UNIVERSAL STATES PATENT OFFICE.

ABRAHAM A. GOLDSMITH, OF CHARLESTON, SOUTH CAROLINA.

IMPROVEMENT IN COTTON-BALE TIES.


To all whom it may concern:

Be it known that I, ABRAHAM A. GOLDSMITH, of Charleston, in the county of Charleston and State of South Carolina, have invented a new and valuable improvement in Bale-Tie; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawing is a representation of a sectional view of my bale-tie. Figs. 2, 3, 4, and 5 are detail views of the same. Fig. 6 is a sectional detail view of the same.

This invention has relation to bale-ties for which Letters Patent were granted to me, bearing date on the 7th day of April, 1874, and numbered 149,468; and the novelty consists in bending down the smallest end of a wedge in the direction of a shoulder upon the lower portion of the larger end thereof, whereby the said bent portion will be forcibly pressed down upon the binder when the compressing power is removed from the bale, materially aiding the said shoulder to prevent the said binder from being drawn through the taperingly-slotted loop or binder. It also consists in a shoulder constructed upon the upper side of the said wedge, whereby the said loop or buckle will be prevented from being accidentally knocked off the inclined part of the wedge, either before pressure has been applied to the bale or afterward, as will be hereinafter more fully explained.

In the annexed drawings, A designates a buckle, having through it a slightly-tapering slot, a', as shown in Fig. 1; and it is also provided with a lower beveled edge, a. B represents a wedge, having a transverse ridge or shoulder, b, upon its lower edge, of which ridge the lower surface is slightly beveled, whereby I am enabled to cause the binder borne upon by the said shoulder to be more effectually gripped. The smaller end b' of this wedge is bent downwardly, as shown in Figs. 1, 2, and 3, with a view to giving it a more perfect hold upon the binder, and yet in no way diminishing the yielding or elasticity of the parts necessary for inserting the wedge into the buckle conveniently. b' designates a shoulder constructed upon the upper inclined surface of the wedge B, near that portion thereof upon which will be situated the buckle A when the tie is effected, and which will prevent the slotted tie-buckle from being accidentally knocked off the wedge while the bales are being pressed, or afterward.

When the ends C C' of the bale-band are connected together by the wedge and the slotted buckle, the expansion of the bale which is encircled by the band will firmly draw the wedge into the slot of the buckle, causing the shoulder b of the wedge and its downwardly-bent smaller end b' to bear forcibly against the end C' of the binder, effectually preventing the said end from being drawn through the slot.

When the bale-tie thus described as to its constituent parts is subjected to strain the wedge will be drawn into the position shown in Fig. 3 through the slot A, owing to its being rigidly secured to the end C of the binder, and the shoulder b' upon the upper portion of the said wedge will be closely set against the buckle A, preventing it from being knocked off by accidental shocks occurring during the handling of the bale. The beveled edge a of the buckle A will cause the said buckle to assume a position at an angle to the line of strain of the binders, and will thereby produce a certain and effectual locking of the wedge within its slot.

What I claim as new, and desire to secure by Letters Patent, is—

In a bale-tie, the wedge B, having a beveled shoulder, b, upon its lower surface, and a shoulder, b', upon its upper inclined surface, and having its smaller end b' bent downwardly, in combination with a bale-band and the taperingly-slotted and beveled buckle A, substantially as specified.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

A. A. GOLDSMITH.

Witnesses:
E. H. GADSDEN,
R. W. BURNHAM.