

(No Model.)

W. S. SOULE.  
TRUNK FASTENER.

No. 596,795.

Patented Jan. 4, 1898.

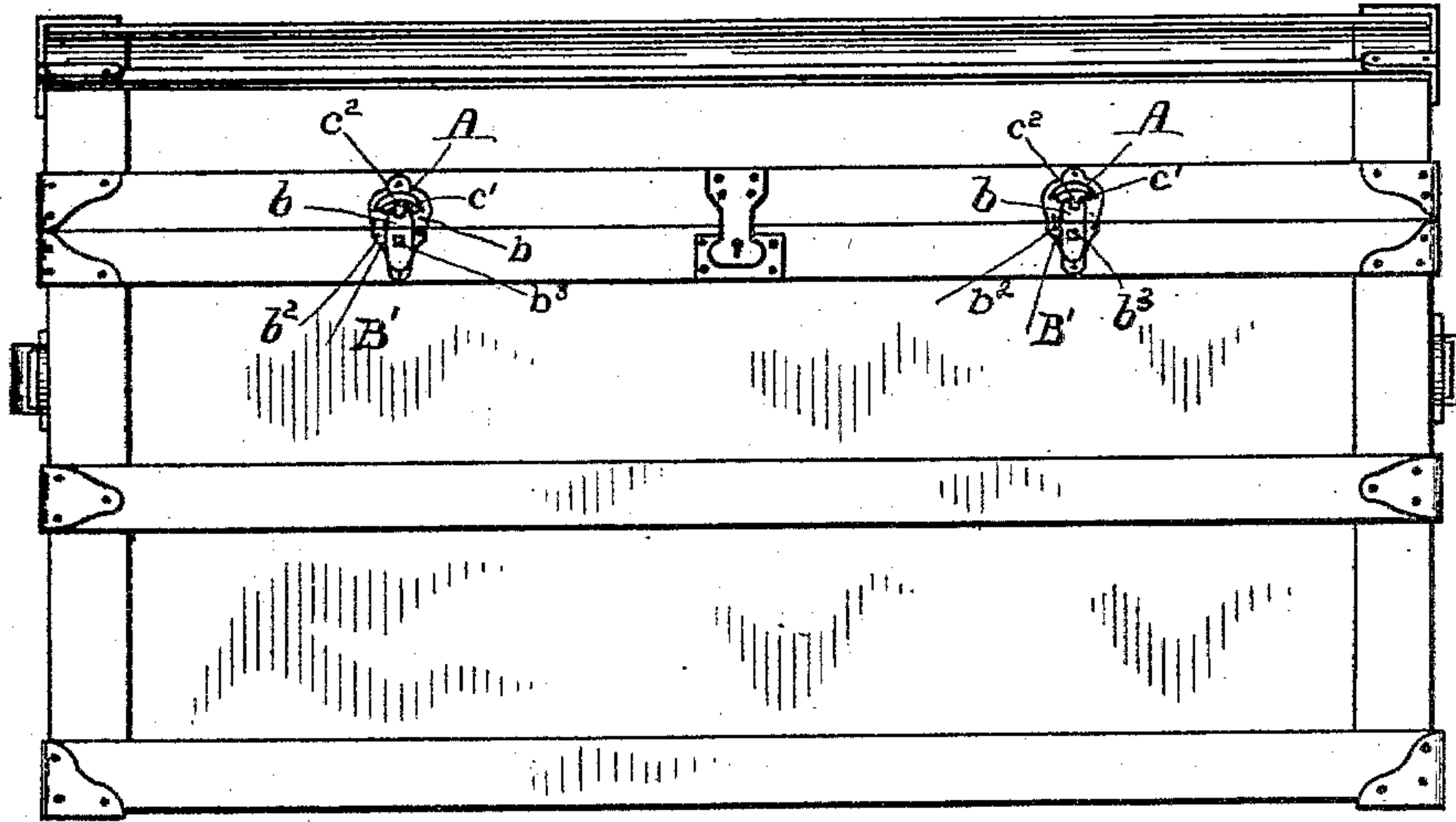


Fig. 1 -

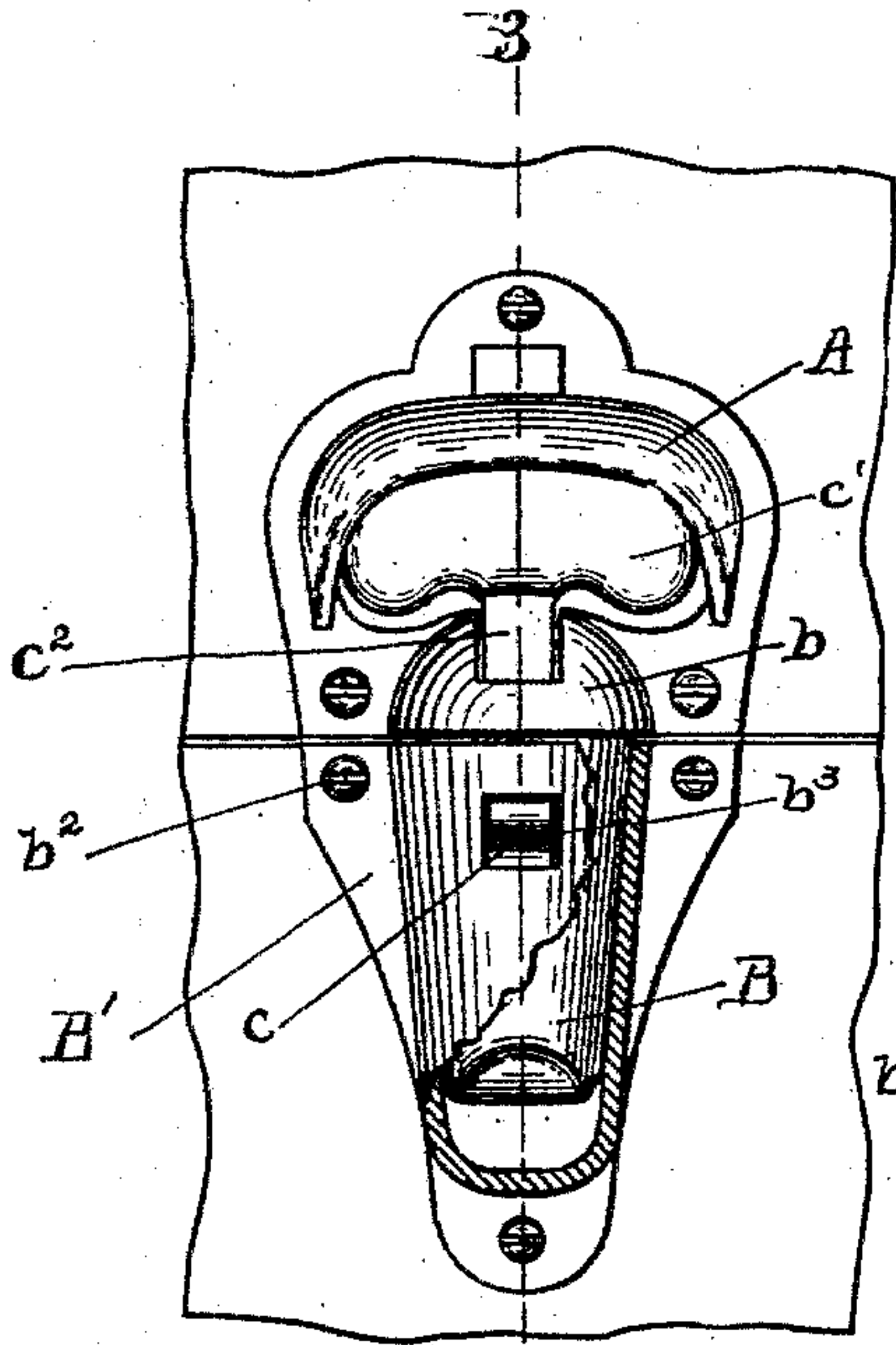


Fig. 2.

