

Stomach

***The stomach (gastric, Ventriculus):** Is the large dilatation of the alimentary canal caudal to the diaphragm which located between the esophagus and the small intestine.

***Classification of stomach:**

A-According to the number of cavities:-

1-Monolocular stomach → It is contain one cavity in (dog, horse, pig, all animals except ruminant).

2-multilocular stomach → It is contain many cavities in { {Ruminant}}.

B-According to type of mucous membrane:-

- 1-Simple stomach:- It's containing glandular mucous membrane (dog, cat, human).
- 2-compound stomach:- It's containing two types
 - a-glandular mucous membrane.
 - b-aglandular or non glandular mucous membrane. (horse, ruminant, pig).

Fixation of the stomach:-

- 1-Pressure of adjacent organs.
- 2-Blood vessels (artery, veins and nerve suppling.
- 3-esophagus.

4-duodenum.

5-Greater omentum.

6-Lesser omentum.

7-Hypo gastric ligament.

8-Hypo duodenal ligament.

9-Gastrosplenic ligament.


Comparative of stomach :-

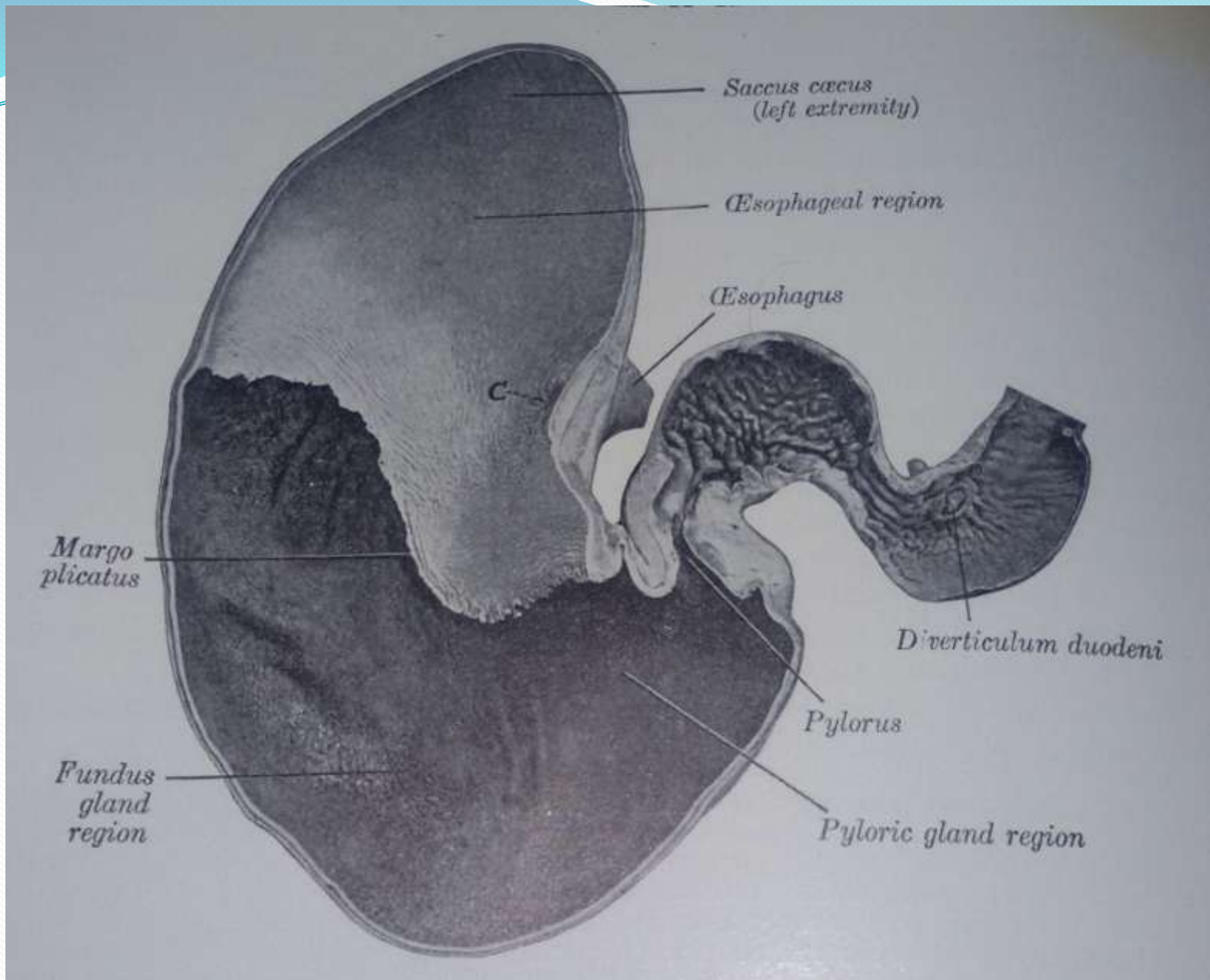
Stomach of Horse:-

1-Its monolocular compound stomach.

2-It's J shape.

3-It has two orifice (cardiac and pyloric orifice).

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- 4-It has two surface (parietal and visceral surface).
 - 5-It has two curvature (Lesser and greater curvature).
 - 6-The horse stomach consists of a non-glandular proximal region (saccus cecus), divided by a distinct border, the margo-plicatus, from the glandular distal stomach.



