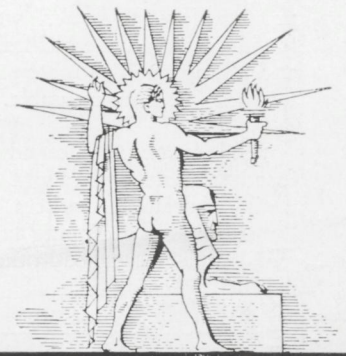
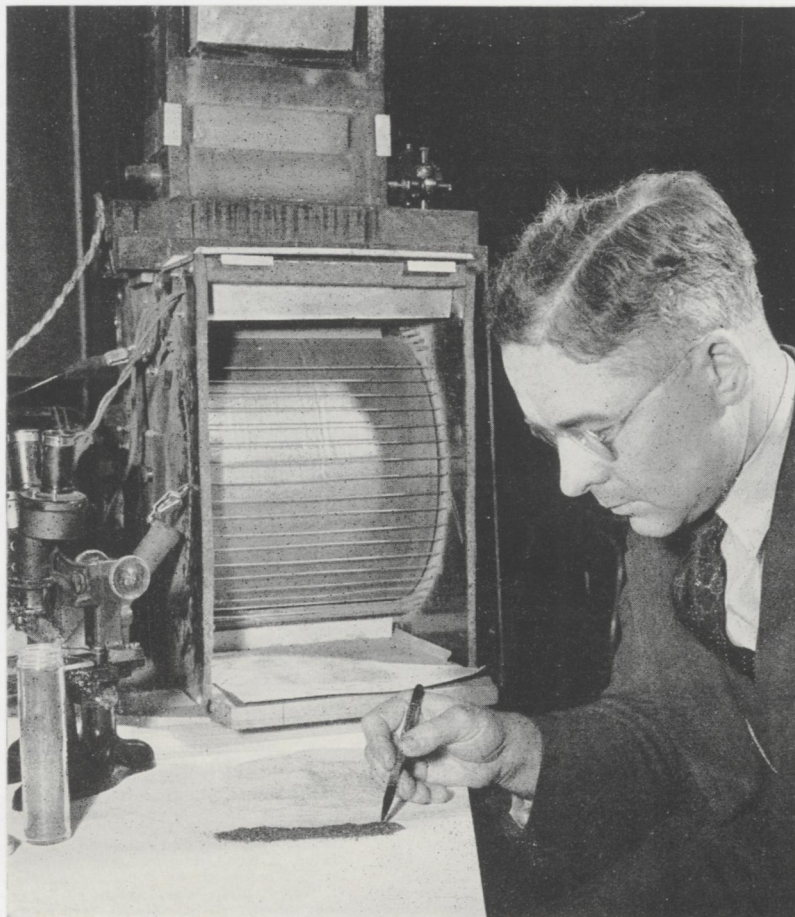


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SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE •



June 27, 1942

Tin From Low-Grade Ore

See Page 409

A SCIENCE SERVICE PUBLICATION

Do You Know?

Similar physical properties of the fibers make *milkweed* a potential substitute for kapok.

Some types of .303 British *rifle* are being converted into machine guns by a method invented by a New Zealander.

Over 215,000 tons of food are represented by the *game* animals, game birds, and game fish taken by sportsmen in one year.

Steel *ball bearings* perfected for use in airplane instruments have diameters of less than .04 inch and weigh .000144 ounce each.

The London (England) Passenger Transport Board estimates that by reducing *ticket* thickness .004 of an inch, it will save 480 tons of paper a year.

Spraying with a naphthalene acetic acid solution is said to keep ripened *apples* on trees for ten days to two weeks, so that they may be harvested all at once.

Improved glass-making methods have produced *milk bottles* weighing one-fourth less than the old fashioned bottle and averaging 45% more round trips before they become unusable.

Wild *cotton rats*, caged together, refused to mate and fought to the death until laboratory workers made them "smell alike" by dipping both male and female in a creosote bath; then there were no further rat fights.

Question Box

Page numbers of Questions discussed in this issue:

AERONAUTICS

What auxiliary device has been invented for helping rocket planes to reach the stratosphere? p. 410.

ASTRONOMY

How was an invisible star recently discovered? p. 405.

What is the only planet to be seen in the July evening sky? p. 406.

When is the sun farthest away from the earth? p. 406.

Why should marine navigation and air navigation be taught as a single course? p. 407.

CHEMISTRY

How can food be salvaged after exposure to war gas? p. 408.

What chemicals are required in minute amounts by growing plants? p. 404.

ENGINEERING

How can smoke from Diesel engines be reduced? p. 408.

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.

ENTOMOLOGY

What sort of disposition have North American ants? p. 411.

GENERAL SCIENCE

How were the trip winners of the Science Talent Search selected? p. 404.

METALLURGY

What new device may increase our production of tin? p. 409.

PHYSICS

How can scientists determine the composition of a molecule too small to be seen by a microscope? p. 403.

PSYCHOLOGY

What measure is proposed as the best way to keep up American morale? p. 411.

PUBLIC HEALTH

What measure is recommended by health officials in case of an epidemic of horse sleeping sickness? p. 408.

Fuel tanks on one training plane type are now made of wood.

Sheep *intestines* are used to make surgical sutures, commonly called catgut.

The *synoptophore*, an ingenious instrument used by the Royal Air Force, trains eye muscles to perfect balance so that a pilot can judge height and distance accurately.

Cellulose sponges, derived from cotton or wood pulp, absorb 20 times their weight in water and, because they float, they will not pick up grit from the bottom of a bucket.

A male *swan* is called a cob; a female a pen, and a young swan a cygnet.

Wood cores in a new-type *rubber heel* save 28% of the rubber used formerly.

Aptitude testing, intended to insure that men will be employed in the capacity for which they are best equipped by natural ability, is being introduced into the military forces of Australia.

A common method of filling shells with *TNT* is to heat the explosive, which resembles brown sugar at normal temperatures, to just above its melting point and pour it directly into the shell.

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