

lower jaw are long, round, and nearly straight; of those in the upper jaw, four closely resemble the corresponding teeth in the horse, while the two corner incisors bear something of the *fleur de lis* shape of those of the dog. These latter are placed so near to the tushes as often to obstruct their growth, and it is sometimes necessary to draw them, in order to relieve the animal and enable him to feed.

It is seldom that it becomes necessary to ascertain the age of the hog by inspecting his teeth, nor is it by any means an easy task to do so; but still it may occasionally be interesting, and, with reference to those intended for breeding, important to be able to do so when necessary.

The calculation of the age of the hog, by means of reference to the mouth, has not yet been carried beyond three years: no writer seems to have gone much beyond the protrusion of the adult middle teeth of the lower jaw.

The hog is born with two molars on each side of the jaw. By the time he is three or four months old, he is provided with his incisive milk teeth and the tushes: the supernumerary molars protrude between the fifth and seventh months, as does the first back molar; the second back molar is cut at the age of about ten months, and the third generally not until the animal is three years old. The upper corner teeth are shed at about six or eight months, and the lower ones at about seven, nine, or ten months old, and replaced by the permanent ones. The milk tushes are also shed and replaced between six and ten months old. The age of twenty months, and from that to two years, is denoted by the shedding and replacement of the middle incisors, or *pincers*, in both jaws, and the formation of a black circle at the base of each of the tushes. At about two years and half or three years of age, the adult middle teeth in both jaws protrude, and the pincers are becoming black and rounded at the ends.

After three years, the age may be computed by the growth of the tushes; at about four years, or rather before, the upper tushes begin to raise the lip; at five they protrude through the lips; at six years of age, the tushes of the lower jaw begin to show themselves out of the mouth, and assume a spiral form. These acquire a prodigious length in old animals, and particularly in uncastrated boars; and as they increase in size they become curved backwards and outwards, and at length are so crooked as to interfere with the motion of the jaws to such a degree that it is necessary to cut off these projecting teeth, which is done with the file or with nippers. (*Traité de l'Âge du Cheval, du Pœuf, du Mouton, du Chien, et du Cochon*, par N. F. et J. Girard.)

THE BRAIN.

This important organ is not so large as from an external view of the cranium we should be led to suppose, the frontal and sphenoidal sinuses contracting the limits of the cranial cavity, and rendering it narrow; it is, however, considerably larger in proportion to the size of the animal than that of the ox or sheep, being about 1-500th part of the weight of the animal; while that of the ox is only 1-800th part, and that of the sheep only 1-750th part. The irregularities of the surface, or those prominences and depressions which define the organs in phrenology, are more marked in the pig than in the horse, taking the size of the animal into consideration, but not so much marked as in the dog.

The brain of the hog, like that of our other domesticated animals, is composed of two substances differing materially in appearance and structure; the one is of a pale gray or ashy hue, and termed the *cortical* or *cineritious substance*; and the other from its pulpy nature, and from being found deeper in the brain, the *medullary substance*.

These two distinct component parts of the brain are allowed by all scientific men to be intended for the discharge of two distinct functions. The mind or reasoning power is supposed to reside in the cineritious portion; and hence the preponderance of that substance in the human brain; while the medullary portion is merely the recipient of outward impressions upon the senses. There is very little difference between the proportions of these two substances in the brain of the hog and that of the sheep; if anything, the hog has more of the cineritious portion than the ox; a proof, physiologists would say, that his reasoning powers or moral faculties are greater. There are anecdotes enough to prove that the hog is possessed of memory, attachment, and social qualities; but at present the system of treatment affords no scope for the development of any but mere brute and gluttonous instincts.