Month.	No. of Aurorals.	Normals.	Hours.	Normals of Rain.
May . .	36	106	9	109
		103	10	105
June . .	31	101	11	102
		100	12	103
July . .	38	101	13	106
		103	14	109
August .	34	105	15	108
		107	16	104
September .	43	106	17	98
		103	18	92
October .	38	100	19	87
		95	20	85
November .	27	91	21	87
		89	22	90
December .	30	87	23	91

SCIENTIFIC SERIALS

Jahrbuch der kaiserlich-königlichen geologischen Reichsanstalt. Vol. xvi. No. 1. (Vienna.) The first paper in this part of the *Jahrbuch* is one by Prof. Kreuz, "Das Vihorlat-Gutin-Trachytgebirge." This is one of those painstaking lithological papers which are less commonly met with in our own scientific journals than one could wish. The author has carefully examined under the microscope the trachytic rocks of the Vihorlat-Gutin mountains of North-eastern Hungary, a range which stretches from north-west to south-east in the same direction as the Carpathian Sandstones. He groups the rocks under three divisions:—(1) Augite-andesite; (2) Sanidine-oligoclase-trachyte; (3) Breccias and Tuffs; and his descriptions of the two former are particularly full and interesting. The breccias and tuffs are necessarily less susceptible of clear concise description; they appear to vary as much and in as short a space as similar volcanic accumulations elsewhere.—Prof. Koch, of Ofen, contributes "Beitrag zur Kentniss der geognostischen Beschaffenheit des Urdniker Gebirges," an isolated little mountain range, which stretches between the Danube and the Save in East Sclavonia. He describes the Tertiary strata he examined in his last visit to that district as being grouped round the foot of the hills. The beds are of marine, fresh, and brackish-water origin. He does not determine their exact geological horizon, but gives lists of the fossils he obtained. The paper concludes with an account of a mass of sanidine-trachyte, which the author believes to be of Tertiary age.—A paper on *Aulococeras Fr. V. Hauer*, by Dr. Edm. von Mosjsisores, is illustrated with four lithographic plates. This and the following paper "On the Tertiary Formation of the Vienna Basin," by Theodor Fuchs and Felix Karrer we recommend to the attention of our palæontologists. Fuchs' and Karrer's paper is most elaborate, and contains copious lists of fossils which, besides being interesting in themselves, are useful for purposes of comparison. The *Jahrbuch* concludes with "Studien aus dem Salinargebiete Siebenbürgens," by F. Posepny; this, however, is only the second part of the paper, the first part having been published so far back as 1867. These saliferous regions are described in considerable detail, and numerous chemical analyses are given. A map, and sections, &c., accompany the paper. We should mention that the *Jahrbuch* includes obituary notices of two former members of the Institute, the well-known Wilhelm Haidinger, and Urban Schloenbach, an enthusiastic palæontologist and geologist who was cut off at the early age of thirty-one.

