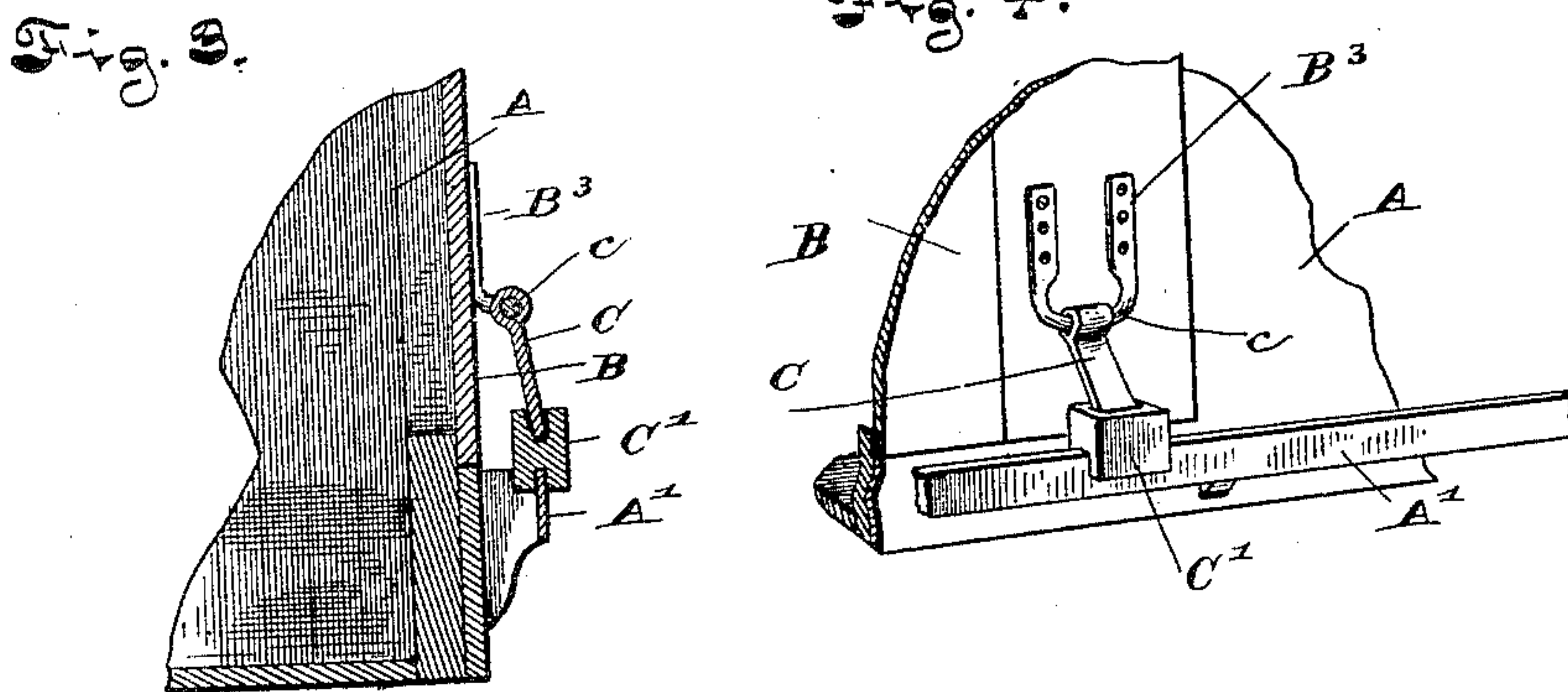
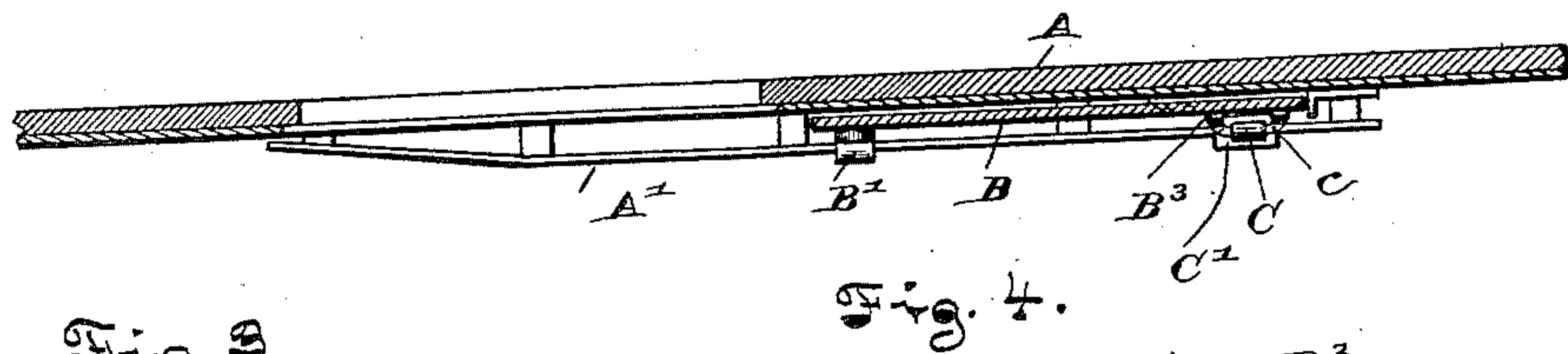
