

CHART OF THE AGE OF THE DOMESTIC ANIMALS

By A. LIAUTARD, M.D., V.S., (American Veterinary College)

AGE OF THE HORSE

The best way to tell the age of animals is by the teeth. This knowledge, though put in practice for many years, was, however, never brought to almost perfection until Pessina and Girard, Jr., had made known all the characters, almost positive, by which the age of horses could be determined for 8 years.

The lower incisors present us those characters; the upper are more difficult to examine and more difficult to wear.

Lower incisors are divided into:—Nippers, A, (Fig. 1); Dividers, B; Corners, C.

Each one has a free part, or *crown*, and a portion contained in the alveolar cavity, the *root*.

The crown has an anterior A, (Fig. 2), and a posterior face B, an internal C, an external D, an anterior E, and a posterior F, surrounding at the superior extremity a cavity—the *external dental cavity*—which by the wearing of the borders becomes smaller, until, when almost disappeared, the tooth is said to be *worn*.

Fig. 3 shows a longitudinal section of tooth, exhibiting the structure: aa', enamel; bb', dentine or ivory entirely surrounded by the enamel; c, dental pulp contained in the *internal dental cavity*.

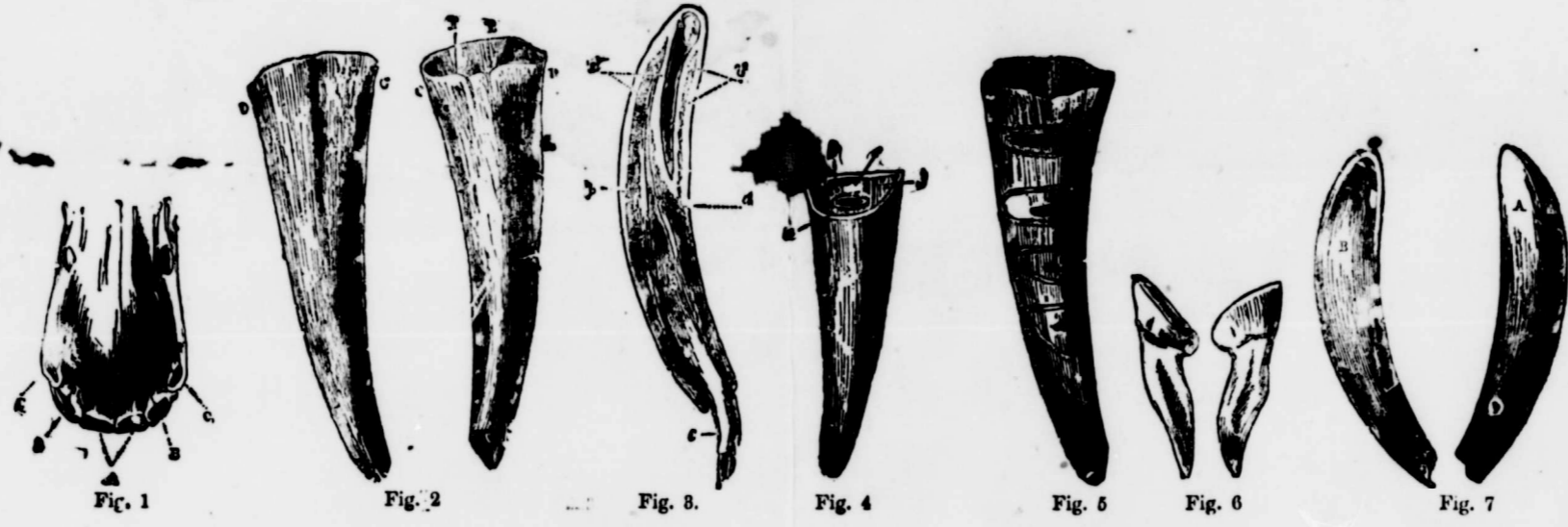


Fig. 4 is a transverse section showing: a, the *cul-de-sac* of the external dental cavity surrounded by b, *central enamel*, with c, the *dental star*—first shade of the internal dental cavity; the whole being surrounded by d, the *surrounding enamel*.

