## 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; C. E. BESSEY, N. L. BRITTON, Botany; HENRY F. OSBORN, General Biology; C. S. MINOT, Embryology, Histology; H. P. BOWDITCH, Physiology; J. S. BILLINGS, Hygiene; J. MCKEEN CATTELL, Psychology; DANIEL G. BRINTON, J. W. POWELL, Anthropology.

FRIDAY, JANUARY 6, 1899.

## CONTENTS:

The United States Naval Observatory: PROFESSOR A. N. SKINNER	1
	16
	23
John Cummings: PROFESSOR WM. H. NILES	24
Scientific Books :	
Holman on Matter, Energy, Force and Work: T. C. M. Congdon's Qualitative Analysis; Muter's Manual of Analytical Chemistry: PROFESSOR W. A. NOYES. Thompson's Wild Animals I have known: T. S. P. Morris's Human Anatomy: PROFESSOR THOMAS DWIGHT. General	
Scientific Journals and Articles :	29
Societies and Academies :	
The Nebraska Academy of Sciences; Science Club of Northwestern University: PROFESSOR W. A. LOCY. The Chemical Society of Washington: WILLIAM A. KRUG. Students' Geological Club and Conference of Harvard University: J. M. BOUTWELL. Torrey Botanical Club: E. S. BUR- GESS	29
Discussion and Correspondence :	
The Pumas of the Western United States: WIT- MER STONE. The Schmidt-Dickert Moon Model: OLIVER C. FARRINGTON. Lehmann and Hansen on 'the Telepathic Problem': PROFESSOR E. B. TITCHENER.	34
Astronomical Notes:— The November Meteors; Chase's Comet (J. 1898); Stellar Motions: PROFESSOR WINSLOW UPTON	36
Current Notes on Anthropology :	
The American Hero-Myth; The Primitive Savage; A Booklet on Ethnology: PROFESSOR D. G. BRINTON	37
Scientific Notes and News	38
University and E lucational News	40

MSS. intended for publication and books, etc., intended for review should be sent to the responsible editor, Professor J. McKeen Cattell, Garrison-on-Hudson N. Y. THE UNITED STATES NAVAL OBSERVATORY.

ALTHOUGH much interest was shown by individuals in the science of astronomy in the early history of our country, this interest did not culminate in the founding of any astronomical observatories until the third and fourth decades of the present century. About 1835 Professors Olmsted and Loomis observed Halley's comet with a five inch telescope placed in the steeple of one of the buildings of Yale College at New Haven, Connecticut, but the observatory erected by Professor Albert Hopkins of Williams College, in 1836, was probably the earliest establishment of the kind in the United States. It was 48 feet long by 20 in breadth, and consisted of a central apartment surmounted by a revolving dome and flanked by two wings. The dome contained an equatorially mounted Herschelian telescope of 10-feet focus, and a 3.5-inch transit instrument was set up in one of the Only two years later Professor wings. Loomis built a small observatory at Hudson, Ohio, and furnished it with a 4-inch equatorial telescope and a 2.7-inch transit circle. The longitude and latitude of this observatory was determined by Professor Loomis, and he observed five comets and sixteen occultations in the brief intervals of leisure left from his regular class work in the Western Reserve College. Another indication of the zeal of individuals in the advancement of science by actual astro-