of these things which are made for the same purpose or use. The farmer who has the intelligence and initiative to succeed in his business can certainly choose between two or more implements, because he knows all about the conditions under which he must use them. Write to each advertiser of articles of which you are in need, mentioning that you saw their ad. in the Michigan Farmer, which will insure prompt attention and fair treatment. Then carefully look over the catalogs they send. This will enable you to select the article best adapted to your needs.

We do not advise our readers where seeds or animals or anything not advertised in our columns can be purchased. We will gladly have our advertisers send them catalogs on request, and advertisements of practically everything needed on the farm or in the home will be found in our columns in season.

We do not send the Michigan Farmer beyond date subscribed for. We sometimes get complaints from those who do not want to miss a paper, but have allowed their subscriptions to lapse thru default. But our subscription department knows only this rule. Prompt renewal of subscriptions will obviate any disappointment or misunderstanding.

These reasonable rules and requirements are established only that we may the better serve our large and constantly growing list of subscribers. We desire to give them all our best service, and it is a pleasure to give any of them any special information within our province, but the very magnitude of this task makes it necessary to draw a line beyond which we do not go.

### CURRENT COMMENT.

With the passing Lessons from the into history of the Wheat Corner. Chicago May wheat deal, the fact seems to have been clearly established that the bull element in the market was correct in the deduction that there is an actual shortage in the world's supply of wheat, and that the advance in cash wheat was due mainly to this cause, rather than to the manipulation of the market. Settlements for wheat sold for May delivery were made on the last day of the option at \$1.34, with cash wheat selling at \$1.52. In order to the better understand the significance of quotations of futures, the reader should know that "contract" wheat, or that in which speculation is carried on by means of sales for future delivery, is a grade which would be represented by the mixing of one-third No. 2 and two-thirds no grade wheat, which accounts for the difference between the price at which final settlements were made in the May option, and the price of cash wheat on the same date. A correct understanding of this proposition is essential to an intelligent study of the market from the standpoint of sales of futures as they are reported from day to day, but with that understanding, an interesting side light is thrown upon the probable trend of the wheat market for future months as viewed by the trained men who figure in these deals. For instance, the fact that July wheat is selling at \$1.16 at this writing, means that in the opinion of the men who operate on the Chicago Board of Trade, cash wheat of standard market grades will sell proportionately higher than that figure all thru July, as the standard market grades of wheat are superior in quality to "contract" wheat as above described. In like manner, it means that in the opinion of these same men that during September, standard market grades of cash wheat will sell proportionately higher, as to quality, than the current quotation on the September option, which at this time is \$1.09. By this means, and with this understanding of the proposition, the growers of wheat may read the consensus of

opinion among large grain dealers who have the broadest possible avenues of information touching the probable world supply and demand for the grain in future months, as readily as they can read and understand the government crop reports.

Of course there are many factors which must be taken into consideration in the study of market problems in this or in any other manner. Notwithstanding their constant and thoro study of the proposition these experts may be mistaken in their conclusions. That such is often the case is proven by the history of other attempted "corners" in wheat. Then the trend of the market may be temporarily influenced by the buying of cash wheat for the purpose of holding up a future, but while such a campaign might prove successful during the months just preceding harvest it would hardly prove practicable during September, when the bulk of the country's crop is in the grower's hands and ready for marketing at any time. That dealings in futures should be shunned by producers, is a fact so apparent as to need no argument, for they cannot hope to compete with the expert traders in this kind of speculation, but having the wheat crop harvested and in the granary, they can safely and legitimately take into consideration this manifestation of the consensus of opinion as held by these expert crop and market students, in connection with the government reports and their own observation, in determining when to sell the crop into which they have put their hard labor and the expense incident upon its production. Unless such thoughtful reflection is indulged in by wheat growers, history is likely to repeat itself in that the wheat which the grower sells at what seems to him an attractive price is later doled out to the consumer from the big store-houses at a vastly higher figure, a condition which could hardly be remedied by the abolition of trading in futures in the big markets. But by such intelligent study of conditions and consequent conservative marketing by growers as conditions seem to warrant, they can reserve to themselves the substantial profit on the wheat itself, and rest content to leave to speculators the paper profits on that which they never owned.

### HAPPENINGS OF THE WEEK.

#### Foreign.

The Canadian parliament passed a law making railroads responsible for fire set by sparks from locomotives and making it unnecessary for the plaintiff to prove whether the stacks were defective or not. Baron Uriu, vice-admiral and chief of the Japanese navy suggests that an alliance should be formed between the United States, England and Japan. He states that Japan would be exceedingly glad to form such a combination, since she feels herself highly indebted to this country for her civilization.

Count Zeppelin, the German inventor who has had such success with his air ships, just completed a trip of 850 miles made in 37 hours without coming to the ground. In the ship was the Count, two engineers and a crew of seven men. This is the most successful trip ever made in a dirigible balloon.

Revolutionary disturbances are giving the inhabitants of Peru considerable anxiety. The activities of the rebels have ceased however, since Saturday last when a demonstration was made near Lima.

Former Vice-President and Mrs. Fairbanks were received by the Emperor and Empress of Japan, Monday.

Americans in Mexico City held memorial services last Monday and decorated the graves of soldiers who fell in the war with that country in 1848.

#### National.

On Tuesday the battleship Mississippi was presented with a silver service by Mississippians at Scranton, where the vessel was anchored.

Decoration Day services were held everywhere thruout the country Monday. All reports indicate an unusually large attendance at the thousands of services conducted in honor of the soldier and sailor dead.

The street railways of Philadelphia are being tied up by a strike. Men are being imported by the companies but despite this trouble the local men have been able to prevent the cars from moving.

The Wright brothers who have become distinguished for their flights upon their aeroplanes will be presented with gold medals by President Taft. They will also make tests of speed in their flying machines for the government and if a certain speed is made they will receive a bonus from the government.

A special session of the legislature of Alabama will be held for considering the adoption of a compulsory educational bill.

Some 14,000 tons of steel pipe is being shipped from Zanesville, Ohio, to the San Joaquin valley, Cal., for the construction of an oil line to San Francisco Bay. The shipment will require 450 cars.

There has been a failure on the part of the strikers and operators of the Georgian railroads to settle the matter of employing negroes as firemen and the question will now be left to arbitration.

A statue of Lincoln was unveiled at Hodgenville, Ky., Monday. The unveiling was by Mrs. Benjamin Helm, a sister-in-law of the great emancipator.

President Taft was chief speaker at the

unveiling of a granite monument at Gettysburg, Pa. The monument was erected by congress to the soldiers who fell during the civil war.

Two Oklahoma towns were laid in ruins by a tornado last Saturday. They were Key West, a small negro village, and Dewey.

At Jackson, Miss., floods, caused by heavy downpours of rain, have placed the railroads in a disastrous situation—the water being within a foot of the highest mark reached in 1902.

### CROP AND MARKET NOTES.

Clinton Co., May 24.—Ground still wet, but few oats sown. Some corn is being planted. Wheat and grass of all kinds doing well, but pasture is late. Live stock generally looking well.

Genesee Co., May 29.—Vegetation is advancing rapidly with favorable weather for more than a week. In spite of the cold and backward spring, oats, even where put in extremely late, are coming on nicely and farmers are beginning to feel better over the prospect. Only occasional fields have been put in corn altho many will be planted next week if the weather permits. Large acreages of beans and potatoes are also a feature of Genesee county agriculture for this year. Both brot good prices last year, which is ever an inducement at planting time. Sugar beet growers are preparing about the customary amount of land. The crop appears to be gaining friends in this part of the state. All in all, no industry is making greater headway than dairying. Prices have been upheld all spring and dairy butter has not brot the farmer less than 24c at the county seat up to this date and most of the time it has exceeded that figure. Today's market reports a falling off, however, and 21c is quoted as the price paid to producers. Appended is full price list for this date at Flint, the county seat, and leading market town. Wheat, \$1.52; oats, 64c; beans, \$2.30; rye, 80c; potatoes, old, 90c; dressed hogs, \$9.50 cwt.; beef, \$6@8.50 cwt; mutton, \$8; veal, \$8.50; old chickens, alive, 13c; yearlings, 14c, alive; butter, 21c; eggs, 20c; hay, \$8@9 per ton, baled; wool, 31@32c.

Osceola Co., May 27.—April ended up in a snowstorm which delayed farm work several days; very little oats sown in April; too wet on heavy ground to do any rain today will help out in good shape as it was getting a little dry on sandy land. Wheat and rye are very poor; rye was never known to winterkill as bad as last winter, probably on account of the small growth it attained last fall. Corn planting was a little late, but about all planted work to speak of up till May 10; early sown oats are up and doing fine. Pastures and meadows are looking good; clover is making good growth; a good now; first planted commencing to peep thru the ground. Potato planting just begun, about the same acreage will be planted as in previous years; a few old potatoes have been marketed now at from 50@72c per bu. Farmers have been very busy as the late spring delayed the work and it all came at once, and owing to the dry weather last fall there was hardly any plowing done then, leaving it all for this spring. Owing to the late spring, hay is pretty well cleaned up, a few carloads have been shipped in, selling at \$16 per ton. Fruit prospects are good if nothing happens from now on. Fat cattle and hogs are not very plentiful. Spring pigs are very scarce. Butter, 18@20c per lb; eggs, 18c per doz.

Livingston Co., May 24.—The weather this spring has been very unfavorable for the rapid advancement of farming operations. There is perhaps not more than one-quarter of the corn crop planted at this date, tho the past week, which has been quite fair, has helped out considerable and if the present weather continues practically all of the corn in this section will be in before June 1. Owing to the wet cold spring there was probably not more than 80 per cent of the acreage that was intended for oats sown and at least 5 per cent of this has been destroyed by the wet weather. On May 15 one of the worst storms in the history of this country passed over certain parts of the county, doing thousands of dollars of damage; houses, barns, orchards, fences and everything in its path were leveled to the ground and the heavy rain and hail which accompanied it did considerable damage to oats and fruit. Farmers have just turned their stock to pasture. Hay promises to be a fair crop and wheat looks much better than was anticipated earlier in the season tho some pieces are very spotted. Grain is very scarce and the price is almost prohibitive. Hired help is very scarce and wages are high. Prices on all farm produce are good, tho there is practically no grain in the hands of the farmers.

Gratiot Co., May 24.—Extreme fair weather has prevailed since the 10th. Practically all seeding is completed and if the present ideal weather continues much of the corn will be planted this week. Orchards are just coming into bloom. Oats are making rapid growth and we are beginning to believe there shall yet be a "seed-time and harvest."

Calhoun Co., May 28.—After two weeks of fair weather which allowed most farmers to get their corn planted we have had a fine rain, which has been of much benefit to oats, wheat, meadows, and fruit. Wheat is looking well for its small fall growth, many pieces looking fine, and oats are looking fair. Meadows were badly hurt by the drouth and some are being plowed up but where there was a good catch it is growing nicely. Corn is mostly in, and a larger acreage than usual is being planted. Fruit promises a good crop barring future frosts. Apples, however, blossom rather unevenly. Strawberries may be a light crop as the dry fall injured many patches. Prices are very good. Hogs bring from \$6@6.50; ordinary steers, \$5 and up; corn buying at 75c; oats, 57c; wheat, \$1.45; potatoes, 80@90c; hay market much better, buyers now offering \$10 for mixed hay.



# Magazine Section

LITERATURE  
POETRY  
HISTORY and  
INFORMATION

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

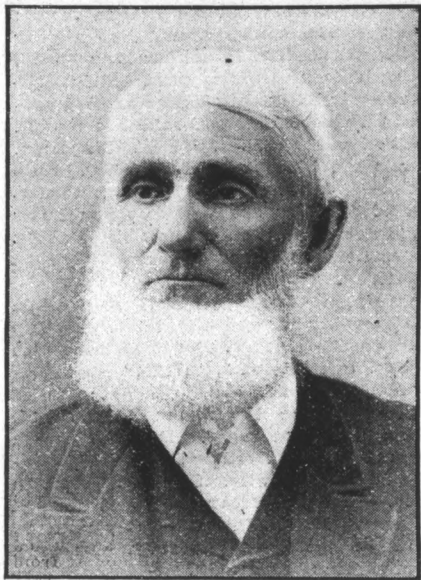
The FARM BOY  
and GIRL  
SCIENTIFIC and  
MECHANICAL

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

## THE ORIGIN OF RURAL FREE DELIVERY

BY FRED P. LUTZ.

WHEN the white rural carrier wagon passes your farm house door, hastening with its load of mingled joy and woe, with the story of the doings of the world, how few there are who pause to think of him who was the cause of it all—in whose brain the microbe of this progression first found soil, and grew until it had spread its contagion thru the mentality of the mass of



Milton Trussler, the Man who First thought of Rural Free Delivery.

the mind of the nation. What spurred that man to action?

Twenty-eight years ago there was a Grange organized in Fayette county, Indiana. It was christened "Bentley." It stood by the roadside in a farming settlement where there was no village, not even a crossroad nor a smithshop, usually the prominent factors in determining the small rural centers.

The villages of Fairfield, Everton and Blooming Grove each lay three miles from the selected sight. Indeed it was the equalization of the distances of these places that determined the site.

As a matter of course, the natural leader of the community—and there is such a one in every community—Milton Trussler, had been selected as the master of the Grange. In assuming the chair he

spoke of the benefits that were to come from the conveniently placed trading center and pledged his political influence toward securing a post office for the store.

It was just at this time that an inspiration came to him "out of somewhere into the here," and he thot, "Why shall not the farmer have his mail laid down to him at his door as well as his brother in the city? Fired with the ardor of a new thot, and eloquent with earnestness, he forgot place or occasion and for over an hour he pointed out to his hearers the objections which might be urged against the scheme. He answered them as he advanced them. So well did he arrange his plans that those who heard him declare that the manner of operation which he outlined are practically the plans of today.

The state officials of the Grange, who were present, were converted to his idea, and induced him to travel over the state and talk rural delivery as a farther advancement of the Grange movement. And so it was that the name of Trussler became so well and favorably known that he was made master of the State Grange, a position which he filled for nine years. As state master he was ex-officio a delegate to the national meetings and here, too, he kept the idea of rural free delivery to the front.

From the national conventions the subject went back to the state conventions, and constant agitation took it farther and farther away from a Utopian dream. Finally the consideration was serious and so it continued until the proudest day of Milton Trussler's life was the day that the rural mail carrier stopped his little wagon and left Milton Trussler his paper on the day which it was published. His earnest, unselfish work had kept the people with him, and they sent him to the legislature for several terms, finally nominating him for the office of secretary of state in 1892. Tho he went down in the tidal wave of that year, he ran 2,000 votes ahead of his ticket.

Mr. Trussler descended from a strong family, one of his brothers having served as secretary of state for Indiana just after the close of the civil war. Another brother spent the greater part of his life in the round of the various offices of his

home county, where a grandson, Clyde Trussler, is today the youngest county school superintendent in the state. He was elected when only 25 years of age.

The Trusslers are well-to-do Virginians, with a family story of descent from Pocahontas. They came to the Whitewater valley before the land had been surveyed for entry and when the remarkable coterie of famous families who first located in Indiana were coming. Brookville, Ind., was then the center of the community, and it was in this town that Gen. Lew Wallace was born, while Maurice Thompson and Joaquin Miller first saw the light of day within an hour's drive.

Capt. Eads, the great civil engineer, was the son of a Brookville merchant, whose partner's son was Gen. James N. Tyner, who, as postmaster under President Hayes, gave the postal card to the country.

At one time in the history of this

were peculiarly "homing folks," who placed the family and neighborhood above the world at large. It was this desire to aid his immediate neighbors that prompted the founding of the rural free delivery system.

Particularly noteworthy is the part that this homing instinct had in the promotion of rural free delivery when the mind reverts to the earlier efforts for speedy communication which forced the "homing" habits of carrier pigeons to act as the winged messengers of the world's business.

How few realize the importance of ideals in material progress! All that this era has which is better than the primal cave man enjoyed, is the direct outcome of day dreams, an ideal, and far too frequently, the world never knows its real benefactors.

Psychic paddle wheels plashed thru the pulsing currents of Fulton's imagination long before the Clermont breasted the waters of the Hudson; Morse lay listening to the tintinnabulations of ghostly arma-



A Michigan Rural Mail Carrier and His Best Friends.

community there lived in Brookville the governor of Indiana, his lieutenant, one congressman, one United States senator, and the entire supreme court. In all, one hundred congressmen and seven governors have come out of the community in and around Brookville.

Prominent among this class of keen and brainy men and women, the Trusslers did not spring into the blaze of publicity, like many of their associates, for they

tures thru many a sleepless night before the wire between Washington and Baltimore flashed the message, "What God Hath Wrought."

In the growing of dawn, there are the rarest tints, Then, the white light leaps in full glory, free,

So the good things of earth,

Had, to herald their birth,

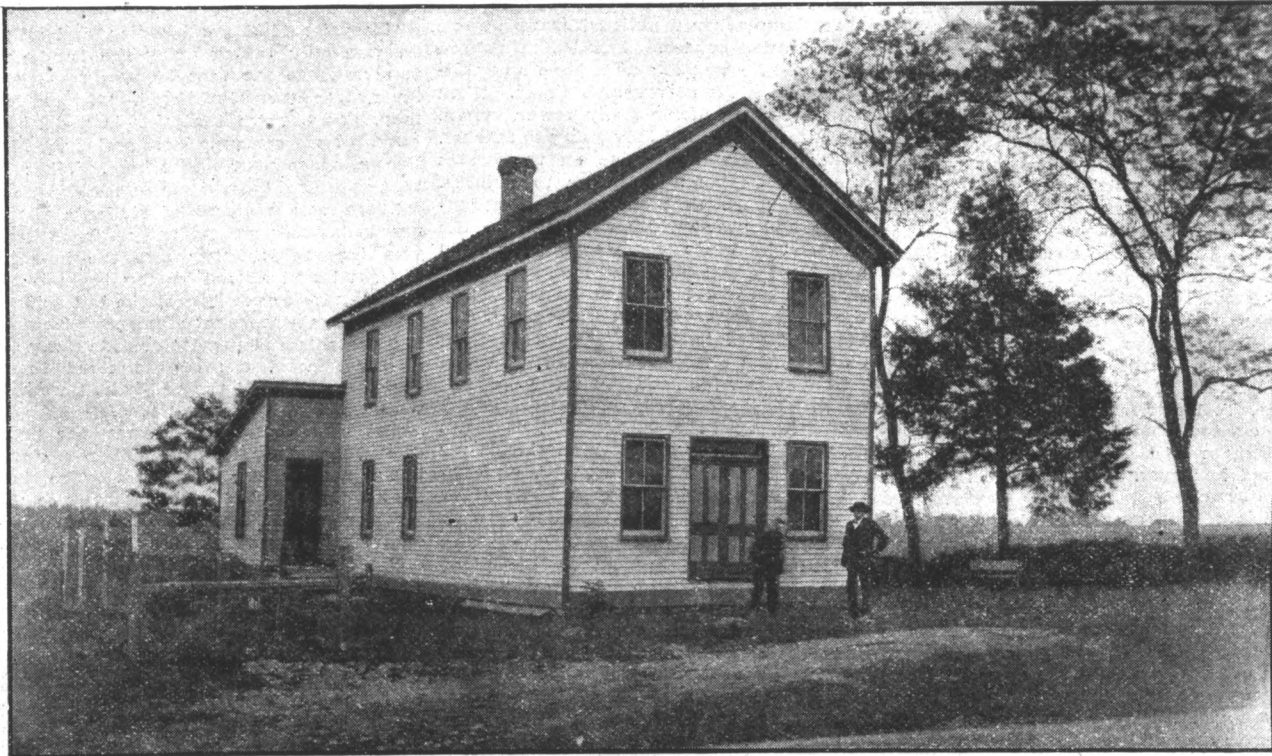
All the heart warm words of pure poesy.

From the desire to save himself and his neighbors a journey of three miles, grew the entire system, the more was needed than the mere conception. Dreams are fugitive and intangible enough—they only materialize under ardent labor. It required years for the infection, industriously propagated, to reach beneficent fruition.

Just across the road from the old Grange hall is a modest wooden church, which is a monument to the homing instincts of Milton Trussler, and which was as much an object of his care as the winning of the daily mail for his neighbors.

This church was founded by Mr. Trussler and five others. When it was dedicated Mr. Trussler quoted from the words of the Savior, "I must be about my father's business," and continued in his own words, "Brethren, I believe that when He used the word business, he meant it. Our church should be run as a business proposition. We expect to be benefited by this church and we should pay for the good that is to result. It would be strange business for one of us farmers to go out and ask alms of our neighbors, and I think that the funds to run this church should be raised without intrusion upon its spiritual work."

The jokesmith has a big basket of alleged humor anent the collection plate, which he usually reshapes when unusually



Bentley Grange Hall, in Indiana, where definite idea of Rural Free Delivery of Mail Originated.

(Continued on page 605).



## HOW MISS JANET SAVED THE DAY.

BY HARRIET LUMMIS SMITH.

Miss Janet Matthews was fifty-seven when she witnessed her first game of base ball. She followed her niece, Miriam, into the grandstand with the air of a reputable citizen who has been entrapped into being a spectator at a prize fight. Thru her lorgnette she scrutinized the various objects of interest, occasionally appealing to Miriam for information.

