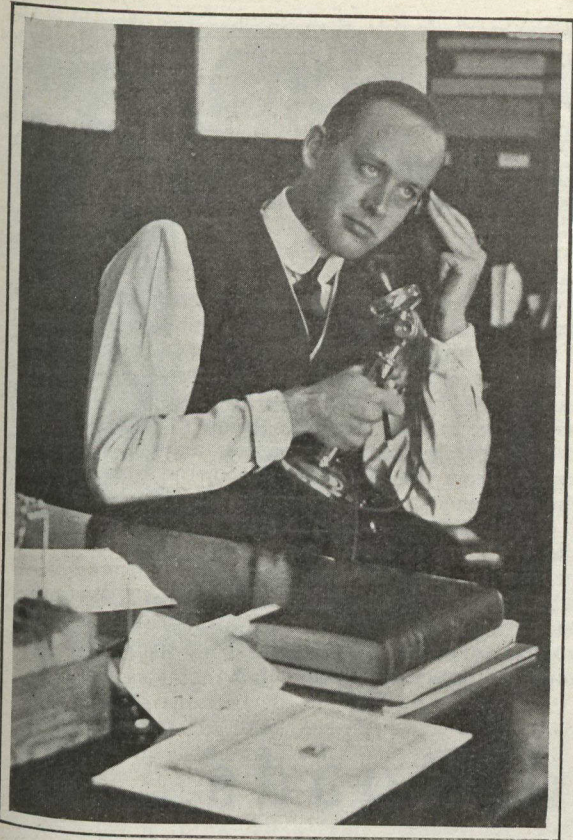


Growing Through a Mountain

With a Personal Account of an Idea, a Tunnel and a Suburb

By NORMAN PATTERSON



STEPHEN PEARSON BROWN,

Who will Bore Mount Royal for the Canadian Northern Railway.

WHO is the author of the idea of a tunnel through Mount Royal in order to double the size of the city of Montreal? This is the question I asked a Canadian Northern official and to which I got no definite answer.

"It was in the air, I guess," he said. "Though I believe that man Wicksteed had been dreaming of it for twenty years."

When I inquired further I heard a little story which seems authentic. When Wicksteed, the engineer, carried the idea to Sir Donald Mann he found that that shrewd railway builder had been in possession of the idea for some time. He had quietly kept it "up his sleeve" to see if his engineers would reason it out as he had.

Take up the map of the Island of Montreal and look at it. It is shaped like the foot of Italy, with the toes turned north instead of south. In the south end of it, the heel of the foot, is Mount Royal. Squeezed in between the St. Lawrence is a narrow strip of precious land known as the City of Montreal—the largest, the wealthiest and the greatest city in Canada. For three hundred years that city has been climbing up from the river bank to the edge of the mountain, even up and along its steep sides. Wherever there was a foothold, there you will find a street and a habitation. Indeed it swept on past the Big Mountain to the little mountain, and around the ends of both. The streets are sometimes narrow, and always three houses are piled one on top of another in narrow, short lots. In Toronto the average lot is 35 feet wide and 100 feet deep. In Montreal it is 25 feet wide and 60 or 70 feet deep. On a single lot, Toronto houses one family; in Montreal, three families live in super-imposed flats on a single lot.

Small wonder that Engineer Wicksteed and other men dreamed of a tunnel through the Mountain, out into the thousands of flat, succulent acres which lie between the Huge Rock and the Back River. And now the dream is come true. There is to be a tunnel from the middle of the big city, under St. Catherine and Sherbrooke Streets straight through for three and a third miles.

Wicksteed may have planned this, but Brown will execute the work. Brown comes from New York, where tunneling for the sake of a congregated humanity has become an accepted art, an exact science. Brown helped to pierce a hole under New York City, from the Hudson to East River, big enough to let the Pennsylvania trains run through at sixty miles an hour. Brown will now pierce Mount Royal to enable the Canadian Northern trains to carry passengers in eight minutes from the centre of Montreal to a model suburb or model suburbs on the north side.

