Do You Know?

Electric household *clocks* are not yet 30 years old.

Doves often complete three broods during one season.

Salt is the most common mineral in existence and one of the most useful.

Japanese beetles are not usually severe agricultural pests in Japan because they are kept in control by natural enemies.

Excellent protection against *chiggers* is secured by an application of a mixture of dimethyl phthalate and indalone inside the legs of trousers.

Rotting apples under fruit trees should be picked up and removed or they may hold over for the next season diseases that might affect the new crop.

The Chinese alligator, a species of crocodile that lives in a small area near Shanghai, may not survive the war as both Japanese and Chinese soldiers have fought back and forth over the area and killed many of them.

Lactic acid, which gives the flavor to many soft drinks, is now under government allocation because it has war uses; it is employed in cleaning, sterilizing and processing textiles, in leather tanning and in lactates used in plastics.



bid them adieu before starting on his homeward voyage.

Permits to bring in pet animals are obtained by addressing the U. S. Fish and Wildlife Service, Chicago, Ill. This is best done in advance, if date and port of probable arrival are known. Since this information is often not available, application may be made while en route, by cable or radio. The Service clears all applications as promptly as is humanly possible, and often has its volunteer inspectors waiting at the dock when the ship lands.

Science News Letter, December 2, 1944

PUBLIC HEALTH

Germ-Killing Soap Lowers Chances of Infection

➤ CLEANER hands and skin, with far fewer germs so that the chances of infection in cuts, scratches and blisters will be much less, is the postwar promise of a new germ-killing soap reported by Dr. Eugene F. Traub, of New York, and Dr. Chester A. Newhall and John R. Fuller, of the University of Vermont (Surgery, Gynecology and Obstetrics).

The soap will have in it a synthetic phenol, dihydroxyhexachloro diphenyl methane, known for short as G-11. Due to wartime restrictions, soap containing this germ-killing chemical cannot be made available at present except for experimental purposes or clinical trial.

In one of the tests reported, soap containing 2% of G-11 was used for all purposes from hand washing to dishwashing for a period of one week. The persons in the tests then washed their hands and forearms for 75 seconds in a good lather of ordinary toilet soap followed by a 20-second rinse. Samples of the soapy water had only about 250,000 germ colonies compared to about 3,250,000 in the same-sized sample of soapy wash water from persons who had used ordinary toilet soap for a week.

Included in the group using the G-11 soap for one week was a football player. He came straight from practice for the final soap washings. In spite of the dirt on his hands, and contrary to what the scientists expected because of the grimy state of his hands, the soap and water he washed in gave a count of only 290,000 germ colonies, only slightly higher than the average.

A person who uses G-11 soap regularly, the scientists state, has fewer "resident" germs on his skin after two minutes of washing than a person who washes for 20 minutes with ordinary toilet soap. Previous studies by other

scientists have shown that some of the germs on the skin are transients that can be easily washed off with soap and water but that others are in the nature of permanent residents and resist removal.

Daily use of a toilet soap containing G-11, it is suggested, would enable a surgeon or operating room attendant to keep these resident germs down to an extremely low level. The routine scrubbing before operations might be shortened and irritating germicides might be eliminated without sacrificing any surgical cleanliness. Omission of the alcohol and iodine rinse might be an important economy now, when these chemicals are not readily available.

While civilians at home may not be able to get any G-11 soap for the duration, members of the armed forces might get some benefit if front-line surgeons and their assistants are able to get it, the scientists suggest. Its use would keep germs on their hands to a minimum so that, even though lengthy surgical scrubup procedures with alcohol and iodine rinses might be impossible, there would be less likelihood of the soldier's wound being contaminated by those dressing it.

G-11 has the advantage of not being irritating to the skin.

Science News Letter, December 2, 1944



pH INDICATOR HELPS MAINTAIN WATER QUALITY

Checking the pH of water is a job in which L&N equipment can help all the way from the stream, lake or well to the finished water tank or boiler.

For laboratory use, we recommend Glass-Electrode Indicator No. 7662 shown above. This instrument reads directly in pH and retains its full accuracy at temperatures up to 85 F (30 C) in atmosphere of 95 per cent relative humidity. It requires practically no maintenance; principal items are filling the reference electrode's salt bridge with KCI crystals every 6 or 8 weeks, and occasionally cleaning electrodes or replacing batteries. This indicator is furnished with all accessories and supplies. For details, see Catalog E-96 (2).



Jrl. Ad. E-96-701(1b)