

HOW TO TELL
The Age of the Domestic Animals.

BY

A. LIAUTARD, M.D., V.S.

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HOW TO TELL

The Age of the Domestic Animals.

BY

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HOW TO TELL THE AGE

OF THE

DOMESTIC ANIMALS.

THE AGE OF THE HORSE.

The best and only scientific 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 detected after eight years.

The lower incisives, in herbivora, are those which present us those characters; the upper being more irregular in their wear, and more difficult to examine and observe.

The lower incisives are divided into :—Nippers, A, (Fig. 1); Dividers, B; Corners, C.

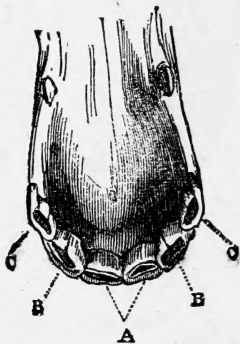


Fig. 1.

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 pos-

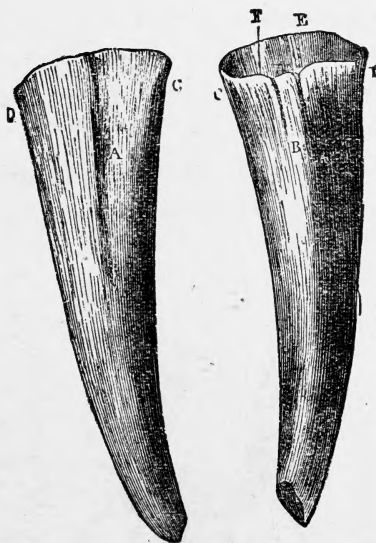


Fig. 2.

terior face B, an internal C, an external D, an anterior E, and a posterior border 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 a tooth, ex-



Fig. 3.

hibiting the structure: *aa'*, enamel; *bb'*, dentine or

ivory, entirely surrounded by the enamel; *c*, *dental pulp* contained in the *internal dental cavity*, which shows itself on the dental table as a white mark, known as the *dental star*.

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. 4.

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



Fig. 5.

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



Fig. 6.

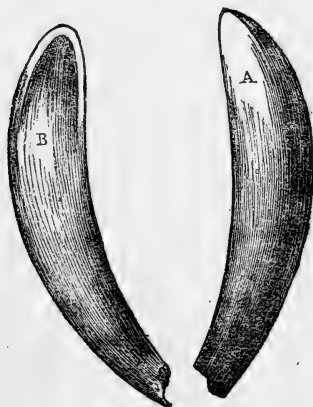


Fig. 7.

The incisors implanted in the two maxillary bones form what is known as the incisive arch. Meeting naturally those of the upper with those of the lower jaw they form two arches or curves—one from above below, and one from one side to the other, supero-inferior and transversal arch, which vary much, ac-

ording to the age of the animal and specially in the old ones.

A tooth is said to be worn when the external dental cavity has been much reduced in depth by wearing of the plate, and when there remains but the *cul de sac* of the same cavity surrounded by central enamel.

The life of an animal may be divided, taking in consideration the changes that take place in the evolution and alteration of the teeth, into three periods :

1st.—Change of caduct teeth.

2d.—Growth and wearing of the adult.

3d.—Change in the adult.

FIRST PERIOD.

Colts are generally born in the Spring—no incisives present. First and second molar, and at the end of the first month, the third molar. The incisives, however, will 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,

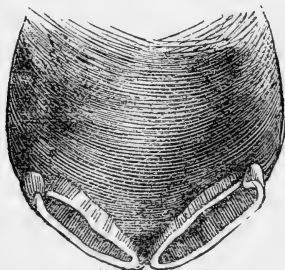


Fig. 8.

About the same time the dividers begin to show themselves, and for some time the colt remains with eight incisives only, the growth taking place between thirty and forty days (Fig. 9).

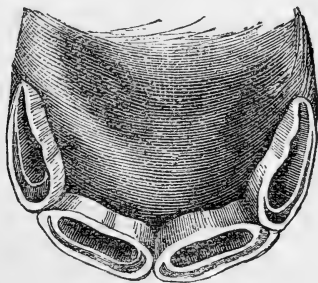


Fig. 9.

The corners vary in their growth between the sixth and tenth months (Fig. 10).

