

I. M. WEINGARDEN & A. CUMMINGS.

THEATRICAL APPARATUS.

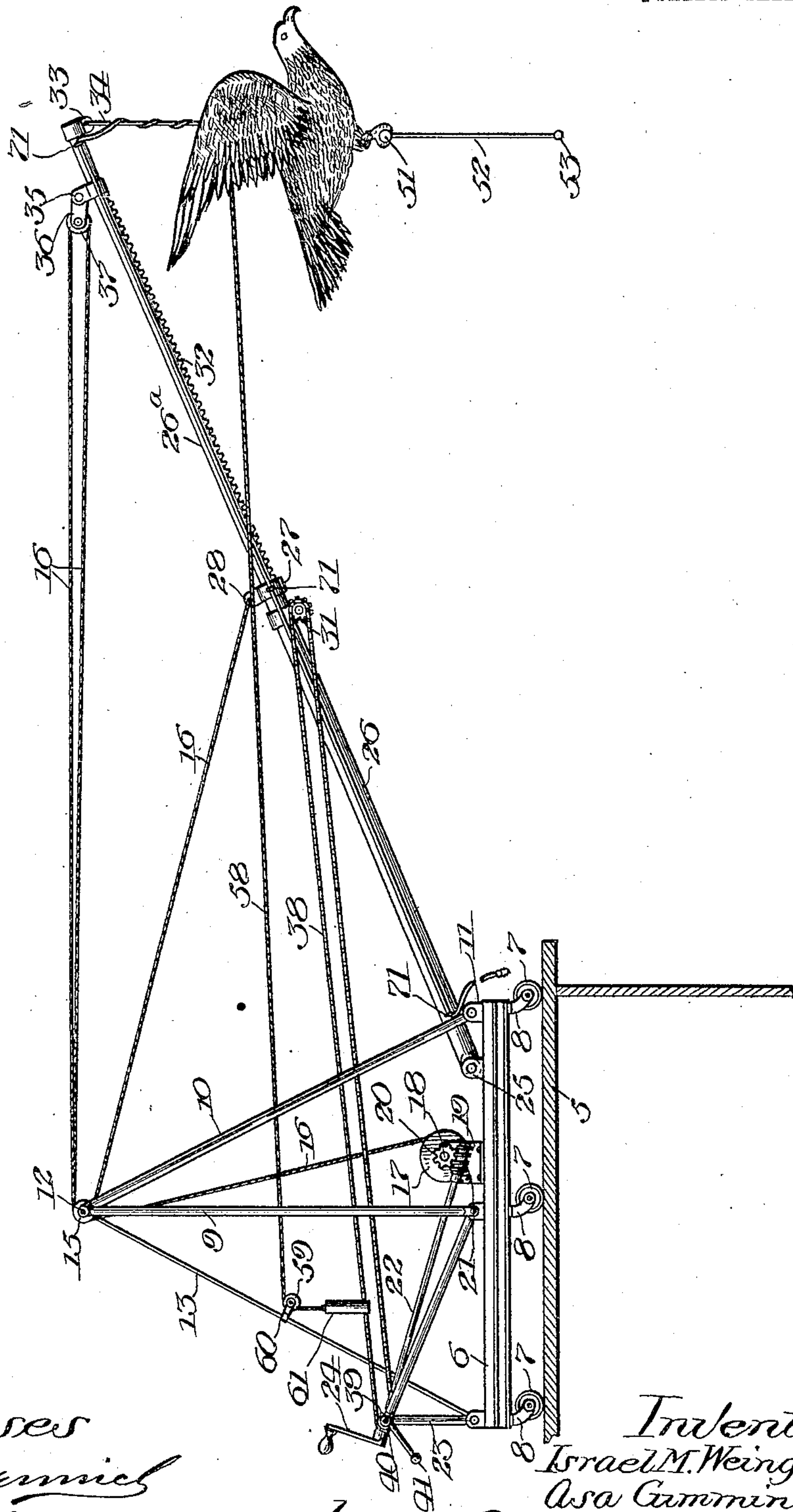
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938,927.

Patented Nov. 2, 1909.

2 SHEETS—SHEET 1.

Fig. 1.



