W. M. CLEAVELAND.

PACKAGE FASTENER.

APPLICATION FILED FEB. 11, 1908.

913,469. Patented Feb. 23, 1909.

Fig. 1.

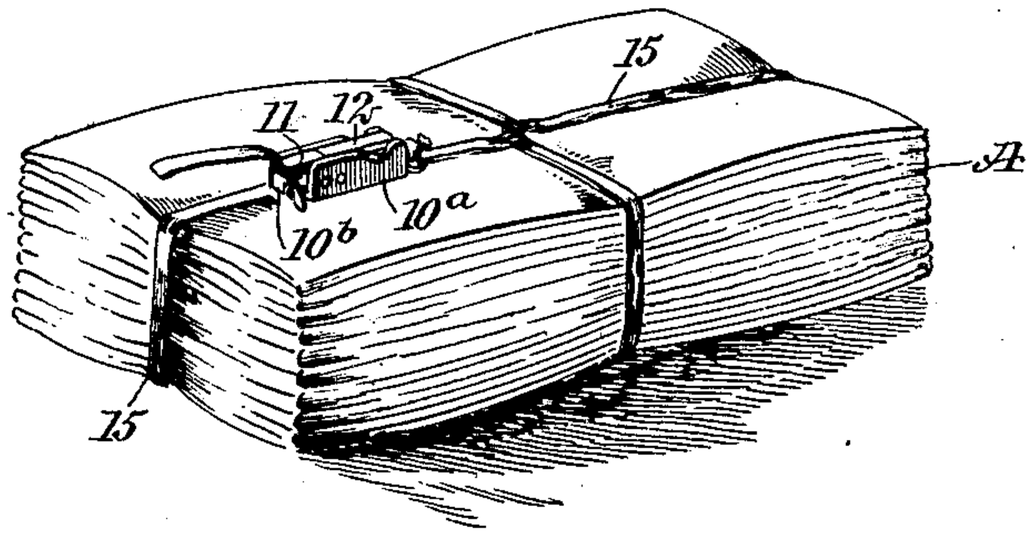


Fig. 2.

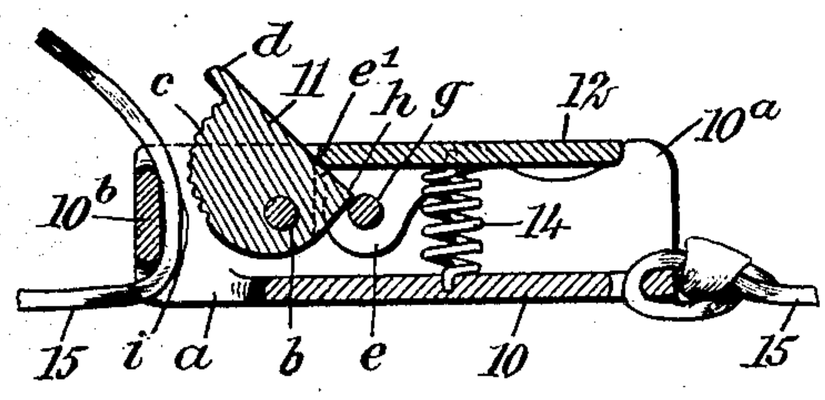


Fig. 3.

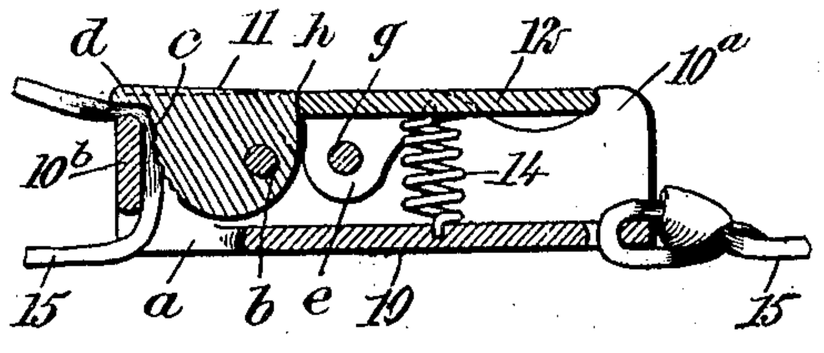


Fig. 4.

