On the Modification of old Races and the Formation of new Races by Crossing.—We have hitherto chiefly considered the effects of crossing in giving uniformity of character; we must now look to an opposite result. There can be no doubt that crossing, with the aid of rigorous selection during several generations, has been a potent means in modifying old races, and in forming new ones. Lord Orford crossed his famous stud of greyhounds once with the bulldog, in order to give them courage and perseverance. Certain pointers have been crossed, as I hear from the Rev. W. D. Fox, with the foxhound, to give them dash and speed. Certain strains of Dorking fowls have had a slight infusion of Game blood; and I have known a great fancier who on a single occasion crossed his turbit-pigeons with barbs, for the sake of gaining greater breadth of beak.

In the foregoing cases breeds have been crossed once, for the sake of modifying some particular character; but with most of the improved races of the pig, which now breed true, there have been repeated crosses,—for instance, the improved Essex owes its excellence to repeated crosses with the Neapolitan, together probably with some infusion of Chinese blood. 22 So with our British sheep: almost all the races, except the Southdown, have been largely crossed; "this, in fact, has been the history of our principal breeds." 23 To give an example, the "Oxfordshire Downs" now rank as an established breed.²⁴ They were produced about the year 1830 by crossing "Hampshire and in some instances Southdown ewes with Cotswold rams:" now the Hampshire ram was itself produced by repeated crosses between the native Hampshire sheep and Southdowns; and the long-woolled Cotswold were improved by crosses with the Leicester, which latter again is believed to have been a cross between several long-woolled Mr. Spooner, after considering the various cases sheep.

²² Richardson, 'Pigs,' 1847, pp. 37, 42; S. Sidney's edition of 'Youatt on the Pig.' 1860, p. 3.

the Pig,' 1860, p. 3.

23 See Mr. W. C. Spooner's excellent paper on Cross-Breeding, 'Journal Royal Agricult. Soc.,' vol. xx.,

part ii.: see also an equally good article by Mr. Ch. Howard, in 'Gardener's Chronicle,' 1860, p. 320.

²⁴ 'Gardener's Chronicle,' 1857, pp. 649, 652.