

J. D. HUSBANDS, Jr.
Bale-Ties.

No. 154,797.

Patented Sept. 8, 1874.

Fig. 1.

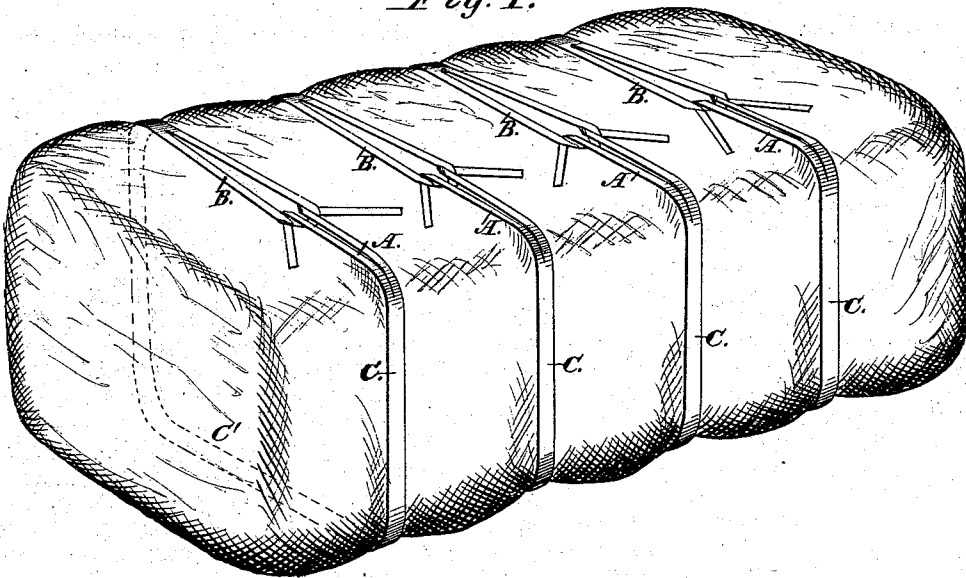


Fig. 2.

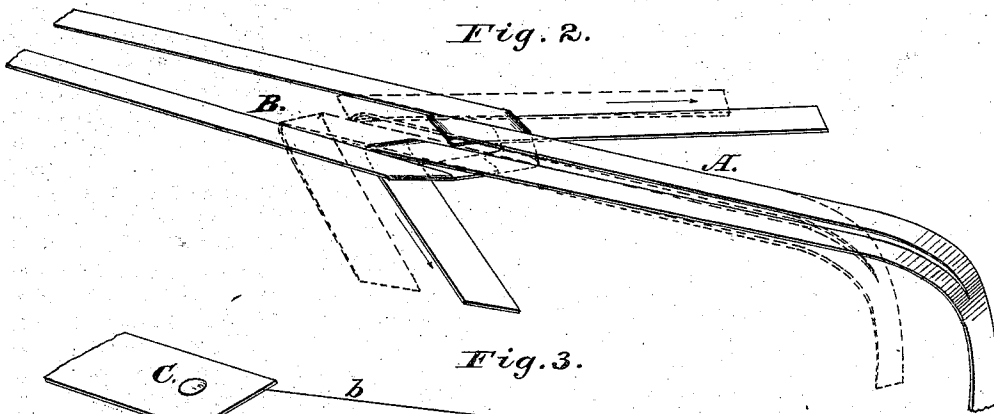
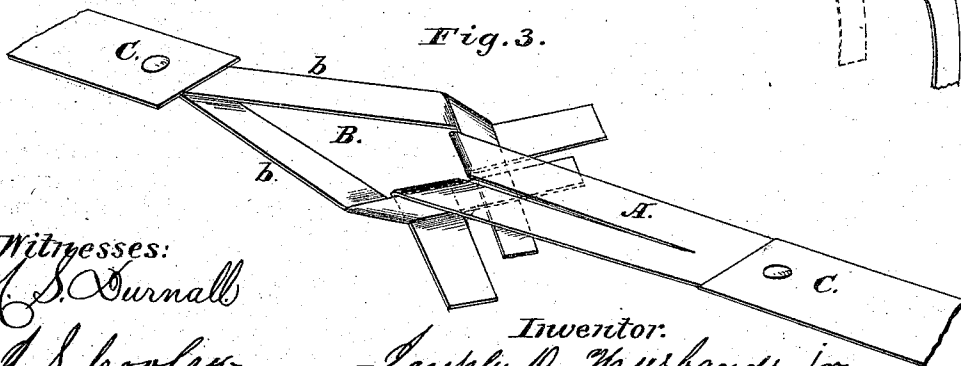


Fig. 3.



Witnesses:
H. S. Surnall
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Inventor:
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By James L. Norris, Atty.

UNITED STATES PATENT OFFICE.

JOSEPH D. HUSBANDS, JR., OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **154,797**, dated September 8, 1874; application filed September 2, 1874.

