

(No Model.)

2 Sheets—Sheet 1.

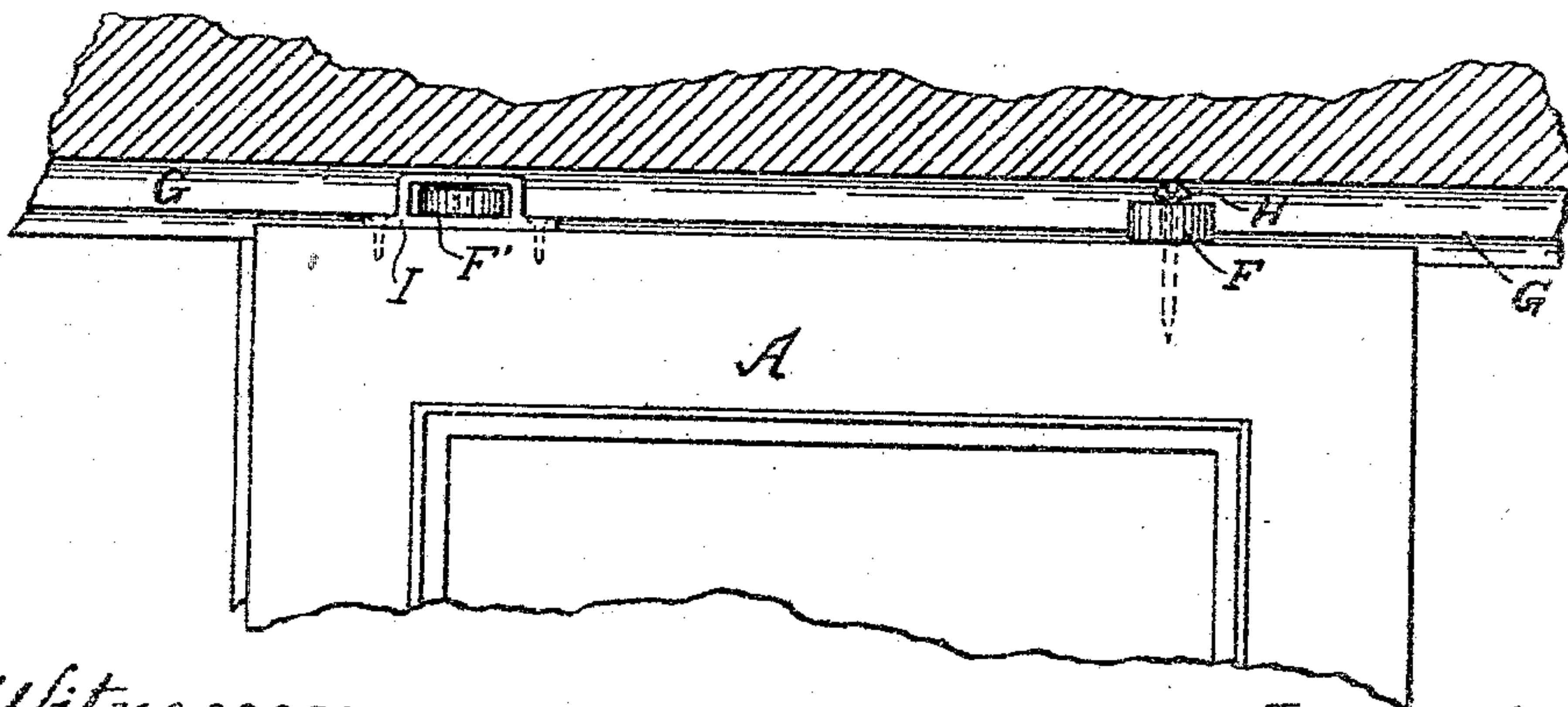
