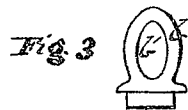
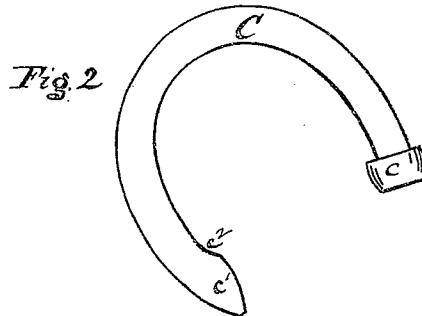
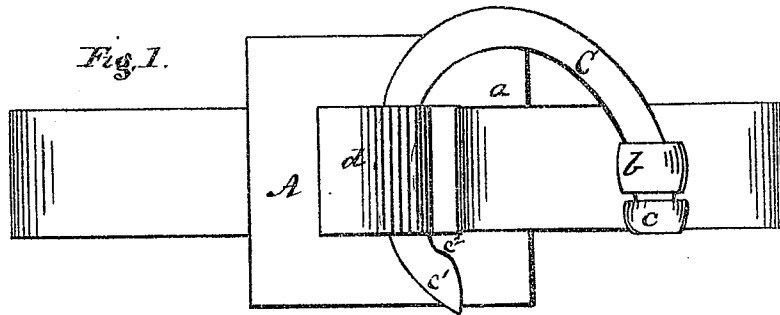


A. J. NELLIS.

Bale-Tie.

No. 159,704.

Patented Feb. 9, 1875.



WITNESSES
James D. Kay
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UNITED STATES PATENT OFFICE.

AARON J. NELLIS, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **159,704**, dated February 9, 1875; application filed January 4, 1875.

To all whom it may concern:

Be it known that I, AARON J. NELLIS, of Pittsburg, in the county of Allegheny and State of Pennsylvania, have invented a new and useful Improvement in Bale-Ties; and I do hereby declare the following to be a full, clear, and exact description thereof, reference being had to the accompanying drawing forming a part of this specification, in which—

Figure 1 is a view of a tie embodying my invention. Fig. 2 is a view of the locking device, detached. Fig. 3 is a view of the rivet for securing the band and buckle.

Like letters refer to like parts in the several figures.

My invention relates to that class of bale-ties in which a loop of the band passes through a slotted buckle, and is secured by a pin, hook, or similar device; and it consists, first, in forming the head of the rivet which secures the buckle and band, or of a rivet attached to the band, with an eye, and in giving to the hook or locking device a U or similar shape, whereby the hook may be secured directly to the tie, but can be removed and replaced at pleasure; secondly, in forming the rivet-head with an elongated slot or eye for the passage of the U-shaped locking device, and in making one end of the U-shaped device of an oval or other form having different diameters, one of which shall exceed the small diameter of the eye, whereby the locking device is not liable to displacement, but can be readily withdrawn; and, thirdly, in forming the locking device with a shoulder or projection upon the portion which passes through the loop of the band, whereby the locking device cannot be accidentally displaced.

I will now proceed to describe my tie with reference to the drawing, so that others skilled in the art may make and use the same.

A represents the buckle, which may have a single slot, as shown in the drawing, or may have two or more parallel slots. To one side, *a*, of buckle A I secure the band by passing one end through the slot and folding it in the usual way, securing the end by a rivet, *b*, which I preferably form with an eye or elongated slot for the passage of the locking device, though the slotted rivet need not, of necessity, be the one which secures the buckle

to the band. *b* is a rivet, the head of which is provided with an eye, *b'*, for the passage of locking device C, and the eye *b'* is, preferably, elongated, for purposes which will hereafter appear. C is the locking device, of a U or similar form, provided at one end with a head, *c*, the diameters of which exceed those of the rivet-eye, and at the other with an oval or other shaped protuberance, *c'*, one diameter of which exceeds the smaller diameter of the rivet-eye. The intermediate part of the locking device is round. The protuberance *c'* forms a shoulder, *c''*, which prevents the slipping of the locking device at such times as the bale is accidentally compressed either by rough handling or otherwise.

In putting the tie together I proceed as follows: Passing one end of the band through the buckle, I fold the end upon itself, and, having punched the ends, insert a rivet having an eye upon the head, spreading the end of the rivet in the usual manner. The locking device can then be passed through the elongated eye of the rivet by causing the long diameter of protuberance *c'* to coincide with the long diameter of the rivet-eye, and as these diameters only coincide when the locking device is in one position, it is evident the liability of the locking device becoming accidentally detached is avoided.

In use the band is bent around the bale and the loop *d* passed through the slotted buckle in the usual manner, the locking device being inserted by moving it in a circular or curved path, which passes through both the eye of the rivet and the loop *d* of the band.

The advantages of my invention are, the simplicity of construction, the facility with which the locking device may be attached or detached, and the non-liability of the locking device becoming loosened or lost.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is—

1. In combination with a bale-band and slotted buckle, an eye-headed rivet and U or similar shaped locking device, substantially as specified.

2. In combination with a bale-band and slotted buckle, an eye-headed rivet, said eye or slot being elongated, and a U or similar shaped

locking device, one end of which is of an oval or similar form having different diameters, one of which exceeds the smaller diameter of the rivet-eye, substantially as set forth.

3. In combination with a bale-band and its slotted buckle, an eye-headed rivet and a U or similar shaped locking device, said locking device being provided with a shoulder or projec-

tion upon the end which engages the band-loop.

In testimony whereof I, the said AARON J. NELLIS, have hereunto set my hand.

AARON J. NELLIS.

Witnesses:

JAMES I. KAY,
T. B. KERR.