

seed of *Anemone coronaria*, found a plant with one additional petal; he sowed the seed of this, and by perseverance in the same course obtained several varieties with six or seven rows of petals. The single Scotch rose was doubled, and yielded eight good varieties in nine or ten years.²⁶ The Canterbury bell (*Campanula medium*) was doubled by careful selection in four generations.²⁷ In four years Mr. Buckman,²⁸ by culture and careful selection, converted parsnips, raised from wild seed, into a new and good variety. By selection during a long course of years, the early maturity of peas has been hastened by between ten and twenty-one days.²⁹ A more curious case is offered by the beet plant, which since its cultivation in France, has almost exactly doubled its yield of sugar. This has been effected by the most careful selection; the specific gravity of the roots being regularly tested, and the best roots saved for the production of seed.³⁰

Selection by Ancient and Semi-civilised People.

In attributing so much importance to the selection of animals and plants, it may be objected, that methodical selection would not have been carried on during ancient times. A distinguished naturalist considers it as absurd to suppose that semi-civilised people should have practised selection of any kind. Undoubtedly the principle has been systematically acknowledged and followed to a far greater extent within the last hundred years than at any former period, and a corresponding result has been gained; but it would be a greater error to suppose, as we shall immediately see, that its importance was not recognised and acted on during the most ancient times, and by semi-civilised people. I should premise that many facts now to be given only show that care was taken in breeding; but when this is the case, selection is almost sure to be practised to a certain extent. We shall hereafter be enabled better to judge how far selection, when only occa-

²⁶ 'Transact. Hort. Soc.,' vol. iv. p. 285.

²⁷ Rev. W. Bromehead, in 'Gard. Chronicle,' 1857, p. 550.

²⁸ 'Gard. Chronicle,' 1862, p. 721.

²⁹ Dr. Anderson, in 'The Bee,' vol.

vi. p. 96; Mr. Barnes, in 'Gard. Chronicle,' 1844, p. 476.

³⁰ Godron, 'De l'Espèce,' 1859, tom. ii. p. 69; 'Gard. Chronicle,' 1854, p. 258.