

Terrace, Castle Hill, Reading, is the hon. secretary. The principal object of the society is to strengthen the relations between the younger students of science in this country by means of meetings, lectures, and publications, and by other suitable measures. The society will endeavour to secure privileges for its members in regard to other societies and to circulate information among the members relating to scholarships, vacant appointments, and so on. All inquiries should be addressed to the hon. secretary.

THE *Publishers' Circular and Booksellers' Record* records a total of 7716 books as having been published during the year 1918. This is a decrease of 415 compared with the previous year, and it is accounted for chiefly by a falling off in the number of works of fiction (-523) and juvenile literature (-155); other classes that have also decreased slightly are education, agriculture, domestic, business, history, and geography. On the other hand, sociology has increased by 112, technology by 110, medicine by 80, and poetry by 98. Under "Science" the number of new books recorded is 232, also 5 translations and 28 pamphlets. In addition, there were 64 new editions, making a total of 329. In the year 1914 science occupied the third place in twelve classes of literature, and technology the fifth place; in 1918 technology was in the eighth place and science in the tenth.

A COURSE of nine lectures on dynamical meteorology will be given at the Meteorological Office, South Kensington, by Sir Napier Shaw, reader in meteorology in the University of London, on Fridays, at 3 p.m., beginning on January 24. Each lecture will be followed by a conversation class for the discussion of practical details and of references to the original sources of information. The informal meetings at the Meteorological Office for the discussion of important current contributions to meteorology, chiefly in Colonial or foreign journals, will be resumed at 5 p.m. on Monday, April 28, and will be continued on each Monday until June 23, with the exception of June 9. Students wishing to attend should communicate with Sir Napier Shaw. The lectures are intended for advanced students of the University of London and others interested in the subject. Admission is free by ticket, obtainable on application at the Meteorological Office.

THE London County Council has arranged a series of special lectures for teachers, on subjects connected with problems of reconstruction, for the spring and summer terms of the present year. Full particulars are contained in the *Handbook of Classes and Lectures for Teachers* published by the Council. Among the numerous courses of lectures the following may be mentioned: the last three of the series on "Science and the Nation," viz. engineering, with special reference to its relations with our national life, by Prof. W. E. Dalby, at 11 a.m. on January 25, at the City and Guilds Engineering College of the Imperial College of Science and Technology, South Kensington; pure science in relation to the national life, by Prof. A. Schuster, at 11 a.m. on February 15, at the Regent Street Polytechnic, W.1; some aspects of the rubber-growing industry, by Prof. J. B. Farmer, at 11 a.m. on March 8, at the Regent Street Polytechnic, W.1. At King's College, Strand, on Wednesdays, at 5.30 p.m., beginning on February 5, a course of public lectures on "Physiology and National Needs" will be delivered. The lectures include physiology and the food problem, by Prof. W. D. Halliburton; physical training of the open-air life, by Dr. M. S. Pembrey; "vitamines"—unknown but essential accessory factors in diet, by Prof. F. G. Hopkins; scurvy—a disease due to the absence of vitamin, by Prof. A. Harden;

physiology and the study of disease, by Prof. D. N. Paton; and conservation of our cereal reserves, by Prof. A. Dendy. Applications for admission to these lectures should be addressed direct to the secretary of the college.

THIS year's educational gatherings included a joint meeting on January 2 of the Headmasters' Conference and the Incorporated Association of Headmasters, at which the reports of the Government Committees on science and modern languages were considered. After some discussion the following resolutions, dealing with the teaching of science and mathematics, were adopted by the conference:—(1) That suitable instruction in natural science should be included in the curriculum of preparatory schools, of the upper standards of elementary schools, and of all boys in public and other secondary schools up to the age of about sixteen. (2) That mathematics and natural science should be necessary subjects in the entrance scholarship examinations of public schools, in the first school examination, and in the examinations for entrance into the Navy and the Army, provided that good work in other subjects should compensate for comparative weakness in mathematics and natural science. (3) That for boys between twelve and sixteen the teaching of natural science should not be confined to physics and chemistry, but should include some study of plant and animal life, and that more attention should be directed to those aspects of science which bear directly upon the objects and experience of everyday life. (4) That there should be as close correlation as possible between the teaching of mathematics and of science. After a discussion of the report on the teaching of modern languages the conference passed resolutions, among others, declaring that the study of one or more languages other than English should be regarded as an essential part of higher education; that the first language other than English should be begun at about the age of ten, the second language not beginning until there was evidence of satisfactory progress in the first; and that usually the first language should be French and the second Latin.

