O. D. HUNTER.

Trunk Bolt or Catch.

No. 215,125. Patented May 6, 1879.

Fig. 1.

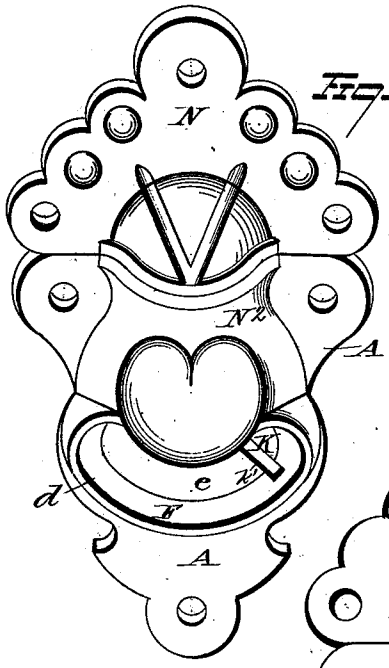


Fig. 2.

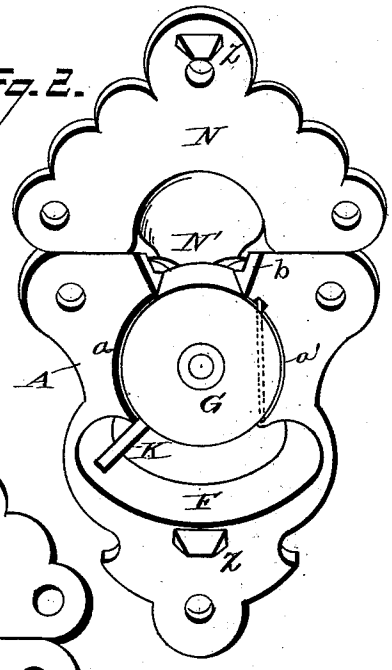


Fig. 3.

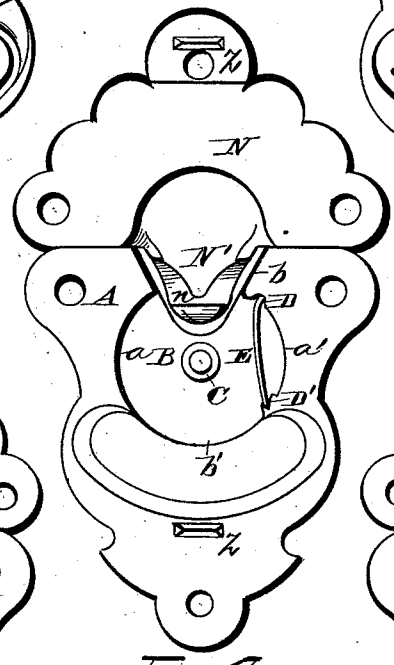


Fig. 5.

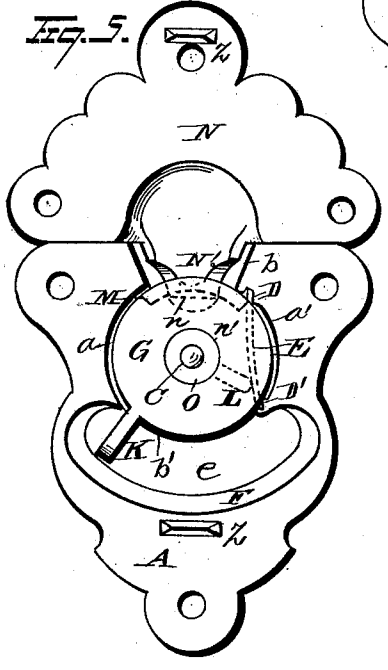


Fig. 4.

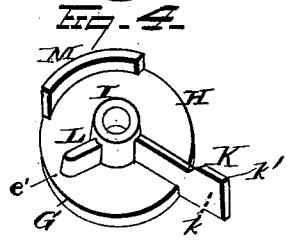
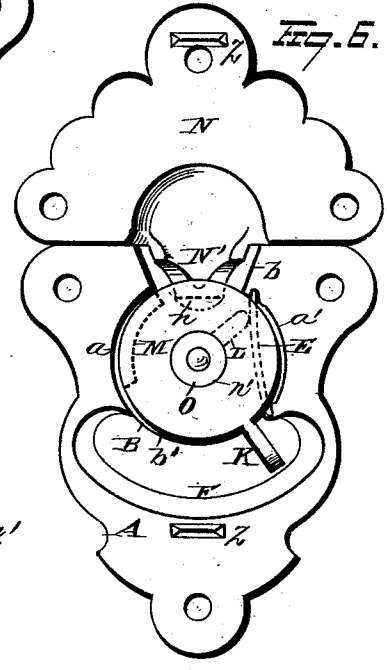


Fig. 6.



