

(Model.)

J. S. & R. TOPHAM.
Tray Bolt.

No. 243,009.

Patented June 14, 1881.

Fig. 1

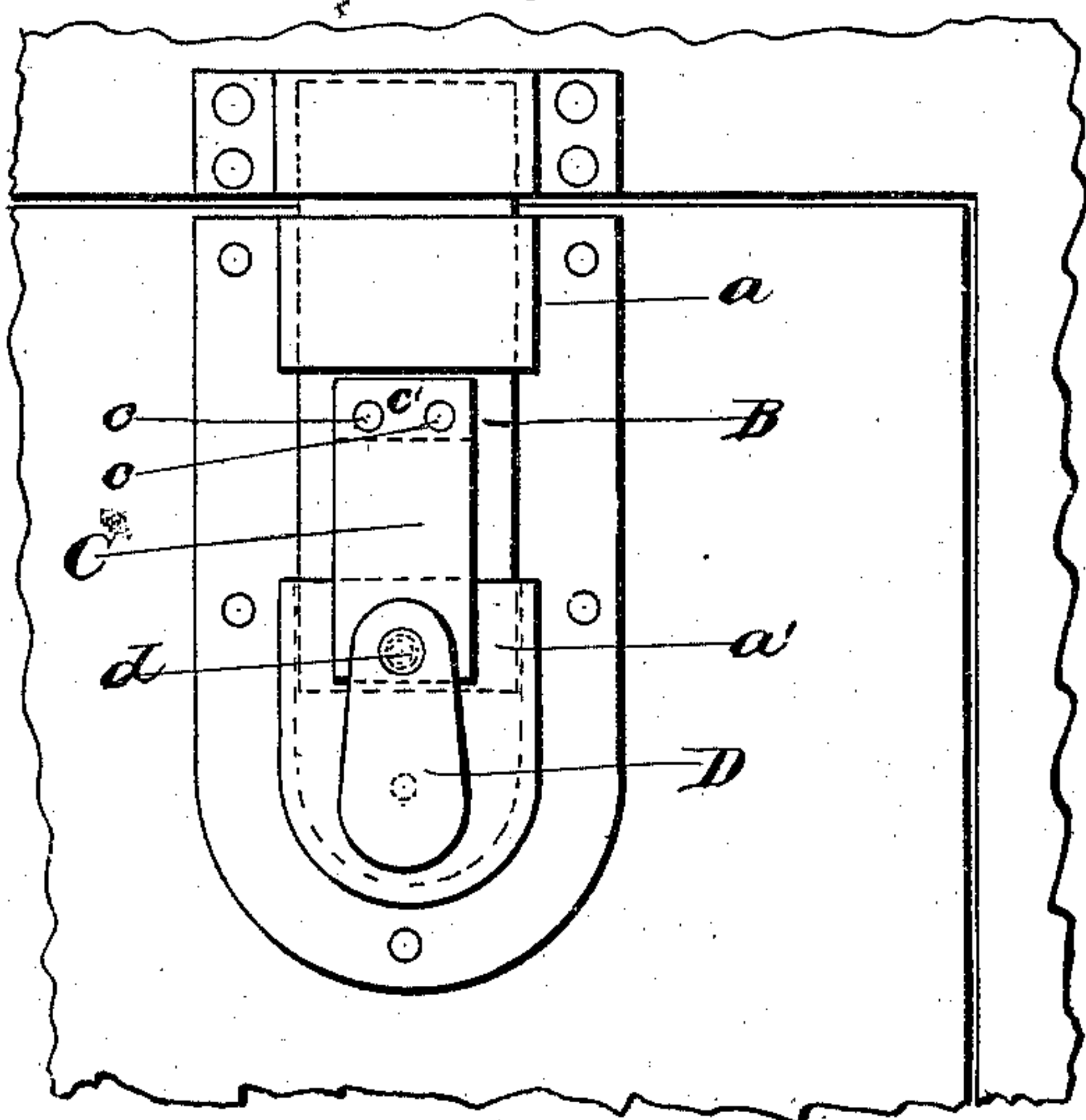


Fig. 3.

