

They had already learned to appreciate his powers and capacity and to admire his manifold attainments. He was a cultured, well-read man with many interests, literary and scientific, a somewhat fastidious critic with a high standard of excellence, but with sympathy and of sound judgment. As a colleague he was all that a colleague should be—unselfish, painstaking, hard-working, and loyal, always ready to put his knowledge and his experience at the service of his fellows. In the college councils he was never argumentative or captious—a man of few words, disposed more to listen than to speak. When he did intervene in a discussion what he said was weighty and strictly to the point, and seldom failed to convince the majority of his colleagues. His sense of fairness, his impartiality, and his freedom from prejudice made him strive to see the other man's point of view and to give it its due weight. This was so obvious that it gave his judgments much of their power and influence. One felt that when Miall reached a conviction, and gave utterance to it in his characteristic slow and deliberate tones, he was probably right.

The development of the Yorkshire College, as compared with that of Owens College in its early days, was comparatively rapid. The times were of course different, and public appreciation of the benefits of such institutions was far greater in 1874 than in the early 'fifties. Moreover, the Leeds institution had never to struggle against the prejudices, religious and social, which at the outset dogged the progress of John Owens's foundation. But this rapid development was not unattended with its crises. There were times of difficulty and of anxiety which the teaching staff was called upon to share. It was on such occasions that Miall's strong common sense, sound judgment, knowledge of affairs, and business aptitudes were of special service, as, for example, in the movement to house the college in more appropriate and more dignified quarters than it at first possessed; in the discussions concerning the plan and arrangements of the projected new buildings; and finally during the course of the delicate negotiations which preceded the federation of the college with the Victoria University.

As one who took his fair share in the various stages of the development of the college during the first eleven years of its existence, and recalls its early struggles, and their outcome, with no small measure of satisfaction, it affords me a special gratification to bear testimony to the loyal and devoted service of one of the truest friends the University of Leeds ever possessed.

T. E. THORPE.

THE Editor invites me to write a few words about the late Prof. L. C. Miall, a man whom I seldom met, but when I did, always with interest and pleasure. More than twenty years ago, when we were editing White's "Selborne" together, I wished to know more of him, and invited him to Oxford for a Sunday. It was like

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him to have brought no evening dress, but we had a fruitful time, and I found in the man a rare simplicity of mind and manners, and a great interest in his own experience, which he perhaps imparted more freely to a classical man than to one of his own circle. I heard the early history of the chance given him through Prof. Rolleston: how he asked a question after a lecture and was invited to talk it over next day before Rolleston left for Oxford, the result being that Rolleston stayed all day to talk to him and thereafter never forgot him. I heard the story of the little society of scientific men formed to read Homer, and later on he wrote me several letters about the best way to teach a boy Latin: a job which in his "emeritus" days he greatly enjoyed, doing it of course in his own peculiar and independent way.

Miall's enthusiasm in his own work was unbounded, and to communicate it to others the great delight of his life. He fairly astonished me, after a visit here at Kingham, by sending me as a gift the five splendid volumes on insects of Réaumur, and later on his own book on the early naturalists, one as great a treasure as the other, for his own beautiful English was as clear and enjoyable as Réaumur's French. He did, in fact, fit me out with a simple apparatus following the course of his own studies, so intensely did he wish his friend, only five years younger than himself, to share his enthusiasm. He once gave me a whole morning's microscopic teaching in his laboratory at Leeds, but though he fitted me out to continue his course I had no time to do so. That at my age he should have thought it possible shows the simplicity of his mind. Miall was one of those men who love teaching for its own sake, and the charm of his personality was such that I spent the time gladly and gratefully. But it was difficult, I found, to get him to bring his mind to bear on something quite new and out of his own experience. At Kingham I once took him to see the work of some mice in a flooded meadow which was new to me, but he had something else which he was expounding to me at the moment, and was not to be enticed. I shall always cherish his memory as one of the straightest and simplest Englishmen I ever knew.

W. WARDE FOWLER.

PROF. R. B. CLIFTON, F.R.S.

PROF. ROBERT BELLAMY CLIFTON was born on March 13, 1836, and so had nearly completed his eighty-fifth year when he died on February 21. The only son of a Lincolnshire gentleman, he received his education at University College, London, and at St. John's College, Cambridge, coming out sixth wrangler in the Tripos of 1859 and second Smith's prizeman, the senior wrangler and first Smith's prizeman being Canon Wilson. His Cambridge record is typical of his subsequent career; he was a man of great learning, but also of great deliberation. Obtaining a fellowship at St. John's, he went to Owens College, Man-

chester, in 1860 as professor of natural philosophy, and was appointed professor of experimental philosophy in the University of Oxford in 1865, which appointment he held until 1915.

