Follow-up examinations for many years enable one to make a synthesis of various pathologic conditions during a given period, and to watch for correlation between certain discontinued clinical manifestations and the appearance of a determined pathologic condition.

NOISE AND OCCUPATIONAL DEAFNESS IN AN INDUSTRIAL PLANT. H. F. FABRITIUS, H. STENWIG and E. THIIS-EVENSEN, Nord. hyg. tidsk., 1950, no. 6, p. 157.

The authors examined 179 workers who had noisy occupations—155 miners, 15 platers and 9 machine house workers. Of the miners, 51 were examined both in 1943 and in 1947. Twenty-one workers who had undergone alterations of the drum membrane are not included in this material.

The noise, mostly produced in closed rooms, was measured and found to be 90 to 109 phons. Forty-one per cent of the workers had ringing of the ears in connection with their work; 11 per cent had constant ringing of the ears; 36 per cent themselves had found that their audition was bad.

The auditory examinations showed that almost one half of the workers had a definite decline of their sense of hearing after the first five years of work in noise and that not one had a normal audition after 20 years. The comparative examination also showed that the decline of auditory sense distinctly appeared during the first years. The authors emphasize, therefore, that beginners should be given special attention and that systematic auditory examinations should be included in the prophylactic work. Noise-preventing precautions are discussed, as well as the necessity of noise measurement and protective arrangements for the workers. Finally, it is emphasized that all precautions against noise and against injuries resulting from noise are good economy for the plant and that information is necessary in order to stimulate the workers to active cooperation.

ADAPTATION OF AUTHORS' ENGLISH SUMMARY.

Environmental Conditions

CONTROL OF ODORS. E. R. WEAVER, Circular no. 491, United States Department of Interior, National Bureau of Standards. Pp. 12. April 17, 1950.

The circular deals briefly with industrial odors and the common methods for their control: dilution, dispersal, burning, adsorption, solution and chemical action. Odors arising in households and places of business are considered more fully. The methods used in industry are the only effective ones here also, although some are impractical or expensive in the home. The so-called deodorants, which (1) mask the odor, (2) dull the sense of smell or (3) irritate the olfactory organs, are shown to have only temporary effects, and the irritants, especially ozone, may be injurious. The author does not believe that chlorophyll is useful in deodorization. To control odors in sick rooms and hospitals, he recommends sufficient ventilation. The treatment of the entire subject is admittedly brief, and the author recommends McCord and Witherridge's book (See *Indust. Hyg. Digest,* abstract 280, March 1949) for a fuller discussion.

ADAPTATION OF INDUST. HYG. DIGEST ABSTRACT.

Determination of Air-Borne Contaminants

SAMPLING CERTAIN ATMOSPHERIC CONTAMINANTS BY A SMALL SCALE VENTURI SCRUBBER. PAUL L. MAGILL, MYRA ROLSTON, J. A. MACLEOD and R. C. CADLE, Analyt. Chem. **22**:1474 (Sept.) 1950.

A portable device for sampling air contaminants permits the scrubbing of large volumes of air by a small volume of liquid. This facilitates chemical analysis of the collected materials by making it possible to obtain relatively high concentrations of contaminants in the scrubbing liquid. The action of this portable field unit is based on the principle used in the Venturi scrubbers employed to remove fumes from industrial stack gases. The pollutants examined include ammonia, sulfur dioxide, sulfuric acid and sodium chloride. The efficiency of the scrubber varies with the contaminants and may vary for the same contaminant in different physical conditions. With sodium chloride the efficiency was 96 per cent. With sulfuric acid the efficiency was about 44 to 65 per cent, depending on conditions. Recoveries of ammonia were about 20 per cent when distilled water was used in the scrubber but were close to 100 per cent when 0.1 normal sulfuric acid was used.

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