

15¢



SCIENCE NEWS LETTER

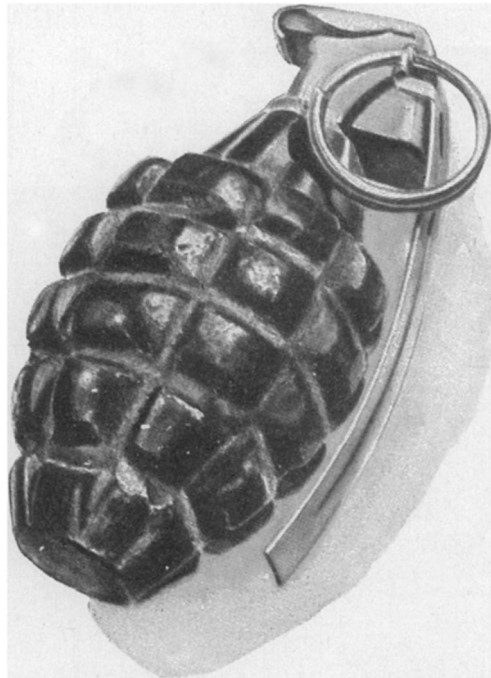
THE WEEKLY SUMMARY OF CURRENT SCIENCE • JULY 22, 1944



Perpetual Cold

See Page 56

A SCIENCE SERVICE PUBLICATION



IT MUSTN'T bite the hand that throws it



THIS IS A HAND GRENADE. When you pull the firing pin and release the lever you have only the length of time it takes the fuse to burn down to get rid of it or get away from there—and that's only a handful of seconds!

If you made hand grenades, or used them, you'd want to be mighty sure about those fuses.

You can be. The fuse of this grenade, and thousands of others just like it, was individually X-rayed while passing down a production line at the rate of 4000 an hour. When a bad fuse showed up, something equivalent to the signal for a four-alarm fire took place. A bell rang, a red light

flashed, the bad fuse was automatically daubed with red paint, and finally, to make assurance doubly sure that the bad fuse didn't slip through, it was recorded on the chart of a photoelectric meter.

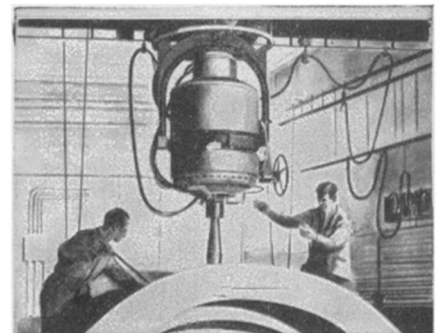
From sorting oranges for California fruit growers to sorting hand grenades is quite a step—but it is typical of the new wartime jobs G-E scientists and engineers have put X rays to work on. It is also typical of the application of G.E.'s peacetime research and engineering to war.

Nearly thirty years ago Dr. William D. Coolidge, now G-E vice-president and Director of the Research Laboratory, developed the Coolidge X-ray tube—one of the most important developments of all time in science and medicine. In the years that followed, he and other scientists and engineers worked steadily to improve this almost magical tool of research and healing.

Then came the war, and the X ray in its latest and most powerful form

became almost overnight a vital tool of war production, testing for hidden flaws no human eyes could reveal the metals on which the strength and endurance of our arms depend.

Which makes the X ray another good example of the way G-E research and engineering work to meet America's needs—constantly, in unexpected ways—in war and peace. *General Electric Co., Schenectady, N.Y.*



The G-E million-volt X ray cuts from hours to minutes the time required to examine metal parts—from airplane crankshafts to turbine shells.

Hear the General Electric radio programs: "The G-E All-Girl Orchestra" Sunday 10 p.m. EWT, NBC—"The World Today" news, every weekday 6:45 p.m. EWT, CBS.

GENERAL  **ELECTRIC**

952-601-C2-211

