

&c.—Helminthological observations by Dr. Ercolani, on dimorphisms, on *Filaria inmitis*, and on a new species of dog Distoma.—Anatomical description of the eye of the European mole, by Dr. Ciaccio.—On the organisation of the brain of Eolidida, by Dr. Trinchese.—On the changes of form of *Amaba limax*, by the same.—On a non-microscopic new and rare parasitic fungus, which is developed on the larva of a living cricket, by G. Bertoloni.—Analytical remarks on some theorems of Feuerbach and Steiner, by Prof. E. Beltrami.—On the continuity of feeling, by Dr. D. C. Biagi.—On the reasons of the low statures which were generally observed amongst the conscripts of the last decennium in some communities in the neighbourhood of Bologna and other districts of Italy, by Dr. P. C. Predieri.—New observations on the minute structure of muscular fibre, by Dr. Ercolani.—Proofs for the contemporariness of the glacial epoch with the Pliocene period at Balerna and at Monte Mario, on the Rhine, by G. A. Bianconi.—On the effects of electric sparks on phosphorus in hydrogen, in nitrogen, in ammonia, and in muriatic acid; and on the effects of electric currents on water, on sulphuric acid, on alcohol, and on bisulphide of carbon, by Dr. Santagata.—Researches on capillary tubes, by Prof. Villari.

*Sitzungsberichte der naturwissenschaftlichen Gesellschaft Isis in Dresden*, October to December, 1874.—The meetings of this society are divided into five classes, besides general meetings, viz., one for mineralogy and geology, one for prehistoric archaeology, one for chemistry, physics, and mathematics, and one each for botany and zoology.—The more important papers read in the different sections during the last three months of 1874 were:—In the mineralogy and geology class: On a peat-like formation occurring at Lindenau, near Leipzig, containing a great number of beetles, one or two species of which are now extinct, by Von Kiesenwetter. On a number of minerals collected during a tour in Saxony, by E. Zschau. On the occurrence of calc-sinter near Quedlinburg, by Herr Ackermann.—In the botany class: On hedge plantation in Australia, by W. Ferguson. On the culture of plants in rooms, particularly of Palmæ, by Adolph Petzold. Report of the results of botanical excursions made during 1874, by A. Voigt.—In the zoology class: Remarks by Th. Kirsch, on "Darwinism and the Researches of Cuvier and Newton," a work lately published by Herr Wiegand.—On Haeckel's calcareous sponges and his Gastræa theory, by Herr Ebert.—In the archaeology class: Report on the Archaeological Congress at Stockholm, by Dr. Mehwald. On some flint implements from the cave near Rochefort, by Dr. Geinitz. On a piece of reindeer horn upon which rough drawings of horses are visible, and which was found near Thayingen, in Switzerland, by the same.—In the physico-chemical class:—On ozone, by Dr. Schürmann, a highly interesting and elaborate paper; the author gives a detailed account of the history of ozone, and then speaks of its properties, preparation, reactions, presence in the atmosphere, action on the animal organism, and thoroughly exhausts the subject. On tables for barometrical measurements of heights, by Prof. Neubert. Meteorological phenomena observed at Dresden during 1874, by Herr Fischer.—At the general meetings, a paper on the earthquakes of the sixteenth and seventeenth centuries was read; the others being all of minor interest.

SOCIETIES AND ACADEMIES

PARIS

Academy of Sciences, Sept. 13.—M. Frémy in the chair.—The following papers were read:—A note by M. Faye relating to the approaching eclipse of the sun.—M. Bertrand then made some remarks on the paper read at the last meeting by M. Bienaymé.—Report on a memoir by M. Lefort, entitled "Critical examination of the basis of calculation usually adopted to appreciate the stability of metal bridges with straight prismatic beams, and propositions for the adoption of a new basis."—Report on M. Boussinesq's paper on the theory of flowing waters.—Memoir on the observations made at Peking of the Transit of Venus, by Mr. J. C. Watson, chief of the American expedition.—A note on the greasy matter in the grain of the oil-tree of China, by M. S. Cloez.—On the development of Heteropoda, by M. H. Fol.—On the migrations and metamorphoses of marine endoparasitic Trematoda, by M. A. Villot.—On some reactions of hæmoglobine and its derivatives, by M. C. Husson.—On the probable origin of the two hailstorms observed on July 7 and 8, in some parts of Switzerland and the South of France,

by M. D. Colladon.—On the non-regeneration of the crystalline lens in man and in rabbits, by M. J. Gayat.

VIENNA

K.K. Geologische Reichsanstalt, April 6.—On Miocene chestnut trees, by O. Heer.—Diallogite after manganese blende and barytes; pseudomorphs after fahl-ores of Przibram, by Ed. Döll.—On the occurrence of native gold in the mineral shells of Verespatak, by F. Posepny.—On the Culm flora of the Moravian-Silesian roofing slates, by D. Stur.