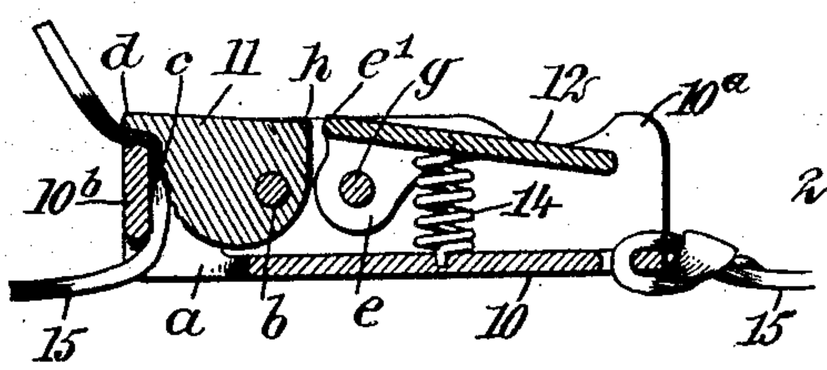
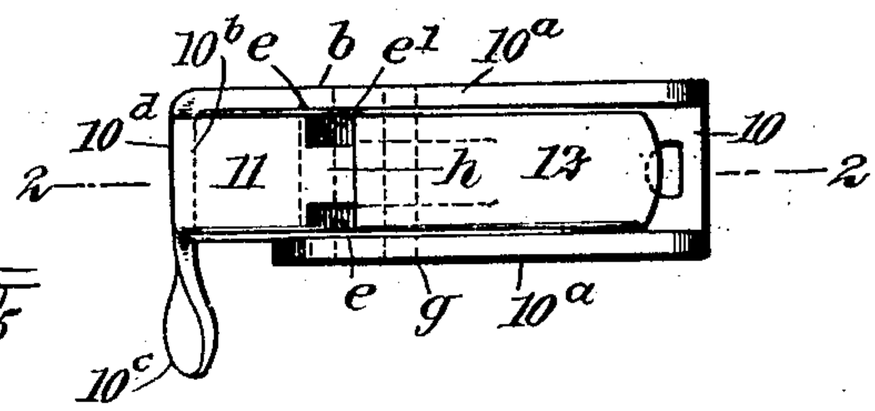


Fig. 5.



WITNESSES

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PACKAGE-FASTENER.

No. 913,469. Specification of Letters Patent. Patented Feb. 23, 1909.

Application filed February 11, 1908. Serial No. 415,297.

To all whom it may concern:

Be it known that I, WILLIAM M. CLEAVELAND, a citizen of the United States, and a resident of Highlands, in the county of Macon and State of North Carolina, have invented a new and Improved Package-Fastener, of which the following is a full, clear, and exact description.

The purpose of the invention is to provide novel details of construction for a fastening device, which adapt it for very convenient and reliable service, as a means for releasably securing a cord or band in wrapped condition upon a package of mail matter or other material it is desirable to temporarily secure, in a manner which will permit the package or bundle to be quickly opened and re-fastened, if this is desired.

The invention consists in the novel construction and combination of parts, as is hereinafter described and defined in the appended claims.

Reference is to be had to the accompanying drawings forming a part of this specification, in which similar characters of reference indicate corresponding parts in all the views.

Figure 1 is a perspective view of the improved fastening device, applied for securing a band in taut condition wrapped around a package; Fig. 2 is an enlarged longitudinal sectional view of the fastener, substantially on the line 2—2 in Fig. 5, showing parts adjusted for releasing a band shown in part; Fig. 3 is a longitudinal sectional view of the fastener, showing parts adjusted for securing a band when drawn in taut condition, portions of the band appearing as connected with the device; Fig. 4 is a sectional side view of the improved fastener, working details thereof appearing as partially adjusted for releasing a tie band, the latter being shown as engaged with the fastener, and Fig. 5 is a plan view of the improved package fastener.

The body portion of the improved fastener is essentially U-shaped in cross section, consisting of a flat bottom wall 10 of a suitable width and length, upon which are integrally formed two parallel side walls 10^a, the upper corners on which are preferably rendered convex. At one end, on one side wall 10^a, a clamping jaw 10^b is formed or secured, that is of less width, vertically considered, than the side walls 10^a, and an end portion 10^c of said jaw projects laterally beyond both of said walls, and has an ovate form edgewise, which adapts said end portion 10^c to serve as a guide finger, as will hereinafter be more fully explained.

