

J. H. LAYMAN.

Improvement in Thaumatropes.

No. 132,676.

Patented Oct. 29, 1872.

Fig. 1.

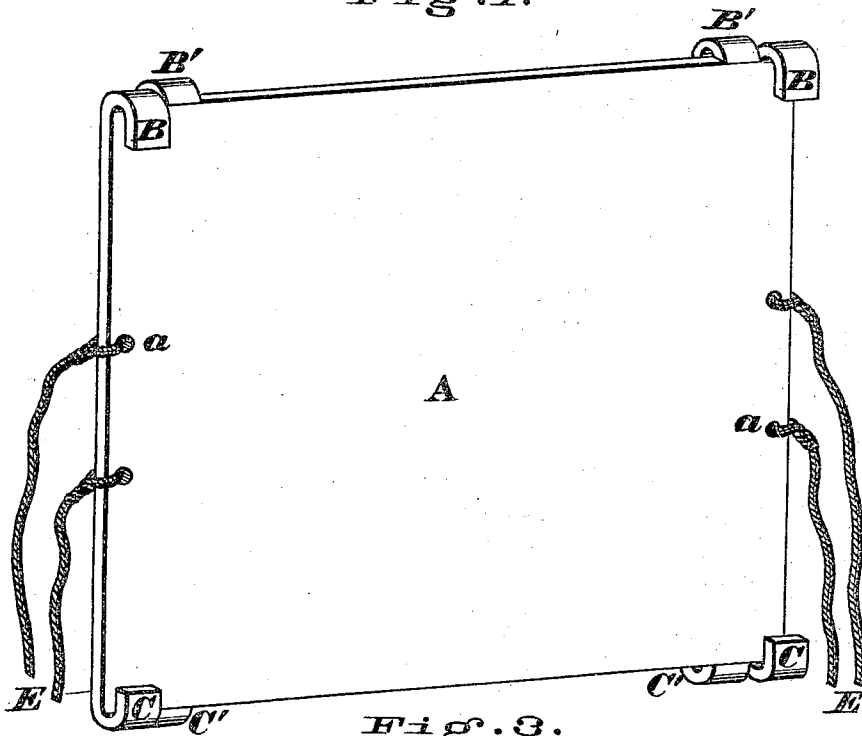


Fig. 2.

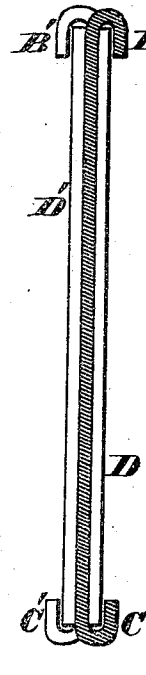
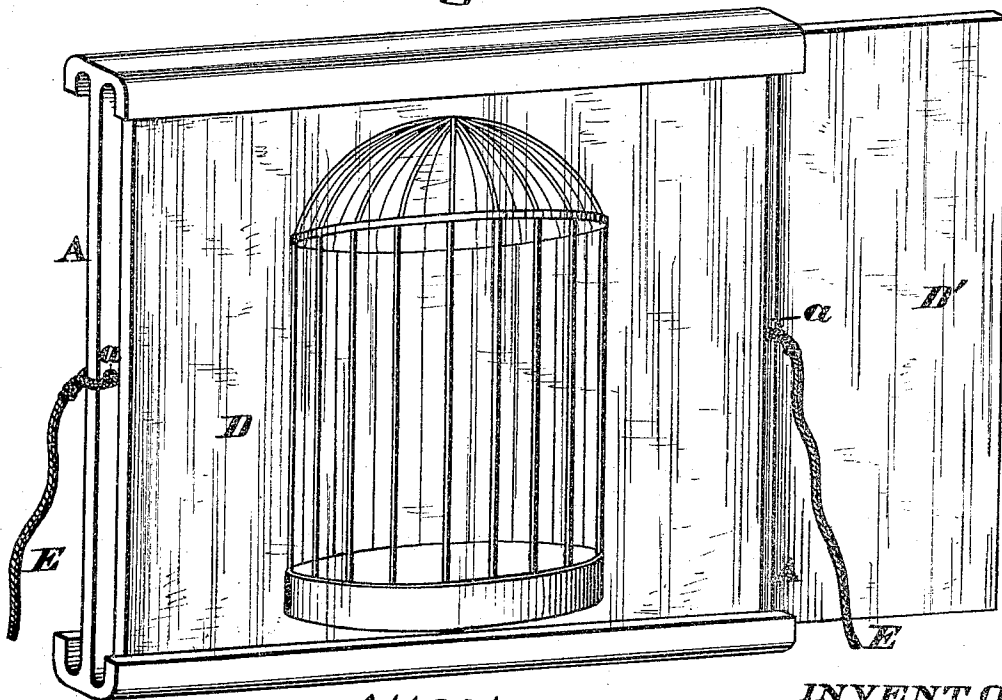


Fig. 3.



