

W. GARDNER & E. G. PARKHURST.  
Cartridge Feeder for Machine Guns.

No. 235,627.

Patented Dec. 21, 1880.

Fig. 1.

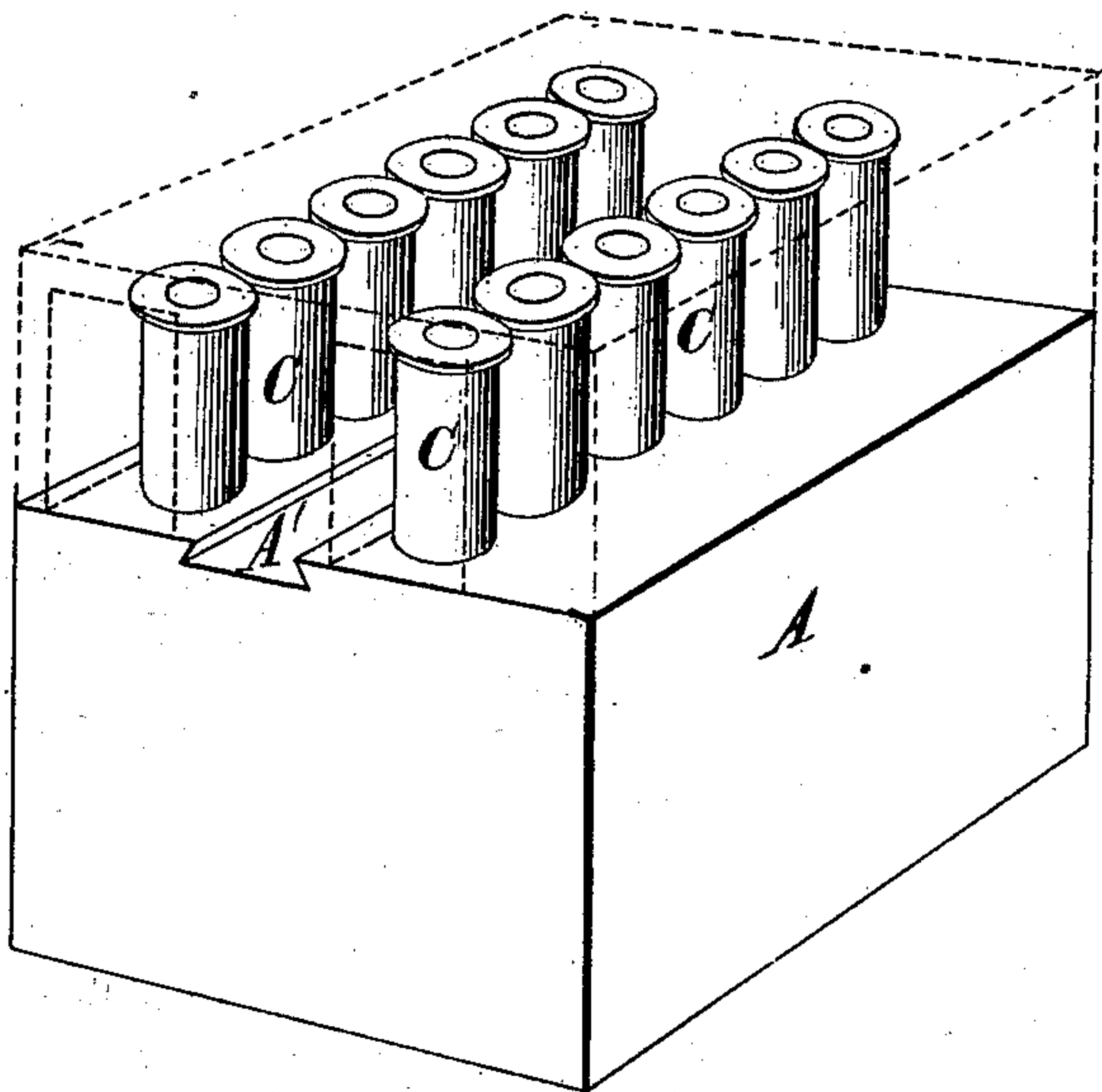
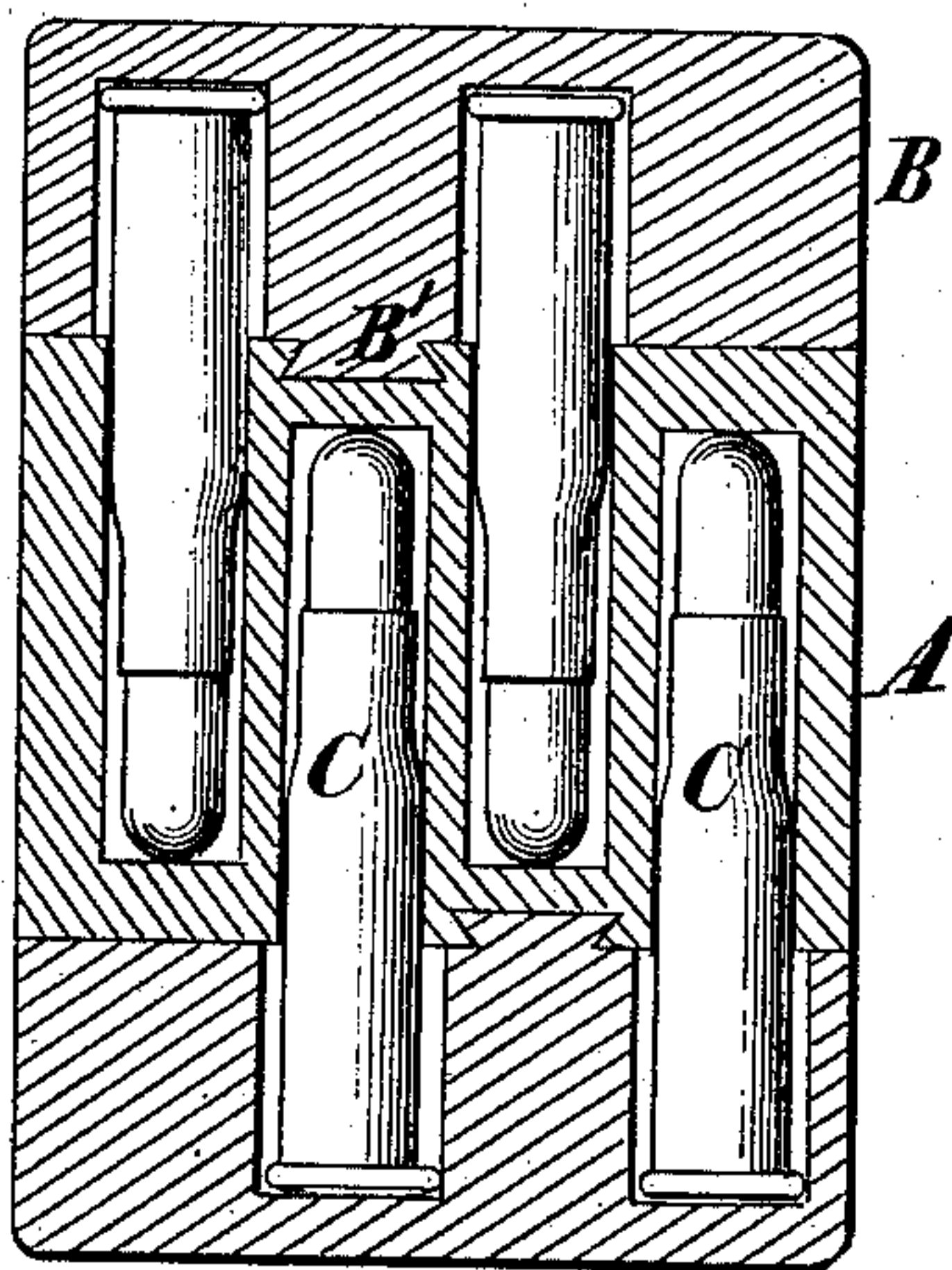


