

Earthing up the plants should be delayed until they have attained a good size; and then it requires care, especially the first time. I always get into the trench myself, and, holding the plant with all its stalks firmly in my left hand, with a short-handled small hoe draw the earth up round the plant, without allowing it to come in between the stalks. When this is done, and the plants thus protected, you may, with a spade, strike off the edges of the trench, and partially fill it. As the plant grows, as it now will, if well watered in dry weather, with great vigor—continue to earth up, and by the 1st of November the plants will be two feet above the level of the earth, with a main stalk the size of a man's arm.

Sometimes, particularly if the season be dry, celery is liable to be attacked by a fly. In that case you will see the tops of the celery turn brown and wither. The moment that symptom appears, no time is to be lost in calling in the doctor; for the whole crop is at stake. The cause of the disease is the sting of a fly upon the leaves of the celery. The egg is deposited between the integuments of the leaf, and soon hatches into a small white worm—sometimes visible on opening the leaf to the naked eye, always by the aid of a microscope. If not attended to, the disease gradually descends to the root, and the whole plant falls a sacrifice. Amputate every defective and diseased leaf; and early in the morning, whilst dew is on, sift on to the whole of the plants fresh slacked lime. One such powdering is generally sufficient; but if not, give them another dose, and the first rain that falls will wash the plants clean, and you will probably see them fresh, green, and stretching away towards maturity.

With regard to the mode of securing the crop for winter use, gentlemen have their fancies. I prefer leaving the plants in their original trenches, earthing up to top of the plants, and covering with straw litter and boards, so as to protect them sufficiently from the frost; to be able to take them up as wanted; and this always fresh and sweet. I do not fancy disturbing the roots, and transplanting into narrow quarters.

Finally, any one in this country who wishes to have "first-rate" celery must cultivate it himself. Common laborers are sure to spoil it. Professional gardeners are seldom found, and generally too expensive when they are.

Your obedient servant,

JUNIAS SMITH.

New York, Dec. 12, 1844.

SOILING, OR HOUSE-FEEDING CATTLE.

At a late meeting of the Farmer's Clubs in Scotland, Mr. Harkness read a communication from Mr. Skilling, of Glasnevin, from which we make the following extracts:

"How does it happen that the Belgians have kept up in the highest condition an indifferent soil, without any such extraneous manures as bones or guano, or any other importation of any kind? This they have done for hundreds of years, and yet their land is never poor or exhausted, but in the highest state of production. The reason is obvious. There is no witchery in their management; and if the farmers of Scotland would only follow their example they would find themselves fully recompensed for their pains. If they would deepen their lands, keep more stock, and chiefly housefeed them, saving the manure—liquid and solid—raise an abundance of crop for soiling summer and winter food, they would make more from their cattle and their land.

When I first adopted the house-feeding system, my neighbours laughed at me, and predicted that my cattle would die; others said the cows would give no milk; but their predictions were not verified. My cows had a good appearance, and when driven to water twice a day, [not enough—cows need drink four times a day, at least]—they were wild and full of spirit; and when others were dry, mine were giving milk.

I have estimated correctly that a well fed cow in the house will make 25 tons of liquid manure, which will be

sufficient for an acre of ground. I can, on an average, keep a cow on two British acres. The cows also give much more milk.

When my present farm was in pasture, only 18 cows could be kept in summer. Now, by the soiling system, it feeds from 20 to 22 cows, 3 horses, and from 30 to 40 pigs, all the year round; and I have as large a proportion of grain crops as most other people have on farms of equal extent—(52 acres.)

No doubt, the system, if ill-wrought, will fail. Some who try it, will bring their cows into the house; they are tied up, and perhaps injudiciously confined—kept filthy—not regularly curried—a large quantity of some particular kind of food is put before them, and this repeated, cloy the appetite, and the animals refuse their food.—They are, perhaps, neglected in water—by-and-by they fail in milk—get out of condition—and the whole experiment is a failure, from being wrongly conducted. The house itself must be airy, well ventilated, and kept perfectly clean. The animals must be well curried and brushed at least twice a day. There ought to be one particular person to superintend and pay attention to the feeding; and one of the first and most important parts of his duty is, to ascertain the appetite of the beast. Cows, like other animals, will eat less or more; and they ought to be supplied accordingly as they require it, being kept rather with an appetite than otherwise. As soon as the animal has eaten its food, all refuse should immediately be taken away, and nothing suffered to remain in the stall before it. Should it seem delicate and careless in eating, let the food be at once removed. The times of feeding are also of great importance, and ought to be regulated. The cattle will know the hour of feeding as correctly as the clock can tell it, and will be disappointed and fretted if neglected. This neglect is prejudicial to milking and fattening. I give six feeds in the day, summer and winter—beginning at 6 o'clock in the morning, and ending at 9 in the evening—viz: at 6, at 8, at 12, at 3, at 6, and at 9. They get water in their stalls at 10 in the morning, and at 5 in the afternoon. They are likewise turned out one hour from 10 to 11, where they exercise and drink if they choose.

The kinds of food I use are chiefly the following: in summer, at 6, fed with perennial or Italian rye-grass and clover; at 8, with cabbages or leaves; at 12, with cut hay and straw, mixed—(this feed is to prevent the action of too much green food on them)—at 3, upon vetches; at 6, upon mangold wurzel leaves or refuse of the farm or garden; at 9, upon clover or grass; or this may be a dry feed, if the state of the bowels require it.

In winter, at 6, feed with steamed food; at 8, with turnips, raw; at 12, cut hay and straw; at 3, with mangold wurzel, raw; at 6 with steamed food; at 9, with hay and straw. Water must be given or offered, and plenty of salt used in the steamed food."

With respect to ventilation of cattle houses, Mr. McCulloch stated that he considered too little attention had been paid to this important matter, as nothing tended more to promote the health of animals more than well ventilated houses. There should be a small aperture below and above in the wall, behind each animal, so that by the admission of air beneath, the respired vitiated air (carbonic acid gas, which is very injurious to animal life, together with the pernicious effluvia from the skin, urine, and dung, may be forced out by the upper aperture, and in this way have a constant renewal of air.

Mr. McCulloch was astonished to observe that even in the establishments of many of our most eminent agriculturists this important subject was so much overlooked. You will often observe openings in the upper part of the hovel, or in the roof, for the escape of the contaminated air, but it seems to be forgotten that there should be an admission of fresh air below, to cause the effective expulsion of the contaminated atmosphere.—*London Agricultural Gazette*.

Strawberries.—Take the strongest of the runners of strawberries off in June, if you want to make new plantations.