

ments of laboratories and purchasing apparatus for his father's foundation. Although forty years have passed since the laboratory was fitted up according to his designs, the arrangements of benches and of electrical distribution are still in use. At the celebration of the centenary of Faraday's discovery of electricity from moving magnetism (1931), he represented the Faraday Society and gave £5,000 towards the reconstruction of the theatre. His interest in the Davy-Faraday Laboratory continued unabated and recently he gave £2,000 to its funds. He also caused to be collected and printed a list of workers in the laboratory from 1896 to 1932 with their publications. The Royal Institution has lost a good friend."

It is interesting to note that Robert Mond's knowledge of the Royal Institution and the unique place it occupies as a scientific centre guided him to a large extent in what he did later in Paris. Much more recently, he gave a sum corresponding to the amount he gave to the Maison de la Chimie in Paris to the funds of the National Council for Chemistry. Like his father, keenly interested in the documentation of scientific knowledge, he hoped that this might be a nucleus from which the more satisfactory documentation of chemical literature and, possibly, a British 'House for Chemistry' might arise.

In celestial chemistry, and other related branches of astronomical research, Robert Mond also took keen interest and encouraged in many ways. He was one of the seven original subscribers to the Hill Observatory Corporation, registered in 1916 to establish an observatory at Salcombe Regis, Sidmouth, Devon, the name being changed in 1921 to the Norman Lockyer Observatory, in memory of the distinguished astronomer who founded it. He became chairman of the corporation twenty-one years ago and occupied that position when he died. Since its foundation, the Observatory has been equipped and maintained entirely by private donations, and Robert Mond was one of its chief benefactors. Six years ago, he generously presented to the Observatory a completely new form of photographic equatorial telescope, which he termed an 'astronomical robot' for the photography of extensive celestial fields with long exposures and on different scales.

In recent years, Robert Mond became as much at home in France as in Great Britain. This was partly a result of his ardent desire to improve international understanding among scientists generally and chemists in particular. In France, he was a generous benefactor of the British Institute in Paris, and he worked wholeheartedly for the France-Grande Bretagne Association. Our French colleagues realized his unique qualities and honoured him (and us) by electing him president of the Société de Chimie industrielle, an office which he held at the time of his death.

The founding in Paris of the Maison de la Chimie as a memorial to Marcelin Berthelot appealed to Robert Mond intensely: in his own words, "L'idéal que matérialisent ces bâtiments a permis de créer mieux qu'une maison: un état d'esprit international. Et c'est cette foi commune qui, loin des luttes de la politique, cherche à élever toujours plus haut les

manifestations de l'intelligence scientifique et le rayonnement du génie humain." He became Membre du Conseil d'Administration de la Maison de la Chimie and, apart from contributing 1,000,000 francs to its funds and, in order that its future and development might be secured, he founded and became president of the Société des Amis de la Maison de la Chimie. What he did for the Maison de la Chimie was typical of many other benefactions in France, all carried out in the spirit of furthering the accomplishment of his ideals. France fully recognized the high quality of his efforts, and none of his friends were surprised at his promotion from 'Officier' to 'Commandeur' de la Légion d'Honneur. In 1937, he was elected Membre de l'Académie des Inscriptions et des Lettres, becoming Membre de l'Institut de France.

Robert Mond received the order of knighthood in 1932. Of his election this year to the fellowship of the Royal Society, he was immensely proud. His letter to the present writer contained the following sentence: "To be considered worthy of admission to the same distinguished Society which recognised my father is the greatest honour I could receive." Arrangements had been completed for conferring on him, by the University of London, the rare distinction of the honorary D.Sc. degree.

Robert Mond's interests in human knowledge and progress were so wide that it is difficult to realize how he found time and strength to maintain them. Recently he suffered considerable physical disability, but his amazing spirit and the constant care of Lady Mond carried him through. In spite of ill-health, he never hesitated to accept an office to which arduous duties were attached when he believed that thereby he might contribute to the realization of his ideals. The international character of the meetings of the Faraday Society was a deciding factor in accepting its presidency, and his interest in photography and especially in colour photography from his early days led him to accept the honorary treasurership of the building appeal (now in progress) of the Royal Photographic Society.

Robert Mond died at his Paris residence on October 22. All who knew him and enjoyed his friendship will warmly endorse the sentiments so ably expressed at the funeral by Prof. Auguste Béhal and Louis Hauzeur. The ashes are interred at Belle Isle en Terre. To Lady Mond and to the family we can only express our deepest sympathy and feel proud that we have been privileged to know a great man who described himself as "un serviteur modeste mais dévoué de la Science".

CHARLES S. GIBSON.

IN the passing of Sir Robert Mond, Egyptology has lost one of its most generous supporters, as well as a most devoted student. Ever ready to help in financing explorations in the field, he himself took the keenest pleasure in the actual work of excavating and enjoyed nothing better than being at the bottom of a tomb-shaft, sifting the sand with his own hands in the hope of finding some hidden treasure.

