

care the specimens of the female *Ornithorhynchus* preserved in the Museum of the Royal College of Surgeons, found the structure to correspond very exactly with the account given by Meckel; and, moreover, succeeded in injecting the ducts of these glands with mercury. He further notices the differences of development occurring in five different specimens: the size of these glands having an obvious and direct relation to that of the ovaria and uteri. The gland itself is composed of from 150 to 200 elongated subcylindrical lobes, disposed in an oblong flattened mass, converging to a small oval areola in the abdominal integument, situated between three and four inches from the cloaca, and about one inch from the mesial line. It is situated on the interior of the panniculus carnosus, the fibres of which separate for the passage of the ducts to the areola; the orifices of these ducts are all of equal size, and occupy an oval space five lines in length by three in breadth; not elevated however in the slightest degree above the surrounding integument. An oily fluid may be expressed from the ducts by squeezing the gland.

A minute description is then given of the anatomical structure of the internal genito-urinary organs of the female *Ornithorhynchus*: from which it appears that if the animal be oviparous, its eggs must, from the narrow space through which they have to pass in order to get out of the pelvis, be smaller than those of a sparrow; and no provision appears to be made for the addition of albumen or of shell in the structure of that part of the canal through which they afterwards descend previous to their expulsion from the body. The ova are enveloped in a tough fibrous membrane in which the traces of vascularity, at least after being preserved in spirits, are not perceptible; whilst in birds the ova are attached by narrow pedicles, and are covered by a thin and highly vascular membrane.

From the whole of this inquiry, the author concludes that these glands are not adapted to the performance of any constant office in the economy of the individual, but relate to a temporary function. Their total absence, or at least their rudimentary condition, in the male, of which the author could perceive some traces in one specimen which he examined, and the greater analogy of their structure to a lacteal apparatus than to that of ordinary odoriferous glands, when taken in conjunction with the correspondence of their development to that of the uterine system, induce him to believe that they are to be regarded as real *mammæ*. This view is confirmed by the fact, noticed by Mr. Allan Cunningham, that the young of this animal readily takes cow's milk, and may be kept alive by this kind of sustenance.

7. "A Physiological Inquiry into the Uses of the Thymus Gland," by John Tuson, Esq. Communicated by J. C. Carpue, Esq. F.R.S.

The author is of opinion that the thymus gland is intended for two purposes: the one to serve as a receptacle of blood for supplying the chasm in the circulation occasioned by the great quantity sent to the lungs as soon as the function of respiration commences: the other to serve as a receptacle of osseous matter preparatory to the extensive ossification which is carried on in the early periods of growth.