

No. 607,511.

Patented July 19, 1898.

E. A. HILL.
CAR DOOR BRACKET.

(Application filed Jan. 19, 1895.)

(No Model.)

Fig. 1.

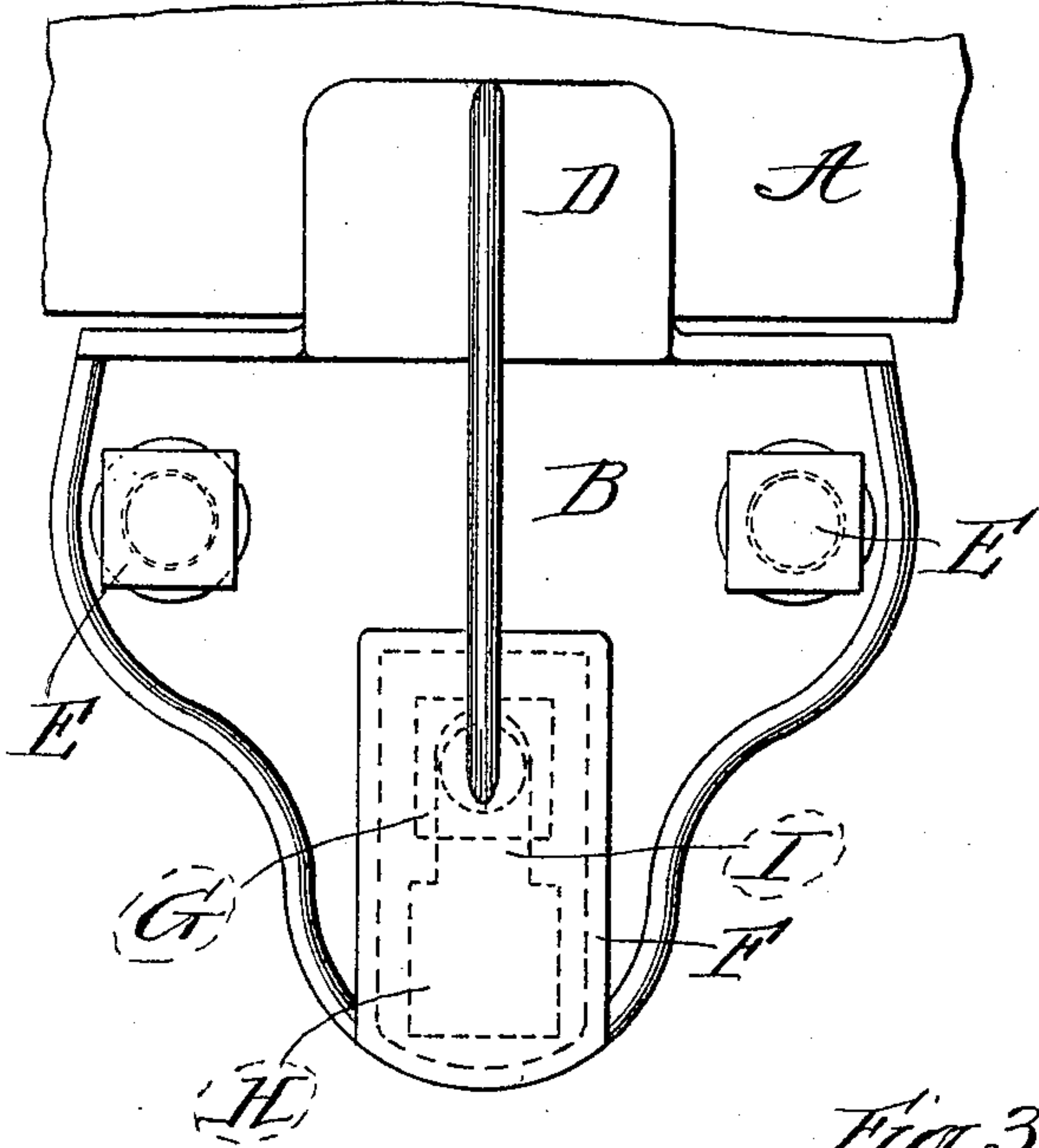


Fig. 2.

