

(Model.)

D. MANUEL.
DOOR HANGER.

No. 318,125.

Patented May 19, 1885.

Fig. 1.

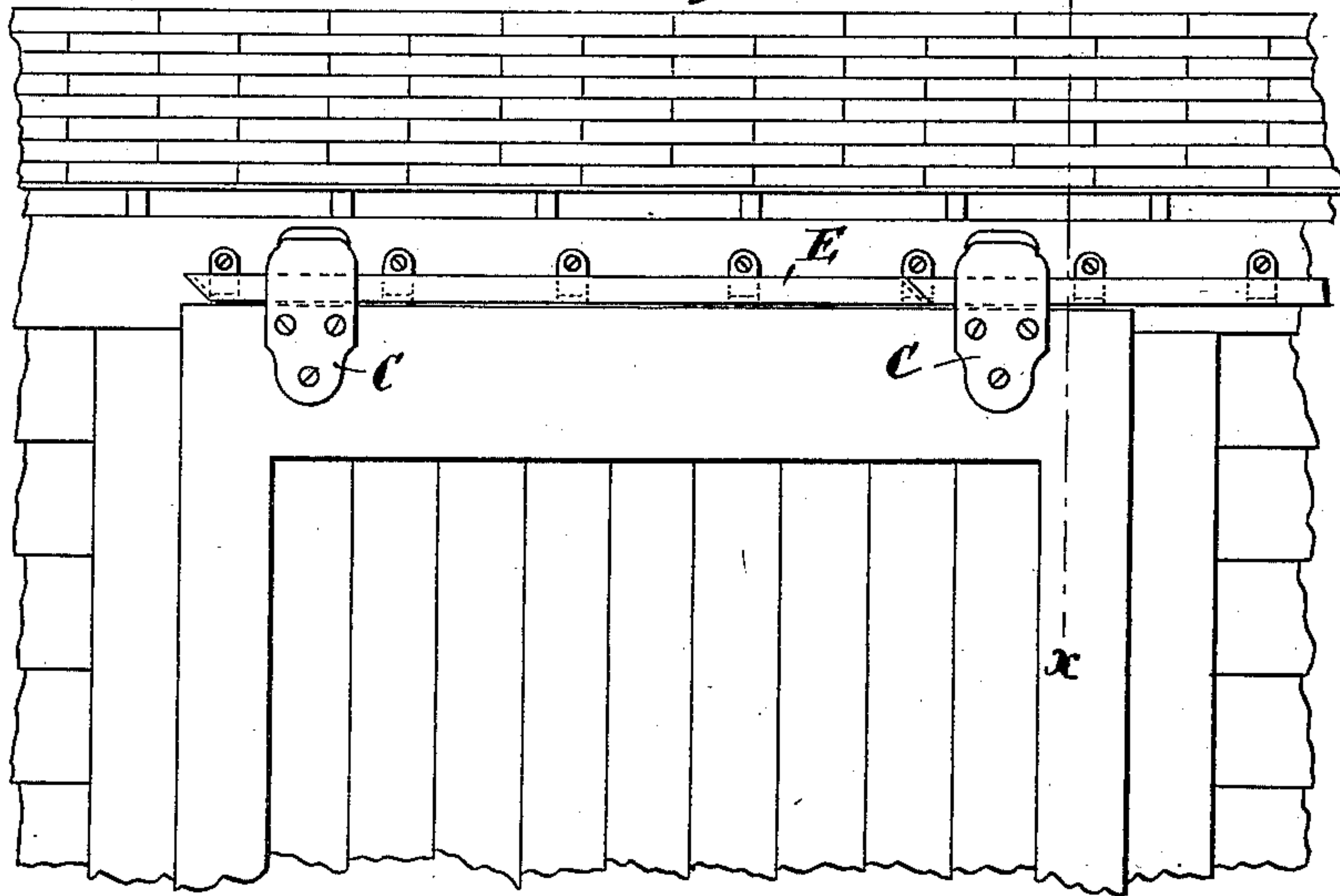


Fig. 2.

