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All papers submitted for publication should be referred to Dr. Richard Schilling, Nuffield Department of Occupational Health, University of Manchester, Clinical Science Building, York Place, Manchester 13.

Papers are accepted on the understanding that they are contributed solely to this Journal, and that they are subject to editorial revision. Papers must be typewritten on one side of the paper only, with double spacing, and with a margin of at least 1¼ in. Where half-tone reproduction of *x*-ray illustrations is required, authors should send in the original film and not prints. Photographs and photomicrographs should be printed on glossy paper, and should be unmarked. Charts and graphs accompanying papers should be carefully drawn in black ink on tracing linen or Bristol board or stout, smooth, white paper. Any lettering on these drawings to be done in the editorial office should be lightly inserted in pencil.

References should be arranged according to the Harvard system. When a book is referred to, the place and year of publication, edition and page should be given. In the text the year of publication must follow the author's name, more than one paper in any one year being indicated by a small letter (a, b, c) after the date. No numbering of references is necessary. At the end of the contribution references are arranged in the alphabetical order of the authors' names. The reference details are given as follows: Author's name, initials, year of publication (in parentheses), title of periodical (in italics, abbreviated according to the World List of Scientific Periodicals), volume number (bold type, Arabic numerals), and first page number (ordinary type, Arabic numerals), thus:

Dunn, C. W. (1940). *J. Amer. med. Ass.*, **115**, 2263.

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Mitotic figures are present in two of the tumours but otherwise they present little evidence of activity. There is little or no melanin pigment in the basal cell layer of the lesions, and there is only a scanty lymphocytic infiltration around the blood vessels in the superficial corium.

"It is not possible to indicate from the histology alone whether the lesions are of an infective nature or due to an exposure to pitch."

The mitotic figures mentioned were present in specimens Nos. 2 and 3, and in subsequent discussion Dr. Currie stated that they represented evidence of a more rapid growth than in the other warts but of a simple nature only, while it was interesting to note also that it occurred in the men with the shortest duration of service. The most important finding appears to be that the warts examined from Groups C and D presented similar appearances to those in the other groups, and that there is no histological evidence of malignancy in any group.

Conclusions

Warts prevalent among workers in the reduction works of this industry are, on the sites selected in this enquiry, very frequently found in the general population. We find actually that their frequency is greater in a control group than in the population of the works, where the influence of a carcinogen is suspected. Among the workers there is no strong or regular evidence of association or length of exposure to the presumed agent. Duration of service shows in the instances already mentioned a difference in frequency suggestive of increase with greater length of service, but on other occasions either a reverse association, or no definite relationship at all is found. The influence of age on wart frequency is similar in both the factory and control personnel.

The histological examination shows that the warts from the works groups and the control group are simple papillomata, and that it is not possible microscopically to indicate that these warts are due to pitch, and that in no case was any evidence suggestive of malignancy detected.

The collective evidence of this investigation is consistent with the view that the skin warts observed in the aluminium workers are not produced by an industrial agent.

Summary

An examination of the exposed skin surfaces of 1,098 out of 1,382 workers in the Aluminium Company's reduction works was carried out, and the number and distribution of warts found are tabulated and discussed.

From the evidence it would appear that the degree of exposure to a presumed carcinogen among workers operating the various processes in the aluminium works is not necessarily productive of cancerous warts.

I wish to thank Dr. A. R. Currie for his kindness in supplying the histological report.

References

Fisher, R. E. W. (1953). *Arch. industr. Hyg.*, 7, 12.
Livingston, S. K. (1953). *Medical Wld (Lond.)*, 78, 31.