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IMPROVEMENT IN THAUMATROPPES.

Specification forming part of Letters Patent No. 132,676, dated October 29, 1872.

To all whom it may concern:

Be it known that I, JAMES H. LAYMAN, of Cincinnati, Hamilton county, Ohio, have invented certain new and useful Improvements in Thaumatroppes, of which the following is a specification:

Nature and Objects of the Invention.

Thaumatroppes usually consist of a pair of pictures or designs painted on opposite sides of a piece of card-board, the latter being operated by a couple of cords attached thereto at diametrically-opposite points, and by rotating the toy in a proper manner the two pictures appear to the eye as a single one. These toys, when constructed in this manner become uninteresting after being used for a little while on account of the monotonous appearance they present, and it is evident that any simple and convenient method of varying the combinations of pictures would add greatly to their attractiveness and increase the amount of amusement that could be obtained from them.

The object of my invention is to overcome such an objection to these popular toys, and I accomplish the result in the following manner: The pictures or designs, instead of being painted upon the thaumatrope itself, are separate and distinct therefrom, being printed or painted on pieces of card-board or other suitable material. These detachable cards are capable of being temporarily applied to a frame or holder and readily removed therefrom, it being understood that the aforesaid frame is the only part of the toy to which the cords or their equivalent rotating devices are attached. The pictures being separate from the rotating part of the thaumatrope, any two may be applied to opposite sides of the frame at the same time as fancy may suggest; and as each toy is provided with a number of cards it is evident that the combinations may be greatly varied. The frame is furnished with clips or other suitable devices for retaining the cards in position during the rotation of the toy; and, if preferred, said frame may be journaled in a stand having gear-wheels or pulleys for effecting a rapid rotation of the thaumatrope.

Description of the Accompanying Drawing.

Figure 1 is a perspective view of the preferred form of my frame or holder; Fig. 2 is

a vertical section of the same, showing two cards or slides in position; and Fig. 3 is a perspective view of a modified form of the frame or holder, showing one card in position and the other in the act of being inserted.

General Description.

The frame or holder A is composed of a piece of sheet metal, whose upper edge is provided with two sets of clips, B B', of which the ones B are bent down in front of the frame, while the other clips B' are bent down in the rear of said holder, as more clearly shown in Fig. 2. The lower edge of the frame is furnished with a precisely similar arrangement of forwardly and rearwardly bent clips C C'. These clips are for the purpose of retaining in position upon both sides of the frame the removable slides, of which two are shown at D D', and said slides are composed of card-board or other suitable material. Painted or printed upon these slides are the designs or pictures, and, if preferred, the illustrations may be applied to both sides of the cards so as to economize material. The ends of the frame are perforated at a for attachment of cords E, wherewith the proper rotation of said frame is effected. In the modification shown in Fig. 3 the retaining devices extend the entire length of the frame, and may be soldered or otherwise attached thereto, while the clips shown in Figs. 1 and 2 are made of the same piece of metal as the holder. Other clips may be applied to the midlength of the frame, so as to prevent the cards bulging or springing out when the holder is rotated at a high velocity.

Operation.

The slides are simply inserted between the clips, as shown in Figs. 2 and 3, after which the frame is rotated by the cords in the usual manner, so as to cause the two exposed pictures upon the slides to appear to the eye as a single one. Owing to the number of slides employed the pictures can be combined in various ways, so as to increase the attractiveness of the toy—as, for example, one slide may have the picture of a bird upon it, and other slides may be provided with illustrations of a bird-cage, a ring, and the branch of a tree, and it is evident that by placing the slide with the bird upon it in the frame, and then applying

successively the other slides to the opposite side of the frame, and rotating the latter in the usual manner the bird will appear to be in the cage or else perched upon the ring or branch. The above is one only of a great number of changes of which the slides may be rendered capable.

The frame may be circular, elliptical, or any other suitable shape.

Claim.

I claim as my invention—

A thaumatrope, consisting of a frame or

holder to which the rotating devices are attached, said frame or holder being provided with clips or their equivalents for retaining the removable illustrated slides, substantially as herein described.

In testimony of which invention I hereunto set my hand.

JAMES H. LAYMAN.

Attest:

WILLIAM M. DAVIS,
JOHN KILOH.