

• New Machines and Gadgets •

⚙️ **MANICURING** attachments for office pencils may become standard equipment. A device for this purpose which slips on the eraser end of the pencil has been recently patented. When not in use the fingernail cutter and cleaner is covered with a metal or plastic cap.

Science News Letter, February 5, 1944

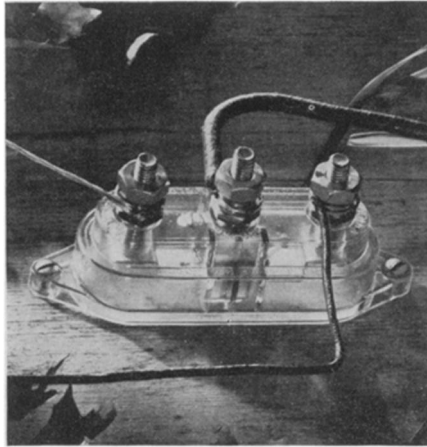
⚙️ **SYNTHETIC** rubber "overcoats" of gasoline-absorbent material placed around bullet-sealing fuel tanks in airplane wings prevent the formation of a highly explosive air mixture. They absorb and hold the gasoline that escapes from a tank pierced by a bullet before the hole seals itself.

Science News Letter, February 5, 1944

⚙️ **SNOW PUSHER** to clear sidewalks and drives, recently patented, resembles somewhat a lawn-mower without revolving cutting blades. A fixed flat or slightly curved scraper blade, mounted in front of the wheels, can be raised and dropped to chip ice from walks and driveway. A push handle operates it.

Science News Letter, February 5, 1944

⚙️ **LIGHTNING** arresters housed in transparent plastic cases are used by the Army. During electrical discharges in thunderstorms, the glow of small neon tubes indicates satisfactory connections



between aerials and the ground. The picture shows the arrester and transparent case. The electrodes sealed within are protected from weather, dirt and insects.

Science News Letter, February 5, 1944

⚙️ **REVOLUTIONS** of a motor armature after the electricity is cut off are accurately counted by use of a phototube. A tiny mirror fixed on the shaft of the armature reflects on each revolution a beam of light to a phototube which converts the light into electrical impulses. These pass through a special galvanometer whose deflections are recorded on a photographic film.

Science News Letter, February 5, 1944

⚙️ **LIGHT**, flexible, steel pipe lines, to supply combat troops with water, gasoline and other liquids, are made in spirally-welded units 20 feet long and four inches in diameter. Each unit weighs only 90 pounds. Specially designed couplings, quickly applied, connect the units. The line is flexible enough to be used on any terrain.

Science News Letter, February 5, 1944

⚙️ **SMOKE FLOATS**, which protect naval vessels with clouds of dense smoke, are converted paint pails that hold smoke-generating chemicals and fuse attachments. They are fitted into hollow flotation chambers with attached skirts to hold them upright in the water, but are designed to sink when empty.

Science News Letter, February 5, 1944

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