

No. 883,291.

PATENTED MAR. 31, 1908.

N. BURGESS,

APPARATUS FOR PRODUCING ILLUSORY DRAMATIC EFFECTS

APPLICATION FILED APR. 17, 1966

2 SHEETS—SHEET 1

Fig. 1.



Fig. 2.

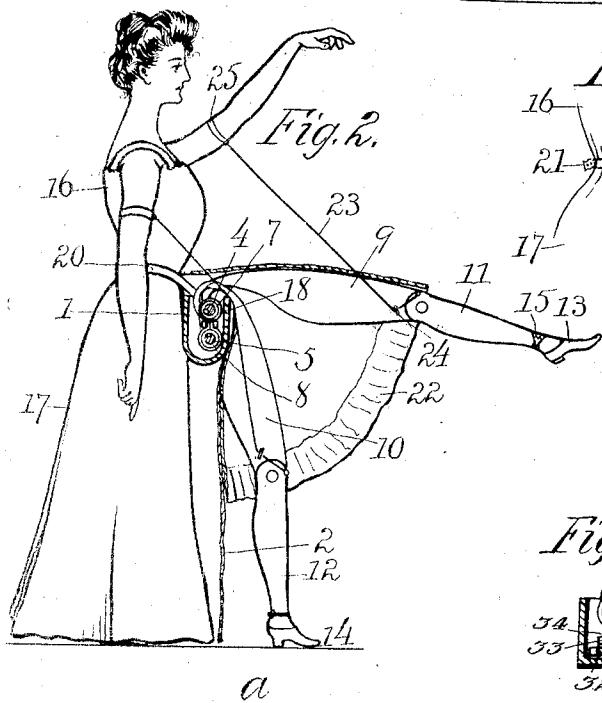


Fig. 3.

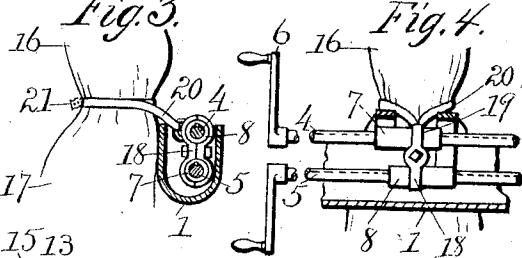


Fig. 4.

Fig. 6.

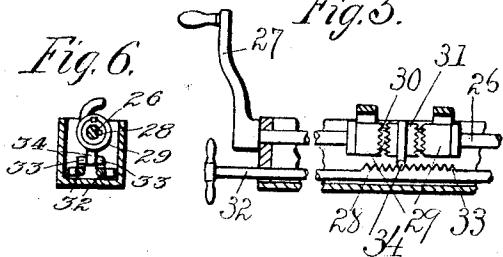


Fig. 5.

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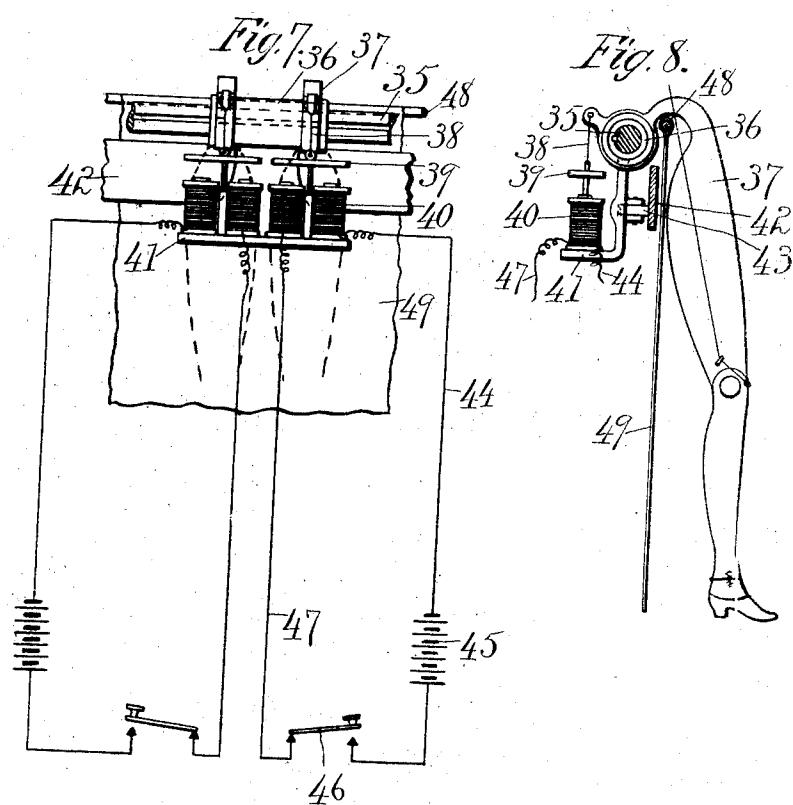
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APPARATUS FOR PRODUCING ILLUSORY DRAMATIC EFFECTS.
APPLICATION FILED APR. 17, 1906.

