

author determined the lines of complete solubility for a mixture of potassium and sodium chlorides, varying the quantity of the metals saturated by the same metalloid as a function of the temperature. He studies the reverse case here, determining the results when in a solution of the same metal the metalloids are varied.—On the different states of iodine in solution, by MM. Henri Gautier and Georges Charpy. Iodine solutions are usually divided into two classes—brown (alcohol, ether, &c.) and violet (sulphur of carbon, chloroform, benzine, &c.). The molecular weights have been determined by Raoult's method, and results were obtained varying from 330 to 489, according to the solvent; Loeb's results are thus confirmed and amplified.—Calorimetric study of the phosphites and pyro-phosphite of soda, by M. L. Amat. These researches fully confirm the author's previous conclusion that the acid phosphite of soda, PO₃H.NaH, may, by the simple process of drying, lose water and become transformed into pyrophosphite of soda, a substance differing in many of its properties from the acid phosphite.—A study of the pneumococcus occurring in the fibrine pneumonia consecutive to *la grippe* (influenza), by MM. G. Sée and F. Bordas. From these clinical researches, made on a large number of patients in the Hôtel-Dieu, the authors conclude that pneumonia is not only a local affection caused by infection, but that it is itself infecting in the sense that it may invade other organs.—Papers were read by M. Chr. Bohr, on pulmonary respiration; by M. Abel Dutartre, on the poison of the land salamander; by M. Ch. Musset, on "selenotropism" (influence of moonlight on plants); by M. A. de Schulten, on the artificial reproduction of malachite all but identical in density, hardness, and crystallization with the natural stone; by M. A. de Grossouvre, on the presence of Alpine fossils in the Callovian formation of the west of France; and by M. Ch. V. Zenger, on the magnetic storms and auroræ boreales of the years 1842-57.

DIARY OF SOCIETIES.

LONDON.

THURSDAY, FEBRUARY 6.

ROYAL SOCIETY, at 4.30.—A New Theory of Colour-blindness and Colour-perception: Dr. Edridge Green.—Memoir on the Symmetrical Functions of the Roots of Systems of Equations: Percy A. MacMahon, Major R.A. LINNEAN SOCIETY, at 8.—On the Stamens and Setæ of Scirpæ: C. B. Clarke, F.R.S.—On the Flora of Patagonia: John Ball, F.R.S. CHEMICAL SOCIETY, at 8.—Ballot for the Election of Fellows.—The Oxides of Nitrogen: Prof. Ramsay, F.R.S.—Studies on the Constitution of Tri-Derivatives of Naphthalene: Dr. Armstrong and W. P. Wynne.—On the Action of Chromium Oxylchloride on Nitrobenzole: G. G. Henderson and J. Morrow Campbell. ROYAL INSTITUTION, at 3.—Sculpture in Relation to the Age: Edwin Roscoe Mullins.

FRIDAY, FEBRUARY 7.

PHYSICAL SOCIETY, at 5.—Annual General Meeting.—On Galvanometers: Prof. W. E. Ayrton, F.R.S., T. Mather, and W. E. Sumpner.—On a Carbon Deposit in a Blake Telephone Transmitter: F. B. Hawes. GEOLOGISTS' ASSOCIATION, at 7.30.—Annual General Meeting.—Notes on the Nature of the Geological Record: The President. SOCIETY OF ARTS, at 5.—The Utility of Forests and the Study of Forestry: Dr. Schlich. INSTITUTION OF CIVIL ENGINEERS, at 7.30.—Reclamation of Land on the River Tees: Colin P. Fowler. ROYAL INSTITUTION, at 9.—The London Stage in Elizabeth's Reign: Henry B. Wheatley.

SATURDAY, FEBRUARY 8.

ROYAL BOTANIC SOCIETY, at 3.45. ROYAL INSTITUTION, at 3.—The Natural History of the Horse, and of its Extinct and Existing Allies: Prof. Flower, C.B., F.R.S.

MONDAY, FEBRUARY 10.

ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—Search and Travel in the Caucasus: an Account of the Discovery of the Fate of the Party lost in 1888: Douglas W. Freshfield (illustrated by Photographs by Signor V. Sella and H. Woolley). SOCIETY OF ARTS, at 8.—The Electromagnet: Dr. Silvanus P. Thompson.

TUESDAY, FEBRUARY 11.

