

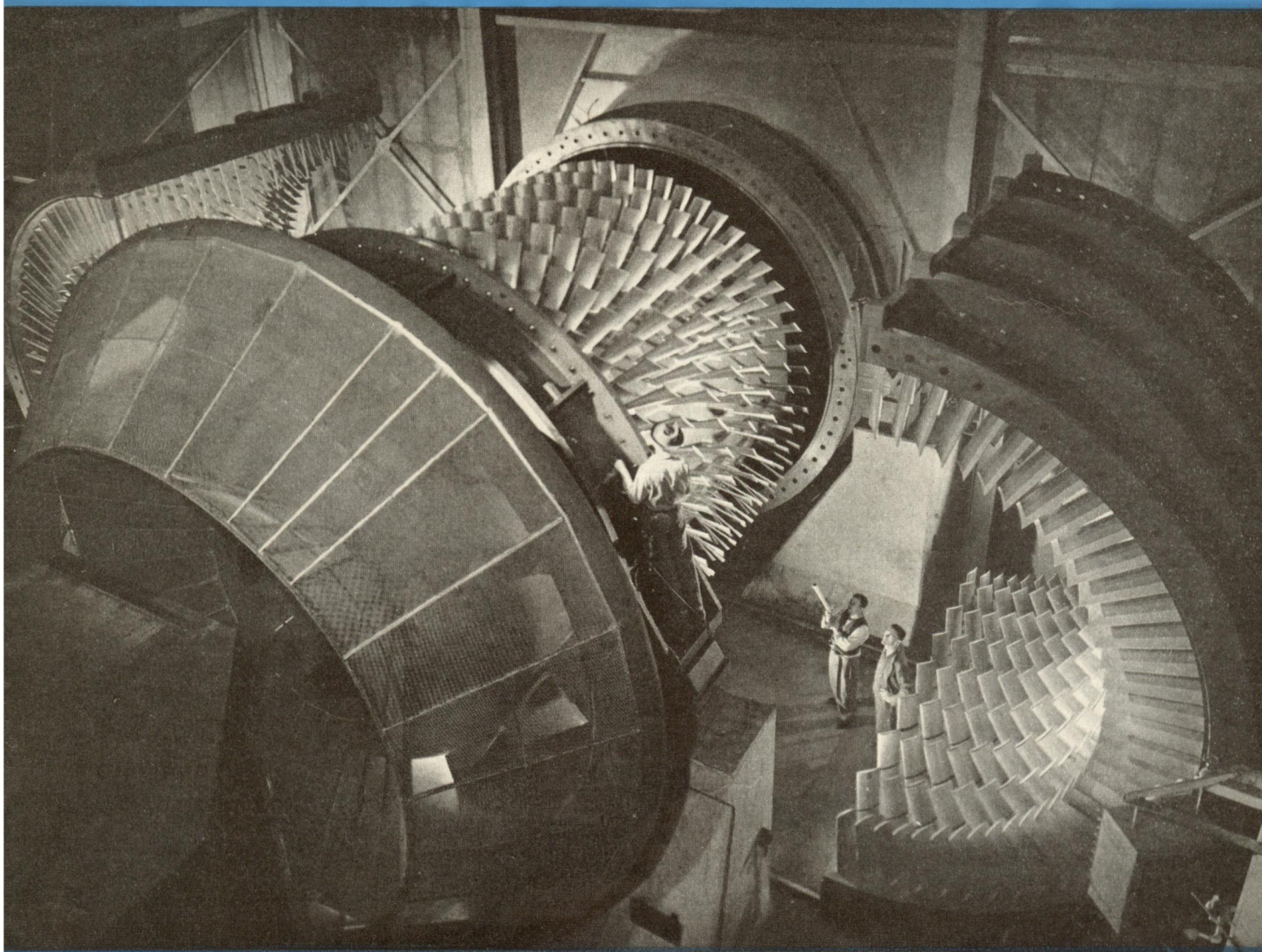
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OCTOBER 8, 1949