2 SHEETS—SHEET 2.



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UNITED STATES PATENT OFFICE.

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APPARATUS FOR PRODUCING ILLUSORY DRAMATIC EFFECTS.

No. 883,291.

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Application filed April 17, 1906. Serial No. 312,166.

To all whom it may concern:

Be it known that I, NEILSON BURGESS, a citizen of the United States, and a resident of Highlands, in the county of Monmouth and State of New Jersey, have invented a new and Improved Apparatus for Producing Illusory Dramatic Effects, of which the following is a specification.

My invention relates to the class of devices used on the stage of a theater or like place for producing an illusion, and the object of my invention is the production of such a device in which an inanimate figure is given movements resembling that of an animate figure; and a further object is the production of such a device in which an inanimate figure may be attached to and have the appearance of a portion of an animate figure and be given movement resembling that of an animate figure; and a further object is to provide means for imparting seeming grotesque movements to an apparently animate figure.

A form of device in the use of which these objects may be attained is illustrated in the accompanying drawings, in which—

Figure 1 is a view of a stage illustrating thereon a device embodying my invention placed thereon. Fig. 2 is a view in side elevation of a person having a figure embodying my invention attached thereto, the device embodying the invention being cut in cross-section. Fig. 3 is a detail side view showing the method of attachment of the device to a person. Fig. 4 is a detail front view showing the method of attachment of the device to a person. Fig. 5 is a detail view showing a modified form of the device, the casing being cut in section on a plane to show both the shaft and rod. Fig. 6 is a view in cross-section through the latter form with the collars removed. Fig. 7 is a detail view, partially diagrammatic showing another method of applying the invention, the view being taken from the rear. Fig. 8 is a side view showing the same device.

In the accompanying drawings the letter *a* denotes a stage provided with the usual wings *b* and other appurtenances common to such a structure.

In carrying out my invention I place upon the stage a casing 1 formed of any suitable material and preferably extending from side to side of the stage, although the length of this casing is not material to my invention. This case extends in a practically horizontal

direction and is located at the proper distance above the stage floor, usually about the height of the waist of a person. A curtain 2 is employed to cover the space between the case and the stage floor. This curtain may be painted or decorated to represent any desired scene in harmony with the other stage settings, and is preferably attached to the case, hanging therefrom. Shafts 4 and 5 extend lengthwise within the case 1 to a point preferably within or beyond the wings *b*, at which point they may be provided with handles or cranks 6. These shafts are suitably mounted within the casing so that they may turn or rotate therein. Sleeves 7—8 are splined to the shafts 4 and 5 so that they may have a free sliding movement lengthwise along the shafts and to these sleeves are secured the upper limb sections 9—10. It will thus be seen that as the shafts are turned these limb sections will be thrown outward. Lower limb sections 11—12 are pivotally secured to the upper limb sections, and feet 13—14 are pivotally secured to the lower limb sections.

A spring 15 is secured between each foot, and the lower limb section to cause the foot under the influence of the spring to point with its toe away from the lower limb section, as shown by the foot 13 in Fig. 2 of the drawings. When the lower limb section is in position to rest the foot on the floor the foot will assume a horizontal position, as shown at 14 in Fig. 2.

The numeral 16 denotes the upper portion of a female figure and 17 the lower portion thereof, see Fig. 2 of the drawings, a number of these figures 16 being shown in Fig. 1 of the drawings, and it will be understood that the mechanism herein described for operating a single pair of limbs applies equally to the mechanism for moving the limbs appurtenant to each of the figures. Each of these figures stands behind the curtain 2, and a pair of limbs, as above described, is attached to each of the figures, preferably at the waist line, each figure being free to move back of the curtain laterally of the stage and swinging movement being imparted to the limbs by means of the shafts 4 and 5. By this means any grotesque movement of the limbs may be had and it will appear that this movement is that of the limbs of the figures in view of the audience.

