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SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE • MARCH 6, 1943



Avengers

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A SCIENCE SERVICE PUBLICATION

Do You Know?

In the 1,100 mile stretch of the *Aleutian Islands* there is no timber.

North Africa is one of the world's largest producers of *phosphate* rock.

In the United States in 1942 approximately 93,000 persons were killed by *accidents*, and over 9,000,000 injured.

The Great Barrier Reef, 1,200 miles long, off the northeast coast of Australia, is the longest *coral reef* in the world.

Only one-fourth as much metal is used in the new wartime wood *bed springs* as was used in the all-metal pre-war springs.

A victory garden *fertilizer* approved by the U. S. Department of Agriculture contains 3% nitrogen, 8% phosphoric acid, and 7% potash.

The American output of *magnesium* has increased a hundredfold since 1939, and the aluminum output is now seven times what it was that year.

A rod of *tungsten* 5½ inches long and slightly larger than the lead of a pencil can be made into a strand 469 miles long, the size of the wire used in the three-watt lamp.

Over 7,500,000 pairs of *stockings*, weighing about 372,000 pounds, were turned in during two months beginning Nov. 15, 1942, as a contribution of American women to the silk and nylon salvage program.

Question Box

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ASTRONOMY

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BIOLOGY

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BOTANY

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CHEMISTRY

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GENERAL SCIENCE

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What engineering jobs will be waiting after the war is over? p. 148.

What is the patriotic duty of scientifically talented youth? p. 148.

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.

INVENTION

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What sort of parachutes might be made of cellophane? p. 157.

MEDICINE

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NUTRITION

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PHYSIOLOGY

Why is it likely that carrots may be recommended for flyers? p. 153.

PSYCHIATRY

What important function should psychiatrists have in the Army? p. 158.

PSYCHOLOGY

What sort of war goals, beyond the Four Freedoms, are needed by Americans? p. 156.

A total of at least 18,000,000 *Victory Gardens* are needed this year to meet food requirements.

The largest known reserve of high-grade *iron* ore in the world is reported to be in the State of Minas Geraes, Brazil.

Because *anti-freezing* solutions containing calcium chloride and other salts will permanently injure automobile engines, the use of these solutions is forbidden in all Government-owned cars.

Curtailement in the manufacturing of hairpins will save an estimated 57 tons of metal a year.

Although in the beginning the United States had approximately 900,000,000 acres of excellent *forests*, only about 200,000,000 acres are left.

Blow-holes and similar foundry imperfections in metal *castings* may be satisfactorily sealed by forcing a new sealing solution into the pores under pressure and then baking the casting.

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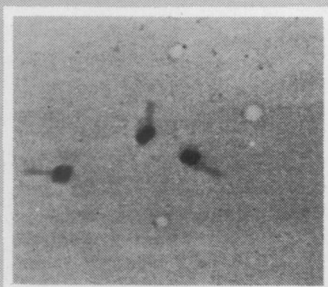
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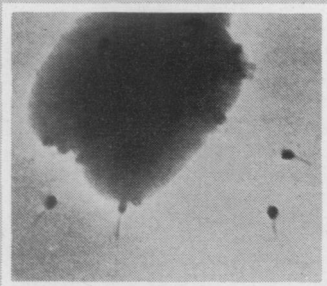
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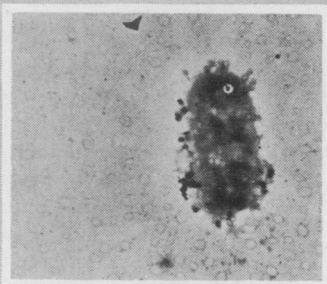
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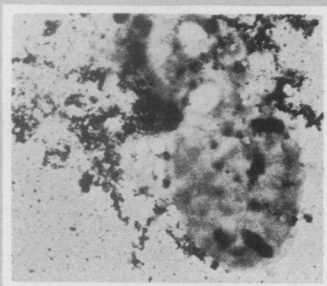
Bacteriophage moving about as they would in the bloodstream looking for bacteria to feed on. Magnified 23,000 times.



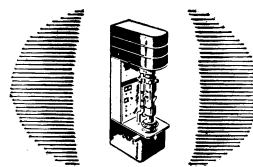
After ten minutes of bacteriophage attack on *Bacillus coli*. The bacteria begin to show signs of wear. Magnification 21,000 times.



The bacteria begin to disintegrate after twenty minutes of attack by the bacteriophage. Magnification 8,000 times.



Half an hour after the attack began, the bacteria are completely destroyed. Phage particles and bacterial debris litter the "battlefield." Magnification 15,000 times.



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