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? WHY THE WEATHER ?

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STORM TIDAL WAVES

In the recent Cuban disaster, as so often happens in tropical hurricanes, the greater part of the loss of life was the work of invading waters and not due to the direct effects of wind. The hapless town of Santa Cruz del Sur was overwhelmed by what is commonly called a "tidal wave." This name is a misnomer for two reasons: first because the phenomenon in question has nothing to do with the lunisolar tides, and second because it consists of a series of waves, rather than a single wave, though one or a few of the series may be conspicuously bigger than the rest. In some cases, moreover, there is a rapid rise of the coastal waters without anything that looks like a wave. Since, however, a committee of eminent geophysicists recently appointed by the International Geodetic and Geophysical Union to investigate the erratic waves and floods that sometimes result from storms, submarine earthquakes and submarine volcanic eruptions calls itself the "Committee for the Study of Tidal Waves," the layman need no longer fear to be frowned upon when he refers to these spectacular events as "tidal waves."

Storm tidal waves are the combined effect of wind and the local elevation of the ocean surface due to diminished atmospheric pressure, but while wind is the principal cause they spread far out from the storm area and thus may play havoc on a coast where, at the time, the air is calm. Winds and waves came together at Santa Cruz, but on August 29, 1916, no wind was blowing in the roadstead of Santo Domingo City when enormous swells from a small cyclone passing to the southward stranded and wrecked the U.S.S. "Memphis."

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