T. S. DAVIES,

GEOMETRICAL CHARACTER OF THE HOUR-LINES

Published 1834



TRANSACTIONS OF THE ROYAL SOCIETY OF EDINBURGH, VOLUME XII contains an paper entitled:

An Inquiry into the Geometrical Character of the Hour-Lines upon the Antique Sun-Dials. By T.S. DAVIES, Esq. F.R.S.ED. F.R.A.S.

(Read 21st Feb. 1831.)

It contains these sections: THE EQUATIONS OF THE HECTEMORIAL CURVES UPON THE SURFACE OF THE SPHERE.



Conical Hectemoria from Section XIV



Diagram from Section XX

It labels each section with a number, up to 32, but few have titles. These are:

XI. GNOMONIC PROJECTION OF THE HECTEMORIA UPON A GIVEN TANGENT PLANE.

XIII.

Cylindrical Hectemoria, in contact with the Equator.

XIV.

Conical Hectemoria.

XX. ON THE ANALYTICAL EQUATIONS OF THE HECTEMORIA. XXI.

The Equations of the Hectemorial Cone.



Diagram from Section XX

He concludes with:

I have thus completed the first part of my plan, that of laying down the mathematical principles of the hectemoria, and investigating those properties of the curves which properly belonged to a solution of the general problem. There yet remains to apply these principles to the construction of the several parts of particular dials, and more especially to examine those remains of antiquity, in which the system of hour-lines either is, or is believed to be, employed. These and some colateral inquiries will form the second part of this dissertation.

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