

Earthquakes and Other Phenomena in New France

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My direct paternal ancestor, **Pierre Boivin**, experienced a massive earthquake in 1663. Here is how his contemporaries described the event, along with a few observations about natural phenomena occurring during his lifetime.

Most likely Pierre Boivin was in Montréal on February 5, 1663. Although he had received the sacrament of Confirmation at Chateau-Richer on 11 April 1662,¹ by November 21, 1662, he was working for the Sulpiciens of Montréal to clear four “*arpents*” of land at their farm, St-Gabriel.”² Pierre Boivin was at that time a servant of Jacques Picot *dit* Labrie. No matter where he was in New France in February of 1663, though, he would have experienced the largest earthquake ever in North America (at least to that date), later estimated as between 7.5 and 8 on the Richter scale. It occurred at 5:30 p.m. on *Lundi Gras*, the Monday before *Mardi Gras* (Fat Tuesday, thus two days before the beginning of Lent) and continued for thirty minutes. The epicenter was calculated to have been at La Malbaie.³ Mother Marie de l'Incarnation (Marie Guyart *dite* de l'Incarnation, founder of the Ursulines in New France),⁴ an eyewitness at **Québec City**, vividly recorded the event in her *Letters*. The translation of these excerpts is mine.

Everything was very calm and serene when we heard from afar a loud noise and a terrible buzzing sound, as if many coaches were rolling on cobblestones with speed and recklessness. This sound had no sooner attracted our attention when we heard it coming from underground, above ground, and from all sides, like a confusion of floods and waves, creating horror.

The sound, like a hail of stones on the rooftops, could be heard everywhere, in the barns and in our rooms. It seemed as if the solid rock, upon which almost all of the country rests and on which the houses are built, would open up, break into pieces, and gobble us up. A thick dust flew everywhere. Doors opened of themselves; other doors, which had been open, closed. All the bells in all of our churches rang out of their own volition as did the bells of our clocks; and the bell towers as well as our houses shook as trees do when the wind blows; and all this happened in a terrible confusion of furniture falling over, stones flying, floors cracking open, walls breaking apart. Through all this we could hear our domestic animals howling. Some people ran out of their houses; others ran in. In a word, all of us were so afraid, because we believed it was Judgment Day since we could see all the signs [...]

After the first shaking, dismay was universal. And since we did not know what was happening, some cried “Fire,” believing there had been an explosion; others ran for water to put out the fire; others seized their weapons, believing the Iroquois army had come. But since it was none of these things, all everyone

¹ Cited in the biography of Pierre Boivin by Michel Langlois, *Dictionnaire Biographique des Ancêtres Québécois* (1608-1700) Tome I, Lettres A à C, Sillery: La Maison des Ancêtres & Les Archives Nationales du Québec, 1998.

² Cited by Fernand Boivin, *Les Boivin*, Publication Numero 121, LeCentre de Généalogie S. C., Montréal: 1989.

³ Christiane Perron, *La vie d'un pionnier de l'Île d'Orléans*, Longueuil: Christiane Perron, 1989, p. 99.

⁴ See *Dictionary of Canadian Biography*, Vol. 1, for her biography.

could do was jostle everyone else to escape the destruction of the houses that seemed about to fall apart.

Once outside, we found no more safety than inside: because, by the movement of the earth that shook beneath our feet like waves broken up beneath a small boat, we understood at last that it was an earthquake. Several people hugged trees that, their branches bending and mixing one into another, caused no less horror than the houses that had been abandoned; others grabbed on to roots that, by their movement, struck them rudely on the chest. The Indians [*Sauvages*], extremely frightened, said the trees were beating them. Some among them said it was demons sent by God to chastise them because they had drunk the brandy that the bad Frenchmen had given them. Other Indians, who were less instructed [in the Faith], who had come to hunt in this area, said it was the souls of their ancestors returning to their ancient home. To get rid of them, they took their guns and shot into the air toward a band of passing spirits, or so they said. But, at last, our “habitants” [inhabitants] as well as our *sauvages*, finding no asylum outside, nor in their houses, for the most part fell into weakness and fainting, and, accepting wiser advice, entered the churches to have the consolation of perishing after having confessed [...]

