

SANITARY ENGINEERING

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New Discoveries Give Impetus to Smoke Abatement—Where pure, undiluted sunlight is plentiful, the disease factor is low. Rickets, long thought to be a diet-deficiency disease, is now found to result much more directly from lack of sunlight. Public demand for smoke abatement, followed by the installation of smoke consuming devices resulted in the elimination of at least 50 per cent of the smoke of Pittsburgh. The death rate from pulmonary tuberculosis in New York City was reduced by one-half within ten years after the new sanitary regulation against smoke became operative.—American Gas Association, New York City. A. W. B.

Sinusitis and Swimming—The literature dealing with the subject of infections of the respiratory passages caused by swimming has dealt largely with only the etiologic factor of contaminated water and has almost ignored the fact that man has few structural adaptations for an aquatic environment. The author was convinced that factors other than contaminated water play a significant rôle in producing sinusitis, since the patients coming under his observation bathed in relatively pure spring water having a temperature of 71° F.

Sinus infection in man may come from foreign bacteria gaining entrance to the deeper portion of the nasal apparatus and conjoined structures. In aquatic animals, certain structures keep the water from gaining entrance to the nasal cavities where infections might be introduced or else injury done to the respiratory epithelium lining the true cavity and the paranasal sinuses. These adaptations are far superior to any means that man has for keeping water from the respiratory tract, since man is now far removed from being an aquatic animal and has not the adaptation for an aquatic environment.

Another possible causative factor of sinusitis from swimming is that of lowered resistance, normally found in the upper air passages. Warm blooded aquatic animals are highly adapted mechanically to live in cold water, be-

ing provided with heavy coats of fur or thick layers of fat. Man is not similarly adapted and if his stay in water is prolonged, the production of heat fails to keep up with the loss, and the body temperature falls. He therefore lacks in the adaptation to maintain his body temperature for more than a brief period in water temperature lower than his own.—H. Marshall Taylor, M.D., *Jour. A. M. A.*, Vol. 85:7 (July 4), 1925.

Lime Hypochlorite Lowers Psychoda Flies at Sewage Works—Studies made at Schenectady indicate that 200 p.p.m. will reduce flies 70 per cent and not upset biological action.—Morris M. Cohn, *Eng. News-Rec.*, 94:684 (Apr. 23), 1925. A. W. B.

Water Supplies and Typhoid Fever—In 1900 the average typhoid fever death rate in the United States was 31.3 per 100,000 population. During the 5-year period from 1918 to 1922 inclusive, the rate was 5.3, a reduction of 83 per cent. The number of persons supplied with purified or treated water has increased enormously during the past 20 years. This has been due, in a large measure, to the development of the application of chlorine to public water supplies. The art of water purification has advanced notably in the development and perfection of mechanical filtration. Health authorities, water works officials and the general public have learned that polluted drinking water means a high typhoid fever death rate and most of the states in the Union have passed water supply, sewerage and anti-pollution laws.—C. A. Holmquist, *Canad. Eng.*, 48:385 (Apr. 7), 1925. A. W. B.

Oiling for Mosquito Control—Sawdust from sawmills in the vicinity is saturated in a mixture of equal parts of kerosene and waste crankcase oil. The sawdust is broadcast on the water as a farmer would sow grain. It sinks to the bottom immediately and oil is released for four or five days. This method is successfully used by Newport News, Va.—*Pub. Works*, 56:81 (Mar.), 1925. A. W. B.