

beans (*Phaseolus vulgaris*) in a bed were killed except about one in thirty, which completely escaped.<sup>69</sup> On the same day of the month, but in the year 1864, there was a severe frost in Kent, and two rows of scarlet-runners (*P. multiflorus*) in my garden, containing 390 plants of the same age and equally exposed, were all blackened and killed except about a dozen plants. In an adjoining row of "Fulmer's dwarf bean" (*P. vulgaris*), one single plant escaped. A still more severe frost occurred four days afterwards, and of the dozen plants which had previously escaped only three survived; these were not taller or more vigorous than the other young plants, but they escaped completely, with not even the tips of their leaves browned. It was impossible to behold these three plants, with their blackened, withered, and dead brethren all around, and not see at a glance that they differed widely in constitutional power of resisting frost.

This work is not the proper place to show that wild plants of the same species, naturally growing at different altitudes or under different latitudes, become to a certain extent acclimatised, as is proved by the different behaviour of their seedlings when raised in another country. In my 'Origin of Species' I have alluded to some cases, and I could add many others. One instance must suffice: Mr. Grigor, of Forres,<sup>70</sup> states that seedlings of the Scotch fir (*Pinus sylvestris*), raised from seed from the Continent and from the forests of Scotland, differ much. "The difference is perceptible in one-year-old, " and more so in two-year-old seedlings; but the effects of " the winter on the second year's growth almost uniformly " make those from the Continent quite brown, and so damaged, " that by the month of March they are quite unsaleable, " while the plants from the native Scotch pine, under the " same treatment, and standing alongside, although consider- " ably shorter, are rather stouter and quite green, so that the

<sup>69</sup> Loudon's 'Gard. Mag.,' vol. xiii., 1836, p. 378.

<sup>70</sup> 'Gardener's Chron.,' 1865, p. 699. Mr. G. Maw gives ('Gard. Chron.' 1870, p. 895) a number of striking cases; he brought home from southern Spain and northern Africa several

plants, which he cultivated in England alongside specimens from northern districts; and he found a great difference not only in their hardiness during the winter, but in the behaviour of some of them during the summer.