Much has been written about western doctors who lived and worked as medical missionaries in northeastern China in the nineteenth century.1–3 There has, however, been far less discussion of those who worked there in other capacities. One of these, James Watson of the Imperial Chinese Maritime Customs Service, was the first Western doctor to practice in northeastern China.

The Imperial Chinese Maritime Customs Service, founded in 1854, was a Chinese government department that was created by foreign merchants and the American, British and French consuls, to assess and collect Chinese customs duties in Shanghai, one of the five ‘Treaty Ports’ established by the Treaty of Nanking of 1842.4 Initially, the ICMCS had three Inspectors (one each from Britain, France and the US) and always had an international staff drawn from many countries. Because the chief French and American Inspectors resigned after a few years, the senior administrators were mainly British until the Service ceased to exist in 1950. (The Ulsterman, Sir Robert Hart, Inspector-General from 1863 until his death in 1911, was the most notable.) Between 1854 and 1858, the ICMCS took over responsibility for collecting customs duties in Shanghai, one of the five ‘Treaty Ports’ established by the Treaty of Nanking of 1842.6 Initially, the ICMCS had three Inspectors (one each from Britain, France and the US) and always had an international staff drawn from many countries. Because the chief French and American Inspectors resigned after a few years, the senior administrators were mainly British until the Service ceased to exist in 1950. (The Ulsterman, Sir Robert Hart, Inspector-General from 1863 until his death in 1911, was the most notable.) Between 1854 and 1858, the ICMCS took over responsibility for collecting customs duties in the other four treaty ports, and its responsibilities increased following the Treaties of Tientsin in 1858, as these treaties created eleven additional treaty ports. Because the ICMCS was extremely well managed and honest, the Chinese government soon assigned it additional responsibilities. In addition to a large number of reports on customs dues and duties, it collected data and published statistical and other reports on many subjects including currency reform, Chinese music, Chinese medicines and the ‘condition of Chinese coolies in Cuba’. It established the Chinese postal service, organised China’s participation in 25 international fairs, built lighthouses and created maritime charts, was responsible for the quarantine service, and often acted as the intermediary between the Chinese and foreign governments. In 1863, the ICMCS created the Customs Medical Service (CMS) to serve its employees and the foreign residents of the treaty ports as well as the foreign sailors visiting the treaty ports.5

Though Newchwang, the main port in northeastern China, had been designated a treaty port in 1858, it was only in 1861 that a British consulate was opened there, by Thomas T Meadows. The consulate was responsible for all of northeastern China (Manchuria). In fact, the consulate and the customs house were actually in Yingkou (sometimes called the Port of Newchwang), about 30 miles south of Newchwang and nearer the mouth of the Liao River. The port was small and, due to ice, seasonal. It was then without a railway connection and did not have a functioning ‘Foreign Concession’ – a separate residential and business area. Meadows, who had started to work for the Chinese Consular Service as an interpreter about twenty years earlier, ‘was becoming increasingly odd and solitary’.6 The consulate was located in a rather unsuitable former temple and it was described as ‘being unfit for stabling European horses but somewhat better than the other foreign residences’ and there was little for the consular staff (normally totalling four or five) to do. It was May 1864 before the ICMCS opened a customs house there and a year later, in May 1865, James Watson was appointed to serve as ‘surgeon’ at Newchwang. He was the first member of the newly established CMS and
the first foreign doctor to practice there. Western missionaries, led by William Chalmers Burns, began to arrive in Newchwang in 1867, but most foreign residents were merchants and visiting sailors. Though an American consul, Francis Parkman Knight, was appointed in 1862, by 1868, the foreign residents, mostly British and American, totaled only 80, of whom 20 were maritime pilots. In 1869, an Irish Presbyterian missionary doctor, Joseph Molyneux Hunter, arrived.

Consul Meadows’ dispatches6 to the Foreign Office in London do not give a very flattering picture of this little community. One of his own assistants, the Irishman JJM Beatty, resigned, or was dismissed, after smoking opium with his servants and boasting in public about his homosexual relations with them – he received a ticket to Australia. The Commissioner of Customs, MacPherson, had an alcohol problem and tried to attack or rape the concubine of another British resident, and Meadows himself was described by a senior Foreign Office official as being ‘clever but [having] as little judgment and tact as could well be found …’.7 Meadows died in 1868, and by 1871 his successor, Thomas Adkins (who remained there for nine years) was suffering from such a deep depression that, on (Watson’s!) medical advice, he took a three-month winter trip inland to examine trade routes. It was at this rather remote port with its small assortment of foreigners that Watson arrived in May 1865. He had married Margaret Ferguson just before leaving Britain – it is not known if she moved there with him at that time. They had a child, Marian, who was born in China in 1870.

