

PHILOSOPHICAL TRANSACTIONS.

November 15. 1669.

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A Description of Dr. Christopher Wren's Engin, designed for Grinding Hyperbolicall Glasses. Some Inquiries concerning the Salt-springs at Nantwich, answered. An Extract of a Letter, concerning the Death of the Bigg-breasted Woman, discoursed of in Numb. 52. An account of some Books: I. CERTAIN PHILOSOPHICAL ESSAYES, and other TRACTS by the Honorable ROBERT BOYLE: The Second edition, enlarged. London; printed for H. Herringman in the New-Exchange; A. 1669. II. DEL MOVIMENTO DELLA COMETA, apparsa A. 1664: Da PIETRO MARIA MUTOLI, in Pisa, in 4°. III. ERASMI BARTHOLINI de COMETIS A. 1664. & A. 1665. Opusculum. Hafniæ in 4°. IV. SYLVA & POMONA, reprinted with Enlargements, by I. EUELYN. Esquire &c.

A Description

Of Dr. Christopher Wren's Engin, designed for grinding Hyperbolicall Glasses; as it was in a manner promised Numb. 48. p. 962.

We shall give it in the Author's owne words, as followeth.

*S*int tria Corpora terendo idonea, P. Q. R; quorum P. & Q. sint equalia & Columnari forma, R vero Corpus Lenti-forme. P. rotetur circa axin AB; Q, circa CD; & R, circa EG. H ffff Sint

Sint autem AB & CD in diversis Planis, ita tamen ut EG pro-nata, sit ad rectos angulos utriusque AB & CD: accedant denique ad se invicem Corpora, prout opus fuerit, servata tamen eadem inclinatione & situ Axium.

Dico, ex revolutione & mutua attritione Corporum prius positorum exurgere nova corpora Geometrica, quorum P & Q erunt Cylindroidea Hyperbolica aequalia, R. vero Conoides Hyperbolicum, specie & magnitudine datum.

Demonstrationem in promptu habemus, nec non Modulium ipsius Machinae, terendis Lentibus Hyperbolicis destinatae, quam operosa pictura & proluxa explicatione describere, mihi & artifice magis fuerit molestum, quam Dædalo cuiusvis sagaci similem ad-invenire. Postquam enim exposita jam sunt principia Geometrica, facile erit conjicere, quale sit Instrumentum; nempe, tres sunt Tabulae oblongae, planae, validae, labiles, & sibi invicem impositae: Infima & Media sustinent inaequalia Capitula (sive Anfas mamphur sustinentes) alternatim posita; id postulat utriusque mamphuris obliquitas & quasi decussatio: Summae Tabulae aequalia sunt Capitula in longum Tabulae disposita; & perforato citimo Capitulo mamphur transmittitur. Omitto rotas, rotulas, lora, pondera, cochleas, & reliqua ad motum expeditum & Machinae firmitudinem necessaria. P pertinet ad infimam Tabulam; Q ad mediam; R, ad summam. R, Lens est vitrea: Q, Modulium Lentem terens; P, Formula Modulium corrigens; quae, dum motu obliquo, & diverso a motu tam Lentis quam Moduli, fertur, delet continuo & deterrit, quicquid vitii imprimitur in Modulium ex Lentis & Materiae attritione.

Quare, cum ad o simplex & spontanea sit ista Hyperbolici Conoidis genitura, ex solis nempe motibus Circularibus; cumque motus sit duplex & varius, credibile est, Lentem Hyperbolicam ex hisce Principiis vel nullis fore explicandas.

Some Inquiries Concerning the Salt-Springs and the Way of Salt-making at Nantwich in Cheshire; Answer'd by the Learned and Observing William Jackson Dr. of Physick.

I. **W**hat is the depth of the Salt-springs? The depths are various, in some places not above 3. or 4. yards. In our Town of Nantwich, the Pit is full 7. yards from the

