G. H. TAYLOR.

BAND FASTENER.

APPLICATION FILED JULY 27, 1916.

1,218,337. Patented Mar. 6, 1917.

FIG. 1.

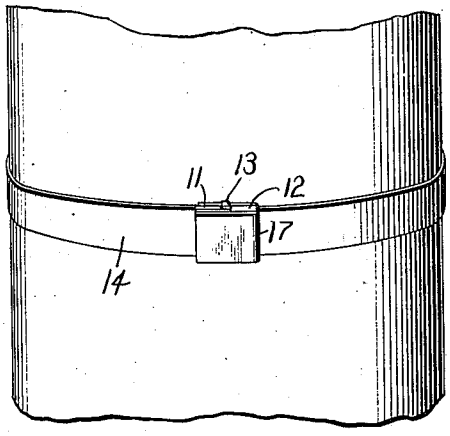


FIG. 2.

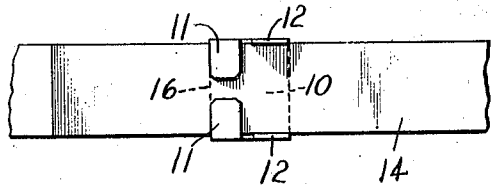


FIG. 3.

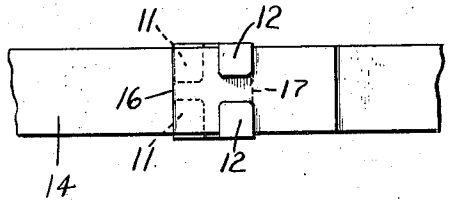


FIG. 4.

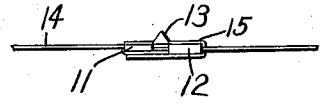


FIG. 6.

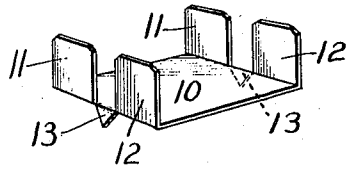


FIG. 5.

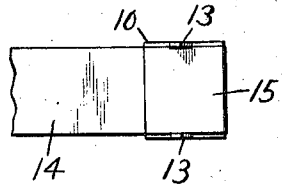
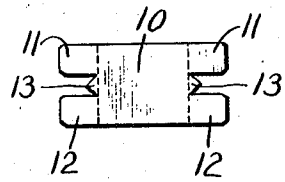


FIG. 7.



Witness

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UNITED STATES PATENT OFFICE.

GEORGE H. TAYLOR, OF RICHMOND, VIRGINIA.

BAND-FASTENER.

1,218,337. Specification of Letters Patent. Patented Mar. 6, 1917.

Application filed July 27, 1916. Serial No. 111,690.

To all whom it may concern:

Be it known that I, GEORGE H. TAYLOR, a citizen of the United States, residing at Richmond, in the county of Henrico and State of Virginia, have invented certain new and useful Improvements in Band-Fasteners, of which the following is a specification.

This invention relates to a band fastener and particularly to the construction of a fastening device formed separate and independent of the band to which it is to be applied and arranged to firmly connect the ends of said band.

The invention consists of a novel and improved construction of fastening plate over which one end of a securing band is adapted to be folded and provided with a plurality of spaced clamping lugs to secure the opposite end of said band and also with retaining means to prevent movement of the plate upon the object to which the band is applied.

Other and further objects and advantages of the invention will be hereinafter set forth and the novel features thereof defined by the appended claims.

In the drawing—

Figure 1 is a perspective of the fastener applied;

Fig. 2 is a detail elevation showing the bending of the first clamping lugs;

Fig. 3 is a similar view of the bending of the final clamping lugs;

Fig. 4 is a top plan of the completed fastener shown in Fig. 1;

Fig. 5 is a bottom view of the plate and band folded thereon;

Fig. 6 is a perspective of the complete fastener; and

Fig. 7 a plan of the blank from which it is formed.

Like numerals of reference refer to like parts in the several views of the drawing.

