No. 860,795. PATENTED JULY 23, 1907

W. S. FRANKLIN.

SIZE CHANGING PICTURE DEVICE.

APPLICATION FILED AUG. 30, 1906.

Fig. 1.

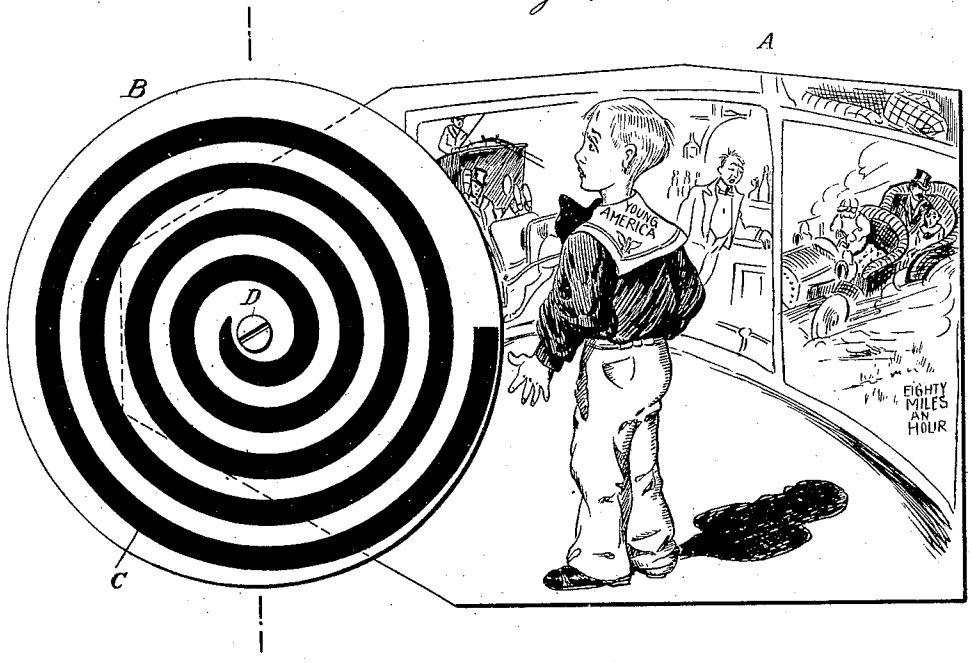
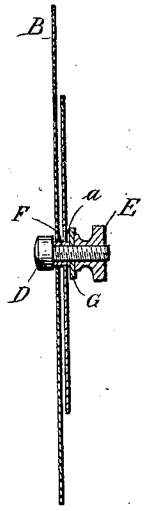


Fig. 2.



WITNESSES

Max B. A. Doring

Marjory Frost.

INVENTOR

William S. Franklin,

BY

Pindle and Williamson,

ATTORNEYS

THE NORRIS PETERS CO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

WILLIAM S. FRANKLIN, OF BETHLEHEM, PENNSYLVANIA.

SIZE-CHANGING PICTURE DEVICE.

No. 860,795. Specification of Letters Patent. Patented July 23, 1907.

Application filed August 30, 1906. Serial No. 332,715.

To all whom it may concern:

Be it known that I, WILLIAM S. FRANKLIN, of Bethlehem, in the county of Northampton, and in the State of Pennsylvania, have invented a certain new and useful Improvement in Size-Changing Picture Devices, and do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, in which—

Figure 1 is a view of a device embodying my invention; and Fig. 2 is a vertical, sectional view of Fig. 1 in the plane of the screw.

The object of my invention has been to provide a device by which a picture or an object in a picture can be made to appear to change its size, that is, to grow larger or to grow smaller while it is being observed, and to such ends my invention consists in the size-changing picture device hereinafter specified.

The reversal of sense impressions is a well known phenomenon and is exemplified by numerous examples in color contrasts, the reversal of heat and cold sensations and the reversal of both visual and bodily sensations of motion.

