

in men aged 55 to 64 years. A possible explanation for this apparent age effect might be that men with respiratory symptoms or bronchitis, who had once been inhalers, had given up the practice for health reasons. The mean length of 20.07 mm. found in this survey may be compared with the figure of 18.8 mm. recorded by Doll, Hill, Gray, and Parr (1959) for a random sample of men and women in Britain. The agreement is fairly close and suggests that in this respect this mining group is representative of the general community.

How much significance can be attached to a mean difference of this magnitude is hard to say. The temperature of the inhaled smoke has been shown to rise rapidly when the burning cigarette is less than 25 mm. long (Smyth, 1959), and a disproportionately large amount of tar may also be drawn into the respiratory passages because of the reduced efficacy of unburned tobacco as a filter. But the small difference we have found seems unlikely to account for the anomaly in the smoking/lung cancer story pointed out by Fisher.

A more plausible explanation of this might be that it is not the smoke inhaled through the cigarette that is important in the development of lung cancer, but rather the more obviously irritating smoke inhaled

from the burning end. It would be valuable to know more about the way in which people smoke. In any future lung cancer studies, attention should be directed not only to the amount of tobacco smoked, the degree of inhalation and length of cigarette end, but also the manner of holding the cigarette, for example whether mainly in the hand or constantly in the mouth, when engaged in other activities.

I am indebted to Dr. J. Good for suggesting this survey, to Dr. H. Campbell for statistical help, to Professor A. L. Cochrane, who kindly criticized the manuscript, to Mr. Hugh Bates, who collected the cigarette butts, and to Mrs. G. S. Kilpatrick, who measured the cigarette ends and analysed the results.

#### REFERENCES

- Breslow, L., Hoaglin, L., Rasmussen, G., and Abrams, H. K. (1954). *Amer. J. publ. Hlth*, **44**, 171.  
 Doll, R., and Hill, A. B. (1950). *Brit. med. J.*, **2**, 739.  
 ———, Gray, P. C., and Parr, E. A. (1959). *Ibid.*, **1**, 322.  
 Fisher, R. A. (1959). *Smoking: The Cancer Controversy*. Oliver and Boyd, Edinburgh.  
 Good, I. J. (1962). *The Scientist Speculates*. Heinemann, London.  
 Higgins, I. T. T., and Cochrane, A. L. (1961). *Brit. J. industr. Med.*, **18**, 93.  
 Lickint, F. (1953). *Ätiologie und Prophylaxe des Lungenkrebses* (Beiträge zur Krebsforschung, Vol. 2). Steinkopff, Dresden and Leipzig.  
 Lombard, H. L., and Snegireff, L. S. (1959). *Cancer*, **12**, 406.  
 Schwartz, D., and Denoix, P. F. (1957). *Sem. Hôp. Paris*, **33**, 3630.  
 Smyth, C. N. (1959). *Brit. med. J.*, **1**, 506.

## THE JULY (1964) ISSUE

The July (1964) issue contains the following papers:—

- Robert Baker: The First Doctor in the Factory Department. Part II. 1858 onwards.** W. R. LEE.  
**Dust in Card Rooms: A Continuing Problem in the Cotton-Spinning Industry.** C. H. WOOD and S. A. ROACH.  
**Design and Evaluation of a Ventilated Garment for Use in Temperatures up to 200°C.** G. W. CROCKFORD and R. F. HELLON.  
**Distribution and Excretion of Methyl and Phenyl Mercury Salts.** J. C. GAGE.  
**Use of Single Urine Samples for the Assessment of Lead Absorption.** M. K. B. MOLYNEUX.  
**Excretion of *p*-Nitrophenol and *p*-Aminophenol in the Urine of a Patient Exposed to Nitrobenzene.** M. IKEDA and A. KITA.  
**Toxicological and Biochemical Studies on Some Trialkylgermanium Compounds.** JILL E. CREMER and W. N. ALDRIDGE.  
**Prevalence of Pneumoconiosis in Cornish Kaolin Workers.** GEOFFREY SHEERS.  
**Health Examinations of Senior Staff in Industry.** SUSAN H. MEADOWS.  
**Endemic Byssinosis in an Egyptian Village.** M. A. EL BATAWI and M. HUSSEIN.  
**Stannosis in Hearth Tanners.** C. W. D. COLE, J. V. S. A. DAVIES, M. D. KIPLING, and G. L. RITCHIE.  
**Efficiency at Sorting Cards in Compressed Air.** E. C. POULTON, M. J. CATTON, and A. CARPENTER.  
**Miscellanea**  
**Pulmonary Aspergillosis.** MINISTRY OF PENSIONS AND NATIONAL INSURANCE.  
**An Early Sign of Lead Poisoning.** W. G. PEARCE and W. A. REYNARD.  
**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 18s. 6d.

medical labour inspectorate in order to perform its duties effectively; (c) the training required by medical practitioners assigned to medical labour inspection and necessary or desirable facilities for providing such training; and (d) miscellaneous questions directly connected with the above items.