Like many of the other early CMS doctors, Watson was a Scot. He had been born in 1840 at Ford, Midlothian, and graduated with an MD from the University of Edinburgh in August 1863; his thesis was entitled Observations on some new remedies. Following graduation, Watson worked at the Edinburgh Royal Infirmary and published an article based on this thesis.8 In it, Watson discusses four new remedies: Veratrum Viride which had been strongly recommended for the treatment of complaints ‘from measles to hydrophobia’ in a recent pamphlet by the American doctor Ephraim Cutter; Tinctura Boleti Laracis Canadensis recommended to treat rheumatic fever; Sarracenia Purpurea to treat smallpox eruption; and carbolic acid used as a disinfectant. Watson was extremely critical of medical practitioners who promoted new (or old) drugs without proper trials, and disapproved of ‘the careless and slovenly way in which many practitioners test new remedies’. He performed what he would now call ‘controlled experiments’ on all four of these drugs and found that only carbolic acid lived up to the promises made for it. He noted:

’I suspect that at least three of them [the drugs] have been unsatisfactorily tested by those who speak in their praise.’ He recommended that until ‘every new drug [has been] fairly tested in a well-ordered hospital ... it behaves (sic) medical men to be cautious how they recommend the employment of a new medicine.’

He was also very aware of the harm some ‘cures’ could cause and he notes: It [Sarracenia] has a virtue, which happily many – unfortunately not all – new drugs possess, of being perfectly innocuous.’ At about the time he left Edinburgh, Watson wrote a further article,9 on the use of carbolic acid to treat alopecia areata. He notes that this appears to be the first time this condition had been successfully treated in this way. He was clearly a forward-thinking practitioner who was open to new ideas and was aware that new medical theories and new drugs needed to be carefully tested before they were adopted or prescribed.

As noted above, Watson joined the ICMCS and was posted to Newchwang in 1865, and in 1867 he wrote a description of his new home in ‘Manchooria’ – it was published in 1869.10 Though published in a medical journal, this article has little significant medical content but he was clearly not overly impressed by the local landscape and missed Scotland. He reports:

’If to crown it all, [one] has come from Edinburgh, that city set upon a hill, and which to her children far removed from her seems fit to be the joy of the whole earth, the first effect produced by the poverty of the scenery is simply and unmistakably depressing.’

In his article he continues his evidenced-based perspective on life by discussing at length the advantages of the ‘American stove’ over the ‘English fireplace’.

By 1870, the CMS employed about 20 medical officers, including such well-known practitioners as John Dudgeon, the translator of many medical books into Chinese,11 and a pioneer photographer of China, Patrick Manson, one of the founders of the Hong Kong medical school and the father of the discipline of tropical medicine; and Wong Fun, the first Chinese person to graduate in medicine from a European university – he obtained his MD from Edinburgh in 1855.12 In 1870, Inspector-General Hart decided:

’that it would be well to take advantage of the circumstances in which the Customs Establishment is placed, to procure information with regard to disease amongst foreigners and natives in China; and I have, in consequence, come to the resolution of publishing half-yearly in collected form all that may be obtainable.’13

The first of these semi-annual reports (for the half-year ending 31 March, 1871) had reports from five of the CMS doctors including Watson. He wrote that:

’Instead of making a special Medical Report for the last six months, I think that it will be well to furnish
on the present occasion … a brief account of the physical characters of that portion of Manchuria in which this port is situated; to describe its climate, its effect on health and disease.'

He acknowledges that this was, in the main, a reworking of his earlier article. These Customs Medical Reports were published regularly until 1910 and most numbers consist of five or six reports from Customs medical officers, mostly written in English, and a few in French. There are a total of twelve reports written by Watson, the last being for the six-month period ending 31 March 1881. Watson's reports are filled with local anecdotes, notes on medical cases and continuing complaints about the lack of hygiene in both the local and foreign communities. In his report for the period ending March 1879, he refers to the second edition of Taylor's Principles and practice of medical jurisprudence: as this was published in 1873, he clearly tried to keep up with current medical knowledge. Though his reports continue to describe Newchwang in less than glowing terms, he became increasingly fond of the scenery and climate in the surrounding area, the Chinese people and their customs, and he continued to experiment. In one case, he wanted to see if Europeans could survive on the Chinese staple diet of millet so arranged for a British sailor serving a sentence of 49 days solitary confinement to be fed only millet and water 'on my promising to change the food at once if he lost weight or seemed in any way to suffer from his restricted diet.' The prisoner actually gained weight and 'when he left prison he looked as he said he felt, perfectly well.' In a later report he recommends that all prisoners in consular jails in China be restricted to a millet diet as 'it does not seem to be a very hard condition that criminals should be fed for a limited period on food which is used by tens of thousands of fine, healthy, hard-working men throughout their whole lives.' In another report, he argues for a change in the policy regarding quarantine and notes that:

"In the event of small-pox occurring in foreign vessels entering this port, it seems to me not only absurd but cruel to insist on quarantine. In this place and its neighborhood small-pox amongst the Chinese is never absent. The cooping up of one or two cases on board ship does not therefore insure us from infection; while the poor non-infected sailors suffer an amount of discomfort which I think they should not be called upon to endure unnecessarily. On the other hand the patients cannot be properly treated.'

A topic he repeatedly returned to was the poor hygiene in Newchwang and its effect on the health of his patients. The hygiene in Newchwang had clearly not improved much by 1899 when one of his successors, Charles de Burgh Daly, reported:

"The water supply is far from above suspicion; the milk is obtained from two dairies in both of which there are cesspools full of urine and feculent matter; close to one of these cesspools there is a hole dug, into which the water from the cesspools drains and this water is used to wash the bottles and cool, if not adulterate, the milk.'

We do not know when his wife, Margaret Ferguson, died, but in early 1884, Watson was on leave in England and got remarried — to Margaret Barlow of Brixton Rise, Surrey and resigned from the CMS. He remained in England and practised for many years at the Portsmouth Royal Infirmary. He clearly kept up with developments in medicine and in a case report in the Lancet in 1892 he refers to Charles Hilton Fagge's Principles and practice of medicine; this had been published in 1886. He certainly did not forget his Newchwang colleagues and in 1894, during the first Sino-Japanese war, he wrote to the Times to urge that a 'British gun-vessel' be sent there to protect them from the invading Japanese during the winter.

In 1901, he was still living in Portsmouth with his wife, his daughter and three resident servants: a butler, a cook and a housemaid. By 1908, he had semi-retired from the Portsmouth hospital and 'he has purchased a small property near East Grinstead and his large garden is a source of much enjoyment to him... Politically he is a sound Conservative and a Tariff Reformer.' He died, aged 86, on 18 June 1926, leaving an estate of thirty thousand pounds and 'an annuity of eighteen pounds to his butler, Aaron Gaisford, one year's wages to Mabel Shaw.'

Watson and the other ICMCS medical officers did not leave lastling monuments in China, such as the hospitals and medical schools built by the missionary doctors and, as they were primarily there to treat foreigners, did not make much direct contribution to the health of individual Chinese. They were, however, avid reporters on Chinese life and medical and sanitary conditions, and their reports deserve further study.

In 1870, the New York Times warned its readers about Newchwang in particular:

"In business matters [in Newchwang] our correspondents report extreme dullness, with no hope of speedy improvement. But who except a crack-brained sinologue would ever have chosen Newchwang as a commercial emporium? To any one proposing to settle there the best advice is an emphatic "don't!""

In general, the life of Customs or Consular officers in China was not easy; in 1907, a consular officer, HA Little, wrote:

"... consular officers in China probably live under worse conditions than any other body of men in the world. From the age of about 30, for 15 or 20 years,
most of them are stationed in remote and lonely places where few comforts and amenities of life are obtainable. There is no social intercourse with the native inhabitants, and the foreign community is generally limited to a dozen or so missionaries, merchants and Customs officials, of whom not more than 3 or 4 can be counted on for social purposes."

James Watson served at Newchwang for almost 20 years.

REFERENCES


9 Cutter E. Veratrum viride as a physiological and therapeutic agent. London; 1860.


16 Taylor AS. Principles and practice of medical jurisprudence. 2nd ed. London: Churchill; 1873.

17 Customs Medical Reports; No. 2, for the half-year ended 30th September 1871.

18 Customs Medical Reports; No. 8, for the half-year ended 30th September 1874.

19 Customs Medical Reports; No. 4, for the half-year ended 30th September 1872.

20 Customs Medical Reports; No. 58, for the half-year ended 30th September 1899.


22 Private communication, April 2006, from the Foreign and Commonwealth Office (London), who hold a set of the Service Lists of the ICMCS.

23 Gaskell E. Surrey Leaders; social and political. London: Queenhithe; 1908?


26 Watson J. Southern Manchuria. Letter, Times October 17, 1894 (Issue 34397); page 2, col. G.


28 Times, Wills and Bequests, 3 August 1926 (Issue 44340), page 13; col. C.

29 Li SJ. Western medicine in 19th century China. Wellcome History 2006 (Summer); 32:10–12.