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# *Time and Sandford Fleming*

*He was one of the most remarkable figures in the history of a remarkable nation. Yet we tend to forget all he did, perhaps because the benefits of his work are so commonplace today. Here, an appreciation of the legacy of Sir Sandford Fleming, Renaissance Man and Canadian. The first in an occasional series on great people in Canada's past . . .*

□ Sir Sandford Fleming is not totally unsung, but considering what Canadians owe him 63 years after his death, it is odd that we so rarely celebrate his fantastic achievements. In his own way, he did as much as Sir John A. Macdonald or Sir Wilfrid Laurier to strap the country together. Yet if you were to ask a hundred assorted Canadians to identify Sandford Fleming, most of them would probably say that he was a senator from New Brunswick or a one-time defenceman for the Boston Bruins.

Words memorialize statesmen — words in speeches, words in print. But Fleming was an engineer, and as he said himself, "engineers must plod on in a distinct sphere of their own, dealing less with words than with deeds, less with men than with matter". Though Fleming was in fact one of the more verbose engineers of a verbose age, the truth remains that his legacy lies in what he did and not what he said and others said about him. The benefits of his acts are so familiar today that we scarcely spare them a thought.

Thanks to Fleming, the world runs on standard time. He was both a professional railwayman and an amateur steamship authority. As such he saw that, although trains and ships got faster and faster, the chaos in time-keeping threatened to cancel every gain they made. International schedules were a railway clerk's nightmare, a traveller's parallel to Babel. Even within the borders of one country, confusion reigned. At noon in Toronto in 1880, it was 11.58 in Hamilton, 12.08 in Belleville, 12.25 in Montreal. Railroads in the United States used one hundred different time standards. Stations displayed rows of clocks telling the time at different points along the railway. Veteran travellers carried watches with as many as six dials.

It was to bring sweet reason to this time-keeping madness that Fleming invented the system of 24 time zones based on a prime meridian of longitude at Greenwich, England. Scientific societies initially treated the scheme as a crackpot's dream, but he doggedly flogged it for 20 years. Earl Grey, the Governor General who gave the Grey Cup to Canadian football, once said Fleming had "the missionary fervour of St. Paul". In the matter of standard time, the big, bearded, Canadian engineer slowly made the world give in. By 1890, North America, Great Britain, Sweden, most of Europe and Japan had all adopted the system. Sandford Fleming is the reason why anyone today can open an atlas, look at a clock, and calculate the time on the far side of the earth.

His influence on where Canadians go in their own country will survive as long as railway trains clatter from coast to coast. Why does *The Ocean Limited,* Montreal-bound from Halifax, penetrate this particular forest, rattle westward beside that particular river? Who was it that, in 1862, gave the

Canadian government the first practical plan, worked out to the last cross-tie and dollar, for a railway to the Pacific? Who said, "The Pacific Railway would surpass in every element of magnitude and cost any work ever undertaken by man" — and who, a dozen years later, became chief engineer of this same, stupendous construction job? Who led historic and death-defying forays into the Rocky Mountains to survey not only the CPR's route through Kicking Horse Pass but also what would one day be CNR's route through Yellowhead Pass? The answer, in every case, is Sandford Fleming.

Fleming was well over six feet tall. His beard had turned white by November of 1885 when, at Craigellachie, B.C., a hunchbacked Winnipegger named Ross took the most famous photograph in Canadian history. It shows a bunch of navvies and dignitaries in the mountain mist. They are wearing dark, rumpled clothes, bowlers and caps, and they surround CPR director Donald Smith as he drives the last spike for the railway Fleming had first planned 23 years before. Behind Smith, wearing a stove-pipe hat and almost dominating the photograph, looms Fleming himself. The bottom of his beard looks like the edge of a shovel. He appears as solid and impassive as a totem-pole, but the moment moves him deeply. Later, he would write:

> Most of the engineers, with hundreds of workmen of all nationalities, who had been engaged in the mountains, were present . . . The blows on the spike were repeated until it was driven home. The silence, however, continued unbroken . . . It seemed as if the act now performed had worked a spell on all present. Each one appeared absorbed in his own reflections . . . Suddenly a cheer spontaneously burst forth, and it was no ordinary cheer. The subdued enthusiasm, the pent-up feelings of men familiar with hard work, now found vent. Cheer upon cheer followed . . . Such a scene is conceivable on the field of hard-fought battle at the moment when victory is assured . . . As the shouts subsided, a voice was heard in the most prosaic tones, as of constant daily occurrence: "All aboard for the Pacific." The notice was quickly acted upon, and in a few minutes the train was in motion. It passed over the newly-laid rail and, amid renewed cheers, sped on its way westward.