Fig. 2.



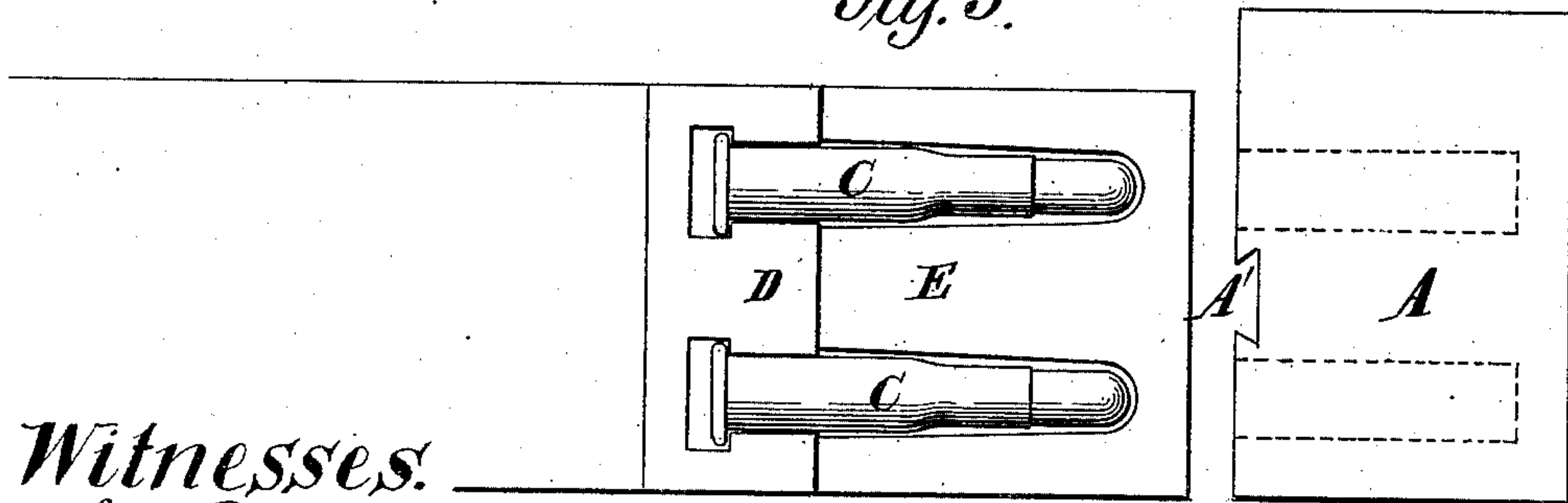
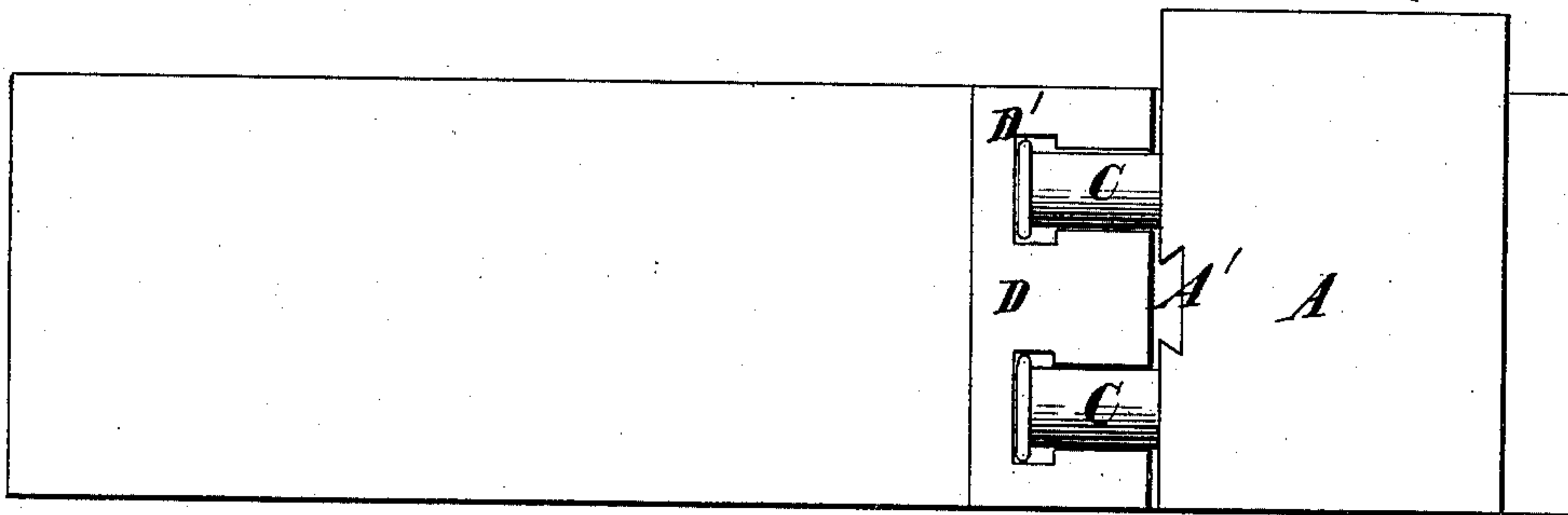
