

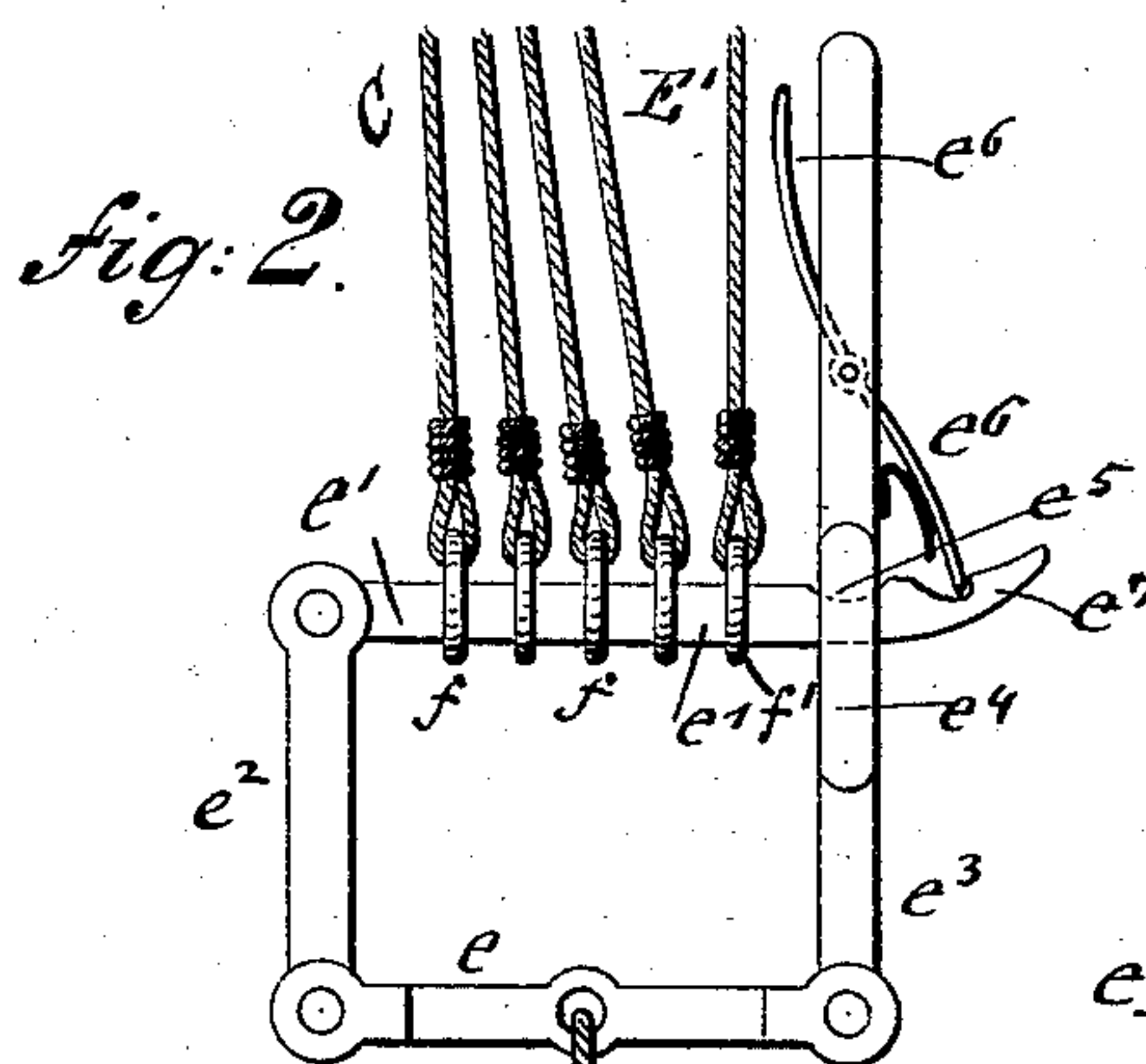
