Obituary.

MR. H. W. MONCKTON.

M. HORACE WOOLLASTON MONCKTON, who died on Jan. 14, was the son of Col. the Hon. H. M. Monekton, a younger son of the fifth Viscount Galway, his mother being a daughter of Sir Thomas Woollaston White, Bart. He was born in 1857 and was educated at Wellington College. His father built a house there, on land belonging to the College, and here Monckton and his sister continued to live for the rest of his life. He also had chambers in the Temple, where he lived when not at Wellington. He was called to the Bar in early life and had some practice on the Midland Circuit and at the Parliamentary Bar, and was all his life an enthusiastic member of the Inner Temple. Visits to the Yorkshire coast and the gault exposures at Folkestone attracted him to geology when still a boy, and in 1882 he was elected a fellow of the Geological Society and he joined the Geologists' Association in the same year. Later he became interested in botany, and was elected a fellow of the Linnean Society in 1892.

Monckton's residence at Wellington College naturally gave him an interest in the Tertiary and Gravel Beds of the surrounding districts. He was associated with the late Sir W. H. Herries in the discovery in 1880 of an abundant fauna in the Upper Bagshot Beds, when the railway cutting through the Fox Hills at Tunnel Hill was quite fresh. The Upper Bagshot of the London basin had hitherto been supposed to be practically unfossiliferous. A series of papers followed dealing with the relative ages and positions of the various exposures of Bagshot Beds, both in relation to the London clay and to the corresponding beds in the Hampshire basin. In this discussion the Rev. A. Irving, Sir Henry Lyons, and others took part. The Upper Bagshot of the London basin was practically proved, by its fossil contents, to be the equivalent of the Lower Barton series of Hampshire, in a joint paper published in the Quarterly Journal of the Geological Society in 1888 by Mr. Starkie Gardner, Monckton, and the late Henry Keeping. Monckton also wrote many papers on the various gravel beds, extending his researches to Essex and throughout the south-east of England. He acted as jointeditor with Mr. R. S. Herries of the jubilee volume of the Geologists' Association, and contributed the articles on the Dorset coast and (jointly with Mr. Osborne White) on Hampshire and the Bagshot district. He was an indefatigable leader of excursions of the Geologists' Association and various field clubs. Monekton's activities were not confined to England. He went annually to Norway for a number of years, and studied especially the glacial phenomena there. He organised an excursion of the Geologists' Association to that country, and devoted one of his presidential addresses to the Association to the district round Bergen.

Though so long officially connected with the Linnean Society, he did not publish much of botanical interest. He made considerable collections of plants, however, and was specially interested

in mosses. In the few contributions he made on this subject, his idea was to link up botany and geology by making lists of plants growing on particular geological soils.

No account of Monckton would be adequate which did not mention the great amount of work that he did in the management of the societies to which he belonged. He was vice-president and treasurer of the Linnean Society from 1905 until the time of his death. He was at one time treasurer, and several times vice-president, of the Geological Society, and served on its Council for some twenty-five years in all. Of the Geologists' Association, he was at various times president, secretary for excursions, and editor of *Proceedings*. He also on several occasions acted as recorder of Section C (Geology) of the British Association. Sound business instinct combined with legal knowledge made his opinion much sought after, and his advice was generally followed by his colleagues.

Besides geology and botany, Monckton was interested in archæology and was an excellent photographer. He made his own slides, and was always ready to give a lantern lecture to the Wellington College boys or others. He wrote the volume on Berkshire for the Cambridge County Geographies, and the article on geology in the Victoria County History. He was also a fellow of the Royal Numismatic Society and made a carefully selected collection of English silver coins. He was a man who will be much missed by many friends, and especially by the sister whom he leaves to mourn his loss.

Prof. A. Leitch.

THE death on Jan. 26 of Prof. Archibald Leitch. director of the Research Institute of the Cancer Hospital, following in less than a year the loss of Dr. H. J. B. Fry of the same laboratory (see NATURE, May 31, 1930), leaves a woeful lacuna in the ranks of cancer research. Born in 1878, Leitch was educated at Rothesay Academy and the University of Glasgow, where he had a distinguished record in arts and medicine, graduating in 1902. He soon devoted himself to pathology, acting as assistant in the Cancer Research Laboratory of the Middlesex Hospital. From London he passed to Dundee as director of the Caird Research Laboratory, a post he occupied until his return to London as pathologist to the Cancer Hospital, becoming director of the Research Institute a few years before the War. During the War, Leitch was in charge of a Mobile Laboratory, retiring with the rank of Major, R.A.M.C. (T.F.).

