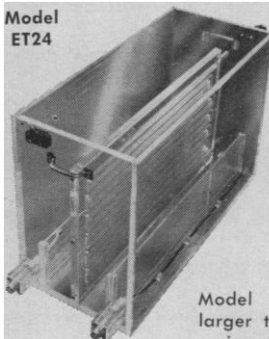


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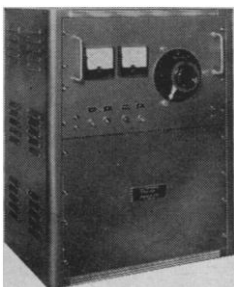


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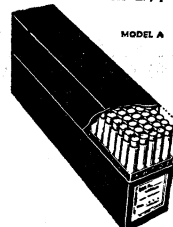
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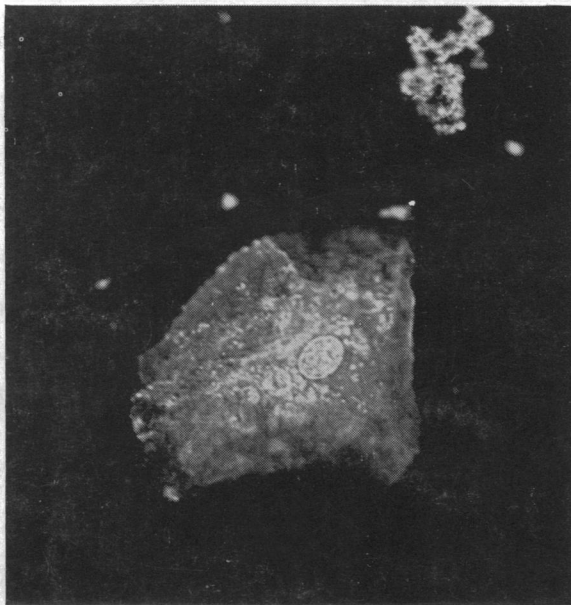
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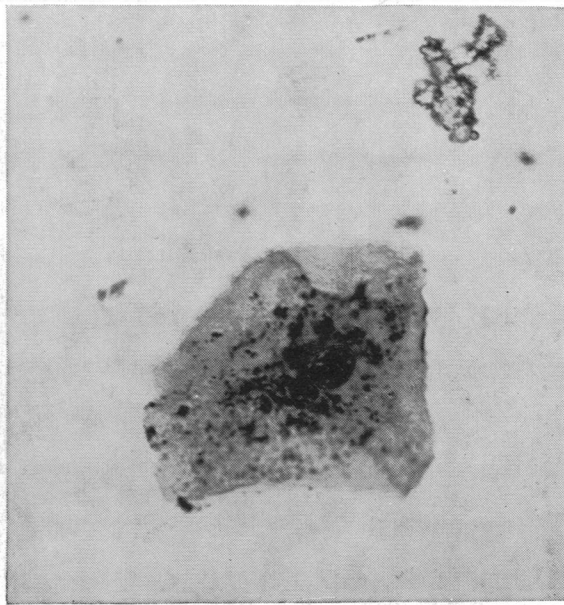
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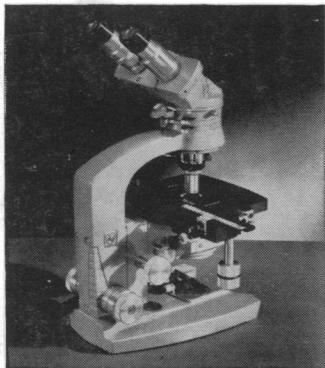
1. First, as shown in the photomicrograph* above, the microscope analyzer was rotated until the background was brought to extinction. Readings were taken directly from the analyzer scale. Averaged settings resulted in reading of 70.4°



2. Next, the analyzer was rotated until the nucleus of the cell was brought to extinction. Averaged settings resulted in reading of 138.2°.

3. The Optical Path Difference, in degrees, is *twice* the difference between the two readings:

$$OPD = 2 (138.2^\circ - 70.4^\circ) = 135.6^\circ; \text{ or } OPD = \left(\frac{135.6^\circ}{360^\circ} \right) .546 = .206 \text{ Microns.}$$



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*Photomicrographs taken by Mr. Lynn C. Wall, Medical Division, Eastman Kodak Co. Data: Epithelial Cell.
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