

R. Norris Wolfenden, M.D.: The medical episode

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Death closes all: but something ere the end,
Some work of noble note, may yet be done,
Not unbecoming men that strove with gods.

Tennyson

Richard Norris Wolfenden was a complex and cryptic man. His path crossed with mine 50 years after his death, in a completely different field and long after that which is stressed here. As a marine zoologist, I never intended to document Wolfenden's medical career, but the apparent lack of biographical information among even those who should have known him best, encouraged this essay. Fate more than anything else has granted me the possibility and the privilege.

Wolfenden was born 18 January 1854 in Bolton, Lancashire, a manufacturing district about ten miles northwest of Manchester. His was an old family, dating back to the 1200s. The Wolfendens had been established many years as political leaders. During World War I, when provoked by having his personal mail opened by the censor on several occasions, Wolfenden prepared a short statement about the family descent for his youngest son (Wolfenden MS, 1917):

As I have been occasionally annoyed in this country [Canada] by the suggestion that our family name of Wolfenden is German in origin, or as is said sometimes 'does not sound English', I wish to put this matter right As to my own family, my recollections do not carry me beyond my grandparents, possibly 150 years of time, but the records could be traced in the parish registers of Bolton-le-Moors. My father Charles Wolfenden was in his time twice Mayor of the town of Bolton and a Justice of the Peace. His eldest brother James Rawthorne Wolfenden was also once Mayor of the town and a Justice of the Peace. His son, my first cousin Henry Wolfenden, still controls the large spinning mills in Bolton of the firm of Wolfenden & Son which have been running for over half a century. My Grandfather Wolfenden was a respected citizen of Bolton and land agent for a large landowner Colonel Pilkington.

My Grandmother was a Norris, one branch of one of the most ancient families of Lancashire and among the forbears of the family being the celebrated Sir John Norreys who in Queen Elizabeth's time was Ambassador to the Court of Spain, and to whose memory one of the very finest tombs exists today in Westminster Abbey. My great uncle Richard Stuart Norris, the last male member of this branch of the family, was a member of the Institute of Civil Engi-

neers, surveyed and engineered most of the London and North Western Railway of England and for most of his life was its chief superintendent.

My [first] wife was a Jardine and her father James Jardine was a Justice of the Peace for the County of Cheshire, High Sheriff of that County, and by Royal Commission a Deputy Lieutenant of the County. The Scottish family name of Jardine is well known.

Wolfenden was the eldest son of Charles Wolfenden, J.P., an accountant, a prominent Conservative, and the mayor of Bolton. It was Wolfenden's great-uncle Richard Stuart Norris who most influenced him toward science and natural history. Norris Wolfenden had one younger brother, Charles Herbert Wolfenden (1858-1920).

Wolfenden attended the Bolton Church of England Institute and Owens College, Manchester, where he was a dependable and vigorous student. He entered Cambridge in April 1873 and there obtained a B.A. with Honours in Natural Science in 1876, followed by an M.B. in 1880. Wolfenden's medical education was expanded that year to St. Bartholomew's and The London Hospitals.

Wolfenden received the M.D., from Cambridge, in 1884, 'with the congratulations of the examiner of the time, the late Sir G. Humphrey' (Anon., 1897). Upon receiving his degree, he was at once appointed to the post of senior house physician at the London Hospital, his principal being Sir Andrew Clark, with whom he worked in close contact for 18 months. He also came under the influence of Morell Mackenzie. Wolfenden's life can only be understood against Mackenzie's dramatic background.

Morell Mackenzie (1837-1892) had dexterously and delicately used a small mirror, which others had considered a toy, and based on it a new medical specialty, laryngology. In 1863, Mackenzie founded the first hospital devoted to a medical specialty, the Hospital for Diseases of the Throat at Golden Square, London. This remains in spirit as the Royal National Hospital for Diseases of the Throat. Mackenzie had written several texts and was the recognized world specialist on the throat and its diseases. The first 'laryngologist', Mackenzie also wrote popular articles about anything and everything. He was among the most successful consulting physicians in the Golden Age of Queen Victoria. Wolfenden became one of his many followers, and one of his closest friends.

