

S. J. CHAPMAN.  
Bale-Tie.

No. 199,788.

Patented Jan. 29, 1878.

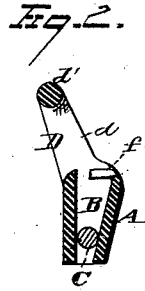
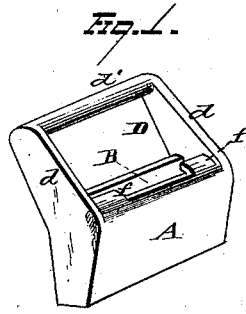


Fig. 3.

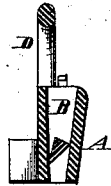
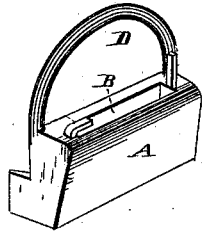


Fig. 4.

WITNESSES  
*Ed. S. Nottingham*  
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By *Dequette and Dequette*  
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# UNITED STATES PATENT OFFICE.

SAMUEL J. CHAPMAN, OF CHARLESTON, SOUTH CAROLINA, ASSIGNOR TO HIMSELF AND DANIEL S. WILCOX, OF SAME PLACE.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **199,788**, dated January 29, 1878; application filed January 5, 1878.

*To all whom it may concern:*

Be it known that I, SAMUEL J. CHAPMAN, of Charleston, in the county of Charleston and State of South Carolina, have invented certain new and useful Improvements in Bale-Ties; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawings, which form part of this specification.

My invention relates to certain improvements in bale-ties; and consists in constructing the same with a wedge-shaped slot, in which the free end of the band is secured by any suitable automatic fastening device, while the upper body of the tie is formed with a loop adapted to engage with the opposite extremity of the band.

In the drawings, Figure 1 is a view, in perspective, of my invention. Fig. 2 is a cross-section of the same. Fig. 3 is a view illustrating one of the modifications of the invention, and Fig. 4 is a cross-section thereof.

The tie A is made of any suitable material and form, having the single through-slot B made therein, of wedge shape in cross-section, and provided with any desired form of automatic band-fastening device C. This fastening device may be either a roller, as shown in Fig. 2, a wedge-shaped pawl, as shown in Fig. 4, or any other suitable form adapted to secure the bale-band by frictional resistance between the same and the wall of the tapering slot. The loop D is formed on the upper body of the tie, with the two uprights *d* at either end thereof, connected at their extremities by the cross-bar *d'*.

One end of the bale-band is to be fastened by engagement with this loop, the band passed around the bale, and brought up with its free end through the wedge-shaped slot of the tie. After due compression of the bale this free end of the band is automatically locked, and the band is tied. The loop D is shown in Figs. 3 and 4 as being formed in the same vertical plane with the tie, instead of at an angular inclination therefo, as represented in Figs. 1

and 2, and also as having a curved outline, instead of being rectangular.

The construction of the loop as shown in Figs. 1 and 2 is my preferred manner of making the tie, as the inclination of the loop provides free room for the automatic locking end of the band, and, in general, is best adapted to my purpose. So, too, the rectangular connection of the cross-bar with the side uprights provides the better bearing-surface for the fixed end of the band in its engagement therewith; but I represent the modifications shown as illustrating the extent of my invention, as it is evident that such or other similar changes of mere form are included within the scope of the invention.

The flanges *f*, formed on the tie to prevent the dislodgment of the band-fastener, are not essential to my invention, and the same may be omitted entirely, or changed in location, so as to be formed on different portions of the tie-body.

Other forms of guards may be substituted for these flanges, as illustrated in the modification view, which latter also represents a different form of band-fastening device, and shows spurs on the side of the tie to engage with the bale.

Any of these different modifications or forms of addition to the tie may be used or omitted, as desired; and I do not further describe or claim the same in this patent, since they form the subject-matter of the two Letters Patent numbered, respectively, 196,432 and 196,433, which were granted jointly to myself and assignee on the 23d day of October, 1877.

The forms of the wedge-shaped slot and its band-fastening device, together with said flanged guards and spurs, are fully set forth in said patents, to which reference may be had for further information relative thereto.

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

1. A bale-tie constructed with a wedge-shaped slot, and having a loop attached to or formed on one end of the tie for the attachment of one end of the band, substantially as set forth.

2. A bale tie or buckle, formed with wedge-shaped slot and automatic fastener for securing the free end of the band, and the inclined rectangular loop attachment for securing the opposite end of the tie, substantially as set forth.

In testimony that I claim the foregoing I

have hereunto set my hand this 18th day of December, 1877.

SAML. J. CHAPMAN.

Witnesses:

T. MOULTRIE MORDECAI,  
I. RICHARDSON.