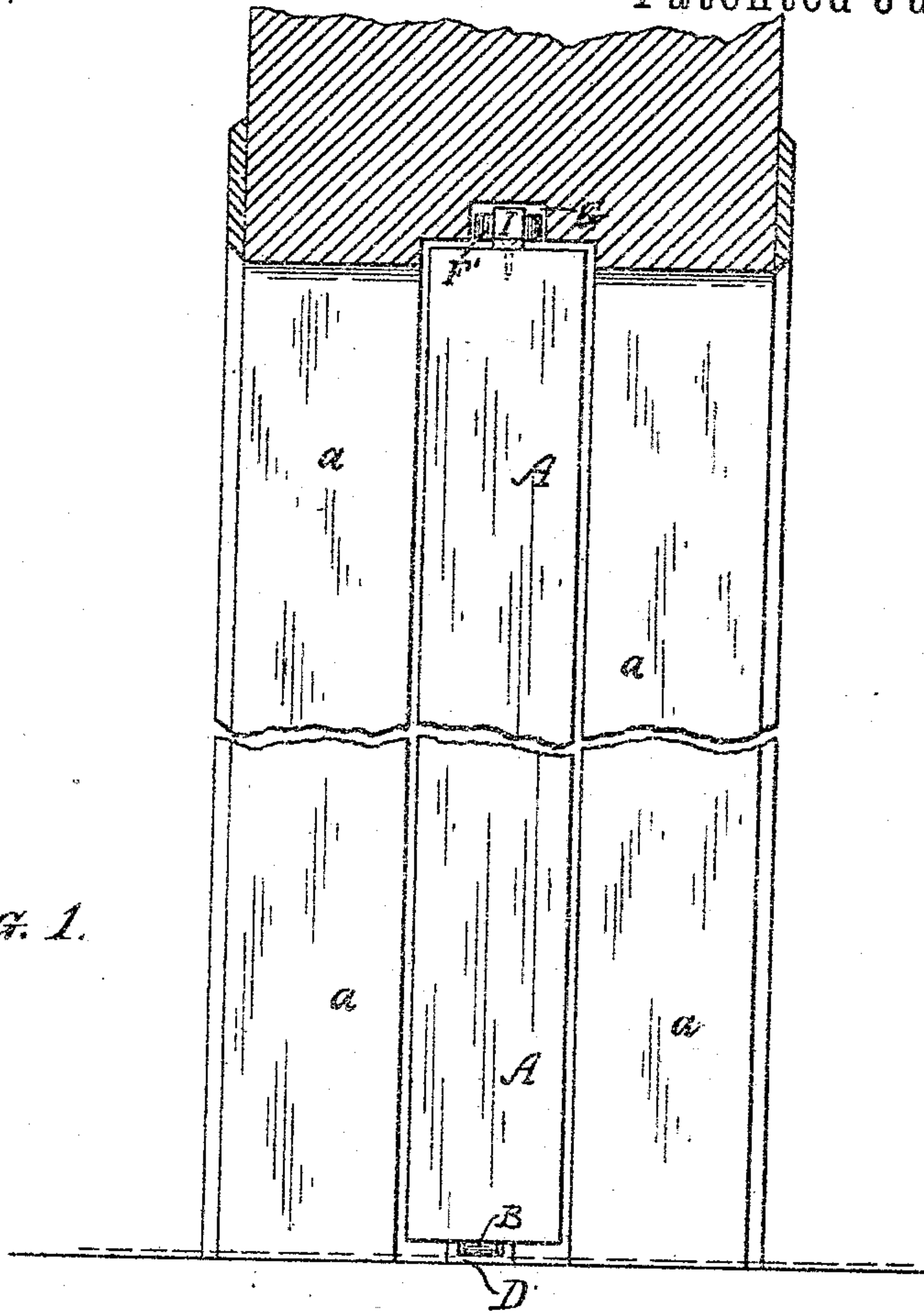
E. Y. MOORE.