In December 1882, Wolfenden married Jessie Stuart

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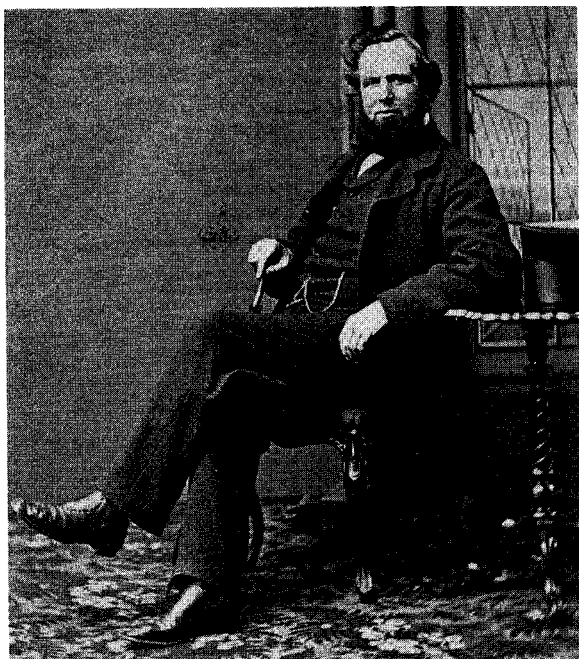


FIG. 1

Charles Wolfenden, J.P., R. Norris Wolfenden's father, ca. 1861.

Jardine, youngest daughter of James Jardine, J.P., D.L., and Hannah Jardine of Alderley Edge, Cheshire. They resided at 19 Upper Wimpole Street, where Wolfenden kept an office and study, until 1890.

The Wolfendens had two sons. The eldest, Stuart Norris Wolfenden, was born in 1889 with a slightly, though permanently, crippled hip, the result of his mother falling down a stairwell while pregnant. That year the Wolfendens moved their residence to Pangbourne. The younger son, Hugh Herbert Wolfenden, was born in 1892.

Wolfenden began a consulting practice and was appointed successively Physician to the West End Hospital for Diseases of the Nervous System (1884); Lecturer in Physiology at the Charing Cross Hospital and the Physiology Laboratory, University College London (1884); Assistant Physician to the North-West London Hospital (1885); to Mackenzie's staff as Senior Physician in the Throat Hospital, Golden Square (1885); and consulting physician to the Pearl Life Assurance Company (1892).

In 1886, Wolfenden suggested there should be an English-language journal for laryngology, an idea that Mackenzie embraced with zeal. Together they founded the *Journal of Laryngology and Rhinology* which is now into its second century, still bearing the inscription: 'Founded in 1887 by Morell Mackenzie and Norris Wolfenden'. Though Mackenzie never served the *Journal* as working Editor, his reputation and guiding hand ensured its success and large circulation among specialists in Europe and America. Wolfenden 'took an active part in its development and maintenance, later becoming its editor-in-chief and contributing many articles to it of distinct value. These, as well as his extraordinarily detailed and critical abstracts, gave evidence of the vigour and thoroughness which characterized his work in its various directions' (Delavan, 1928). Wolfenden's hand

was seen often during the publication of the first ten volumes, until his retirement from the Editorial Board at the end of 1896.

The formation of the British Laryngological and Rhinological Association was announced in July 1888, and Mackenzie was elected its first President. Wolfenden was a charter member and served as Vice-President and member of the Council during the following years.

By 1890, Wolfenden had established an active private practice at 19 Harley Street, near Mackenzie's famous Harley Street consulting rooms (Kelly's London Medical Directory, 1896). Wolfenden also conducted considerable medical research. His published papers of this time ranged over polio, epilepsy, diphtheria, general physiology, actions of cobra and viper venoms, and, of course, diseases of the larynx. 'A strong man, he played an important part in the advancement of modern laryngology' (Delavan, 1928).

