

(No Model.)

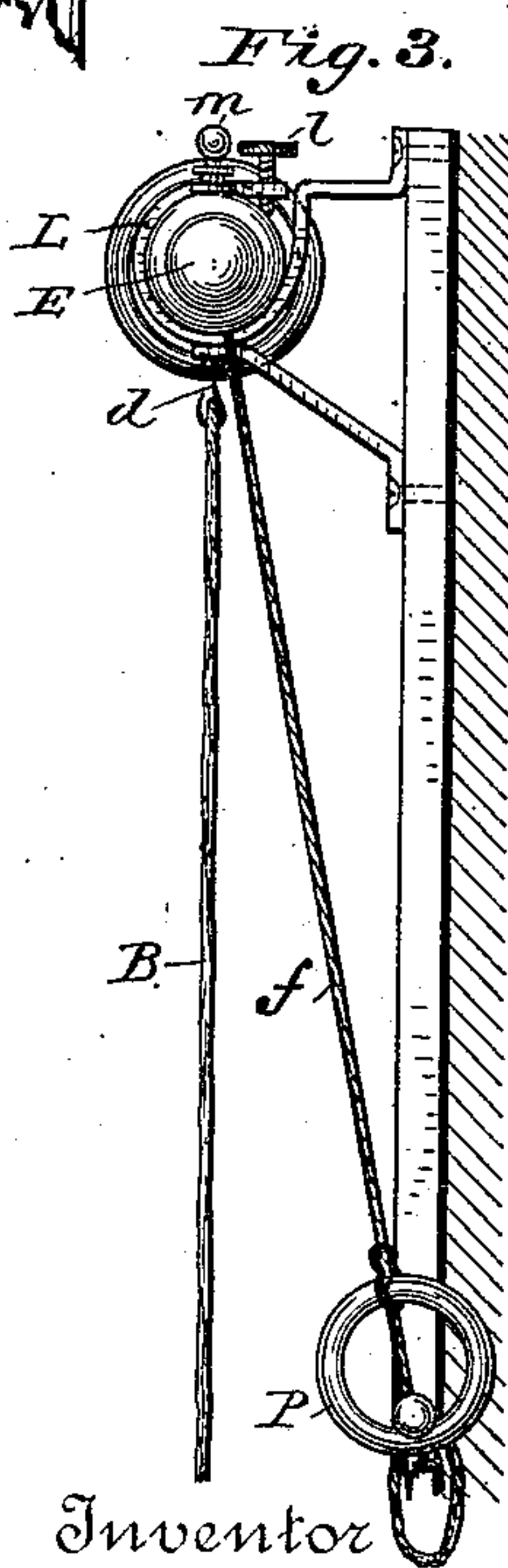
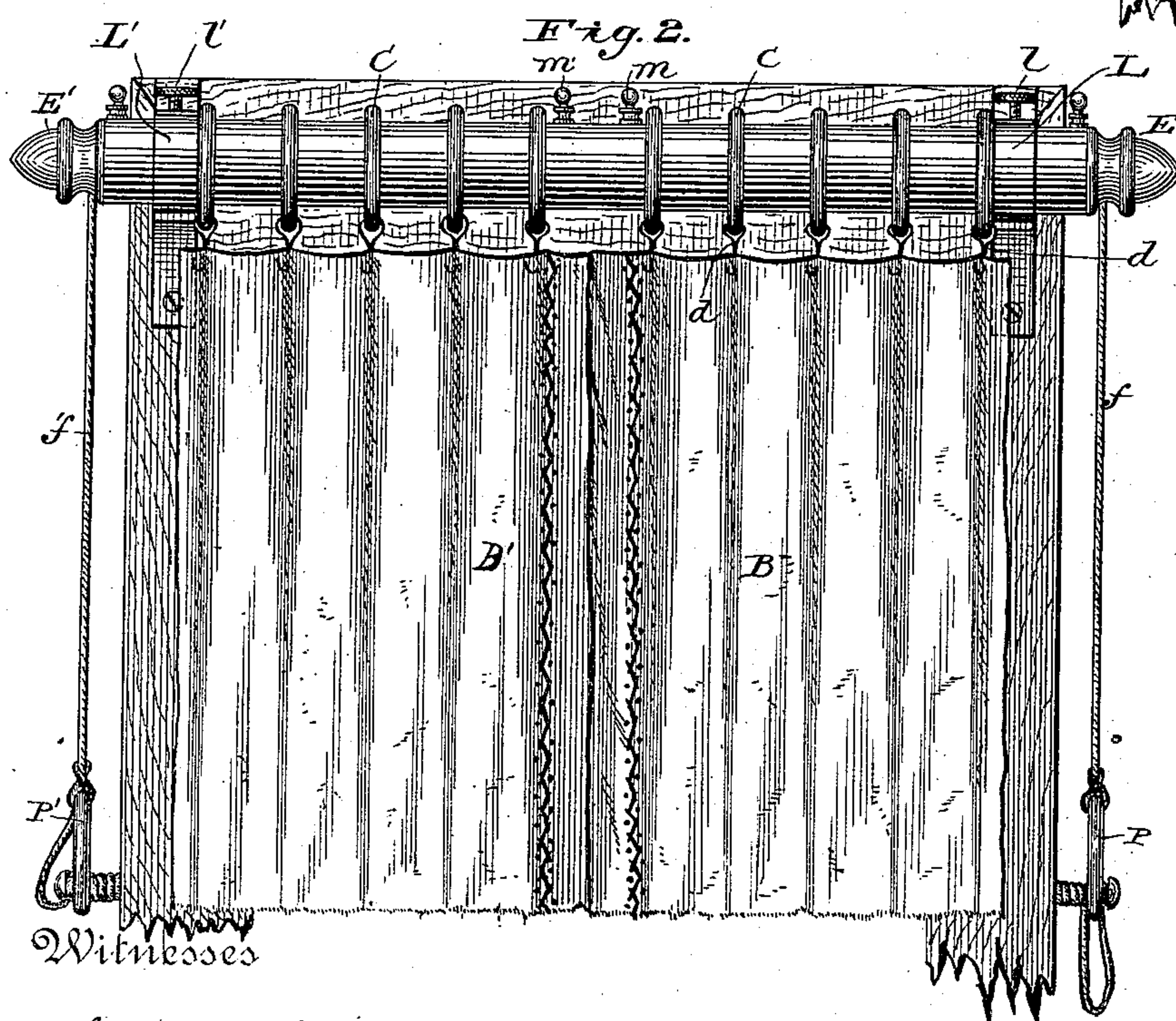