"Who are those men in the dirty white suits with the red B?"

"Why, those are our men, Auntie, the Baxter college team. And the others in the blue uniforms are the Atwater University men. I'll explain something about the game, so you can understand it better."

Miriam's explanations were full and enthusiastic. Henry Irwin, the shortstop of the Baxter college team, had been her teacher, and it is seldom that the devotion of a teacher is repaid by such responsiveness on the part of a pupil. As Miss Janet listened, the look of perplexity deepened on her face. Her brows contracted in a puzzled frown.

The opening of the game put a stop to Miriam's instructions. She sat leaning forward, breathless with interest, while Miss Janet's eyes roved about the field. Suddenly an indignant voice exclaimed, "Miriam!"

"What is it, Auntie?"

"I think it is a shame. There is one blue man playing alone against all those men in white. That is contrary to my ideas of fair play."

Miriam's attempt at reassurance was cut short by a startled exclamation from Miss Janet. "O, Miriam, look! That poor blue boy is running. I have noticed that the ferocious looking man with a wire cage over his head has made several very threatening gestures, and I suppose the other apprehended violence."

"He's only trying to get to his base, Auntie," explained Miriam. "He hit the ball, you know." Miss Janet bridled.

"Really, Miriam, I see no reason why he should not hit the ball. Apparently that man in the middle, who goes thru those extraordinary contortions, is aiming the ball directly at him with the intention of injuring him. Why should he not defend himself?"

With the progress of the game Miss Janet's interest increased and also her bewilderment. When Henry Irwin stole second base, sliding twice his length thru the dust, and beating the ball by six inches, the spectators broke into applause and Miriam's cheeks glowed rosily. But Miss Janet's face was anxious.

"What has happened? Has he fainted?"

"O, no, Auntie. He has only stolen second."

The troubled expression on the face of the older lady was not banished by this assurance. "Stolen second," she repeated. "And I thought he was a young man of such good principles. Dear, dear!"

Before Miriam had made clear to her the fact that stealing bases may be consistent with the highest moral character, Henry had scored, and the first run of the day was hailed with frantic enthusiasm. Miss Janet looked about her on the howling, cheering throng and then joined in the applause with such heartiness that she split her gloves.

But the Miss Janet went home with the most chaotic notions regarding the national game, she had distinctly enjoyed herself. Underneath the prim exterior of this dignified maiden lady was something which responded to the challenge of that gallant sport. She surprised Miriam by inquiring anxiously about the date of the next game, while her comments on what she had witnessed tried the girl's gravity to the point of hysterics.

Before the season was over, Miss Janet was a good example of the feminine fan. She never missed a game, and she had become the most illogical of partisans. Terminology was her weak point. While she loved to talk wisely of sacrifice hits, errors, grounders and home runs she generally meant something very different from what she said, and this made her conversation confusing.

This trifling weakness in Miss Janet had unexpectedly serious consequences. For on one occasion, in discussing a game with Henry Irwin, she reduced that young man to a condition of bewilderment which resulted in his giving way to helpless laughter. Miss Janet looked at him severely and soon made an excuse to leave the room.

A pair of reproachful eyes met those of Mr. Irwin when he approached the

corner of the room where Miriam sat. "I should think you might have kept from laughing for my sake," Miriam declared tearfully. "You know how hard it is for her to forget a grudge, and how she hates to be laughed at."

"I didn't mean to laugh, hang it all," said the conscience-stricken Henry. "But when I found out what she meant, I laughed before I knew it." Reasonable as Miriam knew the excuse to be, she could hardly hope that it would reinstate her lover in the good graces of her aunt. As a matter of fact, it did not.

"I don't doubt he has his good points, Miriam," Miss Janet would say, "but I have higher ambitions for my niece's husband." And on these occasions Miriam's lips would become a singularly straight, inflexible line. She was too true an American girl not to intend to marry the man of her choice, despite Aunt Janet, and Aunt Janet's money.

The spring of Henry's graduation, baseball excitement ran high at Baxter college. There had never been a more efficient team in its history, but Atwater University, a rival of long standing, was equally fortunate. Graduates of both institutions came in swarms to attend the great game. The grandstand was resplendent with the Baxter colors, while Atwater's blue and gold flashed defiance from the breast of many a loyal rooter. Miss Janet and Miriam occupied a box, and each carried a Baxter pennant.

The first run of the day was made in the first inning by Atwater. In the fourth inning McNeil, of the Baxter team, was put out at the home plate, and the enthusiasm of his partisans, who thot the score as good as tied, subsided into a chilling anxiety. The seventh inning credited Atwater with two runs. Miss Janet moved uneasily and let her pennant fall. "I should think our men would begin to do something," she exclaimed. "It's preposterous." Miriam saw that her hands were trembling, but she herself had no heart to offer consolation.

The eighth inning opened gloomily for Baxter. Crockett, one of the most reliable of the Baxter batters, struck out and went off with his head hanging. Higley, who followed, knocked up a fly which sailed obligingly into the hands of the right fielder, who caught it without moving an inch. "Preposterous," snorted Miss Janet again.

Then things took a turn. A two-base hit on the part of Billy Bates brot the Baxter pennants to the front. Henderson followed with a grounder that shot playfully by the shortstop and gave Bates a chance to get to third. When Henry Irwin came to bat the bases were full. Several thousand people were hoping against hope for a safe hit. A smaller number, but no less ardent, were praying that ignominious failure might crown his efforts.

"Strike one!" said the umpire nonchalantly. The ball had just ticked Irwin's bat. Henry braced himself and waited with set teeth for the next. Just as he struck it swerved to the right and the Atwater partisans shouted derisively.

"O, isn't he going to hit it?" moaned Miss Janet. "He must hit it. If only he does—" She looked across at Miriam and their eyes met. The girl understood the unspoken pledge, and a wave of carmine, the Baxter color, suffused her cheek.

It was time for those of the fates who pity lovers to take a hand in the game. The next ball that came flying down toward the home plate glanced from Henry's bat and shot toward that portion of the grandstand which was reserved for ladies, and which, owing to its comparatively safe location, was not protected by wire screening. It struck Miss Janet in the ribs and she fell back fainting in her chair, her face an ashen gray, her parted lips colorless.

Henry, following the course of his foul ball, dropped his bat, horror stricken. "My God," he said, "I've killed her!"

A number of policemen hurried to the scene. A doctor forced his way down thru the excited crowd. Among them they tenderly raised Miss Janet, when she opened her eyes. "What's the matter?" she demanded.

Miriam bent over her, almost as pale as she. "Dear Auntie, everything is all right. We are going to take you home."

"But I don't want to go home," said Miss Janet with positiveness. "It would be absurd to go home before the game is finished." She turned peremptorily to one of the policemen supporting her. "Please put me down, my good man. Thank you for your trouble, but I am going to stay and see the game out."

The sight of Miss Janet, standing very

erect and returning to her box, was the signal for applause. A white-faced youth in a Baxter uniform uttered an ejaculation of heart-felt gratitude as he saw her tottering back to her place.

Miss Janet leaned toward him with some asperity. "Young man what are you doing here? Never mind whom you main or kill. Your business is to win this game." Her flashing eyes caught his and held them.

Like Miriam, Henry understood. "I will!" he answered.

How well he kept his word is part of the annals of two colleges. It will be a distant day when Baxter reunions fail to recall the time that Irwin sent the ball over the fence, and the men ran home one after another, and the great game was over. And when Henry, his chest still heaving, came around for congratulations, Miss Janet leaned forward and kissed him.

"You can't expect Miriam to do as much here," said the old lady in his ear. "But if you will come home with us after the game I'll see that she has a chance to do whatever is fitting. You saved the day, Henry, and you will have no reason to be sorry."

Henry's answer completed his conquest of her maiden heart. "Miss Janet," he cried impetuously, "It isn't my game. It's yours. I'd lost my nerve when you sent me back. If it hadn't been for you, Baxter wouldn't have scored. Your pluck saved the day."

Miriam interrupted with a tremulous little laugh. "Just listen to you two praising each other," she exclaimed. "Where do I come in?" She blushed under her lover's expressive gaze, and blushed more deeply when Aunt Janet took it upon herself to answer that query.

"You, my dear," said the old lady with deliberation, "play quite an important role. You are the prize of victory."

## FOR SALE—A ROGUE HORSE.

BY J. W. GRAND.

FOR SALE CHEAP.—A Bay Horse, black points, can trot in 2.40. Owner has no further use for him.

There was a runaway seven weeks ago. The horse, a bay, with black points, sixteen hands high, with a record of 2.43, is now for sale, cheap. The buggy was sold to a wooden-toothpick factory. The man hobbled out of the hospital recently and told all about it. He had bandages around his head and one arm was in a sling, but he said he was spending ten hours a day trying to sell a bay horse with black points.

I bot the brute up in Westchester county, he said, and paid \$700 for him. The first look I had at him I said to him: "You're a rogue horse, you are!" Well, I drove him for a week and felt like begging his pardon. He went like a lamb—if you ever saw a lamb go in 2:43 on a fairground track. I brot him to the city and sent him up thru the park. He behaved like a gentleman horse and I began to trust him.

This particular day he sulked a bit when I turned him into the park. I thot I would take that out of him. So I sent him well ahead of the harness for ten miles. He was quiet as a cut of cold roast lamb when I pulled him up at one of the road-houses. I had him rubbed down till he was dry as a bone and then gave him a bit of warmish water. Then I let him peg along easily toward town. He went like an old lady going to market. Coming down the incline on the bridge the skin on his neck began to wrinkle. I knew what that meant in a rogue-horse and grabbed for the slack on the reins. The brute was slogging his head and went down the bridge on four feet, like a turtle. At the foot he whirled to the right and headed on a dead run, for the tangle of "elevated" posts. I tried to steer him clear. He wouldn't have it. I tried to saw his head in two. I couldn't do it.

I woke up in a hospital. The brute didn't have a scratch on him. He is for sale—to a man who is opposed, on conscientious principles, to the Society for the Prevention of Cruelty to Animals.

I woke up in the hospital. There was molten lead in my head in the place where I used to keep my gray matter. Little black specks danced in my eyes. When I looked down at the white counterpane the small black specks were there, moving about like lepidoptera. Then I knew there was an odor. It was a faint, sour, sickly odor—a combination of alcohol and dead people. The odor was all about me, like a cloud. Probably it was

ether. I do not know what it was.

I couldn't move my hands, and it seemed to me that my head was seven feet away from my neck. I was wondering whether my head would ever come back, when a tall doctor loomed out of the gray clouds. He was about eighty feet high and had a long nose. He pulled my arms and legs and twisted my head. Then he said—and his voice was somewhere up in the air—"Do not change the bandages until 5 o'clock."

"No, sir."

The "No, sir" came from a little woman who wore a white apron and a mobcap. She was such a little woman and her hands were small and made out of white satin. Red hair she had, and it was combed up in big puffs on the top of her head. Her voice was soft as whipped cream.

"You might give him another hypodermic injection now," said the doctor.

Then it was as tho a gnat had stung you. A little thing stung in your arm, don't you see? There wasn't any pain; as the moments drifted by there was neither pain, nor place, nor time. A fellow felt as tho he were on the island of the lotos-eating people. Some poet chap has written about them, you know. Then I sorter began to drift away. First thing I knew I was back in the Metidja desert; sands, sands, sands, spread like a gray woolen blanket, a camel lurching ahead, with bullock trunks piled high; the mouse-colored donkey I rode ambled easily. "Where's Algiers?" said I to myself. "Not here. This is Fort Napoleon. Here's the white lady of Kadidja; here's a fall—" down, down, 1,000 feet thru a fall of feathery snow. Don't you know I slid down and the dry snow sifted about me and the end was?

That's when I fell asleep.

The pain began to come again when the morning blurred the windows. The man on the right hand cot to mine was awake, too. He said, "Hello."

"Hello," I said.

"Do you see the screen?" he asked. "Man died last night. Put the screen around him. Dead. They had telegraphed for his wife. She didn't come in time. Clergyman came up and wanted to pray. Man didn't want any prayers. Said so plainly—too plainly. In fact, shocked the clergyman."

"Little woman," the man on the right hand cot to mine went on; "Nice little woman, nurse, red hair, was holding his head. 'Give it to her,' he said, dying."

"No one knew what he meant. No one except the nurse. She leaned over him and kissed his lips. Wife—widow, I mean—will come today and get the kiss."

The man on the left hand cot to mine woke up. He was a big, burly fellow, with a three days' beard on his red face. I would have known him for the driver of a brewer's cart, even had he not given me the information. He was surly as well as burly, so when I said: "What's the matter, neighbor?" he only grunted. I started to give him my views on the question, when such a little hand fell on my mouth. "You mustn't talk," said the nurse who owned the small white hand. Then I remembered the man behind the screen and said: "Won't you kiss me?" She laid her hands over my face and eyes—and I fell asleep again.

"Easy," said the tall doctor, and altho he was only taking away the bandages it seemed to me that he was removing layer after layer of my head. "So, gentlemen, you observe that this is a curious case. Not serious, but curious. Mr. Brown, place your finger here. What is that fracture?"

There was a crowd of students about my bed. It was evidently Mr. Brown who thrust his finger into the hole in my skull and stirred up my brain matter. "Quite correct," said the tall doctor.

Then again the gnat stung my arm and the students and the doctor rode away on a cloud. And out of the cloud there shone the face of the red-haired woman with small white hands.

The clouds had rolled away the next day when I awoke and did not come back, neither did the gnat. The tall doctor did, tho, but he had shrunk to six feet or so. Then the students came again, but they were just ordinary, everyday young men. But the little woman with the red hair and white hands, she was there all that day and the next and the next, with her voice like whipped cream, and her rippling smile, and she was the only vagary of my broken head that did not shrink into the commonplace. She remained a charming dream. And so I got well and mean to sell that rogue horse.



## SWIMMIN'.

BY BERT LEACH.

Us boys, why, now it's been a month  
We've gone barefoot, an' say,  
It seems an awful time to wait  
Clean since the first o' May.  
The trees are all leaved out, and now  
The sun's real hot at noon,  
And ma told pa this morning, "Tom,  
Today's the first o' June."

Us boys we almost laughed out loud—  
We almost, then we did—  
For ma knew 'bout it and it was  
No use to keep it hid.  
Us boys, we've talked for more'n a week  
How it was comin' soon,  
The day they always say we can  
Go swimmin' first o' June.

Before us boys get to the creek  
It seems as if we'd burst,  
And don't we dig to see which one  
Can get his clothes off first?  
And don't we grab the one that does?  
And don't we hold him fast  
And keep him standin' on the bank  
Till he jumps in the last?

And first the water's awful cold—  
It's most as cold as ice—  
But then, us boys don't care for that  
And soon it's warm and nice.  
We thot 'twas lots of fun in May,  
But now we've changed our tune;  
Us boys have most fun when we can  
Go swimmin' first o' June.

## THE EARLY AMERICAN AUTHORS.

William Cullen Bryant.

BY CARL S. LOWDEN.

This distinguished American poet and journalist, the first prominent poet of our country, was born in Cummington, Mass., November 3, 1794. He numbered among his ancestors Priscilla and John Alden; and his father, a sturdy physician, did not neglect the training of his son. Very soon William became cultured and refined, entirely in keeping with the tradition of his lineage.

At thirteen he wrote his first poem; and at eighteen he wrote the justly celebrated "Thanatopsis," which, owing to its charms and general beauty earned him a wide reputation. He continued his literary studies for a while, and in 1815 he was admitted to the bar. Ten years of law was sufficient to show him its faults as legitimate means of earning his subsistence; and he then became editor of the New York Evening Post. This influential position he retained until his death in New York City, June 12, 1878.

The majority of Bryant's poetry was written while he was occupied with the arduous duties of editor. During this time and shortly before, there appeared "To a Waterfowl," "Planting the Apple Tree," "The Ages," "Letters of a Traveler in Europe and America," translations of "The Iliad," and "The Odyssey," a "Popular History of the United States," and a standard American anthology which was eagerly welcomed by scholars throughout the world.

Bryant wrote forcible prose. While connected editorially with the Evening Post, he formulated certain rules of grammatical construction for use in the office, which are today considered the most reliable of any collection ever attempted. His style both in prose and poetry, is simple, clear, and direct; in an amazing way it reflects his utmost sincerity. He was a passionate lover of nature. "I was always," he says, "from my earliest years, a delighted observer of external nature—the splendors of a winter day-break over the wide waste of snow seen from

our windows, the glories of the autumnal woods, the gloomy approaches of a thunder storm and its departure amid sunshine and rainbows, the return of the spring with its flowers, and the first snowfall of winter. The poets fostered this taste in me; and tho at that time I rarely heard such things spoken of, it was none the less cherished in my secret mind."

The typical poem, "To a Waterfowl," which is given below, is commonly considered among the best of this great master's works.

"Whither, midst falling dew,  
While glow the heavens with the last  
steps of day,  
Far, thru their rosy depths, dost thou  
pursue  
Thy solitary way?"

Vainly the fowler's eye  
Might mark thy distant flight to do thee  
wrong,  
As, darkly seen against the crimson sky,  
Thy figure floats along.

Seekest thou the plashy brink  
Of weedy lake, or marge of river wide,  
Or where the rocky billows rise and sink  
On the chafed ocean-side?

There is a power whose care  
Teaches thy way along that pathless  
coast—  
The desert and illimitable air—  
Lone wandering, but not lost.

Thou art gone, the abyss of heaven  
Hath swallowed up thy form; yet on my  
heart  
Deeply hath sunk the lesson thou hast  
given,  
And shall not soon depart.

He who from zone to zone,  
Guides thru the boundless sky thy certain  
flight,  
In the long way that I must tread alone,  
Will lead my steps aright."

The following verses have been selected from "The Crowded Street."

"Let me move slowly thru the street,  
Filled with an ever shifting train,  
Amid the sounds of steps that beat  
The murmuring walks like autumn rain.

How fast the flitting figures come!  
The mild, the fierce, the stony face;  
Some bright with thotless smiles, and  
some  
Where secret tears have left their trace.

And some who walk in calmness here,  
Shall shudder when they reach the door  
Where one who made their dwelling dear,  
Its flower, its light, is seen no more.

Some, famine-struck, shall think how  
long  
The cold, dark hours, how slow the  
light;  
And some who flaunt amid the throng,  
Shall hide in dens of shame tonight.

Each, where his tasks or pleasures call,  
They pass, and heed each other not.  
There is who heeds, who holds them all,  
In His large love and boundless thot.

These struggling tides of life that seem  
In wayward, aimless course to tend,  
Are eddies of the mighty stream  
That rolls to its appointed end."

## THE ORIGIN OF RURAL FREE DELIVERY.

(Continued from page 603).

hard up for material, but his utmost efforts would fall flat at the Ireland church, for from 1881 the church has prospered. There has never been a collection plate passed inside its walls, save the annual missionary offering, and that donation is sacredly set aside for its intended purpose. There has never, in all that time, been a minister or a lecturer occupying the pulpit who was not paid for his individual effort before he left the building.

The financial record, kept in the plain

handwriting of Milton Trussler, is a striking curiosity. The entries read: "Paid Rev. Crossley for preaching," and the amount. If the occasion were a serial meeting, each day's entry shows the daily payment. The church was planned

to work along the lines of the modern institutional work of the cities. A large parklike yard surrounds the building, beautifully shaded with native trees, and the burial place is far away out of sight. The church is the social clearing house for the community, and reunions, celebrations, picnics and like gatherings are held within its walls or in the yard, as the occasion demands. As a certain consequence the church has grown without parallel. In denomination the church is Universalist. In the Ireland's young people's Christian Union is found the latest exemplification of the homing, neighborhood idea of the founder. Two years ago the Union discovered that it was numerically well up in numbers in comparison with similar organizations of its kind. It is the largest society of its kind in the whole nation.

Not considering all the circumstances, a country church sitting by the roadside, with only the surrounding farms to supply its membership, maintaining the largest society of its kind in the nation thru the harmony of communal interests, is a splendid tribute to the memory of the quiet unostentatious man who sent the daily mail into hundreds of thousands of country homes thru the realization of an ideal.

## SAVED BY A DOG.

BY RAY E. WHITE, (14 years old).

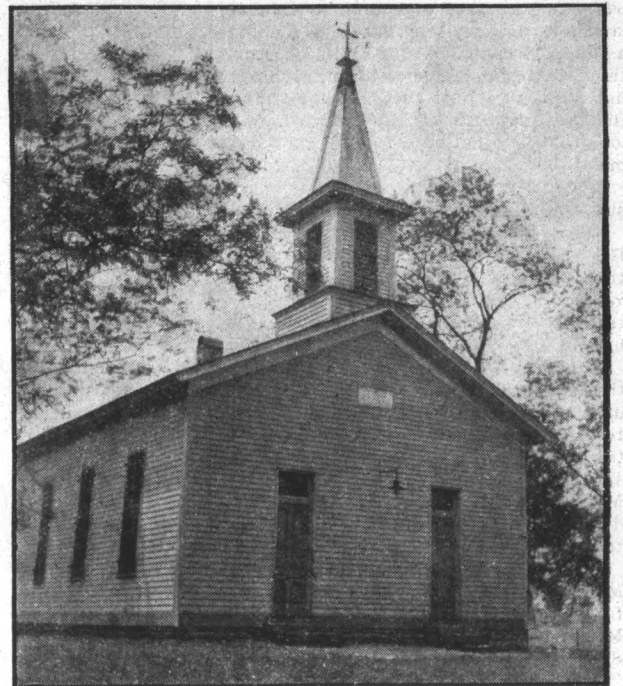
The boys in our vicinity liked to go and hear an old settler tell Indian stories by the hour, sometimes telling the same story over again when it was an especially interesting one. There is a story which he was generally asked to repeat, I know not why unless because it shows the usefulness and faithfulness that comes thru kindness to dumb animals. The following is the story as the old settler told it:

"My father and mother and I lived alone in the forests of Wisconsin. The nearest neighbor was sixteen miles away, with all woods between, so you see it was not as you have it today, with your schools and playmates. Where our little cabin then stood is today the flourishing city of Eau Claire. There were then no schools, but if there had been, scarcely any one could have attended, and the only playmate I had was my dog, Carlo. He was my constant companion and I had taught him several tricks. Sometimes when I was out in the woods I would send him to the house with some message, and afterwards found how this simple trick probably saved my life.

