

*Anatomical Observations in the Body of a Woman about 50 years old, who died Hydropical in her left Testicle, Decemb. 30 1677. Made and Communicated by the Learned Dr. Henry Sampson. Extracted out of his Latine Copy, by the Author of these Transactions.*

She had been married, but had never born Child. Had been a Widdow for about ten years before her death. In which time she was much oppressed with grief; and her Belly, by degrees, began to swell: yet not much, till about four years before she dy'd, In the year 1678; at which time she weighed 216 *l*. I advised her to the use of *Cathartick Hydragoges*, and *Diureticks*, after the use of which for some time, she weighed but 200 *l*. But still the *morbi-fick* matter was reaccumulated to the diseased Part. So that resolving to forbear further Medicines, within half a year after, she weighed 250 *l*. her belly being, at last, so far distended, as to hang down, as she sat, a good way below her knees.

Being called to open her, I put a Pipe into the Cavity of the *Abdomen*, with intent to exhaust the *Serum* supposed to be gathered therein. But hereupon there issued only some few drops like the white of an Egg. At another place there ran about 20 *l*. of a brownish water or *Serum*; one of the *Vesicles* hereafter mentioned being pierced. Where to enter my knife next, I was almost at a stand, her belly being as yet, scarce at all lessened.

Having separated the *Muscles* of the *Abdomen*, I found no *Serum* or *Hydropick* Water therein; but a heap of *Bladders*, of several sises, presented themselves. From the greatest whereof, being pierced, there issued above 20 *l*. more of a brown and thickish *Serum*, *tinctur'd* with a *Sediment* of the colour of *Umber*. Some of the lesser were about the bigness of a Childs head; which yielded a slimy *Serum*, in consistence and colour, like the *Mucilage* of *Quince* Seeds. Others were much less, some as big as a mans fist, some as an ordinary Apple, and some as a Walnut. In most of which was contained a *Serum* like to the White of an Egg. in some of them, much less *viscous* and somewhat white, like Starch newly boyl'd.

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At the length I perceived, that all these Bladders were parts some way relating to the Womb. Wherefore having separated the *Ossa Pubis*, I took out the Womb, with the *Pudendum*, and parts appendent all together. And then, amongst other particulars, observed, That the right *Testicle* or *Ovary* was but small, white, and its *Vesicles* in a manner dried up. But the left to be swell'd into a Vast bulk: The aforefaid Bladders, in one of which were contained so many pounds of Liquor, being nothing else originally, but the Eggs belonging to this left *Ovary*. Imagine you saw about 40 Bladders, some of a little Pig, others of a Hog, or a Calf, and some of an Oxe: all distended with Liquor, and ty'd, like a Reeve of Onions altogether, and you have also seen this *Ovary*.

The *Testicle* or *Ovary* it self, all the *Serum* being exhausted, weighed (together with the Womb, which was but light) 25 *l*. Out of all the said *Vesicles* or Bladders together, were exhausted above an hundred & twelve pounds of *Serum*. Thus for the Authors own Observations.

The History of the Child that was found in the Mothers Belly out of the Womb, published in the Transactions last foregoing, sc. Num. 139; and this of the *Hydropick Testicle*; may be two Arguments, further to satisfy those who have hitherto doubted of the Female *Testicle* its being an *Ovary*. The former proving the *Vesicles* thereof with the Humor or Humors they contain, to be the Eggs out of which the *Fœtus* is bred. Which as they are used to enter into the Womb by the *Fallopian Tube*: So in this case, it is most likely that the Egg falling off the *Ovary* into the said *Tube*, by some preternatural contraction of its lower *Orifice*, was stopped from issuing thence into the Womb. Yet being, it seems, near enough to receive the Vital Contact, It thereupon began to be enlarged; and so, by reason of its own increasing Bulk, was made gradually to slip back again towards the upper and larger *Orifice* of the said *Tube*, and at last, to drop thence into the Cavity of the *Abdomen*; which now, instead of the Womb, became its Nest.

This latter History of the *Hydropick Testicle* sheweth, That it is possible for the said *Vesicles* or Eggs, to be enlarged, upon Conception, as much as is necessary for the

Generation of a Child: That isto say , when within the Womb, as much as they were here, upon the *Ovary*. So that it is not, I conceive, reasonably to be doubted, but that the *Membranes*, which we call the *Secundine* or *After-Birth*, are the *Individual* ones, which belong to that *Vesicle* or *Egg* which falls from the *Ovary* into the Womb: Being therein, with their contained *Humor*, naturally augmented and amplified, as here they were preternaturally, in this *Hydropical* Case.

*Microscopical Observations of the Structure of Teeth and other Bones: Made and Communicated, in a Letter by Mr. Anthony Leeuwenhoeck.*

I Have some time since applyed a Glafs, (esteemed by several Gentlemen, who had try'd it, a very good one) to observe the Structure of the Teeth, and other Bones. Which both to them and my self also, then seemed to consist of *Globules*. But since then, having drawn out one of my Teeth, and for further Observation, applyed better Glafses than the former; the same Gentlemen, with my self, agreed, from what we plainly saw, That the whole Tooth was made up of very small strait and transparent Pipes. Six or seven hundred of these Pipes put together, I judg exceed not the thickness of one Hair of a Mans Beard. In the Teeth of a Cow, the same Pipes appear somewhat bigger, and in those of a Haddock somewhat less.

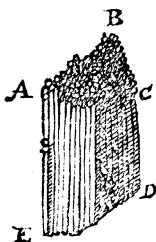
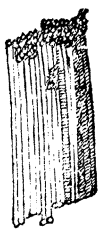
Fig. 1.  Fig. 2.  Fig. 1. *A. B. C. D. E.* is a Square piece of a Bone, whereto, although you apply a good *Microscope*, yet at the end *A. B. C.* it will seem as if composed of *Globules*. Nor will the Pipes distinctly appear on the sides *A. C. D. E.* by reason of the thickness of the Bone, and thereby the trajection of less light.

Fig. 2. Is a flat piece of a Bone, in which the aforesaid Pipes may be seen.

I have also observed part of the *St in-Bone* of a Calf six or eight weeks old. In which the said Pipes are less strait than in a Tooth. And sometimes there seemed to be several lesser Pipes