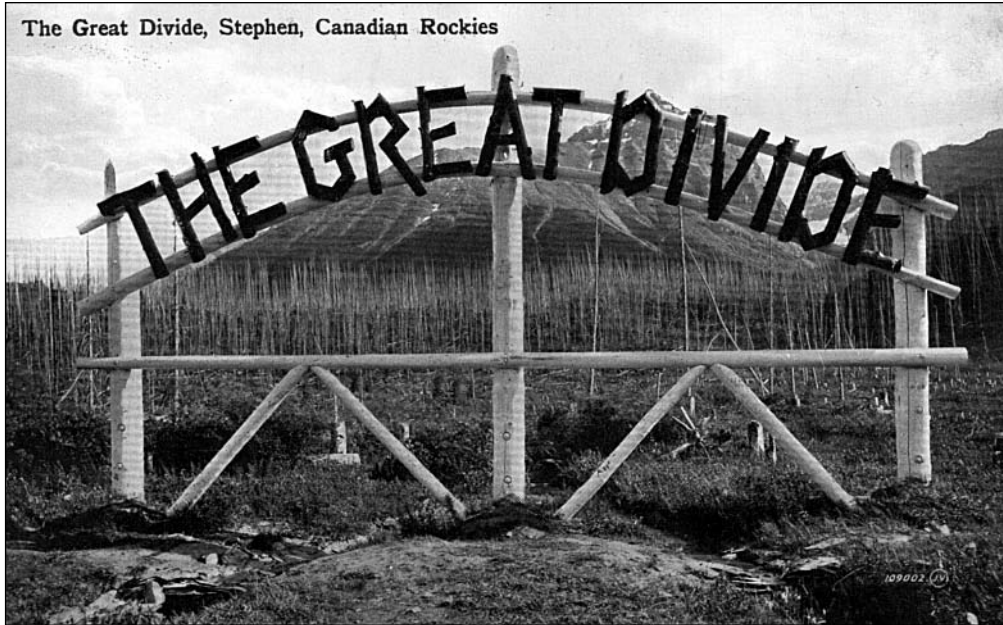




2-1

**JAMES HECTOR, KCMG, MD  
1834-1907**



*Parting of the Waters at The Great Divide, circa 1900*

2-2



*The Kicking Horse River Valley looking upstream from Wapta Falls (middle of photo)*

2-3

# JAMES HECTOR, KCMG, MD 1834-1907 The Palliser Years 1857-1860

*“He could walk, ride or tramp snowshoes with the best of our men ...  
and his fame as a traveler was a wonder and a byword  
among many a teepee that never saw the man.”<sup>(1)</sup>*

## From Youth to MD 1834-1856

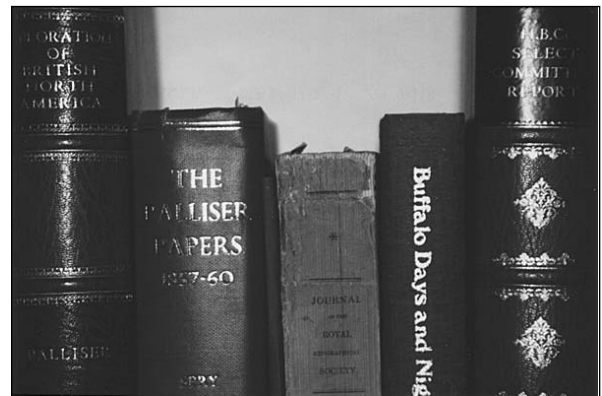
Born in Edinburgh on March 16, 1834, Dr. James Hector was the seventh child in his family. His father was a lawyer and a writer. By 1852 Hector's interest in chemistry and the natural sciences had surfaced. Since the only way he could follow his interest was to study medicine, he enrolled in the medical school at Edinburgh. Summer holidays were spent on highland excursions. His descriptive articles on the geological and botanical observations he made, caught the attention of the local botanical societies. Friends encouraged young Hector to take further courses in the fields of geology, mineralogy, and paleontology. In 1856 Hector graduated after writing his thesis in medicine entitled “The Antiquity of Man”. Graduation was followed by his only medical appointment: a one year assistantship to James Y. Simpson, the discoverer of chloroform.<sup>(2)</sup>