"Often when my work was done I would take father's musket, go out into the forests and hunt game, which was very plentiful. One day I shouldered the gun, called my dog and started on a hunt. It was a fine morning and, with little thot of Indians, I went away with a heart as light as my heels. Carlo, too, seemed happy, for he bounded from one place to another as is natural for a dog. I had been out two or three hours and had brot down a little small game. As it was nearing noon I was about to return home when a deer bounded out of a thicket a little way ahead. Now, it was quite a feat for a boy of fifteen to shoot a deer. So, not stopping to think that something must have frightened the deer to make it come out of its hiding place in broad daylight, I shot and killed it. Carlo ran up to it and I had started towards it when I heard a crackling of the bushes in the direction which the deer came from and a young redskin hopped out. He had undoubtedly followed me for a considerable distance waiting for a good opportunity to capture me. I did not know what he intended to do with me but he would probably kill me. As I did not have one of your modern breechload-

ers of today I was powerless to defend myself, as I had emptied my gun at the deer.

The Indian's intention was not to kill me—not for a time, at least—for, dragging me to a nearby tree he produced a



Ireland Church, in which no Collection is ever taken.

stout cord from his pocket and bound me securely to the tree. Luckily he did not see the dog or he probably would have killed him, and Carlo did not notice us, for he was busy watching the deer. No word was spoken between us until the Indian had me bound. Then he said, in broken English, "You no go. Indian go way off. Come back, big lot Indians. Have heap big pow-wow."

"I now saw what he was going to do. He would gather a lot of Indians and have a big time in honor of the Indian who had captured a 'pale-face.' How I wished I could get word home. My father and I, with a musket apiece, could put to flight twenty Indians, for they were very much afraid of guns and had not learned to use them yet. After the Indian had gone I worked for about five minutes in a vain endeavor to free myself but at the end of that time I was as secure as ever. I then called my dog. He came and barked as if to say he would like to help me, but for some time I could think of no way he could do so. After a while I thot of a scheme. Why not send Carlo home with a message! At first this sounded plausible, but after a second thot I nearly gave it up. How could I write a message while tied hand and foot to a tree. Then, besides, I had no pencil or paper. Suddenly an idea occurred to me and I immediately commenced working with the rope that bound my right hand. After a few moments I was rewarded by the freedom of that hand. Then what could I do, you say, with no paper or pencil? Perhaps if you were in the danger I was you would think how, and think quick, too, if you were afraid the Indians might return at any moment; so I hastily tore a strip of bark from the birch tree to which I was tied. All I could do must be done with my one hand alone, so I tore a small narrow strip from the larger one, dipped it into some blood which had been started from a sore that had been opened by the rope's rubbing, and scribbled, rather than wrote, the single word, HELP, on the bark, giving it to Carlo with the word home. He seemed to know something was wrong for he started off directly on a run. After he had gone, all sorts of fears ran thru my mind. Suppose the dog should be hurt or lose the precious message. Suppose the Indians should return before help came, but all my fears were groundless, for I afterward learned that Carlo had reached home safely and given the note to my mother. She called my father, who got the other gun and told Carlo to 'Go find George.' Carlo started off quite rapidly and father followed as fast as he could, but they arrived none too soon. After freeing me and recovering and loading my rifle we hid behind some bushes. We had been there scarcely a few moments before the Indians came. I shuddered to think what would have become of me had I been tied to the tree. They were covered with paint and were armed with awful looking weapons. Their smile of triumph changed to looks of fear and wonder when they found I was not there. I picked out the Indian that had captured me and fired. Simultaneously



Ray Scott, an Ohio Farm Boy, and his Dogomobile.



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- No. 8376.—Useful and comfortable work apron. Made in three sizes—small, medium and large.
- No. 8365.—A very becoming ladies' waist. Made in sizes for 32, 34, 36, 38 and 40 inches bust measure.
- No. 8370.—Set of sleeves. Made in three sizes—small, medium and large.

my father shot and two Indians fell. The rest scattered and ran. We did not try to follow them for I had had enough adventure for one day. After that you may be sure nothing was too good for dear old Carlo. What more can a dog do than to save the life of his master?"

After the old settler had finished telling the story he would always show us the scalps of the two Indians and the picture of an honest, intelligent looking dog to prove the truth of the story, which I never doubted in the least.

## LITTLE FARM FABLES.

BY AUNT QUILLIA.

## The End of a Trust.

A large body of toads once assembled in a farmer's garden. From far and near they had met, some coming from their beautiful bungalows under the great mandrake leaves in a distant part of the township, others from marshy savannas that bordered nearby pools, and still others from the secluded fastnesses of sundry heaps of stones.

They had met to form a trust. By scores and hundreds they had hopped along the hard-beaten paths that stretched like brown ribbons along the grassy waysides, and now, as they were gathered under the broad silvery cabbage leaves, or fresh green ovals of lettuce, one could see by the moonlight that purpose was written on every stolid countenance.

The Hon. Winkless Wartman—principal speaker of the evening—was a large and rather imposing fellow in spite of his rough skin. He had long possessed the largest holdings in numerous small concerns, and, on account of his wealth, dignity of presence and other considerations he was allowed to hold the floor and air his opinions without restraint.

"Good friends," said he, "our combine will not only be of great advantage to ourselves but of incalculable benefit to the farmer. The birds alone have never been able to gather up all the insects that infest his crops. By furnishing us with long, rapid lances, a capacity for stealthy watching, power to see prey at long distances, and ability to silently seize opportunities, nature has fitted us for a predatory life. It is evidently our province to help the farmer and, at the same time, line our own stomachs with the good things of the world.

"Now, I propose that we join our interests and take possession of this entire garden, and not only this but of all surrounding ones. Let these be some of our mottoes: 'Individual rights.' 'No sentimental rot for society.' 'Down with the community.' 'Up with personal interests.' 'Every man for himself and the devil take his neighbor.'

"I am tired to death of these long-faced moralists who everlastingly preach responsibility toward society and the guardianship of the commonwealth.

"Let it be understood that no cock or hen, no goose or gander, no hen-turkey or gobbler, no fowl of any kind, no bird, wild or tame, has any rights in these, our exclusive domains. We will diligently corner up all insects, and those that we cannot use ourselves we will allow to prey upon the crops, meantime declaring that we are of great benefit to the farmer, and by using this little slogan we will so impose upon his innocence that he will never raise a voice against us."

Here someone feebly suggested that such fabulous prosperity might end in disaster. "Toads," said he, "like other living creatures, are liable to become surfeited, and surfeit might be followed by disease. It is possible that the bloated bodies of toads would so encumber the ground that the farmers, in disgust, might at last arise and wipe every one, living or dead, off the face of the earth."

At this man's remark, Wartman only gave a sniff of contempt and went on with his harangue. For hours he continued to orate on the advantages of a trust until his hearers, tired of travel and of his tireless tongue, one by one fell fast asleep.

The inspiration of an admiring audience having been lost the speaker himself began to grow drowsy. At this point an owl who, in a nearby maple, had seen and heard all, noiselessly left his perch and pounced upon his victim with these words: "Surrender, Wartman. Insects are the natural property of birds as well as of toads, yet you have excluded all birds and fowls from your selfish combine. Even predatory wealth itself may become a prey to silent and unseen forces. I have been delegated to make way with you. If your end had not come,

I should strive to impress you with this truth to which a popular writer in the world of men has lately given utterance. It is this: 'Nobody should have everything, until everybody has something.'

## KINKS.

## Kink I.—Hidden Picture.



This near-sighted hunter has lost his dog. Please find it for him.

## Kink II.—Initials.

- is for trials the dairymen meet,
- for their homes in the country so sweet;
- for their enterprise lightening their toil,
- is for milk, their farms' Standard Oil,
- for the intellect needed to bring,
- ash returns largely without laboring
- ard to the injury of body and mind;
- is for innings for them of the kind
- ained by other producers who join
- nd win their full share, and more, of the coin
- eeded to live and make the work pay,
- is for farmers who prune and who spray;
- for the apples they gather this way;
- is their reason for sorting them well,
- for their marketing methods which sell,
- nding in making "sure thing" for the man
- aising the very best fruit that he can,
- is for daughters, true girls of the farms,
- lecting to use their wits and their charms
- o brighten and broaden the neighborhood life,
- efute the magazine articles rife
- n the dreadful condition of the farmer's wife,
- is for ingenious ideas these girls
- hink out beneath their hats and their curls,
- aking on farms a field for their wits
- ndeed full as big for adv. writers' hits
- ailing the trade as any that ever
- apply opened for city brains clever.

## Prizes for Straightening Kinks.

To the first 25 who send us correct answers to ALL of the above Kinks, we will give choice of a package of 50 post-cards representing a trip around the world, a copy of "Concrete Construction on the farm," or a bread and cake knife. 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 June 25, as correct solutions will be published in issue of July 3. Address answers to Puzzle Dept., Michigan Farmer.

## Answers to May 15 Kinks.

Kink 1. Hidden Picture.—The Indian brave is represented at 1, and his dog at 2.

Kink II. May Flowers.—1. Cowslips. 2. Buttercups. 3. Innocence. 4. Adder's tongue. 5. Dandelion. 6. Speedwell. 7. Bloodroot. 8. Bluebells. 9. Phlox. 10. Bear grass or meadow rue.

## Kink III. Charade.

—Mead Cycle Co.

## No Prizes Awarded.

Failing to receive correct solutions to Kinks of May 1, no prizes are awarded.

## Stop a Moment

and consider how important it is that you keep your horses in good condition, especially if you are expecting to sell them. If you have a blemished horse, write for my free book telling how to treat them. Absorbine is performing wonders in removing puffs, thoroughpins, curbs, enlarged glands, swellings, etc. Absorbine at your druggist \$2.00 a bottle, or delivered postpaid. Made only by W. F. Young, P. D. F., 268 Temple Street, Springfield, Mass.

One of the most commonly mispronounced words in the English language is "R-u-b-e-r-o-i-d." Most people call it Rubber-oid, altho the correct pronunciation is as tho it were spelled "Rueberoid." It is commonly supposed that Ruberoid is a "rubber" roofing—but nothing could be further from the truth. Ruberoid contains no rubber, and a roofing containing rubber would be practically useless, as rubber rots under slight exposure to the weather. The base of Ruberoid is an exclusive processed gum known as Ruberoid Gum. This gum resembles crude rubber, and is as flexible as crude rubber but unlike rubber it retains its durability and flexibility after years of exposure to the weather. Do not confuse the genuine Ruberoid with those cheap substitutes commonly known as "rubber" roofings.



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## OF INTEREST TO WOMEN

### HOME CHATS WITH FARMERS' WIVES.

#### Going to the Exposition.

A reader of Home Chats writes that she and her husband rented their farm and are going to take a western trip this summer which will include a visit to the Yukon-Seattle Exposition and some of the California points of interest. As this is their first extensive journey by rail she asks if I can give them any information as to selection of routes, amount and variety of clothing and other articles to be taken along, also points on the use of sleepers and dining cars. Furthermore, she asks about the comparative merits of standard and tourist coaches as represented by first and second class tickets.

Among the pleasant recollections of my life I count my two trips to the Pacific Coast. These trips were made over different roads and with tickets of different grades, one being first class, or standard, the other second class, or tourist from Chicago. As to the latter, I found the coach we occupied immaculately clean and perfectly comfortable in every way. What was lacking in luxurious upholsterings was more than compensated for by a delightful element of informality among the passengers who happened to be particularly congenial so that the social spirit which soon developed enhanced the enjoyment of the long journey many fold. Among the number were retired farmers and their wives, theologians, teachers and several representatives of the business and professional world.

There is one point which should not be overlooked in deciding between the tourist coach and the Pullman, however, and that is the fact that in case of accident the latter is more than twice as likely to escape injury because of the substantial manner in which it is built. In case of any delay the Pullman passengers are always first looked after, too, and they will be first sent toward their destination.

As to selection of route, I think all roads have numerous points of interest while probably not one of the over-land roads is wholly lacking in long stretches of monotonous prairie or desert. Yet even these are not entirely devoid of attraction to eyes which see them for the first time. It is well to go one way and return by some other road so as to see as much of the country as possible.

To persons unaccustomed to travel, there may be some things about a sleeper not quite understood at first, but any bright man or woman soon catches on and nobody notices a mistake even should one be made. To keep an eye out for pointers and do as the rest do will enable most people to get along without attracting undue attention.

In the coach which is to be occupied continuously for three or four days the traveler finds everything arranged for comfort and convenience. Upon the colored porter one is dependent for many little services and a quarter slipped into the dusky palm occasionally will not be without good effects. Some pay all in one fee at the end of the journey, others at the beginning. Certainly to enlist his good will during the time one is en route is quite essential. The wage he receives from the railroad company is merely nominal and would scarcely pay for his meals. Hence the patrons of the road are expected to help out in tips for services rendered.

While on the train ladies usually prefer to do most of their dressing and undressing in their berths. The crowded condition of the compartment set aside for this purpose makes such a course expedient, unless one is an early riser. The little netted hammock at the back of the berth will hold the various articles in disrobing. One's purse will be safer there also than under the pillow. Stockings may be tucked into shoes where they can be easily found. A stout cloth bag is a convenience; into it can be placed various small toilet articles where they may be found when wanted. Skirts are best fastened by safety pins to the draperies to avoid wrinkles, or laid lengthwise at the back of the berth upon removal.

What to wear on such a trip is a question usually debated by most women. A good tailored suit of almost any color except black, will be a wise choice and with it a waist of soft silk, or two or

three clean white cotton ones, as preferred. As for the hat to wear with it, select one of medium size, not too fancy in makeup, and that is comfortable on the head. A long tissue veil of the same color as the suit will be a great convenience when sight-seeing or autoing, especially so on the coast where the wind blows a good deal. Tied down firmly this will anchor a refractory head piece more successfully than any number of pins.

In addition to the suit, one will need little else in the line of dress, unless it be a more pretentious gown for dinner at hotels. If there are friends to visit that is another matter, and in such case a greater variety of apparel will be required. For convenience the less baggage the better, and a trunk is both an encumbrance and an expense. A suit case and a smaller hand bag ought to hold everything a person would require for an absence of three or four weeks, if there is no visiting on the program. Whatever by way of hosiery or underwear is required beyond a single change can be purchased as needed, and this in light weight can be washed in one's room and dried without ironing. Some women make a practice of wearing partly worn hosiery when traveling, discarding them when soiled. Others do the same with handkerchiefs, but most of us dislike the idea of appearing in public wearing clothes which we would be ashamed of in case of accident. At home we are known for what we really are, regardless of the clothes we wear, but among strangers we are judged largely by our apparel. This and our behavior, or the manner in which we conduct ourselves makes its impression, be it favorable or otherwise, and this judgment is not always tinged with leniency either. For this reason, ladies of good breeding dress with quiet taste when traveling and draw attention to themselves as little as possible. Showy or exceptionally attractive raiment lays the wearer open to criticism and a woman so attired in public need not be surprised if she finds other women eyeing her with suspicion. Women of the best taste, regardless of financial standing, garb themselves in a way that will be unobtrusive in traveling.

An example of this kind came under my observation a couple of years ago when a young woman powdered, painted, puffed and perfumed, boarded an over-land train. She was showily gowned, and wore a big hat profusely trimmed with plumes. Her black eyes wandered all over the car seeking glances of admiration. In less time than it takes to tell it every person in the coach had set themselves in judgment upon her, and I fear it was not a very charitable one either. Deservedly or not, she drew upon herself harsh criticism merely by the way in which she was dressed. It was something which no woman would willingly invite if she cared at all for the opinion of strangers.

I think the dining car is a sort of bugbear to the inexperienced traveler. The uninitiated are apt to feel ill-at-ease in ordering a meal with a white-aproned lackey standing by, and fellow-travelers in imagination ready to note any divergence from the established order of proceedings. However, a little knowledge of what is expected, coupled with a manner of composure and dignity will enable anyone who will keep their eyes open to get along without serious blunder. Making out an order for a meal which shall embrace a suitable variety and not overrun reasonable boundaries when totals are set down, is not an easy matter. Bargain counter prices do not prevail in a diner and it calls for careful planning to provide a meal that will satisfy a healthy appetite for less than a dollar. By eliminating extras and being content with a few substantial dishes, it can be done.

Where there are two or more persons in the party it simplifies matters to allow one to do the ordering for all. Many single orders are sufficient for two, and by ordering all together the meal can be served in family style, cozy and homelike. I have seen well-to-do people content themselves with one meal a day in the diner, bringing out a previously packed lunch basket for the other two, and in a Pullman, at that.

By the way, many experienced travelers never start on a long journey without taking along something in the line of a lunch. Dining cars are not carried

throughout, as a rule, but are dropped out and picked up again as they are required. Delay of any kind in reaching the station where the car is taken on means belated and hungry crowds to feed when the place is finally reached. In such cases it is a source of satisfaction to be able to produce something to eat, if nothing more than fruit, and the person possessing such will be the envied of many.

Tipping the waiter is a custom which prevails the same as tipping the porter. Since ten per cent of the amount of the bill is considered a fair tip, it is not necessarily much of a burden. Men are notably more generous in the matter of tips than women, and quarters and halves are not infrequently left on the tray. Surely no one would think of offering less than a dime no matter how small the bill. It pays to keep on the right side of those who render personal service to the traveler. Whether or not one believes in the custom it will be wise to follow it. It is another case of "when in Rome," and the coin will be well expended, especially if the same service will be required again.

Tourist passengers have all privileges of the dining car the same as those traveling on first-class tickets. Yet it is more common for the former to provide themselves with lunch baskets and it is entirely possible to make the journey to the coast with the expenditure of very little for meals if one so desires. Tea and coffee can be purchased from the kitchen at any regular meal hour, but passengers are not allowed to make these for themselves, even if provided with alcohol lamps for the purpose, owing to danger of accidents by fire.

Taking it all around such a trip can hardly fail to be a pleasant and profitable one, and I congratulate my correspondent upon being able to take it. If there is further information which I can impart it will be a pleasure to do so in a personal letter.

### HOW TO MEND CHINA, GLASSWARE AND BRIC-A-BRAC.

Glassware, china and bric-a-brac can be patched and glued together and made to look like new, if one is careful to fit the edges closely together. In this way many valuable dishes and ornaments can be saved.

They are also serviceable if water or liquid are not left standing in them. Clear glass will show the crack much more easily, therefore, it will have to be mended more expertly. Two ounces of isinglass and a half pint of gin, poured into an open-mouthed bottle, and set in the sun until it dissolves, is the best kind of glue for clear glass. It should be shaken every day and before being used should be strained thru a clean lawn cloth. When the glueing is to be done the broken glass pieces should be washed well in hot suds, especially on the edges, dried, and then with a small camel's hair brush the cement should be put on the edges of both pieces and when they are tightly and evenly fitted together rubber bands or clean strips of cloth should be bandaged tightly around them to hold the edges well together until the glue dries. The break should really not be visible, unless the cement was not properly mixed. It is essential that the edges be well joined, otherwise the crack will look jagged, caused by bubbles of air getting in, reflecting the light, making the rugged, broken lines glaringly apparent.

Bric-a-brac that is part metal and glass should not be so difficult to mend, particularly where the two materials meet, for often a paste of sifted plaster of paris mixed with the beaten white of an egg will make them as strong and good as new. This should be done quickly, for within five minutes after putting it on the pieces it hardens and holds the metal and glass, or china firmly together. Two metal pieces should be mended with solder. The edges should first be carefully dusted, washed if they are very dirty, and rosin brushed over them. Then when fitted well together and tied in place a stick of solder should be laid upon the break and a hot iron brot down lightly on it. After the solder cools the melted rosin may be removed with a cloth dipped in alcohol.

O. E. HACHMAN.

An appetizing way of preparing eggs is to break the eggs in a dish and pour over them boiling water in which sufficient salt has been put. Be careful in pouring the water that the yolks are not broken. With a large spoon keep dipping the hot water over the eggs, should it not cover them, until the white coagulates. Take up with a skimmer and put on hot toast.

## Over the Fence Neighbor Says Something

The front yard fence is a famous council place on pleasant days. Maybe to chat with some one along the street, or for friendly gossip with next door neighbor. Sometimes it is only small talk but other times neighbor has something really good to offer.