To all whom it may concern:

Be it known that I, JOSEPH D. HUSBANDS, Jr., of St. Louis, in the county of St. Louis and State of Missouri, have invented certain new and useful Improvements in Bale-Tie, of which the following is a specification:

My invention relates to a new and improved bale-tie, and it is designed particularly for binding and fastening cotton, hay, tobacco, and other like bales, although it may be used for other similar purposes; and it consists, first, in a bale-tie or packing-band having one end divided or slotted, so as to form two members or straps, or a double band, at said end, which are adjusted to be passed through a suitable eye, loop, or opening formed on the other end of the band, and be tied or fastened thereto by bending the ends of said two members or double band either upward or downward, as may be desired, in the manner hereinafter described; second, in a bale-tie or packing-band having each end slotted for a suitable distance, so as to form two members, straps, or a double band at each end of the tie or band, the members or straps at one end being constructed so that they may be clasped or connected together and formed into an eye or loop to receive the ends of the two members or straps on the other end of the band, which may be tied, fastened, or interlocked therein, as above; and, third, in a bale-tie so constructed that the ends may be brought together and automatically tied or fastened at each successive stage of the pressing of said bale, as will be fully hereinafter set forth and described.

In the drawing, Figure 1 represents a bale of cotton, hay, tobacco, or other material desired or susceptible of being compressed, bound, and tied by means of my tie and packing-band. Fig. 2 represents a detached view of one modification of my tie, and Fig. 3 a detached view of another modification of the same.

A represents one portion of the tie, and B the other. These may be formed directly upon the ends of the band C, as shown in Figs. 1 and 2, or may be made separate and attached to the band, as shown in Fig. 3. In either case the part A is made by dividing or slotting the end of said band, Figs. 1 and 2, or the strip A, Fig. 3, so as to divide the said

band or strip and form two members or a double strip or band, as shown. The other portion, B, of the tie is formed with an eye, loop, or slot, which may be made directly in the end of the band C in any convenient manner, or it may be formed of a separate strip provided with an eye or loop suitably constructed of a slotted strip in the same manner as the strip A', and attached to the band C, the ends being clasped together to form an eye or loop; or it may be constructed of separate strips *b b*, attached to the end of said band and bent or clasped together into a loop at the ends, as shown in Fig. 3. The tie or packing-band is generally made of thin, flexible metal, that may be easily bent, although any other material that may be adapted to the purpose may be used.

In applying my invention, the packing-bands are passed around the bale when it is first compressed, and the ends of the tie A are passed through the loops or eyes B, as shown in the drawings, or from below, as may be desired, after which they are bent backward and outward at an angle to the sides of the packing-band. When the pressure on the bale is relieved the outward pressure of the cotton, hay, tobacco, or other material, caused by its elasticity, will firmly interlock the two portions of the tie and prevent all slipping. As cotton, hay, or tobacco bales are all of about the same size, the ends of the portion A may be properly bent before the bar *d* is placed around the bale, and its two members fastened in the eye or portion B by inserting first one and then the other, the natural elasticity of the cotton, hay, or tobacco, in pressing the bale outward, firmly interlocking the two portions of the tie, causing the bale and the bands to assume the positions shown in Fig. 1. After the first compression of the bale the bands may be tightened to fit it by drawing the ends of the part A in the direction shown by the arrows, Fig. 2, until they firmly bind the bale, after which they will remain tied without requiring further manipulation. At the next compression they may be again tightened in the same manner, and so on at each successive stage during compression until the bale is reduced to proper bulk.

The tie as thus constructed is made of a sim-

ple piece of metal, by simply cutting the same, and does not require the addition of any extra parts to make it perfect, such as buckles and the like, which have hitherto been necessary in all self-locking ties. Its operation is instantaneous, and it may be readily locked and unlocked and straightened by hand by any person, and it cannot give or work loose under any circumstances, and, owing to the simplicity of its construction, it can be manufactured much cheaper than the ties in ordinary use. Besides, there are no weak parts in the tie, as it is uniform in thickness and weight throughout its entire length, and by the peculiar method of fastening the strain will be in a straight line and equal throughout the entire tie, and not upon one side, as is the case in other ties in use.

What I claim is—

1. A bale-tie or packing-band having one end divided, so as to form two members or straps, or a double band, at said end, which

are adapted to be passed through a suitable eye or loop in the other end of the packing-band or tie, and the two tied or fastened together.

2. A bale-tie or packing-band having each end slotted and divided, forming two members or straps at each end, the members or straps of one end being formed into an eye or loop, into which the members of the other may be interlocked.

3. A bale-tie or packing-band constructed with divided ends, so that the ends may be brought together and tied or fastened automatically at each successive compression of the bale, substantially as described.

In testimony that I claim the foregoing I have hereunto set my hand.

JOSEPH D. HUSBANDS, JR.

Witnesses:

JAMES L. NORRIS,
ALBERT H. NORRIS.