

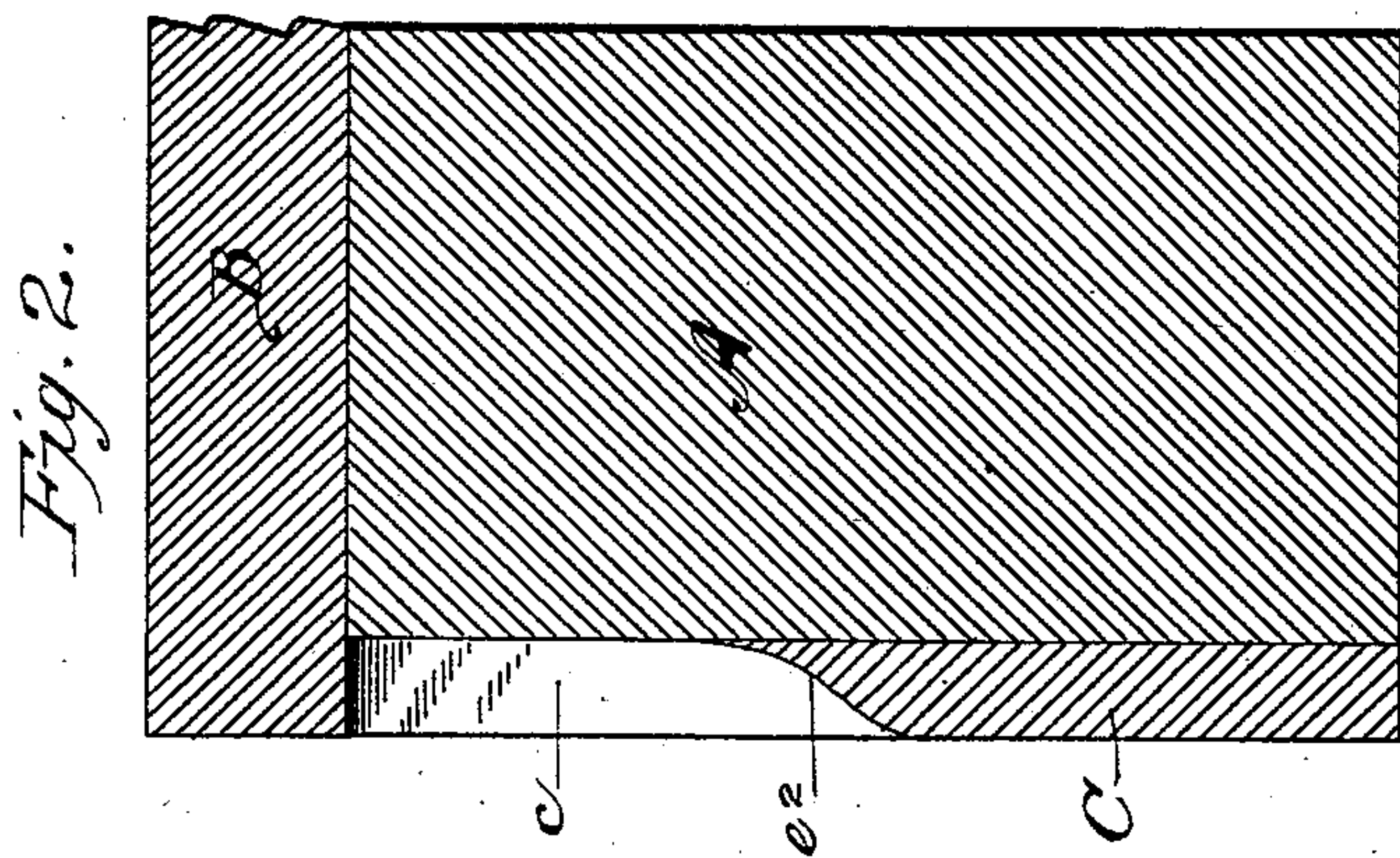