SLIDING DOOR FIXTURE.

No. 321,518.

Patented July 7, 1885.

FIG. 1.



Witnesses:
J. B. Halpenny.
G. A. Harbach

FIG. 2.

Inventor.
Edward Y. Moore
By F. F. Warner
his attorney.

E. Y. MOORE.

SLIDING DOOR FIXTURE.

No. 321,518.

Patented July 7, 1885.

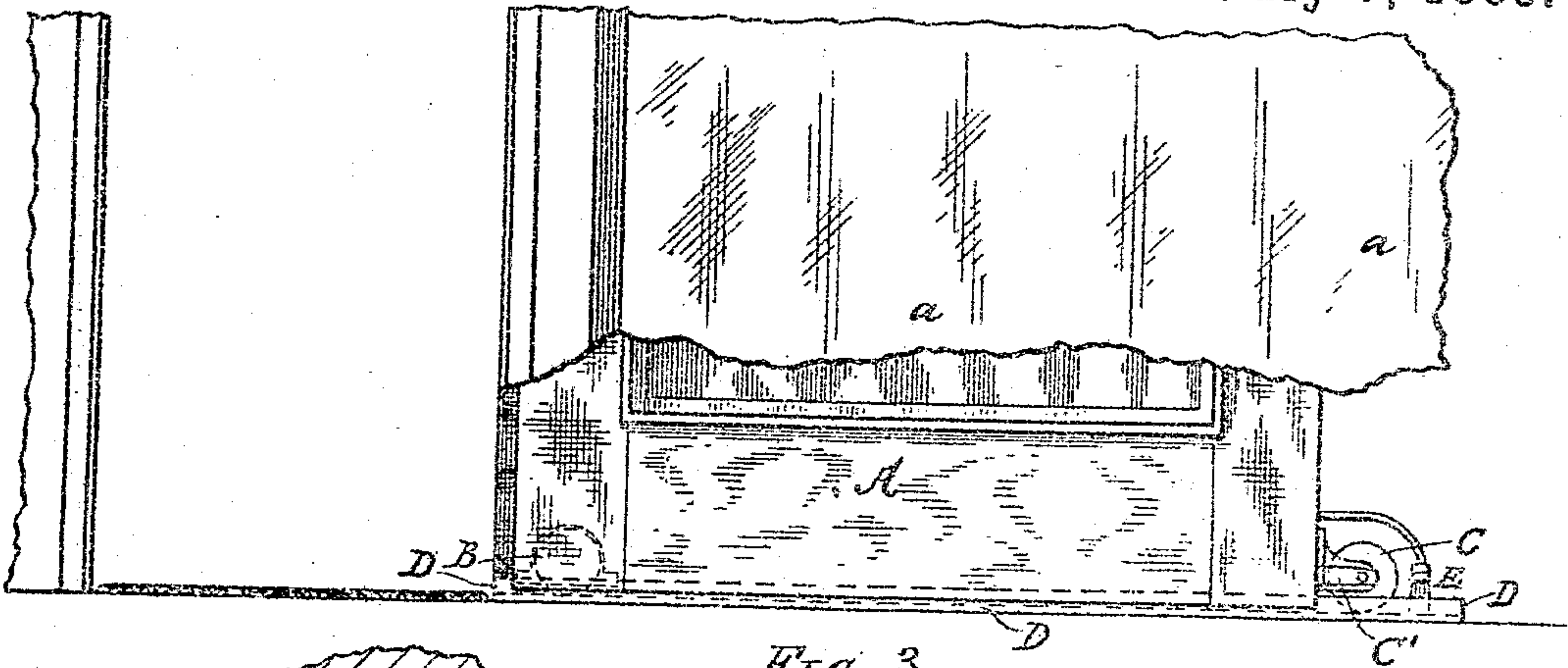


FIG. 3.