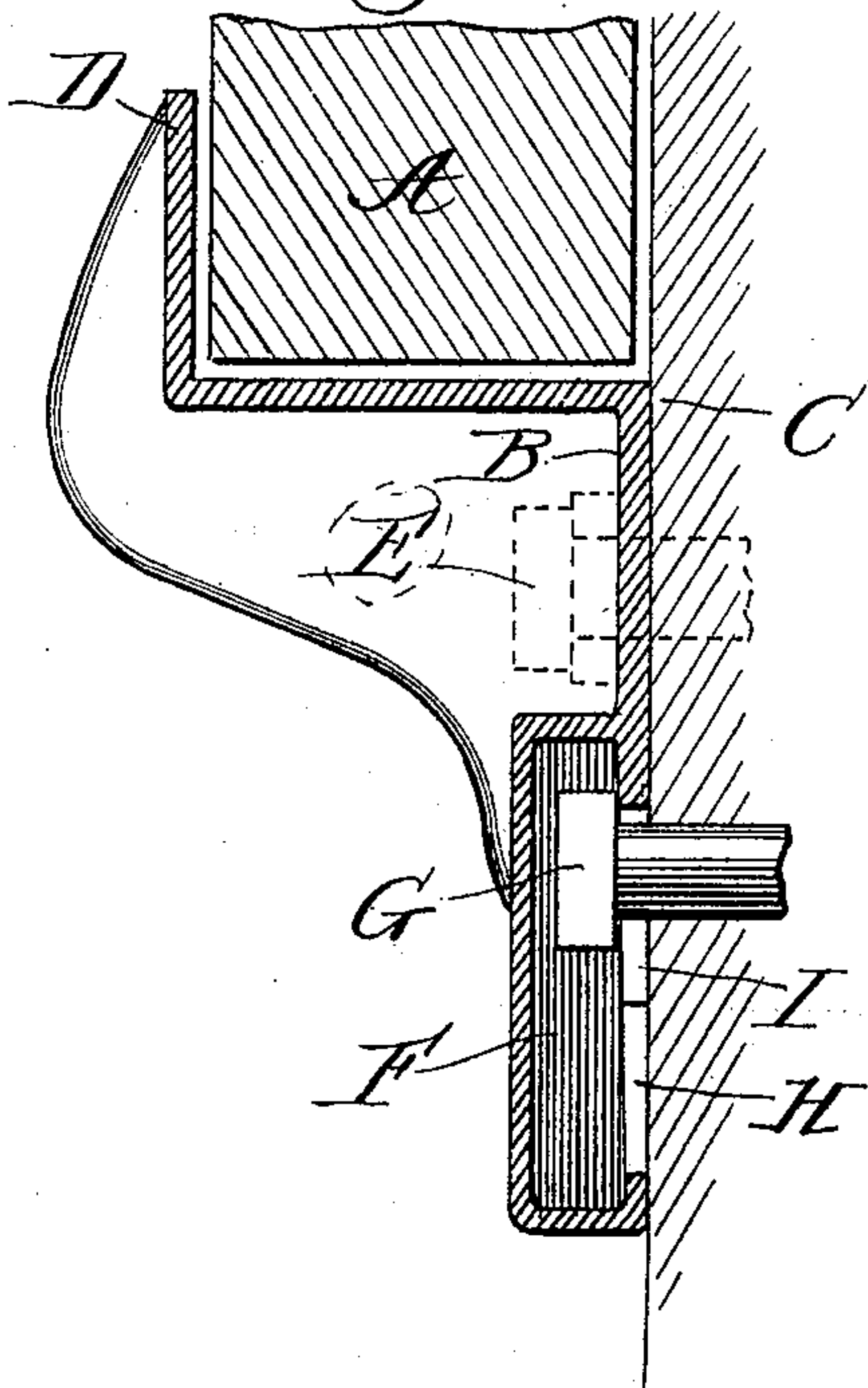


Fig. 3.