April 20.—On remains of *Ursus spelæus* from the cave of Igritz, by F. von Hochstetter.—On the meteorite of Lancé, by R. von Drasche.—On a geological detailed map of the surroundings of the Seisser Alp and of St. Cassian, by E. von Mojsisovics.—On a map of the upper Vilnöss and the lower Enneberg valleys, by R. Hörnes.—Geological report from the investigation district of the Octz-valley group, by G. A. Koch.

May 4.—Presentation of a new special map of the Austro-Hungarian Monarchy, F. v. Hauer.—Characteristics of some minerals occurring on the Przibram ore deposits, by F. Babánek.—Report by Dr. E. Tietze from his travels in Persia.—On a new fossil resin from the Bukowina, by J. von Schröckinger.—On *Cervus megaceros* from Nussdorf, by Dr. F. von Hochstetter.—On a human cranium found in the diluvial Loess of Manners-Porf, by Dr. J. Woldrich.—On Noric formations in Transylvania, by E. von Mojsisovics.—On the phosphorites of the Lavant valley, by H. Wolf.

GÖTTINGEN

Royal Society of Sciences, July 10.—At this meeting of the Society the following papers were read:—On the electric elementary laws, by Herr Riecke.—A note on the toxicological action of phenols, in particular of thymol, by Th. Husemann.—On Rötteken's eye of Actinia, by Dr. Hub. Ludwig.—A note by Herr Fromme on the maximum of temporary magnetism in soft iron.—On the potential function in space extended in several directions, by M. Jouelli.

BOOKS AND PAMPHLETS RECEIVED

BRITISH.—The Royal Tiger of Bengal: Dr. J. Fayer, M.D., F.Z.S. (Churchill).—Jummoo and Kashmir Territories. A Geographical Account, by Frederic Drew, F.R.G.S., F.G.S. (E. Stanford).—Proceedings of the Berwickshire Naturalists' Club.—Brande and Cox's Dictionary of Science, Literature, and Art. 3 vols., new edit. (Longmans).—Further Researches in the Mathematical Science, by the author of "The Two Discoveries" (Bridge-water, Pine).—Bristol and its Environs (Bristol: Wright and Co.).—The Geology of British Guiana: C. S. Brown, F.G.S., and J. G. Sawkins, F.G.S. (Longmans).—A Manual of Mollusca: S. P. Woodward, A.L.S., F.G.S. (Lockwood).—The Native Races. Vol. iii.: Hubert Howe Bancroft (Longmans).—Tapeworms: T. Spencer Cobbold, M.D., F.R.S., F.L.S. (Longmans).—An Introduction to Animal Physiology: E. Tully Newton, F.G.S. (Murby).—The Abode of Snow: Andrew Wilson (Blackwood).—Quarterly Journal of the Geographical Society (Longmans).—Journal of the Scottish Meteorological Society (Blackwood).

COLONIAL.—Centrifugal Force and Gravitation. Six parts: John Harris (Montreal).—The Immortality of the Universe: J. A. Wilson (Melbourne, G. Robertson).—Report of the Meteorological Reporter of Bengal.—Report of the Nidnapore and Burdwan Cyclone.—Magnetic and Meteorological Observations at the Magnetic Observatory, Toronto, Canada, 1841 to 1871 (Toronto: Copp, Clark, and Co.)

CONTENTS

	PAGE
HELMHOLTZ ON TONE . . . . .	449
OUR BOOK SHELF:—	
Guide to the Geology of London and the Neighbourhood . . . . .	452
Nioland; or, Iceland, its Jokulls and Fjalls . . . . .	453
Report on the Neigherry Loranthaceous Parasitical Plants destructive to Exotic Forest and Fruit Trees . . . . .	453
LETTERS TO THE EDITOR:—	
Personal Equation in the Tabulation of Thermograms, &c.—THE REVIEWER . . . . .	453
Ocean Circulation.—Dr. W. B. CARPENTER, F.R.S . . . . .	454
Source of Volcanic Energy.—WM. S. GREEN . . . . .	455
Gyostat Problem; Spinning-top Problem.—F. M. S. . . . .	455
OUR ASTRONOMICAL COLUMN:—	
The Mass of Jupiter . . . . .	455
THE HOPKINS UNIVERSITY, U.S. . . . .	456
SCIENCE IN GERMANY . . . . .	457
THE LAWS OF STORMS ( <i>With Illustrations</i> ). . . . .	457
NOTES . . . . .	459
THE BRITISH ASSOCIATION:—	
Reports . . . . .	461
Sectional Proceedings . . . . .	462
Section A.—Mathematics and Physics . . . . .	462
Section B.—Chemical Science . . . . .	463
Section D.—Biology . . . . .	465
SCIENTIFIC SERIALS . . . . .	467
SOCIETIES AND ACADEMIES . . . . .	468
BOOKS AND PAMPHLETS RECEIVED . . . . .	468