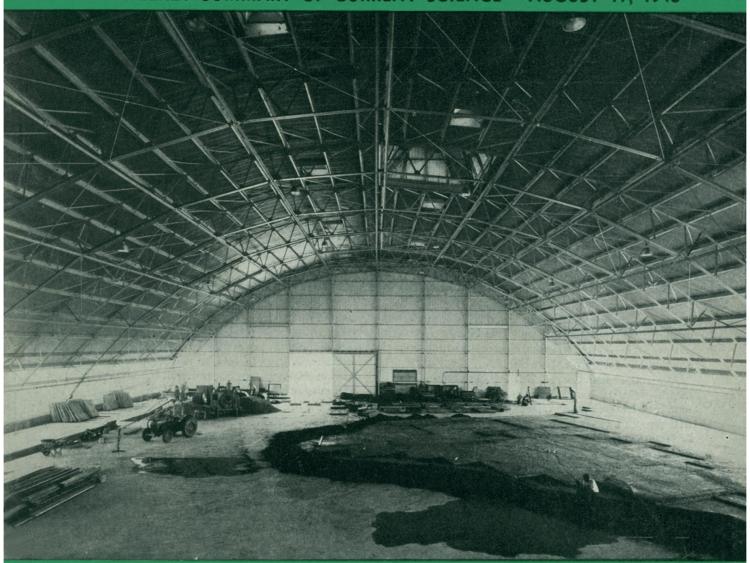


1921

SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE • AUGUST 17, 1946



Typhoon-Proof Harbor

See Page 103

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1946



Lighting Main Street

Sixty years ago electric lighting, as we enjoy it today, was unknown. This was because only one kind of electricity was available-direct current-which could be transmitted economically for only a short distance.

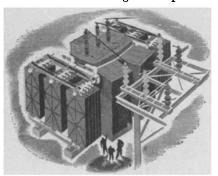
About this time George Westinghouse began experimenting with the "new" alternating current electricity. He soon realized that here was the golden key to a new industrial age—for he found that alternating current could easily be "transformed" to high or low voltage, at will.

Westinghouse reasoned that alternating current could thus be transmitted for many miles at high voltage, then reduced to low voltage at the point of use.

This great industrial pioneer acted at once. He acquired the rights to manufacture a new invention-the "a-c transformer." He then redesigned it completely and sent his associate, William Stanley, to the outskirts of Great Barrington, Massachusetts . . . to install the first complete a-c transmission system in America.

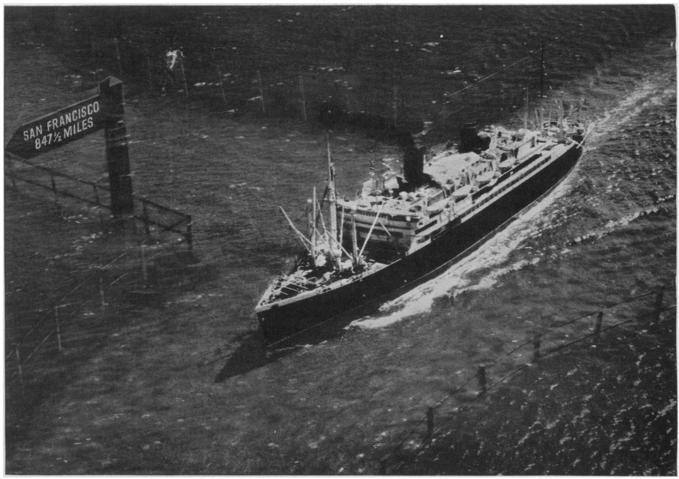
On the historic night of March 20, 1886, William Stanley closed a master switch and electric lights blazed on Main Street, Great Barrington, nearly a mile away.

George Westinghouse's dream of the long-distance transmission of electricity was well on its way to fulfillment.





TODAY . . . The Westinghouse Electric Corporation manufactures hundreds of different types of transformers—from thimble-size units for radio receivers to giants with ratings as high as 100,000 kva. Two of the latter type . . . each as big as a six-room house . . . were built by Westinghouse for a large eastern utility to transform the output of a huge power plant soon to be put into service.



Developed during the war, Loran projects long-distance radio beams to guide ships on lanes charted by radio-electronics.

Loran-"highway signposts" for the seas and skies!

Loran provides a new kind of road map for the sea and air, day or night, and in almost any kind of weather.

With Loran, ships and planes as far as 700 to 1400 miles offshore in the densest fog can determine their positions with uncanny accuracy. Trial installations of Loran are being successfully conducted on both the Atlantic and Pacific by Radiomarine Corporation of America—a service of RCA.

The same scientists and engineers at RCA Laboratories who were largely

responsible for the development and refinement of Loran also devote their skills and knowledge to every RCA product.

This never-ending research at RCA Laboratories is your assurance that when you buy anything bearing the RCA or RCA Victor monogram you are getting one of the finest instruments of its kind science has yet achieved.

Radio Corporation of America, RCA Building, Radio City, New York 20. Listen to The RCA Victor Show, Sundays, 2:00 P.M., Eastern Daylight Time, over the NBC Network.



Loran (short for LOng RAnge Navigation) uses radio waves which hug the earth's surface instead of going off into space. Two sets of stations, about 300 to 400 miles apart, send out impulses to a Loran receiver on shipboard like the one shown above. It then shows the ship's exact position.



RADIO CORPORATION of AMERICA