

preceding day a farmer was using 6 horses for plowing to a depth of 20 to 22 inches, and had to rest his horses every 40 or 50 yards. However on the following day he found that 4 horses could easily do the same work and with fewer intervals of rest. This fact the farmer attributed to the loosening of the heavy ground by the quake, and the explanation seems plausible.

In conclusion let me say that the earthquake of April 28 last was a very minute manifestation of the pent up energy of the earth, although to us, small crawlers on the surface, it aroused fear and trembling in some quarters. The earth is always under strain and from various causes. Some of these causes are periodic like the daily squeezing, and to the very core, that the earth undergoes by the attraction of the moon in its path around the earth. Again, in the upper crust we have a bulge following the daily heating by the sun. The cooling of the earth, which we assume but cannot prove as existing at the present time, produces strains of a cumulative nature; so does the action of the elements, (rain, snow, water, wind, frost), ceaselessly wearing down here, building up there; ever changing the distribution of matter upon the surface of the earth; lessening the pressure in one place, increasing it at another; mountains rising, sea-bottoms sinking, minutely but continuously day by day, year by year, until at times the strain becomes greater than the rocky crust can resist, and then this big 8,000-mile sphere gives a little jerk, perhaps only of an inch, to have its coat fit more snugly, when suddenly the crawlers shout,—an earthquake—, while the earth is scarcely conscious that she did anything.

In our part of Canada, in fact over the greater part of Canada we need have no fear of any disastrous earthquake, we are too near the primeval rock, we have too few formations beneath us in which the compression and adjustment take place. The weak line of the surface of the earth in eastern Canada, an old wound that is not perfectly healed, and that would be the first to open afresh, if strains were to become excessive, is the Great Champlain fault running down the bed of the St. Lawrence from Levis to the Gulf, and already referred to.

We may rest in peace, we are not in a seismic area.

The accompanying map, being a small section of the standard map of Canada on a scale of 35 miles to an inch, 1:2,217,600, shows the area within which the earthquake was felt, and is indicated approximately by a red dotted line. Not all the small places given in the table of the text are shown on the map. Along the northwestern edge of Vermont the quake is said to have been felt too.