The sleeves 7 and 8 are connected as by a yoke 18 so that the limbs are always main-

tained in the same relative position. This yoke, as shown in Fig. 3 of the drawings, is preferably formed in halves, and lies within the grooves 19 in the sleeves. This yoke is 5 somewhat loosely connected so that there may be no binding action of the collars or sleeves in their sliding movement along the shafts. The yoke has, preferably rigidly secured thereto, a band 20. This band is 10 sufficiently rigid to steadily support the sleeves and move them along the shaft, and yet is sufficiently flexible to conform to the shape of the waist of the wearer. Straps 21 attached to the ends of the band serve as a 15 means of securing the limbs to the figure. A skirt 22 is secured to the upper limb sections, or to the band 20, this skirt covering the upper limb portions and having the appearance as being worn by the figure 20 standing or moving behind the curtain 2.

The lower limb sections may be swung on their pivots as by means of cords 23 secured at one end to the lower limb sections and passing through eyelets 24 located on the 25 upper limb sections to a band 25 encircling the arm of the figure.

It will thus be seen that by operating the shafts 4 and 5, moving them to and fro, the upper limb sections appurtenant to each of 30 the figures may be moved at the will of an operator located between or beyond the wings or in other suitable screened position, each limb section of each pair being separately moved. The lower limb sections may 35 be moved by the person represented by the figure the numeral 16 located behind the curtain, and this movement of the lower limb sections may be imparted by any desired means, in the form shown this movement being imparted by a natural movement 40 of the arms of the person as in dancing. The limbs may thus be given a variety of movements resembling that of a dancing figure, the limbs being thrown out in a 45 variety of positions and the foot assuming different positions, being horizontally arranged when resting on the floor and thrown out as in dancing when the limbs are thrown outward.

50 It will be observed that the upper limb sections may be operated in a variety of ways without departing from the invention.

In Figs. 5 and 6 of the drawings I have shown a modified form in which there is a 55 single shaft 26 which may be rotated continuously in one direction as by means of a handle 27. A sleeve 28 is splined to the shaft on which the supports 29 for the upper limb sections are so mounted that the sleeve 60 may rotate freely therein. These supports have clutch surfaces 30 to engage clutch surfaces on a clutch 31 which is splined to the sleeve and is adapted to engage either of the supports 29. This clutch may be 65 moved into engagement with either of the

supports as by means of a rod 32, having a toothed part 33 engaging a tooth 34 on the clutch 31. This will afford a yielding connection, the spring rod allowing the clutch 31 to be disengaged from the coöperating parts under undue pressure, the tooth 34 slipping over the teeth 33.

A plural number of rods 32 may be employed to operate the limb sections appurtenant to different figures, each of these rods bearing the toothed part 33, as shown in Fig. 6 of the drawings.

It will be seen that by my improved device inanimate devices, apparently a part of an animate figure, may be given movement 80 by means located out of view of an observer of the figure from certain directions, and that such means may be variously located with respect to the moving figures.

Another such device is shown in Figs. 7 85 and 8 in which the numeral 35 denotes a support to which is splined a sleeve 36 free to slide along the support, this sleeve having circumferential grooves in which extensions from the upper leg section 37 are 90 located to rotate independently of the sleeve, but to be moved lengthwise with it. A connection 38 is provided between this extension and the armature 39 of a magnet 40. This magnet is supported on a shelf 41 secured to the sleeve 36 and a rest 42 extending laterally of the stage may be provided against which a roller 43 may run to facilitate movement of the shelf 41. It will be understood that the sleeve 36 is to be secured 100 to the waist of a person as hereinbefore described. Wires 44 and 47 extend from the magnet to a battery 45, and a circuit closing device 46 may be employed to energize the magnets. It will thus be seen that when 105 the key or closing device 46 is operated to close the circuit the magnets will be energized, the armature 39 drawn downward and the upper leg sections thrown outward as heretofore described.

110 What I claim as my invention and desire to secure by Letters Patent is:—

1. In a stage appliance, an actuator located on the stage, an inanimate object formed in imitation of an animate object 115 and mounted to be moved by the actuator, and a screen arranged to hide that portion of the animate object represented by the inanimate object.

2. In a stage appliance, an actuator located on the stage and projecting beyond the wings thereof, an inanimate object formed in imitation of an animate object and mounted to be moved by said actuator, and a screen arranged to hide that portion 125 of the animate object represented by the inanimate object.

3. In a stage appliance, an actuator located on the stage, an inanimate object formed in imitation of an animate object 130

and mounted to be operated by the actuator, means for attaching said object to an animate object, and a screen arranged to hide that portion of the animate object represented by the inanimate object.

4. In a stage appliance, an actuator located on the stage, an inanimate object formed in imitation of an animate object and mounted to be operated by the actuator, but movable independently thereof, means for securing said inanimate object to an animate object, and a screen arranged to hide that portion of the animate object represented by the inanimate object.

