

SCIENTIFIC SERIALS

Ocean Highways, March.—The following are the original articles in this number:—"Dr. Livingstone and the Cameron Relief Expedition;" "Francis Garnier—In Memoriam," a highly and deservedly eulogistic memoir (by Colonel Yule, C.B.) of this brave and high-minded soldier and explorer, whose untimely death we recently noticed; "Bhawalpur;" "An Account of the Early Jesuit Missions in the La Plata," by A. A. Geary; and "The British India Steam Navigation Company."

THE *Geological Magazine*, March.—The following are the original articles in this number:—"The Leinster Coal-field," by J. M.C. Meadows (with a page map); "On a new Species of *Dithyrocaris* from the Carboniferous Limestone, &c.," by Henry Woodward, F.R.S., and Robert Etheridge, jun. (with a plate); "Glacialoid or Rearranged Glacial Drift," by G. H. Kinahan; "On some new Devonian Fossils," by Prof. H. Alleyne Nicholson (with a woodcut and plate); "Reply to Mr. Poulett-Scrope," by Robert Mallet, F.R.S.

Quarterly Journal of the Meteorological Society, January.—This number contains the following papers:—"Notes on Meteorology of Vancouver Island," by R. H. Scott, F.R.S.; "The Thunderstorm at Brighton on October 8, 1873, and its effects," by F. E. Sawyer; "Some of the Considerations suggested by the Depressions which passed over the British Islands during September 1873," by F. Gaster; "On an improved form of Aneroid for determining Heights, with a means of adjusting the Altitude Scale for various Temperatures," by Rogers Field; "On the Hurricane of August 1873, which moved in a curved track round Bermuda between the 20th and 23rd, and passed on to Nova Scotia and Cape Breton on the 24th, doing extreme damage both at sea and on land," by Capt. H. Toynebee (with a plate); "On a Mercurial Barometer for the use of Travellers, filled by the spiral cord method," by Staff-Commander C. George, R.N.; also an account of the discussion on the best form of Thermometer Stand, which took place at the meeting of November 19, 1873.

Archives des Sciences Physiques et Naturelles, Jan. 15, 1874.—The principal article in this number is an exhaustive study, by Prof. Forel, of the *seiches*, or peculiar tidal phenomena, which have long been observed on the lake of Geneva. The subject is treated in five sections, as follows: the *seiches* at Geneva and at Morges compared; oscillatory movement in the harbour at Morges, analogous to *seiches*; the movement of oscillation of *seiches*; experimental study (with special apparatus) of the laws of oscillation of libration; and lastly, comparisons and conclusions. Prof. Forel adheres to the theory generally accepted in explanation of the phenomenon, viz., that it is due to variations of atmospheric pressure; the pressure diminishing at one part and increasing at another, the surface of the water rises in the former case and sinks in the latter. Thus a swinging undulation is produced. Some of the larger *seiches* are attributed to earthquakes. The amplitude differs in different *seiches*; and in the same *seiche* it varies from one point of the lake to another. The duration of different *seiches* also varies in the same locality; and the duration of *seiches* is longer at Geneva than at Morges. These and other effects the author seeks to explain, harmonising them with physical phenomena studied in his apparatus.—In a note on the surface of waves, by M. Charles Cellerier, it is sought to show that there is no real disagreement between the laws of double refraction, as furnished by observation, and the theory based on molecular movements. It is probable, he thinks, that the ordinary ray, whether in uniaxial crystals, or in principal sections of crystals with two axes, has not quite the direction generally assigned to it; though the deviation, without disagreeing with theory, may be so small as to escape observation.—In the department of zoology, we may notice a review of recent researches by Haeckel, Bütschli, and others, on Infusoria.

