

and mountaineers of the Caucasus; Feb. 3, Dr. D. Webster Prentiss, Mesmerism in animals, with experiments; Feb. 10, Professor Theodore Gill, Mythical animals; Feb. 17, Dr. John S. Billings, U.S.A., Germs and epidemics.

— At the meeting of the Biological society of Washington, held Jan. 19, an address was given by the retiring president, Professor Theodore Gill, on the Principles of zoögeography.

— The Association of Ohio Colleges, during its meeting at Wooster, Dec. 27, formally adopted the resolutions of the American association for the advancement of science and the American philological association, concerning the degrees of S.D. and Ph.D. Henceforth the sixteen colleges comprising the association are in honor bound not to confer either degree, except upon examination.

— Diffuse but entertaining notes on the habits of *Lepus sylvaticus* are given by Rev. Samuel Lockwood in the December number of the American Naturalist.

RECENT BOOKS AND PAMPHLETS.

Ballard, R. The solution of the pyramid problem, or Pyramid discoveries; with a new theory as to their ancient use. N.Y., 1882. 8°.

Beal, W. J. The new botany: a lecture on the best method of teaching the science. 2d ed., revised. Phila., Marot. 1882. 16 p. 8°.

Beard, George M. Herbert Spencer on American nervousness: a scientific coincidence. N.Y., Putnam. 1883. 17 p. 8°.

Brunner von Wattenwyl, Carl. Prodrömus der europäischen orthopteren. Leipzig, Engelmann. 1882. 32 + 466 p., 11 pl., map. 8°.

Cambridge—Peabody museum of American archæology and ethnology. Fifteenth annual report of the trustees [and curator]. Cambridge, Trustees. 1882. [106 p.] 8°. Forms vol. iii., No. 2, of the reports.

Comstock, J. H. Report on insects for the year 1881; with illustrations. Wash., Government. 1882. 22 p., [7] pl. 8°.

Dames, W., and Kayser, E., editors. Palæontologische abhandlungen. 1er bd. heft. 1. Struckmann, C. Neue beiträge zur kenntniss des oberen Jura und der waeldenbildungen der umgegend von Hannover.) Berlin, 1882. 4 pl. 4°.

Decante, E. Tables du cadran solaire azimutal pour tous les points situés entre les cercles polaires. Variation automatique, détermination instantanée du relèvement vrai, controle de la route. 2 vol. Paris. 1882. 8°.

Fletcher, Robert. On prehistoric trephining and cranial amulets. Wash., Government. 1882. 32 p., 9 pl. 4°.

Frayser, Persifor. Mémoire sur la géologie de la partie sud-est de la Pennsylvanie. Thèse présentée à la faculté des sciences de Lille. Lille, Imp. Six-Horenans. 1882. 179 p., 4 pl. 4°.

Geikie, Archibald. Text-book of geology. N.Y. Macmillan. 1882. 11 + 971 p. ill. 8°.

Harris, Edward Doubleday. Memoir of Thaddeus William Harris, M.D. Cambridge, Wilson. 14 p., chart. 8°.

Hoffer, E. Die hummeln Steiermarks. Lebensgeschichte und beschreibung derselben. i. hälfte. Graz. 1882. 8°. Plates.

International exhibition of electricity, Paris, 1881. Report of the sub-commission [Barker and others] on incandescent lamps. N.Y., Burgoyne pr. 1882. 28 p. 8°.

Laflamme, v'abbe J. C. K. Le Canada d'autrefois; esquisse géologique. Conférence donnée à l'Institut canadien de Quebec, durant l'hiver de 1882. n.p. 23 p. 8°.

Loew, O., u. Bokorny, T. Die chemische kraftquelle im lebenden protoplasma; theoretisch begründet und experimentell nachgewiesen. München. 1882. 8°.

London—Royal geographical society. Supplementary papers. Vol. i. pt. 1. (Travels and researches in western China; by E. C. Baber.) London. 1882. 8°.

Mass.—Commissioners on inland fisheries. Seventeenth annual report for 1882. Boston, State. 1883. 58 p. 8°.

Maxwell, James Clerk. Life, with selections from his correspondence and occasional writings, and a sketch of his contributions to science; by Lewis Campbell and W. Garnett. N.Y., Macmillan. 1882. 16 + 662 p., 3 portr. & pl. 8°.

Minchin, G. M. Uniplanar kinematics of solids and fluids, with applications to the distribution and flow of electricity. N.Y., Macmillan. 1882. 8 + 266 p. 12°.

Princeton—College of New Jersey. Preliminary report upon the Princeton scientific expedition of 1882; by W. B. Scott and W. F. Magie. Princeton, Robinson, pr. 1882. 8 p. 8°.

Riley, C. V. Report of the entomologist of the Department of agriculture for the year ending June, 1882. Wash., Government. 1882. 167 p., 20 pl. 8°.

Scientific and literary gossip. Vol. 1, nos. 1-3. Boston, Cassino. 1882-1883. 16 p.m. 8°.

Searles, W. H. Field engineering: a handbook of the theory and practice of railway surveying, location and construction. 4th ed. N.Y., Wiley. 1883. 12°.

Searles, W. H. The railroad spiral: the theory of the compound transition curve reduced to practical formulæ and rules for application in field-work. N.Y., Wiley. 1883. 12°.

Southwick, A. P. Question-book of botany with notes, queries, etc. Syracuse, Bardeen. 1882. 40 p. 16°.

Spencer, Herbert. Herbert Spencer on the Americans and the Americans on Herbert Spencer: a full report of his interview and of the proceedings at the farewell banquet of Nov. 9, 1882. N.Y., Appleton. 1883. 96 p. 12°.

Studer's popular ornithology: the birds of N. America, drawn and colored from nature; by T. Jasper. N.Y., Studer. 1883. 182 p., 119 pl. f°.

Taylor, W. B. Physics and occult qualities. An address before the philosophical society of Washington, Dec. 2, 1882. Washington, Judd and Detweiler, pr. 1882. 50 p. 8°.

U. S.—Department of agriculture. Report of the commissioner of agriculture for the years 1881 and 1882. Wash., Government. 1882. 704 p., 84 pl. 8°.

Washington—Anthropological society. Transactions. Vol. 1, Feb. 10, 1879-Jan. 17, 1882. Wash., Society. 1882. 142 p. 8°.

Washington—Smithsonian institution. Catalogue of publications of the Smithsonian institution (1846-1882), with an alphabetical index of articles in the Smithsonian contributions to knowledge, Miscellaneous collections, Annual reports, Bulletins and proceedings of the U. S. national museum and Report of the bureau of ethnology; by William J. Rhees. Wash., Institution. 1882. 328 p. 8°.