system. Hence the spheres also form a coaxaloid system, *i.e.*, they can be obtained from a coaxal system of the intersecting species by increase or diminution, in a constant ratio, of the radii of the latter.

(iii) If the spheres be cut by any plane through their line of centres, the great circles so obtained are, as we have seen, coaxaloid; hence their envelope and that of their associated hyperbolas is a conic. By rotating this plane round the line of centres as axis we see that the envelope of the spheres and their associated hyperboloids is a quadric of revolution.

This quadric touches the edges of the tetrahedron at

$$X_1,\ X_2,\ X_3,\ X_4,\ X_5,\ X_6;$$

for the envelopes of the coaxaloid systems of circles on the faces of the tetrahedron do so, and these envelopes are obviously sections of the quadric.

(iv) The spheres of the system are related to any other tetrahedron whose edges touch their envelope, in the same way that they are related to ABCD.

"La Perspective d'une Conique est une Conique." Démonstration Élémentaire.

By M. L. Leau.

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