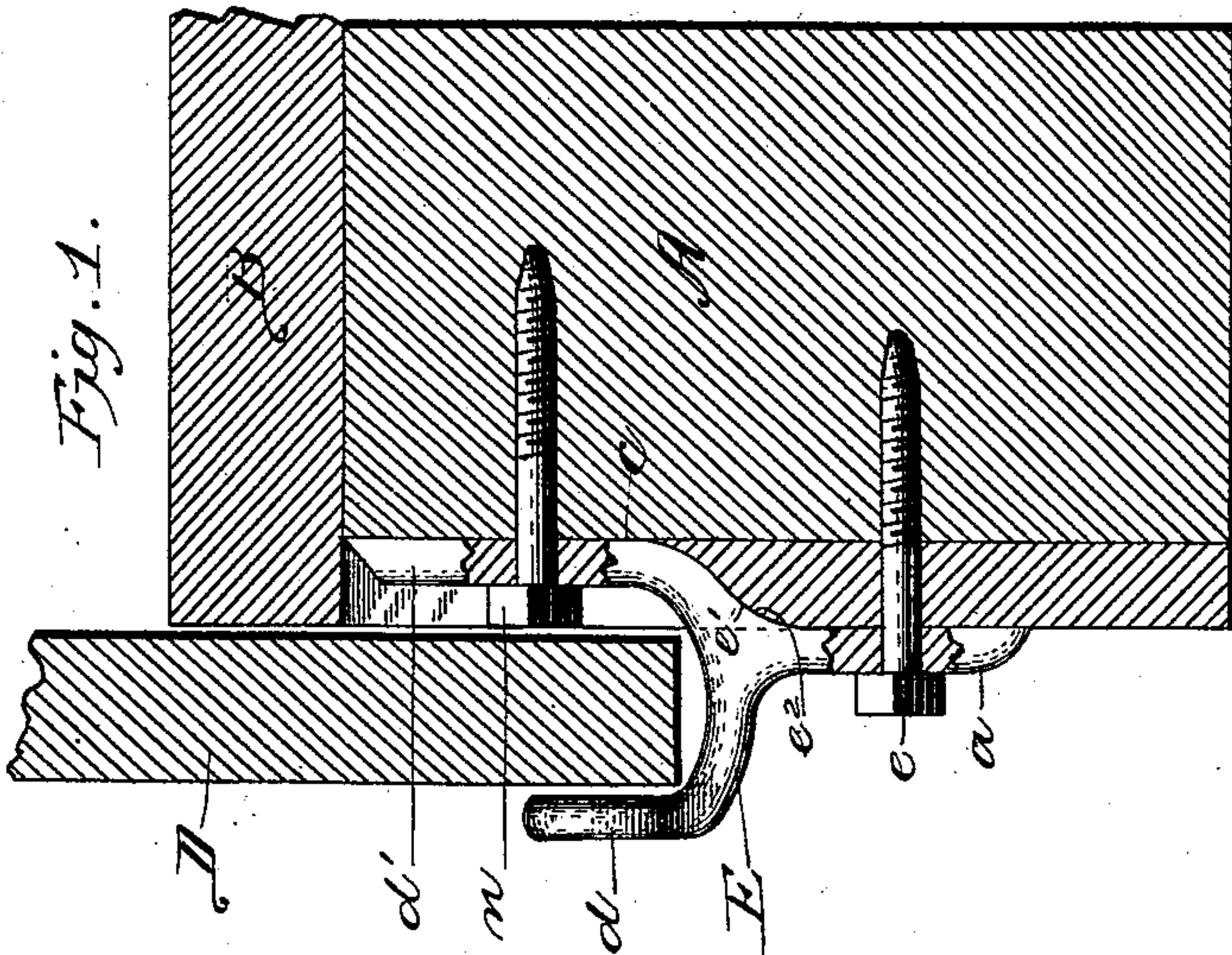
(No Model.)