The position of physics in 1865 was very different from what it is at the present time; there was then no such thing as a physical laboratory actually built for the purpose. Clifton's first work was the building of the Clarendon Laboratory, which was completed in 1872. The architect, no doubt, was responsible for most of the exterior, but the interior fittings down to the minutest details were practically carried out from Clifton's own working drawings. The necessary funds came from the trustees of Edward, second Earl of Clarendon, an alternative competitor for these funds being a riding-school.

The laboratory having been built, it had to be equipped with apparatus, which was a labour of love to Clifton, who was a born instrument-maker. Much of the apparatus is of his own designing, with the result sometimes that when an instrument had been brought to perfection it had become too sacred to be entrusted to the common herd.

Clifton was an excellent and inspiring lecturer, and spent an enormous amount of time in designing and fitting up apparatus for lecture purposes, so that his lectures were often more of the nature of laboratory demonstrations; time, however, was no consideration; no student could hope to get through even one subject during his academical life. He devoted himself to his pupils, both in Oxford and afterwards in obtaining posts for them. Besides lecturing, he took a large share in the laboratory instruction. This consisted almost entirely of repetitions of known experiments carried out with as much accuracy as possible. Research in the modern sense was not welcomed with open arms; the apparatus was too jealously guarded; but every student received a sound grounding in accurate experimental work, which no doubt bore good fruit later in many cases.

Clifton served on the council of the Royal Society for several years, was president of the Physical Society from 1882-84, was on the Royal Commission on Accidents in Mines from 1879-86, and at the same time had an estate in Lincolnshire to look after. All this, combined with his teaching, kept him constantly engaged, as he worked very thoroughly and deliberately at anything he took up, so that he had very little time left for original work; his published papers, in fact, are very few.

Clifton's method of private work was peculiar; he was popularly supposed to begin about midnight, and to go to bed with the "hooter," the Great Western Railway whistle which is sounded at Oxford at 5.30 a.m.; as he never took any exercise, it was a mystery how he managed to maintain his general fitness.

Clifton married in 1862 Miss Catharine Elizabeth Butler, and during her lifetime kept a most hospitable house. Every Sunday he had some of his

students to lunch, having previously furnished them with a sketch of the route to his house. He was a most lovable man, who had the affection of all his pupils, and was a welcome addition to any company.

PROF. W. ODLING, F.R.S.

ON February 17 the death occurred at Oxford of the former Waynflete professor of chemistry, in his ninety-second year. For many years the name of Prof. Odling has been almost unknown to students of chemistry, except to those who have become acquainted with something of the history of their subject during the last century. But it deserves to be held in respectful remembrance both by students of chemistry and by the large body of professional chemists now practising in this country, though probably only a contemporary could appreciate at their full value Odling's services to science on one hand, and on the other the position of influence in relation to applications of chemistry which he held fifty years ago.

William Odling was born in Southwark in 1829, the son of a surgeon. After leaving school he studied medicine at Guy's Hospital Medical School, and graduated M.B. Lond. with honours in physiology and comparative anatomy in 1851. Before this time, in 1848, he had shown his bent in the direction of chemistry by becoming a fellow of the Chemical Society, then in the early days of its existence. He never practised medicine, but proceeded to Paris in 1851, where he placed himself under the famous Alsatian chemist Gerhardt, and so received some impress from his teacher which doubtless influenced his attitude later as an exponent of chemical theory. In 1856 he became one of the hon. secretaries of the Chemical Society, being associated during the first nine years with the late Prof. Redwood, and during the last four with the late Mr. A. G. Vernon-Harcourt. In the years 1860 to 1872 Odling gave great assistance to the English chemists of his time by his masterly discourses at the Chemical Society on subjects such as the fixation of atomic weights, valency, and classification, then matters of frequently hot debate.

From 1868 to 1872 Odling held the Fullerian professorship at the Royal Institution, previously held by Faraday, and in 1872 he moved to Oxford, having been appointed Waynflete professor of chemistry in succession to Sir Benjamin Brodie. This appointment he retained for forty years until he retired in 1912. Oxford at the time of his appointment was still too much under the conservative influences which had for so long retarded the progress of science in the University, and, like the other scientific departments, chemistry had to struggle during many years.

In 1877 the Institute of Chemistry had its origin in a voluntary association of chemists united in the desire for the organisation of the profession and for improvement in the education and qualifications of those who intended to practise