



Agricultural Department.

THE SUBSTITUTE FOR BUTTER.

In addition to our heavy exports of live cattle, a very lively export trade has steadily grown up in the article of beef tallow made to resemble butter. One of our city papers gives the following authentic account on the subject of oleomargarine, which will be specially interesting to dairymen.

"A maker of engines in Courtlandt Street the other day was heard to speak of a lively demand for machinery to be used in the manufacture of artificial butter, known as oleomargarine. The business, he said, was rapidly extending. Beginning with a large factory up-town, now working day and night, similar establishments are rising in nearly all our principal cities. These statements being in conflict with common report, which speaks of artificial butter as a failure, our reporter took pains to enquire into the facts, and found a full confirmation. The oleomargarine factory is a large establishment on Forty-eighth street, near the North River, covering eight lots. The president of the company was found, also the secretary, but neither was inclined to be communicative. The feeling appeared to be that they had a 'good thing', that they had all the business they could do, and more too; and that notoriety would be of no advantage in any respect. Little had been said thus far, and agitation of the subject would only excite useless enquiry. The facts, as gathered, appear to be that there are 'millions in it,' the demand and the manufacture being limited only by the amount of beef fat which it is possible to procure from the slaughter-houses. It would not be worth while to destroy the cattle simply for the fat they might yield. From this substance oleomargarine is made, every particle of fibre being extracted, thus leaving a pure oily residuum, which can be preserved indefinitely, and is claimed to be so nearly like excellent dairy butter that one cannot be distinguished from the other except by the brand. In truth, there is in the local butter trade at the present moment much conversation about the necessity for legislation in this matter, to prevent imposition by fraudulent imitations of the genuine article. This the manufacturers consider the best possible argument that could be cited in their favor.

"It is understood that the first contract of the New York company was with parties in France, who are prepared to take all that can be made. The principal consumption, therefore, is abroad, though officers in the local company affirm that there is a large consumption of artificial butter in New York—that the article is found not only in some of the large Broadway hotels, but in the best families. 'Why,' said our informant, 'my family use nothing else, because nothing else is so good,' the substance being all derived from the best beef cattle. According to statements now made, artificial butter has taken a decided start of late, factories having been commenced, if not already in operation, in Boston, Buffalo, Chicago, St. Louis, Philadelphia, and elsewhere."—*N. Y. Independent.*

A GREAT ENGLISH DAIRY.

"City milk" is for the most part noteworthy as being a very different fluid from "cows' milk," but it is a curious fact that London, the largest city in the civilized world, has the great advantage of a supply of the latter kind of milk from one large company, the Aylesbury Dairy. This company has been in existence fifty years, and has a capital of a quarter of a million dollars. It has two large "factories" in the country, as well as a splendid building in London, which is the headquarters of the selling department. Above 1000 gallons of milk are distributed daily in London to about 5000 families, 30 light carts being employed in the delivery of the milk. Besides the retail sale, a vast quantity is sold to the trade on its arrival at Paddington station, in London. The total quantity of milk dealt with by the company is about 22,000 gallons daily, furnished from about 50 farms. The contracts with the farmers from whom the milk is obtained, are models of stringent dealing for the security of cleanliness and purity. "No milk from any cow out of health, or just calved, or just deprived of her calf, or just bought, is to be sent. All milk is to be cooled in a refrigerator down to 60 degrees before despatch, and none is to be sent that has been bought. The sender is to be liable for all damage arising from neglect of any of these conditions." For the security of their customers in preventing milk from filthy farm-houses, or where the people or cattle are diseased, the company have a paid sanitary in-

spector, who makes occasional inspections of all their farms; they have in addition a medical board, who meet quarterly to receive the reports of the inspector and to make such suggestions on it as may occur to them. The company have also a well-arranged system for preventing those who deliver the milk by retail from diluting it. Thus every possible precaution is taken for securing pure milk.

