

so great. The largest town struck by any one of the tornadoes was Purvis, located in Lamar County and having a population estimated at 2,000. At that place the killed numbered 55 and the property loss was estimated at about \$500,000. A considerable portion of the property loss in the Purvis-Winchester and the Epps-Janet tornadoes was due to the destruction of thousands of large pine trees and several large sawmills.

Losses by counties.

Counties.	Storms.	Number of people killed.	Number of people injured.	Value of property loss.
De Soto.....	(a)	0	0	\$1,500
Sunflower.....	(b)	0	0	2,000
Sharkey.....	(c)	0	0	500
Claiborne.....	(f)	0	4	2,000
Jefferson.....	(f)	21	82	75,000
Adams.....	(f)	30	200	45,000
Simpson.....	(d)	0	10	10,000
Noxubee.....	(e)	0	3	500
Kemper.....	(e)	2	6	5,000
Marion.....	(g)	2	15	2,000
Lamar.....	(g)	60	391	540,000
Forest.....	(g), (h)	11	75	150,000
Perry.....	(g), (h)	10	108	140,000
Greene.....	(h)	0	1	500
Wayne.....	(g)	19	75	50,000
Total.....		155	970	1,024,000

This information was obtained from 63 cooperative observers of the Weather Bureau, who are well distributed throughout the State, and from 55 postmasters located in or near the paths of the tornadoes.

TORNADOES IN ALABAMA, APRIL 24 AND 30, 1908.

By FRANK P. CHAFFEE, Section Director. Dated Montgomery, Ala., May 3, 1908.

Two destructive tornadoes past over portions of Alabama during the afternoon and evening of April 24, 1908.

The more destructive of the tornadoes extended thru portions of five counties in northern Alabama, and traveled a distance of about 125 miles in about one hour and thirty-five minutes. It began near Dora, Walker County, about 2:40 p. m., past over Warrior, Jefferson County, at 3 p. m., was next felt at Royal, Blount County, 3:30 p. m., at Wynnville, Blount County, 3:40 p. m., at Albertville, Marshall County, 4 p. m., at Tenbroek, DeKalb County, 4:10 p. m., and seems to have ended a few miles northeast of Sylvania, DeKalb County, about 4:15 p. m., as shown in fig. 1.

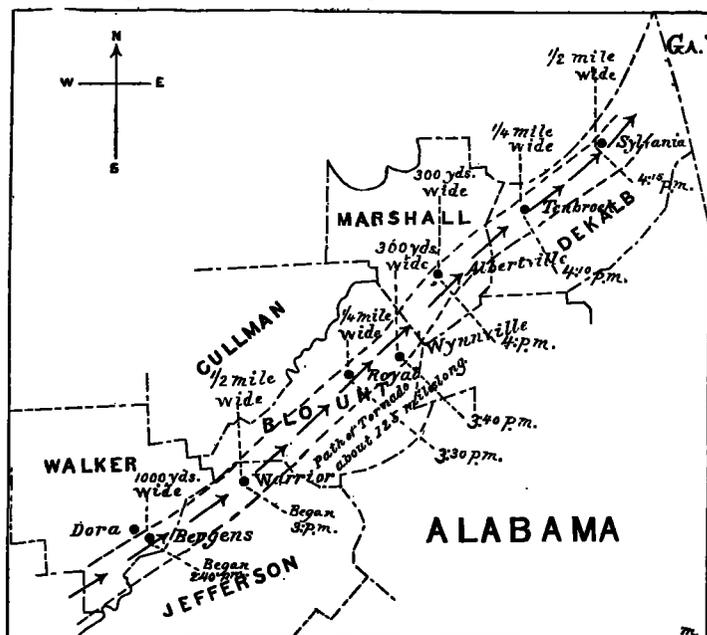


Fig. 1.—Path of tornado in northern Alabama, April 24, 1908.

The path of the storm varied in width from about 200 yards to half a mile, the greatest destruction being wrought where it was most constricted. While the storm was of destructive force along practically its entire path, the greatest loss of life and damage to property occurred at Bergens, near Dora, and at Albertville, half of which was practically destroyed.

A funnel-shaped cloud swept along the entire path of the storm. The cloud is reported to have had a bounding and whirling motion, and to have swept everything from its path where it touched the ground. A loud, rumbling noise was heard from the cloud, which emitted brilliant lightning. A noteworthy fact is that the rainfall, while heavy during the passage of the storm, was not nearly so heavy near the track as it was at points 50 to 100 miles to the southward, where it was generally excessive. Heavy and damaging hail also fell at points to the south of the storm's path.

At Albertville, a 9-ton oil tank was picked up and carried about a half mile, and a train of 9 freight cars was overturned and the cars torn from their trucks and destroyed.

