

H. F. PARSONS.

Stage-Scenery and Shifting-Devices.

No. 151,671.

Patented June 2, 1874.

Fig. 1

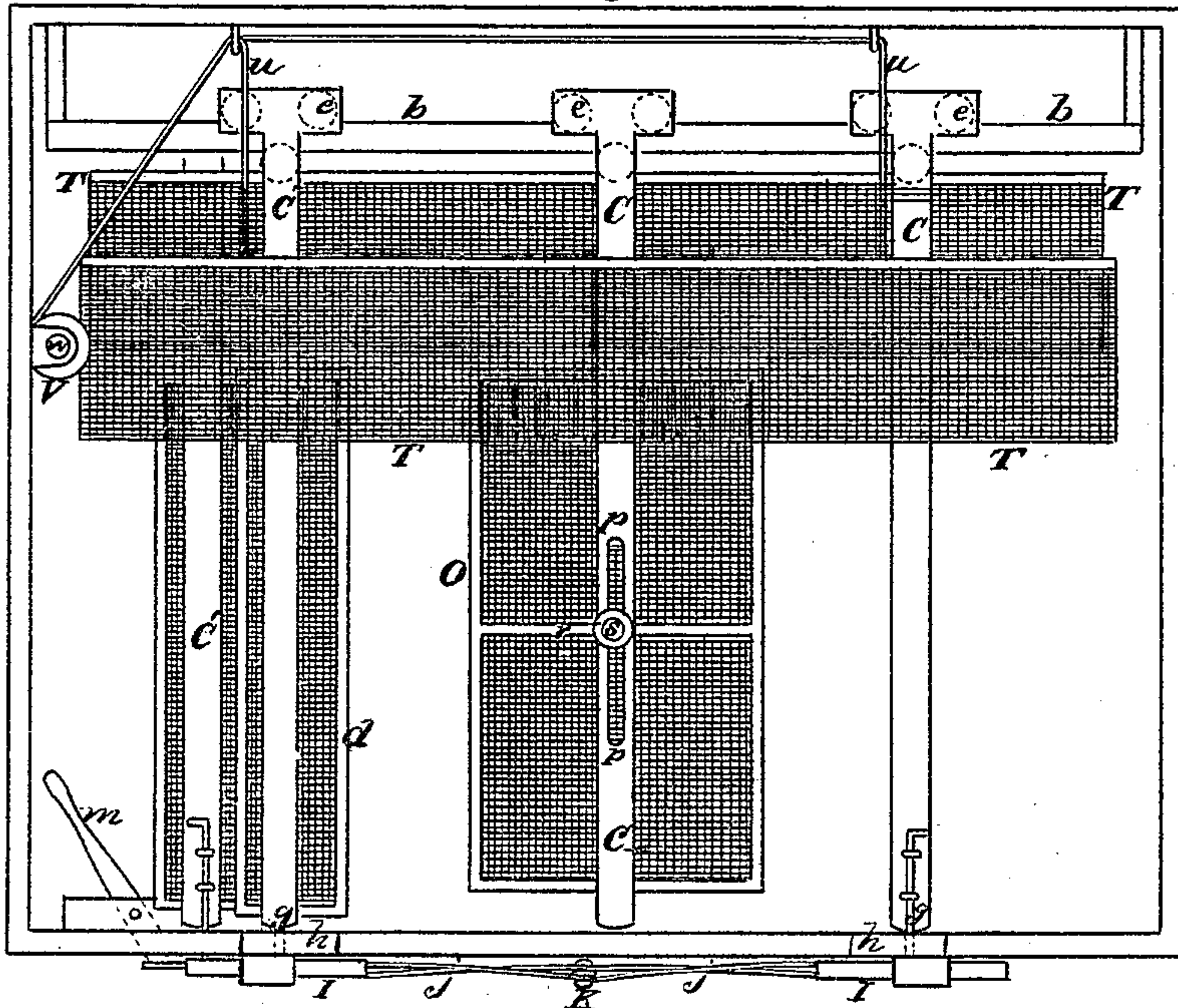


Fig. 2.

