

MEMOIR OF THOMAS CHESMER WESTON

BY

ROBERT BELL

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Born in Birmingham, England, October, 1832. Arrived in Montreal, and joined the Geological Survey of Canada, 16th February, 1859, *æt.* 27. Married in Montreal, 9th June, 1859, to Miss Matilda Allen, of Quebec, who predeceased him many years. Superannuated, 1st July, 1894. Died in Minneapolis, 10th May, 1910, *æt.* 78.

Dr. Bell, with the approval of Miss Weston, writes the following sketch of her late father and of his official career. He had been a friend and associate of Mr. Weston from the day he arrived in Montreal until the time of his death.

Mr. Weston was a man of rather slight or delicate build, fair complexion, with blue eyes, flaxen hair and whiskers, of gentle manners and disposition, even temper, and deliberate in speech. In religion a Protestant. Mr. and Mrs. Weston had three children—Eleanor (Nellie), Chesmer, and George H.—all of whom have survived their parents.

* Contributed after the meeting.



yours truly
Thos. C. Weston.

Montreal,
Oct. 27.
Quebec,
1894.

Following
friend
until

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Protest-
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The first duties Mr. Weston had to perform on entering the Geological Survey consisted in testing (by cutting and polishing) the characters and adaptability of ornamental and semi-precious stones, of which Canada has a great variety, and it was important to ascertain their uses and values. The non-metallic economic rocks and minerals which he thus brought into notice have added much to our knowledge of the latent wealth of Canada. Another branch of his duties at this period consisted in "developing" fossils, or preparing them for more ready description and illustration. This he did by skillfully filling up breaks, repairing accidents, and by removing rocky matter which covered or obscured them. His delicacy of manipulation allowed him to do this work accurately and artistically.

Mr. Weston's training in England was under his father, and while it gave him a good insight into the art of the jeweler and lapidary, it did not include much of a scientific character. His opportunities on the Geological Survey, however, enabled him to acquire a considerable knowledge of geology, lithology, and microscopy, and he soon showed that he was just the man required to fill the place which he occupied until his retirement, 35 years later.

By going on trips to the field with the more experienced members of the staff, he learned by degrees to do good original work in several branches of geology. The first of these excursions was made with Mr. James Richardson and myself, in 1863, to the Saint Francis River. This was the precursor of many independent journeys occupying from a few weeks to whole seasons, and extending from the coast of Labrador to the Rocky Mountains. In these days the more distant parts of the country were inaccessible except by one's own primitive outfit, until the white man gradually spread into large sections of the regions which were uninhabited when Mr. Weston first set out.

He was particularly expert in collecting fossils, and did much good work in this line in various formations and in widely separated parts of the Dominion. He had a kind of intuitive knowledge as to what beds or what particular spots were likely to yield organic remains, and his quick eye immediately detected anything like a fossil. He thus discovered them in numbers of cases where the rocks had been given up as hopeless from the paleontologists' point of view. He directed his attention to finding new forms or those parts which might be lacking in order to complete a specimen for specific description or illustration. Thus his collections were made judiciously, and they were not burdened with great numbers of duplicates, especially where transportation was expensive or difficult.

Apart from Mr. Weston's usefulness as an explorer, it was found impossible, after his retirement, to procure a successor who, in those branches of his work which were connected with the museum, possessed a similar versatility, mechanical skill, neatness, and deftness, and it soon became evident that the Survey had lost an invaluable member.

Although Mr. Weston had not much practice as an author, his octavo volume of 328 pages, entitled "Reminiscences Among the Rocks," is replete with good descriptions and shows a range of reading which enabled him to make poetical and other quotations whenever they seemed appropriate. His travels in the Northwest Territories took place mostly during the time when the first wanderers of the plains consisted of the waifs and strays, mysterious and odd people with funny notions, who had come from nearly all quarters of the world—a queer lot, many of whom had interesting histories if they could only be known. In connection with his experiences among these pioneers his book contains numerous philosophical reflections, interspersed with humorous stories of what he saw and heard.

His narrative is, however, mainly devoted to his geological operations, which supplement the official accounts of his work as given in the Summary Reports of the Survey for the years he was in these northwestern regions. So rapidly do events follow each other in the wonderful development of these regions that Mr. Weston's book is already useful for historical reference.

The museum work, already referred to in connection with fossils and ornamental stones, together with much desultory field work, mostly among the Quebec rocks, occupied Mr. Weston's time till 1865. In that year he went to Anticosti Island, accompanied by an assistant, and collected fossils along considerable sections of the coast. From that year until the end of his official career he spent the greater part of each season in the field. Until 1873 he often acted as Sir William Logan's assistant or was occupied in museum work; but when time permitted he was off on excursions to various localities, mostly in the province of Quebec.

In 1873 he went to the Labrador coast, accompanied by Mr. C. W. Willimott, who had newly joined the staff, but who remained with us for 35 years, when he was superannuated. They examined the stratified rocks all along the northwest side of the straits of Belisle, and determined their age by means of the fossils they collected.

In 1874, at the request of Mr. Alexander Murray, and with the advice of Sir William Logan, Mr. Weston went to Newfoundland to search for fossils, which no one else could find, in order to determine the age of certain rocks. He was quite successful, having discovered at Mannel's Brook some species which proved them to be primordial. During the

eight years which followed 1874, or till 1882, Weston was occupied with the following and other work:

Study of *Eozoon canadense* and preparation of two fine series of specimens of this form, one for the museum and another for an international exhibition; questions as to the age of certain Quebec rocks; age of formations along the south side of the Lower Saint Lawrence; discovery there of areas of the Utica and Hudson River formations, fossils of the Guelph formation, the upright treelike cylinders in the Potsdam rocks near Kingston; investigations of the older formations of New Brunswick and Nova Scotia; discovery of fossils in various rocks in the eastern townships; also at Bic Harbor and Temiscouata Lake; the geology of Saint Mary and Thessalon rivers and collection of rock specimens from both; discovery of Beatricea at Stoney Mountain, Man.; collecting fossils at Arisaig, N. S.; making sections of rocks for microscopic study; photographing objects of scientific interest in various parts of the Dominion; removal of the museum from Montreal to Ottawa.

Reports on the results of his field work during the next eleven years, namely 1883-1893 inclusive, in each of which he had a party with him, were prepared by Mr. Weston and are included in the summary reports of the director for these years. In four of these seasons he traversed the country from Red River to the more western plains, and one year entered the foothills of the Rocky Mountains.

In the spring and summer of 1893 he suffered from ill health, but earlier in the year he assisted in preparing the geological collections for the Chicago International Exhibition. This work included everything which required to be done in order to exhibit a fine series of specimens, illustrating all that is known about *Eozoon canadense*, for, although it was no longer considered to be of organic origin, it was still regarded with great interest, and geologists from all parts of the world were gratified by being afforded such a good opportunity of studying it.

In 1894 he was placed on the retired list, at his own request, his superannuation dating from the 1st of July. Having served the government for 35 years, he was allowed the maximum pension. This, together with the income from real estate which he owned in Ottawa and Quebec, enabled him to live comfortably for the remainder of his life, which he spent with the different members of his family and in leisurely traveling in Canada and the United States.

He was fortunate in having innumerable friends and not a single enemy. Sixteen years after his retirement from active work, or at the age of 78 years, he died, on the 10th of May, 1910, at the home of his daughter in Minneapolis, deeply regretted by every one who had known him.