Varying historical, political, and administrative factors determine the organizational framework in which the medical inspector operates and the nature of the job he does. The basic criteria, however, are professional independence and unrestricted access to places of employment with power to take samples and to examine workers for occupational diseases. This involves on his part professional and technical secrecy combined with the absence of any financial interest. His duties will include advising on the application of legislation, giving information to educate management and workers, and supervising medical examinations of special groups. He will be particularly concerned with occupational diseases, with human factors in safety, and in maintaining liaison with other authorities. In certain circumstances he may be concerned with workers' nutrition.

In order to exercise these powers effectively, it is desirable to have a central department with a geographical distribution of medical inspectors according to industrial concentration, each medical inspector having a wide knowledge of occupational hazards, though he may specialize in the main industry of his particular area. The report discusses in detail the routine to be observed in first and subsequent visits to factories and the conduct and publication of the results of enquiries and research projects together with the resources necessary in terms of laboratories and technical and statistical personnel (though this last is more idealistic than a practical objective for developing countries). The Annual Report is recognized to be of great value.

The small number of medical inspectors employed in any one country make the question of training largely a gradual accretion of knowledge by experience, but the symposium decided that not only was basic training in occupational health essential but that a willingness to learn a wide range of related subjects was essential. In addition to the practical experience gained in the job, regional and international training courses and regular meetings of medical inspectors were regarded as valuable aspects of the training of the medical inspector and in keeping him up to date.

Other medico-social topics which it was considered might come within the ambit of the medical inspector were the problems of migrant workers, the construction

of short-term labour camps, seasonal workers, automation, the psychological aspects of accidents and labour relations, and the problems of people who feel economically obliged to do two jobs.

If the medical inspectorate of any country performs satisfactorily a quarter of the functions contained in this document, then it deserves congratulation. We should all like to see medical inspectors so well trained and equipped, but when will the historical, political, and administrative circumstances conspire to give him the opportunity? There is no harm in setting your standards high, and one can only hope that from all these high-sounding sentiments the 22 participants took away at least a resolution to put *some* of the recommendations into effect before the next meeting.

R. MURRAY

## Notices

### Society of Toxicology

The annual scientific and business meeting of the Society of Toxicology will be held in Williamsburg, Virginia on March 8, 9, and 10, 1965. Anyone interested may attend.

At the 1964 annual meeting, 70 scientific papers in all phases of toxicology were presented. Abstracts of these appeared in the journal of the Society (*Toxicology and Applied Pharmacology*, 6, 340-365, 1964).

Papers for the 1965 meeting may be submitted or must be sponsored by members of the Society. Additional information about the meeting may be obtained from the Secretary: Mr. Carrol S. Weil, Mellon Institute, 4400 Fifth Avenue, Pittsburgh, Pennsylvania.

### University of Cincinnati

A Symposium in Occupational Skin Problems will be held at the Kettering Laboratory, Cincinnati, Ohio, from October 12 to 15, 1964.

### University of Manchester

A Course for Industrial Medical Officers will be held in the Department of Occupational Health, University of Manchester, from November 2 to 6 inclusive, 1964. Application should be made to the Secretary, Nuffield Department of Occupational Health, University of Manchester, Clinical Sciences Building, York Place, Manchester 13.

