

J. S. KENNEDY.
Bale-Tie.

No. 215,755.

Patented May 27, 1879.

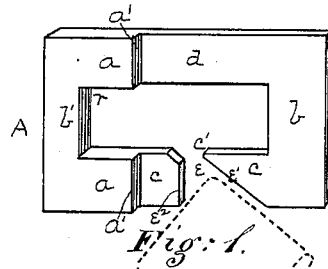


Fig. 1.

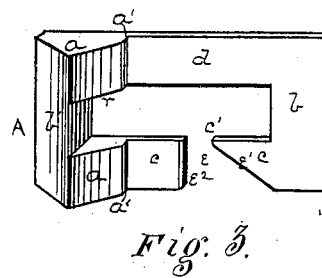


Fig. 3.

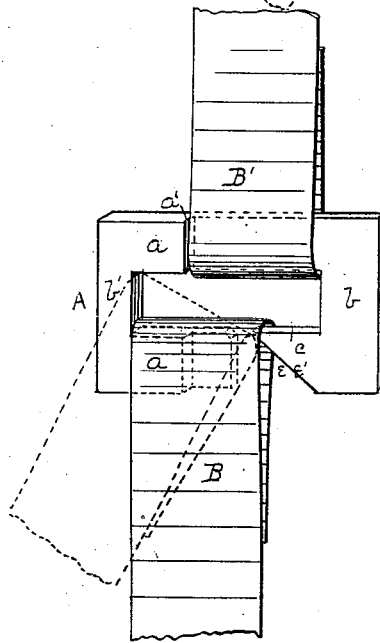


Fig. 2.

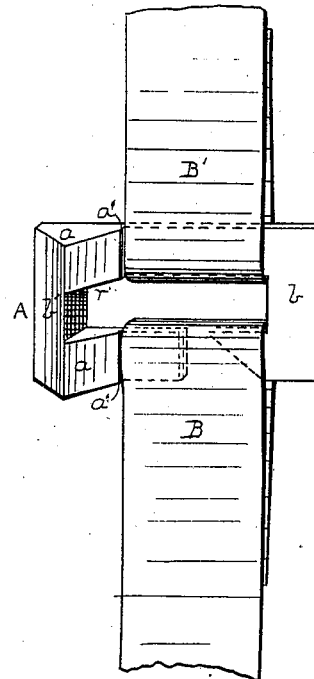


Fig. 4.

Witnesses
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UNITED STATES PATENT OFFICE.

JOHN S. KENNEDY, OF TUSCALOOSA, ALABAMA, ASSIGNOR TO MARY E. KENNEDY, OF SAME PLACE.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **215,755**, dated May 27, 1879; application filed April 16, 1879.

To all whom it may concern:

Be it known that I, JOHN S. KENNEDY, of Tuscaloosa, county of Tuscaloosa, State of Alabama, have invented or discovered a new and useful Improvement in Bale-Ties; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawings, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a perspective view of my improved bale tie or buckle. Fig. 2 is a similar view of the same, showing one end of the band in place and the other end in a position preparatory to being moved sidewise into place, and illustrative of the manner of introducing such end of the band into the opening in or interior of the buckle. Fig. 3 is a perspective view of my improved buckle, showing a form slightly modified from that shown in Fig. 1; and Fig. 4, by a similar view, illustrates my improved tie with both ends of the band in place.

My invention relates to that class of cotton-bale ties which have a single interior opening of rectangular form with a slot in one of the side or transverse bars, through which the free end of the band is passed into the interior opening, and against which bar such end of the band bears when in place.

My improved buckle A is made of rectangular form, having a single interior opening also of rectangular form, and the length of this opening is greater than the width of the band B B'. One end of this buckle is made thicker than the other by a raised or thickened part, *a*, which, if preferred, may extend across the end *b'* and along both side or transverse bars to points *a'* on such bars, which are separated from the inner edge of the end bar, *b*, a distance equal to the width of the band, so that both ends of the band may lie between *a'* and *b* on their respective side bars, and be prevented thereby from being moved sidewise out of line when once brought to place, except by design.

