



Philosophical Transactions

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An Account of a small Tract, entitled,
 THOMÆ HOBBS *Quadratura Circuli, Cubatio Sphæra, Du-*
plicatio Cubi, (secundò Edita,) Denuò Refutata, Auth.
 JOH. WALLIS. S. T. D. *Geom. Prof. Saviliano.*
Oxonie, 1669.

Since Mr. *Hobbs* thought himself obliged to make some Reply to Dr *Wallis's* confutation of what he had, not long since, publish't upon this Argument; Dr. *Wallis* made no stay at all to return this Answer and second refutation. Concerning which we shall give you a brief account, suggested by Dr. *Wallis* himself, of Mr. *Hobbs's* fundamental mistake in his late Quadrature of the Circle, referring the Reader to the Tract itself for the Figure, which is therein the first.

Mr. *Hobbs*, considering, That, in case it should happen so luckily (which was not necessary) that QY (the base of a right-angled Triangle QYA equal to the Sector LCA , and consequently the Square $QRST$ equal to the Circle $BCDE$,) should, by the Arch CL , be cut just in the midst at P ; then would, not only (which to his purpose was necessary) QPL , CPY , be equal each to other (because of $ALPY$ common both to the Triangle and the Sector;) but more-over (which was not necessary) each of them equal to the half of PAV , (supposing CAV taken equal, by construction, to LAP :) all which is true, in case of such a lucky hap:

And finding then (which is true also) that this could not All happen, unless that intersection at P , were in the line AO (drawn from the Center A to the middle of CG ,) because this must needs pass through the middle of QY .

Concluded, That it must needs so happen, or else it was impossible for Any right-angled Triangle, as QYA (like to, and part of GCA ,) to be equal to the Sector LCA : because, in any other, as qyA , the intersection of CL and qy at p , would not be just in the midst of qy ; and therefore (which he suppos'd necessary, but was not) qpA not just the halfe of qyA .

Not considering (which is his fundamental mistake) that, if qPL and CPy be equal each to other (though neither of them be equal

equal to the halfe of $P A V$, or of $p A v$; nor yet $q p$ equal to the halfe of $q y$, nor $q p A$ to the halfe of $q y A$; (*the Triangle $q y A$ will be equal to the Sector $L C A$ (because $A L p y$ is common to both;) and like to the Triangle $G C A$, and a part of it;* which he thought to have been impossible.

Note

WHat in N^o. 54. p. 1077. in the *Answ. to Qu. 1.* is said of the Observation of *Briners*, is to be understood, that the Workmen *think* so, that they make more Salt with the same quantity of brine, at the Full Moon, then at other times, though really they do not, as the Answerer Judgeth by his *Observ.* in N^o. 53. p. 1064: Who hath since advertis'd, that 'tis possible at times, when the Pit hath been much drawn first, that then, if without intermission they go on *walling* till the *Full*, they may make at that time more Salt, than at another time, it being well known, that much drawing the Pit, strengthens the Brine.

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