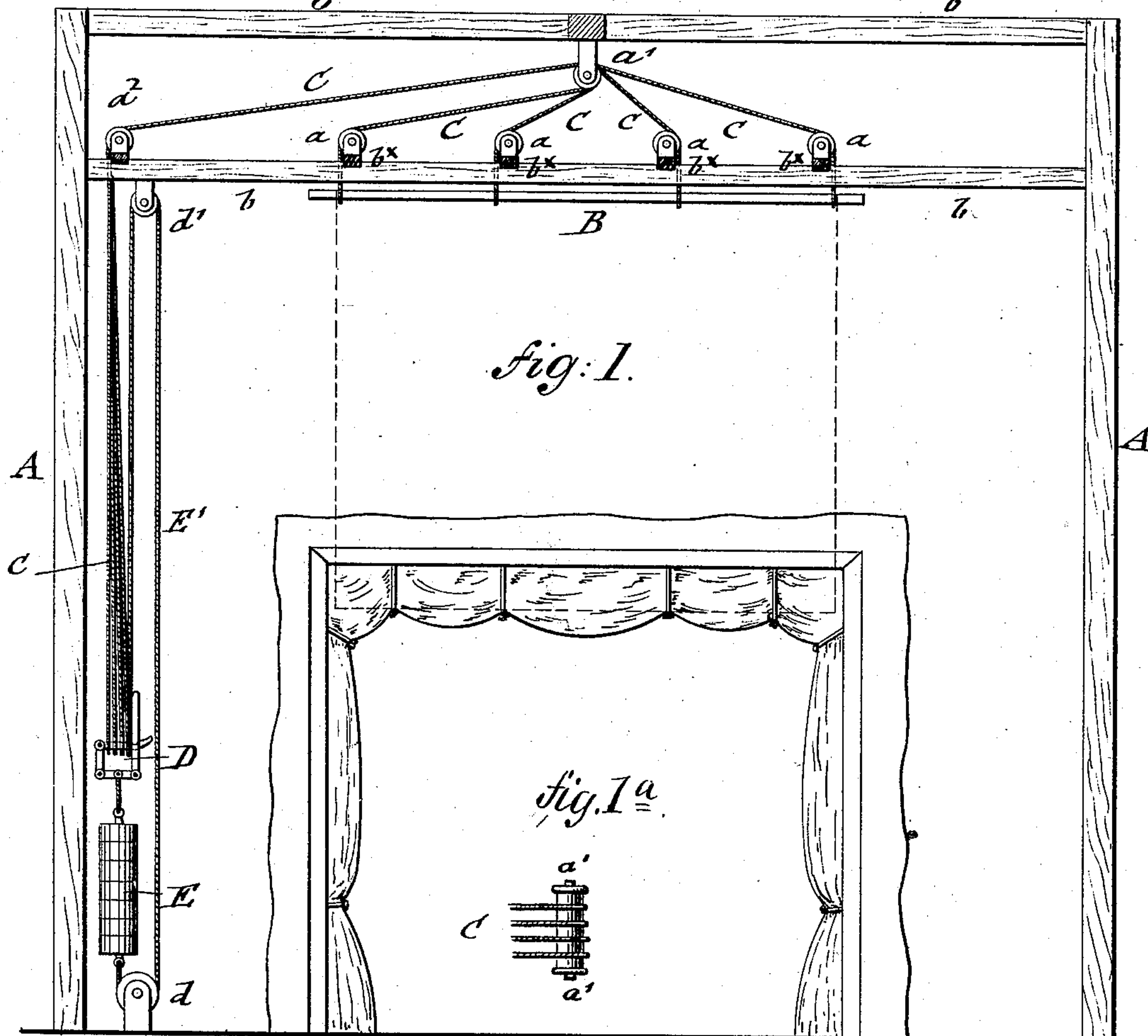
(No Model.)

