New Machines And Gadgets

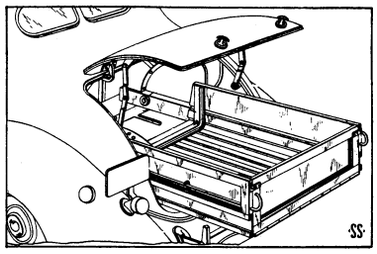
Novel Things for Wartime Living

Synthetic rubber latex is being used to make perfect replicas of the complicated blood system of the human kidney, replicas that reveal tiny details which cannot be seen in the ordinary anatomical cross-sections. They are of great value in the study of kidney diseases. The latex is injected into the blood vessels, and after the rubber has set, the human tissue is dissolved away with acid. Red and blue colors may be used to distinguish arteries and veins. The preparation of such "corrosion specimens" is not new, but the injection fluids hitherto used did not penetrate the finest blood vessels which are important in the proper functioning of the kidney.

Even the blind may thread needles with an improved needle threader recently patented, and those with poor eyesight or trembling hands may also find it helpful. The needle is inserted eye first into a hole in the side of the instrument and the thread is laid in a slit at right angles to the needle and just over the eye. A plunger is pushed which thrusts a tiny sort of flat crochet hook through the eye, hooks the thread and draws it back through the eye. The instrument is mostly composed of molded and cemented plastic.

Magnetic compasses, with cases and tops composed of transparent plastic instead of the usual brass and glass, may answer the problem of depleted supplies of French compasses, especially for school and college physics laboratories. On the smaller compasses the plastic cover is molded into a magnifying glass so that the small dial figures may be read easily. The plastic is not brittle and will not break like glass when dropped.

The sliding tray shown in the illustration in the storage compartment of an automobile can be loaded or unloaded without getting your head



dangerously under the lifted lid. Also in a pinch both the tray and the space behind it can be filled, almost converting your car into a small truck, which may sometimes be useful in these days. This device has been recently patented.

Two pictures, side by side, of the same object can be made with any ordinary camera by means of an attachment, recently patented, which requires no alteration in the construction of the camera or its lens. Afterwards the two pictures can be recombined on a screen by means of a projector equipped with the device. Color photographs can be made and projected in this way which, the inventor claims is simpler and cheaper than the methods now used.

A lipstick holder with a little roll of disposable tissue carried in an extension of the tube is one of the latest patented inventions. The roll can of course be replaced by a new one when used up.

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 117.*

Science News Letter, August 15, 1942

MEDICINE

Sulfur Vanishing Cream Best to Repel Chiggers

A NEW way to use sulfur for repelling chiggers is reported by Major John E. Weigel, of the U. S. Army Medical Corps (*Military Surgeon,* February).

Dusting the body with powdered sulfur before going out is the old standard method of preventing chigger bites. Chiggers hate sulfur and will shun it like the plague. Powdered sulfur, however, is soon washed off by perspiration.

A lotion of sulfur and calamine is effective, Major Weigel reports, but takes time to apply to the arms and legs and more time is required for it to dry before going out. Most practical for soldiers, he found, is a vanishing cream into which sulfur is mixed.

Several vanishing creams were tried but the most satisfactorry, he states, is one known as "Hazeline Snow." The cream can be applied quickly, dries rapidly, and leaves an almost invisible film of sulfur on the skin which is quite effective in repelling chiggers besides being cool and refreshing to the skin.

Sulfur is irritating to the skin of some persons, so a doctor should be consulted before using it either powdered or in a cream or lotion.

Science News Letter, August 15, 1942

METALLURGY

Lead in Babbitt Metal Saves Tin for Other Use

A VERY considerable saving of tin has been effected by substituting for the standard babbitt metal used for bearings, which contain 83 1/3% of tin, a lead-base babbitt of the following composition: 82½% lead, 15% antimony, 1% arsenic, 0.5% copper, and only 1% of tin.

The new bearing metal is the result of innumerable tests and trials, and has been found satisfactory except for very heavy bearings. By making this substitution in electric motors one company is saving 200,000 pounds of tin a year.

Science News Letter, August 15, 1942

"Camel's hair" brushes are usually made from squirrel's hair; real camel's hair would make a very inferior brush.