

δ are generally very soluble in water, but the hydrochloride, hydrobromide, and basic oxalate form exceptions, and may be easily crystallised.—On the ophites of the Western Pyrenees, by M. P. W. Stuart-Menteath. The author controverts the supposed necessary connection between the Trias and the Ophites of this region, and shows that the presence of the latter is due to the faults of the district. He also shows that the intercalation of the ophites parallel to the surrounding beds is not an invariable case, many instances being now known of penetration of neighbouring strata, and that the granites, porphyries, and ophites of the Pyrenees are not independent of each other, but rather that the latter become important as the former die out.—On the composition of the waters of the Dranse du Chablais and the Rhone at their entrance into the Lake of Geneva, by M. A. Delebecque. The varying quantities of solid residue in the waters of these two rivers are given for various times in the year. The proportions of the substances dissolved vary, calcium sulphate being found more abundantly in winter, and the alkalies in greater proportion in summer. An approximate calculation gives for the amounts of dissolved matter carried annually into the Lake of Geneva by the Rhone and by the whole of its affluents, respectively, the figures 750,000 and 1,150,000 tons.

NEW SOUTH WALES.

Linnean Society, November 29, 1893.—Prof. David, the President, in the chair.—The following papers were read:—A Thylacine of the earlier Nototherian period in Queensland, by C. W. De Vis. The occurrence of a Thylacine, for which the name *Thylacinus rostralis* was proposed, larger than the existing species, and differing from it in other expressive features, was recorded from the Darling Downs deposits. A number of fragmentary portions of the cranium have been for some time in the Queensland Museum; but the most valuable evidence has been furnished by a recent acquisition, in the shape of the major part of the left side of an adult skull, with all the teeth except the second upper premolar in place, together with the first four cervical vertebrae.—A second note on the *Carenides*, with descriptions of new species, by T. G. Sloane. Nine new species were described, and the opportunity of reviewing the classification of the group has been taken, synoptical tables of the more important genera being furnished.—Additions to and emendations in the reference list of the land and freshwater mollusca of New Zealand, by Henry Suter. In the "Reference List" published in last year's Proceedings, a further account of several new species was promised. Descriptions, which will be fully illustrated, of these novelties have now redeemed this promise. Critical notes on various other New Zealand land mollusca accompany the descriptions. The existence in New Zealand of an undetermined species of *Gundlachia*, the young of which were formerly mistaken for an *Ancylus*, was also announced.—On the Australasian *Gundlachia*, by C. Hedley. Two Australian species, *G. Petterii*, Johnston, and *G. Beddomei*, Petterd, were figured and described, and the dentition of the former was also elaborated. A summary was given of the whole genus, with especial reference to its discontinuous distribution, and probable path of migration.—Description of *Cæcum amputatum*, an undescribed mollusc from Port Jackson, by C. Hedley. The newest addition to the Port Jackson molluscan fauna, figured and described by the author, stands nearest to *C. auriculatum*, de Folin, from the Mediterranean. It is the first of its genus observed in extratropical Australia.—Notes on the red-crowned parakeet (*Cyanorhamphus Cooki*) of Norfolk Island, by A. J. North. Having recently examined two specimens of this parakeet forwarded by Dr. P. H. Metcalfe, of Norfolk Island, the author has found it to be specifically distinct from *C. nova-zealandia*, as maintained by Count Salvadori, in whose views as to the incorrectness of the habitat assigned to *G. Cooki* by Gray, and the necessity of regarding *C. Rayneri* as a synonym of *C. Cooki* he therefore concurs.—Fourth contribution to a knowledge of the geographical distribution of Australian batrachia, with description of a new cystignathoid frog, by J. J. Fletcher. The collections recorded are mainly from the Lower Clarence and the Northern Tableland of N.S.W.; and a new species of *Crinia*—with vomerine teeth, the tympanum indistinct, the throat very dark, the belly maculate and granulate, a light vertebral line—from Jervis Bay, proposed to be called *C. Hasswelli*, was described.—Description of a new Australian *Acacia*, by J. H. Maiden and R. T. Baker. A well-defined and somewhat remarkable species from Murrumbo, near the Goulburn River, N.S.W., was described.

NO. 1263, VOL. 49]

It bears some superficial resemblance to *A. decurrens*, var. *normalis*, but the length of the leaflets, the fewness of the glands, the pinnae, and the flowers in the heads (six or eight only), are the principal distinctive differences upon which the specific rank is based. This species commemorates Baron Ferd. von Mueller, the eminent botanist, to whom we are indebted for the classical "Iconography of Australian Acacias."

