

## IV.

A dairy should always be built in a northerly situation, so as to keep it cool, and so dry. The dairy should be well ventilated, and have plenty of pure air, as far as possible from farm buildings, cess-pools, drains, and sinks, because disease and its germs can be easily communicated by milk and butter. Milk will be more likely to give up its cream, &c., in a dry place where there is a continual flow of air. Milk being prepared for butter is spread out in basins, so a large surface of the milk is thus exposed to the air, and so will be more ready to catch impurities in the air. All the appliances of a dairy, as churns and basins, should be kept constantly clean and bright, the floors well washed, and made of material—as tiles—not likely to hold dust, &c.

The preceding examination papers are taken from the *London Agricultural Gazette*, where they are published by a Judge as examples of good and bad answering. We reproduce them for a very different purpose,—to show what may be done, at very little expense, in a country where there is at present no answering at all, simply because there is no questioning,—where our farm boys are practically taught nothing so far as the science of agriculture is concerned. If our farmer's boys were all spending their winter evenings in thinking out questions such as those of the above papers, we should have more rapid improvements, better farmers, and more stirring enterprise in our agricultural districts.

Among recent losses of useful men in England may be specially noticed two scientific agriculturists who have done much by their laboratory work, their writings, and their public teaching. The first is Professor Voeleker, whom we recollect as a young man thirty-five years ago, when he came to Edinburgh as assistant in the Chemical Laboratory, and whose name has since become so famous in connection with the Chemistry of Agriculture, and his work at Cirencester. The other is Professor Buckman, who also, for a period of between 14 and 15 years, held his appointment in the Royal Agricultural College at Cirencester with honor and success. His name will long be remembered, not only as an able instructor, but as the personal friend of many hundreds of worthy young fellows who are now scattered throughout the world, many holding distinguished positions. In 1859 Professor Buckman married the only daughter of the late John Savory, Esq., of London. In 1862 a very serious rupture took

place in the Royal Agricultural College, when Professor Buckman and three of his colleagues (Professors Voeleker, Coleman, and Brown) severed themselves from the college. The handsome silver Grace Cup, then presented to Professor Buckman by the students of the college, has from that time occupied the position of honor on his table, and many a student of the college has had evidence of the high esteem with which he regarded their gift.

In October, 1862, Professor Buckman took a large farm at Bradford Abbas, Dorsetshire, and removed there with his wife and family. Those who had the privilege of knowing him during his early occupation of that farm regarded him as one of "the happiest of happy men." Surrounded there by every comfort, and possessing a brilliant and affectionate wife, with a young family of bright and happy children, his home circle was well nigh complete in happiness, and that happiness he and his wife made to overflow throughout the surrounding district. But a few days' illness, in Nov., 1865, severed him from his beloved wife, and cast a deep shadow over that home, from which he could never free himself, even if he ever desired to do so. From that time he became an altered man, and never rose to his former brilliancy and powers of mind. The every-day duties of life were regularly discharged, and the agricultural literature of the period has been enriched by many valuable contributions from his various researches, but the shadow remained. Those who had the pleasure of knowing the late Mrs. Buckman are not surprised at the enduring sorrow he felt. The cares and anxieties of a large farm severely taxed his powers of endurance during a long period of agricultural depression, but nothing could induce him to leave a scene so dear to him. In Bradford he had lived in the zenith of joy, and there on the 23rd of November, at the age of 70, he ended a useful life, amidst the deep grief of his children, and many to whom his memory must long be dear.

Hang up his harp, he'll wake no more,  
He sleeps the sleep of death.

We are indebted to a friend for the following clipping from a London morning paper:—

The report that the Edelweiss has been discovered in Western America will at once be pleasing and painful news to the Switzer. No plant of the High Alps is more prized than this tiny species of *Leontopodium*, or regarded either by the tourist or the mountaineer as more characteristic of the regions which, to the one, is a playground, and to the other a home. It has little to recommend it so

far as beauty is concerned. The dwarf Rhododendron is infinitely more attractive, and there are few species of saxifrage which could not be compared with it, greatly to the advantage of the fluffy looking Edelweiss. But the species is rare, and is never found until the collector reaches a height of several thousand feet. Its possession is, therefore a mark of a certain capacity to climb, and every holiday-maker in the Alps aims at returning with a sprig of Edelweiss in his guide book, or, if a trifle more audacious than usual, with the flower stuck in the band of his wideawake. The result is, that a lively trade in the plant has grown up. It is cultivated in quiet places for the tourist traffic, and it is collected by preparers of Alpine Herbaria in quantities large enough to supply all likely customers for their scientific wares. The latter are, indeed the plant's worst enemies. For, while the ordinary traveller is usually content with plucking a little bouquet, the commercial botanist must, in order to possess a complete specimen, dig it up by the root. Consequently, the Edelweiss is rapidly disappearing. Localities in which it formerly grew abundantly know it no more, and in others it is hard to get sight of a single plant; so that the time when it will be practically extinct as a wildling may be safely reckoned as not very far distant. Each year brings this undesirable conclusion nearer, for every Summer and Autumn the Alpine valleys and mountain sides are being covered with a greater and greater number of holiday-makers. Happily, however, the Swiss Cantons have taken both it and the Ibex under their protection, in the hope that the depredations on them may be reduced to comparatively small proportions. In England, the fern mania has had a similar effect on the rarer species—the Woodsias and other varieties being now extremely difficult to obtain in localities where twenty or twenty-five years ago they were quite plentiful. Some of the uncommon semi-Alpine plants for which Scotland and the Welsh hills were famous in botanical annals cannot much longer survive the constant raids made upon them by botanical lecturers with a troop of students at their heels, and, still worse, by the dealers in such commodities, who are doing their worst to exterminate, in their primeval haunts, some of the choicest members of the British flora.

If, however, the Edelweiss has actually been discovered in Washington Territory, the patriotic Swiss will experience a certain pang. No longer can he regard his favourite plant as the child of Helvetia alone. He must share it with another land, and henceforth feel as if some traveller had discovered the *Bonz des Vaches* in Central Africa, or as a patriotic High-