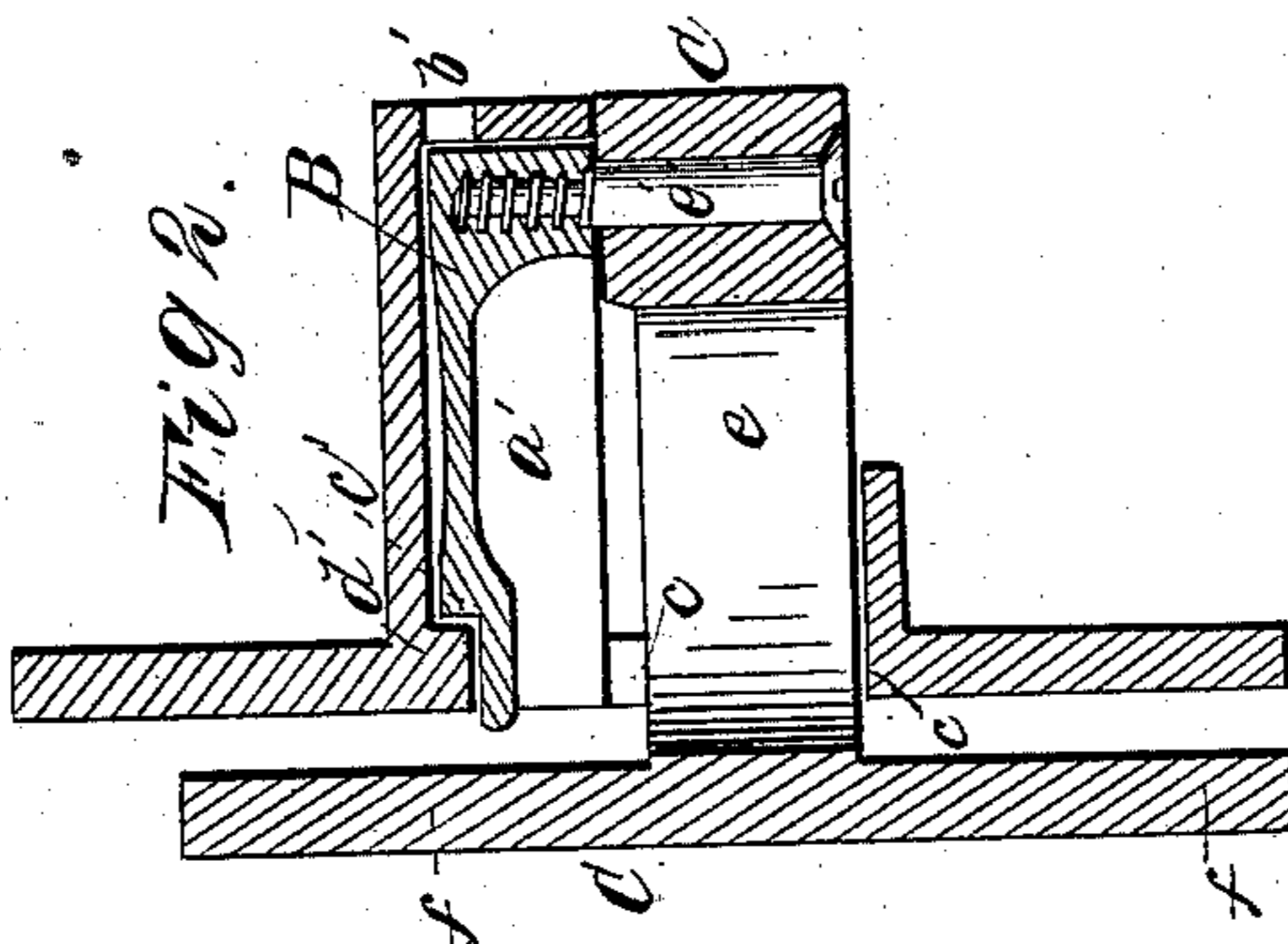
