

**EARTHQUAKES IN TENNESSEE AND NEARBY
SECTIONS OF NEIGHBORING STATES — 1901-1925**

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INTRODUCTION

The seismic history of Tennessee and its immediate environs from 1699 to 1900 has been treated in two previous papers by the writer.¹ In the present paper, accounts are presented of all known earthquakes which affected the region from 1901 to 1925, inclusive. The several earthquakes are arranged in chronological order on the basis of local dates and times given in the published source material.

In the following individual accounts, the intensity of each earthquake is indicated by a Roman numeral at the end of the caption line. As in the two preceding papers, the intensities are expressed in terms of the Wood-Neumann scale, on which the maximum intensity is XII.

The sources of the information included are indicated at the end of the individual accounts. References to newspaper accounts are given in full but references to more scientific descriptions are indicated by Arabic numerals, which refer to the publications listed at the end of the paper.

THE EARTHQUAKES

1901, *September 14*, —, *Mississippi Valley (III)*

A light shock reported at Memphis, Tennessee. (11, 17)

1902, *January 24, 4:48 a.m.*, *Mississippi Valley (VI)*

A moderately strong earthquake, apparently centered in the Mississippi Valley near St. Louis, Missouri, was felt over an extensive area in the central United States. The full extent of the affected area is not known, but one or two shocks were reported at St. Louis, St. Joseph, Lebanon, and Kansas City, Missouri; Leavenworth and Beverly, Kansas; and Chester, Quincy, and Springfield, Illinois. Although this earthquake is not known to have affected western Kentucky, northwestern Tennessee and northeastern Arkansas, there is some probability that it did. (1, 7, 8)

1902, *May 29, 2:30 a.m.*, *southern Appalachians (V)*

A strong shock accompanied by a rumbling noise awoke sleepers at Chattanooga, Tennessee. (7, 17)

¹ Some Early Earthquakes in Tennessee and Adjacent States (1699 to 1850), *Journal of the Tennessee Academy of Science*, Volume 29, No. 3, July 1954, pages 224-233.

Earthquakes in Tennessee and Nearby Sections of Neighboring States (1851 to 1900), *Journal of the Tennessee Academy of Science*, Volume 30, No. 3, July 1955, pages 222-233.

1902, *October 18, 1:00 p.m. and 5:00 p.m., southern Appalachians (III and V)*

A light shock was felt at 1:00 P.M. at Sewanee, Tracy City, and Monteagle, Tennessee. At 5:00 P.M., a strong shock was felt at LaFayette, Trion, and Rocky Face, Georgia, and at Chattanooga, Sewanee, Tracy City, and Monteagle, Tennessee. The latter shock was centered near LaFayette, where large vases were shaken from the mantle in one home and pedestrians felt "the earth seeming to upheave" under foot. At Chattanooga, dishes and windows rattled and people rushed from their homes in fright. The second shock was strong at Sewanee. There, "the duration was but a few seconds, the waves appearing to pass from south to north, rattling windows and shaking things up generally."

This earthquake was not felt at Johnson City, as reported by Heck (1938). (*Knoxville Journal and Tribune* for October 9, 1902) (7, 17)

1903, *February 8, 6:20 p.m., Mississippi Valley (VI)*

A strong earthquake was felt over an area of about 70,000 square miles in southern Illinois, eastern Missouri, western Kentucky and possibly portions of other states. The shock was strong at Cairo, some 35 miles north of Tennessee. At Murphysboro, Illinois, chimneys were thrown down. (1, 7, 8)

1903, *October 4, 8:56 p.m., Mississippi Valley (III)*

A light shock at Memphis and at St. Louis. It was "felt strongly" also in the "lead belt" south of St. Louis. (8, 11)

1903, *November 4, 12:15 and 1:18 p.m., Mississippi Valley (VI)*

Two shocks were felt over an area of about 70,000 square miles in eight states in the Mississippi Valley. The entire western section of Tennessee was affected. At Memphis the shocks were light. The disturbance was most severe at New Madrid and Cairo, where walls were cracked, and at Cape Girardeau, where chimneys were thrown down. (1, 7, 8, 17)

1903, *November 24, 9:20 a.m., Mississippi Valley (III)*

A shock at New Madrid, Missouri. (7, 8)

