

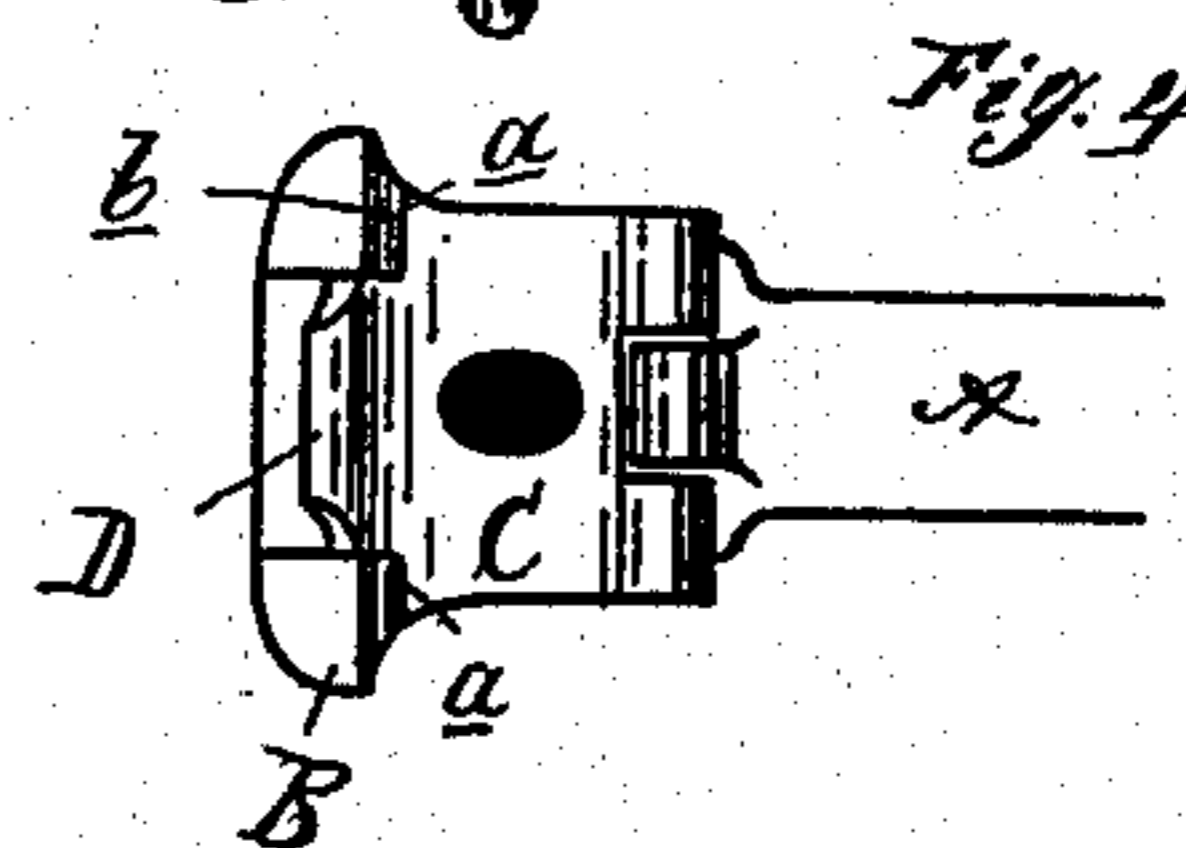
