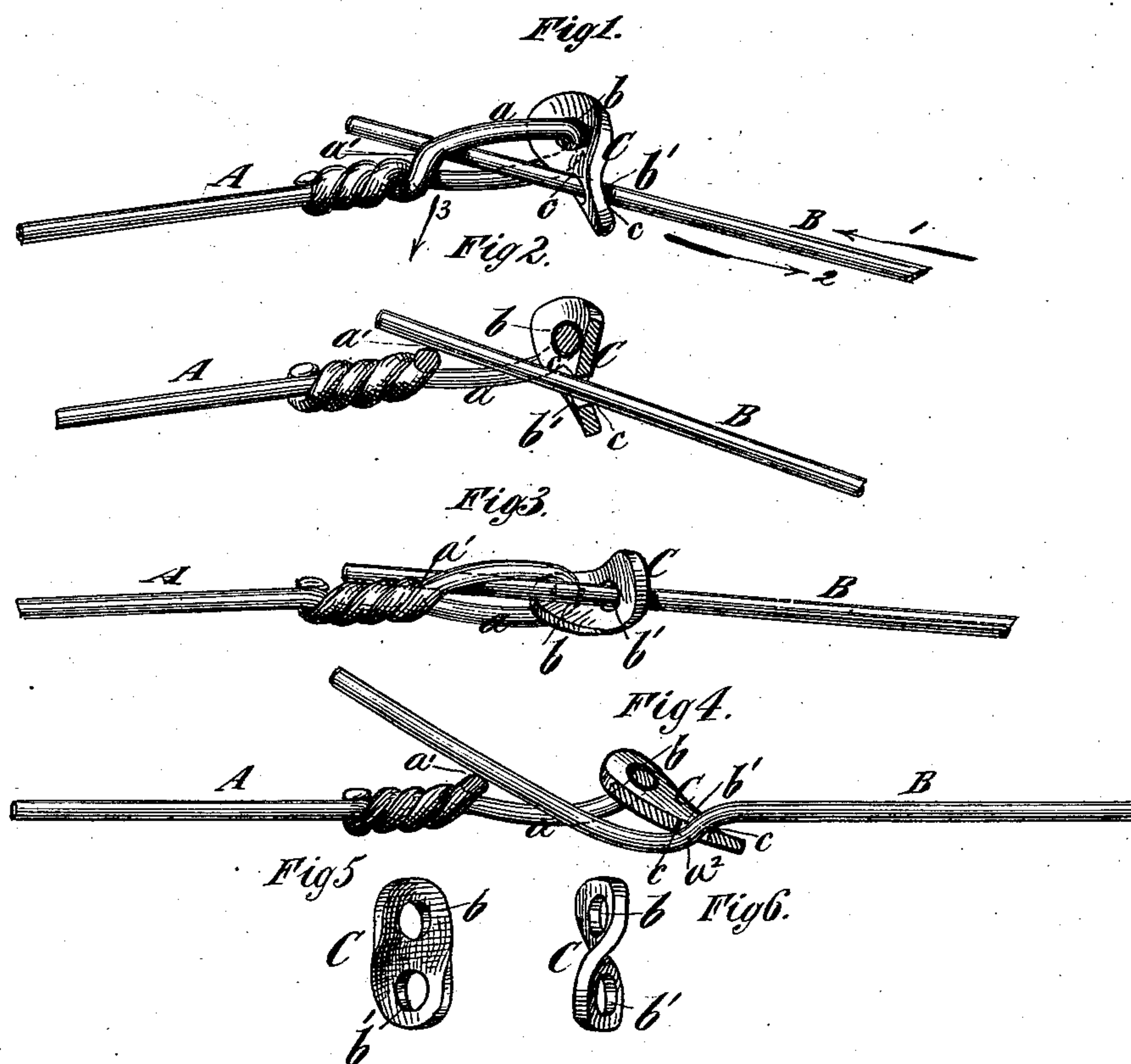


(No Model.)

T. A. WEBER.  
Bale Tie.

No. 236,128.

Patented Dec. 28, 1880.



Witnesses

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# UNITED STATES PATENT OFFICE.

THEODORE A. WEBER, OF NEW YORK, N. Y., ASSIGNOR TO GRANVILLE NICHOLSON, OF SAME PLACE.

## BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 236,128, dated December 28, 1880.

Application filed October 9, 1880. (No model.)

