

EFFECT OF COLD ON FATTENING ANIMALS.
—Dr. Playfair, in the *Journal of the Royal Agricultural Society*, in speaking of the necessity of warmth to fatten an animal readily, says that to keep up the animal heat, the oxygen of the air unites with that portion of blood which goes to form fat and tissue, and converts it into carbonic acid, water, and ammonia. Where all the vitality of the animal is used to manufacture heat, there is no power left to increase the fat. If we would fatten animals in winter we must give them a summer temperature, by warming the shed and stable they occupy. The air that they breath should be as pure as possible.

Horticultural.

For the "Agr. culturist."

Dwarf Apple Trees.

On seeing a few remarks in the April number of the *Agriculturist*, made by Mr. Atkins, I would say to him that I believe from his experience, together with mine, that the representations made by the nursery-men in their catalogues and books, that the dwarf apple will bear when it is a small bush, or like the dwarf pear, is only a humbug, and done for the purpose of selling their trees; for, like Mr. Atkins, I have fine model trees eight or ten feet high, and the tops over ten feet in circumference, with limbs branching out from the ground, that have never borne an apple yet. These trees were purchased from the most responsible nurserymen in Rochester, and recommended to bear the second or third year after planting, and are now eight or ten years old.

Mr. Atkins says, if he wanted to make more dwarf trees he would graft them to Keswick Codringham, Haw. horn Dean, and Duchess of Oldenburgh. These trees are early bearers, but they grow as large as any tree, and bear on young standard trees as well as on the Paradise stock. I have late bearing kinds, such as the Northern Spy and St. Lawrence on the Paradise stock, in order to throw them into early bearing, but without effect. I have likewise visited the Rochester nurseries, and found their dwarf apple trees just like my own, and none in bearing except the early bearing kinds as above mentioned. But I am satisfied they are a better stock to graft on than the common standard, as they are more hardy and more fibrous, not forming such huge prongs, running deep in the cold and wet ground. Their branching from the ground is also a self protection to the tree, and will be the cause of it being more hardy; for no fruit tree in this country should be trimmed up and started, leaving a long trunk to the merciless extremes of heat and cold of our extreme climate, which will disarrange the sap vessels and cause the tree to become diseased and short-lived.

I now wish to ask for more information respecting the dwarf apple trees, to show if the above statement is not true, that others may not be deceived as to the nature of the trees, as we have been. Any information respecting the nature and habits of the dwarf apple tree, or what treatment will cause them to bear when young and small, will be thankfully received.

R. B. WERDEN.

Picton, Prince Edward County, Jan. 1862.

Cultivation of Plums.

The following observations on Plum culture, written by J. M. Barret, of Canterbury, N. Y., and published in a recent number of the *Horticulturist*, will be acceptable to fruit growers generally.]

So much has been said and written of late upon the Grape question, that I begin to fear that we may forget that other fruits can be successfully raised. I therefore propose to give you my experience in raising Plums, in which I have made a profitable experiment, willing that my fellow readers of the *Horticulturist* may go and do likewise, if they believe the Yankee maxim, that some things may be done as well as others, and that one man can do what another has done *if he tries*.

In 1856, I set out with care what remained of 700 or 800 Plum trees, which had been struck out by contract two years before, and up to that time had refused to thrive. This transplanting revived them, and from that period I date the beginning of my experiment, which, including the present season, makes six years that they have been under treatment. The ground between the Plum trees has been regularly plowed and cultivated for the Raspberry crop, the product of which has paid all expenses, including \$50 per year ground-rent, for two acres and a quarter, and a profit besides. In 1859, I spread under each tree half a peck of common salt.

The black knot upon these Plum trees has appeared regularly every year, and has been cut out clean to the healthy wood in the month of June, say within a fortnight after its first appearance, and while the excrescence was still soft. It is then easily removed without injury to the tree, the wound generally healing over the same season. For the last three years this disease has decreased yearly. The past season I removed the whole from 640 trees in less than half a day. In 1859, these trees began to bear fruit, yielding twenty bushels, which was sold for fifty-five dollars, after paying expenses. In 1860, the crop was nine bushels and one peck, which brought