It is understood that the official in charge of the Birmingham office will render a detailed report on the damage done by this tornado at Dora and Bergens.<sup>1</sup> Reports from reliable sources show the loss of life and damage to property at the places named, to have been as follows:

Place.	Killed.	Injured.	Buildings destroyed.	Value.	Other damage.
Dora and Bergens.....	12	16	27	\$25,000	\$25,000
Warrior.....	5	11	15	6,000	10,000
Royal.....	1	6	10	8,000	25,000
Wynnville.....	2	0	4	4,000	5,000
Albertville.....	15	150	150	250,000	100,000
Tenbroek.....	0	0	1	1,000	5,000
Sylvania.....	0	5	30	50,000	75,000
Totals.....	35	188	237	344,000	245,000

There was doubtless much other damage, and possibly some additional loss of life and personal injury of which no report has been received. It is conservatively estimated that the total damage to property by this tornado approximates \$650,000.

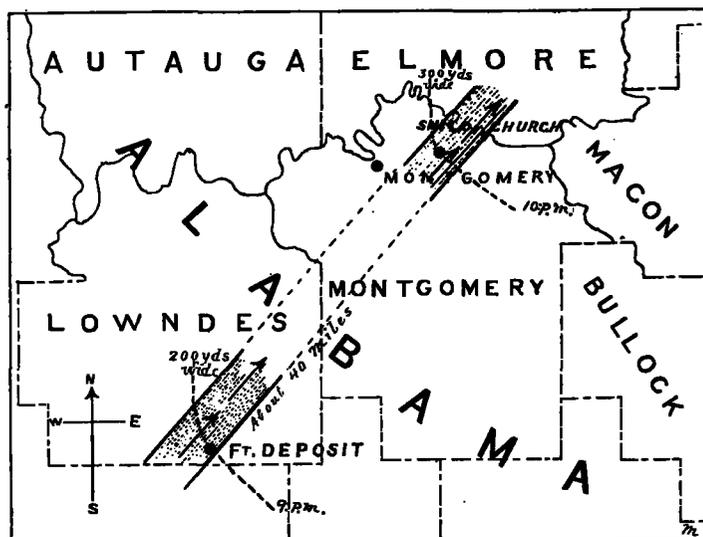


Fig. 2.—Path of tornado in south-central Alabama, April 24, 1908.

Another tornado swept over portions of Lowndes and Montgomery counties in south-central Alabama during the evening of April 24. This tornado made its appearance about 3 miles southwest of Fort Deposit, Lowndes County, at 9 p. m. and ended about 40 miles to the northeast, in the northern portion of Montgomery County, and about 8 miles northeast of the city of Montgomery, at about 10 p. m. The path (see fig. 2) was not continuous, and had an average width of 250 yards

<sup>1</sup>The report by Mr. Lehman appears elsewhere in this issue.—EDITOR.

where the storm struck the ground. On account of darkness, no funnel-shaped cloud was observed, tho a loud, roaring noise was heard as the storm past. At Fort Deposit 2 persons were killed, 22 were injured, 50 buildings valued at \$50,000 were destroyed, and other damage done to the extent of \$30,000. At Shiloh Church, a small settlement 7 miles northeast of Montgomery, 2 frame buildings were partially destroyed, and other damage done, aggregating about \$3,000.

A tornado occurred at Tarentum, a small settlement in the southeastern part of Pike County, Ala., at 1:30 a. m., April 30, 1908. The track of this tornado extended about 3 miles in a northeasterly direction and was about 400 yards wide. No funnel-shaped cloud was observed tho the storm was accompanied by a rumbling noise which was immediately followed by a heavy downpour of rain and hail. No one was killed, but 10 people were injured, 25 frame buildings valued at \$25,000 were destroyed, and other damage done to the extent of \$10,000. The hail was quite heavy and caused considerable additional damage to crops.

#### TORNADO AT DORA AND BERGENS, ALA., APRIL 24, 1908.

By W. F. LEHMAN, Observer. Dated Birmingham, Ala., May 28, 1908.

The first of the tornadoes that occurred in northern Alabama on April 24, 1908, developed in southeastern Walker County during the early afternoon, and at about 2:40 p. m., central time, destroyed the settlement of Bergens on the Northern Alabama Railroad, 22 miles northwest of Birmingham. In its early stage the storm crost a sparsely settled district, advancing in a northeasterly direction and causing havoc over a track three-quarters of a mile wide. It was not until the storm was joined, about a mile southwest of Bergens, by another black mass of clouds, smaller in extent and moving in a more easterly direction, that it developed its greatest violence. Continuing on a northeast course the tornado ravaged a territory nearly a mile wide, but encountered few dwellings until it struck the hill ranges of Dora. Here the path of destruction narrowed down to about 3,000 feet.

