
On the anatomy of the breast, by Sir Astley
Paston Cooper, 1840

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3-7-1840

On the anatomy of the breast - Plate III: Shewing the udder of the ewe

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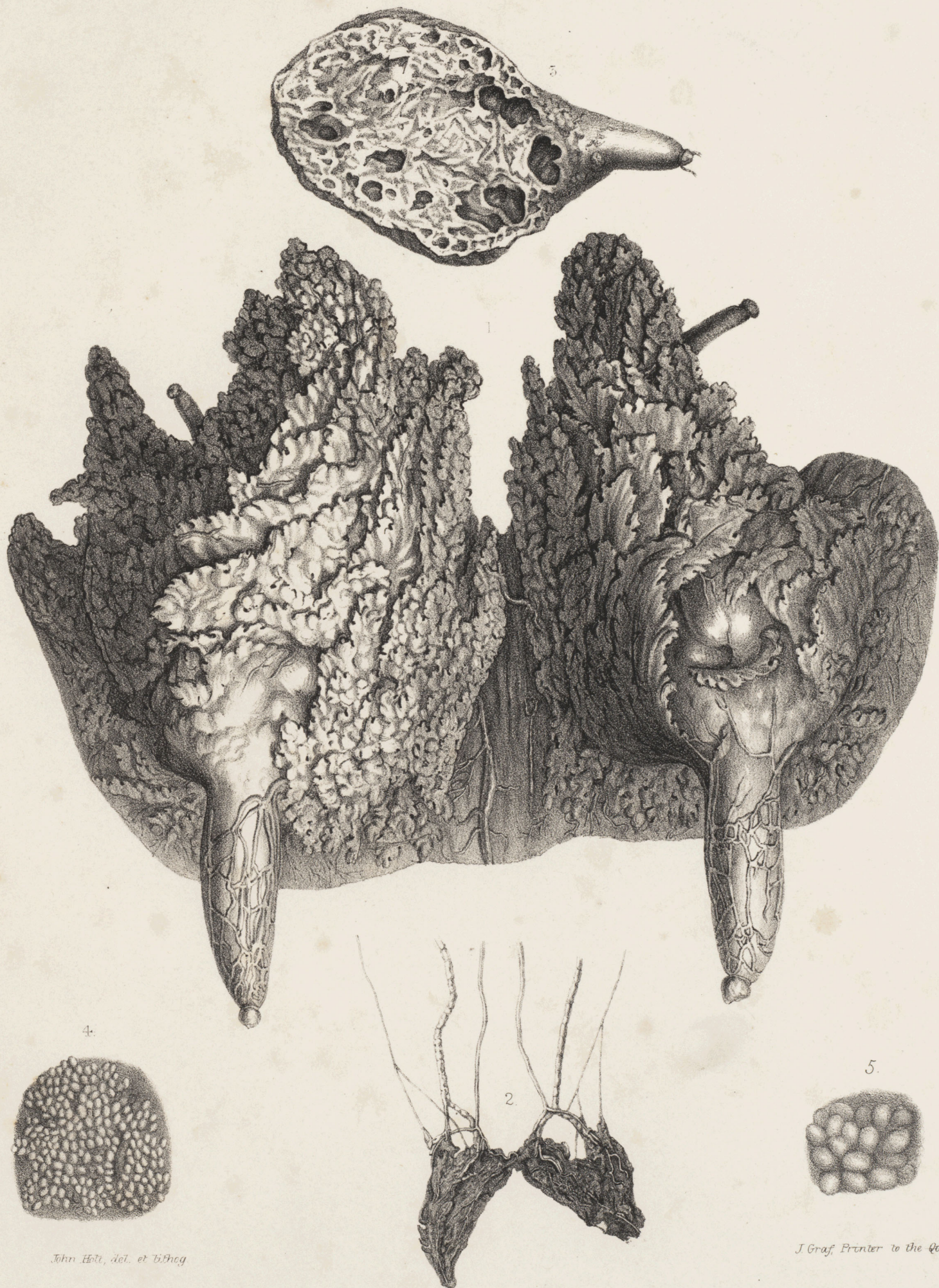
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Cooper, Sir Astley Paston , Bart., "On the anatomy of the breast - Plate III: Shewing the udder of the ewe" (1840). *On the anatomy of the breast, by Sir Astley Paston Cooper, 1840*. Paper 53.
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John Holt, del. et lithog.

J. Gray, Printer to the Queen.

PLATE III.

Shewing the Udder of the Ewe.

There are in the ewe two teats, leading into two large glands, and there are sometimes imperfect teats behind.

The teat is covered by the common integuments condensed at the orifice of the tube, to prevent its dilatation; the teat is covered by wool and little glands.

Under the integuments, an elastic structure is found, composed of cellular fibres, passing in a longitudinal, circular, and oblique direction, which yield to the pressure of the milk, so as to enable the tubes to retain it, and also by their elasticity to discharge and expel it.

Under this elastic tunic is a plexus of arteries and veins, the vessels of which are numerous.

The inner or lining membrane of the tube is of the mucous character, and it possesses a few small glands. The vascular plexus surrounds it, and the common integuments enter about a quarter of an inch into its tube.

The milk tubes of the teats open into a reservoir, capable of containing many ounces of milk, and a mucous membrane lines it, similar to that which lines the teat.

Milk canals begin from the reservoirs, and these form a foliage on the surface of the gland.

The foliage is turned in opposite directions in the two glands.

The foliage contains the glandules, and the milk-cells are capable of being filled with coarse injection.

Fig. 1. Shows the two teats and the vascular covering of the mucous membrane.

At the root of these are the reservoirs injected.

The whole surface of the two glands shows the foliage containing the glandules and cells.

Fig. 2. Shows the foetal glands, with their arteries, veins, and nerves.

The inner line of the three on each side is the artery; the second, the vein ; and the third or outer, is the nerve.

Fig. 3. One gland from an ewe lamb of only six months, in which there was a considerable quantity of milk. A section shows several reservoirs in the interior of the gland in which the milk was contained, a year and an half before it is usually with lamb.

Fig. 4. The milk-cells magnified twenty times.

Fig. 5. The milk-cells magnified fifty times.

Of the Milk of the Ewe.

It is abundant, and is sometimes used as the food of children.

It forms a considerable quantity of cream.

Its butter retains a large quantity of curd, and therefore it easily becomes rancid.

Its cheese is rich but contains much oily matter.

According to Brande its specific gravity is 1·036 to 1·041.

Its composition—

Cream	11·5
Butter	5·8
Casein or Curd	15·3
Sugar	4·2

See Henry, Stiprian Luisius, Bondt.
