762 Experimental Pneumoconiosis. J. Horta and C. Cancela. J. Soc. Ciencias Med. Lisboa 5, 120 (1956). Portuguese.

The authors found in many men working with cork a pulmonary illness resembling tuberculosis but without tubercle bacilli in the sputum. When these patients were away from their work their cough, dyspnea, and general condition improved quickly. In the belief that the pneumopathy was caused by the inhalation of cork dust, the authors exposed rabbits and guinea pigs for long periods to the conditions of the patients' work and injected sterile cork dust intraperitoneally and in the pulmonary veins of the animals. This caused a severe reaction in the lungs, with proliferation of the large alveolar cells, increased number of the septal fibroblasts, and even the formation of fibrotic nodules. The production of this experimental illness suggests that also in man there is a pneumoconiosis produced by cork dusts.
-- J. Am. Med. Assn.

763 An Outbreak of Weaver's Cough Associated with Tamarind Seed Powder. R. Murray, I. Dingwall-Fordyce, and R. E. Lane. Brit. J. Ind. Med. 14, 105-110 (Apr. 1957).

An unusual and widespread outbreak of cough and dyspnea occurred among weavers of viscose yarn, in which tamarind seed kernel powder had been used as a sizing agent. The condition appeared to be a reaction to a constituent of the size. Fungicides and fungi were eliminated as causative factors. An allergic reaction rather than an infective or irritant factor is indicated. As the use of the suspected size has been discontinued, confirmation of these hypotheses can only be obtained by inducing a reaction under controlled conditions. Such experiments are now in progress. -- Cond. from authors' summary

PHYSICAL ASPECTS OF THE ENVIRONMENT

764 Environment for Measuring Noise. H. B. Karplus. Noise Control 3, 19-22, 82 (Mar. 1957).

The measurement of octave-band sound-pressure levels is now a relatively simple standard procedure. However, the measurements depend to a large degree upon the environment of a given noise source. Two ideal environments are often used: the free field, and the reverberant field. In the free field method, reflection of sound is reduced to a minimum by the use of acoustic materials. The reverberant field method utilizes the fact that the sound-pressure level in a room with low absorption is very uniform and depends only on the total power fed in and the absorption. Both methods are discussed mathematically and experiments are described showing how uniform conditions can be obtained in the reverberant field method.

765 Evaluation of Four Methods for Determining Sound-Power Output of a Fan. W. F. Kerka. Heat. Pip. Air Cond. 29, 139-146 (Apr. 1957).

Four methods of determining the sound-power output of a fan by octave-band analysis were investigated. Measurements within the duct by an anechoic termination at the end were used for determining the sound power delivered by the fan to the duct system. The free-field and reverberant-room methods were employed in finding the sound power radiated into a space from the inlet and discharge ducts. The acoustic power in the space is dependent upon both the sound-power output of the fan and the size and location of the duct openings. The acoustic power at the duct opening was found from measurements made at the periphery, with and without air flow, and at the open face without flow. In the 300 to 600 cps band and above, all of the methods correlate within 6 db. Measurements made within the duct indicate that the energy level within the duct in the lower frequencies is greater than that which is radiated from the duct opening. This is in accordance with theoretical findings. Recommendations are made for adapting the test methods to other types of air-moving equipment. -- Editor's summary

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