## 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. Bowditch, Physiology; William H. Welch, Pathology; J. McKeen Cattell, Psychology.

Friday, September 18, 1903.

## CONTENTS:

What Training in Physiology and Hygiene may we reasonably expect of the Public Schools: Professor William T. Sedgwick,	
Professor Theodore Hough	353
The Marine Biological Survey Work carried on by the Zoological Department of the University of California: Professor Wil-	
LIAM E. RITTER	360
Scientific Books:—	
The Collected Papers of Rowland and Fitz-Gerald: R. S. W. Haller's Lehrbuch der	
vergleichenden Anatomie: J. P. McM	866
Societies and Academies:—	
The American Pomological Society	369
Discussion and Correspondence:—	
The Bahamas vs. Tortugas as a Station for	
Research in Marine Zoology: Dr. Alfred	
GOLDSBOROUGH MAYER	369
Shorter Articles:—	
The Brain Weight of the Japanese: Dr. E.	
A. Spitzka. Gonionemus versus Gonione-	
ma: Dr. L. Murbach	:,71
Botanical Notes:—	
Mosses; Morphology of Angiosperms:	
Professor F. D. Heald	374
Investigations in Progress at the University	
of Chicago	375
The School of Geography in the Summer Ses-	
sion of Cornell University: A. P. B	380
The Malaria Expedition to the Gambia	381
Scientific Notes and News	382
University and Educational News	384

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

WHAT TRAINING IN PHYSIOLOGY AND HYGIENE MAY WE REASONABLY EX-PECT OF THE PUBLIC SCHOOLS.\*

In the public schools of to-day various subjects are taught, and for various reasons. Some, like arithmetic or the reading and writing of English, are indispensable tools of modern civilized life; others, like geography and history, impart necessary information or promote general intelligence; still others, like algebra, geometry and Latin, are agents of mental discipline or else afford necessary preparation for subsequent work. Physiology and hygiene, the studies with which we are concerned in the present paper, were introduced into the public schools for the express purpose of affording information concerning the structure and functions of the human body, being expected thereby to contribute to the preservation and promotion of health; and they have kept their place, in spite of serious shortcomings, as a concession to the practical importance of sound ideas concerning health and disease.

The training which may reasonably be expected in the reading and writing of English, in arithmetic, in geography or in Latin, is the subject of frequent discussion in educational gatherings and is doubtless influenced by such discussions; but it is determined chiefly by the exami-

\* Read before the American Social Science Association, Boston meeting, May, 1903.