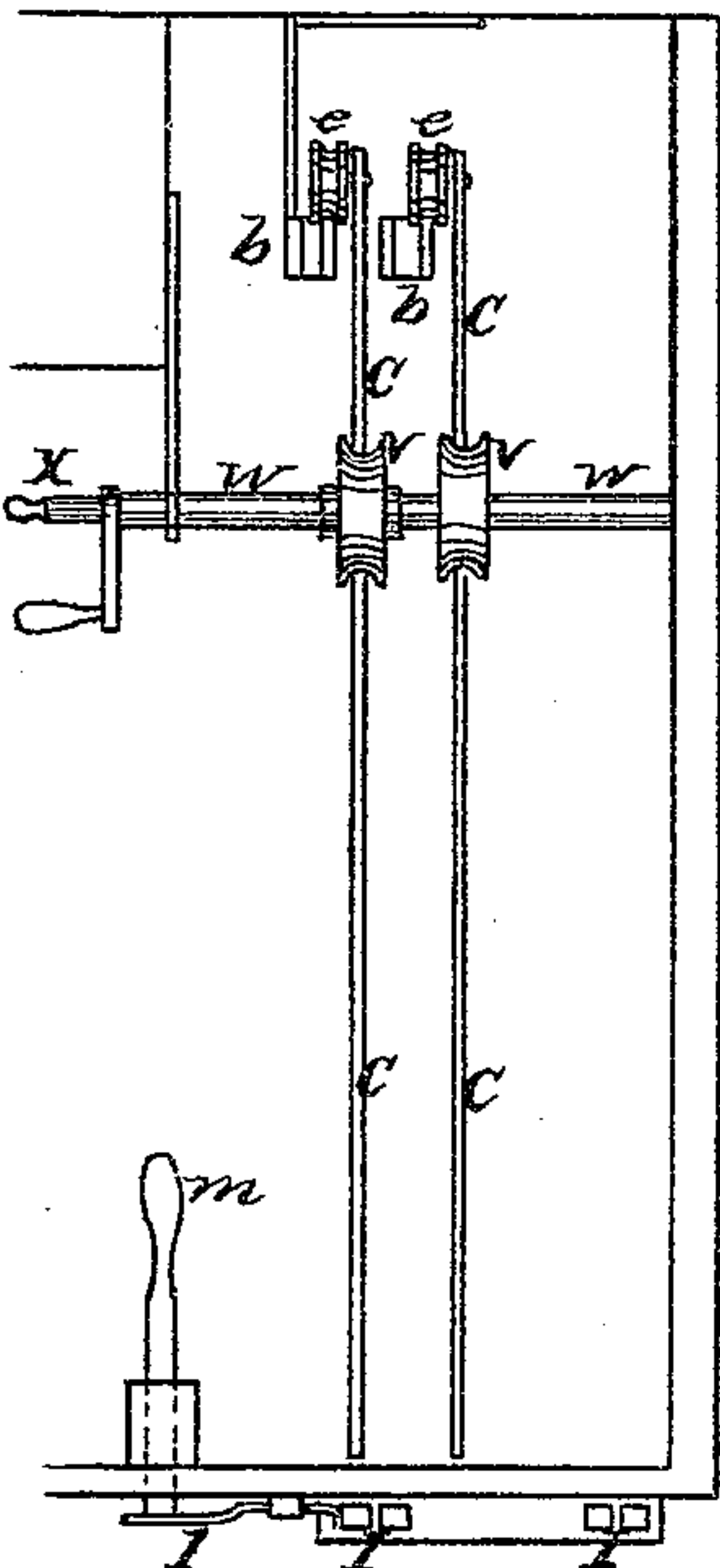


Fig. 3.