# INDEX TO VOLUME 21, 1964

## A

- Accident proneness, concept, review, 1  
 Acid, amino-laevulinic, delta, determination, rapid method, 78  
 Admune, *see* Influenza vaccines  
 Air, compressed, efficiency at sorting cards in, 242  
 —, pollution, *see* Pollution, atmospheric  
 ALDRIDGE, W. N., *see* CREMER, J. E. and ALDRIDGE, W. N.  
 Aldrin, exposure, diagnostic blood test showing, 283  
 —, poisoning in industrial workers, 46  
 ALOJ, S., *see* CASTELLINO, N. and ALOJ, S.  
 Aluminium, associated with arsine poisoning in a slag-washing plant, 74  
 Amino-laevulinic acid, *see* Acid  
 Anaemia, haemolytic, and arsine poisoning in a slag-washing plant, 74  
 Arsine poisoning, in a slag-washing plant, 74  
 Asbestos factory, follow-up of workers from, incidence of lung cancer, 304  
 —, meeting on the Biological Effects of Asbestos, 1964, 166  
 Asbestosis, and peritoneal tumours, 20  
 Aspergillosis, pulmonary, 246  
 ATHERLEY, G. R. C.: Monday morning auditory threshold in weavers, 150  
 Automobile factory, skin disease in, epidemiology, 287

## B

- Bacteria, volatilization of mercury by, 294  
 Baker, Robert, first doctor in the factory department, part I, 1803-1858, 85, Part II, 1858 onwards, 167.  
 BARNES, J. M. and HEATH, D. F.: Some toxic effects of dieldrin in rats, 280  
 BARTLETT, L. S., *see* PARSONS, W. D. *et al.*  
 BATAWI, M. A. EL, and HUSSEIN, M.: Endemic byssinosis in an Egyptian village, 231  
 —, SCHILLING, R. S. F., VALIĆ, F., and WALFORD, J.: Byssinosis in the Egyptian cotton industry: changes in ventilatory capacity during the day, 13  
 BAYNES, A. H., *see* SPINK, M. S., BAYNES, A. H., and TOMBLESON, J. B. L.  
 BECKLAKE, M. R., *see* PARSONS, W. D. *et al.*  
 BEHAR, M., *see* TAMIR, M. *et al.*  
 BENJAMIN, I. T., *see* ELWOOD, P. C. *et al.*  
 Blood test diagnostic of exposure to aldrin and dieldrin, 283  
 Book Reviews:  
 AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS: Air sampling instruments for evaluation of atmospheric contaminants, 2nd ed., 1962, 83  
 BEDFORD, T.: Basic principles of ventilation and heating, 2nd ed., 1964, 324  
 BENSLEY, E. H. and JORAN, G. E.: Handbook of treatment of acute poisoning, 1963, 84  
 BOYLAND, E.: The biochemistry of bladder cancer, 1963, 165  
 BRASSEUR, L.: L'exploration fonctionnelle pulmonaire dans la pneumoconiose des houilleurs, 1963, 328  
 BRITISH COUNCIL FOR THE REHABILITATION OF THE DISABLED: The handicapped school-leaver, 1964, 327  
 BUREAU OF HEALTH EDUCATION: Occupational disease in California attributed to pesticides and other agricultural chemicals, n.d., 329  
 BUZZARD, R. B. and LIDDELL, F. D. K.: Coalminers' attendance at work, 1963, 328  
 CHEIT, E. F. and GORDON, M. S., editors: Occupational disability and public policy, 1963, 327  
 CRESSWELL, W. L. and FROGGATT, P.: The causation of bus driver accidents, 1963, 248  
 CUNNINGHAM, D. J. C. and LLOYD, B. B., editors: The regulation of respiration, Proceedings of the J. S. Haldane Centenary Symposium, 1963, 82  
 CYRIAX, J.: Text-book of orthopaedic medicine, Vol. 1, 4th ed., 1962, 83  
 EISENBUD, M.: Environmental radioactivity, 1963, 163  
 FATI, S. and PALLOTA, R.: La Medicina del Lavoro sulle Navi e negli Arsenali Militari Marittimi, 1963, 249  
 GARDINER-HILL, H., editor: Compendium of emergencies, 1963, 165  
 GLEASON, M. N., GOSSELIN, R. E., and HODGE, H. C.: Clinical toxicology of commercial products, 1963, 149  
 GOVERNMENT OF INDIA: An industrial hygiene study in a ferro-manganese plant, Report No. 22, 1962, 163  
 GRANT, W. R.: Principles of rehabilitation, 82  
 HARDY, J. D., editor: Tempera, its measurement and control in science and industry, Vol. III, Part 3, Biology and medicine, 1963, 81  
 HAVENS, W. P., editor: Internal medicine in World War II. Vol. II. Infectious diseases, 1963, 163  
 INTERNATIONAL COMMISSION ON RADIOLOGICAL UNITS AND MEASUREMENTS: Radioactivity, Handbook No. 86, 1963, 327  
 INTERNATIONAL LABOUR OFFICE: Adaptation of work to man and occupational health problems in countries undergoing industrial development, 1964, 324  
 —: International symposium on the medical inspection of labour, 1963, 329  
 KURTSIN, I. T.: The effects of ionising radiation on the digestive system, 1963, 248  
 LEITHEAD, C. S. and LIND, A. R.: Heat stress and heat disorders, 1964, 325  
 MALTEN, K. E. and ZIELHUIS, R. L.: Industrial toxicology and dermatology in the production and processing of plastics, 1964, 325  
 MEDICAL RESEARCH COUNCIL: Report for the Year 1961-62, 164  
 NATIONAL COMMITTEE ON RADIATION PROTECTION: Safe handling of radioactive materials, Handbook No. 92, 1964, 327  
 PEMBERTON, J., editor: Epidemiology: reports on research and teaching, 1963, 164  
 PIOTROWSKI, Z. and ROCK, M.: The perceptanalytic executive scale, 1963, 326  
 RIVLIN, S.: A new way with old leg ulcers—a practical and illustrated manual for nurses, 1963, 249  
 Rochdale Industrial Health Service Limited, Annual Report, 1963, 324  
 SAX, M. I.: Dangerous properties of industrial materials, 2nd ed., 1963, 248  
 SEMMES, R. E.: Ruptures of the lumbar intervertebral disc, 1964, 326  
 Surgeon General: Preventive disease in World War II. Vol. VI, Communicable diseases, Malaria, 1963, 163  
 TAYLOR, Lord: First aid in the factory, 2nd ed., 1962, 81  
 WEDBERG, S. E.: Paramedical microbiology, 1963, 164  
 WEITZMAN, D.: A synopsis of cardiology, 1964, 324  
 WEST, M. M.: A handbook for occupational health nurses, 1962, 81  
 WORLD HEALTH ORGANIZATION: Air pollution—A survey of existing legislation, 1963, 325

