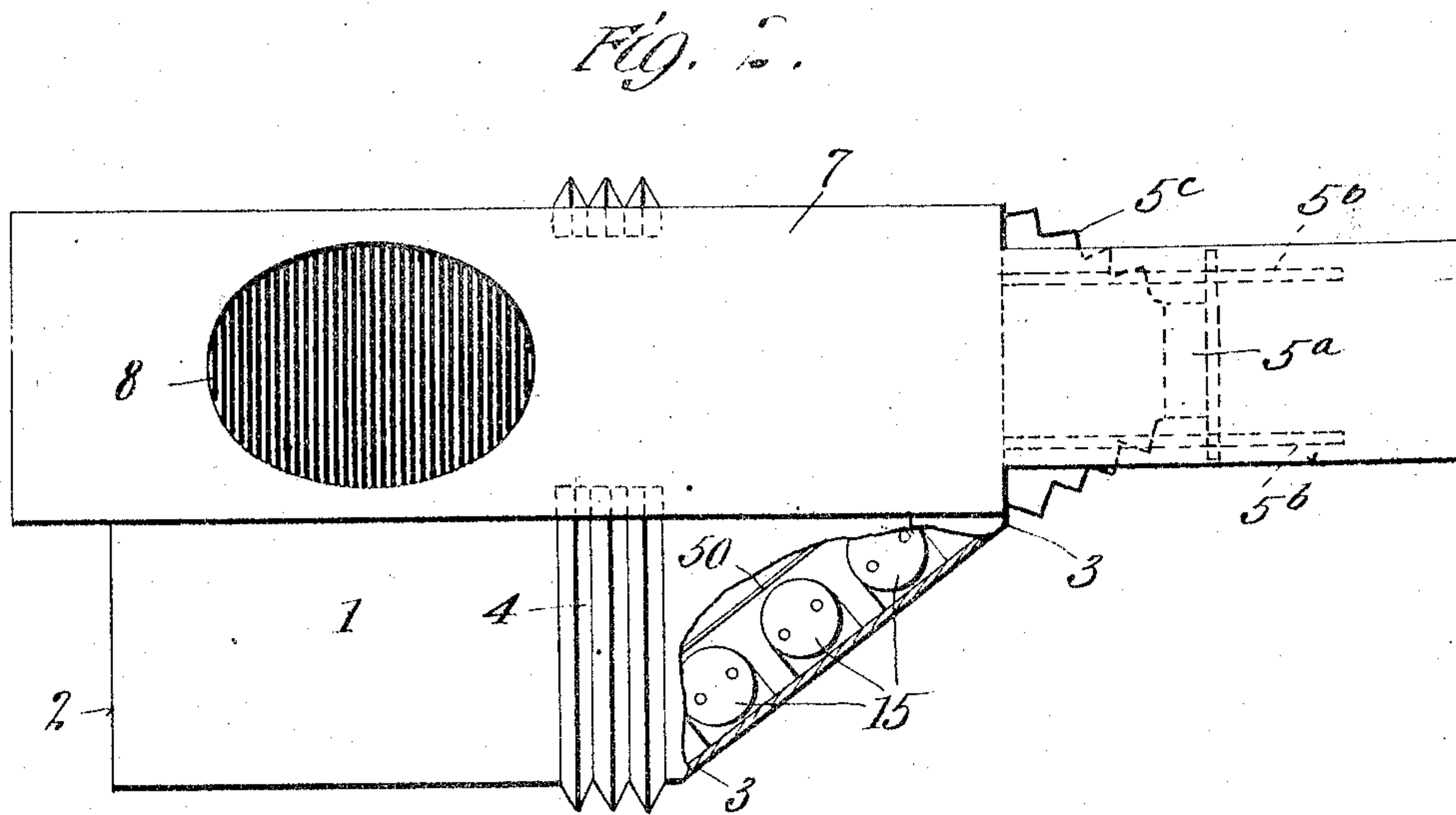
