

creases in size and in activity for several weeks. In the mean time the legs, of which no trace was at first apparent, have commenced their growth. The hind legs are the first to make their appearance, showing their embryo forms within the transparent coverings of the hinder part of the trunk, just at the origin of the tail. These are soon succeeded by the four legs, which exactly follow the hind legs, in all the stages of their development, until they have acquired their due proportion to the size of the trunk. The animal, at this period, wears a very ambiguous appearance, partaking of the forms both of the frog and of the lizard, and swimming both by the inflections of the tail, and the irregular impulses given by the feet. This interval is also employed by this amphibious being, in acquiring the faculty of respiring atmospheric air. We observe it rising every now and then to the surface, and cultivating its acquaintance with that element, into which it is soon to be raised; occasionally taking in a mouthful of air, which is received into its newly developed lungs, and afterwards discharging it in the form of a small bubble. When the necessary internal changes are at length completed, preparations are made for getting rid of the tail, which is now a useless member, and which, ceasing to be nourished, diminishes by degrees, leaving only a short stump, which is soon removed. The gills are by this time shrunk, and rapidly disappear, their function being superseded by the lungs, which have been called into play; and the animal now emerges from the water, and begins a new mode of existence, having become a perfect frog, (Fig. 199.) It still, however, retains its aquatic habits, and swims with great ease in the water by means of its hind feet, which are very long and muscular, and of which the toes are furnished with a broad web, derived from a thin extension of the integuments.

No less curious are the changes which take place in all the other organs for the purpose of effecting the transformations rendered necessary by this entire alteration in all the external circumstances of that animal,—this total reversal of