

hen stole her nest. he was sure to miss her and search her out, then get her eggs, if he could reach them; if unable to do so, he would stand and whine till aid came. In our daily drives, Carlo was accustomed to go with mother and me, so when left at home he was very sad. To deceive him as to our going, we came to spell the words *go*, *barn* and *ride*. For a few days the plan succeeded well, but, regardless of special tone or other (to us) apparent association, he soon pricked up his ears at the sound "g-o," and that mystery was solved, then followed "r-i-d-e" and "b-a-r-n," till those combinations were nearly as significant of a pleasure-hour to him as to us.

During mother's long and severe illness, he took great interest in all that pertained to her, watching the doctor very closely, and sitting, by the half-hour, with his chin on the bed by her side. We bought our bread, and, knowing Carlo's fondness for warm biscuit, the baker often gave him one which he quickly despatched. Once, during a very severe attack of mother's, when we were doing our utmost to tempt her appetite, Carlo came in early one morning, bringing his warm biscuit untouched, and laid it on the floor by mother's side. Too sick to notice this act of his, but not to be disappointed in his own plan, he came forward and lifted the biscuit to her pillow, and retired again to his corner to wait some look of thanks from her. It came, and such a happy dog! He had brought his choicest offering—a warm biscuit—and it had been recognized. Was there a loving plan and careful observation in this act?

One day while busy writing, I heard him in the dining-room asking to go out. The outside doors were open, and I said "Yes, Carlo may go!" and returned to my desk. Soon he repeated his request, and I rose saying "Now you must go, and not bother me so!" but he lay quietly, though anxiously, in the middle of the floor. Going to him, I found he had my canary between his front feet, not a feather injured, but waiting for me to release it in safety. The cage had accidentally been left open, and finding the bird free, with these outside doors of the room open, he had

gently caught and held my pet. Why should he catch it when the doors were open, when if closed he made no such effort? Who will say this was mere instinct? MARY E. HOLMES.
Rockford, Ill.

BOOK-REVIEWS.

Deep-Sea Sounding. By CAPT. A. S. BARKER, U.S.N. New York, J. Wiley & Sons, 1892. 133 p. Maps. 8°.

CAPTAIN BARKER, in this very interesting work, gives an account of the results of the explorations of deep-sea bottoms by the officers of the U.S.S. "Enterprise" in the years 1883-1886. The casts of the lead were made by Messrs. Norris and Marix, lieutenants attached to the "Enterprise," the one on the outward, the other on the homeward voyage. The ship sailed and steamed across the Atlantic and the Indian Oceans, and returned by way of the Pacific, sounding out different routes. Soundings were made daily, often for many days together; steam being raised for the purpose each time, and the fires allowed to go out again immediately after the cast. With characteristic naval spirit, the author assumes all responsibility for even the minutest detail, as where he says "my usual custom, during the cruise, was to use only two boilers when steaming," and where similar assumptions of credit in regard to details for which other officers were responsible, and which a commanding officer in the merchant service would have given credit for, and left absolutely, to the person best prepared by experience and judgment to perform. The two lieutenants who did the work, and the chief engineer, are, however, complimented as officers "whose intelligence, zeal, and devotion to duty could not be surpassed." This innocent and unconscious self-assertion runs through the book.

The volume is very interesting, however, and contains much new and valuable information and data. New submarine mountain ranges were discovered, and previously unknown obstructions to navigation. The voyage terminated at the further side of the Indian Ocean, immediately after the great eruption of Krakatoa;

CALENDAR OF SOCIETIES.

Society of Natural History, Boston.

Jan. 4.—W. G. Farlow, Account of Some of the Botanical Establishments of Europe; J. Eliot Wolff, Application of the Microscope to the Study of Rocks.

Entomological Society, Washington.

Dec. 31.—The eighth annual and eighty-fifth regular meeting of the society was held at the residence of the president, Dr. C. V. Riley. The following officers were elected: President, C. V. Riley; vice-presidents, W. H. Ashmead and C. W. Stiles; recording secretary, C. L. Marlatt; corresponding secretary, L. O. Howard; treasurer, E. A. Schwarz; executive committee, the officers and Dr. W. H. Fox, Dr. Geo. Marx, and Mr. B. E. Fernow. Mr. Frank Benton was elected an active member. The retiring president, Dr. C. V. Riley, then delivered his annual address on the subject of "Parasitism in Insects." The address began with a definition of the term and a classification of the subject, and then treated in detail the following subdivisions: (1) The parasites among insects proper, by orders; (2) origin of insect parasitism; (3) effects of the parasitic life; (4) economic bearings of the subject. At the conclusion of the address, on motion of Dr. Gill, the thanks of the society were voted to the president.

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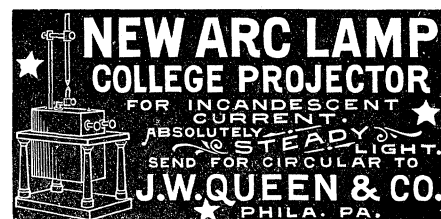
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and the exploration of the desolated islands of that neighborhood formed one of the most interesting parts of the work. Depths were reached in the Atlantic exceeding 4,500 fathoms, and a line across the South Pacific was the first ever made in deep-sea 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—

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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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