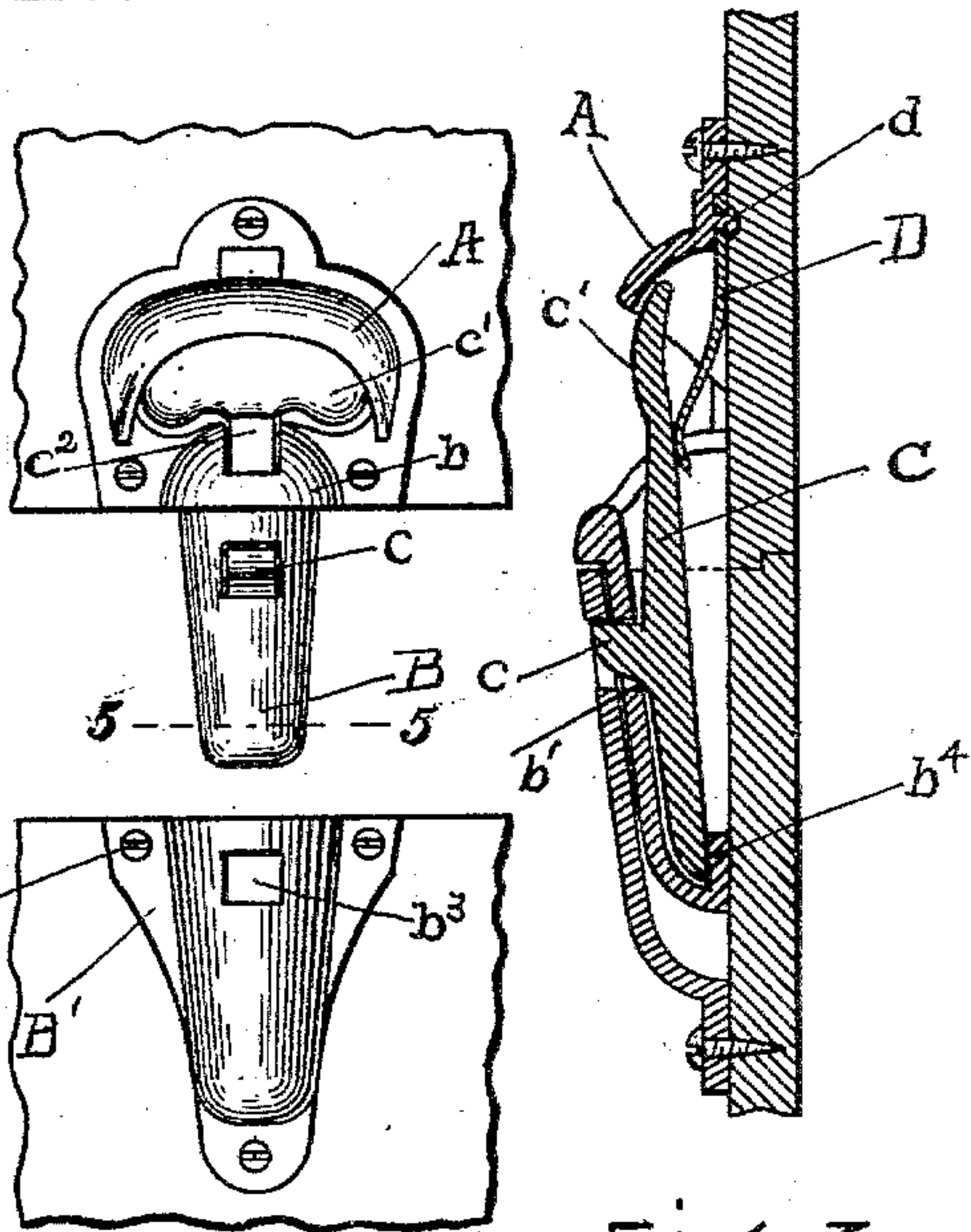


Fig. 3.

