

strongest, and not being subject to Corruption from the other, as Water or Air, may deserve (*he saith*) the name of the Book of Eternity.

Some Experiments of Signor Carolo Rinaldini, Philosopher and Mathematician in the University of Padoua; shewing the difference of Ice made without Air, from that which is produced with Air: In the same Venetian Journal.

THERE was taken a Glafs-cane, about $1\frac{1}{2}$ of a Florentin *braccia* or Ell, open at one end, of which above one Ell and a quarter was fill'd with Quick-silver, the rest with common water. This open end was shut with a finger, and inverted into a vessel with stagnant Mercury; then removing the finger, the Mercury began to fall out, so that the aggregat of the Quick-silver and water falling, the water remain'd in the upper-part of the inverted cane, now free from Air. This being done, the Cane was thus exposed to the open Air in the Month of *January*, in frosty weather, and in one night the water in it was congealed into Ice of a very good consistence. Afterwards Signer *Rinaldini*, having compared this Ice with that which was produced in the open Air, found, that the Ice in the Cane was in substance altogether like that of Hail, that is, an opaque and whitish Body; whereas that, which was made in the Air, was transparent like Chrystal. Besides, he observed, that the Ice made in the Cane was heavier *in specie* than that in the ambient Air: which he discover'd by putting it into a fluid, which was *in specie* lighter than water, but heavier than Ice made in the open Air; whereby he found, that, whereas the Ice made in the Cane sunk, that in the Air floated therein.

Which Experiment seems not to favour those (*saith the Author*) who esteem, that Ice, made in the common Air, is produced by the extrusion of Air-latitant in the water, and by the resolution of the more subtil parts, receiving in their stead the mixture of terrestrial exha-

D d d 2

lations

lations: considering that by the above mentioned Experiment it appears, that in the production of the Ice made in the open Air, the very Air is mixed with the Water.

But of these and many other things the Author (saith the *Journalist*) intends to discourse in his *Natural Philosophy*; where he means to shew, that 'tis not necessary, there should be any vacuities in the Ice, and to teach, what is to be said of the place deserted by the *Mercury* whether it be void of all Body, or only of the Air, that was there.

A Letter written to the Publisher from York, Jan. 10. 1670, concerning a kind of Fly that is Viviparous, together with a Set of curious Inquiries about Spiders, and a Table of the several sorts of them to be found in England, amounting to at least 33. By Mr. Martyn Lister.

Sir,

I Return you thanks for your obliging Letter of the third of *January*, and have sent you the *Viviparous Fly* and the Set of Inquiries you desire of me. The Fly is one, if not the very biggest, of the harmless Tribe that I have met with in *England*; I call them *harmless*; because that they are without that hard Tongue or Sting in the mouth, with which the *æstrum*-kind, or Gad-flies, trouble and offend both man and beasts. This Fly is striped upon the shoulders grey and black, and as it were checkered on the tail with the same two colours: the *Female* may be known by a redness on the very point of the tail. The very latter end of *May* 1666, I opened several of them, and found two Baggs of live white worms of a long and round shape, with black heads; they moved both in my hand and in the un-opened Vesicles, backwards and forwards, as being all disposed in the Cells, length-ways the body of the femal, like a Sheaf.

Some such thing is hinted by *Aldrovandus* lib. 1. de *Insect.*