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# SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE

• JULY 17, 1943



Germ Killer

See Page 36

A SCIENCE SERVICE PUBLICATION

## Do You Know?

Canada has 35 *women doctors* in the armed services.

*Self-sealing* fuel tanks are used on many ground combat vehicles.

The surface of the *head* constitutes approximately 6% of the total body surface.

*Sponges* have no special organs of respiration, so they breathe through their body walls.

Sugar beet leafy tops, pulp and molasses, by-products in processing, are valuable *foods* used to fatten livestock.

*Wood-pulp* receipts by U. S. paper mills were 22% less in the first four months of 1943 than in the same period of 1942.

Producer-gas, obtained from *wood*, is reported to be the source of power on 90% of the motor vehicles used by the state railways of Sweden.

Twenty *locomotives* built in America, used by the American army in France during World War I, and later sold to France, are still in service now in French North Africa.

In weight of *fish* landed, the leading American ports in 1942 were, in the order named, Los Angeles-Long Beach, Monterey, San Francisco, Boston and Gloucester; in total value of catch Boston ranked first.

## Question Box

### Page numbers of Questions discussed in this issue:

#### AERONAUTICS

How is the glider expected to be useful for commercial operations in the future? p. 38.

#### ARCHAEOLOGY

What peoples were the first to build places solely for the discussion of political questions? p. 46.

#### BIOLOGY

How is penicillin being produced on a large scale? p. 36.

#### BIOLOGY—MILITARY SCIENCE

What can be learned about camouflage from animals? p. 45.

#### ENGINEERING

In a frame house where should you take refuge from bombing? p. 40.

#### GENERAL SCIENCE

How have U. S. Scientists been honored in Mexico? p. 39.

#### MEDICINE

What extract is useful in overcoming sulfa drug poisoning? p. 39.

What is the latest way to stop bleeding? p. 35.

What part of the Army is now using parachutes to reach the combat area? p. 47.

What two new sulfa drug triumphs have been recorded? p. 39.

#### METALLURGY

How has the composition of our coins been changed by scarcity of certain metals? p. 42.

#### PHARMACY

What new corps of the Army Medical Department was recently authorized by Congress? p. 38.

#### PHYSICS

What simple apparatus can be used in speeding the dehydration of fruits and vegetables? p. 46.

#### PUBLIC HEALTH

An outbreak of what skin disease is causing loss of time in war plants? p. 44.

What evidence is there that German measles may be becoming more serious? p. 37.

What plans are being made to provide a better distribution of physicians among the civilian population? p. 36.

What signs are there that there may be an infantile paralysis epidemic ahead? p. 37.

#### WILDLIFE

Why are snapping turtles not considered a major menace to game fish? p. 41.

*Most articles which appear in SCIENCE NEWS LETTER are based on communications to Science Service, or on papers before meetings. Where published sources are used they are referred to in the article.*

*A beaver*, in felling a tree, makes the deepest cut on the side most easily reached; this is usually the down-hill side.

The Federal Communications Commission has extended for three-year periods, all amateur *radio operators'* licenses which have expired since Pearl Harbor.

In one prewar year the United States imported from Japan 10,720,000 pounds of *crab-meat* valued at \$4,582,000, 95% of which came from king crab taken by the Japanese from the Bering sea in sight of American territory.

*Rabbit* meat has a different taste from that of the hare.

*Sulfamerazine*, a new sulfa drug, promises to simplify treatment, as it can be taken by mouth for pneumococcus pneumonia, meningitis, gonorrhoea and streptococcus infections.

California *redwood* trees grow to a maximum height of 364 feet with trunks up to 20 feet in diameter; the giant sequoias, found only in the Sierra Nevada, grow up to 300 feet high and 33 feet in diameter.

## SCIENCE NEWS LETTER

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# Invisible G-MAN

## The Story of Super-Sleuths of War Production

**W**HEN the FBI gets on the trail of a potential saboteur, tracks him down, and catches him before he can do any damage—that's front-page news! Yet there are a few score unsung sleuths doing this kind of work—all day and every day—in America's war factories. This is their story.

They are the million-volt X-ray units developed by G-E scientists just in time to go to work, all-out, in war production.

