XI. *Part of a Letter from Mr.* Trembley, *F.R.S. to* Martin Folkes, *Esq*; Pref. R. S. *concerning the Light caused by* Quickſilver *ſhaken in a Glaſs Tube, proceeding from* Electricity.

Hague, 4 Feb. 1745. *N. S.*

Read Feb. 13. 1745-6.

MR. *l' Allamand* continues here very ſucceſsfully his Experiments upon Electricity, and is at all times pleaſed to communicate them, in order to excite others as much as he can to purſue the ſame Inquiries: He has been pleaſed to impower me to give you an Account of ſuch as he thought might be moſt likely to give you Pleaſure, and at the ſame time deſires your Acceptance of his beſt Reſpects.

Mr. *l'Allamand* incloſed ſome Mercury in a Tube cloſe-ſtopp'd; and, when he afterwards rubb'd this Tube, it gave a great deal more Light than when the ſame had no Mercury in it.

When this Tube has been rubb'd, after raiſing ſucceſſively its Extremities, that the Mercury might flow from one End to the other, one ſees a Light ſerpenting all along the Tube; that is to ſay, the Mercury, as it runs along, is all luminous.

Mr. *l' Allamand* then made the Mercury run in the ſame manner along the Tube without rubbing it, and it ſtill gave ſome Light, but much leſs than before. This laſt Experiment perſuaded him, that the Friction of the Mercury againſt the Glaſs might electrify that Glaſs, in the like manner as the rubbing of the Hand. And he has been confirmed in the

the ſame Notion by another Experiment: He brought ſome Down near to the Tube, and then made the Mercury run from one End to the other; and the Down was attracted, as the Mercury in its Motion paſſed by it.

Theſe Experiments he has repeated, and varied ſeveral Ways; and they have led him to conclude, that the *Phoſphorus* of the Barometer, known this great while, is not ſo properly a *Phoſphorus*, as the Effect of the Mercury electrifying the Tube of the Barometer.

Mr. *l'Allamand* has put Mercury into exhauſted Tubes, and, when theſe are rubb'd, they give much more Light than before; there then come out from them on all Sides Rays of very lively Light. I have alſo ſeen at *Leyden*, at Mr. *Muſchenbroeck*'s the Mechaniſt's, an exhauſted Globe of Glaſs, which, when rubb'd with the Hand, ſeem'd all fill'd with a very bright Fire.

Several Perſons have obſerved, that when they had been electrified, their Pulſes beat a little faſter than before. I have even myſelf felt, after having been electrified a pretty while together, a Senſation all over my Body: But within theſe few Weeks, ſome Perſons have felt very ſharp Pains upon their being electrified.

There is an Experiment that Mr. *l'Allamand* has tried; he electrify'd a tin Tube, by means of a glaſs Globe; he then took in his left Hand a Glaſs full of Water, in which was dipped the End of a Wire; the other End of this Wire touched the electrified tin Tube: He then touch'd, with a Finger of his right Hand, the electrified Tube, and drew a Spark from it, when at the ſame Inſtant he felt a moſt violent Shock all over his

Body. The Pain has not been always equally ſharp, but he ſays, that the firſt time he loſt the Uſe of his Breath for ſome Moments; and he then felt ſo intenſe a Pain all along his right Arm, that he at firſt apprehended ill Conſequences from it; tho' it ſoon after went off without Inconvenience.

It is to be remarked, that in this Experiment he ſtood ſimply upon the Floor, and not upon the Cakes of Reſin. It does not ſucceed with all Glaſſes; and tho' he has tried ſeveral, he has had perfect Succeſs with none but thoſe of *Bohemia*. He has tried *Engliſh* Glaſſes without any Effect. That Glaſs with which it beſt ſucceeded was a Beer-Glaſs.

Mr. *Muſchenbroeck* the Profeſſor has repeated his Experiment, holding in his Hand a hollow Bowl exceeding thin, full of Water; and he ſays he experienced a moſt terrible Pain. He ſays, the Glaſs muſt not be at all wet on the Outſide.

XII. *A Letter from Mr.* John Hill, *Apothecary, to the* Preſident, *concerning the Manner of the Seeding of* Moſſes; *and in particular of the* HYPNUM terreſtre, trichoides, luteovirenus, vulgare, majus, capitulis erectis. RAII Synopſ. *Ed.* 3. *pag.* 84.

SIR,

Read Feb. 13. 1745-6. *with Alterations.*

THE many late Diſcoveries of the Seeds of Vegetables (formerly ſuppoſed to produce none) have opened a Way