DEVELOPMENT OF LIGHTHOUSES

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The paper by D. Alan STEVENSON on lighthouses which was read to the Royal Society of Arts on Dec. 2 and is published in the Society's Journal for Jan. 15 is of great interest.

D. Alan STEVENSON and his father have just been awarded a special prize by the Royal Society of Arts for their invention of the talking beacon, which combines radio and fog signal methods most satisfactorily. Many people estimate the distance of a flash of lightning by noting the time between seeing the flash and hearing the thunder. Dividing this time expressed in seconds by five gives a rough approximation to the distance of the flash in miles. Similarly, if we use fog signals and radio waves, the distance of the beacon from the ship is found in nautical miles by dividing by 5 1/4, the radio waves travelling practically instantaneously and the air waves with the velocity of sound. In the STEVENSON'S method, the ship does not need a stop-watch, only a simple radio receiver and a loud speaker, and the mariner is told in speech his exact distance at any time from the beacon whenever he hears the sound of the fog signal through the air. Suppose, for example, that the third blast of the air fog signal is heard by the navigator when the loud speaker is saying "one mile two cables", then this is the distance of the ship from the beacon. This system has been tried out successfully on the Little Cumbrae Island in the Firth of Clyde for the last twelve months.