

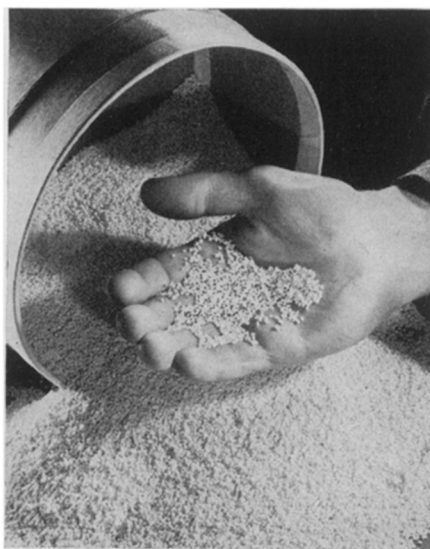
• New Machines and Gadgets •

⚙️ **FIELD** demineralizing units prepared particularly for the Army produce the equivalent of distilled water for storage batteries and other purposes. In operation, first the chlorides, sulfates and bicarbonates in the water are converted into acids, then these are absorbed by a special agent, except the carbonic acid, which is converted into water and carbon dioxide.

Science News Letter, February 12, 1944

⚙️ **GRANULATED** plastic pellets are used by the Army Air Forces to remove carbon from aircraft engine pistons. The pellets, shown in the photograph, are blown by sand-blasting equipment against the piston sides and ring grooves. Carbon is knocked off and the surface polished without any abrasion.

Science News Letter, February 12, 1944



⚙️ **SURFACE** temperatures in the heat treatment of metals are easily noted by the use of chalk-like marks made on them with special crayons that melt at varying specific temperatures. The mark remains unchanged as the surface temperature of the object increases until its critical temperature is reached, when it melts instantly into a liquid streak.

Science News Letter, February 12, 1944

⚙️ **SMALL** troughs holding water placed under seed-bed boxes in greenhouses supply sufficient moisture to the soil in the boxes for the germination of the seeds and for the young plants. Burlap or fiber glass wicks extending from the water through the bottom of the box into the soil draw the water up by capillary action.

Science News Letter, February 12, 1944

⚙️ **AUTOMOBILE** air-cooling apparatus, recently patented, consists of a refrigerating unit placed in the engine compartment between the radiator and the outside protecting grill. It cools water, or some other suitable liquid, which is piped to cooling coils under the driver's seat. The cooled air is delivered through the ducts on the rear of the seat.

Science News Letter, February 12, 1944

⚙️ **ANOTHER** coffee-maker, now patented, brews the coffee in a partial vacuum to retain its full flavor. Coffee and water partly fill a glass container to which is fitted a stopper with a valve through which the hot air can escape. When boiling begins, the heat is turned off, the valve automatically closes and the contents are allowed to simmer for five minutes.

Science News Letter, February 12, 1944

If you want more information on the new things described here, send a three-cent stamp to SCIENCE NEWS LETTER, 1719 N St., N. W., Washington 6, D. C., and ask for Gadget Bulletin 194.

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