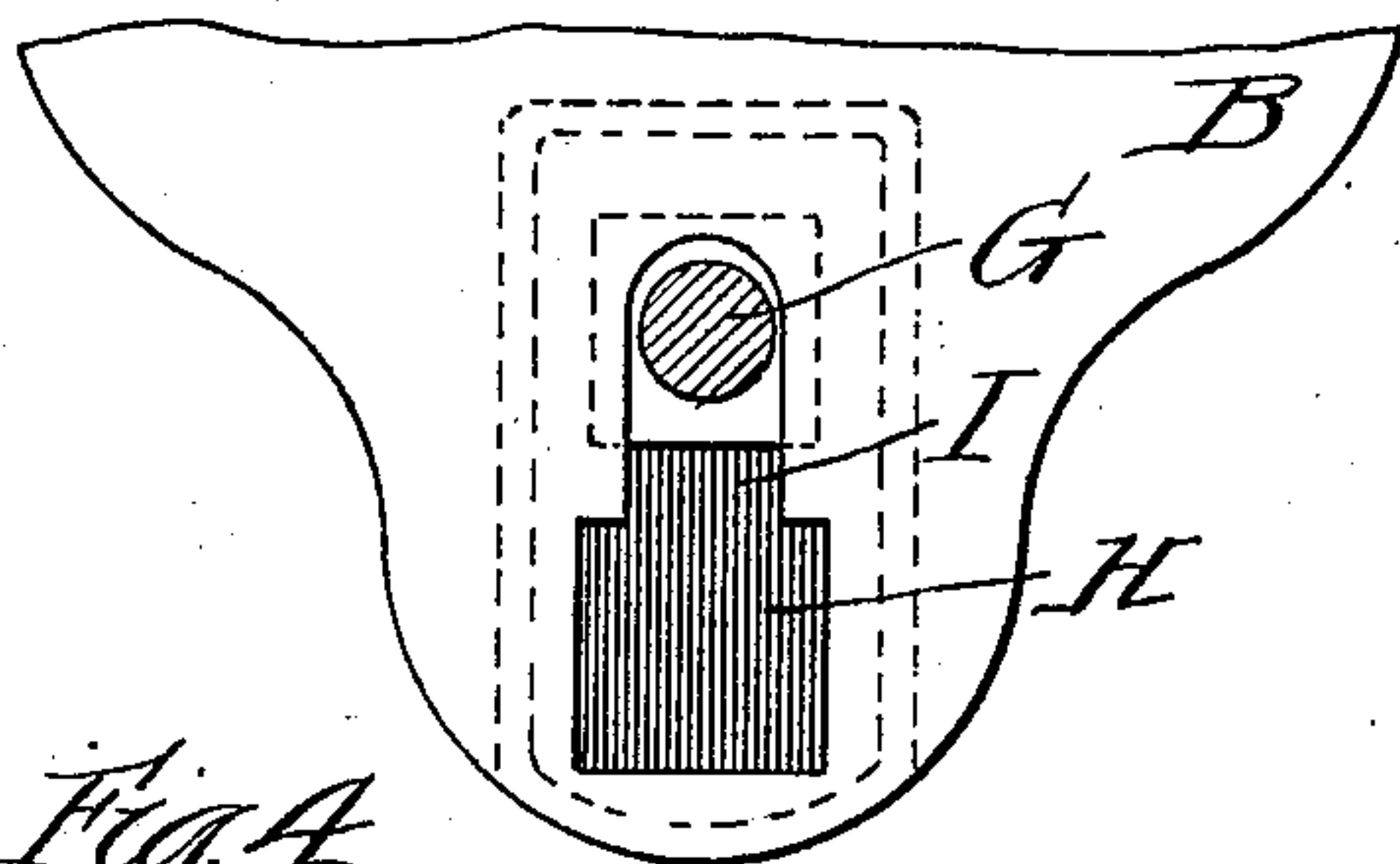


Fig. 4.

