

certain substances on solidification.—Prof. A. C. Haddon presented a paper upon the Actinaria of Torres Straits. This account of the Actinaria is based mainly on the collections made by the author in 1888-9, supplemented by descriptions published by Mr. Saville-Kent in his works "The Great Barrier Reef of Australia" and "The Naturalist in Australia." In order to render the paper more complete, allusions are made in it to genera which are not recorded from Torres Straits. In a second paper, Prof. Haddon described a new species of Actinaria from Oceania—*Phellia Sollasi*. This was collected by Prof. Sollas in the lagoon at Funafuti, Ellice Group, W. Pacific, in 1896.—The following objects were exhibited at this meeting: The Cocoliths of Dublin Bay, by Mr. H. H. Dixon, and Prof. J. Joly, F.R.S.—A collection of economic plant products from the Gold Coast, by Prof. T. Johnson.

ST. LOUIS.

Academy of Science, December 6.—Mr. Julius Hurter exhibited specimens of a considerable number of reptiles and batrachians, mostly of southern origin, which had been collected by him during the past season, and were additions to the known fauna of Missouri. Among the more interesting additions were the cotton-mouth moccasin, the banded water snake, Holbrook's water snake, the little brown snake, the Louisiana mud turtle, the chestnut-backed salamander (first detected west of the Mississippi River by Mr. Colton Russell), and the marbled salamander.—Mr. H. von Schrenk exhibited a series of specimens and drawings illustrating some of the injuries inflicted on the trees of St. Louis by the tornado of May 1896, showing not only the formation of double twig elongation and growth rings, but the exfoliation of the bark and the consequent drying out of 50 per cent. or more of the wood through the trunk and branches, in several species.

NEW SOUTH WALES.

Linnean Society, October 27.—Prof. J. T. Wilson, President, in the chair.—Descriptions of new species of Australian Coleoptera, Part 4, by Arthur M. Lea. Thirty-four species, principally belonging to the *Curculionidae*, were described as new; with critical notes and remarks on synonymy.—On the lizards of the Chillagoe district, North Queensland, by Dr. R. Broom. Twenty-three species were collected during a six months' residence at Muldiva, seventy miles west of Herberton, a district in which during eight months of the year (April-December) as a rule there is practically no rain. A species of *Lygosoma* was described as new.—On a *Trachypterus* from New South Wales, by J. Douglas Ogilby. In this paper the author gave a detailed description of a young example washed ashore near Newcastle, and reviewed at length our present knowledge of the genus in the south-western Pacific.—Contributions to a more exact knowledge of the geographical distribution of Australian Batrachia, No. 5, by J. J. Fletcher. The present contribution is based upon the examination of collections from Tasmania and West Australia. In the British Museum Catalogue (second edition) seven (? eight) species are attributed to Tasmania, and fourteen to West Australia. Three additional species are now recorded for the former Colony, and six for the latter, including an undescribed species of *Crinia* belonging to the group having the abdominal surface non-granulate.—Mr. Froggatt exhibited a number of scale insects (*Eriococcus coriaceus*, Mask.), upon a twig of Eucalyptus, among which had been placed a great number of the eggs of the scale-eating moth *Thalpochares cocophaga*, Meyr. The eggs are pale pink, circular, and beautifully ribbed. The scales were infested with the larvæ of *Cryptolemus montrouzieri*, Muls., a useful small black ladybird beetle. Both these enemies of *Eriococcus* are of great economic value, as the moth larvæ have now taken to eating the olive scale (*Lecanium oleæ*, Sign.), and the ladybird beetle is bred both in New Zealand and America. Also living specimens of our largest white ant, *Calotermes longiceps*, Froggatt, which were taken out of a log of fire-wood, and had already been in captivity for over two months.

DIARY OF SOCIETIES.

MONDAY, JANUARY 3.

SOCIETY OF CHEMICAL INDUSTRY, at 8.—Standard Methods of Tanning Analysis as adopted by the International Association of Leather Trades Chemists, with Remarks thereon: Prof. H. R. Procter and Dr. J. G. Parker.—Extraction of Tanning Materials at various Temperatures: Dr. J. G. Parker.—Neatsfoot Oil: J. H. Coste and E. J. Parry. VICTORIA INSTITUTE, at 4.30.—Ancient Civilizations: Rev. John Tuckwell.