Wolfenden's name is associated with a method for swallowing liquids when it is too painful to do so in the normal manner (Wolfenden, 1887):

One of my patients in the last stage of laryngeal-phthisis, and in whom the epiglottis had more than half disappeared from ulceration, lately taught me a 'wrinkle' which others may find of service . . . Lying stomach downwards upon the couch in my consulting-room, with the head and arms hanging free over the end, . . . he took a large tumblerful of water in both hands, and placing the open end of a piece of india rubber tubing . . . in the fluid, and the mouthpiece between the lips, drained off the contents without stopping, and with the greatest ease and comfort. Not the slightest pain or cough accompanied the act, showing that none of the fluid entered the larynx . . . In the ordinary position a teaspoonful of fluid was as much as he could manage to get down, and this was



FIG. 2

R. Norris Wolfenden's mother, ca. 1891.

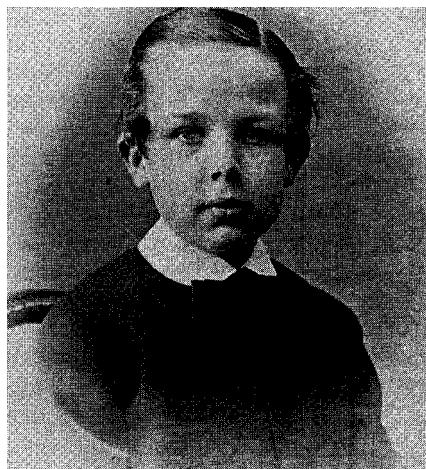


FIG. 3

Richard Norris Wolfenden, ca. 1861.

accomplished only at the cost of much pain and terrible paroxysms of coughing.

Wolfenden's method was praised by Felix Semon (1898).

Events which began in 1887 soon turned Wolfenden's life away from medicine and led to circumstances that would affect everyone in the western world. While at the Throat Hospital, Wolfenden was chosen by Mackenzie to accompany him to Berlin on his first consultation to Frederick, Crown Prince of Germany, in May 1887. At the height of the Victorian Age, royalty were deemed more than ordinary humans, this new and unexpected



FIG. 4

Richard Norris Wolfenden, ca. 1874.

patient was not only of royal blood, but the heir to a great empire, and married to the eldest daughter of Queen Victoria herself. Royalty were newsworthy and their most intimate affairs were of public interest.

In summer 1887, during Queen Victoria's Golden Jubilee, Wolfenden was Frederick's principal physician while the Crown Prince was in England at Norwood, Windsor Castle, and the Isle of Wight, until 9 August, with 'domestic circumstances preventing the latter gentleman (Wolfenden) from continuing his services' (Mackenzie, 1888).

Cutting away the national prejudice, medical rivalry, and political bias, we can acknowledge that Mackenzie was a talented and dedicated physician. When Frederick died in June 1888, he had been Emperor of Germany for only three months. Mackenzie was viciously attacked over his role in Frederick's diagnosis and treatment, and defended himself according to rules laid down by his detractors. He believed that his honesty and straightforward writing would carry the day. Yet Mackenzie was condemned for speaking his mind, and regarded as a traitor to his profession; a spiteful tide of powerful, jealous, and hypocritical peers swept him away. Mackenzie deserves our admiration and our tears.

Wolfenden was so disturbed at what he considered unfair treatment of Mackenzie that he left medicine forever. Much has been written about these events, but the most complete account is by Stevenson (1946). According to Stevenson, the 'best and fairest' biography of Mackenzie, who died in February 1892, was that by Wolfenden (1892).

Concurrent to the Mackenzie episode, Wolfenden was beset by the domestic troubles alluded to by Mackenzie. Wolfenden's wife was an alcoholic and subject to frequent jealousy, indiscreet behaviour, and incapacitation. This caused Wolfenden considerable embarrassment, particularly in his dealings with female patients and in essential social relations with his peers (Wolfenden MS, 1902).