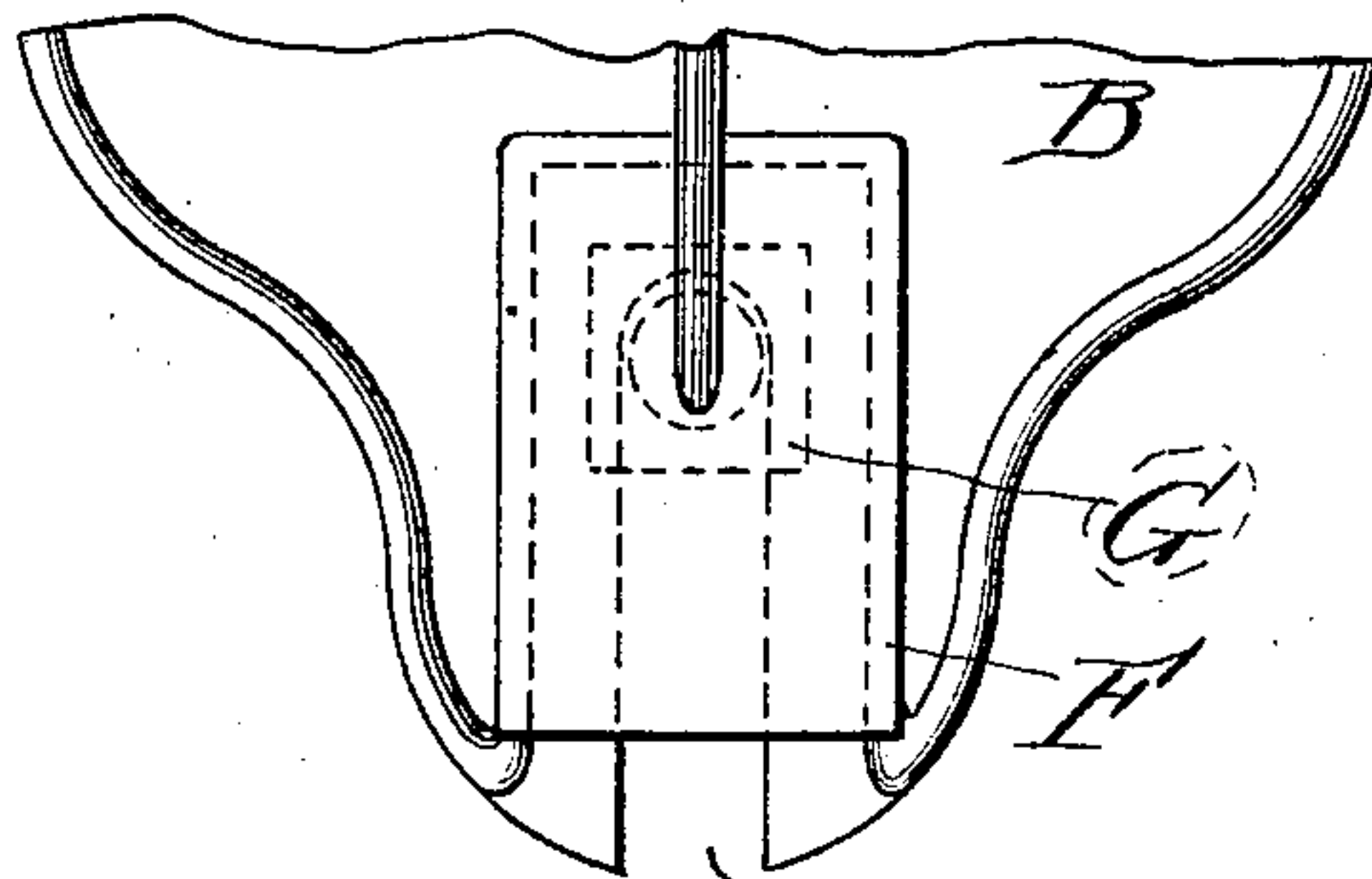
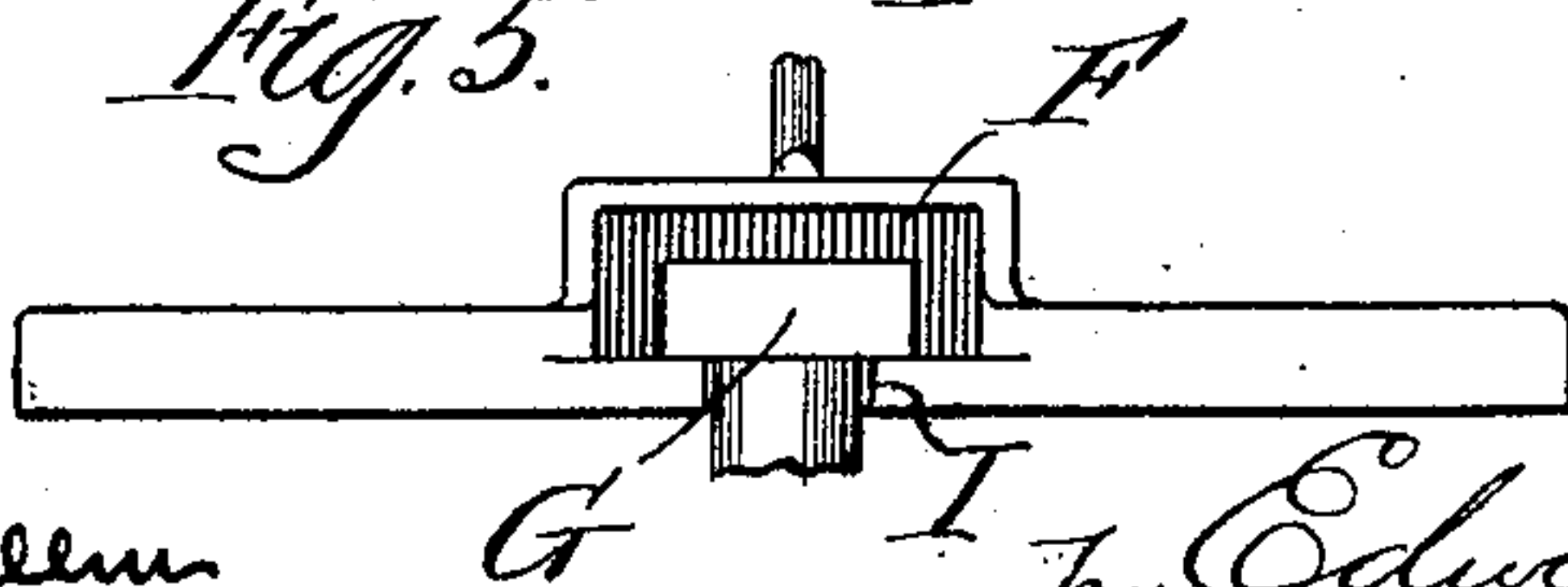


