

miles—even up to a thousand miles—in diameter. Hurricanes, tornadoes, typhoons, cyclones, cyclonic storms, are some of the names applied to storms, which may be classified as tropical cyclones, temperate-zone cyclones, thunder-showers, and tornadoes.

Hurricanes and Typhoons

The tropical cyclones of the North Atlantic are called hurricanes, and those of the North Pacific, which seem to rise over the South China Sea, are known as typhoons. Sailors always know when a typhoon is approaching.

There is a thin haze of curious clouds, which cause dull red sunsets; the air is sticky and hot; the barometer shows unexpected high pressure, and the wind dies down; there are long rolling swells upon the sea; and soon after the barometer falls and continues to fall. Then a rain cloud appears on the horizon, rushes on the ship, and lets fall a deluge of water. The wind increases steadily. Suddenly the wind dies down, blue sky appears, and all seems serene.

The cautious sailor knows, however, that he has passed through only one-half of his troubles. Suddenly the wind rises from the opposite direction and blows sometimes with even greater fury. After a few hours the wind ceases and the heavens gradually clear. What has happened is that the ship has been through the eye, or centre, of the storm, and has caught the violent winds which blow towards it on both sides.

These tropical-cyclones are very destructive to shipping, agriculture, and buildings on the coasts. They give rise to waves, which sometimes flood cities, causing great loss of life.

The temperate-zone cyclones, usually called cyclonic storms, are far less destructive. They move more slowly and are characterized by gentler winds and rains. The tropical cyclones are rarely more than 600 miles across, while the cyclonic storms may extend over

a region of 1,000 miles or more. The tropical storm loses its force as it travels into temperate regions or over large land areas; the other may suddenly increase in vigour.

These cyclonic storms sometimes travel right round the earth, and at other times they do not get far from their point of origin. They are of great importance to crops, because they bring alternate days of rain and sunshine. They are more common in the Northern than in the Southern Hemisphere.

Thunder-showers are caused by moist air

rising, cooling, and condensing its moisture. Everyone has watched the various stages—the heavy nimbus cloud, the falling rain, the squall caused by the rising and sinking air at the front of the cloud forming a whirl, and the broken clouds following after. In the tropics it is common for 200 days to be recorded as having thunder-showers. The path of a thunder-shower is far shorter and narrower than that of a hurricane or cyclonic storm, and its duration is usually only for a few hours.

Tornadoes usually occur as parts of thunderstorms. An eddy is started which makes a funnel-shaped cloud moving towards the east with the larger storm of which it is a part. By centrifugal force the air is thrown away from the centre of the whirl, thus leaving an area of low pressure. The de-

struction is terrific, but fortunately the path of a tornado is never very wide, varying from a few feet to several thousand. Tornadoes occur chiefly in the open prairie country of the United States. At sea tornadoes are called waterspouts.

STOWE, HARRIET BEECHER (1811–96). The distinction of having written the book which, by its vivid pictures of the evils of slavery, is reckoned as one of the forces that helped to bring about the American Civil War, belongs to Harriet Beecher Stowe, the author of “Uncle Tom’s Cabin.”

FAMOUS AMERICAN AUTHORESS



Harriet Beecher Stowe, whose “Uncle Tom’s Cabin,” one of the most successful stories ever written, laid bare the horrors of slavery and did much to bring about its abolition.