2 Sheets—Sheet 1.

E. A. HILL.  
CAR DOOR BRACKET.

No. 540,593.

Patented June 4, 1895.



Witnesses:

Albert B. Blackwood.

Edward A. Hill

John H. Blackwood

By Raymond G. Quahndro

Attorneys

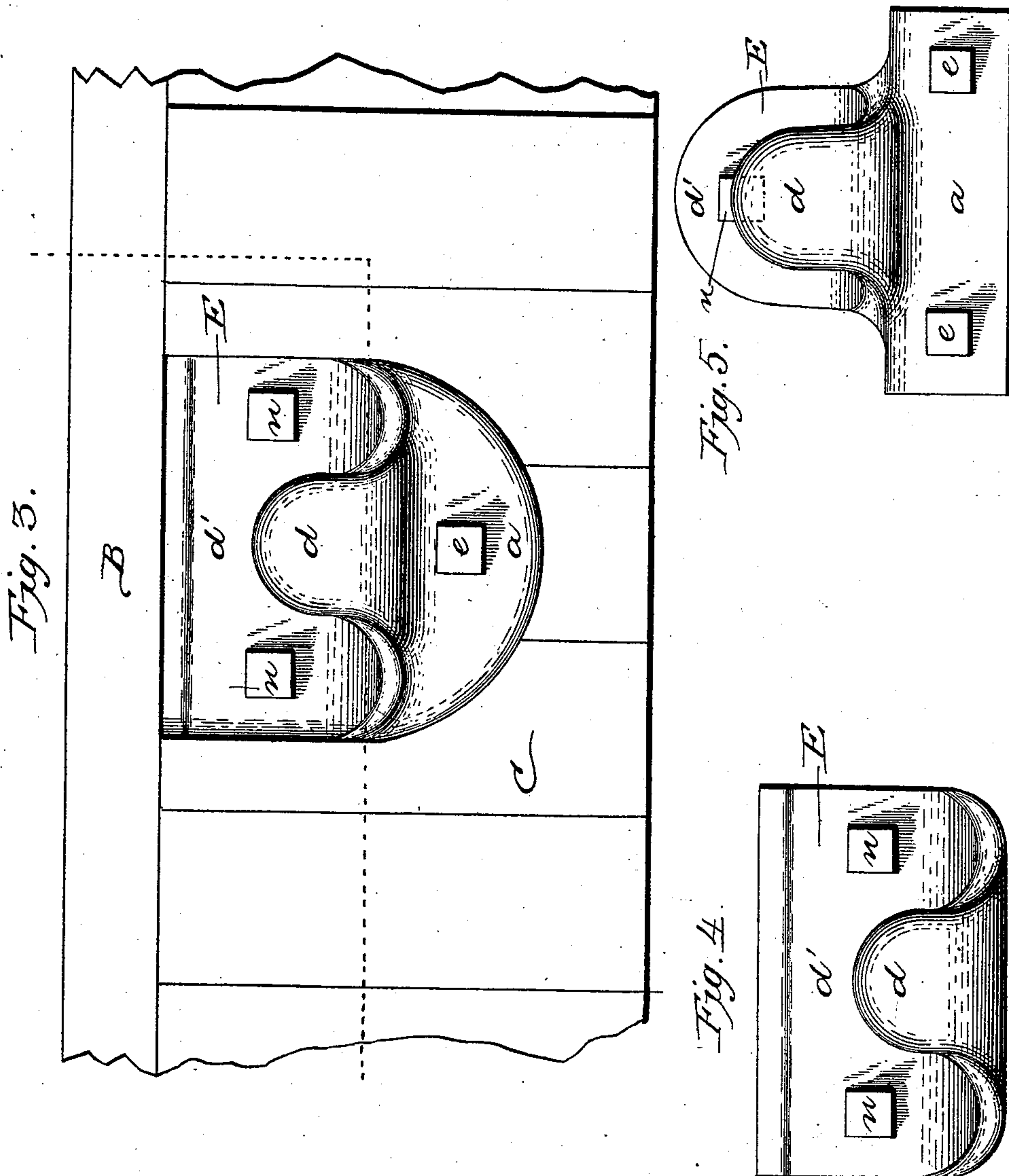
(No Model.)

2 Sheets—Sheet 2.

E. A. HILL.  
CAR DOOR BRACKET.

No. 540,593.

Patented June 4, 1895.



Witnesses:

Albert B. Blackwood.

John H. Blackwood.

By

Edward A. Hill  
Inventor.  
Raymond C. Quinlan  
Attorneys



# 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. 540,593, dated June 4, 1895.

Application filed November 24, 1894. Serial No. 529,828. (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.

My invention relates to metal brackets which are especially utilized for guiding the lower edges of the sliding doors of freight cars so as to properly direct the movement of such doors into and out of closed position, and also serve to prevent the outward movement of the door.

The primary object of my invention is to produce a simple, durable and economical bracket, suitably fitted in a recess or niche in the car sheathing or body which shall effectually guide the sliding door into and out of closed position and which is attached to the body of the car in such a manner as to be effectual proof against removal.

A further object of my invention is to so secure the brackets to the body of the car by suitable fastening screws or bolts in such a position as to conceal and prevent access to said fastenings by the car door when closed, thus rendering it impossible to remove the bracket; pry open the adjacent part of the door sufficiently to admit a person's body and thereby surreptitiously gain an entrance to the car, which it is understood, has heretofore been accomplished without either breaking the door lock or rupturing the seal.