Dora is a town of about 2,000 inhabitants and rather extended limits, partly situated in the valleys formed by three hill ranges running southeast-northwest. The business portion of the town is built alongside the railroad track between the central and northern hills, both about 150 feet high, while the southern valley is occupied by farmers and miners. Southeast of the hills, within earshot of the sheltered Dora habitations lies Bergens.

The claim of the Dora people that the hills saved their town from destruction induced the writer to spend a day and a half in exploring the storm track around Dora. The result is embodied in the accompanying diagram.

Fig. 1 shows that had the path of destruction remained as wide as it was to the southwest it would have embraced the whole eastern half of Dora, and also that it again widened out to its earlier width when the storm past beyond the northernmost of the Dora hills. As it was, however, the central path past over Bergens, while on the west side the path of destruction narrowed to one-half its original width so that only on the Dora hilltops were trees uprooted. The eastern side of the path of destruction continued uninterrupted a half mile wide.

On the forenoon of the 24th the weather had been cloudy and squally. A slight shower occurred shortly after noon. The uniform, light gray appearance of the sky an hour before the storm, set people to wondering what would happen next. Some predicted rain, but there was no sign of rain. The unusual weather conditions were the topic of conversation everywhere. Some one suggested a coming tornado, tho he had never experienced one, and for want of a better explanation

of the prevailing conditions this idea was generally adopted. But the people were woefully ignorant as to the character of a tornado and the direction from which to expect it. Had they known, probably no lives would have been lost. From unobstructed viewpoints the meeting of the two clouds had been observed half a minute before the storm arrived, but most of the people of Bergens can only recollect seeing the cloud coming, rushing to their houses for shelter (there were no tornado cellars), and having their houses blown down; all this happening within the space of fifteen seconds.

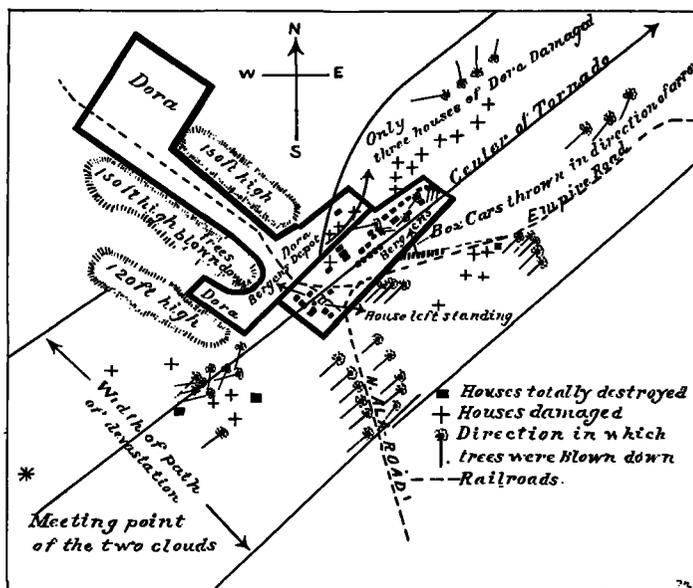


FIG. 1.—Path of storm thru Dora and Bergens, Ala.

The cloud is generally described as a dense coal-black mass with a whitish top, reaching to the ground. To some its central mass, between the top and the ground, seemed to revolve around a horizontal axis. Some observers noticed the cloud had a distinct funnel shape as it retreated into the distance. The tornado was attended by lightning and hail, some hailstones measuring three-quarters of an inch in diameter. The rain was light until some minutes after the cloud had past, when a heavy shower of short duration occurred. The roar caused by the storm was so deafening that no mere sound of crashing buildings could be heard.

Of the first group of ten houses, situated within 500 feet of the depot, eight were totally destroyed, including the depot, while one building almost in the center of the group escaped without any damage, and a substantially built two-room house was thrown bodily on the railroad track 75 feet away from its foundation. Farther on all the dwellings, the store, and the church of Bergens were razed to the ground. Of ten empty box cars standing on a side track of the Empire Road three were overturned and the other seven were blown toward the center of the storm track, some heavy parts being carried 100 feet away to a low hill. In the southeastern portion of the path all the tall trees were either blown down or snapped off at from 10 to 20 feet above the ground, and every house sustained heavy damage. At Bergens six persons were killed outright and two died of their injuries on the same day; the other injured number sixteen. Twenty-seven houses were totally destroyed and fifteen more or less damaged. The property destroyed was valued at about \$50,000.

From Bergens the tornado progressed toward the northeast, with a path three-quarters of a mile wide. The few dwellings in its way were badly damaged, and at Old Democrat, a village 4 miles northeast of Dora, several houses were blown down and two persons were killed.