The Aylesbury Company also supply another want; they can furnish an almost unlimited supply of cream. At the Swindon factory they can set for cream 1500 gallons of milk in 800 square feet of milk-pans; and if they get an order for 400 quarts of cream on any evening, it can be despatched the next morning. The skim-milk is made into cheese of poor quality; and, having complete arrangements for cheese-making, any day that the demand may fall off for "new" or "whole" milk, the company make cheese of the usual richness. Indeed, this company combine milk-selling and cheese-making, the former being the most prominent feature. At the Derby cheese factory they reverse this order of things, selling their milk only when it pays better than making it into cheese.

It would seem that companies on a similar scale, if managed with the same honesty and business ability, might find a profitable field in our large cities. The "milk producers," who are so much troubled by the extortion of the "middle-men," could take the whole business into their own hands by inaugurating such an enterprise. People in the city would naturally prefer to buy of such a company, whose guarantee of the quality of their milk would be indisputable, rather than to patronize the common run of irresponsible retailers. The latter would then have to be honest in order to secure any custom at all.—*Boston Journal of Chemistry.*

HOW TO LAY SHINGLES.—The correct way for laying shingles of any length, in order to form a roof leak-tight, is to lay the courses less than one-third the length of the shortest shingles. For example, when shingles are 18 inches long, many of them will not be more than 17 inches in length. Therefore five inches is all that the courses will bear to be laid to the weather with surety of forming a good roof. The shingles must be three thicknesses over the entire roof. If they are not three thicknesses—if now and then a shingle lacks a quarter or half an inch of being long enough to make three thicknesses—there will in all probability be a leaky place in the roof at such a point. Moreover, when the lower courses lack half an inch of extending up far enough to receive the rain from the outermost course, in case the middle course were removed, it would be just as well to lay them seven or eight inches to the weather as to lay only five or five and a half. Many shingles are only 16 inches long and many that are sold for 16 inches long will hardly measure 15 inches. In this case—if the roof be rather flat, say about one quarter pitch—four and a half inches is as far as they should be laid to the weather. In case a roof were quite steep it might answer to lay the courses four and three-quarter inches to the weather. When buildings are erected by the job, proprietors should give their personal attention to this subject, and see that jobbers do not lay the courses a half inch too far to the weather. There is another important consideration which is too frequently overlooked in shingling, which is breaking joints. Careless workmen will often break joints within half an inch of each other. When the joints of the different courses come so close together, the roof will most certainly leak. Why should it not? There is nothing to prevent it during a heavy rain. Unless a roof is steeper than a quarter pitch, much care should be taken to break joints not less than one and a quarter inches. Let all workmen and helpers be taught the vast importance of rejecting every poor shingle except when the upper courses are being laid.—*Canadian Mechanics' Magazine.*

HOGS IN THE ORCHARD.—A correspondent of the *American Farm Journal* says: "For the past two winters I have fed hogs a good portion of the time in my orchard, and continue to feed and pasture in it until the early fruit commences to fall. By so doing my orchard appears to be in a very flourishing condition, heavily loaded with large smooth apples, which appear to be clear of any effects of the apple worm. I believe this method of treating an orchard preferable to any other mode of cultivating an orchard yet tried. Having practised feeding corn in the ear around the apple trees, especially the ones of slowest growth and bearing, the result is such trees appear to grow and bear finely by such treatment. Hog manure and corn cobs no doubt are about the best manure that we can apply to trees to promote a healthy growth and good bearing. Then after the apples are gathered in the fall, if hogs are pastured and fed in the orchard they will doubtless destroy many worms that may remain in the refuse and decayed matter left on the ground, thereby

greatly promoting the healthfulness of the next year's crop. Some care should be taken with young trees by placing some trimmings of brush around the roots to prevent the swine from rubbing against the tender trees, but if they should scratch their backs against the large trees, all the better."