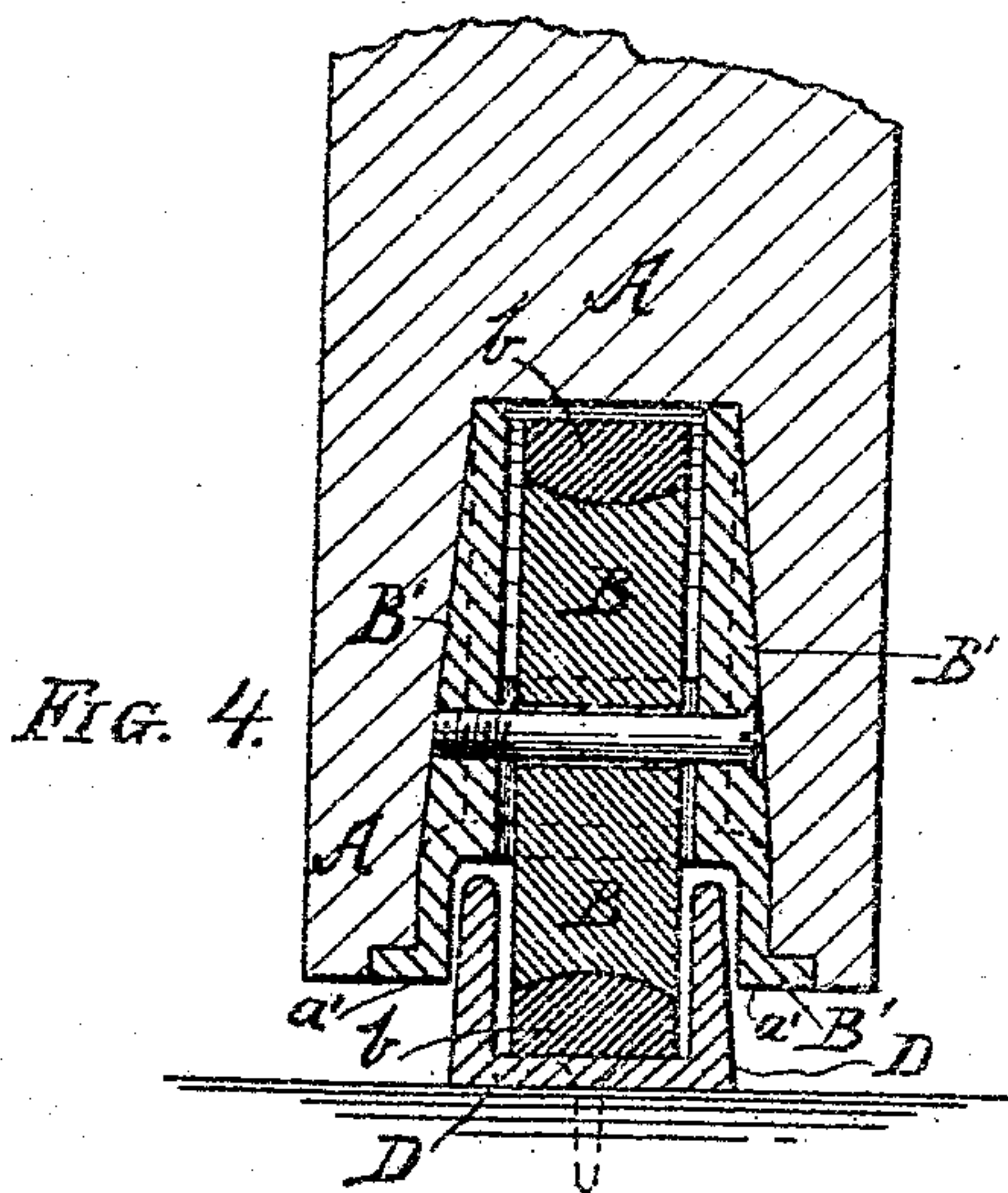


FIG. 4.