SCIENCE NEWS LETTER

®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



Mammoth Air Compressor

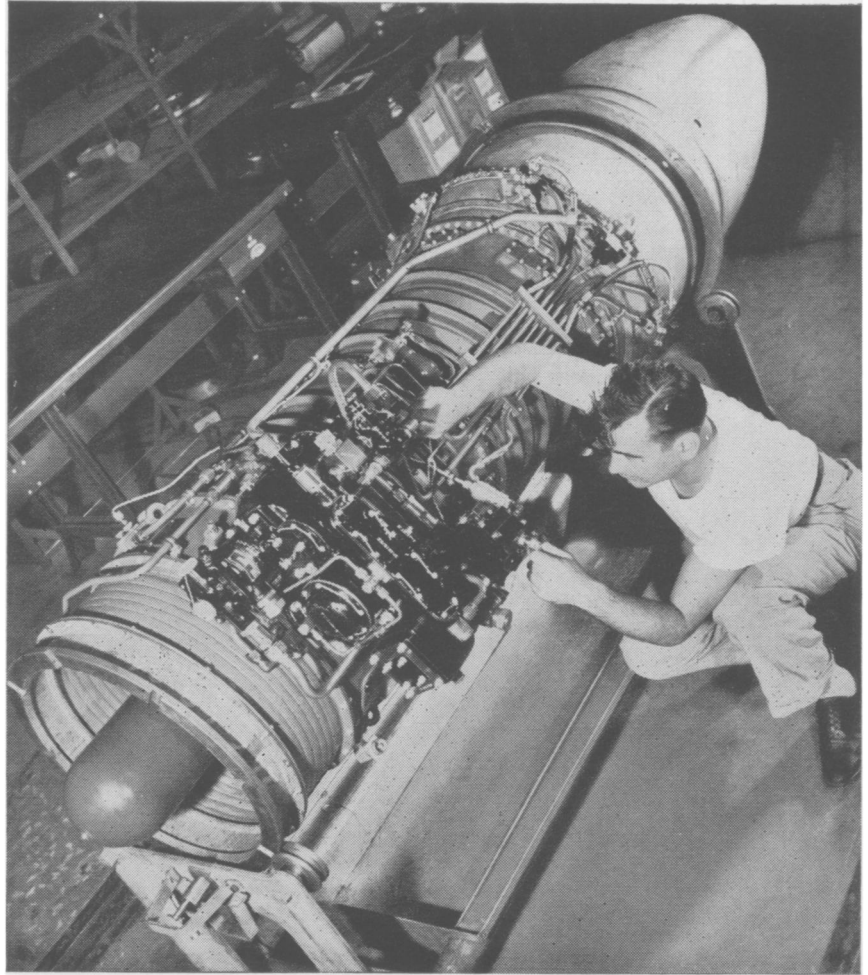
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Research... Power... Better Living



Power is the foundation of the Westinghouse business. Not electric power, not steam power, not diesel power . . . but *every* kind of power required by commerce and industry.

Some idea of the dimensions of Westinghouse in power may be gained by a few quick facts in one field of activity . . . turbines.

As the much discussed Navy "Ban-shee" and the Army Lockheed F-90 defy the speed of sound, two Westinghouse J-34 jet turbines help set a new pace in power plants for aircraft.

