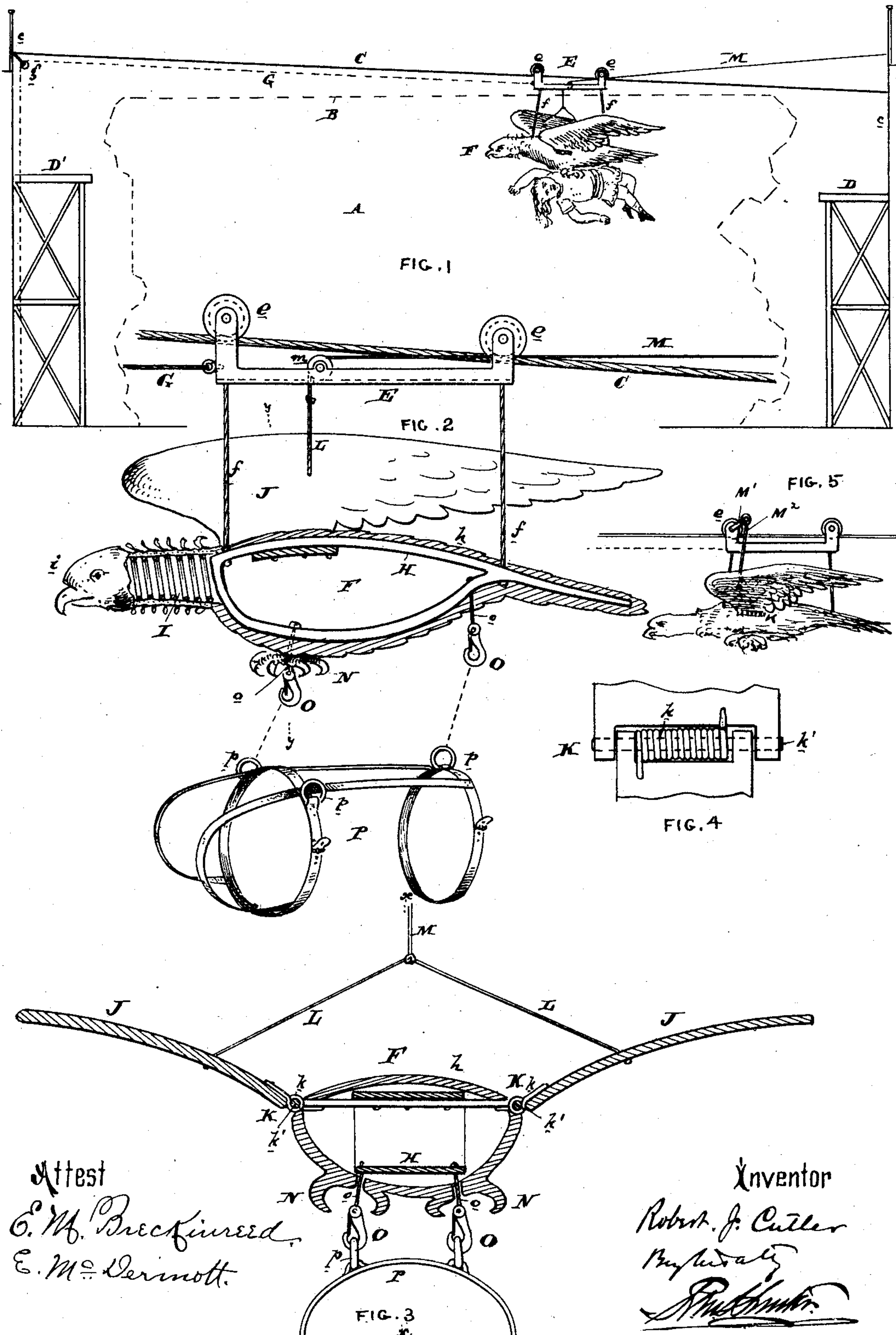


(No Model.)

R. J. CUTLER.
THEATRICAL APPLIANCE.

No. 370,858.

Patented Oct. 4, 1887.



UNITED STATES PATENT OFFICE.

ROBERT J. CUTLER, OF NEW YORK, N. Y.

THEATRICAL APPLIANCE.

SPECIFICATION forming part of Letters Patent No. 370,858, dated October 4, 1887.

Application filed May 2, 1887. Serial No. 236,781. (No model.)

To all whom it may concern:

Be it known that I, ROBERT J. CUTLER, of the city, county, and State of New York, have invented an Improvement in Theatrical Apparatus, of which the following is a specification.

My invention has reference to apparatus for producing scenic effects in dramatic productions; and it consists in certain improvements, all of which are fully set forth in the following specification, and shown in the accompanying drawings, which form part thereof.

