

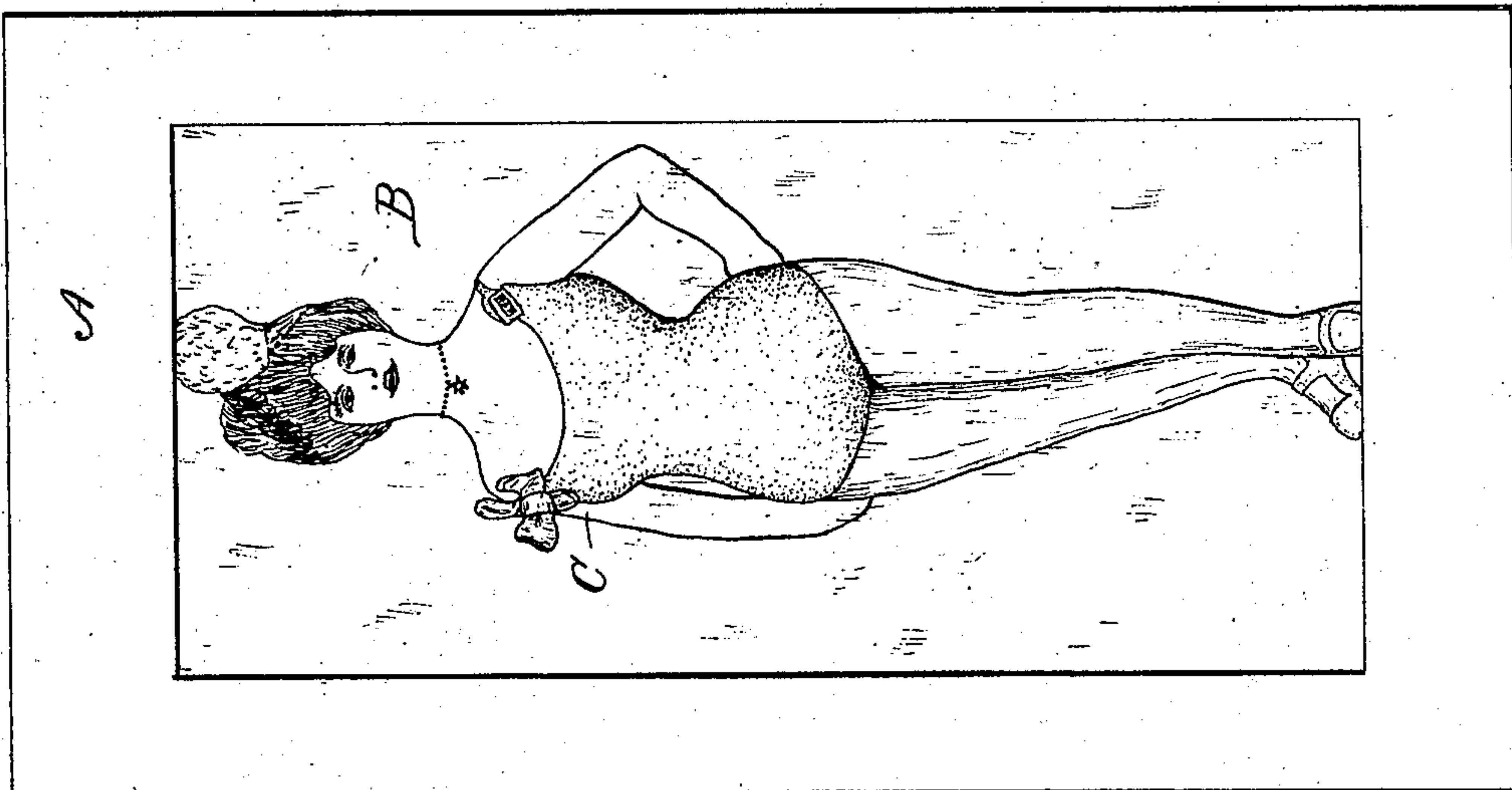
