

PHILOSOPHICAL TRANSACTIONS.

Monday, *March* 16. 1667.

The Contents.

An Introduction to the Fourth Year of these Tracts. An Account of the Invention of Grinding Optick and Burning-Glasses of a Figure not Spherical, lately produced before the R. Society. Some Observations by way of Answer to some of the Inquiries concerning Tydes, proposed Numb. 17. and 18. Queries and Directions for the Caribbe-Islands. An Account of two Books: I. SAGGI DI NATURALI ESPERIENZE fatte nell' ACADEMIA del CIMENTO, in FIRZENZE A. 1667. in Fol. II. VERA CIRCULI & HYPERBOLÆ QUADRATURA, in propria sua Proportionis specie inventa & demonstrata à JOCOBO GREGORIO Scoto, PATAVII in 4^o 1667: whence a Method is deduced of Measuring the Area of an Ayperbole, and consequently finding the Logarithim of any Number, and é contra: And this applied to the Gauging or Mensuration of any Segment of any Cone, &c.

An Introduction

To the Fourth Year of these Tracts.

IN my first Number (of *March*, in the Year 1665.) I render'd the reasons and purposes of these *Philosophical Communications*. In the *Second Year* (beginning in *March* A. 1666. at Numb. 10.) I endeavour'd to revive and impress the Utility of these United Correspondencies. In the *Third year* (beginning in *March* A. 1667.

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at *Num.* 23.) I defended our Industry from the Obloquies of such men, as prefer endless Contentions about words before the useful Works of the noblest Arts; and boast the Notions, yea, and oft-times the Cavils of *pore-blind* Heathen Writers, above the great and admirable Works of God.

Here, I think, I may from manifest appearances, without any great presumption, ominate, That the following *Tracts* shall somewhat more satisfie the *Ingenious*, than the former, for as much as my Philosophical Commerce from time to time enlargeth it self, and I am still better and better furnish'd with store of judicious Correspondents in the most considerable places of the World; and they are by the foregoing *Tracts* (especially from *Numb.* 11. and several of those that follow) better directed to afford true Aids, as also to send in good Answers to the Enquiries already made publick.

Yet I hope, even our *former Tracts* will not be very much blamed by such, as shall be pleas'd to consider, that *some* of them have already brought in several pertinent *Answers*; *viz.* from a *Sea-Voyage*, the *Caribbe-Islands*, and *Jamaica* in particular, the *Baltick-Sea*, our *Mendip-Mines*, &c. *Numb.* 19, 27, 30; that *others* of them do instruct, prepare, and enable, for severe Observations; *others* lay the ground for Philosophical Advancements; *others* are accurate Exemplifications; and some of them contain divers valuable Particulars, which perhaps had otherwise been lost, or drown'd in a worse crowd of Impertinencies, or scatter'd in more costly *Volumes*. Certainly there are well-devised *Directions*, especially proper for Sea-men and all Travellers, and such as may pleasingly and beneficially entertain them whilst they are under Sail, or on their Land-Voyages; and they cannot be unacceptable to the Ingenious and Curious in our Colonies, and in other places of best note. All which may be seen in a short view in the *Tables* annexed to *Numb.* 22. and 32.