The object of my invention is to produce the effect of an eagle or other large bird in the act of flying with a child or other prey.

In carrying out my invention I place across the stage, in the upper portion of the scenes, a cable preferably on a slight incline, and upon this cable is supported a carriage, which carriage is drawn across the stage by means of a suitable rope. Suspended from this carriage is an automatic eagle constructed in such a manner that the wings and head may move, though this is not absolutely necessary. The wings may be operated to rise and fall by means of a suitable cord connected thereto and passing over the carriage, and preferably to that side of the stage from which the eagle is supposed to fly. By pulling upon said cord, or by letting it loose and holding it firmly alternately during the travel of the carriage, the wings will be caused to rise and fall with the sluggish movement so characteristic of birds of this size. Other methods may be used to make the wings vibrate. The eagle is supported at sufficient distance below the carriage to be seen from the audience, while the carriage and its supporting-cable are screened by the drops. To the under portion of the bird are secured suitable hooks, which are adapted to connect and disconnect with a harness which may be worn by the child or object to be carried in suspension.

In the drawings, Figure 1 is a front elevation showing my improved apparatus for producing the scenic effect. Fig. 2 is an enlarged sectional elevation of the eagle and its accessories, the eagle being in section on line $x x$ of Fig. 3. Fig. 3 is a cross-section of the eagle on line $y y$ of Fig. 2. Fig. 4 is a plan view showing the construction of the hinged joint

for the wings, and Fig. 5 is a side elevation of an eagle and its suspending apparatus, and showing a modified construction of apparatus for vibrating the wings.

A is the stage.

B represents the lower edge of the drop or overhead scene.

C is the suspended cable connecting the side walls, c , of the stage, and is preferably arranged on an incline to give the impression of the eagle flying upward when being drawn across the stage.

D is the platform at one end of the cable, from which the child may be attached to the eagle, and D' is a similar platform at the opposite side of the stage, and upon which the child is received after being carried across. These platforms are covered or screened by suitable scenery, as indicated in dotted lines.

E represents the carriage, which is supported upon the cable C by grooved rollers e , and may be pulled along the cable by a traction-rope, G, held parallel to the cable C by a guide-pulley, g , at one end thereof, and then allowed to hang down within reach of an operator on the stage.

F is the eagle, which is formed in any manner desired. Preferably, however, it is made with an interior frame, H, of metal, upon which the outer configuration of the body h is formed. To the forward end of this frame H is secured a coiled spring, I, about which the flexible neck portion is placed and to the end of which the head i is secured, and whereby the head and neck may vibrate when the body portion is moving or shaking. Secured to the frame H near the two extreme ends thereof are the suspending-cords f , the upper ends of which are fastened to the carriage E, preferably at points below the rollers e thereof. By these cords (or, if desired, light rods) the eagle may be suspended below the drop and maintained in a horizontal position.

J J are the wings of the eagle, which are formed in any manner desired, but are hinged to the body portion h at K by hinge-pins k' or otherwise. When the wings are raised, the resistance offered by the air has a tendency to make them drop very slowly, too much so for proper effect; and, further, if the center of gravity of said wings were moved back of the

hinged points, then there would be no tendency for the wings to drop. To overcome these defects I provide a suitable spring which always tends to throw the wings down. In the
 5 drawings this spring is shown as a coiled spring, and is lettered *k*. Any other form of spring may be used. The wings are connected by a cord, *L*, which is secured to the rear operating-cord, *M*, which passes down through
 10 the carriage *E*, preferably over a roller or grooved pulley, *m*, and extends back to the platform *D* or a suitable position on that side of the stage where an operator may properly manipulate it.

15 In place of operating the wings by the cord *M*, the said wings may be operated by a link, *M*², and crank *M'*, secured to one of the rollers *e*, as indicated in Fig. 5; but I prefer the former method as being more simple and more
 20 easily under the control of the operators.

N represents the claws of the eagle, and through their centers and projecting downward are wire cords *o*, which are secured to the metal frame *H* at their upper ends, and
 25 are provided at their lower ends with snap-hooks or other suitable catches, *O*, and a third and similar wire cord, *o*, and catch *O* project down from the frame *H* near the tail. These three snap-hooks or catches are designed to
 30 catch upon the rings *p*, secured to the harness *P*, which is adapted to be strapped upon the child or object to be suspended.

If desired, simply the two hooks from the claws may be used; but by the addition of the
 35 third hook the child will be held in horizontal position, which will be most natural, as indicated in Fig. 1.

