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? WHY THE WEATHER ?

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ZONES OF SILENCE

During the past three decades frequent discussions have appeared in scientific journals concerning the erratic range of audibility of loud sounds, such as those of heavy cannonading, accidental explosions and volcanic eruptions. It frequently happens that such sounds are audible within an area of irregular shape surrounding the source, beyond which lies a "zone of silence," in which the sound is not heard, while beyond this again there are places where the sound is audible. Sometimes there are two or more zones of silence with zones of audibility beyond them.

The bombardments of the world war brought forth many discussions of this subject, and within recent years the phenomenon has been systematically investigated with the aid of explosions set off for the purpose, the reception of the sounds being noted not only by ear but also by registering microphones, etc. The sounds heard beyond the silent zone are supposed to travel to great heights in the atmosphere and then return to earth; hence their study has led to various hypotheses concerning atmospheric conditions at high levels.

Observations of silent zones are not all of recent date. Pepys, in his diary, tells how people congregated in Hyde Park in June, 1666, to listen to the guns of the English and Dutch ships fighting on the North Sea, though no sounds of this fight were heard at Deal and Dover, on the coast.

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