

it was not possible to draw a wire in this alloy, they have yielded a negative coefficient of temperature. When the alloy contained only a small percentage of manganese, the coefficient was very small, so that such wires would be suitable for the construction of standard coils. In conclusion, he described how the resistances are measured in the Government Institute. The method employed is that of compensation, and measurement of potentials.—Dr. Jäger announced that Dr. de Coudres, in Leipzig, had succeeded in detecting a thermo-electric tension between compressed and uncompressed mercury. The compression was produced either hydraulically or by means of its own weight acting through a column of mercury. It was found possible to determine with certainty the direction of the thermo-electric current, and to measure its intensity for given pressures and temperatures. The investigation is not yet completed, but Dr. de Coudres hopes to be soon in a position to give a full account of his experiments.

In the report of the meeting of the Berlin Physical Society, January 27 (p. 383), for Dr. Lehmann read Dr. Leman.

#### STOCKHOLM.

**Royal Academy of Sciences, February 12.**—Contributions to the flora of the Hieracia of South-Eastern Sweden, by Herr H. Dahlstedt.—On the remains of a bread-fruit tree from the Cenoman strata of Greenland, by Prof. A. G. Nathorst.—Report on researches in practical pomology and horticulture during a tour in France and Germany, by Herr C. V. Hartman.—On the lichens of the island of Bornholm, by Dr. P. J. Hellbom.—*Algæ aquæ dulcis exsiccatae quas distribuerunt*, V. Wittrock et O. Nordstedt, Parts 18–21, exhibited and demonstrated by Prof. Wittrock.—The results of a determination of the rotation of the sun, executed during the years 1887–89 in the Observatory of Lund, by Prof. Dunér.—On the influence of the duration of exposure for a photographic image of a star, by Dr. Charlier.—Experimental determination of the principal elements of a divergent lens, by Dr. C. Mebius.—Derivatives of sulphur urates, by Dr. Hector.—On the  $\beta_1 = \alpha_1$  bromium naphthalin sulphonic acid, and on the constitution of the acids which are formed by the agency of concentrated sulphuric acid on  $\beta$ -naphthylamin, by S. Forsling.—Experiments on the humidity of the atmosphere, by Dr. K. H. Sohlberg.—Anatomical studies on the floral axes of diclinous Phanerogams, by Herr A. Grevillius.

### DIARY OF SOCIETIES.

#### LONDON.

##### THURSDAY, FEBRUARY 27.

**ROYAL SOCIETY**, at 4.30.—The Croonian Lecture.—The Relations between Host and Parasite in certain Epidemic Diseases of Plants: Prof. H. Marshall Ward, F.R.S.

**SOCIETY OF ARTS**, at 5.—The Northern Shan States and the Burma-China Railway: William Sherriff.

**INSTITUTION OF ELECTRICAL ENGINEERS**, at 8.—The Theory of Armature Reaction in Dynamos and Motors: James Swinburne.—Some Points in Dynamo and Motor Design: W. B. Esson.

**ROYAL INSTITUTION**, at 3.—The Three Stages of Shakspeare's Art: Rev. Canon Ainger.

##### FRIDAY, FEBRUARY 28.

**AMATEUR SCIENTIFIC SOCIETY**, at 8.—Practical Coal-mining: H. S. Streetfield.

**ROYAL INSTITUTION**, at 9.—Evolution in Music: Prof. C. Hubert H. Parry.

##### SATURDAY, MARCH 1.

**ESSEX FIELD CLUB**, at 7.—Micro-Fungi of Epping Forest: how to Collect, Preserve, and Study Them: Dr. M. C. Cooke.

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

##### SUNDAY, MARCH 2.

**SUNDAY LECTURE SOCIETY**, at 4.—Apollonius of Tyana; the Story of his Life and Miracles: G. Wotherspoon.

##### MONDAY, MARCH 3.

**SOCIETY OF ARTS**, at 8.—Stereotyping: Thomas Bolas.

**ARISTOTELIAN SOCIETY**, at 8.—The Psychological Development of the Conceptions of Causality and Substance: G. F. Stout.