*To all whom it may concern:*

Be it known that I, THEODORE A. WEBER, of the city of New York, in the county and State of New York, have invented a certain new and Improved Fastening for Bale-Bands, of which the following is a specification.

My invention relates to the fastenings or locks employed to unite the two ends of bale-bands; and its object is to produce a simple and inexpensive fastening device or lock for a band which will permit of the band being readily tightened, but which will catch and hold the band at any point after such tightening has been performed.

To this end my invention consists in a bale-band fastening composed of a link having in it two holes or openings, and a band one end of which is inserted through one hole or opening only of said link and formed into a long open loop, and the other end of which is adapted to be inserted through the other hole or opening of said link and through said loop, and to come to a bearing upon the end of the loop opposite said link and upon the side of the loop opposite to that in which the link projects. When so inserted, if a strain be applied to withdraw the plain end of the band from the loop and link, as would be caused by the expansion of a bale after compression, the plain end of the band will be forced down upon its said bearing and a bend formed in the free end of the band between said link and said bearing, which will preclude the band from drawing out of the hole or opening in the link so long as it rests upon the said bearing.

In the accompanying drawings, Figure 1 represents the two ends of a wire bale-tie connected by my improved fastening before strain is applied to the band. Fig. 2 represents a partially-sectional side view thereof. Fig. 3 represents an under-side view thereof. Fig. 4 is a view of the fastening similar to Fig. 2 after strain has been applied to the band, and Figs. 5 and 6 represent detail views of the twisted link which I preferably employ.

Similar letters of reference designate corresponding parts in all the figures.

A and B designate the two ends of a wire bale-tie, the end A being bent to form an elongated open loop, *a*, while the end B may be left plain and straight.

C designates a link, preferably cut or punched from sheet metal, and of oblong form, as shown in Figs. 4 and 5. The link is provided with holes or openings *b b'*, one near each end thereof, of a size to permit the wire of the bale-tie to pass easily through them, and which may or may not have their edges rounded.

Before forming the loop *a* the end A of the wire is inserted through the hole or opening *b*, and the twisting of the end to form the loop permanently attaches the link to that end of the wire.

In order to fasten a bale the tie is placed around it, in the usual way, while the bale is in the press, and the plain straight end B is inserted, first, through the hole or opening *b'*, and then through the loop *a*, as shown clearly in Fig. 1. When so placed the plain end B may be pushed inward in the direction of the arrow 1, so far as may be desired, to tighten the band; but as soon as a strain is produced upon the band in the direction of the arrow 2, as would be done by the expansion of a bale when released after compression, the edges *c c* of the hole or opening *b'* bite on opposite sides of the wire, and tend to bend the end protruding through the link in the direction of the arrow 3. This, however, is precluded by the wire bearing upon the end of the loop at *a'*, upon the end opposite the link, and upon the side opposite to that in which the link projects, and the continued pull upon the wire forms immediately in rear of the link, between the link and the bearing *a'*, a bend, *a<sup>2</sup>*, as seen in Fig. 4, which effectually precludes the drawing of the band through the hole or opening *b'* so long as it bears upon the bearing *a'*.

The link C might be straight; but as the hole or opening *b* fits upon the rounded end of the link *a*, while the end B should pass straight through the hole or opening *b'*, as shown in Fig. 1, it is preferred to bend or twist the link so that its two ends will stand almost at a right angle with each other, as shown in Fig. 5. In case the link be left straight, the holes *b b'* should be beveled out upon opposite sides.

By my invention I produce a very simple, durable, and inexpensive tie and fastening, which may be readily adjusted so as to secure any sized bale or tighten the bale after being once secured.



This invention is not limited to wire bands, but may be applicable to bands of hoop-iron or other material, it being necessary to vary the shape of the hole or opening *b'* to suit the transverse section of the band.

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

1. A bale-band fastening composed of a link having in it two holes or openings, and a band one end of which is inserted through one hole or opening only of said link and formed into an open loop, and the other end of which is adapted to be inserted through the other hole or opening in said link and through said loop, and to come to a bearing, *a'*, upon the end of the loop opposite said link and upon the side

of the loop opposite to that on which said link projects, substantially as and for the purpose specified.

2. A bale band and fastening composed of a link having in it two holes or openings, and twisted or bent near the middle of its length, and a band one end of which is inserted through one of said holes or openings and formed into a loop, and the other end of which is inserted through the other hole or opening and through the loop, substantially as and for the purpose specified.

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Witnesses:

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