The Bioscope 500 Micro Projector

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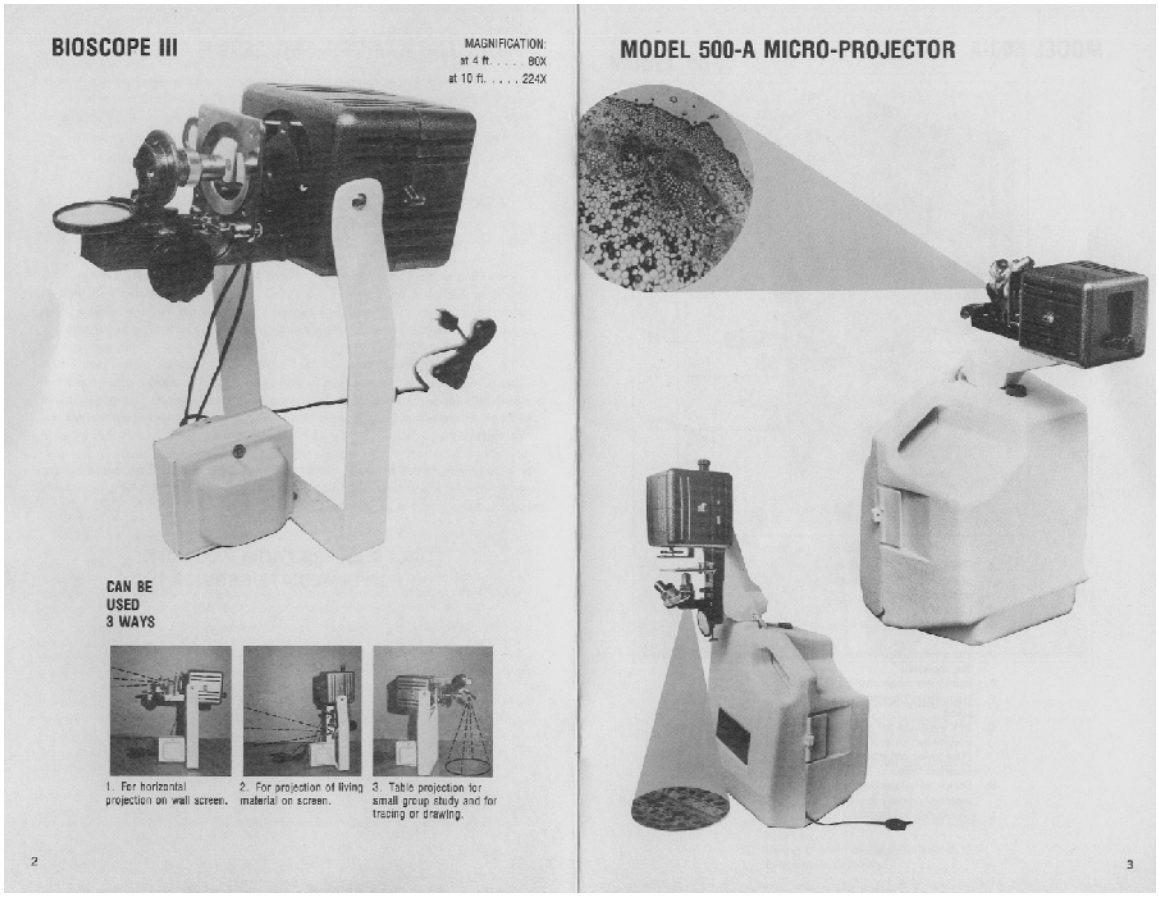
I may be getting somewhat of a reputation at Micscape for my esoteric finds at www.shopgoodwill.com, but this one is a beauty.
In the 1950s and 1960s, the Bioscope Manufacturing Company of Tulsa, Oklahoma manufactured a line of projection microscopes to be used in education. The Bioscope Manufacturing Company is no more, and the same is true of the distributor in Texas whose stamp is on the manual included with my copy of the scope. Here is their logo:

The Bioscope Manufacturing Company produced a number of projection microscopes for educators. Few have made it across the pond from the USA, most likely because of their distribution network, but they regularly show up on eBay in the USA. Here is a page from their instruction manual from the 1960s showing current models:



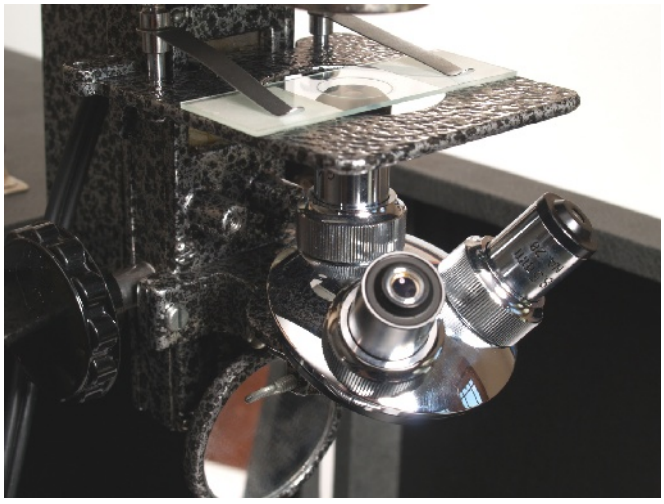
The text in the manual is formal beyond belief, and is reminiscent of language of the early Twentieth Century.

I got my sample from Goodwill for $42.00 USD and shipping was slightly less than the purchase price. Mine appears to be a model from the 1950s housed in a fiberboard case.
The case is actually the stand for the scope.

The scope is supported by a yoke bolted to sides of the case. I had to tighten the nuts and bolts severely to be able to position the scope vertically.
In use, the scope is flipped up above the case. There is a rather large AC step-down transformer for the illuminator that serves as a weight to balance the scope.