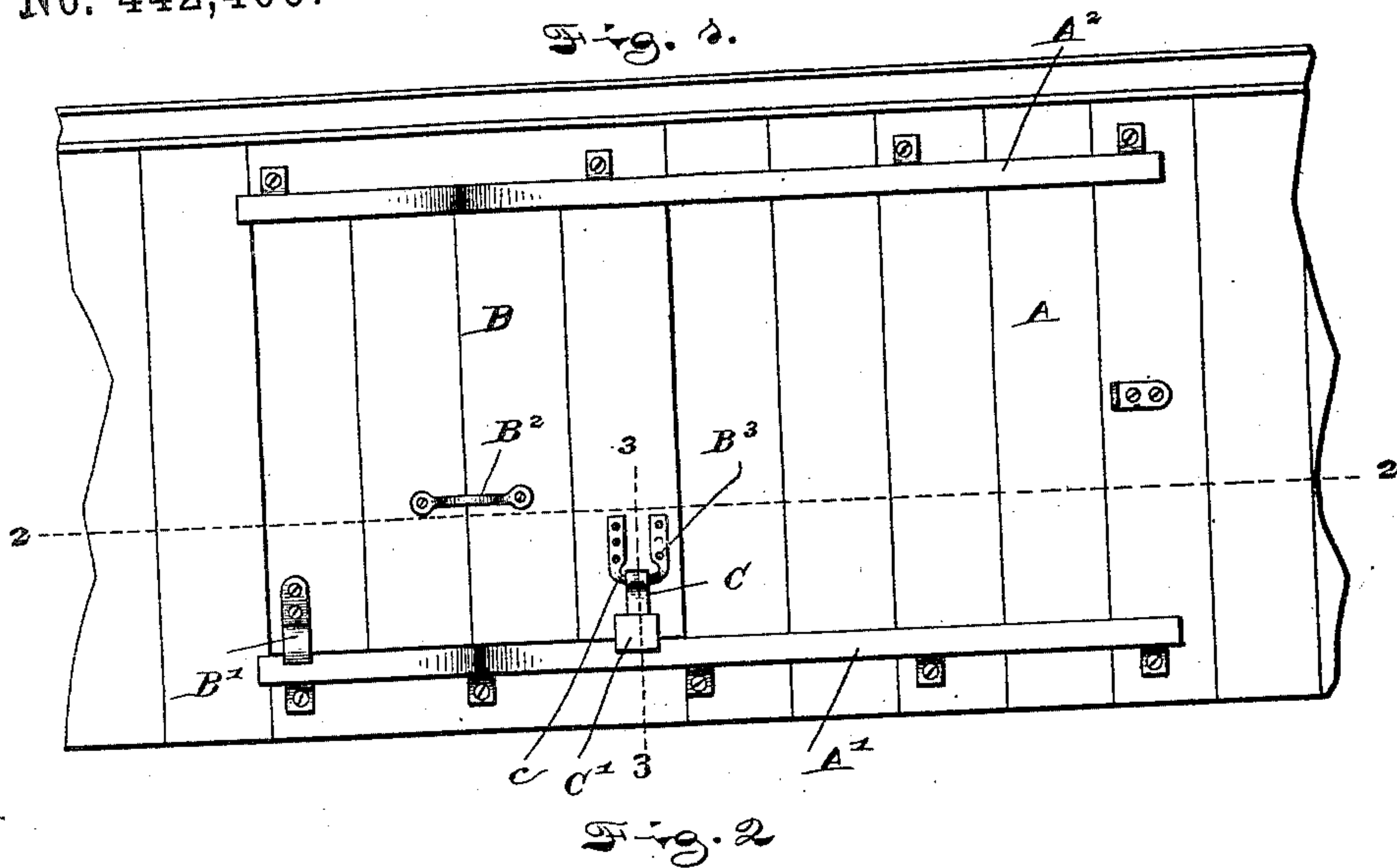