Stomach of the horse

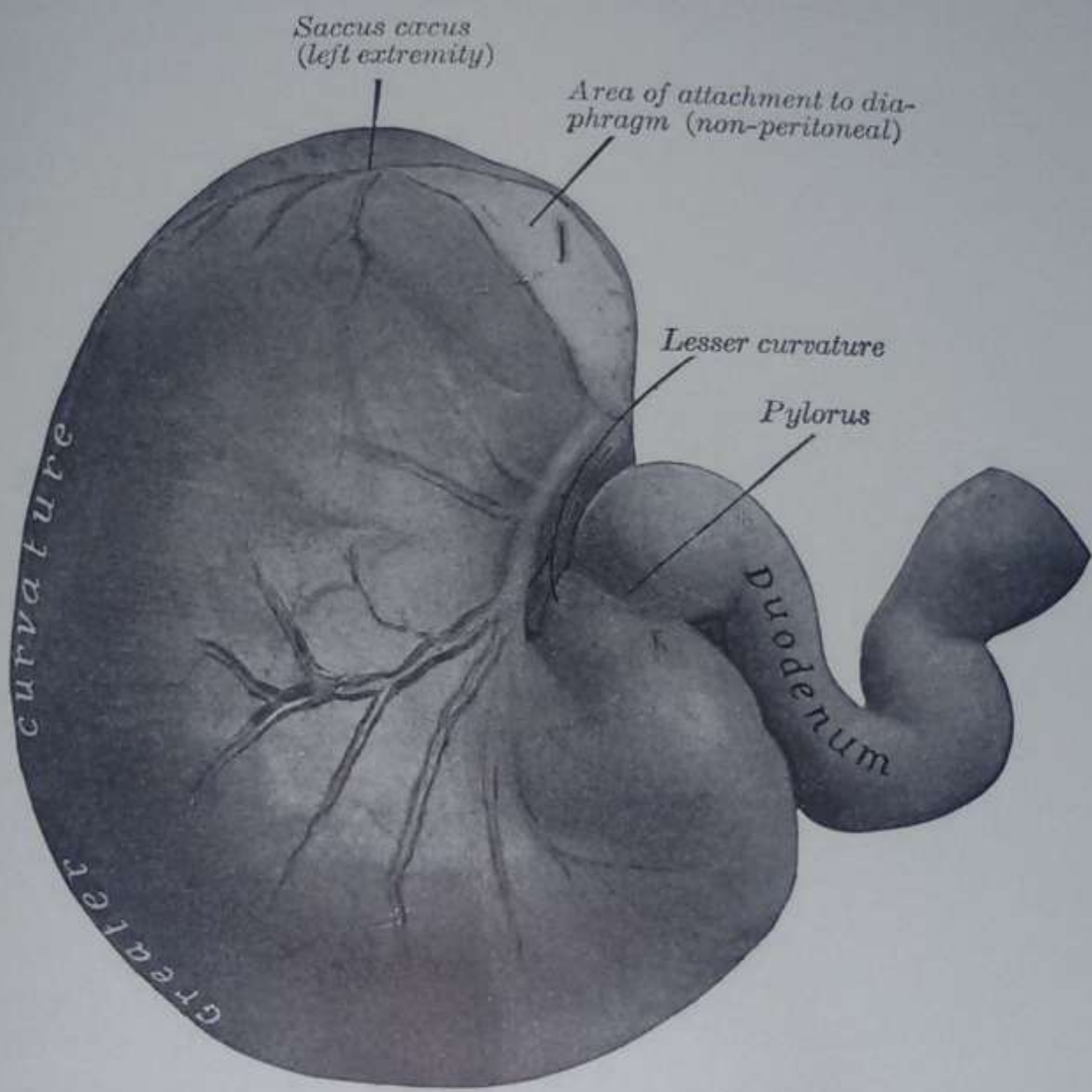


FIG. 355.—STOMACH OF HORSE; VISCERAL SURFACE, WITH FIRST PART OF DUODENUM.

Fixed in situ when full but not distended. The posterior gastric artery and its larger branches with two satellite veins are shown.

Stomach of Dog:-

- 1-It's monolocular simple stomach.
- 2-It has two orifice (cardiac and pyloric orifice).
- 3-It has two surface (parietal and visceral surface).
- 4-It has two curvature (Lesser and greater curvature).
- 5- 6-The dog stomach consists of only glandular mucous membrane.
- 6-The left (cardiac part, fundus and body part) is large and rounded, while the right or pyloric part is small and cylindrical.