Brown is young and tall and smooth-

faced, but he is enthusiastic about tunnels. He can tell you how they built the famous tunnel under the Euphrates into Babylon, of the Egyptian tunnels, and the Roman tunnels, and the modern Alpine tunnels. He knows how engineers did the work before the invention of black powder and nitroglycerine and compressed air rock-drills. In a little office in St. James Street, Montreal, he sits and plans to make a new record in tunnel piercing. It may take him three years, it may require four, but Brown will be a disappointed man if he does not complete it in twenty-four months. Brown is out to make a reputation—and with ordinary luck he will do it.

"Do you expect to find hard, solid rock all the way through?" I asked him.

"I hope so," he replied, "the harder, the better. Soft rock and earth tumble down and around your ears and make the work slow. With hard rock you do not need supporting timbers and you can even operate big scoop excavators to gather up the broken rock and put it in the dump cars."

And then he told me about the Loetschberg tunnel, and how they struck a soft spot from which came water and mud and gravel enough to bury twenty-five men, all the drilling machinery and to fill up

it would do to get Montreal citizens quickly into the country, but how to pay the bills? The clever men in the Canadian Northern Railway spent some of their grey matter on the problem. It was Colonel Davidson, manager of the land department, who hit upon a workable scheme. They would buy up all the habitation farms north of the mountain, beyond Outremont, out toward St. Lambert and Cartierville and lay out some new suburbs. They would buy this at the price of farm lands and sell it at the price of city lots. The profit would go to help pay for the tunnel. And they did this very thing!

But to sell farm lands at city lot prices is not an easy task. There must be a reason. Hence they called in the city planner—an expert, Frederick G. Todd by name. To him they said "plan us a model town, with diagonal streets, circular driveways, gardens and parks, public buildings, and street-car services. Make it the best model town in the world." And this man went to work. Examine the result and you see the latest thing in town-planning. It is more perfect than any town or suburb ever laid out in Canada, except, perhaps, the town plot of Goderich on Lake Huron. It is equal to anything in America, except possibly the city of Washington.

In future, when people plan new towns and new sub-divisions in this country they will take Mr. Frederick G. Todd's "Mount Royal" as their model if they are real town builders and not amateur real-estate agents. Perhaps the lots might have been a little deeper with advantage; but the Montrealer is not accustomed to large patches of green sward in front of his house and a capacious kitchen, garden. Perhaps the parks might have been larger, but as it is they are more numerous and broader than any hitherto dedicated to public use by any Canadian planner of an annex or a sub-division. On the whole, the work was creditably done.

Because of this scheme, when the lots were put upon the market they sold at high prices. The lowest priced fifty-foot lot was about \$1,200, and from this it ran up to \$6,000 for central business lots thirty-three feet wide. Everybody agreed that the price was high, yet on the morning that the sales began the purchasers tumbled over each other in their anxiety to get a slice of the new domain. The writer was on hand that day, and saw for himself that the people of Montreal thought highly of the tunnel and the new model town. The prospect of having a home which could be reached in ten minutes where hitherto they had required thirty minutes, was too alluring to be withstood. Then again, no snow or rain penetrates the tunnel. There is neither snow-plough in winter nor street sweeper in summer to contend with.

Can Montreal Stand It?