An old resident of Baird, Texas, got some mighty good advice this way once.

He says:

"Drinking coffee left me nearly dead with dyspepsia, kidney disease, and bowel trouble, with constant pains in my stomach, back and side, and so weak I could scarcely walk.

"One day I was chatting with one of my neighbors about my trouble and told her I believed coffee hurt me. Neighbor said she knew lots of people to whom coffee was poison and she pleaded with me to quit it and give Postum a trial. I did not take her advice right away but tried a change of climate which did not do me any good. Then I dropped coffee and took up Postum.

"My improvement began immediately and I got better every day I used Postum.

"My bowels became regular and in two weeks all my pains were gone. Now I am well and strong and can eat anything I want to without distress. All of this is due to my having quit coffee, and to the use of Postum regularly.

"My son who was troubled with indigestion thought that if Postum helped me so, it might help him. It did, too, and he is now well and strong again.

"We like Postum as well as we ever liked the coffee and use it altogether in my family in place of coffee and all keep well." "There's a Reason." Read "The Road to Wellville," in pags.

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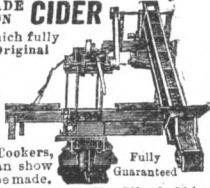
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## HEALTH INQUIRIES.

BY CHARLOTTE A. AIKENS.

An inquiry has come to hand from a subscriber who wrote about a year ago for advice as to the best method of relieving chronic diarrhoea. She improved, for a time, but later began to suffer from distress in her stomach after eating. For this trouble she consulted a doctor who told her that the stomach was in such condition that no part of the work of digestion could take place in it. She has used medicine for a year for this condition and has lived chiefly on toast, milk and eggs. She has gained twelve pounds in weight, but still has some distress, greater at some times than others. Is getting very tired of her restricted diet, and of taking medicine, and wants advice as to what changes in diet she should make. Has very little trouble now with diarrhoea.

The question of medicine is one which must be left entirely to the judgment of the physician. Personally, I do not believe in continuous drugging. Medicines have their place. They cure very few diseases. The question as to how far the work of digestion depends on the stomach is still unsettled. Cases not a few are on record in which the stomach has been entirely removed and a fair measure of digestion has continued. The stomach digests one single class of foods—proteids. The digestion of starches and fats and sugars is not dependable on the stomach.

Within the past year I have given considerable study to the question of diet and digestive disorders. It is a big and important subject. In pursuing this study I corresponded with the medical director of one of the largest sanitariums or health resorts in the country, where sometimes as many as five hundred patients are under treatment at once. A very large proportion of these are sufferers from dyspepsia or some form of chronic digestive disorder. The utmost care and labor is expended to get at the bottom of these ailments. Experts are employed to analyze the stomach contents and find out just how much pepsin and hydrochloric acid and other digestive juices are secreted in the stomach glands. After years of experience in this kind of work a doctor should be able to speak with authority, and Dr. E. says: "I am rather skeptical as to the need of as much dieting as is now in vogue. The directions which we give are very individual. We do not diet diseases, we diet individuals, and two individuals with the same disease may require different diets. \* \* \* There are a few general rules in dieting. First, the food stuffs are very similar, however different the foods which they make up may be. For instance, if you tear down two houses of very different architecture, and pile the bricks in one heap, the wood in another heap, and the iron in another heap, it would be rather difficult to tell what kind of a house these formerly composed. And yet that is exactly what our digestive organs do with foods. They tear down the various foods to the simple food stuffs, and there really is not so much difference in these products of digestion which are absorbed into the blood stream."

"A great deal depends on the way food is prepared. A piece of steak has not a definite value which is invariable. One has always to think of the condition before cooking and the way it is cooked."

"Quite as much depends upon the mental condition of the person eating as upon the preparation of the food. The experiments of scientific experts have shown that the secretion of the stomach digestive juices depends greatly upon the mind stimulus, and the digestion depends greatly upon the rapidity with which this secretion occurs."

"Lastly, patients are terribly crazy now about diets, and it is our duty to disabuse them of these many fads and theories by showing them that of the foods on the ordinary menu there is scarcely one which cannot be so prepared, that it will be beneficial to almost any patient. It is interesting to note that they will with pleasure take a food when it is prescribed as a medicine which would distress them when it was ordered as a food."

He further states that many of the cases of so-called dyspepsia have some other trouble. A frequent trouble is a hardening and thickening of the opening from the stomach into the bowels. In cases where the trouble seems to be a deficiency of the digestive fluids of the stomach, he recommends frequent small, dry meals.

I do not wonder the inquirer is tired of a diet consisting solely of eggs, milk and toast. She asks about the best cereal foods to use in her case. Inasmuch as

there is a tendency to diarrhoea, cereals containing much gritty substance should be avoided. For real nourishment, good old oatmeal stands at the top of the list of cereals. If very thoroly cooked, it is about as easily digested as any cereal food. But in her case it should be boiled for hours. Oatmeal which is hastily cooked in ten or fifteen minutes while the breakfast table is being set, is not a wholesome diet for any one. In our house we cook it in a fireless cooker over night, and bring it to a boil in the morning. A double cooker is just as good. It should be put to cook the afternoon before and boiled for hours. The double cooker keeps it from burning. A little tin or enamel bucket set in a pot of water can be used instead. It is impossible to keep it from burning unless some such method is used, when the boiling is continued for hours.

I would suggest trying a small piece of tender beef or fresh fish or chicken to give variety to the diet. Well cooked rice occasionally also might be tried. The main thing is to chew every bit of food very thoroly, not to eat when overtired, and avoid worry. Everyone who has used ordinary powers of observation has noticed that the appetite fails when a bit of bad news is received. The stomach is at once influenced by the effect of this news on the mind of the individual. There is a very close connection between the nervous system, the brain and the digestive organs, and food eaten under the strain of nervous excitement or worry is certain to be long and difficult of digestion.

There is so little nourishment in many of the vegetables that they are best avoided in this case. Hot breads, pastry, etc., also are best let alone. A little experimenting with small, dry meals, using fresh, tender meats and fish, mealy, well-baked potatoes, macaroni, oatmeal, rice, etc., very thoroly cooked, eggs and milk combined with fresh, tender young vegetables, cream, butter and stale bread or toast, would seem to be worth trying in this case. Sugars and fruits should be used sparingly, if at all. In addition, tonic measures, such as a tepid sponge bath, using about two teaspoonfuls of salt to a quart of water, and a brisk rub with a coarse towel afterward, with plenty of time spent outdoors in the sunshine, will help to build up the general health. A good rest and a visit away from home two or three times a year with congenial people who will help her to forget her troubles, would probably do as much good for this woman as medicines.

The tendency in these conditions is to get low-spirited and that of itself makes the general condition worse. Happiness and health are closely associated. It is rare to find a really healthy person who is not happy. And happiness can be cultivated. It is a condition of mind. The trouble with a great many farm women is that they stay too closely at home, brood over their ailments and magnify small things till these things look like mountains. It is a bad habit. Less money spent in drugs and more spent on vacations and holiday trips would mean better health and happier homes. It is easy to settle down and saw, "O, I can't get away, see all the work there is to be done. Who would see to the chickens and turkeys, etc., to say nothing of the children." But there are none of us so desperately useful or valuable that we cannot be spared for a month or six weeks each year. A good rest and a holiday trip are remedies well worth trying.

## CANE VS. BEET SUGAR.

Owing to an opinion sometimes expressed that beet sugar is not as satisfactory for making preserves and jellies as cane sugar, the California Experiment Station studied the question under commercial and domestic conditions. Of 2,000 cans of cherries, apricots, plums, peaches and pears prepared with syrups of different strengths and stored for two years in cases under rather unfavorable conditions, only six cans from the beet sugar lot and seven cans from the cane-sugar lot were found to be spoiled, evidently owing to imperfect sealing. This shows, according to a report of the station, "the utter lack of foundation for the idea that fruits do not keep well when preserved with beet sugar, and that such sugar does not work well in the cannery."

Everyday Fritters.—Sift 1 teaspoonful each of sugar and baking powder into 1½ cupfuls of sifted flour. Beat 2 eggs to a froth, stir into them 1 cupful of sweet milk, add a pinch of salt and then the flour. Drop in spoonfuls in hot lard. Serve immediately.

## From Parlor to Kitchen



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## POULTRY AND BEES

### FIGHT LICE NOW.

At this season hundreds of chickens die and thousands of hens stop laying because of the evil effects of lice. A thoro application of insecticides to flock and poultry houses once a week during the hot months will save dollars, and save the life of many a chick that might grow into a prize winner or a phenomenal layer.

A good dusting powder, one containing a large percentage of tobacco dust preferred, is, to my mind, the best insecticide for lice on the fowl. Hold the fowl by the legs, head downward, and sprinkle the powder among the feathers, especially where they are thickest, for here is the hiding place of the vermin. To be effective it is necessary to rub the powder into the feathers, and down to the skin, all over the fowl. This must be repeated once a week for at least a month.

Do not think when you have the fowls dusted that your duties end there. Get your kerosene can and soak the roosts and cracks in the poultry house to kill the mites, fleas, and other vermin which harbor there. Roosts need not be treated oftener than once a fortnight in hot weather, and once a month in winter. Don't forget the dust bath. This is nature's method of getting rid of vermin. The time fowls spend in dusting themselves is well spent. In summer the hens will find their own wallowing or shuffling places, but in winter a box two or three feet square and two feet deep should be filled two-thirds full of dry earth. The fowls will certainly appreciate it and it will save lots of time and trouble in dusting the fowls.

Liquid lice killers are also good and when properly applied will rid the fowls of body lice and clear the house of mites as well. The trouble with them is that they are carelessly used, and so either prove dangerous to the health of the flock or else are not used to good advantage in getting rid of the lice.

The important thing is to get after the lice in season and fight them with vigor and a determination to kill and destroy as many as possible. Adopt the rule, "Never put off till tomorrow what you can do today," and lice will never mock you of your failure in the poultry business.

A. G. SYMONDS.

### SEASON FAVORABLE TO GAPES.

The frequent and heavy rains, which have greatly increased the cares of poultrymen on flat or low land, promise also to be productive of a large number of cases of gapas in the growing chicks. Under such weather conditions earthworms are not only very numerous but are easily obtained by fowls. The trouble known as gapas is due to the presence in the wind-pipe of the gapeworm. These worms obstruct the passage of air to and from the lungs and thus occasion the characteristic gasping movements of the suffering chicks.

It has been found that the commonly recommended practice of introducing into the trachea a partly stripped feather, or a blue-grass top, and by a twisting motion dislodging and removing the worms does not seem to be practicable for very young chicks. The trachea is so small and so easily injured that it is impossible to dislodge and remove all of the worms by such means. Chicks generally recover without treatment when they are attacked after they are half grown, and hence fowls that might, from their size, be treated successfully with a feather do not require treatment of any sort. It is the very young chicks that suffer most, and the only remedial treatment in their case that seems to be successful is rubbing the neck from time to time with lard or vaseline, thoroly mixed with a little turpentine (three parts of the lard or vaseline to one part of turpentine). This treatment should begin before the disease has made its appearance. It will not help a chick in the last stages of the trouble. Pure turpentine will very quickly kill a chick when rubbed on the neck over the trachea.

A French scientist asserts that the use of pounded garlic with the usual food (one garlic bulb to ten chicks daily), supplemented by special care in the use of only pure water, which is changed several times a day, has been found to completely eradicate gapas from pheasants. This is a simple treatment and there is no apparent reason why it should

not prove as effective with chickens as with pheasants.

Experiments show that chickens contract the disease when allowed to run on soil which has become infested with the gapeworm, or when fed earthworms, and that keeping chicks on a plank floor for several weeks after they hatch will prevent the gapas. It is probable that the same result would be obtained by simply elevating the earthen floor above the surrounding level, so that it would not retain moisture. It must be remembered, however, that after the disease is established in a brood it will be conveyed from one to another thru the medium of food and drink, and in such case a plank floor would not alone obviate it. In case the disease should be introduced by chicks which had contracted it elsewhere, the proper treatment would be to isolate affected individuals as soon as discovered and medicate the drinking water of the rest.

### NOT FRIGHTENED AT THE HIGH GRAIN VALUES.

It now looks as tho those who stay in the hen business will see high prices for eggs next winter. I believe a higher range of prices will prevail from now on than perhaps has ever been known under normal conditions. The only abnormal condition at present is the high price of grain, which is scaring many out of raising chickens and has already caused many to curtail their operations.

Eggs locally are now being picked up at the door at 21c a dozen, while those shipping to Boston realize 24c net. This is four cents a dozen higher than is ordinarily paid at this season, or until about July, and it is not reasonable to expect they will go any lower.

Many are discouraged, but it seems to me that where one is equipped for quite a flock he is shortsighted if he does not hatch a sufficient number of chicks to replace at least one-half his flock. Good year-old hens will pay some profit, but they are not comparable to pullets that have been hatched early and kept coming.

With grain where it is now, dairy and poultry products must stay at an average high range of prices. With us, fairly clean wheat retails at \$1.95 per cwt.; corn, \$1.60, and corn meal \$1.50. Oats are out of the question. I believe hens will pay a profit if anything does. That is, if they are given proper care.

Maine.

D. J. R.

### PUTTING SUPERS ON THE HIVES.

The first super given should always contain bait sections; that is, sections filled with drawn comb saved from the previous season. One bait section in the center of a super will generally induce the bees to commence work promptly.

But sometimes a colony will refuse to commence work "upstairs" even when bait sections are given. The common black bees hardly ever are as obstinate as this, but Italians can sometimes only be started to work above by taking a super from some other colony in which work is under way, and putting it (bees and all), on the colony that refuses to go to work.

When to give the first super is an important question. If given too early the bees are liable to gnaw holes into the foundation; and their running over the foundation also seems to make it less inviting to the bees when they come to draw it out into comb. Waiting until the nectar flow is under way before giving surplus apartments is, in my opinion, as undesirable as giving them too early. In the first place, some surplus honey will be lost, and the swarming fever is increased when the bees, have no place except the brood-nest in which to store honey. It has been given, as a rule, to put on the surplus apartments when the bees commence to build bits of comb between the top bars of the brood frames, thus indicating that they are securing nectar from the fields with which to make wax. This is just a little late. (Others may think differently; everyone is entitled to opinions of his own). I seldom wait until the bees construct bits of comb on the frames, etc., but put on the supers as soon as I see, from the way they act at the entrance, that they are carrying nectar.

When the super that was put on first is about half filled, another is given below the partly filled one, and, if there seem to be idle bees, a third super is given. During a good nectar flow and with large swarms, four or five supers are not too many. If one does not give all of the bees in a hive a chance to work, how can large yields be secured?

When giving extra supers, great care must be taken not to place a super below a partly filled one when the indications are that the nectar flow will soon cease, for one may be caught with a lot of partly filled sections, and these usually sell for several cents per pound below the price of well filled sections. If one is not sure whether the bees will finish a whole super of sections it is best to err on the safest side and set the super on top, in which case the bees will not commence work in it until they really need the room. The reason fresh supers are not always given on top of partly filled ones is that honey would be lost by so doing, thru the bees not commencing work in them until they are crowded out of the ones below.

Wisconsin.

F. A. S.

### Plymouth Binder Twine.

For a number of years past manila hemp has been higher in cost than sisal from which the lower grades of twine are usually made. This has naturally resulted in a slightly greater cost of manila twine. Even under these conditions manila has been considered far more satisfactory on account of its strong, smooth, pliable fibres, which contrast strongly with the stiff, coarse characteristics of the much shorter and weaker sisal. The Plymouth Cordage Co., of North Plymouth, Mass., who are the largest manufacturers of cordage in the world, are buyers of practically one-eighth of the world's supply of manila fibre. This advantage gives them the opportunity, impossible to other manufacturers, of selecting at the lowest price, the grades of hemp necessary to make the best twine.

### Rise in Linseed Oil as Applied to Painting.

There may be danger of a false impression gaining headway that the rise in price of linseed oil makes it too expensive to paint the buildings that need it this year. At first glance there might seem to be some basis for such a thought. Linseed oil, this year is 75c a gallon as against 50c a gallon last year—a rise of 50 per cent. This fact alone is liable to impress itself on the farmer. He says to himself, "I'll put off painting now. Linseed oil may go lower next year, and I'll save money by waiting." But he won't save money—rather will the postponement probably be more costly. He overlooks the fact that wood not sufficiently protected by a good coat of paint, and thereby exposed to all kinds of inclement weather, is certain to rot. To allow the wood in house or barn to deteriorate for lack of paint so that it will have to be replaced is far more expensive than to pay a little higher price than usual for linseed oil. Lumber is not only very dear now but it is going to be more costly, because of the growing scarcity. To re-paint a 12-room house could not be more than \$2 over what it would have cost last year, and anyone whose buildings need repainting should compare this really slight excess with what an outlay for new lumber would mean by next year. In this connection, it is well to be sure that nothing but pure white lead of a standard brand is used for your painting work—test the lead for purity. Place a small piece of the white lead, about the size of a pinhead, on a match a short distance from the tip. Hold one or two lighted matches underneath. If the lead is pure and reliable, it will in a few seconds reduce to small shining globules of metallic lead which, tho small, are easily discernible. "White Lead" that will not reduce in this way is not pure and is unfit for use.

### The Arkansas Valley.

The transformation of a once barren plain into a productive country is so wonderful in its effect as to produce the most profound impressions on those who were familiar with the country before the transformation was wrought. A man who had once endured great hardship on the plains in southeastern Colorado and northern Kansas was invited by his old partner to visit his place in the Arkansas Valley. He complied with reluctance as it revived memories of his former experience; memories of a barren plain, of thirst, of dying sheep and the bleaching bones of cattle. He accepted the invitation, but wrote his friend that the creator never intended man to live in such a God-forsaken country. His partner replied that man's experience in the Garden of Eden, where he had everything made to order was disastrous; that it was where he had subdued the wilderness and turned the desert into a garden that he had shown himself a man. The friends met enroute, and made their first stop at Garden City, Kas. With his early experience in mind, this man could not believe his eyes, and said, in alarm, "I'm all in; take my watch and remember me to loving friends." His friend replied, "You're not in Heaven yet, but you're pretty near it. This is Kansas." Then he listened to the tale of the transformation—how water was first pumped from the river for irrigation; how the government stepped in and showed that the river was insignificant in comparison to the great underground store of water that had leached from it and could be pumped from wells; how farmers raised an average of 23½ tons of sugar beets per acre; how vegetables and fruits and all kinds of crops responded to the water pumped from the ground and supplied by canals. Learning that the A. T. & S. F. Ry. not only touched this country, but as well that to the north of it, which his friend said was claimed to be still better, this man is now urging his friends to write C. L. Seagraves, Gen. Colonization Agent, 1171-M, Railway exchange, Chicago, Ill., for descriptive literature.

### Do this with your children.

School children should be fed plentifully and frequently on Quaker Oats. It makes the best possible breakfast for anyone who is to work with either brain or muscle. It's easy to prove this in your own family. Increase the daily consumption of Quaker Oats and you'll see an almost immediate improvement in the health and energy of those who eat it. The regular size package of Quaker Oats sells at 10c, the large family package size at 25c; the family package with a piece of china 30c.

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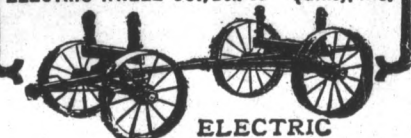
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EGGS reduced to \$1 per 15 in June, B. Rocks, R. I. Reds, White, Silver, Golden Wyandottes, all varieties Leghorns, Indian Runner Muscovy, Cayuga, Pekin Ducks, \$1 per 15. E. J. Haskins, Pittsford, Mich.

Barred Plymouth Rocks—Eggs for hatching, Price, 15 for \$1.25 for \$1.50; 50 for \$2.50; \$4 per hundred. Satisfaction guaranteed. Colon C. Little, Coopersville, Mich.

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RINGLET'S BARRED ROCKS. The noted winning strain. Eggs, 15 for \$1. Five matings. Plainview Stock Farm Bell Phone. J. W. SALIARD, Prop., Romeo, Mich.

EGGS—Light Brahma, White Wyandotte and B. P. Rocks \$1 a setting, \$1.50 for two settings. E. D. BISHOP, Route 38, Lake Odessa, Mich.

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## MARKETS

## DETROIT WHOLESALE MARKETS.

June 2, 1909.

