

OBITUARY NOTICES.

JOHN DENTON.

1882—1934.

JOHN DENTON was born at Great Horton and died in his 53rd year at Denholme, near Bradford, on June 18th, 1934. He leaves a widow.

Denton was a student at the Bradford Technical College, and in 1903 began his industrial career as a chemist at the Crossley Hall Dyeworks of William North & Co., Ltd. His work soon led to several improvements of commercial importance and he attained an influential position whilst comparatively young. He also occupied the position of manager of the Silsden Dyeing Co., Ltd., from 1912 to 1914, and in 1919 at Keighley he became a member of the firm of Denton Bros., dyers and bleachers.

In later years he was interested in designing electrical recording instruments. For example, with a Keighley friend, he invented the "electrograph." This was not merely a speedometer, but was designed to chart also stops and their duration, and in the event of accident, registered the time of the mishap and the speed at which the car was then travelling.

Denton became a Fellow of the Chemical Society in 1906 and an Associate of the Institute of Chemistry in 1920; but he was most actively concerned with the Society of Dyers and Colourists, which he joined in 1898, subsequently serving as a member of the Publication Committee and Council, Hon. Treasurer, and Vice-President, successively, of this Society.

He served during the War with the 3rd/2nd West Riding Brigade, R.F.A.; he went to France with the 49th Division and was badly gassed; although he went to the front again, his health compelled his return to this country and he retired with the rank of Captain. He was an active supporter of the British Legion.

Denton was enthusiastic in all causes into which he entered and his enthusiasm was contagious. Full of energy, straightforward in character and speech, he was generous to a fault. He had a great love of horses and probably was never happier than when in the saddle. He was a familiar figure at agricultural shows in the North and often acted as judge in equestrian jumping classes.

F. M. ROWE.

GEORGE WILLIAM FRASER HOLROYD.

1871—1934.

THE only son of Colonel W. G. M. Holroyd of the Bengal Staff Corps, who was afterwards Director of Public Instruction in the Punjab, G. W. F. Holroyd was for a short time at Winchester, but on account of delicate health was educated privately and went to Christ Church, Oxford, in 1889 as Fell Exhibitioner. Here he obtained a First in the Final Honours School of Natural Science in 1893 and took the B.A. in 1895. After an interval spent in the analytical laboratory of Fresenius in Wiesbaden he spent two years in research in organic chemistry under Thiele in Munich. At Christ Church—as an undergraduate from 1889 to 1893, as assistant to Vernon Harcourt, 1897—1899, and demonstrator and lecturer, 1899—1903—Holroyd is best remembered by his contemporaries as the first President of the Alembic Club. One of its founders states: "This was a club formed by a number of (then) junior undergraduates because the existing Chemical Club was filled up with seniors. The original members asked Holroyd to be President and I remember him as very enthusiastic and helpful. The first meeting was in the spring of 1901, and in a photograph of the Club taken in 1902 there are 16 members including Holroyd."

After a year spent as Science Master at Bristol Grammar School in 1905 Holroyd went into industry, was employed as chemist to a firm in the heavy chemical industry on the

South Coast, and became very largely occupied in the working up of residuals from the manufacture of coal gas. He was of a slender physique and not of a combative nature, but in August, 1914, he enlisted in the Royal Sussex Regiment and transferred to the Special Gas Section of the Royal Engineers in 1915. Towards the end of 1916, when the demand for chemists with industrial experience became urgent, he was sent home and until the end of the War was occupied in the synthetical production of phenol. The remainder of his life was spent in technical education, and many students of the Blackburn Technical College during the years 1919—1934, where he was Vice-Principal and Head of the Chemistry Department, owe much to his enthusiasm and ability.

Holroyd's work was characterised by meticulous accuracy, and a dogged persistence in overcoming all the details of any problem confronting him. His career as a research student in Munich (1894—1896) was wrecked as far as official recognition was concerned by his persistence in the time-consuming, but self-imposed job of improving the technique for the preparation of liquid hydrogen cyanide and semicarbazide, reagents not readily obtainable in those days. Later (J., 1901, 79, 1326) he published a detailed description of the electrolytic reduction of nitrourea. This experience probably led him on returning to academic life to the study of the electrolysis of potassium oleate (J., 1924, 125, 438) and of the electrical conductivity of phosphorus pentachloride (J., 1925, 127, 2492). Holroyd's scientific friends in later years realised that it was due to a retiring disposition that his output of original work was incommensurate with his critical instinct, deep knowledge, and a laboratory technique persistently improved throughout his whole career.

R. H. PICKARD.

DANIEL J. O'MAHONY.

1860—1934.

DANIEL J. O'MAHONY was born on August 14th, 1860. He received his early education at the Christian Brothers' schools. Intended for the Church, he proceeded to St. Vincent's Seminary and then to St. Sulpice, Paris. He abandoned his clerical studies in 1882. Profiting by his experiences in Paris, he became Superintendent of the Fine Art Department at the Cork Exhibition of 1883.

In 1884 he joined Mr. Denny Lane at the Silverspring starch works, and it was here that his interest in chemistry developed. He became a medical student at Queen's College, Cork, but turned to chemistry, took practical courses in London under Professors Armstrong and Wynter Blyth, and became Demonstrator in Practical Chemistry at the Queen's College under Professors Maxwell Simpson, Senier, and Dixon. Many of the older generation of medical practitioners still pay tribute to the efficiency of his teaching. He became a Fellow of the Chemical Society in June, 1889.

He was appointed Analyst for the Borough of Cork in 1891; in 1894 he became analyst for the County of Cork, and, later, for adjoining bodies. He held these posts until his death.

