

incessantly urge every one to preserve the finest plants for the production of seed.

Although plants often present much more conspicuous variations than animals, yet the closest attention is generally requisite to detect each slight and favourable change. Mr. Masters relates²² how "many a patient hour was devoted," whilst he was young, to the detection of differences in peas intended for seed. Mr. Barnet²³ remarks that the old scarlet American strawberry was cultivated for more than a century without producing a single variety; and another writer observes how singular it was that when gardeners first began to attend to this fruit it began to vary; the truth no doubt being that it had always varied, but that, until slight variations were selected and propagated by seed, no conspicuous result was obtained. The finest shades of difference in wheat have been discriminated and selected with almost as much care as, in the case of the higher animals, for instance by Col. Le Couteur and more especially by Major Hallett.

It may be worth while to give a few examples of methodical selection with plants; but in fact the great improvement of all our anciently cultivated plants may be attributed to selection long carried on, in part methodically, and in part unconsciously. I have shown in a former chapter how the weight of the gooseberry has been increased by systematic selection and culture. The flowers of the Heartsease have been similarly increased in size and regularity of outline. With the Cineraria, Mr. Glenney²⁴ "was bold enough when "the flowers were ragged and starry and ill defined in colour, "to fix a standard which was then considered outrageously "high and impossible, and which, even if reached, it was "said, we should be no gainers by, as it would spoil the "beauty of the flowers. He maintained that he was right; "and the event has proved it to be so." The doubling of flowers has several times been effected by careful selection: the Rev. W. Williamson,²⁵ after sowing during several years

²² 'Gardener's Chron.,' 1850, p. 198.

²³ 'Transact. Hort. Soc.,' vol. vi. p. 152.

²⁴ 'Journal of Horticulture,' 1862, p. 369.

²⁵ 'Transact. Hort. Soc.,' vol. iv. p. 381.