

(No Model.)

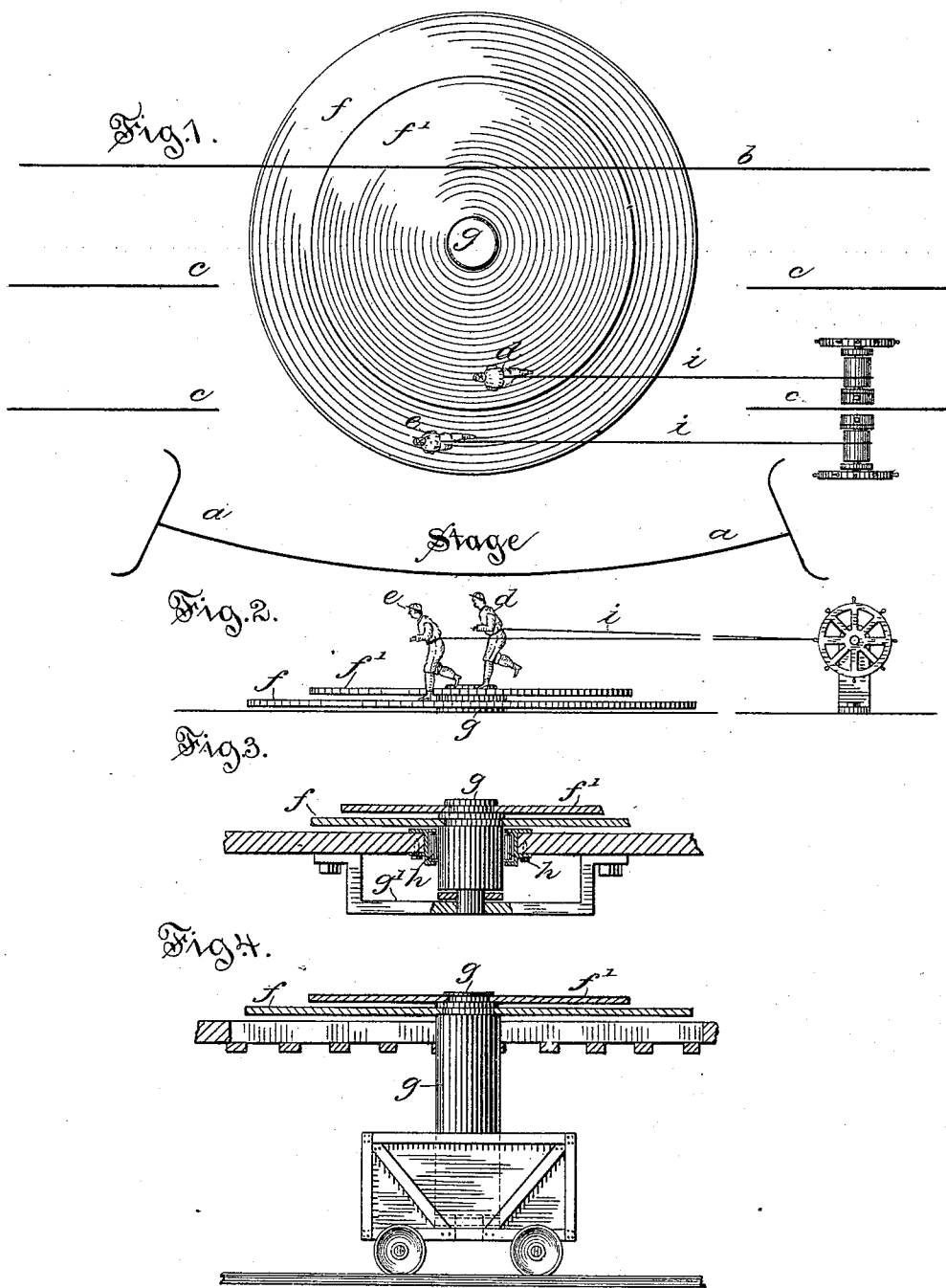
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By judicial change of name now NEILSON BURGESS.

APPARATUS FOR PRODUCING ILLUSORY DRAMATIC EFFECTS.

No. 471,126.

Patented Mar. 22, 1892.



WITNESSES

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UNITED STATES PATENT OFFICE.

JAMES WM. KNELL, BY JUDICIAL CHANGE OF NAME NOW NEILSON BURGESS,
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APPARATUS FOR PRODUCING ILLUSORY DRAMATIC EFFECTS.

SPECIFICATION forming part of Letters Patent No. 471,126, dated March 22, 1892.

Application filed March 20, 1890. Serial No. 344,687. (No model.)

To all whom it may concern:

Be it known that I, NEILSON BURGESS, formerly JAMES WM. KNELL, of Highlands, in the county of Monmouth and State of New Jersey, have invented certain new and useful Improvements in Apparatus for Producing Illusory Dramatic Effects, of which the following is a full, clear, and exact description, whereby any one skilled in the art can make
10 and use the same.

