

A Science Service Feature

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? WHY THE WEATHER ?

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BANNER CLOUDS

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Authority on Meteorology.

In connection with recent studies of the turbulent winds that blow about the Rock of Gibraltar, made partly at the Rock itself and partly in England with a model of the Rock exposed in a wind-tunnel, the current number of the Meteorological Magazine says:

"When a humid wind blows past a great obstruction, such as a hilltop or mountain peak, there is frequently to be observed a 'banner cloud' trailing downwind as a stationary feature anchored on the apex, the free wind of the day blowing along and through its body yet leaving it unmoved. We know of celebrated instances in the 'plume' of Mt. Everest and the 'table-cloth' of Table Mountain, and at Gibraltar, to correspond with these, there occurs the 'Levanter cloud.' On a day of strong damp east wind from the Mediterranean this banner cloud will spring from Gibraltar's ridge and stretch westward for several miles, with the free wind rushing through it in its onward course over the Bay.

"At regular intervals of a few minutes a terminal part of the banner will break off and travel away downwind, to be succeeded in formation and break-off by similar cloudlets in due time order. This is entirely in accordance with the known behavior of a bluff obstruction in a wind-tunnel, for eddies form in its lee and break away at time intervals that can be calculated from the scale of the obstruction."

A time interval of about three minutes was calculated for Gibraltar from the wind-tunnel experiments and the natural phenomenon was found to agree closely with this calculation.

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