## Selected for the Palliser Expedition 1857

In 1857 the British Parliament struck a Select Committee to investigate the state of affairs of the Hudson Bay Company (HBC), its monopoly, and the conflicts it was having with the residents of the Red River Settlement. The Committee examined many key witnesses including George Simpson, Dr. John Richardson, Dr. John Rae, Dr. George Back, Colonel George Lefroy, Edward Ellice and Ontario Chief Justice W.H. Draper.<sup>(3)</sup> It recommended that an expedition be sent to western Canada to provide firsthand information on Rupert's land and the HBC chartered territory, and advise the British Government on amendments to the 1858 renewal of the HBC Charter.<sup>(4)</sup>

The Government agreed to fund the expedition for one and possibly two years. The field team was to survey, map, assess the value of the prairies, and find a railway pass through the Rockies north of the 49th parallel. The leader of the expedition was Captain John Palliser, who had been on a hunting trip to North Dakota in 1847/1848 and had written of his travels in 1853.<sup>(5)</sup> Other field experts chosen were Dr. James Hector (physician, naturalist), Eugene Bourgeau (botanist), Lieutenant Thomas Blackiston (surveyor), and Edward Sullivan (astronomer).<sup>(6)</sup>

During his medical training, Dr. Hector came to the attention of the Royal Geological Society President Sir Roderick Murchison. Murchison knew Hector was knowledgeable in natural history, geology, botany, and medicine. Hector's diverse set of skills and talents, as well as his youthfulness and physical stamina, sealed Murchison's recommendation for his appointment to the expedition. Dr. Hector became the team leader in the field when Palliser was away, as he was during two winters.



*Antiquarian books on the Palliser Expedition* 2-4

1. Erasmus, Peter *Buffalo Days and Nights*, pages xix-xxi, 74-78, Glenbow, 1976.
2. Ballon, H.C. “Sir James Hector, M.D., 1834-1907”, *CMAJ* 87: 66-74, July 1962.
3. British Parliamentary *Report of the Select Committee on the Hudson's Bay Company*, 547 pages. August 17, 1857.
4. Mitchell, Ross “Sir James Hector”, *CMAJ* 66: 497-499, May 1952.
5. Palliser, John *Solitary Rambles*, Hurtig, 1969.
6. Spry, Irene M. *The Palliser Expedition: An Account of J. Palliser's BNA Exploration Expedition: 1857-1860*, Macmillan Toronto, 1963.

### The Palliser Expedition 1857-1863

Hector was a youthful twenty-three years of age when the Palliser Expedition arrived in Western Canada in the fall of 1857. In the summer of 1858, Hector made his first tour of what is now Alberta. Hector and five companions left Edmonton and entered the Rocky Mountains at the Devils Head on Lake Minnewanka. They ascended the Bow Valley to Castle Mountain which Hector named and crossed the Great Divide over Vermillion Pass. They followed the Kootenay River down to the Hector Gorge, on today's Banff-Radium highway. From there, they headed north, descending the densely treed Beavermouth River valley to its junction with the Kicking Horse River.

On August 29, 1858 the party had been ascending the soon-to-be-named Kicking Horse River for two hours, when Hector was kicked in the chest as he walked around the rear of his horse, just above Wapta Falls.<sup>(7)</sup> The site was approximately twenty miles west of Field, BC. Despite the accident and the starving status of the expedition, Hector was able to ascend the Kicking Horse River to the Great Divide.<sup>(8)</sup> Then he headed north following the route of the Lake Louise-Jasper highway to Bow Summit, and down the Mistaya River to the North Saskatchewan River. Hector was well enough to ascend the river to the summit of Howse Pass, before returning downstream to Edmonton.

Hector led a second reconnaissance to the Yellowhead and Athabasca Passes in January 1859. He followed David Thompson's 1811 route to the top of the Athabasca Pass before returning to Edmonton.

Hector made a third sweep of the prairies in June, 1859. He traveled southeast from Edmonton to the arid badlands, Medicine Hat, and the Cypress Hills before returning to the Rocky Mountains. There, Palliser and Hector separated. Hector crossed the Howse Pass and met Palliser at Fort Colville in Washington near the 49th parallel. The two explorers



*Kicking Horse River and CPR near the Great Divide, 2-5  
circa 1900*

returned to England via the Columbia River, Nanaimo BC, and San Francisco in 1860.