1903, *November 25, —, Mississippi Valley (III)*

Tremors at New Madrid, Missouri. (7, 8)

1903, *November 27, 1:00 and 3:00 a.m., Mississippi Valley (III-IV)*

Two strong shocks at New Madrid, Missouri, Cairo, Illinois, and Paducah, Kentucky. According to Branner and Hansell (1937), the earthquake affected an area of 70,000 square miles, including all of western Tennessee. (1, 7, 8)

1904, March 4, 7:30 p.m., southern Appalachians (V)

A fairly strong earthquake centered somewhere between Maryville and Sevierville and felt along the mountains for a distance of 90 to 100 miles. Sound was heard at Tellico Plains. This earthquake is not known to have been felt outside of eastern Tennessee. (7, 17)

1905, January 27, — p.m., southern Appalachians (VIII)

An earthquake centered near Gadsden, Alabama, was felt over an area of at least 250,000 square miles in several states, including Tennessee. It was strongly felt at Birmingham and as far away as Savannah, Georgia, and Louisville, Kentucky. At Gadsden, chimneys were thrown down and a well dried up. (1, 7)

1905, January 28, —, southern Appalachians

A second shock in the Gadsden area. Subsequent aftershocks occurred up to November. (7)

1905, August 21, (3), 11:08 p.m., Mississippi Valley (VI)

This earthquake, apparently centered near Sikeston, Missouri, was felt over a wide area in Missouri, Tennessee, Arkansas, Kentucky, Illinois, Indiana and Mississippi. Chimneys were thrown down and walls were cracked at Sikeston. In Tennessee, the disturbance was strongly felt at Union City, Brownsville, Memphis, Paris, Clarksville, and Nashville. Three shocks accompanied by noise, were reported at some localities. (1, 7, 8, 11, 17)

1908, September 28, 1:34 p.m., Mississippi Valley (IV)

A light shock at New Madrid, Missouri, and Cairo, Illinois. (1, 7, 8)

1908, October 27, 6:27 p.m., Mississippi Valley (IV)

A light shock which rattled windows and doors "considerably" at Cairo. Felt also at New Madrid, Missouri. (1, 7, 8)

1908, December 28, —, Mississippi Valley (III)

A light shock at Memphis. (11)

1908, December 31, —, Mississippi Valley (III)

Several light shocks at Blandville, (Ballard County) Kentucky. (8)

1909, September 27, (2), 3:45 and 3:50 a.m., Wabash Valley, Indiana (VII)

This earthquake, centered in Indiana between Terre Haute and Vincennes, was felt over a wide area in Indiana, Illinois, Kentucky, Missouri, Arkansas, Tennessee and possibly other states. In the epicentral area, chimneys were thrown down and window panes were broken. (1, 7, 8, 17)

1909, *October 23, 1:10 a.m., Mississippi Valley (V-VI)*

A moderately strong earthquake which affected an area of at least 40,000 square miles in Missouri, Arkansas, Tennessee, Mississippi, Kentucky, Illinois, and Indiana. It was felt at Memphis and northward across the state along the Mississippi Valley. (1, 7, 8, 17)

1911, *March 31, 11:00 a.m., Mississippi Valley (VI)*

This earthquake, centered near Pine Bluff, Arkansas, was felt in Arkansas, Missouri, Tennessee, and Mississippi. At Memphis, the shock was light and the vibrations were reported to have been north to south. (1, 7, 8, 11, 14, 17)

1911, *April 21, —, southern Appalachians (V)*

An earthquake, centered near Caesar's Head on the North Carolina—South Carolina state line, was felt as far to the northeast as Hendersonville. Cracks were reportedly opened in the ground. (7)

1913, *January 1, 1:28 p.m., southern Appalachians (VIII)*

This earthquake centered in Union County, South Carolina, affected an area of 43,000 square miles, mainly in South Carolina, Georgia, North Carolina, and Virginia. Only the extreme eastern margin of Tennessee is known to have been within the affected area. At Union, South Carolina, masonry walls were cracked, chimneys were thrown down, and furniture was shifted.