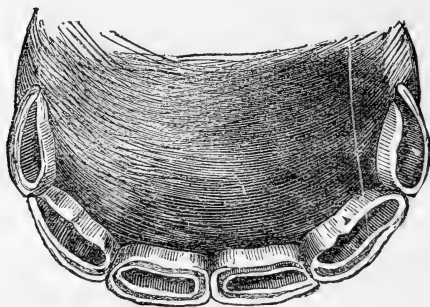


Fig. 10,

All these teeth, as they gradually appear, undergo a process of wearing, and in this way we obtain another character, viz.: that the caduct nippers are worn at about ten months to a year, the dividers are at eighteen months, and at two years a full mouth of worn milk teeth is found.

SECOND PERIOD.

$2\frac{1}{2}$ to $3\frac{1}{2}$. Appearance and growth of the caduct nippers; milk dividers and corner teeth worn (Fig. 11).

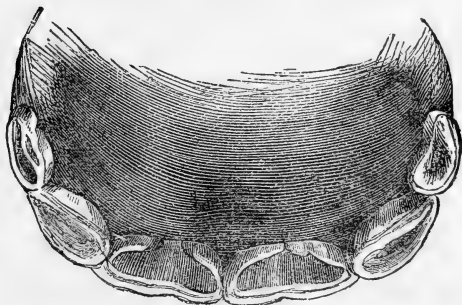


Fig. 11.

$3\frac{1}{2}$ to 4. The nippers are those of second dentition. The permanent dividers make their appearance and grow out of the alveoli. Milk corner teeth worn loose, more or less, and ready to make room for the corners of second dentition (Fig. 12).

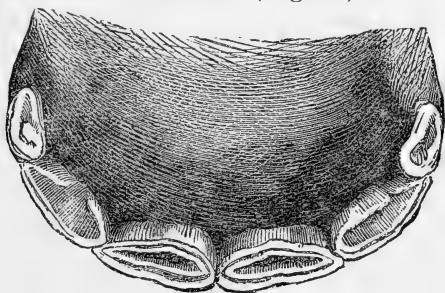


Fig. 12.

5 years. The nippers are worn more or less completely. The dividers are on a level with the nip-

pers, and have their posterior border on a level with the anterior (Fig. 13).



Fig. 13.

The corners are lower than the dividers. There is a notch on the posterior border which is lower than the anterior. Sometimes this notch is very deep and extends down on the posterior face of the tooth, which is then called a *shell tooth*.

Then the corners are fresh and well grown out. The two dental arches form a regular semi-circle from above below, and from one side to the other.

6 years. The nippers are worn. The cul-de-sac of the external dental cavity is slightly worn in its middle.

The dividers are becoming worn; the corners are on a level with the dividers, and present their anterior border worn down (Fig. 14).

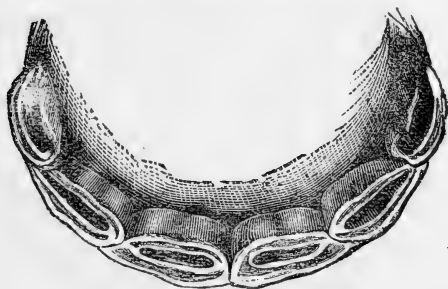


Fig. 14.

7 years. In the nippers the central enamel is becoming triangular. The dividers are worn and have the external cul-de-sac slightly concave in the middle, while in the corners the posterior border is worn some and the tooth also begins to wear. It is not uncommon to find at that age a notch on the superior corners (Fig. 15).

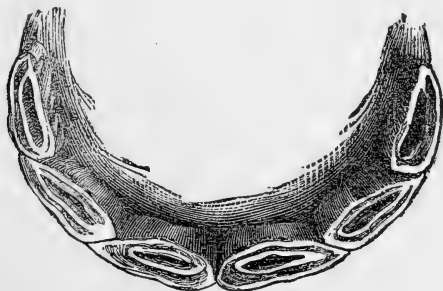


Fig. 15.

8 years. The nippers are oval, the central enamel is narrow and near the posterior border. The dividers are becoming oval and present a central enamel triangular. The corners are worn and show their central enamel concave well in the middle of the dental plate.

It is then, at that age of 8 years, that all the teeth of second dentition are worn (Fig. 16).

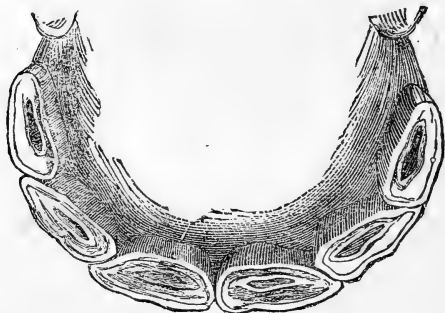


Fig. 16.

THIRD PERIOD.

9 years. The nippers are rounded, their central enamel round is very near the posterior border.