WITNESSES

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ORANGE D. HUNTER, OF TERRYVILLE, CONNECTICUT, ASSIGNOR TO ANDREW TERRY & CO., OF SAME PLACE.

IMPROVEMENT IN TRUNK BOLTS OR CATCHES.

Specification forming part of Letters Patent No. **215,125**, dated May 6, 1879; application filed March 24, 1879.

To all whom it may concern:

Be it known that I, ORANGE D. HUNTER, of Terryville, in the county of Litchfield and State of Connecticut, have invented certain new and useful Improvements in Trunk Bolts or Catches; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to an improvement in trunk-bolts, the object being to provide a bolt or fastening for trunks, boxes, &c., of a simple and durable construction, and which may be manufactured at small initial cost; and to that end my invention consists, first, in the combination, with the casing of a trunk bolt or fastening, of an oscillating disk constructed with a thumb-piece which projects radially from said disk, a hasp-engaging flange formed on the side or face of the oscillating disk, and a lug or rib extending from the hub of the disk nearly to the periphery thereof, said disk-locking flange, rib or lug, and thumb-piece being cast in a single piece.

My invention further consists in the several details of construction and combinations of parts, as will hereinafter be described, and pointed out in the claims.

In the accompanying drawings, Figure 1 is a view, in perspective, of my improved trunk bolt or fastening. Fig. 2 is a similar view of the rear face of the bolt or fastening. Fig. 3 is a plan view of the rear side of the hasp and casing with the oscillating disk removed therefrom. Fig. 4 is a view, in perspective, of the oscillating disk-bolt detached from the casing. Fig. 5 is a plan view of the bolt or fastening, showing the position of the parts when the lock is secured; and Fig. 6 is a similar view, showing the position of the parts when the oscillating disk-bolt is in an unlocked position.

A represents the casing of the bolt or fastening, and is formed with a recess or depression, B, having curved side walls, *a a'*, and with hasp-bolt opening *b* and thumb-piece opening *b'*. C is a stud located centrally within the recess B, and preferably cast solid with the lock-casing.

The curved side wall, *a'*, of the recess B is formed with grooves or spring-seats D D', within which are seated the opposite ends of a straight flat spring, E; or, if desired, a straight steel-wire spring may be used in lieu of a flat spring.

I do not restrict myself to the employment of a straight spring, as the shape of the shell may be changed and a curved spring used for accomplishing the same purpose; or a spiral spring arranged to act upon a plate or block may be employed, if desired.

The lower portion of the casing A is provided with a thumb-piece guard, F, which consists, essentially, of an outwardly-projecting flange, *d*, forming an arc-shaped slot, *e*, within which is located the thumb-piece of the lock, as will be hereinafter described.

I have illustrated the slot *e* as being of arc shape in form; but I do not limit myself to this particular shape of slot, as it is evident that it may be of rectangular or other form; but I prefer the arc-shaped form, as it corresponds to the line of movement of the thumb-piece of the lock.

G represents the oscillating disk-bolt, and consists of a comparatively thin disk, H, provided with a central hub, I, which fits upon the stud C of the casing, and thereby affords ample bearing-surface for the disk upon its pivotal support. From the hub I projects radially outward a thumb-piece, K, which is cast solid with the disk, and the outer end of which is made of increased width, as at *k*. This wide outer end, *k*, of the thumb-piece projects outwardly into the arc-shaped slot, the outer edge, *k'*, of the lower end of the thumb-piece being not quite flush with the outer edges of the flanges of the guard F, whereby ready access to the thumb-piece is given for its being moved backward and forward by the fingers, while it is completely protected from accidental displacement, or from becoming broken while the trunk is *in transitu*.

L designates a rib or lug, which is cast solid with the disk, and extends outwardly from the hub I part way to the edge of the disk, so that there will be a portion of the disk *e'* overlapping said rib or lug. This rib or lug L bears against the flat spring E, and the portion *e'* of the disk serves to hold the spring in place.