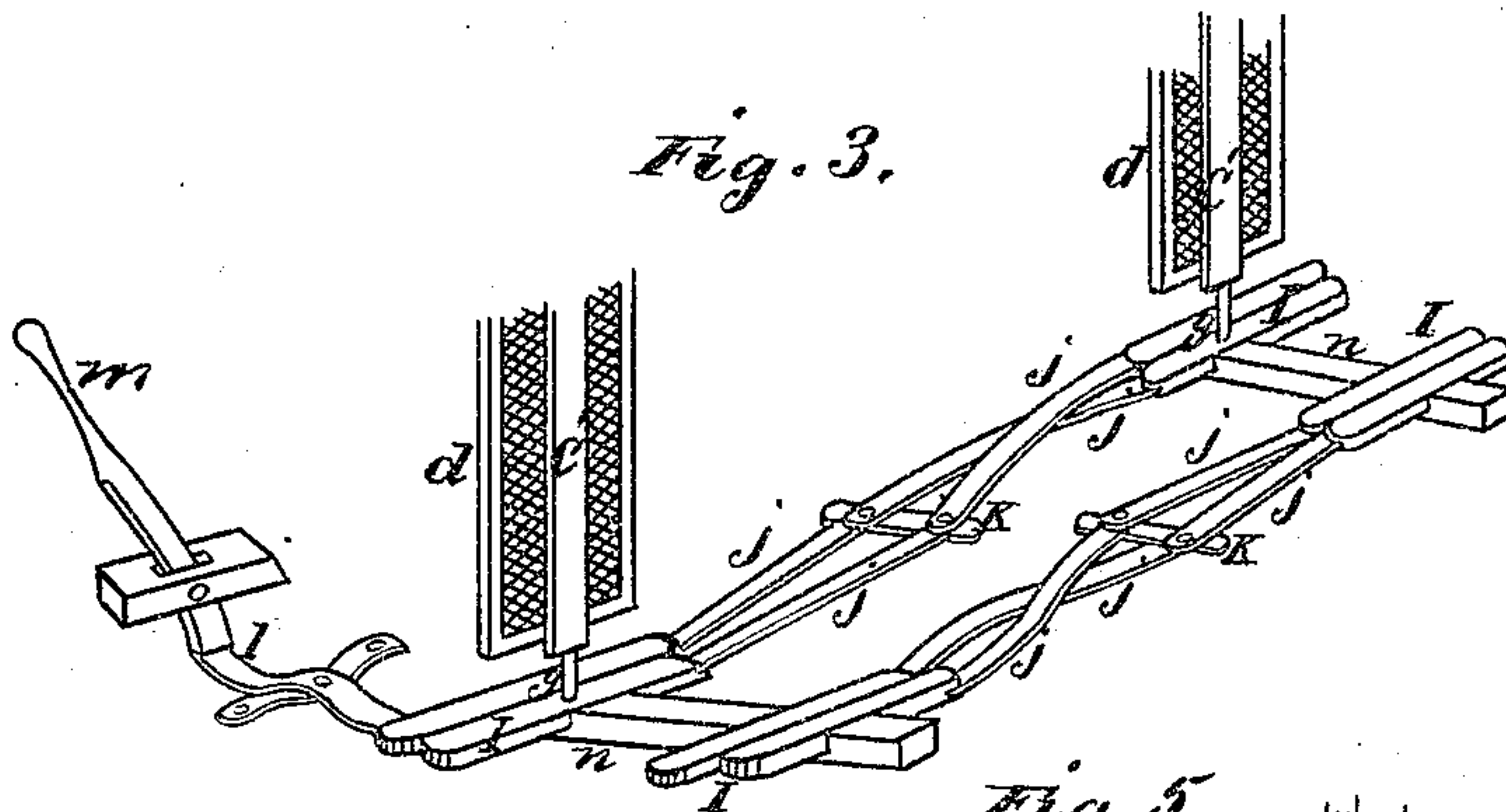


Fig. 4.

