A. A. GOLDSMITH.

BALE-TIES.

No. 183,390. Patented Oct. 17, 1876.

Fig. 1.

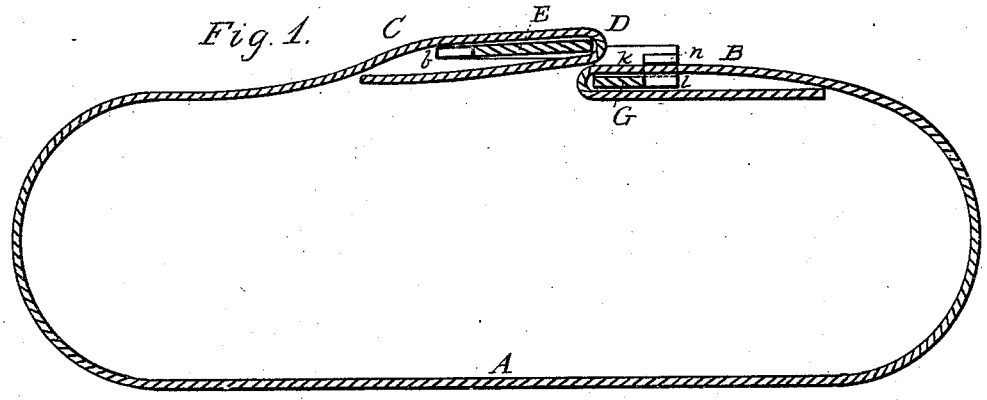


Fig. 3.

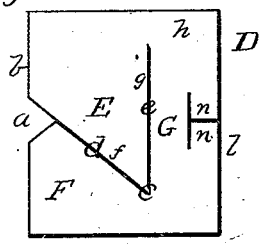


Fig. 4.

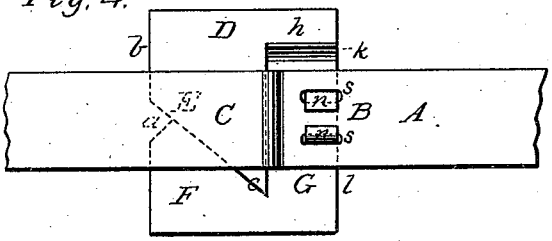
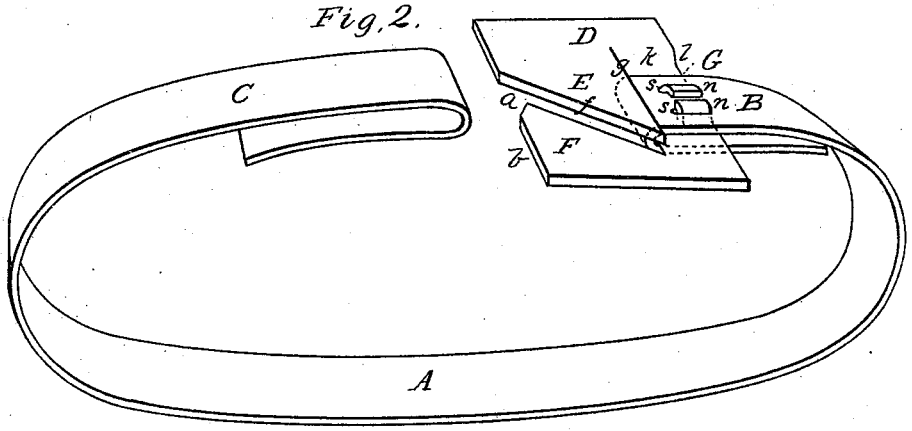


Fig. 2.



WITNESSES

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ABRAHAM A. GOLDSMITH, OF CHARLESTON, SOUTH CAROLINA.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **183,390**, dated October 17, 1876; application filed September 2, 1876.

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 drawings is a representation of a section of the band and tie-plate connected. Fig. 2 is a perspective view of the same before binding. Fig. 3 is a plan view of the plate, showing the form of the slits in front and rear. Fig. 4 is a plan view of the tie-plate and ends of the band connected.

This invention has relation to means for securing the ends of the metallic bands used in baling cotton and hay; and it consists in the construction and novel arrangement of the angular cut or slit running from the front edge of the tie-plate, the angular cross-tongue formed thereby, the guard-piece and the bar for the looped end of the band depressed below the level of the tongue; also, in the novel formation of lugs bent from the material of the buckle or tie-plate, to enter corresponding perforations in the band, as hereinafter shown and described.

In the accompanying drawings, the letter A designates a metallic band, such as is ordinarily used in baling cotton. B indicates the looped end, which is secured to the tie, and C the adjustable end, which is fastened to the tie after being carried around the bale. D represents the buckle or tie-plate. This may be stamped in form out of stout sheet or plate metal. It is rectangular, usually nearly square, as illustrated in the drawings. A notch, *a*, is made in its front edge *b*, which is the edge toward which the adjustable end of the band is carried. From this notch extends laterally inward the angular cut or slot *c*, whereof the first portion *d* is oblique, and the last part *e* is parallel with the front and rear edges of the plate. This slot for the main part bounds the tongue E of the buckle, which, therefore, has an oblique edge, *f*, and a rear edge, *g*, parallel with the rear edge of the plate.

At the heel of the tongue the plate extends to the rear on the level of the tongue, as shown at *h*.

The part F of the plate, which is divided from the tongue by the oblique cut *d*, forms the guard of the tie, and the portion G, which is separated partly by the cut *e* from the rear edge of the tongue, forms the bar of the tie. Both of these portions are somewhat depressed below the level of the tongue to enable the free end of the band to be introduced. The bend *k* connects the depressed bar G with the heel-extension *h* of the tongue.

The operation of this tie is as follows: The end B of the band is secured to the bar G of the plate, being looped around the same and riveted or otherwise fastened thereto. The free end of the band is carried around the bale and bent around under the tongue D when the bale is compressed, the bend of the band engaging with its rear edge. When thus connected, the guard F will prevent the adjusted end of the tie from slipping off the tongue, and the fastening of the band will be firm and secure.

In order to avoid riveting the end B of the band to the bar G of the plate, angular cuts are made in the metal of the plate at the rear edge *l* of the plate, forming lugs or projections *n* when bent outward, which serve to enter perforations *s* of the band, and may be secured after passing through the same by bending their ends down against the metal of the band, as indicated in the drawings. These front and rear notches of the plate are covered by the ends of the band when in use, so that they cannot be readily manipulated.

I am aware that it is not new to form an entrance-slit in the front bar of a tie-plate, and to depress one branch of the plate below the other for convenience in attaching the band; hence I do not claim, broadly, such invention.

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

1. The tie-plate D, having the angular cross-tongue E, rear bar G, depressed at the bend *k*, and guard F, separated from said cross-

tongue by the angular slit *a*, opening at the front of the plate, and joined to the depressed rear bar G, substantially as specified.

2. The tie-plate having the angular cross-tongue E separated by slit-opening at *a* in front, and the bent fastening-lugs *n* cut from the material of the plate in rear, substantially as specified.

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

ABRAHAM A. GOLDSMITH.

Witnesses:
JNO. R. HERIOT,
JAS. M. ADDISON.