In defence of Jessie Wolfenden, she was probably not equipped by temperament or training to deal with her husband's wide-ranging intellect, talents and activity. Her plaintive letters to her mother and father were



FIG. 5

R. Norris Wolfenden (front left) with a Cambridge cricket team, ca. 1875.



FIG. 6

Richard Norris Wolfenden, ca. 1876.

answered with typical Victorian admonitions to remember her duty, to devote herself to her children, to her husband, and to her other social obligations. In her mind she was a prisoner, unable to develop a personality of her own or even a home as she saw it in the wake of a strong-willed and intense husband. Wolfenden and his wife were separated in fact about 1892, although they continued to live under the same roof. Wolfenden's 'cousin' Marion Lees (actually his wife's cousin) then joined the household to care for Mrs Wolfenden. Providing what his wife would not or could not, Marion became Wolfenden's hostess, confidant, and admirer. Marion later worked side by side with Wolfenden, and drew with a remarkable talent and eye for beauty and detail many



FIG. 7

Wolfenden's study at Cambridge, ca. 1880.

complex organisms revealed in his oceanographic collections.

There was a formal and complete marital separation about 1902, with Wolfenden retaining custody and responsibility for his two sons, as well as trusteeship for Jessie's father's considerable estate. It is not clear if Jessie died about this time or whether they were divorced. Jessie apparently had died by about 1907, when Wolfenden married Marion Lees.

Stuart Wolfenden's early photographs show a sullen and unhappy child, in contrast to his younger brother Hugh, ever eager for a new naturalist's outing, with its concluding notebook of observations. Stuart became estranged from his father, citing what Wolfenden had done 'to my poor Mother' and Wolfenden's alleged attempts to gain complete control of Jessie's inheritance. This estate, in trusts, provided life-long comfort to both sons; Wolfenden never controlled it. Stuart wrote smiting letters from India, Burma and Australia. He married late in life, but apparently had no children. Family members could recall no information on Stuart's final years, other than that he died in California.

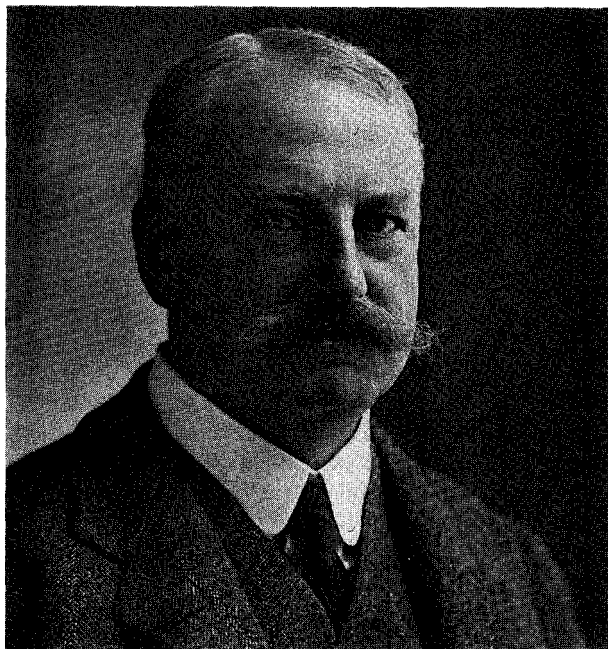
I have learned that Stuart was a linguist and published outlines of classical Tibeto-Burman languages [for example, (1929) *The Royal Asiatic Society Prize Publication Fund* 12:1-216]. Stuart Wolfenden was a Fellow of the Royal Anthropological Institute and a member of the Royal Asiatic Society, the Burma Research Society, and the Linguistic Society of America.

Hugh Wolfenden had a career (as an actuary) and marriage in Canada, but had no children. He was a member of the Actuarial Society of America and authored several publications on social statistics [for example, (1954) *Population statistics and their complication*. Revised edition. University of Chicago Press. 258p]. Ironically, he ended his days in Seattle, Washington, at the same time I was a graduate student at the University of Washington, working with copepods, some of which were first described by Hugh's father. It never occurred to me to look in the telephone book, and pursue names of important copepodologists. If I had done so, this story might possibly have been much more complete. Hugh died in 1968.