J. FRIED.

## DEVICE FOR HANGING STAGE SCENERY.

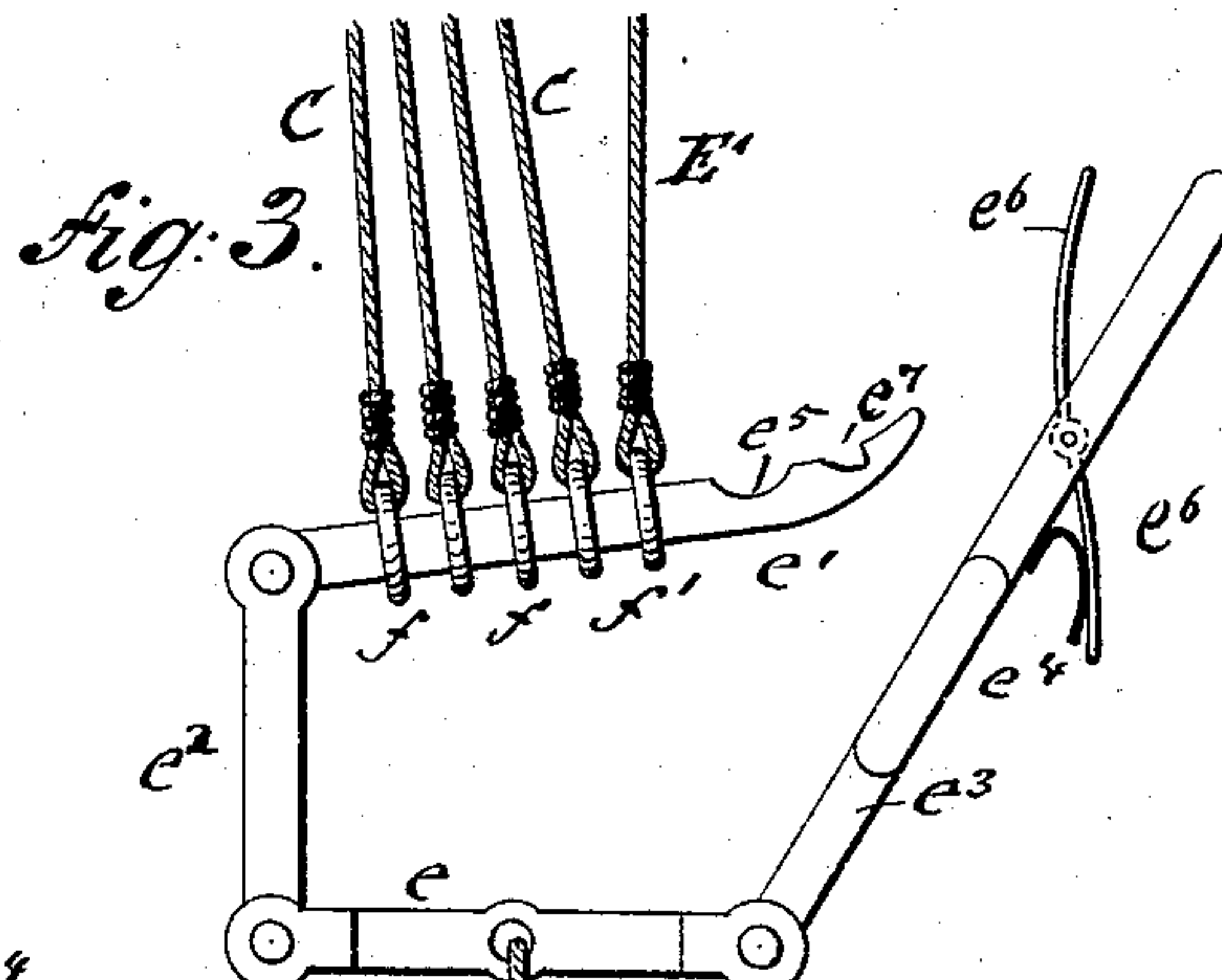
