

merely to the skin; but we here encroach on the subject of inherited mutilations. A man who is left-handed, and a shell in which the spire turns in the wrong directions, are departures from the normal asymmetrical condition, and they are well-known to be inherited.

Polydactylism.—Supernumerary fingers and toes are eminently liable, as various authors have insisted, to be inherited. Polydactylism graduates²⁷ by multifarious steps from a mere cutaneous appendage, not including any bone, to a double hand. But an additional digit, supported on a metacarpal bone, and furnished with all the proper muscles, nerves, and vessels, is sometimes so perfect, that it escapes detection, unless the fingers are actually counted. Occasionally there are several supernumerary digits; but usually only one, making the total number six. This one may be attached to the inner or outer margin of the hand, representing either a thumb or little finger, the latter being the more frequent. Generally, through the law of correlation, both hands and both feet are similarly affected. Dr. Burt Wilder has tabulated²⁸ a large number of cases, and finds that supernumerary digits are more common on the hands than on the feet, and that men are affected oftener than women. Both these facts can be explained on two principles which seem generally to hold good; firstly, that of two parts, the more specialised one is the more variable, and the arm is more highly specialised than the leg; and secondly that male animals are more variable than females.

The presence of a greater number of digits than five is a great anomaly, for this number is not normally exceeded by any existing mammal, bird, or reptile. Nevertheless, supernumerary digits are strongly inherited; they have been transmitted through five generations; and in some cases, after disappearing for one, two, or even three generations, have reappeared through reversion. These facts are rendered, as Professor Huxley has observed, more remarkable from its being known in most cases that the affected person has not married one similarly affected. In such cases the child of the fifth generation would have only 1-32nd part of the blood of his first sedigitated ancestor. Other cases are rendered remarkable by the affection gathering force, as Dr. Struthers has shown, in each generation, though in each the affected person married one not affected; moreover, such additional digits are often amputated soon after birth, and can seldom have been strengthened by use. Dr.

²⁷ Vrolik has discussed this point at full length in a work published in Dutch, from which Sir J. Paget has kindly translated for me passages. See, also, Isidore Geoffroy St. Hilaire's 'Hist. des Anomalies,' 1832, tom. i

p. 684.

²⁸ 'Massachusetts Medical Society,' vol. ii. No. 3; and 'Proc. Boston Soc. of Nat. Hist.,' vol. xiv., 1871, p. 154.