Rajput, criminal tribes settlement officer and personal assistant to the collector of Sukkur, Sind; Raj Narain Singh, deputy conservator of forests, Utilization Division, Naini Tal, United Provinces; Dr. Raghunath Sabajirao Tiradkar, professor of medicine, Grant Medical College, and honorary physician, J. J. Hospital, Bombay.

## Prof. A. F. Joffe: Award of Order of Lenin

For his outstanding work in physics, Prof. A. F. Joffe has been awarded the Order of Lenin, the highest honour in the Soviet Union. The award was made on the occasion of Prof. Joffe's sixtieth birth-Prof. Joffe's study of the mechanical and electrical properties of crystals has gained him a world-wide reputation. His work on the photoelectric effect and the magnetic field of projectiles is of importance; during the past few years he has investigated semi-conductors. Under the guidance of Prof. Joffe, experiments have been carried out as a result of which it has been possible to increase the frost-resistance of Soviet-grown caoutchouc and to work out a new method for the manufacture of plastic synthetic rubber. He was responsible for the establishment of the Physico-Technical Institute in Leningrad in 1918, the first of a system of physico-technical and physico-chemical institutes in the Soviet Union in Kharkov, Dniepropetrovsk, Sverdlovsk, Tomsk, and elsewhere. Prof. Joffe is a member of the Academy of Sciences of the U.S.S.R. and also of many scientific academies of other countries.

# Air Raid Damage at the Royal Observatory, Greenwich

THOUGH parts of the Royal Observatory, Greenwich, have been damaged on several occasions during recent air raids, the historic Wren building of 1675 remains substantially undamaged and the damage to instrumental equipment has been of a minor nature. The south portico of the Altazimuth pavilion was hit by a high explosive bomb and partly demolished. The Altazimuth instrument had recently been dismantled and a small reversible transit instrument mounted in its place; this was thrown from its mounting and broken in two, but the object glass and impersonal micrometer were undamaged. personal equation machine had been fitted to the collimator in the south portico; this and the collimator objective sustained no damage. Though the main gates were destroyed, the Shepherd 24-hour electric clock, well known to visitors to the Observatory, received only slight damage. The damage to the coverings of the domes has been considerable, but the objectives and mirrors of the principal telescopes, with other valuable equipment, were dismounted and sent away for safety in the early days of the war. The main building, erected at the end of the last century, has received minor damage. The time service provided by the Observatory has been maintained without interruption; alternative arrangements had been made early in the War to ensure its continuance in the event of damage to the Observatory.

# Air Raid Damage at the University of Liverpool

THE buildings of the University of Liverpool have been damaged during air raids. One of the chemical departments in the main University buildings received a direct hit, and extensive damage was done in the laboratory, generating and battery rooms; damage to the structure of the building, however, was superficial. Nevertheless, the building was severely rocked and many of the laboratory instruments were affected; the building was not in use at the time and there were no casualties. More than a hundred windows in the University buildings, and particularly the Engineering Laboratories, have been destroyed by blast. Bombs have also fallen in the grounds of both of the University's halls of residence: the damage, however, was slight, consisting mainly of shattered windows.

### A Committee on Reconstruction

It is announced that the Minister without Portfolio, Mr. Arthur Greenwood, has undertaken responsibility for the study of reconstruction and post-war problems. Later on, when the end of the War can be more clearly foreseen, a Ministry will be formed for this purpose. Meanwhile, Mr. Arthur Greenwood will be chairman of a group of Ministers studying these problems. The object will be to find practical solutions for the immediate problems of a transition from war to peace, and also to outline and presently to amplify a policy for the years immediately following the War which will command the support of the nation as a whole and enable united action to proceed in peace as in war.

# Medical Planning Commission

A MEDICAL Planning Commission has been set up by the British Medical Association "to study wartime developments and their effects on the country's medical services, both present and future". It will consist of 68 doctors, representing all branches of the profession, under the presidency of Colonel Thomas Fraser, consulting physician to the Aberdeen Royal Infirmary. The detailed work of the Commission will be undertaken in committees and subcommittees. The chairman of the council will be Mr. H. S. Souttar, surgeon to the London Hospital.

#### The Universities: An American Tribute

YALE and Harvard Universities have sent a telegram to the Universities of Oxford and Cambridge conveying a tribute to the "dynamic courage of Great Britain" and stating that an important aspect of that courage is expressed "in the determination of your scholars to pursue their researches in the spirit of Nilton's Seraph, 'Unshaken, unseduced, unterrified'". The Vice-Chancellors of Oxford and Cambridge have replied, sending "grateful acknowledgments to Harvard and Yale for their tribute to the resolution of this country". They go on to say: "The cause of liberty and learning, now eclipsed over most of Europe, is nowhere better understood

than in the great and historic institutions from which these Christmas greetings come. The more profoundly do we appreciate their noble and moving recognition of our endeavour, together with the other Universities of Great Britain, to maintain the continuity of scholarship and to keep, even in these days, the standards of knowledge unimpaired and the sources of truth unsoiled."