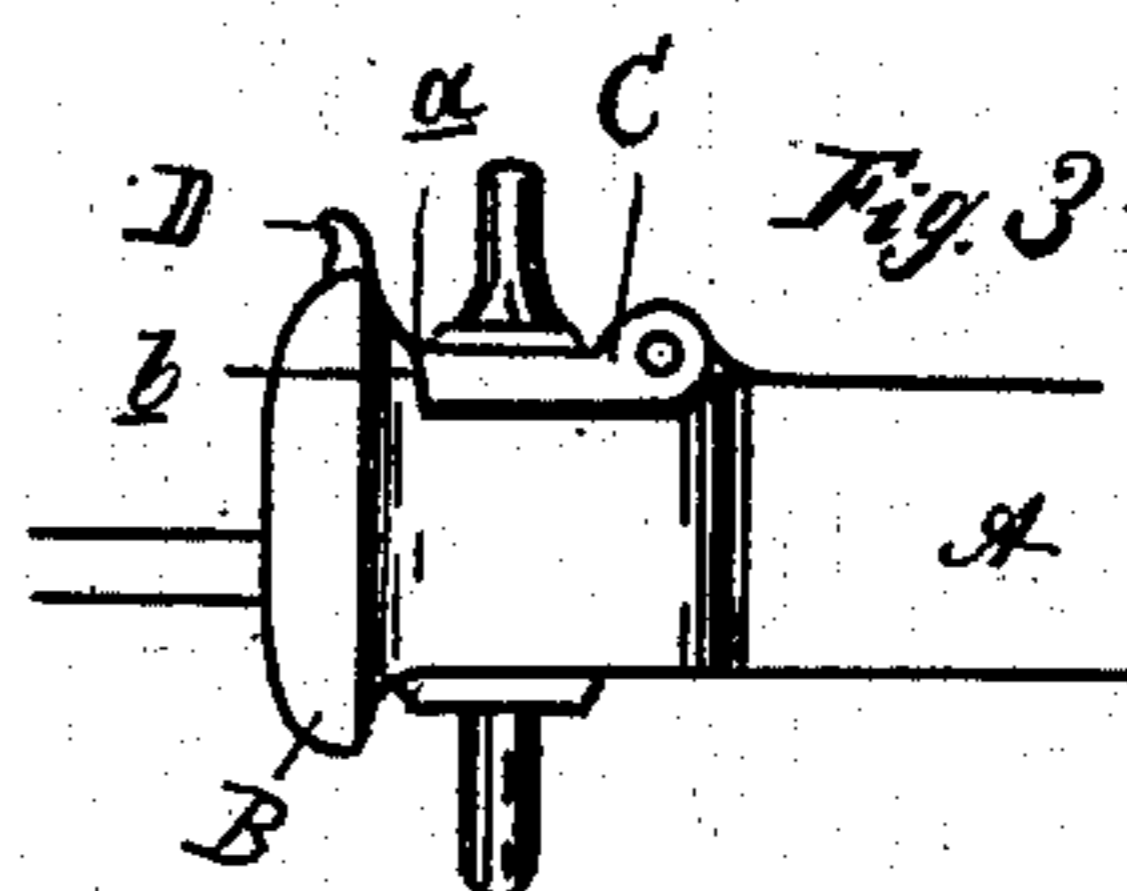
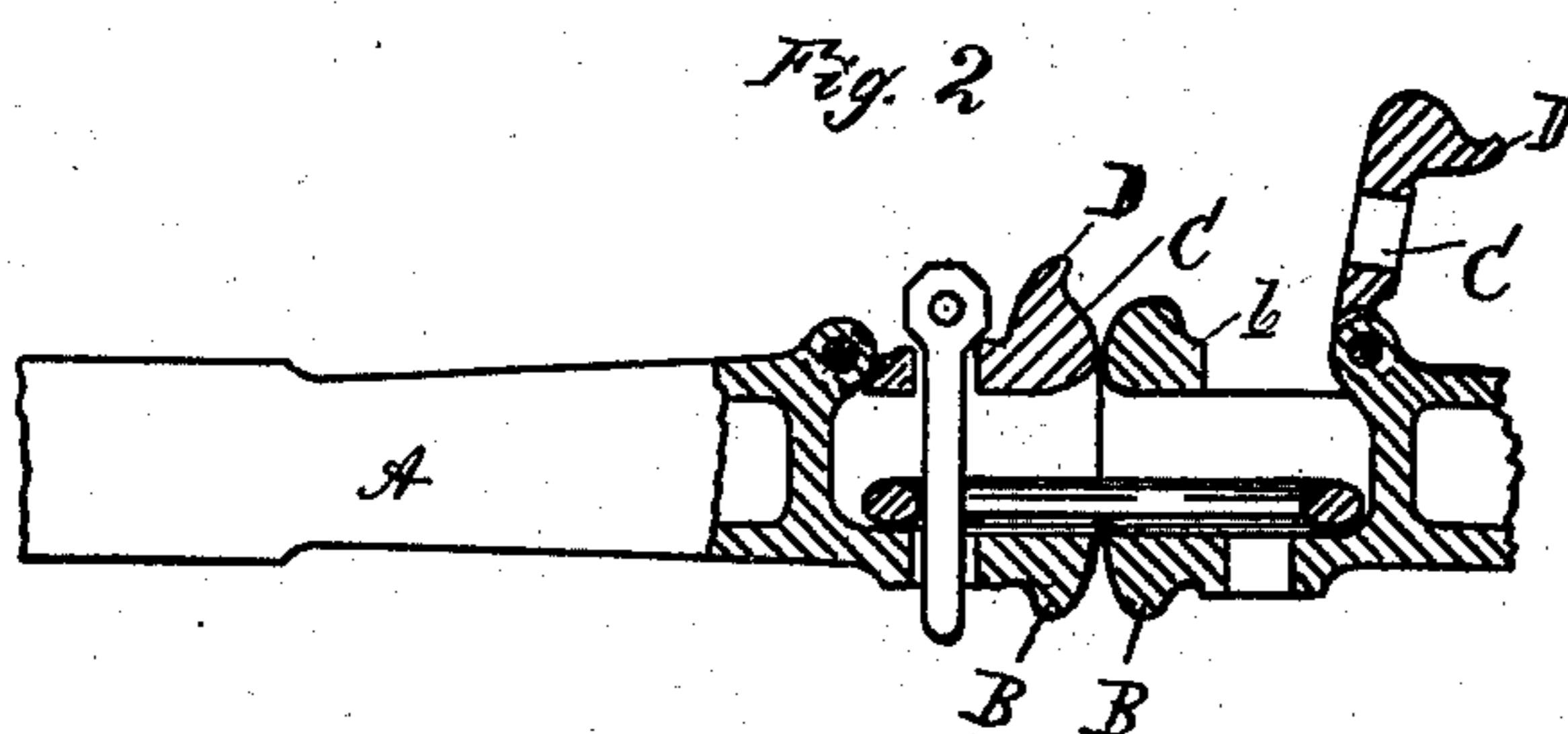