MY PROFESSION.—The *Maine Mirror* gives the testimony of a New Hampshire boy, now a resident of Wisconsin, a fine scholar, a graduate of Dartmouth, and a law student in Merrimack county, who, just previous to his admission to the bar, took a severe cold, which rendered him very deaf, and no medical skill was able to restore his hearing. This affliction compelled him to give up his chosen profession, and he went West very much broken down in spirits. For ten years he has been farming, cultivating about 200 acres of prairie land, as he expressed it, making a good living, and salting down something every year. And he declares that if, knowing what he now knows, he was to begin his active life over again, he would do just as he was compelled to do so unwillingly ten years ago; that is, he would throw aside his profession and settle down upon a farm. Said he:

"There isn't much glory in a farm, but you get a good, sure living. You are your own master; you can't starve or be turned out of business; and as far as the work is concerned in these days of horse-power, a man needn't kill himself at farming any more than at any other business. It is brains that win on a farm as well as anywhere else, and the smart man is going to ride, while the stupid one goes afoot, in the cornfield as well as in the bar or pulpit. I should like to have my hearing again, but I wouldn't leave my farm if I had it."—*Christian Secretary.*

CHEESE AFTER CURING.—At the late meeting of the American Dairymen's Association a paper was read, contributed by Mr. A. S. Fish, of Herkimer County, N. Y., on the subject of heat in cheese-making. The *Rural New Yorker* condenses portions of it, and one of the features referred to is, holding the flavor of cheese after curing. On this point Mr. Fish would have one room connected with the factory where a low temperature could be secured during the hottest weather. Then, as fast as cheese is cured, and when the flavor is perfect, it may be placed in this room, under a low temperature, where decomposition is arrested and the flavor can be retained until such time as the cheese can be profitably put upon the market. In this way the annual loss which now occurs from "off-flavored" cheese can be avoided, and the reputation of factories for extra fine goods be increased. It is well known that large quantities of cheese "out of flavor" are annually crowded upon the market in July and August; and this cheese, on account of the necessity of its going into immediate consumption, has a depressing influence on the market. By shipping a perfect article prices could be better maintained, and consumption would be promoted, since many who are fond of good cheese and would buy liberally of a good article, will refuse that which is of bad flavor and is fast going into decay.

VALUE OF POULTRY MANURE.—From actual experiment, we found that the droppings from four Brahmas, for one night, weighed, in one case, exactly one pound; and in another more than three-quarters, an average of nearly four ounces each bird. By drying, this was reduced to not quite 1½ ounces. Other breeds make less; but allowing only 1 oz. per bird daily, of dry dung, fifty fowls will make, in their roosting house alone, about 10 cwt. per annum of the best manure in the world. Hence half an acre of poultry will make more than enough manure for an acre of land, 7 cwt. of guano being the usual quantity applied per acre, and poultry manure being even richer than guano in ammonia and fertilizing salts. No other stock will give equal return in this way, and these figures demand careful attention from the large farmer. The manure, before using, should be mixed with twice its bulk of earth, and then allowed to stand in a heap covered with a few inches of earth, till decomposed throughout, when it makes the very best manure that can be had.—*Illustrated Book of Poultry.*

GOOD ADVICE.—We know that many farmers have an idea that they cannot write well enough for publication, but this is all nonsense in this connection. We have plenty of employees in our office who can write and spell better than they can talk agriculture, and if our friends will give us their experience and opinion in a plain way, there are those here who will put their communications in proper shape. We want to get at the facts which our readers alone can furnish us, and the rest we can take care of here. If you have found a new variety of potatoes which is better than the old ones, write and let us know. If you have found how to raise pork at a profit, tell us about it. If you have proved anything by experiments in feeding cattle, or breaking colts, or keeping hens, let us know that, and so on.