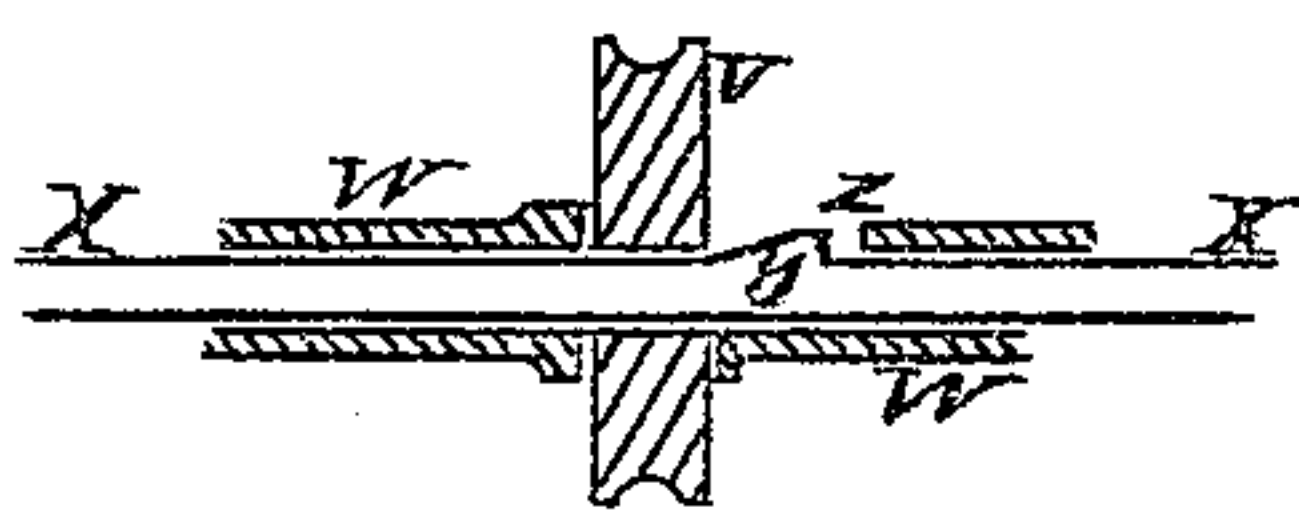
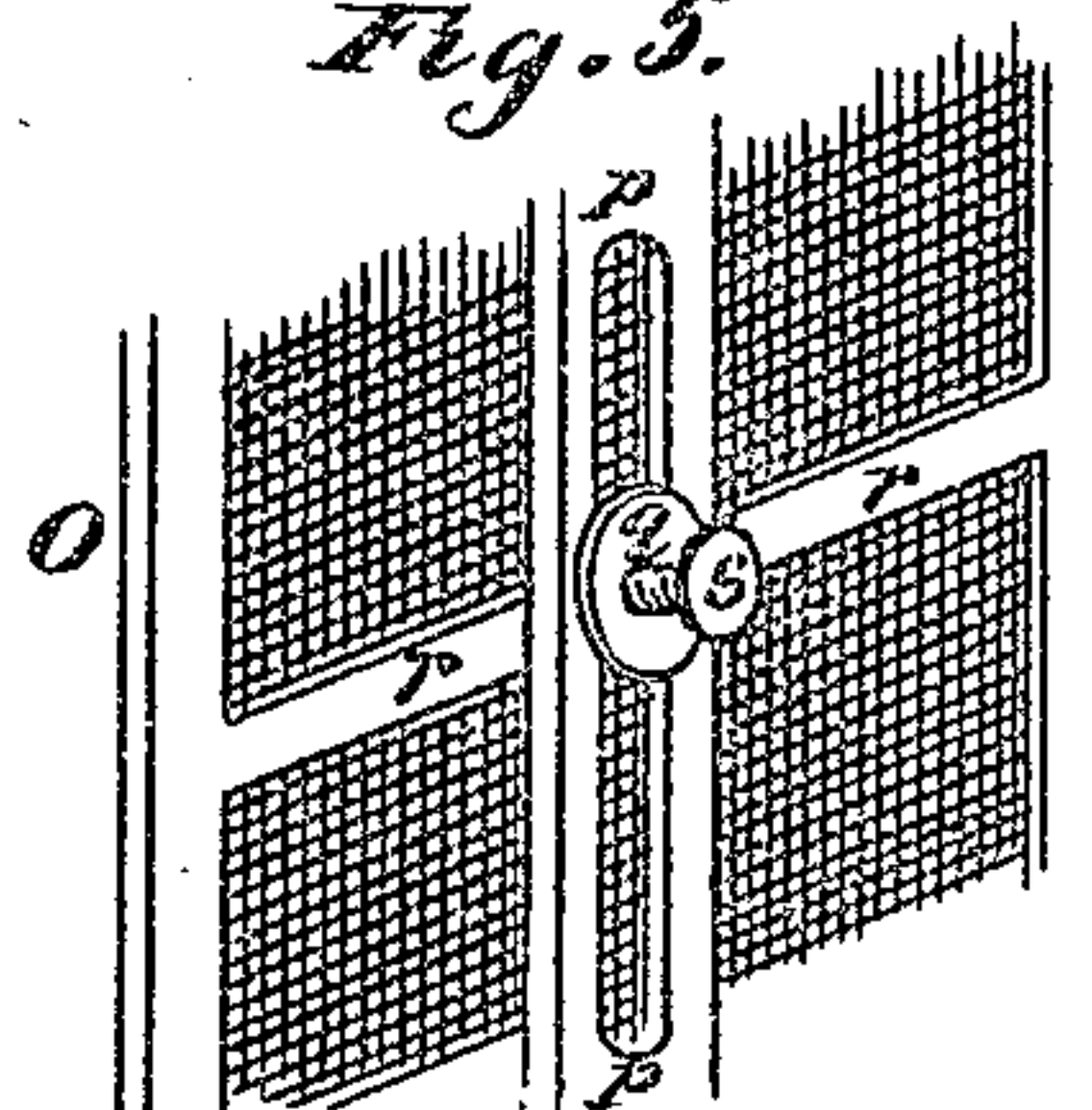