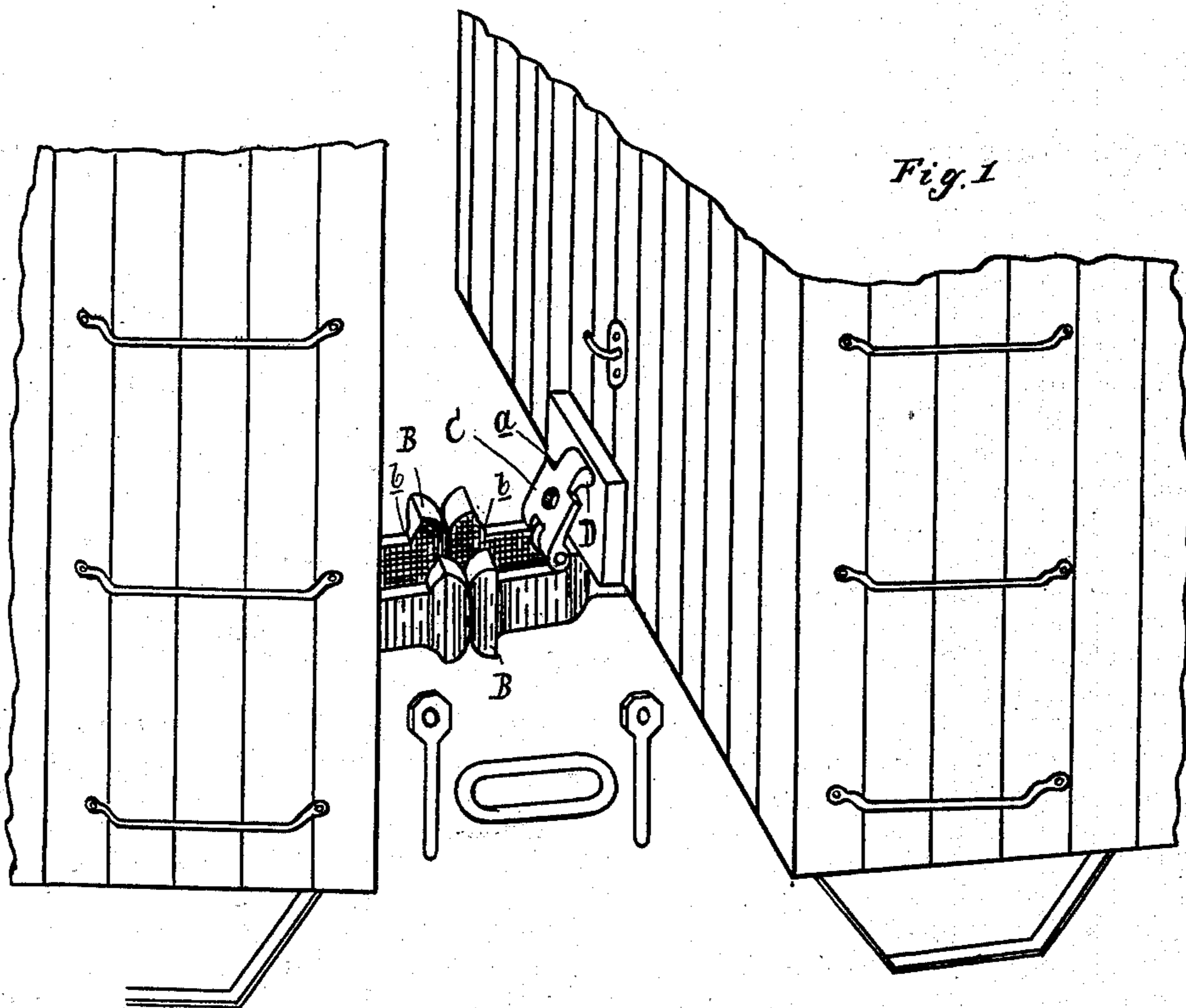
(No Model.)

