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4% of quartz, and the aetiological significance of quartz in such mixed dusts is not well established. The experiments described above and similar previous experiments suggest that fibrosis is slightly more advanced when 2 or 5% of quartz is injected with large doses of coal, graphite, or diamond, but it is not certain that similar results would be given by dust inhalation; further experiments to establish this point are in progress.

Summary

Diamond dust (100 mg.; 99% under 2μ) caused no fibrosis in rats' lungs in 400 days when introduced by the intratracheal injection technique. Small amounts of quartz (2 and 5 mg.; 95% under 2μ) produced only a few scattered lesions of grades 1 and 2 fibrosis. Diamond dust (100 mg.) combined with quartz (2 and 5 mg.) produced many more lesions which were somewhat more fibrosed (grade 2,

and 2 maximum, and 3). The results are discussed in their possible relation to coal-miner's pneumoconiosis.

We are grateful to the Medical Research Council and to the National Coal Board for grants to defray the expenses of this investigation, and to Mr. B. S. C. Hollands for skilled technical assistance, and the Ministry of Power for permission to publish this paper.

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 Nussbaum, R. (1956). *Arch. Mal. prof.*, **17**, 350.
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THE JANUARY (1958) ISSUE

The January (1958) issue contains the following papers:—

The Treatment of Experimental Silicosis with Compound 48/80. By J. Marks, Dinah M. James, and T. G. Morris.

Immunological Factors in the Pathogenesis of the Hyaline Tissue of Silicosis. By E. C. Vigliani and B. Pernis.

Toxic Properties of Some Dialkyl and Trialkyl Tin Salts. By J. M. Barnes and H. B. Stoner.

Pulmonary Disease amongst Sisal Workers. By Hugh Stott.

Heat Stress in Non-ferrous Foundries. By D. Turner.

Some Clinical and Administrative Aspects of Occupational Health. By Kenneth P. Duncan.

Dermatoses in the Manufacture of Glass Fibre. By William B. McKenna, J. F. Ferguson Smith, and Donald A. Maclean.

Absence from Work in Relation to Wage Level and Family Responsibilities. R. D. Shepherd and J. Walker.

Studies on the Risks Associated with the Use of Parathion-impregnated Gauze Strips in Fly Control. By Jon Glömme and Å. Swensson.

Miscellanea:

Health, Welfare, and Safety in New Zealand. By T. O. Garland.

Obituary:

Ludwig Teleky.

E. L. Collis.

Book Reviews.

A number of copies are still available and may be obtained from the Publishing Manager, British Medical Association, Tavistock Square, W.C.1, price 17s. 6d.

Summary

Industrial zinc stearate dust in suspension is acutely irritant when injected into the lungs of rats or the peritoneum of cavies.

No fibrosis has resulted from single injections into the lungs of rats or the peritoneum of cavies. Foreign-body granulomata were present for several weeks in the peritoneum but ultimately resolved.

I am grateful to Dr. A. I. G. McLaughlin, H.M. Medical Inspector of Factories, for drawing my attention to the report of Noro and Uotila, for trying to obtain further information from Dr. Noro, and for helping to obtain the sample of zinc stearate. The photomicrographs were taken by Mr. A. W. Collins, F.I.M.L.T.

The expenses of this investigation were met by a grant from the Research Fund of the South-West Metropolitan Regional Hospital Board.

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- Committee on Accidents from Zinc Stearate Dusting Powders (1925). *J. Amer. med. Ass.*, **84**, 750.
 Murray, L. M. (1926). *Arch. Pediat.*, **43**, 193.
 Noro, L., and Uotila, U. (1954). Paper 239, XI Internat. Congr. Industr. Med., Naples, Sept. 1954, p. 116.
 Uotila, U., and Noro, L. (1957). *Folia med. (Napoli)*, **40**, 245.

Welfare at Wall's

The practice of preventive medicine to benefit not only the people initially concerned but also the thousands who eat Wall's ice cream, pies, and sausages is the key to the welfare and medical departments recently opened at Wall's factory at Godley, near Hyde, Cheshire.

The medical department, which is under the direction of Dr. Geoffrey Fletcher, has the usual consulting and treatment rooms, well designed and equipped, surgery, and x-ray room. Also, the building contains a bacteriological laboratory in which it is planned to add research in industrial medicine to the routine tests necessary in a food factory.

