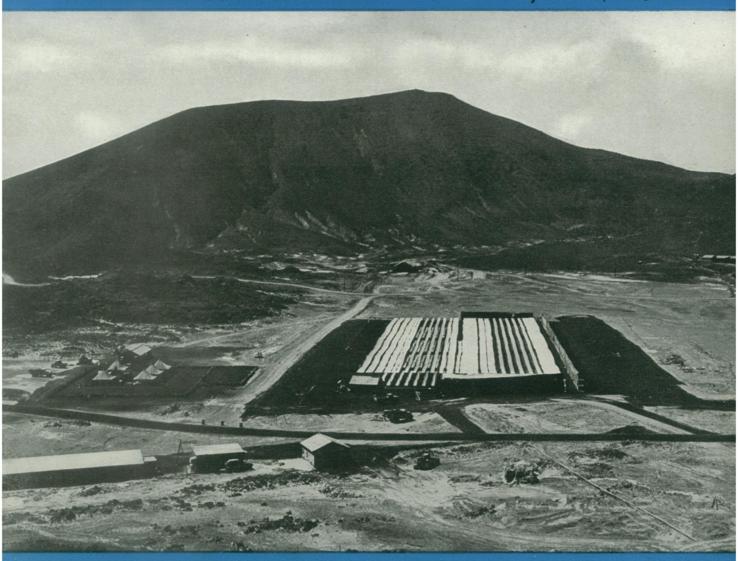


## SCIENCE NEWS LETTER



THE WEEKLY SUMMARY OF CURRENT SCIENCE • JUNE 16, 1945

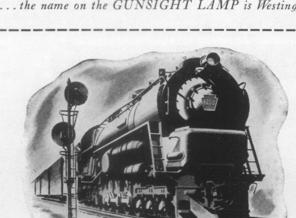


Garden on a Rock See Page 378

A SCIENCE SERVICE PUBLICATION

In a bomber a GUNNER uses a new gunsight lamp that permits him to aim directly into the sun – blasting enemy planes that otherwise would be invulnerable because of the blinding glare.

... the name on the GUNSIGHT LAMP is Westinghouse.

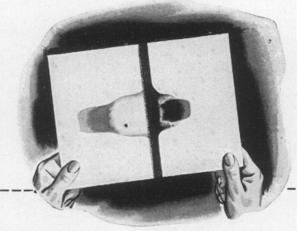


On a railroad an ENGINEER gets smoother operation - and 25% more power - from his steam locomotive because of a revolutionary new steam turbine drive.

... the name on the TURBINE DRIVE is Westinghouse.

In an Army arsenal a BALLISTICS EXPERT photographs projectiles, smashing through armor plate, with an x-ray tube that takes a picture in 1/1,000,000th of a second.

... the name on the X-RAY TUBE is Westinghouse.





On a carrier a PLANE DIRECTOR uses a new kind of elevator to hoist planes on deck faster – keeping the deck cleared and getting fighters into the air quicker.

... the name on the ELEVATOR is Westinghouse.

is constantly at work, developing new and better war materials for final Victory.

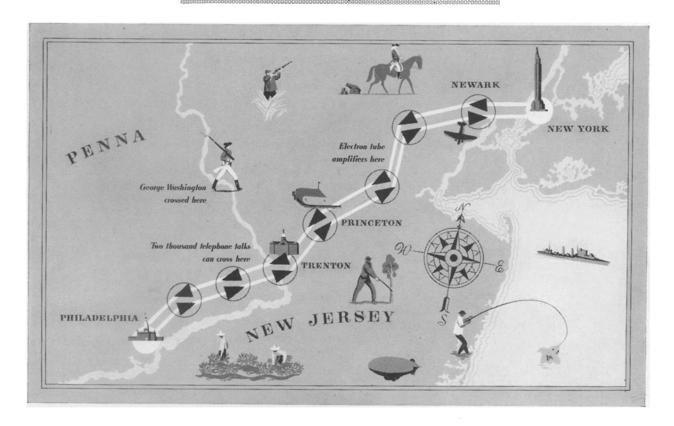
TODAY - Westinghouse skill in research and engineering

TOMORROW - This same research and engineering skill will mean more dependable, more efficient industrial equipment and appliances for the home.

Tune in: JOHN CHARLES THOMAS-Sun. 2:30 pm, EWT, NBC

## 90-MILE LABORATORY

## for Telephone and Television



Between telephone offices in New York and Philadelphia once stretched a strange sort of laboratory. Most of the way it was underground; engineers made their measurements sometimes in manholes. It was a leadsheathed cable containing two "coaxials"— each of them a wire supported in the center of a flexible copper tube.

Theory had convinced engineers of Bell Telephone Laboratories that a coaxial could carry many more telephone talks than a full-sized voice frequency telephone cable; that it could carry adequately a television program. Experimental lengths were tested; terminal apparatus was designed and tried out. Finally, a full-sized trial was made with a system designed for 480

conversations. It was successful; in one demonstration people talked over a 3800-mile circuit looped back and forth. Now the cable is carrying some of the wartime flood of telephone calls between these two big cities.

This cable made television history also: through it in 1940 were brought spot news pictures of a political convention in Philadelphia to be broadcast from New York. Bell System contributions to television, which began with transmission from Washington to New York in 1927, have been laid aside for war work. When peace returns, a notable expansion of coaxial circuits is planned for both telephone and television in our Bell System work.



BELL TELEPHONE LABORATORIES Exploring and inventing, devising and perfecting for our Armed Forces at war and for continued improvements and economies in telephone service.