A slot, *e*, is made through one of the side bars, as *e*, in such position that the distance from the inner point, *e'*, of the bar to the di-

agonally-opposite corner, *r*, of the opening in the buckle is equal to, or at least not less than, the width of the band; also, the distance from such point to either of the adjacent angles or corners on the bar *c* is less than the width of the band. Instead of making this slot square across the bar or parallel with the line of strain, I prefer to make the edge *e'*, next to or toward the end *b*, inclined to the line of strain and to the length of the bar, the direction of such inclination being toward the corner *r*, while the other edge, *e''*, of the slot is cut away or made parallel, or nearly parallel, with the line of strain, or at right angles to the length of the bar, thus giving the slot the form of a right-angled triangle. The opening at *e'* should be large enough for passing the band through the same into the buckle in the direction of the edge *e'*. By making the slot in this form I reduce the side motion necessary in passing the band into the buckle, and this I consider an important advantage, as the greater the side motion required the greater will be the slack in the band after it is brought to place.

The ends of the band are looped in the usual way, and one end, B', is, by preference, permanently secured in place on the bar *d* between the shoulder *a'* and bar *b*, as in Fig. 2. The position of the end B as it is presented to the slot *e* preparatory to passing it through such slot is represented by dotted lines, Fig. 1. As this looped end B is passed into the buckle its advance edge is carried into the corner *r*, as represented by dotted lines, Fig. 2, so that the following edge of the band may clear the point *e'*. The band is then brought down upon the bar *c*, as in full lines, Fig. 2, and from such position it is moved sidewise, so as to rest between *a'* and *b*, and in line with the end B'.

If, from carelessness or other cause, the end B should not be moved by the workman quite into place, the expansion of the bale will tend to work such end sidewise off the thickened part *a* and into proper position, and to facilitate such tendency the upper face of *a* may be beveled more or less toward the shoulder *a'*, as in Figs. 3 and 4. In either case such thick-

ened part *a* of the buckle will operate to prevent the end of this band from working side-wise in the buckle, so as to be out of line.

By making the distance from the slot *e* to the edge *b* less than the width of the band, as described, the band will have a bearing, when in place, upon the bar *c* on both sides of the slot, and thus the requisite strength be secured; also, by making the interior opening of the buckle of rectangular form, and the distance from *e* to *b'* less than the width of the band, as described, the end B of the band can readily be brought down upon the bar *c* after being passed through the slot *e*, as in Fig. 2, so that the edge of the band adjacent to the point *c'* will pass such point with greater certainty than would be the case were the interior opening made with inclined interior edges at the end *b'*, down which incline the band must slide as it is moved into place. When such inclines are used the end of the band can right itself but slowly, and, consequently, there is greater liability that it may pass back out of the slot *e* instead of past the point *c'*, and thus cause vexatious delay.

My improved buckle is practically free from this objection, and at the same time it affords a cheap, effective, and convenient means of securing the ends of bale-bands.

I am aware that it is not new to shape the opening of a bale-tie so that the length of the bearing-edge for the free end of the band shall equal the width of the band, as in Patent No. 58,760, and hence I do not claim such feature broadly.

I claim herein as my invention —

1. A bale-tie buckle, A, having a transverse opening longer than the width of the band, an enlargement on the upper face of one end, the distance from the base of the enlargement to the opposite end of the opening being equal, or about equal, to the width of the band, and having, also, a slot in one of its transverse bars for the diagonal insertion of the free end of the band, substantially as described.

2. In the bale-tie buckle A, having rigid transverse bearing-bars, an opening, *e*, in one of such bars, bounded on one side by a line, *e*¹, angular to the line of strain, and on the other side by a line, *e*², parallel with the line of strain, with sufficient space between their inner adjacent points or corners for the angular insertion of the free end of the band, substantially as set forth.

3. The bale-tie buckle A, having a rectangular opening and a slot in one of the transverse bars properly shaped for the angular insertion of the free end of the band, the distance from the point *c'* on one side of the slot to the diagonally-opposite corner of the opening being at least equal to the width of the band, and the distance from the same point to either of the adjacent corners on the slotted bar being less than the width of the band, substantially as set forth.

In testimony whereof I have hereunto set my hand.

JOHN S. KENNEDY.

Witnesses:

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