

fio fuit $9^h 27' 53''$ in recta cum Galilæo, & Lansbergio. Emerfio verò $10^h 24' 17''$ in recta cum Macrobio & Sofigene.

Mart. die 21 Vesp. occultavit Luna Stellam γ *Canceri*. Immerfio fuit $8^h 14'$ in recta per Copernicum & Boreum marginem Langreni. Emerfio fuit neglecta.

Maii die 24 Summo Mane $1^h 51' 30''$ Luna abforbuit Stellam τ *Scorpionis* proxime Byrgium. Emerfio non fuit obfervata.

Sept. die 14 Vesp. Luna occultavit Stellam η *Capricorni*. Immerfio fuit $8^h 11' 20''$ inter Seleucum & Cardanum. Emerfio $9^h 37' 30''$ paulo infra Langrenum.

Die 19 Vesp. Luna obtexit Stellam δ *Pifcium*. Immerfio fuit $8^h 43' 45''$ in recta per Tychonem & Langrenum. Emerfio autem $9^h 5' 15''$ in recta cum Tychone & Keplero.

Oct. die 28 Manè Luna occultavit Regulum, feu Cor *Leonis* Immerfio fuit $1^h 39' 50''$ in recta per Aristarchum & Gaffendum. Emerfio $2^h 11' 15''$ in recta per Aristarchum & Cardanum.

V. *An Account of the Veins and Arteries of Leaves.*

By Frank Nicholls, M. D. *Præl. Anat.* Oxon. F. R. S.

BY a Letter from Dr. Fuller in *Holland* to the President, and communicated about *October* laſt, the Society was informed, that the ingenious Profeſſor *Ruyſch* had obſerved ſomething in the diſſecting of Leaves analogous to the Veins and Arteries of Animals; but without explaining in what Manner theſe different Veſſels were diſpoſed, or by what Means they may be diſtinguiſhed from each other.

When:

When I had the Pleasure of examining the Collections of *Frederick Ruysch* and *Albert Seba* at *Amsterdam*, in both which were great Variety of dissected Leaves, they made no Mention of such Discovery; although in a Leaf from the Collection of *Ruysch* I could (with a Glass) observe the Fibres to be double towards the Edges of the Leaf; which at that Time I imagined to be an unnatural Division of the Fibres, as in decayed Sticks.

In the mean Time, *Albert Seba* having communicated the Method of dissecting Leaves to the Society, by a Letter to the President, I separated the pulpous from the fibrous Parts of several Leaves after his Method; when examining them by Glasses, and in Water, I found that each Fibre was naturally separated into two distinct Fibres by a thin *Stratum* of the pulpous Substance; and that this Separation was continued through all the Fibres and Stem of the Leaf, so as to form two distinct Planes of similar Net-work.

Though this Duplication of the Vessels in Leaves seems to point out an Analogy between them and the Veins and Arteries of Animals, yet I see no probable Means of guessing which are the arterial and which the venal Fibres.

That I might illustrate this Matter, as it appeared to me, I have prepared two Leaves, the one of an Apple, the other of a Cherry; in which, as well the Separation of the Fibres and Stem, as the pulpous Substance, by which they are naturally separated, are very obvious. See *Plate II. A the Cherry-Leaf; B the Apple-Leaf, whose Planes are separated.*

Both which (the Society having nothing of this Nature in their Repository) I desire may be accepted as a Mark of the Respect of their

Most Humble Associate,

June 11, 1730.

F. NICHOLLS.

Fig. II.

