A. A. GOLDSMITH.

Bale-Tie.

No. 159,815. Patented Feb. 16, 1875.

Fig 1

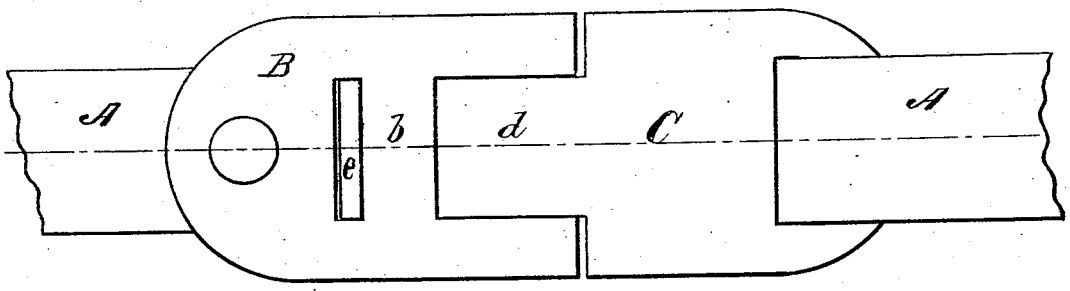


Fig 2

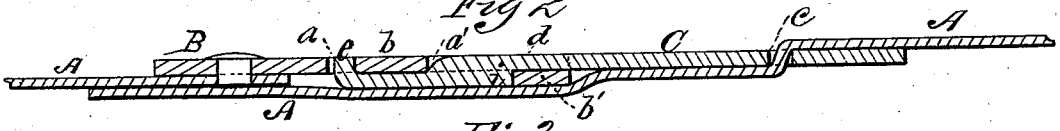


Fig 3

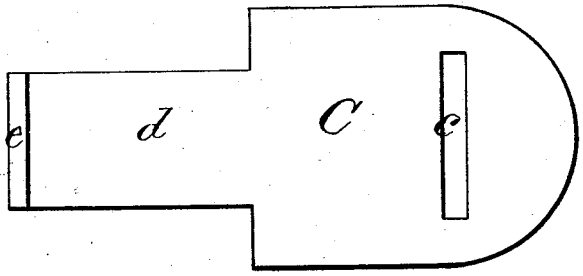


Fig 4

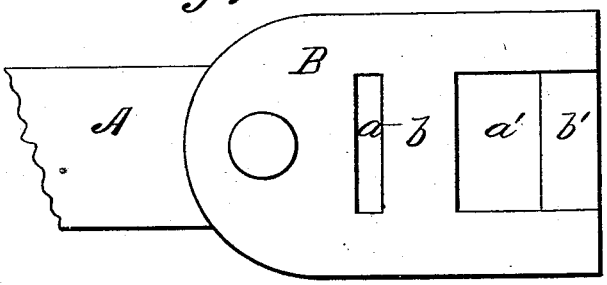
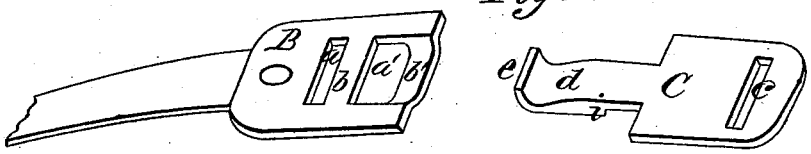


Fig 5



WITNESSES

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UNITED STATES PATENT OFFICE.

ABRAHAM A. GOLDSMITH, OF CHARLESTON, SOUTH CAROLINA.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No **159,815**, dated February 16, 1875; application filed January 23, 1875.

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-Ties; 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 plan view of my bale-tie, and Fig. 2 is a sectional view of the same. Figs. 3, 4, and 5 are detail views.

This invention has relation to improvements in bale-tie buckles, which are designed for uniting the two ends of a strap-iron binder passing around a compressed mass of hay, cotton, or other analogous substances; and the nature of the invention consists in combining, with a metallic plate, rigidly secured upon one end of a strap-iron binder, and having two rectangular slots, one in rear of the other, cut through it vertical to its length, the front bar of the said plate being struck down below its level, a second metallic plate adjustably applied upon the other end of the said binder, and having an upwardly-hooked projecting tongue and a stop arranged under and transverse to the tongue, whereby the two ends of the binder passed around a bale will be effectually united when the tongue on the adjustable plate is passed from above into the first slot of the fixed plate, its hooked end engaged with the second slot, and the compressing power removed, all as will be hereinafter more fully explained.

In the annexed drawings, A designates a strap-iron binder of the usual dimensions, in connection with which I propose to show the application, advantages, and mode of operation of my improved tie. B designates a plate of any suitable metal rigidly secured upon one end of the said binder, and having rectangular slots *a a'*, the latter being of greater width than the former, cut through it in positions vertical to its length, as shown in Fig. 4. These slots are separated by a strong bar, *b*, and the front bar *b'* of the plate is struck down below its level, as shown in Fig. 5, for a purpose hereinafter explained. C designates a second plate, also of metal, having in one end a rectangular slot, *c*, and upon its other end a projecting tongue, *d*, terminating in an upturned hook, *e*, as shown in Fig. 5. Plate C is adjustably applied upon the binder by passing the end of the same from above through slot *c*, the said binder having been previously passed around the mass to be baled, and adjusted thereon, so that its length, added to that of the binder, shall suffice to embrace the same. Its tongue *d* is then passed from above through slot *a'* of plate B, and the hook *e* engaged from below behind bar *b* with its end in slot *a*. In this position plates B C will be in the same horizontal plane, their upper surfaces presenting a smooth appearance, the front bar *b'* of the former being struck down for the purpose, and a transverse stop or shoulder, *i*, rigidly secured to the under side, or forming a component part, of tongue *d*, will be engaged behind the said bar, as shown in Fig. 2.

A suitable number of binders having been applied to the bale, as above described, the compressing power may be removed, when the expansion of the mass will bend the end of the binder engaged in slot *c* oblique to the line of the strain, at the same time driving its projecting end forcibly up against the under side of plates B C, effectually holding it against displacement by slipping, and rigidly holding hook *e* to its engagement with slot *a*, and stop *i* in position behind bar *b'*, thus not only securing the binder to the hook-plate, but also the hook-plate to the rigid plate, the union thus effected being of great strength, and fully adequate to resisting successfully both the strain naturally pertaining to expanding bodies and that incident to and produced by shocks and careless handling during transportation.

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

1. In a bale-tie, the combination, with plate B, rigidly secured upon one end of a binder, A, having rectangular slots *a a'*, and a bar, *b'*, struck down below the level of its plate, of

the plate C, adjustably applied upon the other end of the said binder, and having slot *c*, tongue *d*, with upturned hook *e*, and stop *i*, substantially as specified.

2. The plate C, having slot *c* and tongue *d*, with upturned hook *e* and stop or shoulder *i*, when adapted for use substantially as specified.

3. The plate B, having slots *a a'*, separated by bar *b*, and a front bar, *b'*, struck down below its level, as specified, and for the purpose set forth.

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

A. A. GOLDSMITH.

Witnesses:
D. D. DUPONT,
C. L. SIMONS.