

the intellect supple and develops a habit of logical deduction necessary to one who commands."

In the preface to the third volume, written after three and a half years of war, the author explains that the experiences through which the country is passing have influenced him to extend the treatment of applied mechanics beyond the course as it is now given. He foresees, after peace is reestablished, a profound transformation in scientific study, which will adapt it more directly to the realities of life (*réalités de la vie*). He refers to the action of L'Académie des Sciences in deciding (January, 1918) to admit a certain number of representatives of industry and predicts that l'Ecole Polytechnique will reduce the time now given to abstract theory and increase the time allotted to applied work.

W. R. LONGLEY.

*Electric and Magnetic Measurements.* By CHARLES MARQUIS SMITH. (Edited by E. R. Hedrick.) New York, Macmillan, 1917. xii + 373 pp.

FROM the point of view of the mathematical reader the interest of this book is purely incidental. Moreover, it is incidental to study not in any general field but only in the special field of the mathematical theory of electricity and magnetism. In fact, the book belongs to a series of texts on topics in engineering. As such a detailed review of it is out of place in this BULLETIN. It is well, however, at this time when more interest is being manifested in applied mathematics than heretofore in this country to have attention directed to a convenient description of the instruments and methods by means of which are measured the quantities involved in the theory of electricity and magnetism, a subject which has lent itself in a remarkable way to precise mathematical treatment. The book under consideration furnishes in convenient form what such a mathematical reader will desire. The fact that it was written for engineering students does not interfere with this use of the book.

R. D. CARMICHAEL.