The bottom wall 10 is removed to a short extent below and near the transverse clamping jaw 10^b, providing a throat-opening *a*, and above said opening between the side walls 10^a a clamping block 11 is pivoted as at *b*. The block 11 fits loosely between the walls 10^a and has a convexed lower edge, which extends from one end to a point adjacent to the upper edge at the other end of the block, which latter end is in service disposed adjacent to the clamping jaw 10^b. The periphery of the clamping block 11 in the portion nearest to the transverse jaw 10^b is serrated transversely, as shown at *c*, and the pivot *b*, which supports the clamping block 11, is disposed eccentric to the convexed edge having the serrations *c*. A short finger *d* is formed on the clamping block 11 adjacent to the serrations *c*, and in service projects above the upper edge of the jaw 10^b. The serrated edge portion *c* of the clamping block 11, closely approaches the side of the jaw 10^b, but does not contact therewith when the clamping block is so adjusted that the finger *d* is disposed near to the upper edge of the clamping jaw, as is shown in Figs. 3 and 4.

A locking lever 12 is an essential detail of the invention, and as shown, is in the form of a flat plate-like lever of a suitable length, and a width which permits it to work freely between the side walls 10^a of the body 10, when arranged for service. Upon the lower side and at one end of the lever 12 two flanges *e*, *e* are formed, which are spaced apart so as to leave a channel between them. The flanges *e* are preferably rounded on their edges, and concentric with said edges they are transversely perforated for the reception of a pivot *g*, which also passes through opposite perforations in the side walls of the body 10.

The upper rear corner of the clamping block 11 is reduced in thickness by an equal removal of material at the sides, thus producing a toe *h* on the block, which may be loosely inserted between the flanges *e*. The edge portions of the flanges *e*, *e* that are near to the transverse edge *e'*, of the lever body 12, are concaved slightly so as to permit the edge *e'* to interlock with the adjacent por-

tions of the clamping block 11 at each side of the toe *h*, when said block is rocked upon its pivot into the position shown in Fig. 2, for a separation of the serrated edge *c* from the jaw 10^b.

As shown in Fig. 2, the toe *h* on the clamping block 11 has contact with the pivot *g* when the finger *d* is rocked backward, and there is a gap *i* formed between the serrations *c* on the forward edge of the clamping block and the rear side of the jaw 10^b.

A coiled spring 14 is held in position between the bottom wall 10 and the lever body 12, by short pins formed on opposite ends of said spring, whereby the normal expansion of the latter is adapted for enforcing an engagement of the locking lever with the rear portion of the clamping block 11.

A flexible tie string or band 15 is employed for wrapping upon a parcel or package, and one end of said band is secured upon the end of the body plate 10 that is furthest from the jaw 10^b, in a perforation therein, leaving a sufficient portion for its designated purpose as a tie band.

In application of the complete fastening means upon a package A, the band 15 is passed around said package longitudinally and laterally and drawn taut, so as to properly bind the articles composing the package together. The fastening device is in this way disposed upon one side of the package longitudinally thereof, as shown in Fig. 1, and in position for its service as a securing means. The free end of the band 15 is now drawn taut and passed around the end of the guide finger 10^c, which will conduct the band into the opening *a* and into contact with the side of the jaw 10^b. To facilitate the insertion of the band 15, as described, the clamping block 11 should be adjusted so as to separate the serrated edge *c* from the jaw 10^b, as is represented in Fig. 2; then when the band is properly drawn upon the package, the lever 12 is depressed at its rear end, as shown in Fig. 4, which will release the forward end of said lever from the block 11. Simultaneously with the rocked adjustment of the lever 12 which compresses the spring 14, the finger *d* is manually depressed, which will rock the serrated edge of the clamping block into forcible engagement with the band 15, this being produced by the eccentric formation and pivotal engagement of the block with the side walls 10^a.

It will be seen in Fig. 3, where the locked adjustment of the fastener is shown, that the lever 12 is rocked into a level position by the tension of the spring 14, the finger *d* is pressed upon the band and co-acts with the serrations *c* for holding said band from slipping, and that the forward transverse edge of the lever body 12 is impinged upon the toe *h*, thus locking the clamping block in clamped adjustment, which can only be released by a depression of the free rear end of the lever as shown in Fig. 4, and hereinbefore explained.

