

## New Machines And Gadgets

### Novel Things for Wartime Living

Longer life for fish nets may be secured by a new chemical treatment which employs chlorinated rubber, butyl phthalate and a bactericide. The strands treated in this manner retain their flexibility and are easier to handle and to clean. There is also less tendency for the knots to slip.

For discharging static electricity from an automotive vehicle, a small trailing metallic wheel has recently been patented. It is intended to replace the clanking chain so frequently carried by trucks. Doubtless it will be much more quiet, but neither more nor less effective in discharging electricity.

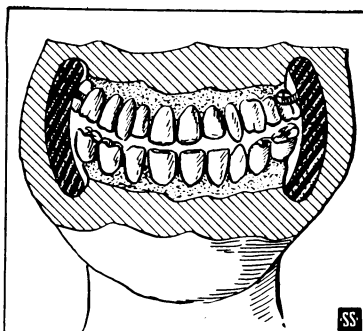
A hoe with a variety of interchangeable blades, making it almost a universal garden tool, has recently been patented. The blades may include a straight edge of the usual type, a rounded edge, a sawtooth edge, a single V point or a re-entrant V giving just two sharp points, etc. They are attached by a simple interlocking device requiring no screws or nuts. One advantage is that the blades can be removed for sharpening.

Non-fogging windows for gas masks, observation panels for aircraft, etc., are the subject of a recent invention on which four patents have been taken out. The windows are made of cellulose acetate plastic or similar material, one side of which has been made more capable of absorbing moisture than the other by saponifying it. Or the object is accomplished by cementing together two sheets of plastic, one of which is more absorbent than the other.

To change the expression of your face is the object of the device illustrated. Its Hungarian inventor, who has secured a patent in this country, thinks movie actors will prefer it to a mask. According to the shape, size and position of the side wings attached to the teeth, he

An absolute maximum of joking, teasing and familiarity was encouraged among in-laws by the *Seminole* Indians of Oklahoma, according to Dr. Alexander Spoehr, of the Field Museum of Natural History, Chicago.

Nearly two tons of *nicotine* per year, extracted from many more tons of tobacco plants, are sold to the oil industry as an active ingredient in insect sprays.



claims that an old face may be made young, a round face oval or square, the lips may be made thicker or thinner, and the chin may be altered.

Making pies with the help of air pressure and vacuum is the process used in a new automatic pie-making machine recently patented. To lift the upper pie crust from the table where it is formed, an inverted metal cup is lowered over it. A slight vacuum produced above the crust lifts it into this holder, which then transfers it to the pie. A slight air pressure above the crust then presses it firmly into place on top of the pie. All the operations are of course done automatically.

*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 107.*

*Science News Letter, June 6, 1942*

#### MICROBIOLOGY

### Malaria Germs, Preserved By Freezing, Survive

**M**ALARIA GERMS, and probably the germs of other diseases as well, can be frozen at temperatures colder than 100 degrees below zero in the Fahrenheit scale and kept at that extremely frigid temperature for as long as seven weeks without damage, Dr. Reginald D. Manwell, of Syracuse University, announces.

His method, so far applied only to germs of bird malaria, consists of instantaneous freezing of the germs in a small amount of the birds' blood in a test tube by whirling the tube at high speed in a mixture of alcohol and dry ice. Thawing within a few seconds is required to avoid killing the germs when the scientist wants them alive.

Saving of urgently needed shipping space and reduction in expense will be one result of Dr. Manwell's achievement, since germs can now be shipped frozen in small containers from one laboratory to another, instead of in the bodies of guinea pigs, birds or other laboratory animals requiring bulky cages.

*Science News Letter, June 6, 1942*

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