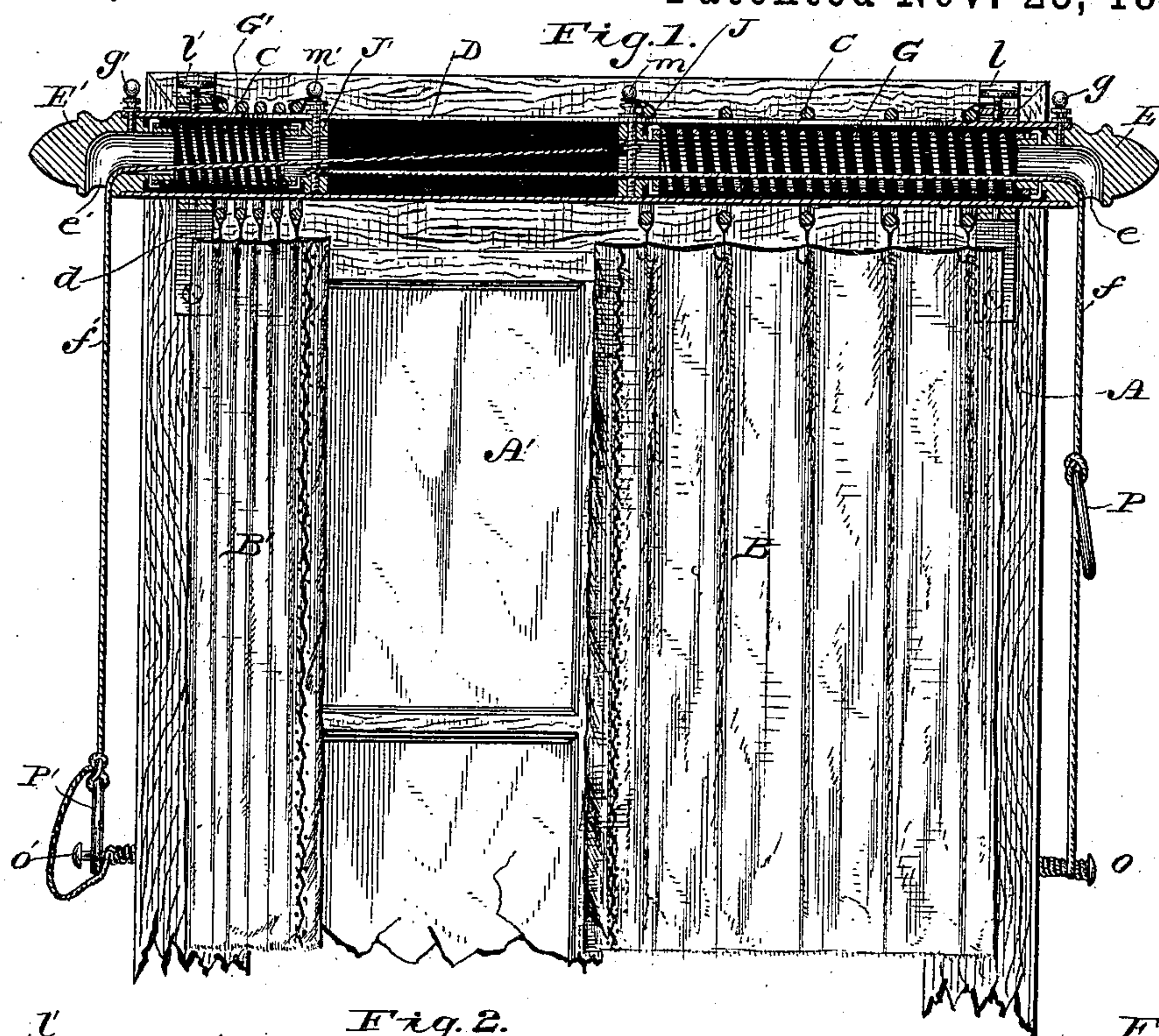
3. Sheets—Sheet 1.