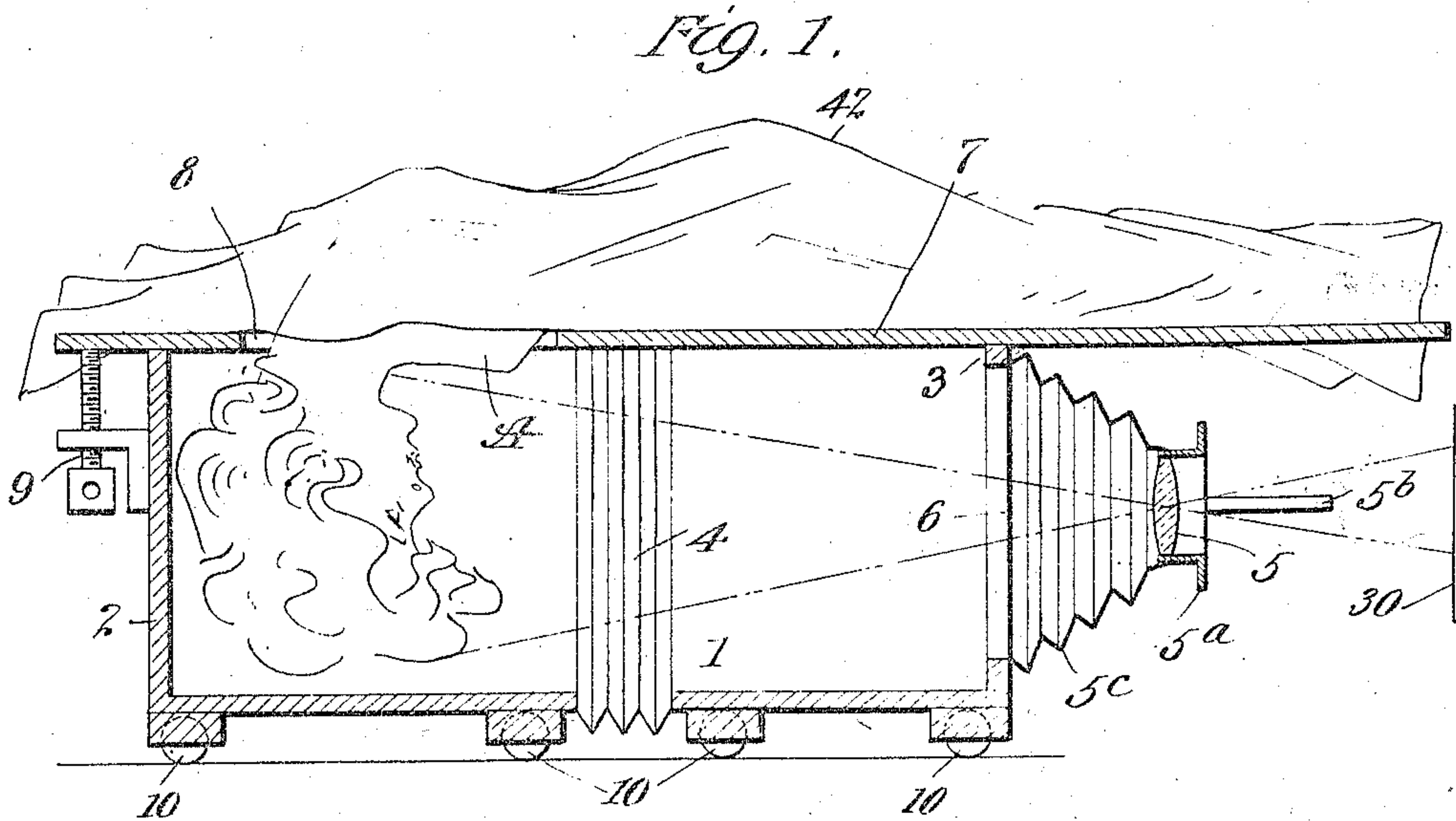


