

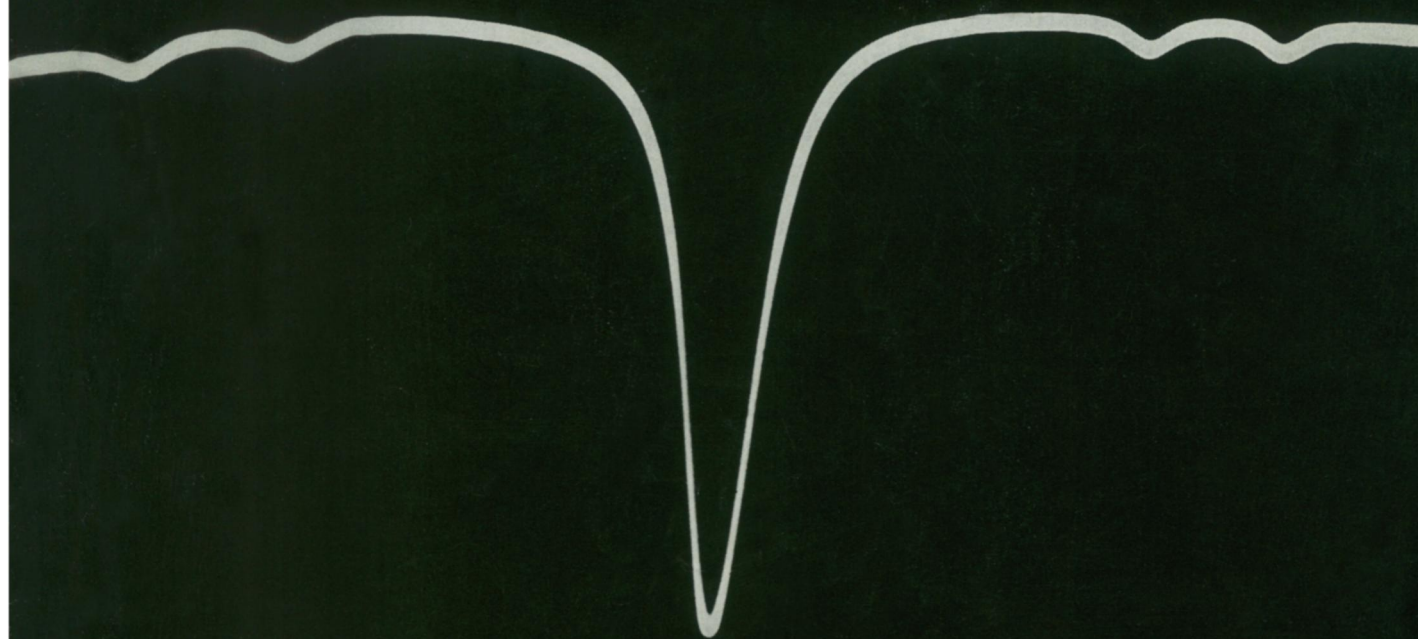
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January 15, 1949

SCIENCE NEWS LETTER

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THE WEEKLY SUMMARY OF CURRENT SCIENCE



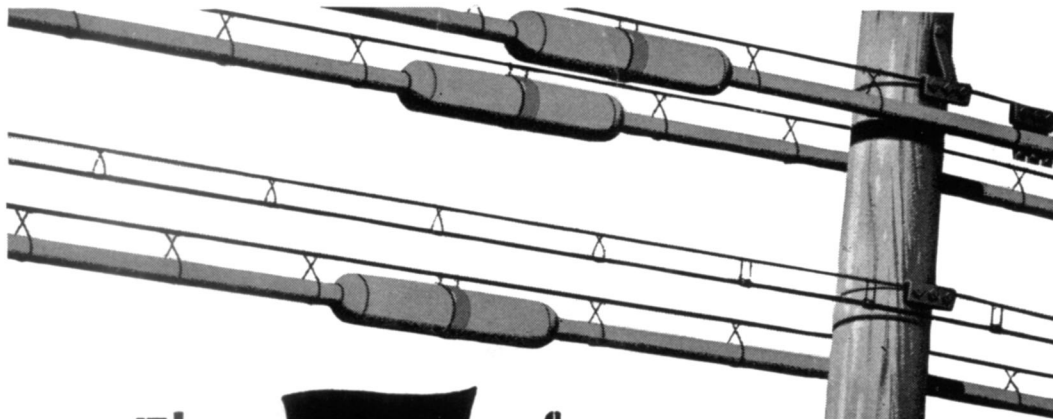
Atomic Time

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A SCIENCE SERVICE PUBLICATION

\$5.50 A YEAR

VOL. 55 NO. 3



The **case** of the Creeping Sleeve

Lead sheathing on telephone cable meets many stresses—the tug of its own weight, wind pressure, contraction and expansion from cold and heat. Then, too, there's the pressure of nitrogen gas put in Long Distance cable to warn of sheath breaks and keep out moisture.

And, sometimes, lead is subject to "creep"—a permanent stretching—even when the stress is but a fraction of the normal tensile strength. Creep is especially likely at the lead sleeves used where two lengths of cable are joined. The sleeve may stretch and break open exposing telephone circuits to the elements.

