# New Machines and Gadgets

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STEAM CLEANER, a portable type for cleaning automobile engines and chassis, floors, walls, building exteriors, henhouses and barns, is of welded construction and simple in design. It uses for heat either oil or gas, has a normal pressure of 100 pounds and a 90-gallon per hour water capacity.

Science News Letter, December 6, 1947

Die IEEPS with attached plows for forest-fire fighting can dash to the scene at 65 miles an hour and lower their plow-disks for immediate action on arrival. Their two lister moldboards, with sharp root-cutting blades ahead, throw soil to the side to form a five-foot fire break.

Science News Letter, December 6, 1947

de COOKING UTENSILS, which resist food sticking to them, are made of two layers of stainless steel with a layer of copper between. The copper distributes the heat evenly throughout the utensil, overcoming the uneven heating in spots, the main cause of the food sticking to the pan.

Science News Letter, December 6, 1947

TIRE INSPECTOR locates metallic particles buried in automobile tires in much the same way that electric detectors located explosive mines buried in the earth. The locating head of the device, which is passed slowly over the tire's surface, contains an electric coil on a plastic bobbin.

Science News Letter, December 6, 1947



RUG SEAL is a liquid self-curing compound developed to hold together two pieces of carpet padding. It is applied to the squarecut edges of the padding; then the two pieces are laid on a flat surface and pushed together. After drying, a pull will tear the padding, as shown in the picture, before it opens the seam.

Science News Letter, December 6, 1947

ELECTRIC DEVICE for hen houses, to shorten hours of darkness during winter months and thus increase egg production, automatically turns on small electric lamps one after another over a 15-minute period, and reverses action in

the evening. It simulates sunrise and sunset conditions.

Science News Letter, December 6, 1947

STOPPER FOR BOTTLES having a pressure relief device, just patented, has a central vertical opening extending through the stopper with a valve over the top and a button with an intake mouth over the bottom. A coil spring connects the two. When sufficient pressure forms within the bottle, the valve allows relief.

Science News Letter, December 6, 1947

Modern agriculture requires continuous breeding of improved varieties of crop plants to prevent the decline of major crops.

Among land animals in the Everglades National Park, Florida, are black bears, deer, panthers, wildcats, raccoons and opossum; among amphibious animals are sea cows, otters, alligators and crocodiles.



### **AERONAUTICS**

What two planes challenge the size of the Hercules flying boat? p. 359.

#### ASTRONOMY

How does the new guider for telescopes operate? p. 358.

## MEDICINE

For what diseases is streptomycin effective? p. 357.

How has firmer closure of ruptures been accomplished? p. 360.

How has the ruptured appendix hazard been reduced? p. 356.

What chemical cured lead poisoning? p. 355.

What gland extract may save lives of unborn infants? p. 359.

What new discovery may avert Rh blood death in babies? p. 355.

What vitamin may aid chilblains? p. 357.

What laboratory may become an international cosmic ray center? p. 356.

#### VETERINARY MEDICINE

What two lines of defense have been drawn up against Mexico's cattle disease?

What game animals are the worst danger for spreading the foot-mouth disease? p. 358.

Photographs: Cover, U. S. Air Force; p. 355, General Electric Co.; p. 359, U. S. Air Force; p. 368, Dept. of Agriculture.