THE JULY (1954) ISSUE

The July (1954) issue contains the following papers :—

Some Toxic Properties of Dimethylnitrosamine. By J. M. Barnes and P. N. Magee.
A Report on 235 Cases of Erysipeloid in Aberdeen. By D. M. Proctor and I. M. Richardson.
Raynaud's Phenomenon in Workers with Vibratory Tools. By R. P. Jepson.
The Treatment of Complicated Pneumoconiosis with Isoniazid. By W. E. Miall, P. D. Oldham, and A. L. Cochrane.
Silica and Collagen in the Lungs of Silicotic Rats Treated with Cortisone. By B. D. Stacy and E. J. King.
The Development of Compensation for Occupational Diseases of the Lungs in Great Britain. By Andrew Meiklejohn.
Tumours of the Urinary Bladder in Workmen Engaged in the Manufacture and Use of Certain Dyestuff Intermediates in the British Chemical Industry. Part II : Further Consideration of the Role of Aniline and the Manufacture of Auramine and Magenta (Fuchsine) as Possible Causative Agents. By R. A. M. Case and Joan T. Pearson.
Thermal Conditions in Warships Refitting at H.M. Naval Base, Singapore. By G. Southwell-Sander.
Miscellanea :
Some Personal Observations on Industrial Health in the United States of America. By Bryan Harvey.
Second Conference of the British Occupational Hygiene Society. By R. J. Sherwood.
Obituary :
Edward Provan Cathcart.
Raymond Hussey.

A number of copies are still available and may be obtained from the Publishing Manager, British Medical Association, Tavistock Square, W.C.1, price 12s. 6d.

cause alarm in medicine where advances in knowledge have frequently begun in this way.

Research of this type will lead to a general realization that behaviour at work is social behaviour and work itself a social activity. Exhortations about how people should behave addressed to people conceived of either as isolated individuals or as an undifferentiated mass are beside the point. People live and work in social groups of one kind or another and the individual rarely creates the norms of the groups to which he belongs. But the problems involved in studying these complex systems of social relations are immense, and the procedures for investigating them but little developed. It is a peculiar excellence of *Size and Morale* that it directs attention to issues which can be profitably studied with techniques already available.

REFERENCES

Behrend, H. (1951). *Absence Under Full Employment*, Birmingham.
Hewitt, D., and Parfit, J. (1953). *Occup. Psychol.*, 27, 38.
Homans, G. C. (1951). *The Human Group*. Routledge and Kegan Paul, London.
Long, J. R. (1951). *Labour Turnover under Full Employment*. Studies in Economics and Society. Monograph A 2. University of Birmingham.
Marriott, R. (1949). *Occup. Psychol.*, 23, 47.
Mayo, E. (1949). *The Social Problems of an Industrial Civilization*. Routledge and Kegan Paul, London.
Miller, D. C., and Form, W. H. (1951). *Industrial Sociology*. Harper, New York.
Moore, W. E. (1951). *Industrial Relations and the Social Order*, rev. ed. Macmillan, New York.
Roethlisberger, F. J. (1942). *Management and Morale*. Harvard University Press, Cambridge, Mass.
——, and Dickson, W. J. (1939). *Management and the Worker*. Harvard University Press, Cambridge, Mass.
Social Survey SS 134. *Labour Mobility in Great Britain*, 1945–1949, by G. Thomas.
Trist, E. L., and Bamforth, K. W. (1951). *Hum. Relat.*, **4**, 3.

Third Conference of the British Occupational Hygiene Society

The Society's third conference has been arranged for Monday, November 1, 1954, starting at 11 a.m. and will be held at the London School of Hygiene and Tropical Medicine, Keppel Street, London, W.C.1. (by kind permission of the Dean). The conference will be devoted to a discussion of radiation hazards in industry. The conference is open to non-members (on payment of the conference fee) as well as to members of the Society.

The Chair will be occupied by the President, Professor E. J. King, Professor of Chemical Pathology at the Postgraduate Medical School, University of London.

Four papers will be presented. There will be a short discussion after each paper. Abstracts of the papers will be sent to all those who have notified the Hon. Treasurer of their intention to be present.

The conference will be reported in the January, 1955, issue of the *British Journal of Industrial Medicine*.

Programme

11 a.m. Opening of the Conference by the President.

11.5 a.m. **The Health of Workers Exposed to Ionizing Radiation**, by A. S. McLean, M.B., Ch.B., D.I.H., Principal Medical Officer, Department of Atomic Energy.

12.5 p.m. **Radiation Safety in the Industrial Group of the Department of Atomic Energy**, by D. R. R. Fair, O.B.E., B.Sc., A.Inst.P., Head of the Health Physics Division, Department of Atomic Energy, Windscale Works, Sellafield.

1.5 p.m. Luncheon interval.

2.30 p.m. **Protection against *X* rays and Gamma rays in the Industrial Field**, by W. Binks, M.Sc., F.Inst.P., Radiological Protection Service, Ministry of Health and Medical Research Council.

3.30 p.m. **Safety Criteria in Atomic Energy**, by F. R. Farmer, B.A., Assistant Director (Production), Department of Atomic Energy, Industrial Group Headquarters, Risley.

