

## OBITUARY NOTICES.

H. E. COX.

1892—1951.

DR. H. E. COX died in hospital on November 21st, 1951, as the result of a street accident.

Henry Edward Cox was born at Lowestoft in 1892. He was educated at St. Paul's School, but left at the age of 16 to spend the next two years with John Bell and Croyden. He then became an assistant in the famous Allen laboratory in Sheffield. It was in 1879 that Alfred Henry Allen published the first volume of the first edition of "Commercial Organic Analysis," an attempt to bring together all that was then known about general commercial organic analysis, this being pioneer work except for a small volume of less than 200 pages entitled "Outlines of Proximate Organic Analysis," by Prof. Prescott, of Michigan, in 1875. The completion of this edition and its revision occupied Allen until the time of his death in 1904. The revision still continues with the aid of many specialists, and edition has followed edition. This activity, steadily pursued in this great laboratory, must have had a very great influence in determining the direction of Cox's life work during the seven years of early manhood that he spent there; whenever he referred to Sheffield in conversation he did so always in terms of affection and respect. While there he qualified as an Associate of the Institute of Chemistry. In 1917 he joined Rudd Thompson in Newport, and during the next ten years he gained the London University degree of Ph.D., became a Fellow of the Institute of Chemistry, and was appointed Deputy Public Analyst to Rudd Thompson for the County of Monmouth. He also acted as an abstractor to *The Analyst*, and it is likely that it was through the agency of Ainsworth Mitchell, Editor of *The Analyst* from 1920 onwards and in close touch with Otto Hehner, that in 1923 he joined the latter in partnership as Hehner and Cox; this analytical and consulting practice was established at 11, Billiter Square, London. Hehner had left England in 1921 for change and rest in South Africa, where his son was engaged in farming, but the death of his then partner R. G. Grimwood in 1922 brought him back; he resumed active work with Cox, only to return, however, almost immediately to South Africa where he died in 1924. Cox was then left as the only principal in the practice, and he remained so until the time of his death. He was appointed Public Analyst for Hampstead in 1925 and later for Cornwall and the Isles of Scilly. In 1934 he was awarded the D.Sc. of London University. The second world war inflicted a very hard blow; his laboratory was destroyed during an air-raid in 1941. Cox was too strong in character, and too resilient in reaction, to permit this disaster to deter him from his life's work but it required a great resolution because the destruction was complete. I remember very well one day, when we were standing side by side in Billiter Square, watching the men digging into the heap of rubble and ashes, how depressed we became as one of the men came up with a rescued object: a platinum basin battered and shapeless and black with soot; for this, of a verity, meant certain loss of all his records and books. The only bright spot was that he was able immediately to reconstruct his laboratory next door at No. 10 and here he continued his practice until his death.

Cox possessed very great energy, both mental and physical, much of which was devoted to loyal service to the many scientific Societies to which he belonged. He was elected to the Chemical Society in 1916 and became Chairman of the Joint Library Committee in 1948, a position which he held to the time of his death. By virtue of this appointment he was an ex-officio Member of Council. He was also a Member of Council of the Society of Chemical Industry, having held the high office of Vice-President, and was active on many of the Committees. Perhaps he found his greatest pleasure in this Society in the work of its very active and greatly esteemed Food Group, and he and Mrs. Cox were unfailing attendants at all the social occasions. Indeed no summer tour by the Food Group would have been deemed complete without Dr. and Mrs. Cox and the faithful camera, and no reunion without photographs from the latter. To the Society of Public Analysts he gave similar service, as Vice-President and on Council and Committees; and he was the first choice of the Society whenever any Government or Ministerial Enquiry or Committee called for representatives. His last activities in this connexion were as a Member of the Government enquiry now concerned with the Preservative Regulations, and as a Member of the Joint Negotiating Committee of Local Authorities and Public Analysts. The Royal Institute of Chemistry owed much to him for service on Council and for the maximum period as an Examiner for the Fellowship in Branch E.

Cox often held very firm opinions on policy, procedure, or domestic economy in these various Societies but he was never harsh or dogmatic. His somewhat disarming smile was a characteristic accompaniment of the exposition of his views. It happened occasionally that these were against the general views or feelings, but however much in the minority he would regard it as a duty to give his opinion. He rarely seemed to lose his temper. He was highly esteemed and in considerable demand as an expert witness on scientific matters and doubtless this capability of controlling his temper was a great asset under severe cross-examination.

His literary output was very considerable. He had contributed to the "Encyclopaedia Britannica," and had revised, and almost completely re-written, Wynter Blyth's "Foods—Composition and Analysis." His personal work, "The Chemical Analysis of Foods," has run into three editions, and has been accepted on many occasions in Courts of Law as an authority for definitions, standards of composition, and methods of analysis in proceedings under the Food and Drugs Act. He also wrote a large number of articles for the various scientific journals.