FIG. 8

R. Norris Wolfenden, M.D., second from left, at a garden party at his Tillingbourne home, honouring the President and Fellows of the British Laryngological Association, 14 July 1894. John Macintyre (Glasgow), President, on left; third from left is presumed Mrs. Macintyre; Marion Lees is seated far right.



Wm. Fairley 8-4-11

FIG. 9

R. Norris Wolfenden, M.D., ca. 1905.

At the height of professional success, Wolfenden retired from active practice of medicine in 1893, not yet 40 years of age. Although he resigned then from the staff of the Throat Hospital, he remained a Member of the Board of Management until 1899. In 1893, he moved to Tillingbourne, near Dorking, to 'a beautiful seat at which he has led a country life, interesting himself in scientific dairying, and possessing a fine herd of pure bred Red Poll cattle' (Anon., 1897). Until about 1895, Marion Lees also lived in the Tillingbourne household and cared for Mrs Wolfenden. Many of similar means would have spent their remaining days in leisure, but Wolfenden's energy and inquiring mind led him to other significant work.

When X-rays were discovered in 1895, Wolfenden was intrigued and began to work with these to improve techniques. As early as 1896, Wolfenden was making cinematic photographs with X-rays, showing movement of muscle and bone in frogs; his cinematograph film was exhibited at the Glasgow Philosophical Society. He published papers about the effects of X-rays on bacteria and micro-organisms. Wolfenden (1899) published a manual on practical X-ray apparatus and procedures. He described equipment, some of which could be constructed by the reader, for basic X-ray applications, both in radiography and radioscopy. Growth in this field and the proliferation of X-ray applications must have been extraordinary during this short time.

The imagination of many people has run riot as to what the X-rays can do. The first wild rush of enthusiasm having now, we may hope, somewhat passed

away, we may be permitted to contemplate the subject with calmness and properly estimate the limitations of the method. To peruse the literature of the last two years we might sometimes imagine that there was no longer any need for clinical methods in the diagnosis of disease, especially of the chest. While the benefits of radiography to surgery are on all hands admitted, it is precisely in internal medicine where they are more doubtful, and the method has, at present, at any rate, very strict limitations.

In reading this pioneer study, one recalls that such techniques were but a few years old, not well understood, and very primitive by today's standards. Certain of Wolfenden's cautions are therefore understandable in that context:

Those who are fortunate enough to possess a town supply of electricity in their houses, can easily adapt it to X-ray work The conducting wires from the secondary terminals to the focus tube should never be bare, and should be well out of the way of contact with the person. They should not be approached too closely while current is passing It is a safe rule never to approach too near the focus tube, the coil, or the conducting wires without having first switched off the current The receipt of the full discharge from both terminals of a large coil might be fatal, and even from one terminal of a 10-inch coil would be highly unpleasant, and in certain cases dangerous.

Care must be taken not to heat the glass too greatly, or it may be made to burst. It is not well to do as some workers, viz., to keep waving the spirit lamp round the tube while the current is passing. A great deal of sparking occurs, during which the operator receives numerous shocks, and the tube may be perforated.

