Journal of the Association of Public Analysts (Online) 2009 **37** 14-39
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Sir Charles Alexander Cameron (1830-1921) Dublin's Medical Superintendent, Executive Officer of Health, Public Analyst and Inspector of Explosives

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Summary

The life and times of Sir Charles Alexander Cameron are reviewed briefly herein. Attention has been given to listing his publications, and to some less well known aspects of his social and professional life. An account is given for the first time of his influence via the Irish Analysts Association, on professional integrity and fair play amongst analysts in Ireland.

Introduction

Although Charles Cameron (Fig. 1) is not particularly well known these days, he was in his time, very well known in chemical, medical and social circles in Dublin and in London. A deal of information about him is available via his *Reminiscences* [1] and *Autobiography* [2], in the accounts of his life [3-10] and in various obituaries [11-13]. His importance at the time can be judged from the report in *The Irish Times*, March 3, 1921, giving details of the funeral service and procession "whose proportions bore testimony to the esteem in which Sir Charles Cameron was held", and listed the chief mourners, the representatives of the Royal College of Surgeons of Ireland, the Royal Dublin Society, the Masonic Order, members of the general public, the floral tributes and the messages attached, and finally the contents of the telegrams of sympathy received [14].

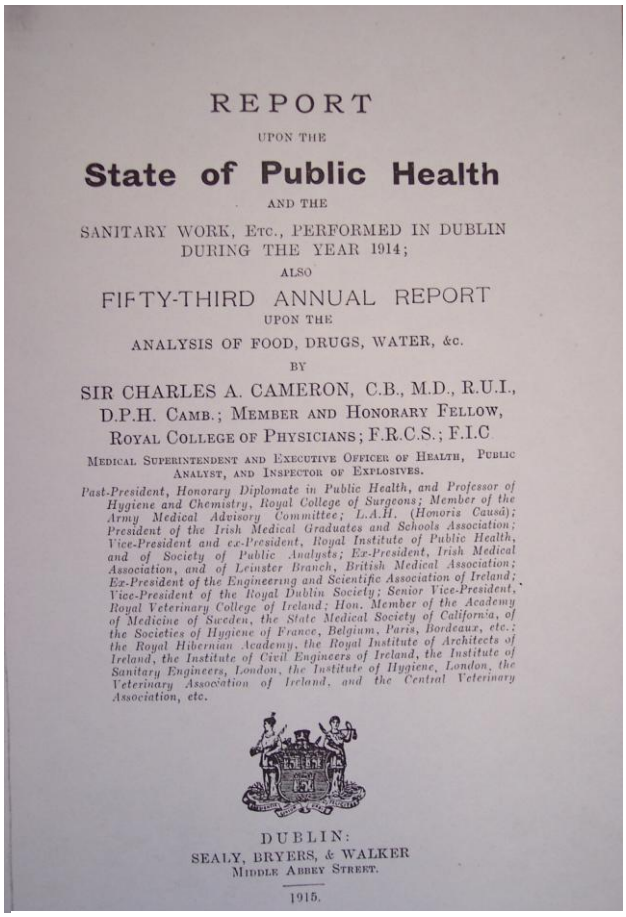
Charles Cameron was born in Dublin on 16 July 1830, son of a Scottish British Army Officer, his mother Belinda Smith was from Co. Cavan. He was schooled first in Dublin and then Guernsey. After his father's death in 1846 the family returned to Dublin and Cameron obtained employment in the laboratory of the Apothecaries, Bewley & Evans. The Superintendent of Bewley & Evans laboratory, John Aldridge, was Professor of Chemistry at the Apothecaries Hall Medical School and Cameron received from him a good knowledge of pharmaceutical chemistry. Cameron studied medicine in the School of Medicine of Apothecaries Hall, the Dublin School of Medicine, the Ledwich School, the Meath and the Coombe Hospitals, and studied in 1854 in Germany. During his long career he collected numerous degrees and memberships and high office in many professional bodies, most of which were recorded on the title pages of the various annual editions of *Report upon the State of Public Health* (see for example that for 1914 [15], Fig. 2). At first sight, the omission of his Membership of the Royal Irish Academy (elected May 14, 1860, roll number 1087, he signed the Roll Book June 25, 1860) seems strange, particularly since the Academy had given grant in aid of his research both prior to and post his election. This omission was however

Figure 1
Portrait of Sir Charles Alexander Cameron when President of the Royal College of Surgeons of Ireland

logical, in view that all the other distinctions and qualifications listed were not from bodies whose sole mode of entry was by election of candidates selected as worthy by their existing members. He did however note his M. R. I. A. after his name on his series of papers in *Chemical News* from 1860 to 1862.

