

FORESTRY IN NYASALAND

FROM the annual report of the Forestry Department of the Nyasaland Protectorate for the year ending December 31, 1940 (Govt. Printer, Zomba, Nyasaland, 1941), it appears that a happy relationship has been established between that Department and the Agricultural Department. The Forestry Department has to some extent undertaken duties which bring it into direct relationship with the agricultural habits and practices of the local population. The Conservator reports that during the year the Provincial Agricultural Officer visited the southern course for special discussions, and the Director of Agriculture addressed the Foresters at the close of the course. These courses are annual ones given to the subordinate forest staff by divisional forest officers and lasting 10-14 days. The aims of the forestry policy in Nyasaland have been already discussed in NATURE.

The formation of village forests has proved a most important departure in the Protectorate, for they have caught the imagination. It is stated that the number of registered village forest areas has now reached 4,677 and that the majority are well cared for by the headman and villagers. In some of the earliest formed, systematic thinnings are now being undertaken with assistance from the district forestry staffs. It will be noted that this management is on the same lines as practised in the management of the communal forests in France. But a still closer connexion between the forest staff and the agricul-

tural community exists through the participation of the former in land use problems and in activities to introduce simple reforms in the agricultural methods of the people. It is said that results have been excellent in parts of the Southern Province and that whole communities have changed over from mound planting (on hill-sides, productive of serious erosion) to ridge planting on the contour. Hill slope closure and stream bank protection are serious questions in parts of the Protectorate, and a plea for increased agricultural production has emphasized the need for much better control by native authorities over the opening up of new land for cultivation. For example, one of the commonest phases of these unchecked, ignorant cultivation practices it is stated is that "in some regions very steep hill slopes, of only ephemeral utility for agriculture, are still being cleared for planting maize".

It appears only fair to a forest staff to point out that, so long as dangerous activities of this kind are allowed by the administration to be practised unchecked, the danger to the Colony concerned as a whole may be so great as to render nugatory the efforts of a Department in obtaining sanction to the formation of forest reserves with a view to their professional management; or even to the future success of the village forests, to the inauguration of which the Conservator of Forests in Nyasaland has devoted so much energy with such refreshing and creditable results.

OXFORD MEETING OF THE WORLD CONGRESS OF FAITHS

BY SIR FRANCIS YOUNGHUSBAND, K.C.S.I., K.C.I.E.

RECONSTRUCTION is in the air: the need for building a New World Order; and the need for a sound spiritual basis on which to build it. This was the subject discussed at the meeting held at Oxford during June 27-July 2 of the World Congress of Faiths. The main idea of the Congress is to promote the spirit of fellowship and to promote it through religion; not through one religion only, but through all religions working in collaboration and in concert, each retaining its own individuality, its own special forms and beliefs, but all willing to work with others in the great world-reconstruction now before us.

With this as its general aim, the World Congress of Faiths had for its special subject for discussion at this sixth annual meeting the interdependence of religion and the political, economic, social and educational aspects of the New World Order.

The Congress was officially welcomed to Oxford by the University. The inaugural meeting was addressed by the chairman of the Congress, Sir

Francis Younghusband, by Señor Madariaga, Sir Hassen Suhrawardy (Muslim adviser to the Secretary of State for India) and the Rev. Canon Grensted. Others who spoke at the sessions of the Congress included Lord Samuel, Dr. Gilbert Murray, Mr. Yussuf Ali (translator of the Koran into English), Lord Davies, Diwan Runganadhan (another Indian adviser to the Secretary of State for India), Baron Palmstierna (formerly Swedish Minister to the Court of St. James's), the Warden of All Souls, Prof. W. Adams, and Miss Maude Petre, a well-known Roman Catholic writer.

Both the addresses and the discussion on them were on a high level. As a result of the meeting it was decided to invite the principal leaders in the Hindu, Buddhist, Jewish, Confucian and Muslim worlds to make pronouncements so far as possible on similar lines to that issued by the Pope and acceded to by the leaders of the Roman Catholic, Anglican and Free Churches in Britain. But the Congress also passed a resolution advocating the addition of a

clause favouring freedom of religious worship and expression.

It was evident to those who had attended previous Congresses, as well as the present, that distinct progress had been made. The Congress is now well established and able to draw support from the most influential persons in the country. Moreover, a growing cohesion among its members was noted, and it is safe to predict that some years hence a meeting of the Congress on a far greater scale might be held. There would necessarily be a meeting of the present belligerents to settle the terms of peace between them. After this limited conference, a more general conference would probably follow at which representatives from most of the peoples of the world would assemble to decide upon the future political structure of the New World Order, whether a reformed League of Nations or some type of federation. This would be an opportunity which should be seized. The World Congress of Faiths should organize a meeting of the most prominent representatives of all the great world religions to devise means by which the political New World Order may be given that spiritual drive and that steady and sustained spiritual support without which it can never endure. Annual meetings of the Congress will be held as heretofore; but the greater meeting some years hence will be the goal towards which they will deliberately be made to tend.

MATHEMATICAL PROBLEMS IN SEISMOLOGY

A. BLAKE has recently directed attention to many outstanding problems in mathematical seismology (*Trans. Amer. Geophys. Union*, 1940). The following problems are, more particularly, mentioned: (1) Problems in the theory of seismic waves due to inhomogeneities in the media and other causes, and to new methods available for the study of the interior of the earth. (2) Problems of instrumental seismology including the new strain meter and rotation seismograph. (3) Problems relating to the complexities encountered in determining the response of engineering structures to the motion of a strong near earthquake. (4) Problems of statistical seismology, especially the periodicity problem. In many cases Blake states that seismological calculations may be performed by machines such as the differential analyser and punched card machines.