THE three numbers of the *Quarterly Journal of Microscopical Science* of the present year contain a number of valuable original contributions to science, besides transactions, chronicles of the progress of histology and micro-zoology, and various reviews and short notes and memoranda. In the January number Prof. Allman describes a new mode of reproduction by fission in a new hydroid polyp, which he figures in a plate.—Haeckel's researches on the nature of Coccoliths and Bathybius are noticed at length, and the remarkable Radiolarian *Myxobrachia* is figured in a tinted plate.—Mr. Archer, of Dublin, to whose researches published in the same journal in 1869 we owe our knowledge of a most beautiful and interesting group of fresh water Protista—the Heliozoa—contributes to the April number a further account of new fresh water rhizopods, illustrated with two coloured plates.—In the same number Mr. Moseley figures and describes the nerves of the cornea, and Mr. Lankester gives a minute account of the structure and mode of formation of the sperm-ropes of the river Annelids.—In the July number an exceedingly valuable memoir by Dr. Van Beneden appears "On the Development of a Species of Gregarina," which he described last year (also in the Journal). It appears that the Gregarinæ exhibit a young stage when they are devoid of nucleus, and have great activity and worm-like form; to this stage Dr. Van Beneden applies the name *pseudo-filarian*.—In the same number Mr. Sorby gives an elaborate paper on the colouring matters of leaves, which has an appropriate place in a journal devoted to microscopy, since it is only by the micro-spectroscope that many of those colouring matters can be studied on account of their small quantity, and, further, since the application of such methods of analysis to histology as the micro-spectroscope affords is of the very highest importance.—Various points relating to the instrument itself are discussed in these three parts by Dr. Royston Pigott, who figures his aplanatic searcher and its results on the Podura scale; by Messrs. Dudgeon, Newton, and others, who describe new apparatus.—Mr. Moseley gives accounts of how to use gold chloride and silver nitrate in histological research, and how best to prepare and cut sections of the frog's egg for embryological study.—The original paper by Dr. Nitzsche, of Leipzig (illustrated), on the reproduction of the Bryozoa, and the reply to Mr. Hincks, are important, and on a very curious point. It is, however, to the chronicles and notes which we would especially call attention as of service to biological students. Long abstracts of all the important papers published in the German periodicals are to be found—in some cases illustrated by woodcuts; thus we have Neuman on the origin of the red blood corpucles, Kranse on connective tissue, Flemming on fatty tissue, Schöbl on the bat's wing and mouse's ear, Pflüger on the method of demonstrating nerve-endings in the liver and other glands, Exner on the Schneiderian membrane, Cienkowski on the sporogonia of *Noctiluca*, and many other such.

IN the *Journal of Botany* for October, Dr. Braithwaite continues his Recent Additions to our Moss Flora. Mr. R. Tucker gives some Notes on the now well-defined Flora of the Isle of Wight; and Dr. Moore Notes on some Irish Plants. Mr. F. Stratton contributes an article on *Monotropa hypopitys*, confirming the statement of other recent observers that this plant is not truly parasitic. The remainder of the number is occupied by short notes, reviews, reports, and reprints.

THE *Scottish Naturalist* for October opens with a timely reprint of an extract from Mr. Patrick Matthew's work on Naval Timber, published in 1831, and referred to in Darwin's "Origin of Species," in which he distinctly enunciates the theory that "circumstance and species have grown up together," or that new species have arisen from old species adapting themselves to altered circumstances. The most important original articles in the number are: The Baleens, or Whalebone Whales of the North-east of Scotland, by Mr. R. Walker; Notes on the Tetraonidæ of Perthshire, by Mr. R. Paton; On the Altitudes attained by Certain Plants (varying from those already recorded), by Dr. F. Buchanan White; and On Scottish Galls, by Mr. J. W. H. Traill.

SOCIETIES AND ACADEMIES

PARIS

Academy of Sciences, October 2.—M. C. Jorden read a mathematical paper "On the Classification of Primary Groups." Two papers on subjects connected with physics were read, one by M. A. Cornu, "On the Determination of the Velocity of Light," in which he suggests an improvement in the method proposed by Fizeau for this purpose, and a note by M. G. Salet on the Spectra of Tin and its components, which he describes as the most singular he has ever seen.—On astronomical subjects several communications were made.—M. Chasles replied to a statement made by M. Bertrand at a previous meeting with regard to Aboul Wéfa's method of calculating the position of the moon. M. Yvon Villareau communicated a long paper, full of mathematical formulæ, "On the Determination of the true Figure of the Earth, without the necessity of actual levellings."—M. Delaunay read a note on the two recently discovered planets, Nos. 116 and 117, in which he indicated that the planet discovered at Versailles by M. Borelly, and named Lomia, must be numbered 117, as the planet discovered by M. Luther two days afterwards had been previously detected in America by Mr. C. H. F. Peters.—