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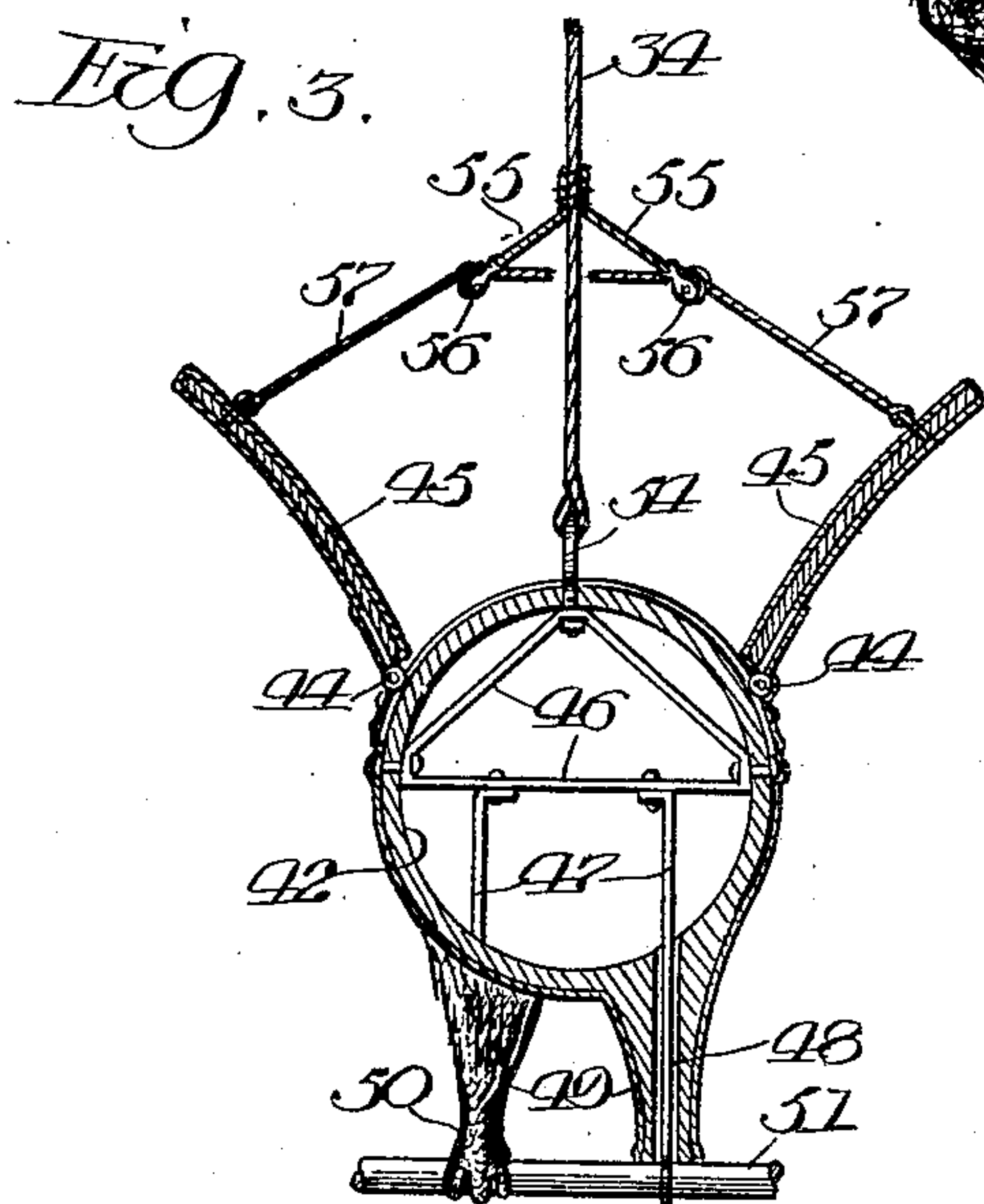
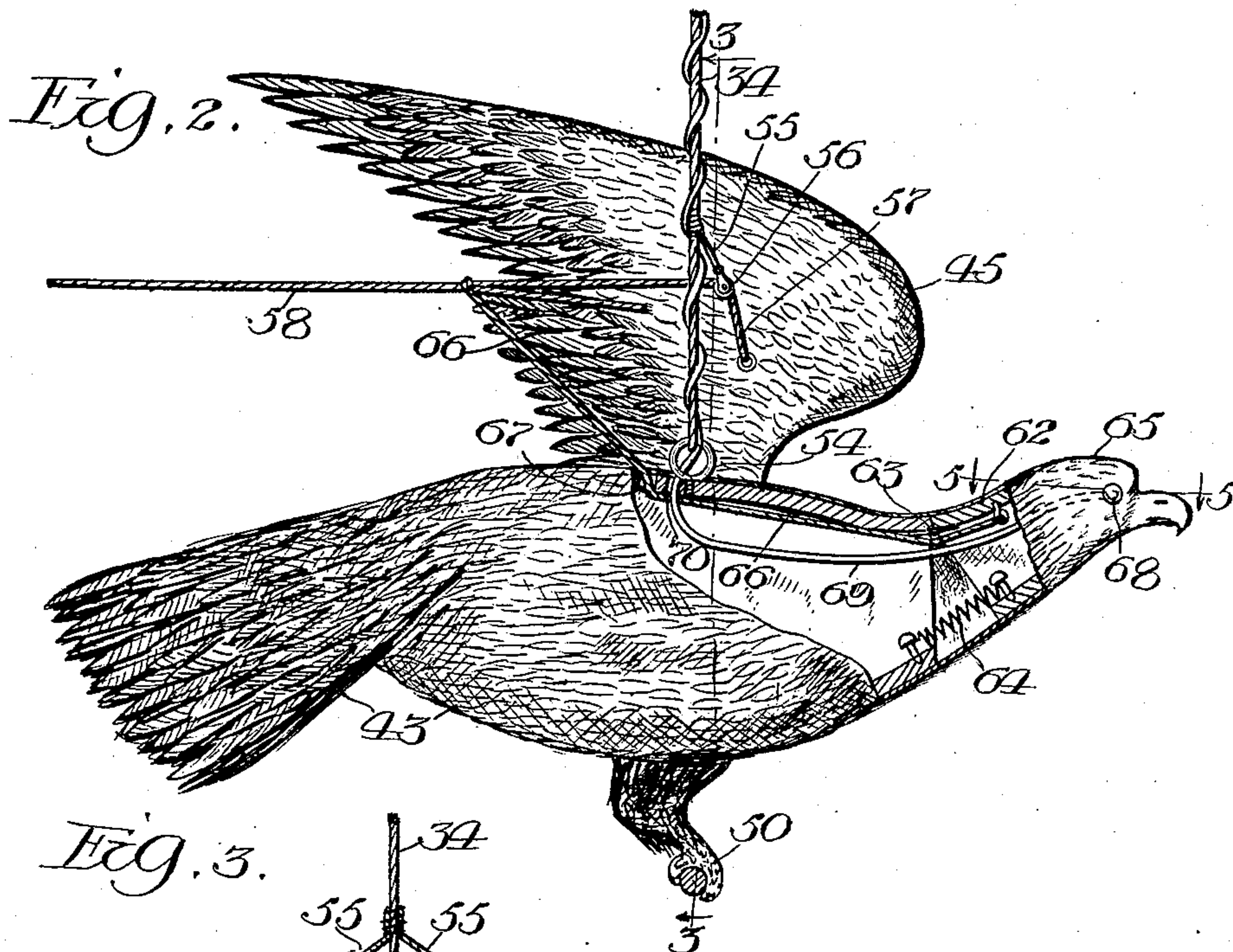