Concerning strong-motion problems, Blake says that the analysis of the response of a structure into characteristic or normal components satisfying linear equations depends on the treatment of the strain-energy function as quadratic. But the purpose of investigating the response to destructive earthquake motions requires consideration of strains much exceeding the limits within which Hooke's Law remains valid. According to the author the linear theory can then only be used as a first approximation and the effects of the various components of ground motion cannot be treated separately. The Rayleigh dissipation function may be important, but the case of small damping including the existence of normal modes of oscillation has been encountered in the case of buildings, bridges and tank towers. The paper will act as a signpost towards further progress in mathematical seismology.

APPOINTMENTS VACANT

APPLICATIONS are invited for the following appointments on or before the dates mentioned:

TEACHER OF GENERAL SCIENCE SUBJECTS (PHYSICS AND CHEMISTRY), AND A TEACHER OF MATHEMATICS—The Principal, Luton Technical College, Park Square, Luton (August 9).

DIETITIAN—The Secretary-Superintendent, Middlesex Hospital, London, W.1 (August 9).

ASSISTANT INSPECTOR OF SCHOOLS—The Education Officer, Education Office, Katharine Street, Croydon (endorsed "Assistant Inspector of Schools") (August 11).

ASSISTANT SECRETARY FOR EDUCATION—The Secretary for Education, Education Offices, 6 Lampton Road, Hounslow, Middlesex (August 23).

COLLEGE LIBRARIAN—The Secretary, Bedford College for Women, Regent's Park, London, N.W.1 (September 13).

PROFESSOR OF MATHEMATICS—The Registrar, University College of Swansea, Singleton Park, Swansea (September 13).

PART-TIME LECTURERS AND INSTRUCTORS IN ALL SUBJECTS OF MECHANICAL, ELECTRICAL AND PRODUCTION ENGINEERING—The Principal, South-West Essex Technical College and School of Art, Forest Road, Walthamstow, London, E.17.

REPORTS AND OTHER PUBLICATIONS

(not included in the monthly Books Supplement)

Great Britain and Ireland

John Innes Horticultural Institution. Thirty-first Annual Report for the Year 1940. Pp. 20. (London: John Innes Horticultural Institution.) [217]

The British Council. Report for 1940-1941. Pp. 176. (London: The British Council.) [217]

Transactions of the Hertfordshire Natural History Society. Vol. 21, Part 3: Sawflies of the Berkhamsted District, with a List of the Sawflies of Hertfordshire and Buckinghamshire, and a Survey of the British Species (*Hymenoptera Symphyta*). By Robert B. Benson. Pp. 177-232. (Hertford: Stephen Austin and Sons, Ltd.) 5s. [217]

Other Countries

Report and Accounts of the National Botanic Gardens of South Africa, Kirstenbosch, Newlands, Cape (and the Karoo Garden, Whitehill, near Matjiesfontein) for the Year ending 31st December 1940. Pp. 20. (Kirstenbosch: National Botanic Gardens.) [147]

Contributions from the Biological Laboratory of the Science Society of China, Zoological Series. Vol. 13, No. 9: Study of the Effect of Cerebral Cortical Lesion on the Respiratory Exchange and its Associated Phenomena of the Albino Rat (*Mus norvegicus*). By Y. J. Wu, T.L. Chiu and C. Ping. Pp. 101-120. 40 cents. Vol. 13, No. 10: On the Digestive Enzymic Actions in the Gut of the Earthworm, *Pheretima*. By Y. Chiung Puh. Pp. 121-134. 80 cents. Vol. 14: Taxonomy and Faunal Relations of the Limnic Oligochaeta of China. By Y. Chen. Pp. 132. 13 dollars. Vol. 15, Part 1: Study of some Forest Insects of Nanking and its Vicinity, Part 4: Observations on the Pine Moth (*Dendrolimus punctata* Walker). By C. P. Miao. Pp. 16. 80 cents. Vol. 15, Part 2: Compounds related to the Natural Oestrogens: γ -Cyclopentyl- δ -(4-Hydroxyphenyl)- Δ^7 -Hexene, γ -(2-Methyl Cyclopentyl)- δ -(4-Hydroxyphenyl)- Δ^7 -Hexene. By Dr. Huang-Minon. Pp. 17-28. (Shanghai: Science Society of China.) [177]

Report of the Aeronautical Research Institute, Tōkyō Imperial University. No. 204: Numerical Calculation of Power Variation with Altitude in a Naturally Aspirated Engine by means of J.S. Diagrams. By Keikichi Tanaka, Osamu Tamura and Osamu Konisi. Pp. 32. 50 sen. No. 205: On the Subsonic Flow of a Compressible Fluid past a Symmetrical Joukowski Aerofoil. By Susumu Tomotika and Hazumi Umemoto. Pp. 33-126. 1.30 yen. (Tōkyō: Kōgyō Toshō Kabushiki Kaisha.) [177]

Report of the Institute of Scientific Research, Manchoukuo. Vol. 4, Nos. 19-20: On the Fatty Oil of Awa (*Stauria stauria*, Beauv.) Bran., by Mano Yoshikatsu; On the Vitamin Contents of Dried Mushrooms produced in Manchoukuo, by Kozo Kawakami and Hideo Miyayoshi. Pp. 333-404. (Hsinking: Institute of Scientific Research.) 25 sen. [177]

Baltische Geodätische Kommission. Sonderveröffentlichungen, Nr. 8: Messung der Grundlinien Örebro und Värnamo in Schweden im Jahre 1935. Von U. Pesonen. Pp. 26. Sonderveröffentlichungen Nr. 9: Tafeln zur Übertragung geographischer Koordinaten auf dem Internationalen Erdellipsoide im Bereich 35° bis 71° Breite. Pp. 54. (Helsinki: Baltische Geodätische Kommission.) [177]

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