THE ANALYST.

OBITUARY NOTICE.

JOHN RUFFLE, F.I.C.

MANY of the older members of this Society will mourn the death, on November 19, at the age of nearly seventy-eight, of John Ruffle, who joined the Society in its early days as a very welcome adherent to its ranks, when, unlike now, those who did not actually hold official appointments were in a decided minority.

Ruffle, who was born in Suffolk, went to Germany as a lad, and spent some years on an estate in the Rhineland. Having thus acquired a taste for agricultural pursuits, he returned to England in 1861 and became a student in the Royal Agricultural College at Cirencester, where he took his diploma and, being attracted especially by the chemical side of his studies, he became and remained for some years an assistant in the laboratory of the consulting chemist to the Royal Agricultural Society, viz., the late Dr. Augustus Voelcker, his old chemical professor. From there he went as chemist to the fertiliser factory of Messrs. Jas. Gibbs and Co. at Silver-town, where he remained until 1884. He then practised as a consulting chemist on his own account for two or three years in the City but relinquished his practice to take up the post of chemist to the "Cape Copper Company and Butenferry Chemical Works" at Neath in South Wales, where he remained until 1896. In 1897 he became a chemist in the works of Messrs. Allen and Hanburys, Ltd., at Ware, and this post he held until his death, which occurred almost suddenly.

Although his interest in both pure and applied chemistry was always keen and led him into a good deal of investigational work, his publications were not many. A paper on the "Examination of Copper Sulphate," read before a meeting of the Society of Public Analysts in 1893, was published in the *ANALYST* of that year. His most notable contribution to analytical literature, however, was his paper on the "Estimation of Nitrogen by Combustion, including Nitro-Compounds," published in the *Transactions of the Chemical Society* for 1881, in which he demonstrated that the admixture of sulphur with the material to be analysed and of sodium thio-sulphate with the soda-lime used resulted in the complete conversion of nitric nitrogen into ammonia, the process being especially designed for use in the analysis of complex fertilisers containing nitrates as well as organic and ammoniacal nitrogen. Although the soda-lime combustion process, whether in its original form or as modified by Ruffle, has now given way to the more easy and rapid Kjeldahl moist combustion method, with its modifications due to Jödelbauer, Gunning, and Arnold, the process of Ruffle has not been surpassed in its accuracy. In the *Journal of the Society of Chemical Industry* for 1887 two notable papers were printed embodying

the results of general work on the composition of superphosphate and compound manures derived therefrom, in which he showed that the then conventional methods of expressing the results of analyses of such materials were based upon erroneous conceptions. The titles of these papers were "Correct Analysis of Plain and Ammoniated Superphosphates" and "Moisture in Superphosphate." Various other contributions from his pen, some based on his own work and some in criticism of the work of others, also appeared from time to time in the same journal and in the *Chemical News*, but these do not now call for especial mention.

Ruffle's disposition was sensitive and retiring and very gentle, and he was much loved by his early colleagues and contemporaries. Living, however, in geographical retirement for many years past, and but rarely visiting his old scientific haunts, he would be personally unknown to most of those of the younger generations of our members.

He was married in 1871, and became a widower in 1906. He had two children, a daughter who died in 1898, and a son, Mr. Hugh W. E. Ruffle, who survives him.

BERNARD DYER.