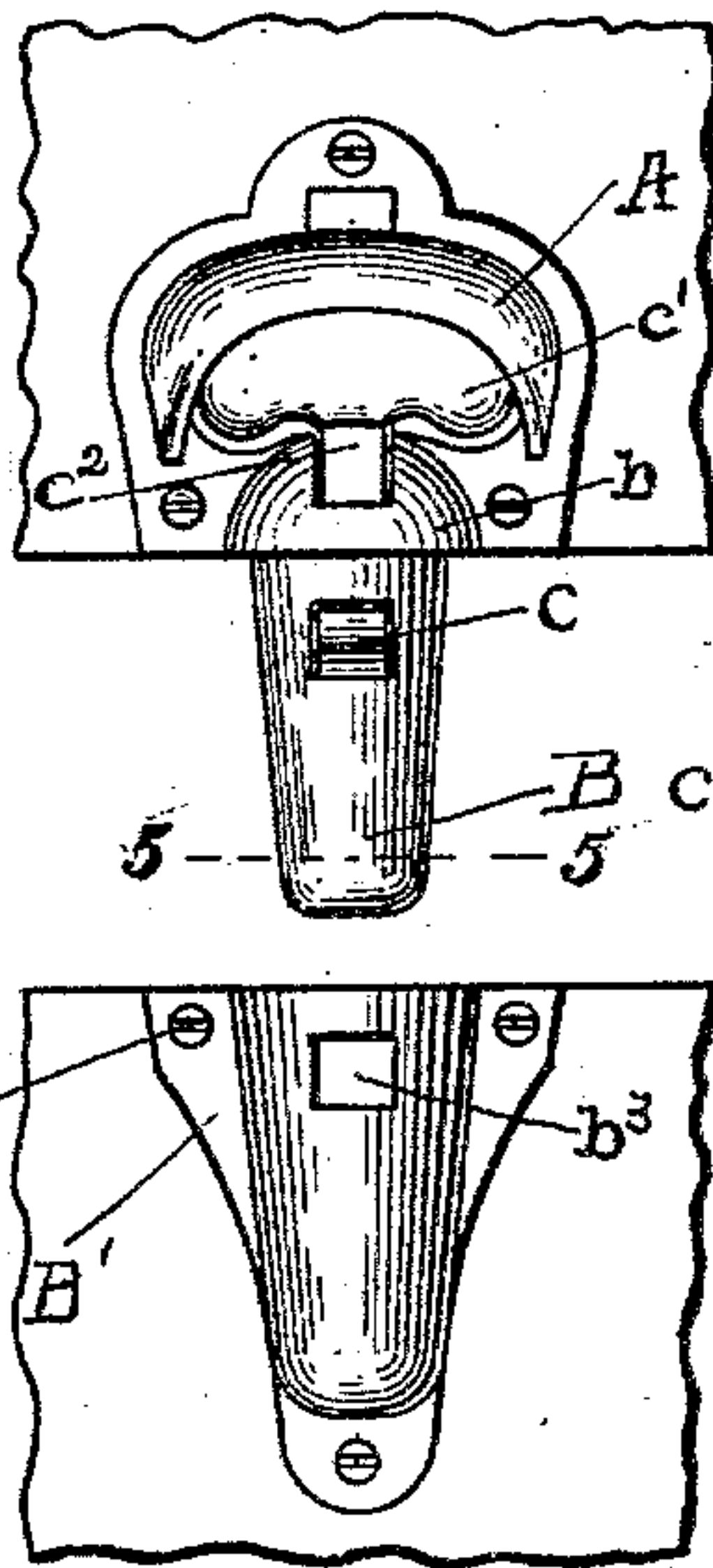


Fig. 4

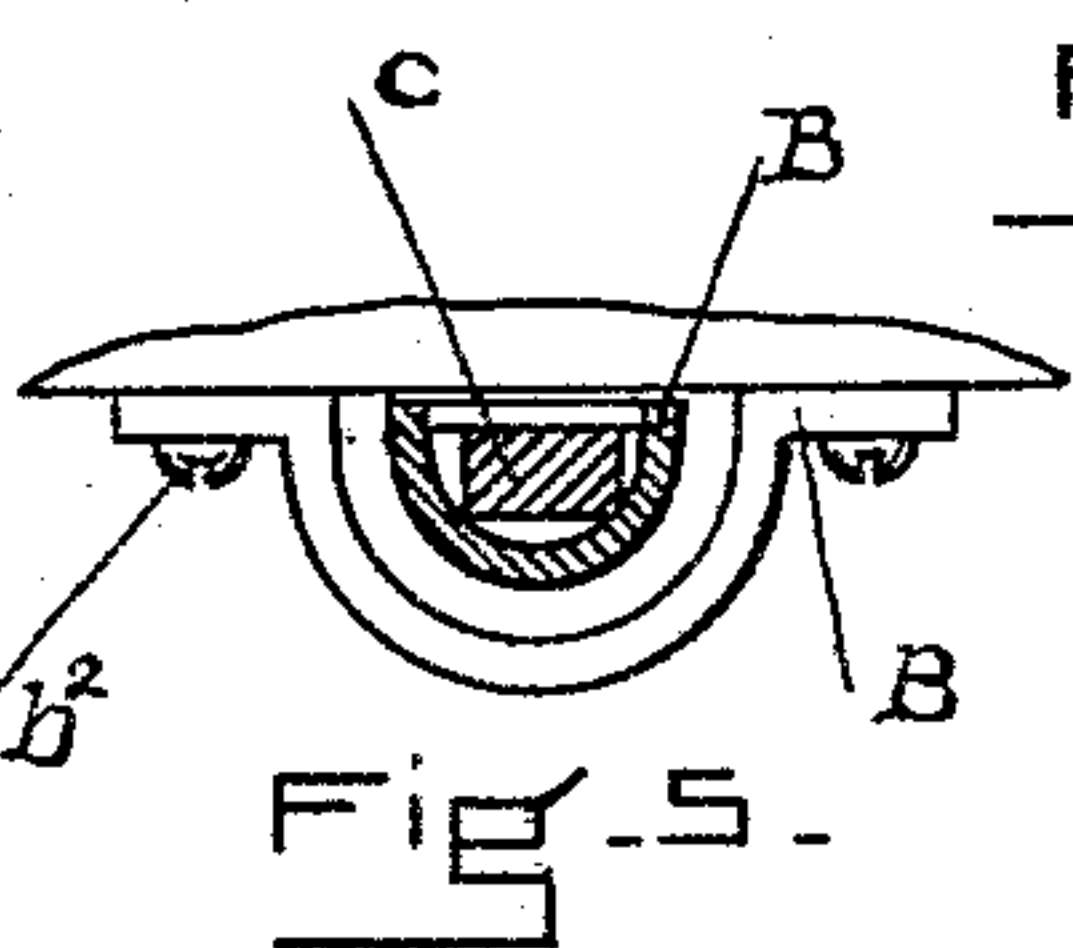


Fig. 5.

WITNESSES

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# UNITED STATES PATENT OFFICE.

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## TRUNK-FASTENER.

SPECIFICATION forming part of Letters Patent No. 596,795, dated January 4, 1898.

Application filed March 26, 1897. Serial No. 629,339. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM S. SOULE, a citizen of the United States, residing at Boston, in the county of Suffolk and Commonwealth of Massachusetts, have invented a new and useful Improvement in Latches and Bolts for Trunks and other Articles, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification, in explaining its nature.

The invention relates to an improvement in latches and bolts for trunks and other articles, and comprises a bolt or dowel adapted to be attached to the lid or cover of a trunk or other article, having a handle, a latching projection, and a latch-operating device which is placed adjacent to the handle, whereby upon laying hold of the handle to lift the cover of the trunk or other article the latch is actuated and withdrawn from its keeper. It further relates to a dowel holder or socket used in conjunction with said bolt, dowel, and latch of peculiar construction. It further relates to a long tapering dowel having a single latch of peculiar construction, which is adapted to cooperate with the said socket-piece, as hereinafter described.

In the drawings, Figure 1 is a view in elevation of a trunk equipped with my invention, the cover thereof being shown as closed. Fig. 2 is a view, partly broken away, showing the features of my invention. Fig. 3 is a vertical section on the line 3 3 of Fig. 2. Fig. 4 is a view in elevation of the two members of the latch and bolt slightly separated. Fig. 5 is a vertical section upon the dotted line 5 5 of Fig. 4 and in plan of parts below the same.