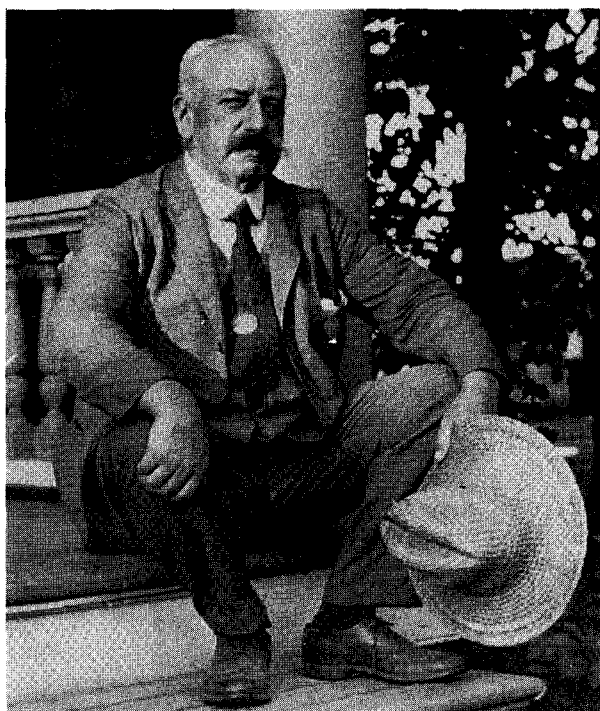


FIG. 10

R. Norris Wolfenden, M.D., at his home in Grimsby, Ontario, Canada, ca. 1917.

Most concern was with electrical shock; the long-term effects of X-rays were at that time not imagined:

We have no accurate means of testing the intensity of the X-rays given off from the tube. We may roughly estimate the degree of penetration by placing the hand against the fluorescent screen as a test At a low vacuum all is opaque, as the exhaustion increases the flesh becomes transparent, the bones remaining opaque, until with increase in the vacuum, these become so transparent and the penetration of the X-rays is so great, that all contrast between bones and flesh is lost.

Wolfenden had knowledge of certain immediate effects of over-exposure to X-rays:

In exposing the patient to the X-rays, it is necessary to take precautions against injury. Such injury could never occur except in very careless and inexperienced hands. Still, it is within the author's knowledge that very serious mishaps have occurred. A prolonged exposure, or one of too great intensity of X-rays, may succeed in bringing a large portion of the hair off the head (within the area of exposure), or the effects of severe sunburn upon the skin, and a case occurred where an exposure of two hours and ten minutes of a man supposed to have renal calculus, produced an ulcer on the abdomen eighteen inches long, which took months to heal, and caused intense pain Now, such cases should not occur, and only the veriest tyro would submit a patient to an exposure of two hours! The test of improper exposure is a feeling of pricking or tingling, or formication in the exposed limb. When this occurs stop the current at once, and remove the tube a few inches further from the subject, until the sensation ceases.

Wolfenden reviewed work of others on elucidation of organs, deformities, fetal development, and organ movement. He also mentioned X-ray in therapeutic applications, for neuralgia, lupus, and cancer, although he refuted claims for success in treating tuberculosis. He concluded that:

There is a great field open for investigation in internal medicine as well as in surgery, in which the results are more assured [in medicine] we meet with our old difficulty of seeing, and discriminating when seen, the soft tissues and organs, especially those lying deep in the abdomen. Consequently the method lends itself to error, and it is very easy to draw false conclusions The correct reading of a Roentgen ray picture, when obtained, is by no means easy, and it takes a good deal of experience and training to interpret a radiogram correctly. It is thus very easy for the 'philistine' to dismiss the matter with contempt because he cannot interpret the result We have scarcely as yet got beyond the fringe of the subject of the application of the X-rays.

It is not within our scope to discuss the applications of the X-rays in directions other than Medicine and Surgery—however interesting they may be—such as Zoology, Botany, Metallurgy, the detection of false gems from real, of genuinely old pictures from recent imitations; and in commerce, in the detection of fraudulent practices. In a brief article such as this,

which merely skims the surface of the subject, it is impossible to deal with many matters which the writer would have liked to treat in detail The endeavour has been to present a sufficiently complete *resume* of the subject as it appears today, to encourage the worker to give his attention to one or more of the important developments that may appeal to him, and in respect of which he may greatly add to the sum of our knowledge.