## Grain and Seeds.

**Wheat.**—Those interested in the wheat market have seen what the public would call the unexpected, happen when the May options were delivered without disturbing the trade prices for cash grain in the least. It was generally anticipated that prices would go down as soon as contracts for the above option were satisfied, but the very contrary occurred, which goes to prove that the market is based, not upon a speculative basis, but upon the foundation of supply and demand. The wheat holdings are known to be reduced to a short supply and the condition of the winter wheat crop is not encouraging for consumers of the grain; reports from the southwest proclaim lateness in the maturing of the wheat plants and Oklahoma sent out a very bullish state report putting the condition of the crop at 61 points as compared with 74 points for the corresponding period a year ago. The American visible supply decreased over two and one-half million bushels during the week. A year ago the price paid for No. 2 red wheat was 97c per bushel. Quotations for the past week are:

	No. 2	No. 1	No. 3	Red.	White.	Red.	July.	Sept.
Thurs.	1.52	1.52	1.49	1.18	1.12	1.12	1.12	1.12
Fri.	1.52	1.52	1.49	1.18	1.12	1.12	1.12	1.12
Sat.	1.52	1.52	1.49	1.18	1.12	1.12	1.12	1.12
Mon.	1.52	1.52	1.49	1.18	1.12	1.12	1.12	1.12
Tues.	1.55	1.55	1.52	1.20	1.13	1.13	1.13	1.13
Wed.	1.57	1.57	1.54	1.21	1.13	1.13	1.13	1.13

**Corn.**—The splendid growing weather of the last week has been worrying the bulls in the corn deal a little and the offerings during the early days of the period, showed up somewhat to the surprise of traders, but with all this the strong position of the wheat trade and the natural supply and demand of corn itself has caused the tobogganing prices of a few days ago to be rescued and brot back to the high basis upon which trading was done a week ago. This tendency is due in part to the falling off of receipts the past day or so and the promise that still further limitations will be placed upon shipments in the near future. Demand is active. The price for No. 3 corn a year ago was 75c per bu. Quotations for the week are:

	No. 3	Yellow.
Thursday	75 1/4	76 1/4
Friday	75 1/4	76 1/4
Saturday	74 1/2	75 1/2
Monday	74 1/2	75 1/2
Tuesday	76	77
Wednesday	77	78

**Oats.**—While there is a general opinion that the oat crop has been permanently damaged by the unusual weather of the past spring, the recent warm days and excellent growing weather has given hope for such improvement that the bears have worked values to a lower level than prevailed last week. The decline is not large and the price still remains so high that consumers continue to complain that they are compelled to limit the amount they use as much as possible. Market is firm. A year ago the price for No. 3 white was 56c per bu. Quotations are:

	No. 3	White.
Thursday	64	64
Friday	63 1/2	63 1/2
Saturday	63	63
Monday	63	63
Tuesday	62 1/2	62 1/2
Wednesday	62 1/2	62 1/2

**Beans.**—There is no trading and consequently little news about the condition of the grain stored. Indications are that the usual amount of acreage will be planted this spring. The following nominal quotations ruled during the past week:

	Cash.	Oct.
Thursday	\$2.55	\$2.67
Friday	2.55	2.67
Saturday	2.55	2.67
Monday	2.55	2.67
Tuesday	2.55	2.67
Wednesday	2.55	2.67

**Cloverseed.**—The plant has improved with the better weather of the past few days and growers are more hopeful for the growing crop. Market slow. Prices have not changed. Quotations for the past week are:

	Prime	Spot.	Oct.	March.
Thursday	\$5.85	\$6.65	\$6.80	\$6.80
Friday	5.85	6.65	6.80	6.80
Saturday	5.85	6.65	6.80	6.80
Monday	5.85	6.65	6.80	6.80
Tuesday	5.85	6.65	6.80	6.80
Wednesday	6.00	6.75	6.90	6.90

Rye has advanced to 80c, and handpicked beans are now worth \$2.50 per bu.

**Rye.**—This market continues dull and firm. The price is 92c for cash No. 2, last week's quotation.

## Visible Supply of Grain.

	This week.	Last week.
Wheat	19,786,000	22,420,000
Corn	2,841,000	1,492,000
Oats	7,463,000	7,370,000

## Flour, Feed, Provisions, Etc.

**Flour.**—Prices unchanged. Market is firm. Quotations are as follows:

Clear	\$3.30
Straight	6.60
Patent Michigan	6.55
Ordinary Patent	6.70

**Hay and Straw.**—Prices declined for best timothy and mixed. Carlot prices on track are: No. 1 timothy, new, \$14@14.50; No. 2 timothy, \$13@13.50; clover, mixed, \$12; rye straw, \$10@10.50; wheat and oat straw, \$9 per ton.

**Feed.**—Steady. Bran, \$31 per ton; coarse middlings, \$31; fine middlings, \$31; cracked corn and coarse corn meal, \$31@32; corn and oat chop, \$30.

**Potatoes.**—Operations are steady. The hot weather is bringing surplus holdings

from country places which causes an easier feeling in the deal. Southern offerings are higher. Good stock is quoted at 90@95c per bu. New potatoes from the south are quoted at \$4.75@5 per bbl.

**Provisions.**—Family pork, \$21@21.50; mess pork, \$19.50; light short clear, \$19.50; heavy short clear, \$22; pure lard, 11 1/2c; bacon, 14 1/2c; shoulders, 9 1/2c; smoked hams, 13c; picnic hams, 8c.

## Dairy and Poultry Products.

**Butter.**—Values remain at last week's figures. Trading continues steady with the demand and supply adjusted to keep the movement active. The following are the quotations for the week: Extra creamery butter, 25c; firsts, 24c; dairy, 19c; packing, 17 1/2c per lb.

**Eggs.**—The price for fresh eggs lost the fraction the past week. At the new figure the trade is steady with an active market. Extra fresh eggs, case count and cases included are now quoted at 21c per dozen.

**Poultry.**—The poultry deal is inactive and the conditions are unchanged with values ruling as a week ago. Quotations are: Chickens, 15 1/2@16c; roosters, 12@15c; fowls, 14 1/2c; ducks, 15@16c; geese, 9c; turkeys, 17@18c; broilers, 28@30c .lb.

**Cheese.**—New Michigan, 13 1/2@14c; York state, old, 17@18c; new, 14c; limburger, fancy old, 17@18c; new, 14c; schweitzer, fancy old, 20@21c; brick cream, 16c lb.

## Fruits and Vegetables.

**Apples.**—Market steady. Best grades are quoted at \$7@7.50 per bbl.

**Onions.**—Bermudas, \$1.50 per crate.

**Strawberries.**—24-qt. cases, \$3.25@3.75.

**Gooseberries.**—Per bu, \$4.50.

**Vegetables.**—Green onions, 10c per doz; radishes, 15@20c per doz; cucumbers, 50@60c per doz; lettuce, 10@12c per lb; head lettuce, \$2.50 per hamper; water-cress, 25c per doz; spinach, 50c per bu; parsnips, 90c per bu; oyster plant, 40c per doz; asparagus, 75@80c per doz; rhubarb, 40@50c per doz.

## OTHER MARKETS.

## Grand Rapids.

The old potato deal will be off in three weeks. Prices for the old stock still remaining in farmers' hands range from 60@70c. Tuesday morning's market on the Island was the biggest of the season, with prices ranging as follows: Pie-plant, 30@35c bu; radishes, 5@7c doz; onions, 5@6c doz; lettuce, 7@8c lb; spinach, 45@50c bu. Asparagus took a drop, selling at 60@75c bunches. The season of hothouse lettuce is over and the glass farmers are now giving their attention to cucumbers and tomatoes. Eggs and butter are unchanged. Receipts of dairy butter are heavy. In grains, wheat has slipped off 3c, while corn is up 2c.

**Quotations follow:**  
Grains.—Wheat, \$1.52; corn, 79c; oats, 61c; buckwheat, 60c per bu; rye, 80c.  
Beans.—Handpicked, \$2.50 per bu.  
Butter.—Buying prices, Dairy, No. 1, 17 1/2@18c; creamery in tubs, 24 1/2c; prints, 25c per lb.

**Cheese.**—Michigan full cream is selling at 16@16 1/2c per lb; brick, 17c; Swiss, 17c; limburger, 17c.

**Eggs.**—Case count, 19@19 1/2c.

**Potatoes.**—60@70c per bu.

**Cattle.**—Cows, \$2.50@4 per cwt; steers and heifers, best quality, 3@5 1/2c; dressed mutton, 9@10c; dressed veal, 6@9c; dressed beef, cows, 5@7c; steers and heifers, 7 1/2@9 1/2c.

**Hogs.**—Dressed, 9@9 1/2c.  
**Live Poultry.**—Fowls, 13@13 1/2c; chickens, 13 1/2@14c; roosters, 10@11c; turkeys, 18@19c; ducks, 14@15c; broilers, 1 1/4 to 2 lbs., 28@30c per lb.

## Chicago.

**Wheat.**—No. 2 red, \$1.50@1.55; July, \$1.19 1/4; Sept., \$1.09 1/2.

**Corn.**—No. 3, 75 1/2c; July, 71 1/2c; Sept., 68 1/2c.

**Oats.**—No. 3 white, 57@59c; July, 54c; Sept., 44 1/2c.

**Beans.**—Pea beans, handpicked, \$2.65 per bu. for choice; good, \$2.50@2.60; red kidney, \$2@2.15 for old.

**Butter.**—Steady. Creameries, 22@25 1/2c; dairies, 20@24c.

**Eggs.**—Easy. Firsts, 20c; prime firsts, 21 1/2c per doz.

**Potatoes.**—Higher. Carlots in bulk, 85@95c for average offerings.

## Pittsburg.

**Potatoes.**—Michigan, 80@85c per bu.

**Apples.**—Steady. Baldwins, \$5.25@6; Spys, \$5@5.50; Spitzenburg, \$5@5.50.

**Eggs.**—Western: firsts, 22c; do. extras, 22 1/2c; current receipts, 21c.

**Butter.**—Creamery, 25@26c; prints, 24 1/2@25c per lb.

## New York.

**Butter.**—Western factory firsts, 20c; creamery specials, 26 1/2@27c per lb.

**Eggs.**—Easier. Western firsts to extras, 21@23c; seconds, 20@20 1/2c per doz.

**Poultry.**—Alive, steady and lower. Western chickens, broilers, 28@30c; fowls, 17c. Dressed, steady. Western broilers, 28@30c; fowls, 15 1/2@16 1/2c per lb.

**Grain.**—Wheat, No. 2 red, 147c per bu; corn, No. 2, 86c; oats, mixed, 62c.

**Potatoes.**—Per 180 lbs., \$2.62@2.75.

## Boston.

**Wool.**—The activity of the wool market is reaching out into nearly every line of the trade and prices have advanced till at present they are on practically the same basis as they held three years ago when the market was at its best. Manufacturers are anxious buyers at the present range of values, which activity would indicate their belief in a good future market. The following are the leading quotations: Ohio and Pennsylvania fleeces—XX, 34@35c; X, 32@33c; No. 1 washed, 39@40c; No. 2 washed, 39@40c; fine unwashed, 27@28c; fine unmerchantable, 29@30c; half blood combing, 35@36c; three-eighths blood combing, 35@36c; quarter-blood combing, 34@36c; delaine washed, 40@42c; delaine unwashed, 32@34c. Michigan, Wisconsin and New York

fleeces—Fine unwashed, 24@25c; delaine unwashed, 30@31c; half blood unwashed, 33@35c; three-eighths blood unwashed, 33@35c; quarter blood, 33@34c. Kentucky, Indiana and Missouri—Three-eighths blood, 34@35c; quarter blood, 34@37c.

## Elgin.

**Butter.**—Market continues firm at 25c per lb., which is the price of last week.

## THE LIVE STOCK MARKETS.

## Buffalo.

May 31, 1909.

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

Receipts of sale stock here today as follows: Cattle, 135 loads; hogs, 16,000 head; sheep and lambs, 8,000; calves, 2,300.

The cattle market opened about steady with last week's prices but closed dull and 10@15c lower on all butcher cattle. One fancy load of cattle, as good as has been here in years, sold at \$7.35. They were strictly prime and would top any market in the country. Cows and heifers sold lower today than last week. There were some grass cattle on the market today and they made against the trade on the common kinds. We would advise caution in buying the common and grassy kinds as there will be a wide range in prices between the dry fed and the grass cattle. Stockers sold a shade higher today, while fresh cows and springers were from \$2@3 per head lower than last Monday.

We quote: Best export steers, \$6.75@7; best 1,200 to 1,300 lb. shipping steers, \$6.50@6.80; best 1,000 to 1,100 lbs. do, \$6@6.40; light butcher steers, \$5.50@5.75; best fat cows, \$5.25@5.50; fair to good, \$4.50@4.75; trimmers, \$2.75@3; best fat heifers, \$6@6.50; light fat heifers, \$4.50@5.50; best bulls, \$5@5.50; bologna bulls, \$4.25@4.75; best feeding steers, 800 to 900 lbs., \$4.50@4.75; 700 to 750 lb. dehorned stockers, \$4.25@4.50; common stockers, \$3.50@4; best cows, \$4.50@5.50; medium, \$3.50@4.50; common, \$2.50@3.

Good hogs sold today about steady with Saturday, yorkers 5@15c lower and pigs from 10@20c lower. Market closed about steady with the opening.

We quote: Medium and heavy, \$7.50@7.60; mixed, \$7.40@7.55; best yorkers, \$7.25@7.40; light yorkers, \$7@7.15; pigs, \$6.75@6.85; roughs, \$6.40@6.50; stags, \$6@6.50.

The lamb market today was slow and strong quarter lower than Saturday. We look for lower prices the balance of the week.

We quote: Top lambs, \$7.75@8; fair to good, \$7@7.65; culls, \$5.50@6; skin culls, \$4@4.50; yearlings, \$6.50@6.75; wethers, \$6.25@6.50; ewes, \$5.25@5.50; cull sheep, \$2@4; best calves, \$8.25@8.50; medium to good, \$7@8; heavy, \$4@5.

## Chicago.

May 31, 1909.

**Cattle.** Received today, 20,000; 44,000; 12,000. Same day last year, 11,767; 26,836; 21,659.

**Hogs.** Received today, 42,277; 161,459; 56,740.

**Sheep.** Received today, 33,028; 146,332; 64,977.

Cattle were marketed so sparingly last week, following the sharp breaks in prices of the previous week, that sellers had a much better show, and despite the fact that the consumption of beef thruout the country was still on a smaller scale than in recent years, prices for fat beefs were 15@20c better. It is true that people are eating more beef than they did a few months ago, but beef is too high to admit of normal consumption, and a resumption of full supplies of cattle spell disaster for stockmen. Beef steers have been selling largely at \$6@7, with inferior to fair light weights going at \$5@6 and choice heavy shipping cattle at \$6.80@7.25. A good class sold at \$6.50@6.75, and a medium class at \$6.10@6.45, exporters' purchases being chiefly at \$6.25@6.65 and no big numbers wanted for foreign markets. Handy little yearlings were the most satisfactory sellers, and fat butcher stock had a good outlet also, only fair supplies of long-fed Kansas and Nebraska steers being needed. Cows and heifers were not in excessive supply and sold freely at \$3.60@6.60, canners and cutters going as usual at \$2@3.55, bulls at \$3.25@5.75 and stags at \$5@6. A good many distillery-fed cattle were marketed to good advantage. Calves were good sellers, going at \$3@7.50, according to quality. The stocker and feeder trade was of but small proportions, owing to small offerings and high prices, buyers paying \$3.20@5.75, with few transactions higher than \$5.50. With abundance of luxuriant grass, there is not much inducement for shipping in stock cattle. Today's cattle market is slow and largely 10c lower, with a \$7.25 top. T. B. Hord, of Nebraska had 19 cars that brot \$6.90.

Hogs were shipped in unusually freely last week to Chicago and other western markets, and the Chicago packers were disposed to hold back and fill their orders late in the day at lower prices after the eastern shippers secured the cream of the offerings at high prices. Good fat droves continued to sell around the best prices of the year, with a strong demand, and fat strong-weight pigs, as well as strong-weight hogs on the shipping order and heavy hard hogs were extremely good sellers daily. The hogs arriving on the market have been averaging 218 lbs., or 3 lbs. higher than a year, while the average was 235 lbs. two years ago and 227 lbs. three years ago. The future outlook for both cattle and hogs is considered as extremely good, and stockmen cannot be too careful in finishing off their hogs these times, for there is an unusually large consumption of fresh pork and provisions. Today's market was active and about 5c higher, with sales at \$6.85@7.45. Light hogs went up to \$7.30.

Sheep and lambs have continued very scarce for still another week, and very high prices prevailed for all fat consignments, with a good outlet, altho the dearthness of muttons greatly restricts its consumption everywhere. With anything like even fair supplies, lamb prices would rule much lower, and at times recently the packers have held back and absolutely refused to buy except at reduced values, but there were quick recoveries in every instance. Fat sheep and lambs are closely held, with over 80 per cent reported in feed lots near Chicago. As yet spring lambs are offered sparingly, and quality is lacking as a rule. Today's market was steady, with a scarcity of choice stock. Ewes were salable at \$3.75@6.75, wethers at \$6@7, rams at \$3.50@5.50, yearlings at \$7@7.75, clipped lambs at \$4.50@8.85 and spring lambs at \$6@11. Horses have been selling well or otherwise, according to their quality, a superabundance of thin overworked horses right from farm work going \$5@15 per head lower than recently. But good fleshy horses were good sellers, and fancy prices are paid for extra heavy stall-fed drafters. Drafters of a desirable class are finding buyers at \$170@215 per head, fancy animals going at \$220@250 or even higher, and not long since some eastern orders were filled at \$275@350. Wagon horses and farm chunks have sold at \$140@200, and drivers have found buyers at \$140@350. Feeders are in demand at \$175@200 for shipment to Ohio and Pennsylvania farming sections.

## LIVE STOCK NOTES.

Wool is selling at high prices, and predictions have been heard that top has not been seen yet. Such talk is based on short clips in various countries, and a wildly bullish market has been seen in London recently. All over the west very high prices are reported for the spring clip, and fleece wool has sold at 29@31 1/2c per pound in Missouri and at 31@31 1/2c in Ohio and Michigan. The Boston market has received wool of the new clip from Wyoming, Arizona, Nevada and Utah, and it is reaching the mills briskly.

Our export cattle, sheep and meats trade has undergone a great falling off in recent years and our once good customer, the United Kingdom, is buying sparingly this year. This is particularly noticeable in the Chicago cattle market, where the export buying each week is a very small affair. The exporters take most of their cattle on Mondays, and recent selections have cost them largely around, \$6.25@6.65 per 100 lbs.

The Chicago packers have sent buyers to Louisville, Ky., recently, and they have shipped a great many southern spring lambs direct to the Chicago packing houses. Thus far no very large supplies of spring lambs have been offered on the open market at Chicago, and prime lots have been disposed of readily at very high prices, some selling at \$11 per 100 lbs. The "crop" is reported as a large one, but many complaints are heard of outbreaks of the scab disease resulting from carelessness of sheepmen. Thus far the markets of the country have had to depend largely on last year's lambs and sheep, and extremely high prices have been paid as a result of their extraordinary scarcity. Killers complain that meat-eaters will not pay high prices enough for mutton to admit of profits, but mutton is selling at prices that are prohibitory to most families. Beef, too, is selling high, and hog products, both fresh and cured, are unusually popular with the public generally.

Recently one of the largest live stock commission firms in the country, with its headquarters in Chicago and branch houses in every other leading market, received advices that the supply of young hogs in Ohio, Indiana and Michigan is fully 25 per cent less than a year ago. This condition arose from most of the farmers wintering as few pigs as possible on account of the extremely high price of corn. For some time the eastern farmers have been free sellers of pigs and light hogs, and this has been very marked in the country tributary to Buffalo, this movement being encouraged by the fact that corn has been selling around 80 cents per bushel. During the last three months Buffalo has received more than one-fourth of its hogs from west of Indiana. The prolonged eastern shipping demand in the Chicago market is sufficient explanation of the high prices paid week after week. This state of things promises to continue thruout the summer and even well into the fall months.

There is no danger of any surfeit of hogs this season, and owners need give themselves no uneasiness regarding future prices, altho there may be a temporary decline before June is over. July and August are going to be extremely good months for sellers, unless all predictions fail, and the prophets say that \$8 hogs will be seen. Thus far the big supplies of hogs promised by some of the packers have not shown up, and western marketings have been showing a great reduction in numbers as compared with a year ago. In the eastern markets also there have been heavy losses. Under all the circumstances it is perfectly natural that high prices should prevail in the markets of the country, and the only peculiar feature is the disposition of many stockmen to market their pigs and light-weight hogs in order to save their corn. True, feed is extremely high, but plenty of farmers are making big profits in putting high-priced corn into healthy growing young hogs.

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## THIS IS THE LAST EDITION.

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

## DETROIT LIVE STOCK MARKETS.

## Thursday's Market.

June 3, 1909.

## Cattle.

Receipts, 1,124. Market active at last week's prices on dry-fed; grassers selling around \$5, trifle lower.

Dry-fed cattle steady. Grass cattle 15@25c lower than last week at the close.

We quote: Extra dry-fed steers and heifers, \$6.75; steers and heifers, 1,000 to 1,200, \$6@6.25; steers and heifers, 800 to 1,000, \$5.50@6; grass steers and heifers that are fat, 800 to 1,000, \$5@5.25; grass steers and heifers that are fat, 500 to 700, \$4.50@4.85; choice fat cows, \$4.50@4.95; good fat cows, \$4@4.15; common cows, \$3@3.40; canners, \$1.50@2; choice heavy bulls, \$4.75@5; fair to good bolognas, bulls, \$4.50; stock bulls, \$4@4.15; choice feeding steers, 800 to 1,000, \$4.50@5.25; fair feeding steers, 800 to 1,000, \$4.50@4.65; choice stockers, 500 to 700, \$4.25@4.75; fair stockers, 500 to 700, \$4@4.25; stock heifers, \$3.50@4.25; milkers, large, young, medium age, \$4@4.7; common milkers, \$2.50@3.5.

