19th Century Toys & Games

Zoetropes and Thaumatropes

Zoetropes and Thaumatropes are called "optical toys." The word optical translates as having to do with seeing. These toys use light, mirrors, and movement in order to play tricks on your eyes.



Zoetropes

This toy was a drumlike cylinder marked with slats in the cylinder at equal distances around the circle. Small pictures were lined inside the drum just below the slats. When the drum was spun, a child could peer through the slots and the pictures inside appeared to be moving creating a small cartoon. Zoetropes shows acrobats tumbling, couples dancing, and boxers fighting.

*This old fashioned toy is available online.

Thaumatropes

Thaumatropes are round, paper disks attached to strings on both sides. A different picture is drawn on each side of the disk. When the two strings on each side of the pictures are spun quickly, the pictures seem to form a single image.

Make Your Own Thaumatrope

- 1. Draw then cut a circle a little more than 3 inches in diameter.

 This can be done using cardstock or cardboard. Whatever material used must be sturdy.
- 2. Punch two holes on opposite sides of your circle.
- 3. Draw a picture on each side of your circle. The images should be tied together with the ability to tell a story together.
 - a. To make sure the features will match, flip your thaumatrope bottom side up. This will ensure the picture on the second side appears right side up in the finished product.







- 4. Tie a piece of string through each hole punch. I have found looping a rubberband through the hole to be easier for a successful thaumatrope than string.
- 5. Wind up the strings, or rubberbands. When you release the spin, your thaumatrope will create one whole picture.





Materials Needed

- Cardboard or cardstock
- Scissors
- Colored pencils or markers
- Pencils
- String or rubberbands
- Hole punch