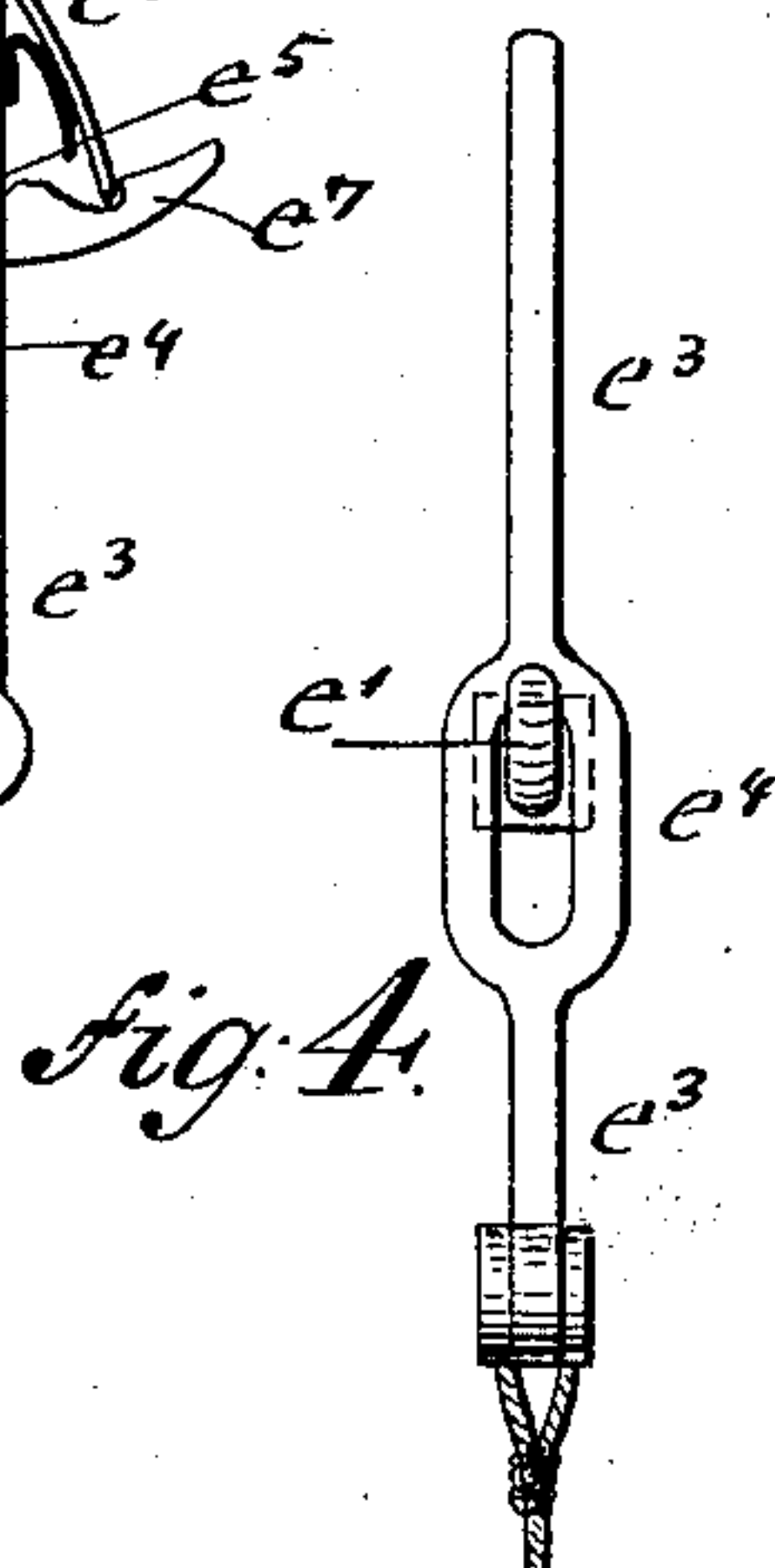
No. 369,052,

Patented Aug. 30, 1887.