Bishop, B. & H. sold Goose 5 cows av 960 at \$4.30; to Sullivan P. Co. 3 steers av 886 at \$5.65; to Kamman B. Co. 10 do. av 787 at \$5.60, 1 cow weighing 1,000 at \$4; to Jonghin 6 do av 961 at \$3.25, 4 do. av 985 at \$3.50, 1 do weighing 890 at \$2.25; to Mich. B. Co. 9 butchers av 860 at \$4.50, 2 do av 860 at \$4, 2 cows av 660 at \$2.50, 5 steers av 1,240 at \$5, 3 cows av 790 at \$2.50, 3 do av 1,060 at \$4, 3 steers av 1,073 at \$5.75, 2 bulls av 1,440 at \$4.50, 1 do weighing 1,380 at \$4.50, 3 cows av 1,040 at \$4.50, 2 steers av 960 at \$5.90, 1 do weighing 690 at \$5.60; to Sullivan P. Co. 3 cows av 1,000 at \$4.50, 8 steers av 894 at \$6, 2 bulls av 1,268 at \$4.50; to Newton B. Co. 4 cows av 1,150 at \$5, 3 do av 1,050 at \$4, 5 steers av 1,184 at \$6; to Hammond, S. & Co. 2 bulls av 1,335 at \$4.50, 4 cows av 1,040 at \$4.50; to Regan 11 butchers av 600 at \$4.50, 2 bulls av 500 at \$3.50; to Davenport 4 cows av 945 at \$4.30, 17 stockers av 656 at \$4, 2 do av 735 at \$4.50, 6 do av 666 at \$4.20; to Thompson Bros. 4 steers av 852 at \$5.50; to Schlischer 6 butchers av 870 at \$5.50, 2 do av 815 at \$5, 4 steers av 625 at \$5.50.

Roe Com. Co. sold Newton B. Co. 20 steers av 1,347 at \$6.75; to Hammond, S. & Co. 20 butchers av 797 at \$4.70, 14 do. av 911 at \$5.10, 13 steers av 954 at \$5.50; to Sullivan P. Co. 3 bulls av 1,193 at \$4.50; to Localt 6 butchers av 933 at \$5; to Caplis 22 do. av 980 at \$5.15, 14 do. av 1,000 at \$4.25.

Sharp sold Freeman 2 stockers av 580 at \$4.50.

Same sold Sullivan P. Co. 1 bull weighing 1,360 at \$4.50, 18 steers av 870 at \$5.85, 6 do av 753 at \$5.

Kendall sold same 3 cows av 810 at \$3.50.

Henderson sold same 1 bull weighing 1,550 at \$4.50, 2 do av 825 at \$4, 6 cows av 1,018 at \$4.50.

Groff sold same 2 do av 1,110 at \$4, 3 steers av 976 at \$5.80.

Long sold same 2 cows av 1,175 at \$4.75, 2 heifers av 825 at \$3.50.

Spicer, M. & R. sold Newton B. Co. 20 steers av 1,133 at \$6, 5 do av 1,088 at \$5.90, 3 cows av 1,066 at \$4.50, 1 bull weighing 1,100 at \$4, 13 butchers av 743 at \$5; to Rattkowsky 2 bulls av 410 at \$3; to Huff 3 butchers av 833 at \$4.35; to Hammond, S. & Co. 10 steers av 877 at \$5.50, 26 do av 920 at \$5.50; to Carey 3 cows av 1,026 at \$3.15, 4 do av 975 at \$3.15; to Sullivan P. Co. 1 bull weighing 2,000 at \$4.75; to Prince 3 stockers av 590 at \$4, 4 do av 500 at \$3.75, 2 do av 605 at \$4; to Carey 2 canners av 880 at \$3.15.

Robb sold Hammond, S. & Co. 17 steers av 982 at \$6.25.

Kalaher sold same 2 cows av 960 at \$3.75, 3 steers av 1,177 at \$6.50.

Henderson sold same 39 do. av 989 at \$6.20, 19 do av 960 at \$6.20.

Haley sold Marx 3 butchers av 590 at \$4.50, 1 cow weighing 930 at \$4.

Oversmith sold same 6 steers av 953 at \$5.50.

Haley sold Prince 6 stockers av 521 at \$4.

Kendall sold Kamman 5 cows av 1,000 at \$4, 1 steer weighing 920 at \$7, 2 do av 780 at \$5, 2 do av 725 at \$5.25.

Long sold same 2 do av 820 at \$5.

Veal Calves.

Receipts, 1,120. Market 25@50c higher. Best, 7.50@8.25; others, \$4@7; milch cows and springers, good, steady; common, dull.

Spicer, M. & R. sold Caplis 13 av 130 at \$7.25, 5 av 140 at \$5, 18 av 140 at \$7; to Newton B. Co. 4 av 115 at \$5, 29 av 145 at \$7.50; to Mich. B. Co. 3 av 140 at \$5, 24 av 140 at \$7.25; to McGuire 20 av 135 at \$7.50; to Mich. B. Co. 26 av 145 at \$7.50; to Burnstine 6 av 115 at \$7.25; to Markowitz 13 av 140 at \$7.50; to Newton B. Co. 17 av 135 at \$7.25.

Bishop, B. & H. sold Sullivan P. Co. 26 av 140 at \$7.50, 6 av 105 at \$5, 26 av 142 at \$7.50; to Goose 25 av 145 at \$7.85; to Fitzpatrick Bros. 11 av 160 at \$7.25; to Bresnahan 9 av 145 at \$7.40; to Strauss & Adler (New York) 10 av 140 at \$7.50, 2 av 150 at \$7.75, 29 av 130 at \$7.25, 7 av 150 at \$8, 40 av 135 at \$7.70, 25 av 140 at \$7.50; to Parker, W. & Co. 16 av 135 at \$7.75, 6 av 150 at \$5, 11 av 155 at \$7.75,

17 av 165 at \$8.25, 7 av 150 at \$7.50, 26 av 130 at \$7.60, 5 av 150 at \$7.75; to Strauss & Adler (New York) 4 av 135 at \$8, 36 av 150 at \$7.75, 4 av 135 at \$7.50, 18 av 130 at \$7.25; to Newton B. Co. 12 av 135 at \$7.75; to Markowitz 5 av 105 at \$5, 13 av 155 at \$7.80.

Lewis sold Newton, B. Co. 1 weighing 110 at \$7.

Oversmith sold Burnstine 12 av 135 at \$7.25.

Morris sold Sullivan, P. Co. 5 av 110 at \$5.50, 42 av 140 at \$7.50.

Robb sold Bresnahan 1 weighing 190 at \$7.

Wickmann sold Mich. B. Co. 8 av 130 at \$6.85.

Haley sold same 30 av 130 at \$6.90, 2 av 200 at \$5.

Belheimer sold same 7 av 150 at \$7.50, 1 weighing 170 at \$6.

Haley sold Hammond, S. & Co. 6 av 110 at \$5, 28 av 143 at \$7.50.

Noble sold same 4 av 155 at \$7.10.

Groff sold same 19 av 140 at \$7.50, 1 weighing 100 at \$6.

Downing sold Fitzpatrick Bros. 13 av 135 at \$7.15.

Sheep and Lambs.

Receipts, 933. Market steady with last Thursday. Thin grass stock hard to sell. B. K. Holmes says keep them home until fat as they will go higher.

Best lambs, \$7.90; fair to good lambs, \$6.50@7; light to common lambs, \$5.50@6; spring lambs, \$8@9; fair to good sheep, \$5@5.50; culs and common, \$3@4.50.

Bishop, B. & H. sold Sullivan P. Co. 9 lambs av 90 at \$7, 8 sheep av 100 at \$3.50; to Mich. B. Co. 5 do. av 120 at \$4, 18 lambs av 75 at \$7.50; to Fitzpatrick Bros. 17 do. av 55 at \$6.50, 19 sheep av 60 at \$4, 12 spring lambs av 50 at \$8, 17 sheep av 100 at \$4.50, 9 do. av 80 at \$4.25, 33 lambs av 60 at \$6; to Sullivan P. Co. 26 do. av 80 at \$7; to Newton B. Co. 8 spring lambs av 55 at \$9, 2 lambs av 80 at \$6, 6 do. av 88 at \$6; to Young 13 do. av 77 at \$7.50, 10 do. av 99 at \$6, 19 spring lambs av 60 at \$8.50; to Parker, W. & Co. 21 sheep av 60 at \$4.50.

Spicer, M. & R. sold Newton B. Co. 4 sheep av 105 at \$5, 11 lambs av 77 at \$7.50, 12 do. av 80 at \$7.25, 2 sheep av 140 at \$4, 19 mixed av 80 at \$5.75; to Fitzpatrick Bros. 4 lambs av 115 at \$7.75, 2 sheep av 120 at \$4, 5 do. av 130 at \$5.50, 5 spring lambs av 55 at \$8.50, 8 lambs av 95 at \$6.50; to Mich. B. Co. 27 do. av 80 at \$7, 18 do. av 70 at \$7.25; to Eschrich 3 sheep av 125 at \$3.50, 39 do. av 65 at \$5, 8 do. av 80 at \$3.25.

Roe Com. Co. sold Newton B. Co. 12 spring lambs av 60 at \$9.

Groff sold Hammond, S. & Co. 1 buck weighing 130 at \$3.50, 2 sheep av 90 at \$5.50.

Wickmann sold Mich. B. Co. 13 sheep av 75 at \$4.25.

Robb sold same 5 do. av 40 at \$5.

Belheimer sold same 197 fall clip lambs av 80 at \$7.90.

Robb sold Newton B. Co. 15 spring lambs av 45 at \$7.50.

Downing sold Fitzpatrick Bros. 4 spring lambs av 60 at \$9, 4 sheep av 65 at \$4.

Haley sold same 7 do. av 130 at \$4, 12 mixed av 85 at \$6.50.

17 av 165 at \$8.25, 7 av 150 at \$7.50, 26 av 130 at \$7.60, 5 av 150 at \$7.75; to Strauss & Adler (New York) 4 av 135 at \$8, 36 av 150 at \$7.75, 4 av 135 at \$7.50, 18 av 130 at \$7.25; to Newton B. Co. 12 av 135 at \$7.75; to Markowitz 5 av 105 at \$5, 13 av 155 at \$7.80.

Lewis sold Newton, B. Co. 1 weighing 110 at \$7.

Oversmith sold Burnstine 12 av 135 at \$7.25.

Morris sold Sullivan, P. Co. 5 av 110 at \$5.50, 42 av 140 at \$7.50.

Robb sold Bresnahan 1 weighing 190 at \$7.

Wickmann sold Mich. B. Co. 8 av 130 at \$6.85.

Haley sold same 30 av 130 at \$6.90, 2 av 200 at \$5.

Belheimer sold same 7 av 150 at \$7.50, 1 weighing 170 at \$6.

Haley sold Hammond, S. & Co. 6 av 110 at \$5, 28 av 143 at \$7.50.

Noble sold same 4 av 155 at \$7.10.

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Best lambs, \$7.90; fair to good lambs, \$6.50@7; light to common lambs, \$5.50@6; spring lambs, \$8@9; fair to good sheep, \$5@5.50; culs and common, \$3@4.50.

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Spicer, M. & R. sold Newton B. Co. 4 sheep av 105 at \$5, 11 lambs av 77 at \$7.50, 12 do. av 80 at \$7.25, 2 sheep av 140 at \$4, 19 mixed av 80 at \$5.75; to Fitzpatrick Bros. 4 lambs av 115 at \$7.75, 2 sheep av 120 at \$4, 5 do. av 130 at \$5.50, 5 spring lambs av 55 at \$8.50, 8 lambs av 95 at \$6.50; to Mich. B. Co. 27 do. av 80 at \$7, 18 do. av 70 at \$7.25; to Eschrich 3 sheep av 125 at \$3.50, 39 do. av 65 at \$5, 8 do. av 80 at \$3.25.

Roe Com. Co. sold Newton B. Co. 12 spring lambs av 60 at \$9.

Groff sold Hammond, S. & Co. 1 buck weighing 130 at \$3.50, 2 sheep av 90 at \$5.50.

Wickmann sold Mich. B. Co. 13 sheep av 75 at \$4.25.

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Belheimer sold same 197 fall clip lambs av 80 at \$7.90.

Robb sold Newton B. Co. 15 spring lambs av 45 at \$7.50.

Downing sold Fitzpatrick Bros. 4 spring lambs av 60 at \$9, 4 sheep av 65 at \$4.

Haley sold same 7 do. av 130 at \$4, 12 mixed av 85 at \$6.50.

Hogs.

Receipts, 3,959. Market steady at last week's prices.

Range of prices: Light to good butchers, \$7.25@7.45; pigs, \$6.75; light yorkers, \$7@7.15; roughs, 1/2 off; stags, 1/2 off.

Bishop, B. & H. sold Parker, W. & Co. 16 av 215 at \$7.50, 985 av 180 at \$7.40, 213 av 160 at \$7.25, 121 av 150 at \$7.25, 73 av 155 at \$7.15, 116 av 165 at \$7.20, 204 av 175 at \$7.30.

Roe Com. Co. sold Hammond, S. & Co. 14 av 156 at \$7.25, 52 av 184 at \$7.45.

Spicer, M. & R. sold same 95 av 172 at \$7.45, 67 av 187 at \$7.40, 286 av 174 at \$7.35, 119 av 166 at \$7.30, 54 av 170 at \$7.40.

Sundry shippers sold same 112 av 184 at \$7.35, 62 av 154 at \$7.10.

Bishop, B. & H. sold Newton B. Co. 35 pigs av 110 at \$6.75.

Friday's Market.

May 28, 1909.

Cattle.

Market steady at Thursday's prices.

We quote: Extra dry-fed steers and heifers, \$6.50; steers and heifers, 1,000 to 1,200, \$6@6.40; steers and heifers, 800 to 1,000, \$5.75@6.25; grass steers and heifers that are fat, 800 to 1,000, \$5.50@6; grass steers and heifers that are fat, 500 to 700, \$5@5.50; choice fat cows, \$5; good fat cows, \$4@4.50; common cows, \$3@3.25; canners, \$2@2.50; choice heavy bulls, \$4.75; fair to good bolognas, bulls, \$4.25@4.50; stock bulls, \$3.50@4; choice feeding steers, 800 to 1,000, \$4.75; fair feeding steers, 800 to 1,000, \$4.50; choice stockers, 500 to 700, \$4@4.25; fair stockers, 500 to 700, \$3.75@4; stock heifers, \$3.50; milkers, large, young, medium age, \$4@4.50; common milkers, \$2.50@3.

Youngs sold Kamman B. Co. 6 steers av 1,180 at \$6.50, 1 heifer, weighing 920 at \$6, 4 cows av 987 at \$4.

Bishop, B. & H. sold same 3 cows av 1,066 at \$4.50, 3 steers av 883 at \$6.

Roe Com. Co. sold same 4 butchers av 960 at \$5, 4 do av 852 at \$4.

Bishop, B. & H. sold Huston 12 stockers av \$6.50 at \$4.

Same sold Goose 1 cow weighing 830 at \$3, 2 do av 960 at \$4, 1 bull weighing 840 at \$4.50, 1 cow weighing 850 at \$2.50.

Same sold Sullivan 1 bull weighing 1,300 at \$4.75, 2 do av 1,135 at \$4.50, 1 do weighing 830 at \$4.25.

Sheep and Lambs.

Market steady at Thursday's prices.

Best lambs, \$8; fair to good lambs, \$6.50@7; light to common lambs, \$5.50@6; spring lambs, \$8@9.50; fair to good sheep, \$5@5.50; culs and common, \$3.50@4.50.

Bishop, B. & H. sold Sullivan P. Co. 4 spring lambs av 58 at \$9.25, 4 sheep av 120 at \$4.50, 2 do av 155 at \$3.50, 4 do av 95 at \$4, 23 lambs av 60 at \$7.75.

Hogs.

Market 5@10c lower than on Thursday.

Range of prices: Light to good butchers, \$7.25@7.30; pigs, \$6.75@6.80; light yorkers, \$7@7.15; stags, 1/2 off.

To Save Labor  
USE THIS

DAIN  
LOADER

MAKE  
Better Hay

WITH THIS  
DAIN  
Side Delivery  
RAKE

No pulling or tugging to drag the hay from the back end of the load if this Loader is hitched to your wagon, because the elevating bars push the hay forward on the wagon so one man handles the hay easily.

The Dain Loader takes hay from swath or windrow. Two sets of self adjusting rakes having a long sweep over stubble gather hay clean, but do not disturb trash. The reciprocating bars elevate hay without injury to the tender



leaves because the self-expanding throat allows hay to pass freely onto wagon without wadding, tangling or jamming. An apron at top keeps hay from spilling or blowing off side of load. Wheels set underneath so it can be taken through gates and operated close to fences, can be coupled on without crawling under wagon, uncoupled without getting off load.

No ropes, cog gears, crossed chains, crooked crank shaft, or other traps to cause trouble, delay and expense. Simple in every respect, light draft and durable.

USE THE DAIN SIDE DELIVERY RAKE and have air cured hay. Such hay has better color, is sweeter, rich in natural juices and nutriment. Worth more to feed or sell.

It's a Tedder and Rake in one, more and better than either. The three sets of teeth on a slowly revolving reel gently deliver two swaths of hay upside down in a loose continuous windrow so that every bit is exposed. The teeth may be set forward out of plumb so fluffy windrows are made in heaviest hay. Spring-supported reel-frame prevents jar and strain over roughest grounds.

These two tools are famous for saving labor and improving hay. Like Dain Mowers, Sweep Rakes, Stacks and Presses, they are made of highest grade guaranteed material and will stand severe use even abuse that would ruin ordinary tools.

We have specialized on building hay making machinery for over a quarter of a century and have a reputation for producing unequalled labor-saving, rapid-hay-handling, reliable tools.

Ask your Dealer to show you the Great Dain Line.

Handy Reference Book  
"All About Hay" SENT FREE

If you will tell us your Hay Tool needs. It gives valuable information for Hay Growers, write for it today.

DAIN MFG. CO.

814 Vine Street

OTTUMWA,

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## LIGHT DRAUGHT POTATO HARVESTER

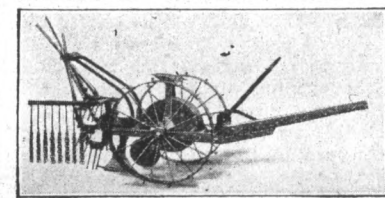
A Digger That Digs Where Others Fail.

Guaranteed to work under all kinds of field conditions with only two horses. Better write for our circulars and field scene pictures.

STEVENS MFG. CO., Marinette, Wis.

Builders of High Grade Potato Machinery.

Transfer and distributing points in every potato raising section.



A REAL POTATO DIGGER.

## WANTED!

## HAY OF ALL GRADES.

Write for quotations. One profit, from producer to consumer.

F. D. HEWITT,  
120 Liberty St., New York.

## HAY &amp; GRAIN



## THE DAIRY

CONDUCTED BY COLON C. LILLIE.

### SOME BUTTER QUESTIONS.

Will you kindly give me information about renovating butter, telling how cream, when too sour, is to be treated, what you call a commercial starter and how it should be used, whether renovated butter is sold for first-class creamery butter, and how you determine the percentage of water in butter. Can butter be salted in the churn as well as in the worker?

Kansas.

F. H.

Renovated butter is poor butter that has been reworked, or renovated. The principal source of raw material for renovated butter is poor dairy butter that is sold in grocery stores all over the country and is very poor butter when sold. Before it can be disposed of to customers, much of it becomes very rank and is shipped to the renovator. One city in Michigan has had a renovated butter factory for years and its owners have made a fortune out of reworking poor dairy or farm butter. The process of renovation is a secret one, known only to the manufacturers. We do know, however, that the butter is accumulated there in very bad condition, much of it. Then it is melted up and worked with fresh milk and, by some process understood only by the manufacturers, it is brought out in much better condition than when it was received. The product is uniform in appearance and practically so in quality; but it is not sold for creamery butter. In fact, it is against the law to sell it for anything but renovated butter and the government compels the manufacturer to pay a tax upon renovated butter.

When cream gets too sour it is certainly a difficult proposition to treat it so that good butter can be made from it. In fact, it is absolutely impossible. In the best creameries the cream is pasteurized to kill the bacteria, and then a commercial starter is added to introduce the right kind of bacteria into the sour cream and the cream is churned at once. This does, in a measure, improve the quality of butter made from overripe or oversour cream, but it is not as good as the you had had the handling of the cream before it became sour.

A commercial starter is simply milk into which pure culture containing lactic acid bacteria has been introduced. The milk is pasteurized in the first place to kill all the bacteria in it and then pure culture is introduced and the lactic acid bacteria are allowed to multiply until the milk sours. This then is introduced into the pasteurized cream and these lactic acid bacteria give it the flavor of ripened-cream butter.

The way to determine amount of moisture is to weigh out carefully a small portion of the butter. Put this butter into an oven and heat it at a low temperature until the moisture is all evaporated and then weigh it again. The difference between the first weight and the last will be the moisture content. Then this can be reduced to percentage easily. It is simply a problem in percentage after the weighing has been done. There are moisture tests on the market, in applying which definite amounts are taken so as to get the percent easily, but the chemist, as I understand it, does not take a definite amount. He takes a small amount of butter, weighs it accurately and then evaporates the moisture in a slow oven, weighs again and figures out his percentage from the actual weights.

