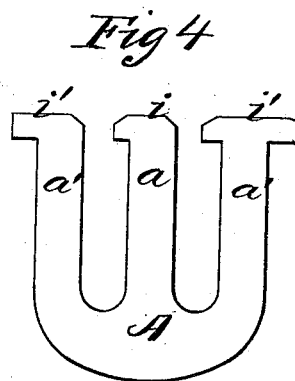
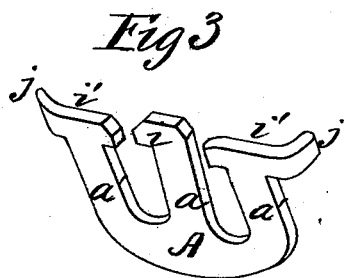
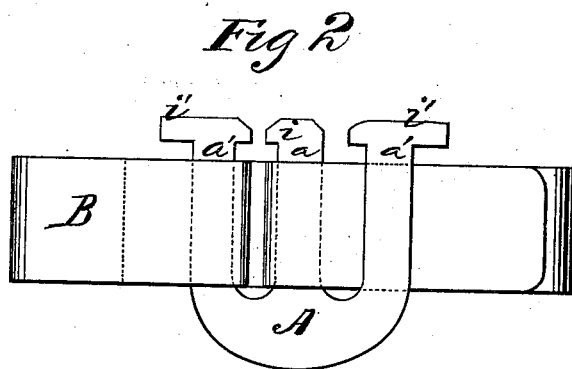
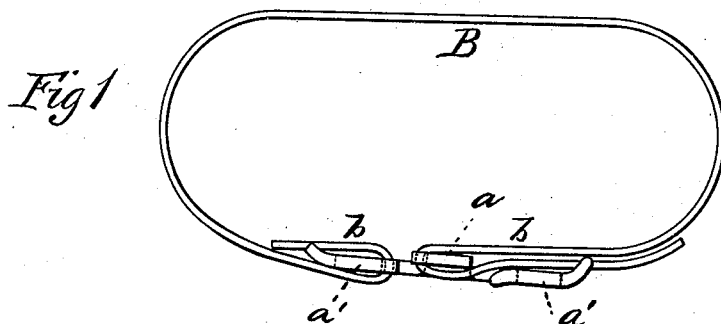


A. A. GOLDSMITH.

BALE-TIE.

No. 178,762.

Patented June 13, 1876.



WITNESSES

Villette Anderson.
E. H. Bates

INVENTOR

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ATTORNEYS.

UNITED STATES PATENT OFFICE.

ABRAM A. GOLDSMITH, OF CHARLESTON, SOUTH CAROLINA.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **178,762**, dated June 13, 1876; application filed December 11, 1875.

To all whom it may concern:

Be it known that I, ABRAM 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 drawings is a representation of a plan view of my bale-tie; and Figs. 2, 3, and 4 are plan views of the buckle-plate thereof.

This invention has relation to improvements in bale-ties; and it consists in a **W**-shaped buckle, having stops on its prongs, which will prevent the looped ends of a strap-iron binder from being thrown off the buckle by casual shocks in handling or transportation of the bale, as will be hereinafter more fully explained.

In the annexed drawings, the letter A designates a metallic buckle, presenting the general appearance of the letter **W**. The ends of the central bar *a* of the buckle is provided with a lug, *i*, projecting out at right angles to it, and the end bars *a'* with cross-bars *i'*, the outer ends of which are bent downward, as shown in Fig. 3. The strap-iron binder B is provided at each end with a loop, *b*, one of which is passed over one of the end bars *a'* of the buckle. The free end of the said binder is then passed around the compressed mass, and the

buckle, having been slightly raised, is then passed from below over the central bar *a'*. The slack of the binder is then taken up, and its free end passed under the other bar *a'*, thus completing the tie. A sufficient number of binders having been thus applied, the compressive power is removed, when the natural expansion of the bale will jam the binder up against the under side of the buckle. In this position the downwardly-bent ends *j* of cross-bars *i'* will be outside of loop *b* and of the free end of the binder, forming the other loop *b*, which latter loop is prevented from escaping by lateral displacement from the central bar *a* by means of lug *i*. By this means the casual escape of the binder from the buckle is rendered to all intents and purposes impossible.

I am aware that a bale-tie formed with three prongs, for the purpose of holding or tying the looped ends of the band with their laps, has heretofore been employed, and I therefore lay no claim to such invention, broadly.

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

The **W**-shaped plate A, having lug *i* and cross-bars *i'*, respectively, on its central and end bars, substantially as specified.

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

ABRAM A. GOLDSMITH.

Witnesses:

D. B. DUPONT,
JNO. R. HERIOT.