

somewhat as follows: When the wings move forward the bird's motion is being retarded; when they move backwards it is being accelerated. The result is to produce an oscillatory motion of the centre of gravity in addition to the uniform motion of translation. But in harmonic oscillations the displacement is in the opposite direction to the acceleration. This gives a forward displacement of the centre of gravity in the forward stroke and a backward displacement in the backward stroke as stated.

As another instance, I would call attention to the correspondence on page 89. It seems fairly obvious that the trouble has arisen largely, if not entirely, through a confusion between "motive force" and "horse power," the former of which is equal and opposite to the resistance to be overcome, while the latter is equal to the former multiplied by the velocity of its point of application multiplied by a certain constant. With resistance varying as the square of the speed the motive force will vary as the square and the horse power as the cube of the speed. In neither of these cases is the meaning very obvious without some such explanation.

G. H. BRYAN

EMANUEL SWEDENBORG'S MSS.

SIRS,—I have pleasure in forwarding to you a translation of the notes that you ask for. The original of the document preserved at Linköping may be seen in facsimile at the Swedenborg Society's House at No. 1, Bloomsbury Street. I am not sure that they have a copy of the *Dædalus*, in which the published account appeared, but there is a copy in the British Museum. I think it is to be found under the head of Periodicals. It is an exceedingly rare work. It is to be published in facsimile by the University of Upsala as a part of their celebrations of the bi-centenary of their Scientific Society. It is not, however, to be ready till November.

JAMES R. RENDELL

ANALYSIS OF FOREIGN PUBLICATIONS

ABBREVIATIONS

Aeron. , Aeronautics (New York)	L'Aér. , L'Aéronaute (Paris)
Aircraft , Aircraft (New York)	L'Aérop. , L'Acrophile (Paris)
C.-V. , Le Cerf-Volant (Paris)	Rev. Aér. , Revue Aérienne (Paris)
D.Z.L. , Deutsche Zeitschrift für Luftschiffahrt (Berlin)	Rev. de l'Av. , Revue de l'Aviation (Paris)
Flug , Flug und Motor Technik (Vienna)	Tech. Aér. , La Technique Aérienne (Paris)
	W.L.Z. , Wiener Luftschiffer-Zeitung (Vienna)

AERODYNAMICS

- Du rôle du vent dans l'aviation. (Lorenç.) "L'Aérop." May 15
 Etude des parcours aériens. (Delens.) "L'Aérop." June 15
 Recherche du centre vélique en aéronautique. (D'Amans.) "L'Aér." April 30
 Sinusproblem und Verhältniss der Flugarbeits-grössen bei ebenen und gewölbten Flächen. (Lynkeus.) "Flug." May 10 and May 25
 Sur la résistance de l'air. (Bourlet.) "L'Aérop." April 15.
 Sur l'équilibre et la descente rectilique de l'aéroplane. (Lecornu.) "L'Aér." April 30

AEROPLANES

- L'Aéroplane Drzewiecki. "L'Aér." June 25
 L'Aéroplane G. Brunet. "L'Aér." April 30
 L'Aéroplane "Louis Bréguet." "L'Aérop." June 15
 L'Hydro-Aéroplane "Henri Fabre." "L'Aérop." June 1
 Le biplan Maurice Farman. "L'Aérop." June 1
 Le Monoplan "Etrich 1910." "L'Aérop." June 15
 Le Monoplan "Paul Zens." "L'Aérop." May 15
 Le nouvel aéroplane de Sir Hiram Maxim. (Espitallier.) "Tech. Aér." April 15
 The Baldwin Biplane. "Aircraft." July
 The Thomas Biplane. "Aeron." June

ATMOSPHERE

- Beobachtungen über die Lichtintensität bei einer Ballonfahrt. (v. Schrötter.) "W.L.Z." July 1