One of Cameron's early posts was as Professor of Chemistry to the Dublin Chemical Society [1(a)]. This private body was set up in 1852 to teach chemistry, it lasted until 1862, by which time the courses at the Royal College of Science made it unnecessary. He held numerous teaching posts concerned with chemistry and hygiene in the Dublin Medical Schools over the years in addition to lecturing at the Government Agricultural Institute in Glasnevin [5]. His main career was as Medical Superintendent and Executive Officer for Health, Public Analyst, and Inspector of Explosives in Dublin. He was also for many years Expert and Analyst to the Government in criminal cases, resigning from this post in 1883. He recorded numerous humorous anecdotes of his times in court [1(b)] including a case when he appeared for both sides, "and each paid my reasonable fee" [1(c)].

Cameron married Lucie Frances Macnamara at St. Mary's Church of Ireland, October 16, 1862. Charles and Lucie Cameron had six sons and two daughters. Tragically, Cameron's wife and five of his sons predeceased him. In 1883 he wrote, "after the death of my wife, I did not go into society for a year, and only to a slight extent during the following two years". During those three years he devoted all his spare time to research and writing *History of the*



REPORT

UPON THE

State of Public Health

AND THE

SANITARY WORK, Etc., PERFORMED IN DUBLIN DURING THE YEAR 1914;

ALSO

FIFTY-THIRD ANNUAL REPORT

UPON THE

ANALYSIS OF FOOD, DRUGS, WATER, &c.

BY

SIR CHARLES A. CAMERON, C.B., M.D., R.U.I., D.P.H. Camb.; Member and Honorary Fellow, Royal College of Physicians; F.R.C.S.; F.I.C

Medical Superintendent and Executive Officer of Health, Public Analyst, and Inspector of Explosives.

Past-President, Honorary Diplomate in Public Health, and Professor of Hygiene and Chemistry, Royal College of Surgeons; Member of the Army Medical Advisory Committee; L.A.H. (Honoris Causâ); President of the Irish Medical Graduates and Schools Association; Vice-President and ex-President, Royal Institute of Public Health, and of Society of Public Analysts; Ex-President, Irish Medical Association, and of Leinster Branch, British Medical Association; Ex-President of the Engineering and Scientific Association of Ireland; Vice-President of the Royal Dublin Society; Senior Vice-President, Royal Veterinary College of Ireland; Hon. Member of the Academy of Medicine of Sweden, the State Medical Society of California, of the Societies of Hygiene of France, Belgium, Paris, Bordeaux, etc.; the Royal Hibernian Academy, the Royal Institute of Architects of Ireland, the Institute of Civil Engineers of Ireland, the Institute of Sanitary Engineers, London, the Institute of Hygiene, London, the Veterinary Association of Ireland, and the Central Veterinary Association, etc.

DUBLIN:
SEALY, BRYERS, & WALKER
Middle Abbey Street.

1915.

Figure 2
Title page of "Report upon the State of Public Health and the Sanitary Work etc. Performed in Dublin during the Year 1914"

Royal College of Surgeons in Ireland [5]. From family correspondence it is clear the loss of his five sons bore heavily on him [16].

Professional Activities

Cameron was very active and held high office in many of the professional organisations in which he was a member, for example as Vice-President, Institute of Chemistry of Great Britain and Ireland , 1884-1890; President, Royal Colleges of Surgeons in Ireland, 1885-6; President, Royal Institute of Public Health, 1889-93. He made numerous contributions to analytical chemistry through his long service as a Public analyst, his publications, service to the Society of Public Analysts, the Irish Analysts Association much of which overlapped or was synergistic with his duties as Medical Officer for Health in Dublin. This overlap is well illustrated in his *Manual of Hygiene* [17] by the section on adulteration of food and drink, which details the legal background as well as the chemical and microscopic methods in use at the time.