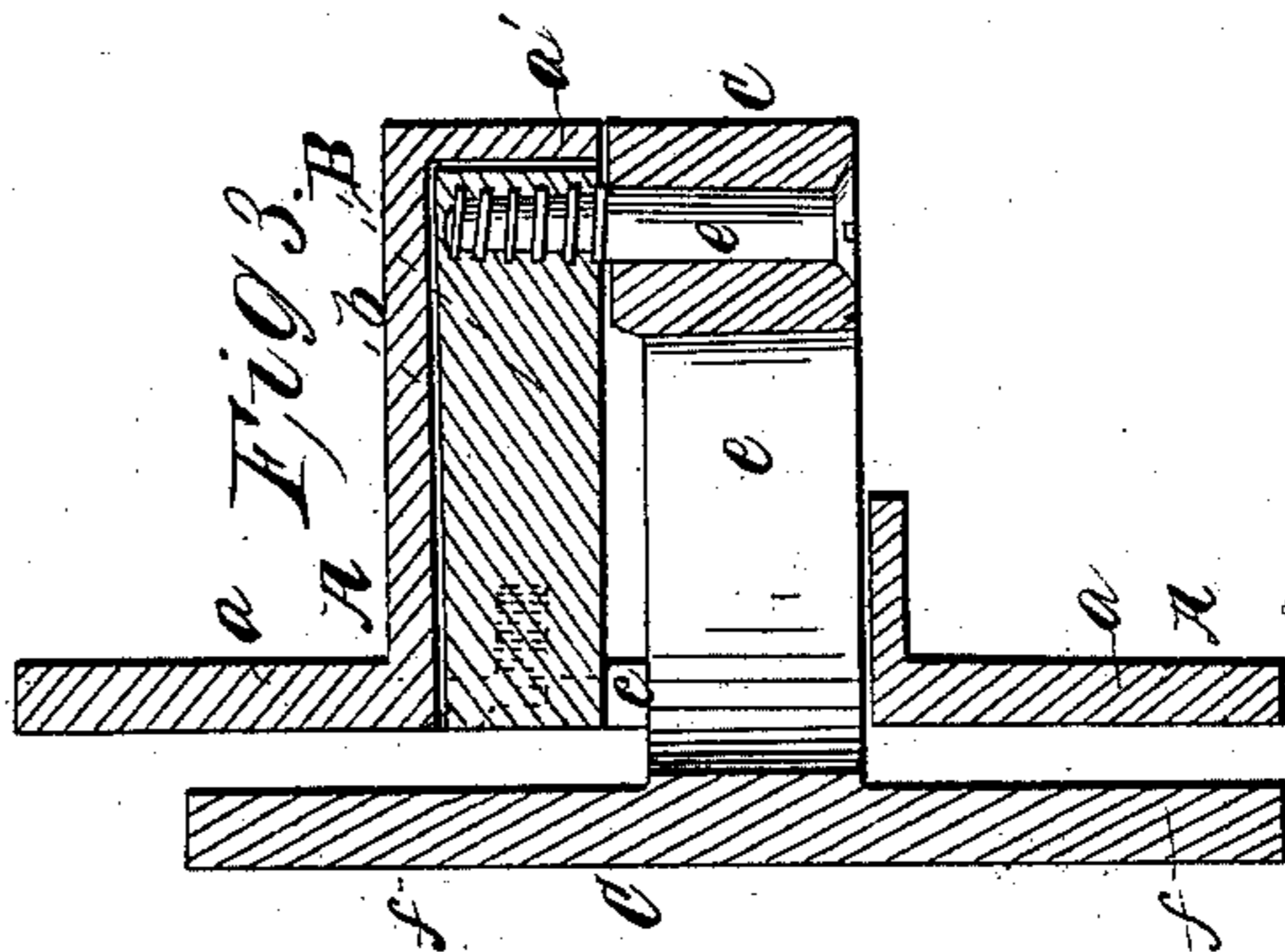
