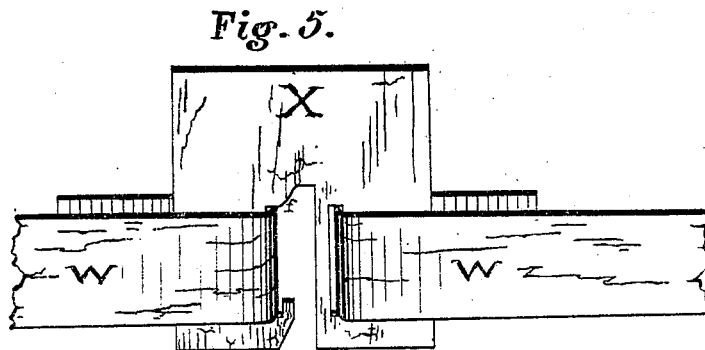
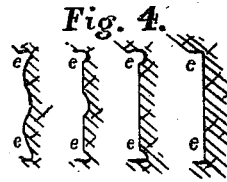
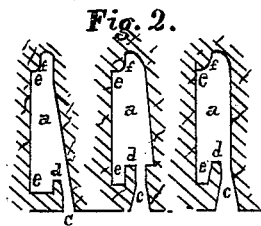
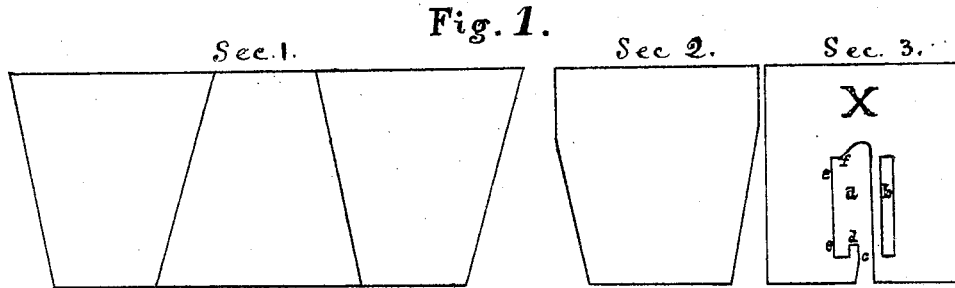


JOHN L. SHEPPARD.

Improvement in Cotton Bale Ties.

No. 124,090.

Patented Feb. 27, 1872.



Witnesses.
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U. H. Hutchins

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UNITED STATES PATENT OFFICE.

JOHN L. SHEPPARD, OF CHARLESTON, SOUTH CAROLINA.

IMPROVEMENT IN COTTON-BALE TIES.

Specification forming part of Letters Patent No. 124,090, dated February 27, 1872.

Be it known that I, JOHN L. SHEPPARD, of the city of Charleston, county of Charleston, State of South Carolina, have invented a new and Improved Cotton-Bale Tie; and I declare the following to be a full, clear, and exact description of same, such as will enable others skilled in the art to which it pertains to make and use it, reference being had to the accompanying drawing forming part of this specification.

My invention relates to the forming of a better and more durable tie for cotton-bales and other purposes than heretofore, where the bands to be united are metal hoops; and in constructing my said invention I take a piece of metal of a thickness somewhat greater than that of the hoop or band to be secured, and from this metal sheet or band, and in the manner which will best subserve the purpose of economy of material, as shown in section 1 of Fig. 1 of the drawing, I cut the pieces that are to form the ties or buckles. These pieces may be of different forms, as represented in sections 1, 2, and 3 of said figure; but the part that is to receive the strain of the hoop or band is equal or nearly so in all. Near the middle of the piece, at the distance of one-fourth to one-half of an inch from the narrow side, and perpendicular to this side, I cut a rectangular hole of sufficient length and breadth to admit of the loop at one end of the band or hoop being hooked into it. Leaving, then, a narrow strip of metal between the two, I cut another hole in the metal, of one of the forms shown in Fig. 1 of the drawing, projecting an opening or slot from this second hole to the narrow side of the metal plate, so that the loop at the other end of the band may be slipped into the opening from the side. In the continuation of this second slot or opening, I extend it just sufficient to admit of the second loop being slipped beyond a lip, *d*, shown in Figs. 1, 2, and 5, falling below which the band settles in the seat *e e*, and is prevented from unfastening by the intervention of the lip *d* on the one side, and curved shoulder *f* on the other.

The seats of the loops in both these holes or openings are straight, but they may be irreg-

ular, presenting any of the forms shown in Fig. 4. The irregular shape of the seat serves to give a firm bearing to the hoop, and the strain being relieved from the edges of the band directly, they are not so liable to be torn, and thereby weakened.

I know that a tie has been made in which the seat presented a convex surface, in order that the strain would be thrown on the middle fibers of the hoop instead of on the edges; but the tie bearing upon the band in but one point is liable to rock under the influence of a severe shock, and unfasten the tie.

I make these ties about double the breadth of the band. The position and size of the slots and openings are such as to leave a broad, strong shank to receive the strain, and the ends of the hoop are securely fastened.

In the drawing, Figure 1 represents the different forms of the exterior of the ties which may be employed, and also in the rectangular section 3 I show the relative positions and sizes of the openings *a* and *b*, the band seats *e e*, slot *c*, and shoulder *f*. Fig. 2 represents the different forms which may be given to the openings and slots *a c* without departing from the principle of my invention. Fig. 4 shows the modifications in the form of the band seats; and in all these drawings *d* represents the lip and *f* the curved shoulder that prevents the tie from unloosening when the band is once in its seat; and similar letters represent similar parts. Fig. 5 represents a tie in use with the bands *W* attached.

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

The improved tie herein described and shown; consisting of the plate *X*, provided with a rectangular slot, *b*, and the opening *a*, having the lip *d*, recessed band seat *e e*, curved projection or shoulder *f*, and the entering slot or cleft *c*, all constructed and arranged for operation, substantially in the manner and for the purpose set forth.

JNO. L. SHEPPARD.

Witnesses:

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