W. RAPER.

DRAW BAR.

No. 322,200.

Patented July 14, 1885.



Attest:
John Schuman.
[Signature]

Inventor:
William Raper.
by his Atty
[Signature]

UNITED STATES PATENT OFFICE.

WILLIAM RAPER, OF WINDSOR, ONTARIO, CANADA.

DRAW-BAR.

SPECIFICATION forming part of Letters Patent No. 322,200, dated July 14, 1885.

Application filed March 18, 1885. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM RAPER, of Windsor, in the county of Essex and Province of Ontario, Canada, have invented new and useful Improvements in Draw-Bars; and I do hereby declare that the following is a full, clear, and exact description thereof, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to a new and useful improvement in car-couplings; and the invention consists in the peculiar combinations and the construction and arrangement of parts hereinafter more fully described and claimed.

In the drawings which accompany this specification, Figure 1 is a perspective view of my improved car-coupling attached to two freight-cars ready to be coupled together. Fig. 2 is a vertical central section through the car-coupling, one draw-head having its hinged cover opened and the coupling-pin removed. Fig. 3 is a side view of one draw-head, and Fig. 4 is a plan thereof.

A is the draw-bar of an ordinary pin-and-link coupler, provided with a draw-head, B, of the ordinary construction, except that its top side, C, does not form an integral part of the draw-head, but forms a separate piece, which is hinged at its rear end to the body of the draw-head so as to form a hinged lid thereto, which, when opened, gives free access to the recess in the draw-head. The hinged top C has formed on it near its free end the shoulders or offsets *a*, which, when the top is closed, impinge against the solid portions *b* of the draw-head.

D is a lip formed near the free end of the hinged top. It forms a convenient handle for the operator to open the hinged top.

In practice the operation of coupling cars with my improved coupling may be proceeded with in the same manner as with the common pin-and-link coupling in ordinary use; but it may also be performed in a manner entirely different therefrom, and which excludes all liability of accidents, and saves time.

It is well known that in making up a freight-train composed of cars provided with the ordinary pin-and-link couplers the cars have to

be assembled and coupled one by one, by the use of an engine, and no coupling can be made between stationary cars. With my improved coupler a coupling can be perfected between stationary cars without the use of an engine.

To make up a train where the cars are provided with my couplers, the pins and links are first removed from the draw-heads. Then the cars are assembled or backed up against each other. The further use of the engine is now dispensed with, and for greater safety it may be moved some distance away. While the cars are now in this stationary position, with the draw-heads impinging against each other, the brakeman simply enters between the cars, opens the lids of the draw-heads, drops a link in the recesses of the two draw-heads, closes the lid again, and inserts the pins. Thus all the cars are coupled together, and the time required is greatly less than with the ordinary coupler, while the danger is entirely removed. This mode of coupling can be even performed where but one of the two draw-heads has my removable lid, as the link can be easily inserted endwise into the other draw-head.

It will be seen that the strain in hauling does not come upon the hinge, but is taken up by the offsets or shoulders *a*, and the lid when closed is firmly seated against any other displacement, except in the direction in which it opens, and which is resisted by its own weight and the weight of the pin.

I am aware of the Patent No. 286,492, and make no claim to the construction shown therein as forming part of my invention.

What I claim as my invention is—

In a car-coupling, the draw-heads B, having open tops and inclines *b*, combined with hinged covers C, with shoulders *a* and intervening tongue, D, all arranged to allow a link to be passed into place from the top and have the covers bear tightly between the points *a* *b*, to relieve the hinge from strain, as set forth.

WM. RAPER.

Witnesses:

H. S. SPRAGUE,
E. J. SCULLY.