The dividers are yet oval and have the central enamel much like that of the nippers.

In the corners, which are oval, the central enamel is still of a triangular shape (Fig. 17).

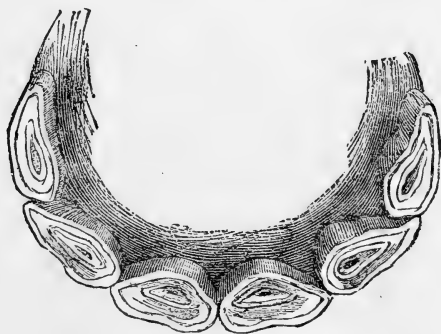


Fig. 17.

10 years. The nippers are rounded. The central enamel, which is round, is still nearer the posterior border, and is small. The dividers are nearly round, while the corners still remain oval. The supero-inferior arch of the teeth becomes more angular.

11 years. The central enamel has disappeared in the nippers, while in the others it is very small. All the teeth are round. On the surface of the nippers and between what remains of the central enamel on the dividers and corners, appears the cul-de-sac of

the internal dental cavity, the dental star, as a small yellow or grayish band, transverse and situated between the enamel and the anterior border of the tooth.

12 years. All the teeth are rounded, and in all the central enamel has disappeared. The teeth meet still more in forming an angle open towards the mouth (Fig. 18).

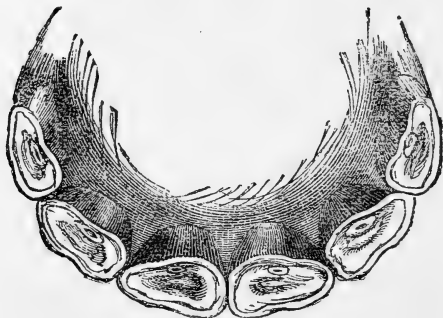


Fig. 18.

13 years. There is but little change with the above. All the teeth have yet the same shape—they are all rounded.

14 years. The nippers are becoming triangular. The dividers and corners remain rounded. The

transverse arch of the teeth becomes narrower (Fig. 19).

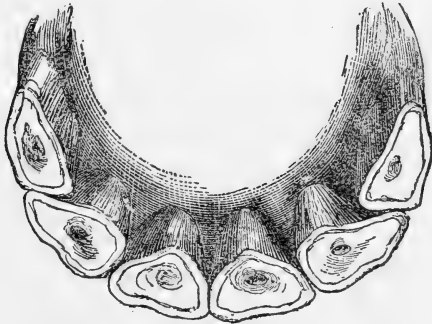


Fig. 19.

15 years. The nippers are triangular, the dividers becoming so, the corners still rounded.

16 years. The dividers are nearly triangular and the corner teeth assuming that shape.

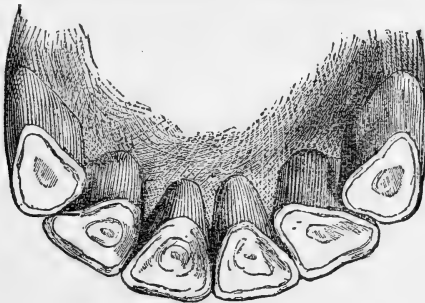


Fig. 20.

17 years. The corners are still more so (Fig. 20), and at **18 years** the incisive arch is occupied with triangular teeth all through (Fig. 21).

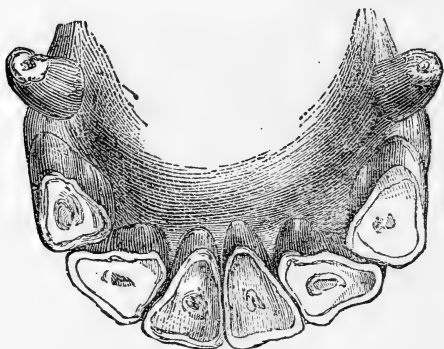


Fig. 21.

19 years. The last change begins. The nippers assume a flattened sideways shape. At

20 years they are flattened from side to side, the dividers becoming so. At

21 years these last are also flattened sideways, when at

22 years the entire arch contains also teeth flattened in the same conditions, representing the last

form represented by the tooth towards its root (Fig. 22.)

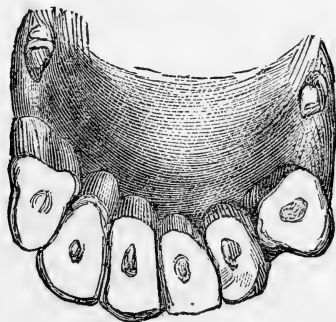


Fig. 22.

