of an engineer." For a specimen of just this kind of work, see the deduction of

$$\delta p = \left(\frac{dp}{dt}\right) \, \delta t + \left(\frac{dp}{dv}\right) \, \delta v$$

on page 138 of the book under review. Again, we read: "In some of the following integrals certain substitutions are suggested. The student must not be discouraged if he cannot see why these are suggested; these suggestions are the outcome of, perhaps, weeks of mental effort by some dead and gone mathematician. Indeed, some of them are no better than this, that we are told the answer and are merely asked to test if it is right by differentiation."

The book was constructed in part from lectures which the author delivered at a night school. In several places it contains traces of the excitement under which he labored in his anxiety to make his point. The intelligent reader, however, will have no difficulty in recognizing such places and in accepting his statements at their proper discount.

THOMAS S. FISKE.

## ERRATA.

OUR attention has been called to several errata occurring in previous numbers of the Bulletin. In Mr. Macaulay's article, "Newton's theory of kinetics," published in the number for July, 1897, of the last volume, the following corrections should be made:

In Dr. McClintock's article "On a solution of the biquadratic which combines the methods of Descartes and Euler," contained in the same number, a correction should be made:

p. 389, line 24, for 
$$4rv = v (p + v^2) - q^2$$
  
read  $4rv = v (p + v)^2 - q^2$ .

In the report by the Secretary "Fourth Summer Meeting of the American Mathematical Society," contained in the Bulletin for October, 1897, a misprint occurs:

p.8, line 41, p. 9, lines 1, 2, 3, 8, 
$$\right\}$$
 in the formulæ, for e read  $\epsilon.$