It will be noted that the application of the fastener may be very quickly effected, that pulling on the free end of the band will not release it, that strain on the wrapped portion of the band will serve to cause the block or dog 11 to increase its bite upon the band, and that only the manual depression of the lever will release the band, which when desired may be instantly effected.

As the upper surface of the lever 12 and the top edges of the side walls 10^a are substantially level with each other, an accidental depression of the lever is not liable to occur, so that a package or bundle fastened by application of the improvement upon a tie band will remain intact until the same is released by manipulation.

The improvement is preferably constructed of a suitable metal that with exception of the spring 14 may be cast into form, and in quantity may be produced cheaply, and as the device may be re-used many times, it will save time by its employment, and also the cost of wrapping twine commonly used for tying parcels of various kinds.

Having thus described my invention, I claim as new and desire to secure by Letters Patent:

1. A package fastener, comprising a band or the like, a body to one end of which one end of the band is secured, said body being provided with a fixed jaw at the end opposite that to which the band is secured and with an opening adjacent to the jaw for the passage of the free end of the band, a clamping block pivoted eccentrically in the body and adapted to clamp the band onto the fixed jaw, said block being provided with a finger projecting over the fixed jaw when the block is in clamping position, and means for engaging the clamping block to hold it in closed or open position.

2. In a package fastener, a body having a bottom, two sides, one of which terminates short of one end, and an end forming a fixed jaw, the bottom having an opening therein adjacent to the fixed jaw, a clamping block pivoted eccentrically between the sides of the body adjacent to the jaw and adapted to clamp a tie band upon the said jaw, and a pivoted and spring pressed locking member arranged between the sides of the body in rear of the clamping block and adapted to engage the end of the clamping block to hold it in clamping position.

3. In a fastening device of the character described, the combination with a body piece having a bottom wall, two spaced parallel sides thereon, and a clamping jaw disposed transversely at one end of the body piece, of a clamping block having a rounded periphery that is transversely serrated and is

pivoted between the sides, so as to dispose the serrated edge eccentrically and opposed to the clamping jaw, the bottom wall being removed at one end to provide an opening below the jaw and clamping block, and a spring-pressed lever pivoted near one end between the sides of the body piece, and holding the clamping block in one position of the block and lever, and releasing said block when the lever is rocked against stress of the spring.

4. In a package carrier of the character described, the combination with a body piece having a flat bottom wall, two spaced parallel sides thereon, and a transverse clamping jaw at one end of the body piece, said jaw having a laterally projected guide finger on one end thereof, of a clamping block having a rounded periphery, and a flat top wall, a short finger projecting from one end of the top wall, and a toe at the other end thereof, the rounded periphery having transverse serrations thereon below the finger, a pivot supporting the clamping block between and upon the sides of the body, and disposing the serrations eccentrically and opposed to the clamping jaw, a locking and releasing lever having spaced flanges at one end, said flanges being pivoted between the sides of the body piece, having edges thereof adjacent to the toe on the clamping block, and a coiled spring pressing between the bottom wall of the body piece and the locking lever.

5. In a package fastener, a body having a jaw at one end, a clamping block eccentrically pivoted in the body, and a pivoted and spring pressed lever in the body and adapted to engage with its forward end the upper surface of the clamping block to hold it open or the rear end of the said block to hold it closed.

6. In a package fastener, a body having a jaw at one end, a clamping block eccentrically pivoted in the body and having a toe at its rear end, and a pivoted and spring pressed lever in the body for engaging the clamping block to hold it in a closed or open position, said lever being provided with side flanges by means of which it is pivoted and between which the toe of the clamping block is adapted to project when the clamping block is in open position.

7. In a package fastener, a body formed of a bottom and two sides, the body having at one end an opening in its bottom and at said end a clamping jaw having a lateral extension forming a guide, and an eccentrically pivoted clamping block in the body.

8. In a package fastener, a body formed of a bottom, an end and two sides, one of which terminates short of one end, the bottom having an opening therein and the end forming a jaw and having a lateral extension forming a guide, a clamping block eccentrically pivoted in the body, and means for locking the block in position.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

WILLIAM MONROE CLEAVELAND.

Witnesses:
JOHN JAY SMITH,
JAMES FRANK CLEAVELAND.