H. D. B. LEFFERTS.

DEVICE FOR SUSPENDING CURTAINS.

No. 352,953.

Patented Nov. 23, 1886.



H. W. Elmore.

Fred. V. Fischer,

Henry D. B. Lefferts.

By his Attorney

John Lemmie.

(No Model.)

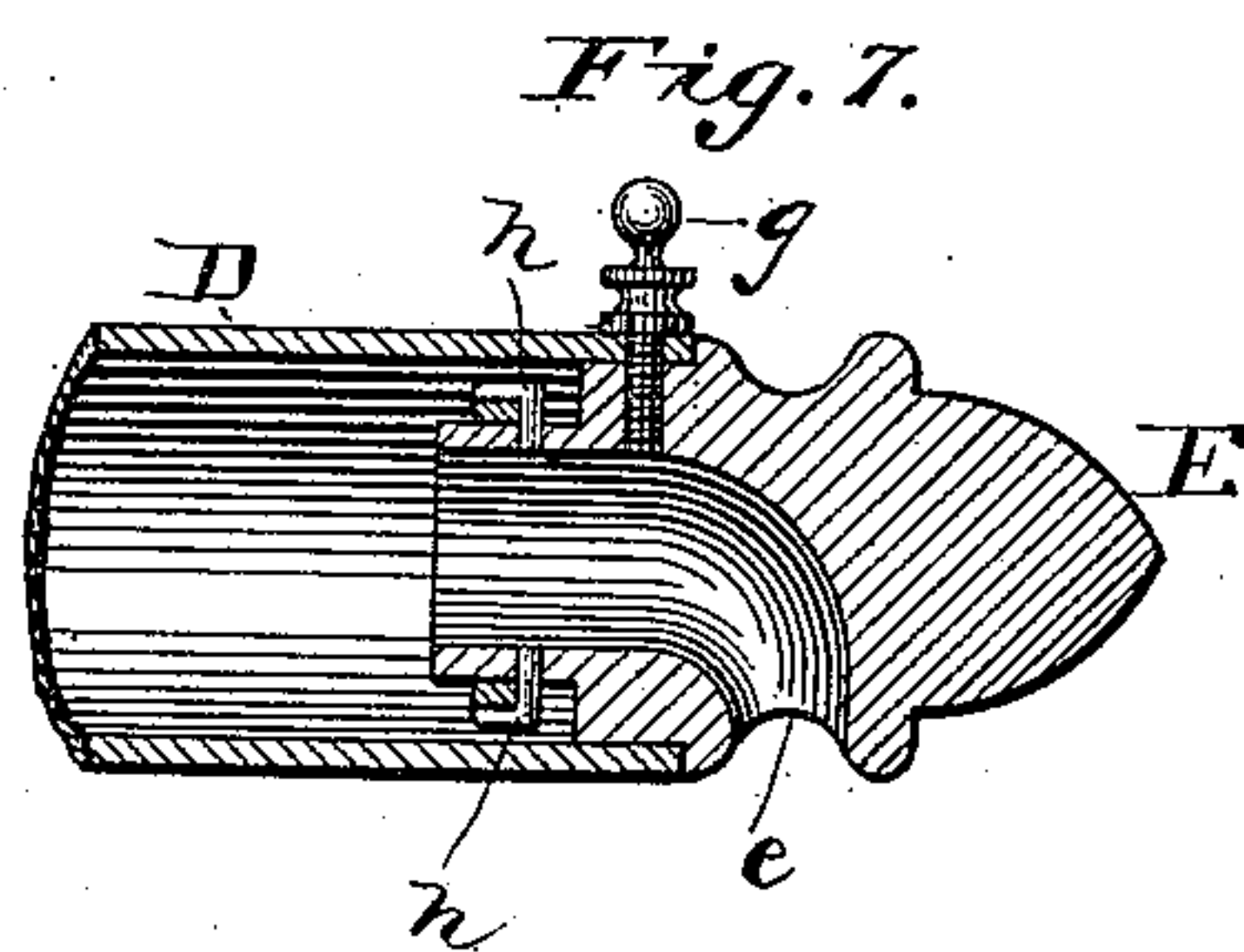
