

As a consequence it was not infrequent to listen to disparagement of one surgeon by another and jealousies openly expressed were too often heard. I thought this all wrong. If we were indeed members of a 'noble profession' as we most certainly were, then it was clearly an obligation upon us to speak well of one another. It seemed to me that if by any means we could be brought together, it would be a great advantage to us all and that we should then be made to realize that we were not competitors, one working against another, but comrades, each working with the others against the common enemy, disease."

The means that Moynihan took to accomplish his ideal were three. First came the foundation of the Provincial Chirurgical Club (since 1929 called the Moynihan Chirurgical Club). This body of surgeons met among themselves, visited each other's clinics as well as foreign cities. In this way the most important surgeons all over the world were visited, and Moynihan may be regarded as the finest medical ambassador England ever had. The second method was the establishment of the *British Journal of Surgery*, which under his chairmanship reached the proud position of the premier surgical journal. The third means and the most important, and one in which Moynihan took a prominent part, was the foundation of the Association of the Surgeons of Great Britain and Ireland. This has proved a great success and drawn together surgeons from all over the country, raised the standard of British surgery and removed the reproach of "lack of cohesion" among members of the profession.

One of the most important works of Moynihan's life and one of which he did not live to see the full fruits was the introduction of the study of experimental surgery. Moynihan saw that if surgery is to continue active and progressive, an intensive and direct study must be made of the many problems which confront the surgeon. During his time as president of the Royal College of Surgeons, he devoted time and energy to securing surgical research scholarships and laboratory accommodation where young men entering on the surgical profession might be trained in methods of research. His efforts were rewarded, and a flourishing school of this new science is growing up, the importance of which it is hard to predict.

Moynihan's life may be described as a success, a victorious success, and the world is the richer for his being.

G. E. G.

Mr. E. R. Deacon, O.B.E.

WE regret to record the death of Mr. Edgar Reginald Deacon on August 29. It may be recalled that during the early months of the Great War there was a serious shortage of high explosives; in particular, the supply of T.N.T. (trinitrotoluene) available was totally inadequate to meet the enormous requirements. It was early in 1915 that Deacon, whose province at the Research Department, Woolwich, had been the study of high-explosive munitions, made the suggestion that by mixing the available T.N.T. with ammonium nitrate it could be made to

go much farther without loss of efficiency, a fact which he demonstrated experimentally. At the outset he suggested the mixture of equal weights of these materials, this mixture having the advantage that it could be filled into shell by casting in a manner similar to that hitherto used for lyddite. Within two months he had worked out the more difficult problem of preparing and filling a mixture of 80 parts of ammonium nitrate and 20 of T.N.T., which contained too much ammonium nitrate to be cast. This advance made it possible to fill five times the number of shell hitherto possible with a given weight of T.N.T.

The importance of these suggestions was immediately recognized by his chief, Dr. (now Sir) Robert Robertson, who took steps to develop these mixtures further and brought them to the notice of the Ordnance Committee and Lord Moulton. In this way, birth was given to that important series of explosives later known as the amatols. Rapid expansion of the use of amatol followed in the national filling factories under the Ministry of Munitions, and many individuals contributed with great skill and ingenuity in furthering its successful application. It was used not only for shell but also for other munitions such as bombs, mines and torpedoes, and it has been estimated that no less than 600,000 tons were used by the British Services during the War.

The importance of the introduction of amatol is indicated by a speech made by Lord Moulton in 1917 in which he referred to two inventions brought forward by the Research Department, 40/60 and 80/20 amatol. By means of these he was enabled to meet his obligations, especially with 80/20, which effected such a great saving in the use of T.N.T. He recalled the advocacy of the Research Department of this explosive, which he considered to be "the greatest single thing in importance in the supply of that wealth of munitions that has enabled our armies to expend shell to an unlimited extent".

Edgar Reginald Deacon was born in 1881 at Frome, educated at Sexey's School, Bruton, Somerset, and later studied at the Finsbury Technical College. For some time he held appointments as assistant to the late Mr. Chaston Chapman and as assistant chemist at the Clinical Research Association. In 1902 he joined the staff of the recently formed Experimental Establishment (now Research Department) at the Royal Arsenal, Woolwich, in which he remained until his death.

Deacon devoted many years to the study of high-explosive munitions and for more than twenty years was head of the high-explosives branch of the Directorate of Explosives Research. He was elected fellow of the Institute of Chemistry in 1917 and awarded the O.B.E. in 1918.

Deacon was highly original and full of resource, and many important improvements in the efficiency and safety of munitions are due to his work. The Fighting Services have lost a most valuable servant. To quote from a letter received from another Government Department: "All who had official dealings with Mr. Deacon will gratefully remember his wide knowledge, wise counsel and willing helpfulness."