

1920 he was elected a fellow of Trinity, continuing to work at Farnborough. He was a fellow of the Royal Aeronautical Society and he was elected a fellow of the Royal Society in 1931. He married, in 1922, Muriel Barker, a Newnham mathematician and one-time colleague at Farnborough: he leaves two sons and one daughter. He had been for some time a principal scientific officer, and last April he succeeded the retiring head of the Aerodynamics Department of the Royal Aircraft Establishment. He had achieved a world-wide reputation in aerodynamical circles.

Glauert combined, with great mathematical knowledge and ability, a fine physical insight and a talent for approximation, which fitted him peculiarly to satisfy the needs of the aeronautical engineer. His knowledge of German, in addition, placed him in a position to follow the work of the German aerodynamical school. The pioneer work of Mr. F. W. Lanchester, given to the world in his "Aerodynamics" in 1908, received too scant attention in Great Britain, but it inspired Dr. Ludwig Prandtl of Gottingen. The work of Dr. Prandtl and his students spread throughout the world after the War. Glauert was quick to appreciate its value and to introduce it to English readers through his translations.

Glauert concentrated mainly on this line of study and made many original contributions to the theory of aerofoils. Perhaps the most important was a rational theory of the airscrew, which adequately fitted experimental observations and provided a sound basis for practical design and for further study. When the autogiro appeared he successfully turned his attention to an aerodynamic analysis. He also followed up the work of Joukowski and Kutta in deriving the flow round an aerofoil by conformal transformation, extending the method to sections with a finite angle at the trailing edge and originating the later series of R.A.F. sections. He deduced the effect of compressibility of the air on the performance of an aerofoil while streamline motion persists.

Glauert's papers published by the Aeronautical Research Committee were numerous, and he contributed also to the *Proceedings of the Royal Society*. His textbook, "The Elements of Aerofoil and Airscrew Theory" (1926), met a real need and has been widely used; he was awarded a medal for it by the Aero Club de France. More recently, he contributed a part to a more ambitious work undertaken by the Guggenheim Fund under the editorship of Prof. W. F. Durand, of Stanford University. But the full measure of his influence is not to be found in his published papers alone: he was a constant guide and source of inspiration to his colleagues, and he had given enough proof of administrative ability to show that he would make a good head of a research department.

Glauert's habits were tidy, punctual, systematic: his style clear and concise. A rapid worker with great power of concentration, he could turn his mind aside and was ever ready to discuss any subject, a quick and tenacious debater; but he

was always loath to deal seriously with problems in any branch of which he did not feel himself master. Outside his work he mixed freely and joined with zest in games and social activities. He will be keenly missed by his associates both at work and at play.

#### PROF. W. C. CLINTON

WE regret to record the decease of Prof. Wellesley Curram Clinton, who succeeded Sir Ambrose Fleming as Pender professor of electrical engineering in University College, London, in 1926. He had been prevented for the last three months from attending to his University work by illness, which was not considered to be serious at first, but in August it took an unfavourable turn and to the grief of his relatives, friends and colleagues, he died on August 18. He was sixty-three years of age, having been born in London on October 28, 1871, and he received his early scientific education at Finsbury Technical College under Profs. Ayrton and Perry.

Prof. Clinton had been officially connected with University College for forty-one years. He went as assistant to Prof. Fleming in 1893, when the present Engineering Laboratories were opened, and was appointed successively demonstrator in 1894, assistant professor in 1906, sub-dean of the Faculty in 1919 and Dean in 1934, but did not live to take up that last office. He was elected a fellow of the College in 1920 and fellow of the City and Guilds of London Institute in 1933. He was elected a member of the Institution of Electrical Engineers of London in 1912.

From 1893 until 1926 Clinton assisted Sir Ambrose Fleming in the work of the Electrical Engineering Department of University College with the greatest efficiency and devotion to his duties, and a large number of those now eminent in the electrical engineering profession were his students and will remember with great affection his effective teaching and kindly help. His amiable disposition and efficiency in work made him extremely beloved and appreciated, and his loss will be deeply felt as he was to the front in all that concerned the welfare of the College.

In addition to his College work Clinton found time for some scientific research. He made a speciality of photometry. He translated into English a book on that subject by Dr. L. Bloch, and he published a very useful book on "Electric Wiring" in 1902. He was a contributor to a work on "Modern Electrical Engineering" edited by Sir Magnus MacLean. He also wrote papers on the voltage ratios of the inverted-rotary converter (*Proc. Phys. Soc. Lond.*, 1906), on the efficiency of direct current machines by the Hopkinson method, on a comparison of estimated and observed values of illumination in some lighting installations and on some photometric tests of brightness of radioactive materials. He could have done more research work were it not for his entire devotion to his College duties.