

weight. The ligamentum nuchæ also comes in aid of the muscular power, being here of vast size and strength.

The head being limited in its range of motion by its approximation to the trunk, the mouth cannot be applied directly to seize the food: and some means were, therefore, to be provided for bringing the food to the mouth. For this purpose, a new organ, the *proboscis*, has been constructed: it consists of a cylinder, perfectly flexible, and of a length sufficient to reach the ground, when the elephant is standing. The animal has the power of moving it in all possible directions, by means of a prodigious number of muscular fibres, which are collected in small bands, some passing transversely, and radiating from the interior towards the circumference, others situated more obliquely, and a third set running longitudinally, and forming an exterior layer; but they are all variously interlaced together so as to compose a very complicated arrangement. The extremity of the proboscis, which is endowed with great sensibility, is furnished with an appendix, resembling a finger, most of the functions of which, indeed, it is capable of performing.

For the formation of this admirable member it has not been necessary to deviate from the ordinary laws of development by the creation of a new organ; the same end being accomplished by the extension of a structure already belonging to the type of mammiferous animals. In several of the pachydermata the nostrils are already considerably advanced, so as to form a moveable snout: this is observable in a certain degree in the *Hog*; it is still more remarkably seen in the *Tapir*, which has a snout so lengthened and so moveable as very much to resemble, though on a small scale, the proboscis of the elephant. This latter organ, then, may be considered as merely an elongation of the nostrils, which have been drawn out to suit a special purpose, very different from the function to which that part is usually subservient.*

* A defective development of the bones of the nasal cavity, while the natural growth of the soft parts has continued, has often, in the case of the hu-