I. A Paper of the Honourable Robert Boyl's, deposited with the Secretaries of the Royal Society, Octob. 14. 1680. and opened since his Death; being an Account of his making the Phosphorus, &c.

Sept. 30. Here was taken a considerable quantity 1680. of Man's Vrine, (because the Liquor yields but a small proportion of the desired Quintesfence) and of this a good part at least, had been for a pretty while digested before it was used. Then this Liquor was distilled with a moderate Heat, till the Spirituous and Saline parts were drawn off; after which the Superfluous Moisture also was abstracted (or evaporated away) till the remaining Substance was brought to the confistence of a somewhat thick Syrup, or a thin Extract. This done, it was well incorporated with thrice its Weight of fine White Sand; and the Mixture being put into a strong Stone-Retort, to which a large Receiver (in good part fill'd with Water) was so joyn'd, that the Nose of the Retort did almost touch the Water: Then the two Vessels being carefully luted together, a naked Fire was gradually administred for Five or Six Hours, that all that was either Phlegmatick or Volatile might come over first. When this was done, the Fire was encreased, and at length for Five or or Six Hours made as strong and intense as the Furnace (which was not bad) was capable of giving: (which Violence of Fire is a Circumstance not to be omitted in this Operation.) By this means there came over good store of white Fumes, almost like those that appear in the Distillation of the Oyl of Vitriol; and

when those Fumes were pass'd, and the Receiver grew clear, they were after a while succeeded by another fort that seem'd in the Receiver to give a faint blewish Light, almost like that of little burning Matches dipt in Sulphur. And last of all, the Fire being very vehement, there pass'd over another Substance, that was judg'd more ponderous than the former, because it fell through the Water to the bottom of the Receiver; whence being taken out, (and partly even whilst it stay'd there, it) appeared by several Essects, and other Phænomena, to be such a kind of Substance as we defired and expected.

II. Problema Florentinnm, de mira Templi Testudine Quadrabili. A Doctissimo Dno. Jobanne Wallis, S. T. D. Solutum.

Thet hic subjungere, Problema quoddam (interventu Clarissimi Viri D. Guilielmi Bridgman) ad me transmissum, de mira cujusdam Templi Testudine Quadrabili, meamque ejusdem Solutionem, cum subjuncto Scholio eam explicante.

D. Guilielmi Bridgman ad me Epistola, erat (Latine reddita) ad hunc sensum;

Reverendo Viro, D. Wallis S. T. D. Geometriæ Professori, Oxonii.

Augusti 30. 1692.

Inclusam churtulam (Reverende Vir) Florentia mibi missam, utad te deferatur (de qua sententiam tuam expetune