SOCIETIES AND ACADEMIES.

LONDON.

Geological Society, December 18, 1918.—Mr. G. W. Lamplugh, president, in the chair.—C. T. Trechmann: A bed of inter-Glacial loess and some pre-Glacial freshwater clays on the Durham coast. A few years ago the author described a bed of Scandinavian drift that was found filling up a small pre-Glacial valley-like depression at Warren House Gill, on the Durham coast. This section, and others north and south of it, have been kept under observation at different times, and several new features have been noticed as the high tides and other agencies exposed parts of the coast. All the observed features seem to point to the fact that the Scandinavian ice-sheet advanced on the east coast of England in the same way as it invaded northern Europe round the southern shores of the Baltic, and gave rise to analogous climatic conditions leading to the formation of loess, a fragment of which is found protected from the erosive action of the later local glaciation in a small hollow on the Durham coast.

PARIS.

Academy of Sciences, December 23, 1918.—M. P. Painlevé in the chair.—C. Guichard: A series of surfaces of constant total curvature such that their lines of curvature form a network of the type pA' , $-pB'$.—M. Georges Charpy was elected a member of the divi-

sion of the application of science to industry.—P. **Fatou**: Suites of analytical functions.—G. **Julia**: Surfaces defined by a kinematic property.—J. **Guillaume**: Observations of the sun made at the Lyons Observatory during the second quarter of 1918. Summary of observations made on seventy-seven days of the spots, their distribution in latitude, and the distribution of the faculae in latitude.—E. **Belot**: The rôle of the satellite material in the structure of the surfaces of the earth, the planets, and the sun.—A. **Portevin**: Comparison between the internal elastic equilibrium of alloys after tempering and after hardening by drawing in the cold. A comparison of the internal strains developed in a 60/40 brass by tempering at 760° C. in water and by wire-drawing.—MM. R. **Dubrisay**, **Tripièr**, and **Toquet**: The miscibility of phenol and alkaline liquids. The relation between the temperature of complete miscibility of phenol and alkaline solutions of varying concentrations has been studied and the results given graphically.—L. F. **Navarro**: The constitution of the Island of Gomera (Canary Islands).—A. **Vacher**: The morphogeny of the roadstead of Brest.—P. **Pruvost**: The fossil fishes of the Coal Measures of the North of France.—M. **Mollard**: The influence of certain conditions on the comparative consumption of glucose and levulose by *Sterigmatocystis nigra* starting from saccharose.—A. **Paillet**: Some new parasitic coccobacilli of the cockchafer.

BOOKS RECEIVED.

Man's Redemption of Man: A Lay Sermon. By William Osler. Reprint. Pp. 63. (London: Constable and Co., Ltd.) 7d. net.

Chemistry Notes and Papers for School Use. (Notes and Question Papers to Supplement the Pupil's own Laboratory Notes.) Part i.: Introductory and First-year Work. In nine sections—A to I. Pp. 114. Part ii.: Second-year Work. In seven sections—A to G. Pp. 101. Part iii.: Third-year Work. In eight sections—A to H. Pp. 123. By G. N. Pingriff. (London: "Geographia," Ltd.) 2s. 3d. net each part.

A School Chemistry Method: Being the Teacher's Supplement to Chemistry Notes and Papers. Parts i., ii., and iii. By G. N. Pingriff. Pp. xii+80. (London: "Geographia," Ltd.) 1s. 9d. net.

Afforestation. By John Boyd. Pp. 39. (London: W. and R. Chambers, Ltd.) 1s. net.