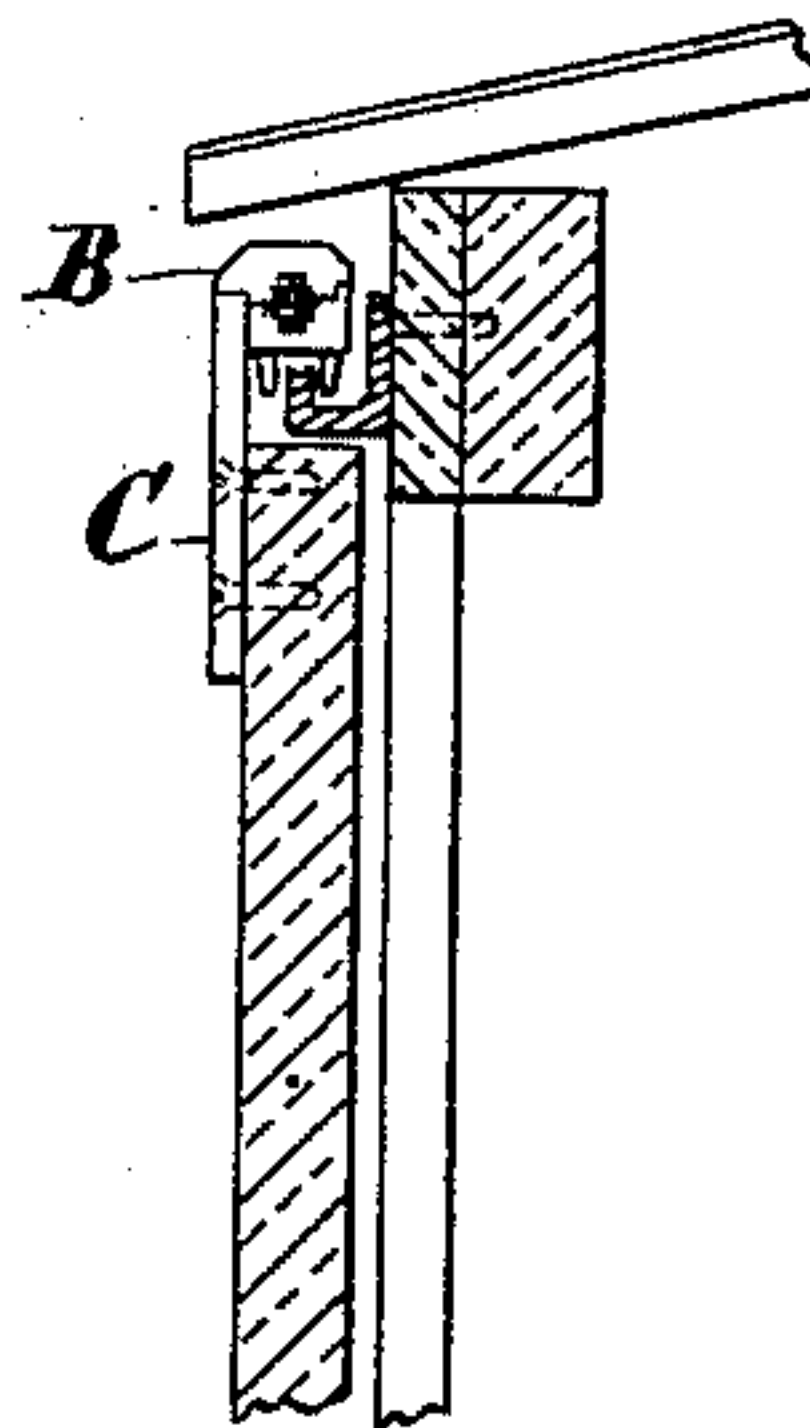
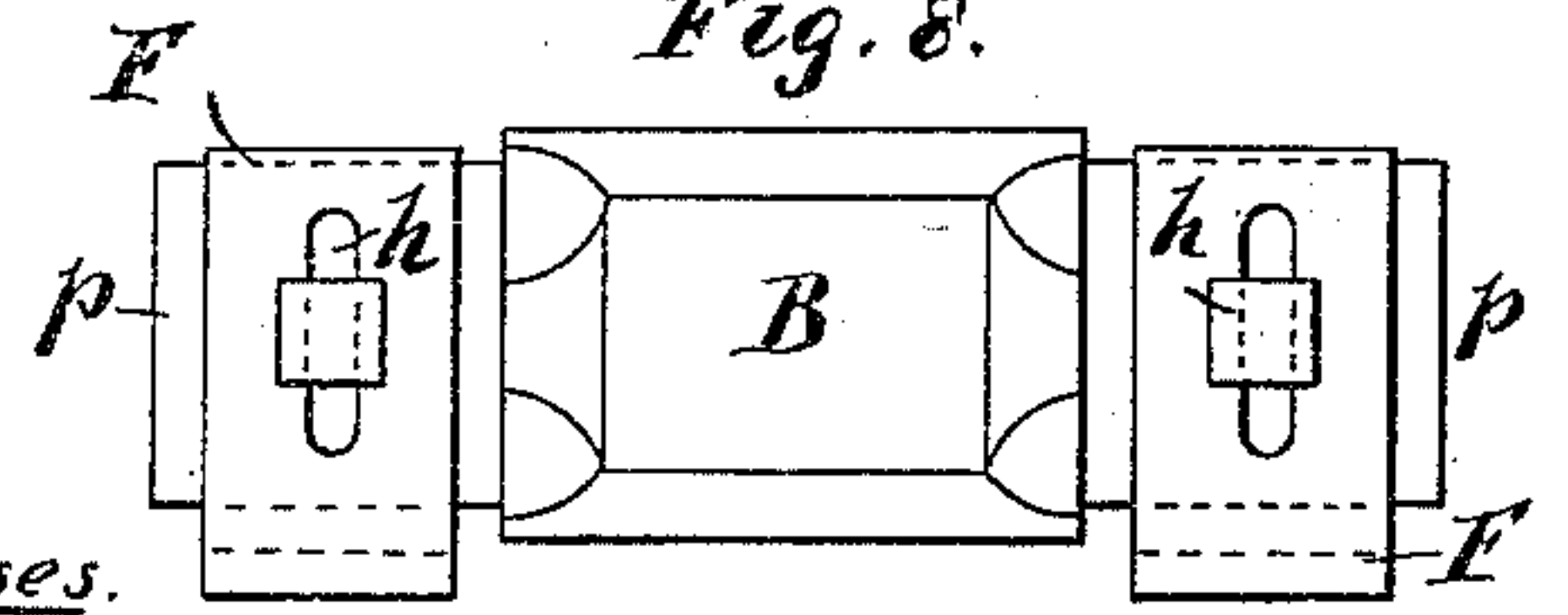