NO. 1470. VOL. 57]

TUESDAY, JANUARY 4.
ROYAL INSTITUTION, at 3.—The Principles of the Electric Telegraph: Prof. Oliver Lodge, F.R.S.
ROYAL VICTORIA HALL, at 8.30.—Coal: W. F. Rudler.
WEDNESDAY, JANUARY 5.
GEOLOGICAL SOCIETY, at 8.—On the Structure of the Davos Valley: A. Vaughan Jennings.—Sections along the Lancashire, Derbyshire, and East Coast Railway, between Lincoln and Chesterfield: C. Fox-Strangways.
THURSDAY, JANUARY 6.
ROYAL INSTITUTION, at 3.—The Principles of the Electric Telegraph: Prof. Oliver Lodge, F.R.S.
FRIDAY, JANUARY 7.
GEOLOGISTS' ASSOCIATION, at 8.—A Brief Account of the Excursions in the Urals, down the Volga, in the Caucasus, &c., made in connection with the International Geological Congress held in Russia, August-September, 1897: L. L. Belinfante.
SATURDAY, JANUARY 8.
ROYAL INSTITUTION, at 3.—The Principles of the Electric Telegraph: Prof. Oliver Lodge, F.R.S.

BOOKS, PAMPHLETS, and SERIALS RECEIVED.

BOOKS.—L'Electro-chimie: A. Minet (Paris, Gauthier-Villars).—Introduction to the Study of Organic Chemistry: J. Wade (Sonnenschein).—Naturliche Schöpfungs-Geschichte: Prof. E. Haeckel, 2 Vols., Neunte Umgearbeitete Auflage (Berlin, Reimer).—Notes on Carpentry and Joinery: T. J. Evans, Vol. 1 (Chapman).—What is Life?: F. Hovenden (Chapman).—The Collected Mathematical Papers of Arthur Cayley, Vol. xiii. (Cambridge University Press).—Physikalisch-Chemische Propädeutik: Prof. H. Griesbach, Zweite Hälfte, 2 Liefg (Leipzig, Engelmann).
PAMPHLETS.—Magnetic and Pendulum Observations: G. R. Putnam (Boston, Mass.).—Hand-Guide to the Botanic Gardens, Buitenzorg (Batavia, Kolff).
SERIALS.—Traité Encyclopédique de Photographie: Dr. C. Fabre, Cinq^e Fasc. B. (Paris, Gauthier-Villars).—Journal of the Royal Microscopical Society, December (Williams).—Century Magazine, January (Macmillan).—Quarterly Journal of Microscopical Science, December (Churchill).—Natural Science, January (Dent).

CONTENTS.

PAGE

Motive Power and Gearing. By Prof. A. Gray, F. R. S.	193
A Pioneer of Medicine	194
Selections from a Diary	195
Our Book Shelf:—	
Adie: "Agricultural Chemistry."—R. W.	196
Lapparent: "Notions générales sur l'Écorce terrestre."—H. B. W.	196
Maspero: "The Dawn of Civilization: Egypt and Chaldea"	196
Scott: "The Local Distribution of Electric Power in Workshops, &c."	197
Edridge-Green: "Memory and its Cultivation"	197
Parish: "Illusions and Hallucinations"	197
"Transactions of the Rochdale Literary and Scientific Society"	197
Sidersky: "Les Constantes Physico-Chimiques"	197
Briggs: "By Roadside and River: Gleanings from Nature's Fields"	198
Letters to the Editor:—	
The Dugong.—W. F. Sinclair	198
Potato-Disease.—G. W. Bulman	198
The Prevention and Cure of Rinderpest	198
Large Refracting and Reflecting Telescopes. By Dr. W. J. S. Lockyer	200
The Woburn Abbey Deer. (Illustrated.) By R. L.	201
The Late Professor A. Schrauf	203
Notes	204
Our Astronomical Column:—	
Astronomical Occurrences in January	207
Nautical Almanac Corrigenda	207
Occultation of the Pleiades	207
Partial Eclipse of the Moon	207
New Investigations of β Lyre	207
The Atmospheres of Planets	207
The Densities of Certain Gases. By Lord Rayleigh, F. R. S.	208
The Northam Pebble Ridge. By W. H. Wheeler. Random Selection. By Prof. Karl Pearson, F. R. S., and L. N. G. Filon	210
Modification of the Great Lakes by Earth Movement. (With Map.) By Prof. G. K. Gilbert	211
Forests and Rainfall. By Prof. H. A. Hazen	213
University and Educational Intelligence	214
Societies and Academies	215
Diary of Societies	210
Books, Pamphlets, and Serials Received	216