(No Model.)

J. L. WAGNER & J. SEATH.
CAR DOOR.

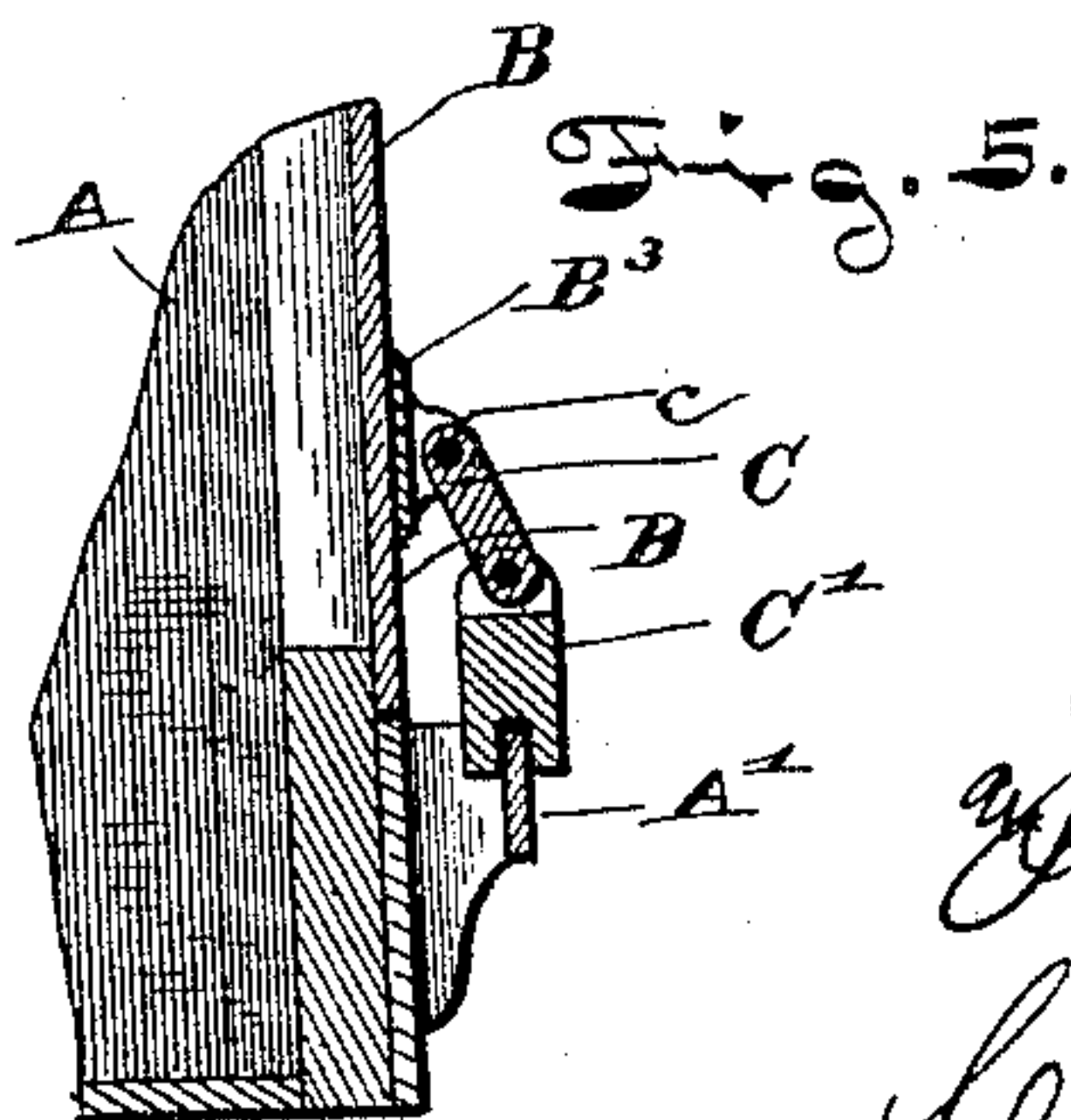
No. 442,406.

Patented Dec. 9, 1890.



WITNESSES:

H. D. Realy
James A. Walsh.



INVENTORS:
John L. Wagner
James Seath,
BY
Edw. C. Bradford.
ATTORNEYS.

