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? WHY THE WEATHER ?

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THE HUMMING OF WIRES

By Charles Fitzhugh Talman,
Authority on Meteorology

What makes telegraph and telephone wires hum? There has been a good deal of controversy over this question in scientific circles. Of course, the sound is not caused or affected by the electric currents passing along the wires, and it is almost certainly due solely to the wind, despite the suggestion often made that it is caused by the small and rapid earthquake tremors, imperceptible to human senses, known as "microseisms." The humming is best heard when one's ear is placed against a telegraph or telephone pole.

A number of meteorologists have made regular observations of this sound from day to day and claim to have found relations between its occurrence and various weather conditions. The sound has even been used as a basis of weather predictions, but such notions about it are undoubtedly illusory.

The real origin of this sound is revealed by motion pictures of the eddies produced in water flowing past a wire or other cylinder. The eddies are seen to occur in rapid succession alternately to the right and left of the obstruction. The same thing happens in the air. The alternation is regular and often occurs at the right speed to produce audible sound waves. The sound is more or less musical, on account of the regularity of the waves, and its pitch varies with the diameter of the wire and the speed at which the air flows past it.

The humming is loudest when the wires are tightly stretched, as they are likely to be in cold weather. The eddies cause rapid variations in the tension of the wires, and these variations are transmitted to the posts, which act as sounding boards and greatly increase the volume of the sound.

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