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men, of whom 1,090 had apparently normal lungs. Of the 271 men with demonstrable abnormalities he found that 23% of those in stage I of silicosis had dyspnœa of effort. Of the second-stage cases 41% suffered in this way, and in the third stage of silicosis 8 men out of 13 had dyspnœa. About 30% of 57 tuberculous workers had this symptom. Of the men with apparently normal lungs 14% had dyspnœa; it is difficult clinically to detect this symptom or to assess its importance. The authors therefore consider that the importance given to this symptom by the French government, in judging incapacity and compensation rights, is very doubtful, and that tests of the venous tension and the speed of circulation do not help in elucidating the problem.

G. C. Pether.

The Dust Hazard in Tremolite Talc Mining. GREENBURG, L. (1947). *Yale J. Biol. Med.* **19**, 685.

The literature on talc dust is reviewed. Writers both in Europe and in the U.S.A. have reported the existence of pneumoconiosis, consisting of a diffuse generalized fibrosis, among talc-workers. Summaries of 5 fatal cases in the U.S.A. are given, no necropsy findings being quoted. A study of talc miners and millers in St Lawrence County, N.Y., is detailed. The talc mined is a fibrous variety called asbestine, accompanied by tremolite in a fibrous state. The free silica content of the dust is stated to be less than 1%. In mines the drilling is dry and little dust control is used. Dust-concentration figures (sampled by midget impinger) are given. At the mills the material is crushed, screened, milled in pebble-mills, air-separated, and bagged; some dust-control measures are used in the last two operations.

An initial radiological survey showed pulmonary fibrosis in 14·5% of 221 men examined, giving a soft hazy "ground-glass" appearance or a granularity of the lung fields, and in some cases a nodulation radiologically of silicotic type. A table shows that of those aged 50 or over fibrosis was found in 4·9% of the controls (carpet-workers) and in 51·5% of the talc-workers. Fibrosis was relatively more prevalent among millers than among miners. Symptoms were those of pneumoconiosis; dyspnœa was greater than the radiographic changes might have suggested. The incidence of active tuberculosis was slightly higher than expected. In 6·3% of the 221 men deposits or plaques of radio-opaque material, often of considerable size and apparently in the visceral pleura, were found. These "talc plaques" have no relation to previous infection, and may not be associated with fibrosis in the adjacent parenchyma or with changes in the corresponding hilar glands; in some cases no other lung changes were found; the plaques are considered to be symptomless. A marked similarity is indicated between tremolite-talc pneumoconiosis and asbestosis. The author concludes that this dust carries a definite risk and that its control is necessary.

L. W. Hale.

Changes in the Pulmonary Vessels in Silicosis. (Le alterazioni dei vasi polmonari nella silicosi.) NUNZIANTE CESARO, A., and PECCHIAI, L. (1947). *Med. d. Lavoro* **38**, 307.

Appraising Exposures to Silica Dust. HOLDEN, E. R., HEMEON, W. C. L., and HYATT, E. C. (1947). *J. industr. Hyg.*, **29**, 265.

The risk of silicosis depends largely on the size of the silica particles inhaled, and it is considered that particles of less than 5 μ, and especially those of 1 to 3 μ, are the most active and dangerous. It is well known that the