which he took have been found of great service in fixing positions in many parts of old Canada and Newfoundland. His surveys of Lake Nipissing and the various channels of French River, made in several different years, were found sufficiently accurate for the purpose of the Ottawa Ship Canal Survey, and were adopted by the engineers of that project—Shanly, Clark, Perry, Norman and Galway who gave him credit for the use they had made of them.

In 1842 the Geological Survey of Canada was instituted by the government, on a petition of the Natural History Society of Montreal, made at the suggestion of the Mr. (afterwards) Sir W. E. late Rev. Dr. Mathieson. Logan was appointed provincial geologist, but owing to unfulfilled business engagements in England he asked for leave of absence and spent the winter of 1842-43 in the old country. Here he appears to have first met with the subject of our sketch in the beginning of 1843, and to have engaged him as his assistant. Little is known of Murray's early studies as a geologist, but even when a midshipman he appears to have had a taste for the science, and had some practical training under Sir Henry T. De la Beche, with whom he served on the Geological Survey of Great Britain during 1841; while his nautical education had already fitted him to undertake topographical surveying. He arrived in Canada in May, 1843, and immediately commenced operations in the western province. while Logan returned from England, by Halifax, the same spring. On his arrival the latter proceeded to the north-western part of Nova Scotia and measured the celebrated section of the Carboniferous rocks at the Joggins, near the head of the Bay of Fundy, which is published in detail in the Report of Progress for 1843. He then went to the eastern part of Gaspé and examined the coast in detail from Cape Rosier to Paspeliac. This was the commencement of the Geological Survey, which has since been extended to nearly all parts of the northern half of the continent.

Murray wrote little for publication besides his official reports to the governments of Canada and Newfoundland.