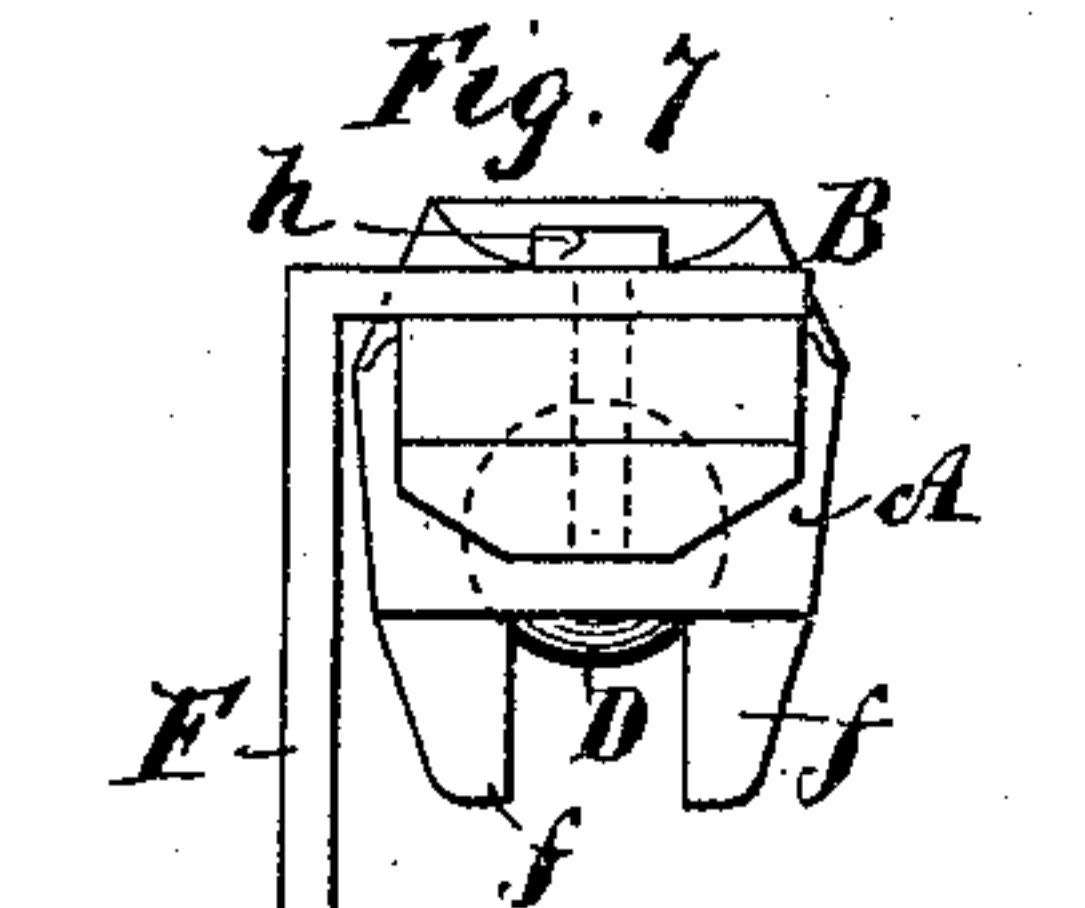
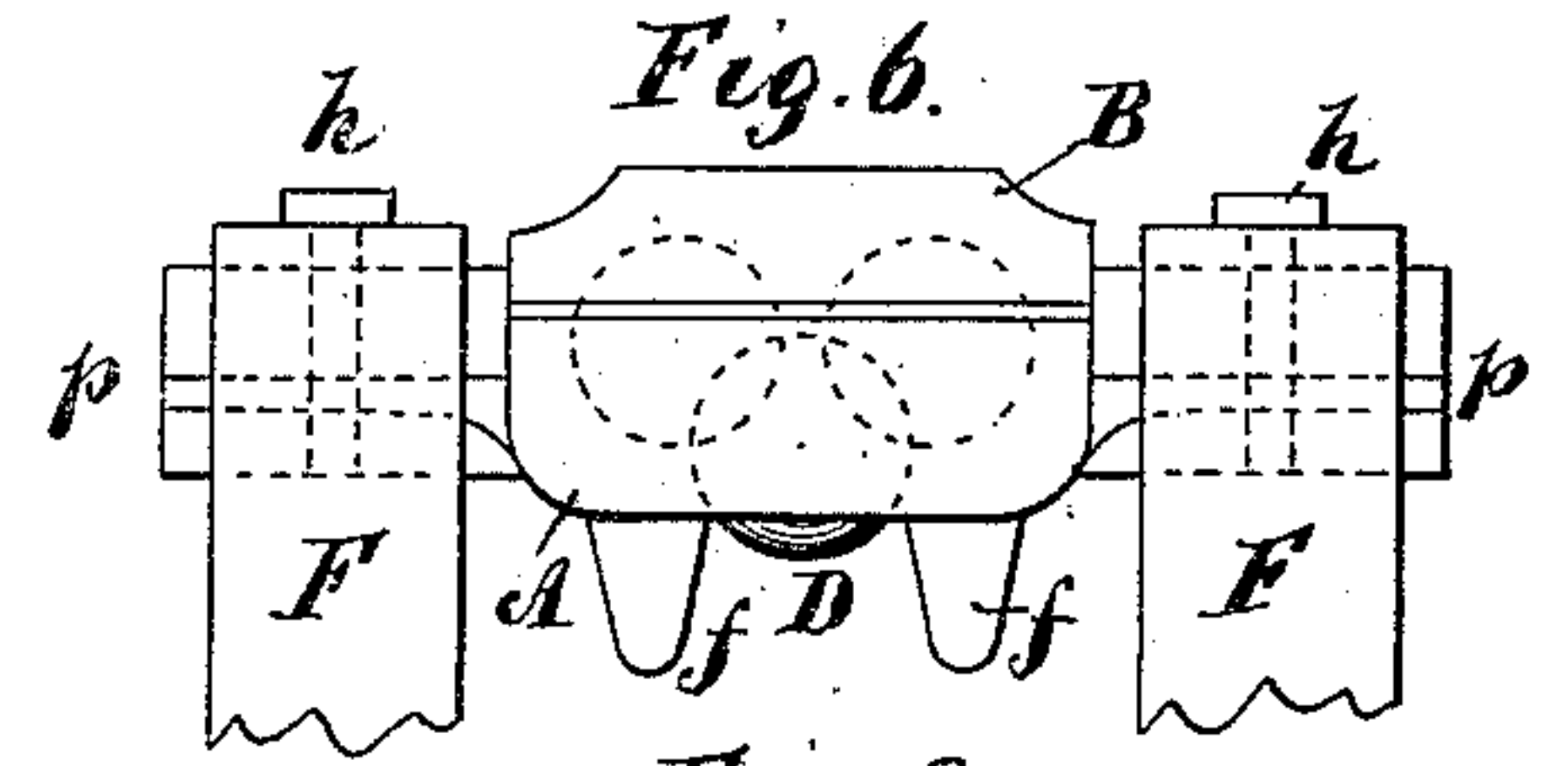
