

Figs. *A* and *B* are seven times enlarged, Figs. *C* and *D* five times, Figs. *E* and *H* four times. Plate II. exhibits the very close blood relationship between birds and reptiles; Plate III. that between man and the other mammals.

PLATE IV. (*Between pages 34 and 35, Vol. II.*)

*The Hand, or Fore Foot, of nine different Mammals.* This plate is intended to show the importance of Comparative Anatomy to Phylogeny, in as much as it proves how the internal skeleton of the limbs is continually preserved by *inheritance*, although the external form is extremely changed by *adaptation*. The bones of the skeleton of the hand are drawn in white lines on the brown flesh and skin which surrounds them. All the nine hands are represented in the same position, namely the wrist (where the arm would be joined to it) is placed above, whilst the ends of the fingers or toes are turned downwards. The thumb, or the first (large) fore-toe is on the left in every figure; the little finger, or fifth toe is to the right at the edge of the hand. Each hand consists of three parts, namely (i.) the *wrist* (carpus), composed of two cross rows of short bones (at the upper side of the hand); (ii.) the *mid-hand* (metacarpus), composed of five long and strong bones (marked in the centre of the hand by the numbers 1-5); and (iii.) the five *fingers*, or *fore toes* (digiti), every one of which again consists of several (mostly from two to three), *toe-pieces*, or *phalanges*. The hand of *man* (Fig. 1), in regard to its entire formation, stands mid-way between that of the two large human apes, namely, that of the *gorilla* (Fig. 2), and that of the *orang* (Fig. 3). The fore paw of the *dog* (Fig. 4), is more different, and the hand or breast fin of the *seal* (Fig. 5) still more so. The adaptation of the hand to the movement of swimming, and its transformation into a fin for steering, is still more complete in the *dolphin* (Ziphius, Fig. 6). The extended fingers and bones of the central hand here have remained short and strong in the swimming membrane, but they have become extremely long and thin in the *bat* (Fig. 7), where the hand has developed into a wing. The extreme opposite of the latter formation is the hand