F. COOK.
Bale Tie.

No. 201,751. Patented March 26, 1878.

Fig. 1

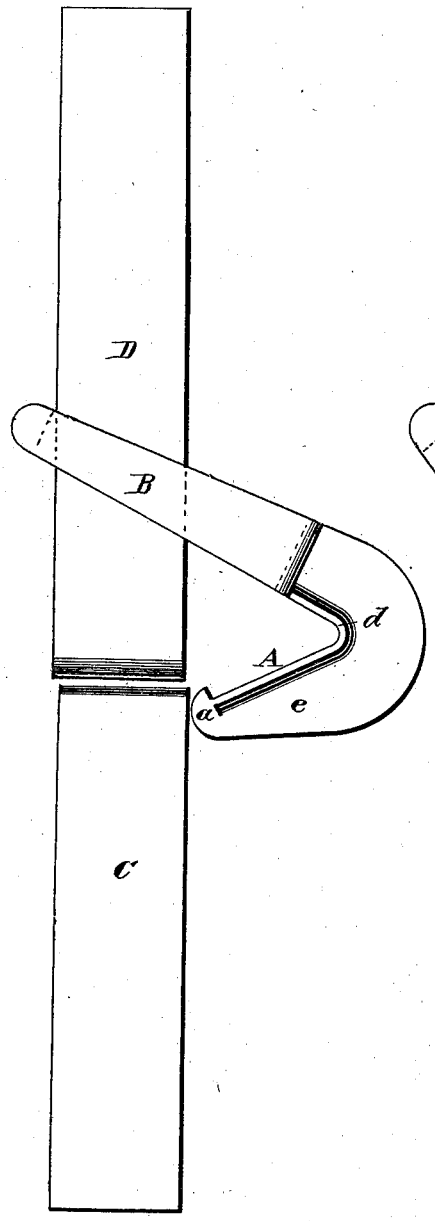


Fig 2

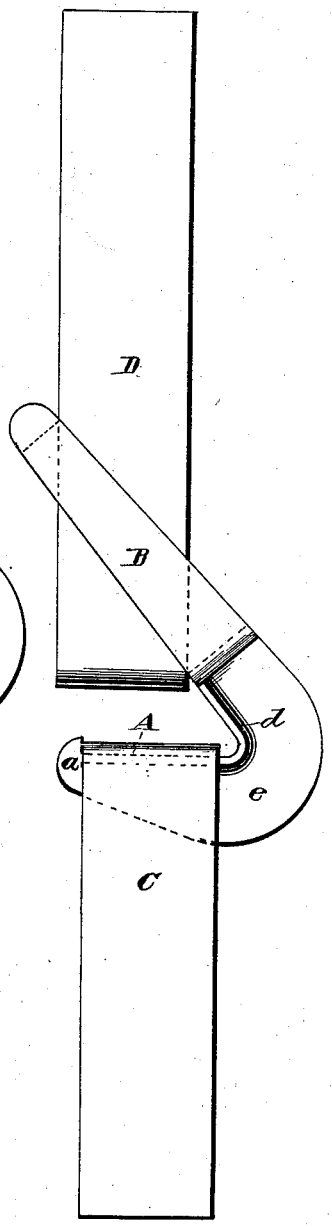


Fig 3

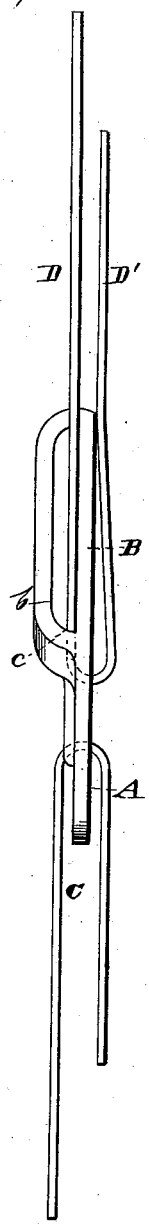


Fig 4


WITNESSES
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# UNITED STATES PATENT OFFICE.

FREDERIC COOK, OF NEW ORLEANS, LOUISIANA.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **201,751**, dated March 26, 1878; application filed March 20, 1878.