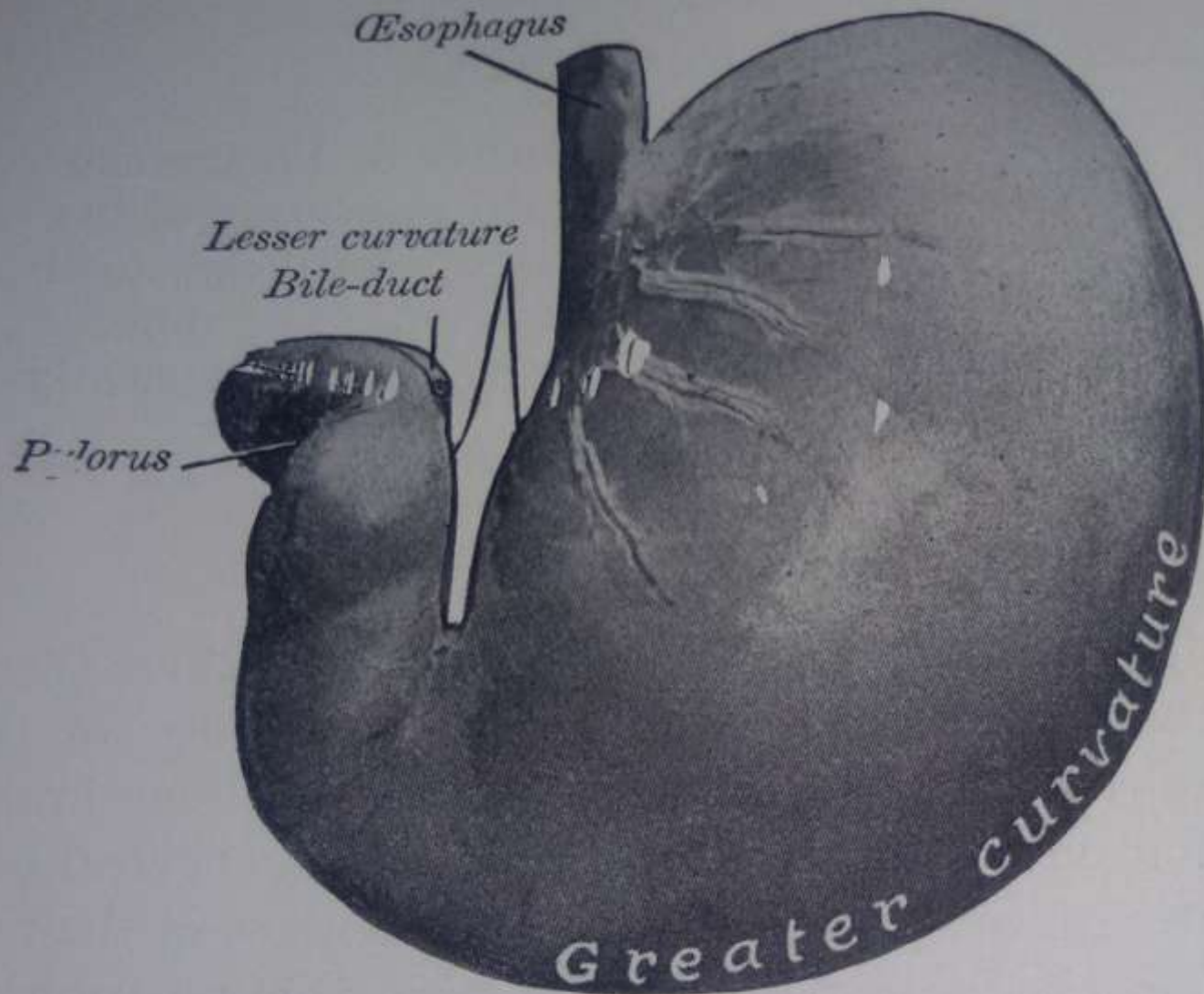


FIG. 438.—STOMACH OF DOG; PARIETAL SURFACE.

Organ fixed *in situ* when well filled.