Fig. 4.

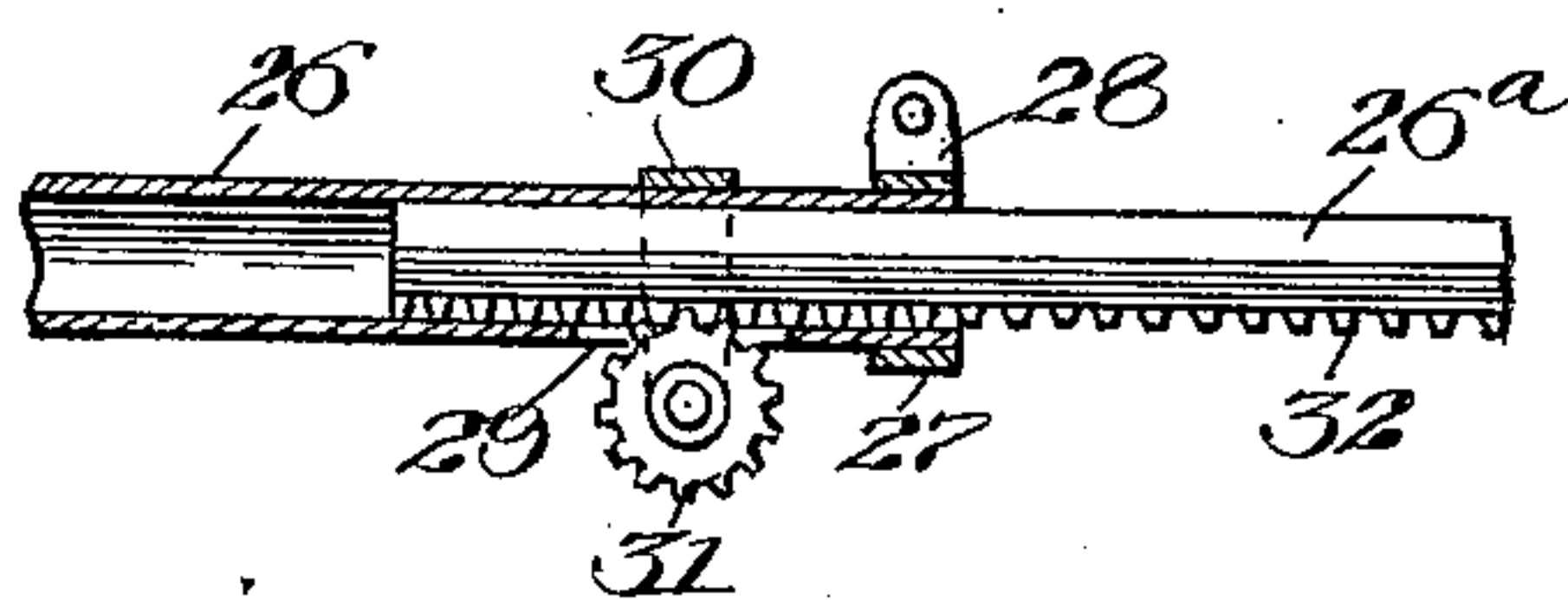


Fig. 5.

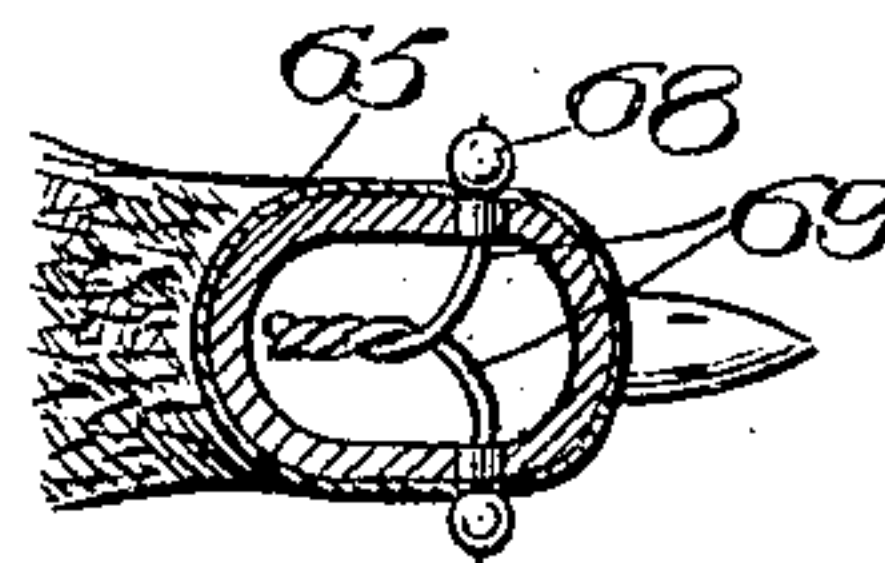
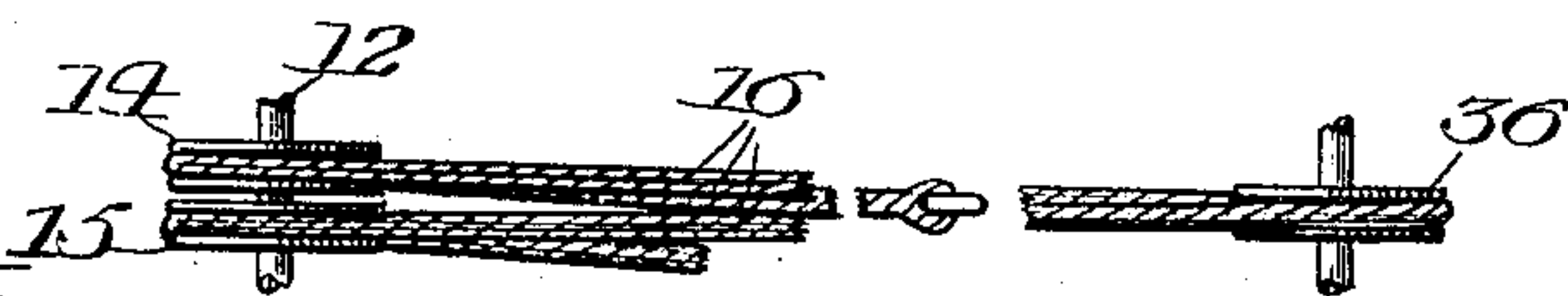


