



## Agricultural Department.

## FARM VILLAGES.

To discuss a modification of the whole system of farming would involve far more detail than is possible in this paper, since we must include the consideration of features which would change with changing locality. But by way of illustration we may take the previously supposed case of a farmer owning one hundred acres of land and milking a dozen cows, selling the milk as before in the distant town. Assume that he and his neighbors within a radius of about a mile are living in a central village, from which his land is one mile distant. During the working season, say from the middle of April until late in October, he must with his teams and assistants spend the whole day on the land. The cows are milked and all stable-work done before breakfast, and some one drives them out to pasture. The men remain afield until an hour before sunset; they must be content with a cold dinner, as is the usual custom with mechanics and laborers. The cows are driven home in time for the evening milking, and are put into the barn-yard at night with green fodder brought home by the returning teams. After the "chores" are done, and a hearty and substantial supper is eaten—the principal meal of the day—all hands will be too weary for much enjoyment of the evening, but not so weary that they will not appreciate the difference between the lounging places of a village and the former dullness at the farm. Other farmers in the neighborhood will, many of them, also be milk producers, and as the stables are near together they will naturally co-operate, sending their milk to market with a single team, employing the services of a single man in the place of five or six men and teams heretofore needed to market the same milk. I have recently received an account of this sort of co-operation, where the cost of selling was reduced to a fraction over eight cents for each hundred quarts.

This arrangement will have the still further benefit of allowing the farmer to remain at home and attend to his more important work, leaving the detail of marketing to be done by a person especially qualified for it and therefore able to do it more cheaply than he could do it in person. During the working season there will be enough rainy weather to allow the work of the stable, the barn-yard, and the wood shed to be properly attended to. There will, of course, be sudden showers and occasional storms and other inconveniences which will make the farmer regret at times that he lives at such a distance from his field work, but he will find more than compensation in the advantages that come naturally from living in a village. For his wife and children the improvement will be absolute, and it will be no slight argument in favor of the change that both in-doors and out-of-doors a better class of servant will be available, because of the better life that can be offered. It will be easier to secure the services of laborers who are married and who live in their own houses, and so avoid the serious annoyance to the household that attends the boarding of hired men.

To make this radical change in any farming neighborhood as at present constituted would be impracticable. It would probably take a generation to convince the farmers of a community of its advantages; it would cost too much, even if not entirely impracticable, to move the house and stables to the central point; and it would involve such a change of habits of labor and of living as must necessarily be the work of time. However, if the principle commends itself to the leading men of the neighborhood, and especially to young men about to marry, the nucleus of a village may be established, and sooner or later the present or the coming generation will find a way to come into the fold.

If we assume that by this or some other means the more intelligent of the young men are induced to remain farmers, it is interesting to consider in what way their greater intelligence is to be made to tell on their work so as to secure the necessary improvement. It would not be unreasonable to suppose that young men of the class we have in mind, those who now seek occupations which afford a better field for their intelligence, and who seek them because of their intelligence, would establish such centres of discussion and interest in improved farming as would not only displace the worthless gossip now so common at the country store, but would awaken a real enthusiasm in better processes and systems.

Not only would there be this tendency toward improvement, but where farmers are close neighbors and are able to conduct their

interests in such a way as to help each other, there would naturally grow up some sort of co-operative business. By the establishment of a butter factory or cheese factory, or by the common ownership of a milk route, or the raising of honey or of poultry, or the establishment of some valuable breed of live stock with a reputation for excellence that will cause it to be sought for from abroad, or by some other combination, they would secure profitable business.

Of course all the farmers in New England cannot within the next ten years move into villages, but what is suggested is that the farmers of some one community should try the experiment. Their success might induce others to follow the example, and, little by little, in proportion to the promise of a good result, more and more would seek the advantages which the system would offer, so that sooner or later the benefits which are now experienced in village life in Europe might be felt here in the higher degree which greater intelligence and greater freedom would be sure to produce.

While advancing these suggestions, with much confidence in their practical value, I would by no means confine the outlook for Eastern farming to this single road to success. Co-operative industry may be largely adopted among farmers living at some distance from each other. The cheese factory has become an institution. The better quality of the product when made in large quantities, and the better price that its quality and the improved system for marketing have secured, constitute a very decided success in our agriculture. Butter factories are coming into vogue with a promise of equally good results.

A very good substitute for the co-operative management of a milk route is in very general adoption throughout New England, where some single farmer who devotes himself chiefly to selling milk buys the product of his neighbors' dairies for a certain fixed price, taking upon himself the labor, the risk, and the profit of marketing. The co-operative breeding of live stock cannot as yet be said to have become well established, but its possibilities of success are considerable. A community can afford to buy and keep a thorough-bred horse, or bull, or boar, or buck, which would cost far too much for the means of a single owner, and thus gradually give to the stock of the whole neighborhood a superiority that will secure it a wide-spread reputation and insure good prices. Let us keep always in view the important principle of making two blades of grass grow where but one grew before; but let us remit no effort which may tend to make one blade worth what two were worth before.