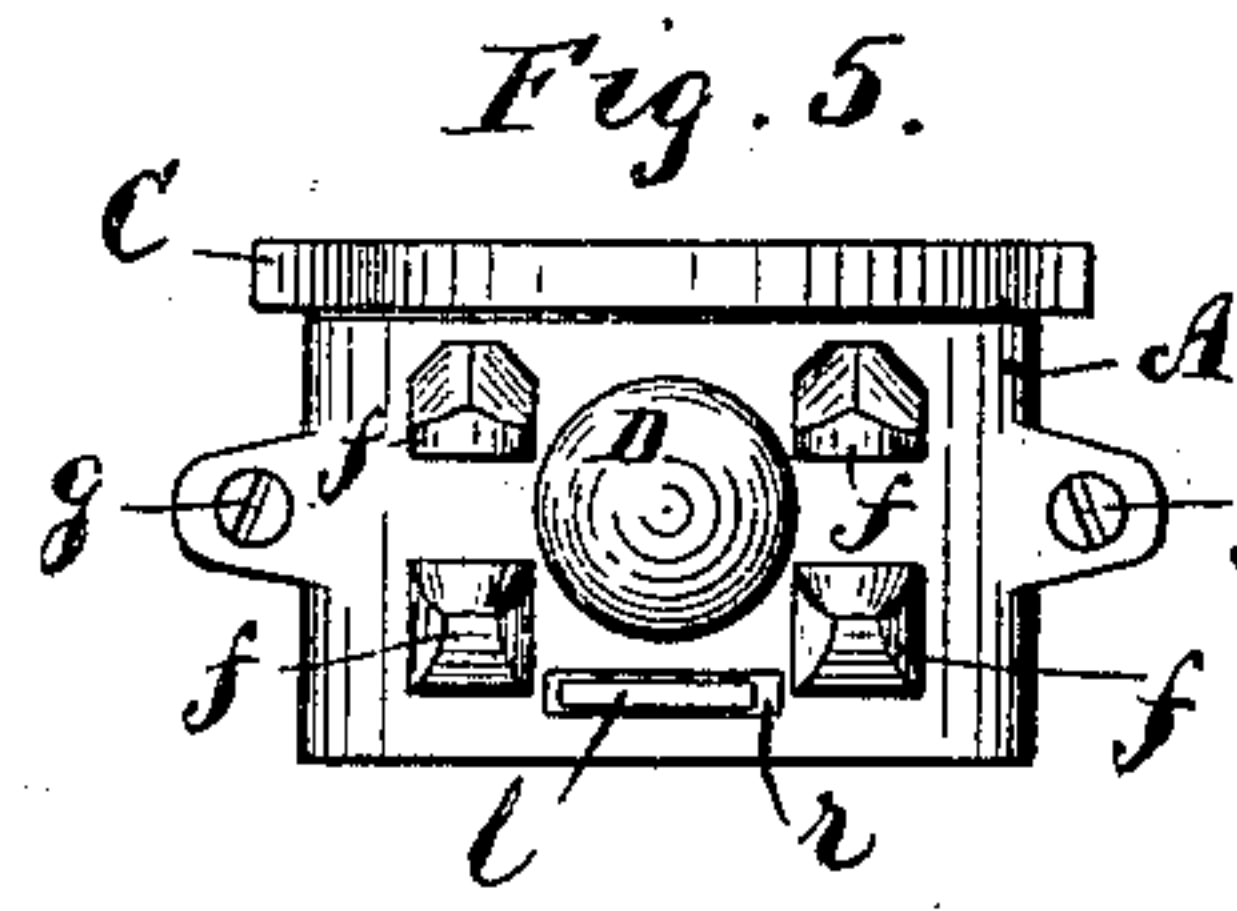