4.30 p.m. Adjournment for tea.

The Hon. Secretary is Peter C. G. Isaac, Public Health Engineering Laboratory, King's College, Newcastle-upon-Tyne.

not much concerned with the label : their interest is in the usefulness of the test for some particular purpose, whether it be in assessing the educability of an apparent defective or in selecting an officer or executive. Argument about terminology is essentially sterile ; to use a test, on the other hand, is dynamic. The danger of generalizing about the nature of psychological factors found in any particular analysis is certainly very real, but if certain tests constantly show approximately the same content in different situations it is obviously convenient to consider them as measuring with some degree of accuracy a factor (or classification category) of which use can be made without worrying whether it is a statistical fiction or an actual entity. For example, there is a striking ubiquity about the figures found on factor analysis of test batteries which include progressive matrices (1938) : studies in the Services and in industry have given this test loadings of about 0·6 to 0·7 on the general factors of many different batteries analysed by different methods. This suggests some similarity of character between the general factors, and further statistical investigation reinforces the impression that the test is, in fact, measuring a " sense " which is common to many intellectual situations—not, indeed, the commonsense of everyday life, but certainly a common ability which is no more and no less real.

Dr. Heim dwells on the possible sources of unreliability. More surprising is the extent to which tests are reliable when subjects are exposed to conditions which are normally considered disturbing. For instance, menstruation as a cause of test variation was thoroughly investigated in the Army ; on eight standard tests no significant difference in score was induced, and at one other practical mechanical test there was, in fact, a rise in score during menstruation. Unreliability obviously cannot be ignored, and it must continue to be the subject of research ; equally, it should not be over-emphasized.

There are few who will disagree with a plea for better tests, more careful testing, better validation against objective criteria, and caution in assumptions about the nature of the abilities displayed by test performance. It would be a pity if over-emphasis on caution should lead to stultification or reluctance to use tests because of the fear of a mistake. A. G. P. ELLIOTT

BOOKS RECEIVED

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

Hospital and Community. By Thomas Ferguson and A. N. MacPhail. (Pp. 157. 9*s*. 6*d*.) London : Oxford University Press. 1954.

Microbiology : An Introduction. By Ernest A. Gray. (Pp. 175 ; 24 illustrations. 10*s*. 6*d*.) London : Crosby Lockwood. 1954.

Intoxications et Maladies Professionelles. By Léon Dérobert. (Pp. 1,556 ; 76 illustrations. Fr.frs. 8,800.–.) Paris : Éditions Médicales Flammarion. 1954.

A Synopsis of Forensic Medicine and Toxicology, 3rd ed. By E. W. Caryl Thomas. (Pp. viii + 180. 12*s*. 6*d*.) Bristol : John Wright. 1954.

A Practical Manual of Diseases of the Chest, 4th ed. By Maurice Davidson. (Pp. x + 647 ; 255 illustrations. 84*s*.) London : Oxford University Press. 1954.

First Report of the Joint Committee on Human Relations in Industry, March 1953 to March 1954. Department of Scientific and Industrial Research and Medical Research Council. (Pp. 16. 1*s*.) London : H.M. Stationery Office. 1954.

Annual Report 1953 of Tata Industries Limited. Department of Industrial Health. (Pp. 17.) 1954.

Expert Committee on Environmental Sanitation. Third Report. (W.H.O. Technical Report Series, 1954.) (Pp. 25. 1*s*. 9*d*.) London : H.M. Stationery Office ; Geneva : World Health Organization. 1954.

There is Life in the Old Dog Yet. By John P. Rainsbury. (Pp. 45 ; 19 illustrations. 5*s*.) Darlaston : Rubery Owen. 1954.

dust, but they were not thought to be specifically causal; nor were specific skin-sensitivity reactions to them obtained, as was the case in a patient whose symptoms were those of asthma following exposure to mouldy hay. Consolidation signs, pleurisy, and haemoptyses do not occur, and serve to distinguish pneumonia from farmer's lung. Aspergillosis is distinguished by the occurrence of dense infiltration and cavitation, and by the presence of actively growing mould in the sputum.

The condition is considered to be a non-specific reaction of the lung to a variety of irritants, and the similarity of the disease to certain other occupational diseases (for example, coniosporiosis, weaver's cough, byssinosis, and diffuse granulomatous pneumonitis) is stressed. A series of 6 personal cases is described.