In 1894, Wolfenden and his family wintered in Orkney, where he leased a lodge for his household for several years. Wolfenden began to turn toward the sea, and he and Marion Lees took separate residences at Seaford (1895-1905), on the Channel coast south of London. It was at this time that Wolfenden acquired a sailing yacht, the 'Walwin', of about 60ft length. Rather than merely indulge in what had become a Victorian amusement, Wolfenden spent the summers of 1896-1897 dredging around the Orkney Islands. It was natural for him to combine all of this with his interest in X-rays (Wolfenden, 1898):

Having collected a large number of specimens, . . . it occurred to me to submit many of them to the X-rays, with the idea of determining how far the new method might assist in the study of marine zoology. I commenced these experiments in December 1896, and between that date and March 1897, had radiographed a very large number of specimens. The plates here reproduced represent only a few of these, chiefly belonging to the order, Echinodermata. These, having a hard skeleton, present very favourable subjects for radiography, and I venture to think that, especially in the Starfishes and Crustacea, the results justify expectations, and that a radiograph of any of these animals presents at a glance most of the anatomical details—at least as regards the hard skeleton—which could only be obtained through troublesome dissection; and in one instance a considerable help was given in discriminating between two closely allied species.

In echinoderms, Wolfenden demonstrated that some details, otherwise found only by dissection, could be seen through X-rays. He also discussed experiments using injections to show circulatory and digestive systems. In the Wolfenden papers were several original and unpublished radiographs. It is easy to believe that these represent the first marine invertebrates to be X-rayed.

Wolfenden was probably a charter member of the Roentgen Society of London, formed in 1897. From 1899, he was on the Editorial Committee, and remained a member until about 1903. [In 1927, the Roentgen Society and the British Institute of Radiology merged, and began *The British Journal of Radiology*].

By good fortune, Wolfenden became interested in other marine biological pursuits. Although the early X-ray instruments were advocated for use in medical studies and treatments, by Wolfenden as well as many others, these were nearly medieval instruments with literally shocking effects. And the long-range, subtle damage caused by X-ray exposure was not then dreamed of. One need only read about the early X-ray work to have one's hair stand on end.

Wolfenden acknowledged the important work of the great national oceanographic expeditions of his time, but he emphasized that problems remained which could best be solved by smaller expeditions working continuously in smaller areas. This modern thought may not have been original with Wolfenden, but certainly it had not caught on by the time he began his monthly scientific cruises in the Faroe-Shetland Channel from June 1899 to August 1900. These were repeated from May to July 1901, and with a new and larger yacht of about 100 ft length, the 'Silver Belle', from May to August 1902.

The International Council for the Exploration of the Sea (ICES) did not begin their important periodic cruises until 1902, when they included Wolfenden's stations in their sampling scheme. Since ICES did not go west of the Faroe Channel, Wolfenden did, from 1903 to 1905. Wolfenden obtained hydrographic, plankton, and trawl samples in the deep water of the Atlantic Ocean from the Faroe Banks to Ireland. Much of the collecting equipment was designed by Wolfenden or his crew, and built especially for his investigations. From 1904 to 1906, Wolfenden's cruising included the Azores, Madeira, and Gibraltar, returning to Plymouth. In 1907, Wolfenden worked from the Faroe Banks to Norway, connecting with ICES observations of German, Scottish, and Scandinavian vessels.

A large amount of chemical, physical, and biological material could not be analysed by Wolfenden himself, and was sent to other prominent researchers. This formed the basis of several published papers on the hydrography of the North Atlantic, especially the Faroe and Shetland Islands area. The oceanographic and biological work was summarized in a classic book by Wolfenden (1909).

Wolfenden sought to understand the current, temperature changes, and the distribution of planktonic organisms. He examined and reported on the radiolarian protozoans and the copepod crustaceans from these cruises, settling later on copepods as his special field. Wolfenden spent a few months studying copepods during each of two trips (1901-1902) to the famous Naples (Italy) Zoological Station, where he occupied the space sponsored by the British Association for the Advancement of Science.

As Wolfenden published, and as his reputation grew, he received copepod collections from others. The most important of these were from the Cambridge Expedition to the Maldives and Laccadive Archipelagoes (1899-1900), the National Antarctic Expedition (1901-1904), and the German South Polar Expedition (1901-1903). Because Wolfenden obtained his own collections at unusually great depths, and was sent other collections from exotic areas, there was much that was new to Science. Wolfenden described well over 100 new species and many new genera of copepods.

