

TRUNK FASTENER.

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1,029,845.

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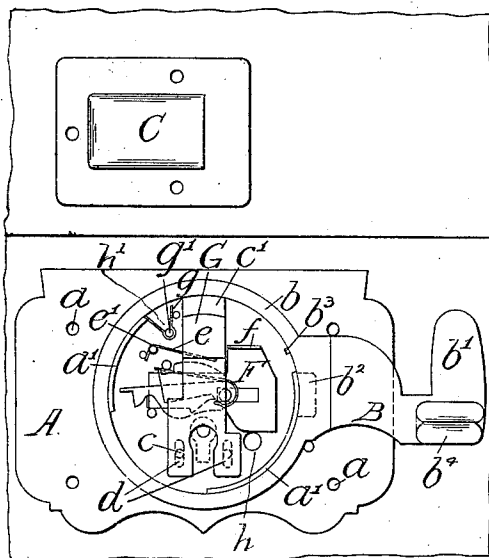


Fig. 1.

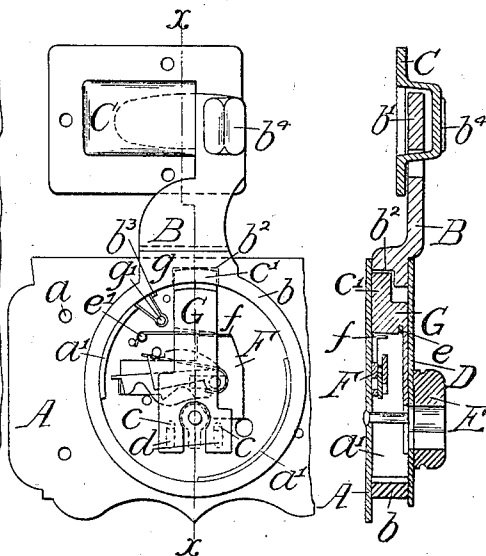


Fig.2. Fig.3.

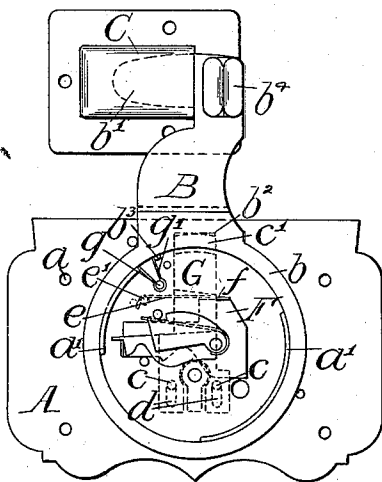


Fig. 4.

Witnesses:

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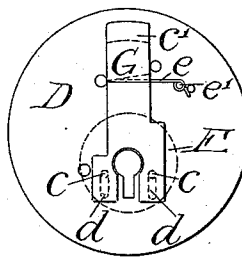


Fig. 5.

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UNITED STATES PATENT OFFICE.

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TRUNK-FASTENER.

1,029,845.

Specification of Letters Patent.

Patented June 18, 1912.

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To all whom it may concern:

Be it known that we, EDWARD BUCKNALL, Jr., and PERCY NEVILL, both subjects of the King of Great Britain, and residents of Willenhall, in the county of Stafford, England, lock, latch, and bag-frame manufacturers, have invented certain new and useful Improvements in Trunk-Fasteners, of which the following is a specification.

This invention relates to the type of fastening in which a turning arm carried by one of two parts which are to be fastened together is engaged, by turning it in a plane which is parallel with the surface to which it is directly attached of the one part, with a staple which is fixed to the other part, and has for its objects to enable the arm to be simply latched in its fastened position and then if desired to be locked, and to otherwise improve the construction of this type of fastening.

In a fastening constructed according to this invention, the arm which is engaged with the staple has, as heretofore, a ring-shaped inner end which is suitably guided in turning in relation to a mounting which is fixed direct to the part to which the arm is to be attached, and the locking mechanism is situated within this ring, but is carried independently of it, as has heretofore also been the case. In lieu, however, of locking the arm direct by the bolt of the locking mechanism, the arm is secured in its fastened position by a spring-pressed latch bolt which automatically engages with a notch formed in the inner end of the arm at the point where it joins into the ring, and when the arm is turned into its fastened position this latch bolt automatically engages with the notch and secures the arm. If it is then desired to lock the arm, the locking mechanism is operated by a key, and the bolt of the locking mechanism engages with the latching bolt and securely locks such latter bolt, and consequently the arm. The arm, therefore, may be simply latched in its fastened position, if desired, and be unfastened therefrom by pulling back the latch.