There was a light shock in Union County, South Carolina, on December 7, 1912, at 2:10 p.m. but it is not known to have been felt outside of South Carolina. (7, 12, 14, 15, 16)

1913, *March 28, 4:50 p.m., southern Appalachians (VII)*

A strong earthquake shock centered at Knoxville was felt over an area of 2000 square miles in eastern Tennessee. Buildings throughout the city shook violently, causing the occupants to rush out into the streets. The Knox County courthouse, a massive brick structure, trembled for a few seconds. A number of false alarms were set off at the fire stations, bricks toppled from chimneys, pictures fell from walls, furniture was overturned, and kitchenware and windows rattled. People out-of-doors experienced a noticeable rise and fall in the ground, followed by a trembling motion. The shock was attended by a noise similar to the report of an explosion, followed by a low rumble or roar. (*Knoxville Sentinel* for March 29, 1911) (4, 5, 8, 11, 12, 14, 16, 17)

1913, *April 17, 11:30 a.m., southern Appalachians (V-VI)*

This earthquake, centered in southeastern Tennessee, affected an elliptical area of 3500 square miles in Tennessee,

North Carolina, South Carolina and Georgia. The intensity was greatest along the major axis, between Ducktown and Kizer. Houses shook and windows and dishes rattled. Two closely spaced shocks were reported at Coker Creek. Some observers reported a wave-like motion of the ground. The disturbance was attended by a loud rumbling or roaring noise. (*Knoxville Sentinel* for April 17 and April 18, 1913) (1, 4, 5, 7, 11, 12, 14, 16, 17)

1913, May 2, 1:00 a.m., *southern Appalachians* (III)

A light shock, accompanied by a rumbling sound and lasting several seconds, was felt near Madisonville, Tennessee. (12, 14, 17)

1913, June 9, 9:30 a.m., *Mississippi Valley* (III)

At Humboldt, Tennessee, "there was a rumbling sound, a considerable quiver of houses for an instant and it was all over." (1, 14, 17)

1913, August 3, 11:45 a.m., *southern Appalachians* (IV)

A light shock at Knoxville and at several other points in east Tennessee.

"A rumbling sound was heard and a slight quiver of the ground was noticeable, similar to the shock of last March." (*Knoxville Journal and Tribune* for August 5, 1913) (12, 14, 17)

1914, January 23, (2), 10:24 p.m. and 10:41 p.m., *southern Appalachians* (IV-V)

Two sharp shocks at Niota, Sweetwater, and other points along the Southern Railway between Chattanooga and Knoxville. (*Knoxville Journal and Tribune* for January 24, 1914) (7, 12, 14, 17)

1914, March 5, 3:05 p.m., *Georgia Piedmont* (VI)

A strong earthquake centered in Georgia southeast of Atlanta was felt over about 100,000 square miles in Georgia, the Carolinas, Tennessee, and Alabama. It was felt as a light shock at Chattanooga and Knoxville. (*Knoxville Journal and Tribune* for March 6, 1914) (1, 7, 11, 12, 14, 16)

1915, January 14, 4:20 a.m., *southern Appalachians* (III-IV)

A shock at Bristol, Tennessee-Virginia. (11, 12, 16, 17, 19)

1915, February 18, 10:35 p.m., *Mississippi Valley* (II-III)

A light shock at Cairo and at Mound City, Illinois. (1, 8, 19)

1915, *April 28, 5:40 p.m., Mississippi Valley (IV)*

One strong shock, attended by a rumbling sound, at Tiptonville, Tennessee, and New Madrid, Missouri. (1, 7, 8, 11, 14, 17, 19)

1915, *October 26, 1:40 a.m., Mississippi Valley (IV-V)*

One shock lasting about three seconds at Mayfield, Kentucky. Pictures were shaken from walls. (1, 7, 8, 19)

1915, *October 29, 12:45 a.m., southern Appalachians (V)*

A shock lasting about 15 seconds at Asheville and at Marshall, North Carolina. Sleepers were awakened. (The time of this shock is given as 12:25 a.m. in some accounts). (8, 11, 12, 14, 16, 19)