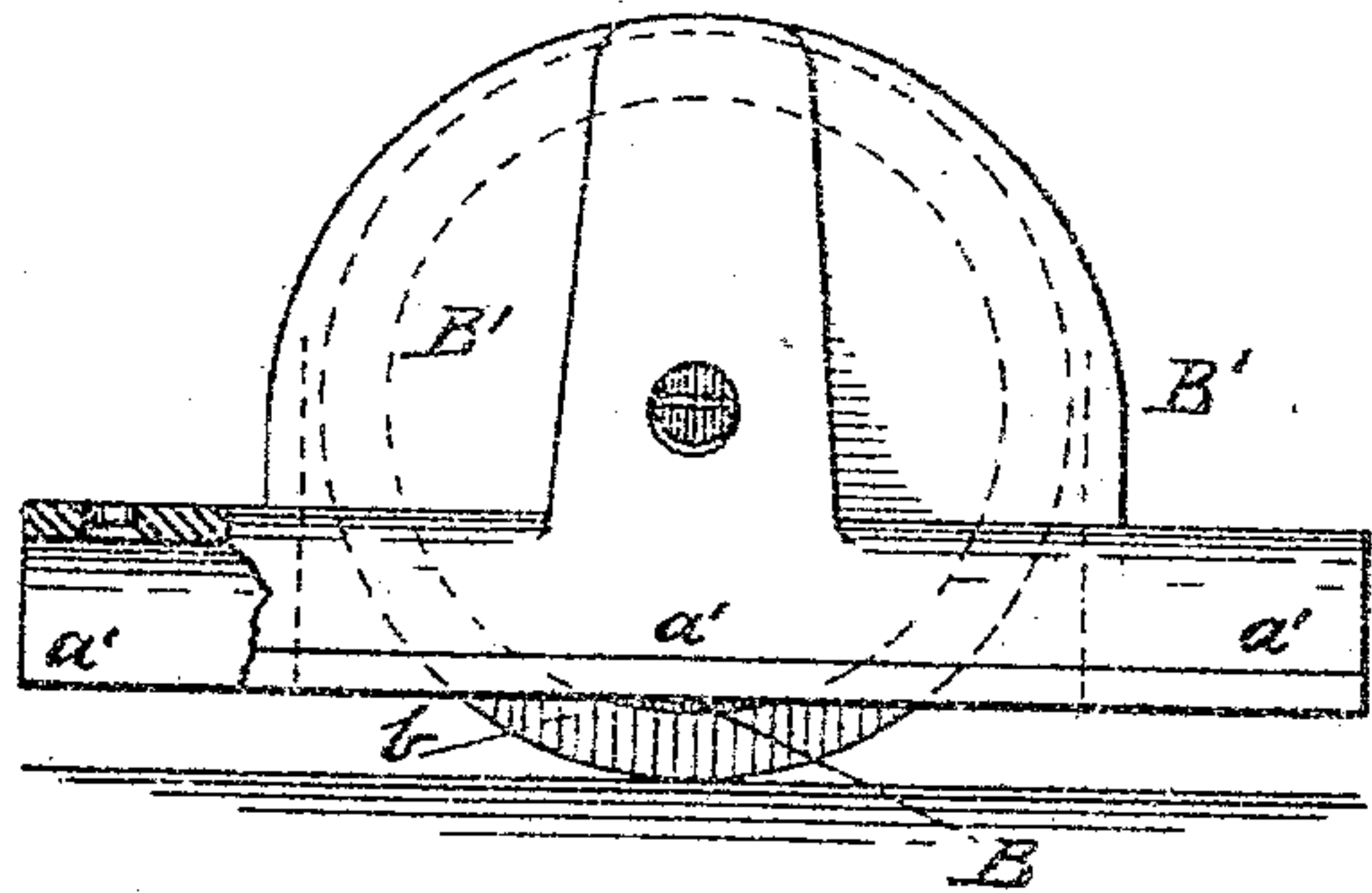


FIG. 5.

