

in my reading his learned and curious Observations in Natural History, made in the Southern Parts of *France*, where he accompanied Monsieur *Cassini de Thury* in measuring a Degree of the Meridian. These Observations are published with Monsieur *Cassini's* Book: But as the reverse of several of the Opinions deliver'd in his Memoir is experimentally found to be true, and as the Discovery of Truth, and carefully separating it from Deception, should be the only Aim of our Philosophizing, I take the Liberty of laying before you my Opinion thereon.

X. *Abstract of a Letter from Mr. William Arderon, F.R.S. to Mr. Henry Baker, F.R.S. concerning the perpendicular Ascent of Eels.*

Norwich, July 9. 1746.

S I R,

Read Jan. 29.
1746-7.

WHEN I read, some Years ago, what Dr. Plot in his History of *Staffordshire* relates concerning the Passage of Eels across Meadows, in the Night-time, from Pond to Pond, I could hardly forbear thinking, that the Gentleman there mention'd must by some means or other have been deceived; but what I have lately seen with my own Eyes gives me great Reason to believe his Account to be strictly true.

On the 12th Day of last *June*, whilst I was viewing the Flood-Gates belonging to the Water-works in this City of *Norwich*, I beheld a great Number
of

of Eels sliding up them and the Posts adjacent, notwithstanding they all stood perpendicular to the Horizon, and 5 or 6 Feet above the Surface of the Pool below the Water-works. They ascended these Posts and Gates, until they came into the Dam above; And what makes the Matter appear still more strange, they slid up with the utmost Facility and Readiness; though many of the Boards and Posts were quite dry, and as smooth as a common Plane had left them.

I observed, that at first they thrust their Heads, and about half their Bodies, out of the Water, and held them up against the Wood work for some time: I imagine, until they found the glutinous Matter, which is constantly about their Bodies, become sufficiently thick or viscid, by being exposed to the Air, to sustain their Weight: Then would they begin to ascend directly upwards, with as much Ease, seemingly, as if they had been sliding along the level Ground; and thus they continued to do, until they they had got into the Dam above.