Fig. 5.



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UNITED STATES PATENT OFFICE.

HENRY F. PARSONS, OF LOS ANGELES, CALIFORNIA.

IMPROVEMENT IN STAGE-SCENERY AND SHIFTING DEVICES.

Specification forming part of Letters Patent No. **151,671**, dated June 2, 1874; application filed March 24, 1874.

To all whom it may concern:

Be it known that I, HENRY F. PARSONS, of Los Angeles city and county, State of California, have invented Improvements in Stage Machinery; and I do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use my said invention or improvement without further invention or experiment.

My invention relates to improvements in constructing, mounting, and operating the ordinary shifting scenes, wings, and flies of a theatrical stage.

In order to properly explain my improvements, reference is had, in the following description, to the drawings which accompany this specification, in which—

Figure 1 is a back view of my stage mechanism. Fig. 2 is a side view. Fig. 3 is a perspective view of the operating-levers for the wing. Fig. 4 is a section of the shaft-coupling. Fig. 5 is a view, showing the manner of securing the scenes to their operating-uprights.

The first part of my invention consists in the employment of wire-cloth as a material or foundation-cloth upon which to paint or otherwise delineate the scenes which are employed upon a theatrical stage.

By employing wire-cloth of a fine mesh, a few coats of paint will entirely fill up the meshes so as to provide a solid surface.

Usually the process of painting the scenes upon the cloth will be sufficient to fill up the meshes; but, if the meshes are too large, I apply one or two preparatory coats of paint before commencing to paint the scene.

By employing wire-cloth for the shifting scenes, wings, and flies, instead of the ordinary canvas or cloth scenes, the stage is rendered comparatively fire-proof, and any sensational plays, which have heretofore been attended with great danger, can be produced with impunity, as the entire scene can be encompassed with flame without danger of a conflagration. The wire-cloth scenes can also be more easily and conveniently handled than the ordinary canvas scenes.

To mount these scenes, I construct as many

tracks or rails *b* near the stage-ceiling as may be required, the tracks running across the breadth of the stage. From each of these tracks I suspend one or more bars or rods, *C*, by means of one or more wheels or rollers, *e*, at the upper end of the rods or bars. These rollers bear and move upon the track or tracks *b*, so that the bar or rod *C* can be shifted across the breadth of the stage to any desired point along the track. One of these suspended bars *C'*, at each end of each track, I employ as a support for the wings *d*, the wings being fastened to the bars permanently. Each of the wing bars or supports has a pin-extension, *g*, at its lower end, which passes down through a slot, *h*, in the stage-floor directly beneath the bars, and is secured in a sliding block, *I*, on the under side of the floor. The slots *h* are long enough to allow each wing to be moved its entire width, in order to permit of its being thrown out in advance of the others.

