J. M. GOLDSMITH.

BALE-TIES.

No. 192,430. Patented June 26, 1877.

Fig. 1.

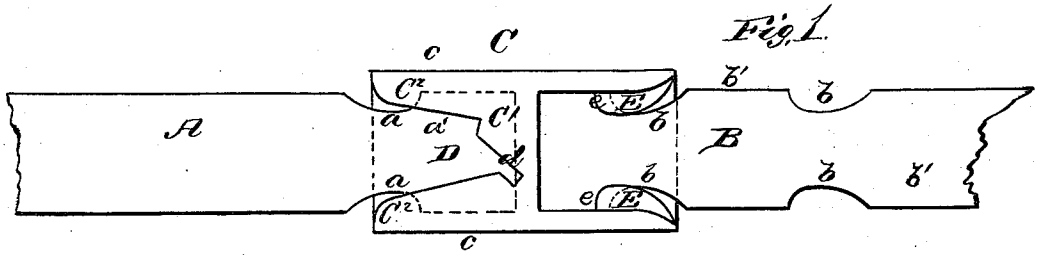
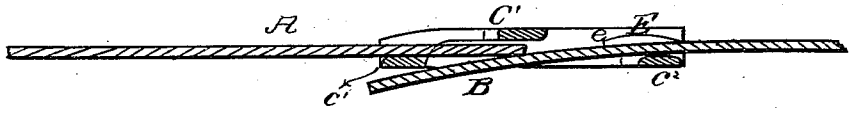


Fig. 2.



WITNESSES

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J. MORTIMER GOLDSMITH, OF BOSTON, MASSACHUSETTS.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **192,430**, dated June 26, 1877; application filed February 24, 1877.

To all whom it may concern:

Be it known that I, J. MORTIMER GOLDSMITH, of Boston, in the county of Suffolk and State of Massachusetts, have invented a new and valuable Improvement in Bale-Ties; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification, and to the letters and figures of reference marked thereon.

Figure 1 of the drawings is a representation of a plan view of my bale-tie, and Fig. 2 a vertical sectional view thereof.

This invention is designed as an improvement on the Letters Patent granted to me June 8, 1875, No. 164,164; and the chief object of the invention is to provide a buckle or fastener for the ends of bale-bands which will allow the latter to be firmly attached and detached while substantially flat upon the bale. This object is effected through the use of lugs having projecting lips in combination with the ends of a bale-tie band, which are specially adapted to engage with said lugs and lips.

In the annexed drawings, A designates one end of a bale-tie band or hoop, and B the other end thereof. End A is provided with a pair of recesses or curved notches, *a a*, formed in its opposite edges, as shown in Fig. 1. End B is provided with several similar pairs of recesses or curved notches *b b*, arranged at regular intervals. C designates the buckle or fastener whereby said ends A and B are held together around the bale. The rectangular frame of this buckle or fastener consists of two longitudinal bars, *c c*, and two thin end or cross bars, c^1 c^2, which connect the ends of the said longitudinal bars, but do not rise above the lower part thereof.

The part of said buckle or fastener nearer to end A is covered by a top plate, C^1, and blocks or stop-lugs C^2 C^2 are formed at the junction of said top plate with cross-bar c^1. Said plate is provided with a large recess, D, extending inward from its outer end, and an oblique slot, *d*, extends inward from this recess. The dimensions of said recess and slot are such that the terminal edge of end A can just be passed down through them, and in one line only, said edge being arranged diagonally with respect to said plate C^1. When the narrow neck *a'* between recesses *a a* has passed within said plate the said buckle is turned so as to lie even with said end A of the bale-tie band. The forward parts of said recesses then engage with stop-lugs C^2 C^2, and the upper side of said end A engages with the under side of said plate C^1. The said buckle or fastener C is ordinarily left thus attached to end A, and its casual detachment therefrom is almost impossible, since, of the many positions which said parts may assume, there is but one which will allow them to separate.

In the angles formed by the junction of cross-bar c^2 with the ends of longitudinal bars *c* are lugs or blocks E E, raised above said cross-bar, and having curved inner faces. From the tops of said lugs or blocks lips *e e* extend rearward along the inside of longitudinal bars *c c*. These lugs and lips do not rise to a level with the tops of said longitudinal bars, in order to facilitate the attachment of said end B. This end is passed over said lugs and lips, and obliquely through the buckle under plate C^1 until the bale-tie band is drawn tight enough. One of the narrow necks *b'* between the pairs of recesses *b b* is then pressed down behind lugs E E, so that the said end B lies quite flat within said buckle or fastener C.

The expanding strain of the bale draws the broad part of said end B against the said stop-lugs below lips *e e*, which prevent it from rising. This form of fastener or buckle C allows the end B of the bale-band to be inserted and fastened without raising or bending it to any inconvenient extent. It holds very firmly, and can be easily unfastened at will by compressing the bale so as to loosen the band, and then reversing the fastening operation above described.

What I claim as new, and desire to secure by Letters Patent, is—

The combination of the band end A, recessed at *a a*, and band end B, having a series of pairs of recesses, *b*, and open buckle C, having top plate C^1, recessed, and obliquely slotted, as shown, lugs E, and lips *e*, as and for the purpose set forth.

In testimony that I claim the above I have hereunto subscribed my name in the presence of two witnesses.

J. MORTIMER GOLDSMITH.

Witnesses:

C. H. MCEWEN,

EUGENE W. JOHNSON.