

graphical Service of the Army, by M. Perrier. Amongst these maps are one of France, scale 1:200,000, comprising the districts of Amiens, Melun, Lille, Mézières; one of Algeria, part 6, scale 1:50,000, districts of Azeffun, Jebel-Filfila, Jemmapes, Ben-Harun, Aine-Bessem, Rio Salado; and one of Tunisia, scale 1:200,000, districts of Nefta, Rejem-Matong, Dwirat, Wed-Fessi.—Note on a new form of purulent infection following an acute attack of pneumonia, by M. Jaccoud.—Researches on the organisation of the star-fish, by M. Edm. Perrier. Amongst the collections brought back by the Cape Horn Mission were several specimens of a new species of star-fish (*Asterias hyadei*, E. P.), with their young still attached, a circumstance which has helped to throw fresh light on some disputed points connected with the anatomical structure of these animals.—Observations of the new comets 1886 *a* (Brooks I.) and 1886 *b* (Brooks II.) made at the Observatory of Nice (Gautier equatorial), by M. Charlois.—On the geography of the Central Tunisian seaboard, by M. Rouire. A careful survey of the section of the coast between Hammamet and Susa has determined the existence of a large marine inlet at the head of Hammamet Bay, which receives all the drainage of Central Tunisia. It was also ascertained that at some more or less remote period the Halk-el-Mengel Sebka was certainly navigable.—Determination of the absolute value of the wavelength of the ray D_2 , by M. J. Macé de Lépinay. A fresh attempt to settle this disputed point gives the general result—

$$5.8917 \times 10^{-5} \text{ (millilitre)}^{\frac{1}{3}};$$

and in the air, at 0°, normal pressure—

$$5.8900 \times 10^{-5} \text{ (millilitre)}^{\frac{1}{3}}.$$

—On a visual illusion: apparent motion of a small object when slightly illumined amid the surrounding darkness, by M. Aug. Charpentier.—A new electric fuse for exploding mines charged with powder or dynamite, by MM. Scola and Ruggieri. For this fuse the authors claim that it prevents all accidents from slow combustion, and also removes some other dangers and difficulties attending mining operations.—Note on an apparatus intended to test the efficacy, or ascertain defects in the preparation, of electric fuses, by M. Ducretet.—Description of the cyclone that swept over Madrid on May 12, by M. A. F. Nogués.—On two different conditions of the black oxide of copper, by M. Joannis.—Action of the air, silica, and kaolin on the alkaline haloid salts: new methods of preparing hydrochloric acid, chlorine, and iodine, by M. Alex. Gorgeu.—On the oxidation of oils, by M. Ach. Livache.—On a little-known cause of corrosion in steam-boilers, by MM. D. Klein and A. Berg.—On a new means of employing the iodo-ioduretted reaction in the research of the alkaloids, and especially of the leucomaines in urine, by MM. Chibret and Izarn.—A fresh study of *Entoniscus* (*E. kossmanni*, *E. fraïssi*, *E. moniezii*), by MM. A. Giard and J. Bonnier.—On the embryogeny of *Comatula* (*C. mediterranea*), by M. J. Barrois.—Observations regarding the nervous system and certain organic features of the scutibranch gasteropods, by M. E. L. Bouvier.—On a new Ichthyobdella, by M. R. Saint Loup. This species, which the author describes under the name of *Scorpenobdella elegans*, was recently observed in the Marine Zoological Laboratory at Marseilles.—On the superficial vascular apparatus of fishes, by M. P. de Sède.—On a fungus developed in the human saliva, by M. Galippe. This fungus, discovered in some saliva filtered by Pasteur's apparatus, and cultivated in Van Tieghem's cellulose, belongs to the family of the Monilia. The author proposes to name it *Monilia spuiticola* (sp.n.).—Remarks on the fifth volume of M. Habich's *Anales de Construcciones civiles y de Minas*, presented to the Academy, by M. Daubrée. To this volume M. Chalon contributes a paper on the prehistoric monuments of Peru, which show a remarkable resemblance to the menhirs, cromlechs, dolmens, and other "Druidical" remains in the west of Europe. They occur in large numbers in every part of the country.—At the request of M. de Lesseps, the President appointed a Commission comprising the members of the Sections for Geography, Navigation, and Astronomy, with MM. Daubrée, Favé, Lalanne, and de Jonquières to study the differences of level caused by the tides in the Pacific and Atlantic Oceans.