1915, *December 7, 12:40 p.m., Mississippi Valley (V-VI)*

Two shocks were felt over an area of 60,000 square miles in Missouri, Arkansas, Tennessee, Kentucky, Illinois, and Mississippi. Although centered somewhere in the vicinity of Cairo, Illinois, the earthquake was felt over the entire Mississippi Valley section of Tennessee and as far eastward as Murfreesboro in middle Tennessee. Buildings were strongly shaken, windows and dishes rattled, and loose objects were shaken from shelves. (1, 7, 8, 11, 14, 17, 19)

1916, *February 21, 5:39 p.m., southern Appalachians (VII)*

This earthquake, centered near Waynesville, North Carolina, affected an area of 500,000 square miles in the Carolinas, Georgia, Alabama, Tennessee, Kentucky, Virginia, West Virginia, and other states. Two shocks, separated by a very short time interval, were felt at many localities, especially in western North Carolina. A rumbling noise was heard over an extensive area. At Waynesville, chimney tops were thrown down, many window panes were broken, and fear-stricken people rushed into the streets.

The earthquake was felt over nearly all of Tennessee. It was most severe in the mountains of eastern Tennessee. At Sevierville, bricks were shaken from chimneys and a team of frightened work horses ran away. There was an increase in the flow of springs and in some instances the water became muddy. Shocks equally strong were felt at Newport and Elizabethton. Plaster reportedly fell from walls at Knoxville, Morristown, and Bristol. At Memphis, the motion was considerable in the higher stories of buildings. Numerous people in West Memphis, Arkansas, felt the shocks. (1, 6, 7, 10, 11, 12, 14, 16, 17)

1916, *May 21, 12:24 p.m., Mississippi Valley (IV)*

A shock accompanied by a rumbling noise at New Madrid and Cairo. (8, 19)

1916, *August 24, 3:00 a.m., Mississippi Valley (III)*

A shock at New Madrid and Cairo and two shocks at Anna, Illinois. Some sleepers were awakened. (1, 8, 14, 19)

1916, *August 26, 1:35 p.m., southern Appalachians (V)*

A strong shock at Statesville and Taylorsville, North Carolina. The shock, accompanied by a rumbling noise was felt also at Harmony, Lenoir, Lincolnton, Morganton, Newton, and North Wilkesboro, North Carolina. At Lincolnton, three shocks were reported. (11, 12, 16, 19)

1916, *October 18, 4:04 p.m., southern Appalachians (VII-VIII)*

An earthquake centered at Irondale, Alabama, affected an area of more than 170,000 square miles in Alabama, Mississippi, Tennessee, Kentucky, Indiana, the Carolinas, Georgia, and other states. In the epicentral area, numerous chimneys were damaged and several wells went dry.

About two-thirds of Tennessee was affected by the earthquake, but there was no damage in the state. The disturbance was felt strongly at Chattanooga, Nashville, Waynesboro, Carthage, Sparta, McMinnville, Lewisburg, and other points in middle Tennessee. At Knoxville and at Clinton a light shock was felt by many.

An aftershock at 10:52 p.m. was reported at many localities. Other aftershocks were felt at Birmingham on October 22 and at 7:15 a.m. on November 4. (*Knoxville Journal and Tribune* for October 19, 1916) (1, 2, 7, 9, 11, 12, 14, 16, 17, 19)

1916, *October 19, 2:00 a.m., Mississippi Valley (III)*

One shock lasting about 50 seconds at Mayfield, Kentucky. (19)

1916, *December 18, (2), 11:42 p.m., Mississippi Valley (V-VI)*

Two shocks accompanied by a rumbling noise at Hickman, Kentucky, and New Madrid, Missouri. Bricks were shaken from chimneys. (1, 7, 8, 19)

1917, *January 2, 4:30 a.m., southern Appalachians*

A shock near McMillan, Knox County, Tennessee. (This shock was thought by some to have been caused by an explosion). (17)

1917, *January 25, 4:15 p.m., southern Appalachians (III)*

A light shock at Jefferson City. (In the U. S. Coast and Geodetic Survey card file, this shock is listed at Jefferson, Rutherford County, Tennessee). (17)

1917, January 26, 7:15 a.m., *southern Appalachians (III)*

A light shock at Talbott, Jefferson County, Tennessee. (17)

1917, January 27, 3:00 p.m., *southern Appalachians (III)*

A light shock at Jefferson City, Tennessee. The U. S. Coast and Geodetic Survey card file lists this shock at Jefferson, Rutherford County. (17)

