

"Wind on the Turn of the Tide."

Having assembled my incomplete data relative to "Wind on the Turn of the Tide" for purpose of writing the article forwarded to you, I have been more interested than ever to discover an answer to my own question:

After a cool night, the atmosphere lies as a dense, cold stratum upon the sea. The warm wind starting with the day and meeting this cold medium, rises above it and blows over its upper surface which it gradually wears away.

The rays of a warm sun assist the wind in this wearing away process. The wind tends to set the upper surface of the colder strata in motion with it and the tide, if running in same direction, gently pulls the lower edge along also.

Sun and wind combined reduce the thickness of the heavier layer to a thin blanket and then, if the tide turns, the onward motion of the lower portion is suddenly checked and in the resulting confusion of currents and forces the heavy but now very thin stratum of dense air is thrown into confusion and swept away by the onward rushing wind.

This explanation, unless scientifically in error, would account for the occurrences as I have observed it. I am inclined to favor it the more because on the only two occasions when I can remember fog preceding the event I have noted the fog being whirled along by the wind only a few feet above me while I remained in complete calm for several minutes before the mist was completely blown away with the breeze following.—*Henry M. Plummer.*

RAIN AT THE HOUR OF HIGH WATER

A perusal of Mr. Plummer's observations as recorded in the issue of last October-November brings to mind a corresponding set of facts observed by me during the years 1903-'08 at Edgartown, Martha's Vineyard. The operator of the Chappaquiddick ferry first called attention to them; and investigation did not reveal, so far as I know, a single exception to the rule. A southeast gale usually brings rain; when the gale does issue in precipitation, the rain, along the southeastern shore of Massachusetts, *always begins at the hour of high water.* If the high tide passes without rain, even though all indications seem threatening, it is safe to count on twelve hours more before the down-pour will commence. Knowing this rule, even after I had removed to a town many miles inland, I was able to estimate the hour at which a southeast gale would develop rain by ascertaining the time of high tide from a tide-table, and then estimating the interval needful for the precipitation to spread inland and determining the hour when rain would begin at my home. Of course southeasters are almost exclusively phenomena of the warmer season. And not every southeaster causes rain. Subject to these limitations, the rule seems to be—*Southeast rain begins at high tide.*—*F. M. Cutler.*

Can someone on the coast cite *records* to test this?—*C. F. B.*

APRIL MEETING AT WASHINGTON.

Plans for the April meeting have been definitely made at follows: Wednesday, April 26, 2 to 4.15 P. M., session for reading and discussion of papers; 4.30-5.30 P. M., meeting of the Council; 8-10.30 P. M. session for reading and discussion of papers. The meeting will be held at the Weather Bureau, 24th and M Streets, N. W. Titles and abstracts of papers to be presented at this meeting should be sent to the Secretary at once.