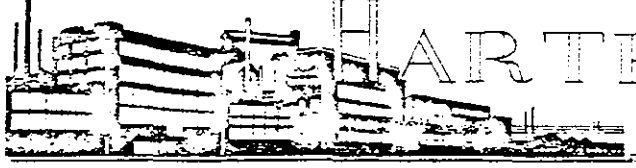
The Manufacturers Association of Connecticut



PLAINTIFF'S EXHIBIT IHF27

RECEIVED SEP 16 1941

September 15, 1941

Bulletin No. 837

ATTENTION: - Industrial Nurses - "Trained Attendants"

A person employed by industrial plants to practice nursing under the direction of a licensed physician is required to be licensed as a registered nurse (R.N.) or as a trained attendant (T.A.). Connecticut licensing requirements are as follows:

A. The graduate nurse having completed a course in an accredited school of nursing may be licensed

1. By examination in Connecticut; or

2. Without examination in Connecticut if her course in nursing equals that set up in this state, and he or she has been licensed by examination in some other state.

B. The trained attendant may apply for licensing

1. By examination if he or she has completed a one year course accredited by the Board of Examiners for Nursing; or

2. Without examination if he or she has completed an accredited course for trained attendant work in another state and is licensed there under a similar title; or

3. BY WAIVER (UNTIL MAY, 1943) IF HE OR SHE (a) HAS HAD THREE YEARS RESIDENCE IN CONNECTICUT, (b) HAS HAD THREE OR MORE YEARS OF EXPERIENCE IN THE CARE OF THE SICK, AND (c) IS A CITIZEN OF THE UNITED STATES OR HAS DECLARED INTENTIONS OF BECOMING A CITIZEN.

Attention is called to the last section, in order that those employed to do industrial nursing who are not now licensed may become properly certified for same. Application blanks or further information may be secured from the Board of Examiners for Nursing, State Office Building, Hartford, Connecticut. We will be glad to answer any questions.

A-1789

004440



Industrial Hygiene Digest

INDUSTRIAL HEALTH NEWS

LITERATURE ABSTRACTS

MEDICAL

ENGINEERING

CHEMICAL

TOXICOLOGICAL

LEGAL - - - decisions and trends

SEPTEMBER, 1952
(Vol. 16, No. 9)

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

PLAINTIFF'S EXHIBIT IHF88

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 | September, 1952 | No. 9

KEYNOTE SPEAKER

Mr. L. R. Boulware, Vice President of General Electric Company, will be the keynote speaker at the 17th Annual Meeting of Industrial Hygiene Foundation. His address will be given on November 20 at the General Meeting, which emphasizes management aspects. Mr. Boulware has taken a keen interest in the welfare of employees both in the plant and in the community.

NEW ADDITIONS TO FOUNDATION MEMBERSHIP

The following companies have recently affiliated with the Foundation:

Cobalt Chemicals Limited
Eaton Manufacturing Company
Kennametal, Inc.
Michigan Iron & Coke Company
Warner Company

STAFF MEMBERS ATTEND SARANAC SYMPOSIUM

The Seventh Saranac Symposium is being held September 22-26 at The Saranac Laboratory of the Edward L. Trudeau Foundation, Saranac Lake, N. Y. Two of the Foundation's Staff Members will attend. T. F. Hatch, Laboratory Director, will serve as Chairman of a discussion on "The Inhalation of Certain Industrial Substances," at the Monday, September 22 afternoon session. D. C. Braun, Medical Director, will present a paper entitled "The Presentation of Medical Evidence in Controverted Compensation Cases" on the morning of Friday, September 26.

REPRINTS AVAILABLE

Reprints of the paper "A Rational Approach to Air-Pollution Legislation," by George E. Best, are now available to member companies upon request. This paper was presented at the 16th Annual Meeting of the Foundation.

17th ANNUAL MEETING, Nov. 19-20

at Mellon Institute, Pittsburgh

1007 Findings of Bronchoscopy in Silicosis and Silico-Tuberculosis. E. Concina and O. Orlandi. Rass. med. ind. 20, 424-426 (Nov.-Dec. 1951) Italian.

