

top and apply another thicker one, and fill up with it packed tightly, and even with the top of the jar; then lay on another cloth to fit the top. I also put another one over the jar and have it come over the top and paste it tight to the jar, then put on a board and weight. Or another way: Instead of putting in salt I take melted butter and turn in on the thin cloth over a full, and lastly, apply salt sprinkled over the top before putting on the last cloth and weight. Then again, I have had butter keep well after packing thoroughly as I have stated, to fill up the top of the jar with strong brine, which should stand two inches deep on the top without being filled up with butter, and it is necessary to put a little salt in the brine. Any one, whether he has a very good place to keep butter or not, if he attend to the strict observance of these rules, can have good butter and keep it so, in winter, and that through the hottest weather.

### Abortion in Cows.

THE *Utter Herald*, in commenting on a statement that Prof. Agassiz thinks of instituting an investigation into this subject, speaks as follows of the continuance and spread of the malady:—

"It is about eight years since the habit first made its appearance in the herds of Herkimer, and every year it increases in its virulence, spreading among the best herds, and often completely breaking them up. During the winter just past the habit has made more extensive ravages than formerly, and seems to be spreading over the entire dairy districts. So far it seems to have all efforts looking towards means for prevention. It makes its appearance in the best and the poorest herds, and without regard to the manner in which they have been treated. It shows itself in all varieties of soil, on highlands and lowlands, among cattle reared on the farm where it occurs, and among those purchased and driven from a distance. We have repeatedly urged upon dairy-men the necessity of a thorough investigation into the causes of this disease—to join together and employ some scientific man to look over the various premises where the habit has appeared, and collect such facts in regard to it as would lead to a discovery of the causes. Of course there is a cause, which should have been discovered long since. The trouble has already become so serious that some have abandoned the dairy business, and, if it continues, many others must do so also: for where one-half or two-thirds of a herd is annually broken up, it is evident dairying cannot be carried on with profit. We shall look forward to the investigations of Prof. Agassiz on this matter with great interest. Probably no man in the country is so competent to examine into the true causes of the disease, or will so thoroughly investigate it in all its bearings. And if he be able to point out a remedy, an important service will be done to the dairy interests, and one which will be widely appreciated."

**HOW TO PRESERVE MILK.**—When milk "turns," this effect is caused by the development of an acid in the liquid. This chemical change may be effectually prevented by adding to the milk a small quantity of bi-carbonate of soda. This addition is by no means injurious to health: on the contrary, bi-carbonate of soda aids digestion. One of the great dairies of Paris employs no other method but this for preserving the milk it keeps on sale.—*Scottish Farmer*.

**CHEESE FACTORIES IN VERMONT.**—*Messrs. Editors*—In compliance with your request I send you the following statistics of the Cheese Factory in this place. The business, which is conducted by a Stock Company, was commenced in March, 1864, but did not get fairly under way till about May 1. The entire cost of fixtures exclusive of the building, which was rented for \$100 per annum, was \$1,225. The factory employs three hands—one man and two women. Manufactures milk from 350 cows. In the best of the season made nine cheeses per day, each weighing 100 lbs. when cured. Milk delivered morning and evening in tin cans on spring wagons. Cheese sold at from 22 to 25 cts. per lb., through the season at least 3 cts. per lb. above the best private dairies. It took 10 lbs. of milk to make 1 lb. cured cheese. Whole cost of cheese per lb., boxed and delivered at the depot, two cts. and one mill. Average gross earning per cow from \$30 to \$100. The quality of cheese was firm, solid, mild. Patrons well pleased and business enlarging. For generating steam, uses a four horse upright tubular boiler. Uses Cooper's vats and Gray's screw press. Used no ice, but instead has a copious flow of cold water conveyed in pipes from a spring not far distant. Some factories use ice to cool the milk in the vats, but sufficiently cold water is preferable. For the material facts in the above statements I am indebted to Allen Whedon, Esq., one of the principal proprietors.—W. HOLLISTER, West Puddle, in the *Vermont Record*.

### Poultry Yard.

#### Small White Hands:—Poultry Rearing.

An "Englishwoman" sends us the following sensible communication, which we hope will not be thrown away on her fellow-countrywomen. We trust that she will meet with unqualified success in her hatching and rearing operations, and that, before long, she will have many imitators all over the land.

"I have often been surprised since I came to Canada to observe how little attention is paid to the rearing of poultry, and the cultivation of the garden. I think a great many young ladies in Canada have very mistaken ideas in reference to the duties of farmers' daughters. They seem to think that gardening and the care of poultry would spoil the look of their white hands; but do they know that the small white hand is the representative of luxurious uselessness, and the large hand of earnest toil? And just as the small-handed warriors of old vanished before the sturdy common-sense energy of the large-handed Teutons, will the beauty pass away before the truth of industry; and the labour of the large-handed will at once support and rule the world. Mr. Editor, don't you think farmers' daughters would be much more in place weeding their gardens and feeding their poultry than spending so much time on dress? If one-half of the time they occupy in adorning themselves, was spent in beautifying their garden, how different Canada would look! I will give you my plan of rearing poultry. I have 15 hens and a rooster. Most of them are of the Brahma breed, and our chief object is to raise chickens for the table. The Brahmas are such good sitters they answer my purpose well. When the chickens are hatched, I shut them up for one or two weeks and feed them well on small wheat and shorts. As the hens are quiet, I can put several into the same place, and when they are let out I have a large coop ten or fifteen feet long by five in width, with bars far enough apart to allow the chickens to go in and out, but not the hens, into the coop. I put wheat, boiled potatoes and meal, and milk twice a day, and by harvest I have all the fat chickens I want. I feed the hens outside the coop. We have more than the French king wished on behalf of his subjects; for we have chickens at least three times a week all the summer. I raised more than one hundred last year. My first three hens this spring hatched 29. I put them with two hens and have six more sitting. I go on the plan of keeping a few hens and keeping them well, which I think is the best way. Every farmer's wife and daughter should do all in their power to add to the comfort of home and the beautifying of its surroundings.