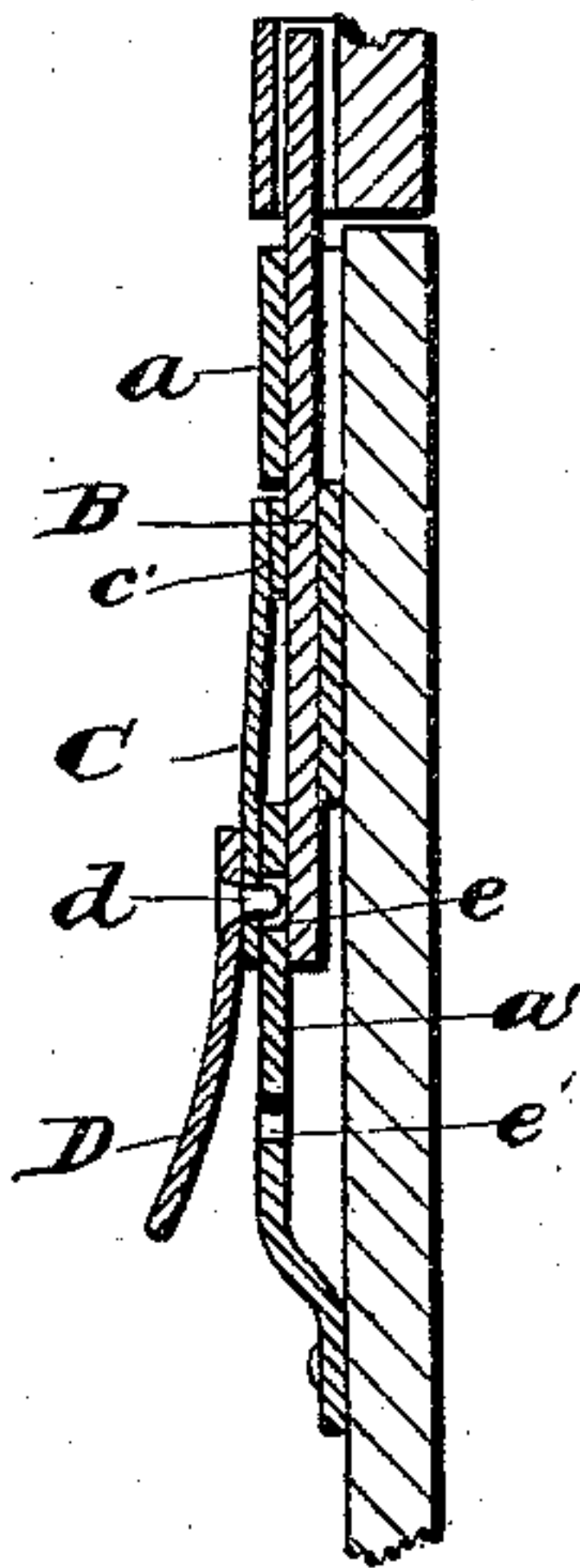


Fig. 4.

