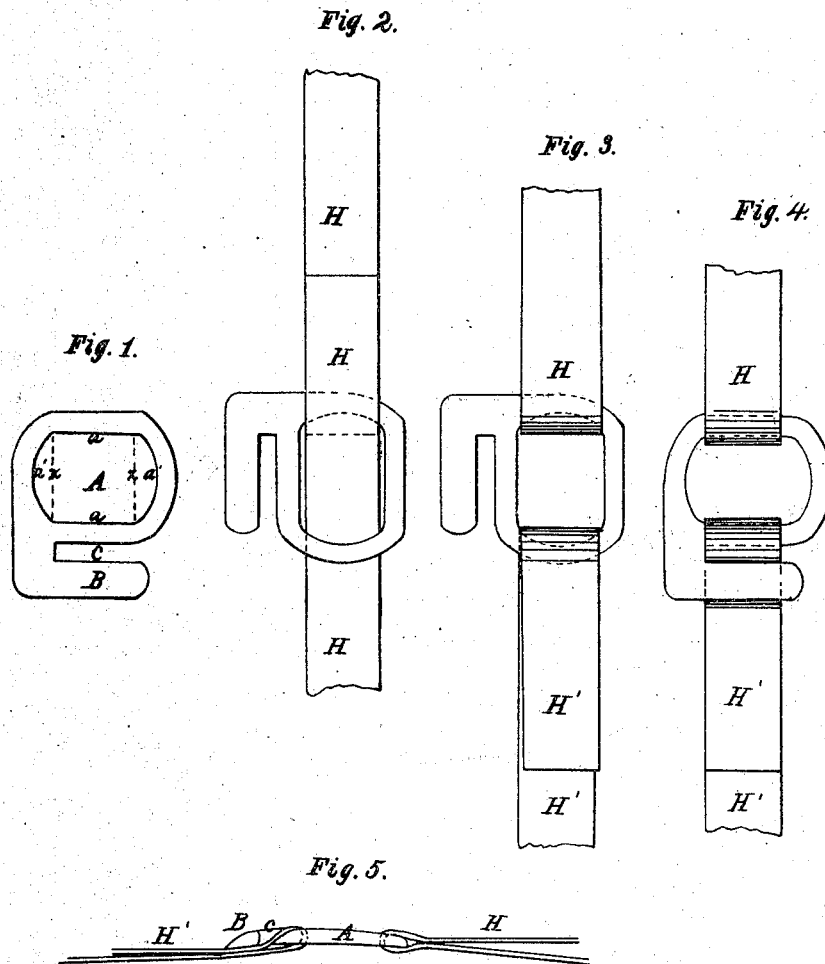


J. L. Sheppard.

Cotton-Bale Tie.

N^o 75705

Patented Mar. 17, 1868



WITNESSES.

J. D. Ellsworth
C. A. Pettit

INVENTOR.

J. L. Sheppard
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United States Patent Office.

J. L. SHEPPARD, OF CHARLESTON, SOUTH CAROLINA.

Letters Patent No. 75,705, dated March 17, 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, J. L. SHEPPARD, of Charleston, in the district of Charleston, and State of South Carolina, have invented a new and improved Cotton-Bale Tie; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming part of this specification, and in which—

Figure 1 is a plan of my improved lock or tie.

Figure 2 is a view of the same applied to the hoop, when the process of locking the bale is partially completed.

Figure 3 is a similar view near the close of the process.

Figure 4 is a view of the same after the completion of the process.

Figure 5 is a longitudinal vertical section through the centre of the tie and hoop.

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

The main feature in this invention consists in making the tie of a single piece of metal, of such a shape that the operator can fasten the hoop by inserting the end of it at one side of the tie, and turning the latter partially round.

In the drawings, the piece of metal used for locking the ends of the bands or hoops is clearly shown in fig. 1. It consists of a single plate, of any suitable metal—brass, cast iron, wrought iron, or steel—having an opening, A, of the form shown, and an arm, B, between which and the body of the plate is a recess, *c*, of sufficient width and depth to admit a hoop of the form used in baling cotton.

The opening A is constructed with two straight parallel sides, *a a*, and two curved ends, *a' a'*. The parallel sides extend in the same direction as the arm B, lying parallel to it, and so situated that a cross-section through the centre of arm B would cut both sides *a a* at their centre. The distance between the sides *a a* is a little greater than the width of a bale-hoop, so that the latter can easily be inserted between them, in the manner shown in fig. 2. The length of the flat sides *a a* is equal to the distance between them, making the space indicated by the red dotted lines *x* a perfect square.

A tie being thus constructed, one end of the hoop H is bent around the side A farthest from the arm B, in such a manner that the bent end shall come underneath the hoop, and be pressed down by it against the hole. The expansion of the bale will keep this end in place.

When the hoop is to be locked to the bale, the tie is turned, as shown in fig. 2, and the end H' of the hoop is passed through it in the manner there represented. The next step in the operation is to bend the end H' back, as shown in fig. 3. After this, the tie is turned back to its proper position, as shown in fig. 4, and the end H' is slipped under the arm B, which will hold it firmly in place. The bale is then completely and securely locked.

The tie being thus locked, the end of the hoop H' is to be cut off, as shown in fig. 4, to prevent catching in anything. The bale cannot now open by any expansive force that the compressed cotton can exert.

The shape of the arm B and the sides of the tie are shown clearly in the sectional view, fig. 5, each of the parts of the tie with which the hoop comes in contact, *a a B*, being rounded or bevelled off towards the outside, as there shown. This peculiar shape gives strength as well as lightness, and saves the tie from being caught against anything, and damaged, while the bale is being loaded or unloaded from vessels.

I do not broadly claim the construction of a tie, consisting of a slotted plate, having an arm extending along one side, and a recess between the arm and the edge of the plate, for I am aware that such a tie has been used before, and is covered by the patent of C. W. Pyle, of September 27, 1859. In that tie, however, the hoop cannot be inserted over the end and locked by turning the tie, but must be inserted in the old way, and then forced around the end of the arm into the recess. The distinctive feature of my invention is the turning of the tie to lock it, instead of turning or twisting the hoop to force it under an arm. In this respect my tie differs from all others hitherto invented, and by virtue of this difference it is more easily applied than any other. Not desiring in any case to use a tie applied as that of Mr. Pyle must be, I disclaim entirely his invention.

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

The cotton-bale tie above described, consisting of the ring *a a' a'*, having the sides *a a* straight and parallel, and the sides *a' a'* curved, the central opening being of such a form as to enable the hoop to be inserted over the ends *a' a'*, and turned so as to rest upon the sides *a a*, when such ring is used in connection with an arm, *B*, between which and the nearest side, *a*, is an open recess, *c*, all the said parts being constructed and arranged substantially in the manner and for the purpose specified.

The above specification of my invention signed by me, this 23d day of October, 1867.

J. L. SHEPPARD.

Witnesses:

THOS. D. LEBBY,

EUGENE LOPEZ.