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SCIENCE NEWS LETTER



®

THE WEEKLY SUMMARY OF CURRENT SCIENCE



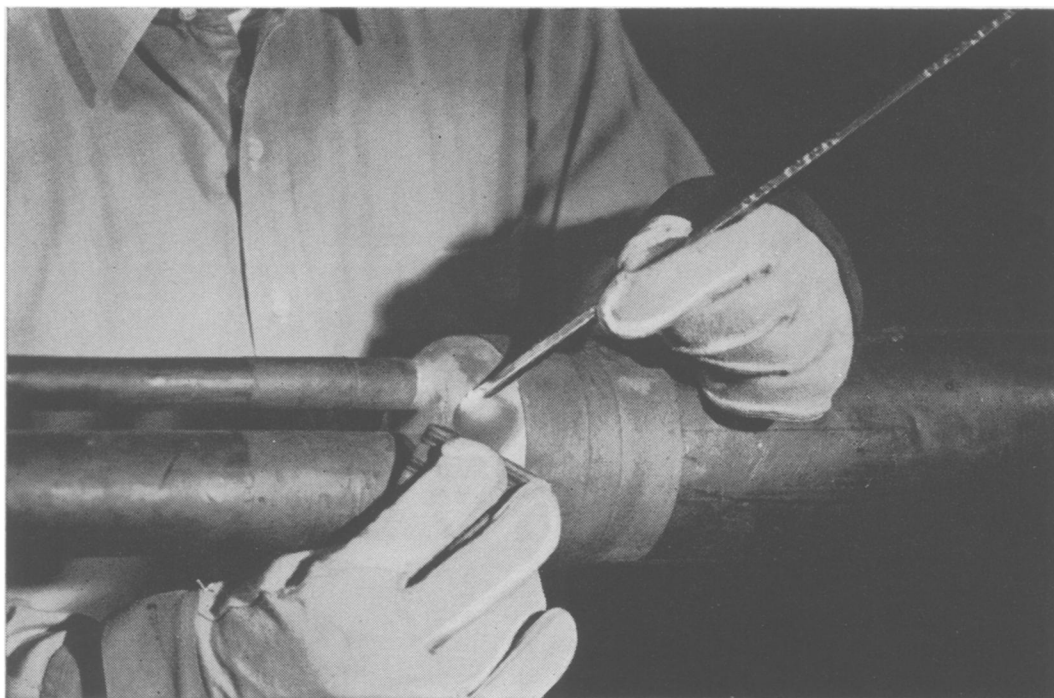
Atoms in Industry

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*He seals out
trouble...*

**TO KEEP THE COST
OF YOUR TELEPHONE
SERVICE DOWN**

To make cable joints tight and strong, splicers formerly used lots of solder. Then, Bell Telephone Laboratories developed a new technique for making *better* joints with much less solder. This saves one million pounds of solder a year — helps keep the price of your telephone service low.

Two kinds of solder are now used. One makes the splice strong; the other seals it. First, the splicer builds up a joint with a solder of lead and tin, which flows easily under his wiping cloth. To seal the joint, he applies a light coating of low-melting-point solder, composed of lead, tin and bismuth. On contact with the still hot joint, it flows into and seals every pore.

Cable-sealing solder is only one of 30 low-melting-point alloys which Bell metallurgists have developed for special uses — in fuse wires, for example, and in the solder connecting hair-like wires to piezoelectric crystals for electric wave filters.

Continuing research with a substance seemingly as commonplace as solder demonstrates again how Bell scientists help keep your telephone service the world's best.

BELL TELEPHONE LABORATORIES



• **WORKING CONTINUALLY TO KEEP YOUR TELEPHONE
SERVICE BIG IN VALUE AND LOW IN COST**