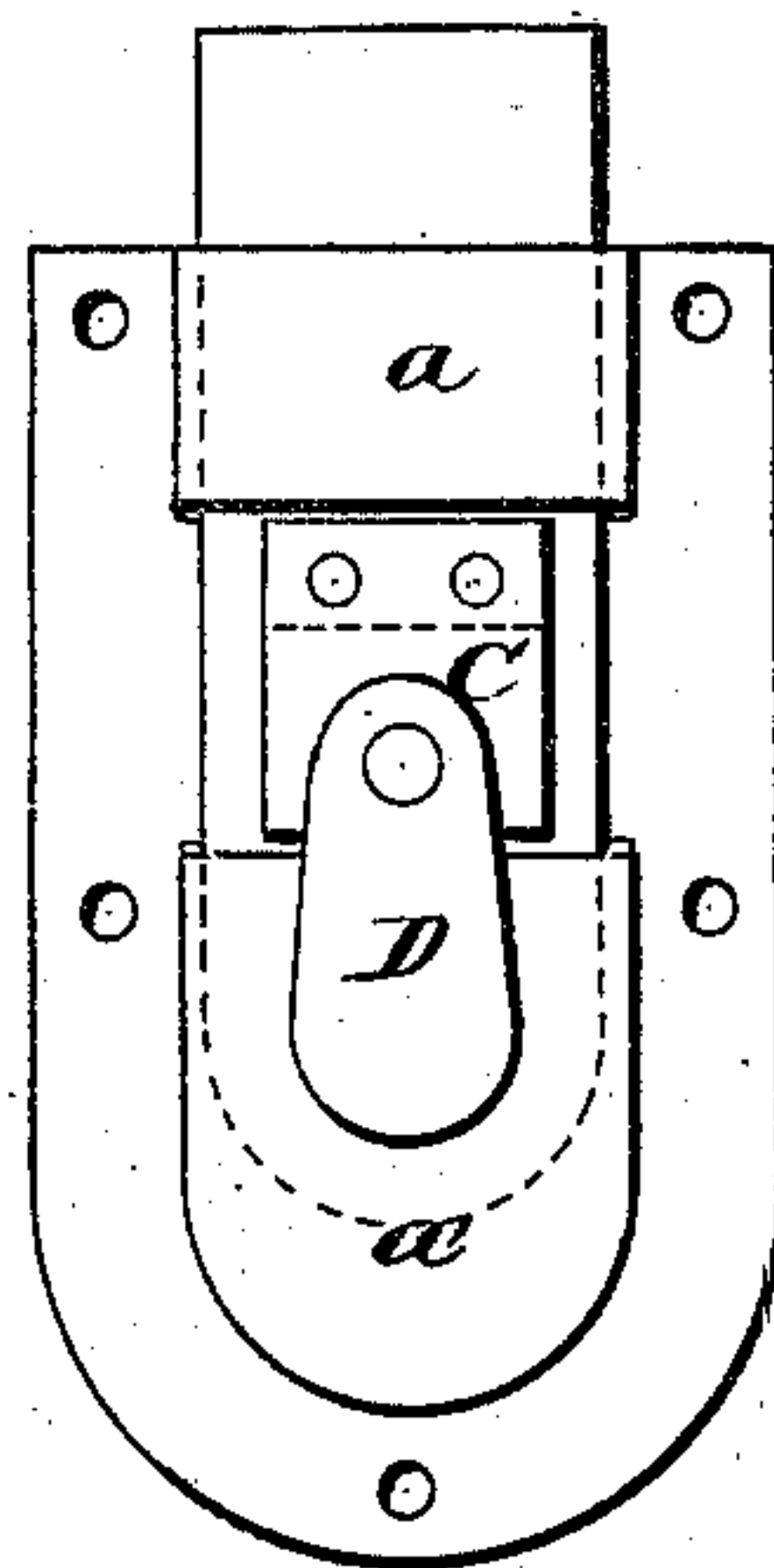


Fig. 2.



Fig. 5.