### Palliser Expedition Report 1860-1861

During his three years, Hector journeyed over three thousand kilometers across Alberta. In the Palliser reports written primarily by Hector, he described the three prairie steppes or roughly one per prairie province and identified the Yellowhead - Winnipeg fertile belt as ten million acres in size. He connected the North-South aligned Palliser triangle with the Great American Desert in the USA to the south of it. The size of the triangle he estimated at 80,000 square miles or 10,000 square miles smaller than previously thought.<sup>(9)</sup>

Hector made recordings of daily temperature, precipitation, and hours of sunlight. He noted the location



*CPR Train at The Great Divide, circa 1904 2-6*

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7. Erasmus, Peter *Buffalo Days and Nights*, pages xix-xxi, 74-78. Additional references to the Kicking Horse incident may be found in 1) Bruce Haig's *James Hector, Explorer*, 51 pages, Alberta Historical Resources Foundation, Calgary, 1983; 2) Mary S. Schaffer's article on "Sir James Hector", in *Rod and Gun in Canada*, pages 416-418 January 1904; 3) Mary S. Schaffer's "Palliser's Expedition some intimate glimpses", in the *Calgary Herald* (n.d.) circa 1929, deposited as Manuscript M79: 6, 2, in the Whyte Museum; and 4) R. Lampard's "The Hector Memorials of 1906", in *Alberta History* 50(4): 2-11, Autumn 2002, reprinted in Part 2.
8. Lampard, Robert "The Hector Memorials of 1906: Tributes to Sir James and Douglas Hector", *Alberta History* 50(4): 2-11, Autumn 2002. Reprinted in Part 2.
9. Spry, Irene M. *The Palliser Papers*, Champlain Society, Volume 44, 694 pages, 1968. For further information see A.R. Turner's "Palliser of the Triangle", *Beaver Outfit* 288: 4-9, Autumn 1957.

of prominent geographical landmarks and located the larger rivers.

Lt. Blackiston departed for China after the first year. Bourgeau and Sullivan left after the second year, leaving Hector and Palliser to continue the work of the expedition through the third season, with no guarantee of payment. In the third year Hector collected another forty-two botanical specimens. The first collection of 819 specimens had already been sent to the Kew Gardens with Bourgeau.<sup>(10)</sup>

Hector mapped, entered, or crossed eight passes including the Bow, Kicking Horse, Vermilion, Pipestone, Howse, Athabasca, Sunwapta and Yellowhead. The first three were new passes. Palliser traversed the North and South Kananaskis, Palliser, and Elk Passes. Blackiston traveled to southern Alberta and entered the North and South Kootenay Passes but missed the Crow's Nest Pass.<sup>(11)</sup>

Hector made first ascents of Mounts Grotto, Pigeon, Sullivan and Miette and named at least thirteen peaks, assessing the maximum elevation of any one of them at 13,000 feet. It was the most accurate elevation estimate to date.

Like Dr. Rae, Hector learned from the Indians how to live off the land. He assisted Father Lacombe in drafting the first Indian vocabulary. Medically he identi-



North Bend Hotel on the Fraser River, circa 1910 2-7

fied the presence of goitre amongst the Northern Crees and encouraged better hygiene practices amongst the all-native tribes he visited. When necessary, he prescribed tea for diarrhea and was quite



Glacier House on Rogers Pass, circa 1910 2-8

willing to use strychnine to silence menacing wolves.

The Palliser Expedition's findings<sup>(12)</sup> confirmed the need to keep the HBC monopoly in place on the prairies to control the flow of liquor to the Indians. They noted the transportation difficulties caused by the shallow and widely spaced rivers, and the exorbitant cost of crossing any mountain pass with a railway. The lowest and cheapest pass the expedition found through the Rockies was the Yellowhead. All prominent geological features and landmarks were located on what became known as Palliser's Great Map (1865). It was still the only map available for use by the NWMP on their 1874 Trek, and the late 19th century Canadian Rocky Mountain alpinists.