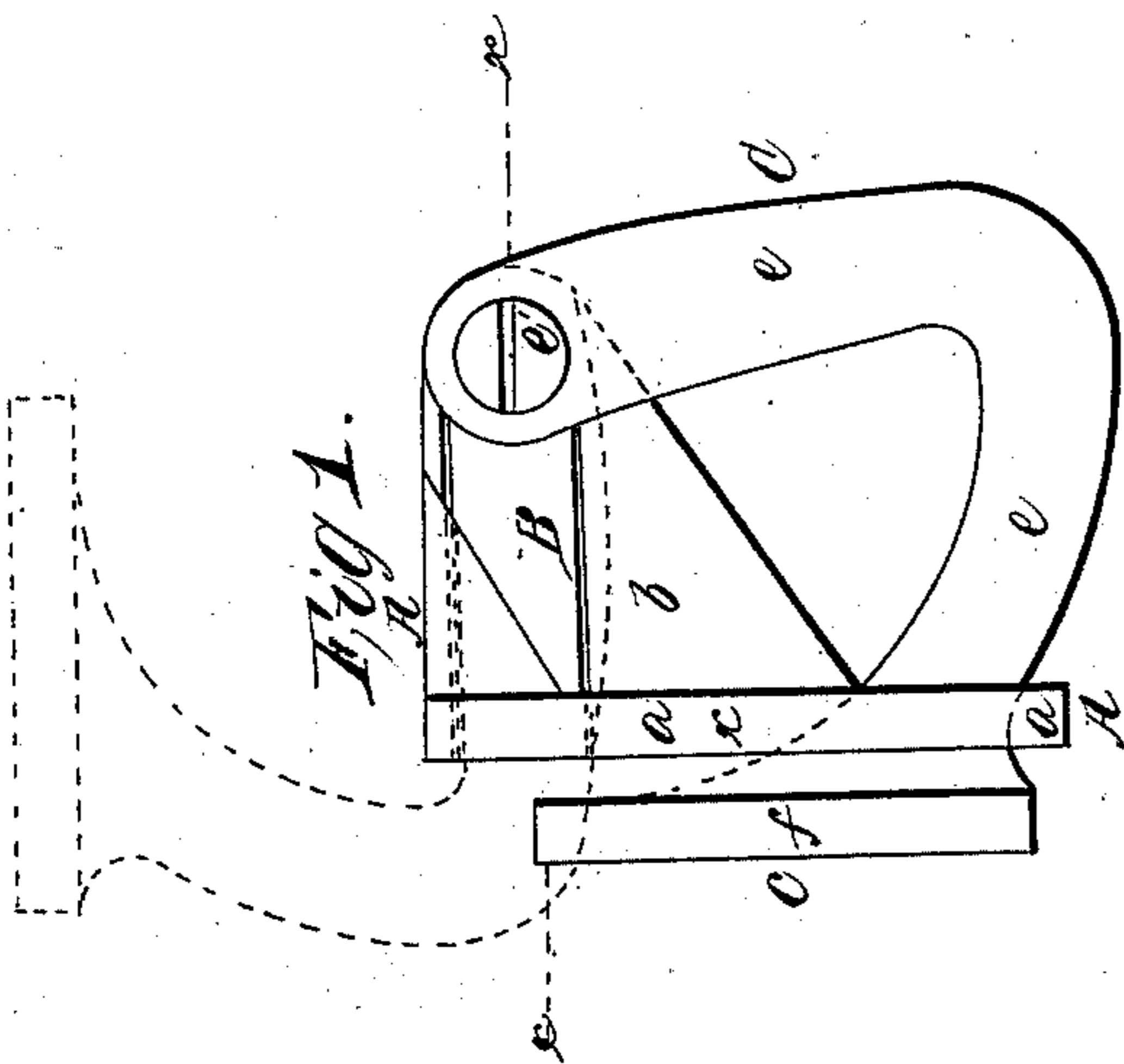