Beginning in 1900, Wolfenden occupied the Cambridge University space at the Plymouth Laboratory of the Marine Biological Association of the United Kingdom. He became a member of the Association (1900-1914) and served on its governing Council (1902-1908), which met at the Royal Society's room at Burlington House, London. Wolfenden was a Founder Member (1903) of the Challenger Society, a group of notable oceanographers who gave lectures and exhibits to

further this new science. Wolfenden's new residence (1906-1908) at 76 Wimpole Street, enabled him to spend more time at these meetings and the British Museum.

In 1907, Wolfenden sold his property at Tillingbourne and purchased a large house, The Grange, in the Kent suburbs south of London, and married Marion Lees. The Grange was sold in 1910, after Wolfenden emigrated to Canada.

Wolfenden's last endeavour in the medical field was probably his support on a committee to establish a 'surgical hostel for gentlewomen'. Many influential people were involved; sometimes the committee met in Wolfenden's Wimpole Street office. Apparently a building was available for a 100-bed facility, but funds were required for its operation. 'Dr. Wolfenden said that once the hospital started there would be no further need to appeal to the public again' (Daily Mail 31 May 1906). Even though the planned hospital was mostly for women unable to pay fees, it was anticipated that some fees would support it.

Wolfenden belonged to several professional and learned societies, in addition to those mentioned above. He was a Fellow of the Chemical, Physiological, Royal Medical and Chirurgical, Zoological, and Linnean Societies of London. He was a member of the American Laryngological Association and of the Societe Francaise. In 1896, Wolfenden was elected an Honorary Fellow of the American Laryngological, Rhinological, and Otological Society. He was also a member of the Royal Photographic Society and the Royal Temple Yacht Club.

Wolfenden abruptly terminated his productive marine zoological investigations just as he had his medical career nearly 20 years previously. Wolfenden's brother owned a farm near Grimsby, Ontario, Canada, and Wolfenden was persuaded to visit there in 1908. He went again to a Grimsby in 1910, with his son Hugh, wife Marion, and black Persian cat 'Golly'. Hugh soon met and married into a Grimsby family, and Wolfenden also became a permanent resident in 1912. Here he put his remaining energy into a 200-acre fruit farm (the 'Thirty Mountain Farm'), raising cherries and peaches in a characteristically intense scientific fashion. Wolfenden and his wife last visited England together in 1921. Wolfenden died suddenly on 18 August 1926. He was buried in what became the family plot, at the Woodlawn Cemetery, Hamilton, Ontario. Marion Lees Wolfenden (1864-1958) died in Grimsby at the age of 94.

Regarding Wolfenden's personality, Delavan (1928) said that 'a certain aggressiveness of nature was counterbalanced by qualities of a quieter order. My own acquaintance with him was particularly agreeable, and my experiences as a guest at his delightful estate near London are among the brightest and most attractive of many other such privileges. Incidentally, it was with him that I was indoctrinated into the mysteries of dry fly-fishing and saw demonstrated for the first time the elaborate methods employed for the propagation and rearing of pheasants'.

Wolfenden's Grimsby neighbours were respectful of his not unpleasant arrogance, knowing little or nothing of his colourful past and scientific achievements. The elders of the community recalled that 'The Doctor'

would leave the room rather than participate in discussions about babies and other trivia. This was misunderstood by some townspeople as snobbishness—but those who knew him best said that it was as if Wolfenden did not want to waste any time on idle talk or on anything unproductive or unintellectual.

Wolfenden was very interested in music, in which he excelled both as a conductor and a performer. He organized and conducted an orchestra in the London Hospital while on its staff (Dundas-Grant, 1926). Crown Prince Frederick gave Wolfenden a Bechstein grand piano, and Grimsby friends remembered that Wolfenden would play Chopin and Beethoven by the hour, with a cigar in his mouth—the ashes falling heedlessly on his clothes.

Wolfenden, 'to whom a debt is owed by laryngologists and zoologists alike' (Anon., 1926), served well and honestly, and made lasting contributions in several important fields. His legacies continue to inspire.

If I had lived in Wolfenden's day, he would have had no better friend than I.

Acknowledgements

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