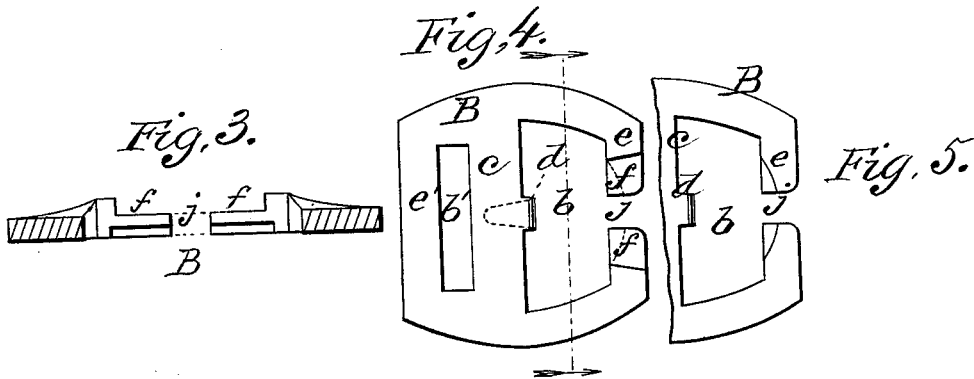
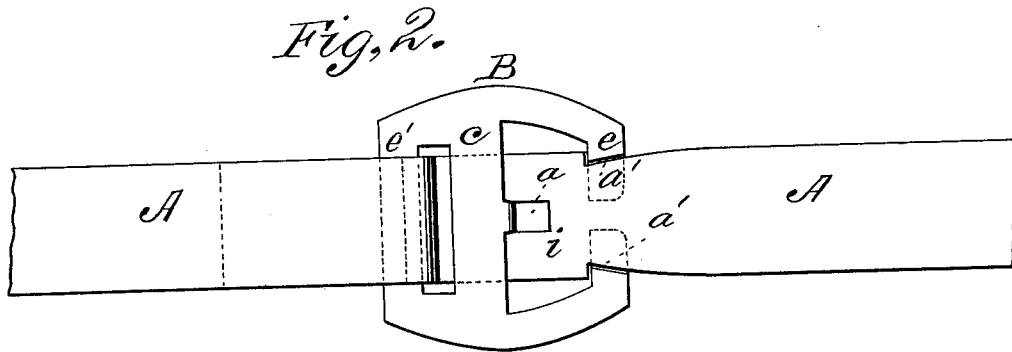
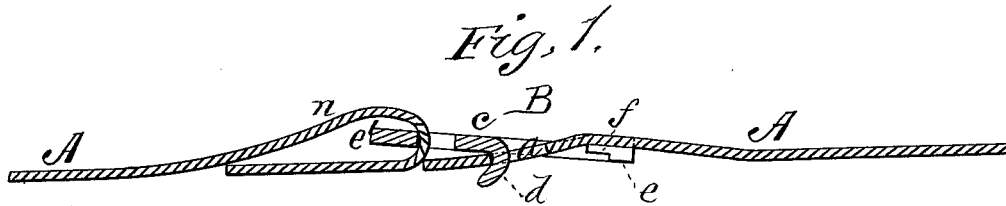


R. H. GOLDSMITH.
Bale-Tie.

No. 201,003.

Patented March 5, 1878.



WITNESSES
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F. J. Massi

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UNITED STATES PATENT OFFICE.

ROSA H. GOLDSMITH, OF CHARLESTON, SOUTH CAROLINA.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **201,003**, dated March 5, 1878; application filed January 12, 1878.

To all whom it may concern:

Be it known that I, ROSA H. GOLDSMITH, of Charleston, in the State of South Carolina, have invented a new and valuable Improvement in Cotton-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 longitudinal vertical section of my improved tie. Fig. 2 is a top view thereof. Fig. 3 is a cross-sectional view of the buckle. Fig. 4 is a top view thereof, and Fig. 5 is a bottom view of the same.

This invention has relation to improvements in bale-ties for compressed cotton, hay, hemp, and other analogous substances.

The nature of the invention consists in the novel construction, in connection with a looped, slotted, and notched binder, of a double-slotted buckle, having on its cross-bar dividing the said slots a hook extending downward, upon its front bar a dovetail depression and a transverse slit, whereby very useful results are obtained, as will be hereinafter more fully set forth.

In the annexed drawings, the letter A designates a strap-iron binder, having in one end a slot, *a*, and in rear of the said slot the angular-edge notches *a'*.

B designates an open metallic buckle, divided by a transverse bar, *c*, into two parts or slots, *b b'*, the former being the larger. The center bar *c* is provided with a recurvate hook, *d*, and the end bar *e*, opposite the convexity of the said hook, with a depression, *f*, the end walls of which are oblique to the length of the buckle, thereby forming a species of dovetail. The angular notches *a'* aforesaid form, in the binder, a shouldered head, *i*, which engages behind the end bar *e* when the hook *d* is engaged in the slot *a*, and is thereby prevented from being drawn through the buckle. Bar *e* at the center of its length has a transverse slot, *j*, by means of which the appropriate end of

the binder is conveniently and expeditiously engaged into the slot *b*.

The mass to be baled having been duly compressed, the binder is passed around it in the usual way, and its free ends approximated. The slotted end of the binder is passed edgewise through the slit *j*, and engaged with the hook *d* aforesaid, the shouldered head *i* being engaged behind the end bar *e*, and seated in the recess *f* in the said end bar. The other end of the binder is then passed down through the slot *b'*, looped around the end bar *e'* of the buckle, and the slack of the binder taken up by drawing forcibly upon its free end. A sufficient number of ties being thus applied, the press is run up and the bale expands, thereby tightening the ties, and rendering the connections of the buckles therewith secure.

The expansion of the bale prevents the loop *n* from straightening out by jamming the free or under branch of the said loop upward against the body of the binder, and draws the shouldered head forcibly against the end bar *e*, thus dividing the strain between the hook *d* and the end bar. At the same time the shouldered head is thrust forcibly up against the under side of the loop, and materially aids in preventing it from being straightened out.

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

1. The buckle B, having the center bar *c*, provided with the recurvate hook *d*, and the end bar *e* and dovetail recess *f*, in combination with the binder A, having a loop, *n*, at one end, and a longitudinal slot, *a*, and the angular-edge notches *a'*, substantially as specified.

2. An open bale-tie buckle having the center bar *c*, provided with hook *d*, and an end bar, *e*, and a dovetail recess, *f*; adapted for use substantially as specified.

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

R. H. GOLDSMITH.

Witnesses:

A. JOST,
JNO. R. HERIOT.