The importance of the existence of bronchial lesions in silicosis has been underestimated. Bronchoscopy allows direct observations of changes in the tracheal and bronchial mucous membrane, deviations in the trachea and main bronchi, and modifications in the orifices of the lobes and segments. Lavage, aspiration of the bronchial section, and endo-bronchial administration of adrenaline and antibiotics may be conducted during the process. Inflammation of the mucous membranes and other changes characteristic of silicosis are disclosed by this method. Findings in 25 patients are reported. -- Cond. from Bull. Hyg.

1008 The Value of the Electrocardiograph for Examining Anthraco-Silicotics. F. Lavenne. Institut d'Hygiene des Mines, Hasselt, Belgium, Communication No. 90, 5pp. (1951). French.

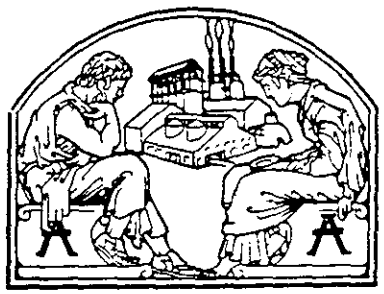
The author used the electrocardiograph to examine 11 cases of anthraco-silicosis with clinical signs of loss of compensation of the right ventricle, and 200 cases of anthraco-silicosis, compensated for invalidity but still ambulant, who were doubly classified according to the extent of fibrosis present and according to the amount of emphysema. The findings are presented in somewhat cryptic symbolism. They are held to justify the claim that the electrocardiograph may be of considerable value in establishing early strain on the right side of the heart.

-- Bull. Hyg.

1009 Asbestosis Associated with Bronchiogenic Carcinoma. R. Stoll, R. Bass, and A. A. Angrist. Arch. Intern. Med. 88, 831-834 (Dec. 1951) German.

Data for statistical proof of any association of asbestosis with pulmonary carcinoma are hard to collect, but three investigators have found carcinoma in 7.5 to 14.8% of cases of asbestosis. A case is reported in which a worker had been exposed to asbestos for 6 years and had refused to wear a respirator. He came under notice with weakness and a persistent cough. Clumps of malignant cells were seen in the bone marrow, and x-ray showed generalized large discrete oval shadows indicative of pulmonary metastases. After death, modules varying to 4 cm. in diameter were found scattered throughout both lungs, with interstitial fibrosis. Large areas of necrosis existed throughout the lungs, and typical asbestos bodies were seen inside and outside the tumor areas. Metastases were found in the kidneys, brain, and liver. The opinion is suggested that the silicate in asbestos must itself be directly carcinogenic. It establishes an additional reason for preventive measures in the use of asbestos.

-- Cond. from Bull. Hyg.



Industrial Hygiene Digest

INDUSTRIAL HEALTH NEWS

LITERATURE ABSTRACTS

MEDICAL

ENGINEERING

CHEMICAL

TOXICOLOGICAL

LEGAL . . . decisions and trends

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AUGUST, 1949
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EXHIBIT
IHF85

However, great care should be taken to exclude the tuberculous in selecting persons to receive aluminum therapy. (4) It is not believed that a scientifically controlled experiment in industry is feasible for the evaluation of aluminum for the prophylaxis of silicosis. This follows from the uncontrollable variables inherent in the industrial situation and other factors which have been discussed. For these reasons, it appears improbable that any research agency would consider it advisable to undertake such a project except under special conditions already discussed, and which may not be attainable. (5) The McIntyre Research Foundation, as presently organized, is not equipped to solve the aluminum prophylaxis problem in relation to silicosis. The steps considered necessary to accomplish this objective are outlined. (6) Research should be continued with laboratory animals with the object of finding a more adequate basis for application to man. Such study is now included in the program of the Saranac Laboratory of the Trudeau Foundation. -- Authors' Summary

66 Effects of Electricity on the Human Body. W.B. Kouwenhoven. Ind. Med. 18, 269 (July, 1949).

The author discusses briefly the various effects of electricity on the body, including variations with the amount of current. The current values of interest are: (1) threshold of feeling, about 1 milliampere, (2) let-go current, above which it is difficult to let go of a wire, about 9 milliamperes for men, 6 for women; (3) current producing ventricular fibrillation, 0.1 ampere; (4) current producing a block in the nervous system, one ampere or more; and (5) the counter shock current. The last three result in death if prolonged; otherwise artificial respiration may save the victim. These effects refer to alternating current of commercial frequency. Direct current is much less harmful. The only effect of high-frequency currents is heating.

