

those that are destitute of either tusk, proboscis, or nasal horn.

The most remarkable genus of this family is the *Elephant*, the colossal giant of quadrupeds. The many peculiarities which are observable in the conformation of this animal have all an obvious relation to the circumstances of its condition. Formed for feeding on a great variety of vegetable substances, and more especially on the tender shoots of trees, fruits, and grains, as well as on herbage, and succulent roots, its organs of mastication are powerful, and its teeth of great size. The whole of this apparatus requires an immense development of bone to render it efficient; so that the head, with its huge tusks and grinders, is of enormous weight. Had this ponderous head been suspended at the end of a neck of such length as to admit of its being carried to the ground, as is the case in grazing animals, it would have destroyed the balance of the body, and would have required greater force to raise and retain it in a horizontal position than could have been given by any degree of muscular power. Nature has accordingly abandoned this form of structure, and has at once curtailed the neck, bringing the head close to the trunk of the body, and supporting it by means of short, but powerful muscles, which are not implanted in any particular point of the skull, as they are in other quadrupeds, where the occipital bone forms a crest or ridge for that purpose; but the general surface of the cranium has been enlarged by an immense expansion given to its interior cellular structure, and, thus, the muscles are attached to a considerable extent of bone, instead of being affixed to a single process, which would have incurred great risk of being broken off by their action. These large cells are constructed with a view to combine strength with lightness; the plates which form their sides being disposed in a radiated manner towards the circumference, and arranged with great regularity; and the cells themselves, instead of containing marrow, are filled with air, by means of communications with the Eustachian tubes, which open into the nostrils: thus, a great extent of surface is given to the skull, without any addition to its