La Face de la Terre (Das Antlitz der Erde). By Prof. E. Suess. Traduit avec l'autorisation de l'auteur et annoté sous la direction de E. de Margerie. Tome iii., 4e Partie. Tables Générales de l'ouvrage. Tomes i.—iii. Pp. 258. (Paris: A. Colin.) 25 francs.

From Darwinism to Kaiserism. By Dr. R. Munro. Pp. xviii+175. (Glasgow: J. Maclehose and Sons.) 4s. net.

Intravenous Injection in Wound Shock. By Prof. W. M. Bayliss. Pp. xi+172. (London: Longmans and Co.) 9s. net.

Can We Compete? By G. E. Mappin. Pp. x+149. (London: Skeffington and Son, Ltd.) 4s. 6d. net.

DIARY OF SOCIETIES.

THURSDAY, JANUARY 9.
 INSTITUTION OF ELECTRICAL ENGINEERS, at 6.—M. B. Field: The Navigational (Magnetic) Compass as an Instrument of Precision.
 OPTICAL SOCIETY, at 7.—Lt.-Col. A. C. Williams: The Design and Inspection of Certain Optical Munitions of War.

FRIDAY, JANUARY 10.
 ROYAL ASTRONOMICAL SOCIETY, at 5.—Rev. A. L. Cortie: The Spectrum of Nova Aquilæ, 1918, June 15.—J. K. Fotheringham: The New Star of Hipparchus and the Dates of Birth and Accession of Mithridates.—Rev.

J. G. Hagen: Observations of Nova Aquilæ, 1918.—A. Stanley Williams: The Variable Star B.D.+39°, 3476.

MONDAY, JANUARY 13.
 ROYAL INSTITUTION, at 3.—Prof. Spenser Wilkinson: Lessons of the War.
 ROYAL GEOGRAPHICAL SOCIETY, at 8.—James Berry: Transylvania and its Relation to Ancient Dacia and Modern Rumania.

TUESDAY, JANUARY 14.
 INSTITUTION OF CIVIL ENGINEERS, at 5.30.—A. G. Cooper: Slips and Subsidence on the Ceylon Government Railways.—F. W. Scott: Pietermaritzburg-Riet Spruit Deviation.
 MINERALOGICAL SOCIETY, at 5.30.—A. Hutchinson: Stereoscopic Lantern-slides of Crystal Pictures.—L. J. Spencer: Mineralogical Characters of Turite (= Turgite) and some other Iron-ores from Nova Scotia.

WEDNESDAY, JANUARY 15.
 ROYAL SOCIETY OF ARTS, at 4.30.—A. F. Kendrick: English Carpets.
 ENTOMOLOGICAL SOCIETY, at 8.—Annual Meeting.
 ROYAL MICROSCOPICAL SOCIETY, at 8.—J. E. Barnard: Presidential Address: The Limitations of Microscopy.

THURSDAY, JANUARY 16.
 ROYAL INSTITUTION, at 3.—Prof. J. N. Collie: Chemical Studies of Oriental Porcelain.
 ROYAL SOCIETY OF ARTS, at 4.30.—H. Kelway-Bamber, M.V.O.: Coal and Mineral Traffic on the Indian Railways.
 LINNEAN SOCIETY, at 5.—Capt. A. W. Hill: The Care of Soldiers' Graves.—N. E. Brown: Old and New Species of Mesembryanthemum, with Critical Remarks.—Dr. J. R. Leeson: Exhibition of Mycetozoa from Epping Forest.
 CHEMICAL SOCIETY, at 8.

FRIDAY, JANUARY 17.
 ROYAL INSTITUTION, at 5.30.—Sir J. Dewar: Liquid Air and the War.

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Editorial and Publishing Offices:

MACMILLAN AND CO., LTD.,
 ST. MARTIN'S STREET, LONDON, W.C.2.

Advertisements and business letters to be addressed to the Publishers.

Editorial Communications to the Editor.

Telegraphic Address: PHUSIS, LONDON.

Telephone Number: GERRARD 8830.