

Mr. W. O. Crosby presents the results of his studies on the mountain-reefs of eastern Cuba, of which an abstract will be printed in our geographic columns. Mr. J. Tatlock, jun., discusses the variation of barometric measurements with the season. Various reports and proceedings fill about half of the hundred pages. The club's growth in popularity, as shown by its rapidly increasing membership of both sexes, has by no means diminished the scientific value of its publications.

— The general catalogue of the American exhibit at the London fisheries exhibition, referred to on a previous page, and which is now in course of publication, will be followed by a series of special catalogues of the more important sections, which will contain much fresh information regarding the distribution, abundance, and relationships of the species exhibited. The handbooks of two sections — that of the birds, by Mr. Ridgway; and that of the invertebrates, by Mr. Rathbun — are now in press.

— It may not be generally known that Harvard college observatory took an important part in the early experiments made in astronomical photography. Under the direction of Prof. W. C. Bond, the first daguerrotype of a fixed star, and many early representations of other objects, were obtained there. After the invention of the collodion process, Prof. G. P. Bond returned to the subject, and obtained an interesting series of photographs of various celestial objects. While stars of the first magnitude only could be depicted by the daguerrotype, the new process rendered it possible to photograph stars of the fourth. Professor Bond paid special attention to the means afforded by photography for the accurate measurement of double stars. For this purpose he procured numerous photographs of the star Mizar (*ζ Ursae Majoris*), which he afterwards measured micrometrically. The accuracy of the results was remarkable; and the average discordance of the values obtained from the photographs taken on eight different evenings was only 0.3".

— The second part of vol. iii. of *Anales* of the Mexican national museum is devoted to the following papers: 1. Continuation of the study upon the *Piedra del sol*, by Alfredo Chavero; Glossary of Castilian words derived from the Mexican, or Nahuatl, by Jesus Sanchez; Mexican antiquities, by Carlos Fernandez. In the list of Sr. Sanchez are more than two hundred words derived from the aboriginal Mexican, a few of which are already in the vocabulary of the United States; and some of them have become reputable English words, such as, cacao (*cacahuatl*), cocoa (*cocoa*), copal (*copalli*), coyote (*coyotl*), Chile (*Chilli*), chocolate (*pozolatl?*), mezcal (*mexcalli*), mezquite (*mizquittl*), ocelote (*ocelotl*), pinole (*pinolli*), tomato (*tomatl*), tule (*tollin*).

— Professor Aeby has published a diagram of the course of the nerve-fibres in the human central ner-

vous system, which is very warmly praised, and recommended to students and teachers alike. The publisher is Dapf in Bern; the price, 1 mark and 60 pfennigs.

RECENT BOOKS AND PAMPHLETS.

Allieri, L. Equilibrio interno delle pile metalliche secondo le leggi della deformazione elastica. Roma, Loescher, 1882. 119 p., 7 tables. 4°.

Beilstein, F. Handbuch der organischen chemie. Leipzig, Voss, 1883. 2185 p. 8°.

Binzer, J. M. v. Vacuosität und schwerkraft. Nachweis der gemeinsamen ursache der attractions- und gravitations-phänomene einschliesslich der magnetismus auf grund physikalischen thatsachen. Salzburg, Dieler, 1883. 49 p. 8°.

Bottler, Max. Exkursions flora von Unterfranken. Ein taschenbuch zum leichten bestimmen der in Unterfranken, auf dem Steigerwalde und in der Rhön wildwachs. Phanerogamen. Kissingen, Hailmann, 1883. 6+208 p. 8°.

Bowman, W. H. Lecture introducing his system of respiration for the development and treatment of the vital organs of the body. Boston, Mudge, pr., 1883. 30 p. 8°.

Brunbauer, Paul. Der einfluss der temperatur auf das leben der tagfalter. Inaug. diss. München, 1883. 115 p. 8°.

Compte rendu des travaux du service du Phylloxera. Année 1882. Procès-verbaux de la session annuelle de la Commission supérieure du Phylloxera. Rapports et pièces annexes. Lois, décrets et arrêtés relatifs au Phylloxera. Paris, Impr. nat., 1883. 603 p. 8°.

Congrès géologique international. Compte rendu de la 2d session, Bologne, 1881. Bologne, impr. Fara et Garagnani, 1882. 15+661 p., 19 pl. 8°.

Falb, Rud. Meteorologische betrachtungen mit besondere bezugnahme auf die periodischen ueberschwerimmungen. Wien, Hartleben, 1882. 6+152 p. 8°.

Gilardini, G. Principio della scienza idraulica italiana. Milan, tip. Osserv. cattolico, 1882. 23 p. 16°.

International (Great) fisheries exhibition. London, 1883. United States of America. A. Preliminary catalogue and synopsis of the collections exhibited by the United States fish commission and by special exhibitors; with a concordance to the official classification of the exhibition. Washington, Government, 1883. 106 p. 8°.

Kempe, H. R. Handbuch der elektrizitätsmessungen. Aus dem englisch übertr. v. J. Baumann. Braunschweig, Vieweg, 1883. 8+308 p. 8°.

Konkoly, Nic. v. Praktische anleitung zur anstellung astronomischer beobachtungen mit besonderer rucksicht auf die astrophysik. Braunschweig, Vieweg, 1883. 22+912 p., 345 cuts. 8°.

Lassalle, C. Origin of the western nations and languages: showing the construction and aim of Punic recovery of the universal language, reconstruction of Phoenician geography, Asiatic source of the dialects of Britain, principal emigrations from Asia, and description of Scythian society. With an appendix upon the connection of Assyrian with the language of western Europe, and Gaelic with the language of Scythia. London, Heywood, 1883. 420 p. 8°.

Maine, Sir H. S. Dissertations on early law and custom, chiefly collected from lectures delivered at Oxford. London, Murray, 1883. 402 p. 8°.

Moncel, Th. du, et Gerdaldy, F. L'Électricité comme force motrice. Paris, Hachette, 1883. 308 p., 112 fig. 18°.

Nebst, E. Moderne instrumentenkunde. Braunschweig, Vieweg, 1883. 22+912 p., 345 cuts. 8°.

New York — Department of public parks. Report of the New York meteorological observatory for the year 1882. N.Y., City, 1883. (13 p.) 4°.

North Carolina — Board of agriculture. Annual report of the agricultural experiment station for 1882. Raleigh, Ashe & Gatling, 1883. 8+150 p. 8°.

Rodriguez Mourello, J. La radiafonia, estudio de una nueva propiedad de las radiaciones. Madrid, impr. Hernández, 1883. 15+286 p., pl. 8°.

Romanes, G. J. Scientific evidences of organic evolution N.Y., Macmillan, 1883. (Nature series.) 6+88 p. 12°.

Taber, C. A. M. How the great prevailing winds and ocean currents are produced, and how they affect the temperature and density of lands and seas. Boston, Williams, 1882. 82 p. 12°.

Thurston, R. H. Conversion tables of metric and British or United States weights and measures. N.Y., Wiley, 1882+83 p. 8°.