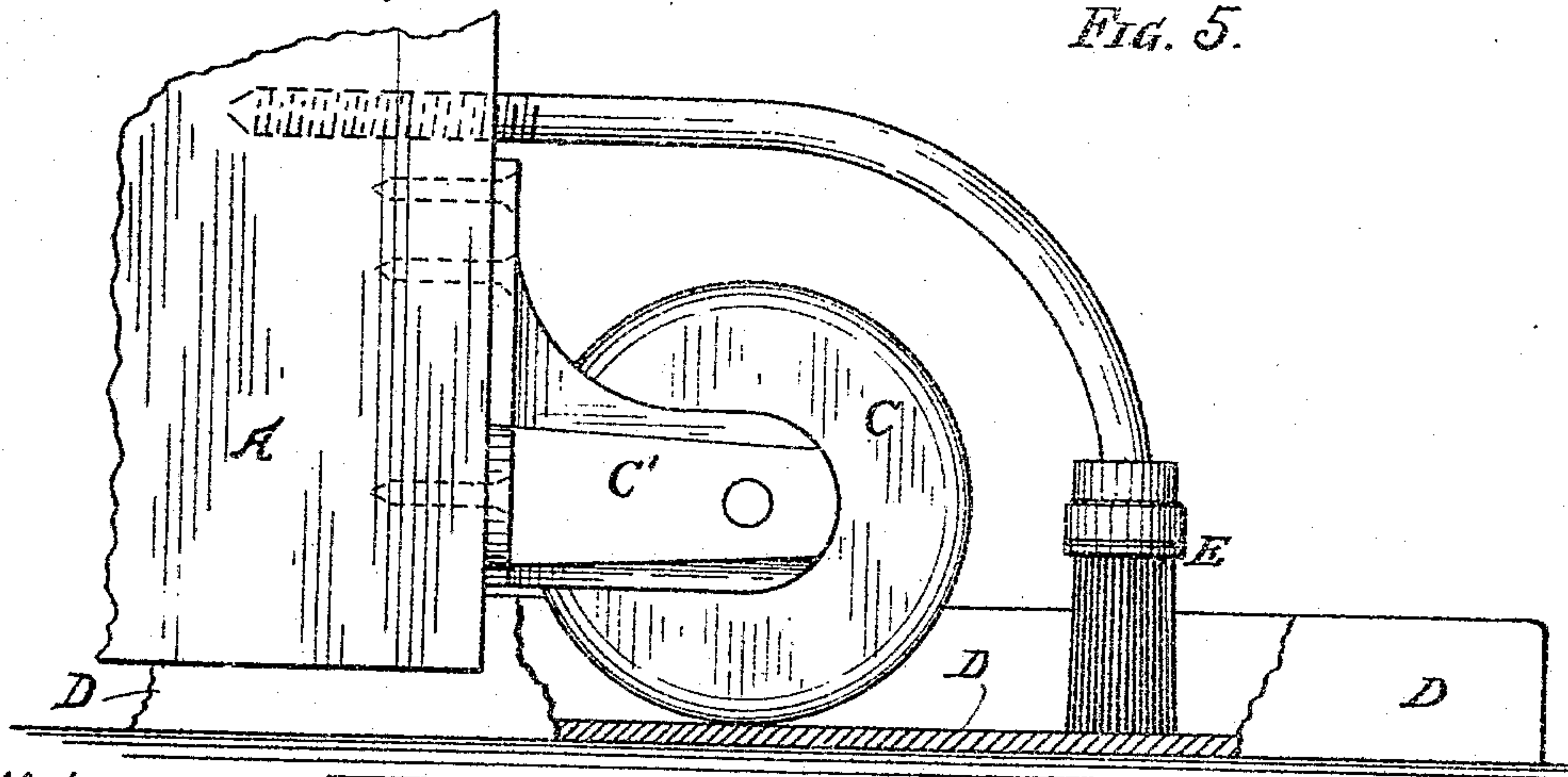


FIG. 6.

Witnesses:

J. B. Halpenny.

G. H. Harbach

Inventor:

Edward Y. Moore

By F. F. Warner—
his attorney.

UNITED STATES PATENT OFFICE.

EDWARD Y. MOORE, OF CHICAGO, ILLINOIS.

SLIDING-DOOR FIXTURE.

SPECIFICATION forming part of Letters Patent No. 321,518, dated July 7, 1885.

Application filed December 10, 1884. (No model.)

To all whom it may concern:

Be it known that I, EDWARD Y. MOORE, a citizen of the United States of America, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Sliding-Door Fixtures, of which the following, in connection with the accompanying drawings, is a specification.

In the drawings, Figure 1 is an edge view of a door provided with my improvements, and also showing its and their relations with respect to the recess into which the door moves when opened. Fig. 2 is a detail showing the upper end of the door and its anti-friction attachments and their way. Fig. 3 is a side view of the lower end of a sliding door provided with my improved fixtures, and showing the relation of the door to its track. Fig. 4 is a sectional detail, the same being a vertical cross-section in the plane of the line *xx* of Fig. 3. Fig. 5 is a detail, the same being a side elevation of the roller which I apply to the outer corner of the door; and Fig. 6 is a detail, the same showing the lower inner corner of the door and the parts applied thereto and their relation to the track.

Like letters of reference indicate like parts.

My invention has for its object the providing of suitable means whereby sliding doors may be moved back and forth or opened or closed with facility without the employment of a track laid in the doorway and without injury to the carpet.