L. W. Hale

The Morphology and Pathogenesis of Pumice Pneumoconiosis. FERRARA, A., and FARAONE, G. (1953). *Riv. Infort. Mal. prof.*, **40**, 453.

This is a general account of the pathology and histology of pneumoconiosis due to pumice dust, based on the post-mortem findings in 4 cases, which are not individually described. The middle zones of both lungs were mainly affected, the apices escaping as a rule. Two types of macroscopic appearance were found—a linear fibrosis, corresponding to the radiological "reticulation", and a massive fibrosis. Unlike other forms of silicosis, the stage of nodulation seems to be entirely absent; the author considers that this may be associated with the low content of free silica (1·85%) in pumice dust. This may also account for the long latent period, perhaps 20 to 30 years, before symptoms develop. Tuberculosis was not found in association with pumice-dust silicosis. Pleural fibrosis was usually present, and also marked enlargement of the mediastinal lymph nodes, but there was no evidence of bronchiectasis, although there was generalized emphysema.

Histologically, the condition did not seem to differ greatly from other forms of silicosis; widespread connective-tissue thickening interspersed with mineral deposits and without extensive cellular infiltration was characteristic. There was no focal emphysema. The bronchial mucosa was greatly swollen and infiltrated with masses of cells and phagocytes containing mineral particles; a true obliterating granulomatous bronchitis was present. Local circulatory obstruction appears to lead eventually to extensive small arterio-venous shunts, and this phenomenon may explain the pulmonary venous congestion and deficient oxygenation characteristic of silicosis. Pumice dust, containing little free silica, does not quickly set up a local irritant process, but is drained into the lymph nodes and blood stream, with involvement of other organs, including the pleura, and alteration in the blood plasma (dysproteinaemia). Massive fibrosis is not considered to follow bronchial obstruction, but to be due to the arterio-venous lesions already mentioned.

L. G. Norman

A Note on Extrapulmonary Histology in Pumice Worker's Disease. FERRARA, A., and FARAONE, G. (1953). *Riv. Infort. Mal. prof.*, **40**, 468.

Silicosis due to pumice dust affects organs other than the lung, the multi-visceral involvement which occurs justifying, in the authors' opinion, the designation "silicotic disease". Histological changes found post mortem in the liver, spleen, and kidneys in 4 cases are described. The liver showed a diffuse reticulo-endothelial hyperplasia; there were widespread and abundant deposits, of a microcrystalline mineral, mainly concentrated in the histiocytes of the portal spaces and the Kupffer cells. The authors consider that the dust is carried to the liver and deposited in crystalline form throughout the process. In one case there was also a diffuse amyloidosis. There was moderate enlargement of the spleen, with hyperplasia of the reticular elements of the pulp, reduction in the number of follicles, and a moderate degree of congestion. Deposits of microcrystalline siliceous material were present, while numerous small infarcts were observed in one of the 4 cases. There was no siderosis. The kidneys showed a widespread deposit of microcrystalline material, less marked than in the liver and spleen, lying mainly in the capillaries of the glomeruli and cortical connective tissue. There was also an early generalized fibrosis, particularly of the glomerular vascular network, with congestion and cellular deposits in and around the tubules. The latter changes were probably associated with alteration in the blood protein levels, mainly due to abnormal excretion of serum albumin.

L. G. Norman

Conference on Silicosis

A conference on silicosis and occupational chest diseases, jointly sponsored by the McIntyre Research Foundation, of Toronto, Canada, and the Saranac Laboratory, of Saranac Lake, New York, has been arranged for Monday, Tuesday, and Wednesday, February 7, 8, and 9, 1955, in the Town Hall at Saranac Lake.

The papers to be presented in the five full sessions will all report on original work conducted or sponsored by either the McIntyre Research Foundation or the Saranac Laboratory. In addition there will be papers presented by guest lecturers.

Doctors, scientists, and business men concerned with the problems of occupational chest diseases in all parts of the United States, Canada, and foreign countries are invited to attend.

The business arrangements including reservations will be handled by Norman R. Sturgis, Jr., and the treasurer will be Clarence L. Wagner, both of the Trudeau-Saranac Institute staff. All communications concerning the conference should be addressed to Mr. Sturgis, Saranac Laboratory, Saranac Lake, New York.

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