# University of London Certificate in Natural History

Just before the outbreak of war, the University of London, in response to an expressed demand, instituted a Certificate of Proficiency in Natural History, designed for teachers who require an additional qualification testifying that they have a practical working knowledge of natural history such as will be of special value in teaching it to children up to the age of fifteen. The necessary studies involved attendance at a course of lectures and laboratory work of about three hundred hours' duration, together with a certain amount of organized field-work. Considerable interest was shown in the University's new departure, and some education authorities were prepared to arrange suitable courses: but the dislocation of the school teaching services all over the country has brought about the result that the courses of study contemplated by the University are not suited to the present-day circumstances of teachers.

Consideration has therefore been given to the possibility of devising some special emergency regulations which would meet the intention of the original requirements and make the best use of the fact that large numbers of urban schools are now located in the country or at the seaside, and so presented with an opportunity of natural history study in the field which, under normal peace-time conditions, would have been impossible; as a result emergency regulations have been drafted. The main principles of the proposed new regulations are: (a) to substitute for the present lecture-laboratory requirement a directed course of private reading together with attendance at a fortnight's summer vacation course arranged by the University, and (b) to take advantage of the teacher's probable extended period of residence in rural conditions by putting the main emphasis on the work in the field, involving the writing under expert advice of a substantial essay on some specialized topic chosen by the student. At the moment, however, the University has no evidence as to how far such a scheme would be welcomed by those teachers who might have been expected under normal conditions to have studied for the original Certificate. Any teacher, therefore, who is interested in the proposed new scheme as outlined is invited to communicate with the University Extension Registrar, University of London, at Royal Holloway College, Englefield Green, Surrey.

### A War-Time Formulary

In view of the urgent need for a comprehensive war-time formulary for the guidance of medical prescribers, it is satisfactory to learn that, at the instigation of the Ministry of Health, a strong and representative committee has been set up for the purpose of providing such a formulary for use during the emergency. The following bodies have been invited to appoint representatives: the Royal College of Physicians, the Pharmacopœia Commission, the British Medical Association, the Pharmaceutical Society, the National Pharmacists Union and the Wholesale Drug Trade Association. It is understood that the Committee intends to complete its work as speedily as possible. The publication of this formulary will be welcomed by medical men and dispensers, who are at present without an official guide as to the best substitutes for drugs which are now almost unobtainable and the best methods of compounding them for administration to patients. Apart from the few additions to the monographs of the British Pharmacopæia and alterations of a few monographs and lists of scarce drugs and suggested substitutes prepared by the Medical Research Council, no attempt has hitherto been made to compile a comprehensive book of formulæ for use during the period of emergency.

## New Winter Forage Grasses

WINTER forage in Great Britain is a matter of first importance to the farmer and any new methods of ensuring a supply are worthy of careful consideration. W. Davis has brought forward the suggestion (Emp. J. Agric., 8, 289; 1940) that pampas and tussac grasses, although exotic species, might profitably be grown for this purpose. Pampas grass (Cortaderia selloana) is a common ornamental plant in Britain, and though its leaves are coarse and harsh, it appears to be surprisingly palatable. It is both winter green and able to withstand drought, so that it would be productive just when other pasturage is short, and further, its tussock-forming habit would be specially valuable on hill pastures during periods of snow. The use of pampas grass has recently been investigated in New Zealand, where the results are promising.

Establishment from seed is slow, and it is probably best raised under nursery conditions and not grazed for at least a year. Chemical analyses show that it is considerably less nutritive than clover or young grass, but its relatively high yield (50 tons per acre per annum) and the fact that it is consumed in situ, thus avoiding labour costs, are compensating features. Tussac grass (Poa flabellata) is a much-prized forage plant in the Falkland Islands. Like pampas grass it is slow to establish, but once the initial stand is secured, the crop should go on indefinitely. In its natural habitat (the sea coast), this grass shelters numerous birds and seals, whose trampling and scratching cultivates the soil, while their excreta act as manure; inland the domestic fowl serves the This combination of plant and same purpose. animal life appears to be of fundamental importance to the healthy maintenance of the tussac plant. There seems no reason why these two grasses should not flourish in Great Britain, and both would probably merit a trial, as they would prove a valuable asset when the usual types of winter feed are scarce.