

Museum. But the Service des Antiquités, hearing of the purchase, requested Mond to sell the documents to the Cairo Museum. Recognizing that this was really a command, he at once presented the collection to the Cairo Museum authorities on condition that he should have the right of publication. He then commissioned Prof. Sayce and Dr. Cowley, of Oxford, to edit and translate the documents, and in 1906 was published the splendid volume "Aramaic Papyri discovered at Assuan". This was due entirely to Mond's munificence. Mond possessed a collection of antiquities at his home in Cavendish Square, but it was his invariable habit to give the best pieces he bought to museums, rather than keep them himself. He was the first to contribute on a munificent scale toward the purchase of the important Petrie Collection of Egyptian Antiquities for the University of London, and the Toronto Museum has benefited greatly by his gifts.

PERCY E. NEWBERRY.

WE regret to announce the following deaths :

Mr. H. G. Billson, C.I.E., formerly chief conservator of Indian forests, on October 27.

Paul Helbronner, 'free member' of the Paris Academy of Sciences, who made a geodesic survey of the French Alps from Lake Geneva to the Mediterranean, and later extended the network to Corsica, on October 18, aged sixty-seven years.

Dr. Volkmar Kohlschütter, professor of inorganic and physical chemistry in the University of Bern, on September 10, aged sixty-five years.

Prof. P. A. Murphy, professor of plant pathology in the Albert Agricultural College, University College, Dublin, on September 27, aged fifty-one years.

Prof. Georges Urbain, professor of chemistry in the Sorbonne, on November 6, aged sixty-six years.

Miss Clotilde von Wyss, formerly lecturer in natural history in the Institute of Education (University of London), on November 7.

News and Views

Royal Society Awards

THE following awards of medals have been made by the president and council of the Royal Society : Copley Medal to Prof. Niels Bohr, For. Mem. R.S., in recognition of his distinguished work in theoretical physics and particularly in the development of the quantum theory of atomic structure ; Rumford Medal to Prof. R. W. Wood, For. Mem. R.S., in recognition of his distinguished work and discoveries in many branches of physical optics ; Davy Medal to Prof. G. Barger, F.R.S., in recognition of his distinguished researches on alkaloids and other natural products ; Darwin Medal to Prof. F. O. Bower, F.R.S., in recognition of his work of acknowledged distinction in the field in which Darwin himself laboured ; Hughes Medal, awarded jointly to Dr. J. D. Cockcroft, F.R.S., and Dr. E. T. S. Walton, in recognition of their discovery that nuclei could be disintegrated by artificially produced bombarding particles.

Lord Lugard, G.C.M.G.

A BRONZE statuette of Lord Lugard has been presented to the Imperial Institute by members of the Royal African Society as an addition to the collection of statuettes of empire-builders in the Institute's galleries. The presentation took place on November 7, when the statuette, which stands in the Nigerian Court, was unveiled by the Earl of Athlone, president of the Society, and formally accepted by Sir Harry Lindsay, director of the Institute. The statuette, which is half life-size, is the work of Mr. Herbert H. Cawood, who has executed the effigies of Cabot, Van Riebeck, Raffles, and Livingstone in the collection. Lord Lugard is the only living subject represented. The presentation marks the fiftieth year since Lord Lugard's first service in Africa. His brilliant success

as an administrator of native affairs has been due to his application of the policy now known as 'indirect rule' to tribal government, in order to secure maintenance of law and order through the least disturbance of tradition by the imposition of civilized authority. His book, "The Dual Mandate in British Tropical Africa" (1922), not only gained him the award of the Gold Medal of the Royal Geographical Society, but immediately became a classic, as Lord Athlone said in his address of presentation, when he also spoke of Lord Lugard as "the father of indirect rule". Owing to his advocacy and the practical demonstration of its efficiency in Nigeria, the principle of 'indirect rule', with or without modification, has been extended to the other British colonial possessions in Africa. In 1922-36 Lord Lugard was the British representative on the Permanent Mandate Commission of the League of Nations ; while as Chairman of the Council of the International Institute of African Languages and Cultures, he has inspired and guided a great work of scientific research on the peoples and languages of Africa.