1917, March 4, 9:07 p.m., *southern Appalachians (III)*

One heavy shock at Knoxville. Houses seemed to rock on their foundations. According to the *Knoxville Journal and Tribune* for March 5, 1917, "this is the second seismic disturbance felt in Knoxville and vicinity within the last ten days". Matthes (1922) lists the shock on March 2. (11, 12, 13, 14, 17, 19)

1917, March 25, 4:15 p.m., *southern Appalachians (III-IV)*

One shock accompanied by a rumbling noise was felt at Jefferson City and at Talbott. (11, 12, 14, 17, 19)

1917, March 26, 7:50 a.m., *southern Appalachians (III)*

A shock attended by a rumbling noise felt at Talbott. (11, 12, 17, 19)

1917, March 27, 3:00 p.m., *southern Appalachians (III-IV)*

Houses were shaken by a shock at Jefferson City. (11, 12, 17, 19)

1917, April 9, (2), 2:52 p.m., *Mississippi Valley (VI)*

A strong earthquake centered near Ste. Genevieve, Missouri, affected an area of at least 200,000 square miles in eleven states — Missouri, Arkansas, Illinois, Kentucky, Tennessee, Mississippi, Indiana, Ohio, Kansas, Iowa, and Wisconsin. In the epicentral area, buildings rocked, bricks were thrown from chimneys, window panes were broken, and people were alarmed. In Tennessee, the shock was felt in the Mississippi Valley from Tiptonville to Memphis. (1, 3, 7, 8, 11, 17, 19)

1917, April 9, 5:35 p.m., *Mississippi Valley (IV)*

A shock at Cape Girardeau and St. Marys, Missouri, and at Anna, Illinois. (8, 19)

1917, April 19, —, *southern Appalachians (III)*

A light shock in southwestern Virginia. (13)

1917, May 8, 9:— a.m., *Mississippi Valley (III)*

A light shock at Hendrickson, Butler County, Missouri. (19)

1917, May 9, 3:00 and 9:00 a.m., *Mississippi Valley (III)*

Two light shocks at Hendrickson, Missouri. (13, 19)

1917, June 9, 7:14 a.m., *Mississippi Valley (IV)*

A light shock felt at New Madrid, Missouri, Cairo, Illinois, and Springville, Henry County, Tennessee. (Some authors erroneously state that the shock was felt at Springfield, Tennessee). (1, 8, 11, 17, 19)

1917, June 21, —, *southern Appalachians (IV)*

Harry Fielding Reid (1918) reports light or moderate shocks in eastern Tennessee but gives no details. (11,13)

1917, June 29, (2), 8:23 and 8:50 p.m., *southern Appalachians (V)*

Two moderately strong shocks, attended by a rumbling noise, were felt at Rosemary and Greensboro, Alabama. (19)

1918, January 16, 10:45 a.m., *southern Appalachians (V)*

A hard shock, apparently centered in northeast Knoxville, was felt over all of Knoxville and the suburban areas and as far away as Concord, Strawberry Plains, and Corryton. Houses shook, windows rattled, and loose objects were disturbed. In the Coker Springs, Greenway and Washington Pike sections of north Knoxville the shock was strongly felt and the explosive sound seemed to be directly underfoot. Men sitting in a grocery store at Greenway found their feet suddenly raised from the floor as windows and goods on the shelves rattled.

By some, the disturbance was attributed to the detonation of a hundred sticks of dynamite in an ice jam on the Tennessee River. Such a small explosion could not have affected an area of 400 square miles with an intensity of III to IV. On February 5, 1949, the Tennessee Valley Authority detonated 1,400,000 pounds of explosive in a stone quarry in Sullivan County, Tennessee. The resulting vibrations were felt over an area comparable with that affected by the earthquake of January 16, 1918. (11, 12, 17, 19)

1918, February 17, 2:10 a.m., *Mississippi Valley (IV)*

At Cairo, Illinois, "one shock accompanied by a faint sound and an abrupt E.-W. rocking". (1, 8, 19)

