27
119
58
105
07
52
50
51
23
42
45
46
3



ARMY
MEDICAL
FEB 26 1952
LIBRARY

Industrial Hygiene Digest

INDUSTRIAL HEALTH NEWS

LITERATURE ABSTRACTS

MEDICAL

ENGINEERING

CHEMICAL

TOXICOLOGICAL

LEGAL - - - decisions and trends

FEBRUARY, 1952
(Vol. 16, No. 2)

INDUSTRIAL HYGIENE FOUNDATION
MELLON INSTITUTE
4400 FIFTH AVENUE -:- PITTSBURGH 13, PA.

PLAINTIFF'S EXHIBIT
tabbies
WV-D00446

PLAINTIFF'S EXHIBIT
tabbies
01339.33

FOUNDATION FACTS

Foundation Facts is a monthly news-letter issued to industrial concerns holding membership in Industrial Hygiene Foundation. The Foundation is a nonprofit association of industries for the advancement of healthful working conditions.

Volume 14 — February, 1952 — No. 2

DR. D.C. BRAUN APPOINTED MEDICAL DIRECTOR

Dr. Daniel C. Braun, a national authority on industrial health and an engineer as well as a physician, has been appointed Medical Director of Industrial Hygiene Foundation and a Senior Fellow of Mellon Institute. He will also serve on the staff of the University of Pittsburgh Graduate School of Public Health as lecturer in occupational health. Dr. Braun, who had been medical director of the Pittsburgh Coal Company since 1944, is widely known for his activities in industrial medicine, educational, civic, municipal and medical affairs. He was adviser to the Westinghouse Electric Corporation in its expanding health program.

MEDICAL LIBRARY FEB 26 1952

Dr. Braun, a 1937 graduate of the University of Pittsburgh School of Medicine, was associated with the late Dr. Grover C. Wolf, a pioneer in industrial medicine and surgery. Dr. Braun is a fellow of the American Medical Association, the American College of Chest Physicians, the American Academy of Occupational Medicine, and the Pittsburgh Academy of Medicine. He is also a member of the Industrial Medical Association and a member of the American Industrial Hygiene Association, The American Institute of Mining and Metallurgical Engineers, the Allegheny County and Pennsylvania State Medical Societies.

As Medical Director of Industrial Hygiene Foundation, Dr. [illegible] for the position held by Dr. Walmer prior to and after his appointment as Emeritus Director.

MR. HATCH SELECTED FOR STATE HEALTH BOARD

Theodore F. Hatch, the Foundation's Laboratory Director, has been selected by Governor Fine to serve as the engineer member of the newly created Pennsylvania Advisory Health Board. This Board will advise with the State Secretary of Health on further advancements of local and state health [illegible]. Prof. Hatch's wide knowledge of the fields of occupational hygiene and [illegible] health engineering will be a valuable asset to the State through his service [illegible] Board.

MR. HEMEON SPEAKS AT CONFERENCE ON AIR POLLUTION

Mr. W.C.L. Hemeon, the Foundation's Engineering Director, will present a paper on "Measurement of Atmospheric Pollution" on February 28 at the Governor's Conference and Exhibit on Atmospheric Pollution, which is being held in Trenton, N.J.

I - H - F

caused or aggravated by a specific irritant in the linen thread, the author conducted experiments in which the macerated linen thread was suspended in saline solution and injected beneath the skin of mice. The mortality was high; 45 died during the first month. Three of the survivors developed malignant tumors. In one, linen fibers were seen in the middle of the tumor, and a metastasis showing active mitosis of the cells was found in the lung. The possible nature of the irritant is discussed but no definite conclusion is reached. -- Cond. from Bull. Hyg.

INDUSTRIAL DUSTS

211 The Present Status of Silicosis. L.T. Fairhall. Ind. Health Monthly 11, 169-170, (Nov., 1951). Occ. Health 12, 3,6, (January, 1952).

The author presents a picture of the present state of the knowledge of silicosis by reviewing briefly 36 of the most significant papers and publications that have appeared, nearly all within the last three years. The first installment deals with theories of the cause of silicosis, and the second with diagnosis and incidence in various industries. In conclusion, he writes, "In general, it may be said that owing to better protective measures the proportion of cases of silicosis occurring in industry in comparison with the number of workers exposed has diminished within the present generation. Nevertheless, silicosis remains one of the most important diseases of industry."

212 Industrial Hygiene Survey of Cemetery Memorial Industry. W.H. Magill. Missouri Ind. Health Bull. 9, 1-3, (Sept., 1951); 1-4, (Dec., 1951).

The survey included 72 shops in Missouri, employing 151 persons engaged in stone-cutting operations, varying from lettering, designing, and engraving, to complete manufacture of monuments. The survey did not include quarrying operations. Granite from various sources is used and varies from 15 to 41% free silica. Sandblasting was conducted in enclosed booths with a window for observations. Many of the booths were not dust-tight and glass windows were not always used. Exhaust was usually provided, but was not always sufficient. Sand was used as the blasting agent in the majority of establishments. Even when the booth was tight and exhaust sufficient, the collected sand was usually sifted without sufficient protection.

Work involving pneumatic hand tools is necessarily done without using a booth, and exhaust ventilation and respirators should be provided. Wetting the work with turpentine should be practiced when no exhaust

218 A Morphological Study, with the Electron Microscope, of Particles of Asbestos Found in the Air. P. Lepine and O. Croissant. Ann. Inst. Pasteur 80, 305-308, (March, 1951). (In French).

Six samples of airborne dust from workplaces in Quebec where asbestos is used were examined with the electron microscope after removal of all but the most minute particles. The dust was found to contain crystalline needles, smaller in size but similar to those seen in an ordinary microscope; these needles comprised 65 to 75% of the particles. The remainder consisted of amorphous particles, mostly of serpentine. The needles had a diameter of 0.028 micron; they occurred in bundles about 0.85 micron or more in diameter. Such particles could readily gain access to the alveoli and undergo phagocytosis, with formation of the tissue lesions seen in asbestosis. Photomicrographs of the particles are shown.

-- Cond. from Bull. Hyg.

219 Experimental Asbestosis in Rats. J.M. Smith, I.D.P. Wootton, and E.J. King. Thorax 6, 127-136, (June, 1951).

A study has been made of the effect of particle size on the production of lung fibrosis in rats by asbestos. Short-fiber asbestos (2.5 microns) caused only a moderate peribronchial fibrosis, whereas long-fiber asbestos (15 microns) caused well-marked interstitial fibrosis resembling that seen in the human disease. Alumina injected together with asbestos of varying particle size increased the fibrosis produced.

-- Authors' Summary

220 The Problem of Pneumoconiosis, Including a Report on the Lung of a Slate Worker. W. Ceelen. Beit. z. Silikose-Forschung No. 13, 3-15, (1951). (In German).

The paper gives a stimulating but somewhat speculative discussion of the silicotic process as seen by a pathologist, followed by the description of the appearance of a slate miner's lung. According to the author's hypothesis, quartz acts first as a physical poison by absorption, and later as a chemical poison by solution. The typical reaction in silicosis, the hyalinization of nodules, is due to precipitation of protein, possibly according to some antigen-antibody mechanism. The worker in question had been exposed to dust of slate containing about 30% quartz for 28 years. He had been refused certification for silicosis, but died of pneumoconiosis. Widely disseminated fibrosis of the lungs, reticular and nodular, was present, and especially an enlargement and solidification of the hilar and peribronchial lymph nodes which had led to a constriction of the main artery. The tissue appearance is described in detail.

-- Cond. from Bull. Hyg.