SCIENCE

A WEEKLY JOURNAL DEVOTED TO THE ADVANCEMENT OF SCIENCE, PUBLISHING THE OFFICIAL NOTICES AND PROCEEDINGS OF THE AMERICAN ASSOCIATION FOR THE ADVANCEMENT OF 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; CHARLES D. WALCOTT, Geology; W: M. DAVIS, Physiography; HENRY F. OSBORN, Paleontology; W. K. BROOKS, C. HART MERRIAM, Zoology; S. H. SCUDDER, Entomology; C. E. BESSEY, N. I. BRITTON, Botany; C. S. MINOT, Embryology, Histology; H. P. BOW-DITCH, Physiology; J. S. BILLINGS, Hygiene; WILLIAM H. WELCH, Pathology; J. MCKEEN CATTELL, Psychology; J. W. POWELL, Anthropology.

FRIDAY, SEPTEMBER 13, 1901.

CONTENTS :

The American Association for the Advancement of	
Science :	
The Carnegie Technical School: CHANCELLOR	
John A. Brashear	385
Section A, Mathematics and Astronomy; PRO-	
FESSOR G. A. MILLER	393
On the Stability of Vibrations : PROFESSOR CARL	
BARUS	403
The Fifth International Zoological Congress: J. P.	
McM	405
Scientific Books :	
Annals of the Astrophysical Observatory of the	
Smithsonian Institution: DR. C. E. MENDEN-	
HALL. Sheldon on Dynamo-electric Machinery :	
PROFESSOR DUGALD C. JACKSON	407
Discussion and Correspondence :	
A New Field for Kites in Meteorology: PRO-	
FESSOR A. LAWRENCE ROTH	412
Graduate Courses in Science: DR. GEORGE B.	
Germann	413
Prize Subjects in Applied Science	420
Scientific Notes and News	
University and Educational News	424

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 CARNEGIE TECHNICAL SCHOOL.*

IT was the intention of your vice-president to prepare an address on the Evolution of the Mechanics of the Telescope for pre-

*Address of the vice-president and chairman of Section D, Mechanical Science and Engineering, of the American Association for the Advancement of Science, Denver meeting, August, 1901. sentation before Section D of this Association, but a new and important theme has been brought before me by reason of intimate association therewith, and to which a number of the members of this Section have contributed most valuable data. I therefore beg to present to you a few notes upon this subject, namely, the technical school for which Mr. Andrew Carnegie has most generously proposed to furnish the means to build, equip and endow in the city of Pittsburg. When Mr. Carnegie gave to the city its library, its art gallery, its temple of music and its museum, neither the donor nor the citizens had the remotest dream of what they would develop into, nor how far their influence would reach and be felt. Ι need not tell you what potent factors these institutions have been as educators in the realms of art, science and literature. Suffice it to say, that every department of the great institute has proved itself worthy of its name and is doing marvelous work for the betterment of the people. So marked has been this development during the six years of the existence of the Pittsburg Institute that Mr. Carnegie has given over three million dollars to enlarge its boundaries and increase its influence.

But Mr. Carnegie had promised even greater things for the city of his adoption. He knew as well as any man the need, the great value of a school of technology in