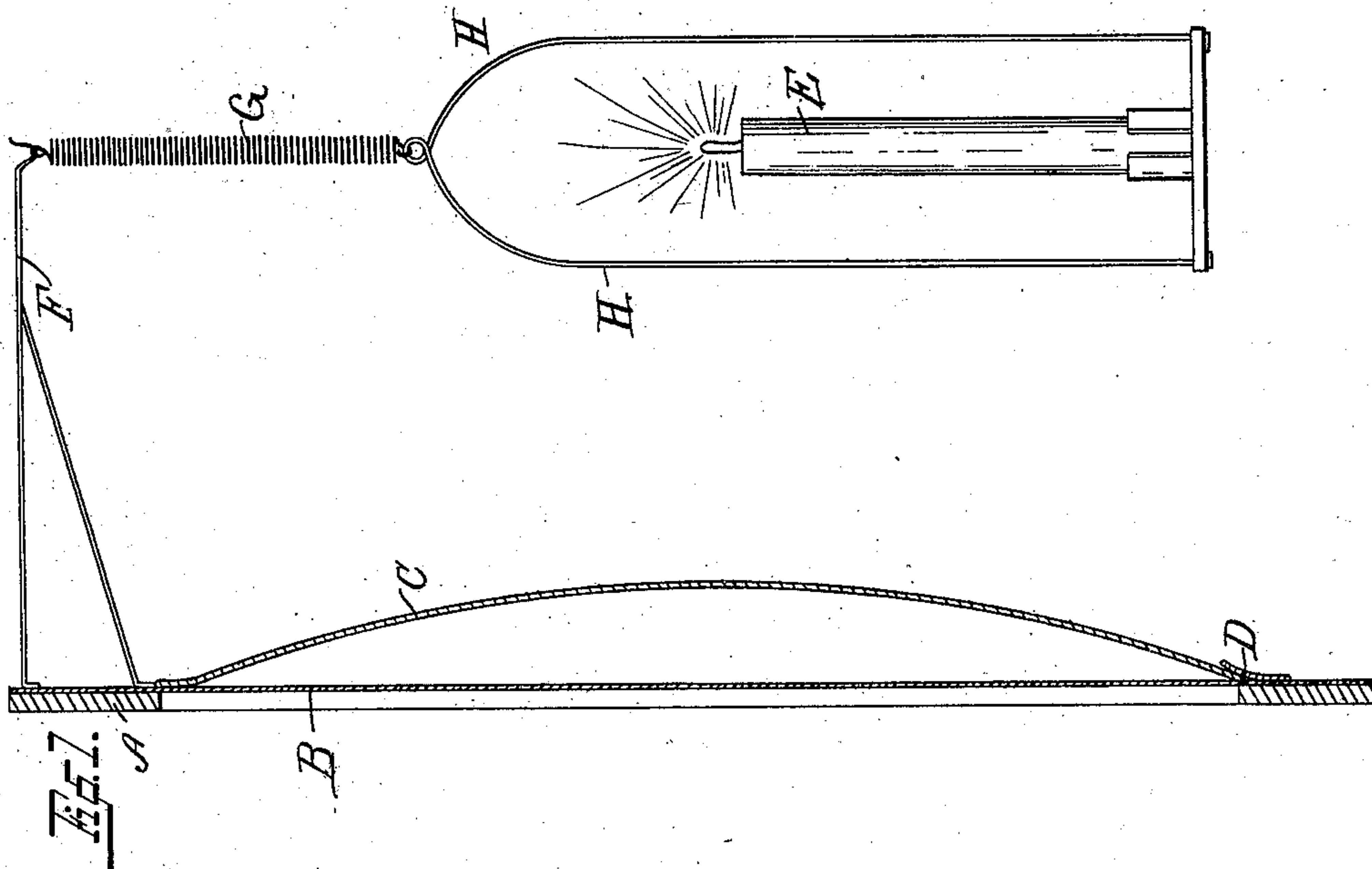
No. 693,430.