15. In a stage appliance, a shaft mounted on the stage for turning movement, an inanimate object formed in imitation of an animate object and connected to be operated by said shaft, and a screen arranged to hide that portion of an animate object represented by the inanimate object.

25. In a stage appliance, an actuator located on the stage, a pair of limb sections operatively connected with the actuator, a screen for partially hiding a person located appurtenant to said limb sections, and means for attaching the limb sections to said person.

30. In a stage appliance, an actuator located on the stage, a pair of limb sections connected to be operated by the actuator, but having movement independently thereof, a screen, and means for attaching the limb sections to a person partially hidden by said screen.

35. In a stage appliance, an actuator located on the stage limb sections connected to be independently operated by the actuator, but having movement independently thereof, a screen, and means for securing the limb sections to a person partially hidden by said screen.

40. In a stage appliance, an actuator located on the stage, upper and lower limb sections connected to be operated by the actuator, means for moving the lower limb sections independently of the upper limb sections, and a screen for partially hiding a person located appurtenant to the limb sections.

45. In a stage appliance, an actuator located on the stage, upper and lower limb sections connected to be operated by the actuator, but having a movement independently thereof, means for moving the lower limb sections independently of the upper limb sections, and a screen for partially hiding a person located appurtenant to the limb sections.

50. In a stage appliance, an actuator located on the stage, a pair of limb sections each member of the pair mounted to be independently moved by the actuator and both having a movement independently of said actuator, each member of the pair consisting

of upper and lower parts, means for moving the lower limb sections independently of the upper limb sections, a screen, and means for attachment of the limb sections to a person partially hidden by said screen.

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12. In a stage appliance, an actuator located on the stage, upper and lower limb sections mounted to be moved by said actuator but having a movement independently thereof, a screen, means for attachment of the limb sections to a person partially hidden by the screen, and means to be attached to the arm of the person and for moving the lower limb sections independently of the upper limb sections.

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13. In a stage appliance, an actuator located on the stage, means for operating the actuator, an inanimate object mounted to be moved by said actuator, and a screen arranged to partially hide an animate object located appurtenant to and apparently constituting a part of said inanimate object.

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14. In a stage appliance, an actuator located on the stage, means screened from the view of an audience for operating the actuator, an inanimate object mounted to be moved by said actuator, and a screen to partially hide an animate object located appurtenant to and apparently constituting a part of said inanimate object.

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15. In a stage appliance, an actuator located on the stage, an inanimate object mounted to be moved by the actuator and formed to represent a portion of an animate object, and a screen arranged to permit view of said inanimate object but to partially hide the animate object.

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16. In a stage appliance, an actuator located on the stage, an inanimate object mounted to be moved by the actuator and formed to represent a portion of an animate object, and a screen arranged back of but appurtenant to the inanimate object.

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17. In a stage appliance, an actuator located on the stage, mechanism formed in imitation of a portion of an animate object and mounted to be moved by the actuator, and a screen arranged to hide that portion of said animate object imitated by said mechanism.

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18. In a stage appliance, an actuator, a pair of limb sections located on the stage operatively connected with the actuator, and means for attachment of the limb sections to a person.

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19. In a stage appliance, an actuator located on the stage, a pair of limb sections connected to be operated by the actuator, but having movement independently thereof, and means for attachment of the limb sections to a person.

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20. In a stage appliance, a casing extending horizontally along the stage at a distance therefrom, an actuator located within said casing, an inanimate object formed in imitation of an animate object operatively con-

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1. nected with said actuator and extending downward therefrom, and a screen secured to said casing to hide that part of an animate object imitated by the inanimate object.

5. 21. In a stage appliance, a casing extending across the stage at a height substantially equal to that of the waist of a person, an actuator located in said casing, a pair of limb sections operatively connected to said actuator and extending downward therefrom, a screen arranged to hide a person from the waist downward, and means for connection of said limb sections to a person.

10. 22. In a stage appliance, an actuator located on the stage, a pair of limb sections operatively connected with said actuator, a screen arranged to hide that portion of a per-

son from the waist downward, means for connection of the limb sections to a person, and a skirt to cover the upper portion of the 20 limb sections.

23. A casing arranged upon a stage at substantially the height of the waist of a person, an actuator located within said casing, limb sections operatively connected to said actuator, means for connecting the limb sections to a person, a screen arranged to hide that portion of a person from the waist downward, and a skirt to cover the upper portion of the limb sections. 25

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Witnesses:

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