1918, June 21, 7:59 p.m., *southern Appalachians (IV-V)*

A "heavy" shock centered near Lenoir City affected an area of at least 3000 square miles in eastern Tennessee. It was felt from McGhee on the Little Tennessee River to LaFollette and at the intermediate localities of Knoxville, Sweetwater, Clinton, and Kingston. The initial heavy shock was followed by a trembling motion and two lighter shocks in rapid succession. At some places, the motion was described as "rolling" or "rocking." A loud rumbling noise was reported at Lenoir City and Loudon. (*Knoxville Journal and Tribune* for June 22, 1918) (11, 12, 14, 17, 19)

1918, *October 4, 3:21 a.m., Mississippi Valley (V)*

A sharp shock centered in Lonoke County, Arkansas, affected some 30,000 square miles in Arkansas and Tennessee. At Memphis, the disturbance was described as "a light bump". (1, 7, 8, 11, 13, 14, 19)

1918, *October 13, (3), 3:30 to 4:00 a.m., Mississippi Valley (V)*

Three abrupt shocks at Black Rock, Arkansas. This earthquake attained its maximum intensity at Hoxie and Pocahontas, where trembling and rocking motions were accompanied by a rumbling noise. Felt also at Jonesboro, Arkansas. (1, 19)

1918, *October 15, 8:15 p.m., Mississippi Valley (IV)*

This earthquake was felt at widely separated points in Tennessee, Arkansas, and Illinois. It was centered somewhere near New Madrid, and affected an area of 50,000 square miles or more. The motion was described as "trembling" and "rocking". In Tennessee, it was felt at Union City, Memphis, Savannah, and Clarksville. Other points within the affected area include Black Rock and Hardy, Arkansas, and Cairo and Anna, Illinois. (1, 8, 11, 13, 17, 19)

1919, *February 10, 9:37 p.m., Ohio Valley*

An earthquake centered in southwestern Indiana, and felt over a wide area in southwestern Indiana and northwestern Kentucky. (1, 8, 13, 14)

1919, *April 8, 2:40 a.m., Mississippi Valley (IV)*

A light shock at Ravenden, Arkansas, "may not be a quake". (8, 13)

1919, *May 23, 6:30 a.m., Mississippi Valley (III)*

One shock, accompanied by rumbling, at Hickman, Kentucky. (1, 8, 11, 13, 19)

1919, *May 24, 7:30 a.m., Mississippi Valley (III)*

A light shock at Hickman, Kentucky. (1, 8, 11, 13, 19)

1919, *May 25, (2), 3:45 a.m., Ohio Valley (V)*

Two shocks nearly an hour apart in southern Indiana and in nearby portions of Illinois and Kentucky. (1, 7, 8, 13, 19)

1919, *May 26, 7:25 a.m., Mississippi Valley (III)*

Three shocks accompanied by a rumbling noise at Cairo, Illinois, Bardwell and Hickman, Kentucky, and at New Madrid, Missouri. (1, 8, 11, 19)

1919, *May 28, 5:30 a.m., Mississippi Valley (III)*

A light shock at Hickman, Kentucky. (19)

1919, May 28, 7:45 a.m., *Mississippi Valley* (III)

An earthquake at Tiptonville, Tennessee. (This shock is reported 2 hours and 15 minutes later than that at Hickman, Kentucky, on the same date). (1, 8, 11, 13, 17)

1919, November 3, 2:40 p.m., *Mississippi Valley* (IV-V)

One shock, accompanied by a loud rumbling noise, felt by many at Pocahontas, Arkansas. (1, 7, 8, 19)

1920, April 7, 2:45 p.m., *Mississippi Valley* (III)

"One shock — a heavy jar" at Springville, Tennessee.

Heinrich (1941, page 203) quotes an account of a powder blast explosion at Fayville, near Cairo, Illinois. As Springville is 85 miles from Fayville, the earthborne vibrations set up by the explosion probably were not felt at Springville. The "heavy jar" might have been an air shock resulting from the explosion. (1, 8, 11, 17, 19)

1920, May 1, 9:15 a.m., *Missouri* (V)

An earthquake centered near Columbia, Missouri, was felt at Poplar Bluff, Missouri, and at several localities in southern Illinois.