Under the Food and Drugs Acts

The first Food and Drugs Act, in 1860, established the post of Public Analyst. Dublin was one of the first authorities to use the Act, and in 1862 appointed Cameron to the post he held for 59 years. He was only the third Public Analyst to be appointed in the United Kingdom, after Dr. H. Letheby by the Corporation of London and Dr. Alfred Hill by the Corporation of Birmingham. The first Food and Drugs Act, in 1860, established the post of Public Analyst. Dublin was one of the first authorities to use the Act, and in 1862 appointed Cameron to the post he held for 59 years. He was only the third Public Analyst to be appointed in the United Kingdom, after Dr. H. Letheby by the Corporation of London and Dr. Alfred Hill by the Corporation of Birmingham. The 1860 Act was in many ways very defective and proved practically inoperative in every place except Dublin. In the first year of his appointment Cameron examined 46 articles of food and 11 drugs. Out of 19 samples of milk he examined only 1 was pure [18]. Much as a result of Cameron's success in prosecutions in cases of adulteration, the 1860 Act was amended. Following the 1870 Act, he was chosen by 33 counties and boroughs in Ireland and was humorously referred to as "the Public Analyst for Ireland". Details of his laboratory (see Figs. 3-6), described as, "It is a thoroughly up-to-date laboratory, and in fact one of the finest in the United Kingdom" and the samples examined were recorded in his *Report upon the State of Public Health for the City of Dublin* (1914) [15]. During his long career as a Public Analyst he made a considerable number of research and instructional publications to advance the field (see Tables I and II). The care and attention to detail he gave to research is well illustrated by his comprehensive survey on the composition of milk from 42 cows kept at the Government Agricultural Institute, Glasnevin. (From 1874 until 1902, Cameron gave 50 lectures annually at the Institute, delivered at 8.00 a.m.; 25 on chemistry and 25 on geology [2(a)]). During the milk survey, the morning and the evening milk samples from each cow were analysed; notes taken of the age of the cows and of the periods of lactation. As a result of his survey, Cameron recommended a composition standard of 8.5% non-fat solids and 2.7% fat for cows' milk [19].

The Society of Public Analysts

In the early days of the Society of Public Analysts [20] Dr. Cameron contributed numerous papers on the analysis of milk, water and drugs to the *Analyst*. He served on Council (1878-81) and was President 1893 and 1894, his President's Annual Address at the AGM's are good summaries of the problems of the period and the progress being made [21, 22]. The 1893 dinner was reported in *The Times*, January, 5th. Cameron introduced a more formal character into the annual dinners by inviting official guests; however the earlier "relaxed Bohemian joviality" continued unabated [20 (a), 23]. The annual summer meeting of the society was held on three occasions in Dublin (1881, 1885 and 1893).

Just prior to his Presidency, a bill was introduced into Parliament to amend the Food and Drugs Act by Dr. C. Cameron, M.P. (of Glasgow). This bill was withdrawn, but due to public pressure and a Select Committee set up, which sat from 1894-6 receiving evidence from the President, members of the Society, and others [20(b)]. An amended Act was passed in 1899 and which importantly required proof of requisite qualification to act as a Public Analyst. In

Figure 3
External view of the Laboratories at Chatham Row.

the period 1892-4 the Society had debated the possibility of establishing its own examination, but did not proceed as it was felt this would trespass upon the province of the Institute and they suspended discussion on the matter in the hope that it might be satisfactorily be dealt with by the Institute, as it was in 1896 [20(c)]. In 1896 the Institute established five branches for the final examination; branch (e) was "Analysis of Water, Food, and Drugs, including the Assay of Alkaloids and recognition of impurities, adulterations and substitutions". The 1899 Act, as have subsequent Acts, accepted success in the branch (e) examinations as proof of requisite qualification [24]. Since 1968, the successor examination to branch (e) has lead to the award of a Mastership in Chemical Analysis (M.Chem.A.). Many now consider it is time to change the status of M.Chem.A. to that of a taught-experiential doctorate (D.Chem.A.). A view formed by consideration of the length of post-graduate time, the depth and extent of study and of practical experience, gained under strict supervision, demanded of candidates. A necessary change to give parity with other professions, such as psychology, which have parallel, in depth theory-practical experience, training schemes. Alternatively to submitting a research based thesis, candidates might proceed from M.Chem.A. to D.Chem.A. by assessment of peer reviewed publication, a process that would also encourage links between the profession and academic departments of chemistry.