67 Asbestosis and Cancer of the Lung. Editorial. J.A.M.A. 140, 1219-1220 (Aug. 13, 1949).

Records of English, American and German physicians and The Annual Report of the Chief Inspector of Factories in England for 1947 show that the occurrence of cancer of the lung is related to pulmonary asbestosis. This relation is supported by the following observations: (1) The incidence rate of cancer of the lungs in asbestosis patients is 10 to 15 times as high as among the general population.(2) The male-female ratio is more nearly equal than it is for the general population, which indicates that an environmental and evidently occupational carcinogen tended to equalize the incidence rate of cancer of the lungs for both sexes. Recent experimental observations support this interpretation of clinical evidence.

68 Changes in the Lungs Produced by Natural Graphite. H.E. Harding and C.B. Oliver. Brit. J. Ind. Med. 6, 91-99 (April, 1949).

A brief description is given of the industrial uses of natural graphite, which is a crystalline carbon mixed with up to 10% of free silica and with other minerals. The greatest dust risk occurs in the grinding of natural graphite, for which evidence is presented to show that this can lead to

875 Research on the Development of Silicosis Following Cessation of Exposure to Dangerous Dust. Vera Greinacker-Oristofari and F. Lang. Ztschr. f. Unfallmed. 40, 61 (1947) German.

The authors prepared tables which give the status of silicotic persons who were removed from exposure for at least four years. From these figures the authors conclude that the workers who are removed from exposure as soon as the first roentgenologic changes are noted have a greater chance of not falling ill or of manifesting illness later, than those who go on working. They stress the importance of adopting technical measures to control dust.
-- Condensed from J. Ind. Hyg. & Tox.

876 Investigations on Combat of Occupational Anthrax: Further Experiments on Disinfection Procedures in Industries Utilizing Animal Hairs and Bristles: Bactericidal Action of Watery and Soapy Formaldehyde Solutions at Higher Temperatures. E. Hailer and K. Heicken. Ztschr. f. Hyg. u. Infektionskr. 128, 109 (July, 1948) German.

The bactericidal effect of formaldehyde solutions on anthrax strains is greatly enhanced by increased temperature. With the same concentration, a formaldehyde solution is 100 times as effective at 80°C. as at 20°C. The addition of soap increases the sporocidal effect, particularly in the lower concentrations. The most effective concentrations for various temperatures were determined. On the basis of these observations a procedure was developed for the disinfection of animal hairs and bristles(which are impaired by exposure to boiling or to steam under pressure), which was used with success in establishments that spin horse hair or manufacture brushes. -- Condensed from J. Ind. Hyg. & Tox.

877 Investigations on Combat of Occupational Anthrax: Bactericidal Action of Caporit, Chloramine, Chlorimide, and Formaldehyde Against Anthrax Spores at Twenty, Twelve and Four °C. E. Hailer and K. Heicken. Ztschr. f. Hyg. u. Infektionskr. 128, 87 (July 16, 1948) German.

These studies were conducted to determine the most suitable methods for the disinfection of railroad cars and other transportation facilities in which imported skins and other possible sources of anthrax had been carried, also of storage facilities, tanneries, wool-carding establishments, horse-hair-spinning, and for the protective clothing of workers. Of the three chloride preparations, caporit was found to be the most efficient, particularly at the lower temperatures of 12 and 4°C. The sporocidal action of formaldehyde solutions increased in proportion to the concentration up to a concentration of 4%. The disinfecting potency of these solutions was considerably less at 12°C. and even less at 4°C that it was at 20°C. The soapy solutions of formaldehyde were more effective at lower temperatures than the watery solutions and the ones that had been prepared 24 hours before, either with or without soap were more effective than fresh solutions. It was concluded that the solutions of caporit and formaldehyde are of practical value for the disinfection of areas which might be contaminated with anthrax organisms.
-- J. Ind. Hyg. & Tox.