STOCKHOLM

Academy of Sciences, April 14.—On the results of some experiments on the condition of electricity in a vacuum, by Prof. E. Edlund.—On the power and fineness of the hollow muscles of the frog, by Herr C. G. Santesson.—On the oxidation of cymal,

and on nitrocymal, by Prof. O. Widman and Dr. J. O. Bladin.—Mineralogical notes, by Dr. G. Flink.—Some remarks on the geological map of Sweden, by Herr E. Törnebohm.—Determination of the definite elements of the orbit of the Comet VIII. (1881), by Dr. K. G. Olsson.—Micrometrical determinations of some telescopic star clusters, by Prof. H. Schultz.—Contributions to the theory of wave-motions in a gaseous medium, by Prof. A. V. Bäcklund.—On the integration of the differential equation in the problem of N bodies, by Prof. G. Dillner.

May 12.—On a new method for determining the velocity of the electric molecules in a current of a certain power, by Prof. Edlund.—Contributions to the knowledge of the discharge of the Ruhmkorff coil, by Hr. T. Moll.—A method for increasing the convergence of periodical series, by Hr. C. Charlier.—Research on a non-linear differential equation of the second order, by Prof. H. Gylden.—An account of the Zoological Station of Christineberg, in the province of Bohus, belonging to the Academy, by Prof. Sven Lovén.—Researches on the changes of the arsenious oxide in contact with putrid animal matters, by Prof. Hamberg.—A balance constructed by Hr. F. J. Lemcke for determining the consumption of the normal light in the measurement of the power of the light, exhibited by Prof. F. L. Ekman.—New or imperfectly known Isopoda, part 3, by Dr. C. Bavallius.—On naphthoic acids, by Dr. Ekstrand.

BOOKS AND PAMPHLETS RECEIVED

"Ling-Nam," by B. C. Henry (Partridge).—"Infant School Management," by S. S. Hale (Stanford).—"The Romance of Mathematics," by P. Hampson (E. Stock).—"Handy Guide to Norway," by T. B. Willson (Stanford).—"Chemical Arithmetic," by J. M. Coit (Heath, Boston).—"Summary Report of the Operations of the Geological and Natural History Survey of Canada," part 3 (Maclean, Ottawa).—"Earthquakes of Ischia," by H. J. Johnston-Lavis (Dulau).—"La Mythologie," by A. Lang; traduit de l'Anglais par Léon Parmentier (A. Dupret).—"Determination of Rock-forming Minerals," by Dr. E. Hussack, translated by Dr. E. J. Smith (Wiley, New York).—"Studies from the Biological Observatory, Johns Hopkins University," vol. iii. No. 6.—"Catalogue No. 10 of Physical Apparatus for Universities and Superior Schools" (F. Encke, Berlin).—"Account of the Graphic Method in Use for Determining the Co-ordinates of the Secondary Trigonometrical Stations of the Ordnance Survey," by J. O. Farrell (Eyre and Spottiswoode).—"Modern Armour for National Defence," 2nd edition, by W. H. Jacques.—"Ericsson's Destroyer and Submarine Gun," by W. H. Jacques.—"Heavy Ordnance and National Defence," by W. H. Jacques (Putnam, New York).—"Circulars of Information of the Bureau of Education," No. 4, 1885; Education in Japan (Washington).—"John Bunyan and the Gipsies," by J. Stimson (MacLachlan, Edinburgh).

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