The Society changed its name in 1906 to that of the Society of Public Analysts (SAC) [20(d)] and other Analytical Chemists, and again in 1954 to the Society for Analytical Chemistry [25]. Upon amalgamation in 1975 with the Chemical Society, the Royal Institute of Chemistry and the Faraday Society, the SAC became the Analytical Division of the Royal Society of Chemistry [26, 27]. The Association of Public Analysts (APA) was established in 1954 to deal specifically with the interests of the Public Analysts, the necessary examinations remaining with the successor body to the Institute, namely the RSC.

Figure 4
West end of Laboratory No. 1

The Irish Analysts Association

Although Cameron's income was more than adequate due to the multiplicity of medical and chemical posts he held, the same was not true for other Public Analysts, nor for those in official posts such as Medicines Analysts to Poor Law Unions. These latter posts are noted in the Institute's list of Official Chemical Appointments for 1910, in the section for The Local Government Board for Ireland as follows:

> *"In addition to the appointments under the Sale of Food and Drugs Acts, and the Fertilisers and Feeding Stuffs Acts there are many appointments as Medicines Analysts to the Unions, for which, besides the Public Analysts, the following are officially recognised:- Robert Fredrick Blake, F.I.C.; Edwin Lapper, L.R.C.P.I., F.R.C.P.I., F.I.C.; Walter Thorp, B.Sc. (Lond. and Leeds), F.I.C.; David Smith Jardin, Assoc. R. C. Sc. I., F.I.C., Hugh Ryan, M.A., D.Sc. (R.U.I), F.I.C."* [28].

Following a circular letter to all analysts holding public appointments in Ireland a meeting was held in Dublin, Saturday, October 15 1910, to discuss professional fees and to set up an "Irish Analysts Association" [29]. At this meeting it was noted that many English Fellows of the Institute of Chemistry of Great Britain and Ireland were complaining to the Institute that Irish analysts were accepting fees as low as 4/- per sample and that it was increasingly difficult for English analysts to obtain their minimum fee of 10 shillings and 6 pence.

The Institute had a Public Appointments Committee [30] which via the Council had, by 1910, made complaints to the Local Government Board. It was pleased to draw attention to the note in the Board's 1908-1909 Report:

Figure 5
West end of Laboratory No. 2.

> *"Our attention has been drawn to the practice which has been adopted by certain local authorities of inviting applicants for the office of public analyst to state the terms upon which they are prepared to accept the appointment. We consider the offering of such appointments "on tender" as open to strong objection, and we trust the practice will be discontinued."* [31].

At the first meeting of the Irish Analysts Association, Sir Charles Cameron was voted to Chair the meeting and was later in the meeting, appointed President of the Association. Among the resolutions passed at the first meeting were:

i) That no Irish Analyst shall apply for any position advertised as vacant until he shall have received satisfactory evidence that the former holder is no longer a candidate.
ii) The subscription to the Association to be half a guinea yearly.
iii) For any future Poor Law appointment members shall ask for £4 for each dispensary, each dispensary depot and hospital.
iv) The fee, for all samples of water from all public authorities in connection with any new appointment to be a minimum of 1 guinea per sample.

At the second meeting, February 18, 1911 the among the fees were discussed the following agreed:

i) £25 per annum retaining fee under the Food and Drugs Acts. £15 per annum under the Fertiliser and Feeding Stuffs Acts. 10/6 per sample for the first 100

samples under F &D Acts, 7/6 for all other samples. 5/- per sample for F & F samples sent by *bona fide* tenant farmers.

ii) For Unions, 2/6 per sample of tea, 5/- per sample of milk, all other foods 10/6 per sample.

A year later, February 15, 1912, it was agreed that:

i) For the smaller Irish counties the annual retention fee for the combined duties under Food and Drugs Acts and the Feeding and Fertiliser Acts be £25.

ii) The fee as witness in cases be £3/3/0 per day and first class travelling expenses.

iii) The fees when acting as Acting or Temporary Analyst to be 10/6 per sample, under the F & D, F & F and Medical Charities Acts, for waters to be £1/1/0.