The heretofore mentioned objects and such others as may appear from the ensuing description are attained by means of the devices illustrated in the accompanying drawings, in which—

Figure 1 illustrates my invention in side elevation, showing the bracket and fastenings therefor, the bracket partly in section, and representing in transverse section a portion of the car frame or sill, the floor, sheathing, and car-door. Fig. 2 is a transverse section of a portion of the car, showing a recess or niche in the sheathing or car-body adapted to receive one of the bracket arms or extensions. Fig. 3 is a side elevation of the bracket

and a portion of the car-body, illustrating a portion of the car-floor in section and the car-door by dotted lines. Figs. 4 and 5 represent, in front elevation, modified forms of the brackets illustrated in Figs. 1 and 3.

Referring first to the arrangement shown in Figs. 1 to 3, both inclusive, A designates a portion of the frame or sill of a freight car; B, the car floor; C, the outer sheathing of the car provided with a niche or recess *c*, and D, one of the side doors of the car which may be suspended by suitable hangers in the usual or any desired manner.

E designates the bracket which serves as a guide for the car door and prevents accidental or intentional outward movement of the same, located in the usual manner so far as position is concerned. The said bracket E may be made of two or more pieces. However, I prefer to construct the same of a single piece of metal, consisting of a base-portion *a* adapted to rest against the outer side of the car sheathing and firmly secured to the car body by a suitable screw-bolt or fastening *e*. A portion of the bracket projects outwardly and upwardly from the base, forming a guide and protecting flange *d*, the latter serving to retain the door in close proximity to the outer side of the car body and preventing the outward displacement or movement of the door. Another portion or extension of the bracket designated *d'*, extends in an inward and upward direction from the base, forming a shoulder at *e'*, said shoulder resting or abutting against a beveled portion of the car sheathing, as shown at *e''*, the entire extension *d'* above the shoulder resting in the niche or recess made in the car sheathing or body, and is secured to the car sill or frame by suitable screw bolts *n*, thereby, allowing the upper portion of the bracket to set into the side of the car and out of the way of the car door, as clearly illustrated in Fig. 1 of the drawings.

When the car door is in a locked or closed condition, it will be readily understood that the upper bracket fastening bolts or screws are concealed normally behind the door, hence rendering it impossible to gain access to the bolts or screws for the purpose of removing the brackets.

The modified form of bracket illustrated in Fig. 4, represents the fastening screws or bolts



as applied to that portion only of the bracket which is adapted to rest in the niche or recess in the car sheathing, while the form of bracket shown in Fig. 5 illustrates the main fastening screws or bolts as applied to the base and a single bolt or screw for securing the upper portion of the bracket in the niche or recess.

It will be observed that in all of the forms of the bracket shown in the drawings the upper fastening bolt or bolts—that is, those bolts which pass through the extension of the bracket, which projects up behind the door and above the lower edge thereof—are concealed both from view and from the possibility of tampering, by the door itself, and even though the bracket have the lower extensions or base portion *a*, as illustrated in Figs. 1, 3 and 5, the removal of the bolt or bolts *e* will not enable the displacement of the bracket, because it will still be held firmly in place by the bolt or bolts *n*, concealed behind the lower edge of the door. Of course, the bolts *e* are not concealed by the door in any position thereof. As illustrated in the drawings, the bracket may or may not have the base or lower extension *a*, and both the lower extension and the upper extension behind the lower

edge of the door may be fastened with one or more bolts.

It is obvious that various forms of brackets may be utilized for the purpose without departing from the spirit of my invention.

What I desire to claim and secure by Letters Patent is—

1. A device for preventing the outward movement of a car door, comprising an extension or arm normally in front of the door and an extension in the rear of the door firmly secured to the car body above the lower edge of the door, said rear extension being secured in such relation to the door as to conceal the securing bolts behind the same, substantially as described.

2. A bracket for car doors provided with a base portion, an outwardly and upwardly projecting portion, and an inwardly and upwardly extending portion, the latter being fitted and secured in a recess or niche in the side or sheathing of the car above the lower edge of the door, substantially as described.

EDWARD A. HILL.

Witnesses:

M. E. SHIELDS,  
O. R. BARNETT.