Fig. 5.



Witnesses.

Wm. M. Rheem
Wm. J. Fleming

Inventor.

by Edward A. Hill
Raymond S. Quinlan

UNITED STATES PATENT OFFICE.

EDWARD A. HILL, OF CHICAGO, ILLINOIS, ASSIGNOR OF TWO-THIRDS TO
JAMES L. MALLORY AND EDGAR A. HILL, OF SAME PLACE.

CAR-DOOR BRACKET.

SPECIFICATION forming part of Letters Patent No. 607,511, dated July 19, 1898.

Application filed January 19, 1895. Serial No. 535,514. (No model.)

To all whom it may concern:

Be it known that I, EDWARD A. HILL, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Car-Door Brackets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

This invention relates to improvements in that class of car-door brackets which are employed for guiding the lower edge of a car-door and which are so secured to the car-body that they cannot be removed while the car-door is in position to engage the bracket.

The object of this invention is to have an anchor-fastening for the bracket concealed and protected by the bracket, whereby, notwithstanding the removal of the exposed fastening-bolts, the anchor cannot be moved nor the bracket disconnected therefrom so long as the door is in proper juxtaposition. This object is attained by the devices illustrated in the accompanying drawings, in which—

Figure 1 represents a face view of a bracket and portion of a car-door embodying my invention. Fig. 2 represents a central vertical section thereof. Fig. 3 represents a detail rear face view of a portion of the bracket, and Figs. 4 and 5 detail views of a modification of my invention.

Similar letters of reference indicate the same parts in the several figures of the drawings.

Referring by letter to the accompanying drawings, A indicates the car-door, and B a bracket of any desirable configuration and dimensions, adapted to be secured to the face of the car-body, which is represented at C in Fig. 2, and provided with the usual upturned projection D, forming a guide for the lower edge of the door.

