

turer with Prof. Gilchrist and his two successors, and later as professor.

From the early age of eighteen he farmed on his own account and at the time of his death he occupied some seven hundred acres of farm-land in County Durham. Here, his pedigree herd of Jersey cattle hold an international reputation. However, his main endeavour was in the fields of agricultural teaching and research. His academic career was substantially influenced by his early training under Gilchrist, at a time when the experimental work at Cockle Park on grassland improvement was becoming world famous. As a member of the staff of the Agricultural Department, and later as director of the Cockle Park Station, he was responsible, in a very practical way, for much of the improved grassland husbandry techniques since applied to farming. His first personal contribution to agricultural research, however, was connected with the manuring of the potato crop, and he obtained his D.Sc. in 1927 as a result of this work.

The period 1940-53 represents a time of considerable development of agriculture within the Newcastle Division of the University of Durham. Prof. Wheldon used all his wide knowledge and experience untiringly for the furtherance of agricultural education and research. At the beginning of the War, while still a lecturer, he was appointed acting head of the Department, and gave it fresh life. He was awarded a personal professorship in 1943 and was formally appointed as professor of agriculture and rural economy in 1947. In that year, the Department of Agriculture was enlarged to a School of Agriculture with its own faculty within the University, and with Prof. Wheldon as its first dean. In 1944, the University acquired the tenancy of a 742-acre farm at Nafferton for use as a teaching farm, and in 1945 took over Cockle Park Experimental Station from the Northumberland County Council. The numbers of students and postgraduate workers increased tenfold under Prof. Wheldon's leadership.

His skill and experience were used outside the University in the application of scientific developments to farming practice, and he played a leading part in both technical and administrative work in agriculture in the North of England. During the war period, he served with the Durham County Agricultural Executive Committee and was appointed chairman of this Committee in 1952. In addition, from September 1952 he represented the Minister of Agriculture as his personal liaison officer in the Northern Province. He undertook this work although he knew full well that by doing so he was adding to the risks of ill-health.

Prof. Wheldon was a past president of the English Jersey Cattle Breeders' Society and vice-president of the newly formed World Jersey Cattle Bureau—an organization created in no small measure by his personal efforts. His old students knew Prof. Wheldon as a great friend and an inspiring teacher. Through them, his influence on the science and practice of agriculture will go on in many ways. He was a modest man and a great Christian, who enriched the experience of all who worked with him. Above all, he will be remembered by his colleagues and friends in a very personal way, especially for his kindness and wise counsel.

J. S. HALL

#### Prof. H. Benndorf

DR. HANS BENNDORF, professor emeritus of physics in the University of Graz, Austria, died on February

11, 1953. He was born in 1870 at Zurich and was the son of the well-known archaeologist, Otto Benndorf. He studied mainly in Vienna, and he was appointed lecturer in the University there in 1899. During 1904-36 he was professor of physics in the University of Graz, where the Institute of Physics was, under his direction, a place of many-sided scientific investigations. Both the many students of physics and his colleagues knew him as a rigorous and critical yet kind-hearted teacher, always willing to give them assistance.

Of the scientific investigations of Benndorf, those in atmospheric electricity and seismometry are the best known and they were of great importance for further investigations. The Benndorf quadrant electrometer for registering the electrical field in the atmosphere is known throughout the world. Many other problems of pure physics, too, were dealt with at Graz under the guidance of Benndorf; for example, problems of the propagation of electrical waves, examination of luminescence and piezoelectricity, and measurements of ionization in electrical discharges. The great number of investigations at Graz directed by Benndorf was made possible by his genius for experimentation with limited resources, as there was little money in the Institute of Graz.

Benndorf's books and his theoretical papers, too, are distinguished by clarity of style, and he advised his co-workers to follow his example with regard to this. In the preface to the first volume of *Physica Acta Austriaca*, which came out in 1948 under Benndorf's stimulation, he urged young physicists to give a clear exposition of their work. Benndorf had the results of his investigations published only when he was absolutely sure of them, for he believed that physicists working in the same field should not have to study unnecessary literature.

The scientific work of Benndorf was acknowledged by his election as a member of the Academy of Sciences in Vienna in 1929.

Benndorf married his cousin, Rosa Wagner, daughter of the well-known political economist Adolf Wagner, of Berlin; they had four children. The eldest, Wolfgang, was until recently librarian in the University of Graz. His daughter Nora emigrated with her husband, a medical man, to the United States. Two of Benndorf's sons were reported missing in the Second World War.

Benndorf corresponded with many friends throughout the world and he also visited them, for he loved travelling. He was an ardent player of the viola in his leisure time, and was an excellent mountain climber. His strength of character and warmth of heart gave support and consolation to many in times of political stress.

A. SZÉKELY

WE regret to announce the following deaths:

Mr. A. Campbell, one of the original members of the staff of the National Physical Laboratory, on February 6, aged ninety-one.

Prof. Kotaro Honda, formerly of the Tohoku Imperial University, known for his work on magnetism and in metallurgy, on February 12, aged eighty-three.

Mr. David Milne, C.I.E., formerly economic botanist to the Government of the Punjab, and during 1923-33 dean of the faculty of agriculture, Punjab University, Lahore, aged seventy-seven.