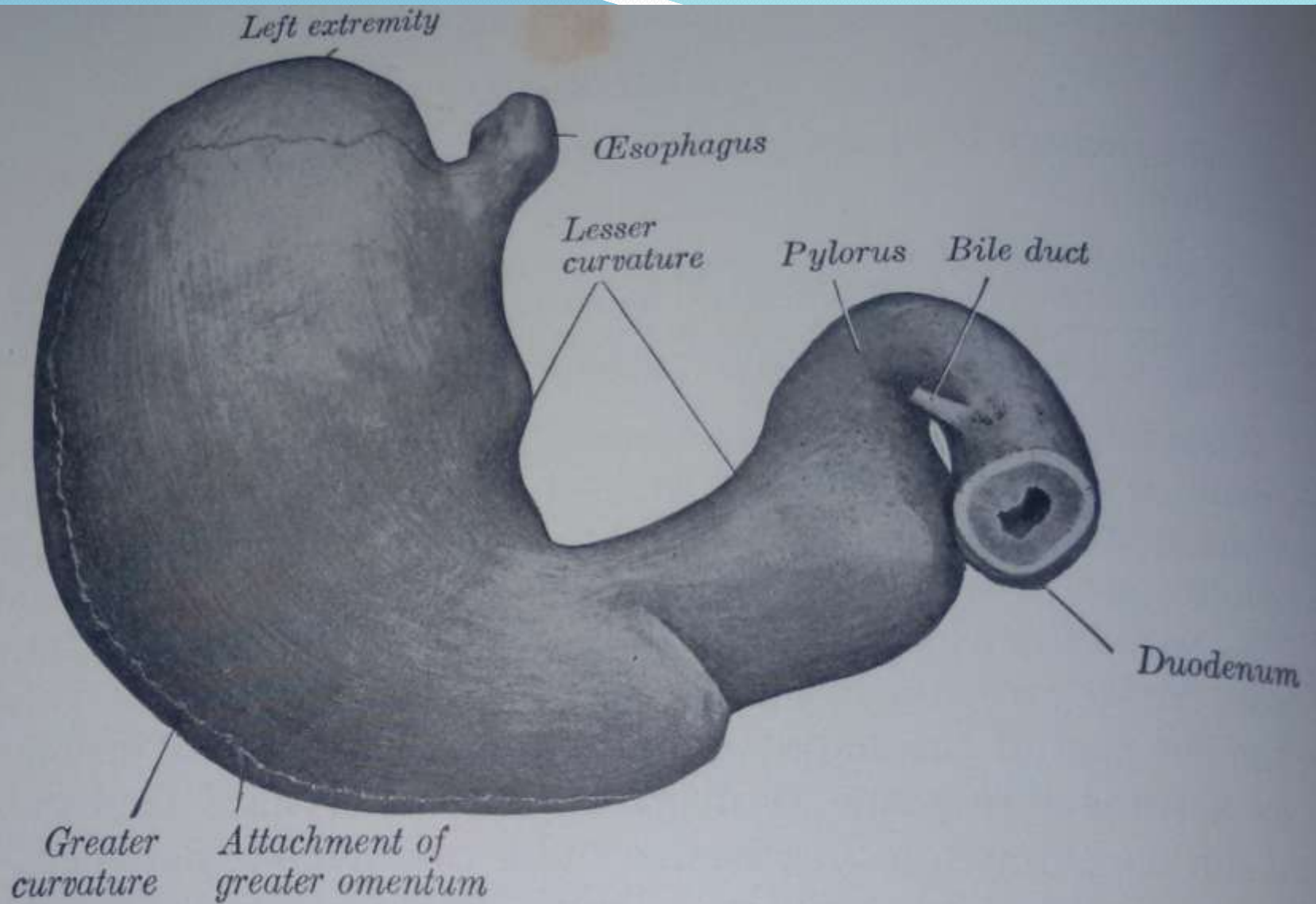


FIG. 439.—STOMACH OF DOG; VISCERAL SURFACE.
Organ fixed in situ when it contained small amount of ingesta.

Stomach of Ruminant:-

- 1-It's multilocular compound stomach.
- 2-It's consist of four cavities (Rumen, Reticulum, omasum and abomasum).
- 3-It is occupied all the left side of abdominal cavity extend from diaphragm to the pelvic inlet and it is extend to right side.
- 4-The first three part is aglandular mucous membrane called proventriculus.
- 5-The fourth part (Abomasum)it is consider glandular stomach (true).

Groove of the rumen:-

- 1-Right longitudinal groove.
- 2-left longitudinal groove.

3-Cranial transverse groove.

4-caudal transverse groove.

5-Dorsal right coronary groove.

6-Ventral right coronary groove.

7-Dorsal left coronary groove.

8-Ventral left coronary groove.

***The rumen characterized by :-**

1-ruminal papillae.

2-ruminal pillars (left and right).

3-longitudinal pillars (cranial and caudal).

4-transverse pillars (dorsal and ventral).

5-coronary pillars and accessory pillars.

6-The rumen has two orifice (cardiac orifice and rumino-reticulum orifice).

7-Mucous membrane of the rumen is aglandular type.

Reticulum:-

1-It is oval in shape.

2-inner surface have shape like honeycomb having small papillae.

3-opening of the reticulum (rumino-reticulum orifice, reticulo- omasum orifice).

Omasum:-

1-It is dome like and have greater curvature.

2-It is located on the right surface of rumen caudal to reticulum.

3-Opening of omasum (reticulo-omasum orifice, Omasal- abomasum orifice).

4-It have about 100 longitudinal fold called omasal laminae. It is different size and length, each laminae have small papilla.

Abomasum:-

1-It is glandular stomach of the ruminant.

2-It is located on the right surface of the rumen.

3-It has greater and lesser curvature.

4-Opening of abomasum (omasal- abomaso orifice, and pyloric orifice).

5-It is glandular stomach and have about 12-14 longitudinal fold in cardiac region.

