

all these ideas are subjective and artificial. I have proved this in detail in the criticism of the idea of species in my "General Morphology" ("Gen. Morph." ii. 323-364). Practically I proved this in my "System of Calcareous Sponges" in 1872. In the case of these remarkable animals, as in sponges generally (even in the Bath-sponge), the usual distinction of species appears altogether arbitrary.

As arbitrary and unnatural have been the opinions hitherto formed of the *relation of species to hybridism*. Formerly it was regarded as a dogma that two good species could never produce hybrids which could reproduce themselves as such. Those who thus dogmatized almost always appealed to the hybrids of a horse and donkey, the mule and the hinny, which, truly enough, are seldom able to reproduce themselves. But the truth is that such unfruitful hybrids are rare examples, and in the majority of cases hybrids of two totally different species are fruitful and able to reproduce themselves. They can almost always fruitfully mix with one or other of the parent species, and sometimes also among themselves; and in this way completely new forms can originate according to the laws of "mixed transmission by inheritance" (compare above, p. 216).

Thus, in fact, *hybridism is a source of the origin of new species*, distinct from the source we have hitherto considered—natural selection. I have already spoken occasionally of these *hybrid species* (species hybridæ), especially of the hare-rabbit (*Lepus Darwinii*), which has arisen from the crossing of a male hare and a female rabbit; the goat-sheep (*Capra ovina*), which has arisen from the pairing of a he-goat and ewe; also the different species of thistles (*Cirsium*),