(Editor's Note: We have no clue to the composition of "Caporit".)

934 Control of Cupola Stack Emissions. J F. Drake and T.G. Kennard. Iron Age 163, 88-92 (Apr. 7, 1949).

An installation is described involving a closed charging bell, a dry dust collector and a wet washer, which results in stack emissions within the limits set by Los Angeles County air pollution regulations. Data are given on the nature of matter collected by this system.

935 Musgrave "Aerodynamic" Dust Collector. Anon. Ind. Heat. Engr. 10, 188-189 (Sept. 1948).

Messrs. Musgrave & Co., Ltd, have acquired the manufacturing and selling rights for this new collector (Systeme Linderoth), which is based on a new principle of separation, and is designed to overcome difficulties inherent in the normal type of centrifugal collector. The filter surface consists of a specially slotted sheet bent into the form of a cone. The air or gas to be cleaned is passed at high velocity over this surface, and due to the form of the slots,aerodynamic forces are set up, the resultant force on the dust particles being in a direction away from the cone face. This force keeps the dust particles suspended in the form of a thin cloud layer immediately in front of the filter surface, while the clean air escapes through the slots. These slots or passages for the clean air are many thousand times larger than the dust particles which are removed, so that even with adhesive dusts there is little tendency for the filter to become clogged. -- Atm. Poll. Bull.

936 Is It True that Silicosis Is Not Progressive in the Absence of Tuberculosis? J.L. Nicod. Presse Med. 57, 51ff. (Jan. 8, 1949).

Nicod does not agree with the conclusions of the conference on pneumonoconiosis held in London in April, 1947, which asserted that pneumonoconiosis can be arrested spontaneously by the cessation of exposure to dust except for those cases in which silicosis is combined with tuberculosis. He performed necropsies on 150 miners who had been employed in the Swiss Alps and who had died from silicosis. Neither recent nor old tuberculous lesions could be demonstrated on microscopic examination of 35 to 40 per cent of these 150 men who had been working as miners only temporarily, in some cases not longer than one year, and who died from silicosis twelve to twenty-three years after having discontinued work in the silica dust environment. The postmortem examination revealed the progressive course of the silicosis in the pulmonary tissues and in the lymph nodes in the absence of any tuberculous process. In cases in which silicosis was combined with tuberculosis, the latter nearly always developed after the silicotic lesions in the lungs, and frequently it had an acute and terminal course. Tuberculosis is a late complication of the pneumonoconiosis in the great majority of silicotic patients. -- J.A.M.A.

937 Dust Control in Machine Shops. Anon. Industrial Notes. Bureau of Ships, Navy Dept. No. 91. 12pp. (April 22, 1949).

Conscious of the daily requirements of proper dust control, technicians are stressing constantly the importance of using effective dust-collecting

PLAINTIFF'S EXHIBIT IHF 93

1953 ANNUAL INDEX

Volume 17



Industrial Hygiene Digest

INDUSTRIAL HEALTH NEWS

LITERATURE ABSTRACTS

MEDICAL

ENGINEERING

CHEMICAL

TOXICOLOGICAL

LEGAL . . . decisions and trends

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79 A Case of Pulmonary Asbestosis, with Its Development Followed by X-ray and Its Post-Mortem Study. P. Luton, J. Champeix, and P. Faure. Arch. maladies profess. 12, 629-633 (1951) French.

The case reported is said to have been the first one of asbestosis known to have occurred in France. The man had been exposed to high concentrations of asbestos for 11 years. Symptoms and progressive x-ray findings are described. After death the lungs showed general thickening throughout, especially of the plurae, but with no localized nodules. Many asbestos bodies were seen, isolated and in groups, together with giant cells and mineral particles. No evidence of tuberculosis was found. The dust particles could be traced not only in the lung vessels, but also in the vessels of the liver, kidneys and spleen. The action of asbestos is apparently mechanical rather than chemical. -- Cond. from Bull. Hyg.