### The New Zealand Years 1861-1907

In 1861 Palliser and Hector completed the 467 page report without remuneration. Dr. Hector then accepted a position with the New Zealand Geological Survey. In time he became its Director and later a Senator and Chancellor of the University of New Zealand. Queen Victoria awarded Dr. Hector a CMG in 1875 and knighted him in 1886.<sup>(13)</sup>

### Return of the Hectors in 1903

In August of 1903, Dr. Hector and his son, Douglas, returned to Canada, compliments of the CPR. The trip was to identify where Hector had been kicked by his horse, close to the junction of the Beavermouth and Kicking Horse Rivers. The river had been marked and named by Hector as the Kicking Horse River on Palliser's Great Map forty years earlier in 1863. The CPR construction crews had crossed the Divide at

10. Patterson, Harry S. "Sir James Hector, M.D., 1834-1906" (sic), CACHB 6(3): 1-10, November 1941.

11. Hector, James "Physical Features of the Central Part of British North America". Edinburgh New Philosophical Journal, pages 1-35, October 1861.

12. Palliser, John, Hector, James *Explorations of British North America*. British Parliamentary Papers 1859, 1860, 1863, 1865.

13. Burnett, R.I.M. *The Life Work of Sir James Hector*. Masters Thesis, 173 pages, University of Otago, Dunedin, New Zealand, 1936.

the Kicking Horse Pass during the summer of 1884. The new railway followed the river valley down to Field and Golden, BC.

During the return visit, the Hectors over-nighted at the North Bend Hotel at the upper end of the Fraser Canyon. At Glacier House on the summit of the Rogers Pass, Douglas Hector developed appendicitis. Despite emergency surgery in Revelstoke, BC, Douglas Hector died three days later on August 16, 1903. He was buried in the Revelstoke Cemetery. His grief stricken father returned to New Zealand without identifying the location of the now famous Kicking Horse accident.

In 1906, the Revelstoke grave of Douglas Hector was covered with a slab of Cascade Range granite. The same granite was used to create the Hector memorial cairn, located first at the Lake Louise CPR station (1906), before being moved to the Great Divide circa 1909. It has remained there ever since, the oldest monument in any Canadian National Park. The two cairns were paid for by an international subscription, organized by surveyor A.O. Wheeler, Sir Sanford Fleming and University of Chicago Professor Charles Fay.<sup>(14)</sup>

The inscription on the Great Divide Cairn on the summit of the Kicking Horse Pass reads:

“Erected in Honor of  
SIR JAMES HECTOR, K.C.M.G.  
Geologist & Explorer to the Palliser Expedition,  
1857-1860.  
By his friends in Canada, the  
United States & England.  
One of the earliest  
scientists to explore the Canadian Rocky  
Mountains, he discovered the Kicking Horse  
Pass through which the Canadian Pacific  
Railway now runs from the Atlantic to the  
Pacific Ocean.  
Erected in 1906.”

Dr. Hector passed away in Wellington, New Zealand on November 6, 1907.<sup>(15)</sup> He was remembered in Alberta through the naming of two Lake Hectors, the Kicking Horse River and Pass, one railway point on the Kicking Horse Pass, and prominent Mount Hector north of Lake Louise. Hector descendents survive in Ontario and New Zealand.<sup>(16)</sup>

**Related Profile:** Rae

**Key Words:** Palliser Expedition 1857-1860, Palliser's Great Map, Kicking Horse River and Pass, Rocky Mountain Passes from the 49th Parallel to Jasper



*Inscription: Douglas Hector of Wellington, N.Z. 2-9  
Died August 15 (sic), 1903. Aged 26 Years.  
Revelstoke Cemetery*



*Ian Hector MD at the Hector Cairn 2-10  
on the Great Divide, 2002*

14. Lampard, Robert

“The Hector Memorials of 1906”, pages 2-11. Reprinted in Part 2.

15. Lampard, Robert

“The Hector Memorials of 1906”, page 7. Reprinted in Part 2.

16. Hector, Ian

Dr. Hector is a noted Canadian psychiatrist. The Ian Hectors are related to the New Zealand Hectors and are descendents of the English Hectors. They live in Ontario. The Hectors visited the Great Divide Cairn, and the author in September 2002.