One of the most important tasks in the medical supervision of those handling food is to ensure care of the hands. By an intensive campaign workers are being trained to report even the most trivial cut or abrasion which is cleaned and one of the department's dressings put on in the surgery. Also, if a worker cuts her hand at home (a high proportion of the workers at Godley are women) the charge hand is trained to spot an unsuitable dressing and send the patient to the medical department to have it exchanged for an approved one. The medical officer has taken great pains to ensure that dressings are suitable for workers on wet and on dry processes, that they are of a pattern which can be securely fastened to the finger or hand, and are distinctive.

All new employees have a medical interview, and also those returning after an illness. In cooperation with family doctors certain treatments are continued during working hours, and cases of sudden illness at work are referred to them also.

A Human View of a Great Port

M. W. GOLDBLATT

It is characteristically Italian that even so apparently a workaday subject as the industrial medical problem of work in docks, including its physiopathological, clinical, and preventive aspects should be presented in this book* with covers showing a detail of Bordone's seventeenth-century picture of the port of Genoa in colour. This beautiful picture, which resembles a kind of aerial abstract of the conception one has of old Genoa, inevitably tells us that, even in those far-off days, a great port involved almost every working activity which man must undertake. The congestion of dwellings, storehouses, building and repair shops, administration and commercial buildings, guildhalls, loading and unloading quays, breakwaters, ships big and small, coming and going, landing stages, all combine to present to us a world, at once beautiful, vital, questing and, in every sense, bigger than man, its creator, himself. In this picture by Bordone we realize the time when the quest had to be undertaken in the hard way. If, today the way is different, mechanized, quick, massive, it nevertheless remains hard. In almost every field of activity embraced in the term dock work the call upon qualities of strength, judgment, expertise, courage, skilful cooperation, and responsibility is more insistent today than it was in those early days.

Dock work entails a peculiarly strong sense of responsibility. The loader in the hold knows he endangers the sailor if careless; the pump operator knows the life of the underwater man depends on him; the crane operator can maim a stacker; the port doctor knows he endangers the population if he is too facile in lowering the Yellow Jack; the industrial doctor knows he must be rigid in his standards of acceptance for work, more so indeed, than in most other industries; the loader on shore knows that careless handling of drums, kegs, and other containers may subject his opposite number at a port of call in dangers, toxic or dermatitic; the welder in dry dock knows that on the effectiveness of his weld depend the lives and property of many people. Like miners, dock workers have something different about them. In modern times some degree of travel has come within the means of most people in Britain, but even in Britain the dock worker gets to know more about foreign lands and peoples than do the generality of workers. In the great ports of Europe every tongue and every kind of face and dress are daily heard and seen, so that the dock worker inevitably acquires a cosmopolitan outlook and gets to know what happens in his field of work or interest abroad. There is a sense of importance and immediacy in the efforts of a dock worker which is different from that

* *Il Lavoro Portuale (Dock Work)*. By Francesco Molfino and Damiano Zannini. (Pp. 319+index; illustrated.) Milano: Edizione I.N.A.I.L. 1956.

There is an admirable section on experimental test methods by Dr. Silverman in which he describes the design and operation of exposure chambers and methods of producing various aerosols. The numerous practical details and diagrams included will be of immediate interest to those wishing to expose human subjects or animals to suspect pollutants, and to others who need to prepare artificially polluted atmospheres for testing filters or sampling methods.

By far the longest section is on equipment and processes for abating air pollution. There are 10 authors, headed by Dr. H. F. Johnstone, of Urbana, who is the leading authority on industrial emissions, particularly of sulphuric acid. This excellent survey covers questions such as the effect of stack height on the dispersal of pollutants, the collection of aerosols by impaction, filtration, scrubbing, electrostatic and sonic precipitation, and the control of gaseous pollutants. There is again a certain amount of overlap with earlier sections, but the seven pages on the removal of sulphur dioxide are largely complementary to those on the same subject in the first section.

The book concludes with a section on legislation in which the author sets out to "(1) review some of the basic legal considerations involved, (2) point out some of the issues with which pollution legislation will need to deal, and (3) report what has been done and is proposed by way of air pollution legislation." It provides a useful summary of American ordinances, most of which relate to single cities or counties. The author refers to the difficulty of defining air pollution and restricts his discussion to "the presence in the atmosphere of substances, resulting from acts of man, in quantities which are or may become injurious to human, plant or animal life or to property; all aspects of employer-employee relationship as to health and safety hazards are excluded." This might well be accepted as defining the limits of "community air pollution".