80 Byssinosis. J. B. M. Vismans, Ned. Tijdschr. Geneesk. 96,800 (Apr. 5, 1952). Dutch.

Byssinosis occurs in workers in the cotton industry, chiefly in those who handle the cotton before it is sent to the spinning room. The author quotes from the literature and presents the histories of seven patients observed by himself which illustrate the three stages of the disease. He also comments on the incidence, etiology, pathologic anatomy, and diagnosis. Generally, the disease develops only after the worker has worked with cotton for at least five years. A constricted, tight feeling in the chest is usually the first manifestation, and since this symptom is often severest on Mondays, the term "Monday fever" or"Monday cough" has been applied to it. Patients with the advanced form of byssinosis may die of decompensation of the right side of the heart. Prophylaxis is of primary importance and should involve giving attention to the selection of workers and to dust control in cotton mills.
-- Arch. Ind. Hyg. & Occ. Med.

81 Studies on Cotton Dust in Relation to Byssinosis. Part III. Comparison of Cotton Dust and House Dust by Chemical and Skin Tests. H. R. Cayton, G. Furness, D. S. Jackson, and H. B. Maitland. Brit. J. Ind. Med. 9, 303-308 (Oct. 1952).

An extract of cotton dust has been compared chemically and by skin tests with extracts of house dust. Both contained a polysaccharide associated with a polypeptide grouping of amino-acids giving none of the usual color reactions for proteins. Quantitative and chromatographic tests revealed a similarity in the sugars and amino-acids detected. Both extracts produced the early type of skin reaction. Cotton dust generally produced also a late skin reaction, whereas the house dust did not. The two extracts, therefore, were not identical. Polysaccharide-polypeptide compounds were probably responsible for the early skin reaction. Their source is not known but they

and after treatment. It improved in 62% of the miners on an average of 104 cc. The improvement of neurotic conditions present in the majority of silicotics is an essential part of treatment. Rehabilitation as such is only possible in the early stages of the disease. It will be possible to consider the rehabilitation of patients no longer suitable for work in the mines only when they have been retrained for other work.

-- Cond. from Arch. Ind. Hyg. & Occ. Med.

77 Investigation of Silicotic Lungs with the Electron Microscope. H. Konig. Staub No. 28, 31-38 (Mar. 15, 1952) German.

The lower limit of visibility, which is of the order of 0.3 micron for the light microscope, can be extended to particles 100 times smaller by the electron microscope. Electron diffraction patterns and chemical tests should be used to identify the components of dusts. Digestion of lung tissue containing silicotic nodules with concentrated sulfuric acid and potassium nitrate yielded platelets showing signs of chemical attack. On the other hand, when the tissues were treated with hydrogen peroxide, or washing the tissue below 300° C and digestion with potassium chromate the particles were less attacked and gave the electron diffraction pattern of montmorillonite. Whether the montmorillonite was formed in the lung or weathering of mica or whether it already occurred in the airborne dust remains to be studied. Identical lung residue shows quartz by x-ray diffraction but montmorillonite under the electron microscope. This is explained by the fact that these minerals occur in different size classes. Both methods should be used.

-- Cond. from Brit. Hyg.

78 Silicatosis: Etiology, Pathogenesis, and Clinical Treatment. M. A. Kovnatskii and others. Gigiena i Sanit. No. 8, 28-32 (1952). Russian.

A review is given of the disease caused by particles of silicates rather than those of the type producing silicosis proper. A study of the disease caused by asbestos particles showed that the chemical and biological features are increased rate of respiration (compensatory) and in stages the level of blood saturation with oxygen is essentially normal, although changes in the myocardium are evident on the electrocardiogram. The tone of the veins is reduced, and the permeability of capillary walls suffers a decrease in a considerable number of cases. This affects the oxidative processes as shown by the increase of oxidized glutathione and a decrease of total glutathione.

-- Chem. Abstr.

treated animals diffuse delicate connective tissue, consisting of loosely knit fibers and thin-walled blood vessels, surrounded the silicotic nodules. In the controls, a cellular fringe with fibroblasts suggested that active fibrosis was still progressing. The authors were unable to detect any reduction of collagen in established silicotic nodules in the treated animals, although further fibroblastic proliferation was apparently retarded. This suggests that cortisone will not have any lasting benefit on the collagen in human silicosis, although it might arrest progression of the lesions while it was being administered.