Fig. 5 points out the different shapes of the tooth in different parts of its length. First, flattened from forward backwards; then oval; then rounded triangular, and finally, or flattened from side to side. These will be most essential in determining the age in the third period of life of the animal.

Fig. 6 is a milk or caduet tooth, and Fig. 7 represents the canine or tusks; which are missing in mares, or, if they exist, are only rudimentary.

FIRST PERIOD.—Colts generally are born without teeth, but they make their appearance in from twenty-four hours to a few days. The nippers then come out by their anterior border, and at one month (Fig. 8) the posterior border is on a level. About the same time the dividers begin to show themselves, and for some time the colt remains with eight teeth only (Fig. 9). The corners vary in their growth between the sixth and tenth months (Fig. 10). From ten months to a year the caduet nippers are worn; at eighteen months the caduet corners are worn; at two years a full mouth of worn milk teeth is found.



YEARS		Map of the Second and Third Periods			
Figures		NIPPERS	DIVIDERS	CORNERS	OBSERVATIONS
2½ to 3½	11	Appearance and growth of Caduet nippers.	Milk teeth worn.	Milk teeth worn.	
3½ to 4½	12	Nippers of second dentition.	Appearance and growth of permanent dividers.	Milk teeth worn loose, more or less, and ready to make room for corners of second dentition.	
5	13	Worn more or less completely.	On a level with nippers. Posterior border on a line with anterior.	Lower than dividers. Notch on posterior border, which is lower than anterior.	Then the corners are fresh and well grown out. Dental arch forms a regular semicircle.
6	14	Worn. External cul-de-sac slightly concave in its middle.	Worn. (†)	On a level with dividers. Anterior border worn down.	
7	15	Central enamel triangular.	Worn. External cul-de-sac slightly concave in its middle.	Posterior border on a level with anterior. Begins to be worn.	Notch in superior corners of many horses.
8	16	Oval. Central enamel narrow, and near posterior border.	Oval. (†) Central enamel triangular.	Worn. Central enamel concave in its middle.	
9	17	Rounded. Central enamel round and very near posterior border.	Oval. Central enamel round, and near posterior border.	Oval. Central enamel triangular.	
10	18	Rounded. (†) Central enamel round, and still near posterior border.	Rounded. (†) Central enamel as in nippers.	Oval. Central enamel as in others.	Appearance of internal cul-de-sac as a small yellow or grayish band, transverse and situated between central enamel and anterior border of tooth.
11	19	Rounded. Central enamel has disappeared more or less.	Rounded. Central enamel as in others.	Rounded. (†) Central enamel as in others.	
12	20	Rounded. Central enamel almost gone.	Rounded. Central enamel has disappeared.	Rounded. Central enamel has disappeared.	Central enamel of superior corner has disappeared.
13	21	Rounded.	Rounded.	Rounded.	
14	22	Triangular. (†)	Rounded.	Rounded.	
15		Triangular.	Triangular. (†)	Triangular. (†)	
16		Triangular.	Triangular. (†)	Triangular. (†)	
17		Triangular.	Triangular.	Triangular. (†)	
18		Triangular.	Triangular.	Triangular.	
19		Flattened sideways. (†)	Triangular.	Triangular.	
20		Flattened sideways.	Flattened sideways. (†)	Triangular.	
21		Flattened sideways.	Flattened sideways.	Flattened sideways. (†)	
22		Flattened sideways.	Flattened sideways.	Flattened sideways.	



Fig. 23 shows a defective jaw of an old horse, in which the external dental cavity is yet remaining; the excessive length of the teeth of those animals allows to make out the age by adding to the age given by the marks of the crown as many years as there are lines in excess in its length. Fig. 24—Jaw of a cribber, with wearing of the teeth on their front face. Fig. 25—Bishop's mouth, easily recognized by the shape of the teeth, the presence of the dental star which is not surrounded with enamel.

