

During 1915-25, Nolan was engaged as research chemist to Messrs. Nobel's Explosives Co., Ltd., during which period he carried out many valuable researches. In 1925 he returned to Dublin to become assistant State chemist and afterwards State chemist, a post which he held until his appointment in 1932 as professor of chemistry in University College, Dublin.

Much of the research which Nolan carried out during the past thirteen years was directed towards the investigation of the chemical constituents of lichens found in Ireland. In this very difficult field he was the first to isolate a chlorinated depsidone, gangaleoidin, and had gone far towards establishing the constitution of this and other organic substances containing chlorine, which are found in lichens. More recently, he had isolated two nitrogenous constituents in the lichen *Lecanora epanora*.

Among his many activities Nolan served on the council of the Chemical Society, London, during 1926-29. He was chairman of the Board of the

Industrial Alcohol Factories established by the Irish Government, member of the Irish Industrial Research Council and during the emergency created by the War his advice was frequently sought and highly valued both by the State and industrialists.

Nolan was an inspiring teacher, a loyal and understanding colleague, a staunch friend and a chemist of the highest calibre. His death at the height of his powers is a grievous loss to chemistry and to his University.
JOSEPH ALGAR.

WE regret to announce the following deaths :

Prof. A. Fersman, the distinguished Russian geologist and mineralogist, aged sixty-one.

Sir Martin Forster, F.R.S., during 1922-23 director of the Indian Institute of Science, Bangalore, on May 24, aged seventy-two.

Mr. G. C. Robson, formerly of the British Museum (Natural History), where he was in charge of the collection of Mollusca, on May 17.

NEWS and VIEWS

Geology at the University of Sheffield :

Prof. W. G. Fearnside, F.R.S.

Not a few of the younger generation of geologists will learn with surprise of the retirement of Prof. W. G. Fearnside from the Sorby chair of geology at the University of Sheffield. They will have ample ground for wonder whether anyone so patently young can have reached the age at which university professors retire, though the surprise may be lessened by the discovery that he has held the chair since its foundation thirty-two years ago, and consolation will follow the thought that geology still has the promise of his enthusiasm and energy for many years to come. Under McKenney Hughes, as a colleague of Alfred Harker, J. E. Marr, Henry Woods and Gertrude Elles, he commenced his geological career in some of the brightest days of the Cambridge school. It is not surprising that some of his earliest claims to distinction were notable contributions in the Cambridge tradition of Lower Palaeozoic geology, while his characteristic versatility was foreshadowed by his concern at the same time with the teaching of petrology and the collection of quaternary bones. During this period he was a fellow of Sidney Sussex College.

Shortly after his acceptance of the Sorby chair, Prof. Fearnside remarked on one occasion that the time had come to apply the lessons learned in the minute study of the lower Palaeozoic to the problems of the Coal Measures. His publication shortly thereafter of a structural map of the Yorkshire Coalfield laid the foundation of much work by himself and others, which has given greatly increased precision to knowledge of Carboniferous and post-Carboniferous earth-movements and their consequences. Among industrialists and engineers, Fearnside has performed a notable service in demonstrating the value of geology in those spheres, whether concerned with fuels, metals, refractories, bricks or roads. For him there is no 'pure' or 'applied' science. He is equally at home in the councils of the Institutions of Mining Engineers, or of Mining and Metallurgy, or in the presi-

dential chair of the Geological Society or of Section C (Geology) in the British Association. In the Royal Society his work for geology has been outstanding, and all will wish that in this and other spheres it may long continue.

Major F. W. Shotton, R.E.

PROF. FEARNSIDES is being succeeded by Major F. W. Shotton, R.E. After a brilliant undergraduate career at Cambridge, Mr. Shotton was appointed to a lectureship at the University of Birmingham, where he worked under Prof. W. S. Boulton and Prof. L. J. Wills. During this time he carried out important work on the rocks of the Coventry district; he also studied the conditions of deposition of the Trias Sandstones with the aid of students from the University of Birmingham, whom he organized into teams for field-work. In 1936 he returned to Cambridge as lecturer under Prof. O. T. Jones and carried out detailed research in the Cross Fell district of the Pennine Chain.

In 1940 Shotton was asked to take an appointment as geologist with the Armies in France; but the need for the appointment disappeared with the return of the B.E.F. to Great Britain. Shotton was eventually commissioned in the Royal Engineers in the autumn of 1940 and proceeded to the Middle East as geologist on H.Q. staff. Here he carried out excellent work mainly concerned with water-supply problems. In 1943 he was appointed as geologist to the Chief Engineer, Twenty-first Army Group, in succession to Prof. W. B. R. King. During the time before D-day, Shotton was busy studying many problems connected with the Normandy landings, particularly in connexion with the behaviour of various types of beach under different loads, and reaction to shelling, condition of river banks and bottoms, water supply and suitability of sites for the construction of landing strips for fighter aircraft. Shortly after D-day, he was in Normandy putting the results of this study into practice, and has been with the armies throughout their advance into Germany. During this time he