A second shock at 11:00 a.m. was felt at McLeansboro, Illinois. (1, 7, 8, 19)

1920, December 24, 2:00 a.m., *Southern Appalachians* (V)

An earthquake of "considerable violence" was felt at many eastern Tennessee localities including Rockwood, Glen Alice, Spring City, Harriman, Decatur, and Crossville. At the latter place, two shocks were reported. Many sleepers were awakened and it was reported that the entire village of Glen Alice was aroused. (12, 14, 17, 19)

1921, January 9, 3:54 p.m., *Mississippi Valley* (IV)

A light earthquake felt at Tiptonville, Tennessee, New Madrid, Missouri, and Hickman, Kentucky. (1, 8, 14, 17, 19)

1921, February 27, 4:16 p.m., *Mississippi Valley* (III)

One shock, accompanied by rumbling, felt by many at Cairo, Illinois. (1, 8, 19)

1921, July 15, —, *southern Appalachians* (V)

A sharp shock in southwestern Virginia and northeastern Tennessee. At Mendota, window glass was broken and frame buildings were twisted. (7, 12, 14, 17)

1921, September 2, 8:— a.m., *north central Tennessee* (III)

Several shocks, accompanied by loud noises, were felt by many at Statesville, (Wilson County) Tennessee. (17, 19)

1921, *December 15, 8:20 a.m., eastern Tennessee (V)*

An earthquake of "considerable intensity" was felt along the western portion of the Great Valley from Kingston and Rockwood to Decatur and Dayton, and as far eastward as Athens. Pans and tableware were shaken from cupboards near Kingston. A loud rumbling noise accompanied the disturbance. (12, 14, 17, 19)

1922, *March 22, (2), 4:30 p.m. and 8:20 p.m., Mississippi Valley (V)*

A sharp earthquake centered somewhere in the Mississippi Valley was felt over an extensive area in at least five states. Mild damage was reported in some areas. In Tennessee, the shock was felt at Union City, Memphis, Brownsville, and Troy.

A second shock, as strong as the first, was felt over much of the same area at 8:20 p.m. It was felt at Union City, Troy, Memphis and at other points in Tennessee along the Mississippi Valley. (1, 7, 8, 17, 19)

1922, *March 23, 3:45 p.m., western Kentucky (V)*

An earthquake centered somewhere in western Kentucky was felt over all of the Jackson Purchase Region and as far eastward as Owensboro and Louisville. Although it was not reported outside of Kentucky, it was felt at Fulton and other points along the state line, indicating that the affected area included also portions of Tennessee, Missouri, Illinois, and Indiana. (7, 19)

1922, *March 28, 10:42 a.m., Mississippi Valley (III)*

A light tremor attended by a rumbling noise was felt and heard by many at Poplar Bluff, Missouri. (8, 19)

1922, *March 29, 8:20 p.m., middle Tennessee (V)*

One shock accompanied by a light noise was felt and heard at Farmington, Marshall County. (17, 19)

1922, *March 29, 9:21 p.m., northeastern Tennessee (IV)*

A light shock was felt at Arcadia, Sullivan County. (17, 19)

1922, *March 30, 10:53 a.m., Mississippi Valley (V)*

An earthquake which affected parts of Kentucky, Missouri, Illinois, and Tennessee was felt at Memphis and other points in Tennessee along the Mississippi River, and as far to the east as Farmington (Marshall County). (8, 19)

1922, *March 30, 5:20 p.m., northeastern Tennessee (IV)*

One shock was felt at Arcadia, Sullivan County. (19)

1922, *November 26, 9:31 p.m., Mississippi Valley (V)*

An earthquake which affected parts of five states was felt at Dickson, Clarksville, and Nashville, Tennessee. The same earthquake was felt at St. Louis, where walls swayed, and at numerous localities in Illinois, Kentucky, and Indiana. (1, 8, 14, 19)

1923, *March 27, 2:00 a.m., Mississippi Valley (IV)*

One shock at Wyatte, Marshall County, Mississippi. Felt by many. (1, 19)

1923, *May 6, 1:50 a.m., Mississippi Valley (III)*

One shock at Cairo, Illinois. (1, 8, 19)

1923, *May 15, 5:42 p.m., Mississippi Valley (III)*

One shock at Cairo, Illinois. (1, 8, 19)

