

but no true nitro-derivative could be obtained.—On the supposed binaphthylene alcohol, by M. R. Fosse. The compound described by Rousseau as a binaphthylene alcohol is a derivative of trinaphthylmethane.—On the $\beta\beta$ -diacetylpropionate of ethyl, by M. F. March.—Properties of the alkyl substitution products of the ethyl ester of cyano-acetone-dicarboxylic acid. Action of cyanogen chloride upon the methyl ester of acetone-dicarboxylic acid, by M. J. Derôme.—The action of butyryl chloride upon the sodium compound of methyl acetoacetate, by MM. Bouveault and A. Bongert. Two classes of substances are produced in this reaction, there being a true carbon linkage in the one, whilst in the other the carbon atoms are joined through an oxygen atom. The separation of these isomers is described and some of their characteristic properties studied.—On the constitution of gallotannin, by M. H. Pottevin.—The production of acetyl-methyl-carbinol by the *Bacillus tartricus*, by M. L. Grimbart. By the action of this bacillus upon solutions of glucose or sugar, small quantities of the alcohol $\text{CH}_3\text{-CO-CHOH-CH}_3$ are produced. This substance, which has not been previously noted as a fermentation product, was identified by means of its osazone.—On the diagnosis of tuberculosis, by MM. Albert Robin and Maurice Binet. It is found that the respiratory exchanges are much higher in tuberculous subjects than in the healthy man, and this feature is so constant that it will be of service in the diagnosis of tuberculosis.—The slow conduction of the nerve and negative variation, by M. Aug. Charpentier.—On the opacity of the vitreous body and the rigidity of this medium of the eye, by M. A. Imbert.—On the histology of the branchia and the digestive tube, by M. P. Vignon.—On the absorption of highly diluted metallic poisons by plant cells, by M. H. Devaux. Both phanerogams and cryptogams are poisoned by solutions of lead and copper salts containing only one or two parts of the salt in ten millions of water.—Influence of darkness on the development of flowers, by M. L. Beaulaygue.—Comparative anatomy of the leaf organs in the acacias, by M. P. Ledoux.—On the tabular icebergs of the Antarctic regions, by M. Henryk Arctowski.

CAPE TOWN.

South African Philosophical Society. February 6.—T. Stewart, vice-president, in the chair. Mr. E. H. L. Schwarz exhibited some photographs and copies of interesting Bushman paintings from Groot Riet River, near the boundary of the Ceres and Clanwilliam districts, on the road from the Cold Bokkeveld to Whupperthal. The drawings are on the face of a cliff overhanging a tributary of the Groot Riet River. There is no cave properly speaking, but the river has cut slightly into the cliff at the base, so as to form a shallow recess. The floor of the recess is some 20 feet above the present river level, and a fine Bushman pot (exhibited) was obtained here. The paintings themselves are done in a great number of styles, by different people. They are in red paint, except for three black and one brown figure. Mr. Sclater pointed out that one of the photographs evidently represented the drawing of a white rhinoceros, an animal of whose occurrence so far south no written record has been preserved.—Mr. A. W. Rogers read a paper on evidence of glacial action during the deposition of the Table Mountain sandstone.—Mr. Sclater having taken the chair, Mr. Stewart read a paper on the rainfall of the Cape Peninsula. The average for the last seven years at Signal Hill is 15.49 inches; at Rondebosch 41.22 inches; at Kenilworth 42.90 inches; at Disa Head (2500 feet above the sea) on Table Mountain 39.96 inches; and at Maclear's Beacon (3478 feet above the sea) on Table Mountain 86.81 inches. The heaviest rainfall in the Peninsula is registered at the last station. The rainfall during the month of January last was of an exceptional character, in fact there is no record of a previous rainfall during any of the summer months having approached the amount recorded.

DIARY OF SOCIETIES.

THURSDAY, MARCH 28.

ROYAL SOCIETY, at 4.30.—(1) On the Arc Spectrum of Vanadium; (2) On the Enhanced Lines visible in the Spectrum of the Chromosphere: Sir N. Lockyer, K.C.B., F.R.S., and P. E. Baxandall.—Further Observations of Nova Persei, No. 2: Sir N. Lockyer, K.C.B., F.R.S.—The Growth of Magnetism in Iron under Alternating Magnetic Force: Prof. E. Wilson.—To be read *in title only*; On the Electrical Conductivity of Air and Salt Vapours: Dr. H. A. Wilson.

INSTITUTION OF ELECTRICAL ENGINEERS, at 8.—The Electrical Transmission of Power in Coal Mines: H. W. Ravenshaw.—Portable Electric Lamps: S. F. Walker.

CHEMICAL SOCIETY, at 3.—Annual General Meeting.

NO. 1639, VOL. 63]

FRIDAY, MARCH 29.

