

# ELECTRIC WAVES SWEEP WORLD.

## Mysterious Pulsations of En- ergy Roll Down from the North Pole.

### TIE UP THE TELEGRAPH.

#### "Wireless" System Hopeless and the Others Work Slowly if at All.

Two severe electrical disturbances, one following the other so closely that in some parts of the country they seemed as one, have practically held up telephone and telegraph business in the United States, Canada, and Mexico for more than twenty-four hours, and experts declare that similar disturbances may recur at frequent intervals for a week.

The cause of the disturbance lies in some law of nature which is not yet known to scientists. It is definitely known that the aurora borealis and the aurora australis are in some way connected with the "storm," and the fact that scientists have found that the aurora and sun spots are linked together by another unknown law is the basis of the assertion that the sun spots are the cause of the present disturbance.

#### Waves from the North Pole.

Powerful currents during the last twenty-four hours have swept in irregular waves from the north pole south through Canada, the United States, and Mexico. The fact that the greatest disturbance was observed in Regina, in the northwest territory, Helena, Mont., Denver, and Trinidad, Colo., Las Vegas, N. M., El Paso, Tex., and Guadalupe, Mexico, and that all of these cities are within a few miles of the 105th meridian seems to indicate that the course of the current was along that line. The disturbance was not so severe in Mexico as in Regina, where it reached its maximum.

From the 105th meridian the current radiated east and west, and electrical machinery and instruments in every part of the country were more or less affected by it.

In Chicago telegraph and long distance telephone lines were seriously interfered with, and wireless telegraphy was almost impossible. From points in the north and western part of the United States came reports of a brilliant display of the northern lights, and even in Chicago above the smoke of the city a faint red glow hung in the northern sky. In Salt Lake City the aurora was mistaken for a fire north of the city Saturday morning, and in Duluth, Minn., it took the form of huge waving columns, apparently blown by the wind.

#### Starts Soon After Midnight.

The disturbance first manifested itself about 1:30 yesterday morning and it continued until late in the afternoon. The climax of the first "storm" came at 8:30 o'clock. In the morning and telegraph men in Chicago agree that it was the worst in years. Toward sunset the waves became less frequent and in some parts of the country nearly ceased for a few hours. During the evening the second "storm" began and it continued all night.

Telegraph lines coming into Chicago from the north and northwest were most affected. Lines coming from southern points were barely affected. The current came in pulsations, gradually becoming strong and then diminishing to return at intervals of a few minutes or seconds. Extremes of heat or cold, dense fogs along the lines frequently cause trouble for telegraph men, but it is asserted that none of these difficulties is so damaging to telegraphic communication as the storm now in progress.

Scientists have recently agreed that somewhere in the universe is a great fund of electrical energy. Occasionally this energy breaks loose, and, centering itself on the earth, indulges in freakish antics. Disturbances similar to that of yesterday have been observed before, but heretofore they have not been so severe. Prof. E. C. Freeman, head of the department of electrical engineering in Armour Institute, believes that the disturbance is due to the aurora borealis, and that as a result the northern lights will be visible in Chicago for several nights.

"The aurora borealis is now generally conceded to be caused by electrical discharges in the higher atmosphere," said he, "and it is known to be in some way connected with the sun spots. Just what the connection is has not been determined.

#### Might End All Human Life.

"Theoretically, such a disturbance as that of yesterday, if intensified, might exterminate all life on the face of the earth, but there is little likelihood of this. Had the currents been more continuous and of a slightly higher voltage they would have been perceptible to the human body."

Prof. Cox of the weather bureau also believes that the aurora borealis is the cause of the disturbance and predicts brilliant displays of the northern lights as a result.

J. E. Pettit, chief operator of the Postal Telegraph company, holds sun spots responsible for the trouble. "At 8:30 o'clock this morning, when the storm seemed to have reached its climax, we tested our wires without batteries," he said. "We took the bat-

#### Statement of Prof. C. G. Comstock.

Prof. C. G. Comstock, director of Washburn observatory at Madison, Wis., says the cause of the currents probably is a storm in the sun.

"Probably the real cause is severe disturbance on the face of the sun, producing heavy electrical currents, which affect the earth," said he. "At least this is the belief of the scientists."

Prof. Comstock said that a series of eruptions or disturbances occur on the surface of the earth in cycles of eleven years. "These disturbances," he said, "are much like thunder storms on earth."

#### Cripples Wires in England.

LONDON, Oct. 31.—The severest electrical storm of many years crippled telegraphic communication throughout the united kingdom today. The atmospheric conditions were better than has been usual during the present stormy autumn, but communication over the land lines and by cable was almost wholly interrupted. The government scientists predicted that better conditions would prevail after sunset and their forecasts proved to be true as regarded the cables, but the condition of the land lines became worse, if possible. The disturbance shows no sign of abating.

#### Continent of Europe Affected.

PARIS, Oct. 31.—Telegraphic communication between France and the remainder of Europe and America was almost suspended throughout the entire day in consequence of an electrical disturbance which seems to be general over the world. The conditions resulting from the disturbance were the worst known since the installation of telegraphs. Communication by wire after being interrupted all day was suddenly restored at sunset, but again interrupted within an hour.

#### Brilliant Aurora in New York.

New York, Oct. 31.—[Special.]—Business in the stock exchange was seriously hampered today by the inability of brokers to get orders over the wire from their western customers. The interruption in telegraph service was the result, it is believed, of extraordinary electrical disturbances caused by the aurora borealis, which was seen here last night. The disturbances so affected the cable, telegraph, and telephones lines that the various companies today issued notices that their services would be slightly delayed. The French cable line notified its patrons that a message had been received at its main New York office from the European officials stating that business would be subject today to a heavy delay. For two hours early this morning, between 2 and 4 o'clock, New York's telegraph service was badly crippled and few messages got through. The brilliant display of the aurora borealis was witnessed by hundreds of New Yorkers.

#### A Sure Thing.

Stocks tumble, real estate stands still, but Diamonds go on paying 20 per cent annual profit to the wearer. Easy payments. Lofels Bros., 92 State.