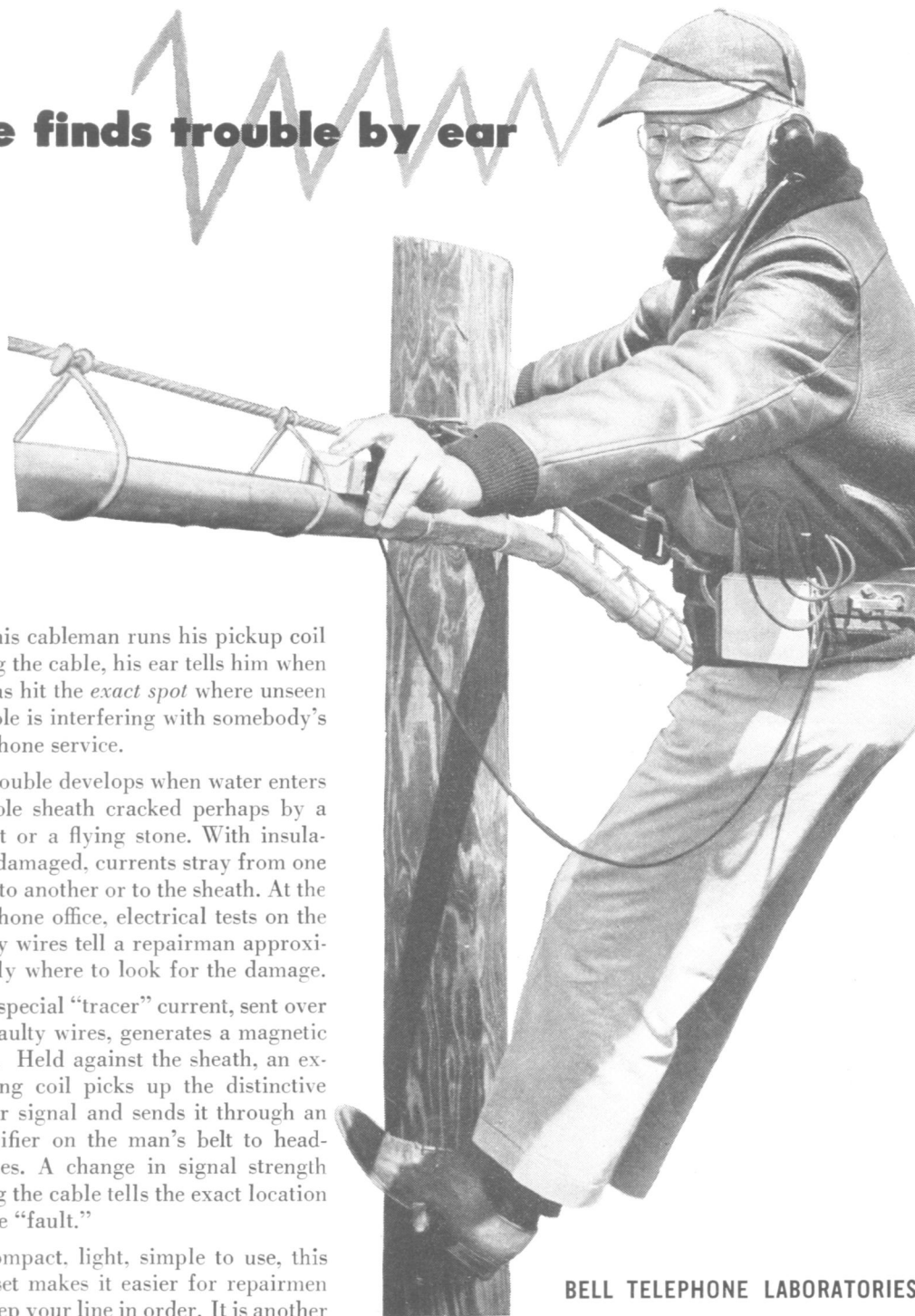
Only by calling on the rich back-

ground of experience, technical knowledge and creative skill, gained through constant research for more efficient, economical sources for power, has Westinghouse been able to attain the eminent position it holds as a leading creator and producer of power for land, sea and air.

This ability to interpret the findings of pure research and apply them in terms of useful, productive tools and products is the result of a vigorous, unceasing interest over the years in all the phases of research . . . the foundation of better living for all.

YOU CAN BE SURE . . . IF IT'S Westinghouse

He finds trouble by ear



As this cableman runs his pickup coil along the cable, his ear tells him when he has hit the *exact spot* where unseen trouble is interfering with somebody's telephone service.

Trouble develops when water enters a cable sheath cracked perhaps by a bullet or a flying stone. With insulation damaged, currents stray from one wire to another or to the sheath. At the telephone office, electrical tests on the faulty wires tell a repairman approximately where to look for the damage.

A special "tracer" current, sent over the faulty wires, generates a magnetic field. Held against the sheath, an exploring coil picks up the distinctive tracer signal and sends it through an amplifier on the man's belt to headphones. A change in signal strength along the cable tells the exact location of the "fault."

Compact, light, simple to use, this test set makes it easier for repairmen to keep your line in order. It is another example of how Bell Laboratories research helps make Bell Telephone service the most dependable in the world.

BELL TELEPHONE LABORATORIES

Exploring and inventing, devising and perfecting, for continued improvements and economies in telephone service.