Fig. 6.



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UNITED STATES PATENT OFFICE.

ISRAEL M. WEINGARDEN AND ASA CUMMINGS, OF CHICAGO, ILLINOIS.

THEATRICAL APPARATUS.

938,927.

Specification of Letters Patent.

Patented Nov. 2, 1909.

Application filed June 3, 1909. Serial No. 499,944.

To all whom it may concern:

Be it known that we, ISRAEL M. WEINGARDEN and ASA CUMMINGS, citizens of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in a Theatrical Apparatus, of which the following is a specification.

This invention relates to improvements in a theatrical apparatus of that type in which a movably mounted crane is employed to support and extend over the audience of a theater and to move in various directions a figure, such as the representation of an eagle, which seemingly supports with its feet a trapeze, upon which gymnastic and other feats may be performed; and it consists in certain peculiarities of the construction, novel arrangement, and operation of the various parts thereof, as will be hereinafter more fully set forth and specifically claimed.

The principal object of the invention is to provide an apparatus of the above-named general character, which shall be simple and inexpensive in construction, strong, durable and efficient in operation, and so made that it may be operated from the stage of the theater by a single person, if desired, and in such a manner that the figure supporting the performer may be raised or lowered, moved forwardly or rearwardly, or laterally and horizontally when desired.

Another object of the invention is to so construct the figure or representation of an eagle that its wings and head and neck portion may be caused to move in a manner similar to that of an eagle when in flight.

Still another object of the invention is to provide means for illuminating the eyes of the eagle figure.

Other objects and advantages of the invention will be disclosed in the subjoined description and explanation.

In order to enable others skilled in the art to which our invention pertains, to make and use the same, we will now proceed to describe it, referring to the accompanying drawings, in which—

Figure 1 is a side view in elevation of a theatrical apparatus embodying our invention, showing it mounted on the front portion of a stage of a theater with the jib or arm of the crane carrying the figure or representation of an eagle extended forwardly from the front portion of the stage, and illustrating the wings of the eagle in their

raised positions; Fig. 2 is a view partly in section and partly in elevation of the eagle figure, showing the means for suspending the same from the jib of the crane and also the means for moving its wings and head, as well as for illuminating its eyes; Fig. 3 is a cross-sectional view partly in elevation taken on line 3—3 of Fig. 2 looking in the direction indicated by the arrows; Fig. 4 is a view partly in section and partly in elevation of a portion of the extensible jib of the crane, showing a part of the means for extending one of its members; Fig. 5 is a plan sectional view taken on line 5—5 of Fig. 2 looking in the direction indicated by the arrows of a portion of the head and neck of the eagle figure, showing a part of the means for illuminating the eyes thereof; and Fig. 6 is a plan view shortened for the convenience of illustration of the tackle used for raising and lowering the jib of the crane.

Like numerals of reference, refer to corresponding parts throughout the different views of the drawings.

