

of fruit have been tried experimentally from time to time, including some of the more tropical varieties, such as peaches. But Lord Aberdeen, we understand, does not consider that the nature of the soil and the climate make this a reliable crop, and intends that the land shall be devoted mainly to the cultivation of apples, pears, plums, etc. So far as can yet be judged, small fruits are likely to do extremely well.

The same remarks apply to the larger estate at Coldstream (near the town of Vernon, B. C.), purchased in 1891. This property is about twelve thousand acres in extent.

In order to develop the culture of fruit in the district, and also of course to benefit his own estate, Lord Aberdeen has erected a jam factory, and has also imported some first-class machinery; but until a larger area of ground is yielding fruit, it is not likely that the factory can be put into practical operation, inasmuch as it would not be worth while to run the machinery for only a day or two in each week. But the fact that the building is erected and the machinery there, ought to be an inducement and an encouragement to the cultivation of fruit. It was in truth put up in fulfilment of a promise made by Lord Aberdeen, and he considered that it was due to the district that the factory should be erected, so that there should be no uncertainty as to the opportunity for disposal of the fruit produced in the neighborhood. Of course the larger fruit trees are not yet bearing, but the manager's report on the area now under cultivation shows that the smaller fruits do well, and that hitherto the local market has absorbed all that has been produced.

THE SPECIFIC ACTION OF NITROGEN UPON PLANTS. — The influence of nitrogen in its various forms upon plant growth is shown by at least three striking effects.

*First.* The growth of stems and leaves is greatly promoted, while that of buds and flowers is retarded. Ordinarily, most plants, at a certain period of growth, cease to produce new branches and foliage, or to increase those already formed, and commence to produce flowers and fruits, whereby the species may be perpetuated. If a plant is provided with as much available nitrogen as it can use just at the time it begins to flower, the formation of flowers may be checked while the activity of growth is transferred back to and renewed in stems and leaves, which take on a new vigor and multiply with remarkable luxuriance. Should flowers be produced under these circumstances, they are sterile and produce no seed.

The *second* effect of nitrogen upon plants is to deepen the color of the foliage, which is a sign of increased vegetative activity and health.

The *third* effect of nitrogen is to increase in a very marked degree the relative proportion of nitrogen in the plant.