

munication between them and the lachrymal bones is cut off by the interposition of a projection of the frontals on either side; the suture between them and the superior maxillary is mortised; the anterior maxillary sends up a broad deep process more than half the length of the nasal bones, and the suture here is exceedingly strong. The bony nasal opening is but small, not one-sixth of the size of that of the sheep, and the apices of the bone form one sharp but rapidly widening point, which is carried forward to the anterior extremity of the maxillary. The suture between the nasals themselves is often so intricate, that before the animal is two years old, the upper part of it is perfectly obliterated, and the nasal cavity appears as if only covered by one bone. A very slight comparison of the face of this animal with that of any other, will prove that strength is the object here in view—strength towards the inferior part of the bone. In point of fact, the snout of the hog is his spade, with which, in his natural state, he digs and grubs in the ground for roots, earth-nuts, worms, &c. And to render his implement more perfect, an extra bone is added to the nasal bone. This one is short and trifling, and placed directly before the nasal bones, with which, and with the edges of the anterior maxillary, it is connected by strong ligaments, cartilages, and muscles. This bone has been termed the *spade-bone*, snout-bone, and, by some writers, the *vomer*, from its supposed resemblance to a ploughshare. By it and its cartilaginous attachment is the snout rendered strong as well as flexible, and far more efficient than it could otherwise be; and the hog often contrives to give both farmers and gardeners very unpleasant proofs of its efficiency, by ploughing up deep furrows in newly-sown fields, and grubbing up the soil in all directions in search of his living and dead food.

The palatine bones constitute the crescentic and posterior border of the palate and nasal cavity: they do not advance further than just before the last molar tooth, instead of occupying a considerable portion of the palate. The palatine processes consist merely of bony laminae.

As roots and fruits buried in the earth form the natural food of the hog, his face terminates in a strong muscular snout, insensible at the extremity, and perfectly adapted for turning up the soil. There is a large plexus of nerves proceeding down each side of the nose, and ramifying over the nostril, and in these doubtless reside that peculiar power which enables the hog to detect his food, though buried some inches below the surface of the ground. The olfactory nerve, too, is large, and occupies a middle rank between that of the herbivorous and carnivorous animals; it is comparatively larger than that of the ox: indeed few animals, with the exception of the dog, are gifted with a more acute sense of smell than the hog. To the acute sense of the hog are epicures indebted for the truffles which form such a delicious sauce, for they are the actual finders. A pig is turned into a field and suffered to pursue his own course, and watched. He stops, and begins to grub up the earth—the man hurries up, drives him away, and secures the truffle, which is invariably growing under that spot, and the poor pig goes off to sniff out another, and another, only now and then being allowed, by way of encouragement, to reap the fruits of his research. And how many a school-boy has, by watching a hog along the hedge sides, and driven him away just as he began to dig, secured a fine juicy earth nut!

The muscles, too, of the snout of the hog require some notice. According to Cuvier, there are four principal muscles proceeding to it; the superior of these proceeds from the lachrymal bone, which occupies a rather large rhomboidal space upon the cheek, and its tendon bears upon the snout, but does not approach sufficiently near it to unite with it. The next two are situated immediately beneath, and proceed from the maxillary bone; these are partially united, but their tendons pass on separately, one on the one side and one on the other of the extremity of the snout; and the fourth and smallest passes obliquely beneath the tendons of the others, from the nasal bone towards the insertion of the second and third muscles. These longitudinal muscles are enveloped in annular fibres, which appear to be a continuation of the *orbicularis* of the lips, and give to the snout its extreme flexibility.

THE TEETH.

The hog has fourteen *molar* teeth in each jaw; six *incisors* and two *canines*; these latter are curved upwards, and commonly denominated *tushes*. The molar teeth are all slightly different in structure, and increase in size from first to last: they bear no slight resemblance to those of the human being. The incisors are so fantastic in form as to baffle description; and their destined functions are by no means clear. Those in the