Patented Feb. 18, 1902.

F. W. OSBORN.
AUTOMATIC MOVING SHADOW PICTURE.

(Application filed June 26, 1901.)

(No Model.)



Witnesses:
F. A. O. M.
C. Reich.

Fig. 2.

Inventor

Frederick W. Osborn
Erwin & Wheeler
By Attorneys.

UNITED STATES PATENT OFFICE.

FREDERICK W. OSBORN, OF MILWAUKEE, WISCONSIN.

AUTOMATIC MOVING SHADOW-PICTURE.

SPECIFICATION forming part of Letters Patent No. 693,430, dated February 18, 1902.

Application filed June 26, 1901. Serial No. 66,057. (No model.)

To all whom it may concern:

Be it known that I, FREDERICK W. OSBORN, a citizen of the United States, residing at Milwaukee, county of Milwaukee, and State of Wisconsin, have invented new and useful Improvements in Automatic Moving Shadow-Pictures, of which the following is a specification.

The object of my invention is to provide a device for producing moving shadow-pictures upon a translucent screen, in which device the moving effect of the object is produced in the shadow-picture by changing the relative position of the light to the figure or the figure to the light.

The construction of my device is explained by reference to the accompanying drawings, in which—

Figure 1 represents a side view of my invention, partly in section; and Fig. 2 is a front view of the same.

Like parts are identified by the same reference-letters in both views.

A represents a frame. B is a translucent screen, which is secured at its marginal edges to said frame, as indicated in Fig. 1.

C represents a figure, which is suspended at its upper end from the frame A or screen B and is adapted when not in use to lie flat throughout its entire length against the screen B. When, however, it is used for throwing a shadow upon the screen, the lower end is raised and engaged against the upper edge D of the lower side of the frame, as shown in Fig. 1, whereby said figure C is caused to curve outwardly and away from said screen, as indicated in said Fig. 1.

E represents a movable light or taper, which is preferably suspended from the upper side of the frame A by the bracket F, flexible connection G, and hangers H.

It will be understood that, owing to the fact that the center of the figure C is located at a distance from the screen, the shadow of such figure upon the screen will be thrown toward the right and left or upwardly and downwardly by a corresponding inverse movement of said light, thus giving the shadow-picture the appearance of moving in various directions corresponding with the movements of the light. It will also be understood that the size of said shadow-picture upon the screen

will be increased and diminished as said light is moved nearer to or farther from the figure C. These various movements of the figure may be produced by the manual act of the operator or they may be automatically produced in the manner indicated in Fig. 1 by suspending the light from the flexible connection G, which may be a spiral wire or rubber band. When thus suspended, a slight movement of the atmosphere or an occasional movement of the hand will serve to keep the light in motion, whereby an almost infinite variety of changes in the shadow-picture will be produced upon the screen.

While I have illustrated a simple means of automatically producing the desired movements, the same may be produced by clock-work or in a great variety of other ways without departing from the spirit of my invention.

While the invention thus far described may be used as an interesting toy, it may also serve as an efficient and attractive medium for advertising, in which case the advertising matter may be printed upon the marginal edges of the frame, and while I have shown and described a device for changing the shadow-picture by moving the light or taper it is obvious that substantially the same effects may be produced by moving the screen and figure and permitting the taper to remain at rest.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A device for producing moving shadow-pictures, comprising a translucent screen; a figure conforming in outline to the picture desired to be represented upon the screen, located upon the rear side of, and wholly or in part at a slight distance from, said screen; means for directing rays of light upon the rear side of said figure and screen; and means for changing the relative position of said rays of light and said figure to each other, whereby the shadow of said figure upon the screen will be caused to move, and its appearance changed and varied in size and shape, as set forth.

2. A device for producing automatically moving shadow-pictures, comprising a translucent screen; an opaque figure, representing the outlines of the person or thing which it is desired to reproduce upon the screen,

suspended in a curved concavo-convex position in rear of said screen; a light located in rear of said figure and screen; and means for automatically moving said light and changing its relative position to said figure, as set forth.

3. In a device for producing automatic moving shadow-pictures, the combination of a frame A; translucent screen B secured at its marginal edges to said frame; a flexible figure C suspended at its upper end from the upper side of said screen, and means for holding the same in a curved position in rear of

said translucent screen, by the engagement of its lower end against the lower side of said frame; a light or taper E; a supporting-bracket F; a flexible elastic connection G; and hangers H, all substantially as and for the purpose specified.

In testimony whereof I affix my signature in the presence of two witnesses.

FREDERICK W. OSBORN.

Witnesses:

JAS. B. ERWIN,

CHAS. G. WHEELER.