

## • New Machines and Gadgets •

☼ THE "COMPARATOR" is an inspection device used to examine acorn-sized commutators for dynamotors which power aircraft radio equipment. It contains a light bulb, two mirrors, and four magnifying lenses. With it women inspectors make sure that paper-thin strips of copper and mica are in perfect alignment.

Science News Letter, March 6, 1943

☼ DEHYDRATORS for home use, suitable for drying out vegetables and fruits, may be made at a small cost by using plans and instructions which are available without cost at any office of the U. S. Rural Electrification Administration. Non-critical material is used and house current furnishes the heat.

Science News Letter, March 6, 1943

☼ GLASS SHOWER BATHS, prefabricated and ready for installation, are on the market. Plate glass is used, fabricated with holes for plumbing outlets and installation screws. Translucent glass is available if desired.

Science News Letter, March 6, 1943

☼ SNAP FASTENERS, long used on clothes and upholstery covers, have been patented for a new use. They are set on the flattened surfaces of sliced off spheres. By snapping these units together complex groups are built up to demonstrate molecular structure to science students.

Science News Letter, March 6, 1943

☼ TRANSPARENT PLASTIC which screens out severe sunburn ultraviolet rays is being used in aircraft construction to protect pilots from disabling sunburns. Aviators have often returned from long flights at high altitudes with severe burns because the rays pass through the plastic coverings now used.

Science News Letter, March 6, 1943

☼ A NEW fire detector has been recently designed for military use. Sudden overheating of engines and extremes of climate often make ordinary detectors, which depend on temperature rise, impractical. The new device is actuated by flames rather than heat. Two organic filaments hold an electrical circuit open as illustrated in the photograph. At the slightest contact with flame these filaments are destroyed and the alarm circuit is closed. As an extra precaution, there is also a fixed-temperature thermo-



stat in the flame detector, but this is set high enough not to be affected by operating conditions.

Science News Letter, March 6, 1943

☼ AN ELECTRONIC clock counts pulsations of electric current and translates that count into correct time by means of lights. This ultra-modern timepiece, equipped with 170 electronic tubes, has no moving parts, no motors, wheels, main spring or hands.

Science News Letter, March 6, 1943

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, D. C., and ask for Gadget Bulletin 146.

### INVENTION

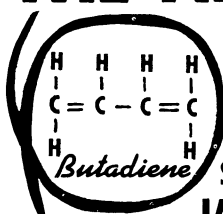
## Adapter Permits Use of Low-Price Ammunition

➤ "LIVE" firing practice with the .45-caliber Thompson ("Tommy") submachine gun at low cost can be had through the use of a new adapter which permits the substitution of .22-caliber ammunition for the much more expensive pistol cartridges normally fired in the weapon. The adapter, invented by C. William Robbins of Cincinnati, consists chiefly of a .22-caliber barrel inserted down the larger bore of the submachine gun, and a magazine to carry the smaller caliber long-rifle cartridges. Thus equipped, the gun can be fired either semi- or full-automatic, just as it can with its normal ammunition.

The Robbins adapter is described by Lieut. Col. Calvin Goddard (*Army Ordnance*, Jan.-Feb.).

Science News Letter, March 6, 1943

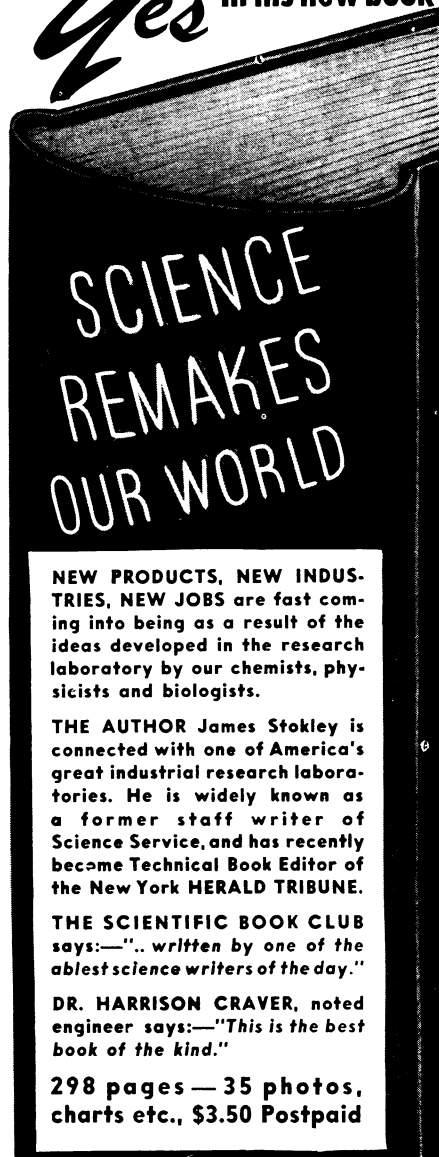
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