C. E. Schwind,
Coach Hinge.

No 68,121.

Patented Aug. 27, 1867.



Witnesses.
J. W. Brown,
G. L. Reed.

Inventor.
C. E. Schwind

United States Patent Office.

C. E. SCHWIND, OF NEW YORK, N. Y.

Letters Patent No. 68,121, dated August 27, 1867.

IMPROVEMENT IN CARRIAGE HINGES.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, C. E. SCHWIND, of the city, county, and State of New York, have invented a new and useful Improvement in Hinges; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, making a portion of this specification, in which—

Figure 1 is an inverted plan view of a hinge constructed according to my invention.

Figure 2 is a vertical section of the same taken in the line *x x* of fig. 1.

Figure 3 is a similar section showing a modification of the same.

Similar letters of reference indicate corresponding parts in all the figures.

This invention is designed more especially for use with the doors of coaches; and its object is to enable such doors to be taken off from the coach-bodies without involving the necessity of removing any portion of the casings around them, which, as coach-bodies are ordinarily constructed, is now generally required; and to this end the invention consists in the combination, with the two halves or main parts of the hinge, of a detachable piece or slide, whereby, when the coach-door is in an open position, the said parts or halves of the hinge may be disconnected with very great facility to permit the removal of the door without interfering with the hereinbefore mentioned casing in any way.

To enable others to understand the nature and construction of my invention, I will proceed to describe it with reference to the drawings.

That part of the hinge which is attached to the coach-body is shown at A, and consists of a plate, *a*, which is placed in a vertical position when the hinge is in use, and which has formed upon one side thereof, and at right angles thereto, a strong extension, *b*, in the under side of which is formed a deep longitudinal groove or recess, *a'*, at the end of which is a hole, *b'*, which extends through the extremity of the extension *b*, as shown in fig. 2. This recess or groove *a'* is made of tapering form, being widest at the inner end, or, in other words, at that end adjacent to the plate *a* of the aforesaid part A of the hinge. Placed in the recess *a'* is a detachable piece or slide, B, the outermost portion of which is made solid with its extremity fitted into the hole *b'*, and the main portion of the said slide is preferably made comparatively thin and elastic, as represented in fig. 2, and with its inner end formed with a shoulder, *c'*, which rests against a similar shoulder, *d'*, formed at the end of the recess *a'*, in such manner that the slide B, being placed in the said recess, will be effectually retained and secured therein. Instead of being secured in the recess *a'* in this manner, its retention may be provided by making both the recess and slide of dove-tail form in their cross-section, and furnishing the slide with a lateral projection attached to the extension *b* by a suitable screw, as shown in dotted lines in fig. 3. Formed transversely in the plate *a*, immediately below the extension *b* thereof, is an opening, *e*. The elbow-shaped portion, *c*, of the part C is passed through the opening *e* of the part A, and has its extremity pivoted to the outermost end of the piece or slide B, by means of a vertical pivot or screw, *e'*. The aforesaid elbow-shaped portion *c* of the part C of the hinge is formed upon one side of a plate, *f*, which corresponds to the plate *a* of the part A, and is attached to the door of the coach by screws or other suitable means.

In using the hinge, the elbow shape of the portion *c* of the swinging part C thereof, enables it to move freely through the opening *e* of the part A, as required in opening and shutting the door; the position of the two parts, A C, of the hinge when the door is closed being shown in fig. 1, the said elbow-shaped portion resting upon that edge of the plate *a* formed at the lower side of the opening *e*, which thus prevents the weight of the part C, and that of the door attached thereto, from drawing the piece or slide B downward out of the recess *a'*. The position of the part C of the hinge, when the door is swung open, is indicated in red outline in fig. 1, and, inasmuch as the plate *f* is thus brought away from the plate *a*, the elastic portion of the piece or slide B may be sprung or forced downward clear of the shoulder *d'*, whereupon the door, together with the part C of the hinge, may be pulled away from the coach-body, the piece or slide B being drawn longitudinally out of its groove or recess *a'*, so that by these means the door may be removed without being raised vertically, thus obviating any necessity of removing the top of the casing around the door, which would otherwise be required. Of course when the slide B is held in place by a screw, as indicated in fig. 3, and hereinbefore explained, the screw will be removed previous to taking off the door.

What I claim as my invention, and desire to secure by Letters Patent, is—

The detachable piece or slide B, in combination with the two parts A C, substantially as and for the purposes specified.

C. E. SCHWIND.

Witnesses:

J. W. COOMBS,
G. W. REED.