

and the exploration of the desolated islands of that neighborhood formed one of the most interesting parts of the work. Depths were reached in the Atlantic exceeding 4,500 fathoms, and a line across the South Pacific was the first ever made in deep-sea sounding. The visit to Australia was especially interesting. The opinion of the author is highly favorable to that growing empire of the distant seas. He thinks the "working people" of Australia have more influence than elsewhere, and that their average intelligence exceeds that of our own people even. The four millions are "a whole-souled and gallant race," and the visitors "left their country with a genuine love for the people and a firm belief in their future greatness." The "Enterprise" sailed on Jan. 3, 1883, and went out of commission, after having thus in three years circumnavigated the globe, March 31, 1886. The log of the soundings, and the roll of the officers and men, are appended to the book, which is continuously of interest from its first page to the last.

Elements of Graphical Statics. By L. M. HOSKINS. New York and London, Macmillan & Co., 1892. 8vo. pp. viii., 191. Pl. v. \$2.25.

THIS work is an elementary text-book for use of students in engineering. Fundamental principles and simple methods of treatment are illustrated, and illustrated well. The funicular and other polygons, and figures related to them, are deduced from statical principles. The theory of elasticity is omitted. Bow's notation has been adopted and extended, and the lettering of both the force and the space diagrams is thus made at once convenient and intelligible. The whole constitutes an excellent graphical discussion of the general and fundamental principles of mechanics, and in such form as to be especially useful in applications by the engineer in design and construction. The tracing of the forces involved in the framing of structures and the relations of efforts and resistances in such constructions is, by these methods—now becoming well known and extensively applied—

made both easy and simple. The work is likely to prove valuable both in instruction and in office work.

AMONG THE PUBLISHERS.

THE ninth volume in the series of technological handbooks issued by George Bell & Sons, London (Macmillan, New York), is devoted to "Silk Dyeing, Printing, and Finishing," by George H. Hurst, F.C.S. The substance of the book consists of a series of articles contributed to a technical journal, though they have been revised and to some extent rewritten. In addition to these there are added chapters on silk printing and finishing, and on the testing of dyed silks. The methods of using all the new coal-tar colors, which have of late years led to new developments in silk dyeing, have been included. The book is a thoroughly practical one, not a mere collection of recipes—though recipes are not lacking. The appendix contains a series of patterns illustrative of the tints and shades produced in the dyeing of silks. (237 pages. 12°. \$2.)

—Macmillan & Co. have just issued a revised and enlarged second edition of "Blowpipe Analysis," by J. Landauer, member of the Imperial German Academy of Naturalists (authorized English edition by James Taylor, B.Sc., Wh.Sc., A.R.S.M. The soundness of the principles on which the work is based is attested by the favorable reception accorded to it in the various languages into which it has been translated, as well as by the fact that new editions have been found necessary. In the present edition not only has the text been completely revised, but new methods of approved value have been incorporated, so as to bring the work up to the present time. Some additional details of manipulation will be found of value by readers who are working up the subject without a teacher. A handsome plate of the spectra of the metals of the alkalies and alkali groups, from the drawings of Bunsen and Kirchhoff forms the frontispiece. (173 pages. 12°. \$1.10.)

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