

## **Otto Julius Klotz, Civil Servant, Surveyor, Astronomer, Author**

by Valerie Knowles

The number of Otto Julius Klotz's achievements is eye-popping, but in Ottawa the one that stands out is the Ottawa Public Library, fittingly described as "an enduring monument to this memory" by the *Ottawa Journal*.

Making the library a reality was far from easy. In fact, it required years of struggle, dating back to 1895. In that year, a group of public-spirited women issued a publication promoting the establishment of a public library. However, as municipal funding was essential for the building and operation of such an institution, public opinion had to be canvassed. To ensure that it was well-informed, several meetings were convened to discuss the issue. Nevertheless, despite the forceful support of such high-profile individuals as the governor general and his wife, Lord and Lady Aberdeen, the requisite by-law was soundly defeated in the January 1896 municipal election.

Another setback occurred in 1897. That July, a library board was formed and at its first meeting Otto Klotz suggested that a reading room be opened with some assistance from City Council. Labelling such a service a "useless luxury," Council refused to vote the required funds.

Over the years, several more attempts were made to obtain funding but each one was rebuffed. Then Klotz, the board's president, conceived the idea of approaching Andrew Carnegie for financial assistance. So, in early 1901, he wrote to the famous American captain of industry and philanthropist on the board's behalf. Carnegie responded to Klotz's appeal with an offer to provide \$100,000 for the erection of a suitable building on condition that the city furnish a suitable site and contribute not less than \$7,500 for the building's maintenance.

Even an offer as generous as this one did not meet with Council's unanimous approval, some aldermen wishing to see Council assume exclusive control of the library's management. Since this would dispense with the library board's services, it resigned immediately. Nevertheless plans went ahead for a public library and on April 30, 1906, it was officially opened by Andrew Carnegie himself.

It is no wonder that Klotz observed in his diary during this period of strenuous lobbying, “It is so difficult to start anything pertaining to intellectual development & if started to keep it going.” Interestingly, he kept a daily diary for 57 years. Running unbroken from 1866 to until his death, it comprises 33 manuscript volumes that are housed in Library and Archives Canada.

The “father of the Ottawa Public Library,” as he has been called, was born in Preston (now Cambridge), Canada West, on March 31, 1852 the son of Otto Klotz and Elise (Elizabeth) Wilhelm. Otto Klotz Sr., who had immigrated from Germany to New York City in 1837 and then put down roots in Preston, was a successful innkeeper, brewer, educationist, and court clerk. His mother, Elise, was the German-born daughter of a farmer.

Otto Julius Klotz received his earliest education in Preston’s public schools. He then attended grammar schools in nearby Galt, the most distinguished being the one headed by the well-known disciplinarian, Dr. Tassie. It was here that the future scientist mingled with members of many prominent Canadian families and began to develop his life-long passion for English literature.

After passing his matriculation exams and earning a scholarship, Otto Klotz embarked on studies at the University of Toronto. Unfortunately, its astronomy and science programs were still in their infancy and so he transferred to the University of Michigan in Ann Arbor, where he studied with the astronomer James Craig Watson. While there, he met his future wife, Marie C. Widenmann (Wiedeman), the daughter of the German Consul. After marrying in 1873, they had three sons and a daughter.

Following his graduation in 1872 as a civil engineer, Klotz returned to Preston, where he established a private practice as a surveyor and engineer. Five years later, he obtained the coveted designation of dominion topographical surveyor.

His career in the federal civil service began in 1879, when he joined the Department of the Interior as a contract surveyor. Initially his work focused on the Prairies, but in the early 1880s it took him to Hudson Bay country as the federal government was then interested in studying the feasibility of a Hudson Bay route from western Canada to Europe. To investigate ice and weather conditions along Hudson Strait and in the Bay it assembled an expedition and placed Klotz at its head. In the ensuing months, the four-man expedition surveyed a 2,000-mile area from the South Saskatchewan River to York Factory on the Bay, using two canoes and undertaking 37 portages.

Having met this challenge, Klotz performed surveys associated with the construction of the Canadian Pacific Railway. While working in British Columbia, he also established the accurate heights of mountains in the Rockies and named a number of well-known peaks, among them Mounts Macdonald, Tupper, and Mackenzie.

Otto Klotz also conducted surveys involved in determining the boundary between British Columbia and Alaska and Canada's position in the Alaska Boundary dispute. This long smouldering dispute came to a head in 1897, when the Klondike gold rush was under way and both Canadians and Americans sought to control the trade that it produced. Even before this happened however, the federal government Dispatched Klotz to the Alaska panhandle to probe American infringement on territory regarded as Canadian (1889). As he supported the American position on the panhandle's inland boundary, he was not nominated to sit on the international boundary commission set up in 1892.

Otto Klotz moved to Ottawa in 1892, but continued to do field work. Four years later, he became a permanent member of the civil service and was appointed clerk and astronomer. In the late 1890s, he worked closely with William King, then chief astronomer, to establish the Dominion Observatory, which began operating on the Central Experimental Farm in 1905. At this time, he was named Assistant Dominion Astronomer.

Shortly thereafter, a seismological section was established for the recording of earthquakes, and under Klotz's direction it soon placed Canada and the observatory in the forefront of seismology.

This period also saw the one of the most extensive magnetic surveys in the world carried out: the magnetic survey of Canada that Dr. Klotz inaugurated in 1907.

Otto Klotz's career highpoint was reached in 1917, when, one year after Dr. King's death, he was appointed Dominion Astronomer.

As biographer Richard Jarrell points out, Otto Klotz was also a "lifelong organizer." It would take several paragraphs to list all the organizations to which he belonged. Several of these he served as president, notably the Royal Astronomical Society of Canada, the Seismological Society of America, the Association of Mechanics' Institutes of Ontario, the Canadian Club of Ottawa, and the Ottawa Literary and Scientific Society. Between 1882 and 1922, he also published more than a hundred papers in addition to his official reports.

Otto Klotz died of a heart condition in Ottawa on December 28, 1923. He was survived by his wife and two sons, Dr. Oscar Klotz and Dr. J.E.Klotz.

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*This article originally appeared in the December 2009 issue of Forever Young Newspaper.*