

An Account of BOOKS.

- I. *Traſtatus Mathematicus de Figurarum Curvilinearum Quadraturis & Locis Geometricis.*
Autore Johanne Craig. Londini apud Sam. Smith & Benj. Walford, Soc. Regiæ Typographos.

THis Treatiſe conſiſts of two Heads. In the Firſt the Author undertakes to give a General Method for determining the Quadratures of Curvilinear Spaces, and this he ſhews may always be done by finding another Curve-line from the known Property of its Tangent; which Curve-line he therefore calls the *Quadratrix* of the propoſed Space. Now this *Quadratrix* (for all Spaces comprehended by Geometrical Curves) is either a Geometrical or a Mechanical Curve-line: And accordingly he divides the whole into two Parts. In the Firſt of theſe he treats of ſuch Spaces, whoſe *Quadratrix's* are Geometrical Curves, where he Illuſtrates his Method by a great variety of Examples; diſcovering in ſeveral of them a new Method of finding Infinite *Series's* (without the trouble of Diviſion or Extraction of Roots) by aſſuming an Arbitrary *Series* with unknown Coefficients, which are eaſily determined in the Progreſs of the Problem. And ſince the Publication of this Treatiſe we have ſome Inſtances of the like Method of finding *Series's* by that excellent Mathematician, Mr. *Leibnitz*, Printed in the *Acta Eruditorum* of April, 1693. Afterwards he gives a Method of comparing the *Area's* of Figures with the ſimpleſt Figures of the ſame kind; from which he deduces many Theorems, each of which do exhibit the Quadratures of an Infinity of Figures without any trou-

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ble of Calculation : And withal shewing to what Theorem any proposed Figure is to be referred, and how the like Theorems may be continued by the help of his general Method. He concludes this First Part with a Discourse concerning the Analytical Expression of Quadratures, wherein is shewn, that though the *Area* answering to the *Abscissa* be that which is commonly sought, yet the general Quadrature found by his Method, is for the most part either greater or lesser : Therefore he gives both a Geometrical and Analytical Rule for knowing whether the said general Quadrature be deficient or exceeding, and what that deficient or exceeding Quantity is.

The Second Part treats of the Quadratures of those Spaces, whose *Quadratrix's* are *Mechanical* or *Transcendent* Curves, as he (after Mr. *Leibnitz*) chooses rather to call them; where he gives a general Method for finding their Tangents. And having given a Rule for defining the *Transcendent Quadratrix* of any *Algebraical* Curve (that is not capable of a *Geometrical* one) he illustrates the same by finding the *Transcendent Quadratures* of the *Circle*, *Hyperbola*, and two other Figures.

There is added at the end, the Author's Answer to a Letter of Mr. *D. T.*'s. relating to a Controversie between them concerning a Method of Quadratures, published by Mr. *D. T.* in the *Acta Eruditorum*.

The Second Head of this Treatise is concerning the *Geometrical Places*, wherein is shewn how to determine any *Solid Place*, by comparing the Equation with a general *Theorem* comprehending all Places of that kind: Whereby are avoided all those many Rules about the Reduction of the given Equation, and the variety of the Signs + and —, which have hitherto rendred this Piece of Geometry so troublesome.

II. *The History of the Church of Malabar, from the time of its being Discovered by the Portuguese in the Year 1501. Giving an Account of the Persecutions and violent Methods of the Roman Prelates to reduce them to the Subjection of the Church of Rome, together with the Synod of Diamper, celebrated Anno 1599. With some Remarks upon the Faith and Doctrine of the Christians of St. Thomas in the Indies, agreeing with the Church of England, in Opposition to that of Rome: Done out of Portuguese into English by Michael Geddes, Chancellor of the Cathedral Church of Sarum. Lond. Printed for S. Smith and B. Walford. In Octavo. 1694.*

THE Author of this History begins with a short Account of the Country of *Malabar*, as to its Situation, its Kingdoms, and Ports, mostly inhabited by Heathens, only the South end of the *Serra* or *Gate*, a Ridge of Mountains running 200 Leagues North and South, is inhabited by *Christians*, as they call themselves of *St. Thomas*, which Apostle, they say, first converted them. They have been for 1300 Years under the *Patriarch* of *Babylon*. Next, he shews us how the first News of them came to *Portugal*, Anno 1501. and upon what Account they begged the *Portuguez* Assistance against the Infidels. Anno 1505. two *Christians* sent by the *Venetians*, taught the *Indians* the use of Great Guns, thereby to oppose the *Portuguez* and their Trade there. Till about the Year 1544. little more was heard of them,

them, at which time the Cross, and other pretended Reliques of *St. Thomas* were found at *Meliapor*, of which the Author gives the Legend, which leads him to give an Account of the Violences used by the *Roman Catholics* to bring them to the Obedience of their Church, for that purpose erecting a Colledge at *Cranganor*, Anno 1546. and in the Year 1587. another to instruct them in the *Chaldee* and *Syriack* Tongues. The Extremes they there made use of, as the Author Observes, had like to have cost them all that they had in the *Indies*; and was the greatest cause of the War between the *Portuguez* and the *Indians*. There are several Remarkable Passages of the *Jesuites* Contrivances, and the *Indians* Resentment thereof, for which I refer to the Book, as less proper to our Design. The Author shews the Doctrines wherein the *Church* of *Malabar* agrees with that of *England*, and differs from the *Roman*. And concludes with the Acts and Decrees of the *Synod* of *Diamper*, with the occasion of its being called; which, with a Preface to a *Missal* imposed upon that Church by the Arch-Bishop *Menezes*, ends the whole Book.

E R R A T A. Numb. 208.

Page 48. line 23. read *Hynnou Dhemi*, or *Phynnou Dhemi*. pag. 49. l. 17. r. *Hurtich*. pag. 70. l. 17. r. 58 $\frac{1}{2}$.

L O N D O N :

Printed for *Sam. Smith*, and *Benj. Walford*, Printers to the *Royal Society*, at the Prince's Arms in *St. Paul's Church-yard*. 1694.