As shown in the drawings, there are two ordinary fastening-bolts E, one at either side of the center thereof, and at the center of the bracket, toward the lower end thereof, is provided a recess or chamber F, to which access is gained through the rear wall or back of the bracket.

The anchor shown in the drawings is an

ordinary square-headed bolt G, screwed into the wall of the car, but projecting therefrom a distance sufficient to accommodate the thickness of the bracket or, rather, of the back wall of the recess F therein.

The back wall of the bracket is provided, near the lower end of the recess F, with an opening H sufficient in size to freely admit the head of the bolt G, and from this opening extends upwardly a contracted slot I of a width substantially equal to the shank or body of the bolt G, so that when the head of the bolt enters the opening H and the bracket is moved down so that the shank of the bolt G will lie in the slot I the head of the bolt overlaps the side edges of the slot and serves to prevent the outward movement of the bracket in line with the bolt, and in fact serves to prevent detachment of the bracket from the anchor-bolt without first moving the bracket vertically, so as to bring the head of the anchor to register with the opening H. When the door A is in proper juxtaposition, of course this vertical movement of the bracket, after it is once adjusted to proper position, is prevented by the door, and notwithstanding the bolts E may be removed by unauthorized persons the bracket cannot be removed, and consequently the lower edge of the door cannot be swung outwardly, so as to give access to the interior of the car to unauthorized persons, without the breaking of the car-door seal or the bracket or otherwise so tampering with the bracket that such tampering will be readily discovered upon the first inspection thereafter.

In Figs. 4 and 5 I have shown a modification of my invention, in which the opening H is dispensed with and the slot I is extended to the lower end of the bracket, and a sufficient length of this slot, at its upper end, is protected by the hood forming the chamber F to prevent the removal of the bracket in the same manner as with the construction above described. The only reason that the construction shown in Figs. 1, 2, and 3, inclusive, is preferred over that shown in Figs. 4 and 5 is that when the bracket is in position the anchor is absolutely concealed both from view and from reach with any sharp instrument that might be employed for cutting off the

head of the bolt or otherwise breaking the back of the bracket beneath the hood forming the chamber F, which might be done with the construction shown in Figs. 4 and 5, although
5 such constructions are believed to be practically about as good as the other constructions shown.

It is desirable for the purpose of preventing the rattling of the bracket to have the same
10 fit snugly under the head of the bolt G, and to this end I have shown in Fig. 2 the inner face of the rear wall of the chamber F slightly inclined or beveled from the bottom to the top of the chamber, so that as the bracket is forced
15 down the rear wall will wedge between the head of the bolt and the wall of the car and thus afford a tight snug fit.

While I have shown the anchor for my bracket embodied in the form of a headed
20 bolt, obviously I do not desire to limit myself to this particular kind of anchor, for many variations and modifications thereof will readily suggest themselves to one skilled in the art; but so long as they serve the purpose of
25 the anchor herein shown and described such modifications or changes are contemplated by my invention.

A car-door bracket constructed in accordance with my invention is exceedingly simple,
30 cheap, and durable, does not necessarily involve any more parts, and practically no more expense, than are involved in the construction

of the ordinary car-door bracket in common use, and it may be readily and quickly applied to cars in place of the old and ordinary
35 bracket, even by an unskilled person and without any change of the car whatever.

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

1. The combination with a car and its door, of an anchor, and a bracket engaged by the door provided with a hood for concealing said anchor; and having an opening in its rear wall, behind the hood, of a size sufficient to
45 admit the head of the anchor, and a slot extending from said opening, of less width than the head of the anchor, substantially as described.

2. The combination with a car and its door, 50 of a bracket engaged by the door, a headed bolt secured to the car-body, said bracket being provided with an opening in its rear wall of a size sufficient to freely admit the head of the bolt, and having a slot extending from
55 said opening to receive the shank or body of the bolt, and a hood on the bracket covering said opening and slot, substantially as described.

EDWARD A. HILL.

Witnesses:

W. R. OMOHUNDRO,
CHAS. B. BOWEN.