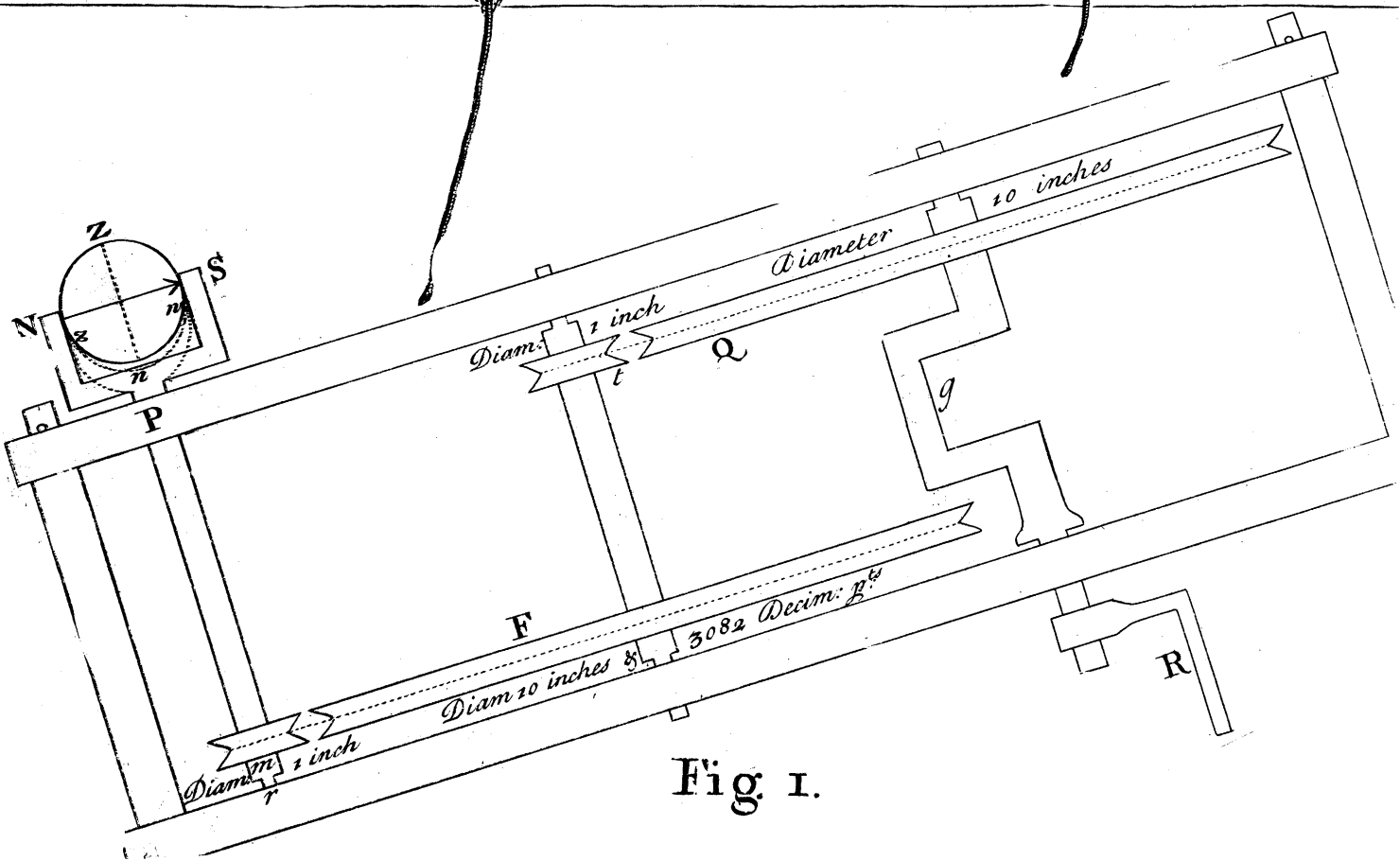
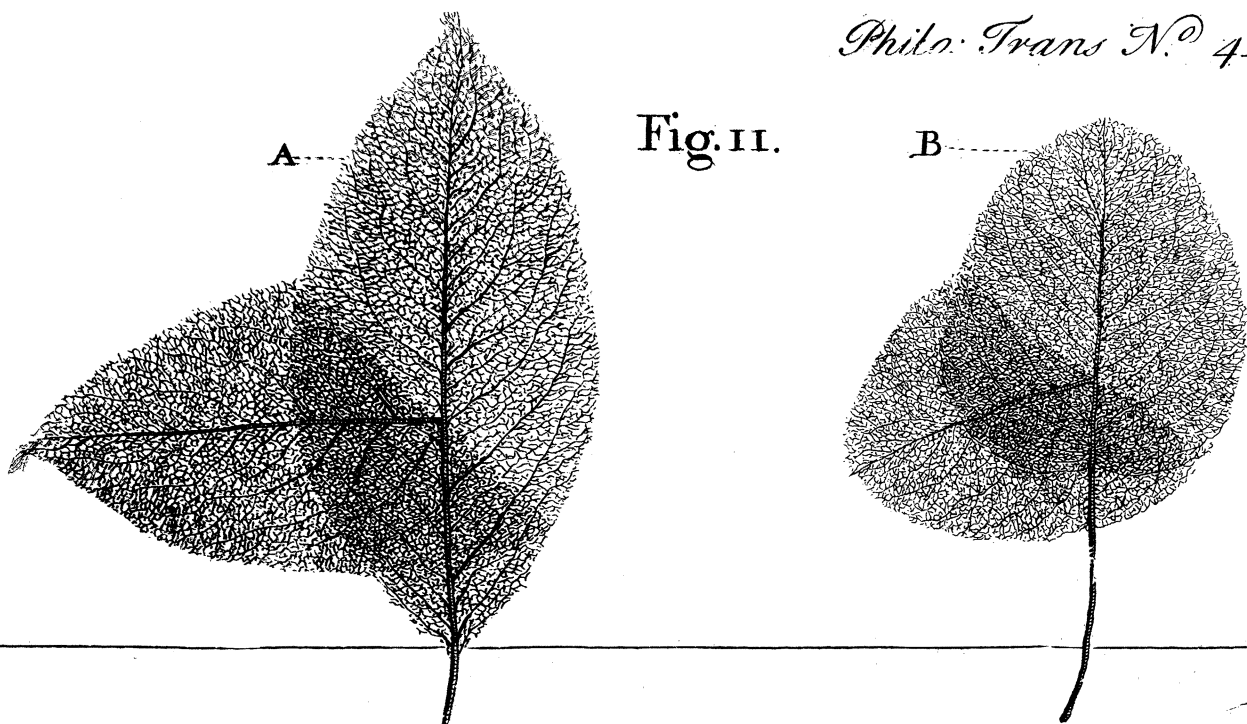


Fig I.