A is the cover-handle of a trunk, formed in the usual manner and placed on the cover near the bottom edge thereof.

B is a dowel which is cast integral with the piece containing the handle of the trunk, as shown in the figures.

$b$  is an outwardly-bowed section at the upper part of the dowel.  $b'$  represents a slot in said dowel, the object of which will be presently described.

On the main body of the trunk I place the socket  $B'$ , which is provided with ears for attachment to the trunk by means of the screws

$b^2$ . The socket has a slot  $b^3$ , which registers with the slot  $b'$  of the dowel when the trunk is closed. The dowel is provided at its bottom with a pocket  $b^4$ , as shown in Fig. 3. A latch-piece C is provided, having a latch  $c$ , which passes through the hole  $b'$  of the dowel and registers with the hole  $b^3$  in the socket when the trunk is closed. The latch-piece is formed in the manner shown in Fig. 2, having an upper enlarged portion  $c'$  and a downwardly-extending portion  $c^2$ , the lower end of which is placed in the pocket  $b^4$  of the dowel B, but is not attached in any way to the said dowel. The latch is held in place by the spring D, which is affixed to the inner side of the upper part of the casting forming the handle and the dowel-piece. I preferably form the pin  $d$ , to which the spring is attached, integral with the casting and head up the outer end of it after the spring has been placed in position, though this is not a necessary part of the invention. The dowel-piece is made at its upper end of a size to register closely with the upper end of the socket, which tapers toward the bottom, as shown in Fig. 2. The dowel-piece is also made tapering toward its lower end. The lower edge of the handle-piece A from which the dowel extends forms a stop or shoulder, which preferably shuts against the upper edge of the socket-piece  $B'$  when the dowel is fully seated in the socket. The advantage of this construction is that the lower end of the dowel is considerably smaller than the upper end of the socket, so that it has an extended play therein when the dowel is approached to the socket. The socket thus acts as a centering device, as will be understood by reference to Fig. 4. If the cover of the trunk is somewhat out of line to one side, the dowel will enter the upper part of the socket and will be brought into proper position for latching by the shape of the said socket. The same effect will be produced if the cover of the trunk be somewhat too far out or too far in. This centering action of the socket is an important feature.

The advantages brought about by my invention, besides the centering effect of the socket already described, consist in the fact that a spring of little strength will be sufficient to operate the device, and also that a



great saving in metal is accomplished because of the compactness of the latch. The improved manner of operation is also an advantage. When the fingers of the hand are passed underneath the handle A in order to raise the cover of the trunk, the head  $c'$  of the latch-piece is pushed backward against the force of the spring D into the hollow behind the handle. This frees the latch  $c$  from the slot  $b^3$  in the socket B', and the cover can then be freely raised. When the cover is brought down again, the dowel having been centered by the socket, as already described, the curved edge of the latch  $c$  rides past the edge of the socket until the slot  $b'$  of the dowel registers with the slot  $b^3$  of the socket, when the latch-piece is thrown outwardly by the spring and the latch catches in the said hole  $b^3$ .

It will be observed that the lid-handle A surrounds the upper part of the latch-piece and extends beyond it, thereby protecting it from being accidentally moved inward and disengaging the two members of the latching device.

It will also be seen that the portion of the dowel which extends into the socket or dowel-holder is long and tapers throughout its length, and that the socket or dowel-holder is made of a corresponding size to receive it, and this not only provides a socket-entrance which is much larger than the lower end of the dowel, but a bolt connection of large strength, because of the size and length of the cooperating parts.

It will further be seen that the dowel is hollow and that the latch-arm is contained in the cavity of the dowel, and that thereby the dowel is provided with an automatic latch which extends from the side and is adapted to make engagement with any part of the socket adapted to receive it when the two parts are close together.

It will further be seen that the latch in the dowel proper is operated by an operating extension or handle connected with the part carrying the lid-handle, so that the lid-handle, dowel, and latch form one part of the device and are fastened by the same fastenings to the trunk lid or cover.