- WORLD HEALTH ORGANISATION: Milk hygiene, Monograph series No. 48, 1962, 82  
 ————: Occupational health in four countries, 1963, 249  
 ————: Occupational health problems in agriculture, *Tech. Rep. Ser.* No. 246, 1962, 83
- BORNSTEIN, B., *see* TAMIR, M., *et al.*  
 BREYER, M. G., KILROE-SMITH, T. A., and PRINSLOO, H.: Changes in activities of respiratory enzymes in lungs of guinea-pigs exposed to silica dust. II. Comparison of the effects of quartz dust and lampblack on the succinate oxidase system, 32  
 ————, *see also* KILROE-SMITH, T. A., BREYER, M. G., and PRINSLOO, H.
- BRITISH OCCUPATIONAL HYGIENE SOCIETY, 2nd International Symposium, 1965, 84
- BROWN, V. K. H., HUNTER, C. G., and RICHARDSON, A.: A blood test diagnostic of exposure to aldrin and dieldrin, 283
- Byssinosis, and the cotton-spinning industry, 180  
 ————, Egyptian changes in ventilatory capacity during the day, 13  
 ————, English and Dutch workers, 124  
 ————, endemic, in an Egyptian village, 231  
 ————, origin of term, 162
- C
- Cancer, *see* Skin, Lung, Tumours, etc.  
 Capacity, ventilatory, *see* Ventilatory capacity  
 Card rooms, dust in, 180
- CARPENTER, A., *see* POULTON, E. C., CATTON, M. J., and CARPENTER, A.  
 CARPENTER, R. G., Method of calculating the S.M.R.s and their error, 44  
 ————, *see also* COCHRANE, A. L., *et al.*
- CASTELLINO, N. and ALOJ, S.: Kinetics of the distribution and excretion of lead in the rat, 308
- CATTON, M. J., *see* POULTON, E. C., CATTON, M. J., and CARPENTER, A.  
 CHWAT, M., *see* TAMIR, M., *et al.*
- Cigarette ends, length, inhaling, and lung cancer, 321
- Cincinnati University, Symposium in Occupational Skin Problems, 1964, 330
- CLARKSON, T. W., *see* MAGOS, L., TUFFERY, A. A., and CLARKSON, T. W.  
 CLEARY, G. J., *see* SULLIVAN, J. L., and CLEARY, G. J.
- Clothing, protection against high temperatures, ventilated garment, 187
- COCHRANE, A. L., *see also* ELWOOD, P. C., *et al.*  
 ————, CARPENTER, R. G., MOORE, F., and THOMAS, J.: The mortality of miners and ex-miners in the Rhondda Fach, 38
- COLE, C. W. D., DAVIES, J. V. S. A., KIPLING, M. D., and RITCHIE, G. L.: Stannosis in hearth tanners, 235
- Cotton industry, dust in card rooms, 180  
 ————, Egyptian, byssinosis in, changes in ventilatory capacity during the day, 13  
 ————, English and Dutch, byssinosis, chronic respiratory symptoms and ventilatory capacity in, 124
- CREMER, J. E. and ALDRIDGE, W. N.: Toxicological and biochemical studies on some trialkylgermanium compounds, 214
- CROCKFORD, W. G. and HELLON, R. F.: Design and evaluation of a ventilated garment for use in temperatures up to 200°C., 187
- D
- DAVIES, J. V. S. A., *see* COLE, C. W. D., *et al.*  
 DE VILLIERS, A. J. and WINDISH, J. P.: Lung cancer in a fluorspar mining community. I. Radiation, dust, and mortality experience, 94  
 ————, *see also* PARSONS, W. D. (for part II)
- Dermatitis, aetiological analysis, 100 patients claiming to suffer from prescribed disease, 145  
