

CHAPTER XII.

INHERITANCE.

WONDERFUL NATURE OF INHERITANCE—PEDIGREES OF OUR DOMESTICATED ANIMALS—INHERITANCE NOT DUE TO CHANCE—TRIFLING CHARACTERS INHERITED—DISEASES INHERITED—PECULIARITIES IN THE EYE INHERITED—DISEASES IN THE HORSE—LONGEVITY AND VIGOUR—ASYMMETRICAL DEVIATIONS OF STRUCTURE—POLYDACTYLISM AND REGROWTH OF SUPERNUMERARY DIGITS AFTER AMPUTATION—CASES OF SEVERAL CHILDREN SIMILARLY AFFECTED FROM NON-AFFECTED PARENTS—WEAK AND FLUCTUATING INHERITANCE: IN WEEPING TREES, IN DWARFNESS, COLOUR OF FRUIT AND FLOWERS—COLOUR OF HORSES—NON-INHERITANCE IN CERTAIN CASES—INHERITANCE OF STRUCTURE AND HABITS OVERBORNE BY HOSTILE CONDITIONS OF LIFE, BY INCESSANTLY RECURRING VARIABILITY, AND BY REVERSION—CONCLUSION.

THE subject of inheritance is an immense one, and has been treated by many authors. One work alone, 'De l'Hérédité Naturelle,' by Dr. Prosper Lucas, runs to the length of 1562 pages. We must confine ourselves to certain points which have an important bearing on the general subject of variation, both with domestic and natural productions. It is obvious that a variation which is not inherited throws no light on the derivation of species, nor is of any service to man, except in the case of perennial plants, which can be propagated by buds.

If animals and plants had never been domesticated, and wild ones alone had been observed, we should probably never have heard the saying, that "like begets like." The proposition would have been as self-evident as that all the buds on the same tree are alike, though neither proposition is strictly true. For, as has often been remarked, probably no two individuals are identically the same. All wild animals recognise each other, which shows that there is some difference between them; and when the eye is well practised, the shepherd knows each sheep, and man can distinguish a fellow-man out of millions on millions of other men. Some authors have gone so far as to maintain that the production of slight differences is as much a necessary function of the powers of