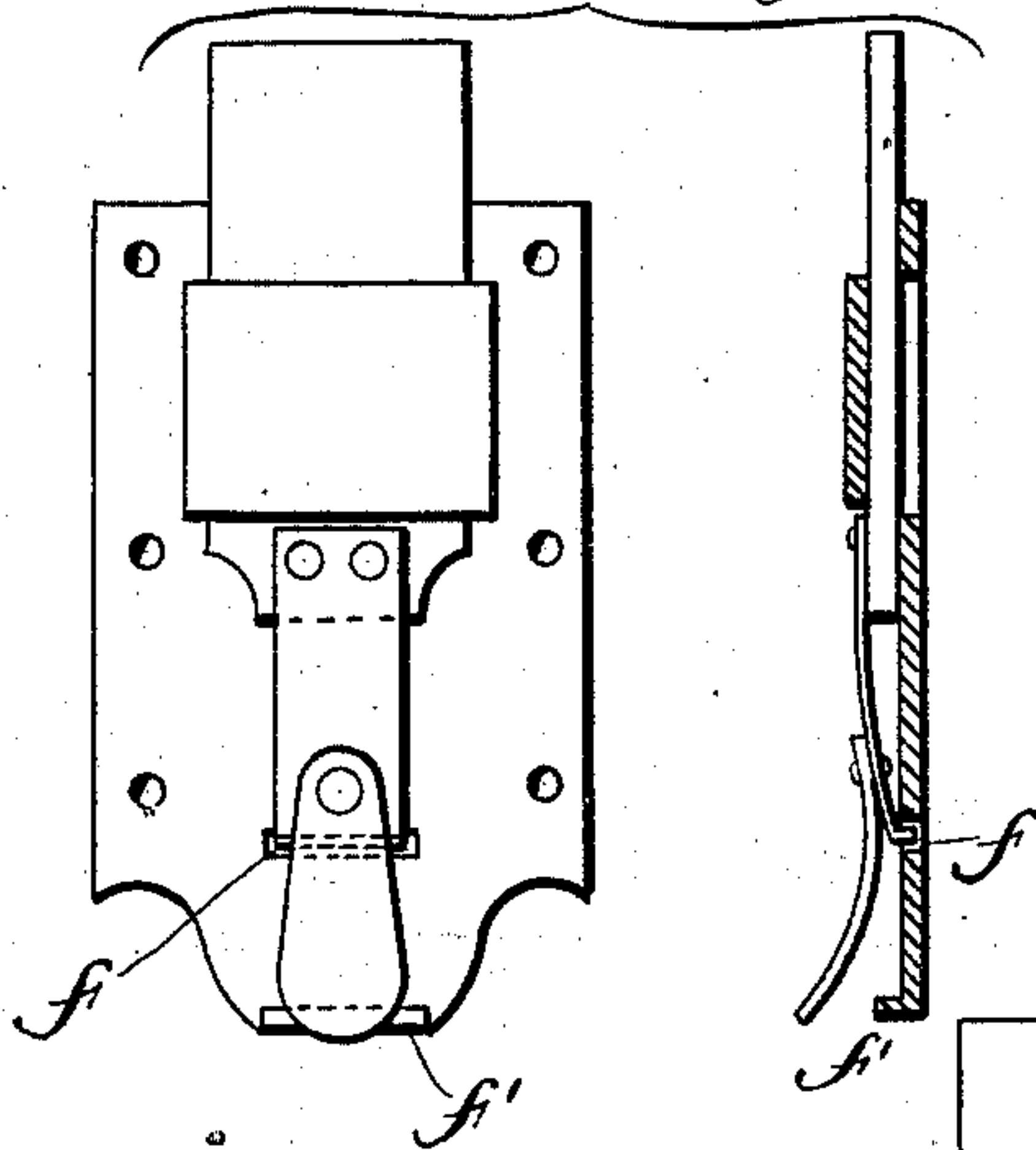


Fig. 6.

