

were proved to be parts originally the same, developed out of one and the same foundation, one of the difficult problems of the philosophy of nature was solved. Here again we meet the notion of a single type—the conception of a single principle, which becomes infinitely varied in the different species, and in the parts of individual species.

But Goethe did not merely endeavour to search for such far-reaching laws, he also occupied himself most actively for a long time with numerous individual researches, especially in comparative anatomy. Among these, none is perhaps more interesting than the discovery of the *mid jawbone in man*. As this is, in several respects, of importance to the theory of development, I shall briefly explain it here. There exist in all mammals two little bones in the upper jaw, which meet in the centre of the face, below the nose, and which lie between the two halves of the real upper jawbone. These two bones, which hold the four upper cutting teeth, are recognized without difficulty in most mammals; in man, however, they were at that time unknown, and celebrated comparative anatomists even laid great stress upon this want of a mid jawbone, as they considered it to constitute the principal difference between men and apes—the want of a mid jawbone was, curiously enough, looked upon as the most human of all human characteristics. But Goethe could not accept the notion that man, who in all other corporeal respects was clearly only a mammal of higher development, should lack this mid jawbone.

By the general law of induction as to the mid jawbone he arrived at the special deductive conclusion that it must exist in man also, and Goethe did not rest until, after com-