A TYPHOON IN SICILY.

In the early morning of the 7th of October, 1884, Etna was seen to be covered with a mantle of clouds, which spread themselves in a north-west direction. At eight o'clock there was a barometric depression throughout the whole western part of Sicily, the mercury falling two millimetres. During the typhoon, which began at about noon, the barometer registered 761.1 millimetres, whereas in the morning at nine o'clock it stood at 761.8 millimetres. The normal average is 762.5 millimetres. The thermometer at nine o'clock was 22.5° C., and during the storm went up slightly. The relative humidity at nine was 0.78,

A VIEW NEAR CATANA AFTER THE TYPHOON.
(From *La Nature.*)

but at noon had risen to 0.88. At eight o'clock the wind was from east-north-east, blowing gently, and at noon was from the south-east. At 12.30, near the Passo Portese, 18 kilometres from Catana, a dark cloud in the form of a spout was seen to form. The rotary movement was opposite that of the hands of a watch, and the spout travelled across the country from west-south-west to east-south-east at the rate of 28 kilometres (17 miles) per hour. It frequently raised itself above the ground for some moments, and then again touched the land to complete its devastation. When near Ognina, it left the land and went to sea, where it died out. The noise produced by the storm has been compared to that caused by many trains of cars passing over an iron bridge at high speed. There were very few flashes of lightning, and only two reports of thunder loud enough to be heard above the storm. Hailstones of great size fell on the northern border of devastation, causing much damage. They were very rough, and some were as large as oranges. One weighed 300 grams. The zone of greatest devastation was about 27 kilometres in length (not including the 5 kilometres at sea), with a breadth of 350 metres. Twenty-seven inhabitants were killed, and five hundred wounded. Many houses were destroyed, trees torn up by their roots and carried away, and in one place a piece of lava weighing 8 kilograms was thrown through a window 10 metres from the ground, while another pierced a house like a bullet.

EFFECTS OF THE TYPHOON IN A CATANA OLIVE-GARDEN.
(From *La Nature.*)

CREEPING OF RAILS.

It has been observed by those having charge of railroad-tracks, that in some places the rails move longitudinally, or 'creep.' On double-tracked lines the rails tend to move in the direction of the traffic; but on single-tracked roads the alternating direction of the trains will naturally neutralize this tendency. Again: on long inclines or grades the track may creep down hill, — a phenomenon which is reasonably attributed to expansion and contraction from successive changes of temperature, the rails slipping in the direction of least resistance; that is, expanding down hill, and contracting up hill. In both cases there is generally little difficulty in arresting the movement by driving spikes into the ties through the notches provided for this purpose, either in the rail-flanges at or near their ends, or in the angle splice-bars so commonly used at joints. The rail often exerts considerable force against these spikes or bolts, and has been known, in some instances, to partially cut or shear them off. The thrust is resisted by the ballast in which the ties are bedded.

A curious instance of rail-creeping, which it is difficult to explain, was given in the *Railroad gazette*, Dec. 5, 1884, where it is stated, that on a piece of single track on the New-York and New-England railroad near Hartford, Conn., a part of which was level, and the rest on a grade of twenty feet per mile, with an equal number of trains each way, one rail moved down hill five feet and one inch in the course of a year, and the other moved eighteen inches in the reverse direction. It has been suggested that the spikes in the two ends of the ties or sleepers may not have been properly alternated, thus allowing the ties to turn horizontally from the correct position at right angles to the rails.