

H. Simons,

Trunk Bolt.

No. 85,617.

Patented Jan. 5, 1869.

Fig. 2.

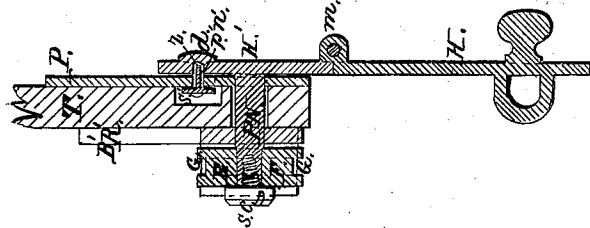


Fig. 1.

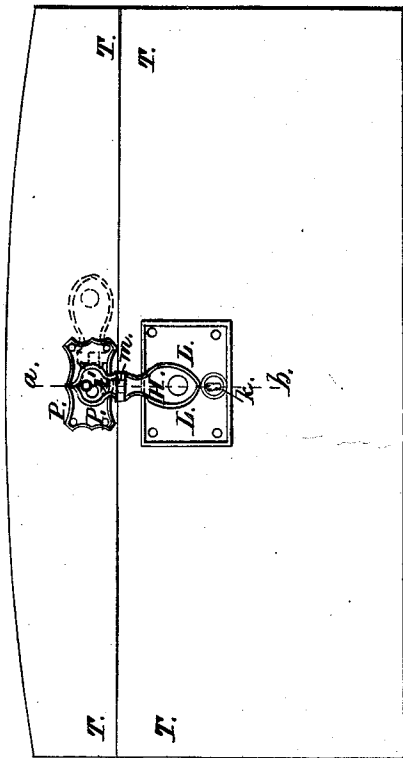


Fig. 6.

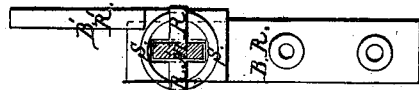


Fig. 3.

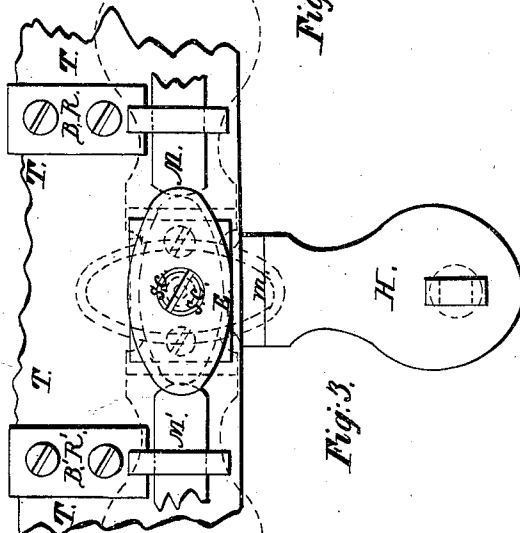


Fig. 5.

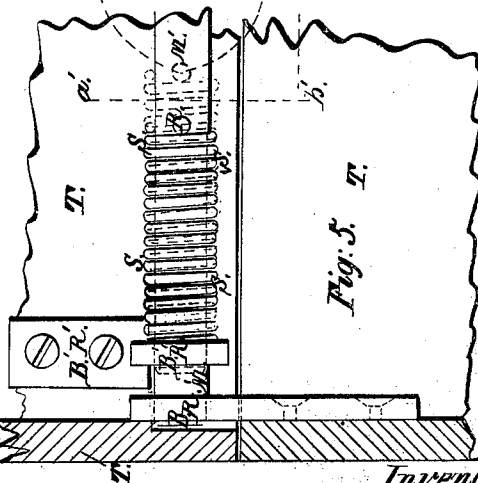


Fig. 4.

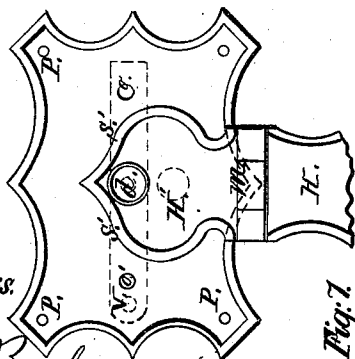


Fig. 7.



Witnesses.

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Letters Patent No. 85,617, dated January 5, 1869.

IMPROVEMENT IN BOLTS FOR TRUNK, &c.

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, HENRY SIMONS, of the city of Philadelphia, in the county of Philadelphia, in the State of Pennsylvania, have invented a new and useful Improvement in "Locks for Trunks, &c.;" and I do hereby declare that the following is a full and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—

Figure 1 is an elevation view of the outside-lock arrangement as applied to a box or trunk.

Figure 2 is a sectional elevation on A B (enlarged scale) of the lock-device of fig. 1.

Figure 3 is an elevation view of the back of the lock-device.

Figure 4 is, on an enlarged scale, the elevation view of the hasp and outside of the copper plate on the lock.

Figure 5 is an elevation view partly sectional of the end of the box, with the bolts, brackets, and springs.

Figure 6 is a sectional elevation on A' B'.

Figure 7 shows the key of the spring.

My invention relates to the mode or manner of fastening or locking trunks and like boxes by means of horizontal-sliding bolts, combined in a certain manner with the lock of the trunk; and

It consists in combining permanently the sliding horizontal bolts, not with the lock, but the upper part of the hasp only, and in so simple and effective a manner as to permit to bolt or unbolt the trunk by simply swinging the hasp around its centre-pin, either right or left; also, in combining a certain spring with the upper part of the hasp, so that, even when the lock is opened and has released the staple of the hasp, the trunk can be unbolted or the hasp swung around its centre-pin only if the operator knows the secret *modus operandi* of the said spring.

