

• New Machines and Gadgets •

⚙️ **KNOTLESS** shoelaces, recently patented, have the usual metal tips, but have a series of openings woven in the laces themselves near the tips. Each tip is inserted through an opening on the opposite end and drawn tightly. The lace holds firmly without tying.

Science News Letter, May 13, 1944

⚙️ **EMERGENCY** wheel brakes for motor vehicles, now patented, consist of a pair of curved metal pieces hinged to the car frame, the lower ends of which swing under the wheels when released by the emergency brake lever. When the wheels run on them, they become locked to the vehicle, and the car stops instantly.

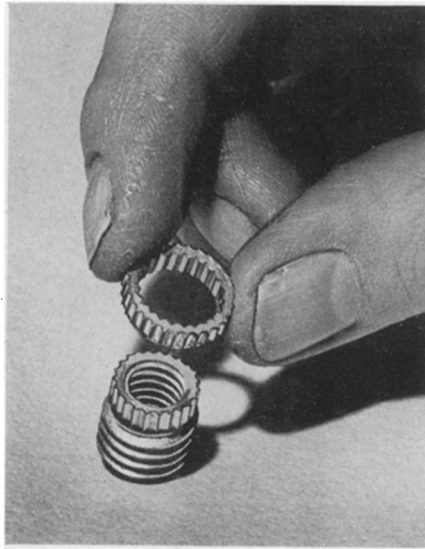
Science News Letter, May 13, 1944

⚙️ **LIGHTWEIGHT** automobiles, refrigerators, railroad cars and other equipment may be made in post-war days of a new aluminum alloy of remarkable strength and toughness now reserved for aircraft. It is tough enough to replace armor plate, and so strong that thinner sheets may be used successfully in airplanes.

Science News Letter, May 13, 1944

⚙️ **MODIFIED RUBBER** recently developed, mixed in small quantities with large quantities of synthetic rubber, gives a material satisfactory for bullet-sealing gasoline and oil tanks in airplanes. The mixture has the necessary quality of cohesion or tackiness.

Science News Letter, May 13, 1944



⚙️ **LOCKING RING**, grooved inside and out, is used to hold a stud or threaded insert firmly in place in spite of airplane vibration or machinery shaking. The inside serrations, shown in the picture, engage similar serrations on the stud while the outside serrations fit in grooves in the surrounding metal.

Science News Letter, May 13, 1944

⚙️ **A SCOOTER** operated by a foot lever, now patented, is propelled by pumping with one foot while standing on its platform with the other. It has a simple pawl-and-rack power transmission, and saves rationed shoe leather.

Science News Letter, May 13, 1944

⚙️ **FIRE HOSE**, canvas and raincoats are now being made of a new cotton fiber which, when moistened, swells enough to block up the interstices in fabrics made from it. The cloth becomes water-resistant and water-repellent.

Science News Letter, May 13, 1944

⚙️ **A FLATIRON** mounted on the end of an arm over the ironing board in a newly patented device must be guided manually, but it is mechanically controlled for varying thicknesses of materials. It raises automatically from the material when the hand is removed from the guiding and pressure lever.

Science News Letter, May 13, 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 207.

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