-- Cond. from J. Am. Med. Assn.

283 Pulmonary Tuberculosis in the Rhondda Fach: an Interim Report of a Survey of a Mining Community. J. G. Cox and T. F. Jarman. Brit. Med. J. 2, 843-853 (Oct. 18, 1952).

A field experiment was designed to study, in a mining community with a high prevalence of pneumoconiosis, the effect of reducing tuberculosis infectivity upon the rate of appearance of progressive massive fibrosis in miners already affected by simple pneumoconiosis. The present report is concerned with the findings of the first roentgenological survey of the adult population. Figures are given for the prevalence of tuberculosis by age and sex. The extent of tuberculosis is apparently typical of such areas in the country. About 30% of the miners and ex-miners had some roentgenological signs of pneumoconiosis; 15% had progressive massive fibrosis. All but two patients with infectious tuberculosis were given hospital treatment. The number of infectious cases has been reduced by about 60% and the patients are all being closely supervised by a health visitor. Future surveys will show what effects this reduction will have on the tuberculin positivity and on the rate of appearance of new cases of tuberculosis and massive fibrosis.

-- Cond. from Authors' Summary

284 A Clinical and Pathological Study of a Case of Pulmonary Asbestosis. H. Bastenier, H. Denolin, A. Decoster, and R. Denolin-Reubens. Arch. belg. med. sociale, hyg., med. travail et med. legale 10, 61-70 (Feb. 1952) French.

A diagnosis of asbestosis must depend upon a history of occupational exposure to asbestos dust, associated with effects on the respiratory organs. A case is reported in which a woman had worked for 25 years weaving asbestos in a factory with heavy dust exposure. The symptoms described are typical. The authors compared this case with those of uncomplicated silicosis; in the latter residual air is frequently increased, expiration is prolonged, and the maximum respiratory capacity is reduced, but hyperpnea is less, rapid breathing is not so intense, and anoxemia is never so important during effort, as in asbestosis. These differences are stressed as important when necessity may arise in determining the occupational origin of a case with obscure diagnosis.

-- Cond. from Bull. Hyg.

494 A Critical Review of the Chemical Theory of Silicosis. Luise Holzapfel. Beitr. Silikose-Forsch. No. 15, 1-19 (1952) German.

The solubility theory is first reviewed and reasons are given why it cannot be maintained in its original form, which says that silicosis is due to dissolved silica. The main argument is that silicosis requires years to develop, while the solubility of quartz drops in the course of days or weeks. A modified solubility theory is suggested by the author's published work and on later recent results with carbohydrates. From plant extracts, a fraction containing carbohydrate and silica could be isolated, and experiments with lignin and quartz showed specific adsorption of a galactose complex. The galactose adsorbed on quartz still reacts with hydrazine, demonstrating that the aldehyde group does not take part in the reaction with quartz. Next follows a very speculative chapter dealing with the structure of silica-galactose complexes. Collagen is said to contain galactose but there is no evidence on its structure. The same reaction can be used to demonstrate quartz in human silicotic tissues, as well as to demonstrate galactose adsorption on quartz, and a number of colored illustrations of this effect are shown. Electron micrographs of serpentine asbestos after disintegration in water are also shown.

-- Cond. from Bull. Hyg.

495 Considerations on a Case of Progressive Massive Silicosis Following Past Limited Exposure. M. Bodo and L. Briccarello. Rass. med. ind. 21, 233-238 (May-June 1952) Italian.

The authors discuss a case of progressive massive silicosis of the lungs which was seen by them in April, 1951. The patient was a metal worker, aged 28, who had been employed, for 2 years only, at chiseling grindstones in 1939-40. Signs and symptoms of silicosis, which are described, appeared in November, 1950. At the time of the examination, signs and symptoms were said to be stationary. Tuberculosis was absent. X-rays showed a generalized deep and confluent shadow on the lungs, except for clear areas which may have been due to spontaneous pneumothorax or to localized emphysema. In the light of this case the authors question the statement that simple pneumoconiosis can be arrested by removing the patient from exposure to dust. The tendency to progress varies with the physico-chemical properties of the dust and the individual tissue reactivity. As in the case of hepatic cirrhosis, the causative agent may start a chain reaction which does not stop progressing after the cause has been removed.