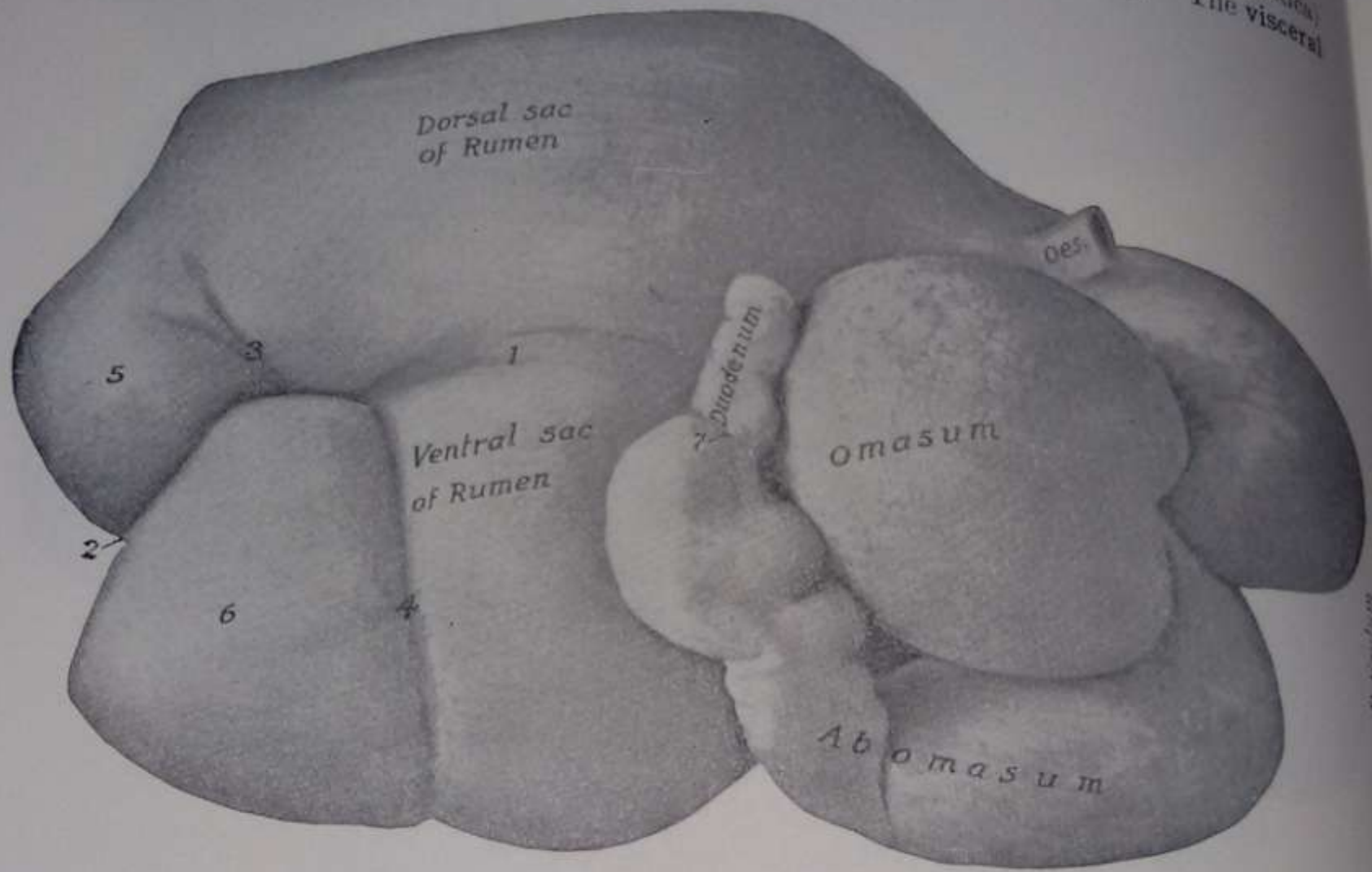


FIG. 388.—STOMACH OF OX; RIGHT VIEW.

Oes., Esophagus; 1, right longitudinal groove of rumen; 2, posterior groove of rumen; 3, 4, coronary grooves; 5, 6, posterior blind sacs of rumen; 7, pylorus.