A represents a sliding door, the wall *a* being broken away, as represented, to show the door and its fixtures while the door is open or in its recess in the wall.

B is a sheave or roller, and B' is its block. The lower or horizontal part of the block B' has depending flanges *a'* on its sides, there being one flange on each side, as shown. This flanged portion also projects horizontally some way from the tread of the roller, for the purpose hereinafter referred to. The tread of the roller is flat, and I have represented it as having thereon a flat-faced tire, *b*, made of rubber; but a rubber tire is not absolutely essential, as the roller need not necessarily be so covered. This wheel or roller I make either of metal or wood, and its face may be somewhat or slightly convex or rounded outward,

instead of being flat. I mortise the lower edge of the door, near its forward corner, to receive the roller B and its block B', and I secure the block to the door by means of screws or other suitable fastenings.

C is the inner or rear roller or wheel journaled in a bracket, C', adapted for attachment to the inner or rear edge of the door, as indicated in Fig. 6. I so arrange the roller or wheel C that its bracket will, by preference, project from the rear edge of the door; but the inner lower corner of the door may be mortised in such a manner as to permit the roller C to be concealed by the door.

D is the track or way, on which the rollers or wheels described roll or ride. This track I locate wholly within the door-recess—that is, it does not project into the room or door-opening. The track is flanged or upturned at its sides, thus forming a channel or groove in which the rollers travel. I make the rollers of such width as to extend nearly across the groove or channel in which they run, and the track or way is also of such width as nearly to fill or extend across the space between the depending flanges on the block B', as is clearly indicated in Fig. 4. It is also to be understood that the lower edge of the door is grooved or channeled from corner to corner to receive the upper parts of the upturned sides or flanges of the track. By these means the door, while it is permitted to ride freely on or in the track, is prevented from moving laterally, and is retained with certainty in its proper position. It will also be perceived, on reference to Figs. 4 and 5, that the door will be supported sufficiently high to run clear of the carpet extending across the doorway.

E is a brush, which may or may not be attached to the rear edge of the door and arranged to travel in the track, thus keeping the latter free of obstructions.

F and F' are horizontally-arranged rollers applied to the upper edge of the door, and running in a way or channel, G, above the door. These rollers may be applied to the door in any suitable way. For example, I have shown the roller F as applied by means of a screw, H, while the roller F' turns in a block, I, which exposes the perimeter of the roller on opposite sides, and which is screwed to the door.

It will be perceived from the foregoing de-

scription, and on reference to the drawings, that doors operating in connection with fixtures such as specified may be rolled with facility out upon a carpet without injury to the latter.

By allowing the inner or rear roller to project rearwardly, as described, it need not leave the track when the door is closed, and hence the track will guide the rollers properly at all times.

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

1. The combination, with each other and a sliding door, of door-supporting wheels or rollers attached to the lower end or edge of the door, the outer wheel being either flat or slightly convex on its tread, and a way or track having upturned sides or flanges for guiding the said wheels, the said way or track being located wholly within the door-recess, substantially as and for the purposes specified.

2. The sliding-door fixtures, consisting, essentially, of a sheave or roller, B, having bearings in a block, B', on which are the depending flanges *a' a'*, a wheel or roller, C, made

either flat or slightly rounded out on its tread, and a track, D, having upturned sides or flanges, substantially as and for the purposes specified.

3. The sliding-door fixtures, consisting of the grooved or channeled track D, the rollers or wheels B and C, the former having a flat or slightly convex tread, and the brush E, all adapted for operation together, substantially as and for the purposes specified.

4. The combination, with each other and a sliding door, of the horizontally-arranged rollers F and F' on the upper edge of the door, a recess for receiving the said rollers, the wheel or roller B, applied to the door at or near its lower outer corner and having a flat or slightly convex tread, and the wheel or roller C, extending inward from the lower inner corner of the door, substantially as and for the purposes specified.

In testimony that I claim the foregoing as my own I hereto affix my signature in presence of two witnesses.

EDWARD Y. MOORE.

Witnesses:

F. F. WARNER,

M. BYRON RICH.