Sir Andrew MacPhail, professor of medical history at McGill University and sometime author, said it was just possible Fleming was not the greatest engineer who ever lived; he was merely "the greatest man who ever concerned himself with engineering". Fleming concerned himself with much more. He designed Canada's first postage stamp in 1851. He founded a society of professional men, called it The Canadian Institute, and lived to celebrate its 50th anniversary. On September 5, 1883, at 4,600 feet above sea level in the Selkirk Mountains, he also helped found the Canadian Alpine Club and became its first president. (That was the day he and his party named Rogers Pass and, before plunging forward on an expedition that almost cost them their lives, had a wild, mountain-top game of leap-frog. Fleming was 56.)

## *Making way for nationhood with oysters and champagne*

He was the first lithographer in Canada, and printed the country's first real town maps. He drew up an elaborate plan for Toronto Harbour, where he took out a row-boat and did all the soundings himself. He wrote articles on ocean navigation, steamboats, historical pictures, postage stamps and colour-blindness. (He was colour-blind; once he unintentionally alarmed his future wife by courting her in a pink suit that clashed with his red beard.)

He wrote a book of *Short Daily Prayers for Busy Households,* invested so shrewdly that he was wealthy by his mid-thirties, and, at the time of the historic Charlottetown conference of 1864, dreamed up and successfully promoted post-conference trips by the Canadian delegates to Halifax and Saint John. He believed that "there is nothing like the brotherhood of knife and fork"; and as his own lusty parties in Ottawa and Halifax had already proved, his was also a brotherhood of oysters and champagne. After the Maritime parties in 1864, the Saint John *Morning Telegraph* patted its editorial tummy and allowed: "The Canadians are good fellows and a jolly set, and we are sorry to part with them." Fleming had made the ground for the planting of Confederation softer than before.

Fleming had a knack of showing up at places where Canadian history could breathe on him. In 1849, he travelled from Toronto to Montreal to get a surveyor's license, and walked right into a riot. A street mob had pelted the Governor's carriage with rotten eggs and stones and the throng swept Fleming to the doors of the burning Parliament Buildings. He was then 22, and only four years out of his home in Kirkcaldy, Scotland. He promptly organized a small party to rescue a massive painting of Queen Victoria. A lifelong lover of the British Empire, Fleming would later celebrate supreme moments, such as crossing the Great Divide in the Rockies, by drinking a toast to Queen Victoria in the sparkling water of an alpine brook.

## *Around the world and back again via Fleming's cable*

Having welded Canada together by rail, Fleming decided to weld the Empire together with cables. The massive missing link in the imperial communications system lay between Canada and Australia. In 1879 he wrote his first letter to propose a Pacific cable. After a campaign which, for tenacity and dipping into his own ample pocket, put even his promotion of standard time to shame, he at last saw the cable go into service on October 31, 1902. The Prime Minister of New Zealand sent a wire to congratulate him. To mark the occasion Fleming sent westbound and eastbound messages around the world and back again.

Even in an age that regarded work as holy, Fleming's work-addiction was spectacular. As a boy in Scotland, he had copied the following from Benjamin Franklin's *Poor Richard's Almanack:* "But dost thou love life? Then do not squander time, for that is the stuff life is made of. How much more than is necessary do we spend in sleep, forgetting that the sleeping fox catches no poultry, and that there will be sleeping enough in the grave. Sloth maketh all things difficult, but industry all easy." Fleming spent his whole life, all 88 years of it, refusing to squander time.

It was a tribute not only to his reputation as an engineer but also to his lust for work, and more work, that at one time he held down no fewer than three of the biggest railway jobs in the country. He was chief engineer for the Intercolonial Railway, under construction between Halifax and Quebec; chief engineer for the CPR, for which he was to survey the route to the Pacific; and chief engineer of the survey for what would one day be the Newfoundland Railway. "No man without his extraordinary mental and physical vigour could have borne the tremendous strain," his friend and biographer, L.J. Burpee, wrote. "The task was Herculean." Fleming was the quintessential hard-working Scot in the New World.

But if Fleming was a Scot he was also a super-Canadian. It is a cliché of our history that the challenge of conquering distance to achieve unity has forced Canadians to master solutions to problems of communication and transportation. Fleming's passions included railways, telegraph systems, steamships, ocean navigation, postal communication and cables to girdle the globe.