It will further be seen that the dowels not only automatically fit the entrances to the sockets upon the closing of the lid or cover and automatically center or register the cover with the remainder of the trunk, but that by this construction there is always an automatic latching of the dowels and trunk lid or cover to the sockets and main part of the trunk upon the closing of the lid, it never being necessary to previously place in position any part to insure this automatic latching of the dowels and dowel-holders or sockets.

It will also be seen that the part C performs two functions: First, its lower portion or part acts as an automatic latching device for latching the dowel to the dowel holder or socket, and, second, its upper part acts as a latch-

disengaging device by means of which the latch is adapted to be disengaged from the dowel holder or socket, and while I prefer to make them in one piece it is not necessary that they should be so made, as the latch may be separate from the latch-disengaging device.

It will be further observed that the dowel extends from one edge of its fastening-plate with which it is integral, the fastening-plate being preferably flat upon its inner surface and being provided with means whereby it is adapted to be fastened to one member, preferably the movable member, (cover,) of a trunk or other similar article.

It is desirable, although not essential, that the dowel be flat upon its rear or back side and upon the same plane as the back side of its attaching-plate, also that there surround its upper end a shoulder which may act as a stop when brought into contact with the upper edge of the socket, and which also is of the size of the socket at its entrance and serves to act as a shield or cover to the upper edge of the socket when the bolt is closed, thereby protecting the edge and preventing it from being injured and also strengthening the construction of both parts. The dowel preferably is so long that it is not essential that its inner surface be tapered, its end extending so far from the cover as to swing or move upon an arc which brings it well without the upper outer edge of the trunk or article to which the socket member is secured as it enters the socket.

It will also be noticed that the socket member is shaped or formed to provide a continuous cover and support for the dowel or bolt from its lower to its upper end and to also protect or cover the lower or outer end of the dowel or bolt when in said closed position, and the socket is preferably formed, as above indicated—namely, in one piece—with attaching-ears upon each side and at the lower end and open upon its back and top.

Having thus fully described my invention, I claim and desire to secure by Letters Patent of the United States—

1. In a trunk latch and bolt the combination of the handle A, the dowel B formed integral therewith having the slot  $b'$ , the pocket  $b^4$ , the latch-piece C, the latch  $c$ , the spring D and the socket B' with its slot  $b^3$ , substantially as described.

2. In a trunk latch and bolt a dowel or bolt adapted to be attached to the trunk lid or cover and to extend from the lower edge thereof, having an interior cavity and a hole through its side, and a latch-piece contained in said cavity, having a latching projection which extends through said hole, a spring for moving said latching-piece in one direction, and an extension of said latch-piece beyond its cavity, whereby the latch may be moved in a direction opposite that in which it is pressed by the spring.

3. The combination in a trunk latch and



bolt, of a bolt, a dowel holder or socket B' having a relatively large opening and long tapering sides and a catch, with a plate adapted to be attached to the lid or cover, and having  
5 extending therefrom a long dowel or bolt B having tapering sides to fit the tapering cavity of the socket when fully closed therein, a latching-arm C contained in a cavity of the  
10 c and an extension above the dowel or bolt, a spring to act against said latching-piece to press it outward and a handle A which acts as a shield or protector for the upper end of the latch-arm, as and for the purposes set  
15 forth.

4. The combination of a cover or lid for a trunk or other article, a lifting handle-plate attached thereto, a long tapering bolt or dowel in one piece with the handle-plate projecting

downwardly from the said lid or cover, the 20 main part of the trunk or other article with which the cover or lid is used, a rigid tapering socket-piece to receive, retain and stay the said bolt or dowel, guide the cover or lid to its seat, and prevent lateral movement 25 thereof after it has seated, fastened to the main part of the trunk or other article, an automatic latch to lock or bolt the dowel directly to the tapering socket-piece when the bolt or dowel is closed therein, and an un- 30 latching device having a section below the handle and in a position to be moved by the hand in the act of laying hold of the handle, as and for the purposes described.

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Witnesses:

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