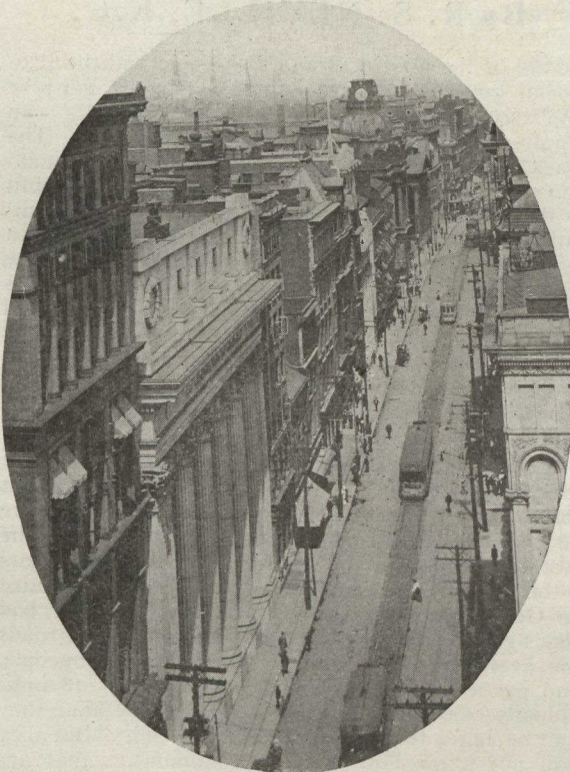
Does Montreal need this new town? This is a question which one naturally asks when he sees a new town, capable of housing 50,000 people, brought into the market. The Montrealer immediately and unhesitatingly answers "Yes." The outsider needs more convincing.

In 1901, Montreal exported goods to the value of \$56,000,000; in 1911 the exports were worth \$71,000,000. During the same period, the imports grew from \$65,000,000 to \$129,000,000. In 1901, the amount of duty collected at Montreal was \$9,000,000; in 1911 it was \$19,000,000. This is proof number one.

In 1901, Montreal had a population of 283,590; in 1911 the census figures placed it at 515,570. If Montreal grows at the same rate during the next ten years, it will have a population of a round million. If it merely makes the same net increase it will have 750,000 people within its borders. This is proof number two.

Judging by its bank clearings, Montreal is now the ninth city in North America. While last year bank clearings have been showing declines in New York, Philadelphia, Pittsburgh, Chicago and Kansas City, on the other hand Montreal shows an increase of 13 per cent. Montreal has become a great financial centre and this means much for its future development. As Canada grows Montreal must grow. This is proof number three.

Montreal has been on the line of only



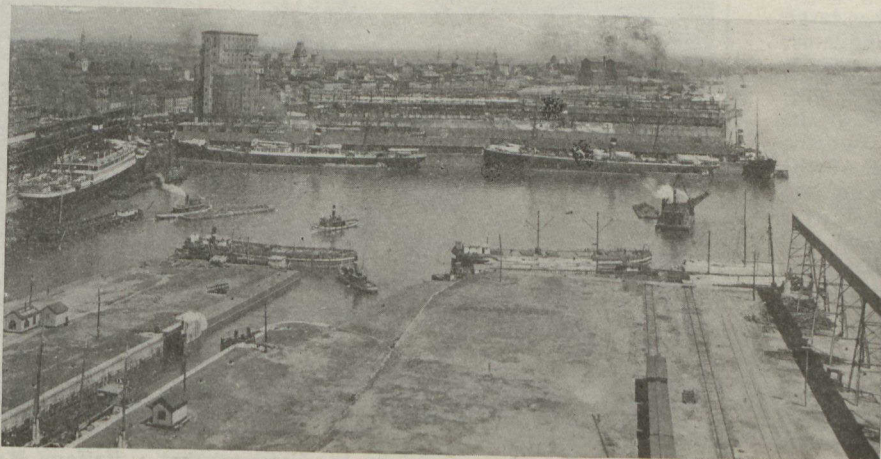
ST. JAMES STREET.
Financial Centre of Montreal.

thousands of feet of the hardly won passageway. He hopes that Mount Royal is really solid rock right down to the water-level.

So much for Stephen Pearson Brown, Managing Engineer for the Montreal Tunnel and Terminal Construction Company, behind which stand Mackenzie, Mann & Co.

How to Pay the Bills.

Easy enough to think of the tunnel and of what



MONTREAL HARBOUR.

Nearly 3,000,000 Tonnage of Shipping in a Year.