

D. — *Biology.*

Newton, Prof., Zoological bibliography . . .	£50
Slater, P. L., Natural history of Timor Laut . .	50
Lankester, Prof. Ray, Table at the zoological station at Naples	80
Harrison, J. Park, Facial characteristics of races in the British Isles	10
Hooker, Sir J., Exploring Kilimandjaro and the adjoining mountains of equatorial Africa . .	500
Cordeaux, Mr. J., Migration of birds	20
Foster, Dr. M., Coagulation of the blood . . .	50
Stainton, Mr. H. T., Record of zoological literature	100

E. — *Geography.*

Godwin-Austen, Lieut.-Col., Exploration of New Guinea	100
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F. — *Economic Science and Statistics.*

Brabrook, Mr. E. W., Preparation of the final report of the anthropometric committee . .	10
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G. — *Mechanics.*

Bramwell, Sir F., Patent legislation	5
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—Lieut. Ray returned to San Francisco, Oct. 7, by the schooner *Leo*. He left that port on July 18, 1881, under instructions from the signal-service bureau to establish a permanent signal-station at Point Barrow, and to remain there until the summer of 1884, unless otherwise ordered. The order for the party to return created great surprise, as the work was successfully carried on. Lieut. Ray stated, that, apart from the scientific importance of the station, it was a necessity, as a refuge for the crews of whaling-vessels. Every year, in the Arctic Ocean, there are, on an average, forty vessels, worth, with their cargoes, four million dollars, and employing sixteen hundred men. Out of eighty-seven vessels, fifty have been lost within a hundred miles of Point Barrow, in one year alone. In 1877 twelve were lost, with all on board. The crews would not abandon their vessels, knowing there was nothing on the shore. Had the station then existed, it is probable that all their lives would have been saved. Since the station was established, two years ago, over fifty lives have been saved. Lieut. Ray states, that all the party lived comfortably, and enjoyed good health, the climate being particularly beneficial to those suffering from malaria. Besides their regular provisions, the party had seal, walrus, and white whale meat; the last being the best, as it was sweeter and more nutritious. Lieut. Ray expressed regret at his recall.

—Lieut. Schwatka, who, with his party, was picked up by Lieut. Ray at St. Michael's, speaking of his trip up the Yukon River, Alaska, says they started from Fort Vancouver, W.T., on May 21, and travelled twenty-eight hundred miles overland, reaching the head waters of the river, where they constructed a raft of logs to navigate the stream to its mouth. They procured a crew of six Indians, and proceeded down the gradually increasing stream within two hundred and fifty miles of Fort Chitkat, where rapids were encountered. Down these the

Indians refused to go, and attempted to force the raft ashore. Schwatka succeeded in suppressing the mutiny, and the rapids were run. The voyage on the raft was eighteen hundred and twenty-nine miles. From the mouth of the Yukon they proceeded to St. Michael's, where they boarded the *Leo* for this port. Signal-service officer Leavitt, who has been stationed at St. Michael's, and who also came down on the *Leo*, says he has ascended the Yukon to Fort Selkirk two thousand miles from its mouth. He describes the river as being one of the largest in the world, discharging fifty per cent more water than the Mississippi, and as being in places seven miles in breadth.

—Professor Oswald Heer, of the university and federal polytechnic school of Zurich, the celebrated Swiss paleontologist, died at Lausanne, Canton de Vaud, the 27th of September. Heer has done more for fossil botany and fossil insects than any one else during the last forty years, and his death will leave a place in science which it will be difficult to fill.

RECENT BOOKS AND PAMPHLETS.

Bernheim, G. Incombustibilisation des théâtres et bâtimens. Nice, *impr. Gauthier*, 1883. 16 p. 4°.

Berthelot, M. P. E. Explosive materials: series of lectures delivered before the Collège de France, Paris; to which is added a short historical sketch of gunpowder. Translated from the German of Karl Braun by J. P. Wisser, and a bibliography of works on explosives. New York, *Van Nostrand*, 1883. (Van Nostrand's sc. ser., no. 70.) 24°.

Bourassé, J. J. Histoire naturelle des oiseaux, des reptiles et des poissons. Tours, *Mame*, 1883. (Bibl. jeun. chrét.) 288 p., illustr. 12°.

Briggs, R. Steam-heating: an exposition of the American practice of warming buildings by steam. New York, *Van Nostrand*, 1883. (Van Nostrand's sc. ser., no. 68.) 108 p., illustr. 24°.

Brooks, W. K. The law of heredity: a study of the cause of variation and the origin of living organisms. Baltimore, *Murphy*, 1883. 2+336 p., 2 pl., illustr. 16°.

Browne, W. R. The student's mechanics: an introduction to the study of force and motion. London, *Griffin*, 1883. 16+210 p., illustr. 16°.

Campagne, E. Les mines, or, argent, fer, cuivre, plomb, étain, zinc, mercure, et platine. Rouen, *Mégaré*, 1883. (Bibl. mor. jeun.) 190 p., illustr. 8°.

Carrière, E. A. Étude générale du genre pommier, et particulièrement des pommiers microcarpes ou pommiers d'ornement, pommiers à fleurs doubles, etc. Mesnie, *impr. Firmin-Didot*, 1883. 179 p. 18°.

Foye, J. C. Chemical problems, with brief statements of the principles involved. New York, *Van Nostrand*, 1883. (Van Nostrand's sc. ser., no. 69.) 24°.

Freeman, E. A. English towns and districts: a series of addresses and sketches. London, *Macmillan*, 1883. 13+455 p., 11 pl., map. 8°.

Gladstone, J. H., and Tribe, A. The chemistry of the secondary batteries of Planté and Faure. London, *Macmillan*, 1883. (Nature series.) 11+59 p. 8°.

Gomme, G. L. Folk-lore relics of early village life. London, *Stock*, 1883. 8+246 p. f°.

Grant, B. A few notes on St. Helena, and descriptive guide. To which are added some remarks on the island as a health resort, Capt. J. R. Oliver's geology of the island, and numerous appendices. St. Helena, *Grant*, 1883. 127 p., 8 phot. pl. 8°.

Haeckel, E. The pedigree of man and other essays. Translated by E. B. Aveling. London, *Free thought publ. co.*, 1883. 15+352 p., illustr. 16°.

Kiddle, H. A text-book on physics, being a short and complete course, based upon the larger work of Ganot; for academies, high schools, etc. New York, *Wood*, 1883. 272 p., illustr. 8°.

MacLeod, J. Leiddraad bij het onderwijzen en aanleeren der dierkunde. Algemeene dierkunde. Gent, *Vuysteke*, 1883. (Willems-fond, uitgave 104.) 4+151 p., 1 pl., illustr. 16°.