

# Seeing Inside of a Tornado

BY ALONZO A. JUSTICE

[Weather Bureau Office Dodge City, Kans.]

Although the incidents herein set forth occurred nearly two years ago, it is thought that they are sufficiently interesting to be reported even at this date. It was just 16 months to a day from the time the events happened that the writer heard a direct account of them from the man whose extraordinary experience forms the basis of this story.

Mr. Will Keller, a farmer of near Greensburg, Kans., is the man to whom reference is made, and the following is substantially his story:

It was on the afternoon of June 22, 1928, between 3 and 4 o'clock. I was out in my field with my family looking over the ruins of our wheat crop which had just been completely destroyed by a hailstorm. I noticed an umbrella-shaped cloud in the west and southwest and from its appearance suspected that there was a tornado in it. The air had that peculiar oppressiveness which nearly always precedes the coming of a tornado.

But my attention being on other matters, I did not watch the approach of the cloud. However, its nearness soon caused me to take another look at it. I saw at once that my suspicions were correct, for hanging from the greenish-black base of the cloud was not just one tornado, but *three*. See Figure 2.

One of the tornadoes was already perilously

near and apparently headed directly for our place. I lost no time therefore in hurrying with my family to our cyclone cellar.

The family had entered the cellar and I was in the doorway just about to enter and close the door when I decided that I would take a last look at the approaching tornado. I have seen a number of these things and have never become panic-stricken when near them. So I did not lose my head now, though the approaching tornado was indeed an impressive sight.

The surrounding country is level and there was nothing to obstruct the view. There was little or no rain falling from the cloud. Two of the tornadoes were some distance away and looked to me like great ropes dangling from the clouds, but the near one was shaped more like a funnel with ragged clouds surrounding it. It appeared to be much larger and more energetic than the others and it occupied the central position of the cloud, the great cumulus dome being directly over it.

As I paused to look I saw that the lower end which had been sweeping the ground was beginning to rise. I knew what that meant, so I kept my position. I knew that I was comparatively safe and I knew that if the tornado again dipped I could drop down and close the door before any harm could be done.

Steadily the tornado came on, the end gradually rising above the ground. I could have stood there only a few seconds, but so impressed was I with what was going on that it seemed a long time. At last the great shaggy end of the funnel hung directly overhead. Everything was as still as death. There was a strong gassy odor and it

seemed that I could not breathe. There was a screaming, hissing sound coming directly from the end of the funnel. I looked up and to my astonishment I saw right up into the heart of the tornado. There was a circular opening in the center of the funnel, about 50 or 100 feet in diameter, and extending straight upward for a distance of at least one half mile, as best I could judge under the circumstances. The walls of this opening were of rotating clouds and the whole was made brilliantly visible by constant flashes of lightning which zigzagged from side to side. Had it not been for the lightning I could not have seen the opening, not any distance up into it anyway.

Around the lower rim of the great vortex small tornadoes were constantly forming and breaking away. These looked like tails as they writhed their way around the end of the funnel. It was these that made the hissing noise.

I noticed that the direction of rotation of the great whirl was anticlockwise, but the small twisters rotated both ways -- some one way and some another.

The opening was completely hollow except for something which I could not exactly make out, but suppose that it was a detached wind cloud. This thing was in the center and was moving up and down.

The tornado was not traveling at a great speed. I had plenty of time to get a good view of the whole thing, inside and out. It came from the direction of Greensburg, which town is 3 miles west and 1 mile north of my place. Its course was not in a straight line, but it zigzagged across

the country, in a general northeasterly direction.

After it passed my place it again dipped and struck and demolished the house and barn of a farmer by the name of Evans. The Evans family, like ourselves, had been out looking over their hauled-out wheat and saw the tornado coming. Not having time to reach their cellar they took refuge under a small bluff that faced to the leeward of the approaching tornado. They lay down flat on the ground and caught hold of some plum bushes which fortunately grew within their reach. As it was, they felt themselves lifted from the ground. Mr. Evans said that he could see the wreckage of his house, among it being the cook stove, going round and round over his head. The eldest child, a girl of 17, being the most exposed, had her clothing completely torn off.. But none of the family were hurt.

I am not the first one to lay claims to having seen the inside of a tornado. I remember that in 1915 a tornado passed near Mullinville and a hired man on a farm over which the tornado passed had taken refuge in the barn. As the tornado passed over the barn, the door was blown open and the man saw up into it, and this one like the one I saw, was hollow and lit up by lightning. As the hired man was not well known, no one paid much attention to what he said. [Mr. Keller thought that this tornado was the one shown in photograph opposite p. 448 of MONTHLY WEATHER REVIEW of 1919.]

According to Mr. L. E. Wait, president of the Greensburg State Bank, the tornado passed the outskirts of Greensburg, striking and demolishing some outhouses. As it passed Greensburg it swept the ground and made a

noise like distant heavy hail. Mr. Wait and others watched it as it traveled eastward toward the Keller farm and saw it rise from the ground. Mr. Wait said that from the rear it looked like a "sawed-off cylinder."

From Mr. Wait the writer first heard of Mr. Keller's's experience. Mr Wait made a trip from Greensburg to Dodge City, a distance of 50 miles, bringing Mr. Keller with him for the express purpose of having him relate his experience to the writer.

From Mr. Wait and members of his family and from Mr. Corns, cashier of the Greensburg State Bank, the following additional account of the actions of the tornado was gathered.

After leaving the Evans farm it continued to "bounce" (as one witness described it) its way across the eastern half of Kiowa County and was last heard of in Pratt County. It left a path here and there where it struck the ground, not of wrecked buildings, for there were no more buildings in its path after the Evans farm, but of torn-up ground. It tore holes and plowed furrows from a few inches deep to several feet deep.

Mr. Corns said that he saw a furrow which it plowed across a field of wheat. The furrow was from 2 to 3 feet wide and as deep as the ground had been plowed, about 6 inches. The dirt was thrown over on each side of the furrow just as it might have been if a plow had made it. A farmer whose land had been marked by the tornado said that it made a furrow "deep enough to bury a horse in."

Mr. William Cobb, resident of Greensburg and owner of a number of farms in Kiowa County,

said that the tornado crossed one of his pastures of buffalo-grass sod and that it plowed a furrow a mile long, in places from 4 to 6 feet deep, and that the whole thing looked like "where there had been a grading for a railroad." The dirt was piled along the side of the furrow, just as if thrown there by hand or plow or dragged there by scrapers. It was reported that farmers used scrapers and horses to level up the ground where the tornado had disturbed it.

Mr. Wait made a trip from Greensburg eastward along the path which the tornado traveled, for the purpose of obtaining, if possible, photographs of some of the torn-up ground. But the trip was made 18 months after the occurrence of the tornado and the land including the Cobb pasture, had all been twice sown in wheat and only a few faint traces could be found.

Mr. Keller is a man apparently between 35 and-40 years of age. His reputation for truthfulness and sobriety is of the best. Apparently he is entirely capable of making careful and reliable observations.

Publication of the [National Oceanic & Atmospheric Administration \(NOAA\)](#), [NOAA Central Library](#).

Last Updated: June 8, 2006 9:24 AM

[Privacy Policy](#) | [Disclaimer](#)