THE ANALYST.

OBITUARY.

THOMAS FAIRLEY, F.I.C.

IN the death, on February 21, at the age of seventy-six, of Thomas Fairley, the Society of Public Analysts loses another of its few remaining founders, as well as one of the most respected of its past Presidents; and a large number of the individual members of the Society deplore the loss of a valued personal friend and of a loyal colleague in the profession of chemistry.

Besides being a sound chemist of the older school, Fairley was well read, and had a wide outlook on life, and was a pleasant companion in conversation that might wander far from professional topics. This makes it not a surprise to learn from letters of attestation of the early sixties placed in the writer's hands (through the kindness of Mrs. Fairley), that in early years spent in the Free Church Training College of Edinburgh—not his native city, for he was born in Glasgow—he earned the encomiums of his teachers for proficiency in Latin, Greek, English Literature, and Constitutional History, as well as in Mathematics, Geography, and Physical Science.

The taste for science, however, had manifested itself even earlier than this. Fairley unhappily lost both his parents when but four years old, and was brought up by an uncle who kept a school in Dumfries. Here—in his aunt's kitchen and somewhat to the discomfiture of that lady—he would dabble in chemical experiments with such limited apparatus as he could get, and this early acquired taste, developed at Glasgow, led later to his becoming first a student under and subsequently assistant to Lyon Playfair (afterwards Lord Playfair), of Edinburgh University. In this capacity he acquired considerable teaching as well as laboratory experience, and migrated to Leeds to become chemical teacher in the Leeds Grammar School, and lecturer in chemistry in the Leeds School of Medicine. At the same time he began to practise as a chemical consultant, and on the coming into operation of the Sale of Food and Drugs Act in 1873 he was appointed Public Analyst for Leeds and for the North Riding of Yorkshire. At a much later date, on the passing of the Fertilisers and Feeding-Subs Act, he also became official Agricultural Analyst, not only for the North but also for the West Riding, having been for many years interested in the agriculture of the county as consulting chemist to the Yorkshire Agricultural Society.

Down to the time of his death he was associated with many local educational matters, literary and scientific. He had acted both as Treasurer and as Chairman of the Yorkshire section of the Society of Chemical Industry, of which Society he also became Vice-President; also as President of the Leeds Naturalists' Field Association, and as Chairman of the Leeds Institute of Science, Art, and Literature, and while holding this office he was elected Chairman of the Council of the Association of Technical Institutions of Great Britain and Ireland in 1908.

He served a full term as examiner during the earlier days of the Institute of Chemistry, and became a Vice-President of that body, in whose welfare he always took an active and cordial interest; and his term of office as President of the Society of Public Analysts in 1903 and 1904 will be pleasantly fresh in the recollection of those of its members who were in the habit of attending the gatherings of the Society.

Fairley's earliest contribution to chemical literature was a paper published in volume xvii. of the *Journal of the Chemical Society* for 1864 on "The Action of Hydrogen on Organic Polycyanides." This paper incidentally records the first successful attempt at the synthesis of cyanoform, which the author prepared by heating together chloroform, potassium cyanide, and alcohol, at 100° C. under pressure. Fairley's experiment appears to have been successfully repeated seven years later by Pfankuch (see *J. Chem. Soc.*, 1871). Further contributions to that journal were: "Analysis of Water from the 'Old Crescent Well,' Harrogate" (1875); "A New Oxide and Acid of Uranium" (1876); and "Study of Hydrogen Dioxide and of Certain Peroxides, including Experiments to determine the Heat of Formation of the Oxygen Molecule" (1877).

To the Transactions of the British Association he contributed papers on: "Organic Cyanides" (1865 and 1868); "The Use of Platinum Black in the Preparation of Ethylene Diamine" (1868); "Preparation of Olefiant Gas" (1868); "Preparation of Cyanogen and Hydriodate of Cyanogen" (1870); "Use of Platinised Charcoal in the Hydrogenation of Cyanogen" (1870); and "The Distillation of Sulphuric Acid" (1870).

To the *Journal of the Society of Chemical Industry* he contributed: "Note on the Detection of Certain Adulterations in Dye-stuffs" (1886); "On the Estimation of Sulphur and Impurities in Coal Gas" (1886); "On the Various Forms of Filter-Pumps or Water-jet Aspirators" (1887); "On the Impurities of Coal Gas" (1892); "Note on the Durabilities of Platinum-Iridium Vessels in Laboratory Use" (1896); and "The Manufacture of Ammonium Nitrate by Double Decomposition" (1897).

Published in the *ANALYST* were the following papers: "Note on the Estimation of Chlorine in Water" (1893); "Arsenic Estimation Relating to Malt-kilns" (1901); "Notes on the History of Distilled Spirits, especially Whisky and Brandy" (1905); and "On the Phosphates in Certain Vinegars, and the Materials used in their Manufacture" (1909). The paper on the distillation of spirits, as very many readers of this journal may remember, was one recording the results of interesting antiquarian research into the early antecedents of an industry which at about that time was the subject of much legal contention and a monumental official investigation.

A paper on "The Water-Supplies of Yorkshire" was contributed in 1898 to the *Journal of the Federated Institute of Brewing*.

Various other papers and notes from Fairley's pen appeared at various times in the *Chemical News* and *Pharmaceutical Journal*, while not a few interesting fragmentary records of his practical experience are recorded in the reports in this and other journals of the discussions following on the papers of other authors. He was also one of the contributors on subjects connected with laboratory apparatus to Thorpe's "Dictionary of Applied Chemistry."

As gas examiner to the city of Leeds he became interested in questions relating

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to the manufacture and purification of coal gas, to which he devoted a good deal of practical attention.

His health and activity were well maintained until 1911, when he had an illness, from the effects of which he never completely recovered ; but he was able, with the assistance of his old pupil and partner, Mr. B. A. Burrell, to continue to take, until quite recently, a responsible directive share in the conduct of his practice.

He is survived by Mrs. Fairley, but left no family.

BERNARD DYER.