

J.H. Gridley.

Cotton Bale Tie.

N^o 59,007.

Patented Oct. 23, 1866.

Fig. 5.

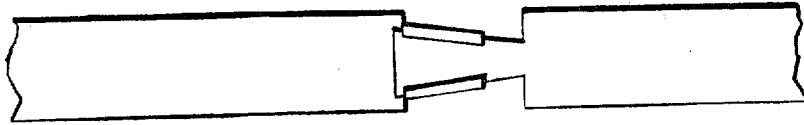


Fig. 4.

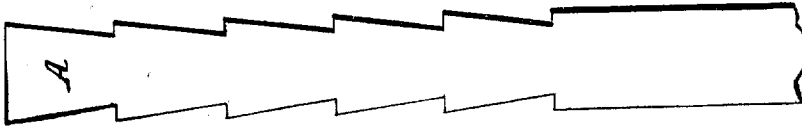


Fig. 3.

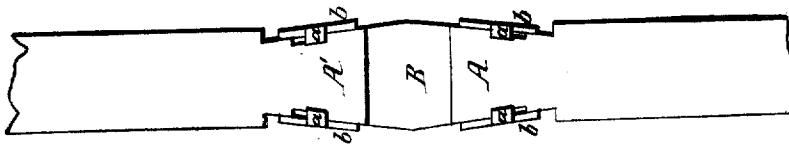
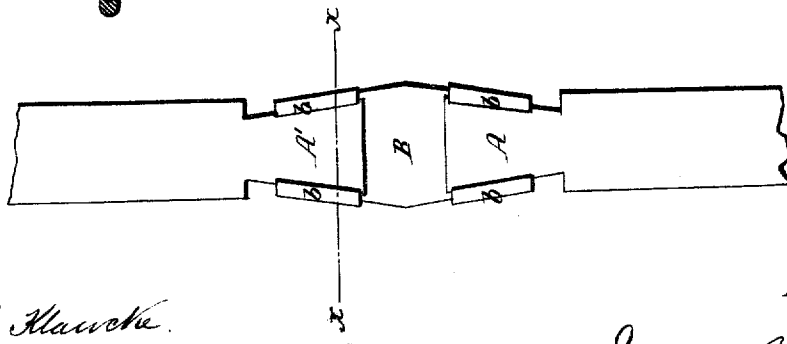


Fig. 2.



Fig. 1.



Witnesses.

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JAMES H. GRIDLEY, OF WASHINGTON, DISTRICT OF COLUMBIA.

IMPROVEMENT IN COTTON-BALE TIES.

Specification forming part of Letters Patent No. 59,007, dated October 23, 1866.

To all whom it may concern:

Be it known that I, JAMES H. GRIDLEY, of the city of Washington, in the District of Columbia, have invented new and useful Improvements in Cotton-Bale Ties; and I do hereby declare the following to be a true and exact description of the same, reference being had to the accompanying drawings, making part of this specification, in which—

Figure 1 represents a top view of my improved fastening for a cotton-bale metal tie. Fig. 2 represents a transverse view of the same in line *xx*, Fig. 1. Fig. 3 represents a modification of the fastening represented by Fig. 1. Fig. 4 represents one end of a metal tie or packing-band formed so that it can be adjusted or taken up in length when applied to the bale. Fig. 5 represents the manner of fastening the two ends of a metal tie or band without a separate plate.

Similar letters of reference indicate corresponding parts in the several figures.

This invention has for its object a simple, cheap, and reliable fastening for the ends of metal ties or packing-bands, particularly those used in baling cotton; and it consists in having one or both ends of the band cut or otherwise made in dovetail form to fit correspondingly-shaped flanges either on the hoop or on a separate plate, as will be hereinafter fully described.

To enable others skilled in the art to which my invention appertains to understand and use the same, I will now proceed to fully describe its construction and operation.

In Figs. 1, 2, 3, and 4 of the drawings, A and A' represent the two ends of a metal tie or packing-band cut at its extremities in dovetail form. B represents a metal plate with flanges *b* formed upon its sides or edges for the dovetail end of the band to fit into when the two are put together to form the fastening.

The plate B may be made of cast, wrought, or malleable iron, or of any other suitable metal, malleable iron being preferred because it is tough and can be cast into the required shape, so as not to require any fitting or finishing after it is taken from the mold and cleaned to adapt it for use.

The flanges *b* on the plate B may be made as represented in Fig. 1—that is to say, hooked

in form; or they may be made as represented in Fig. 3—that is to say, to stand at right angles with the bottom of the plate, and have at about their center lips *a* projecting inwardly from them to catch over the edges of the band, and thus prevent the latter from working out over the flanges when placed between them to form the fastening.

The edges of the band forming the dovetail represented in Fig. 3 are notched to allow the dovetail end to be placed between the flanges, the lips passing through the notches, when, by a slight longitudinal movement of the band, it is securely fastened to the plate.

When the flanges *b* of the plate B are made as represented in Fig. 1, the ends of the band simply require to be cut in dovetail form.

For ties or packing-bands not subjected to great strain the flanges may be formed on one end of the band to fit a dovetail cut on the other end, thus dispensing with the separate plate.

The ends of the bands may be cut into the required shape to fit between the flanges of the plate by passing them between rollers having raised surfaces on one roller and corresponding depressions in the other, or they may be cut in a die or otherwise.

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

1. A cotton-bale or other tie so constructed that the fastening is made by the edges of said tie, in connection with corresponding flanges on the opposite end of the tie or on a separate plate having said flanges on it, substantially as described.

2. The plate B, having flanges *b* cast or otherwise formed on its edges, in combination with the ends of the tie, when said ends are cut in dovetail form, substantially as described.

3. The plate B, having the flanges *b* on its edges and lips *a*, as described, in combination with the tie having a dovetail end with notches cut in the edges of said dovetail, substantially as described.

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Witnesses:

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