In 1912 the Council of the Institute received a report from their Public Appointments Committee held March 1st, in regard to the unsatisfactory terms for the Appointments of Public Analysts to the Metropolitan Boroughs of Lambeth and Wandsworth and the County of Antrim. The Council agreed to inform all Fellows and Associates resident in Great Britain and Ireland that the terms were unsatisfactory; that any Member having made application for any of these posts withdraw, in addition Members should refrain from supplying testimonials in support of any candidate applying for them. The Council invited the Association of Public Analysts for Scotland and the Irish Analysts to appoint representatives to serve on the Public Appointments Committee in March 1913 [32]. Early in April the Committee held a special meeting to hear the views of R. F. Blake, of Belfast. At the Institute's A.G.M., the President, Raphael Meldola, commented adversely on a circular letter from the Association, September 2nd. 1911, bearing the names of 90 Fellows of whom 21 were resident in Ireland, sent to Fellows nominated for election to Council by the Association. The President objected to the charge that Council had not given these members the "full support to which they were entitled" [33].

The Irish Association met on November 30th. 1912 and were still very concerned about the Antrim post. They agreed a circular letter to be sent to all analysts in Ireland, members of the Institute, complaining that Mr. Hodgson the Public Analyst for Blackpool, whose laboratory was in Manchester, had been appointed to the Antrim post, asking the Institute considered this to be unprofessional conduct by Mr. Hodgson. Before it was sent they sought signatures in support before the letter was sent to the Council [34]. According to the Minutes of the Association of July 5, 1913, the letter was duly sent. It appears no reply was made as it was agreed that a further letter be sent to the Institute, desiring a definite reply.

On May 9th, 1914, the Association had a long discussion about applications by Analysts resident in England for appointments in Ireland and on fees. They confirmed fees for Unions should remain as before but rescinded their scales of fees under the Food and Drugs Acts and the Fertiliser and Feeding Stuffs Acts. This latter decision was probably due to the higher scale of fees recommended, earlier, by the Institute [35].

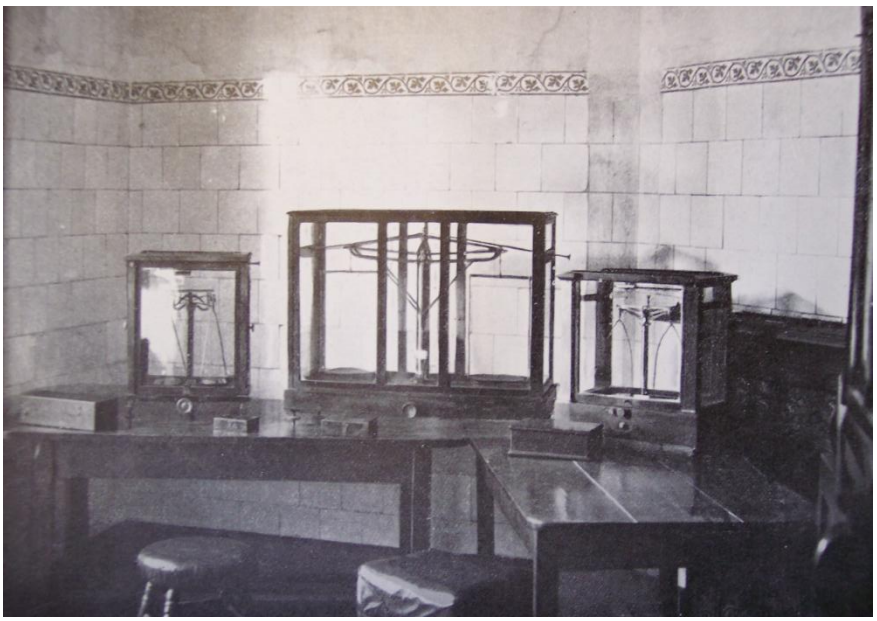


Figure 6
Balance Room

The Association met twice in 1915. On May 15th they passed unanimously, what must be, a land mark resolution to forbid any religious and political discrimination by members in respect of posts, namely,

> *"That no member of this Association shall in canvassing for any appointment ask for or accept the aid of any religious, political or secret society or organisation, nor shall use to his own advantage his own religion or politics if they happen to differ from those of any of the other candidates".*

This stance deserves wider recognition given the social and political atmosphere in which it was promulgated.

