

# My First Microscope

(A little nostalgia for the old folks)

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My first microscope was a Tasco Deluxe 1200XK, which I received as a Christmas gift when I was 13 years of age 50 years ago. I have been trying to track one of these down for some time out of pure nostalgia and finally found one at [www.shopgoodwill.com](http://www.shopgoodwill.com) for a winning bid of \$22.00. Since this came from a Goodwill store in central Wisconsin, this may have even be by mine.



Except for some of the included slides and cover slips, the kit is complete. Much like the experience adults have when they visit their childhood home, my first impression was that it was smaller than I remembered. To show the microscope in scale, here is a photo of it with a 1960s vintage roll 35mm Tri-X film.



Unlike many of the “toy” microscopes sold today, this model featured a fine focus knob. The build quality is also quite a bit better than today’s “toy” microscopes.

The microscope has three objectives: 5x, 12x, 40x and 60x. The turret uses a non-standard thread for the objectives.

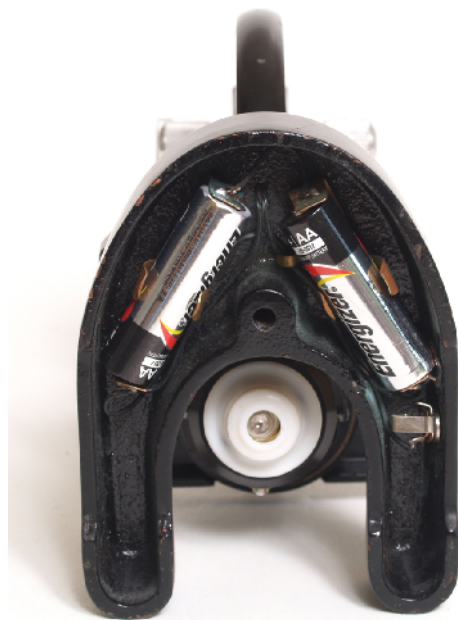
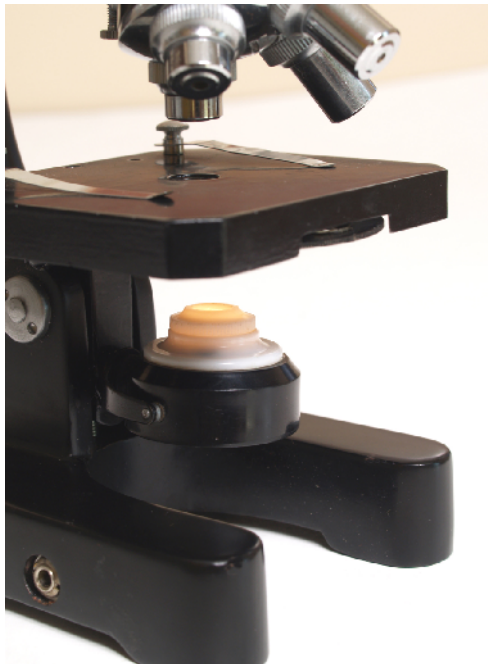
Since the higher magnification objectives are not spring loaded, there is a set screw at the base of the focusing assembly to prevent the objective from being forced through a slide. It had to be set by inspection with the 60x objective in position.

The scope does not have a condenser, but in the stage opening there is a double-convex lens to focus the light somewhat. On the underside of the stage there is an aperture wheel, but I have not found it to be in any way effective.





On the backside of the mirror assembly is a battery-powered lamp that turns on when the lamp is clicked into position. The batteries are mounted in the base, which also has a jack for an AC adapter.



The eyepieces included in the kit are 8x, 15x and 20x, but the 15x and 20x provide mostly empty magnification.



The kit also included "color cylinders", but I have never figured out what they are used for and they are not addressed in the instructions.