In order to provide for the automatic and simultaneous shifting of any two opposite wings, each pair of blocks, *I*, upon one side of the stage, is connected with the pair directly opposite by means of rods *j j*, which connect them with the opposite ends of a centrally-pivoted lever, *K*, midway between the blocks. The rods *j* at one side of the pivoted lever *K* are crossed, so as to give an opposite motion to each two opposing wings. A pivoted lever, *l*, has one end secured to one of the blocks *I*, while its opposite end is bent upward and passed through a slot or opening in the floor, as shown. A hand-lever, *m*, is secured to this upward-extended end of the lever *l*, so that a person standing on the floor above can operate the sliding blocks by simply moving the lever *m* back and forth, each opposite pair moving simultaneously in opposite directions. The wing-bars, being secured at their lower ends to the sliding blocks *I*, will likewise be moved or shifted back or forth by the movement of the lever *m*, the rollers or wheel at their upper ends moving upon the tracks. Two or more pairs or series of blocks can be connected together by centrally-pivoted levers *n*, if desired, so that the same lever serves to operate a large number of wings, or several levers can be used, as convenient. The screws or flats *O* can be attached to the pendent bars *C* by any conven-

ient means; but I prefer to make a longitudinal or vertical slot, *p*, in the bar at the proper height. The scene then being placed with its back against the front side of the bar, I pass a screw-hook, *q*, through the slot, and hook it over the middle plate or stiffening-bar *r* of the flat. A nut, *s*, is then screwed upon the screw-hook *q*, so as to bind firmly against the bar *C*, and thus hold the scene in place. When thus secured, the scene can be readily moved across the stage with slight effort, and, when necessary, can be removed and another substituted in a very short time. They also serve as up-rights, to which scaffolding can be secured, and thus avoid the use of heavy trestles, as is ordinarily used. The flies *T*, as above stated, are also made of wire-cloth. These flies I suspend from the ceiling, between the bars *C*, by means of cords or wires *u*, which pass up through a staple in the ceiling, and down to one side of the stage, where they are passed around and secured to pulleys *V* on a hollow shaft, *W*. This shaft will be long enough to accommodate one pulley, *V*, for each fly, and both cords or wires which support each fly are passed around and secured to the same pulley, so that when the pulley revolves the fly will be raised or lowered, according to the direction in which it revolves. The pulleys *V* are placed loosely upon the shaft *W*. A rod, *X*, passes through the hollow shaft, and is provided with inclined projections *Y* at the proper point, one of which passes through a slot, *Z*, in the tube close to each pulley. When the rod *X* is forced closely into the hollow shaft, these projections are carried away from the pulleys, so that they will remain stationary when the shaft revolves; but, when the rod is drawn in an opposite direction, the inclined projection engages with the pulleys, and they move with the shaft.

As many rods may be employed as will be required by the number of pulleys.

By this arrangement, the principal stage mechanism can be quickly and easily operated by one or two persons, while the stage will be comparatively fire-proof.

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

1. The improved method of preventing conflagration in theaters by means of scenery, including sliding and drop scenes, wings, flies, and other hangings, formed of and painted on wire-cloth fabric, substantially as herein described.

2. The overhead tracks or rails *b*, in combination with the suspended bars *C*, with their wheels or rollers *c* and the suspended flats *O*, substantially as and for the purpose above described.

3. The suspended bars *C'*, with their attached wings *d*, and having the pin-extension *g*, which connects the bars *C'* with the block *l*, through the slots *h*, in the stage-floor, in combination with the series of crossed and pivoted levers *j j k l m n*, all combined and arranged to operate substantially as above described.

4. The bars *C*, having the slots *p*, in combination with the flats *O*, with their stiffening-bar *r*, and the screw-hook *q*, with its nut *s*, or equivalent device, substantially as and for the purpose above described.

5. The flies *T*, suspended by the cords or wires *u*, in combination with the hollow shaft *W*, with its loose pulleys *V* and coupling or clutch rod *X*, all combined and arranged to operate substantially as described.

In witness whereof I hereunto set my hand and seal.

HENRY F. PARSONS. [L. S.]

Witnesses:

JOHN L. BOONE,
C. M. RICHARDSON.