

GEORGE N. BEARD.

110539

BALE TIE.

PATENTED DEC 27 1870

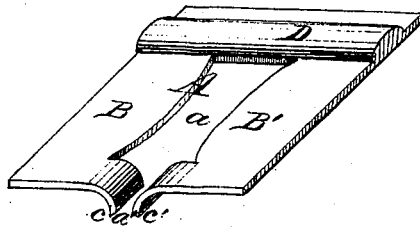


Figure 1.

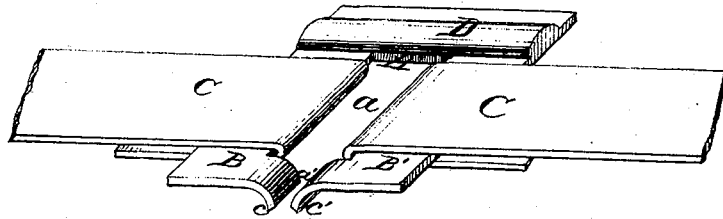


Figure 2.

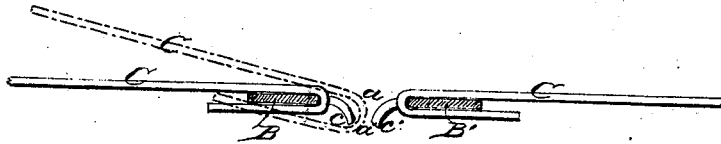


Figure 3.

Witnesses:

J. W. Herthel.

Robert Burns.

Inventor:

George N. Beard
by his Atty's
Herthel & Co

UNITED STATES PATENT OFFICE.

GEORGE N. BEARD, OF ST. LOUIS, MISSOURI.

IMPROVEMENT IN COTTON-BALE TIES.

Specification forming part of Letters Patent No. **110,539**, dated December 27, 1870.

To all whom it may concern:

Be it known that I, GEORGE N. BEARD, of St. Louis, in the county of St. Louis and State of Missouri, have made certain new and useful Improvements in Cotton-Bale Ties; and I do hereby declare that the following is a full and true description thereof, reference being had to the accompanying drawing, and to the letters of reference marked thereon.

The object of this invention is to form a simple, cheap, durable, and effective locking device or tie for baling cotton, hemp, and similar materials; and the nature thereof consists, first, in constructing the tie-piece, having a rectangular slot communicating with a central lip-opening, in which the bands are inserted, to be retained in said rectangular slot; secondly, in curving the edges of said rectangular slot forming the end bars so as to retain the leverage of the bands centrally; thirdly, in the peculiar locking device formed by the depressed lips, preventing a disengagement of the bands, all of which will hereinafter more fully appear.

To enable those herein skilled to make and use my said invention, I will now more fully describe the same, referring to the accompanying—

Figure 1 as a perspective view of the tie-piece, to Fig. 2 as a perspective view of the tie with bands locked, and to Fig. 3 as a sectional elevation.

My device consists of a clasp or tie, A, of metal, wrought-iron being most suitable. Said tie A is formed with a rectangular slot, *a*, forming the end bars B B'. On the side, and centrally in communication with said slot *a*, I arrange the opening *a'*, sufficiently large for the insertion of the baling-bands C.

When the bands C are inserted in the slot *a*, to prevent any possibility of disengagement on part of said bands I have formed a "lock" for said bands C by depressing each end of the slotted projection, so as to form the curved lips *c c'*, as clearly shown in the figures.

The inclination of the lips *c c'* is such that, by force of the expansion of the compressed

material, said lips are caused to clutch into the baled article. As, therefore, the movements of said lips are in a downward direction, and by force of the expansive tendencies of the baled material the movements of the bands being upward, it is plain that a disengagement of the bands C encircling the bale or package is impossible by any contusion, concussion, or shifting movements occurring in handling and transporting said bale or storing the same.

The end bars B B' have their inner edges slightly curved or beveled, as shown in Fig. 1, in order that the strain of the bands C may be more equally distributed and retained in position where said bars are strongest and most durable. Furthermore, the tie-piece A, I provide with a ridge or band-like projection, D, to add strength and durability to the tie.

The bale being under pressure, one end of the band C is first bent, as shown in Fig. 3, and inserted in the lip-opening, to be retained in the rectangular slot *a*. Similarly, the other end of said band, after passing round the bale, is properly bent and inserted. Said bands are then tightened by the expansion of the cotton as soon as released from the press.

My improved tie is easily constructed, readily applied, besides forming a fastening for the bands that is thorough and effectual.

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

The combination, in the bale-tie A, herein described, of the rectangular slot *a* with the end bars B B', provided with the curved lips *c c'* and central entering-slot *a'* and the strengthening rib or projection D, when all these parts are constructed and arranged as shown and described, for the purpose set forth.

In testimony of said invention I have hereunto set my hand.

G. N. BEARD.

Witnesses:

WILLIAM W. HERTHEL,
JNO. W. HERTHEL.