New Machines And Gadgets

Novel Things for Better Living

The pencil ferrule, the bit of metal that holds the eraser on the end of your pencil, may be a small thing, but they have contained brass or copper which are of immense importance in our war effort. These ferrules are now being made of plastics, and they are smooth, ridgeless and tasteless—something that will be appreciated by the habitual pencil-chewer.

Sanitary and silent is a household garbage can recently patented. It has an outer and an inner container, the inner one having a rounded bottom so that it can be easily cleaned and sterilized. The lid hermetically seals both containers. It is opened in the usual way with a foot pedal, but a stiff spring holds it firmly in the shut position. The under side of the lid is cushioned with a thick layer of a spongy material which in former days might have been rubber.

Simple silver plating can be accomplished by using a photographic acid fixing bath that has become too exhausted for further photographic work. Such a bath contains silver that has been dissolved from the negatives or prints that have been fixed in it, and this will be deposited on brass or iron objects immersed in it for a few minutes.

Eye protectors of an entirely new kind, valuable alike to armed forces in the field and to industrial workmen in the factory, are a new invention. They replace the thick glass or plastic of conventional goggles with domed pieces of metal set in soft-rubber frames that fit comfortably around the eye-sockets. Each eye-covering has two slits cut into it at right angles, one permitting side-to-side vision, the other a vertical sweep of the eye. To adjust the vertical slits to the proper inter-pupillary distance there is a threaded sector in the connecting rod above the nose.

The metal is heavy enough to give good protection against shell or grenade

splinters in combat, or flying sparks or particles of metal in industry. Since no glass is used, there is no fogging in cold weather; also, everything appears in normal color relations, so that lights and other signals are easily read. If used where there is fine flying dust or sand, cups of molded transparent plastic can be fitted inside the protectors.

Another advantage claimed by Inventor A. L. Freed is high usefulness where there is much glare, as on sand, snow or water. It has also been suggested that they might prove valuable in night driving of automobiles.

A new waterproof carton is being tested as a container for Army field rations. It can be submerged in water or set out in the sun without moisture or air getting in or out. The carton was originally developed for the frozen foods industry. Before being filled it is dipped in a bath of molten plastic composed principally of unmilled crepe rubber and a blend of waxes. The plastic thus coats all surfaces. After the plastic has set, the carton is filled, the top flaps are folded down, and by application of heat to these parts, the plastic is softened and a perfect seal is produced. All operations are performed in fast time by automatic machinery.

● RADIO

Saturday, March 21, 1:30 p.m., EWT

On "Adventures in Science," with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. Mark Graubard, Office of Defense Health and Welfare Service, will discuss the food habits of Americans and other peoples in relation to the national nutrition program.

Tuesday, March 17, 7:30 p.m., EWT

Science Clubs of America programs over WRUL, Boston, on 6.04 and 11.73 megacycles.

R. Newton Mayall of the American Association of Scientific Workers will speak on "Unhonored and Unsung."

One in a series of regular periods over this short wave station to serve science clubs, particularly in high schools, throughout the Americas. Have your science group listen in at this time.

Blackout candles are now available for emergency lighting. Each candle has a pedestal-like base on which it can stand without the use of a candlestick.

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 96.*

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MALACOLOGY

Big Collection of Shells Acquired By University

SHELLS by the thousand have been placed in the University of Cincinnati museum recently. But that does not convert the museum into an arsenal. They are perfectly harmless seashells.

They constitute a large collection, the gift of Mrs. Mary B. Cist of Mountain Lakes, N. J., and Sanibel Island, Florida.

Many of the specimens come from the parts of the South Seas now temporarily closed to collectors by the war. Biggest items in the collection are 200-pound Tridacnas, popularly known as bear-trap clams — shellfish so large and powerful that if an incautious swimmer gets his foot caught in the great, wavy-edged shells he is held helpless until he drowns.

At the other end of the size scale are the exquisite cowries, long used as money in some of the islands. Price of a bride in the Solomon Islands is stated to be 20,000 cowries—prewar exchange rate.

Science News Letter, March 14, 1942