Miss Lise Meitner

MANY readers of NATURE will wish to join with her friends in offering their congratulations to Miss Lise Meitner on the occasion of her sixtieth birthday, which she celebrated in Stockholm on November 7. It is now more than thirty years since Miss Meitner left Vienna for Berlin to begin work on radioactivity with Prof. Hahn, and throughout the whole of that period, both alone and in collaboration, she has contributed as much almost as any one person to the subject to which she devoted all her energies. During the years 1908-10, in collaboration with Hahn, she studied in detail the radiations from the active deposits of radium, thorium and actinium, obtaining

the first indications of the existence of the C^o bodies and of the radiations from radium D. Between 1911 and 1915, with v. Baeyer and Hahn, she studied the groups of β -particles by the direct deviation method, showing that α -ray as well as β -ray bodies give rise to such groups. After the Great War, Miss Meitner turned to the semicircular focusing method for the further study of the β -ray groups, regarding them now as secondary radiations associated with γ -ray emission, and was the first to maintain that in the process of disintegration the emission of radiation follows, rather than precedes, the emission of the particle. Experiments on the long range α -particles, with Freitag, on the heating effect of the β -particles of radium E, with Orthmann, and on the scattering of hard γ -rays, in collaboration with Hupfeld, occupied the years 1926-32. Since 1932 Miss Meitner has devoted her attention more and more to studies of nuclear transmutation and artificial radioactivity. With Hahn and Strassmann she has investigated particularly the complicated series of bodies obtained by bombarding uranium and thorium with neutrons.

R.A.F. Long-distance Non-stop Record Flight

THREE R.A.F. Vickers Wellesley bombers, two of which landed at Darwin, Northern Australia, at 4 a.m. (G.M.T.) on November 7, have broken the world's long-distance record, held by the Russian airmen who flew from Moscow to San Jacinto (California), a distance of 6,306 miles. The two Vickers machines covered a distance of 7,162 miles non-stop, from Ismailia to Darwin, while the third was forced to land at Koepang, Timor, 400 miles short of this, owing to lack of fuel. It afterwards completed the journey, arriving at Darwin at 7.36 a.m. Their speed averaged about 149 miles per hour, as compared with 102 miles per hour for the Russian record. The actual machines and their crews are a flight known as the Long Range Development Unit of the R.A.F., under the command of Wing-Commander Gayford, specially charged with the duties of investigating service problems associated with long-distance flying. Early in the flight, they flew in formation under the command of Squadron-Leader Kellett, but later they separated, the other two machines under Flight-Lieutenants Hogan and Combe each flying independently.

THE aircraft are standard Vickers Wellesleys as supplied as bombers to R.A.F. squadrons, modified for very long distance flights, principally having greater fuel tank capacity. They are cantilever monoplanes built with Vickers geodetic method of construction. The exceptional lightness of this structure allows a correspondingly large weight of fuel to be carried within the limitation of their maximum weight. They are fitted with retractable undercarriages, totally enclosed cabins and all other devices for reducing their drag to a minimum, thus keeping the power required as small as possible. The Bristol Pegasus XXII engine with its very low fuel consumption, adding to these refinements, has given the combination that makes a flight of this length possible. The machines were fitted with automatic

pilots, which relieve the pilots of much of the necessity for actually holding the controls on a long fixed course. Sleeping accommodation was arranged in the cabins, and the other two members of each crew, navigator and wireless operator, were qualified pilots, able to control the aircraft when required.

Planning for Defence

A BROADSHEET issued by PEP (Political and Economic Planning) entitled "Planning for Defence" directs attention to the necessity for fundamental thinking as to the values upon which the society that is being planned is to be based. The dangers of running a world by standards which are largely distorted for immediate material ends is clearly revealed by the events of September last, and realization of these dangers may well compel a reassessment of values, checking the drift towards opportunist materialism, and the evolution of a more explicit code of values on which the democracies and people in all countries who are not prepared to succumb to temporary illusions can take their stand as a basis for working towards a more tolerable human society. Simultaneously, specific thinking about the problems of a society and economy functioning under the shadow of war is urgently demanded and reinforces the case for eliminating waste in distributive services and elsewhere, the conservation of national resources, the adoption of economic operating units for public services and the rationalization or decentralization of some of the local government services or functions and staffs concentrated in London.

THE broadsheet suggests that such adjustment must be based on three principles: maximum efficiency (which in wartime might not coincide with efficiency in peace); the maintenance or even extension of ultimate democratic control, particularly in the economic sphere, whatever special powers might be needed; and the framing of emergency measures so far as possible in accord with the long-term needs of social and economic reconstruction. The importance of local self-reliance is stressed, for an educated democracy requires both resolute leadership and information on which to base its judgment and actions. It will be necessary to think out very carefully the respective functions of the local committee or council, of the executive officers who perform the local service and of the officer who represents the requirements of the central government. While the central government would require decentralization, many local services require larger operating areas for efficiency. The broadsheet further refers to the need for public information, for rationalizing transport and distribution, for keeping a balance between demands and the normal economic life of the community. The structure of industry and especially the location of new plant present special problems, and, in regard to man power, one of the most serious problems is that of utilizing professional and technical workers. Nutrition policy and food control, land policy, the acquisition of development rights are other questions to which the broadsheet briefly directs attention.