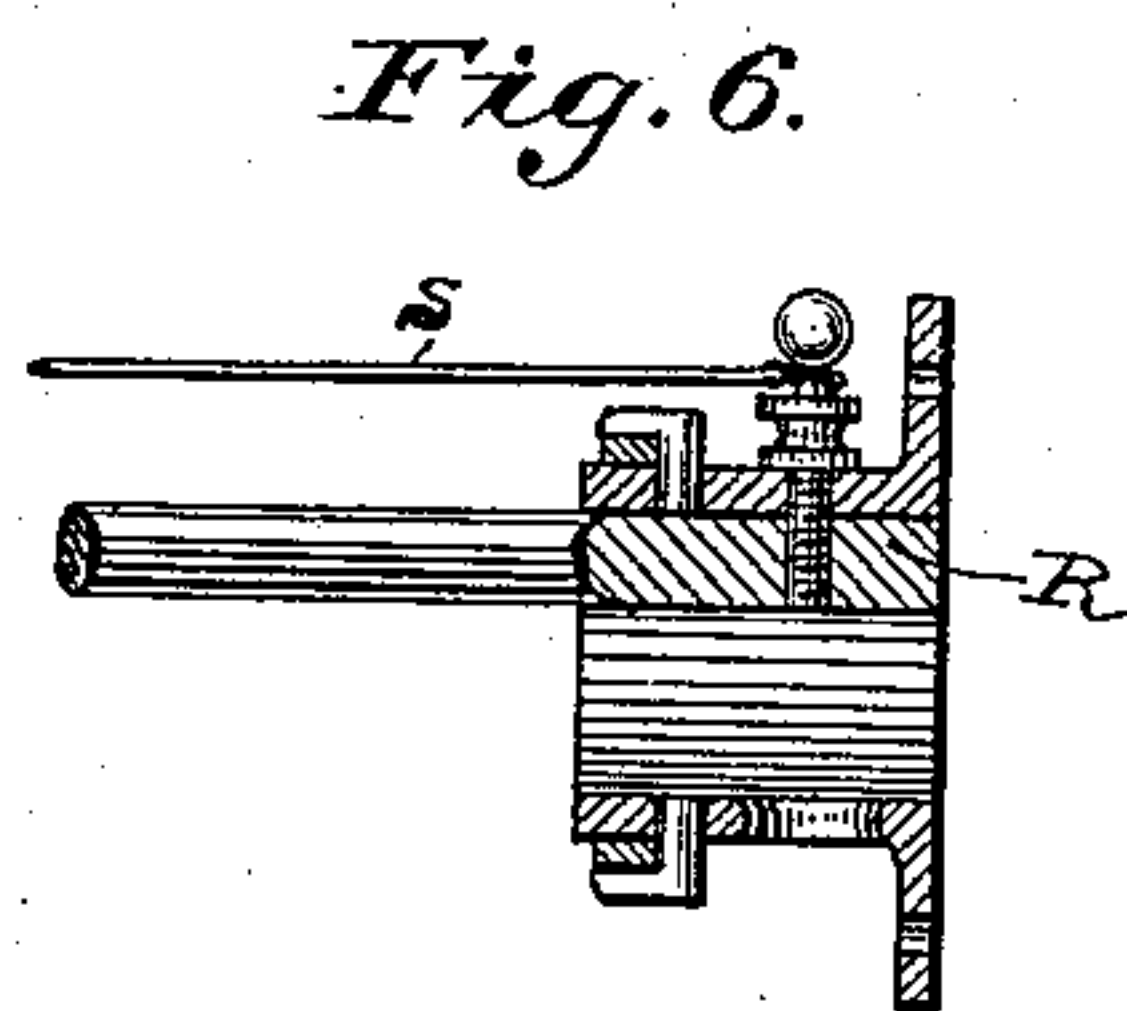
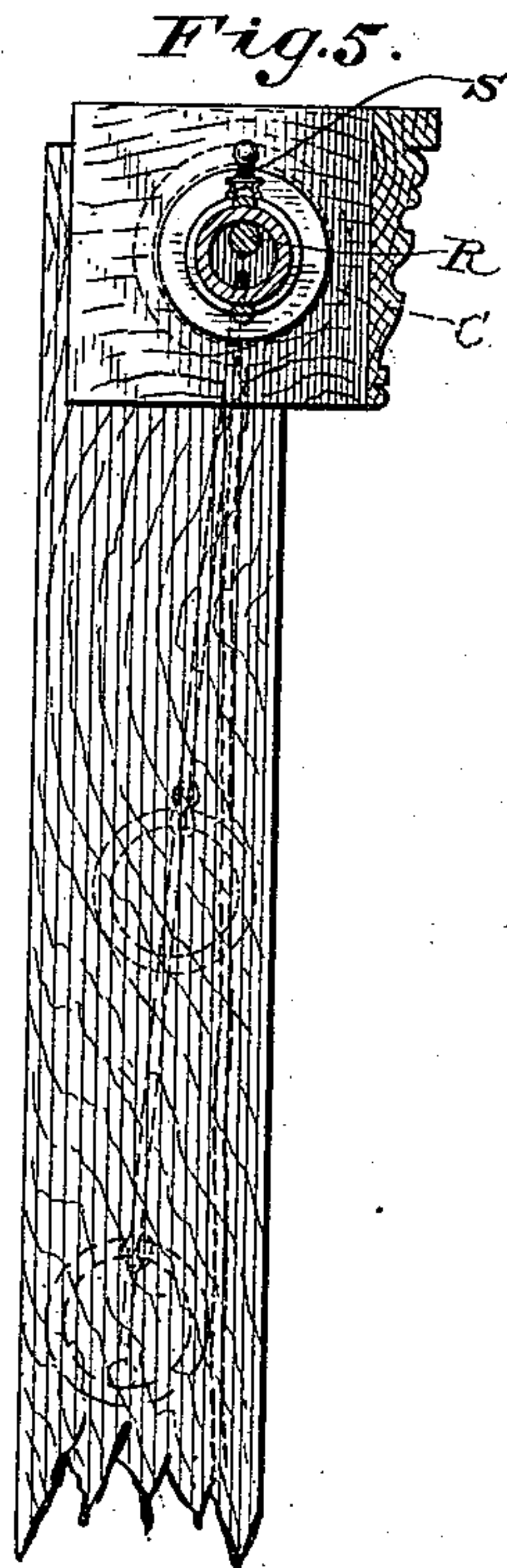
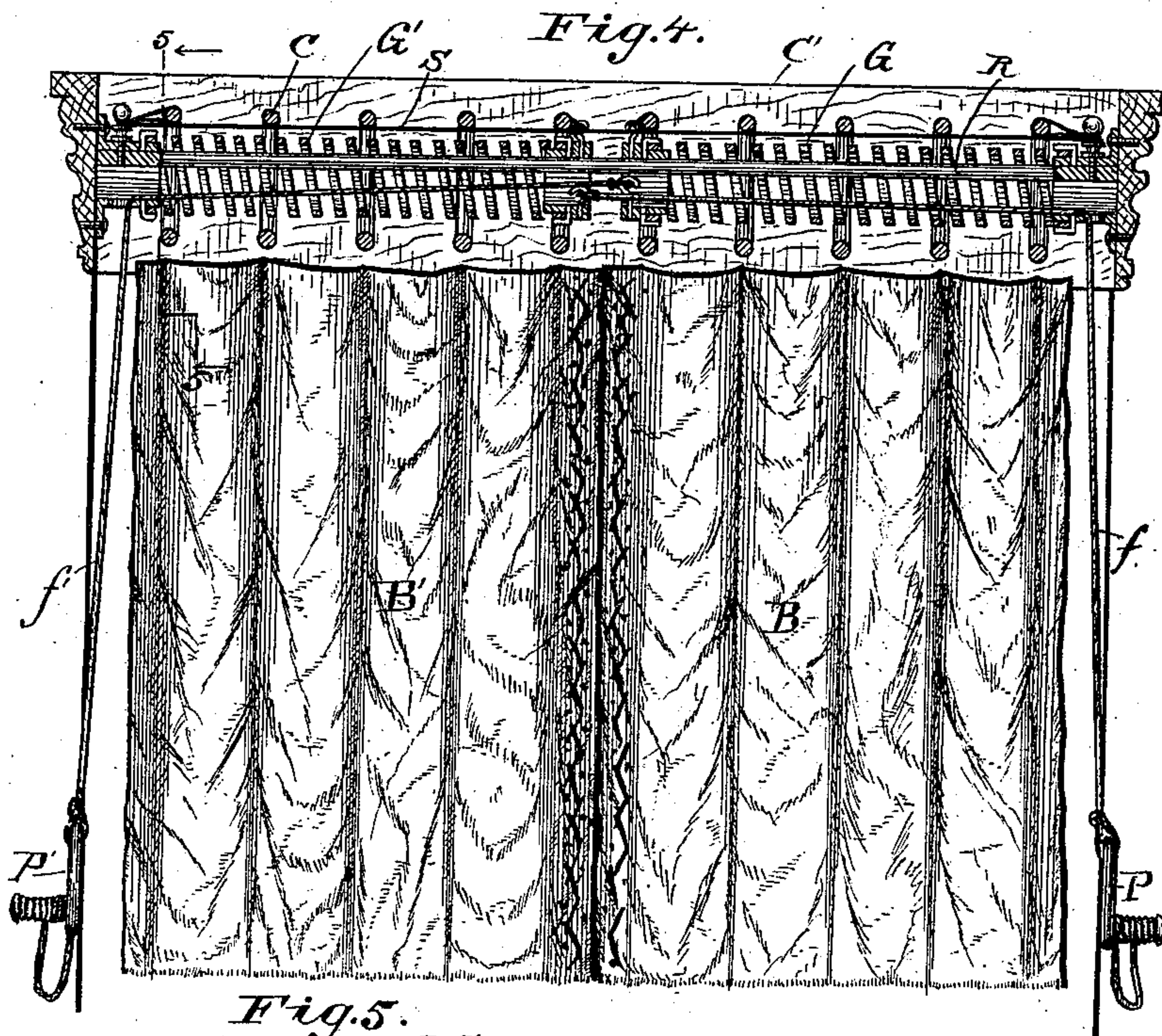
3 Sheets—Sheet 2.

