

• New Machines and Gadgets •

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⚙️ **CONVERTIBLE FURNACE** for home heating, which burns either coal or oil, has two combustion chambers which are united in a compact, streamlined jacket. Conversion is effected by the flip of a switch; its electric control damper automatically shuts off one unit when converting to the other fuel.

Science News Letter, July 17, 1948

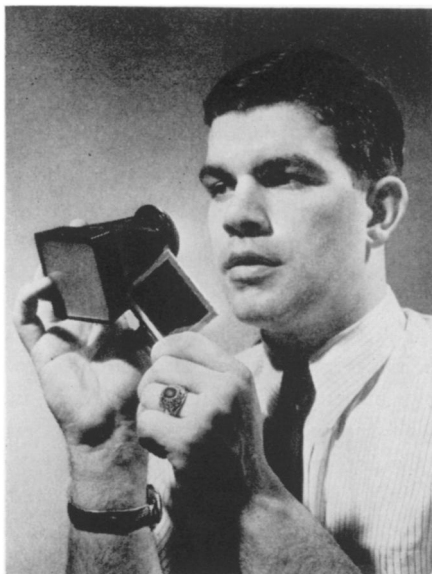
⚙️ **AUTOMATIC BRAKE LOCK**, which does not operate until the automobile has been brought to a full stop, holds the car even on a steep hill without the driver's foot on the brake pedal. It is designed for hydraulic shift transmission vehicles. Depression on the accelerator pedal releases the lock.

Science News Letter, July 17, 1948

⚙️ **MINIATURE GREENHOUSE** for the plant fancier or hobbyist is approximately eight feet square and about six feet high at the eaves. The factory-built, metallic-framed structure has upper sidewalls and roof of a transparent cellulose plastic reinforced by wire mesh.

Science News Letter, July 17, 1948

⚙️ **VIEWER OF** photographic films and transparencies is a light-weight plastic de-



vice, shown in the picture, with a ground glass back and an adjustable lens. Only the ordinary electric light bulb is needed for illumination; the viewer accommodates 2.25-inch-square transparencies and 35-mm. film in continuous lengths.

Science News Letter, July 17, 1948

⚙️ **INDIVIDUAL LOUD SPEAKER**, for use in drive-in or open-air theaters where it is attached to the window frame inside the car, has a pad of glass fiber packed inside its cast aluminum shell which contributes to the quality of sound reproduction by reducing echo. Each speaker has its own volume control.

Science News Letter, July 17, 1948

⚙️ **JARS, VIALS** and other containers, made of a special plastic, are particularly suitable for packaging wet, oily, acidic materials as well as dry products sensitive to moisture. The plastic used is lighter than glass, non-breakable, durable, odorless, tasteless, and highly resistant to strong acids, even to hydrofluoric acid.

Science News Letter, July 17, 1948

⚙️ **LAVATORY** unit for railroad cars, that requires only one square foot of space when recessed in the wall, combines a washbowl and a highly-efficient jet-flushing water closet. The washbowl is swung down into place for using by means of a finger latch, and the closet is controlled by a push button.

Science News Letter, July 17, 1948

• Nature Ramblings by Frank Thone •

➤ **RAGWEED**, the cause of most late-summer and autumn hayfever, is due to begin shedding its poisonous pollen soon. The resulting storm of sneezes will resound first in the North, about the end of the first week in August, all the way from Montana and Wyoming to Pennsylvania and New England. The wave rolls southward with the season, reaching the latitude of Tennessee and Oklahoma at mid-month, and the Gulf states about the first of September. The ill weeds will continue maturing and shedding pollen until frost kills them.

That is, they will unless you kill them first. Ever since the ragweeds were recognized as the villains they are, there have been efforts to eradicate them, at least in urban areas. But until very recently the only way to fight them was to pull them up by hand or mow them down with scythes, so anti-ragweed campaigns could as a practical thing be waged only when underemployment threw a surplus of cheap labor

Rough-on-Ragweeds



on the market. When people were busy and prosperous, ragweed prospered, too, and was busy in its own nefarious way.

Quantity production of the chemical weed-killer, 2,4-D, has made a revolutionary change in the method of fighting the ragweeds. Now, two men with a power sprayer can prevent more pollen than a score with

scythes. It isn't even necessary to kill the ragweed outright; a solution of less than lethal strength will still abort the pollen. Since both of the common ragweed species, the low and the giant, are annuals they will die when frost hits them, anyway.

Although 2,4-D spraying makes mass killing of ragweed easy, it does not entirely do away with the older hand methods of combating the pestiferous plants. If there are ragweed patches so close to shrubbery, flower beds or vegetable gardens that drifting spray might harm valuable plants, the safer thing is to stick to hand-pulling or scythe-swinging.

Nor should you expect to rid your community entirely of hayfever by clearing it of pollen-producing weeds. Ragweed pollen is dry and light, so that it will float in from rural fields and roadsides on even light breezes. Nevertheless, it is desirable to abate the nuisance as much as possible, for esthetic reasons as well as to diminish the discomfort of hayfever sufferers.

Science News Letter, July 17, 1948