From 19 years the horizontality of the teeth is becoming more and more marked in such a manner that at 21 the inferior incise arch is almost straight.

IRREGULAR MOUTHS.

On account of the peculiar nature of some of the elements of the tooth and of its anatomical structure, some jaws will either wear out too rapidly, while others will not, and on this account a young animal may present an old mouth, or an old individual will show all the characters of a young

mouth. To approximate the age exhibited by such a mouth we will take off from the characters shown in the first case, or add to those of the second as many years as by approximation the tooth will show in measuring by lines the number which would be necessary to add or to take off to give the tooth its normal length.

Fig. 23 shows a defective jaw of an old horse, in

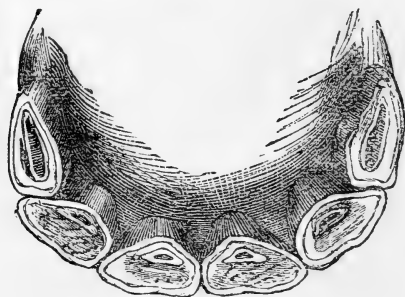


Fig. 23.

which the external dental cavity is yet remaining; the excessive length of the teeth allows us 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.

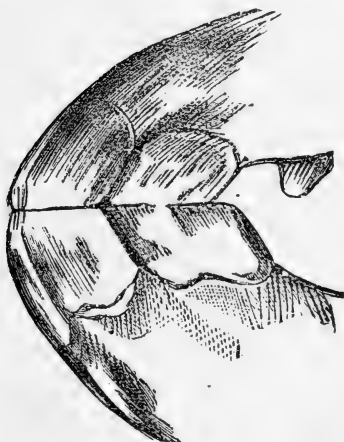


Fig. 24.

Fig. 24 shows the jaw of a cribber, with the wearing of the teeth on the front jaws.

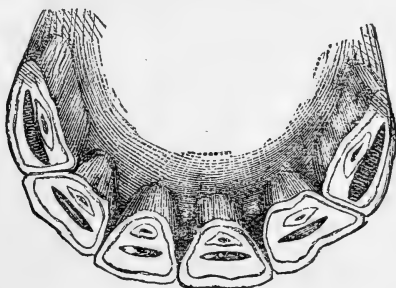


Fig. 25.

Fig. 25 is a bischopped mouth, easily recognized by the shape of the teeth and the presence of the dental star, which is not surrounded by the central enamel.

AGE OF CATTLE.

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*. At this time the

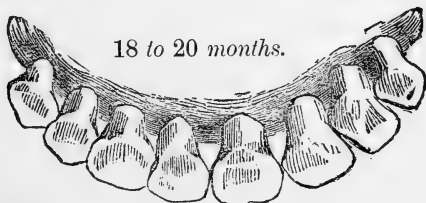


Fig. 26.

caduct nippers are shed and replaced by the permanent nippers, which are at their full growth at two years.

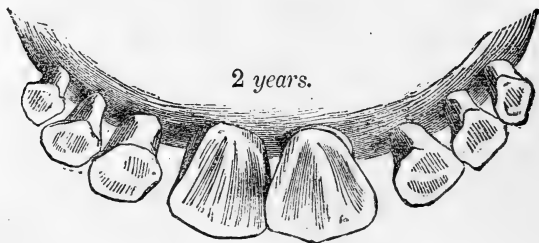


Fig. 27.

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

From three and a half to four, that of the second middle permanent incisives (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.

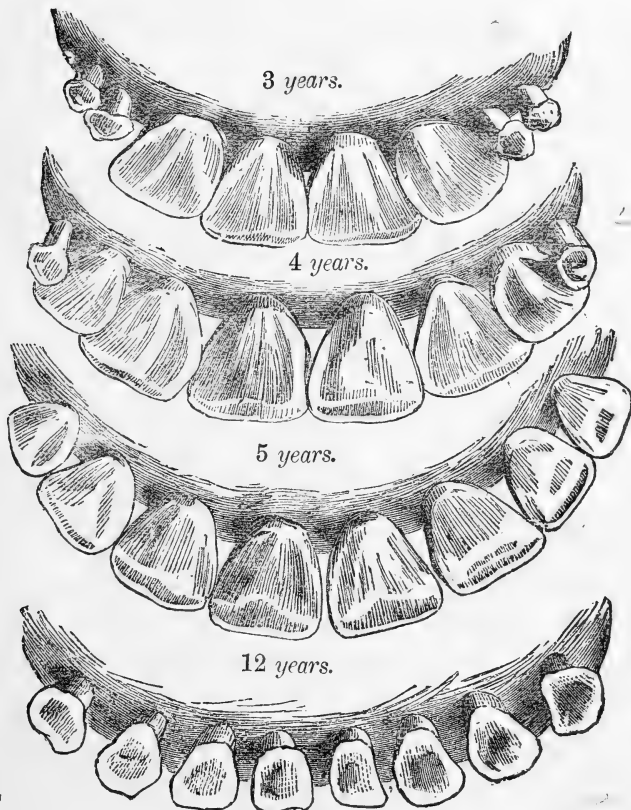


Fig. 28, 29, 30 and 31.