In operating this apparatus the child is taken to the platform *D* and is attached by
 40 means of the harness to the hooks *O*. The carriage *E* and the eagle with its burden are then drawn across the stage by the traction-cord *G*, giving the effect indicated in Fig. 1. During its travel the cord *N* is manipulated
 45 to draw up the wings and to allow the springs *k* to force them down intermittently, producing the effect of flying, and the inclination given to the cable *C* causes the bird with its burden to gradually rise. When the carriage
 50 *E* arrives over the platform *D'*, the child is unhooked from the eagle.

I do not limit myself to the details of construction, as they may be modified in various ways without departing from my invention.

55 Having now described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. The combination of the stage, a suspended cable extending across the upper part
 60 thereof, a mechanical structure representing a bird suspended from said cable, and means to propel said bird along the cable from one side of the stage to the other.

2. The combination of the stage, a suspended cable extending across the upper part
 65 thereof, a mechanical structure representing a bird with movable wings suspended from

said cable, suitable mechanism to vibrate said wings, and means to propel said bird along the cable from one side of the stage to the
 70 other.

3. The combination of the stage, a suspended cable extending across the upper part thereof, a mechanical structure representing
 75 a bird with movable wings suspended from said cable, suitable mechanism to vibrate said wings, means to propel said bird along the cable from one side of the stage to the other, a supporting-harness for the child or object to
 80 be suspended, and a connection between said harness and bird structure.

4. The combination of the stage, a suspended cable extending across the upper part thereof, a mechanical structure representing
 85 a bird with movable wings suspended from said cable, suitable mechanism to vibrate said wings, means to propel said bird along the cable from one side of the stage to the other, a supporting-harness for the child or object to
 90 be suspended, and a detachable connection between said harness and bird structure.

5. The combination of the stage, a suspended cable extending across the upper part thereof and arranged at an incline, a mechanical structure representing a bird suspended
 95 from said cable, and means to propel said bird along the cable from one side of the stage to the other.

6. The combination of the stage, a suspended cable extending across the upper part
 100 thereof, a mechanical structure representing a bird with movable wings suspended from said cable, suitable mechanism to vibrate said wings, means to propel said bird along the cable from one side of the stage to the other,
 105 a supporting-harness for the child or object to be suspended, a detachable connection between said harness and bird structure, and two platform structures at each end of the cable, extending up close to the cable.

7. The combination of the stage, a suspended cable extending across the upper part thereof,
 110 a mechanical structure representing a bird with movable wings and a flexible neck suspended from said cable, suitable mechanism to vibrate said wings, and means to propel
 115 said bird along the cable from one side of the stage to the other.

8. The combination of a suspended cable, a carriage adapted to run upon said cable, a
 120 structure representing a bird suspended from said carriage, having movable wings, a traction-cable to pull the carriage and bird structure along the cable, and a cord to operate the wings.

9. The combination of a suspended cable, a carriage adapted to run upon said cable, a
 125 structure representing a bird suspended from said carriage, having movable wings, a traction-cable to pull the carriage and bird structure along the cable, extending to one end of the cable, and a cord to operate the wings, extending
 130 to the opposite end of the cable.

10. The combination of a suspended cable,

a carriage adapted to run upon said cable, a structure representing a bird suspended from said carriage, having movable wings, springs to force said wings down, a traction-cable to pull the carriage and bird structure along the cable, and a cord to operate the wings.

11. The combination of a stage, a suspended cable, a carriage adapted to run upon said cable, a structure representing a bird suspended from said carriage, having movable wings, a traction-cable to pull the carriage and bird structure along the cable, a cord to operate the wings, and a drop or scene adapted to hide the cable, cords, and carriage.

12. The combination of a frame of metal, upon which a covering is secured representing a bird, a carriage, suspending-cords connecting the carriage with the frame of the bird, and suspended hooks or catches, also carried by said frame and projecting below the bird.

13. The combination of a frame of metal, upon which a covering is secured representing a bird, a carriage, suspending-cords connecting the carriage with the frame of the bird, and suspended hooks or catches, also carried by said frame and projecting below the bird and from the center of each claw.

14. The combination of a frame of metal, upon which a covering is secured representing a bird, a carriage, suspending-cords connecting the carriage with the frame of the bird, and suspended hooks or catches, also carried by said frame, projecting below the bird from the center of each claw and at a point at or near the tail.

15. The combination of a frame of metal, upon which a covering is secured representing a bird, a carriage, suspending-cords connecting the carriage with the frame of the bird, a flexible head and neck, also secured to said frame, and hinged wings connected to the bridge portion of the bird.

16. The combination of the center frame, H, having the covering *h*, representing the body of a bird, the flexible neck portion I, carrying the head *i*, and hinged wings J, hinged to the body of the bird and frame thereof.

In testimony of which invention I hereunto set my hand.

ROBERT J. CUTLER.

Witnesses:

R. M. HUNTER,
JOHN FOSTER.