NETHERLANDS.

Zoological Society, November 25, 1893.—M. Hubrecht in the chair.—M. Hubrecht contributed a paper on the development of the Shrew (*Sorex vulgaris*), and especially on its placentation. The placenta is an embryonal organ; the part which the tissue of the mother plays in its formation is considerably smaller than has been supposed.—M. Seydel exhibited models of embryonal skulls of Anguis and Lacerta, made of wax after the method of Born.—M. Bolsius dealt with the anatomy especially of the generative organs of *Branchiobdella parasita*.—M. Vosmaer treated on the so-called membrane of Sollas, in sponges of the genus Sycon.—M. Hoek described a hermaphroditical ray (*Raja clavata*). A specimen of a length of 44 centimetres (without the tail) was in possession of a single pterygopodium (the left one) only. On dissecting it was found to be furnished with a complete set of female reproductive organs (ovaries, oviducts, oviductal glands, uteri), and at the left side with a well-developed testis containing mature spermatozoa.

BOOKS, PAMPHLET, and SERIALS RECEIVED.

BOOKS.—Electromagnetic Theory: O. Heaviside, Vol. i. (*Electrician Publishing Company*).—Eau Sous Pression: F. Bloch (Paris, Gauthier-Villars).—Anuario publicado pelo Observatorio do Rio de Janeiro, 1893 (Rio de Janeiro).—The Crinoidea of Gotland, Part 1.—The *Crinoidea Inadumato*: F. A. Bather (Stockholm, Norstedt).—Index-Catalogue of the Library of the Surgeon-General's Office, U.S. Army, Vol. xiv. (Washington).—Results of Rain, River, and Evaporation Observations made in N.S.W. during 1892: H. C. Russell (Sydney).

PAMPHLET.—Report of the Meteorological Council to the Royal Society for the year ending March 31, 1893 (Eyre and Spottiswoode).

SERIALS.—Geographical Journal, January (Stanford).—Natural Science, January (Macmillan).—Handbuch der Paläontologie Erste Abthg. iv. Band, 3. Liefg. (Williams and Norgate).—Observatory, January (Taylor and Francis).—Bulletin of the New York Mathematical Society, December (New York, Macmillan).—Revue Générale des Sciences, No. 24 (Paris).—Annals of Scottish Natural History, January (Edinburgh, Douglas).—American Journal of Science, January (New Haven).—Journal of the Royal Statistical Society, December (Stanford).—The Physical Society of London, Proceedings, Vol. xii. Part 3 (Taylor and Francis).—Contributions from the Botanical Laboratory of the University of Pennsylvania, Vol. i. No. 2 (Philadelphia).—Medical Magazine, January (Southwood).

CONTENTS.

	PAGE
The Kew Index of Plant-Names	241
Astronomy for the Public. By R. A. Gregory	243
Our Book Shelf:—	
Coleman: "Practical Agricultural Chemistry for Elementary Students."—C. J.	244
Walther: "Bionomie des Meeres"	244
Letters to the Editor:—	
Correlation of Solar and Magnetic Phenomena.—Dr. M. A. Veeder: William Ellis, F.R.S.	245
The Mendip Earthquake of December 30-31, 1893.—Prof. F. J. Allen	245
Quaternionic Innovations.—Oliver Heaviside, F.R.S.	246
The Second Law of Thermodynamics.—S. H. Burbury, F.R.S.	246
The Fauna of the Victoria Regia Tank in the Botanical Gardens.—Frank E. Beddard, F.R.S.	247
Rudimentary (Vestigial) Organs.—W. E. H.; C. Mostyn	247
Fresh Light on the Ainu. (<i>With Illustrations.</i>) By H. R. M.	248
The Purification of Sewage by Bacteria	249
Arthur Milnes Marshall	250
Notes	251
Our Astronomical Column.—	
Harvard College Observatory Report	256
The "Gegenschein"	256
Geographical Notes	256
The Rise of the Mammalia in North America. II. By Prof. H. F. Osborn	257
A Dynamical Theory of the Electric and Luminiferous Medium. I. (<i>With Diagram.</i>) By Dr. Joseph Larmor, F.R.S.	260
Scientific Serials	263
Societies and Academies	263
Books, Pamphlet, and Serials Received	264