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? WHY THE WEATHER ?

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By Charles Fitzhugh Talman,
Authority on Meteorology.

THE WATER OF A WATERSPOUT

In his classic poem the "Lusiad," first published in 1572, the Portuguese poet Camoens describes a waterspout that he encountered off the coast of Africa and he notes that the water discharged by the spout when it collapsed was fresh and not salty. As, in common with everybody else at that period, Camoens supposed that the spout consisted of water sucked up from the sea, he was doubtless much puzzled at this observation, which he does not attempt to explain.

Many later observers have testified to the same effect. Benjamin Franklin helped make the subject familiar by publishing an account of a sailor who was at the helm of a vessel when a spout broke over him, and who stated that the water that ran into his mouth and nose "tasted perfectly fresh." Other sailors, however, have been drenched with salt water from a waterspout.

Of course we know today that the chief visible feature of a waterspout is a cloud, condensed from the air, and therefore consisting of fresh water. We know, also, that when a spout collapses something in the nature of a cloudburst often occurs, owing to the sudden downfall from the clouds above of water drops previously held aloft by the vortex, and this water is necessarily fresh. However, a spout churns up a great amount of spray from the surface of the water at its base and this is swept up in some cases to a height of hundreds of feet. This spray, in the case of an ocean waterspout, consists of salt water and may constitute a large part of the deluge that falls upon a ship in an encounter with one of these sea tornadoes.

Thus the water discharged upon the vessel may be fresh, brackish or salty, according to circumstances.

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