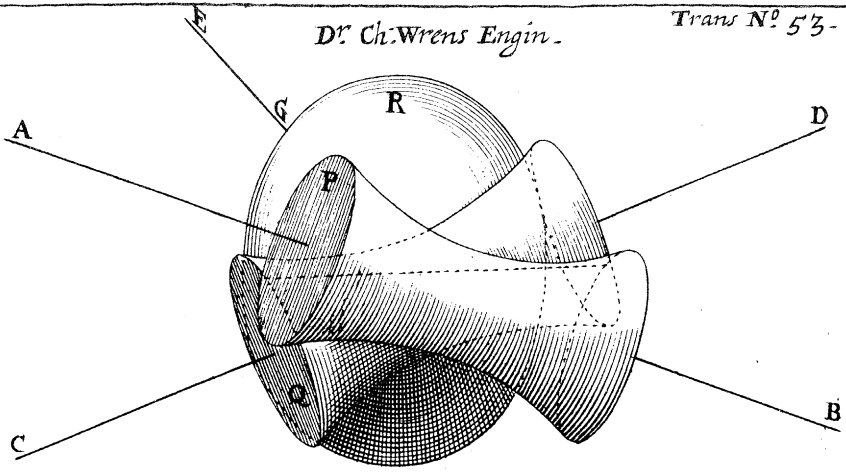


Fig. I.

For Salt-work

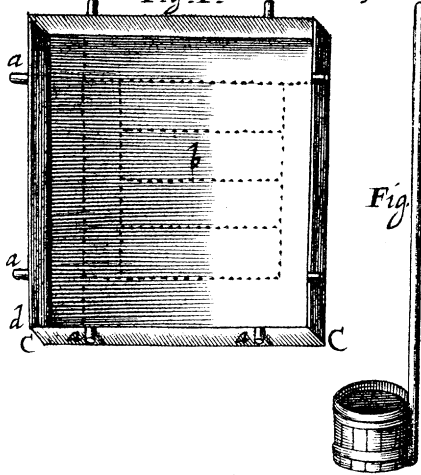


Fig. IV.

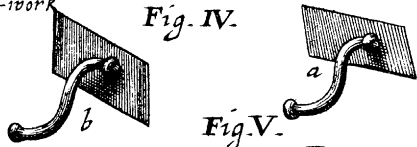


Fig. V.

Fig. III.

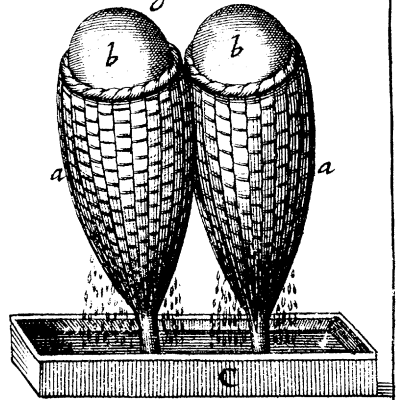


Fig. II.

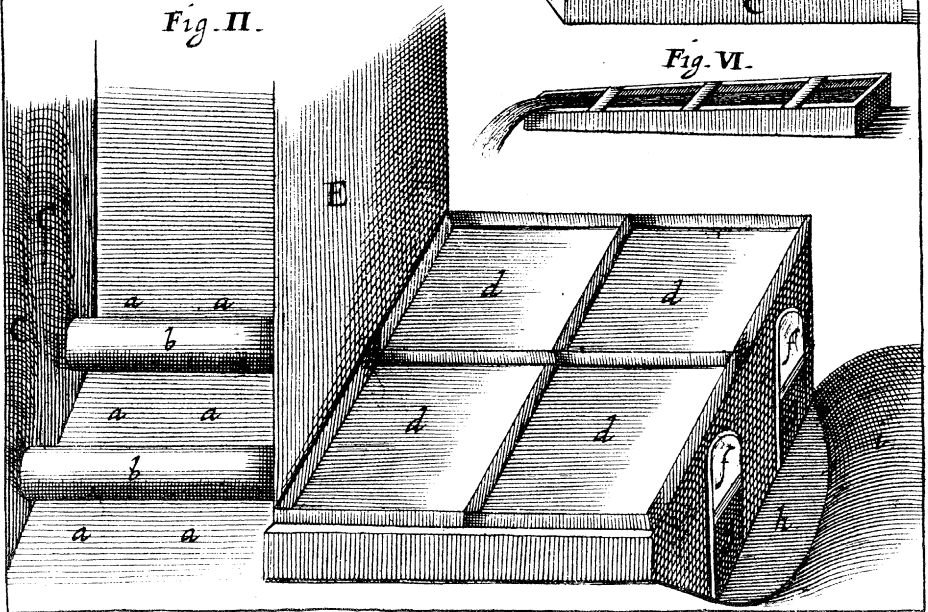


Fig. VI.