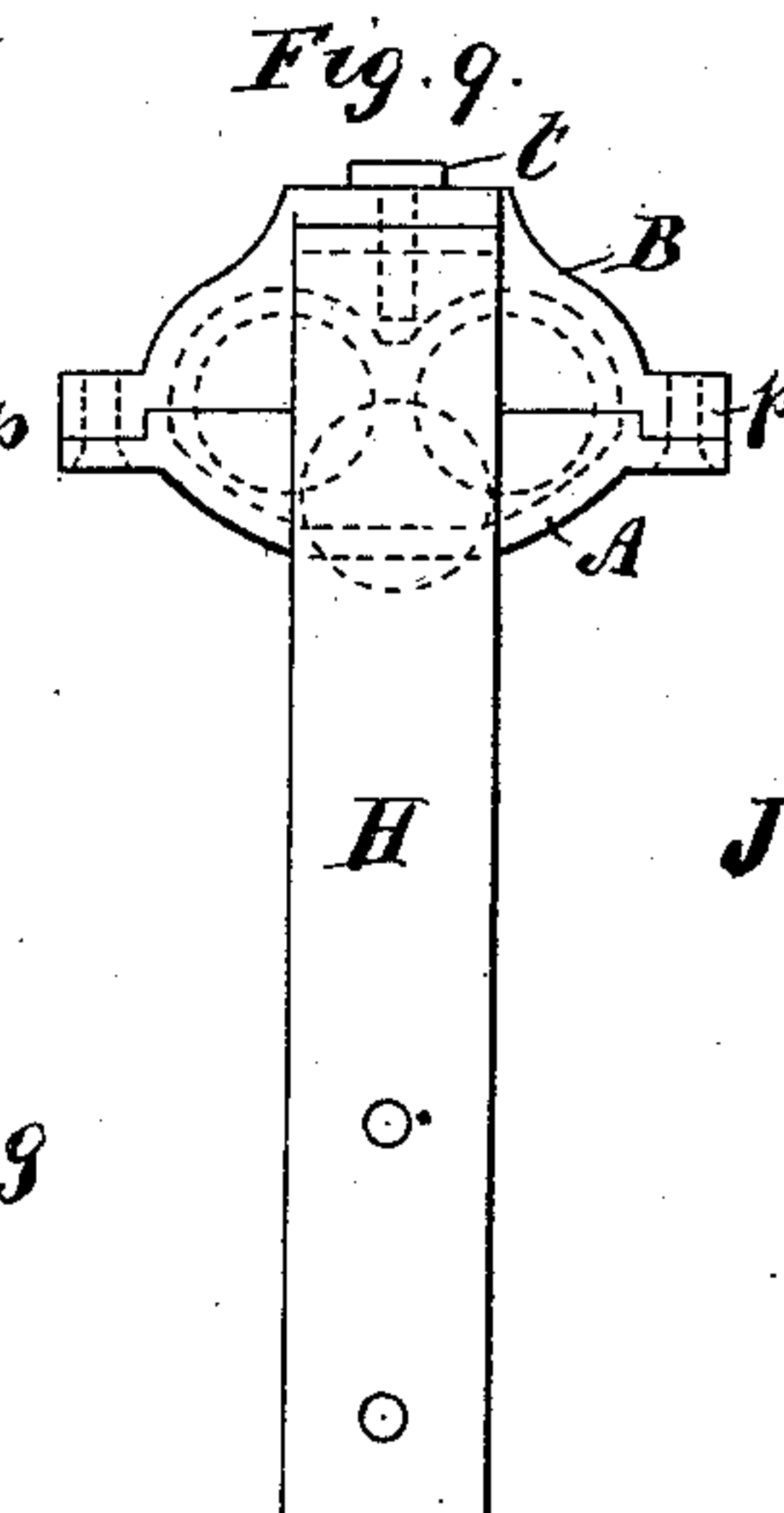
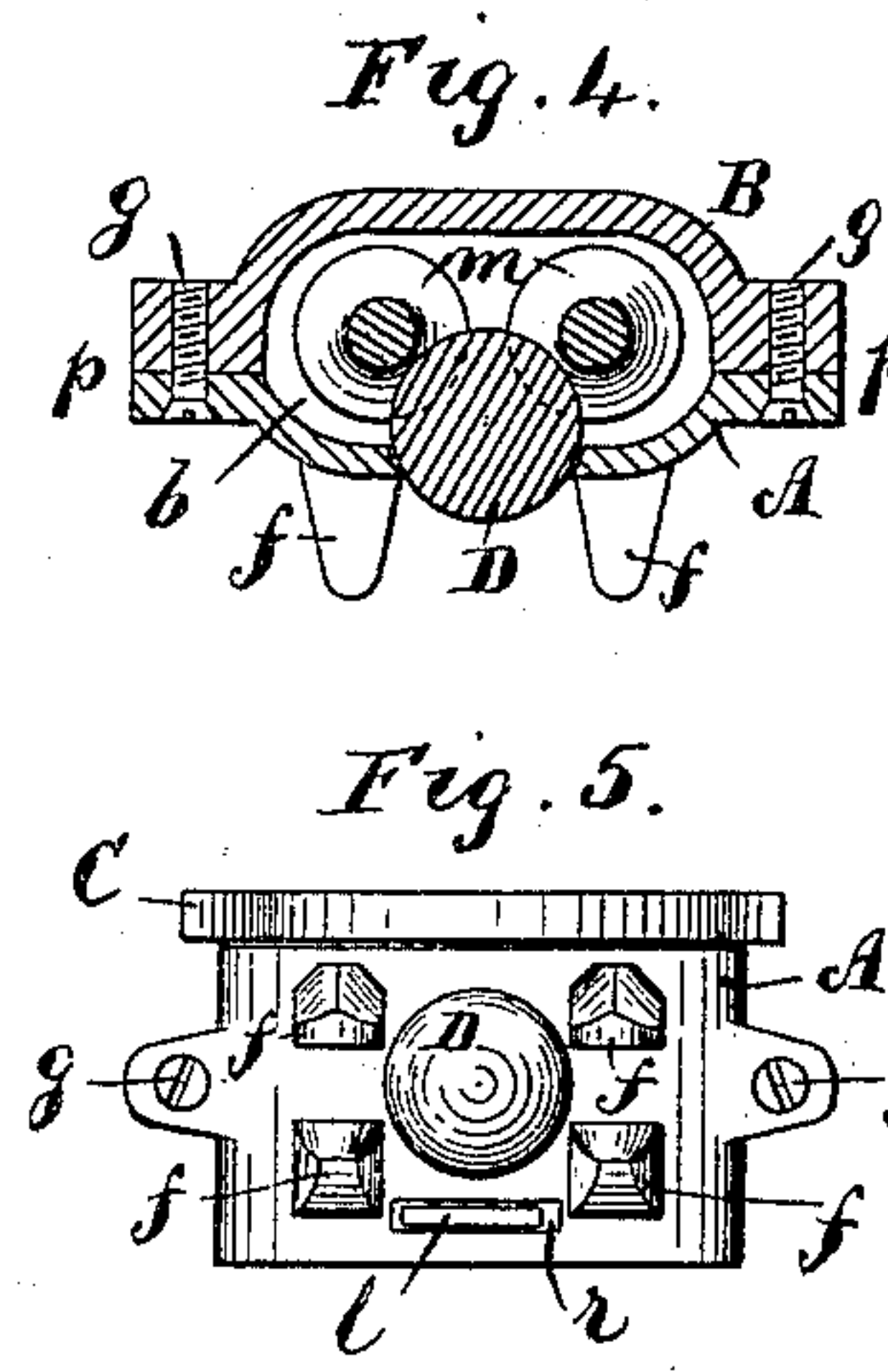