 ————, in an automobile factory, epidemiology, 287
- DEVINE, D. C.: Aetiological analysis of 100 patients with dermatitis claiming to suffer from prescribed disease, 145
- Dieldrin, exposure, diagnostic blood test for, 283  
 ————, toxic effects, rats, 280  
 ————, toxicity and metabolism, rats, 269
- Dimethoate, toxicological properties, 52
- Dust, airborne, gravimetric sampling with modified Hexhlet dust sampler, 318  
 ————, in card rooms, cotton industry, 124, 180  
 ————, flax, and byssinosis, Egyptian village, 231  
 ————, sampler, Hexhlet, for gravimetric sampling, 318  
 ————, *see also* Quartz dust; silica dust
- E
- Eczema, in an automobile factory, epidemiology, 287  
 ————, contact, caused by true teak (*Tectona grandis*), 65
- EDSON, E. F., *see* SANDERSON, D. M. and EDSON, E. F.
- Efficiency at sorting cards in compressed air, 242
- EL BATAWI, M. A., *see* BATAWI, M. A. EL
- Electric shock, *see* Shock, electric
- ELWOOD, P. C., COCHRANE, A. L., BENJAMIN, I. T., and SEYS-PROSSER, D.: A follow-up study of workers from an asbestos factory, 304
- ENTICKNAP, J. B. and SMITHER, W. J.: Peritoneal tumours in asbestosis, 20
- Enzymes, respiratory, changes, lungs, II. Exposed to silica dust, guinea-pigs, effects of quartz dust and lampblack on succinate oxidase system, 32; III. Progressive effect of dust contained in lung after cessation of dust inhalation on succinate oxidase system, 35
- Examinations, health, of senior staff in industry, 226
- F
- FERNANDEZ, R. H. P.: Medical problems of wearing a coal-miner's safety helmet, 158
- Flax dust, and byssinosis, Egyptian village, 231
- Fluorspar mining, lung cancer in community, I, radiation, dust and mortality experience, 94; II. Prevalence of respiratory symptoms and disability, 110
- Folliculitis, in an automobile factory, epidemiology, 287
- FOTHERGILL, R., *see* KIPLING, M. D. and FOTHERGILL, R.  
 FROGGATT, P. and SMILEY, J. A.: The concept of accident proneness: a review, 1
- G
- GAGE, J. C.: Distribution and excretion on methyl and phenyl mercury salts, 197
- Garment, ventilated, design and evaluation for use in temperatures up to 200°C., 187
- Gravimetric sampling, simple device for modified Hexhlet dust sampler, 318
- H
- HEATH, D. F., *see also* BARNES, J. M. and HEATH, D. F.  
 ————, and VANDEKAR, M.: Toxicity and metabolism of Dieldrin in rats, 269
- HELLON, R. F., *see* CROCKFORD, G. W. and HELLON, R. F.
- Helmet, safety, coalminer's, medical problems of wearing, 158
- HIGGINS, I. T. T.: Length of cigarette ends and inhaling, 321
- HOWELL, R. W. and MACKENZIE, A. B.: A comparative trial of oil-adjuvant and aqueous polyvalent influenza vaccines, 265  
 ———— and STOTT, A. N. B.: A trial of oil-adjuvant influenza vaccine in a non-epidemic season, 259
- HUNTER, C. G., *see* BROWN, V. K. H., HUNTER, C. G. and RICHARDSON, A.
- Hydrocarbons, polycyclic aromatic, emissions from diesel and petrol-powered vehicles in partially segregated traffic lanes, 117