A month passed in that manner in the fear and uncertainty of what would happen next; but at last, when the quakes diminished, occurring less often and less violently, except two or three times when they were very strong, we began to discover the ordinary consequences of such earthquakes when they are so violent; we learned about a number of crevasses in the earth, new streams, new springs, new hills where there were none before; some land was flat where before it had been mountainous; new abysses had opened up in some places, from which arose sulphurous vapors, and, in other places, that once were filled with trees, nothing but vast plains; rocks were overturned; plots of land were moved; forests destroyed: some trees were turned upside down and others driven into the earth to the level of their branches. We saw two rivers disappear; we found two new springs, one as white as milk, and the other as red as blood. But nothing was more astonishing than to see the big river, the Saint-Laurent, which, because of its extreme depth never changes, not from melting snow that ordinarily changes most rivers, not by the confluence of 600 rivers that empty into it, without mentioning the 600 springs, large ones for the most part; to see, I say, this river change its course and take on the color of sulfur and stay that way for eight days (...)⁵

Gustave Lanctot, in his *History of Canada*, gives more details, these taken from the Jesuit *Relations* and *Journal*:

[At Trois-Rivières] the high banks of the St. Maurice collapsed along a considerable extent carrying all the trees at the water's edge into the river. A powerful current bore such huge amounts of earth down to the St. Lawrence that even this mighty river's flow was silted and slow for three months. Two hills collapsed into the water at St. Paul Bay and Pointe-aux-Alouettes. At Montréal,

⁵ Quoted by Christiane Perron, *La vie d'un pionnier de l'Île d'Orléan, Robert Gagnon, 1628-1703*, pp. 98-101, from Richaudeau, *Lettres de la Révérende Mère Marie de l'Incarnation*, Tournei: H. Casterman, 1876, tome II, pp. 228-233, 243, 313-314, 375. Translation mine. Elisions [...] are by Perron.

the seismic tremors were weaker but they shook the buildings as though they were leaves in the wind. People fled from their houses and patients left the hospitals. Madame d'Ailleboust leapt from her bed half-dressed and raced towards the Abbé Souart, crying, "Confession, Father, confession!" while her servant followed her, trying to give her a skirt.⁶

Seven months later, August 20, 1663, Marie de l'Incarnation wrote: "The earth still quakes. But what is admirable in the midst of the strange and universal debris is that no one has died. No one has even been injured." The earth rocked again in December 1664; January 1665; and April 1668. The original quake was felt in Acadia and New England.⁷ At Trois-Rivières, before the aftershock of December 1664, on November 4, 1664, Pierre married **Étiennette Fafard**, daughter of Bertrand Fafard and Marie Sédilot. Their marriage contract had been passed before the notary Séverin Aneau the previous July 1, 1664. (Photocopies of both records.)

But these earthquakes were not the only unusual events of the time; there were other natural phenomena experienced by the *habitants* of New France. On the 18th of December, 1664, Marie de l'Incarnation reported, in a July 1665 letter, "a comet appeared at Québec at about midnight, which was visible until six o'clock in the morning and continued for some time." And "On the 20th of December, at about three o'clock in the afternoon, three suns were seen at a distance of about a quarter of a league from one another; these lasted for about a quarter of an hour and then came back together into the usual sun."⁸ Comets were observed in January and February of 1665, and other fiery phenomena, including a "sort of dart ... [that was] high in the air and, because it was directly between us and the moon, so that it seemed actually to be in the moon, there were some that believed—and said—that they had seen the moon pierced by an arrow."⁹ Under portents such as these, the young couple, Étiennette Fafard and Pierre Boivin, began their married life.

Today, we have almost instant access through television or internet of unusual celestial events and the havoc earthquakes cause. That such vivid accounts of natural phenomena experienced by my ancestors have survived is a marvel.

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12 May 2004
2013 Version

⁶ Gustave Lanctot, *A History of Canada: From the Royal Régime to the Treaty of Utrecht, 1663-1713*, translated by Margaret M. Cameron, Cambridge, Massachusetts: Harvard University Press, 1964, Vol. II, pp. 264-65.

⁷ Christiane Perron, *La vie*, pp. 99 and 101.

⁸ Joyce Marshall, Editor and Translator, *Word from New France, the Selected Letters of Marie De L'Incarnation*, Toronto: Oxford University Press, 1967, p. 308.

⁹ Marshall, p. 309.