

during the War he gave much time to testing lenses that were required for military purposes. He observed the solar eclipse of 1914 in Russia, and went to Christmas Island for that of 1922, but it was cloudy. He has been ten years at the Cape and has made a very careful study of the motions of sun, moon and planets; he has discussed the lunar elements both from the meridian observations and from occultations, of which a great number have been observed. He is also a keen spectroscopist, and has contributed many papers on Nova Pictoris, deducing its distance from the rate of expansion of the nebulous envelopes. The heliometer measures of the planets, inaugurated by Sir David Gill, have been continued, and will shortly be published. Prof. de Sitter testified, in his discussion of the satellites of Jupiter, to the value of the results obtained with that instrument. A reversible transit-circle has been in use at the Cape for many years, of somewhat similar type to the new Greenwich instrument; experience with it will doubtless be of service to Dr. Spencer Jones at Greenwich. He will also find the new Yapp reflecting telescope nearly complete.

Dr. J. Jackson

DR. J. JACKSON, chief assistant at the Royal Observatory, Greenwich, has been appointed H.M. Astronomer at the Cape Observatory in succession to Dr. H. Spencer Jones. Dr. Jackson hails from the University of Glasgow, and went to Trinity College, Cambridge, where he was a scholar from 1909 until 1914, and made researches in dynamical astronomy, particularly the perturbations of Jupiter's eighth satellite. He became chief assistant at the Royal Observatory, Greenwich, in October, 1914, where he took a considerable part in the observing activity of the Observatory. He served with the survey section of the Royal Engineers from December, 1917, to the end of the War. Attention may be directed to Dr. Jackson's work on double star orbits and the determination of hypothetical parallaxes with Mr. Furner; to the very interesting results he obtained from his study of the Shortt clocks; and to his determination of the constant of nutation from observations with the Cookson telescope. During the last seven years, he has co-operated with Dr. Knox Shaw and Mr. Robinson in the reduction of Hornsby's observations at the Radcliffe Observatory, Oxford. Quite recently he has published corrections to the orbit of Mercury for the epoch 1774-98. These results are of special importance as they confirm the motion of the perihelion of the planet, discovered by Leverrier and explained by Einstein. With Prof. F. J. M. Stratton he edited vol. 5 of the collected works of Sir George Darwin. From 1920 until 1927 he was editor of the *Observatory* magazine, and was secretary of the Royal Astronomical Society from 1923 until 1929.

Boyle Medal of the Royal Dublin Society

THE council of the Royal Dublin Society at its meeting on December 15 decided, on the recommendation of the Committee of Science and its Industrial

Applications, to confer the Society's Boyle medal on Prof. Paul A. Murphy, professor of plant pathology at University College, Dublin, for his important contributions to plant pathology. Prof. Murphy's researches on the fertilisation, cytology, and life history of the potato blight (*Phytophthora infestans*), and his investigation on the infection of the new by the old crop, have been at once an important contribution to pure science, and an advance of high economic value. He early recognised the economic importance of mosaic virus, and pointed out the close connexion between the deterioration of new varieties and their infection with virus. He also established the compound nature of mosaic and recognised the fact that the disease might be transmitted by symptomless carriers. This knowledge has greatly facilitated the finding and propagating of virus-free plants. His researches have also very materially increased our knowledge and means of control of onion mildew (*Peronospora Schleideni*) and of dry rot in swedes (*Phoma lingam*).

Native Lands in Kenya

ON December 20 question was raised in the House of Commons by Sir R. Hamilton as to the situation which has arisen in Kenya in regard to native rights in the land and the leases which are to be granted by the Crown for mineral development in the new goldfield in the district of Kakamega and elsewhere. Certain amendments to the Native Lands Trust Ordinance have been embodied in a Bill which was read for a second time in the Legislative Council of Kenya on December 21. Under these amendments, it is proposed to exclude temporarily from a native reserve, land leased for mineral development, without the provision of an equivalent area of land in exchange and without the requirement of notice to the local native council concerned. Sir R. Hamilton asked whether these proposals were made with the approval of the Secretary of State for the Colonies, and further, whether the amendment of the Native Lands Trust Ordinance had been considered by the Morris-Carter Commission. In his reply, Sir P. Cunliffe-Lister stated that not only had the provisions of the Bill been agreed to both by the Morris-Carter Commission and by the Central Lands Trust Board, but that he was satisfied that the arrangements for compensation and consultation provided ample safeguards for the interests of the native occupants of the area in question.

THE Secretary of State justified his approval of the amendments on the ground that they are necessary, as an interim measure to deal with immediate practical difficulties which might operate to retard the development of valuable minerals; while provision has been made for compensation in the form of a money payment. His statement that the development of the goldfield would be for the benefit of the native was repeated by the Chief Native Commissioner when introducing the amendments in the Kenya legislature; but he candidly admitted that they would be unpopular with the natives. That admission was an understatement of the case.