## I

- IKEDA, M. and KITA, A.: Excretion of *p*-nitrophenol and *p*-aminophenol in the urine of a patient exposed to nitrobenzene, 210  
 Industrial Medical Association, competition, 166  
 ———— Officers, course, University of Manchester, 1964, 330  
 ———— medicine, future in Great Britain, 251  
 Influenza vaccine(s), oil-adjuvant and aqueous polyvalent, comparative trial, 265  
 ————, oil-adjuvant, trial in a non-epidemic season, 259  
 Inhaling, length of cigarette ends, and lung cancer, 321  
 Insecticides, dimethoate, toxicology, 52  
 ————, *see also* Aldrin, Dieldrin

## K

- Kaolin workers, Cornish, pneumoconiosis in, 218  
 KAZANTZIS, G., McLAUGHLIN, A. I. G., and PRIOR, P. F.: Poisoning in industrial workers by the insecticide aldrin, 46  
 KILROE-SMITH, T. A., BREYER, M. G., and PRINSLOO, H.: Changes in activities of respiratory enzymes in lungs of guinea-pigs exposed to silica dust, III. Progressive effect of succinate oxidase system of dust contained in the lung after cessation of dust inhalation, 35  
 ————, *see also* BREYER, M. G., KILROE-SMITH, T. A., and PRINSLOO, H.  
 KIPLING, M. D., *see also* COLE, C. W. D. *et al.*  
 ————, and FOTHERGILL, R.: Arsine poisoning in a slag-washing plant, 74  
 KITA, A., *see* IKEDA, M. and KITA, A.  
 KROGH, K.: Contact eczema caused by true teak (*Tectona grandis*), 65

## L

- LAMMERS, L., SCHILLING, R. S. F., WALFORD, J., MEADOWS, S., ROACH, S. A., VAN DEN HOVEN, VAN GENDEREN, D., VAN DER VEEN, Y. G., and WOOD, C. H.: A study of byssinosis, chronic respiratory symptoms, and ventilatory capacity in English and Dutch cotton workers, with special reference to atmospheric pollution, 124  
 Lampblack, and quartz dust, comparison of effects on succinate oxidase system, 32  
 Lead concentration, in urine, use of single samples, 203  
 ————, kinetics of distribution and excretion, rat, 308  
 ———— poisoning, early sign, 247  
 ———— workers, plasma porphyrins in, 315  
 LEE, W. R.: Robert Baker: the first doctor in the factory department, Part I. 1803-1858, 85, Part II. 1858 onwards, 167  
 ———— and ZOLEDZIOWSKI, S.: Effects of electric shock on respiration in the rabbit, 135  
 Lung cancer, in fluorspar mining community, I. Radiation, dust and mortality experience, 94, II. Prevalence of respiratory symptoms and disability, 110  
 ————, follow-up of workers from an asbestos factory, 304  
 ————, length of cigarette ends and inhaling, 321  
 Lungs, changes in activities of respiratory enzymes, guinea-pigs exposed to silica dust, 32, 35

## M

- MACKENZIE, A. B., *see* HOWELL, R. W. and MACKENZIE, A. B.  
 Mackenzie Industrial Health Lecture, 1964, 250  
 McLAUGHLIN, A. I. G., *see* KAZANTZIS, G., McLAUGHLIN, A. I. G., and PRIOR, P. F.  
 MAGOS, L., TUFFERY, A. A., and CLARKSON, T. W.: Volatilization of mercury by bacteria, 294  
 Manchester University, Course for Industrial Medical Officers, 1964, 330  
 MASSOUD, A.: The origin of the term 'byssinosis', 162  
 MEADOWS, S., *see* LAMMERS, B. *et al.*

