

THE ANALYST.

OBITUARY.

M. A. ADAMS, F.R.C.S., F.I.C.

It falls once more to the lot of the writer to give expression to his great sorrow at the loss of a dear friend and colleague, a prominent member and past President of the Society of Public Analysts. Matthew Algernon Adams passed away, 76 years of age, on April 29, at Bearsted, Kent.

Adams was born in 1836 in London. He studied medicine at Guy's Hospital, hearing chemistry lectures by Odling and Taylor. After having been house-surgeon to the Public Dispensary, in Leeds he settled, soon after 1860, as a medical practitioner in Maidstone. He specialised in ophthalmic surgery, in which he excelled and earned an almost international repute. Hard-working and well-read, he had wide scientific interests, with a predilection for chemistry. In 1874, while the Sale of Food and Drugs Bill was under Parliamentary discussion, Adams worked for some time in the laboratory of J. A. Wanklyn, and was in the same year appointed Public Analyst for the county of Kent. He held that position till 1911, when he was succeeded by his former assistant, then partner, L. W. Stansell. He also was analyst for Rochester and Maidstone.

He was one of the medical men who, when the Food and Drugs Act compelled local authorities to appoint public analysts, developed in an iatro-analytical era into chemists. A number of them—like Letheby, Hassall, Tidy, Wanklyn, Stevenson, Hill, Adams, and Cameron, became distinguished both as sanitarians and as analysts. At that time the exercise of the small amount of knowledge available for food analysis could easily be added as an appanage to a medical practice. Delicate questions involving an accurate knowledge of the chemistry of food had not yet arisen, and there was fair reason why appointing authorities should entrust to the doctors, who to them were the apostles of all that was scientific, the duty of controlling the food-supply. Chemistry and the processes carried on in laboratories are even now, after a generation, impenetrable mysteries to local administrators. At that time, as now, the doctor, to the popular mind, represented the knowledge of nature, from medicine to astronomy, from geology to sewage-treatment, from sanitation to adulteration. Many of the medico-chemists—Adams among them—rendered splendid service, and the now independent profession of chemistry owes them a deep debt of gratitude. In Germany the modern chemist developed from the apothecary; in England, upon a less chemical but broader humanitarian medical basis.



De. Ash & Dunk, photographers, Maastricht

Emery Walker Dr. sc.

Emery Walker

Adams for many years regularly attended the meetings of the Society. His capacity for clear exposition at the meetings, his sound common sense in the Council, his geniality and kindness in the Chair, greatly endeared him to the members.

An observation made by him in 1884 that cooked (not raw) apple-pulp contained a substance reacting with iodine like starch, enabling the ready distinction of apple in mixtures with other fruits, has been found exceedingly useful in the microscopical examination of jams.

About 1880, and for some years afterwards, an amount of controversy, which now seems hardly intelligible, raged round the composition and analysis of milk. Wanklyn had, some years before, stated upon somewhat slender data that milk, apart from a considerable variation in the fat percentage, was of remarkably constant composition, the amount of "solids-not-fat" ranging from 9.0 to 9.3 per cent. While this statement had never met with acceptance by Continental chemists, public analysts had adopted Wanklyn's methods of milk analysis and his figures almost without criticism. The method adopted by Wanklyn for the separation of fatty and non-fatty constituents was inconceivably crude, and consisted in the direct extraction of the hard, horn-like, and impervious masses of casein and sugar, obtained by the evaporation of milk in small basins with a few successively applied portions of ether. Of course, anyone now can see that the whole of the fat could not thus be extracted. Workers like Vieth, then at the Aylesbury Dairy Company, trained in other schools, had always insisted upon a subdivision of the solids by gypsum or other powdered mineral matter. But no one had realised how widely the discrepancies of analysis of the same sample of milk could be in various, otherwise competent, hands, until a celebrated milk case, heard in Manchester in 1885, caused the appointment by the Society of a Milk Committee to investigate the matter. Portions of the same milk were distributed and analysed by the members of the Committee, each one at first following his own laboratory method. The discrepancies were relatively enormous. While various proposed modifications were being investigated, Adams's mechanical genius solved the question in the simplest possible manner. By merely distributing a weighed quantity of milk over strips of blotting-paper and thus subdividing the solids over a very large surface, the direct extraction of the fat became easy and complete. It is true that Adams at first overlooked the fact that all blotting-paper contains substances which, partly under the influence of the action of the milk, become soluble in ether and thus add to the apparent percentage of fat—an error at once detected and corrected by Vieth. But we owe to Adams the simple solution of a problem which at that time was of urgent importance, and it can truly be said that from the introduction of the Adams method accurate milk-analysis takes its date, and that it at once swept away all previously published results. It has become the standard method by which all other methods of fat-estimation in milk are judged and regulated. The observation in itself was a small one, but it has affected each one of the fifty thousand milk analyses annually made by English and Scottish public analysts.

Living in the midst of the Kentish hop industry, Adams was greatly interested in the chemistry of the hop. He worked out a process for preserving new hops, and preventing them from undergoing deteriorating changes which vastly affect their

price. He also devised a process for the distinction of hop-bitter from quassia and other bitter substances in malt beverages.

He was President of the Society of Public Analysts in 1889 and 1890, and a Fellow of the Institute of Chemistry, and of other chemical and scientific bodies.

To his activity as Medical Officer of Health and Sanitarian no detailed reference need be made in the ANALYST. His services to the Borough of Maidstone in the suppression of diphtheria and smallpox, and at the time of the terrible outbreak of typhoid fever in 1897, secure him the lasting gratitude of his fellow-citizens.

For many years I was in intimate and very frequent contact with him in London and at his home in Bearsted, where, in the middle of lovely Kentish scenery, he had built himself a house on a hill affording a wide panoramic outlook. The kindest memories will ever connect him with many of my colleagues and myself, who had deplored that as a result of a serious illness some nine years ago he had been compelled to forego attendance at our meetings.

OTTO HEHNER.

