

cidence of asbestosis with relation to occupation, concentration of the dust, and length of exposure in the fifty-six persons examined in this study is indicated in Table XI. Obviously the examination of such a relatively small group prevents the formation of definite conclusions as to the influence of these factors. Nor is it possible from our findings to establish the maximum safe concentration of asbestos dust in the air. However, the results of this investigation show the necessity of a reduction of the dust concentrations in those operations, shown in Part II of this study, where there is continuous exposure to high concentrations.

SUMMARY

- (1). The concentration of dust in asbestos fabricating plants depends primarily on the grade of asbestos; mill fiber gives rise to a higher concentration than crude fiber. Operations arranged in decreasing concentration of dust are preparing, carding, weaving, spinning, twisting, winding, and warping.
- (2). The average particle size of asbestos dust is stated in two diameters, longitudinal and transverse.
- (3). Petrographic analyses of dust encountered in asbestos fabricating plants collected in the workers' breathing zone shows it to contain no free silica.
- (4). Fourteen, or 25% of fifty-six workers employed in the textile departments of asbestos fabricating plants in Pennsylvania had both clinical and roentgenological evidence of asbestosis.

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