H. D. B. LEFFERTS.

DEVICE FOR SUSPENDING CURTAINS.

No. 352,953.

Patented Nov. 23, 1886.



Witnesses

H. W. Elmore.

Fred V. Fischer.

Inventor

Henry D. B. Lefferts

By his Attorney

John C. Knie.

(No Model.)

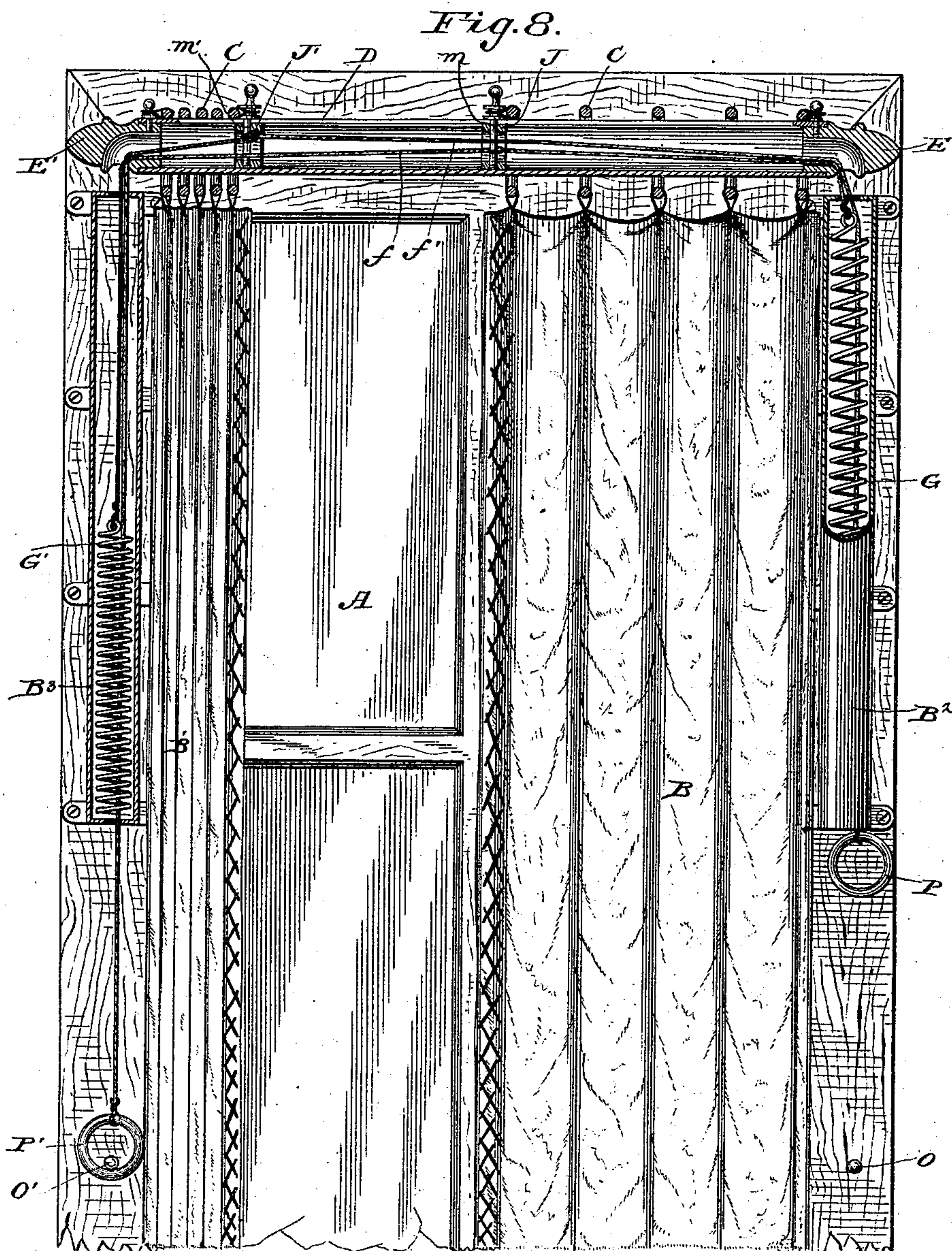
3 Sheets—Sheet 3.

H. D. B. LEFFERTS.

DEVICE FOR SUSPENDING CURTAINS.

No. 352,953.

Patented Nov. 23, 1886.



Witnesses

Inventor

H. W. Elmore,

Henry D. B. Lefferts,

Fred. V. Fischer.

By his Attorney

John Pennie.

UNITED STATES PATENT OFFICE.

HENRY D. B. LEFFERTS, OF NEW BRUNSWICK, NEW JERSEY.

DEVICE FOR SUSPENDING CURTAINS.

SPECIFICATION forming part of Letters Patent No. 352,953, dated November 23, 1886.

Application filed March 12, 1886. Serial No. 194,989. (No model.)

To all whom it may concern:

Be it known that I, HENRY D. B. LEFFERTS, a citizen of the United States, residing at New Brunswick, in the county of Middlesex and State of New Jersey, have invented certain new and useful Improvements in Devices for Sus-
5 pending Portières, Curtains, and the Like; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the
10 art to which it appertains to make and use the same.

My invention relates to means for suspending portière or other fabrics in such manner
15 that they may be readily drawn apart without touching the material itself, and as quickly restored to the closed position without exertion on behalf of the operator.

The particulars of my invention are illustrated in the accompanying drawings, wherein—

Figure 1 represents an elevation of a door-casing and door, in front of which a portière is suspended, the portière-bar being shown in
25 longitudinal section. Fig. 2 represents a front elevation of the same, and Fig. 3 a side elevation. Fig. 4 represents a rear elevation of a cornice behind which a portière or curtain fabric is suspended, and illustrates a modified
30 form of the means employed for suspending the same. Fig. 5 is a cross-section upon the line 5 5 of Fig. 4. Fig. 6 is a detail longitudinal sectional view of the end fastening shown in Fig. 4, and Fig. 7 is a detail longitudinal sectional view of the end pieces shown
35 in Fig. 1. Fig. 8 represents in elevation a door, door-casing, and suspended curtain, the latter being supported and operated in accordance with a further modification of my invention, shown in section and partial elevation.
40

Similar letters of reference indicate like parts throughout the several views.

A represents the door-casing, and A' the door, in front of which are hung the door curtains or portières B B', suspended from a series
45 of rings, C, by means of hooks *d* in the ordinary manner. The ring C rests upon a hollow bar, D, closed at its ends by the ornamental end caps, E E', having openings *e e'*, respectively, through which the drawing-cords *f f'*
50 extend.

