

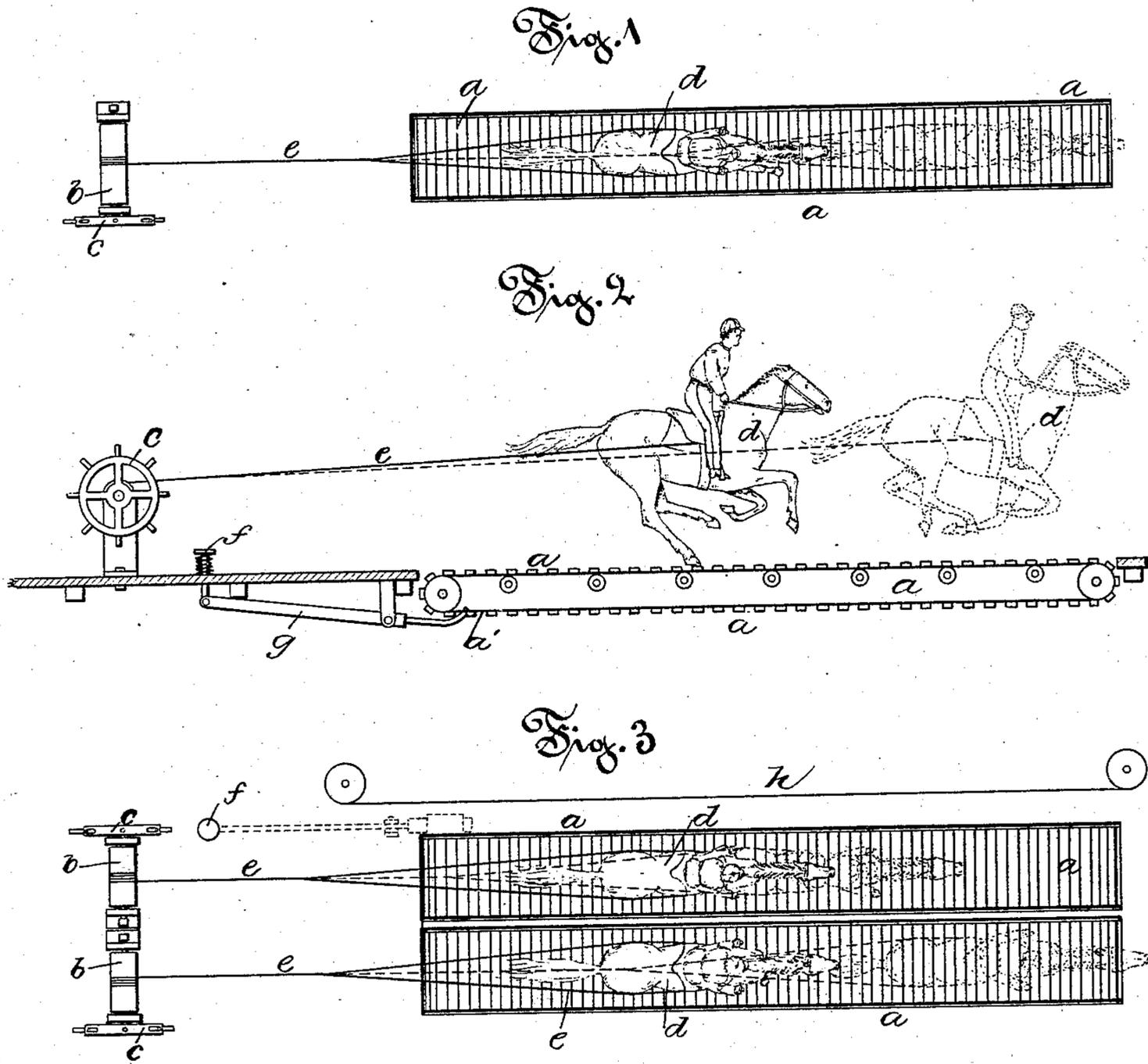
(No Model.)

J. W. KNELL.

APPARATUS FOR PRODUCING ILLUSORY DRAMATIC EFFECTS.