AGE OF CATTLE, SHEEP, DOGS AND PIGS

The CALF is often born with the nippers and first middle teeth, or at least they are out in the first eight days. Towards the twentieth day the second middle teeth appear, and at the end of a month, the corners. However, the dental arch is not perfect and round or full until five or six months.

The wear of the teeth varying with the mode of feeding, in general it may be said, that the milk nippers are worn at ten months, the first middle teeth at one year, the second middle incisors at fifteen months, and the corners at twenty months (Fig. 26). At this time, the caduet nippers are shed and replaced by the permanent nippers, which are at their full growth at two years (Fig. 27).

From two and a half to three years, appearance of the first middle permanent incisors (Fig. 28).

From three and a half to four, that of the second middle permanent incisors (Fig. 29).

From four and a half to five, that of the corners (Fig. 30).

From five to six years, the jaw is full well round.

From seven to eight, the nippers are worn.

From eight to nine, the middle teeth are worn.

At ten years, the corners are worn.

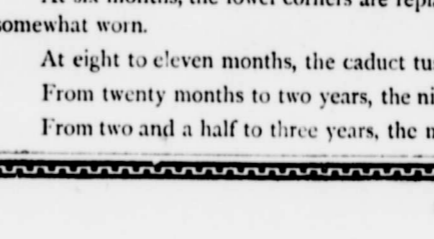
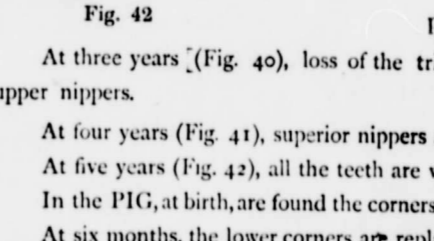
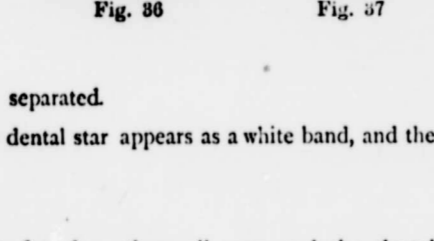
At eleven years, the teeth begin to be quite short and somewhat separated.

At twelve, the separation of the teeth is well marked. The dental star appears as a white band, and the teeth assume a square rubbing shape (Fig. 31).

After this age the characters are only vague and approximative.

The LAMB is ordinarily born without teeth, but in about twenty-five days these all grow, and the dental arch is full and round at three months (Fig. 32).

Towards eighteen months, the milk nippers are replaced by those of adults (Fig. 33).



Towards two years, the first middle milk teeth drop and are replaced by the adult teeth (Fig. 34).

From three to three and a half years, the second middle adult teeth grow (Fig. 35).

From four to four and a half years, the corners of second dentition are appearing (Fig. 36).

At five years, the dental arch is round.

At nine years, all the teeth are worn (Fig. 37).

At birth, the PUP has generally all its incisive teeth. At that time his eyes are closed and remain so until the twelfth to fifteenth day. At two months begins the appearance of the permanent teeth. At five months all the incisives and tusks are replaced by adult teeth; at eight months their growth is complete.

Large dogs make teeth sooner than little ones.

At one year, their teeth are fresh and without wear (Fig. 38).

At two years (Fig. 39), wearing of the low nippers and disappearance of the trifolium shape.

At three years (Fig. 40), loss of the trifolium shape of the inferior middle, and beginning of wear on the upper nippers.

At four years (Fig. 41), superior nippers are worn and the teeth are becoming yellow.

At five years (Fig. 42), all the teeth are worn. From that time, it is impossible to tell the animal's age.

In the PIG, at birth, are found the corners and tusks; and at three or four months the milk incisives are present.

At six months, the lower corners are replaced by the permanent ones, the nippers and middle teeth being somewhat worn.

At eight to eleven months, the caduet tusks are replaced by those of second dentition.

From twenty months to two years, the nippers are replaced by adult ones.

From two and a half to three years, the middle teeth undergo the same change.