**VICTORIA INSTITUTE**, at 8.—Chinese Chronology: Rev. James Legge.

**ROYAL INSTITUTION**, at 5.—General Monthly Meeting.

##### TUESDAY, MARCH 4.

**ZOOLOGICAL SOCIETY**, at 8.30.—On the Classification of Birds: Henry Seebohm.—A Revision of the Genera of Scorpions of the Family Bathidae, with Descriptions of some New South African Species: R. I. Pocock.—On some Galls from Colorado: T. D. A. Cockerell.—Report on the Insect-House for 1889: A. Thomson.

**INSTITUTION OF CIVIL ENGINEERS**, at 8.—The Hawksbury Bridge, New South Wales: C. O. Burge.—The Erection of the Dufferin Bridge over the Ganges at Benares: F. T. G. Walton.—The New Blackfriars Bridge on the London, Chatham, and Dover Railway: G. E. W. Cruttwell.

**UNIVERSITY COLLEGE BIOLOGICAL SOCIETY**, at 5.15.—A Peculiar Ferment in *Balan glossus*: Dr. Halliburton.—The Weather Plant: Mr. Weiss.

**ROYAL INSTITUTION**, at 3.—The Post-Darwinian Period: Prof. G. J. Romanes, F.R.S.

#### WEDNESDAY, MARCH 5.

**SOCIETY OF ARTS**, at 8.—Recent Progress in British Watch and Clock Making: J. Tripplin.

**ENTOMOLOGICAL SOCIETY**, at 7.—New Longicornia from Africa: C. J. Gahan.—Notes on the Lepidoptera of the Region of the Straits of Gibraltar: J. J. Walker, R.N.—Some Water Beetles from Ceylon: Dr. D. Sharp.—The Classification of the Pyralidina of the European Fauna: E. Meyrick.—A New Species of Thymara and other Species allied to *Himantopterus fuscicornis*, Wesm.: Captain H. J. Elwes.—A Catalogue of the Pyralidæ of Sikkim collected by H. J. Elwes and the late Otto Möller: Pieter C. T. Snellen.

#### THURSDAY, MARCH 6.

**ROYAL SOCIETY**, at 4.30.—The following papers will probably be read:—On a Second Case of the Occurrence of Silver in Volcanic Dust—namely, in that thrown out in the Eruption of Tunguragua, in the Andes of Ecuador, January 11, 1886: Prof. J. W. Mallet, F.R.S.—On the Tension of Recently-formed Liquid Surfaces: Lord Rayleigh.—(1) On the Development of the Ciliary or Motor Oculi Ganglion; (2) The Cranial Nerves of the Torpedo (Preliminary Note): Prof. J. C. Ewart.

**LINNEAN SOCIETY**, at 8.—On the Production of Seed in some Varieties of the Common Sugar-Cane (*Saccharum officinarum*): D. Morris.—An Investigation into the True Nature of Callus; Part 1, the Vegetable Marrow, and *Ballia callitricha*: Spencer Moore.

**ROYAL INSTITUTION**, at 3.—The Early Developments of the Forms of Instrumental Music: Frederick Niecks.

#### FRIDAY, MARCH 7.

**PHYSICAL SOCIETY**, at 5.—On Bertrand's Refractometer: Prof. S. P. Thompson.

**GEOLOGISTS' ASSOCIATION**, at 8.

**INSTITUTION OF CIVIL ENGINEERS**, at 7.—Telephonic Switching: C. H. Wordingham.

**ROYAL INSTITUTION**, at 9.—Electrical Relations of the Brain and Spinal Cord: Francis Gotch.

#### SATURDAY, MARCH 8.

**ROYAL BOTANIC SOCIETY**, at 3.45.

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

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