Leitch's most productive period fell in the succeeding years, when renewed interest in carcinogenetic studies followed the pioneer investigations of Fibiger, for whom his admiration was intense, and Yamagiwa. His best-known contributions to knowledge in this domain dealt with the carcinogenic action of lubricating oils and the causation of mule-spinners' cancer, and he served on the

Home Office Committee appointed to inquire into this disease.

Of greater theoretical importance was Leitch's demonstration of the carcinogenic action of arsenious acid, and the fact that this factor was not responsible for the carcinogenic action of tar. He also showed that in the production of tar cancer in mice, the essential damage was completed before the appearance of proliferative changes in the skin, although a relatively long latent period might elapse before definite tumour development supervened. This important observation has revolutionised our earlier attitude to the problems of compensation in occupational cancer.

Leitch's numerous publications are characterised by a careful and polished diction, enlivened from time to time by striking and appropriate phrases, which betrayed his literary and classical learning and training. He was an able and attractive speaker, and many of his addresses on formal and informal occasions were enlivened by a wealth of appropriate anecdote. He leaves a widow and four children, to whom will be extended the sympathy of his co-workers at home and abroad.

J. A. MURRAY.

Mr. R. G. Lunnon.

ROBERT G. LUNNON, who died on Jan. 25 at the age of forty years, was widely known both for his scientific and for his humanitarian work. He was educated at Tottenham County School and University College, London, where he held the Neil Arnott Scholarship of the University of London, and after graduating was appointed to a lectureship in the department of applied mathematics. During the War he served in France with the Red Cross and later was engaged in relief work for refugees in Holland

In 1919, Mr. Lunnon was appointed lecturer in physics at Armstrong College, Newcastle, where he remained to the time of his death. His work there gave full scope to his many abilities. In addition to his departmental duties, which he discharged with conspicuous success, he undertook a great deal

of work on behalf of the students, and had acted since 1926 as senior tutor in the Faculty of Science. His colleagues were also greatly indebted to him for his work in connexion with the Association of University Teachers, both as secretary and representative on the council. He attended the meetings of the British Association regularly, and served on the committee of Section A.

Mr. Lunnon's published papers relate to a variety of topics, the best known being a series on the motion of spheres in fluid media, which gave evidence of mathematical and experimental ability of a high order. Although extremely active in academic and scientific work, he yet found time for a great deal of social service in various forms. These are too numerous to detail; but the cause of international goodwill was perhaps the one nearest his heart, and he laboured to promote it with all the enthusiasm and energy that was in him. His students, his colleagues, and his many friends will always remember him with gratitude as one who had great gifts and used them to the full—but always on behalf of others.

WE regret to announce the following deaths:

Sir Andrew Balfour, K.C.M.G., director of the London School of Hygiene and Tropical Medicine, on Jan. 30, aged fifty-seven years.

Dr. W. E. Johnson, Sidgwick lecturer in moral philosophy in the University of Cambridge, and author of a work on "Logic", three volumes of which out of the four contemplated have been published, on Jan. 14, aged seventy-two years.

Prof. Orazio Marucchi, professor of archæology at the University of Rome and director of the Vatican Egyptian Museum, on Jan. 21, aged seventy-seven

Dr. R. B. Moore, formerly chief chemist of the U.S. Bureau of Mines and recently professor of chemistry in Purdue University, who was known for his work on radioactivity, applied chemistry and metallurgy, aged sixty years.

Dr. J. Perrin Smith, emeritus professor of palæontology at Stanford University, with which he had been connected since 1892, on Jan. 1, aged sixty-six years.

News and Views.

The causes of the present agricultural depression in Great Britain are reviewed by Mr. C. S. Orwin, director of the Institute for Research in Agricultural Economics at Oxford, in an article in the Political Quarterly, vol. 2, No. 1, entitled "The Agricultural Problem". Although the assertion that in previous years wages have been based entirely on the price of wheat is probably an over-statement, it is evident that at the present time wages are fixed with reference to a standard of living regardless of the condition of the industry, and the fact that the necessity for paying a statutory wage continues, while the guarantee for prices has been withdrawn, constitutes one of the farmer's chief complaints. From a comparison of the costs of production of such commodities as wheat, mutton, and milk for the years 1914, 1925, and 1930, it appears that for the two earlier years the corresponding figures were almost identical, and even in 1930 the cost of production has only risen appreciably in the case of wheat. The problem is, therefore, mainly one for the arable farmer; but the obvious course of abandoning corn-growing in favour of the more profitable industries is no solution for the eastern districts, where climatic conditions are unsuitable for dairying or market gardening; and further, the transformation of these areas into sheep farms could only be done at a great sacrifice of employment and production.

THE solution of the present agricultural problem, Mr. Orwin thinks, lies in a readjustment of the principles underlying arable farming. In the first place, he questions the advisability of continuing mixed farming, which includes the production of both corn