If these amendments become law, of which at present there seems every prospect, the outlook is indeed grave. No limit can at present be set to the area which will be affected by the exploitation of mineral rights. Difficulties have arisen when compensation has been given for expropriated native rights in land in the form of substituted areas. The consequences of a money payment in its effect on tribal feeling and on tribal character will be serious. To divorce the native from his land, which to him is sacrosanct, is to incur the risk of causing unrest and creating a native problem no less, and possibly even more, serious than the problem of the detribalised native in South Africa. Matters should not be allowed to rest here.

Imported Books in Australia

EARLY this year (NATURE, Feb. 20 and April 2), we commented on the unfortunate effect on scientific and educational progress in Australia likely to be produced by the primage duty and sales tax on books, periodicals and magazines. We welcome, therefore, the announcement made on November 10 in the House of Representatives by Mr. Lyons, the Prime Minister, that these taxes are to be abolished (*Sydney Morning Herald*). They were introduced, with much other taxation, as part of the emergency measures necessary to meet the financial situation in Australia. A duty of 10 per cent on imported books and a sales tax of 6 per cent, together with the depreciation of Australian money, was clearly a heavy burden for scientific workers and others anxious to keep abreast of the times to bear, and an influential deputation waited upon Mr. Lyons asking for the remission of these taxes. As we pointed out at the time, and also when the Import Duties Bill proposing a duty of 10 per cent on goods imported into Great Britain was before the House of Commons, the revenue to be expected from the taxation of scientific literature in particular is negligible; such duties increase the cost of research and thereby hamper progress. Now that the budgetary position in Australia has improved to the extent that reduction of taxation can be considered, we are glad to find that the abolition of the primage duty and sales tax on literature is in the first group of measures brought forward.

Jubilee of the Basic Steel Process in France

THE basic steel process was introduced into France in 1882, and to mark the fiftieth anniversary, a special meeting of the Société des Ingénieurs Civils de France was held in Paris on December 5, the President of the Republic, M. A. Lebrun, honouring the proceedings by presiding. Four addresses were given dealing with the history of the basic process, and another on the iron ore district of Lorraine. The Iron and Steel Institute was represented by the president, Sir Charles Wright, Mr. F. W. Harbord and Mr. G. C. Lloyd, who prior to the official proceedings were received in private audience at the Palais de L'Élysée by the President of the Republic. The basic steel process which made possible the

utilisation of huge deposits of hitherto practically useless phosphoric ores, was the invention of Sidney Gilchrist Thomas (1850–85) who worked at the subject while a clerk in a London police court. His first paper, written in collaboration with his cousin Percy Carlyle Gilchrist, "On the Elimination of Phosphorus in the Bessemer Converter" was to have been read at the Paris meeting of the Iron and Steel Institute in 1879, but for want of time had to be omitted. Thomas, however, was brought into contact with E. W. Richards and then J. E. Stead, and a successful demonstration of the process was made on April 4, 1879, at the Cleveland Steel Works. Thomas unfortunately did not live long to enjoy his triumph, for after travelling in search of health, he died in Paris on February 1, 1885, and was buried in the Passy cemetery.

Education and International Organisation

THE report of the Sixth Committee to the Assembly of the League of Nations on the work of the International Organisation for Intellectual Co-operation stresses the importance of the educational questions with which the International Committee has been concerned, particularly those concerned with instruction in the aims and work of the League. Inquiries on the training of primary and secondary school teachers and the efforts made to facilitate the revision of school textbooks are of the greatest importance for the development of a spirit of world citizenship and the replacement of the partisan and nationalistic teaching of history and geography by a presentation alike scientific in method and world-wide in sympathy. Links are being created between university organisations and national educational information centres, and the report stresses the advantages obtainable from a new orientation of broadcasting and the cinema, with the assistance and guidance of teachers.

EFFORTS in the field of continuation courses and adult education have continued, while the research work on international relations, of which the report on the intervention of the State in economic life at the Milan Conference last May was the outcome, is being pursued, and the results of inquiries carried out in an objective and disinterested spirit will be discussed at a further meeting of men of science. Stress was laid on the work to be done by the Press in raising the intellectual level of mankind and a resolution adopted by the Assembly requests the organisation to study the methods by which the Press might contribute to a better understanding between the peoples of the world by perfecting their knowledge. Reference is also made in the report to the successful co-operation established with the Chinese Government to facilitate the extensive schemes of educational re-organisation drawn up by the latter, and the report of the mission of educational experts sent to China, like the report presented by a representative of the Educational Cinematographic Institute, embodies ideas regarding the establishment of a system of public education which should be of value to all governments.