## EARTHQUAKES.

IN the earthquakings, landslides and other disturbances that occurred in southern Spain during the last Christmas holidays over 2,000 persons are known to have been killed, several towns completely demolished, and over thirty-five sadly shaken. France and Spain are at present actively and earnestly working out, through their geologists, the cause of these destructive events. In Switzerland, also, seismological commissions are at work. English professors at the Royal College of Japan are taking advantage of their favorable situation to complete the work already there begun: while in England, Scotland and Ireland pursuits are now being followed out, though on a smaller: scale, in order to determine more accurately the origin and nature of the movements of the earth's crust generally included under the comprehensive title, Earthquakes. In Canada the tremblings felt of late have been but feeble, though not altogether wanting. The subject, however, is one of world-wide importance, and the fact that we have not been favored with these luxuries should not arouse any selfish congratulations for future safety. The fact is that the quakings of the American continent are becoming quite extensive, and Canada may suddenly, one of these days, be shaken out of a state of disinterested apathy. It will doubtless require a small earthquake and a vigorous shaking up, or down perhaps, to rouse Canadians to the importance of the inquiries now being vigorously prosecuted in so many parts of the world.

Jntil late years all such disturbances were attributed to one cause-volcanic action, or the same cause as that of volcanic action. The fact that earthquakes occur in regions where volcanoes are not found is sufficient to overthrow the universality of that theory. The second theory is that they are similar to dynamitic shocks, resulting from the explosion and expansion of large volumes of gases that have been collected in subterranean caverns. This second theory is very closely related to the first.

