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COLIN MACLAURIN 1698–1746

Pencil and chalk drawing by the 11th Earl of Buchan, 31.1 × 26.5 cm reproduced courtesy of the Scottish National Portrait Gallery, Edinburgh. The inscription reads "Colin Maclaurin from a drawing by Ferguson the Astronomer a Cast in Pencils [made?] Post Mortem Buchaniae Comes del. NB M. had star or fool [?] on left eye." ('Star' is obsolete Scots for a speck or cataract on the eye.)

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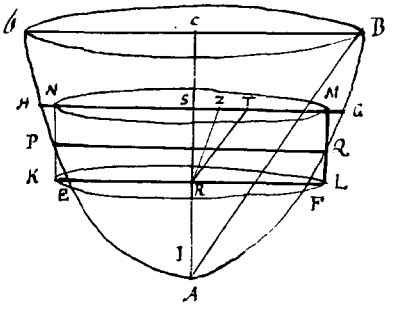
and a half. The Errors in computing frustums of different altitudes are as the Cubes of ~ these altitudes.

Fig. 4. In a Spheroid the error always produces an overcharge and is in proportion to the Error in computing the Content of a frustum of the same height in a sphere as the square of the horizontal Axis of the Spheroid, to the square of its perpendicular Axis. In such a Vessel the overcharge may become very considerable: Suppose for Example the Horizontal Axis to be the double of the vertical Axis, and the Error in computing the Content of every frustum 6 inches deep will amount to almost one Gallon, and if the depth of the frustum be 10 inches, the error that arises in computing the Content from the Area at the middle of these 10 inches would amount to more than four Gallons and one half, and in computing a segment of 10 inches deep from the Area at the middle of every 10 inches there would arise an Overcharge of 18 Gallons. When the proportion of the Horizontal Axis to the vertical is not known it may be easily found in the following manner. Suppose e f & g to be



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