—Take every precaution to prevent the accumulation of dust upon plants, and above all protect them from that terrible infliction, ear-pet sweeping. It may be well enough to kill the old people by compelling them to breathe clouds of dust, but send the children into the fresh air to skate, or to snow-ball, and screen the plant if possible. The essentials of success in plant culture are suitable soil, air, light, moderate and regular heat, a moist atmosphere, regular and moderate watering, and freedom from dust and foul gas.—*Vick's Floral Guide.*

—In Holland, a new disease has attacked pigs, for which no remedy has been found; the animals become entirely blue when dead. Bad potatoes are suspected to have something to do with the malady, which in any case are known to induce rotteness of the lungs.

DOMESTIC.

HOUSE CLEANING.

As far as practicable, move everything out of the room to be cleaned. If clothes or pieces of carpeting are stored in the attic, or in any room to be cleaned, take them into the yard, brush well, hang on the line, and let them remain there for the sun and wind to free from dust and dampness. While one is attending to the clothes, trunks, bags and boxes that usually fill up the attic, to expedite the work another with clean brushes, brooms and dusters can begin the cleaning. Brush every cobweb from the walls with a long-handled brush, and sweep down the walls with a stiff broom. Take up the dust and put into a pail—never leave it standing in the shallow dustpan to be blown back into the room. If the walls are hard-finish they can be washed off with some warm soapsuds and wiped dry. Then wash and polish the windows, and scrub all wood-work and the floors with very hot suds; rinse off with hot water, made hotter with a good quantity of cayenne or red pepper. If this is faithfully used this peppered rinsing-water will find its way into every crack or crevice in the wall or on the floor. Mice and rats will seek a cooler boarding place, and insects of all kinds will keep a respectful distance.

When the floor is well scrubbed and dried, blow with a small bellows which comes for this purpose cayenne pepper, Persian Powder or Poole's Moth Powder into every hole or crack that can be reached, and then replace whatever belongs in the room unless the walls, not being hard-finish, need to be whitewashed. This must be done after the wood-work is washed and scrubbed, but before scrubbing the floor, that any whitewash that may drop from the brush may be removed.

The attic finished descend to the next story, and so on till all parts of the house have been faithfully cleaned. But never attempt more than one or two rooms at a time. Do not make the family wretched by making the whole house unfit to stay in. It sometimes happens that all the family are absent except the mistress, and then the whole house may be dismantled and cleaned at once. This is always a comfort, because the work can be done so much easier and better. Then all the help that can work to advantage can be called in, and the whole work speedily accomplished. A half dozen cleaners for three days are no more troublesome or expensive than half the number for twice as many days.

In cleaning a room remove everything that can be moved without injury. Take down curtains and cover such articles as must remain in the room. Take up such carpets as need cleaning, and, if not sent to a carpet-sweeping establishment, remove them to the back yard, stretch across a clothes-line, and get a man to beat and brush them faithfully. While the carpets are receiving their share of attention another hand can clean whatever is removed from the room. Brush the upholstered furniture with a furniture brush, cleaning around each button or tuft. Turn sofas and chairs down, and beat them with a carpet or furniture whip, then brush again, and wipe the covers with a clean damp cloth to take off what dust may have settled. Take a basin of warm soap suds and wash all the wood work and carving with a soft cloth. Wash only a small part of one thing at a time, and then wipe dry as quickly as possible and polish with a chamois skin. If left wet till the whole piece is well washed the soap suds may turn the varnish. But if carefully done it cleans furniture of all finger marks.—*Mrs. Beecher, in Christian Union.*

DESSERT OF APPLES.—Make a rich syrup of a pound of sugar and put into it a pound of finely-flavored ripe sour apples, nicely pared and cored. Stew till soft, then mix smoothly with the syrup and pour all into a mold. Stir into a pint of rich cream, or if none, new milk must answer, two well-beaten eggs, half a cup of sugar, and let it just boil up in a farina kettle; then set aside to cool. When cold, take the apples from the mold and pour this cream custard around it and serve. If spice or flavoring is agreeable, nutmeg, vanilla or rose-water can be used.