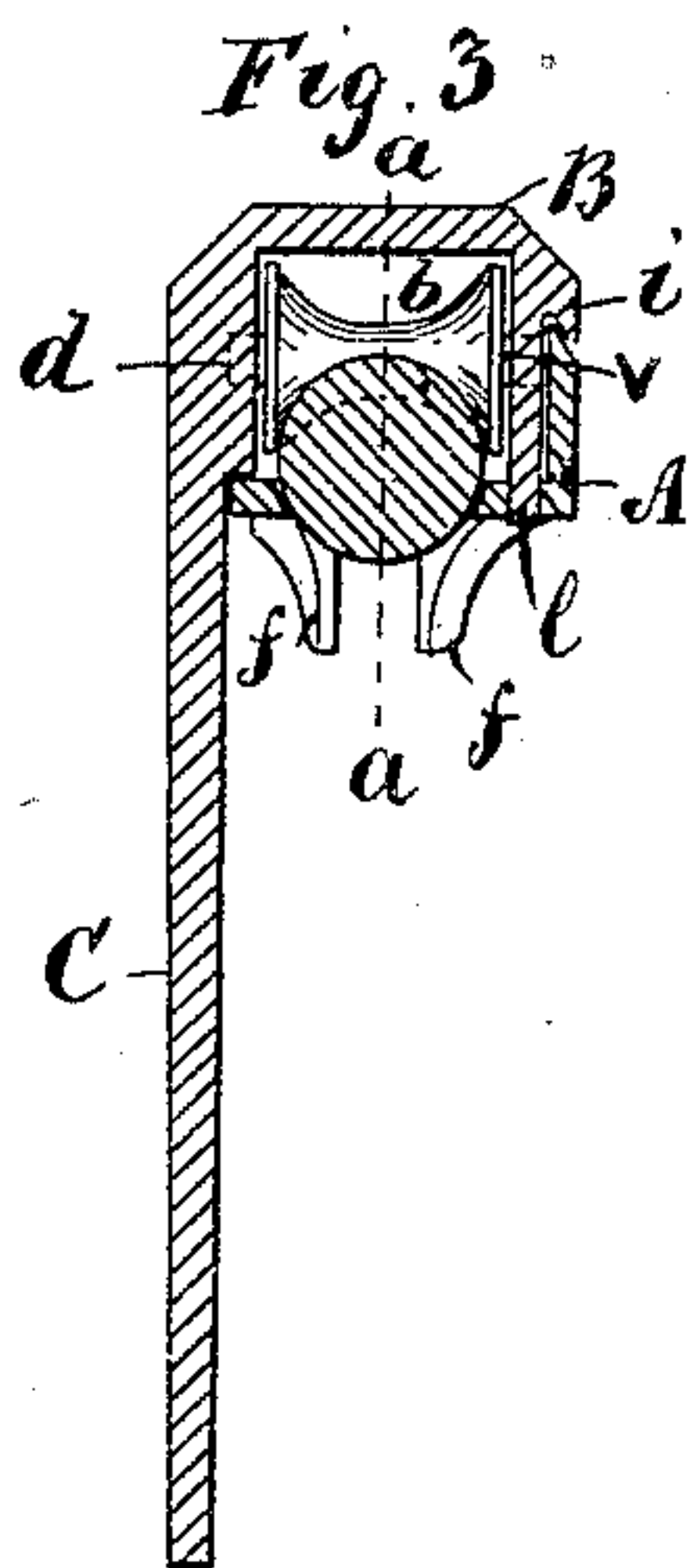
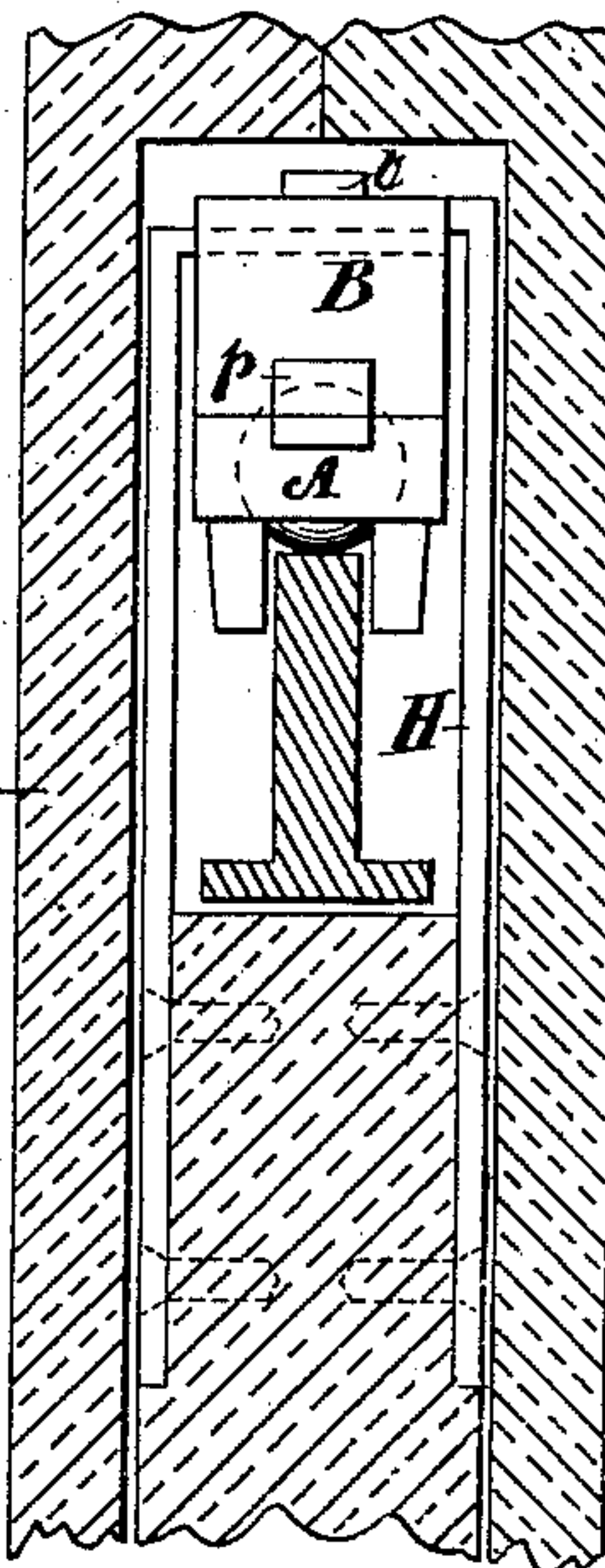


