briefly discuss the conjoint bearing of this fact, and others, on the difference in fertility between crossed varieties and crossed species.

Domestication eliminates the tendency to Sterility which is general with Species when crossed.

This hypothesis was first propounded by Pallas,[28] and has been adopted by several authors. I can find hardly any direct facts in its support; but unfortunately no one has compared, in the case of either animals or plants, the fertility of anciently domesticated varieties, when crossed with a distinct species, with that of the wild parent-species when similarly crossed. No one has compared, for instance, the fertility of *Gallus bankiva* and of the domesticated fowl, when crossed with a distinct species of Gallus or Phasianus; and the experiment would in all cases be surrounded by many difficulties. Dureau de la Malle, who has so closely studied classical literature, states[29] that in the time of the Romans the common mule was produced with more difficulty than at the present day; but whether this statement may be trusted I know not. A much more important, though somewhat different, case is given by M. Groenland,[30] namely, that plants, known from their intermediate character and sterility to be hybrids between Ægilops and wheat, have perpetuated themselves under culture since 1857, *with a rapid but varying increase of fertility in each generation.* In the fourth generation the plants, still retaining their intermediate character, had become as fertile as common cultivated wheat.

The indirect evidence in favour of the Pallasian doctrine appears to me to be extremely strong. In the earlier chapters I have shown that our various breeds of the dog are descended from several wild species; and this probably is the case with sheep. There can be no doubt that the Zebu or humped Indian ox belongs to a distinct species from European cattle: the latter, moreover, are descended from two forms, which may be called either species or races. We have good evidence

[28] 'Act. Acad. St. Petersburg,' 1780, part ii. pp. 84, 100.

[29] 'Annales des Sc. Nat.' tom. xxi. (1st series), p. 61.

[30] 'Bull. Bot. Soc. de France,' Dec. 27th, 1861, tom. viii. p. 612.