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roads, no houses. He must find the people, one by one, traveling afoot, on horseback or in canoe. He must carry his questionnaires in one hand and defend himself against wild animals, snakes or unfriendly humans with the other.

Cooperation of the people must be won

so that they will be willing to disclose information to the census taker. This is a problem in the United States; it will be even greater in those countries unfamiliar with censuses and where the people look with suspicion on anyone coming around asking questions.

Science News Letter, November 5, 1949

PUBLIC HEALTH

Reduce TB Germs in Air

➤ **DANGER** of getting tuberculosis by breathing the air-borne germs can now be greatly reduced with ultra-violet germicidal lamps, H. M. Vandiviere, director of bacteriology and parasitology research, State Department of Public Health, Atlanta, Ga., and his co-workers discovered.

The air was tested by a device called an impinger concentrator which breathes in one cubic foot of air per minute. The TB germs collected were exposed to direct irradiation under ultraviolet lights. It was found that the droplets ejected into the air by an infected person could be killed after 22 hours exposure at a distance of six and eight feet, he told the American Public Health Association in New York.

These germicidal lamps also kill about 70% of all other air-borne bacteria usually found in a room, Mr. Vandiviere pointed out.

This is a promising way of protecting workers exposed to TB, he said.

The experiments were made at the Battey State Tuberculosis Hospital with the cooperation of C. Edwin Smith, director, Battey State Hospital Laboratory, Rome, Ga., and Earl J. Sunkes, director of Laboratories, State Department of Public Health, Atlanta, Ga.

Food spoilage by molds, which cause destruction running into millions of dollars every year, can also be reduced with the use of ultraviolet lamps. Spores of various molds are destroyed or made inactive in the air with ultraviolet, experiments conducted at Lighting Research Laboratory of the General Electric Company in Cleveland, showed. The work was reported to

the meeting by Matthew Luckiesh, A. H. Taylor, Thomas Knowles, and E. T. Lepelmeier of GE.

Aerial disinfection with the chemical, triethylene glycol vapor, is another effective method of ridding the air of both bacteria and viruses. But it requires that the relative humidity be within a range of 20% to 50%, otherwise the killing action of the chemical is reduced. This was pointed out by Dr. William J. Lester, Dr. O. H. Roberston, Saul Kaye and Edward W. Dunklin, all of the University of Chicago.

Science News Letter, November 5, 1949

Three "church boats," which were put into service after the war as a temporary measure for the benefit of northern Norway villages whose churches were burned by Nazi invaders, will probably be retained indefinitely.

Words in Science—

TRANSPARENT-TRANSLUCENT

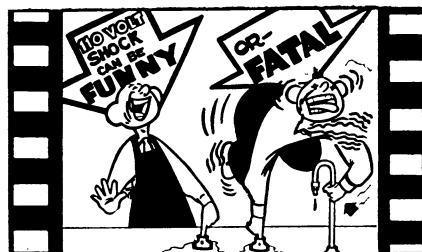
➤ **TRANSPARENT** is from two Latin words, *trans* which means "through" and *pareo* which means "appears." This word is applied to materials through which you can see objects clearly.

Translucent, from the same word *trans* and another Latin word *luceo*, "shine," describes material which lets light through but is not transparent.

If a substance is neither translucent nor transparent, it is said to be opaque.

Science News Letter, November 5, 1949

Safety in the Laboratory



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