

1. *To enquire how the Salt-Petre is made in India; whether by the heat of the Sun or with Fire or both: what sort of Earth the Lye whereof the Salt-Petre is made is extracted from: how the said proper Earth may be known, either by Colour or Taste or otherwise; in what Latitude or Climate it most abounds: whether it be found most, nigh to Rivers on the Sea side, or in Woods from the falling of the Leaves, and how deep in the Earth it is to be search'd for.*
2. *To get a true Account of the whole Operation of Indico from Jamaica, or elsewhere, the managing of the Plants, and how rais'd, whether by Seed or otherwise, and to know the proper Season for Sowing if rais'd by Seed, and what sort of Soil is required for the same.*

*Some Experiments and Observations made of the force of the pressure of the Water in great Depths, made and communicated to the Royal Society, by a Person of Honour.*

*A* April 8th. *ft. v. 1680.* Being off of *Pantalaria* near *Sicily* in a Calm, I let down a Bottle 70 Fathom, stopp'd with an excellent good tender Cork, well fitted, and bound down; and the Cork came up in the Bottle  $\frac{3}{4}$  full of Salt Water: Whereupon making some Reflection on the softness of the Cork, the Bottle was again fitted with an excellent good Cork, but of a woodiness or hardness as some Corks are, with the which, being let down in like manner, the Cork continued in its place, but as it were bruised, and the Bottle as before, about  $\frac{3}{4}$  full of Salt Water. Whereupon I took a good Ox Bladder, and bound it four-fold over the mouth of the Bottle without any Cork at all, only I put a piece of Leather to keep the Glass from cutting the Bladder,  
as

as it might do, having somewhat a sharp mouth; and so order'd, it was let down as before, but taken up without any water, or the least moisture in it.

May 18, 1680. Being in a stark Calm some Leagues distant from the Coast of *South-Spain*, off the great Hills of *Granada*, in pursuance of the foregoing Experiment, we took a Bottle and clapt a Leather on the mouth of it, tying over that a single part of a Bladder, the which we let down 75 Fathom, but it came up again intire; whereupon imagining that the Leather in great part had contributed to the resistance the Bladder had made, being that the same was marked very much by the force of the pressure against the mouth of the Bottle, we made a hole in the Leather about the bigness of a large Pea, and let the same again down 75 Fathom, but it came up perforated in the vacant place where the Leather had the hole in it, and almost full of water; we then bound over another part of Bladder single, and let it down but 30 Fathoms, but it came up whole and intire; whereupon immediately we let it down 50 Fathom, but it came up broke and full of water. Then we again fitted the Bottle with the said perforated piece of Leather and a double Bladder, and let it down 50 Fathom, but it again came up intire: So again immediately we let it down 75 Fathom, but then it came up broke and full of water: when the wind bringing the Ship into motion hindered our farther trials.

June 24, 1680. Being in  $39\frac{1}{4}$  degrees of Latitude, and by the Ships account 150 Leagues Westward of *Portugal*, I caus'd a *Florence* Flask to be well stop'd with a Bladder over the mouth of it, and lower'd it down 30 Fathom, but it was taken up broke. Whereupon imagining that the roughness of the Leads halling so tender a Body so violently through the water, might be the breaking thereof, I caus'd another Flask in the like manner to be fitted, and close by it I tied likewise another

ther Flask, so as to be born with the mouth downwards, as were the other, but which was not stop'd; and these I caus'd to be taken up when they had been but 10 Fathom under water; and found them both entire, but the open Flask almost full of water; the which being emptied, were both let down again, and taken up at 20 Fathom, when the open Flask was entire, tho full of water, but the other broken to pieces.

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## *Lumbricus Hydropicus;*

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*An Essay to prove that Hydatides often met with in morbid Animal Bodies, are a Species of Worms, or Imperfect Animals. By that Learned and curious Anatomist EDWARD TYSON, M. D. and R. Soc. S.*

**T**HE Title of this Essay, I doubt not will be some surprize to the Reader, and may prejudice his Judgment in what I am to offer; which indeed doth give me caution in it. But that I might not impose upon his Belief, or what I shall mention might not hinder his farther inquiry, 'tis only as an Essay. If truth, others Observations will confirm it; if otherwise, 'twill be a great satisfaction to be better inform'd.

By the opportunity given me of dissecting a *Gazella*, or Antelope brought from *Aleppo*, I observed several *Hydatides* or *Films* filled with limpid Water, about the bigness of a Pigeons Egg and oval, which were fastened to the *Omentum*, and some in the *Pelvis* between the Bladder of Urine and the *Rectum*. Upon this occasion I was very desirous of satisfying my self as much as I could of  
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