ANTHROPOLOGICAL INSTITUTE, at 8.30.—Exhibition of some Skulls, dredged by G. F. Lawrence from the Thames, in the Neighbourhood of Kew: Dr. Garson.—Characteristic Survivals of the Celts in Hampshire: T. W. Shore. SOCIETY OF ARTS, at 8.—Cast Iron and its Treatment for Artistic Purposes: W. R. Lethaby. INSTITUTION OF CIVIL ENGINEERS, at 8.—Bars at the Mouths of Tidal Estuaries: W. H. Wheeler. ROYAL INSTITUTION, at 3.—The Post-Darwinian Period: Prof. G. J. Romanes, F.R.S. UNIVERSITY COLLEGE BIOLOGICAL SOCIETY, at 5.15.—Some Aberrant Coleoptera: S. V. Tebbs.

WEDNESDAY, FEBRUARY 12.

ROYAL MICROSCOPICAL SOCIETY, at 8.—Annual Meeting.—President's Address. SOCIETY OF ARTS, at 8.—Modern Improvements in Facilities for Railway Travelling: George Findlay.

THURSDAY, FEBRUARY 13

ROYAL SOCIETY, at 4.30. MATHEMATICAL SOCIETY, at 8.—Concerning Semi-invariants: S. Roberts, F.R.S.—Ether-Squirts: Prof. K. Pearson. INSTITUTION OF ELECTRICAL ENGINEERS, at 8. ROYAL INSTITUTION, at 3.—The Three Stages of Shakspeare's Art: Rev. Canon Ainger.

FRIDAY, FEBRUARY 14.

ROYAL ASTRONOMICAL SOCIETY, at 3.—Anniversary Meeting. ROYAL INSTITUTION, at 9.—Problems in the Physics of an Electric Lamp: Prof. J. A. Fleming.

SATURDAY, FEBRUARY 15.

ROYAL INSTITUTION, at 3.—Electricity and Magnetism: Right Hon. Lord Rayleigh, F.R.S.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

Medical Electricity and Massage: H. N. Lawrence (Gill).—A Theory of Lunar Surfacing by Glaciation: S. E. Peal (Thacker).—Einleitung in die chemische Kristallographie: Dr. A. Fock (Leipzig, Engelmann).—Elemente der Paläontologie, 2 Hälften: Dr. G. Steinmann and Dr. L. Doderlein (Leipzig, Engelmann).—L'Evolution du Système Nerveux: H. Beaunis (Paris, J. B. Baillière).—A Theory of Gravitation: T. Wakelin (Petherick).—The Psychology of Attention: T. Ribot (Chicago, Open Court Publishing Company).—English Intercourse with Siam in the Seventeenth Century: Dr. J. Anderson (K. Paul).—Contributions to the Fauna of Mergui and its Archipelago, 2 vols. (Taylor and Francis).—Report of the Commissioner of Education for the Year 1887-88 (Washington).—The Library Reference Atlas of the World: J. Bartholomew (Macmillan).—Science and Scientists: Rev. J. Gerard (London).—Le Climat de la Belgique en 1889: A. Lancaster (Bruxelles).—Tylar's Practical Hints and Photographic Calendar, 1890 (Tylar, Birmingham).—Results of Astronomical Observations made at the Melbourne Observatory in the Years 1881-84 (Melbourne).—Babbage's Calculating Engines (Spon).—Practical Hints for Electrical Students, vol. 1: Kennelly and Wilkinson (Electrician Office).—Lehrbuch der Meteorologie: Dr. W. J. Van Bebber (Stuttgart, Enke).—Is the Copernican System of Astronomy True?: W. S. Cassedy (Kittanning, Pa.).—New Zealand for the Emigrant, Invalid, and Tourist: J. M. Moore (S. Low).—Fauna der Gaskohle und der Kalksteine der Permformation Böhmens, Band 2, Heft 4: Dr. Ant. Fritsch (Prag).—The Extermination of the American Bison: W. T. Hornaday (Washington).—Iowa Weather Report, 1878-79-80-82-83-84-85-87 (Des Moines, Iowa).—U.S. Commission of Fish and Fisheries; Part XIV., Report of the Commissioner for 1886 (Washington).—Report on Insect and Fungus Pests, No. 1: H. Tryon (Brisbane, Beal).—La Photographie à la Lumière du Magnésium: Dr. J. M. Eder (Paris, Gauthier-Villars).—Notes upon a Proposed Photographic Survey of Warwickshire: W. J. Harrison (Birmingham).—Chinese Games with Dice: S. Culin (Philadelphia).—Ancient Symbolism among the Chinese: Dr. J. Edkins (Trübner).—Journal of the Royal Statistical Society, December (Stanford).—Charts showing the Normal Monthly Rainfall in the United States (Washington).

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