They also adopted the following resolutions:

i) That in the event of failure to obtain adequate remuneration, from an appointing authority, either satisfactory to himself and (or) the L.G.B. [Local Government Board] it is essential for the proper conduct of the work that the Union or Public Analyst should resign his position and with the support of his colleagues and practising analysts in Ireland insist upon terms commensurate with the work involved.

ii) That the terms fixed by the Analysts Association in Ireland are: £3 per annum for each dispensary and union workhouse or an alternative of 6/- per sample and £20 per annum retaining fee together with 6/- per sample for Counties and County Boroughs.

iii) That the Council of the Institute of Chemistry be asked to ratify these resolutions and further consider it would be a breach of professional etiquette

> for any member of the Institute to apply for any appointments rendered vacant in Ireland at terms lower than those determined by the members practising in Ireland, who have first hand knowledge of the duties and conditions of analytical work in Ireland.

The second meeting in 1915, held December 11th, was regarded as a special meeting to decide upon a deputation to the Local Government Board and what the deputation shall say. They were concerned about remuneration of analysts under the Medical Charities and under the Food and Drugs Acts. It was agreed to ask the Local Government Board to sanction £4.10.0 per annum for the analysis of drugs per sending station.

The last meeting, recorded in the Minute book, was held December 5th, 1916. At this meeting both the Secretary, Mr. W. Thorp, and the Treasurer, Dr. E. Lapper, resigned due to pressure of work and ill heath respectively. Dr. J. Hawthorn, from Belfast, was appointed Secretary and Treasurer. A discussion was held on the recent attempts by the Kerry County Council to have their Public Analyst removed from post, on the grounds that his remuneration was excessive. The Association noted with satisfaction that the L.G. Board had refused to sanction their proceedings. A resolution was passed that in the Association's view the terms for the Kerry position were not excessive and agreed to inform the L.G.B. of their view and to offer their services in determining similar or other points in the future. They went on to discuss problems that arose when a drug sample is condemned under the Medical Charities Act. The Secretary was then directed to write to the L.G.B. to draw their attention to the problem and suggest that a clause be introduced in the contract for medical supplies in the future to the effect that,

> *"where a drug sample is found to be defective, the cost of analysis of the new supply be borne by the contractor".*

The last mention of the representative of the Irish Analysts Association in the Institute's Proceeding as being on the Public Appointments Committee was in 1921 [36], the year Cameron died. What happened within the Irish Analysts Association in the period 1917 – 1921 is yet to be discovered. The Association of Public Analysts for Scotland remained on the Institute's Public Appointments Committee, one year longer, until 1922 [37].

As Public Officer for Health in Dublin

In 1874 Cameron was appointed Co-Medical Officer for Health and from 1880 sole active Medical Officer for Health for Dublin. In 1882 the Corporation of Dublin placed the whole of the Sanitary Department under his direction and permitted him to retain all his other numerous appointments. During the following forty years he played a key role in improving the living conditions for the poor in Dublin by improving the physical and medical conditions in the city, in addition to and synergistic to the nutritional improvements made via his activities as Public Analyst.

He published annual sanitary reports, books and numerous papers on hygiene and spread of disease (see Tables I and II). As the publications show Cameron was early in recognising the dangers from milk as a means of carrying infections such as typhoid, scarlet fever and diphtheria many of which were traced to dairies. If disease was traced to a dairy the premises was immediately inspected and if necessary the supplies of milk, butter and eggs destroyed. Cameron noted the connection between unfit and overcrowded housing and the spread of tuberculosis and other contagious diseases.

Cameron succeeded in improving the conditions of thousands of dwelling houses and the closing down of over two thousand houses declared unfit for human habitation. In this task he was not afraid to seek the assistance in 1885 of the Prince of Wales (afterwards King Edward VII). Cameron suggested to the Lord Lieutenant at the time, that as the Prince of Wales had visited many model dwellings for the working classes, he ought to see some of the wretched dwellings in which the poor lived and which it was desirable should be replaced by healthy abodes. The visit took place *incognito.* A quarter of a century later he had the pleasure of showing the Prince, then King, the model dwellings erected by the Corporation in Bride Street [1(d)]. In 1885 Cameron was knighted for "his scientific researches, and his services in the cause of Public Health". He was later, 1899, made a Companion of the Order of the Bath.

