

• New Machines and Gadgets •

⚙️ **BATTERY-LESS** flashlight, small enough to be easily carried about with one hand, contains an internal combustion engine of the type used in miniature airplanes and a tiny electric generator to light the bulb. A simple mechanism for starting the engine is also included.

Science News Letter, December 2, 1944

⚙️ **AIRCRAFT** spark plugs, with new internally cooled center electrodes, have increased life and dependability. The electrode is composed of a drawn nickel alloy cap into which is fitted a brazed copper core. This affords internal cooling by increased heat conductivity, and also reduces erosion.

Science News Letter, December 2, 1944

⚙️ **REFRIGERATED** package is the term applied to an eight-foot-long metal container for use in bringing fresh food to frontline troops. It has a gasoline-powered cooling unit and twin slabs seven feet long. The latter are filled with a special freezing solution and house the cooling coils.

Science News Letter, December 2, 1944

⚙️ **FINE WIRES** used to suspend tiny mirrors in electric galvanometers are



measured to a millionth of an inch by embedding them in a plastic block which is then carefully cut so that the ends of the wire show on the surface. The picture shows the block being examined under a powerful microscope with micrometer eyepiece.

Science News Letter, December 2, 1944

⚙️ **PORTABLE** sterilizer to purify air in a sick-room is a bowl-shaped receptacle opening upward, containing an electric motor, fan and several germicidal

lamps. The air, driven between the lamps, is sterilized by ultraviolet rays. It may be mounted in the ordinary inverted-type floor lamp.

Science News Letter, December 2, 1944

⚙️ **GARDEN WEEDER** is a hoe-like tool which has teeth to grasp the weeds. The teeth are Y-shaped and have curved, dull edges which, when dragged forward close to the ground, grasp the weeds and pull them up by the roots.

Science News Letter, December 2, 1944

⚙️ **LETTER-OPENER** has two flat arms with a cutting blade between them, all fixed in the same handle. The letter is slipped between diverging lips at the ends of the arms, engaged by the blade and slit open.

Science News Letter, December 2, 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 236.

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