To enable others skilled in the art to make and use my invention, I will now proceed to describe its construction and operation.

T T is the frame or wood-work of a box or trunk.

L, its lock.

H, the lower part of the hasp of the lock.

m, the hinge of said hasp, and

H', the upper part of said hasp.

k, the lock's key-hole.

Red lines, both in figs. 1 and 3, show the positions which the hasp can alternately be made to occupy.

P is the plate on which the hasp is attached by means of a pin, PN, which (fig. 2) runs clear through P and the wood T of the frame.

E is a metallic elliptical piece set on inside end of pin P N and secured there by means of screw SC.

Piece E is made with or without a groove, G, around its periphery; but in case it should be deemed best to groove it, I have shown said groove in dotted line in fig. 3.

Inside of the front of the upper portion or lid of the

trunk are set two bolts, M and M', held in proper place, viz, parallel to the length of the trunk, by means of a series of brackets, BR BR.

M and M' are made out of flat or round metal, to suit.

The inward ends of M and M' must respectively rest on both ends of piece E, when said piece is in the position shown in black lines in fig. 3. The outward ends of M and M' are respectively inserted and running through spiral springs S, having their outward end fastened to the body of the trunk, and the inward end to the bolt by means of pin R.

Two brackets, B'R' B'R', are set on each inside end of the lower portion of the trunk, and in such a position as to receive the ends of M and M', as hereinafter shown.

Thus constructed, my device is now ready for use.

When I wish to shut and lock the trunk, I must place the hasp in either of the positions shown in red lines in figs. 1 and 3.

In such position the eccentric or elliptical piece E presents its smaller diameter to the inward heads of M and M', which the action of springs S S forces constantly against the said piece E. This operation permits the outward ends of M and M' to clear brackets B'R' B'R', so that the trunk may easily be closed. When closed, I revolve hasp H around its pivot-pin, PN, until it (the hasp) reaches the proper position to fit in the lock under. This forces both bolts, M and M', out, when they run through brackets B'R' B'R', thereby locking tight both ends of the box or trunk. Meanwhile the hasp is secured to the lock L by means of the key as usual, and I have thus a trunk locked at its centre and both ends.

It is well to remark that the bolt-device is entirely separate from the lock, so that in case the whole bolt-arrangement would get out of order, removing the bolts would in nowise prevent the hasp and lock being used with the same advantage as in any other trunk provided with one lock only.

Now, and in order to add to the effectiveness of my bolt-arrangement, I will describe the device by means of which the hasp can be secured to plate P in the position in black lines, figs. 1 and 3, so that when the lock has been opened it will not follow that the bolts are loosened.

S' is a spring made of any spring-metal, and set flat back of plate P, to which it is secured at V.

p'n' is a pin on S' which runs out through a hole in P into a hole, Z, in H'.

An ornamental knob or boss conceals hole Z.

O is a small hole drilled through hasp H', opposite the free end of S'.

O' is a symmetrical (false) hole on said H'.

It is obvious that pin p'n' will present hasp H' H to be revolved in any of the positions in red lines, figs. 1 and 3. But if I insert key K O through hole O,

and press on spring S' until its pin p'n' clears H', I can then revolve hasp H' H in any desirable position, thereby closing or opening the bolts.

I do not intend claiming broadly the invention of lock-bolts in their application to any system of closing doors or windows, as an entirely similar system has been applied to French windows. Nor do I intend to confine myself to the actual shape of the different pieces above described, reserving, for instance, to increase or diminish the difference between the two diameters or axes of elliptical piece E, as well as to alter its shape, provided that its action on bolts M and M' will substantially be the same. Reserving, also, to use piece E, with or without a groove on its periphery; also, to give spring S' any shape desirable, provided that it will answer the intended purpose, viz, to hold the hasp H' H in the vertical position, unless otherwise desired, when the spring would be acted upon by key K O or any other device substantially the same. I do not either intend to confine myself to the relative positions of the sundry pieces of my combination. For instance, I reserve to have the lock on the upper part or lid of the trunk, and the bolts on the lower part, which would be, in fact, simply reversing the construction, which would otherwise be the same.

The springs S S, which I have represented as acting by compression, may also be reversed, and act by extension, or be made of steel spring, flat, coiled, spiral, or of India rubber, gutta-percha, &c.

I also reserve when it may be found desirable, to

have the lock and bolts on the same part of the trunk, brackets B'R' B'R' being then on the others.

I do not intend claiming the mode of combining horizontal automatic-sliding bolts with locks and hasps, or hasps alone, &c., because I am aware that such arrangements are known, used, and applied to different purposes, especially in France, for windows.

I do not either intend claiming the mode of applying such arrangements, to trunks, or like boxes, as I am aware such arrangements, as applied to trunks, &c., have been in use for some time already.

But if I disclaim producing, in the instance, a new effect, or a novel application, I do obtain the intended effect by means of a construction and *modus operandi* very different from any known combination of the kind, simpler, cheaper, and safer.

Having thus described my invention,

What I claim, and desire to secure by Letters Patent of the United States, is—

The combination of the hasp H' H, pin PN, piece E, bolts M M', their springs S S, the hasp-spring S', brackets BR B'R, and key K O, for locking trunks and like boxes, the whole constructed and operated in the manner and for the purpose above set forth and described.

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Witnesses:

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