

general, resemble, in their figure and connexions, those of the higher orders of *Mammalia*, to the type of which this order of reptiles evidently approximates. There are five toes in the foot, with sometimes the rudiment of a sixth: the anterior extremity has only four toes, which are without claws.

The necessity of employing the same instruments for progression in the water and on land, is probably the cause which prevents their having the form best adapted for either function. The hind feet of the frog, being well constructed for striking the water backwards in swimming, are, in consequence, less capable of exerting a force sufficient to raise and support the weight of the body in walking; and hence this animal is exceedingly awkward in its attempt to walk. On a short level plane it can proceed only by leaps; an action which the length and great muscularity of the hind legs particularly fit it for performing. The toad, on the other hand, whose hind legs are short and feeble, walks better, but does not jump or swim so well as the frog.\* The *Hyla*, or tree-frog, has the extremities of each of its toes expanded into a fleshy tubercle, approaching in the form of its concave surface to that of a sucker, and by the aid of which it fastens itself readily to the branches of trees, which it chiefly inhabits, and along which it runs with great agility.

The *Salamander* is an animal of the same class as the frog, undergoing the same metamorphoses from the tadpole state. It differs much, however, in respect to the development of particular parts of the skeleton. The anterior ex-

\* It is singular that the frog, though so low in the scale of vertebrated animals, should bear a striking resemblance to the human conformation in its organs of progressive motion. This arises from the exertions which it makes in swimming being similar to those of man in walking, in as far as they both result from the strong action of the extensors of the feet. Hence, we find a distinct calf in the legs of both, produced by the swelling of similar muscles. The muscles of the thigh present, also, many analogies with those of man; particularly in the presence of the long muscle called the *sartorius*, the use of which is to turn the foot outwards, both in stepping and in swimming.