ROYAL INSTITUTION, at 9.—Polish: Lord Rayleigh, F.R.S.

SATURDAY, MARCH 30.

ROYAL INSTITUTION, at 3.—Sound and Vibrations: Lord Rayleigh, F.R.S.

ESSEX FIELD CLUB (Essex Museum of Natural History, Stratford), at 5.—Twenty-first Annual Meeting.—At 6.30.—Neolithic Implements from the North Downs: J. P. Johnson.—On Borings of the Ash-bark Beetles (*Hylesinus*): Miller Christy.—Lantern Demonstration of Colour Photography as applied to Natural Objects: E. Sanger Shepherd.

MONDAY, APRIL 1.

SOCIETY OF CHEMICAL INDUSTRY, at 8.—The Effect on the Marsh Test of some Commercial Products containing Selenium and Tellurium: A. E. Berry.—A New System for the Manufacture of Borax and Nitrates: Dr. W. Newton.—Basic Superphosphate: its Preparation and Use as a Manure: John Hughes.—The Preparation of Pure Cineol from Eucalyptus Oil by means of the Arsenate: Watson Smith.—Action of Caustic Potash and Soda on Stannous Sulphide: Dr. F. Mollwo Perkin.

VICTORIA INSTITUTE, at 4.30.—The Maori's Place in History: J. Rutland.

TUESDAY, APRIL 2.

ZOOLOGICAL SOCIETY, at 8.30.—On the Myology of the Tongue of Parrots, with a Classification of the Order based upon the Structure of the Tongue: G. P. Mudge.—On the Structure of the Larynx in *Cogia* and *Balaenoptera*: Prof. W. B. Benham, F.R.S.—On a Collection of Lizards from the Malay Peninsula, made by Members of the "Skeat Expedition," 1899-1900: F. F. Laidlaw.

INSTITUTION OF CIVIL ENGINEERS, at 8.—The Burrator Works for the Water-supply of Plymouth: E. Sandeman.

ROYAL PHOTOGRAPHIC SOCIETY, at 8.—Animals and Birds in their Native Haunts: Charles Reid.

WEDNESDAY, APRIL 3.

GEOLOGICAL SOCIETY, at 8.

ENTOMOLOGICAL SOCIETY, at 8.

SOCIETY OF PUBLIC ANALYSTS, at 8.—On the Maumené Test for Oils: C. A. Mitchell.—Some Arsenic Estimations relating to Malt Kilns: T. Fairley.—The Aeration Test for Effluents: Dr. S. Rideal.

THURSDAY, APRIL 4.

LINNEAN SOCIETY, at 8.—On some British Freshwater Rhizopods and Heliozoa: G. S. West.

CONTENTS.

	PAGE
The Book of Antelopes. By R. L.	509
The Science of Ore Deposits. By Prof. Henry Louis	510
Organic Chemistry. By W. T. L.	511
Our Book Shelf:—	
Dwight: "Description of the Human Spines, showing Numerical Variation, in the Warren Museum of the Harvard Medical School"	512
Prichard: "Where Rules White: a Journey across and about Hayti"	512
Schwalbe: "Untersuchungen zur Blutgerinnung"	512
Gregory and Simmons: "A Manual of Elementary Science"	513
"The Mind of the Century"	513
"Morison's Chronicle of the Year's News of 1900"	513
Steel: "Imitation, or the Mimetic Force in Nature and Human Nature"	513
Allen: "In Nature's Workshop"	513
Benedict: "Elementary Organic Analysis"	514
Davis: "Elevation and Stadic Tables"	514
Letters to the Editor:—	
The Recent "Blood Rains." (<i>With Diagram</i>).—Prof. J. W. Judd, C.B., F.R.S.	514
Note upon a New Form of Spermatophore in an Earthworm.—Frank E. Beddard, F.R.S.	515
Graphic Solutions of the Cubics and the Quartics.—T. Hayashi	515
"The Principles of Magnetism and Electricity."—Llewelyn B. Atkinson; The Reviewer	515
The Land Work of the Belgian Antarctic Expedition. (<i>Illustrated</i>)	516
The International Association of Academies	519
Prof. C. F. Lütken. By W. E. H.	520
Notes (<i>Illustrated</i>)	520
Our Astronomical Column:—	
Astronomical Occurrences in April	524
New Variable Stars	525
Light Curve of Algol	525
Chart for Observations of Nova Persei	525
Photography of the Aurora. (<i>Illustrated</i>)	525
The Mississippi River. By W. H. Wheeler	525
History and Progress of Aerial Locomotion. By Prof. G. H. Bryan, F.R.S.	526
University and Educational Intelligence	528
Scientific Serials	528
Societies and Academies	529
Diary of Societies	532