"P.S. Since writing the above four more hens have hatched. My young ducks and chickens now number 64, and if the rats and hawks do not make a raid on my poultry yard, I hope to raise 150 this season."

#### Italian Mode of Fattening Ortolans.

Sir Hugh Lyon Playfair, in his lectures on the application of physiology to the rearing of cattle, gives a very remarkable illustration of the influence of rapid alternations of light and darkness, without reference to the diurnal revolutions of the earth, in inducing sleep and inclination for food, in the Italian mode of rapidly fattening ortolans. "At a certain hour in the morning the keeper of the birds places a lantern in the orifice of the wall, made for the special purpose of darkening and illuminating the room. The dim light thrown by the lantern on the floor of the apartment induces the ortolans to believe that the sun is about to rise, and they awake and greedily consume the food upon the floor. The lantern is withdrawn, and the succeeding darkness acting as an actual night, the ortolans fall asleep. During sleep, little of the food being expended in the production of force, most of it goes to the formation of flesh and fat. After the birds have been allowed to repose for one or two hours to carry on digestion and assimilation, the keeper again exhibits the lantern through the aperture. The mimic daylight awakes the birds again; again they rise and feed; again darkness ensues, and again they sleep. The representative sunshine is made to shed its rays four or five times every day, and as many nights follow its transitory beams. The ortolans thus treated become like balls of fat in a few days."

**HEN HOUSE AND CHICKEN YARD.**—At the weekly meeting of the American Institute Farmers' Club, May 9th, the chairman, Mr. Alderman Ely, called the attention of the Club to an experiment which he had tried in constructing his hen house with two distinct apartments, one for laying, and the other exclusively

for the setting hens. He found it answer admirably until the eggs commenced to hatch, when all the hens, attracted by the peeping of the chicks, and moved by their natural instincts, would leave their own nests and hover around the peeping family. The consequence of this natural curiosity on the part of late setting hens whose eggs had not yet commenced to hatch, was that the latter became cold, and the unhatched chickens died while the setters were trying to appropriate the fortunate hen's early brood. It was suggested that hens never do well in a large body, and that where many are kept, moveable standings might be peculiarly employed. Prof. Mapes explained the construction of a good chicken yard. A board fence about five feet high, with several posts ten or twelve feet high, to which several horizontal wires, extending around the yard, are fastened. Hens will not creep from such a yard, for in attempting to fly out they will alight on the wires (which are of small size), and fall back into the yard. On wood they would readily effect a landing, but cannot sustain themselves on the wires, and will never try to fly between them without alighting. Such a chicken yard is an economical substitute for the expensive structure of wood, lat, and boards.

### The Apiary.

**SUPERIORITY OF THE ITALIAN BEE.**—Mr. Fairchild inquires in regard to the hardness of Italian bees, after relating some of his experience. I have kept them some five years, and have found them equal to my expectations; being more hardy than the black—less die in winter—they gather one-third more honey, breed one-third more bees—working when so cold that black bees right along side would scarcely stir, and actually storing honey while the black were consuming the stores to live. This I have seen, by actual inspection of the interior of the hives, from day to day, each stock having equal chances, standing side by side the Italian bees proving so much superior to the black, that I do not now keep the black ones at all.

P.S.—I am told that the Italian bees are kept in log-hives in their native clime.—*Cor. Co. Gent.*

**CHANGING BEES.**—We remember many years ago in reading the travels of James Backhouse, in South Africa, this distinguished English botanist stated, that when stung by a venomous insect, he sucked out the poison with his mouth, and observed the taste to be distinctly acid. Acting on the suggestion here furnished, we have found the best remedies to be alkalies, for the purpose of neutralizing the acid. Saleratus or soda should be made into a thin paste and applied to the punctured spot, which should be kept moistened with it some time. In the absence of either of these substances, fresh wood ashes made into a paste answers well. It is important that a speedy application should be made, before the poison has extended far. The application of mud has been found useful, acting in two ways, viz., by excluding the air and diluting or weakening the poison by the moisture in contact with it, but alkalies are much more efficient. As the season for the stinging of bees is approaching, those who are sensitive to the action of the poison may do well to bear this remedy in mind.—*Country Gentleman*.

**LIGURIANIZING AN APIARY.**—In a late number of the *Field* you wish to know for the benefit of your readers, the mode by which I insured the bees rearing queens from the Ligurian brood put into the hives, instead of from the old black brood. I devoted two strong stocks to the raising of royal cells from the Ligurian combs with which they were supplied, and when the royal cells had been sealed up about four days, I cut them out of the combs, and having removed the common black queen out of a stock, and the royal cells that I found on the combs, placed the Ligurian royal cell in the centre of the middle comb, and in about two days after, I had the pleasure of seeing a beautiful Ligurian princess in the hive, which compensated me for the great trouble I had bestowed upon them. In nearly every stock I knew the exact hour in which the princess was hatched. I examined the stocks again in ten days after I had removed the old queen, and in some of them I cut out no less than ten royal cells the bees had constructed on the common combs. I saw nearly all the young queens come out on their matrimonial excursions, and some of them were out on four separate days before they had been successful in meeting with the Ligurian drones, my apiary being very short of them at that time. I made memoranda each day of every particular relating to each stock, which are very interesting, but too long for publication in your paper.—Wm. Carr, in *London Field*.