

MEMORIAL OF THOMAS LEONARD WALKER

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Thomas Leonard Walker, who died on August 6, 1942, was born near Brampton, Ontario, on December 30, 1867, of English parentage. His father, William Walker was a native of Whitby, England, while his mother, Hannah Sanderson Walker, came from Scarborough, England. He attended schools in both Brampton and Orangeville, Ontario, and then entered Queen's University, Kingston, from which he received the silver medal in chemistry and the degree of Master of Arts in 1890, and at a later period the Gowan Prize in botany.

On his graduation he served on field parties of the Geological Survey of Canada in the Sudbury district where his inability to locate certain contact relations led him to make a detailed study, the results of which appeared in his thesis for the Doctorate under the title "Geological and Petrographical Studies of the Sudbury Nickel District, Canada," and put him in the front rank among petrographers.

For a short time after his graduation from Queen's University he was employed as chemist at the Murray Mine, and for two years was Laboratory Demonstrator in the Faculty of Mines, Queen's University. He was awarded one of the first 1851 Exhibition Scholarships and continued his studies under Professor F. Zirkel in the University of Leipzig where, in 1896, he was awarded the degree of Doctor of Philosophy. At a later time he also continued his studies in crystallography in the University of Heidelberg with Professor Victor Goldschmidt.

In 1897 Dr. Walker was appointed Assistant Superintendent of the Geological Survey of India. While in India he made a scientific expedition across the high passes of the Himalayas into Thibet, making incidentally a collection of Himalayan mosses, many of which were new to science.

In 1901 he returned to Canada to become Professor of Mineralogy and Petrography in the University of Toronto, a position which he held until his retirement in 1937. In 1913, the Royal Ontario Museum of Mineralogy, Toronto, appointed him its first Director. Through the years Dr. Walker worked indefatigably for the Museum. By collecting, judicious purchase and exchange he built up a Museum of Mineralogy which ranks among the best seven in the world.

Dr. Walker was one of the founders of this Society, being one of a small group who conceived the idea at the Baltimore meeting of the Geological Society of America in 1909. With the organization of the Society in December 1919 he became a charter fellow and its first Vice-



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President, and two years later he was elected President. While his health remained he was seldom absent from a meeting, usually contributing at least one paper to the program. He prized his association with the Society for the stimulus which he gained from the meetings and the friends that he made and kept among the members.

He was a fellow of the Geological Society of America (1903) and, as President of our Society, was its 3rd Vice-President in 1922 and was elected as 1st Vice-president in 1931.

He was made an honorary member of the Mineralogical Society of Great Britain and Ireland in 1937 after being an ordinary member since 1913.

He was a Fellow of the Royal Society of Canada and President of Section IV (Geological Sciences) 1927-28; a Fellow of the Geological Society of London; Fellow of the Royal Geological Society of Cornwall; member of the Washington Academy of Sciences; and member of the Canadian Institute of Mining and Metallurgy.

For many years he was a member of the Committee on the Measurement of Geologic Time in the National Research Council (United States).

He was an indefatigable worker, as shown by the bibliography which appears later, and accomplished much that was worth while. His thesis for the doctorate started an intensive study of the conditions governing the deposition of the nickel-copper ores of the Sudbury basin. His reports on the tungsten ores of Canada and on the molybdenum ores of Canada called attention to materials that have become of great importance. He was one of the pioneers in the use of the two-circle goniometer on this continent and wrote his *Crystallography* to make this method more readily available in the English language.

The mineral temiskamite, almost simultaneously described under the name maucherite, which was described by him was the cause of much dispute as to its true composition. The latest examination by means of x -rays agrees within reasonable limits with the composition as given by Walker, although the name maucherite is preserved as having priority in publication. Other minerals which were described by him are spencerite, chapmanite, schoepite, enelectrite, and in collaboration with the writer, ellsworthite.

In view of the limited facilities for publishing in English articles dealing with mineralogy and petrography, he started the series of "Contributions to Canadian Mineralogy from the Department of Mineralogy and Petrography in the University of Toronto" in 1921. This publication has appeared annually since that time, except for the year 1936, when he was stricken with his fatal illness. It was then deferred until the next year when a double number was issued.

Special recognition was given to the accomplishments of Dr. Walker in 1938 when the University of Toronto granted him the degree of Doctor of Science (*honoris causa*), and in 1941 the Royal Society of Canada conferred further honour by the bestowal of the Flavelle Medal for his important contributions to mineralogical science.

He travelled widely and was a member of nearly every International Geological Congress during his academic career, and on each occasion he brought home material to enrich the collections of the University and of the Royal Ontario Museum of Mineralogy. His greatest personal pleasure however, was probably in the meetings of this Society for the stimulus that he derived, and from the meetings of the Canadian Institute of Mining and Metallurgy where he was able to keep in intimate touch with the mineral industry of Canada.

Dr. Walker will be remembered because of the men he trained. He will also be long remembered as the builder of a great mineral museum. To these great objectives he devoted his life and his accomplishments were of no mean order.

In 1906 Dr. Walker married Mary Augusta Woods, daughter of the late Sir James Woods of Toronto, who survives him. He is also survived by two sons, James Woods Walker and William P. Walker, and one daughter, Euphemia B. Walker.

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