

## XXXII

ON A PROOF FROM QUATERNIONS OF THE  
CELEBRATED THEOREM OF JOACHIMSTHAL\*

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[*Proc. Roy. Irish Acad.* vol. v (1853), p. 71.]

Sir W. R. Hamilton added some remarks on a very simple proof of the celebrated Theorem of Joachimsthal, derived from the Calculus of Quaternions.

\* [See *Lectures*, article 585. The theorem referred to is the following: 'For any central surface, if  $P$  is the length of the perpendicular from the curve onto a tangent plane and  $D$  is the length of the semi-diameter parallel to the direction of the geodetic on the surface at the point of contact of the tangent plane, then  $PD$  is constant.']