My invention involves the utilization of the reversal of the visual sensation of motion like that which occurs to a person looking backward from the rear platform of a train. In this case everything in the field of vision seems to move toward the center of the field, and when the person after having looked in this direction a sufficient length of time to slightly fatigue the vision, looks at a stationary visual field, such as the interior of the car, everything by reversal appears to move outward from the center or to increase in size. I desire to utilize this quality of the vision to cause a picture or an object in the picture to appear to increase in size while the observer is looking at it or to appear to decrease in size.

In the practice of my invention as illustrated in the embodiment of it shown in the drawings, I provide a picture A of any desired composition. I prefer, however, that such picture shall consist of an object such as the boy or an animal near the center of the picture and another object or two, such as persons or animals in the background of the picture to give perspective toward the rear of the picture. Accompanying the picture and preferably attached to it is some means for giving to the eye the sensation of objects moving toward a center from all directions or of objects moving away from the center in all directions, and such means may be of any desired form which will produce this sensation. As a convenient means for producing this sensation toward or from a center, I prefer to provide a circular card B, having drawn upon it a spiral C. The spiral should preferably consist of a heavy line.

In the use of my invention the spiral is simultaneously rotated and fixably gazed at until a state of sufficient fatigue has been produced, so that when the vision is transferred to the central object of the picture, such as the boy, such object will increase or decrease in size in reversal of the apparent motion of the parts of the spiral. For instance, if the spiral illustrated in the drawing be rotated in an opposite direction to the motion of the hands of a clock, the parts of the spiral will appear to draw toward the center or grow smaller, and when this has been kept up a sufficient length of time to slightly fatigue the eyes, if the vision be transferred to the boy, the boy will appear to grow larger. On the other hand, if the spiral be rotated in the same direction as the hands of a clock, the parts of the spiral will appear to move away from the center, and then when the vision is transferred to the boy he will appear to grow smaller.

The spiral may be simply pivoted on the picture and may be rotated by striking its edge with the fingers, or it may have a button E affixed to its back by which it can be rotated. In the instance chosen for illustration the card A is provided with a hole *a;* the card B is secured upon a screw D, the screw passing through the hole *a*. A thumb nut E is screwed up against a sleeve F which latter forms a journal in the hole *a*, and the sleeve presses a washer G to clamp the card B between the head of the screw and the washer.

It is obvious that the picture may take a large variety of forms and that other means than the spiral may be used to produce the primary state of fatigue which leads to the subsequent reversal.

I claim:

1. A toy consisting of the combination of an object whose apparent size is to be changed, and means for producing the sensation of objects moving toward or away from a center, whereby upon first looking at said means and then at said object, the apparent size of said object will be changed.

2. The combination with a picture whose apparent size is to be changed, of means for producing the sensation of objects moving toward a center, whereby upon first looking at said means and then at said picture, the said picture may be caused to apparently increase in size.

3. The combination with a picture whose apparent size is to be changed, of means for producing the sensation of objects moving away from a center, whereby upon first looking at said means and then at said picture, the said picture may be caused to apparently decrease in size.

4. The combination, with a picture, having a central object and having objects at a considerable distance in the background, of means for producing the sensation of objects in motion toward or from a center.

5. The combination, with a picture, of a spiral pivoted substantially at its center.

6. The combination with a picture of a circular card having a spiral line thereon, said card being pivoted at its center.

7. The combination with a card having a picture thereon, said picture having an object for the foreground, and a card pivoted to said first mentioned card and having a spiral line represented substantially concentric with said pivot.

8. The combination with a picture having an object in the foreground, a circular card journaled on said picture, said card having a spiral line represented thereon, said spiral being substantially concentric with said pivot, and a handle for rotating said card.

9. The combination of a card having a picture thereon, said card having a hole formed therein, a circular card having a spiral line thereon, a screw passing through the center of said spiral and through said hole, a washer for clamping said circular card against the head of said screw, and a thumb nut engaging said screw and bearing against said washer.

In testimony that I claim the foregoing I have hereunto set my hand.

WILLIAM S. FRANKLIN.

Witnesses:
M. J. GREENOUGH,
DANIEL FRIEBELY.