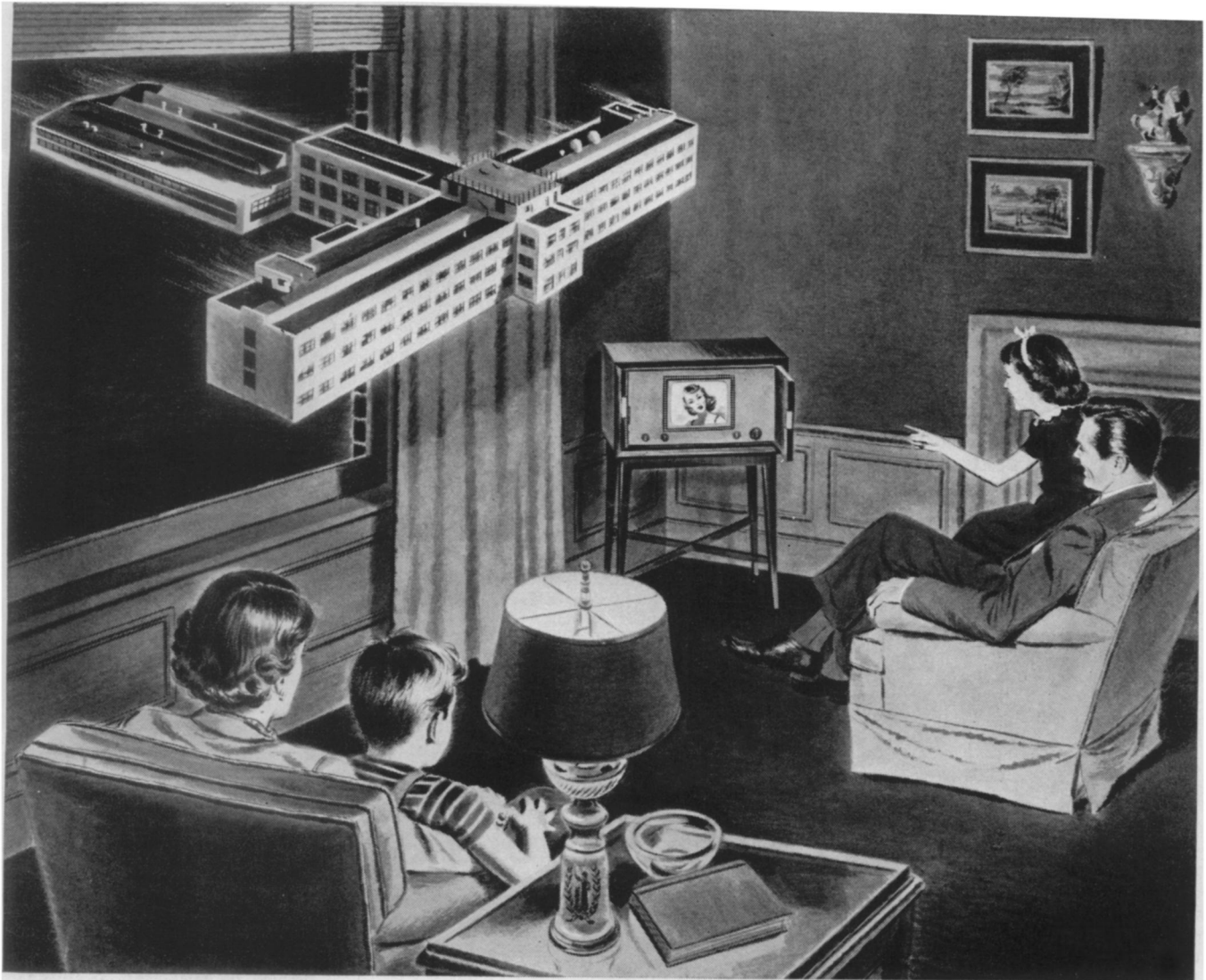
So Bell Laboratories scientists have developed methods to test and control creep. In a special testing room, weights are applied to scores of samples of lead, under controlled conditions. Exact records of the amount of creep are obtained with a precision instrument.

Years of careful study have produced a lead composition which resists creep and yet has all the other properties required of sleeves. This means better telephone service for you and helps give that service at lowest possible cost. It is an example of the way Bell Telephone Laboratories scientists study and improve every part of the great telephone plant.

BELL TELEPHONE LABORATORIES

EXPLORING AND INVENTING, DEVISING AND PERFECTING, FOR CONTINUED IMPROVEMENTS AND ECONOMIES IN TELEPHONE SERVICE.





Into your living room comes the "Age of Electronics"—through radio and television research achievements of RCA Laboratories.

Research comes to life in your Living Room

Turn on your radio, tune in a television set—as simply as that you have completed the final step in a long chain of research and invention . . .

In a generous measure, your new command of *sound* and *sight* comes from research conducted at RCA Laboratories and made available for useful purposes. Almost every major advance in radio and television dur-

ing the past 30 years was pioneered by RCA.

A few examples of RCA leadership: all-electronic television, the all-electronic radio receiver, and the Victrola radio-phonograph. The iconoscope, television's electronic "eye," was developed by Dr. V. K. Zworykin—now of RCA Laboratories. Super-sensitive Image Orthicon television cameras and kinescope "picture tubes" for receiving sets and radio relays are RCA *firsts*.

Actually, there are *hundreds* of examples of RCA leadership in radio and electronic research and engineering "know-how" . . . that give *value beyond price* in any product or service of RCA or RCA Victor.

. . .

When in Radio City, New York, you are cordially invited to visit the radio, television and electronic wonders at RCA Exhibition Hall, 36 West 49th Street. Free admission. Radio Corporation of America, RCA Building, Radio City, N. Y. 20.



RADIO CORPORATION of AMERICA

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