- MEADOWS, S. H.: Health examinations of senior staff in industry, 226  
 Mediterranean Society of Occupational Medicine, 84  
 MEHANI, S.: A rapid method for the determination of delta amino-laevulinic acid in urine, 78  
 Mercury poisoning from an unsuspected source, 299  
 ———— salts, *see* Salts  
 ———— volatilization by bacteria, 294  
 Mesothelioma of the pleura, and asbestos workers, follow-up, 304  
 Methyl mercury dicyanidamide, distribution and excretion, 197  
 Mills, pulp, long-term effects of sulphur dioxide exposure in, 69  
 Miners and ex-miners, in Rhondda Fach, mortality, 38  
 ————, fluorspar, lung cancer in, I. Radiation, dust, and mortality experience, 94, II. Prevalence of respiratory symptoms and disability, 110  
 Ministry of Pensions and National Insurance; Pulmonary aspergillosis, 246  
 MOLYNEUX, M. K. B.: Use of single urine samples for the assessment of lead absorption, 203  
 MOORE, F., *see* COCHRANE, A. L. *et al.*  
 Mortality, method of calculating S.M.R.s and their standard errors, 44  
 ———— of miners and ex-miners, Rhondda Fach, 38  
 Munevan, *see* Influenza vaccines

## N

- NEWHOUSE, M. L.: Epidemiology of skin disease in an automobile factory, 287  
 Nitrobenzene, excretion of *p*-nitrophenol and *p*-aminophenol in the urine of patient exposed to, 210  
*p*-Nitrophenol and *p*-aminophenol, *see* Nitrobenzene  
 Noise, Monday morning auditory threshold in weavers, 150

## O

- Occupational hygiene, academic course, 1964, 166  
 Oil, mineral, skin carcinoma in process of 'Stanford jointing', 154

## P

- PARSONS, W. D., DE VILLIERS, A. J., BARTLETT, L. S., and BECKLAKE, M. R.: Lung cancer in a fluorspar mining community, II. Prevalence of respiratory symptoms and disability, 110  
 PEARCE, W. G. and REYNARD, W. A.: An early sign of lead poisoning, 247  
 Phenyl mercury acetate, distribution and excretion, 197  
 Plasma porphyrins in lead workers, 315  
 Pneumoconiosis, in Cornish kaolin workers, 218  
 Poisoning, arsine, in a slag-washing plant, 74  
 ————, lead, retinal stippling, early sign, 247  
 ————, mercury, from an unsuspected source, 299  
 ————, *see also* Toxicology  
 Pollution, atmospheric, and byssinosis, chronic respiratory symptoms and ventilatory capacity, English and Dutch cotton workers, 124  
 ————, ————, comparison of polycyclic aromatic hydrocarbon emissions from diesel- and petrol-powered vehicles in partially segregated traffic lanes, 117  
 Porphyrins, plasma, in lead workers, 315  
 POULTON, E. C., CATTON, M. J., and CARPENTER, A.: Efficiency at sorting cards in compressed air, 242  
 Prescribed disease, dermatitis, analysis of 100 patients, 145  
 PRINSLOO, H., *see* BREYER, M. G., KILROE-SMITH, T. A., and PRINSLOO, H.  
 ————, ————, *also* KILROE-SMITH, T. A., BREYER, M. G., and PRINSLOO, H.  
 PRIOR, P. F., *see* KAZANTZIS, G., McLAUGHLIN, A. I. G., and PRIOR, P. F.  
 Proneness, accident, *see* Accident  
 Pulp mills, *see* Mills, pulp

## Q

Quartz dust, and lampblack, comparison of effects on succinate oxidase system, 32

## R

RENDALL, R. E. G.: A simple device for gravimetric sampling, 318

Respiration, effects of electric shock on, rabbit, 135

Respiratory enzymes, *see* Enzymes, respiratory

— symptoms, chronic, in English and Dutch cotton workers, 124

Retina, stippling, in lead poisoning, early sign, 247

REYNARD, W. A., *see* PEARCE, W. G., and REYNARD, W. A.

Rhondda Fach, mortality of miners and ex-miners, 38

RICHARDSON, A., *see* BROWN, V. K. H., HUNTER, C. G., and RICHARDSON, A.

RITCHIE, G. L., *see* COLE, C. W. D. *et al.*

ROACH, S. A., *see* LAMMERS, B. *et al.*

—, *also* WOOD, C. H. and ROACH, S. A.