WITNESSES:

A. Schehl.  
Martin Petry.



INVENTOR

INVENTOR  
Joseph Fried  
BY  
Gopher Raegner  
ATTORNEYS.



# UNITED STATES PATENT OFFICE.

JOSEPH FRIED, OF NEW YORK, N. Y.

## DEVICE FOR HANGING STAGE-SCENERY.

SPECIFICATION forming part of Letters Patent No. 369,052, dated August 30, 1887.

Application filed March 31, 1886. Serial No. 197,254. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH FRIED, of the city, county, and State of New York, have invented certain new and useful Improvements in Devices for Hanging Stage-Scenery, of which the following is a specification.

This invention has reference to an improved device for hanging stage-scenery and appliances—such as drops, borders, &c.—the device being designed with a view to secure the horizontal suspension of said scenery without being affected by dry or moist weather, and which may be furthermore quickly dropped on the stage without requiring the cutting of suspension-ropes in case of fire.

The invention consists of stage-scenery which is suspended by ropes that pass over guide-pulleys vertically above said scenery, and over a central equalizing-pulley above the guide-pulleys, and over a side guide-pulley to a counterbalancing-weight, which latter is raised or lowered for setting the scenery by an independent rope that is guided over suitable pulleys.

The invention consists, further, of the combination, with the stage scenery and its suspension-ropes, of a safety appliance that is interposed between said ropes and their counterbalancing-weight, said safety appliance being provided with a lever or other releasing device, by which the ropes can be detached from the safety appliance for dropping the scenery on the floor of the stage in case of fire.

In the accompanying drawings, Figure 1 represents a front elevation of a theatrical stage with my improved device for hanging scenery. Fig. 1<sup>a</sup> is a detail top view of the central equalizing-pulley of the suspension-ropes from which the scenery is suspended. Figs. 2, 3, and 4 are details of the safety appliance by which the scenery can be dropped on the stage in case of fire.

Similar letters of reference indicate corresponding parts.

Referring to the drawings, A represents the frame-work of a theatrical stage of the usual construction, and B a drop or border, which is suspended by four or more ropes, C, that pass over guide-pulleys *a a*. The guide-pulleys *a a* are supported on the beams *b b*, which are again supported on the transverse beams *b* of

the frame-work A, said pulleys being vertically above the drop or border. From the guide-pulleys *a a* suspension-ropes C pass over a central equalizing-pulley, *a'*, that is suspended from a beam, *b'*, above the beam *b*, which pulley *a'* is made wide enough to accommodate the suspension-ropes *a a* sidewise of each other, as shown in Fig. 1<sup>a</sup>. From the pulley *a'* the ropes C pass over a guide-pulley, *a''*, which is supported on the beam *b* at one side of the stage, and of equal width with the central equalizing-pulley, *a'*. The ropes C pass then downward to a safety appliance, D, which is interposed between the ropes C and the counterbalancing-weight E. From the lower part of the weight E extends a rope, *E'*, over a pulley, *d*, applied to or near the floor of the stage, and a pulley, *d'*, suspended from the beam *b* or other suitable point of the loft, and downward again to the safety appliance D.

When it is desired to raise or lower the stage-scenery, the rope *E'* is taken hold of and pulled in downward or upward direction, the counterbalancing-weight facilitating the setting of the scenery to the proper position, as it counterbalances the weight of the drop or border and of the suspension-ropes. This method of suspending stage-scenery has the advantage that it is always supported in a horizontal position, whether the atmosphere is dry or moist, as the ropes expand or contract uniformly, for the reason that they diverge symmetrically from the central equalizing-pulley, *a'*. Consequently the scenery is always supported in a horizontal position, and it is prevented from assuming an inclined position toward the floor of the stage, which is very annoying, especially when the scenery is to be raised or lowered during the performance of a play.

