

of the Department of Agriculture and Technical Instruction for Ireland from 1899 to 1913. These specimens are described externally and anatomically in the paper, and compared with the eight other specimens described by Moseley and Hertwig. The possibility of all these specimens belonging to one species is suggested and discussed, with the conclusion that it is quite likely that the genus contains one variable species only. On the other hand, further material is required for a final decision, and if the three species, *C. rigidus*, *profundus*, and *obtectus*, should prove valid, the Irish specimens would probably require a fourth species. It is further pointed out that the thick and rigid body of the anemones in question seems to be correlated with deep-sea life, and that although the genus has sometimes been regarded as a primitive one, it has a number of characteristics which it would seem can be considered only as specialisations or advanced features.

## PARIS.

Academy of Sciences, May 25.—M. Henri Deslandres in the chair.—E. Goursat: Some transformations of partial differential equations of the second order.—G. Bigourdan: The instruments and work of the Sainte-Geneviève Observatory: Historical account of the work of Pingré and of Lechevalier done between 1755 and 1836.—J. Bossert: Catalogue of the proper motion of 5671 stars, annotated and published by L. Schulhof.—J. Baillaud: The method of the scale of tints in photographic photometry.—C. Guichard: Congruences belonging to a linear complex such that the lines of curvature correspond on the two focal surfaces.—G. Julia: Families of functions of several variables.—M. Janet: Systems of partial differential equations and systems of algebraic forms.—G. Sagnac: The real relativity of the energy of the elements of radiation and the motion of waves in the æther.—F. Viès: Ultra-violet spectrophotometry of the nitrophenols. Seventeen nitro-derivatives were examined and the spectra found to be, in general, constituted of three elements: a constant band, due to the  $\text{NO}_2$  group; a band related to the presence of the benzene ring; and a third band the origin of which is doubtful.—M. de Broglie: The fine structure of X-ray spectra. Details of a doublet given by rhodium, and comparison with the K spectrum of tungsten.—J. L. Pech: Phenomena of antagonism between various radiations (ultra-violet, visible spectrum, and infra-red).—L. Thielemans: Regulation of cables for the transport of electrical energy to long distances.—P. Bunet: The transport of energy to great distances. Remarks on a recent communication by M. Brylinski on the same subject.—M. Toporescu: The lime and magnesia carried down by precipitates of ferric oxide. Varying weights of ferric oxide were precipitated in presence of constant quantities of calcium and magnesium salts, and the proportions of lime and magnesia carried down were determined. A second precipitation of the ferric oxide is sufficient to remove calcium salts, but this is not the case with magnesia.—L. Guillet and M. Gasnier: The plating with nickel of aluminium and its alloys. The aluminium or alloy is cleaned and roughened by sand-blasting, and then takes a satisfactory deposit of nickel. The influence of the size of the sand grains and the time elapsed between the sand-blasting and the deposit have been examined, and results are given.—A. C. Vournazos: A new series of complex combinations: the antimony oxydides. The mercury compound may be taken as a type of these substances; it has the composition  $\text{Hg}(\text{SbIO}_3)$ .—R. Cornubert: The constitution of some dialkylcyclohexanones. A study of the ketones obtained by treating cyclohexanone with sodium and then with alkyl halides.—C. Dufraisse:

The stereo-isomeric forms of benzoylphenylacetylene di-iodide. The conditions under which either of the two isomers can be isolated are given.—A. Mailhe: The catalytic hydrogenation of the ketazines.—L. Moret: The tectonic of the eastern bank of Lake Annecy.—A. Brives: Some results of a new journey in Morocco. A completion of geological work commenced in 1919.—P. Bonnet: The Permo-Triassic limit in the Himalayan-Armenian geosynclinal.—L. Dunoyer and G. Reboul: The prediction of the weather.—G. Truffaut and H. Bezssonoff: The influence of partial sterilisation on the composition of the microbial flora of the soil.—R. Souèges: The embryogeny of the Solanaceæ. Development of the embryo in *Hyoscyamus* and *Atropa*.—P. Bertrand: The constitution of the vascular system in ferns, in Pteridosperms, and in all ancient Phanerogams.—L. Blaringhem: The stability and fertility of the hybrid *Geum urbanum* × *G. rivale*. From the morphological point of view the descent of this hybrid is uniform and regularly fertile. Its mixed characters are sufficiently distinct from those of its parents to give a precise diagnosis, and as it propagates without variation in the wild state it can be described as a good systematic species.—J. Feytaud: The kings and queens of *Leucotermes lucifugus*.—A. Mayer, A. Guieysse, and E. Fauré-Fremiet: Pulmonary lesions determined by suffocating gases.—A. Trillat and M. Mallein: The projection of micro-organisms into the air. The influence of humidity.

## Books Received.

- Calcutta University Commission, 1917-19. Report. Vol. vi. Appendices and Index. Pp. vii+341+plates. (Calcutta: Superintendent, Government Printing, India.) 1 rupee or 1s. 6d.
- A Monograph of the British Orthoptera. By W. J. Lucas. Pp. xii+264+xxv plates. (London: The Ray Society.) 1l. 5s. net.
- The British Charophyta. By J. Groves and Canon G. R. Bullock-Webster. Vol. i. Nitelleæ. Pp. xiv+141+xx plates. (London: The Ray Society.) 1l. 5s. net.
- Ozone. By Prof. E. K. Rideal. Pp. ix+198. (London: Constable and Co., Ltd.) 12s. net.
- Thomas Henry Huxley. By Dr. L. Huxley. Pp. vii+120. (London: Watts and Co.) 3s. 6d. net.
- Auguste Comte. By F. J. Gould. Pp. v+122. (London: Watts and Co.) 3s. 6d. net.
- Is Spiritualism Based on Fraud? By J. McCabe. Pp. vii+160. (London: Watts and Co.) 3s. net.
- The Systematic Treatment of Gonorrhœa in the Male. By N. Lumb. Second edition. Pp. viii+123. (London: H. K. Lewis and Co., Ltd.) 5s. net.
- Optical Projection. By Lewis Wright. Fifth edition. Rewritten and brought up to date by R. S. Wright. In two parts. Part i.: The Projection of Lantern-Slides. Pp. viii+87. (London: Longmans and Co.) 4s. 6d. net.

## Diary of Societies.

THURSDAY, JUNE 10.

- INSTITUTION OF MINING ENGINEERS (at Geological Society), from 11 a.m. to 5.—(General Meeting.)—Prof. H. Louis: Compensation for Subsidence.—W. Maurice: The Fleissner Singing-flame Lamp.—W. Maurice: The Wolf-Pokorny and Wiede Acetylene Safety-lamps.—G. Oldham: The "Oldham" Cap Type Miner's Electric Safety-lamp.—Discussion on First Report of the Committee on "The Control of Atmospheric Conditions in Hot and Deep Mines."—D. S. Newby: A New Method of Working Thick Seams of Coal at Baggeridge Colliery.—T. G. Bocking: Protractors.—T. G. Bocking: Magnetic Meridian Observations: A Method of Utilising the Kew Observatory Records.
- ROYAL SOCIETY, at 4.30.—Prof. A. V. Hill and W. Hartree: The Thermo-Elastic Properties of Muscle.—Sir James Dobbie and J. J. Fox: The Absorption of Light by Elements in the State of Vapour: (1) Selenium and