In order that the invention may be clearly understood, we will now proceed to describe in fuller detail a practical form of the same as applied to a fastening for a suit-case with reference to the accompanying drawings, of which:—

Figure 1 is a front view of a fastening, with the cap plate cut away, showing the

arm in its unfastened position. Fig. 2 is a corresponding view to Fig. 1, but shows the arm in its fastened position and locked. Fig. 3 is a section taken on the irregular line *xx* of Fig. 2. Fig. 4 is a corresponding view to Fig. 2 but shows the latching bolt, hereinafter described, by broken lines in order to more clearly show the locking mechanism; and; Fig. 5 is an inside view of the cap-plate and of the latching bolt which it carries.

A is the back-plate of the case or mounting of the fastening, which in use is fixed flat against the front of the case or trunk, B the turning arm, and C the staple. The plate A, which is conveniently fixed to the front of the case or trunk by means of rivets *a*, is formed with projections which form segments of a circular rim *a'*. The turning arm B is formed at its inner end with a ring *b* which is a turning fit upon the rim *a'*, and as the ring *b* is of the full depth of, and entirely surrounds, the rim *a'* this may be of cheap metal such as iron or steel, though the exposed portion of the fastening is of brass or other more expensive metal.

G is a latching bolt which is carried at the inner face of the cap-plate D, being slidably held in place by rivets *c* which project from a sliding knob E through slots *d* of the cap-plate and are riveted to the latching bolt G. The cap plate D is fastened to the back plate A by means of rivets *h*, *h'*. The latching bolt is normally pressed, when the arm is unfastened, with its head *e'* against the inner surface of the ring *b* of the arm by means of a spring *e* carried by a stump *e'* of the case, the free end of the spring pressing against the underside of the head *e'* of the bolt conveniently within a slot thereof.

Locking mechanism of any convenient character is carried by the back plate of the case, and the bolt F of this mechanism is provided with a projection *f* which, if the bolt is shot by a key into its locked position after the latching bolt G has moved out to secure the turning arm in its fastened position, secures the latching bolt in its outward position thus preventing it from being drawn back.

In use, if the turning arm is unfastened the nose of the latching bolt G is constantly pressed by its spring *e* against the inner surface of the ring *b*. If the turning arm is

now moved to bring its head b' into engagement with the staple C the notch b^2 of the arm is brought into register with the head c' of the bolt G, whereupon such head is
 5 moved by its spring into engagement with the bolt, as shown by Fig. 2, and if the locking bolt F is then shot by the key into the position shown by Fig. 2, its projection f is brought beneath the head of the latch-
 10 ing bolt and the arm is thereby locked in its fastened position. If, however, the locking bolt F is not shot forward by the key, the arm is, of course, left on the latch, with its head b' engaged with the staple C, and may
 15 be unfastened by simply pulling down the bolt G by means of the knob E to disengage its head c' from the notch b^2 of the arm. Upon the withdrawal of the latch bolt G from the notch of the arm, the arm is automati-
 20 cally thrown out from the staple by the reaction of a spring g which may conveniently be of the helical type wound around a stud g' of the back plate, for which purpose one end of the spring presses against an end of
 25 one of the segments of the rim a' and the other against a stud b^3 of the arm by which the spring has been compressed during the latter part of the turning of the arm in closing it. The turning arm is preferably pro-
 30 vided with a thumb-piece b^4 for convenience in moving it into engagement with the staple. When such is preferred two fastenings may be used, such, for instance, as for a suit case.
 35 It will now be obvious, without need for special description, that the fastening may, if desired, be used for many purposes, such, for instance, as for fastening cupboard doors, window sashes, and the like; and that
 40 if required, the outer end of the arm, in lieu of being provided with a thumb-piece such as b^4 , may be provided with a knob for convenience in operation. If desired also the

inner edge of the head b' may be inclined to give it a lead into the staple with a view to drawing the parts together to which the
 45 arm and staple, respectively, would be attached.

Having fully described our invention, what we claim and desire to secure by Letters Patent, is:—

1. A fastener, comprising a case formed of a back plate, a cap-plate, and a rim between them, a partially rotating arm having a ring-shaped inner end for turning around the rim, a spring-pressed latching bolt
 55 which is slidingly fitted within the case in position within the ring of the arm and which automatically engages with a notch in the inner edge of the ring when the arm is turned into its fastened position.

2. A fastener, comprising a case formed of a back plate, a cap-plate, and a rim between them, a partially rotating arm having a ring-shaped inner end for turning around the rim, a spring-pressed latching bolt
 65 which is slidingly fitted within the case in position within the ring of the arm and which automatically engages with a notch in the inner edge of the ring when the arm is turned into its fastened position, and lock-
 70 ing means, also situated within the ring of the partially rotating arm, by which the spring-pressed bolt may be locked in engagement with the arm.

In witness whereof we have hereunto
 75 signed our names this 8th day of September 1911, in the presence of two subscribing witnesses.

EDWARD BUCKNALL, JUNIOR.
 PERCY NEVILL.

Witnesses:

ROBERT G. GROVES,
 ETHEL M. WEBB.