

*I. H. Merritt,
Cotton Bale Tie.*

No. 53,851.

Patented Apr. 10. 1896.

Fig. 1.

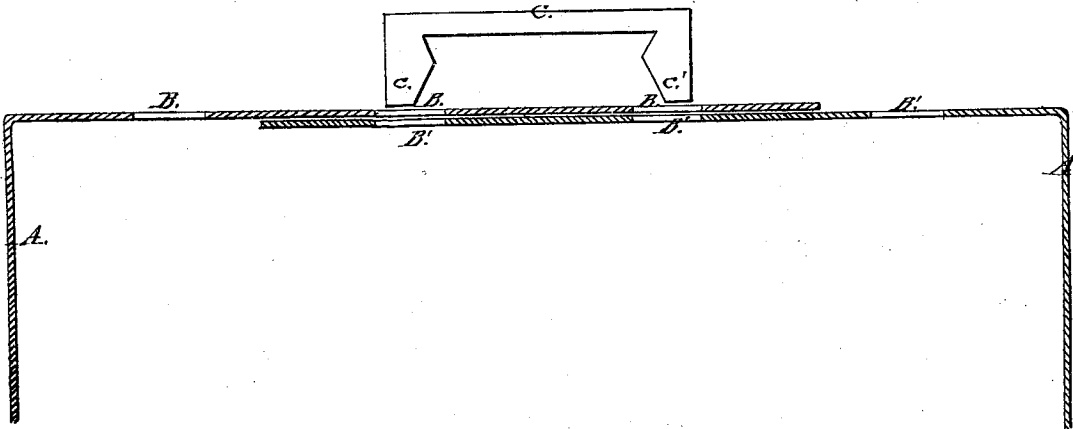


Fig. 2.

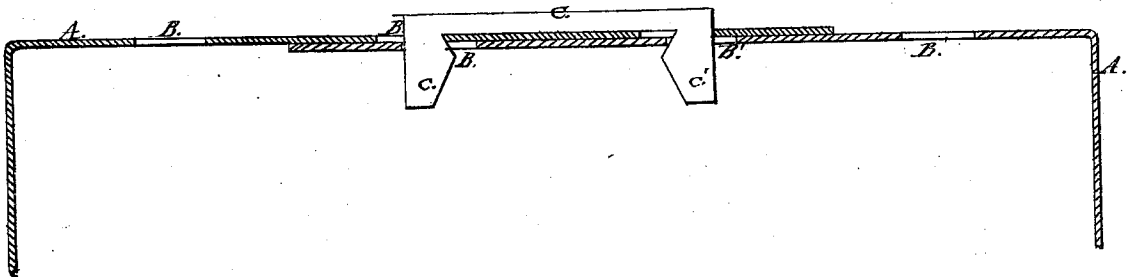
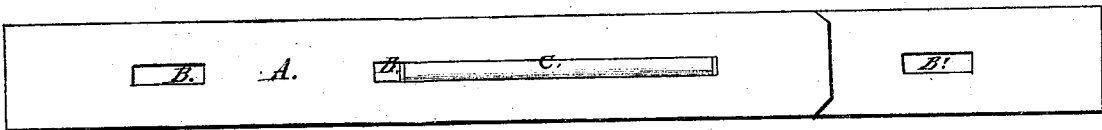


Fig. 3.



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UNITED STATES PATENT OFFICE.

ISAAC H. MERRITT, OF CINCINNATI, OHIO.

IMPROVEMENT IN COTTON-BALE TIES.

Specification forming part of Letters Patent No. 53,851, dated April 10, 1866.

To all whom it may concern:

Be it known that I, ISAAC H. MERRITT, of Cincinnati, in the county of Hamilton and State of Ohio, have made new and useful Improvements in Cotton-Bale Ties; and I do hereby declare the following to be a full, clear, and exact description of the nature, construction, and operation of the same, sufficient to enable one skilled in the art to which it appertains to construct and use the same, reference being had to the accompanying drawings, in which—

Figure 1 is a vertical view of my improvement with the lapping ends of the tie ready for the insertion of the key. Fig. 2 is a similar view when the strain upon each of the lapping ends has caused them to draw upon the lugs of the key.

Similar letters in the figures refer to like parts.

The object of this improvement is a tie which will hold a repressed bale of cotton, in which the cotton is repressed, for the purpose of economy in shipment, to a mass of about one-half of its former cubic dimensions, and a large gain secured from the ability to load a car to its capacity, or to store away in any conveyance of a given capacity a larger amount of the article.

The saving in shipment is itself a handsome profit, and the many ties now before the public have failed when applied to resist the immense expansive force of cotton thus compressed, while some, from their complication or difficulty of attachment, are objected to on other grounds.

My improvement consists of a metallic strap, A, pierced with holes B B of exactly even distances apart on each of the ends, so that they may be brought to register exactly with each other, (see Fig. 1,) and a key, C, the lugs *c c* of which are introduced into the holes B B of the respective strap ends. When placed therein, on the expansion of the bale, the end

containing the holes B' draws upon the notch of the lug *c'*, while the end of the strap containing the holes B draws upon the notch of the lug *c*, as shown in Fig. 2, so that the key serves to keep the two ends of the band together, each lug holding from one point on the respective ends of the band.

I am aware that the ends of the band have been held together by means of a key inserted into corresponding notches in the ends, and also that by a duplication of the device a key with two lugs has been inserted into two sets of notches; but this has been a mere duplication of the single device, whereas in my invention the lugs have each their special duty to retain one end of the band, and they are removed to a distance from each other, so as not to tend to rupture the band at the same point.

The distances between the slots in the band are always equal, so that the ends may be lapped over each other and keyed at such place as may be convenient.

The notched shape of the lug at the place where it draws upon the band insures its retention by the latter when the bale has expanded, and the taper end of the lug assists it to enter the slot.

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

The combination of the band A and key C, when so arranged that the separated lugs of the single key shall detain the respective ends of the band, substantially as described and represented.

To the above specification of my improvement in cotton-bale ties I have signed my hand this 20th of January, 1866.

ISAAC H. MERRITT.

Witnesses:

EDWARD H. KNIGHT,
ALEX. H. C. KLAUCKE.