Fig. 10.



Witnesses.
L. C. Briggs.
L. J. White.

Inventor
David Manuel,
Per C. C. Shaw,
Attorney

UNITED STATES PATENT OFFICE.

DAVID MANUEL, OF HYDE PARK, MASSACHUSETTS, ASSIGNOR TO HIMSELF,
GEORGE HAIGH, OF SAME PLACE, HERBERT C. SOMES, OF MILTON, AND
THOMAS LONERGAN, OF CANTON, MASSACHUSETTS.

DOOR-HANGER.

SPECIFICATION forming part of Letters Patent No. 318,125, dated May 19, 1885.

Application filed May 28, 1884. (Model.)

To all whom it may concern:

Be it known that I, DAVID MANUEL, of Hyde Park, in the county of Norfolk, State of Massachusetts, have invented a certain new and useful Improvement in Door-Hangers, of which the following is a description sufficiently full, clear, and exact to enable any person skilled in the art or science to which said invention appertains to make and use the same, reference being had to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a side elevation showing a door provided with my improved hangers, a portion of the door and building to which it is attached being represented as broken away. Fig. 2 is a vertical transverse section taken on the line *x* in Fig. 1; Fig. 3, a vertical transverse section taken through the center of the hanger; Fig. 4, a vertical longitudinal section taken on the line *a* in Fig. 3; Fig. 5, a bottom plan view; Fig. 6, a side elevation showing a modification of the hanger; Fig. 7, an end view of the hanger shown in Fig. 6; Fig. 8, a top plan view of the hanger shown in Fig. 6; Fig. 9, a side elevation showing another modification of the hanger; and Fig. 10, an end view of the hanger shown in Fig. 9, and representing it in use, some of the surrounding parts being represented in section.