*To all whom it may concern:*

Be it known that I, FREDERIC COOK, of New Orleans, in the county of New Orleans and State of Louisiana, 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 an improvement in bale-ties; the object being to provide a bale-tie of such construction that the locking device may be swung outward from the edge of the band end to which it is attached, to allow the opposite ends of the band to be brought close to each other, and nearly or quite in line, and then, by inserting the locking-bar of the tie through one of the looped ends of the band, the diagonal brace extending from one end of the locking-bar will bite or pinch the edge or edges of the opposite end of the band, and thus firmly secure the band ends nearly or quite in line with each other.

My invention consists in a bale-tie composed, essentially, of a locking-bar provided with a diagonal brace, which latter is attached to one end of the band in such a manner that the locking-bar may be moved toward or from the edge of the band to which it is attached, said locking-bar being of practically the same length as the width of the band, and adapted to be swung quite or nearly in line with the end of the band to which the diagonal brace is secured, whereby the bands, when secured, are practically in line with each other, and the diagonal brace has a bearing on one edge of the band.

In the accompanying drawings, Figure 1 is a plan view of my improved tie, showing its position before the ends of the band are locked together. Fig. 2 is a similar view, illustrating the position of the tie when secured in place. Fig. 3 represents an edge view of the tie and band ends. Fig. 4 is an edge view of a tie having a modified form of diagonal brace.

A represents the locking-bar, provided with a diagonal brace, B. Locking-bar A is provided with a hook or lip, *a*, on its outer end, which serves to prevent the lateral displacement of the looped end C of the band. The diagonal brace B has an elongated slot, *b*, formed therein, said slot, in length, exceeding the width of the band. The ends *c* of slot *b* are tapering or wedge-shaped in form, that the edges of the band ends may be firmly wedged therein when the tie is secured on a bale. The locking-bar A is, preferably, provided with a rib, *d*, which extends to the lower end of the slot *b* in the diagonal brace, said rib affording a suitable seat for the band, and also serving to strengthen the tie. The web *e* of the bar is made of any desired width, that it may sustain any required transverse strain.

In Fig. 3 the slot *b* is represented as being only of sufficient width to admit of a single thickness of band, and hence the end D of the band is passed through the slot *b*, while the free end D′ is turned back beneath the diagonal brace, thus allowing the diagonal brace to be located within the looped end of the band, and thus prevent the accidental displacement of the tie.

The tie may be freely adjusted lengthwise of the band, and when the tie is to be secured the locking-bar A is swung away from the edge of the band, as represented in Fig. 1. The looped end C of the band is then brought in close proximity to the opposite band end D, and nearly in line therewith, when the locking-bar A is inserted through the looped end C, and serves to secure the ends of the band in position.

It will be observed that the band ends C D are not in exactly the same line with each other, and this is owing to the fact that the strain on the locking-bar is intended to be brought out of line with the center of the band end to which the diagonal brace is secured, for the purpose of causing the wedge-shaped ends of the slot *b* to bite or pinch the edges of the band D, and prevent any movement of the tie when strain is exerted thereon.

In Fig. 4 the slot *e* is of sufficient width to admit both ends of the loop formed on the end of the band, and as the ends of the slot are securely interlocked with the band by reason of their biting or pinching the edges thereof, the band ends are firmly secured.

From the foregoing it will be observed that

my improved bale-tie may be produced at small cost, as the minimum weight of material consistent with the required strength is employed in the manufacture of the same.

The tie may be quickly manipulated, and no appreciable slack band is required in securing the same.

It is evident that many other forms of construction embodying the principle of my invention may be devised, and hence I do not limit myself to the precise construction and arrangement of parts shown and described, as my invention consists, broadly, in a bale-tie wherein one end of the band is secured by a locking-bar, while the other end of the band is secured solely by means of a slotted diagonal brace.

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

A bale-tie consisting in a locking-bar provided with a slotted diagonal brace, the latter attached to the band in such a manner that it may be moved to and from the edge of the band, and when the tie is secured the diagonal brace secures one end of the band, and the locking-bar the other end of the band, said brace and locking-bar being constructed and arranged in such a manner that the strain will be exerted in line, or nearly in line, with the opposite ends of the band, substantially as set forth.

In testimony that I claim the foregoing I have hereunto set my hand this 16th day of March, 1878.

FREDERIC COOK.

Witnesses:
CHAS. G. AUDRY,
FR. GRIMA.