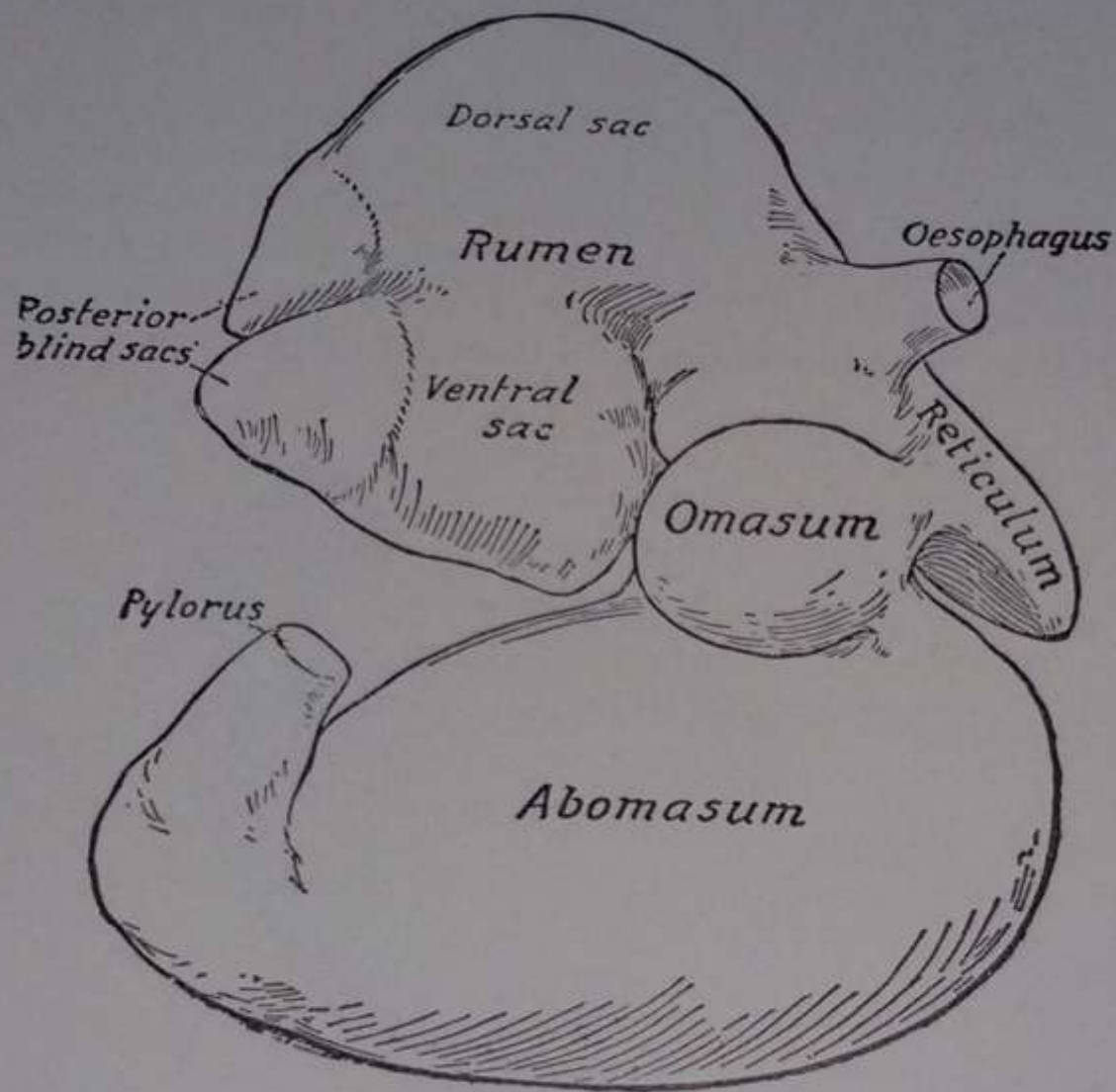


FIG. 395.—STOMACH OF NEW-BORN CALF; RIGHT VIEW.
The rumen is raised.