R. E. WALLER

Books Received

(Review in a later issue is not precluded by notice here of books recently received.)

Gastric and Duodenal Ulcer (Report and Recommendations). (Pp. 6. 1s. 6d.) Pamphlet issued by the British Council for Rehabilitation, London. 1957.

The Chemical Industry Facts Book, 3rd ed. (Pp. 149; illustrated. \$1.75.) Issued by the Manufacturing Chemists' Association, Washington, D.C. 1957.

Lavorazioni che espongono all'azione del Piombo-Tetraetile. By Raffaele Guiliano and Mario Rafanelli. (Pp. 64; 11 figures. Price not stated.) Rome: Istituto Nazionale per l'Assicurazione contro gli Infortuni sul Lavoro. 1957.

Public Health and Social Services, 4th ed. By D. H. Geffen, L. Farrar-Brown, and M. D. Warren. (Pp. 160. 9s.) London: Edward Arnold. 1957.

Practical Psychiatry for Industrial Physicians. By W. Donald Ross. (Pp. xx + 401. 57s. 6d.) Oxford: Blackwell Scientific Publications; Springfield (Illinois): Charles C. Thomas. 1956.

Size and Morale, Part II: A Further Study of Attendance at Work in Large and Small Units. (Pp. 36. 3s.) London: The Acton Society Trust. 1957.

Microdiffusion Analysis and Volumetric Error, 4th revised ed. By Edward J. Conway. (Pp. xviii + 465; 79 figures. 42s.) London: Crosby Lockwood. 1957.

First Aid and Early Treatment of Burns in the Royal Air Force, 2nd ed. [A.M. Pamphlet 168]. (Pp. 70; 14 figures. 3s.) London: Air Ministry. 1956.

The Practice of Industrial Medicine, 2nd ed. By T. A. Lloyd-Davies, with a chapter on *The Hazards of Coal Mining* by J. M. Rogan. (Pp. vii + 282; 15 figures. 30s.) London: J. & A. Churchill. 1957.

Medical Writing, the Technic and the Art, 3rd ed. (Pp. x + 262; 36 figures. 52s. 6d.; \$7.00.) London, New York, Toronto: McGraw-Hill. 1957.

The Nuffield Foundation: Twelfth Report for the year ended March 31, 1957. (Pp. 168.) London: Nuffield Foundation. 1957.

Taschenbuch der Arbeitsmedizin. By H. Buckup. (Pp. 272; 19 figures. DM 27.-.) Stuttgart: Georg Thieme. 1957.

Cronica y Actas del III congreso nacional de medicina y Seguridad del Trabajo, Madrid, 1957. (Pp. 451; illustrated.) Madrid: Editorial Nuevas Graficas. 1957.

Malatti causate da Cromo e Composti. By Guiseppi Rombola. (Pp. 59; monograph. L. 350.-.) Rome: Istituto Nazionale per l'Assicurazione contro gli Infortuni sul Lavoro. 1957.

Digest of Statistics Analysing Certificates of Incapacity 1954/55. (76 tables, 2 charts; multigraphed.) London: Ministry of Pensions and National Insurance. 1957.

L'Hygiène et la Sécurité dans l'emploi des acides forts. I: L'Acide Sulfurique et ses Dangers. By A. Vallaud and P. Salmon; Foreword by Henri Desoille. (Pp. 180; 71 figures, 1 colour plate. Fr. frs. 300.-.) Paris: Institut National de Sécurité.

Industrial Toxicology, 2nd ed. By Laurence T. Fairhall. (Pp. xii + 376. 80s.) London: Baillière, Tindall & Cox. 1957.

A Short History of Public Health. By C. Fraser Brockington. (Pp. vii + 235. 15s.) London: J. & A. Churchill. 1956.

Juvenile Epilepsy. Report of a Study Group. *Wld. Hlth tech. Organ. Rep. Ser. No. 130*. (Pp. 44. 1s. 9d.) London: H.M. Stationery Office; Geneva: World Health Organization. 1957.

Third International Congress of Photofluorography

The third international congress of photofluorography will take place in Stockholm from Wednesday, August 20, to Saturday, August 23, 1958.

There will be discussions on the general and special problems of photofluorography and its importance in the control of pulmonary tuberculosis as well as of other thoracic diseases.

All information can be obtained from the Congress office, Stockholm, 5, Post-box 5097.