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 APPARATUS FOR PROJECTING IMAGES ON SCREENS:
 APPLICATION FILED MAY 9, 1908.

923,209.

Patented June 1, 1909.



Witnesses:
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UNITED STATES PATENT OFFICE.

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APPARATUS FOR PROJECTING IMAGES ON SCREENS.

No. 923,209.

Specification of Letters Patent.

Patented June 1, 1909.

Application filed May 9, 1908. Serial No. 431,812.

To all whom it may concern:

Be it known that I, CHARLES F. DE SORIA, citizen of the United States, and resident of New York, in the county of New York and State of New York, have invented certain new and useful Improvements in Apparatus for Projecting Images on Screens, of which the following is a specification.

This invention relates to apparatus for projecting images upon screens, the purpose being to produce apparatus simple and cheap of manufacture and convenient of operation, by which certain illusory stage effects may be produced by the use of human or other living objects.

The invention consists in certain structural features hereinafter described and particularly pointed out in the appended claims.

In the accompanying drawing, Figure 1 is a sectional view illustrating my invention, and Fig. 2 is a plan view of the apparatus shown in Fig. 1.

Referring to the drawings, in which similar reference characters denote corresponding parts in the several figures, 1 denotes broadly a chamber closed on all sides and comprising two end frames 2 and 3, connected together by bellows-like walls 4 whereby said chamber may be lengthened or shortened, the end frames being mounted on rollers 10 to facilitate handling. End frame 3 is fitted with a lens 5 carried by tube 5^a which is adjustable in a horizontal plane to and from an opening 6 in said frame; the tube being slidable upon the rods 5^b and being provided with an extensible or bellows-like portion 5^c.

The cover or roof of the chamber 1 is a flat platform 7 provided with an opening 8 through which the head or other members of the living object A may be thrust. Platform 7 may be permanently secured to the body 1, or, may be detachable, as shown.

9 denotes a screw upon which one end of the platform rests and by which said platform may be adjusted vertically, the other end of the platform moving on the upper edge of the end frame 3 as a fulcrum.

15 denotes a source of light, preferably strong electric lamps which are located interiorly of the chamber 1 and adapted to illu-

minate the same. These lamps are preferably arranged so as to throw their rays diagonally across the chamber 1, as indicated in Fig. 2, so that a subject A in the position shown in Fig. 1 will not receive them directly in the eyes. This arrangement, however, is not an essential feature of the invention and the lights may be disposed in any other convenient manner.

30 denotes a screen of cloth, gauze, glass, or other material adapted to receive an image of whatever may be inserted into the opening 8, said image appearing on the screen in reversed position. An inverted object will appear right side up on the screen.

42 denotes a cloth to cover the figure or object A so that no light rays may escape from the chamber except through the lens 5; and 50 denotes a transparent plate of colored material which may be introduced between the lights 15 and the object A.

My invention admits of many and varied uses, such, for instance, as the illusion of bodies floating in air; ghostly effects by throwing the image on transparent screens; the effect of bringing pictures or statues to life by making the image of a living object a part of a painted scene, and other uses too numerous to be mentioned herein, but which will be obvious to those familiar with stage settings and effects.

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

1. In apparatus of the character described, the combination of a closed portable chamber, means for illuminating the interior thereof, a platform for supporting an object within said chamber, said object being located at one end of said chamber, means for adjusting said platform, a lens located at the other end of said chamber and adapted to project images of said object upon a suitable surface, and means for adjusting said lens to and away from said object.

2. In apparatus of the character described, the combination of a closed chamber, means for illuminating the interior thereof, an opening in the roof of said chamber adapted to receive the upper portion of a human body in inverted position, a platform adjacent said

opening for supporting the rest of the body
outside of said chamber, and a lens located
at one end of said chamber and adapted to
project upon a screen an inverted image of
5 that portion of said body that is exposed
within said chamber.

Signed at New York, in the county of New

York and State of New York this 30th day of
April A. D. 1908.

CHARLES F. DE SORIA.

Witnesses:

WALDO M. CHAPIN.

JAMES D. ANTONIO.