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SCIENCE NEWS LETTER

THE WEEKLY SUMMARY OF CURRENT SCIENCE • FEBRUARY 13, 1943



Soldiers of Mercy

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A SCIENCE SERVICE PUBLICATION

Do You Know?

Cigaret paper from flax straw is a new by-product of the flax industry.

Hens pick at the boards in the poultry houses, but pick less at boards painted gray than those of any other color.

Formula-fed infants may require more *vitamin C* than breast-fed, as human milk is much richer in vitamin C than cow's milk.

Chicory, used almost exclusively in the blending of coffee, is produced principally in Michigan and used largely in the South.

Blind persons are employed very successfully in certain types of precision assembly work by scientific instrument manufacturers.

With Manila hemp no longer available, more *sisal* is being used in rope-making; the supply comes from the Caribbean countries.

To study *mosquitoes* in the war on malaria among rubber and other workers on the Amazon, a special laboratory has been opened at Belem, Brazil.

The automobile trailer, once the playboy of the roads, is now in serious business, one serving as a *maternity ward* in a 300-trailer camp for war workers.

To learn how to determine the sex of day-old chickens, nine women and ten men have enrolled in a short course at the Iowa State College to become commercial "*chick-sexers*."

Question Box

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BIOLOGY

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CHEMISTRY

What war use has been found for a dry cleaning fluid? p. 105.

ENGINEERING

Should you use an anti-freeze containing a salt? p. 105.

MEDICINE

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Which sulfa drug has been found effective against rheumatic fever? p. 99.

MILITARY SCIENCE

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What new device gives the tank commander a better view of the battle? p. 104.

What will the Army nurse wear in the field? p. 102.

NUTRITION

How should dried beans be prepared as a victory food? p. 110.

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What nutritional assets are found in mushroom? p. 103.

PALEONTOLOGY

How long ago did an amphibian live in Texas? p. 105.

PHARMACY

Which is the scarcest of the sulfa drugs? p. 102.

PHYSIOLOGY—AERONAUTICS

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PSYCHIATRY

Why are physical medicines recommended for psychic troubles? p. 111.

PSYCHOLOGY

What accounts, psychologically, for Japanese ruthlessness? p. 103.

PUBLIC HEALTH

How can anti-freeze be used to prevent epidemics? p. 104.

What disease is the worst saboteur acting against our troops? p. 101.

RESOURCES

How has war changed the baseball? p. 110.

WILDLIFE

What flower is becoming a threat to navigation in California rivers? p. 102.

Rubber instead of gold will probably be the principal product transported over the new highway from the Marcapata gold mines to Cuzco, Peru.

Hundreds of tons of *pinon nuts* are harvested annually from the native slow-growing pinon pine of the dry, bleak and arid high country of the Southwest.

All of Peru's exportable *quinine* will be sent to the United States under an agreement just signed by the two countries.

American Indians ground *pecan nut* meat in a stone mortar, mixed it with corn meal, and made cakes of high caloric value and of good taste.

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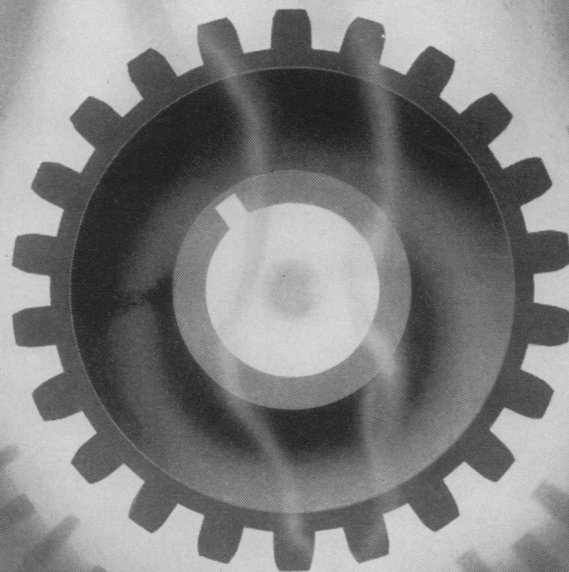
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Keeping fugitive carbon on the job



GIMSTI

TO WIN A WAR, we *must* have hardened steel gears, pinions, and other essential parts that can take a terrific beating—and keep on going.

All steel is basically a mixture of *iron and carbon*. To bring out its stamina and strength, steel must be heat-treated at high temperature.

But the carbon in steel is a *fugitive* thing. When exposed to highly heated air, carbon literally “boils off” the metal. The steel surface gets softer through loss of carbon.

The problem in heat-treatment is to keep fugitive carbon on the job—in the steel surface where maximum wear and strain occur.

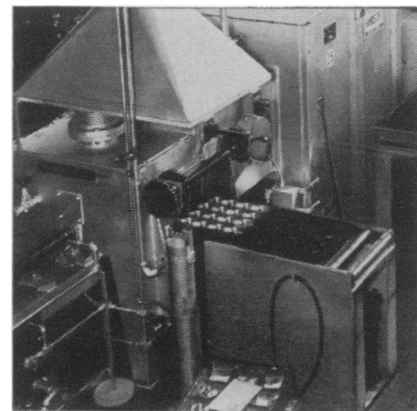
Fortunately, Westinghouse Engineers tackled this problem years ago. They developed an “artificial atmosphere” in heat-treating furnaces that would not rob steel of its fugitive carbon—that left hardened steel parts *clean and free of scale*.

It is known as the Westinghouse “*Endogas*” Balanced Atmosphere. It is

made from inexpensive natural or manufactured city gas—in a self-contained mixing chamber which is simple and easy to operate. It is exclusively a Westinghouse development.

And the balanced atmosphere in the “*Endogas*” Furnace may be varied, at will, for heat-treating practically *any kind of steel*—by merely changing the proportion of fuel gas and air in the mixing chamber. A typical result of Westinghouse “know how” in solving a problem that has perplexed metal workers since primitive man hammered out his first battle-ax!

Today, Westinghouse “*Endogas*” Furnaces are heat-treating vast quantities of gears, cams, dies, and other steel parts. They are setting the pace as



America’s astonishing war-production shifts into high.

Westinghouse Electric & Manufacturing Company, Pittsburgh, Penna.

Westinghouse



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