

ties of a new variety of chromium: Binet du Jassonneix. At a high temperature copper dissolves about 1.6 per cent. of chromium, and this separates out during cooling in the form of a spongy mass. The chromium can be isolated by dissolving away the copper in nitric acid.—The limit to the proportion of silicon which can be taken up by copper: Em. Vigouroux. In the presence of lead, bismuth, or antimony, silicon in excess reacts with the copper only to form a copper silicide, the maximum percentage of silicon taken up being about 10 per cent.—The higher oxides of rubidium: E. Rengade. By the regulated action of oxygen upon rubidium, evidence is obtained of the formation of a black oxide intermediate between the dioxide and the peroxide, and of a composition approximating to Rb_2O_3 .—The isomeric dioximidosuccinic acids: A. Wahl.—The dibromides of the allyl phenolic ethers; the formation of cyclopropanols: MM. Tiffenau and Daufresne.—The bitterness of milk: MM. Trillat and Sauton. The bitterness of milk, as of cheese, is produced whenever contamination occurs with any organism capable of producing both aldehydes and ammonia, or by several species of organisms, some of which are capable of producing ammonia, others aldehydes.—The presence of sympathetic ganglia situated below the spinal ganglia; microsympathetic and hypo-spinal ganglia: G. Marinesco and J. Minea.—The nephro-poietical activity of the foetal kidney: P. Carnot and A. Lelièvre.—The mode of action of sodium salicylate on the uric excretion: Pierre Fauvel. Salicylate of soda does not increase the amount of uric acid or xantho-uric products, but only exerts a modifying action on the secretion.—The discovery of a human jawbone in a Quaternary breccia: A. Favraud.—The relations between glacial erosion and fluvial erosion: Jean Brunhes.—The movements of sands along the coastline: M. Thoulet.

DIARY OF SOCIETIES.

THURSDAY, MAY 9.

ROYAL SOCIETY, at 4.30. The Anatomy of the Julianiaceae considered from the Systematic Point of View: Dr. F. E. Fritsch.—The Ascent of Water in Trees, Second Paper: Prof. A. J. Ewart.—Increase in the Complement-Content of Fresh Blood-Serum: Dr. J. Henderson Smith.—On the Periodic Variations of the Nile Flood: E. B. H. Wade.
ROYAL INSTITUTION, at 3.—Spectroscopic Phenomena in Stars, (1) Chemistry: H. F. Newall, F.R.S.
INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—Telephonic Transmission Measurements: B. S. Cohen and G. M. Shepherd.
IRON AND STEEL INSTITUTE, at 10.30 A.M.—Presidential Address.—Electrically Driven Reversing Roller Mills: D. Selby-Bigge.—(1) Steel Making from High Silicon Phosphoric Pig Iron by the Basic Bessemer Process: (2) Steel Making from Pig Iron containing Chromium, Nickel, and Cobalt: A. W. Richards.—The Use of Steam in Gas Producer Practice: Prof. W. A. Bone and R. V. Wheeler.
MATHEMATICAL SOCIETY, at 5.30.—Rational Expression of the Invariants of a Quintic by Means of Three: Dr. H. F. Baker.—Secular Stability: Prof. H. Lamb.—A Lemma connected with Fourier's Series: F. J. W. Whipple.

FRIDAY, MAY 10.