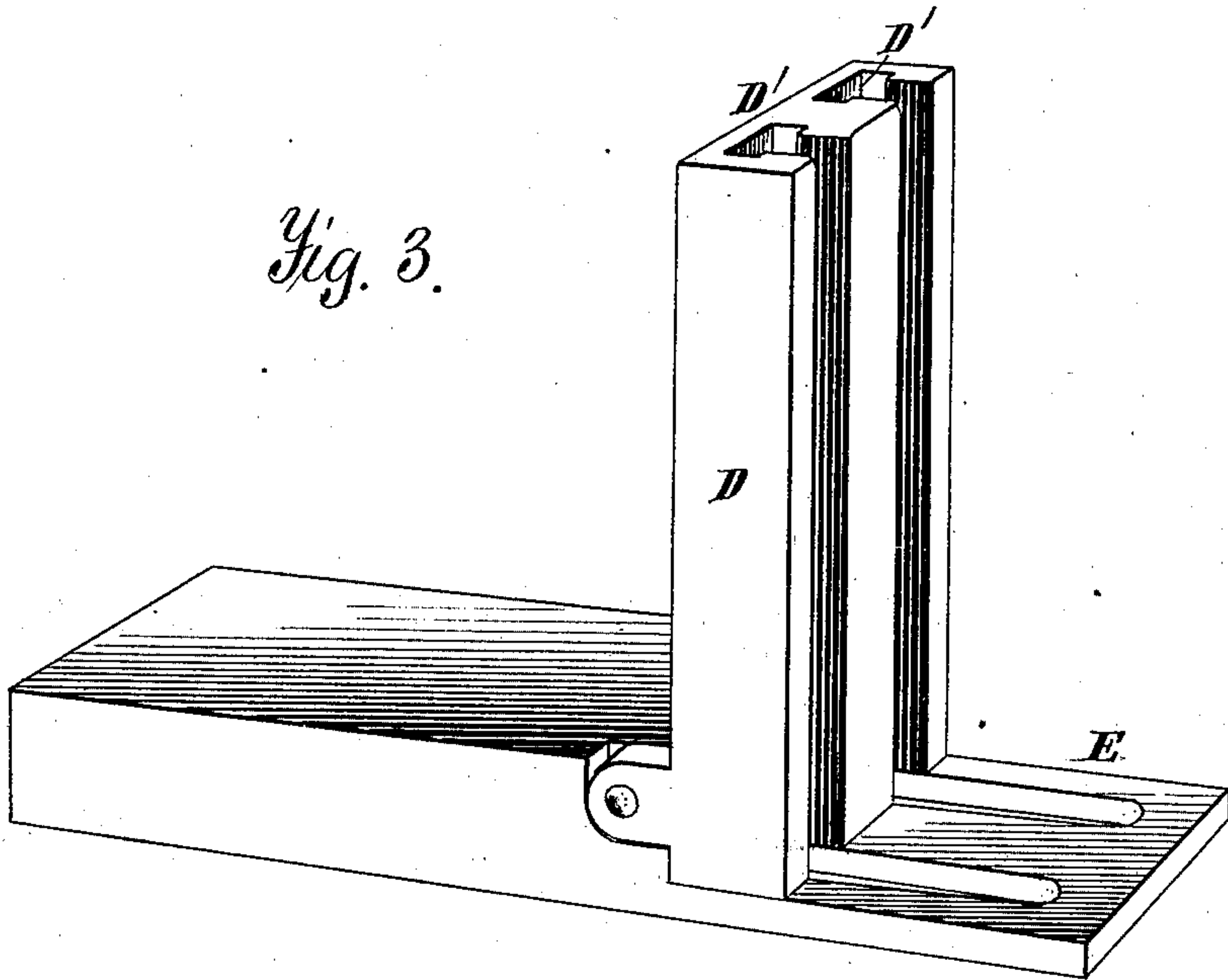
*Witnesses:*  
*A. Ruppert,*  
*W. B. Chaffee*

