J. W. ROOP.
Bale-Tie.

No. 202,963. Patented April 30, 1878.

Fig. 1.

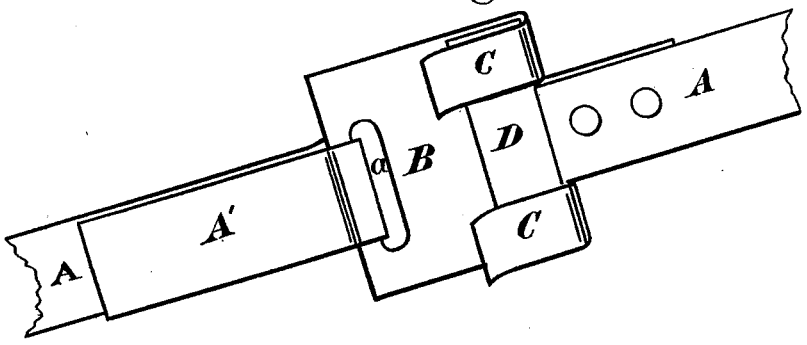


Fig. 2.

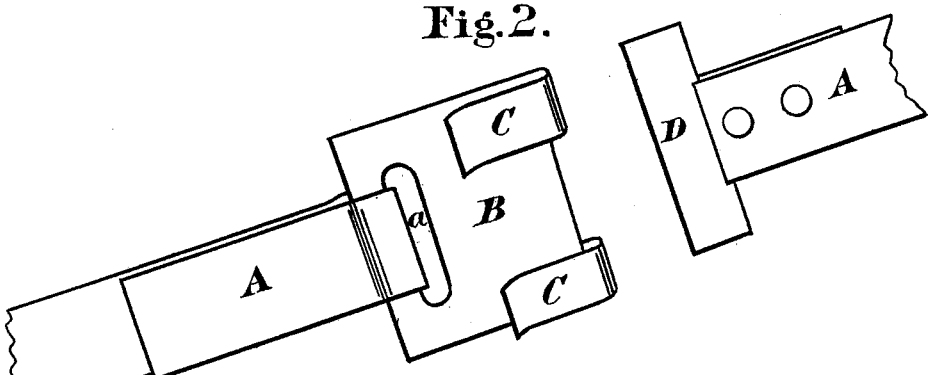
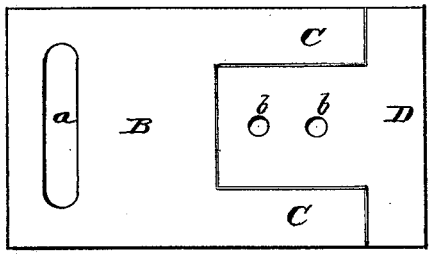


Fig. 3.



WITNESSES.

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UNITED STATES PATENT OFFICE.

JOSEPH W. ROOP, OF LOUISVILLE, KENTUCKY, ASSIGNOR TO WILLIAM J. TAPP, OF SAME PLACE.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **202,963**, dated April 30, 1878; application filed April 19, 1877.

To all whom it may concern:

Be it known that I, JOSEPH W. ROOP, of the city of Louisville, in the county of Jefferson and State of Kentucky, have invented a certain new and useful Improvement in Cotton-Bale Ties; and I do hereby declare that the following is a full, clear, and exact description thereof, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved bale-tie, the two parts being connected, looking at the inner or bale side of the same. Fig. 2 is a similar view with the two parts disconnected. Fig. 3 is a plan view of a piece of metal from which the buckle and catch-bar are cut, illustrating the method of manufacture.

This invention is in the nature of an improvement in bale-ties or band-fastenings; and the invention consists in a flat metal plate or buckle, having a slot in one end, through which one end of the tie or band is passed and then bent back upon itself, so as to be held by the expansive pressure of the bale, said buckle having hooks upon its other end, with which engages a catch-bar riveted to the other end of the band, and of the shape of a block T, the said hooks on the before-mentioned buckle being tongues projecting from the metal of said buckle, and converted into hooks by being bent back upon said buckle in a plane parallel to that of the buckle, so that said hooks shall lie entirely within the edge of the buckle, in contradistinction to L-shaped hooks cut directly out of the metal, and brought into position for use by being bent upward laterally at right angles to the plane of the buckle, and standing outside the edges of the buckle, and as distinguished from lugs made upon the face of the buckle.

The invention further consists in forming the tie or buckle and catch-bar complete at one operation from a single piece of flat metal, the hooks being bent back subsequently by suitable mechanism.

In the drawings before referred to, A is the bale-band or hoop; B, the buckle, through a slot, *a*, in one end of which one end of the band is passed and bent back upon itself, so as to lie snugly against the face of the bale and be held by the expansive pressure of the bale.

The buckle B is of a piece of flat metal, without curves or bends, except hooks C C on one end, which hooks are tongues projecting from the metal and bent back upon it in a plane parallel therewith, and extending rearwardly on its under side or face, so as to lie upon the face of the bale. These hooks are within or in line with the edges of the sides of the buckle, so as to remove any projecting surfaces for catching against other articles, and they are turned down and lie against the bale for the same reason, and for the additional purpose of preventing accidental uncoupling of the tie when secured upon or about the bale.

D is the catch-bar—a flat piece of metal of the shape of a block T—the arms of which engage the hooks C on the buckle when its shank shall have been secured to the bale-band for the purpose of tying the band. This catch-bar D may be riveted to the band.

Before the band is secured about the bale its end A′ is drawn through the slot *a* in the buckle to such extent as to adjust the band to the bale when said end is bent back, as described.

In making my improved bale-tie, I take a piece of flat sheet or plate metal, (see Fig. 3,) of rectangular shape, and by means of a suitable die or punch I cut, at one operation, the slot *a*, the tongues C C, the catch-bar D, and its rivet-holes *b b*, the shank of the catch-bar being the portion removed to form the tongues for the hooks, which hooks are formed by bending back the said tongues. By this method bale-ties are expeditiously and cheaply made, and are very simple.

What I claim is—

1. The within-described bale-tie, consisting of the buckle B, having the slot *a* in one end, and the hooks C, bent back upon it in a plane

parallel therewith, and within the edges of the sides of the buckle and underneath the same, in combination with the catch-bar D, of the shape of a block T, riveted to the band A, and adapted to engage with the hooks C, substantially as specified.

2. In the manufacture of the bale-tie shown and described, the buckle B, hook-tongues C, and the catch-bar D, cut from a single flat piece of metal at one and the same operation, substantially as described.

JOSEPH W. ROOP.

Witnesses:
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