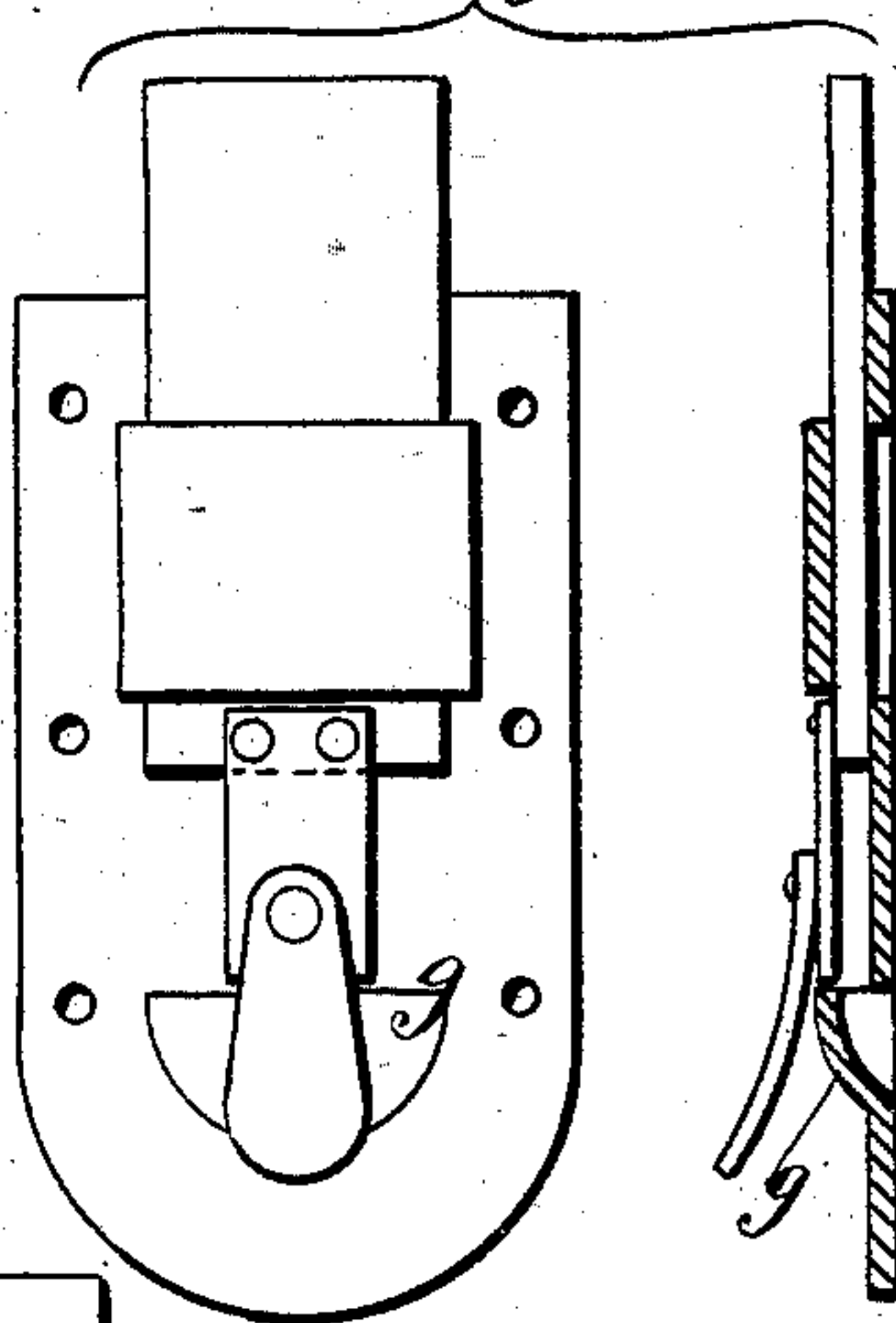
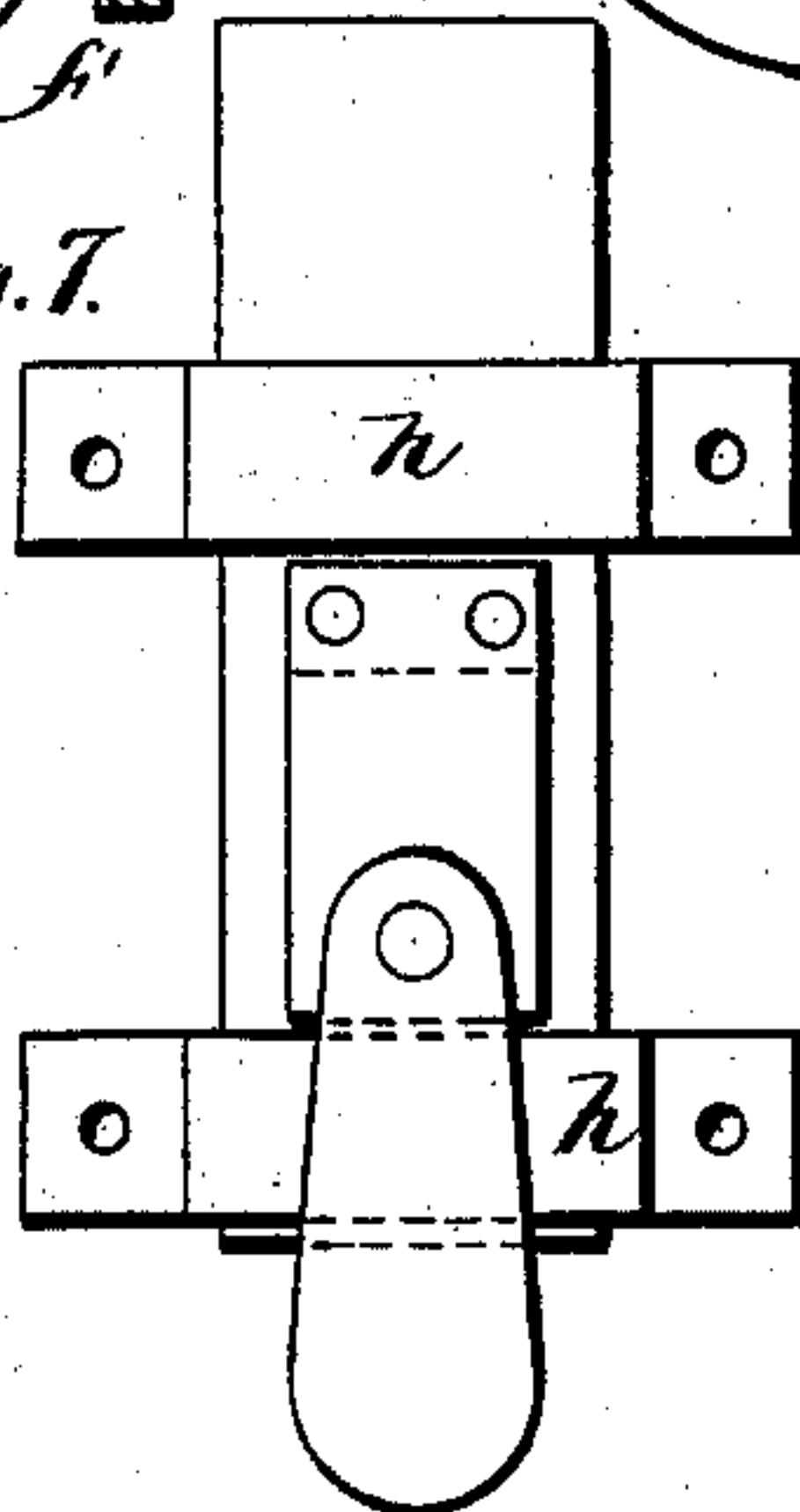


Fig. 7.