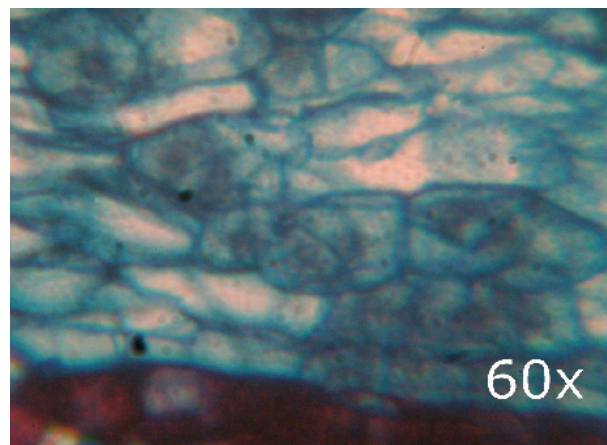
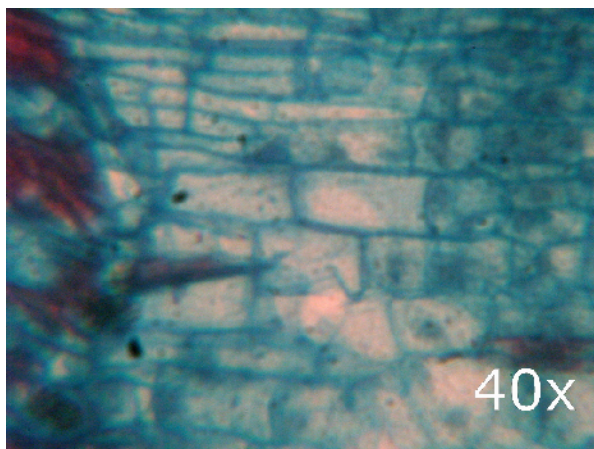
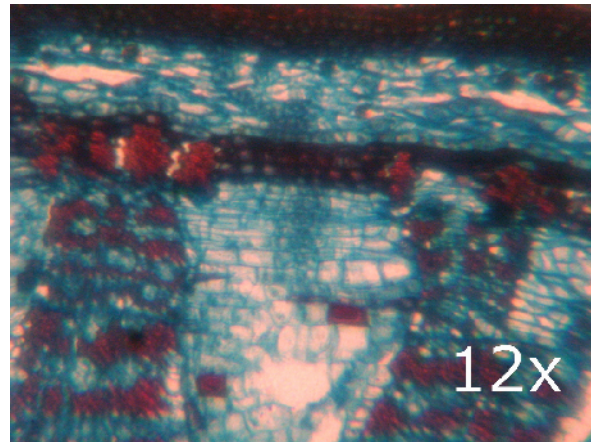
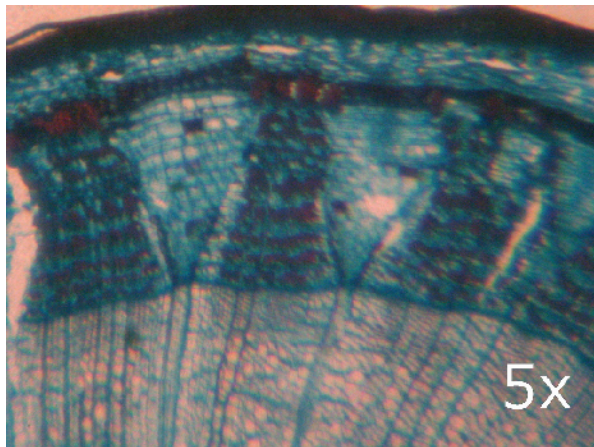


The kit came with six slides and six cover slips, as well as stains and Canada Balsam. It also included a dissecting kit.



The question is, how good is the image quality? Quite honestly, it is pretty poor. Here are some test shots made with the 8x eyepiece and each of the objectives:





Cell nuclei can be barely made out at the higher magnifications, but poor contrast, heavy chromatic aberration and the lack of a condenser results in some pretty mushy image quality.

Tasco re-invented themselves several years ago and now primarily provide sporting optics such as gunsights, binoculars and telescopes. The Wikipedia article describing the history of Tasco and their product lines can be found at <http://en.wikipedia.org/wiki/Tasco>

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