Like letters of reference indicate corresponding parts in the different figures of the drawings.

My invention relates to that class of door-hangers which are employed for hanging or supporting sliding doors; and it consists in a novel construction and arrangement of the parts, as hereinafter more fully set forth and claimed, by which a more desirable article of this character is produced than is now in ordinary use.

The nature and operation of the improvement will be readily understood by all conversant with such matters from the following explanation, its extreme simplicity rendering an elaborate description unnecessary.

In the drawings, A represents the body of the hanger, and B the cap. The body is cham-

bered, as seen at *b*, to receive the friction-rollers *m m*, which are arranged in parallelism therein and journaled in suitable bearings at the front and rear of the body, as shown at *v d*. The cap is provided with the downwardly-projecting flange or strap C, by which it is attached to the door, and projects over the rear wall of the body A, as seen at *i*, to form eaves for preventing the water from entering the chamber *b*, in which the rollers are contained, said chamber being formed partly in the body and partly in the cap of the hanger. A circular opening, *r*, is formed in the lower part of the body A centrally between the rollers *m*, and disposed in the chamber *b*. Beneath the rollers *m* there is a ball, D, the lower portion of which protrudes through said hole, its upper portion resting against the rollers *m*. The rollers are curved or cut out at the center, as seen in Fig. 3, the form or curvature of the rollers being such that the rollers bear on the ball near their ends only, and not the entire length, thus lessening the friction. An elongated slot is formed in the bottom of the body A, for receiving a downwardly-projecting flange, *l*, on the cap B, which passes between the rear ends of the rollers, and assists in keeping them in proper position in the chamber *b*.

Projecting downwardly from the body A there are four studs or guides, *f*, designed to keep the hanger in proper position on the track E, as best seen in Fig. 2, the cap and body of the hanger being connected by screws *g*, which pass through flanges *p* at either end.

In the modification shown in Figs. 6, 7, and 8 the cap is not provided with a downwardly-projecting flange, and the end flanges, *p*, are elongated to receive the overhanging straps F, which are made laterally adjustable thereon from front to rear by means of the slots and screw-bolts *h*, to enable the door to be hung properly with reference to the track, and freed or relieved in case it warps or binds, the bolts also connecting the cap and body.

In the modification shown in Figs. 9 and 10 the body and cap are connected at the ends by screws and flanges in the same manner as

shown in Fig. 4, and the cap is not provided with a downwardly-projecting flange. A yoke or strap, H, passes over the top of the cap, and is made adjustable thereon by means of the
 5 screw-bolt *t*, a slot (not shown) being formed in the yoke to permit it to be moved back and forth from front to rear, as required.

In the use of my improvement the hangers are attached to the upper edge of the door by
 10 screws or nails passed through the flange C, as shown in Fig. 1, a V-shaped or any other suitable track, E, being secured to the building above the door. The door is then suspended or supported with the balls D of the hangers
 15 resting on the track, the track being inserted between the guides or studs *f* to keep the hangers in proper position.

The modifications shown in Figs. 6, 7, and 8 are used in substantially the same manner;
 20 but in that shown in Figs. 9 and 10 the door is immediately under the track, the yoke passing down on either side of it, as seen in Fig. 10, and the hangers and upper edge of the door being entirely housed by the casings or
 25 walls J.

It will be obvious that my invention may be used at the top of the door for suspending it, or at the bottom for supporting it, as desired.

30 Having thus explained my invention, what I claim is—

1. The combination, substantially as set forth, of a hanger-box having a circular opening in its bottom, concave rollers journaled
 35 within said box, and a ball interposed between said rollers and bottom and projecting through said opening below said bottom.

2. The combination, substantially as set forth, of a hanger-box the bottom of which is provided with a circular opening and with
 40 downward-projecting studs on opposite sides of said opening, concave rollers journaled within said box, and a ball interposed between said rollers and bottom and projecting through
 45 said opening below said bottom between said studs.

3. The combination, in a door-hanger, of an inclosing box or body having a slot in its bottom plate, and a cap having a vertical arm
 50 which shuts within the vertical flange of said body and projects into said slot, substantially as described.

4. The combination, in a door-hanger, of a box comprising a body composed of an angular plate the horizontal arm of which has a
 55 circular opening, a rectangular slot and downward-projecting studs on opposite sides of said opening, and a cap connected to said body and having an inner vertical flange which enters
 60 said rectangular slot, a ball within said box projecting through said circular opening, and rollers journaled within said box and resting on said ball, substantially as described.

5. The combination, with a door-hanger, of angular attaching metallic straps provided
 65 with slots in their upper ends transversely to the hanger, and screw-bolts passing through said slots into said hanger, whereby the door may be laterally adjusted on the hanger, substantially as described.

DAVID MANUEL.

Witnesses:

C. A. SHAW,
 L. J. WHITE.