WITNESSES

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TRAY-BOLT.

SPECIFICATION forming part of Letters Patent No. 243,009, dated June 14, 1881.

Application filed April 29, 1881. (Model.)

To all whom it may concern:

Be it known that we, JAMES S. TOPHAM and RICHARD TOPHAM, of Washington, in the District of Columbia, have invented certain new and useful Improvements in Tray-Bolts for Trunks; and we do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a plan view of our invention; Fig. 2, an end view; Fig. 3, a longitudinal vertical section. Figs. 4, 5, 6, and 7 represent views of different modifications.

Similar letters of reference in the several figures denote the same parts.

Our invention has for its object to provide an improved tray-bolt for trunks that can be easily and cheaply manufactured, and that can be locked positively when projected, or both when projected and when retracted; and to this end it consists in the device which we will now proceed to describe.

In the drawings, A represents the body or main plate, constructed, preferably, of sheet brass, iron, tin, or other metal, and having loops *a a'* struck up from it, so as to form, in connection with the part not struck up, a race for the bolt to slide back and forth in, and having perforations around its edge for the passage of nails or screws by which to fasten it to the tray or lid.

B is the bolt proper, constructed, preferably, of flat stiff metal, and of a width and thickness adapting it to slide within the race formed by the loops.

Secured to the bolt by rivets *c c* is a spring-tongue, C, to the outer or free end of which a thumb piece or tag, D, is fastened by means of a rivet, *d*. The said rivet *d* projects through the tongue, and is adapted to engage automatically with a perforation, *e*, in the loop *a'* when the bolt is projected, and with a perforation, *e'*, when the bolt is retracted, thus causing the bolt to be positively locked in either position. The fixed end *c'* of the spring-tongue strikes the edge of the loop *a* when the bolt is thrust outward, and limits the movement of the bolt in that direction.

Various modifications of this device have

suggested themselves to us, and in the drawings we have shown a number of them.

In Fig. 4 the spring-tongue is shown as made somewhat shorter, so that when the bolt is projected the end of the tongue will spring down against the edge of the loop *a'*, and thus lock the bolt positively. The elastic pressure of the outer end of the tongue against the top surface of the loop *a'* is relied upon in this instance to prevent the accidental projection of the bolt. The fixed end of the tongue also serves as a stop for limiting the outward movement of the bolt.

Fig. 5 represents a modification in which but a single loop is struck up from the main plate, and in which the spring-tongue is connected to the end of the bolt, and has an inwardly-turned end, which, when the bolt is projected, is adapted to engage with a slot, *f*, in the main plate to form the positive lock, but when retracted to strike against a stop-flange, *f'*, in the main plate, as shown.

In the device represented in Fig. 6 the main plate is struck up, so as to form a projection, *g*, behind which the end of the tongue springs when the bolt is projected, and which also serves as a stop to engage directly with the end of bolt when the latter is retracted.

Instead of employing a continuous main plate and striking up the loop or loops therefrom to form the bolt-race, a pair of independent guide-loops, *h h*, may be employed, as shown in Fig. 7, and the spring-tongue arranged to spring down against the edge of one of said loops to lock the bolt positively, as shown.

Still other modifications might be suggested falling within the principle of our invention; but those shown we deem sufficient for the purposes of this case.

We claim as our invention—

1. In a tray-bolt for trunks, the combination of the bolt, the guide-loops, and a spring-tongue secured to the bolt between the loops, and adapted to hold the bolt securely when in either projected or retracted position, substantially as described.

2. The main plate having one or more loops struck up from it to form a race for the bolt, in combination with the bolt and the spring-

tongue on the bolt, the secured end of said tongue operating as a stop to limit the outward movement of the bolt, substantially as described.

5 3. The combination of the main plate, the sliding bolt, and the spring-tongue secured to the bolt, and having a projection at its outer or free end adapted to engage positively with the plate when the bolt is either projected or
10 retracted, substantially as described.

4. The combination of the main plate, the

sliding bolt, the spring-tongue secured to the bolt and adapted to engage positively with the plate when the bolt is either projected or retracted, and the thumb-piece attached to the 15 spring-tongue, substantially as described.

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