Cameron's last official appointment at the request of the Home Secretary, at the age of eighty-six, was to inspect and report on the camp and buildings at Frongoch, north Wales, where hundreds of participants in the 1916 rising were interned. One of the prisoners recorded "nothing seems to escape the eagle eye of the old gentleman" [2(b), 38]. Largely as a consequence of his report the prisoners were released.

Research and Publications

Cameron's large number of primary publications, 84 excluding re-publications in full or abridged format, mainly as the sole author, testify to his endeavours to advance applied chemistry and medicine; in particular to advance public health and hygiene via both areas (see Table I). He contributed to agriculture by a series of studies on plant nutrition, to the prevention of fraud by adulteration of food and drugs including many important papers on the composition of milk and drinking water supplies. Some of his publications are brief, by way of a case note e.g. "Amount of tannin in Valonia", but non-the-less valuable at the time to his fellow Public Analysts. The publication of case notes is a practice which is worthy of re-introduction at the present time. Almost half of his journal output was in the form of *Reports on Public Health* combined with *Annual Reports upon the Analysis of Food, Drugs, Water etc.* many of which were also issued as pamphlets. These reports make interesting reading, many contain detail literature reviews on topics of interest at the time in addition to reports on original findings, later the basis of full papers in the chemical or medical journals, as appropriate. His papers on the spread of disease and the influence of diet, water supplies and housing demonstrate his pioneering work in these areas. In addition to applied chemistry, mainly analytical, papers undertook some basic chemical research with Edmund A. Davy, on "some hitherto undescribed compounds of selenium" [39] with grant in aid, (£30), from the

Royal Irish Academy [40]. Later with J. Macallan, Demonstrator in Chemistry at the Royal College of Surgeons of Ireland, he studied the "compounds of ammonia with selenium dioxide" [41] and "the chemistry of selenic acid…" [42].

As well as his large output of publications in journals Cameron revised or wrote text books, pamphlets and reports on the same areas and 5 general items (see Table II). It is not possible to classify this output into single subject groups as most were concerned with more than two areas, such as, chemistry and agriculture, chemistry of food and live stock, hygiene and health. Cameron produced an extensive *History of the Royal College of Surgeons in Ireland, and of the Irish Medical Schools* (1886, Second Edition 1916). The split between applied chemistry (agriculture, food, drugs and water) and medicine and hygiene in Cameron's books and pamphlets is almost 50:50, which reflects his overall interests and life's work.

Cameron produced some material out-with his professional areas including a *"Guide to the Royal Zoological Gardens, Phoenix Park"* (1861), *Short Poems translated from the German"* (1877), *"On the Origins and Progress of Chivalric Freemasonry in the British Isles"* (1901) and left personal records of his life and times in *Reminiscences* (1916) [1] and in *Autobiography* (1920) [2]. In these two later books you can read details of the formation of the Dublin Chemical Society, some amusing anecdotes of court cases in which he had acted as an expert witness, many aspects of his social life, and of the Corinthian Club, a club based on the ethos of the Savage Club, London, of which he was a member.

Aspects of Cameron's Social Activities

Cameron was in many ways a Renaissance figure, interested in both the scientific and the literary life. He was a great admirer of drama, a theatre critic for *The Irish Times* and other papers, and a friend of leading actors. Although a member of the Church of Ireland he was a leading ecumenist as shown by act, for example, serving as one of the honorary secretaries to the fund to erect a statue to the "Apostle of Temperance", Father Mathew [1(e)], and his various friendships with members of other churches such those with Father James Healy [1(f)], and Archbishop William J. Walsh [1(g)]. Much of his social life involved his clubs and the Masonic Order.

Club Life

After joining the London Savage Club, Cameron become well known to other members, as he recorded he had the pleasure of presiding at several of the Saturday night dinners [2(c)]. In his report of the dinner held 7th. June 1893, in honour of W. M. Stanley, the celebrated African explorer, Cameron notes he told Stanley that Surgeon Parke (who had been with Stanley in Africa) had been a student of his in the Chemical Department of the Royal College of Surgeons of Ireland [2(d)]. He also was invited to propose toasts at important functions such as at the Club dinner in 1897, to celebrate the Diamond Jubilee of Queen Victoria, which was the Club's fortieth anniversary dinner [2(c)]. From the menu (see Fig. 7) [43], the toast list and the number of entertainers the Savages and their guests must have sat late, that

Figure 7
Savage Club Menu for Dinner April 10th, 1897

night. The tradition of artist members producing individualised menu cards for specific dinners continues to the present day.