No. 286,709.

Patented Oct. 16, 1883.



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES W. KNELL, OF BOSTON, MASSACHUSETTS.

APPARATUS FOR PRODUCING ILLUSORY DRAMATIC EFFECTS.

SPECIFICATION forming part of Letters Patent No. 286,709, dated October 16, 1893.

Application filed April 30, 1883. (No model.)

To all whom it may concern:

Be it known that I, JAMES W. KNELL, of Boston, in the county of Suffolk and State of Massachusetts, have invented certain new and
5 useful Improvements in Apparatus for Producing Illusory Dramatic Effects; and I do hereby declare that the following is a full, clear, and exact description thereof, whereby
10 a person skilled in the art can make and use the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

Like letters in the figures indicate the same parts.

15 Figure 1 is a top view of my improvement as applied to one endless path. Fig. 2 is a side view of the same. Fig. 3 is a plan view of my improvements as applied to two of the paths.

20 My improvements relate particularly to the invention described and claimed in my patent of April 4, 1882, No. 256,007; and it consists of the devices and means for determining the position upon the endless path, shown and described in my said patent of a horse or other
25 moving animal.

In the accompanying drawings, the letter *a* denotes an endless belt or path—such, in general, as is used in horse-powers—made sufficiently strong to bear the weight that is
30 designed to be put upon it, and hung in a suitable frame placed upon or secured below the level of the stage-floor.

The letter *b* denotes a windlass of ordinary
35 construction, mounted in a suitable stand adapted to be firmly fixed in a position in line with the endless path, having the wheel *c*, provided with handles or similar means for turning the windlass.

40 To a suitable point, as the saddle-girth *d* or other harness part adapted to be secured to a horse or other moving object, is fastened the rope or wire *e*, the other end of which is wound about the windlass.

45 The brake *f*, of any ordinary form, is secured to the stage-floor in such position that it may be used to control the revolution of the rolls upon which the endless path travels, as by depressing the outer end of the pivoted lever *g*, whose inner end bears upon the
50 periphery of the roll *a'*.

The operation of my device is as follows: The horse, attached to the windlass by means of the wire, is placed upon the endless path,
55 as shown in Fig. 1, and started up. If the

windlass is clamped, the horse will remain fixed in reference to objects upon the stage, and the endless path will travel beneath him; but if the windlass be allowed to turn, the horse will make some advance upon the end-
60 less path, and in time reach the farther extremity of it, as shown by dotted lines in Figs. 1 and 2.

If desired, the progressive motion of the horse may be aided by increasing the friction
65 upon the roll *a'* by means of lever *g*. By means of these devices it will be seen that the horse may be made to take any desired position upon the endless path, and I have found
70 by experiment that he may be pulled back bodily to any position—as to the end of the path nearest the windlass after he has advanced to the opposite end. In Fig. 3 I represent
75 two such endless paths and windlasses appurtenant to each, and also show a panoramic scene *h*, arranged back of the paths. By means of these devices all the incidents of a horse-race may be simulated, the horses alternately gaining and losing ground; and it is evident that
80 my invention may be used to represent the well-known circus performances upon a single horse—as bare-back riding and the like—or that races between animals other than horses may be also skillfully represented, and all this
85 with or without the aid of the moving panoramic scene described in my previous patent.

I claim as my invention—

1. In a stage apparatus of the within-described class, the combination of the endless path *a*, the windlass *b*, the saddle or saddle-
90 girth *d*, or other harness part adapted to be secured to a horse or other moving object placed upon the path, and the wire *e*, connecting said windlass and harness, and constructed to be extended and retracted, all sub-
95 stantially as described.

2. In a stage apparatus, the combination of the moving panoramic scene *h* with the endless path *a*, the windlass *b*, the saddle-girth *d*, or other harness part, and the wire *e*, all substan-
100 tially as described.

3. In a stage apparatus, the combination of the brake *f* with the endless path *a*, the saddle-girth *d*, or other harness part, the windlass *b*, and the wire *e*, all substantially as described.
105

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Witnesses:

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