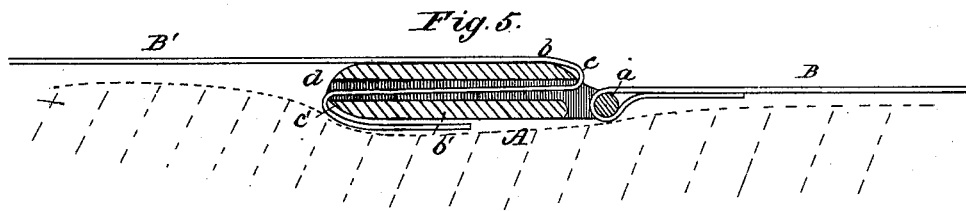
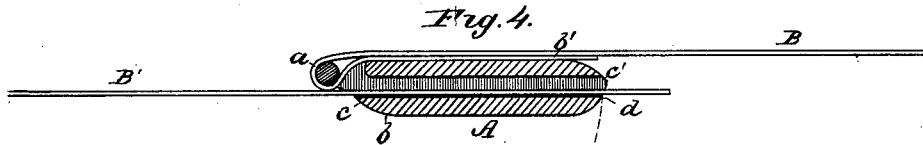
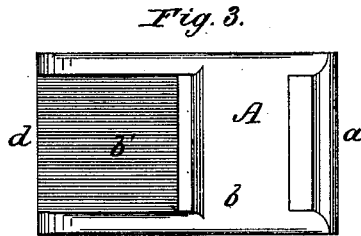
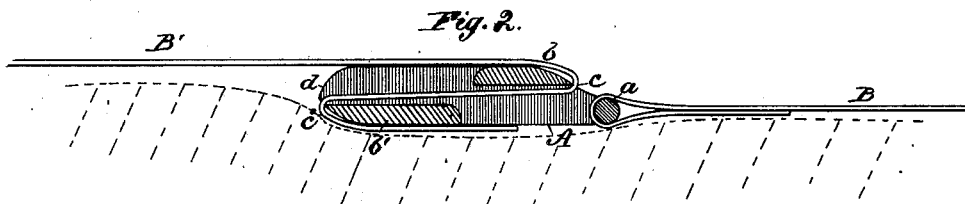
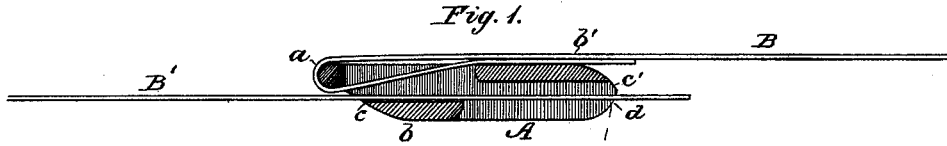


J. D. BRUCE.  
Bale-Tie.

No. 205,833.

Patented July 9, 1878.



WITNESSES:

*W. W. Hollingsworth*  
*Edw. W. Byrn*

INVENTOR:

*J. D. Bruce*  
BY *Wm. T. G.*

ATTORNEYS.

# UNITED STATES PATENT OFFICE.

JEROME D. BRUCE, OF NEWBERRY, SOUTH CAROLINA.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. 205,833, dated July 9, 1878; application filed June 15, 1878.

*To all whom it may concern:*

Be it known that I, JEROME D. BRUCE, of the city and county of Newberry, and State of South Carolina, have invented a new and Improved Bale-Tie; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawing, forming part of this specification, in which—

Figure 1 is a longitudinal section of the buckle, showing the position of the same while the free end of the band is being inserted. Fig. 2 is a similar section, showing the position of the buckle and arrangement of the band after the buckle has been secured by turning it a half-revolution. Fig. 3 is a plan view of the buckle. Figs. 4 and 5 are views similar to Figs. 1 and 2, showing another form of my invention.

My invention covers an improved construction of buckle and arrangement of the same with respect to the ends of the bale-band, to constitute a tie for a bale of cotton, hay, or other material.

The buckle is constructed with straight parallel sides, with a rounded pintle at one end, and with flat opposing faces, which constitute a longitudinal channel through the buckle, to give passage to one end of the bale-band, the buckle being made to turn a half-revolution upon its pintle after the other free end of the band has been inserted longitudinally, so that the free end of the band is bent twice and secured, as hereinafter described.

In the drawing, A represents the buckle, having at one end a rounded pintle, *a*, and formed with flat opposing faces *b b'*, which constitute a central longitudinal channel through the buckle. These faces may be made continuous throughout the greater part of the length of the buckle, as shown in Figs. 4 and 5; but for cheapness and facility in casting I prefer to make them with their flat opposing surfaces extending only a part of the length of the buckle, with their inner faces arranged as in Figs. 1, 2, 3, obliquely to, instead of directly opposing, each other.

B B' represent the two ends of the bale-band, of which B is permanently secured about the pintle.

Now, in fastening the tie, the buckle is disposed, first, upon the bale as in Figs. 1 and 4, with the pintle pointing toward the free end of the band, and the buckle beneath the se-

cured end of the band. In this position the free end B' of the band is extended through the longitudinal channel between the opposing faces *b b'* until the end of said band projects a short distance beyond the buckle. Said buckle is now turned one hundred and eighty degrees, or a half-revolution, upon its pintle, in the direction of the arrow, which gives two bends to the free end of the band, as shown in Figs. 2 and 5, that tightly secure the same, the free end being held by the pressure existing between the buckle and the bale.

In order to make the edges *c c'* of the parts *b b'* hold the band more securely, said edges are made sharp, so as to bite the band at the bends; and to facilitate the turning of the buckle, the end *d*, opposite the pintle, is made rounding.

This form of buckle, it will be seen, is simple and inexpensive, being readily cast, and its arrangement, with respect to the band to constitute the tie, makes a secure and reliable fastening for the bale without weakening or destroying the integrity of the band.

Having thus described my invention, what I claim as new is—

1. The buckle herein described, having straight parallel sides, with a rounded pintle at one end for a loosely-hinged attachment to the band, and flat opposing faces *b b'*, arranged upon opposite sides of a longitudinal channel, substantially as and for the purpose described.

2. The buckle A, having rounded pintle *a*, flat opposing faces *b b'*, and a rounded end, *d*, as and for the purpose described.

3. The buckle A, having rounded pintle *a*, and flat opposing faces *b b'*, made with sharp or chisel edges at *c c'*, substantially as and for the purpose described.

4. The bale-tie herein described, consisting of the buckle, having straight parallel sides, with pintle *a*, and flat opposing faces *b b'*, in combination with the bale-band B B', the end B' being bent first around the face *b*, and then around *b'*, and secured by the pressure of the buckle against the bale, as set forth.

The above specification of my invention signed by me this 14th day of June, 1878.

JEROME D. BRUCE.

Witnesses:

EDW. W. BYRN,  
SOLON C. KEMON.