

hospital. At Charing Cross Hospital the session will commence on October 3, when Prof. Virchow will deliver the second Huxley lecture—"Recent Advances in Science and their Bearing on Medicine and Surgery"—at the St. Martin's Town Hall, Charing Cross. The chair will be taken by Lord Lister. At Guy's Hospital the session will begin on October 3. The first meeting of the Physical Society will be held on that day in the new physiological theatre at 8 p.m., when Sir Samuel Wilks will preside and a paper will be read by Mr. W. H. Crosse. At St. Mary's Hospital the session will be opened with an introductory address by Dr. Caley. At the Middlesex Hospital Dr. Arthur F. Voelcker will deliver an introductory address. At St. Thomas's Hospital the session will commence on October 3, when the prizes will be distributed at 3 p.m. by the Bishop of Rochester. At University College an introductory lecture will be given by Mr. Sidney Spokes, dental surgeon to the hospital. The London School of Medicine for Women will open with an introductory address by Dr. J. W. Carr, senior assistant physician to the Royal Free Hospital. The winter session at Mason College, Birmingham, will commence on October 1, when Prof. Michael Foster will deliver an address. At Yorkshire College, Leeds, the session will open with an address by Dr. C. J. Cullingworth, president of the Obstetrical Society. The University College of South Wales and Monmouthshire, Cardiff, will open on October 3, and Dr. Robert Saundby will deliver an address on October 7. The session at University College, Liverpool, will commence on October 1. The opening ceremony in connection with the new laboratories of physiology and pathology will take place on October 8, when Lord Lister will declare the laboratories open. At University College, Sheffield, Dr. Dyson, vice-president of the College, will deliver the introductory lecture.

### SOCIETIES AND ACADEMIES.

#### DUBLIN.

**Royal Dublin Society, June 22.**—Prof. D. J. Cunningham, F.R.S., in the chair.—Dr. E. A. Letts and Mr. R. F. Blake communicated a paper on the carbonic anhydride of the atmosphere. The first part was read dealing with (1) a brief historical account of the subject, with a discussion of the methods which have been employed in the determinations; (2) a description of the authors' modification of Pettenkofer's process, whereby results of great accuracy were obtained with mixtures of known volumes of purified air and carbonic anhydride; (3) an account of the authors' experiments (qualitative and quantitative) on the action of weak baryta water on glass; and (4) on the disturbing effect produced by soluble silicates on the delicacy of the phenol colour reaction with alkalis.—A paper was next read by Mr. E. St. John Lyburn, of Pretoria, consisting of notes on the minerals and mining in the Transvaal and Swaziland.—This was followed by a paper by Mr. A. Vaughan Jennings and Mr. H. Hanna on *Corallorhiza innata*, R.Br., and its mycorrhiza. The coralloid rhizome is shown to be covered with numerous papillae whereon tufts of hairs arise. The latter enter very closely into relationship with the fungal hyphae growing in the soil, forming a mycorrhiza. Owing to changes taking place in the hairs, bundles of hyphae pass down in the inside of the hairs through the outer layers of cells into the cortex, in the outer layers of which they form a coiled mycelium, and in the deeper layers they undergo a process of degeneration, and are absorbed by the protoplasm of the cells. The evidence indicates that the host plant acts carnivorously towards the hyphae. The hyphae constituting the *mycorrhiza* in this case were traced to one of the higher fungi, *Clitocybe infundibuliformis*.

#### PARIS.

**Academy of Sciences, August 29.**—M. Wolf in the chair.—On the measures to be taken for securing uniformity in the methods and control of the instruments employed in physiology, by M. Marey. After discussing the difficulties that have arisen owing to the defective nature of some of the recording instruments in common use, the resolutions adopted at the recent meeting of the International Congress of Physiology at Cambridge are quoted, proposing an international committee. The object of the committee will be to study the means of instituting comparisons between the various types of self-recording instruments, and to introduce some uniformity into the methods employed in physiology.—Observations of the

planet DQ Witt, made at the Observatory of Toulouse, with the 25 cm. Brunner equatorial, by M. F. Rossard.—Observations of some shooting stars which appeared during the nights of August 9, 10, 12, 13, 14, 16 and 18, by Mlle. D. Klumpke.—Modification of the internal pressures exerted in closed, empty receivers and submitted to the influence of electric currents, by M. G. Ségué. Experimental evidence is given showing that the pressure inside a vacuum tube is neither uniform nor constant, so long as it is traversed by a current of electricity.—The modifications undergone by the organs of the body during seventy two hours on the bicycle, studied by phonendoscopy, by MM. A. Bianchi and Félix Regnault. From the variations in the size and shape of lungs and stomach, some therapeutical applications are suggested. The effects of prolonged bicycling exercise are most severely felt by the lungs and heart.

#### NEW SOUTH WALES.

**Royal Society, July 6.**—Mr. G. H. Knibbs, President, in the chair.—On the stringy-bark trees of New South Wales, especially in regard to their essential oils, by R. T. Baker and Henry G. Smith. Part i. This paper is the authors' third contribution to a knowledge of the essential oils of the genus *Eucalyptus*. Some notes on the classification of the species of this genus by other authors are given, and the species now investigated are arranged according to their chemical, economic, and botanical affinities. It was shown that the essential oil of the red stringy-bark, *E. macrorhyncha*, besides containing a large percentage of eudesmol (the stearoptene of eucalyptus oil) gives an oil of excellent quality containing over fifty per cent. of eucalyptol, and answering all the requirements of the British Pharmacopœia with the exception of that of specific gravity.—On current observations on the Canadian-Australian route, by Captain Campbell Hepworth, R.M.S. *Aorangi*. This paper showed by observations of ocean current made during sixty-four passages between Australia and British Columbia in the liners *Aorangi*, *Warrimoo*, and *Miwewa*, the general set and strengths of the currents which are experienced, according to the season of the year, by vessels making the passage between these two colonies. The paper was illustrated by twelve charts, one for each month of the year, on which was delineated each current observation recorded, amounting to several thousand observations.

### BOOKS AND PAMPHLETS RECEIVED.

**BOOKS.**—Medical Diseases of Infancy and Childhood: Dr. D. Williams (Cassell).—Catalog der Handbibliothek des K. Zoologischen und Anthropologisch-Ethnographischen Museums in Dresden (Berlin, Friedländer).—Schantung und seine eingangspforte Kianschon: F. F. von Richthofen (Berlin, Reimer).  
**PAMPHLETS.**—Colony of Natal. Report of the Government Astronomer for the Year 1897 (Pietermaritzburg, Davis).—Arithmetic, Scheme B, Standards 1, 2, 3 (Reading, N.P.S.A., Ltd.).

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