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SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE • NOVEMBER 6, 1943



Inhaling Immunization

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A SCIENCE SERVICE PUBLICATION

Do You Know?

A five-mile *tunnel* has been completed in southern Lebanon, Asia, to irrigate 7,000 acres with water from the Litani river.

Broom corn is being imported from Argentina to relieve critical shortages in the United States broom industry until the native crop is harvested late this year.

Rayon garments have four principal *insect enemies*: silver fish, cockroaches, crickets and carpet beetles; ordinary household insect sprays and powder are protections.

A new serious *turkey disease* is caused by one-celled animal parasites called trichomonads; clean ranges, foods rich in vitamin A, and doses of gentian violet are recommended for control.

Milkweed floss for use in Navy life preservers and life jackets is now processed at a new plant at Petoskey, Mich., the first milkweed floss plant in the world; its daily capacity is 25,000 pounds.

Italy in 1902 took up the manufacture of *quinine* and its sale at a low price; in a five-year period sales increased ten-fold and deaths from malaria decreased from over 13,000 in 1901 to less than 5,000 in 1907.

Seven southwestern states have over 4,000,000 *goats*; they supply leather for shoes and gloves, mohair or goat wool for fabrics, milk for children and adults, and meat widely used and highly recommended.

Question Box

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AGRONOMY

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ASTRONOMY

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CHEMISTRY

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GENERAL SCIENCE

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HANDCRAFT

What Christmas gifts can you make in a home workshop? p. 298.

INVENTION

How can a housewife clean a dust mop without shaking it? p. 303.

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MEDICINE

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What method permits safety in grinding metals? p. 297.

What new alloy uses little scarce metals? p. 297.

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METEOROLOGY

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NUTRITION

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ORDNANCE

What new invention will give greater velocity to bombs? p. 293.

PHARMACY

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PHYSICS

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PLANT PHYSIOLOGY

What effect does sex activity have on general life processes of plants? p. 291.

PSYCHOLOGY

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PUBLIC HEALTH

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PUBLIC SAFETY

What are the two main reasons for winter car accidents? p. 295.

ZOOLOGY

For how long did a coyote outrun an auto? p. 297.

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.

An enormous bed of 98% pure *salt* has been located in northern West Virginia at 6,300 feet below the surface; it is estimated to extend over some 2,400 square miles, and to be about 100 feet thick.

Burmese natives have asked the Army to use colored fabrics in *parachutes* which drop food and supplies to troops on the Burmese frontier; they use the discarded cloth for clothing and are tired of white.

SCIENCE NEWS LETTER

Vol. 44

NOVEMBER 6

No. 19

The weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N. St., N. W., Washington 6, D. C. North 2255. Edited by WATSON DAVIS.

Subscriptions—\$5.00 a year; two years, \$8.00; 15 cents a copy. Back numbers more than six months old, if still available 25 cents.

In requesting change of address, please give your old address as well as the new one, at least two weeks before change is to become effective.

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Cable address: Scienservc. Washington.

New York office: 310 Fifth Avenue, CHickering 4-4565.

Entered as second class matter at the post-office at Washington, D. C., under the Act of

March 3, 1879. Established in mimeographed form March 18, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Readers' Guide to Periodical Literature, Abridged Guide, and in the Engineering Index.

The Science Observer, established by the American Institute of the City of New York, is now included in the SCIENCE NEWS LETTER.

The New York Museum of Science and Industry has elected SCIENCE NEWS LETTER as its official publication to be received by its members.

Member Audit Bureau of Circulation. Advertising Representatives: Howland and Howland, Inc., 393 7th Ave., N.Y.C., Pennsylvania 6-5566; and 360 N. Michigan Ave., Chicago, STate 4439.

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We kept this secret 25 years

It is, in principle, an amazingly simple device. It is smaller than a bass drum, light enough so one man can lift it, and it looks rather like an overcomplicated fan.

Yet, connected to a plane's engine, it can hoist a plane more than *seven miles* up, where few planes in the world can fly without its help.

And it belongs to America!

It is the turbosupercharger. Driven by the engines' once-wasted exhaust gases, it crams precious oxygen into the carburetors to give American bomber and fighter planes full fighting power as they fly through the stratosphere—out of sight, almost out of reach of any enemy.

For 25 years the development of the

turbosupercharger, and the materials and ways to build it, have been the secret of General Electric engineers and scientists, and of the Army Air Forces engineers who worked with them. They kept on when there seemed little prospect of success. Tremendous difficulties had to be overcome—for one end of the device operates at 67 below zero, the other, only inches away, operates at temperatures up to 1500 degrees, and the whole spins at speeds greater than 20,000 revolutions a minute!

It was a tough job, but it was done. Today all turbosuperchargers for U.S. planes are made either by General Electric or according to G.E. designs. And these turbosupercharged planes are making history.

The story of the turbosupercharger is one more proof that America can count on her scientists, working with military men, to provide our fighting men with every advantage that new and better war equipment can give. And *you* can depend on these same scientists, after the war is over, to work with the same industry and enthusiasm to develop new and better products for peacetime living, and to find ways to make these products cost less so that everyone can enjoy them. *General Electric Co., Schenectady, N.Y.*

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