

J. W. Barnum.
Cotton-Bale Tie.

Nº 76142

Patented Mar. 31, 1868.

Fig. 1.

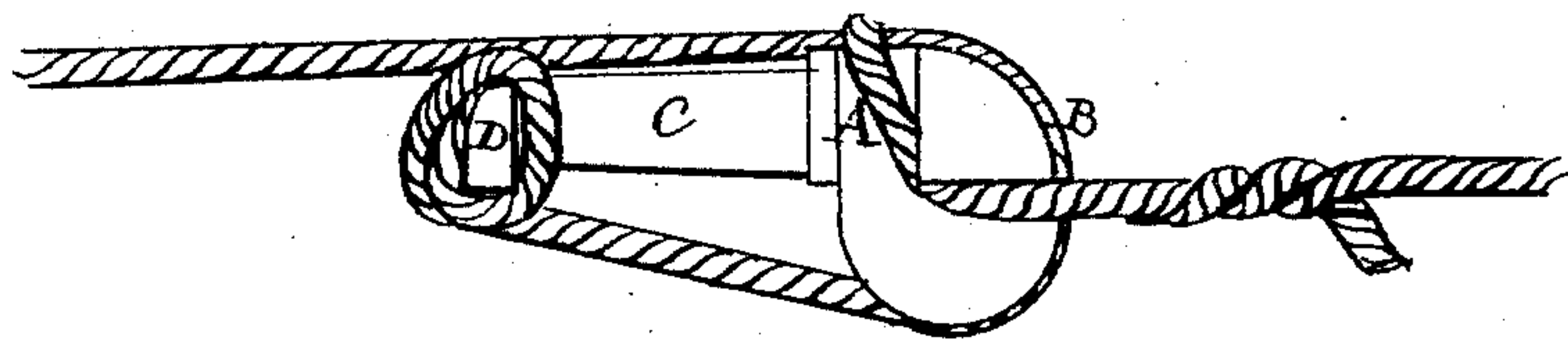
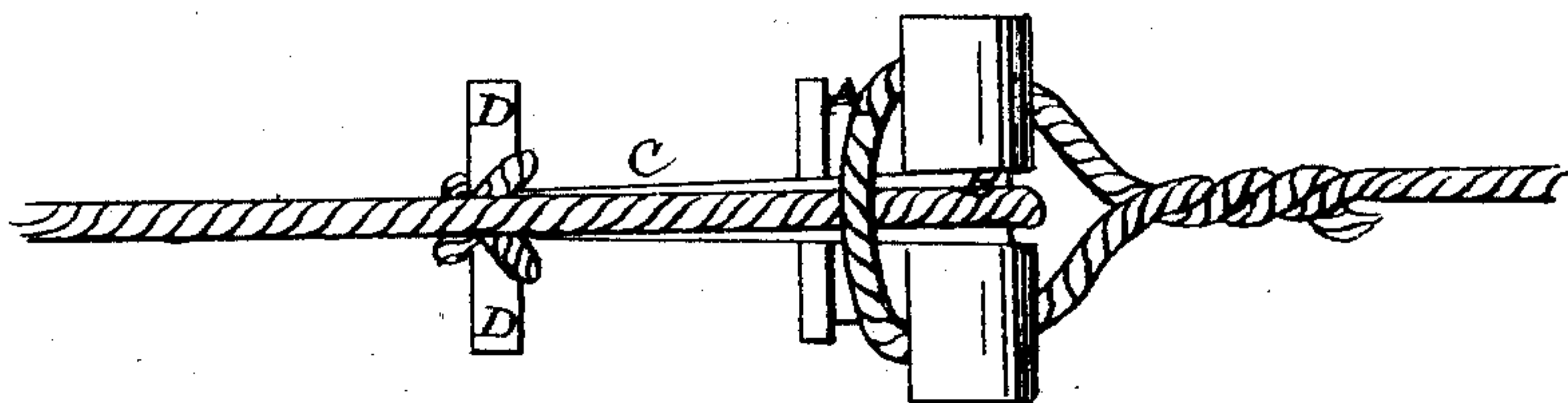


Fig. 2.



Witnesses
A. Garbarin
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Inventor
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JAMES W. BARNUM, OF NEW ORLEANS, LOUISIANA.

Letters Patent No. 76,142, dated March 31, 1868.

IMPROVED COTTON-BALE TIE.

The Schedule referred to in these Letters Patent and making part of the same.

TO ALL WHOM IT MAY CONCERN:

Be it known that I, JAMES W. BARNUM, of the city of New Orleans, parish of Orleans, and State of Louisiana, have invented a certain new and useful improvement in "ties" for fastening together the ends of wire rope or wire bands, when the same are used for banding bales of cotton or other similar substance; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the annexed drawing, making a part of this specification, in which—

Figure 1 is a side, and

Figure 2 a top or plan view of the device as when in use.

My device may be made of cast or malleable iron, and it is so constructed as to present two distinct curved supporting-surfaces for the loops at the ends of the bands, through which the fastening is established and secured, and an elongated or extending arm, with a head or shoulder at its end, around which one end of the wire rope or wire, as the case may be, may be wrapped, and which, whilst it is sufficiently strong to resist longitudinally any amount of strain that can be brought to bear against or upon it, is yet so slight that a blow from a hammer will easily break it when the bale has reached its destination and is to be undone or broken up, and thus to allow of the bands being taken off the bale without any necessity of cutting the same, and hence securing the preservation of the same, without cutting, for new or repeated use upon another or other bales.

It has been demonstrated by that best of all teachers, experience, that when either wire rope or wire is used for banding bales of cotton, an abrupt or short bending of the same at the point at which the ends are fastened together will so greatly impair the normal strength of the same that neither will bear the severe tension that is induced by the expansive force of cotton when compressed and confined within the usual compass of a bale; and hence it will at once be perceived that the object of the two curved supports which my device contains is to prevent such a flexure and such a consequence.

It has, moreover, been proven that it is very difficult, if not impossible, to break up a bale that is banded with wire rope or wire without cutting the same, unless some provision be made for taking off the bands without untwisting the ends; and hence wire rope and wire bands are scarcely ever used upon more than one bale.

My device provides the requisite curved supports to prevent an abrupt flexure of the band, and no untwisting or cutting of the band is necessary in disconnecting it from the same in the operation of breaking up the bale.

But my invention will be better understood by referring to the drawings, upon which A and B are the curved supporting-points, upon which the loops at the ends of the band are sustained. It will be perceived that these curved surfaces are at right angles to each other, and so ordered that the loop at the end of the band that is last fastened to the device bears upon the other end of the band, and thus affords an additional security against the slipping of the same. C is the projecting arm, and D the head or shoulder at the end thereof. This arm projects tangentially, and may extend an inch and a half or two inches from the body of the device.

In the practical application of my invention to actual use, the device is attached to the band by twisting the latter around the head or shoulder D of the arm C, and the band is brought around the supporting-surface B, as shown at both figures on the drawings. The other end is then looped over supporting-surface A, and being secured by twisting, the fastening is established. When the bale is to be broken up, a blow from a hammer will break arm C, and as soon as this is done the tension upon the band will of itself instantly effect a disconnection.

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

The device herein described, consisting of the two supporting curved surfaces A B, the projecting arm C, provided with the head or shoulder D, the whole being constructed as described, and constituting a new article of manufacture, for the purpose set forth.

JAMES W. BARNUM.

Witnesses:

A. BARBARIN,

RUFUS R. RHODES.