ROYAL INSTITUTION, at 9.—Recent Excavations on Forum Romanum, and the Forum Ulpium: Signor Com' Giacomo Boni.
PHYSICAL SOCIETY, at 8.—Stereoscopy with long Base-line illustrated on the Screen: Dr. T. C. Porter.
ROYAL ASTRONOMICAL SOCIETY, at 5.—On the Presence of Tin in Stellar Atmospheres: J. Lunt.—Tables to Accompany Mr. Innes's Paper on Computation of Secular Perturbations: F. Robbins.—Note on Certain Photo-visual Objectives: W. J. S. Lockyer.—On the Variable Stars *RV* and *RX Andromedae*: A. Stanley Williams.—Note on Le Verrier's Tables of Saturn: A. M. W. Downing.—Note on the Range in Brightness at Maximum of Long-period Variables: H. H. Turner.—An apparent Influence of the Earth on the Numbers and Areas of Sun-spots in the Cycle 1889-1901: Mrs. A. S. D. Maunder.—Some Notes on the Classification of Long-period Variables: H. H. Turner.—*Promised Papers*: Distribution of Prominences in Latitude in the Year 1906: John Evershed.—Description of the 30-inch Reflector recently erected at the Helwan Observatory, Egypt: J. H. Reynolds.—Note on the Spectrum of α Orionis: H. F. Newall.—Observations of Jupiter's Sixth and Seventh Satellites from Photographs taken with the 30-inch Reflector in 1906-7: Royal Observatory, Greenwich.—Recent Work at the Kodaikānal Observatory: Prof. Michie Smith.
MALACOLOGICAL SOCIETY, at 8.—The Pairing of *Limnaea peugra* with *Planorbis cornuus*: W. D. Lang.—Notes on *Achatina denisoni*, Reeve, and *Achatina magnifica*, Pr.: E. A. Smith.—Review of the New Zealand Acmaeidae, with Descriptions of New Species and Sub-species: Henry Suter.
IRON AND STEEL INSTITUTE, at 10.30 A.M.—Sentinel Pyrometers and their Application to the Heat Treatment of Tool Steel: H. Brearley and F. Colin Moorwood.—Induced Draught with Hot-air Economisers for Steel-Works and Blast-Furnace Boilers: A. J. Capron.—The Influence of Process of Manufacture on Some of the Properties of Steel: F. W. Harbord.—The Distribution of Sulphur in Metal-Ingot Moulds: J. Henderson.—The Ageing of Mild Steel: C. E. Stromeyer.—Carbon-Tungsten Steels: T. Swinden.—The Nomenclature of Iron and Steel:

Report of a Committee of the International Association for Testing Materials.
SOCIETY OF CHEMICAL INDUSTRY, at 8.—Consideration of the Patents and Designs Bill, 1907.
SATURDAY, MAY 11.
ROYAL INSTITUTION, at 3.—Scientific Work in the Sea-Fisheries: Prof. W. C. McIntosh, F.R.S.
MONDAY, MAY 13.
ROYAL GEOGRAPHICAL SOCIETY, at 8.30.—An Expedition from the Niger to the Nile: Lieut. Boyd Alexander.
VICTORIA INSTITUTE, at 4.30.—Recent Discoveries in Palestine and Syria: Dr. Ernest W. G. Masterman.
TUESDAY, MAY 14.
ROYAL STATISTICAL SOCIETY, at 5.
ANTHROPOLOGICAL INSTITUTE, at 8.15.—Exhibition of Australian Specimens and Photographs recently received from Dr. Ramsay Smith, of Adelaide: Prof. D. J. Cunningham, F.R.S.—Dolls: N. W. Thomas.
WEDNESDAY, MAY 15.
SOCIETY OF ARTS, at 8.—Trypanosomiasis or Sleeping Sickness: Dr. H. W. G. Macleod.
ROYAL METEOROLOGICAL SOCIETY, at 4.30.—The Standard Rain Gauge, with Notes on Other Forms: Dr. Hugh Robert Mill.—On a Method and Apparatus for Measuring Fog Densities: J. W. Lovibond.—Note on a Balloon Struck by Lightning, April 11, 1907: Colonel J. E. Capper.—Account of a Remarkable Excavation made by Lightning in Peat-earth on August 2 or 3, 1906: J. Nevin and A. S. Herschel, F.R.S.
ROYAL MICROSCOPICAL SOCIETY, at 8.—Diffraction Rings due to a Circular Aperture: Prof. A. W. Porter and P. F. Everitt.—An Improved Vertical Illuminator: E. M. Nelson.
GEOLOGICAL SOCIETY, at 8.—The Origin of certain Cañon-like Valleys Associated with Lake-like Areas of Depression: F. W. Harmer.
THURSDAY, MAY 16.
ROYAL INSTITUTION, at 3.—Spectroscopic Phenomena in Stars, (2) Motion: H. F. Newall, F.R.S.
CHEMICAL SOCIETY, at 8.30.—The Relation Between the Crystalline form and the Chemical Constitution of Simple Inorganic Substances: W. Barlow and W. J. Pope.—Experimental Investigation into the Process of Dyeing: J. Hübner.—Some Derivatives of *p*-Pyranol allied to certain Derivatives of Brazilin and Hamatein, Preliminary Communication: W. H. Perkin, jun., and R. Robinson.—Mixed Semi-ortho-Oxalic Compounds: G. D. Lander.—The Mechanism of Bromination of Acylamino-compounds, Preliminary Notice: J. B. Cohen.
INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—The Present State of Direct Current Design as Influenced by Interpoles: F. Handley Page and Fielder J. Hiss.

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