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.

AGE OF SHEEP.

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).

3 months.



Fig. 32.

18 months.



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).



Fig. 34.



Fig. 35.



Fig. 36.



Fig. 37.

AGE OF THE DOG.

At birth, the pup has generally all its incisives 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 lower nippers and disappearance of the trifolium shape.

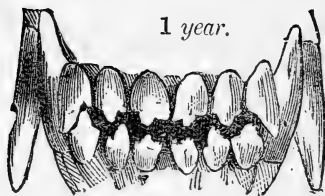


Fig. 38.



Fig. 39.



Fig. 40.



Fig. 41.

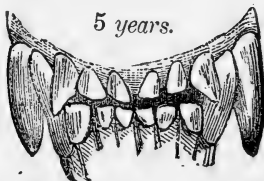


Fig. 42.

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.



AGE OF 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 caduct 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.



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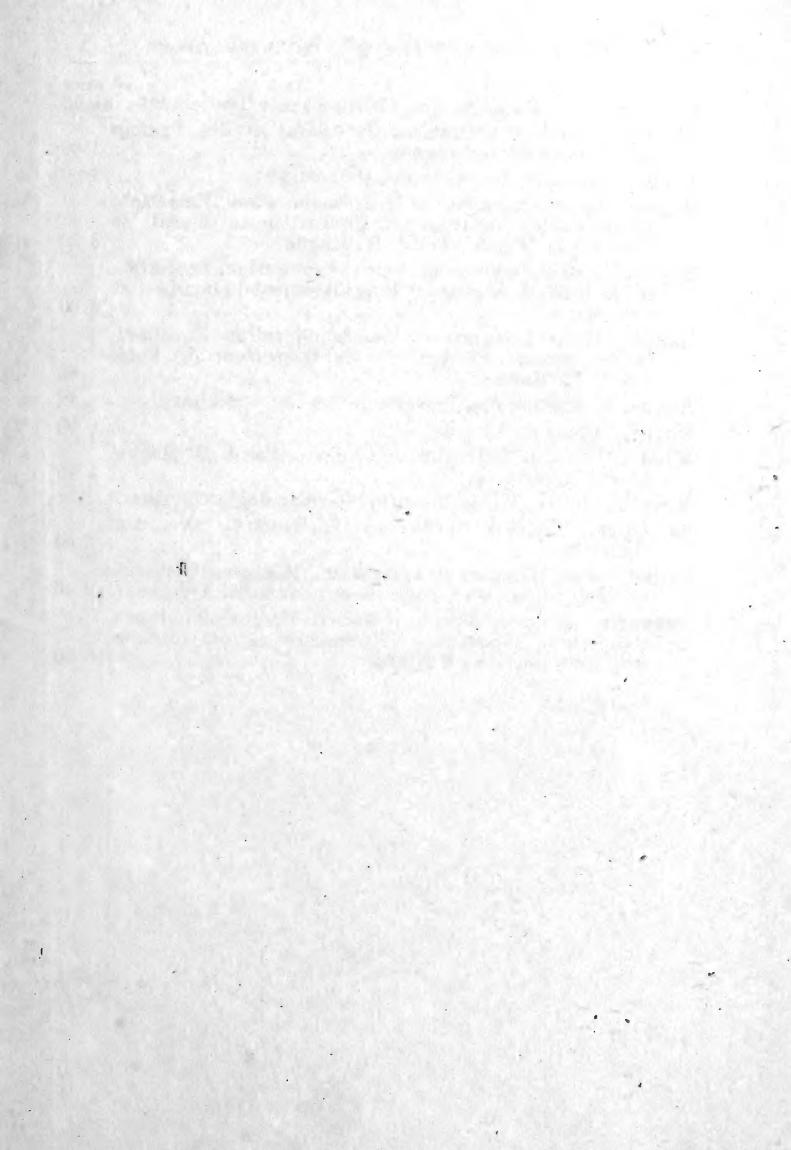
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