Yes, butter can be salted in the churn just as well as when worked, in fact, better. Very little creamery butter is salted in the worker nowadays. It is all salted in the churn. After the butter comes in fine granules the buttermilk is washed out of it and the salt is introduced. The churn is turned a few times to mix the salt with the butter and then the butter is taken out of the churn and packed in the desired kind of package, or made into prints.

### A PROPOSED NEW BARN.

I am sending a description of my barn plans for criticism. The building is to be 46x64 ft., with an 8-ft. basement under the barn floor and hay bents, thus giving sufficient basement room for tool shed and repair shop. The stables will be along the south side with numerous large windows to let in the sunlight. There will be a rise of about 4 ft. to get to the barn floor and the stables will be a trifle above the grade level. With this plan I can feed the cattle from the main floor. There is a deep gully north of the barn into which I can conveniently drain the stables. How would you ventilate

this barn? It is to have a gambrel roof. Ottawa Co. J. J. H.

I would first put a basement under the whole barn. I think that J. J. H. will make a mistake in having only a two-thirds basement. It will cost but little more to have a basement under the whole barn, and then he can put his cows in this basement. Now, by a basement I do not mean a hole dug in the ground. I would have the basement practically all above the ground, at least on two or three sides, but it is so cheap to get more room in a barn by having a basement that I would not think of having a stable in the way that J. J. H. indicates he intends to have his. He will need this room for storage, or where he is going to have his stable would be a good place to put part of the tools—just as good as in the basement.

The trouble in having cow stables above ground is that they are always cold. If you have a plank floor, for instance, you never can keep a cow stable warm. You must have a cement floor. Of course, you have a cement floor in here with the plan proposed, but I take it, you do not intend to have, as you speak of feeding the cows from the main floor. If necessary, I would raise the barn higher rather than to do away with the basement under the whole barn.

Now, with regard to draining the stable into a deep gully. If this simply means draining in order to keep the ground under the stable dry, it is all right, but if you intend to drain from the gutters of the stable into the deep gully, it is all wrong, because this is the valuable part of the manure and you want to use absorbents enough if possible, in the stable to absorb this so that it can be drawn out and spread on the land. You should use cement gutters so as to save all the liquid as well as all of the solid manure.

I think there is but one way of ventilating a stable and ventilating it right, and that is by the King system of ventilation. The King system has pure-air intakes opening on the outside of the stable down next to the ground and on the inside up next to the ceiling. This allows pure air to come into the barn and prevents warm air from going out. The warm air, of course, accumulates up next to the ceiling. Then a ventilating shaft is built which goes up thru the stable, up thru the storage part of the barn and thru the roof. This ought to go high enough above the roof so that there will be a good draft. This is boarded tight to within a foot of the floor. Now the pure air comes in thru the pure-air intakes, gradually mixes with the warm air up next to the ceiling, forces a circulation, and the cold, impure air is drawn from the floor of the stable into the ventilating shaft and escapes. Now, one objection to having the stable as J. J. H. indicates would be that it would be hard to ventilate. You have to have a stable very tight in order to ventilate it in this way. If you have openings you will not get the air to go as you want it to and, consequently, it will not be well ventilated. You must have a stable warm and have it well ventilated at the same time. You can do this better by having it in the basement, but by a basement I do not mean that you must necessarily go below the surface of the ground.

### CEMENT BLOCK VS. BRICK SILO.

Would be pleased to have Mr. Lillie discuss the merits or demerits of the two following described silos: One built with two independent walls, each 4 in. thick, with a 2-in. dead air space between them, the material to be concrete blocks, slightly concave, 4x8x20 inches in size, each tier to be tied, if necessary, with a short, crooked wire. The other plan is to build a silo of brick, each brick being 4x8x12 in. and containing three air chambers about 2 in. square each. The inside walls of either silo to be plastered with cement plaster and the brick silo to have reinforcing wires or outside bands. Would you advise the use of an all-steel door frame in any case?

Sanilac Co.

J. A. REDMOND.

Either one of the proposed forms of construction would make a most excellent silo. I think the one air space in the concrete construction would be sufficient, and if it cost less to make this than the brick, I should certainly make the concrete. In fact, I think the concrete silo would be the strongest and best and would cost less than the brick silo. While the brick silo, with the three dead air spaces, would be a greater protection against freezing than the one dead air space in the cement or concrete blocks, I do not consider this of any great importance. As a matter of fact, the freezing of ensilage is of no great importance anyway. People have silos made simply of staves and the silage does not freeze to amount to anything. Many people

## Pictures Against Talk

NO matter how complicated his cream separator, every "bucket bowl" manufacturer claims his machine is simplest and easiest to clean. Even the makers of disk machines—with 40 to 60 pieces inside the bowl—make the same claims. Yet none of these "bucket bowl" fellows dare put pictures of their separator bowl parts into their advertisements—they all realize that pictures would make their claims ridiculous.

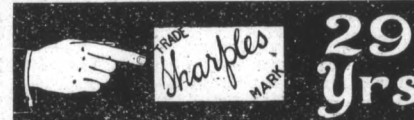
The Sharples Dairy Tubular Cream Separator is, without exception, the **only** simple, sanitary, easy to clean separator made. We put pictures against "bucket bowl" talk. We frequently show you pictures of the light, simple Dairy Tubular Bowl and of heavy, complicated "bucket



One pan contains the single little piece used in Sharples Dairy Tubular bowls. The other contains nothing but disks from a single "bucket bowl." Which is simple and easy to clean?

bowls." Compare them. They tell the whole story. It will take you less than thirty seconds to put "bucket bowl" claims where they belong.

The self styled "original maker of disk machines" is trying to maintain sales by patent infringement suits against equally cheap machines, that have been made for several years with disks like his. If you want to avoid work, expense and dissatisfaction, get a Sharples Dairy Tubular. Made in the world's biggest and best separator factory. Branch factories in Canada and Germany. Sales greater than most, if not all, "bucket bowl" separators combined. Write for catalog. No. 152.



**The Sharples Separator Co.**

Toronto, Can. West Chester, Penna. Portland, Ore.  
Winnipeg, Can. Chicago, Ills. San Francisco, Cal.

U.S. 1909 U.S. 1909 U.S.

# UNITED STATES

U.S. U.S. U.S.

**OUR SIDE OF THE QUESTION**

The United States Separator has built up a reputation for efficiency and durability that makes it the foremost machine from every standpoint of separator requirements.

We prize that reputation and in the changes we have made for 1909 every feature that has helped to make the United States famous as the reliable separator has been retained.

Every improvement that has been made has been made with the object of building up and adding to that reputation.

We have added "working points" and not fancy "talking points."

**YOUR SIDE OF THE QUESTION**

You buy a Cream Separator, not on account of some "fancy talking points," but because it will enable you to handle your dairy product more easily and with greater profit.

A machine that will handle more milk. That will skim it more thoroughly. That will lose least in bowl flushing and that can be kept clean and sanitary with the least trouble.

These are your requirements, and a trial will convince you that the latest model U. S. embodies all of these essential features, to a greater extent than has ever before been reached in Separator construction.

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**BUILT FOR EFFICIENCY AND DURABILITY FOR DAIRYMEN WHO KNOW AND DEMAND THE BEST**

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## The New Iowa

### IS THE CREAM SEPARATOR

which is such a favorite with the ladies. When the lady of the house sees the NEW IOWA she falls in love with its beauty and many conveniences. Invariably the IOWA is the machine purchased when the ladies have their way about it.

It is built low down, just the right height to be convenient and handy. It runs so easily, skims so perfectly and is so easily washed that it is a favorite wherever introduced.

The IOWA is the only machine which won Gold Medals at the three last National Fairs.

Write for free catalog which explains in detail all about this wonderful machine and the great factory that builds it.

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



have built silos of a single thickness of matched lumber and the freezing did practically no harm. As a matter of fact, it doesn't injure silage to freeze anyway. It's only a little inconvenient in feeding, but if you leave the ensilage that freezes onto the sides of the silo alone until it warms up and comes off, and thaw it out a little by keeping it in the warm stable or feeding chute before it is given to the cows, it has not been injured and will not injure the cows. I would prefer a silo with a hollow wall because it does protect it some against the freezing, but as I say, this is of minor importance.

Now, with these two silos I should take the one that could be built the cheapest. The double wall cement block silo will cost enough, and if I were building it I would leave off one of the walls, putting up a single cement wall and reinforcing this with galvanized wire between the courses so that it would have sufficient strength to stand all pressure. You can do the same thing with a brick silo. While the double walls protect largely against frost, I do not consider this of enough importance so that it would pay to put up a double walled cement silo, yet it would be a nice thing to have it, and the first cost is the only thing against it. I consider the hollow brick as entirely too expensive to be considered at all.

#### PREVENTION OF MILK FEVER.

In nearly every farm or dairy paper one may read of the cure for milk fever, and how to apply it, but I do not remember seeing much about the prevention of this trouble, which to me seems even more important than a cure. I think milk fever can be prevented almost entirely. My method is to withhold all grain rations, except an occasional small feed of bran, for a period of ten days to three weeks previous to the time of freshening. After the cows are turned on pasture most people are busy and the dry cow gets little attention. Let me say now that there is little, if any, danger of a cow four years old or less, developing the trouble; neither will the skim-milk cow be troubled, but the best cow, the pride of the herd, must be watched. While for such I consider it bad practice to have them come fresh between May and October, yet many times it seems unavoidable, or for some reason, preferable. When this is the case keep the cow on short pasture if possible, and at least a week or ten days before the calf is expected—sooner in the case of a cow that has had a previous attack of the fever—take her to the barn and feed on dry hay. Be sure she has plenty of salt as this will be needed to keep bowels in good condition. Let her have a yard, without grass, but shade, to exercise in. Be sure she has all the water she wants. Keep her thus until the calf is four days old, then bring her up to whatever feed you like. You will have no more trouble and in a very few days she will be giving a full mess of milk—more than if you had fed heavily and developed an attack of the fever.

While it is a very great comfort to know that this disease, for so many years the dread of the dairyman, can be so readily cured, it is much better for all concerned to prevent it. The idea I have tried to express is that if you prevent the cow from having her full flow of milk at time of calving you will have no trouble with fever. I have kept cows for thirty years and have never yet had a case of milk fever on my farm, so feel safe in recommending this way of caring for them. Have had them freshen every month in the year and always found my cows my best investment, the only kept on a small scale. I usually have from six to ten milking at once and have found much help in the Michigan Farmer. Long may it thrive.

Ottawa Co.

R. B. REYNOLDS.

#### TESTS WITH DAIRY COWS.

The Department of Agriculture has received a report of some experiments made at the Mississippi experiment station with dairy cows. Experiments lasting 16 and 10 weeks, respectively, were undertaken to see if it paid to feed cottonseed meal when cows had an abundance of green feed. In the former test the cottonseed meal gave 5 per cent better returns, but this was not enough to pay for the extra cost of the meal. In the second test there was no increase in the yield of milk.

Using cows pastured at night, but kept up during the day, cottonseed meal was fed at the barn in comparison with the soiling crops, alfalfa, sorghum, and

Johnson grass. In a ten weeks' test it was found that 41 lbs. of green feed gave an average daily yield of 14.9 lbs. of milk for each cow, while the lot fed 3.4 lbs. of cottonseed meal gave 14.2 lbs. The difference in favor of green feed would have been greater if the cows had had no access to pasture.

In a comparison of large, medium, and small rations with three lots of cows, receiving respectively 13 lbs., 10 lbs., and 6 lbs. of a grain ration consisting of wheat bran and cottonseed meal in proportions of 2 to 1, the average weekly yields were 833, 873 and 743 lbs. In the last case there was also some loss of body weight. A second test with three lots of nine cows each showed that 9 lbs. of the mixture yielded better results than 11 lbs. of the same.

In a test of four months with 30 cows it was found that silage resulted in a saving of \$100 over a feed of wheat bran, cottonseed meal, and Johnson grass hay.

During hot weather it was found to be of no advantage to protect cows from the heat by keeping them in the barn, as they were more contented in a shady pasture.

Another experiment showed that, with 149 cows, the average cost of feed per cow per month was \$4.10 in the dry-fed herds and \$3.50 in the silage-fed herds, the average cost of one gallon of milk being fifteen and nine cents respectively and a corresponding cost of one pound of butter-fat of 23 and 20 cents respectively.

#### CEMENT SILO PRACTICAL BUT EXPENSIVE.

As I am thinking of erecting a silo this year, the question of using cement arises. Silo agents tell some discouraging tales of cracked cement and dry mold or wet and soggy ensilage, so I must ask the man who uses a cement silo. I understand that a stave silo 12x30 ft. will cost between \$150 and \$180, and I have some ideas of my own in regard to what I can build a cement silo for, but would also like to ask the probable cost where stone of various sizes and sharp sand and gravel are available on the farm.

Would like also to learn the probable cost of cement work for wall and floor of basement under barn 30x72 ft., with a wing 16x20 ft. on one corner.

Wayne Co.

SUBSCRIBER.

As I have stated many times in The Farmer in the past year or two, the cement silo is entirely practical. It probably makes the best silo that can be built. The only question is its first cost. If one has the gravel on his own farm close at hand, so that he does not have to pay for it, nor pay for hauling it, probably a cement silo can be built as cheaply as any; but where one has to buy the gravel, and has to haul it a considerable distance, the question of expense is a very important one.

Now, there isn't any question but what you can keep silage in a cement silo. The silo, however, must be plastered on the inside with a rich cement mortar. Mix cement and clean sharp sand at the rate of one part cement and two parts sand to make mortar or plaster for this. Unless you so plaster it you will have mouldy ensilage next to the walls of the silo, but if you will do this the cement silo will keep ensilage just as well as a stave silo, and perhaps better, because there will be no cracks in it. I have used a cement silo for some 16 or 17 years and I know what I am talking about when I say that ensilage will keep up next to a cement wall. There are a number of cement silos in Ottawa county and they are giving excellent satisfaction. Of course, the stave silo can be put up much more easily and quickly. If you are going to build a cement silo you want to begin at once or you won't get thru in time, while a stave silo can be put up in a few days.

It would be practically impossible for me to estimate the cost of the cement work of a basement barn and the floor. You can figure it out better than I, because you know the cost of materials and I do not. For your wall, you will want to use cement and gravel at the rate of about one part cement to six of gravel. If you use two coats for your floor you can use one to six for the bottom coat, and one to two or three, or possibly one to four, for the top coat. If you use only one coat I would mix it one to four clear thru. This I know will make a good solid floor that will last almost indefinitely.

#### FREE DEAFNESS CURE.

A remarkable offer by one of the leading ear specialists in this country, who will send two months' medicine free to prove his ability to cure Deafness, Head Noises and Catarrh. Address Dr. G. M. Branan, 102 East 12th St., Kansas City, Mo.

## Another Infringer Nailed

# SHARPLES SEPARATOR CO.

John Deere Plow Co. and Deere & Webber Co.

## Sued For Infringement Of

# DE LAVAL DISC

## Cream Separator Patents

For the information and caution of all whom it may concern announcement is made that the DE LAVAL SEPARATOR CO. has brought suit in the UNITED STATES CIRCUIT COURT against the SHARPLES SEPARATOR CO. for infringement of LETTERS PATENT NO. 743,428 by the manufacture and sale of cream separators containing DISC bowl construction covered by the claims of said letters patent.

And that similar suits have been or will be filed as quickly as possible against the JOHN DEERE PLOW CO. and the DEERE & WEBBER CO., who are jobbing such infringing SHARPLES separators to dealers in the Western States.

Attention is pertinently called in this connection to the recent hypocritical advertising tirade of the SHARPLES concern against DISC separators. We have known for some time that they were getting ready to bring out a DISC machine and thus moving up in line with more modern DE LAVAL imitators and would-be competitors. We have but now, however, been able to obtain one of these new DISC machines and the necessary evidence of infringement. The facts speak for themselves and require no further comment.

In addition to the above suits the DE LAVAL COMPANY now has infringement suits pending against the STANDARD, IOWA, PEERLESS and CLEVELAND Separator Companies and the Wm. Galloway Co., all covering the manufacture or sale of INFRINGING DISC SEPARATORS, which infringement applies equally to machines being made by different ones of these manufacturers and sold under their own and various other names by several "mail order" and other concerns, as well as to EVERY USER of any such infringing separator bought of ANY of these parties.

To avoid any possible misunderstanding and dispel the pretense of some of these concerns that their machines are similar to the DE LAVAL it is proper that we should add that none of the patents sued upon involves the DE LAVAL "SPLIT-WING" FEEDING DEVICE or its combination with the IMPROVED DISC construction utilized in the up-to-date DE LAVAL separators and that none of the machines is in any degree equal in efficiency, all-around practicability and durability to the IMPROVED DE LAVAL machines of today.

We have for years patiently stood the appropriation by would-be competitors of abandoned, discarded or patent expired DE LAVAL inventions and types of separator construction, but have now determined to put a stop to the more brazen utilization of LIVE patents.

There are STILL OTHER infringers of DE LAVAL patents who will be held accountable in due course.

# THE DE LAVAL SEPARATOR CO.

42 E. MADISON STREET  
CHICAGO1213 & 1215 FILBERT STREET  
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**Be Sure Separator Oil is Not Gummy**

Don't spoil the bearings of a hand separator with gummy oil. It cuts the bearings, spoils the balance of the machine and makes it a poor skimmer.

**STANDARD Hand Separator Oil**

is the best oil for separator running. There isn't a gummy particle in it. It has just the right "body" to feed freely; it lubricates perfectly and it wears a long time. Ask your dealer for Standard Hand Separator Oil and try it.



WILL REDUCE FRICTION AND SAVE POWER...

**STANDARD Hand Separator OIL**

FOR THE LUBRICATION OF HAND SEPARATORS

MANUFACTURED BY Standard Oil Company

**STANDARD OIL CO. (Incorporated)**

**OPENS LIKE A BOOK**

and is the most easily and quickly cleaned Cream Separator on the market. No other manufacturer can offer such a simple, sanitary and satisfactory cream separator—a machine with a genuine aluminum skimming device that opens in every part just like the leaves of a book, and admits of thorough cleaning instantly—because

**The NEW BUTTERFLY CREAM SEPARATOR**

is patented in all the leading Dairy Countries of the world, and has 8 times the skimming efficiency of other separators that sell at double the very reasonable price we ask. Shipped on our liberal

**FREE TRIAL PLAN**

No money in advance. Fully guaranteed. Freight prepaid. Ask us for our Cream Separator Book; it is FREE, and contains valuable information that you ought to know before buying any machine. Write for it today. Address

**ALBAUGH-DOVER CO., 781 Marshall Blvd., CHICAGO, ILL.**

Only **\$33.50** and up

**SENT DIRECT FROM FACTORY TO YOU, FREIGHT PREPAID**

Never before in Cream Separator history could you get a high grade Separator—with gears running in a "Bath of Oil"—the superior of any \$35 to \$10 Separator, at such a low direct-from-factory price as I'll make you. I have \$25 to \$50 this way. I make and sell so many I can afford to make the price as low to you as dealers and jobbers have to pay in carload lots—spot cash—for other high grade Separators.

**TAKE 90 DAYS' FARM TEST OF A HIGH GRADE "Bath in Oil" Separator**

Closest skimmer—Easiest running—Easiest to clean—No trouble oiling or danger of running dry like others, which alone is worth \$50 extra. Costs nothing extra on a Galloway. Send me your name today so I can write you my Special Proposition, at the price I'm making direct to farmers and dairymen, based on my output of 14,500 Galloways this year. I'll also send you my big BOOK FREE. Address—Wm. Galloway, Pres., WM. GALLOWAY CO., 643 Galloway Station, Waterloo, Iowa

**THE BOSS CREAM RAISER**

will raise the cream between milkings and give you sweet skim milk for house and stock. Ice not necessary, cold well or spring water will do the work. No skimming, no crocks and pans to handle. **TEN DAYS FREE TRIAL.** Price \$3.25 and up. 50,000 of these machines in use today. Send for Free Catalog.

**BLUFFTON CREAM SEPARATOR CO. BOX E BLUFFTON, O.**

## GRAND RAPIDS MILK CONTEST.

A milk contest, conducted under the auspices of the dairy division of the U. S. Department of Agriculture, the Grand Rapids board of health, the city milk commission and the municipal affairs committee of the board of trade, was held May 14. The contest proved very successful so far as the number of entries and the tests were concerned, though the attendance at the sessions was light. Twenty-two dairy farms made entries, the number of entries reaching 52, and the prize winners, with scores, were as follows:

Producers—Market Milk.—First, Wm. Warrens, 97½; second, L. J. Rindge, 95½. Market Cream.—First, L. J. Rindge, 97½; second, Leavenworth Bros., 96.

Dealers—Market Milk.—First, Vern K. Reed, 97; second, J. W. Bouwman, 95½. Market Cream.—First, Sanitary Milk Company, 98; second, Cherry Farm dairy, 93½.

The milk was all carefully analyzed. It was good market milk, way above the average. Only one sample was below legal standard in butter-fat, that analyzing only 2.4 per cent, pretty poor milk. From a sanitary point of view, which is shown largely by the number of bacteria, the milk varied from a few hundred bacteria per cubic centimeter to over 1,500,000 bacteria in one sample, but on the whole, the samples were low in bacteria. A great majority of them would come under the rule specified for certified milk, which is that milk shall not contain over 10,000 bacteria per c. c.

