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? WHY THE WEATHER ?

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SQUALLS AND GUSTS

To British meteorologists we owe not only much of our knowledge of squalls, the scientific study of which dates especially from the classic "'Eurydice' squall," named for the British corvette sunk in this brief tempest off the Isle of Wight March 28, 1878, but also a clear and definite distinction between the terms "squall" and "gust."

"A squall," says Sir Napier Shaw, "is a rapid increase of wind velocity that remains over half a minute at least; it may include a number of gusts of different force. . . A gust is an increase of wind velocity followed by a lull in less than half a minute. Gusts are incidental to all winds."

M. A. Giblett, of the British Meteorological Office, says: "There is, however, a more fundamental distinction than that of duration between a gust and a squall. Gusts are due to the turbulent or eddy motion of the air arising from the friction offered by the ground to the flow of the general air current passing over the locality. In other words, they are the result of mechanical interference with the steady flow of air. A squall, on the other hand, is the result of some definite meteorological cause which affects the general air current flowing over the observer. Owing to the presence and diversity of the land surface, gusts are in general more frequent and more intense over land than over the sea. They are nevertheless experienced at sea and are very pronounced during heavy gales. In their most intense form they come with a boom like the discharge of a piece of heavy ordnance. Hence has arisen the sailor's expression 'blowing great guns.'"

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