The saboteurs they catch are flaws and blow-holes—unintentional, of course—in big cast-

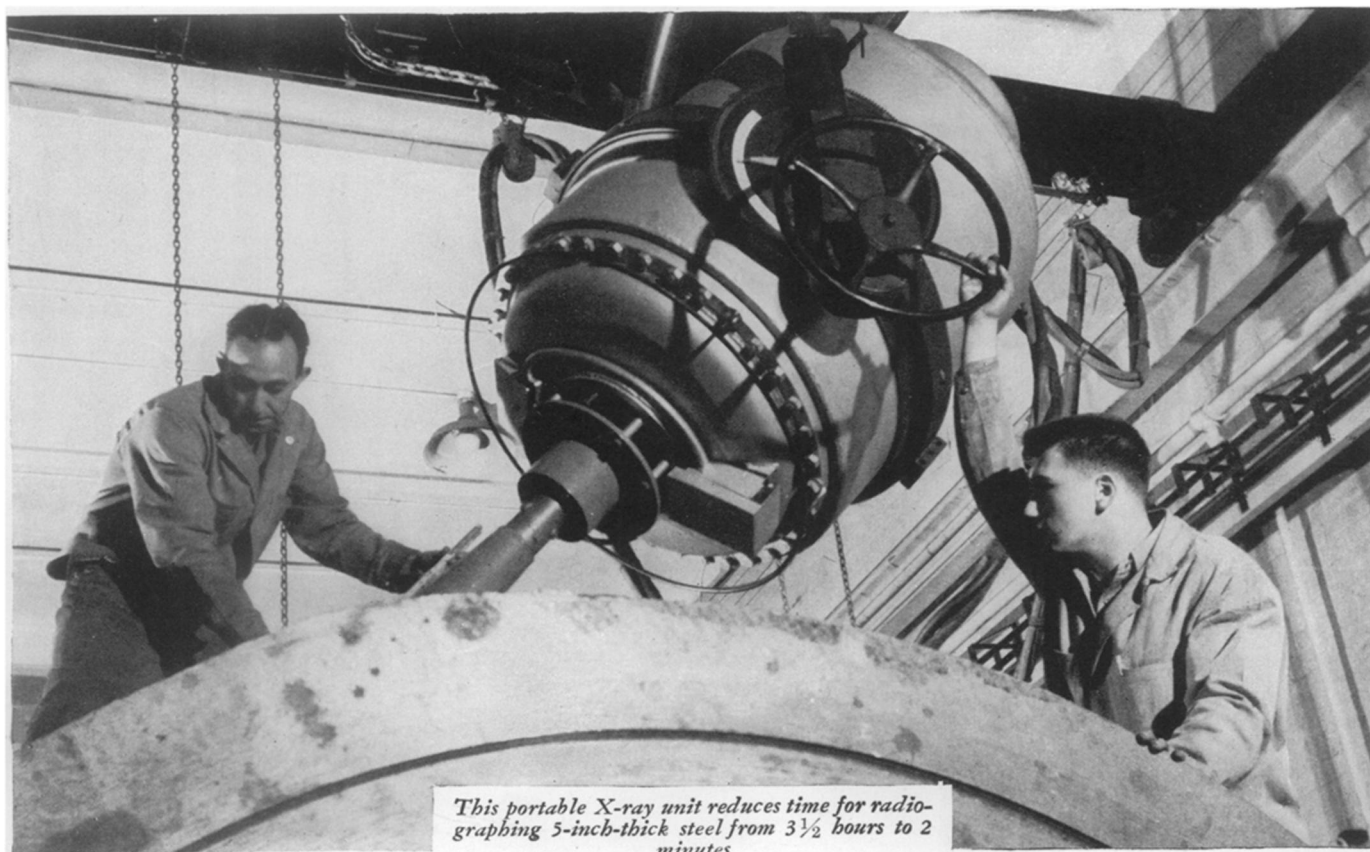
ings for war machinery. The kind of mistakes that *will* turn up occasionally, no matter *how* careful and skillful the foundry worker. But serious all the same.

That's just one calamity the million-volt X-ray keeps from happening. It pours out rays like those from radium, and a lot more plentiful. They pass right through the thick metal; in minutes they show up defects before a stroke of work has been done. Anything that isn't perfect goes back to be melted over—literally liquidated!

It would take a catalog to list

all the other war jobs these X-ray units are doing, and violate the rules of military secrecy as well. But we have them because G-E scientists and engineers have been exercising their ingenuity and perseverance on the subject of electronics for years. And they've only scratched the surface.

After the war this same ingenuity and perseverance will bear fruit in things to make peacetime living better. Which is why this promising field of electronics will bear watching! *General Electric, Schenectady, N.Y.*



*This portable X-ray unit reduces time for radiographing 5-inch-thick steel from 3½ hours to 2 minutes*

The best investment in the world is in this country's future—BUY WAR BONDS

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