their derivatives, by M. G. Perrier.—On Russian essence of aniseed, by MM. G. Bouchardat and Tardy.—On the production of pure gaseous formic aldehyde, by M. A. Brochet. For the purposes of disinfection by gaseous formic aldehyde, free from water vapour, a current of a warm indifferent gas (nitrogen or carbon dioxide) is passed through a tube containing fragments of trioxymethylene. The quantity can be regulated by altering the temperature.—On antivenomous serum, by MM. Calmette, Hankin, and Lépinay. An account of some experiments with a serum, the injection of which protects the animal from snake venom.—On some points in the anatomy of *Tetraclita porosa*, by M. A. Gruvel.—New form of negative reaction on the retina, by M. Aug. Charpentier.—Proofs of the submarine extension to the south of Marseilles of the Maures and Esterel group, by MM. Vasseur and Fournier.

BERLIN.

Physical Society, December 13, 1895.—Prof. Warburg, President, in the chair.—The President referred to the deaths of Prof. Knoblauch, of Halle, and Prof. Spörer, of Potsdam.—Prof. Des Coudres spoke on kathodic radiation, and demonstrated its sensitiveness to magnetic lines of force.—Prof. Neesen described two interesting strokes of lightning, of which one pierced the roof of a church-tower unprovided with a conductor, and stopped short at the organ. Its effects were characterised by the rents it made in the inside of the church above the organ, similar to those observed in a tree when struck. The second struck a petroleum store, whose four tanks were each protected by five-pointed conductors adequately put to earth. Two of the tanks were completely shattered by a violent explosion, the other two burnt out by fire. The speaker was of opinion that the petroleum vapours above the tanks had been ignited by small sparks during the discharge, and he had verified this view by experiment; he therefore proposed that for the purpose of adequate protection all openings, more particularly manholes, should be guarded by wire netting, on the principle of the Davy lamp.—A small instrument was exhibited by Mr. von Hefner-Alteneck for demonstrating minute variations of atmospheric pressure. It consists of a flask, whose neck communicates with a horizontal glass tube, whose central portion is bent slightly downwards; in this tube there is an extremely mobile index of coloured petroleum, which follows the least change of external pressure. The apparatus is one hundred and fifty times more sensitive than a mercurial barometer.—Prof. Neesen criticised a recently published method of measuring the velocity of projectiles. It consists in making the projectile close and open a current which passes spirally round a tube containing carbon bisulphide; the plane of polarisation of this fluid is rotated during the time of flight, and hence a beam of light previously extinguished by crossed Nicols can now pass through, and make a record on photographic paper.

Physiological Society, December 6, 1895.—Prof. H. Munk, President, in the chair.—Prof. I. Munk reported on further experiments as to the minimal proteid requirements of a dog during nitrogenous equilibrium.

December 20.—Prof. H. Munk, President, in the chair.—Dr. Cohnstein reviewed the laws of osmotic pressure from the existing point of view of physical chemistry.—Dr. Rosenberg spoke on reported cases of presumed regeneration of the bile duct some twenty days after its extirpation. He reported a case of a lateral branch from the duct recently observed in a dog and leading into the intestine, and urged that the possible existence of such a branch should have been in every case disproved before concluding that a regeneration of the duct had taken place.—The President exhibited a section of an elephant's tooth, which showed a circular green streak round the outer border of the pulp cavity.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

BOOKS.—Eclipses du Soleil et Occultations: L. Cruls (Rio de Janeiro).—Le Climat de Rio de Janeiro: Ditto (Ditto).—Posições Geographicas: Ditto (Ditto).—Iowa Geological Survey, Vol. 4 (Des Moines).—Ex-Meridian Altitude Tables: Brent, Walter, and Williams (Philip).—A Naturalist in Mid-Africa: J. F. Scott Elliot (Innes).—Domesticated Animals: N. S. Shaler (Smith, Elder).—Practical Studies in Fermentation: Dr. E. C. Hansen, translated by Dr. A. K. Miller (Spon).—Petroleum: B. Redwood, 2 vols. (Griffin).—Computation Rules and Logarithms: Prof. S. W. Holman (Macmillan).—Catalogue of the Mesozoic Plants in the Department of Geology, British Museum (Natural History): The Wealden Flora: A. C. Seward, Part 2 (London).—Catalogue of the Fossil Fishes in the British Museum (Natural History): A. S. Woodward, Part 3 (London).—Roads and Pavements in France: A. P. Rockwell (Chapman).—Cyanide Processes: E. B. Wilson (Chapman).—Heating and Ventilating Buildings: Prof. R. C. Carpenter (Chapman).—Manual of Lithology: Prof. E. H. Williams, jun. (Chapman).—Vegetable Culture: A. Dean (Macmillan).—Lessons in Elementary Botany: T. H. MacBride (Boston, Mass., Allyn).—University Correspondence College Calendar, 1895-96 (Red Lion Square).—Catalogue of Scientific Papers (1874-1883), compiled by the Royal Society of London, Vol. xi. (C. J. Clay).

PAMPHLETS.—The Authentic Letters of Columbus: W. E. Curtis (Chicago).—Contribution to the Flora of Yucatan: C. F. Millspaugh (Chicago).—Variation of Latitude at New York City. Part 1: Declinations and Proper Motions of Fifty-six Stars: Dr. H. S. Davis (New York).—Shanghai Meteorological Society. Third Annual Report: Essay on the Winter Storms of the Coast of China: Rev. S. Chevalier (Shanghai).—Laboratory Tables for Qualitative Analysis (Manchester, Cornish).—Handbook and Catalogue of the Meteorite Collection: Dr. O. C. Farrington (Chicago).—The Honey-Bee: F. Benton (Washington).—Proceedings of the Seventh Annual Meeting of the Association of Economic Entomologists (Washington).

SERIALS.—Proceedings of the Academy of Natural Sciences of Philadelphia, 1895, Part 2 (Philadelphia).—Proceedings of the Rochester Academy of Science, Vol. 2, Parts 2 and 4 (Rochester, N.Y.).—Proceedings and Transactions of the Nova Scotian Institute of Science, Session 1893-94 (Halifax, Nova Scotia).—Zeitschrift für Physikalische Chemie. xix. Band, 1 Heft (Leipzig, Engelmann).—History of Mankind: F. Ratzel, translated (Macmillan).—Cassell's History of England, Part 1 (Cassell).—Humanitarian, February (Hutchinson).—Royal Gardens, Kew. Bulletin of Miscellaneous Information, 1895 (Eyre).—Proceedings of the Physical Society of London, Vol. 13, Part 13; Vol. 14, Part 1 (Taylor).—Contemporary Review, February (Isbister).—Terrestrial Magnetism, No. 1 (Chicago).—National Review, February (Arnold).—Fortnightly Review, February (Chapman).—American Journal of Mathematics, January (Baltimore).—Centralblatt für Anthropologie, &c., 1 Jahrg., Heft 1 (Williams).—Journal of the Chemical Society. December (Gurney).—Century Magazine, February (Macmillan).—Geographical Journal, February (Stanford).—Science Progress. February (Scientific Press).

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