*Wm. Gardner*  
*Ed. G. Parkhurst*  
**Inventor.**  
*D. L. Holloway & Co*  
*Attys*

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# UNITED STATES PATENT OFFICE.

WILLIAM GARDNER AND EDWARD G. PARKHURST, OF HARTFORD, CONN.,  
ASSIGNORS TO PRATT & WHITNEY COMPANY, OF SAME PLACE.

## CARTRIDGE-FEEDER FOR MACHINE-GUNS.

SPECIFICATION forming part of Letters Patent No. 235,627, dated December 21, 1880.

Application filed January 12, 1876.

*To all whom it may concern:*

Be it known that we, WILLIAM GARDNER and EDWARD G. PARKHURST, of Hartford, in the county of Hartford and State of Connecticut, have invented a new and useful Improvement in Cartridge Cases and Feeders for Machine-Guns, of which the following is a specification.

The object of this invention is to provide means for conveniently and safely packing cartridges for transportation, and when required for use transferring them to machine-guns one after the other without having them jam in feeding.

In the annexed drawings, which make a part of this specification, Figure 1 is a perspective view of the packing-case, the head being indicated in dotted lines. Fig. 2 is a longitudinal section. Fig. 3 is a perspective view of the cartridge-guide on the gun. Fig. 4 is a plan indicating the position of the parts when the cartridges are being transferred from the packing-case to the guide on the gun. Fig. 5 is a plan view, showing the guide and feed-plate with the cartridges transferred by withdrawing the case.

The same letters are employed in all the figures in the indication of identical parts.

A is a block of wood having a series of holes bored in parallel lines to receive the bullet end of the metallic cartridges. They may be bored on both sides, as shown in Fig. 2, so that the two sets of holes shall not interfere. On the face of the block, and between the rows, is a dovetailed groove.

B is the head of the case, having a groove cut across its lower face, forming a recess to receive the flanged heads of the cartridges. It has a tongue, B', made of the same wood as the head B, or of metal or hard wood, fastened to it, fitting snugly into the dovetailed groove A'. The tongue and groove may be formed with tapering sides, so that when the head B is placed on the block A the former can only be withdrawn on the side from which they were connected—this to keep the parts together more perfectly and save the necessity of fastening them by screws.

When the cartridges are inserted in the holes in the block A, the head B is slid over

the heads of the cartridges and completely protects them from accidental discharge by anything striking on the fulminate.

On the cover of the gun is a hinged guide, D, which may be turned down out of the way when not required for use. It is immediately over the feed-plate E, through which the cartridges pass in being transferred to the loading and firing mechanism. The guide has cut in its face, immediately over the openings in the feed-plate, and corresponding also with the rows of cartridges in the block A, two parallel grooves, T-formed, to receive the flanged heads of the cartridges, and also to give lateral support to the stems.

It is obvious that cartridges fed into the upper end of the T-formed grooves, being held by their heads, must pass directly down into the openings in the feed-plate E, and cannot be deranged or displaced.

In action, when the heads of the carrying-cases have been removed, leaving the points of the cartridges inserted in the block A, the heads of the cartridges may be slid into the groove D' in the guide D until all the cartridges in the block are engaged, as shown in Fig. 4; then by drawing away the block A the cartridges will remain suspended nearly horizontally by their flanged heads in the guide D, and then drop one by one through the feed-plate from the bottom as they are successively fired. The feed can be made continuous, as cartridges may be supplied at the top of the guide D as fast as they are withdrawn at the bottom.

In cases where packing-cases were successively employed as a hopper for supplying cartridges to machine-guns there has been necessarily loss of time while one case was being removed when exhausted and another attached in its place.

The feed-plate E is in no sense a hopper, but is a plate which overlies the mechanism of the gun, and simply serves to retain a single cartridge while being transferred from the flanged guide to the firing mechanism. By this means the cartridge is held by the head until delivered to the firing mechanism, and no displacement by dropping can occur, as when the cartridges are supplied to a hopper which con-

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tains several cartridges without flanged ways to control their movement and relative position.

What we claim as our invention, and desire  
5 to secure by Letters Patent, is—

1. A packing-case for metallic cartridges, consisting of the block A, with rows of holes to receive the bullet end of the cartridges, and a head, B, connected thereto by dovetailed  
10 and tapering tongues and grooves A' B', substantially as set forth.

2. In combination with the feed-plate of a machine-gun, the grooved and flanged guide

D, leading directly to the feed-opening, for the purpose of controlling and guiding the car- 15  
tridges until delivered to the mechanism of the gun, whereby the usual intermediate hopper is dispensed with.

In testimony whereof we have signed our names to this specification in the presence of 20  
two subscribing witnesses.

WM. GARDNER.

E. G. PARKHURST.

Witnesses:

THEO. G. ELLIS,

WENDELL R. CURTIS.