## *A link between the boardrooms and the wilderness all about*

He was also that peculiarly Canadian type, a gentleman of the wilderness. He was a scholar, a scientist, an unswerving churchman, a man of public affairs. Yet he was as hard as an axe-blade, second only to the Indian at scratching a living out of the wilds. He hob-nobbed with princes and trappers, governors and Métis, prime ministers and Indians, lords and frontier horse traders. The Renaissance Man of the Wilderness was the link between hinterland and the boardrooms, bureaucracies and universities. Fleming flourished in both worlds.

He crossed Canada by foot, snow-shoe, dog team, canoe, wagon, raft and dug-out. But he cruised Venice in a gondola and went up in a balloon in Paris as well. He once drove a sleigh from Shediac, N.B., to Rimouski, Que., a journey of more than 300 miles in five days of ferocious winter weather. He also visited five continents by steamship and revelled in that supreme luxury, a private railway car.

Out on the prairie, he met a Sioux chief with a bear-claw necklace, skunk's fur at his ankles and hawk's feathers in his hair; in Paris, he met the Prince of Wales and joined him in the royal box at an opera. On the trail of a future railroad, he pulled a wolfskin over his head and joined a gang of dancing Indians. In London he ran into Sir John A. Macdonald. The two and their wives spent a couple of days together, shopping and sightseeing in high style along the banks of the Thames.

## *"What made them elect a man who has never been to college?"*

He spent the night of his 24th birthday sleeping on the banks of Lake Huron in three feet of snow and a wind that pushed the temperature down to −14F. He spent other birthday nights on feather mattresses in the four-posters of the most sumptuous hotels in Europe. Once, with an umbrella, he routed a large bear that blocked his path in a desolate part of Ontario. There were times when he ate bear, moose lips, snipe, loon, yellowlegs and, of course, roast buffalo. He could happily eat lunch under an upturned canoe during a rainstorm, or at the best Parisian restaurants.

Sometimes his wilderness world and his society world converged. In 1864, for instance, the Governor of New Brunswick insisted he come to dinner. Fleming had no choice but to arrive in the clothes he had been wearing for weeks on end in the deep forest: a red flannel shirt, homespun trousers, rough boots. "You can imagine the sensation I made when I entered the drawing room at Government House, filled with ladies in wonderful toilets and officers in full dress uniform," he wrote. "However, I was given a charming companion to take in to dinner, and enjoyed myself immensely."

He knew the Premier of Australia, the Queen of Hawaii, and, according to Sir Andrew MacPhail, "every personage of note in the Empire". He got to know at least some of these personages in the wilderness. In July, 1880, for instance, he went salmon-fishing on the Matapedia River in Quebec. In only five days there, he dined separately with George Stephen (the future Lord Mount Stephen), Donald A. Smith ("last-spike" Smith, the future Lord Strathcona), Lord Elphinstone, and the Duke of Beaufort. He also found time to share "a splendid bonfire" with his old friend George M. Grant, the principal of Queen's University, and Princess Louise and Prince Leopold. They were both children of Queen Victoria, and Louise was the wife of Lord Lorne, Governor General of Canada. At the end of this gruelling backwoods social schedule, Fleming reported that his son had caught a 25-pound salmon, and that "I lost one in gaffing — almost hooked another — finally landed two — very tired." He was only 53. He could not slow down yet. There would be sleeping enough in the grave.

That was the year he became chancellor of Queen's University and happily confided to his diary, "This is the strangest thing of my life. What made them elect a man to the highest position, who has never been in his life at college?" He had first seen Queen's only a few days after his arrival in Canada in 1845. The 35 years since then had given him a lot to be thankful for. He had a loving wife, a place called "The Lodge" on the Northwest Arm in Halifax, a family mansion called "Winterholme" in Ottawa, a tract of salmon-fishing territory in northern New Brunswick, the right to travel free on some of the world's best trains, independent wealth, general respect and, in the university appointment, prestige.

Not long before he died on July 22, 1915, Fleming reflected on "my great good fortune to have my lot cast in this goodly land". He added, "I have often thought how grateful I am for my birth into this marvellous world." Others, too, might occasionally consider being grateful for his birth into this land and this world. A good *place* to consider Sandford Fleming is aboard a train on the CN main line as it chugs up to Montreal from the Atlantic Ocean, or the CP line as it arrows across the Prairies, zooms into the mountains and rampages down to the western sea. A good *time* to pay him a silent tribute is the moment you cross from one time zone to another, anywhere the world over, and adjust your watch.

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