

W. LOYD.
Bale-Tie.

No. 204,588.

Patented June 4, 1878.

Fig. 1.

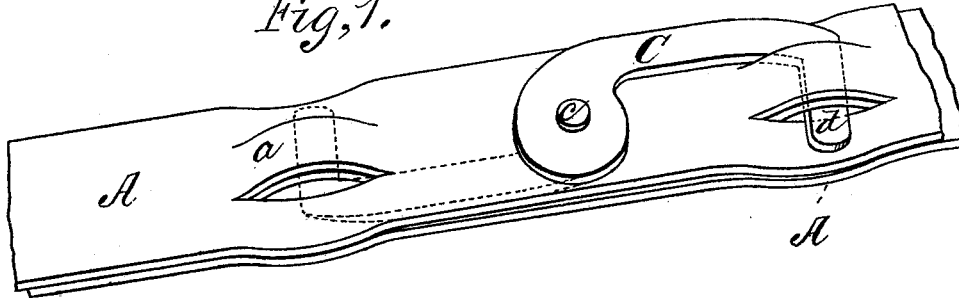


Fig. 2.

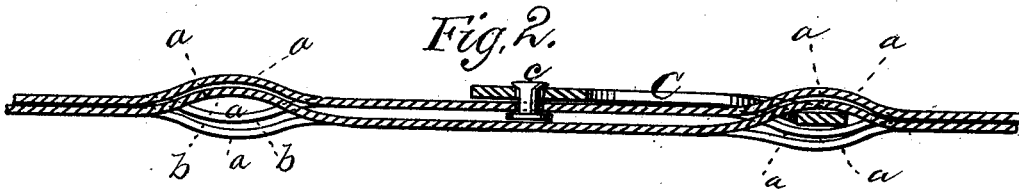
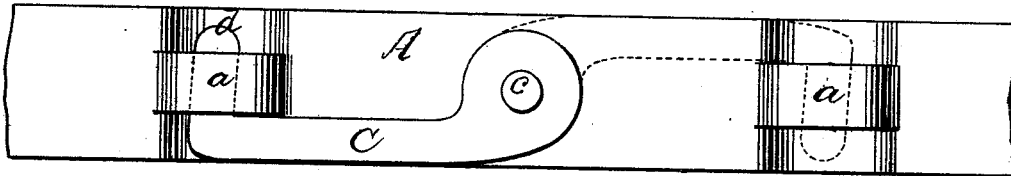


Fig. 3.



WITNESSES

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WILLIAM LOYD, OF ALLEGHENY, PENNSYLVANIA.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **204,588**, dated June 4, 1878; application filed May 14, 1878.

To all whom it may concern:

Be it known that I, WILLIAM LOYD, of Allegheny city, in the county of Allegheny and State of Pennsylvania, 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 perspective view of my improved bale-tie. Fig. 2 is a longitudinal section thereof, and Fig. 3 is a top view of the same.

This invention has relation to bale-ties; and it consists in the novel combination, with a band having transverse eyes or loops formed by bending slitted portions of its lapping ends in opposite directions, of a transverse hook connected to the band between the loops, and adapted to catch into the same by its free end, and to be held from disconnection after engagement by the extension of the band under the expansion strain, as hereinafter fully shown and described.

In the accompanying drawings, the letter A designates the tie or band, which is carried around the bale and connected by lapping one end over the other and fastening the same together in the following manner: At regular distances the underlapping end of the tie, as well as the end which overlays it, is slitted in the direction of its length, and the narrow portions *a*, which are separated by the slits, are bent in opposite directions, forming transverse loops or eyes *b*, which are the counterparts of each other, so that the bent portions of the under end of the tie will fit the bent portions of the overlap when the ends are applied to each other in the manner stated. It is apparent that when so applied to each other the slit-loops form together a loop of two layers, the parts of which have a lateral as well as longitudinal engagement. Between the slit-loops of the overlapping end is arranged a transversely-vibrating hook, C, which is pivoted by a rivet-pin, *c*, to the tie, and is of the proper length to engage by its free end or beak *d* with the slit-loops *b* when the tie ends are to be secured together. In this op-

eration the beak of the hook passes through both layers of the loop and effectually fastens the lap of the tie.

When the pressure is taken off the bale and the strain of its expansion comes on the tie, the slit-loops yield to the shock and prevent the tie from breaking either in their neighborhood or at the rivet-hole wherein the hook is pivoted. These slit-loops also extend and become flatter in their bends, thereby closing in upon the hook-beak under the strain, and effectually securing it from becoming disconnected. The hook C, being permanently riveted to the tie, cannot become detached and lost in transportation. It is easily applied, and, having no offset on the end of its beak, can be passed through a loop of small size.

A comparatively light hook is required, as it is supported throughout its entire length by the band on which it lies when in engagement. In order to secure this overlaying of the hook, the inward or edge bend of the slit-loop is made toward the inside of the tie, thereby admitting of this overlay to the extent of the breadth of the edge bend. This construction affords great protection to the hook, and renders it but little liable to accident.

I am well aware that it is common to form slit-loops in the tie-band, and that it is not new to use a hook in connection with a fold of the entire breadth of the tie; hence I make no broad claim to these devices independently.

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

The combination, with a tie-band having the lapping ends, and the slit-loops *b* in said ends engaging with each other in the manner described, of the transverse hook C, pivoted to the overlap between the slit-loops, to engage the same and be secured in this engagement by their extension under strain, substantially as specified.

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

WM. LOYD

Witnesses:

WALTER C. MASI,
JOHN BARRY.