



THE GREAT SHOCK

By Charles Apple | THE SPOKESMAN-REVIEW

In 1886, the port city of Charleston, South Carolina, was well on its way to recovering from the Civil War that had ended 21 years before and a hurricane the previous year that had damaged buildings and toppled church steeples.

But on the evening of Aug. 31, 1886 — 140 years ago — the most powerful earthquake ever recorded on the East Coast of North America struck the city. More than 2,000 buildings were destroyed, leaving many of the city’s residents homeless.

CHARLESTON FALLS TO THE EAST COAST’S MOST POWERFUL EARTHQUAKE

August is the height of storm season on the Atlantic coast of South Carolina. A tropical storm had hit the state’s largest city, Charleston, on Aug. 15, 1885 with winds of 125 mph or more, leaving 25 dead and damaging churches and washing away walkways along the seawall locals called “the Battery,” where guns had once been mounted to defend against “Yankee” invaders.

In addition, Charleston — despite being located in the center but not the seismically active edge of a tectonic plate — had suffered through a number of minor earthquakes over the years. No real damage was done by these “dish rattlers.”

So, a little more than a year after the storm of 1885, when an odd rumbling sound drifted across Charleston at 9:51 p.m. on the night of Aug. 31, 1886, locals wondered: *What now?*

What at first sounded like a passing train or streetcar grew louder. Wall hangings on the city’s gorgeous downtown mansions rattled then fell off walls. Telegraph and electrical wires snapped and fell across streets and buildings.

Rooftop cisterns sprang leaks, sending water through residences. Chimneys fell over. Kerosene lamps fell and started fires. As firehouse doors opened, frightened horses bolted into the streets, leaving their fire engines behind.

Water and gas mains ruptured as waves two feet high moved through the ground itself. In Cainho, about 30 miles to the northeast, a 20-foot gap appeared in the ground. Railroad tracks were ripped apart.



Charleston’s business district was hit hard. More than 14,000 chimneys fell, taking the fronts of shops, offices and apartment buildings with them.

It didn’t take geologists long to find train tracks in neighboring Summerville displaced by as much as 3 feet high and nearly 15 feet horizontally.

Thousands of residents spent months camping in Charleston’s city squares and parks beneath tents made from boat sails.

better. Damage would be estimated at \$5 million to \$6 million, or \$192 million in today’s money. At least 92 residents had been killed in the initial shaking. About 60 people died in all.

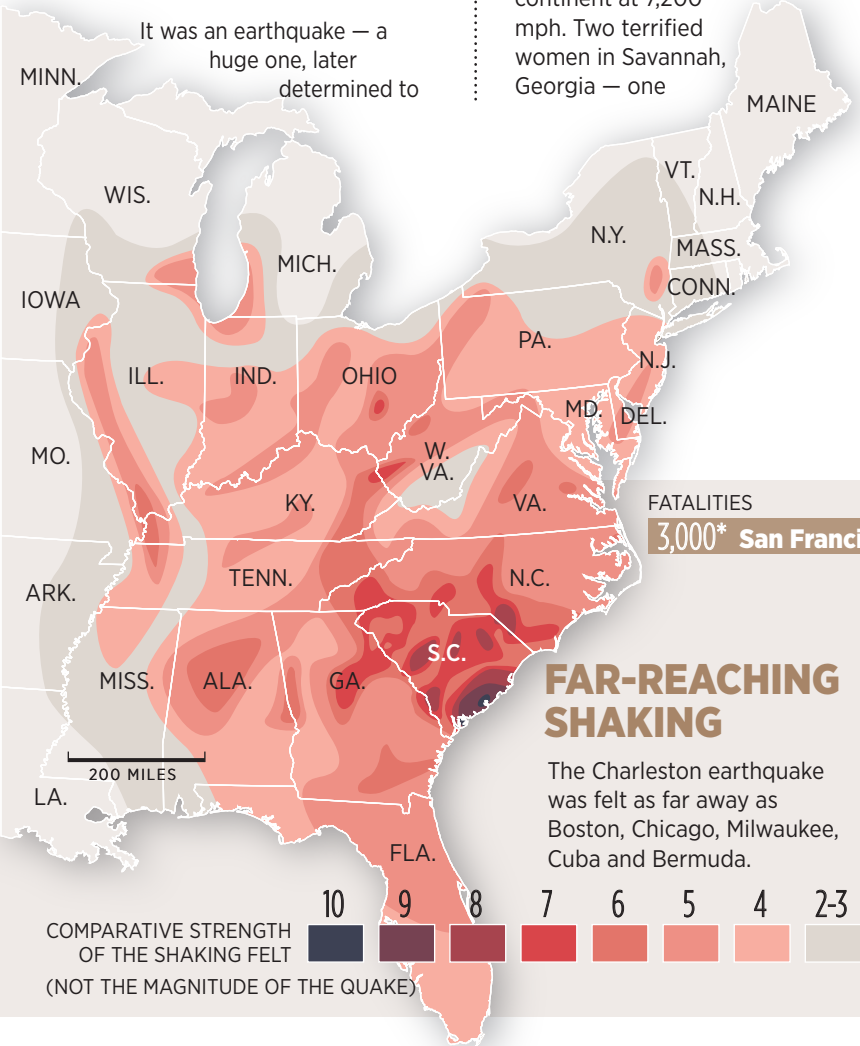
Sailors aboard ships moored nearby organized rescue efforts and donated sails to be used as tents. By Sept. 3, more than 40,000 people were “tenting” in encampments on virtually every undamaged parcel of ground. In some places, white and Black residents set up camps near each other. This raised tensions in the segregated city.