Cameron was a prime mover in the foundation in 1899 of the Corinthian Club in Dublin [1(h)]. This was a dining club which meet every Saturday evening and invited famous people from all walks of life, but particularly those distinguished in music and drama. Over the years the guests of the Club included the Scottish Chemist Sir William Ramsey, Sir Ernest Shackleton the artic explorer, Madame Melba and Signor Caruso [1(i)] and Winston Churchill [1(j)]. The proposal of the health of Churchill by Cameron, and the reply were reported in the *Daily Express* 24th. January 1904, both items were reprinted in Cameron's *Reminiscences* [1(k)]. Press reports of events such as professional and club dinners was common at the period, that C. H. Kruger, a nephew of the Transvaal President, replied to the toast to the guests was reported in the *New York Times*, September 3rd. 1899. Quite naturally the Club honoured Cameron with a dinner after he was made an Honorary Freeman of the City of Dublin in 1911 [1(l)]

Freemasonry

Cameron, an active and well respected freemason, was initiated in Lodge 125, Fidelity, Dublin, in 1858 and in due course held high office in the craft and in the higher degrees [44]. He was Deputy Grand Master in the Grand Lodge of Ireland 1911-20; Deputy Grand Master in the Great Priory of Ireland 1898-1920; Sovereign Grand Commander of the Supreme Council 33rd Degree of the Ancient and Accepted Right for Ireland 1912-1921. Several Lodges, Royal Arch Chapters and Preceptories were named after him. Sir Charles Cameron Lodge 72 was founded in Dublin in 1907 and returned the Warrant to Grand Lodge in 1981,

still in existence are Lodge 353, Sir Henry Wilson & Sir Charles Cameron (1913-); RA Chapter 353, Sir Charles Cameron (1915-); Preceptory 249, Cameron (1911-) and Preceptory 353, Sir Charles Cameron (1921-). A full length portrait of Cameron was presented to the Grand Lodge of Ireland in 1886 by the members of Lodge 25. Cameron mentions Masonic activities in some detail his *Reminiscences* [1(m)] and in his *Autobiography* [2 (a)] and noted, "I have never met any unpleasantness owing to my being a Freemason from any of the public bodies, Chiefly composed of Catholics, with which I am or have been associated". He was friendly with Archbishop William J. Walsh who in a letter congratulating Cameron on his award of the Freedom of the City of Dublin, especially valued by Cameron, put a P.S. - "You and I have worked together for many years, and I don't think anyone be found to say that the city is worse for it" [1(g)].

Cameron's alter ego

There was a contemporary of Charles Cameron, also called Charles Cameron, also born in Dublin, also an M.D., and also a chemist. Following graduation from Trinity College Dublin he moved to Glasgow and became M.P. for the College Division of Glasgow (1874-1900). Both the Dublin and the Glasgow Charles Cameron moved around a lot, with active social lives and people frequently got them mixed up, so much so that one came to refer to the other as his *alter ego*[1(n), 9(a)]. The confusion was no doubt aided that both were involved in matters concerning the operation of the Food and Drugs Acts [20(b)]; C. Cameron, M.P. was active in revision of the Acts in Parliament, whilst C .A .Cameron with the operation of the Acts in his professional practice. The problem of identity partially resolved when the Dublin-based Cameron was knighted in 1885, but not for long as the Glasgow-based Cameron was also knighted in 1893. Some of their amusing correspondence is given in *Reminiscences* [1(n)].

Conclusions

Sir Charles Alexander Cameron led a very busy and active professional and also social life. He was well regarded by all sections of the community for his unbiased concern for all, but especially for the poor in Dublin. His obituary in the *Analyst* [11] concludes "That not the least of his achievements was the retention of his full mental faculties and physical working powers beyond his 90th year". He is an excellent example, for chemists of the present era, to emulate.

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