Incidentally, there may be combinations to secure good outlet drainage for tracts of land belonging to different owners, and later, a provision for the general irrigation of these lands. It is not to be hoped that, either as a whole or in its details, agricultural improvement is to be advanced with anything like a rush. Farmers are generally "conservative" in the worst sense of the term. They have during the past generation adopted many improvements and modifications in the methods of their work, the mere suggestion of which would have been scouted by their fathers; but they are themselves as ready as their fathers were to scout any new suggestion, and it is only by iteration and reiteration that the shorter steps of tentative experiment can be urged upon their acceptance.—Geo. E. Ware, Jr. in *Atlantic Monthly*.

## THE APPLE WORM.

The codling moth or miller, the parent of the worm found inside the apple, makes its appearance the last of June or the fore part of July, when the female spends her time and energies in the orchard, flying from apple to apple, depositing her eggs on the blossom-end of the fruit. It is estimated that a single moth will deposit not less than 100 eggs on as many apples. From these soon hatch a little worm, that immediately begins to eat its way to the core of the apple. The worm remains inside till it completes its growth, and having destroyed the vitality of the half-grown fruit, the later falls prematurely from the tree, either before or after the worm leaves it. The full-grown worm now seeks some shelter secure from birds or other enemies, under which to undergo its transformation. The most of these pupae remain wound up in these silken cocoons till the following spring. Some of the earliest of them, however, complete their transformations and enter the perfected or moth state in a few days, and soon deposit eggs, as did their mothers, in the blossom-end of the apple, for a second brood of worms. These worms from this second brood are the ones found in the fall. So destructive are these little pests that in many orchards nearly half the apples are ruined for market by them. Many farmers recommend allowing sheep and swine to run in the orchard, to devour the wormy apples as they fall from the trees. This is good as far as it goes; but, as many of the worms leave the apple before the latter falls and as the

half-grown apples are not readily eaten by sheep or swine, the preventive is not a sure one. The plan now recommended by entomologists for ridding our orchards of them is to wind around the trunks of the trees bands of straw, paper, or old cloths about the time the worms leave the apples, when, in their search for secure places to spin their cocoons, many of them will crawl under these bandages for that purpose. By examining these bandages two or three times a month, thousands of larvae may be killed. One-half thus killed (allowing one-half to be females) will be just so many less to deposit each 100 or more eggs on as many different apples. By allowing sheep or swine free access to the orchard, many of the worms will be destroyed by them. By united efforts on the part of the orchardists in trapping them in the manner referred to, their destructive influences can be very much lessened. As both sexes of this moth, unlike the females of the canker-worm moth, are provided with wings for flying, the tar bands recommended for the one will not answer for the other; but the paper bandages will. If the loose, scaly bark (their natural hiding-place) be scraped off the tree, the bandages will be more effective, as more of them will find their way beneath them. But unless these bandages are examined occasionally and the larvae killed they will do more harm than good, as they will afford the worms just the place they were searching for to pass their chrysalid state, secure from birds.—N. Y. *Independent*.

**CISTERN WATER.**—In our climate, where rain is abundant during a considerable portion of the year, the water falling upon the roof of any house, if properly collected and stored, is ample for the whole supply of the family which that roof shelters. This water as it falls is ordinarily free from any impurity that can affect its taste, and from every source of serious fouling, though after a long-continued drought it is well to divert and discharge upon the surface of the ground the first ten minutes' flow of a shower—so that the impurities of the air, and the dust of the roof may be first removed. After this first dash, lead to the cistern all that follows. Even with this precaution the water will be more agreeable for use if filtered. There are numerous systems for making filters in cisterns, but no other is so simple, nor so durable and satisfactory as the separation of that part of the cistern from which the suction-pipe leads by a wall of brick and cement. It is simply necessary to build a wall of brick set on edge (two and a half inches thick), so as to include about one-quarter of the area of the bottom, sloping it back so as to terminate against the side of the cistern at a height of from four to six feet. This wall should be so well cemented at its joints that water can only pass through the material of brick, and for strength its form should be slightly bulging. A wall of this sort, measuring say six feet at its base and rising to a height of six feet at its highest point, will transmit an amount of water sufficient to supply the demand of the most constant pumping that any domestic use can require.—*Scribner's Monthly*.

**FEEDING YOUNG FOWLS.**—There are few farmers' wives who do not raise a flock of chicks every year without difficulty; but we have heard many complain that they had tried turkey raising until they gave up in disgust. As I have been remarkably successful with this most tender of all fowls, I will give my plan of feeding, which is simply, feed nothing raw. I prefer feeding corn bread made of unsifted meal and cold water. Make the dough stiff, and bake in a slow oven until done—no more. If baked too long the crust will be hard, and if the meal is sifted the bread will be sticky. Enough can be baked at once to last several days, and is more convenient than mixing raw meal every feed. I think it well to feed all young fowls in this manner; but always found it absolutely necessary to bake bread for turkeys and common ducks. The Aylesbury are more hardy; but I follow my old plan and bake bread for them also. I have fifty-seven at this writing that are growing nicely. Lice are often the cause of death in young fowls, and must be got rid of before they will thrive well. I prefer using an ointment made by stewing tobacco in lard to anything else that I have tried. Anoint the breast and underpart of the wings of the mother and head and under parts of the young, and vermin will give you no further trouble. If these simple directions are followed, together with housing until the sun is up and the dew is nearly gone in the morning, and on stormy days, you will never fail to have a nice roast for Christmas.—*Prairie Farmer*.

