J. A. BOSTWICK.

BALE-TIE.

No. 174,109. Patented Feb. 29, 1876.

Fig. 1.

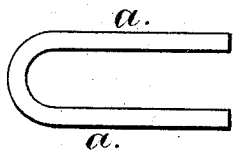

Fig. 2.

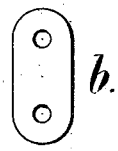

Fig. 4.

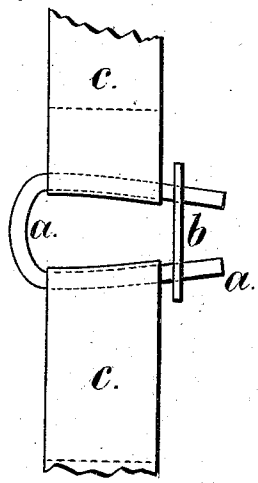

Fig. 3.

Witnesses

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UNITED STATES PATENT OFFICE.

JABEZ A. BOSTWICK, OF NEW YORK, N. Y.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **174,109**, dated February 29, 1876; application filed Jauuary 29, 1876.

To all whom it may concern:

Be it known that I, JABEZ A. BOSTWICK, of the city and State of New York, have invented an Improvement in Cotton-Bale Ties, of which the following is a specification:

Cotton-bale ties have been made of an open link or staple-formed piece of metal, and, in some instances, a link of sheet-metal has been hinged at one end to an eye upon the staple, and the other end of the link has been passed over the free-curved end of the staple-formed tie; but, in consequence of the curved or rounded end of the body, the link is liable to slip off as the strain comes upon the band, and the tie is not fully reliable.

My invention consists in a bale-tie having a metal body in the form of a plain staple, with the ends parallel, or nearly so, to each other, and receiving a movable hard-metal plate, preferably of steel, having two holes that allow the plate to be passed upon the staple ends after the metal straps or bands have been bent back around the staple ends. This plate prevents the body of the tie being drawn apart, and the strain of the band upon the tie causes the plate to imbed itself sufficiently in the surface of the metal to prevent its slipping off. The strain upon the bands will usually bend the body of the tie, and the ends will not remain parallel, but they will assume positions diagonal to the plate, and in so doing the plate at the edges of the hole will impinge upon and cut into the body of the tie sufficiently to prevent the plate slipping.

In the drawing, Figure 1 is a view of the staple-formed tie. Fig. 2 is a side view of the plate. Fig. 3 is a section of the tie complete, with the ends of the straps or bands inserted through the same; and Fig. 4 is an elevation of the tie as under strain.

The body *a* of the tie is preferably of an iron rod or wire, bent in the form of a staple, but it may be cut out of plate-iron; the two sides of which body are parallel, or nearly so, and these sides are to be inserted through the loops formed at the ends of the iron bands *c*, by folding such ends back beneath the bands, as now usual. The plate *b* is then slipped upon the body *a*, while the sides are parallel, as in Fig. 1, and as the strain comes upon the bands *c* the body of the tie will be drawn apart, but the ends cannot spread, because the plate *b* securely holds them, and the body changes its shape to that shown in Fig. 4, and this plate cannot easily be slipped off the ends of the tie, because the bending of the sides of the body causes the metal of the plate to imbed itself sufficiently into the surface of the body to hold the same firmly. It is to be understood that the holes in the plate *b* are only large enough to admit the body of the tie when the sides are parallel; hence the parts bind firmly as soon as the strain causes the sides to bend, as seen in Fig. 4.

This tie is available for bales of cotton or any other goods.

I claim as my invention—

The bale-tie made with the perforated plate *b*, slipping upon the open parallel ends of the staple-shaped body *a*, substantially as set forth.

Signed by me this 26th day of January, A. D. 1876.

J. A. BOSTWICK.

Witnesses:

GEO. T. PINCKNEY,

CHAS. H. SMITH.