1923, *October 28, 11:10 a.m., Mississippi Valley (VII)*

An earthquake centered near Marked Tree, Arkansas, was felt over an extensive area in at least six states: Arkansas, Missouri, Illinois, Kentucky, Mississippi, and Tennessee. In Tennessee, it was felt strongly at Memphis and Savannah. (1, 8, 19)

1923, *November 26, 5:25 p.m., Mississippi Valley (VI)*

A shock felt strongly in eastern Arkansas and western Tennessee. At Memphis, the intensity was between IV and V. (1, 8, 17, 19)

1923, *November 28, 6:00 or 7:00 a.m., Mississippi Valley (III)*

A light shock at Calhoun, McLean County, Kentucky. (19)

1923, *November 29, 5:20 p.m., Mississippi Valley (III)*

A light tremor felt by many at Cairo, Illinois, and Wickliffe, Kentucky. (7, 19)

1923, *December 31, 9:10 p.m., Mississippi Valley (V)*

A moderately strong shock, centered in western Tennessee, affected a large area in the states of Tennessee, Arkansas, Missouri, Illinois, Kentucky, Mississippi, and Alabama. In Tennessee, it was felt strongly at Savannah, Memphis, Brownsville, Moscow, Union City, and Covington. (1, 8, 14, 19)

1924, *March 2, 5:18 a.m., Mississippi Valley (V)*

This earthquake affected an area of at least 25,000 square miles in western Kentucky, western Tennessee, southeastern Missouri, and southern Illinois. In Tennessee, it was felt at Savannah, Nashville, and Clarksville. (1, 8, 17, 19)

1924, *April 2, 5:15 a.m., Ohio Valley (IV)*

A shock felt at Paducah, Kentucky, and at points in southern Illinois. (8)

1924, *June 6, 11:42 p.m., Mississippi Valley (IV)*

One light earthquake shock accompanied by rumbling at Tiptonville, Tennessee. Felt and heard by many. (1, 8, 14, 17, 19)

1924, *October 20, 3:30 a.m., southern Appalachians (V-VI)*

A strong earthquake centered in Pickens County, South Carolina, affected an area of about 60,000 miles in the Carolinas, Tennessee, Georgia, Florida, and Virginia. In the epicentral

area, buildings were shaken strongly, and it was reported that "one man's kitchen was shaken down" at Pickens. Strong roaring and "whizzing" sounds attended the disturbance. There were two shocks about 15 seconds apart. In eastern Tennessee, the earthquake was felt at Knoxville, Elizabethton, and Bristol. Intensities stronger than II are not known to have been attained in Tennessee. (7, 12, 17, 18)

1924, *November 13, 12:30 a.m., southern Appalachians (IV)*

A light shock was felt at Bristol, Tennessee-Virginia. One observer reported that suddenly his house shook violently, dishes and windows rattled, and mortar fell down the chimney into the fireplace. Slight tremors were reported to have been noticed in the region for about a year. (12, 17)

1925, *April 26, 10:05 p.m., Ohio Valley (VI)*

This moderately strong earthquake was widely felt in Kentucky, Illinois, Indiana, Ohio, and possibly other states. It was felt in Mayfield, Kentucky, some 16 miles north of the Tennessee-Kentucky state line, but was not reported in Tennessee. (1, 7, 14)

1925, *May 13, 6:00 a.m., Mississippi Valley (IV)*

A light earthquake in western Kentucky and southern Illinois. It was felt at Clinton, Mayfield, Cadiz, Blandville, Paducah, and Wickliffe, Kentucky, and at Cairo and Metropolis, Illinois. (1, 7, 8, 18)

1925, *September 2, 5:55 a.m., Ohio Valley (VI)*

This earthquake, centered near Henderson, Kentucky, was felt at numerous places in Kentucky, Illinois, and Indiana and at Nashville, Tennessee. (1, 8, 18)

1925, *September 20, 3:00 a.m., Ohio Valley (IV)*

Earthquake shocks were felt over a sizeable area in western Kentucky and southern Indiana. These shocks, ranging from one to three in number, were probably aftershocks of the September 2 earthquake. At Henderson and Owensboro, Kentucky, two additional shocks were felt at 5:00 a.m. (1, 8, 18)

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