

Aurora Borealis Interrupts Wire Service Throughout Country; Phones Affected Here

Electrical disturbances, believed to have been caused by aurora borealis, interfered with telegraphic communications in most of the United States at intervals yesterday. The trouble began about 11 A. M. and continued intermittently till noon.

The American Telephone and Telegraph Company in a statement said:

"The interference did not affect the long-distance telephone lines or the long-distance telegraph lines, which are metallic throughout. It did affect the grounded telegraph circuits, and interference amounting to as much as 120 or 150 volts of foreign potential was discovered. As far as the Bell system is concerned, the interference affected only grounded telegraph lines throughout the country except southeast of Atlanta.

Telephone service in New York was interrupted at intervals between 11 A. M. and noon.

The Associated Press reported that its wires were affected between 11:31 and 11:38 yesterday morning in New York City and north to Albany and west to Toledo, and that they were spasmodically affected about Chicago and Columbus, Ohio, at 11:45 A. M. Commercial cable and telegraph companies also announced some delays in transmission of messages. Telegraph messages coming into THE NEW YORK

TIMES office last night were interrupted at intervals between 6 and 9 o'clock, after which the interference appeared to have ceased.

A scientist connected with the American Telephone and Telegraph Company explained the interference as follows:

"The current theory as to the nature of the aurora postulates that the sun is responsible for the emission of an electric charge, presumably in the form of electrons. Why this charge is emitted by the sun is still the subject of conjecture.

"It is emitted with such force as to traverse the many millions of miles separating the earth and the sun. Although presumably emitted in a random direction, it still reaches the earth to such an extent as to cause very brilliant displays at times in the upper atmosphere.

"Probably the charge does not actually penetrate through the earth's atmosphere and reach its surface, but the influence of the charge readily makes itself felt on the earth's surface by establishing differences of potential between points rather widely separated geographically.

"These differences of potential manifest themselves in the grounded telegraph circuits by conflicting with the potential of the telegraph batteries."