

PUBLIC HEALTH

Cuts Down Diseases

Disinfection of schoolroom air by ultraviolet light helps check infectious germs. This can be a substitute for air replacement.

► THE EVER-difficult problem of hygienic schoolroom ventilation may be solved by ultraviolet light, it appears from a report of Dr. Mildred Weeks Wells, of the University of Pennsylvania School of Medicine, in the *Journal of the American Medical Association*, (Sept. 15).

"School ventilation, which has necessarily been curtailed on account of fuel shortages during the war, will probably never return to prewar standards," she declares. "Enlightened opinion, which formerly opposed, on hygienic grounds, lowering the volume of air change, now recognizes the potentiality of higher standards of sanitary ventilation through air disinfection, which can practically provide the hygienic equivalent of ventilation impossible of attainment by actual air replacement".

The school ventilation standard of 30 cubic feet of air per minute per child is not only difficult to attain; it is not enough to prevent classroom spread of chickenpox and measles except in rooms where less than 40% of the pupils are susceptible to chickenpox and less than 20% are susceptible to measles.

In contrast to this, Dr. Wells found the chances of a susceptible child getting measles, chickenpox or mumps from a classmate can be definitely reduced by disinfecting schoolroom air with ultraviolet light.

Her conclusions are based on studies begun in the Germantown, Pa., Friends School in 1937 and subsequently expanded so that since the fall of 1941 they have included two neighboring private schools and two groups of public schools in Philadelphia suburbs.

Even better results may be attained with air disinfection as the result of the early experience with it. Proper servicing of the lamps is important. Teachers and pupils should understand how they work so as to avoid the mistake made in one school of draping the lights with autumn leaves and Spanish moss for the Thanksgiving festivities. This, of course, blocks the ultraviolet rays so they cannot get at the germs in the air to kill them.

In a first grade outbreak of measles, nine little girls being infected from a classmate, the cause was apparently the

fact that a playhouse was put into the schoolroom. This reproduced in miniature the exact situation the lights were designed to prevent. It gave a chance for germ-laden droplets of moisture from one little girl's breath to reach all the others without having been exposed to the germ-killing light.

When the air has a high relative humidity, as it may in fall before the heat is on, the ultraviolet light is less effective in killing germs. This difficulty may be unavoidable.

Science News Letter, September 22, 1945

MILITARY SCIENCE

Radioman Tells Iwo Jima Experience

A letter to the Editor from James F. Ward RM 2/c, who took part in the Iwo Jima invasion.

► WE ALWAYS get our magazines and newspapers rather late out here, but in your March 31 issue we paid particular notice to the front cover. Our particular type of ship is not well known and little is said about them so we are always on the lookout for anything new concerning them that comes out in any of the magazines we get on the ship.

There were twelve LCS's that took part in the Iwo invasion and the cover of your magazine is without a doubt a reproduction of a photo of our group of LCS's coming away from Suribachi after a rocket run. The ship showing up best, lightest in color and directly in the center of the picture, we are sure is the "54," our ship.

For obvious reasons we would like some reproductions of the picture. If possible photos as large as the cover. What is sent will be left up to you of course.

Iwo was for most of us our first taste of action. We saw plenty of it there, too. Our gang made two rocket runs at the beach near the base of the famous mountain. One 90 minutes before the initial assault. We then led the actual landing in, covering the marines with our guns and also giving the Japs more hell with another load of rockets.

After escorting the "Bellhops" in, we lay a few hundred yards off shore and

peppered targets such as mortar placements and machine gun nests, which were plenty thick on Suribachi. Clear through to March that was our job around the island fortress. Not all of the mortar fire was directed at the Marines either.

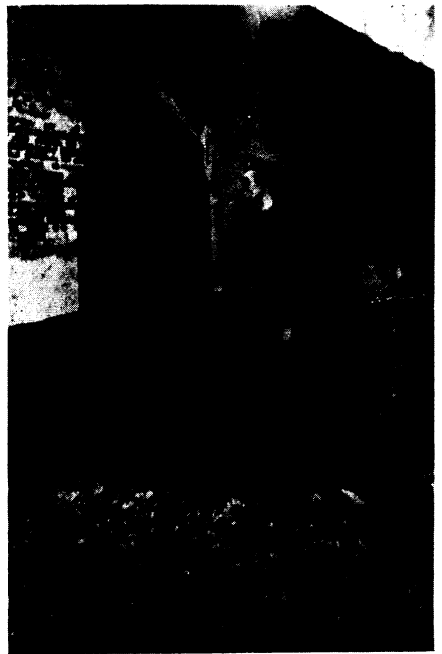
Our little bunch also went right on to Okinawa after a short rest. Ninety-six days were spent there battling the Jap Kamikaze boys. Three of them took dives other than suicide after our guns spoke. All told, our group destroyed almost 50 Jap planes in that campaign.

I could go on for quite some time telling you about our action but this is supposed to be a business letter. In case you would like to know more about the LCS's (called "Mighty Midgets" by Admiral Turner) I can give you some more information on my own and from other sources.

For your information LCS stands for Landing Craft Support. The Navy tagged it LCS (L) (3). The (L) meaning large. The (3) meaning third modification.

I am a Radioman and am writing this letter for the eight men, including myself, in the radio gang. Each of us would very much appreciate a photo.

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COMPARISON—The man appears dwarfed beside the huge projectile. The weight of the projectile plus windshield is eight tons; over-all length is 13 feet.