The paint job is an enamel spatter-coating. When I received my copy, the stage clips were on the underside of the stage. I found it was not possible to focus with the stage clips on the underside.

Below the objective turret, there is a first-surface mirror for right angle projection on walls.
The objectives are marked as:
BMC 10X 16.5mm NA.25
BMS 20X 8.5mm NA.28
BMC 30X 64mm NA.38



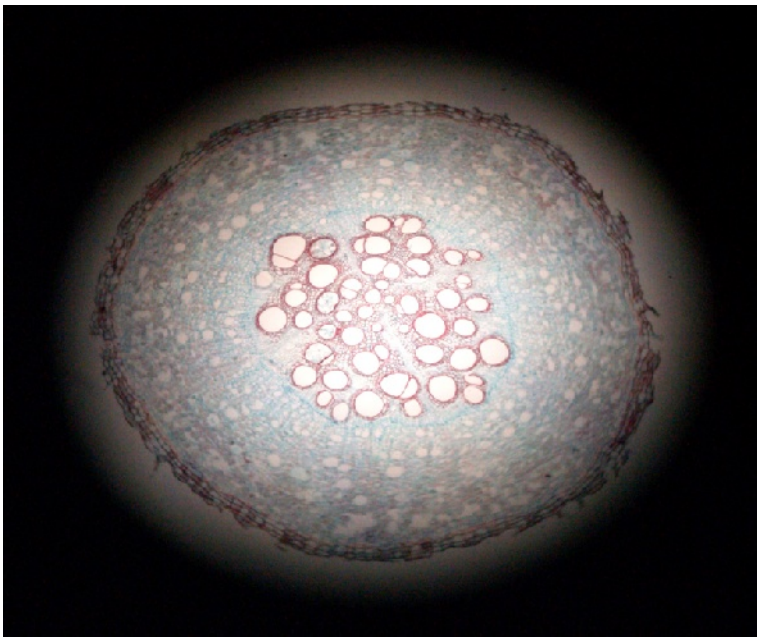
There are two rotating filters between the lamp house and the slide. The first is a heat-absorbing glass filter for use with live specimens such as protists in pond water. The second is a diffusion filter employed when the projection microscope is used as a microscope.

The Bioscope comes with a 10x eyepiece that mounts onto the base of the projection assembly so the projecting microscope can be used as a regular microscope. The yoke is tilted upward from the downward position.

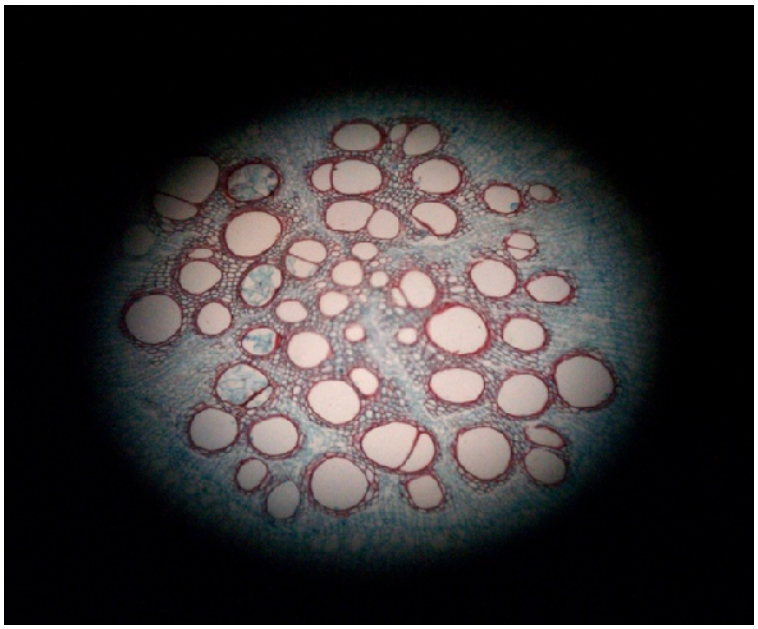
In the class room teaching setup, the Bioscope looks like this:

Here are a few samples of projected images. For the most part, there is curvature of field, but the image brightness is commendable.

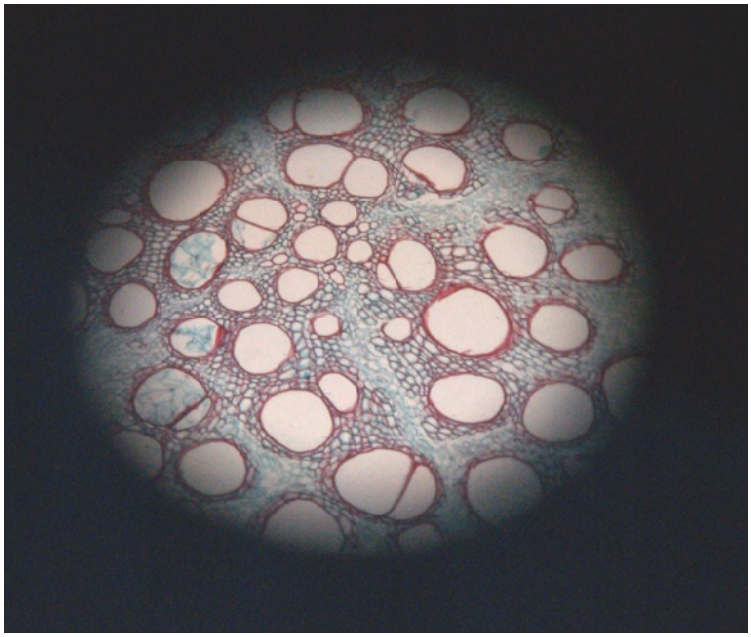
10x



20x



30x



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