When will the next one happen?

Darold Fredricks, San Mateo Daily Journal, 9-19-11

In 1769, Captain Gaspar de Portola was the first European to experience and record an earthquake in California. It happened about 30 miles southeast of Los Angeles. The expedition continued its trip north and eventually found themselves camping in a small, beautiful valley that had a stream flowing through the middle of it. "A beautiful valley," Portola commented.

On Nov. 30, 1774, when Captain Fernando Rivera's exploratory group was returning from their exploration trip to San Francisco, they stopped in a little valley they named Canada de San Andres Valley (later spelled Andreas) to honor their patron saint, St. Andrew. These men thought it was a beautiful little valley. Eventually this valley was discovered to have a great more influence on California than anyone could imagine. From the air, it appears to be to have been made from a nice sharp knife cut — a large knife. It is definitely a uniquely formed valley. In 1893, geologist Andrew Lawson recognized this quaint valley as having been formed by a tremendous fault that ran the length of California — the San Andreas Fault.

In the 1950s, a little known article published by a geologist, Alfred Wagner, stated that the crust of the earth had moved and is still moving. An earthshaking idea at that time. Impossible, skeptics said. Now, however, after examination of the oceans and mountains around the world, we know that it is a fact. We live on what is named the Pacific Plate. As the Pacific Plate moved eastward against the stable Northern American Plate, the Pacific Plate ducked under the North American Plate in the California region and the ensuing slide scraped off some of the millions of years of accumulated debris nearer to the surface. As the Pacific Plate moved eastward against the stable Northern American Plate, the Pacific Plate ducked under the North American Plate in the California region and the ensuing slide scraped off some of the millions of years of accumulated debris nearer to the surface.

This movement of the plates is associated with breaks in rocks as they slide by one another, and earthquakes are formed and felt my people. An example of a surface that is being "stretched" by this movement can be found on Skyline Boulevard, south of San Bruno Avenue. The surface of Skyline Boulevard had been repaved many times since I have resided in the area but eventually cracks are formed on the roadbed. These "cracks" indicate the movement of the San Andres Fault underneath. Another example can be observed east of Sharp Park/Skyline Boulevard, on Westborough Boulevard. About a block east of this intersection, across from a small shopping center and apartment houses, the roadway of Westborough Boulevard had been repaired many times as it continually forms a "dip" in the road due to the San Andreas Fault sliding the road north and south. The dip is deep enough again and the road repair crew will have to fill it in and start over again. In fact, north of this "dip," a fence was observed having moved over 20 feet during the 1906 earthquake. "Sag ponds," formed by the fault have now been filled in and apartments constructed on the site to erase all surface trace of the fault.

On April 18, 1906, an earthquake occurred (8.3 Richter) in this area, with a great deal of damage and loss of life. This quake moved the earth in many places 20 to 30 feet. A great migration down the Peninsula began after the quake and fire in San Francisco resulting in a great deal of settling on the small San Mateo County villages. Thousands of "earthquake houses" were built in San Francisco that were sold months later to people who needed shelter. The houses had to be moved from the parks and public property in San Francisco when they were sold. Although most have been destroyed over the years, in San Bruno two of

these houses are still standing. In San Mateo, almost every house lost their chimney but most survived minor damage. The railroad freight depot was completely destroyed and the trains stopped running as some rails had been bent. Union Square, surrounding the train station, had much damage. Liberty Hall, which housed city offices, a public meeting hall and the fire department was completely destroyed. The city's only chemical fire truck was destroyed. Union Hotel, as well as many other hotels, were damaged, Central School was partially wrecked and the Episcopal and Catholic Church suffered great damage. The Episcopal Church had to be rebuilt. Within three days, the newspaper was being printed and the flood of refugees from San Francisco began arriving.

Again in 1957 we had a good jolt, but this was not excessive and did a minimum of damage. In 1989, the earth moved again for 15 seconds in the Loma Prieta area. The quake (6.9) caused extensive damage throughout the Bay Area, including the collapse of the Cypress Freeway and a portion of the Bay Bridge. The damage caused was over $6 billion and it cost 63 people their lives.