-- Cond. from Bull. Hyg.

496 Usefulness of the Photoroentgen Method in Silicosis and Asbestosis Investigations of Workers. E. Zanetti. Rass. med. ind. 21, 130-132 (1952) Italian.

A comparative study of several tens of thousands of photoroentgen films and roentgenograms has produced several interesting conclusions concerning investigations of silicosis and asbestosis among workers. 15 mm. photoroentgen films were found to represent clearly massive silicosis, advanced

asbestosis, and nodular silicosis. In silicosis which is represented by reticulation, identification is more difficult, but it is still possible in the hands of an expert. The identification of mild or moderate asbestosis is still more difficult. Only a great deal of experience which is integrated with a knowledge of concentrations and exposures of the dust involved makes possible an intelligent interpretation of such films. -- Biol. Absts.

497 Does Silicosis Affect the Silica Content of Human Blood? G. Worth and G. Campen. Z. physiol. Chem. (Hoppe-Seyler's) 288, 155-164 (1951). Ger.

The authors determined the silica content of blood of 264 persons, half of whom were coal miners with various stages of silicosis, using the molybdenum blue technique. The mean result for the whole group was 8.3 + 2.4 micrograms silica per ml. of blood. Neither sex, different kinds of inflammatory or other diseases, nor silicosis caused any difference in the silica content of the blood. Tests were also made after ingestion of organic silicon compound. Here a rapid rise of silica content of blood and urine was found, but the blood silica had dropped to its normal value after 9 hours. The bearing of these findings on the silica solubility theory is discussed. If the theory is to be maintained, it must be assumed that the amounts dissolved are too small to be demonstrated in the blood or that excretion through the kidneys is too rapid.
-- Cond. from Bull. Hyg.

498 Silicotic and Tuberculosilicotic Lesions Simulating Carcinoma. F G. Kergin. J. Thoracic Surg. 24, 545-567 (Dec. 1952).

The appearance of unilateral massive densities in the lungs of eight men between the ages of 49 and 69 with chronic pneumonitis has been reported. In each of these patients clinical and radiographic evidence strongly suggested bronchiogenic carcinoma. Five of the eight patients had prolonged exposure to silica-containing dust in various occupations. Five patients were treated by pneumonectomy, one by lobectomy, and one by thoractomy and biopsies were made. The fundamental feature of the pathological process in this group of patients was complete or partial bronchial obstruction by pressure of lymph nodes, which were the site of a chronic inflammatory reaction secondary to inhalation of silica-containing dust. In five patients the chronic obstructive pneumonitis was non-specific, and in three there was an added tuberculous infection. It is suggested that this condition be called "chronic silicotic lymphadentis with obstructive pneumonitis (nontuberculous or tuberculous)." The patients are all alive; the six patients treated by excision have been relieved of their complaints. -- Cond. from J. Am. Med. Assn.

601 Right Ventricular Hypertrophy in the Pneumoconiosis of Coalminers. A. J. Thomas. Brit. Heart J. 13, 1-9 (1951).

A series of 50 hearts from cases of coalminers pneumoconiosis have been dissected and the ventricular weights recorded. The ratio of left ventricle to right ventricle, LV/RV ratio, shows a great reduction, and there is a consistent relative increase in the weight of the right ventricle. A cardiographic study of 146 persons (normal men, miners and non-miners, and patients with all stages of pneumoconiosis) has shown that V6 changes most with increasing severity of lung disorder. In the most severe groups the R wave of V6 is diminished and the S wave is increased in amplitude. A suggestion is made that a lead from the third interspace immediately above V2 may help in the diagnosis of right ventricular hypertrophy when it shows an r' wave of 4 mm. or more in height. Certain effects of respiration on the electrocardiogram are described, particularly the respiratory variation of the chest leads on the right side. This is presumed to be a positional change, but some findings suggest that the mechanism of respiratory variation should be further investigated in relation to respiratory function.