The speakers during the morning and afternoon sessions included Profs. C. B. Lane and L. H. Maynard, of the U. S. Department, Dr. R. S. Rowland, of Detroit, and Profs. C. E. Marshall and A. C. Anderson, of the Michigan Agricultural College. E. A. Haven, state inspector of dairies, and others contributed to the success of the meeting.

This contest created a great deal of interest, not only among the milk men, but among the citizens of Grand Rapids, and no doubt it has done a great deal of good, because you cannot create interest in a food product in this way without having it result in much good, not only to the producer but to the consumer as well.

## Dairy Farm Contest.

Inspection of the 23 dairy farms, near Grand Rapids, which were entered in competition in connection with the above milk contest, has been completed by Dr. Whitaker, of the national dairy division. The government dairy score card was used, the inspection covering condition of cows, stables, utensils, milk rooms and handling of milk, the equipment representing 40 per cent of the total score and methods 60 per cent. The awards were as follows: First, Leavenworth Bros., 88 per cent; second, John B. Martin, 78.6. The dairy farms of Messrs. Dornbus, Rindge, Briggs, Rathbun, Lamoreaux, Warren and Van Splunter were given honorable mention. A common fault was lack of proper facilities for promptly cooling the milk, also lack of adequate light in the stables. In respect to light, four square feet of glass per stallion gives a perfect score.


## PREVENTING SCOURS IN CALVES.

Having had some years' experience in feeding calves will contribute for the benefit of Mr. F. B. Dow, of Mason Co., who recently inquired regarding scours. By careful observation I have learned that scours in calves are usually caused by overfeeding, which brings on indigestion. When this is well started it is usually very difficult to check, and "an ounce of prevention is worth a pound of cure" in such cases.

My method the last few years has been very satisfactory and is as follows: When first feeding the calf do not give him all he will take, since the difference in the way of his taking his food from what nature intended is in a measure responsible for the calf scours, as in drinking from a pail he takes the milk faster than by sucking. Be sure to have the milk as near the temperature of new milk as possible. Provide some good stock food and follow directions in its use. Feed with or without oil meal and I think you will not be troubled with calves scours. I have not been, at least, and previous to using this method it was a very common thing for me to lose one or two calves each season. The food I use is that put up by Drs. Hess and Clark.

Bay Co.

H. L. R.



**Amatite ROOFING**

Lumber is getting scarce and shingles are not only higher in price, but they are poor in quality.

When you put a roof on your building, it isn't temporary relief and a medium amount of satisfaction that you want, but permanent relief and complete satisfaction.

Amatite is a real mineral surfaced roofing. Get it and you will experience at once what roof satisfaction is and what roofing difficulties can be prevented.

You will find that it needs no painting or attention of any kind after it is laid.

It doesn't pay to patch old roofs when you can get a new Amatite roof at scarcely any greater cost.

Amatite is easy to lay and can be nailed on over the old roof without trouble.

Get a sample of Amatite and do a little investigating. It won't do any harm, and when your roof needs attention or you erect a new building you will be glad to use it.

**BARRETT MANUFACTURING COMPANY**

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Address nearest office.



**FILLS THE SILO FAST**

Richmond, Mich.  
Dear Sirs:—During the year 1907 we purchased one of your size "G" ensilage Cutters with Blower attachment and found the same to be eminently satisfactory. The machine is capable of doing all you claim for it and upon actual test we were able to put into a silo 36 ft. high corn ensilage at the rate of 25 tons per hour, using a 12 h. p. engine. It was easy to cut at the rate of 15 to 20 tons per hour during the whole day's time. This season we had three 150-ton cement silos to fill and were under the necessity of getting a cutter which would do the work rapidly in order to get them filled in time. We are well pleased with the machine.

Yours truly, WEEKS BROS.

**Wilder's Whirlwind Silo Filler**

is built on lines that make it a very fast worker—it's the result of years of development and we confidently offer it as the highest attainment in a silo filling machine. It cuts or shreds and elevates all at one operation, and does it faster and with less power than any other machine on the market. It is easy to operate and quickly moved from place to place. Is low-down and handy to feed; quickly adjusted; traveling apron need not be taken apart when machine is moved. Has very strong fan blades, heavy gear and a simple stop and reversing mechanism. Write for interesting free catalogue—a regular Silo Filler Dictionary. You ought to read it through before you buy a Silo Filler.

**Wilder-Strong Implement Co.,**  
Dept. 13  
Monroe, Mich.

## Farmer Agents Wanted



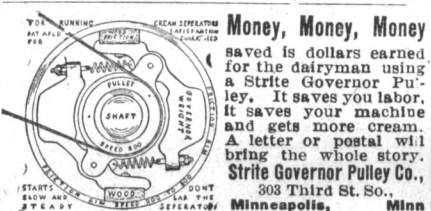
You can earn your own Cream Separator by giving a little time and effort to telling your friends and neighbors about the most wonderful invention in Cream Separator history—

**THE CHICAGO SPECIAL**

Its low Supply Can, easy cleaning, easy turning, few parts, dust and oil proof frame, enclosed gearing, high quality construction, and long life are fitting accompaniments of this wonderful new patented Skimming Device.

We make an attractive offer on the first machine in a community. Write at once for particulars. Do It Now. Address

**Kurtz & Company, 626 Monadnock Bldg., Chicago**



**Money, Money, Money**

saved is dollars earned for the dairyman using a Strite Governor Pulley. It saves your labor, it saves your machine and gets more cream. A letter or postal will bring the whole story. Strite Governor Pulley Co., 303 Third St. So., Minneapolis, Minn.

## FOR THIS NEW LOW DOWN AMERICAN CREAM SEPARATOR



Guaranteed to skim closer than any separator in the world. Sold direct from the factory. We are the oldest exclusive manufacturers of hand separators in America. You save all agents' dealers' and even mail order house profits. We have the most liberal 30 DAYS' TRIAL, freight prepaid offer. Write for it today. Our new low down, waist high separator is the finest, highest quality machine on the market; no other separator compares with it in close skimming, ease of cleaning, easy running, simplicity, strength or quality. Our own (the manufacturer's) guarantee protects you on every AMERICAN machine. We can ship immediately. Write for our great offer and handsome free catalogue on our new waist high model. Address, **AMERICAN SEPARATOR CO., Bainbridge, N. Y.**

**ROOFING "Old Style Iron"**

SEND FOR CATALOGUE

**Bykes Iron & Steel Roofing Co.,**  
CHICAGO, ILL.  
NILES, OHIO.



## FARMERS' CLUBS

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

President—A. L. Chandler, Owosso.  
Vice-President—Mrs. Clara L. French, Pompeii.  
Secretary—Mrs. W. L. Cheney, Mason.  
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### Associational Motto.—

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

### Associational Sentiment.—

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

### HOW THE LOCAL CLUBS ARE CONDUCTED.

(Continued from last week).

The delegate from the Hickory Club, of Tuscola county, mentioned the rivalry between the local clubs at the county fair as a factor in keeping up club interest which is as potent as the local club fair in other clubs. This club has monthly meetings and maintains a good interest throughout the year.

The Deerfield Township Club, of Isabella Co., was reported by its delegate as having a membership of over 100. A July picnic is held annually as a special feature of the club's work. A good program committee succeeds in interesting the young people in the meetings and the club finds no difficulty in keeping up a general interest in its meetings.

The Exeter Club, of Calhoun Co., has a floral fund which is maintained by each member contributing 10 cents annually. The annual dues are 25 cents for each member. The programs are prepared monthly and published in the local paper the week before each club meeting. The delegate reported the club in prosperous condition and the interest good.

The delegate from the Maple River Club, of Shiawassee Co., reported a membership of over 100 for that organization. This club holds twelve meetings during the year. This is one of the few club organizations in the state that is not hampered by a lack of funds, the annual dues being one dollar per year for each family, and the members are assessed pro rata when more money is needed.

The Excelsior Farmers' Club, of Lake Co., was reported by its delegate as an active organization. Reports of all its meetings are published in the local papers, which has brot the club to public notice and added to the attendance of and interest in its meetings. The farms of its members are all named.

The North-east Venice Club, of Shiawassee Co., was reported as having a membership of 24 families. Twelve meetings are held during the year at a specified time each month. The host and hostess do all the entertaining. The average attendance of the meetings is over 100. The club owns its own chairs and dishes. The question box is a much appreciated feature of the monthly meetings and the questions asked and answered at each meeting will average from 10 to 15 in number.

The Howell Farmers' Club, of Livingston Co., was reported to have a membership of 100. A program committee of three is appointed for each meeting, each of which proposes or asks three questions, which is considered a marked improvement over the set program.

The delegate from the Assyria Farmers' Club, of Barry Co., reported a membership of 100 for that club. The young people are interested in the club work by putting them on the program, and those outside the club are also interested by asking them to take part in the meetings when they attend. The discussion of religious and political subjects is barred. A program committee of three members, each of which serves for three months, one being appointed at each meeting, prepares the programs from month to month.

A. B. Hubbard, delegate from the White Lake Club, of Oakland Co., reported that club in a prosperous condition and doing good work. There is plenty of talent among the membership to make each one of the 12 meetings held during the year a good one, and there is nearly always a good attendance. The young people conduct the June meeting, and the annual picnic is held in July. The annual dues are 25 cents for each member. Pro-

grams are prepared monthly. The temperance sentiment among the members is strong.

Mr. Holden, delegate from the Wixom Farmers' Club, of Oakland Co., reported a membership of 25 families for that organization. Like many of the older clubs they need regeneration by the introduction of new blood. As a means to this end he recommended the securing of speakers from prosperous and successful clubs to give the membership new enthusiasm.

The Central Club, of Ionia Co., finds it hard to get the members together in the summer season when the work on the farms is pressing. In the winter season, however, the club is very prosperous, and the programs are made as interesting and varied as possible.

### THE SUMMER PICNIC.

The season of the year is approaching when the preparations for the summer picnic should be made. That an increasing number of farmers' clubs are making the summer picnic a feature of their organization is a matter for congratulation. The increase in the number of clubs holding an annual picnic meeting has been very noticeable in recent years, still out of something over 125 clubs that reported to the associational secretary in reply to the questions asked from which the club statistics published in the annual report are made up, only 36 clubs or about 30 per cent of those reporting, make this summer picnic an annual neighborhood event. This is a mistake which should be rectified at once. The summer picnic is a great advertising feature for the work of the farmers' clubs. Outsiders feel more free to attend these picnic meetings and take part in the social intercourse which marks such events, than they do to attend club meetings at the home of some member, and by a little forethought on the part of members to invite their friends outside the club to attend the picnic and enjoy a social day with them, they may be easily interested in club work and be induced to join the club or to take steps to organize one in their own community in case the territory is not already occupied by such an organization. This is surely worth the effort. It is the one best opportunity to work for club extension during the summer season and, from that standpoint alone, every member of every farmers' club in the state should take an active interest in making the summer picnic a regular feature of the work of his local farmers' club.

But there are other reasons why the summer picnic should be made a regular feature of the work of the local club. During the busy summer season the attendance at the monthly meetings is almost sure to wane, and the members see less of each other in a social way than during the active season of club work. All will agree that it is a pleasure to meet together for a social good time at the club picnic, and surely after the harvest has been garnered the members can well afford to take this day of rest and recreation for pure enjoyment. In some cases a program is prepared, or a speaker from outside is engaged to furnish the mental feast, while in other clubs the day is given over to athletic sports and a social good time, while in still others the last mentioned feature is given predominance to the exclusion of all else. It makes little difference what the plan, so long as it is in accord with the wishes of a majority of the members. The event itself is the important thing, both for the good of the club and of its individual members. Those clubs that have not made a special feature of the summer picnic do not know what they are missing. It is a matter of club history that where this custom has once been inaugurated, it is practically always perpetuated. The writer does not know of a single case in which the club picnic has been discontinued as a special summer feature of club work after it has been once inaugurated. Next year's report should show that instead of only 30 per cent of the clubs in the state holding annual picnic meetings, only 30 per cent or less neglect this important feature of club work. The way to insure such a result is for every club member in the state to work for the summer picnic in his own club this year. This is the time to get busy to that end. It will be worth the effort involved from a personal standpoint, to say nothing of the undoubted benefit to the club as an organization. Announcements of such events are invited in this department. Please advise us of the dates at the earliest possible moment, in order that the greatest publicity can be given to prospective club picnics.

## GRANGE

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

### THE JUNE PROGRAMS.

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

"Every fault in your child is the lack of some virtue."—Elizabeth Harrison.

The Child—IV. His Growth.

Whistling duet, by two boys.

Soil Fertility—IV. Commercial Fertilizers.

Fifteen minutes of pure fun (furnished by a "Surprise Committee" of young people).

#### Suggestions for Second Meeting.

"I believe all children's good, If they're only understood. Even bad ones, 'pears to me, 'S jest as good as they kin be."

Children's Day Program.—In charge of Flora of the Grange, who may make it a day of real joy to the little ones of the neighborhood, with refreshments at the close. Let the children furnish a program of recitations, dialogues, fancy drills, flower exercises and songs. For the older peoples' part, use the topic: "The Child—V. His School and Home Conditions."

### SOME GRANGE PROBLEMS.

Here are a few problems in Grange work, such as are not uncommon. How would you solve them?

Given a Grange with varied ages and gifts, but claiming to have "absolutely no musical ability." What would you do if you were responsible for the program of that Grange?

Given, a small Grange, but among the membership a dozen boys. They are interested now in simply attending the meetings but, when the novelty is worn off, cannot be held by any drifting sort of methods that lets the Grange "take care of itself." What things, just enough beyond these boys to make them stretch a bit, would you propose in this Grange?

Given, a good sized membership but the master, lecturer, secretary and overseer nearly always absent from one cause and another. Fifteen boys and girls are members and willing to attend if there is "anything doing," as they say. What steps do you advise?

Given, a large membership and new names being received at every meeting. Most of the members are young people but the master is of middle age and level-headed, and other officers efficient; the spirit of all is that of readiness for the best possible development. How shall that development be brot about?

Given, a Grange of middle-aged and elderly people, all mainly devoted to the lecture hour interests, having good times together and content to leave it so. Two or three young people are also in the Grange. What should be done for these few young members, and for the future of the Grange?

Given, a Grange with a hundred members, near a good-sized town with fairly good markets. Most of the members care little for ritualistic work or financial co-operation; but a very few believe these features might be developed to advantage even in that location. If you were master, what would you do?

Given, a Grange with the "nine o'clock habit." In consequence, of the late hours kept, the membership is dropping off and losing interest. What should the master do? If he fails to act, what remedy can be applied?

JENNIE BUELL.

### POMONA MEETINGS.

#### Gratiot County.

Gratiot Pomona held a very successful meeting with Arcada Grange on May 8. Despite the backwardness of the season, which has made farmers unusually busy, there was a good attendance and 13 Granges reported.

The feature of this meeting was an address by State Master Hull. His subject was "The Farmer," and among other things he said that the farmer of today is doing too much work with his hands and not enough with his brains. He illustrated this by a train standing on a siding and 150 men shoveling gravel for \$1.50 per day. The man in the cab of the engine gets \$5 per day and the man at the head of the railroad office \$10 per day. Why the difference. One has trained the intellect that directs the hand.

A farmer sent his boy to M. A. C. The boy came home and wanted to try what he had been taught. He wished to prune and spray the ten-acre orchard as had been taught him. The farmer said, "No. You can get out and work the same as I." The boy, being a chip off the old block, said: "Seems to me, dad, you made a big mistake when you

dug up the money to send me to college." The farmer shot. "Well, take the orchard; you can't more than spoil it." The boy carefully trimmed, pruned and sprayed the orchard as he had been taught, and the result was he made more in one year from the ten acres, than his father had made in ten years.

The more the farmer trains the intellect the more he has for his family. We know many things the farmer knew fifty years ago and many more, but the farmer of today knows why he does this or that way. He is the man who discovers things and the chemist tells him what it is. He knows that clover enriches the soil; the chemist has told him why.

A farmer stood watching the great mill in Minneapolis running the bran from the mill into the river. He said: "It seems as if that ought to be made use of," and he takes some home and feeds it to Bossy. He finds it good for feed. The chemist then, with his trained intellect, comes and examines it and tells him why it is good and how to make what is called a balanced ration. The farmer is the discoverer.

The farmers must organize and have the power to sell to buyers. He told how he went to buy a milk can and the merchant asked him \$3 apiece, so he said he guessed he would send to Chicago and get the same can for \$2.15. "O! no," says the merchant, "patronize home and let the money stay here. I help to build the roads and the churches, etc." Now what is the difference? The merchant sent to Chicago, bought the can for \$2.15, paid ten cents to the railroad and put 75 cents in his pocket. I sent to Chicago, got the can for \$2.15, paid the railroad ten cents and put 75 cents in my own pocket. The money staid at home just the same. I help build roads and churches just the same as the merchant.

On the other hand I took a quantity of butter to town and asked Mr. Merchant 22 cents per pound. The merchant said: "Well, I can get any quantity of butter from So and So for 20 cents. I can't do it. The money goes away, why not let it stay at home."

The farmer asks for a square deal. We want lawmakers and policies to benefit the farmers and not let just a few be benefited to the disadvantage of the farmer. We want a square deal. How they laughed when the Grange asked for rural free delivery of mail, but thru the perseverance of the Grange it went thru. Now we want parcels post and postal savings banks and we are going to have them in time.

### AMONG THE LIVE GRANGES.

A Travel Program.—In the unique program enjoyed by members of Grand Traverse Grange at a recent meeting is found a suggestion which should prove of interest and value to lecturers generally. The plan of the lecturer was to have each Patron describe some point of interest visited during his travels and the success of the meeting far surpassed expectations. It brot out the fact that practically every member had been more or less of a traveler. Many places and events of interest were described, among which were the following: Lansing when invaded by the State Grange; state prison at Jackson; a trip thru Georgia; an ascent of Mount Lowe, Calif.; an excursion thru thirteen southern states with the Union army; the Shenandoah valley; West Canada; Put-in-Bay Island; the Tabernacle, Salt Lake City, with the big organ and chorus choir; the Michigan day picnic in Los Angeles in the winter of 1908; Lincoln park, Chicago; Industrial home, Lansing; the Ohio Orphanage home; state penitentiary, Columbus; the mountains of West Virginia; the Ohio natural gas region; the Dakota country; Boston; Kansas and its grass-hoppers; the hills of New York state; and Sugar Loaf, Leelanau county. The account of an Indian Fourth of July in Dakota was specially interesting. One thousand wild Indians, with feathers and ponies and squaws and bears participated in this event. One Patron described a breed of mountain cattle whose legs are longer on one side than the other that they may stand level on the steep sides. This statement was doubted by some of those present. The account of the size and number and enormous appetites of the western grasshoppers caused exclamations. One member gave an account of a sixty-mile walk. The member who pictured Boston told how it is the custom in that city of traditions and culture to be always dressed up when on the street or in public places. It was said that the idea is carried to the extreme. It was the verdict of the majority of the speakers, after the stories were all in, that everything taken into consideration the Grand Traverse region averages up well with the rest of the world.

Burnside Grange, of Lapeer Co., received a visit from Pomona Lecturer Judd, on May 18, who conducted a school of instruction. This Grange now has two degree teams and entertained Pomona June 3.

### COMING EVENTS.

#### Pomona Meetings.

Oakland Co., with Independence Grange, in Clarkston, Tuesday, June 8.

Sanilac Co., with Elk Grange, Wednesday, June 9.

Kent Co., with Oakfield Grange, Wednesday, June 23. Miss Jennie Buell, State Speaker.

Chippewa Co., with Rosedale Grange, in July.

Cass Co., with Redfield Grange, five miles from Edwardsburg, Thursday, June 10. Hon. J. K. Campbell, speaker.

Calhoun Co., with Convis Grange, Thursday, June 10. Geo. Decker, speaker.

Clinton Co., with Banner Grange, Wednesday, July 7.

Rosford Pomona (Roscommon Co.), at Roscommon, Saturday, July 31.

Bay Co., at Pinconning, Tuesday, July 13.



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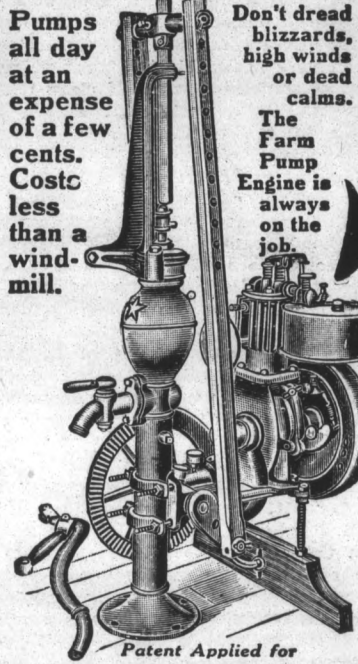
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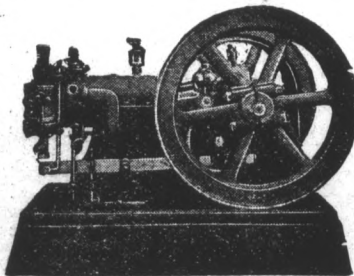
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