The reference numeral 5 designates the front portion of the stage of a theater, upon which is mounted the truck or frame 6 which carries the crane and operating mechanism of the apparatus. This truck is in the form of a platform and has journaled on its lower portion a series of casters 7 or wheels which are mounted on brackets 8, which brackets are preferably swiveled to the truck-frame 6 so that the same may be readily moved or turned to any desired position. Vertically mounted on the truck platform 6 is a frame work, which consists of upwardly extended uprights 9, which are forwardly braced by means of uprights 10 secured at their lower ends to brackets 11 on the front portion of the truck-frame and at their upper ends to a transverse rod or shaft 12 which unites the two uprights 9 at their upper portions. The uprights 9 are rearwardly braced by one or more rods 13 connected to the rear portion of the truck-frame and also to said shaft. Mounted on the shaft 12 are two sheaves 14 and 15 (see Fig. 6) over which is passed a cable 16, which has one of its ends secured to a drum 17 mounted on a shaft 18 which is journaled on suitable supports 19 on the truck-frame and transversely thereof.

The shaft 18 has on one of its ends a worm-gear 20 which meshes with a worm 21 on one end of a rod 22, which has its

other end journaled on an upright 23 at the rear end of the truck-frame, and is provided with a crank-handle 24 to turn the same. Pivotally mounted at one of its ends on a
 5 suitable support 25 on the front part of the truck-frame is a tubular section 26 of the jib or arm of the crane, which has at its other end a collar 27 provided with an aper-
 10 tured extension 28 in which one end of the cable 16 is fastened. Just below the collar 27 the section 26 of the jib is provided on its lower surface with a slot or opening 29,
 15 and around this slotted portion of said section is located a ringlike hanger 30, on the lower portion of which is journaled a gear 31 the teeth of which are extended through
 20 the slot 29 of the section 26 and are adapted to engage a rack-bar 32 with which the lower portion of the section 26^a of the jib is provided. The section 26^a of the jib is of
 25 sufficient size to permit it and the rack 32 which it carries to telescope within the section 26, and has secured to its upper end an apertured bracket 33 in which is secured the
 30 upper end of a cable 34, the lower end of which is secured to the eagle figure, as will be presently explained.

Mounted on the upper portion of the section 26^a of the jib is a bracket 35 to which
 30 is pivotally secured a hanger 36 in which is journaled a pulley 37 over which the cable 16 is extended. Extended at one of its ends around the sprocket-wheel or gear 31
 35 is an endless sprocket-chain 38 which is extended at its rear end around a sprocket-wheel or gear 39 mounted on a shaft 40
 40 journaled on the uprights 23 at the rear end of the truck-frame, which shaft is provided with a crank-handle 41 to turn the same.

As is clearly shown in Figs. 2, 3 and 5 of the drawings, the figure of the eagle consists of a body portion 42, which may be
 45 made of any suitable size and material but preferably of some non-combustible substance, and may be externally coated with feathers 43 of any suitable kind. Secured
 50 to each side of the body 42 of the figure by means of a hinge 44 is a wing 45, which is also coated with suitable feathers. Within the body 42 and located transversely thereof
 55 is a brace-frame 46, which is preferably triangular in shape and may be secured to the body at its angles in any suitable manner. Secured at their upper ends to the lower portion
 60 of the frame 46 are a pair of bars or rods 47 which are extended through vertical openings 48 in the legs 49 and feet or claws 50 of the eagle figure, and are firmly secured
 65 at their lower ends to the upper horizontal bar 51 of the trapeze 52 which has at its lower portion another horizontal bar 53, as usual. Secured to the upper portion of the brace-frame 46 within the body 42 is a link 54 to which the lower end of the cable 34
 is secured. Mounted on the supporting-

cable 34 at a suitable distance above the back of the eagle figure by means of flexible connections 55 are two small pulleys 56 over each of which is passed a cord 57, which
 70 cords are united rearwardly of the suspending cable 34 and are extended in the form of a single cord 58 to the rear portion of the truck-frame, where it is extended over a
 75 pulley 59 journaled on a bracket 60 mounted on the brace-rod 13 of the tackle carrying frame.