My invention relates to the class of apparatus adapted for use on the stage of a theater and by means of which certain illusory effects in connection with a race or contest of speed
15 between moving objects is produced.

The object of my invention is to provide a device by means of which these effects may be produced by a somewhat simpler mechanism than has heretofore been employed by
20 others or by me, as shown in certain United States Letters Patent already granted to me October 16, 1883, No. 286,709, on like subjects-matter.

My within-described invention consists in the combination of the stage and setting, the endless path, and the various mechanisms for producing the effects sought, and in details of the several parts and their combination, as more particularly hereinafter described, and
25 pointed out in the claims.

Referring to the drawings, Figure 1 is a diagram view in plan of a portion of a stage, illustrating the relative position and arrangement of the several parts of my improved apparatus. Fig. 2 is a detail view, in elevation, of the parts. Fig. 3 is a detail view, in central section, through the disks and their supports. Fig. 4 is a detail view, in cross-section, through the disk and a carriage, illustrating the method
30 of support when the disks are to have a sliding movement as well as a rotary movement along the stage.

In the accompanying drawings, the letter *a* denotes the stage, that may be set for any convenient race scene, usually with a background *b* and the wing-pieces *c*.

In order to illustrate the embodiment of my invention, I have selected a foot-race in which the men *d* and *e* are to compete. It is
35 essential in any contest of this kind that

there should be an endless path on which the moving figure or figures are supported while the motions of the legs, as in running, are being made. Either the figure moves rapidly over the ground or floor as the result of the walking or running movement or the path
40 must move backward beneath the feet of the moving object. In prior patents above referred to I have shown and described an endless path or apron moving in a horizontal direction and passing from front to rear and below the stage in order to return; but in this case there are provided the disks or wheels *f* *f'*, borne on a common central shaft *g* in such
45 manner that the two disks can rotate independently of each other. The disks or wheels are of different diameters, the lower projecting the desired distance beyond the perimeter of the inner wheel. It is not essential that the wheel should be solid from center to
50 circumference, as a path may be provided in a somewhat narrow belt near the outer edge of the disk, this annular belt being supported by spokes or braces radiating from the central hub. In the form of apparatus in which
55 the disks are arranged to be fixed, except as to rotary movement, the shaft *g* passes through an opening in the stage and is mounted in a step *g'*, that may be bolted to the under part of the stage or floor timbers, or it may be otherwise conveniently supported. It is preferred that the opening through which the
60 shaft passes should be provided with anti-friction supports *h* and that the bottom or end of the shaft should be stepped also in anti-friction bearings, so as to reduce to a minimum all friction of the bearings caused by the rotary movement of the shaft to which the disk *f* is secured. The upper disk *f'* is
65 so mounted as to enable it to turn freely upon the shaft, so that the two disks may have an independent rotary movement on a common center. Each of the runners *d* and *e* are held by a wire passing from a belt or like means of attachment to the body over a windlass or
70 like device in a manner similar to that already described in prior United States patents above mentioned, and the relative position of the runners to each other may be governed by paying out or drawing in the sup-
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5 porting-cord *z*, connected to the respective
 runners. In place of the running man ani-
 mals or other objects may be employed, or the
 participants may be mounted on horses or bi-
 10 cycles or on other forms of carriages the run-
 ning movements of which are controlled by
 the riders. In case it is desirable that the
 disks should have a movement across the
 stage at the same time that the runners placed
 15 upon the disks have a movement with rela-
 tion to each other the shaft *g* is mounted in
 a carriage and projects through a slot in the
 stage, the carriage being below the stage.
 The disks that form the horizontal endless
 20 path are located above the stage and the car-
 riage below on suitable supports that enable
 it to be moved back and forth at any de-
 sired rate of speed by means of a windlass
 and cord similar to that already described.
 25 In the within-described form of my inven-
 tion the main distinction between it and the
 prior devices or apparatus is that the endless
 path is arranged wholly in a horizontal plane
 instead of moving vertically in a vertical
 30 plane, as does the path described in prior pat-
 ents. At the same time the within-described
 construction possesses certain advantages
 that render it applicable to cases where the
 other form of the device might prove too cum-
 bersome or expensive.

I claim as my invention—

1. In combination with a stage, a plural
 number of endless paths horizontally arranged
 and mounted on a vertical shaft with an in-
 dependent rotary motion on said shaft, the
 35 scenic background *b*, and mechanism whereby
 a moving figure is adjusted to and held in
 any desired position upon the endless path,
 all substantially as described.

2. In combination with a stage, horizon- 40
 tally-arranged endless paths, a scene forming
 a background for the figures placed on the
 paths, and mechanism, as a rope and windlass,
 for adjusting and holding the moving figures
 in a desired position on the said path, sub- 45
 stantially as described.

3. In combination with the stage having an
 opening therethrough, endless paths horizon-
 tally arranged and rotating about a center, a
 carriage supporting the said endless paths, 50
 the mechanism whereby moving figures are
 held in any desired position with relation to
 the endless paths, and the background scene,
 all substantially as described.

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Witnesses:

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