It will be observed that the spring E, in connection with the rib L, constitutes a double lock, and one that is certain and positive in its action. This is due to the fact that the spring is prevented from edgewise movement by the lock-casing on one side or edge thereof, and the overlapping portion of the disk-bolt on the opposite edge of the spring. As the spring has ample space to expand and contract within the radius of the circle described by the lug or rib L, the comparatively thin sides of the latter, at its outer end, have a firm bearing on the spring when the disk-bolt is turned to its open or closed position.

M is a locking-flange formed on the face of the disk, and flush with the periphery thereof. Flange M is of sufficient length to close the opening for the reception of the hasp bolt or catch. As the flange M, lug or rib L, and thumb-piece are nearly equal in width to the length of the hub I, upon which the oscillating disk is supported, the latter is subjected to little friction in its operation, and the stud is prevented from undue wear or breakage, as the disk is prevented from tipping by means of the flanges above described being formed thereon.

N represents the hasp of the fastening, and is constructed with a depending catch, N^1, cast solid with the hasp, said catch having a hook, *n*, which is formed at right angles to the face of the hasp.

The outer portion of catch N is formed circular or curved to fit within a correspondingly-curved socket, N^2, in the upper end of the casing A of the bolt or fastening. This construction insures sufficient play between the hasp and casing to prevent any binding or breakage of parts.

The rear face of the oscillating disk-bolt is countersunk at *n'*, and secured to the stud by a washer, O, which seats against the shoulder of the stud, and is secured by upsetting the upper or outer end of the stud, making a firm and secure fastening for the parts.

The rear face of the hasp and casing are preferably provided with projections Z, of any desired number and arrangement, which penetrate the wood of the trunk to which the bolt or fastening is secured, and operate to bind the bolt firmly in place and prevent its displacement in any direction. These projections Z are cast solid with the hasp and casing, and thus do not materially affect the cost of the device, while adding greatly to its strength and durability when secured in position.

From the foregoing description it will be observed that my improved trunk bolt or fastening is of compact form, of few parts, which are of simple and durable construction, and cannot be accidentally locked or unlocked.

It is evident that many slight changes in the construction and arrangement of the several parts may be resorted to without departing from the spirit of my invention, and hence I would have it understood that I do not limit myself to the exact construction and arrangement of parts shown and described; but,

Having fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a trunk bolt or fastening, the combination, with the casing, of an oscillating disk provided with a thumb-piece projecting outward from the periphery of the disk, and a hasp-catch-engaging flange formed on the side of the disk, substantially as set forth.

2. In a trunk bolt or fastening, the combination, with the lock-casing and a flat spring attached thereto, of an oscillating disk provided with a thumb-piece projecting outwardly from the periphery of the disk, a hasp-catch-engaging flange formed on the side of the disk, and a lug or rib formed on the side of the disk and adapted to engage with said spring, whereby the disk is retained either locked or unlocked by the tension of a single spring, substantially as set forth.

3. In a trunk bolt or fastening, a casing provided with a recess having curved side walls, and with an opening at its upper end for the catch of the hasp, and an opening at its lower end for the thumb-piece of the rotary disk, one of said curved walls provided with grooves or notches for retaining the ends of a spring, substantially as set forth.

4. In a trunk bolt or fastening, the combination, with an oscillating disk provided with a thumb-piece, of a thumb-piece guard consisting of an outwardly-projecting arc-shaped flange, the outer end of said thumb-piece constructed to enter said guard and be protected thereby, substantially as set forth.

5. In a trunk bolt or fastening, a centrally-perforated disk provided with a curved flange on one side thereof flush with the periphery of the disk, a rib extending partially across one-half of the disk, and a thumb-piece projecting outwardly beyond the periphery of said disk, all of said parts being cast in a single piece with said disk, substantially as set forth.

6. In a trunk bolt or fastening, the combination, with a casing provided with a circular recess, and a spring attached to one of the curved walls of said recess, of an oscillating disk provided with a locking-flange on one side or face thereof, and a rib or lug engaging said spring located within the outer edge of the disk, whereby the latter overlaps and retains the spring in place, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 14th day of March, 1879.

ORANGE D. HUNTER.

In presence of—
GEO. E. BUSHNELL,
JASON C. FENN.