The rear end of the cord 58 is provided with a weight 61 which will normally over-
 80 balance the weight of the wings 45 and cause them to normally occupy raised positions. The neck portion 62 of the eagle figure is secured at its rear end by means of a hinge
 85 63 to the front upper portion of the body of the figure, and is connected to the lower front portion of the body by means of an expanding spring 64 which will normally
 90 hold the head 65 in a raised position. Secured at one of its ends to the upper portion of the neck 62 is a cord 66 which is extended through an opening 67 in the top of the body
 95 of the figure, and connected at its rear end to the cord 58, as will be clearly seen by reference to Fig. 2 of the drawings.

The head 65 of the eagle figure is provided on each of its sides with an incandescent
 100 electric light bulb 68 of the ordinary or any preferred construction to represent the eyes of the eagle, and each of said bulbs has leading therefrom an electric conductor 69 which
 105 is passed through an opening 70 in the back of the body 42, and is then preferably extended around the suspending cable 34 and passed therefrom through suitable eyes 71 on
 110 the sections of the jib and may be connected at its rear end to a source of electric supply, not shown.

From the foregoing and by reference to the drawings it will be seen and clearly understood that, by turning the crank-handle
 115 24 on the rod 22 in the proper direction the drum 17, through the instrumentality of the worm 21 and gear 20, will be caused to rotate, in which operation the cable 16, which
 120 is passed over the sheaves 14 and 15, will be wound on the drum or unwound therefrom, thus causing the jib to be raised or lowered as desired. By turning the crank-handle 41
 125 in the proper direction it is evident that the section 26^a of the jib may be extended or retracted to the desired position through the instrumentality of the sprocket-chain 38 and
 130 sprocket-wheels 31 and 39 which are mounted on the section 26 of the jib and on the shaft 40, respectively, as before explained.

To operate the wings and the head of the eagle figure it is only necessary to raise and
 135 lower the weight 61 on the cord 58, which will permit the wings to move downwardly by reason of their own gravity. The head of the eagle figure will be depressed by the

downward movement of the weight 61 and elevated by means of the expanding spring 64, as is evident.

The jib being mounted on a wheeled truck, it is obvious that it may be moved from side to side by simply turning the truck in the proper direction.

It will be obvious from the above description that the device is susceptible of considerable modification without material departure from the principles and spirit of the invention, and for this reason we do not desire to be understood as limiting ourselves to the precise form and arrangement of the several parts of the apparatus herein set forth in carrying out our invention in practice.

Having thus fully described our invention, what we claim as new, and desire to secure by Letters-Patent, is—

1. In a theatrical apparatus, the combination with a wheeled truck, of a jib pivotally mounted thereon, means mounted on the truck and connected to the upper portion of the jib to raise and lower the same, a figure suspended from the outer end of the jib and consisting of a body, a member movably connected to each of its sides, and another member movably connected to one of its ends, and means on the truck and connected to said members to operate the same.

2. In a theatrical apparatus, the combination with a wheeled truck, of an extendible jib pivotally mounted thereon, means mounted on the truck and connected to the upper portion of the jib to raise and lower the same, means mounted on the truck and connected to the jib between its ends for extending one section thereof, a figure suspended from the outer end of the jib and consisting of a body, a member movably connected to

each of its sides and another member movably connected to one of its ends, and means on the truck and connected to said members to operate the same.

3. In a theatrical apparatus, the combination with a wheeled truck, of a jib pivotally mounted thereon, means mounted on the truck and connected to the upper portion of the jib to raise and lower the same, a figure of an eagle suspended from the outer end of the jib and consisting of a body, a wing member movably connected to each of its sides, and a head movably connected to its front portion, flexible connections united at one of their ends to the wing members and head and extended rearwardly to the truck, a pulley mounted above the truck in engagement with said connection, and a weight on the rear end of said connection.

4. In a theatrical apparatus, the combination with a wheeled truck, of a jib pivotally mounted thereon, means mounted on the truck and connected to the upper portion of the jib to raise and lower the same, a figure of an eagle suspended from the outer end of the jib and consisting of a hollow body, a wing movably connected to each of its sides, and a head movably connected to its front end, an electric bulb located in each side of the head, means on the truck and connected to the wings and head to operate the same, and electric conductors connected at one of their ends to the bulbs in the head of the figure and at their other ends to an electric supply.

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