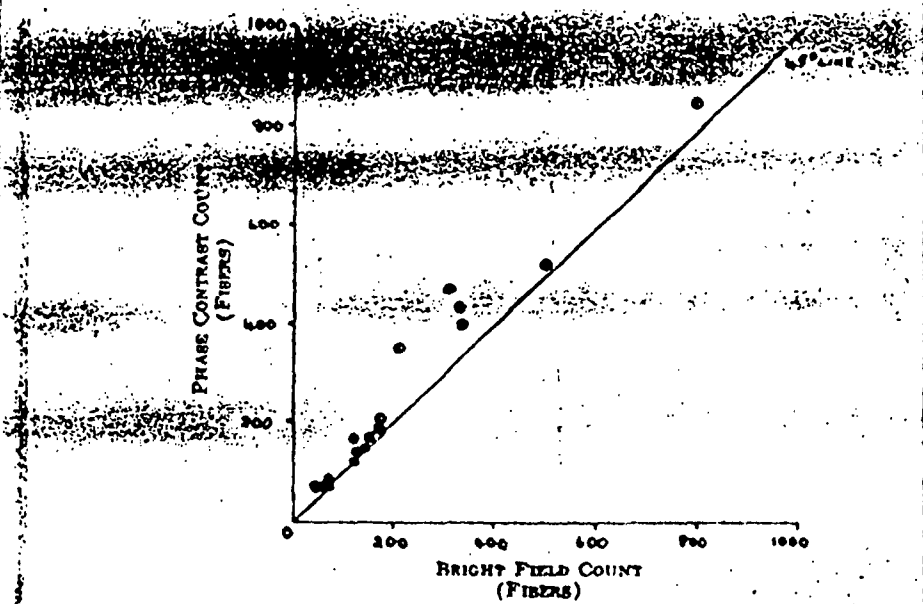

FIGURE 5. Comparison of phase contrast and bright field counts on cleared membrane. Samples observed in transmitted light (480 x).

asbestos (1.55) to the refractive index of the cleared membrane. This is illustrated in FIGURE 1 and FIGURE 2, which show two stages in the progress of a drop of "Microil" across a microscope slide carrying a sample of milled chrysotile asbestos. It was therefore apparent that care must be taken to select liquids which gave a larger difference in refractive index. A number of liquids were tried, including diethyl oxalate (1.41), trimethyl phosphate (1.40), glycerol triacetate (1.43), and cinnamaldehyde (1.62). Dimethyl phthalate (1.51), although recommended for clearing membrane filters was, like "Microil," obviously unsuitable for the purpose.

While the difficulties described above were being experienced with cleared membranes, a program of work was undertaken on sampling by means of opaque filters which could be counted dry in a dark ground reflected light. The magnification chosen was 540 ×. A number of different filters were tried and a comparison of two of them is shown in FIGURE 3, where it will be seen that all results are reasonably close to the 45° line. A comparison was also made between opaque filter samples and "Ottway" samples, and it will be seen from FIGURE 4 that in general slightly higher counts were obtained from the membrane. This was as expected in view of

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the comments above through the "Ottway
Opaque filters pose mounted, particular difficult to count. Fu branes, glycerol tri liquid. The samples total magnification o creased to 540 × usi be argued that phas using a liquid such from that of chrys increase the count (in the sample. Comp as shown in FIGURE this work, a standa adopted by the mem out in detail in App
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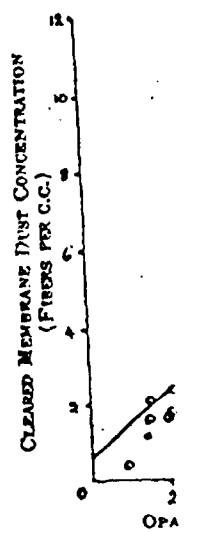

FIGURE 6. Compari
Cleared samples coun
ples counted in dark g

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