ROGAN, J.: The future of industrial medicine in Great Britain, 251

'Rogor', *see* Dimethoate

## S

Salts, mercury, methyl and phenyl, distribution and excretion, 197

Sampling, gravimetric, modified Hexhlet dust sampler for, 318

SANDERSON, D. M. and EDSON, E. F.: Toxicological properties of the organophosphorus insecticide dimethoate, 52

SCHILLING, R. S. F., *see* BATAWI, M. A. EL *et al.*

—, *also* LAMMERS, B. *et al.*

SEYS-PROSSER, D., *see* ELWOOD, P. C. *et al.*

SHEERS, G.: Prevalence of pneumoconiosis in Cornish kaolin workers, 218

Shift, temporary threshold, in weavers, 150

Shock, electric, effects on respiration, rabbit, 135

Silica dust, exposure to, changes in respiratory enzymes in lungs, guinea-pigs, II. Effects of quartz dust and lampblack on succinate oxidase system, 32; III. Progressive effect of dust contained in lung after cessation of dust inhalation, 35

SKALPE, I. O.: Long-term effects of sulphur dioxide exposure in pulp mills, 69

Skin carcinoma in the process of 'Stanford jointing', 154

— disease, in an automobile factory, epidemiology, 287

—, Symposium in Occupational Skin Problems, 1964, Cincinnati University, 330

Slag-washing, and arsine poisoning, 74

SMILEY, J. A., *see* FROGGATT, P. and SMILEY, J. A.

SMITH, T. A. KILROE, *see* KILROE-SMITH, T. A.

SMITHER, W. J., *see* ENTICKNAP, J. B. and SMITHER, W. J.

Society of Toxicology, Annual Meeting, 1964, 330; 1965, Williamsburg, 330

SPINK, M. S., BAYNES, A. H., and TOMBLESON, J. B. L.: Skin carcinoma in the process of 'Stanford jointing', 154

Standard mortality rates, *see* Mortality

'Stanford jointing', skin carcinoma in process, 154

Stannosis in hearth tanners, 235

STOTT, A. N. B., *see* HOWELL, R. W. and STOTT, A. N. B.

Succinate oxidase system, comparison of the effects of quartz dust and lampblack on, 32

—, progressive effect on, of dust contained in lung after cessation of inhalation, 35

SULLIVAN, J. L. and CLEARY, G. J.: A comparison of polycyclic aromatic hydrocarbon emissions from diesel- and petrol-powered vehicles in partially segregated traffic lanes, 117

Sulphur dioxide, long-term effects of exposure in pulp mills, 69

## T

TAMIR, M., BORNSTEIN, B., BEHAR, M., and CHWAT, M.:

Mercury poisoning from an unsuspected source, 299

Teak, true (*Tectona grandis*), contact eczema caused by, 65

THOMAS, J., *see* COCHRANE, A. L. *et al.*

Threshold, auditory, Monday morning, weavers, 150

Tinners, hearth, stannosis in, 235

TOMBLESON, J. B. L., *see* SPINK, M. S., BAYNES, A. H., and TOMBLESON, J. B. L.

Toxicology, of organophosphorus insecticide dimethoate, 52

—, *see also* Aldrin, Dieldrin, Lead, Poisoning

Trialkylgermanium compounds, toxicological and biochemical studies, 214

TUFFERY, A. A., *see* MAGOS, L., TUFFERY, A. A., and CLARKSON, T. W.

Tumours, peritoneal, and asbestosis, 20

## U

Urine, delta amino-laevulinic acid in, determination, rapid method, 78

— lead concentration, use of single samples, 203

## V

Vaccine, influenza, oil-adjuvant, trial in a non-epidemic season, 259

— and aqueous polyvalent, comparative trial, 265

VALIĆ, F., *see* BATAWI, M. A. EL *et al.*

VANDEKAR, M., *see* HEATH, D. F. and VANDEKAR, M.

VAN DER VEEN, Y. G., *see* LAMMERS, B. *et al.*

VAN DEN HOVEN VAN GENDEREN, D., *see* LAMMERS, B. *et al.*

Ventilatory capacity, changes during the day, and byssinosis in Egyptian cotton industry, 13

—, in English and Dutch cotton workers, 124

Volatilization of mercury by bacteria, 294

## W

WALDRON, H. A., Plasma porphyrins in lead workers, 315

WALFORD, J., *see* BATAWI, M. A. EL *et al.*

—, *see* LAMMERS, B. *et al.*

Weavers, Monday morning auditory threshold, 150

WINDISH, J. P., *see* DE VILLIERS, A. J. and WINDISH, J. P.

WOOD, C. H. and ROACH, S. A.: Dust in card rooms: a continuing problem in the cotton-spinning industry, 180

—, *see also* LAMMERS, B. *et al.*

## Z

Zinc oxide, mercury poisoning from an unsuspected source, 299

ZOLEDZIOWSKI, S., *see* LEE, W. R. and ZOLEDZIOWSKI, S.

A cumulative index has been prepared for the years 1944 to 1960.

JR  
5327/10