-- Author's summary (Bull. Hyg.)

602 Factors Favoring Phagocytosis by Reticulo-Endothelial Cells Early in Inflammation. Edna H. Tompkins and Mary A. Grillo. Am. J. Pathol. 29, 217-231 (March-April 1953).

The reticulo-endothelial cells of subcutaneous tissues, the so-called resting-wandering cells, represent active defenders in the first 12 hours of inflammation. They become activated in preparation for phagocytosis by contraction, excretion of fluid from their "fluid vacuoles," and changes in the consistency of their cytoplasm. Once activated, they are aided in making contact with particulate substances and are supported in "surface phagocytosis" by the movements of the underlying muscles and of the infiltrating ameboid polymorphonuclear cells. They carry the burden of phagocytosis before arrival of the polymorphonuclear cells; and they alone must phagocytose for about 12 hours the many invading substances that are not phagocytosible by the polymorphonuclear cells.

-- Authors' summary

603 Dust Diseases. G. E. Spencer. Bull. Allegheny Co. Med. Soc. 42, 389-391 (April 25, 1953).

This brief paper gives advice to family physicians to whom x-ray films from a mass survey have been referred when pneumoconiosis is indicated. Survey physicians do not attempt to differentiate the dust diseases, merely reporting the findings as "pneumoconiosis." It is the responsibility of the family physician to determine which of these diseases is present, and to decide what should be done. After miliary tuberculosis, carcinomatosis, certain fungus diseases, and siderosis due to organic disease are excluded, the various pneumoconioses must be considered. Anthracosis, silicosis,

...erosis, berylliosis, asbestosis, and the organic dust diseases are dis-...ssed briefly in relation to diagnosis. The importance of personal and occu-...tional history is emphasized. The factors to be considered when deciding ...ether a man should be taken from his job are discussed.

604 The Clinical Picture and Pathology of Asbestosis. W. Behrens, Jr. ...Unfallmed. u. Berufkrankh. 45, 129-140 (June 15, 1952); 179-189 ...pt. 15, 1952). German.

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-- Cond. from Bull. Hyg.

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PHYSICAL ASPECTS OF THE ENVIRONMENT

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Antimony
and thyroxin, effects 355
poisoning in industry 356

Arc welding
(see welding)

Arsenic trioxide
exposure in industry 809

Arsine poisoning
fatal case 39
from algae 1041
prevention 1042

Artificial respiration
(see resuscitation)

Asbestos
clinical and
pathological study 284
lung cancer from 605

Asbestosis
case 79
pathology 78,604
studies, miniature films 496

Atmospheric pollution
(see air pollution)

Atmospheric turbulence
measurement 643

Atomic bomb
casualties, treatment 747
effects on blood 619

Aviation toxicology (bk. rev.) 559

Bacteria
and odor control problem 102

Bagassosis 501

BAL
therapy in lead poisoning 361
therapy in thallium
poisoning 148,818,819
vs. citrate in lead poisoning 469

Barbers' disease [illegible]

Baritosis, case [illegible]

Beat disorders
and staphylococcal infection [illegible]

Benzene
and homologues, poisoning [illegible]
blood dyscrasias from [illegible]
factories
health of workers [illegible]
metabolism [illegible]
poisoning
and erythromyelosis [illegible]
effect on platelets [illegible]
hematology [illegible]

Benzene hexachloride
and DDT, toxicity [illegible]
poisoning [illegible]
toxicity 271,485,[illegible]

Benzenemia [illegible]

Berylliosis
summary of cases 357,[illegible]

Beryllium
determination
fluorimetric [illegible]
spectrochemical [illegible]
granuloma treatment
cortisone [illegible]
nonsurgical [illegible]
oxide poisoning [illegible]
poisoning, experimental [illegible]
radioisotope
distribution and retention [illegible]
toxicity and ACTH [illegible]

Best Years of Your Life (bk. rev.) [illegible]

Blood
changes
in industrial disease [illegible]
picture
effects of muscle training [illegible]