It was my privilege to meet Mond first at his father's house in London in 1896, and when he

visited Egypt a few years later, he came to me at Thebes and expressed the wish to collaborate in the exploration of the Mortuary Chapels of the Nobles which I was then carrying out on a very small scale in the Theban necropolis. In 1902, when I relinquished this work in consequence of other duties, Mond took over the concession which I then held from the Egyptian Government, and early in 1903 began working the concession himself. This work he continued for the next three winters and published his reports in the *Annales du Service des Antiquités*, then being edited by Prof. Maspero. Later, when he was prevented from personally supervising the excavations, Messrs. Howard Carter and Arthur Weigall, the successive inspectors of antiquities in Upper Egypt, continued the task with the financial aid of Mond and others. In 1909 he sent out from England Mr. Jelf, an Oxford graduate, to assist Weigall. In 1913 was published the "Topographical Catalogue of the Theban Tombs" by Dr. Alan Gardiner and Weigall, with the assistance of Mond, which is a record of what had, up to then, been accomplished. In the introduction to this book, Gardiner wrote that it was due "in large part to the personal endeavours and enlightened liberality of Mr. Robert Mond that the Theban Necropolis is now, on the whole, well protected and in a satisfactory condition".

Mond now set himself whole-heartedly to work out a well-considered and continuous scheme of restoration and preservation of the Theban tombs. In a lecture which he delivered before the Royal Institution in May 1914, he told his audience that "this object, which had been one of my day-dreams for many years, took shape when the opportunity arose which enabled me to secure, after many consultations with the most competent Egyptologists, and especially with Dr. Alan Gardiner, the services of Mr. Ernest Mackay, for many years the chief assistant of Prof. Flinders Petrie", and he announced that Mackay "will now devote his whole time to the systematic inspection, excavation, restoration, and preservation of these chapels". But Mackay had been employed only a little more than a year when the Great War broke out, and soon afterwards the work at Thebes had to be abandoned.

It was not until the winter of 1923 that Mond again began explorations at Thebes, when he employed Mr. Yeivin in the autumn of that year to superintend the excavations. The same year Mr. Walter Emery, a student of the late Prof. Peet at the University of Liverpool, was sent out to Egypt, and in 1924 took charge of the work. Mond's work was now carried out in association with, and under the ægis of, the University of Liverpool Institute of Archæology, an institution that he had long been interested in, having joined the Committee in 1910. On going over the necropolis with Emery, it was decided to clear and restore the famous tomb of Ramose, vizier of Amenhetep III and Akhenaton. This took three winters to complete, and the publication of the scenes and inscriptions in it has been entrusted to the skilled hands of Mr. Norman de Garis Davies, of Oxford, and for many years on the staff of the Metropolitan Museum of Art, New York. Mond's and Emery's

reports for the years 1923 to 1926 are printed in the *Liverpool Annals of Archaeology and Anthropology*.

In the spring of 1926, Mond and Emery prospected on a new site at Armant, the ancient Hermonthis, ten miles up river from Thebes. A concession covering about fifty square miles was applied for in the name of the Liverpool Institute of Archæology, and when this was granted, Mond began excavating there. The burial ground of the Buchis Bulls, sacred animals famous in Egyptian history, was soon discovered. Mond then had a motor road, some ten miles long, cleared from Thebes to Armant to enable him to visit Emery two or three times a week to inspect the work and record progress. In 1928 the Armant concession was transferred to the Egypt Exploration Society, of which Mond had been elected president on the death of General Sir John Maxwell. A large staff was sent out under the direction of Dr. Frankfort, Mond bearing the whole expense. In the following year Frankfort resigned on being appointed field director of the Iraq Expedition of the Oriental Institute of the University of Chicago, and the Armant excavations were supervised for a season by Mr. F. W. Green, of the Fitzwilliam Museum, Cambridge, Emery having been appointed by the Egyptian Government to carry out the Nubian Archæological Survey. Then Mr. Oliver Myers was appointed director, a position he has held ever since.

How ably this work has been carried out is evidenced by the three volumes published in 1934, entitled "The Bucheum", by Sir Robert Mond and Oliver Myers, and by two volumes issued last year on "The Cemeteries of Armant" by the same authors. To these books no fewer than sixty-nine scholars and scientific workers have contributed, among them many bearing distinguished names. It is interesting to note that two Egyptians have written chapters: one, G. Mattha, a student of the late Prof. Griffith, writes on Demotic Ostraca; the other, Suliman Huzayyin, contributes an able paper on "The Flint Industry". These volumes show how wide was Mond's outlook in Egyptology and how catholic were his interests. Although much more remains to be published of the work he was engaged on, it is pleasant to know that he lived to see these five volumes distributed. During the last two years, Mond also financed the work of Dr. Hans Winkler in the Eastern and Libyan deserts; a small volume, "Völker und Völkerbewegungen im vorgeschichtlichen Oberägypten im Lichte neuer Felsbilderfunde", was issued last year, and "Rock-drawings of Southern Upper Egypt", by the same writer, has just appeared.

Before concluding this notice of Sir Robert Mond's Egyptological activities, as an example of his keenness in the preservation and provision for the careful publication of antiquities, may be mentioned his acquisition of a unique series of papyri. When we were at Thebes in the spring of 1904, we heard that native diggers had made a 'find' of 'Hebrew' papyri at Elephantine. Mond at once telegraphed to the dealer who had secured the documents, asking that they should be kept for his inspection. Next morning, he set off for Aswân and at once bought the papyri with the intention of presenting them to the British

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