UNITED STATES PATENT OFFICE.

JOHN L. WAGNER AND JAMES SEATH, OF TERRE HAUTE; SAID SEATH
ASSIGNOR TO CHARLES S. LEWIS, OF INDIANAPOLIS, INDIANA.

CAR-DOOR.

SPECIFICATION forming part of Letters Patent No. 442,406, dated December 9, 1890.

Application filed March 11, 1890. Serial No. 343,510. (No model.)

To all whom it may concern:

Be it known that we, JOHN L. WAGNER and JAMES SEATH, citizens of the United States, residing at Terre Haute, in the county of Vigo and State of Indiana, have invented certain new and useful Improvements in Car-Doors, of which the following is a specification.

Our present invention relates to that class of doors which are adapted to be shut into the door-openings substantially flush with the outer surface of the car, and thus enable said doors to be so tightly closed as to exclude snow, rain, cinders, &c.; and it consists in mounting such doors upon their tracks by means of a three-part device consisting of a bracket on the door, a shoe on the track, and a link connecting them, as will be hereinafter more particularly described and claimed.

Referring to the accompanying drawings, which are made a part hereof, and on which similar letters of reference indicate similar parts, Figure 1 is a side elevation of a portion of a car, including the tracks for said door, &c.; Fig. 2, a horizontal sectional view, looking downwardly from the dotted line 2 2 in Fig. 1; Fig. 3, a transverse sectional view on the dotted line 2 2 in Fig. 1, on an enlarged scale; Fig. 4, a perspective view of the parts shown in Fig. 2, and Fig. 5 a view similar to Fig. 3 of an alternative construction.

In said drawings the portions marked A represent the side of the car, B the car-door, and C a link connecting a bracket on the door and a shoe on the track.

The car A is or may be any ordinary car and needs no special description. It is provided with a track A' and the guide-rail A², as usual. The track is shown as a bent track; but a straight track may be obviously employed by using two link-brackets, instead of one link-bracket and a stiff bracket, as shown in the drawings. The door B is an ordinary door for the purpose, and is formed to fit closely into the door-opening, so as to be flush with the outside of the car when closed. It is mounted on the track A' by means of the bracket B' and the link C and connected parts. It also has a handle B². This handle in practice is commonly of a construction by

which the door may be forced into and out of the door-opening; but in this case we have shown it as a plain handle, as the handle is no part of our present invention. The link C is hinged by a horizontal pintle c to a bracket B³ near one corner of the door. This pintle is shown as formed integrally with the other portions of the bracket, but may of course be a separate structure, if desired. The other end of the link rests in a socket or mortise in the top of a shoe C', which rests upon the track, as shown most plainly in Figs. 3 and 4. It might, if desired, be connected to said shoe by a horizontal pintle, as shown in Fig. 5, similarly to the manner in which the upper end is connected to the bracket B³, or otherwise, as preferred.

Our present invention is operated as follows: When it is desired to open the door, the rear side thereof is pulled out of the door-opening, bringing the link C into substantially a vertical position, and which brings the door outside of its jamb. The door is then slid along the track in front of the side of the car, leaving the door-opening exposed, as usual. When it is desired to close it, it is slid back along the track, and in the construction shown, because of the curved character of the track-rail A', the front edge of the door reaches a position flush with the side of the car at the same time it reaches the limit of its movement. The rear side of the door is then forced in, which is permitted by the hinging of the link C, as shown.

Having thus fully described our said invention, what we claim as new, and desire to secure by Letters Patent, is—

1. The combination of a car provided with a door-opening, a door adapted to fit into said opening substantially flush with the side of the car, a supporting track-rail secured to the side of the car below said door-opening, a shoe mounted on said track-rail, a bracket secured to said door above said track-rail, and a link C, extending from said bracket to said shoe, whereby that edge of the door to which said bracket is secured is supported from said shoe on said track and adapted to move transversely to said track, substantially as shown and described, and for the purpose specified.

2. The combination of a car having a door-opening, a door adapted to be shut into said opening substantially flush with the side of the car, a track-rail below said door-opening, a bracket on said door, a shoe on said track, and a link secured to said bracket by a horizontal pintle and extending down to said shoe, substantially as shown and described.

In witness whereof we have hereunto set our hands and seals, at Terre Haute, Indiana, on this 25th day of February, A. D. 1890.

JOHN L. WAGNER. [L. S.]

JAMES SEATH. [L. S.]

Witnesses:

B. V. MARSHALL,

FRANK SMALLWOOD.