In his private practice as an analytical chemist and consultant, Cox specialised in several fields, particularly the chemical investigations arising under patent litigation, and the examination of dyed materials in connexion with cases of dermatitis. The destruction of his laboratory in 1941 caused a temporary halt in his patent work as the whole of his records dealing with patent-law cases were destroyed—an irreplaceable loss—but he soon made progress again.

Edward Cox was a devout churchman and served the office of head churchwarden. In the tribute paid by his Vicar, when a full church at the funeral bore testimony to the respect and affection in which he was held, it was recalled with deep emotion that on the Sunday before his death he had served his office to them by reading the morning lessons.

He was a member of the Savage and the Chemical Club, having assisted greatly in the formation and early growth of the latter. At home he was the centre of an active social life, a kindly atmosphere always extended with the utmost cordiality to professional brethren visiting London. Locally he was in demand to explain scientific matters to district meetings in non-scientific terms and he undoubtedly had a flair in this direction.

He married in 1922, and is survived by Mrs. Cox, one son, and two daughters.

GEORGE TAYLOR.

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#### CHARLES KENNETH TINKLER.

1881—1951.

By the death on October 25th, 1951, of Dr. C. K. Tinkler, formerly Professor of Chemistry at King's College of Household and Social Science, University of London, the Chemical Society has lost a Fellow of 44 years' standing and a former member of Council (1930—1933). He will long be missed in many circles, particularly in the world of women's education—a world in which he ranked as a pioneer.

He was born at Shrewsbury in 1881 and received his early education at Caterham School. After graduating from the University College of North Wales, Bangor, he went to the University of Edinburgh to work under Professor J. J. Dobbie with whom he published a number of papers in the *Journal* on cotarnine and related compounds and on the relation between ultra-violet absorption spectra of certain diazo-compounds and their chemical constitution.

He became a lecturer in the University of Birmingham in 1904 in Professor P. F. Frankland's department, and during the following eleven years worked intensively both in teaching and research; he published a series of papers in the *Journal* on topics related to alkaloids of the berberine type and cognate compounds. Towards the end of this period he became interested in the composition and utilisation of fuels, and in collaboration with a fellow Lecturer published a book much valued in the petroleum industry: "Chemistry of Petroleum," by Tinkler and Challenger.

In 1915 he was appointed a Reader in the University of London and Head of the Chemistry Department of King's College of Household and Social Science, then the Home Science Department of King's College for Women. It was to the work and development of this College that he devoted the thirty-two years of his professional career remaining until his retirement in 1947.

To understand fully the main achievements of Professor Tinkler's life it is necessary to look at the history of the College with which he was so closely identified. At the time of his appoint-

ment the College was in its infancy. Only seven years previously, in 1908, a course dealing with the scientific and social aspects of the household and institution had been run for the first time in a department of King's College for Women, a branch of King's College, Strand. The new, and at that time, revolutionary curriculum was devised and initiated by a few men of vision, Sir John Atkins, Sir Cooper Perry, Sir Hubert Jackson, and Professor Smithells, who were convinced of the scope and necessity for this type of education for women.

It was by a stroke of good fortune that Dr. Tinkler became a member of the small staff in 1915, for he too possessed the same ideas and foresaw the expansion which has since taken place in every branch of the field covered by the curriculum : for example, in the science of foods, detergents, and fuels, and even in the study of the social and economic relation of the home to the community and the nation.

His arrival took place at the opportune moment when the first instalment of the new building on Campden Hill, Kensington, had been erected but the laboratories were not yet equipped. The situation was calling for those qualities with which Professor Tinkler was well endowed—organising ability, initiative, and enthusiasm born of his ever-increasing and infectious faith in the whole project. He became a leading spirit in developing the course and establishing the College and its work. His personality combined with wisdom and knowledge rendered him an invaluable committee member, an able representative of the College in the outside world, and the man to whom people instinctively turned for guidance in all matters whether academic, practical, or administrative.

Success came with the years : in 1920 a professorship was conferred upon him by the University, in 1921 the course was recognised by the University by the granting of the degree B.Sc. (Household and Social Science), and in 1928 the College was recognised as an independent school of the University and given its present title.

Within his own department he applied himself from 1915 onwards to the task of devising a suitable course in Chemistry to dovetail with the other subjects in the curriculum. In collaboration with Miss Helen Masters he created a course in Applied Chemistry unique in its scope and to the present day regarded as a model in Home Science departments throughout the world. The results of original work were embodied in this course from time to time. The practical work and some of the better established aspects of theory were published in two volumes : " Applied Chemistry," by Tinkler and Masters.

As a teacher, Professor Tinkler excelled. He possessed a great store of knowledge of a wide range of practical matters, a remarkable gift of clear exposition, and a rare capacity for bridging the gap between the academic and practical aspects of his subject.

He is survived by a widow and one son.

A. JACKMAN.