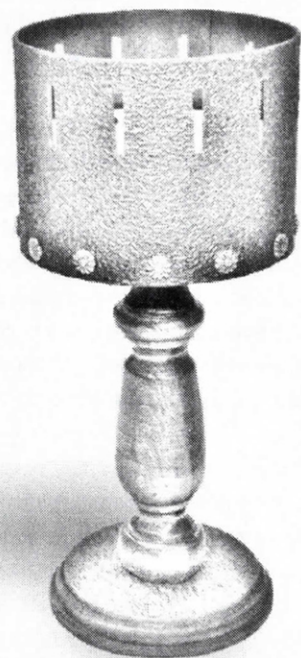


The Amazing Zoetrope



By *Ancient Magic Art Tools*

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How to use: To use hold the base still and spin the cylinder. Look through the slots in the cylinder at a cartoon strip that is place inside the cylinder. Spin faster or slower to change animation speed. If you pull up on the cylinder it will come off—just set it back in place.

How the Zoetrope works: The zoetrope is the third major optical toy, after the thaumatrope and phenakistoscope, that uses the persistence of motion principle to create an illusion of motion. It consists of a simple drum with an open top, supported on a central axis. A sequence of cartoons on strips of paper are placed around the inner bottom of the drum. Slots are placed at equal distances around the outer surface of the drum, just above where the picture strips were to be positioned.

To create an illusion of motion, the drum is spun; the faster the rate of spin, the smoother the progression of images. A viewer can look through the wall of the zoetrope from any point around it, and see a rapid progression of images. Because of its design, more than one person could use the zoetrope at the same time.

How to draw an animation strip: Keep in mind that your animated sequence will repeat itself in the zoetrope. It's a cycle. The drawing in the first frame follows the one in the twelfth frame directly. Don't try to animate a complicated story, just a simple motion, gesture or metamorphosis.

Draw the extreme positions of the motion separated by five empty frames. Go back and draw gradual changes in the frames between your key drawings.

History of the Zoetrope: The zoetrope was invented in 1834 by William Horner, who originally called it a Daedalum ("wheel of the Devil"). It was based on Plateau's phenakistoscope, but was more convenient since it did not require a viewing mirror and allowed more than one person to use it at the same time.

Horner's invention strangely became forgotten for nearly thirty years until 1867, when it became patented in England by M. Bradley, and in America by William F. Lincoln. Lincoln renamed the Daedalum, giving it the name of "zoetrope," or "wheel of life."