President Grover Cleveland didn’t believe in spending federal money on public assistance, so he declined to send the kind of help to Charleston that Chicago received after the great fire of 1871 and midwestern cities got after Mississippi River floods. New Jersey and Ohio sent tents to be used for temporary shelters. Only after News & Courier publisher Frank Dawson appealed to him did Cleveland send 100 large hospital tents.

But Charleston did benefit from other donors. Residents of Paris held a benefit concert for earthquake victims. Local spirits rose when the city received a telegram from England’s Queen Victoria.

For months, residents feared volcanoes that were said to be popping up in the area. In fact, the aftershocks forced water in the area’s low water table upward, causing spectacular “sandblows.” Unlike a volcano, the liquid involved was water. And unlike a thermal spring, the water was not heated.

But once again, Charleston would spring back. Within 14 months, the city was mostly rebuilt. Residents guarded themselves from future earthquake damage by having enormous iron rods inserted into their stone walls to try to keep the structures from falling apart. These “earthquake bolts” can be seen protruding from the walls of Charleston’s historic downtown mansions.



be centered near Summerville, about 30 miles to the northwest of Charleston.

Shock waves spread out across the continent at 7,200 mph. Two terrified women in Savannah, Georgia — one

holding a baby — jumped out of a second-story window. Plaster fell off walls and ceilings in Boston and Chicago. A tsunami damaged a schooner anchored off the coast of Maine.

After 45 seconds, the shaking stopped. But it restarted 10 minutes later. Over the next 24 hours, there would be seven more aftershocks. Over the next 30 years, there would be 300 aftershocks.

More than 2,000 businesses and residences — a quarter of Charleston’s structures — were destroyed. Nearly 81% of the damage was to buildings made of brick or masonry. Wooden structures in the city’s poorer sections took the shaking

FAR-REACHING SHAKING

The Charleston earthquake was felt as far away as Boston, Chicago, Milwaukee, Cuba and Bermuda.

DEADLIEST EARTHQUAKES IN THE U.S. SINCE 1800

*Estimated

	FATALITIES	MAGNITUDE	
	3,000*	7.9*	April 18, 1906
New Madrid, Missouri	1,000*	7.5-8.0*	Dec. 16, 1811-Feb. 7, 1812
Aleutian Islands, Alaska		8.6	165 April 1, 1946
Alaska		9.2	143 March 27, 1964
Long Beach, California		6.4*	120 March 10, 1933
Hawaii		7.9*	77 April 2, 1868
San Fernando, California		6.5-6.7	65* Feb. 9, 1971
Loma Prieta, California		6.9	63 Oct. 17, 1989
Charleston, South Carolina		6.9-7.3*	60 Aug. 31, 1886
Northridge, California		6.7	57 Jan. 17, 1994

Sources: “Upheaval in Charleston: Earthquake and Murder on the Eve of Jim Crow” by Susan Millar Williams and Stephen G. Hoffius, “A Short History of Charleston” by Robert Rosen, “More Tales of the South Carolina Low Country” by Nancy Rhyne, U.S. Geological Survey, the New York Times, University of South Carolina Libraries Digital Collections, Earth magazine, Temblor.net

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