

THE MIXED TRANSFORMATION
OF LAGRANGE'S EQUATIONS

« Nature », vol. 74 (1906),
pp. 488-489.

Returning to Padua after a month's absence, I read in « Nature » of August 2 (p. 317) a letter by Mr. A. B. BASSET on « The Mixed Transformation of LAGRANGE'S Equations ».

The letter begins: « I should fancy from the review by "G.H.B." in "Nature" of Juli 19 (p. 265) that the papers of Prof. LEVI-CIVITA relate largely to the *mixed* transformation of LAGRANGE'S equations, the complete theory ("Proc. Camb. Phil. So", vol. VI, p. 117; "Hydrodynamics", vol. I, p. 171) of which was first given by myself so far back as 1887 »; it is then shown that the *mixed* form of LAGRANGE'S equations may be obtained in the most simple way through an elegant artifice of elimination.

The words here quoted give the impression that my papers deal principally with the announced theory, and that they may be little more than the reproduction of some previous papers by Mr. BASSET. I wish, however, the readers of « Nature » to know — and Mr. BASSET will be the first to recognise the fact — that the case is quite different. The papers in question (as it appears from the general title, « Sur la recherche de solutions particulières des systèmes différentiels et sur les mouvements stationnaires » (*) and as it seems to me to result also from the review by « G.H.B. ») are essentially dedicated to the *effective research* of particular solutions of dynamical equations. Not a word is said of transformations, *mixed* forms, etc., and ignorance of coordinates is mentioned only in the preface, because this was ROUTH'S point of view in defining and studying the stationary motions.

University of Padua, August 1929.

(*) In questo vol.: XXVII, pp. 465-502 [N.d.R.].

THE ALABAMA DONATIONS

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...

...