The fastener may be formed of any desired material, preferably of bendable sheet metal, and the shape or configuration thereof may be varied as found convenient for practical or artistic purposes. The fastener comprises essentially a plate 10 having at opposite sides and at each end spaced clamping lugs 11 and 12 bent at an angle to the plate. This bending is effected by a die or proper tool and is preferably at a right angle to the body of plate so as to secure an accurate and close fitting of the lugs as they are folded inward toward the plate in securing or clamping the band thereto. When such lugs are bent by hand from the plane of the plate into clamping position it is difficult to secure a true straight bend which will fit snugly at the sides and upon the top of the band. To avoid such objection the plate is formed with the lugs mechanically bent at the proper angle thereto.

This plate is entirely separate and independent from the band 14 which it secures in position and to prevent movement of the plate upon the object to which the fastener is applied retaining prongs or projections 13 are formed upon the plate to enter or engage the surface of the object. These prongs may be disposed in various positions, for instance, at the sides of the plate intermediate the lugs 11 and 12 and bent downward at a right angle to the under face of the plate 10.

In the application of the fastener the fixed end of the band 14 is connected to the plate and to the object to be secured by bending over the surface of the plate between the lugs and prongs as shown at 15 in Figs. 4 and 5. The retaining prongs then hold the plate against movement so that the free end of the band may be drawn across the plate under tension and the first lugs 11 bent downward thereon. The band is then bent at 16 over the outer face of these lugs and the final lugs 12 at the opposite end of the plate bent downward thereon. See Figs. 2 and 3. A final bend 17 may then be given the end of the band to cover the lugs 12 and provide a smooth finished surface for the fastener with the lugs completely protected against accidental disengagement. This construction also permits the removal of the fastener from the band if desired and its subsequent repeated use.

The use of the fastener separate or independent of the band provides a great economy in the use of the band material which can be furnished in continuous lengths or reels and cut to the exact lengths necessary to form the complete finished band desired without any waste of material or projecting excess thereof at the free end. When the clamping lugs are formed at one end of the band strip various different sizes thereof must be purchased for different conditions of work and this loss and inconvenience is effectually prevented by the present invention. Furthermore the separate fastener permits the same to be of heavier material

than the band if desired, which saves in weight of material, permits an easy stretching and bending of the band, and provides a clamp means stiff enough to firmly hold the band.

The fastener can be adjusted to the desired extent upon the band and when the slack thereof is taken up it assists in locking by engagement with the primary lugs. The secondary lugs effectually fasten the band and the end thereof is folded over these lugs to form a finished device. The plate when held by the retaining prongs leaves both hands of the operator free to draw the band tight and fold down the clamping lugs. These prongs may however be omitted if found desirable or convenient. While the invention is herein shown as applied to a pipe packing clamp, still it is applicable to any form of band package or bale tie or similar securing means.

What I claim is:—

1. As an article of manufacture, a band fastener comprising a separate plate over an entire face of which one end of a band may be folded and provided with a retaining projection extending at an angle from one side of said fastener, and clamping lugs extending at another angle in an opposite direction from said plate and disposed upon opposite sides of said fastener, said lugs being adapted to be folded toward the plate to retain the other end of a band thereon.

2. As an article of manufacture, a band fastener comprising a separate plate over which one end of a band may be folded and provided with retaining prongs extending at a right angle from each side of said plate, and clamping lugs extending at a right angle in an opposite direction from the side edges of said plate and disposed upon opposite sides of said prongs, said lugs being adapted to be folded toward the plate to retain the other end of a band thereon.

3. As an article of manufacture, a band fastener comprising a separate plate over which one end of a band may be folded and provided with retaining prongs extending from the opposite side edges of said plate, and clamping lugs extending from the opposite edges of said plate at the opposite sides of each prong, said prongs and lugs being adapted to be bent in opposite directions and at an angle to said plate.

In testimony whereof I affix my signature in the presence of two witnesses.

GEORGE H. TAYLOR.

Witnesses:

E. L. WORD,

C. C. CUNNINGHAM.