Within the body of the hollow bar, and at

each end thereof, are fastened springs G G', the inner ends of said springs being connected to lugs *h* upon the end caps, E E', and the forward ends of said springs being attached in
55 like manner to slotted blocks or travelers J J'. The mode of attachment of the springs to these pieces may, however, be varied in any suitable manner, as will be readily understood
60 by those skilled in the art.

The end caps, E E', are fastened within the bar by means of the removable fastening-screws *g g'*, and the bar itself is maintained in
65 position by means of the brackets L L' and clamping set-screws *l l'*. In their stretched position the springs G G' are extended in such manner as to bring the traveling blocks J J' to the center of the hollow bar, thereby closing the curtain fabrics, as represented in Fig. 2.
70 The bar itself is slotted at its upper part, and through this slot extend upwardly the pins or projections *m m'*. To these pins are connected in any suitable manner, as by small wires, the terminal rings of the portière fabric. The pins
75 are preferably screw-threaded, as shown, and extend through the pieces J J', forming means of attachment for the cords *f f'*. The said cords are for convenience wound upon pins *o o'*, attached to the door-casing, and rings P P'
80 are connected with the cords and adapted to engage also the said pins.

The mode of operation of this part of my invention is as follows: When the rings are released from the pins, as shown at the right
85 of Fig. 1, the contractile force of the springs G G' draws the blocks J J' apart until the curtains are drawn apart entirely from the door in front of which they hang. The pins *m m'*,
90 being connected with the outermost rings of the portière fabric, carry the latter with them, thereby folding the curtain fabrics longitudinally, as shown at the left of Fig. 1.

When it is desired to draw the curtains or close them, as represented in Fig. 2, the cords
95 F F' are drawn outwardly by means of the rings P P', said rings being secured by means of the pins *o o'*, the curtains or portière fabrics being drawn together to a common central line, as represented in that figure.
100

In Fig. 8 I have illustrated a modification of my invention wherein the retractile springs are located outside of the hollow suspending-bar, and are inclosed by the casings B² B³.

The construction and arrangement with respect to each other of the bar, sliding blocks, and end caps are similar to that represented in Fig. 1.

5 In Figs. 4 and 5 I have represented my invention as applied to an ordinary window-cornice. In this case I am enabled to dispense with the hollow bar by employing a rod, R, attached to the sides of the cornice C', said rod
10 being encircled by the springs, and by suspending a wire or small rod, S, above the springs, as shown, said wire or rod forming a rest or support for the rings C. In other respects the construction and operation of this
15 modification of my invention is identical with that hereinbefore described.

It will be noted that in all of the modifications of my invention the rings suspending the fabric are supported, not by the spring
20 itself, or in such manner as to interfere with the closing of the coils of the spring, but by independent devices outside of the springs. The rings, therefore, will have no tendency to retard the action of the springs by falling be-
25 tween the coil-convolutions. It will be observed, moreover, that whatever the size of the suspending-rings, their upper portions will always rest upon their supports directly in the path of movement of the upwardly-
30 projecting pins.

I am aware that it has been heretofore proposed to operate suspended fabrics by means of springs located within a hollow supporting-
35 bar, and I do not broadly claim such as of my invention.

I desire to be understood as not restricting my invention to the manipulation or suspension of any particular species of curtain or

portière, as it is evident that it may be applied with useful results to all curtains of similar character to those represented in the drawings. 40

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is— 45

1. A device for supporting and operating portières, curtains, and the like, consisting of a hollow bar longitudinally slotted at its upper portion, and supporting the suspending-rings, in combination with extensible springs, 50 one end of each spring having a fixed point of attachment, sliding blocks connected with the free ends of said springs, and having outwardly-projecting pins traveling within the bar-slot and connected with one of the sus- 55 pending-rings, and drawing-cords connected with the sliding blocks, substantially as described.

2. A device for supporting and operating portières, curtains, and the like, consisting of 60 a support for the suspending-rings, in combination with extensible springs located below the line of support of said rings, one end of each spring having a fixed point of attachment, sliding blocks connected with the free 65 ends of said springs and having outwardly-projecting pins connected with one of the suspending-rings, and drawing-cords connected with the sliding blocks, substantially as described. 70

In testimony whereof I affix my signature in presence of two witnesses.

HENRY D. B. LEFFERTS.

Witnesses:

JOHN M. FARLEY,
CHAS B. BENSON.