

## Historical Note on Wallace's Line.

By R. C. ARCHIBALD, M.A., Ph.D.

(Received 17th February 1910. Read 11th March 1910.)

In earlier volumes of the *Proceedings of the Edinburgh Mathematical Society* (cf. III., 104; IX., 83) it has been shown by researches of Dr. J. S. Mackay that the "discovery of the Wallace line . . . dates back only to about the year 1799 or 1800." This result is reproduced in Cantor's *Vorlesungen über die Geschichte der Mathematik* (III., 542, 2<sup>e</sup> Aufl.). It was arrived at by considering the two following theorems given by Professor Wallace in the old series of Leybourn's *Mathematical Repository* :

*Theorem A* (Vol. I., p. 309; Vol. II., p. 54-5). If three straight lines touch a parabola, a circle described through their intersections shall pass through the focus of the parabola.

*Theorem B* (Vol. II., p. 111). If a triangle be inscribed in a circle, and from any point in the circumference perpendiculars be drawn to the sides, the feet of these perpendiculars lie in a straight line.

I have lately acquired a very fine copy of the old series of Leybourn's *Repository* (*Mathematical and Philosophical*) in which (with the exception of No. I.) the original covers of the "XIV" numbers going to make up this work, are bound in. From these it is obvious that Theorem A was proposed as a prize question in No. IV. on October 28, 1797, while a solution appeared in No. VI. on September 1, 1798. Theorem B is in No. VII., published March 25, 1799.