**TEST FOR QUALITY OF MILK.**—A member of the American Farmer's Club thought it quite as important in butter making to know the quality as the quantity of milk yielded by each cow. One needs to know the percentage of cream to determine the value of the cow, for butter, and as the price of butter is influenced by its color (some believe the color determines the flavor), the test should give both quality

and quantity of cream. This is easily and cheaply done by filling a glass tumbler with the milk of each cow, and setting these tumblers in a cool place for the milk to rise. The transparent glass will show the thickness of the cream and its color. In this manner one has the milk of the several cows under inspection at the same time, and can therefore make an accurate comparison. Both night's and morning's milk should be thus tested. This testing often proves that the cow giving the smallest quantity of milk makes the most butter. A few hours' time will show the comparative quality of the milk given by each cow in the herd, and enable the farmer to select but those that give cream of a rich golden color, and make away with the remainder, supplying their places with others it will pay better to keep.

**POTATO BEETLE REMEDY.**—The *Boston Journal of Chemistry* says:—Good authorities condemn the use of the poisonous Paris Green for the destruction of potato bugs, and suggest carbonate of lime instead. They say that the latter is equally fatal to the bugs, while it is harmless in other respects. Farmers will do well to give it a trial.

## DOMESTIC.

**BREAKFAST STEW OF BEEF.**—Cut into pieces about an inch in length two pounds of uncooked beef that is not too lean. Put into a stew-pan, with just enough water to cover them, and stew very gently for two hours. Set away until next morning, when season to taste with pepper, salt, chopped onion and parsley, and a very little sweet-marjoram. Stew half an hour longer, add two teaspoonfuls of sauce or catsup, a tablespoonful of browned flour moistened in a little water. Boil a few minutes, and serve.

**MINT SAUCE.**—Slightly melt one large tablespoonful of butter, free from salt, and cream into it the same quantity of flour; add this to one small teacupful of boiling water, stirring constantly, that it may not become lumpy; put in two tablespoonfuls of vinegar and three of sugar. If lemon juice is substituted for the vinegar, and it is much nicer, take half the quantity, and add a tablespoonful of water or it will be too thick. Boil it well for a minute or two; let it cool slightly, and stir in half a small teacupful of chopped mint. If the mint is added while boiling hot it becomes wilted, and the freshness is lost.

**QUENELLES.**—Chop very finely the white meat of either fowl or veal left from dinner the day previous; moisten one teacupful of fine bread-crumbs in three tablespoonfuls of cream or milk; then drain them as dry as possible. Beat one egg very light, yolk and white together. Work into a paste the meat, crumbs, egg, and two tablespoonfuls melted butter; season with salt and pepper. Flour the hands, and form the mixture into round balls about the size of a very large walnut, and roll them in flour. Have boiling hot one large cupful of well-seasoned gravy, from which the fat has been removed, and, putting in the quenelles, boil fast for five minutes. Put into a hot colander to drain, and when the gravy has been thickened with browned flour, put in a dish and pour gravy over them, sending hot to table. If preferred, when the quenelles are moulded, roll in beaten egg and cracker dust instead of flour, and fry in hot lard or butter. When done, roll them in paper to absorb the grease, and serve as hot as possible.

**RAPID BAKING.**—I notice that some of our friends ask questions, for which they must wait for answers, when their own experience and judgment could have worked out the problem for themselves in one or two trials of skill. For instance, one asks whether or not it is better to knead graham bread. Now, how easy to try one baking by stirring it hard with a spoon, as some directions are, and then try next time by slightly kneading, and let the judgment, or the verdict of the family, decide which method is best. For own my part, I sometimes do one way and again the other, but give the preference to slight kneading, as it better shapes the loaves, and, as far as I can see, is equally as good. If, however, I do not wish to get my board, I let the spoon stir it, and it does as well. I also find, I continued, that there are many ways of experimenting, and so doing as to save putting the hands in dough, especially if warm cakes are to be made for tea, and one does not wish to be at much trouble to do it. Instead of making and cutting out biscuits, I frequently drop my dough, stirred as hard as needful, on to sheets of tin or into gem pans, using my experience to get them about right, and seldom fail of good luck. So can cake be made hastily, measuring with a spoon as we know is about right, then dropping on to tin and baking in a very few moments ready for the table. It is much less trouble than making cookies, while it is more sure to come out light, if haste is required, than is a loaf, and nothing is better relished than our little drop cakes when newly baked.