

SCIENCE

EDITORIAL COMMITTEE : S. NEWCOMB, Mathematics ; R. S. WOODWARD, Mechanics ; E. C. PICKERING Astronomy ; T. C. MENDENHALL, Physics ; R. H. THURSTON, Engineering ; IRA REMSEN, Chemistry ; J. LE CONTE, Geology ; W. M. DAVIS, Physiography ; O. C. MARSH, Paleontology ; W. K. BROOKS, C. HART MERRIAM, Zoology ; S. H. SCUDDER, Entomology ; N. L. BRITTON, Botany ; HENRY F. OSBORN, General Biology ; H. P. BOWDITCH, Physiology ; J. S. BILLINGS, Hygiene ; J. MCKEEN CATTELL, Psychology ; DANIEL G. BRINTON, J. W. POWELL, Anthropology.

FRIDAY, APRIL 16, 1897.

SYLVESTER.

CONTENTS:

<i>Sylvester</i> : GEORGE BRUCE HALSTED.....	597
<i>The Great Fault and accompanying Sandstone Dikes of Ute Pass, Colorado</i> : W. O. CROSBY.....	604
<i>Exhibition in Science by the New York Academy of Sciences</i> : RICHARD E. DODGE.....	607
<i>The Missouri Botanical Garden</i>	610
<i>The Ganodonta or Primitive Edentates with Enamelled Teeth</i> : H. F. O.....	611
<i>Current Notes on Meteorology</i> :—	
<i>The Exploration of the Air ; Visibility of Mountains and Atmospheric Dust ; The Blue Hill Meteorological Observatory</i> : R. DEC. WARD.....	612
<i>Current Notes on Anthropology</i> :—	
<i>The so-called 'Bow-pullers' of Antiquity ; Fairyland ; Recent Etruscology</i> : D. G. BRINTON.....	614
<i>Notes on Inorganic Chemistry</i> : J. L. H.....	615
<i>Scientific Notes and News</i>	616
<i>University and Educational News</i>	619
<i>Discussion and Correspondence</i> :—	
<i>The Bruce Astronomical Medal</i> : EDWARD S. HOLDEN. <i>Professor Scott's Bird Pictures</i> ; F. A. LUCAS. <i>Note on a Simple Method for Newton's Total Reflection Experiment</i> : F. W. MCNAIR.....	620
<i>Scientific Literature</i> :—	
<i>The Annual Report of the Geological Survey of Canada</i> : C. H. HITCHCOCK. <i>Tables for the Determination of Minerals by their Physical Properties</i> : E. B. MATHEWS. <i>Duhem's Traité élémentaire de mécanique chimique</i> : WILDER D. BANCROFT. <i>Trigonometry for Beginners</i> : J. B. CHITTENDEN.....	621
<i>Scientific Journals</i> :—	
<i>The Astrophysical Journal</i>	628
<i>Societies and Academies</i> :—	
<i>The Biological Society of Washington</i> : F. A. LUCAS. <i>Zoological Club of the University of Chicago</i> : C. M. CHILD. <i>Torrey Botanical Club</i> : E. S. BURGESS. <i>Boston Society of Natural History</i> : SAMUEL HENSHAW. <i>The Academy of Science of St. Louis</i> : WM. TRELEASE. <i>Science Club of the University of Wisconsin</i> : WM. S. MARSHALL.....	629

MSS. intended for publication and books, etc., intended for review should be sent to the responsible editor, Prof. J. McKeen Cattell, Garrison-on-Hudson, N. Y.

ON Monday, March 15, 1897, in London, where, September 3, 1814, he was born, died the most extraordinary personage for half a century in the mathematical world.

James Joseph Sylvester was second wrangler at Cambridge in 1837. When we recall that Sylvester, Wm. Thomson, Maxwell, Clifford, J. J. Thomson were all second wranglers, we involuntarily wonder if any senior wrangler except Cayley can be ranked with them.

Yet it was characteristic of Sylvester that not to have been first was always bitter to him.

The man who beat him, Wm. N. Griffin, also a Johnian, afterwards a modest clergyman, was tremendously impressed by Sylvester, and honored him in a treatise on optics where he used Sylvester's first published paper, 'Analytical development of Fresnel's optical theory of crystals,' *Philosophical Magazine*, 1837.

Sylvester could not be equally generous, and explicitly rated above Griffin the fourth wrangler George Green, justly celebrated, who died in 1841.

Sylvester's second paper, 'On the motion and rest of fluids,' *Phil. Mag.*, 1838 and 1839, also seemed to point to physics.

In 1838 he succeeded the Rev. Wm. Ritchie as professor of natural philosophy in University College, London.

His unwillingness to submit to the re-