CHAPTER XXV.

LAWS OF VARIATION, continued - CORRELATED VARIABILITY.

EXFLANATION OF TERM CORRELATION—CONNECTED WITH DEVEOLPMENT— MODIFICATIONS CORRELATED WITH THE INCREASED OR DECREASED SIZE OF PARTS—CORRELATED VARIATION OF HOMOLOGOUS PARTS—FEATHERED FEET IN BIRDS ASSUMING THE STRUCTURE OF THE WINGS—CORRELATION BETWEEN THE HEAD AND THE EXTREMITIES—BETWEEN THE SKIN AND DERMAL APPENDAGES—BETWEEN THE ORGANS OF SIGHT AND HEARING— CORRELATED MODIFICATIONS IN THE ORGANS OF PLANTS—CORRELATED MONSTROSITIES—CORRELATION BETWEEN THE SKULL AND EARS—SKULL AND CREST OF FEATHERS—SKULL AND HORNS—CORRELATION OF GROWTH COMPLICATED BY THE ACCUMULATED EFFECTS OF NATURAL SELECTION— COLOUR AS CORRELATED WITH CONSTITUTIONAL PECULIARITIES.

ALL parts of the organisation are to a certain extent connected together; but the connection may be so slight that it hardly exists, as with compound animals or the buds on the same tree. Even in the higher animals various parts are not at all closely related; for one part may be wholly suppressed or rendered monstrous without any other part of the body being affected. But in some cases, when one part varies, certain other parts always, or nearly always, simultaneously vary; they are then subject to the law of correlated variation. The whole body is admirably co-ordinated for the peculiar habits of life of each organic being, and may be said, as the Duke of Argyll insists in his 'Reign of Law,' to be correlated for this purpose. Again, in large groups of animals certain structures always co-exist: for instance, a peculiar form of stomach with teeth of peculiar form, and such structures may in one sense be said to be correlated. But these cases have no necessary connection with the law to be discussed in the present chapter; for we do not know that the initial or primary variations of the several parts were in any way related : slight modifications or individual differences may have been preserved, first in one and then in another part, until the final and perfectly co-adapted structure was