The safety appliance D forms an essential feature of my invention, as it facilitates the quick lowering of all the drops and borders on the stage in case of fire, so that the spread of fire is retarded and to some extent prevented.

The safety appliance D may be of any suitable construction, that shown in the drawings consisting of two horizontal bars, *e e'*, which are connected at one end by a pivot-link, *e''*, and at the other end by a lever, *e'''*, the slotted open-



ing  $e^4$  of which passes over the outer end of the upper bar,  $e'$ , until it locks into a notch,  $e^5$ , of the same, as shown in Figs. 2 and 4. The ends of the suspension-ropes C are applied to the bar  $e'$  by means of rings or loops  $f$ , while the setting-rope E' is applied to the bar  $e'$  in the same manner by a ring,  $f'$ , as shown in Figs. 2 and 3. In case of fire the lever  $e^3$  of the safety appliance is released from the bar  $e'$  by a quick pull, so that by the weight of the scenery the rings  $f f'$  are released from the bar  $e'$  and the entire scenery dropped to the floor of the stage. The rings  $f$  are large enough to slip easily from the lever, so that they cannot bind on the bar  $e'$ . The releasing-lever  $e^3$  is provided with a fulcrumed and spring-actuated locking-lever,  $e^6$ , that engages a notch,  $e^7$ , at the outer end of the bar  $e'$ , the upper end of said lever being close to the upper end of the releasing-lever  $e^3$ , so that when the latter is taken hold of the handle of the locking-lever  $e^6$  is also grasped and released from the bar  $e'$ , upon which the releasing-lever  $e^3$  is released from the bar  $e'$  by pulling it forward. The locking-lever  $e^6$  prevents the accidental release of the lever  $e^3$  from the bar  $e'$  in raising or lowering the scenery, so that no inopportune dropping of the scenery can take place.

I do not confine myself to a special construction of the safety appliance D, as many different constructions can be designed, nor to any special construction of the locking device for the releasing-lever of the safety appliance.

The advantages of my improved mode of hanging stage-scenery are, that in case of fire, instead of cutting the ropes with an ax, which was the mode heretofore employed for lowering the scenery, the same is quickly and effectually lowered by releasing the levers of the different safety appliances, which are all preferably arranged alongside of each other at one side of the stage and at a point convenient of access to the machinist or hands employed on the stage. The entire scenery can in case of fire be quickly dropped on the floor of the

stage by simply pulling the levers of the safety appliances, which takes little time and is easily accomplished without exposing the attendant to any danger, so that he is not liable to lose his presence of mind while attending to this duty.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. The combination, with stage-scenery, of suspension-ropes attached to said scenery, guide-pulleys vertically above the same, a central equalizing-pulley above said guide-pulleys, a side guide-pulley, a counterbalancing-weight attached to the suspension-ropes, and a setting-rope connected to the weight and passed over guide-pulleys below and above the same, substantially as set forth.

2. The combination of stage-scenery, suspension-ropes passing over guide-pulleys, a safety appliance for releasing said ropes in case of fire, and means for setting the scenery, substantially as set forth.

3. The combination, with stage-scenery, of suspension-ropes, guide-pulleys above said scenery, a central equalizing-pulley above said guide-pulleys, a side guide-pulley, a counterbalancing-weight, a safety appliance interposed between the ends of the suspension-ropes and the counterbalancing-weight, and a setting-rope applied to the safety appliance and to the counterbalancing-weight, substantially as set forth.

4. The combination of stage-scenery, suspension-ropes attached to the same, guide-pulleys for said suspension-ropes, a safety appliance attached to the ends of said ropes, and a locking device for said safety appliance, substantially as set forth.

In testimony that I claim the foregoing as my invention I have signed my name in presence of two subscribing witnesses.

JOSEPH FRIED.

Witnesses:

PAUL GOEPEL,  
CARL KARP.