Memorie della Soc. degli Spettroscopisti Italiani, September, 1873.—Prof. Tacchini contributes a paper on his observations on the magnesium lines and 1,474 line seen bright on the sun's limb, from which it appears that the 1,474 line is always visible in a magnesium region; and further, that it frequently appears by itself where no magnesium is seen. Two beautifully-executed chromolithographs of the chromosphere on the 15th and 16th of July last accompany the paper, showing the relative intensities of the magnesium and 1,474 lines, together with their positions. The intensity of the magnesium lines seems the greater of the two, though not covering so extensive a region.—Father Secchi gives a note on the spectrum of iron, and other metals, obtained

by volatilisation with fifty Bunsen's cells. He appears to find that the 1,474 line is not due to iron, and that different kinds of iron give slightly different spectra. He also gives a drawing of the carbon spectrum from the electric light, which appears similar to that of cyanogen, with the addition of five equidistant bands in the yellow and red.—The tables of Mr. E. Loomis, containing the maximum years of sun-spots, the maximum years of magnetic declination, and the maximum years of auroral display from 1778 to 1870, are given, from which, at a glance, it is seen that the maxima of all three occur in the same years with very small exceptions, and the years of minima correspond even better.

Justus Liebig's Annalen der Chemie u. Pharmacie, Band 170, Heft 3. This number contains the following papers:—"Communications from the Chemical Laboratory of the Polytechnic School at Delft: iv. Researches upon Podocarpic Acid," by A. C. Oudemans, jun. This acid is obtained from the resin of *Podocarpus cupressina* var. *imbricata* Blume; a tree growing

in Java. The formula assigned to the acid is $C_6H_2 \begin{cases} OH \\ COOH \\ CH_2 \\ C_9H_{13} \end{cases}$

= $C_{17}H_{22}O_3$. Some of the salts are described, and also the mono- and di-nitro substitution products. A sulpho-acid, amidated, and brominated derivatives have been obtained, likewise an acetyl derivative. The author has studied exhaustively the decomposition products of the new acid, and these have led him to the constitutional formula above given.—Upon Cymene, by F. Beilstein u. A. Kupffer. The authors have examined cymenes from cumin-oil and from camphor, and find them to be identical. The same authors contribute a paper on oil of wormwood. This oil yields by distillation a terpene, absinthol ($C_{10}H_{16}O$), and a deep blue oil.—"Crystallographic researches on the calcium salts of cymene-hypersulphonic acid," by M. Jerofejew.—"Cumic acid," by F. Beilstein u. A. Kupffer. The authors obtain the potassium salt of this acid by acting on cumin-oil with fused potash.—A lengthy paper on the salts of ethylaldehyde-sulphurous acid and the action of the sodium-sulphites upon ethylidene chloride, by Hans Bunte.—On the formula of silicates, by Prof. V. Wartha.—The concluding paper is by Otto Sigel, on the constituents of arnica water and of the essential oil of arnica.

SOCIETIES AND ACADEMIES

LONDON

Linnean Society, March 5.—Special General Meeting, G. Busk F.R.S., vice-president, in the chair. After the chairman had, in a short conciliatory address, stated the reasons which had induced the Council to summon the present meeting, he called on Mr. W. Carruthers, F.R.S., who moved "That a Committee be appointed to consider the Bye-laws and to suggest to the Council such alterations, omissions, or additions as they may think desirable." The motion having been seconded by Mr. W. S. Dallas, Major-General Strachey, F.R.S., moved as an amendment, which was seconded by Mr. C. J. Breese, "That, inasmuch as it appears that there are differences of opinion in the Society as to the legality of the alterations of the Bye-laws made at the meeting of January 15 last:—(1) This meeting, retaining complete confidence in the President and Council of the Society, requests them to obtain the opinion of some legal authority, whether these alterations are legally binding on the Society or not; (2) That if the opinion be that the said alterations are legally binding, no further steps be taken in reference to them; (3) That if the opinion be that the said alterations, or any of them, are not legally binding, the Council be requested to take the necessary proceedings for setting aside the vote of January 15."—A second amendment was moved by Mr. J. E. Harting;—"That the case having been already submitted to Council, the opinion thereon be read for the information of the meeting." After much discussion, in which Sir John Lubbock, Dr. Thos. Thomson, Dr. Trimen, Prof. Thiselton-Dyer, Mr. H. G. Seeley, and others took part, Mr. Harting's amendment was withdrawn, and the vote taken on Major-General Strachey's amendment, which was carried, and was afterwards adopted as a substantive resolution.—Sir John Lubbock, Bart, F.R.S. then moved and Mr. W. Carruthers, F.R.S. seconded a resolution expressive of the high sense entertained by the meeting of the eminent services both to