He married in 1900 and had one son and two daughters, who survive him. He was created a Knight of Malta in 1932 on the revival of the Order in the Irish Free State.

In the varied nature of his professional practice he brought to bear a strong element of common sense. He was always ready to advise, but would not fail, when necessary, to point out the limits of his own experience. He had an old-world charm of manner and courtesy, a good sense of humour, and a reputation as a raconteur. Old Cork, its people, things and associations were his particular delight.

In 1928 his health broke down and he had to retire from active participation in the work of the Laboratory. His wife died in 1930. He bore his own long illness with great patience, and passed peacefully away on December 1st, 1934.

D. O'SULLIVAN.

LEWIS GORDON PAUL.

1858—1934.

IN the death of Lewis Gordon Paul on December 13th, 1934, at the age of seventy-six, the chemical circles of the North have lost a well-known and highly respected figure. A native of Dundee, Paul began his studies at the Royal College of Chemistry, South Kensington, under Sir Edward Frankland. After three years as Frankland's assistant he went abroad and carried out research in organic chemistry in the Laboratory at Tübingen. On his return to England in 1882, Paul joined the staff of Messrs. Read, Holliday & Sons, Huddersfield, and was appointed chemist at their New York works. Subsequently he returned to the Yorkshire works, where he took out several patents, the chief of which was in connection with the manufacture of nitrate of soda.

In 1900, Paul was appointed Public Analyst of Huddersfield and from that time to his death carried on a private practice as a consultant. His early works experience proved invaluable to him in establishing a high reputation as a textile analyst. He was keenly interested in his practice until a few days before his death, and no man had a higher sense of what constituted honourable professional conduct or maintained to a greater degree the dignity of the profession.

In private life he was a charming companion, of ever-cheerful disposition, and possessing a sense of humour which never failed. To the personal regret that all his colleagues felt at his death, is added the knowledge that the profession is much the poorer through his loss.

H. T. LEA.

CHARLES H. RIDSDALE.

1862—1934.

CHARLES H. RIDSDALE was born in 1862, and began his chemical training at a very early age. He entered the laboratory of J. E. Stead at Middlesbrough in 1876, and it is only natural, therefore, that most of his later work should have been connected with iron and steel. He took part in the pioneering experiments of Thomas and Gilchrist, which culminated in the invention of the basic Bessemer process of steel-making, and made possible the production of low-phosphorus steel from phosphoric ores; and his first paper, read conjointly with Stead before the Iron and Steel Institute, was on basic slag, a product of that process. Later he entered the laboratory of the North-Eastern Steel Works, where he rose to be chief chemist and technical adviser, and during his time here he made frequent contributions to the Iron and Steel Institute and to the Newcastle Section of the Society of Chemical Industry on the microscopic examination of steel, heat treatment, and various analytical methods. He retired from the North-Eastern Steel Co. in 1917, to take up private practice in Middlesbrough as analyst and consulting chemist, where he was later joined by his son, Mr. Noel D. Ridsdale, with whom he continued to work until his death, and who now carries on the practice.

Ridsdale, himself a careful and accurate analyst, was always dissatisfied at discrepancies occurring in the work of different analysts on what professed to be the same sample, and early saw that it would be a valuable help to have samples of commercial substances of authoritatively ascertained composition, on which analysts could check their methods and their practice; and with great perseverance and in face of great difficulties he instituted and developed "British Chemical Standards," a co-operative association of chemists all over the world, who have now issued a large number of standard substances (chiefly, as yet, connected with the metallurgical industries), the uniformity of which has been ascertained by the concordant results of many independent analysts. He has in this way done a real service to the chemical world.

Ridsdale was a Fellow of the Institute of Chemistry, a member of the Iron and Steel Institute, and a member and Past President of the Cleveland Institution of Engineers. He was very careful and accurate, slow and deliberate in his utterances, always thinking before he spoke; respected and liked by all who knew him, upright and trustworthy, a good man to have as a friend.

J. T. DUNN.

ERNEST HENRY SANITER.

1863—1934.

ERNEST HENRY SANITER, chief consulting metallurgical chemist to the United Steel Companies, Ltd., was one of the best known metallurgists in the steel trade. Many honours came to him, and in 1910 he was awarded the Bessemer Medal, one of the most highly prized distinctions in the steel world.

Born at Middlesbrough in 1863, Saniter received his early education at Sir William Turner's Grammar School, Coatham, Redcar. For three years he studied chemistry in the metallurgical laboratory of Mr. J. E. Stead, and from 1883 to 1890 was assistant chemist at the North-Eastern Steel Works, Middlesbrough. From 1890 to 1897 he held the position of head chemist at the Wigan Coal and Iron Company, Wigan. During 1891 and 1892 he invented and brought to a successful issue his well-known Saniter process for desulphurising iron and steel.

Early in 1898 Saniter went to Port Clarence, and on behalf of Messrs. Dorman, Long and Co., and Bell Brothers, demonstrated the suitability of common Cleveland iron for making high-class basic open-hearth steel. The success of these experiments resulted in the erection of a 200-ton mixer, eight 50-ton basic open-hearth furnaces, and a rolling mill. In 1904, he resigned his position at Port Clarence in order to take up an appointment with Messrs. Steel, Peech, and Tozer of Sheffield.

His published works include papers on his desulphurising process, on allotropic carbon and iron, on the estimation of manganese in metals and minerals, and on the estimation of chromium in chrome ore and ferrochrome.

He died on November 2nd, 1934, having lived to the age of 71. He was elected a Fellow of the Chemical Society on December 4th, 1890.

B. W. METHLEY.