J. M. POLLARD.

BALE-TIE.

No. 190,076. Patented April 24, 1877.

Fig. 1.

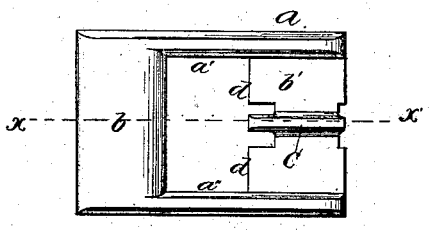


Fig. 2.

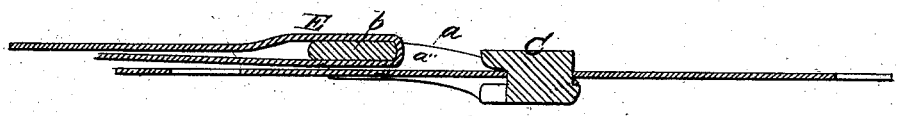


Fig. 3.

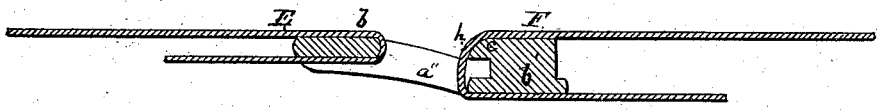
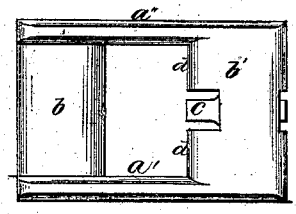


Fig. 4.



Attest.

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UNITED STATES PATENT OFFICE.

JAMES M. POLLARD, OF NEW ORLEANS, LOUISIANA, ASSIGNOR TO HIMSELF WM. L. McNEELY, OF SAME PLACE, AND JOHN D. MILBURN, OF MEMPHIS, TENNESSEE.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **190,076**, dated April 24, 1877; application filed February 24, 1877.

To all whom it may concern:

Be it known that I, JAMES M. POLLARD, of the city of New Orleans, parish of Orleans, and State of Louisiana, have invented a new and useful Combination Device for Attaching Together the Ends of Metallic Bands; and I hereby declare the following to be a full and exact description of the same, reference being had to the accompanying drawing, forming a part of this specification.

Before entering upon a particular description of my invention I will briefly allude to the present state of the art as exemplified in its practical workings in the cotton-growing States.

Cotton is generally pressed in bales of an average weight of five hundred pounds, on or near the plantation where it is grown. "Button-ties," as they are termed—that is, ties formed of slotted bands and buckles, having a cleat or lug to enter one of said slots and form the "lock"—have come into extensive use for securing the bales. These "country" bales require to be repressed—that is, further compressed, to reduce their size—before being stored in warehouses or shipped to foreign ports.

In such case it is desirable, for sake of economy of labor and material, that the same ties shall be used again; but, in general, the bands only are retained, the cleat-buckles being substituted by a buckle having a slot but no cleat.

In applying the ties at the compress the ends of the band are thrust through the slot, bent backward on the under side, with the ends terminating next the bale.

The principal reason for thus dispensing with the cleat-buckle is the greater rapidity with which the ties can be applied; but since the cleat-buckle is in some cases retained, the bands of button-ties have been heretofore slotted a length of four and one-half to five feet from the free end, to permit the lock to be effected on the compressed bale in the same manner as before—*i. e.*, on the bale before it is reduced.

It is obvious, however, that each slot weakens the band, and renders it much more liable to part or break at the point where it is made, and especially so when the band is used with a cleatless or closed buckle, since the band is then bent at a sharp angle around the end bar of the buckle.

Another disadvantage, which scarcely requires elaboration, results from slotting so great a length of the band—namely, in respect to the reduction of the weight of the tie below the standard weight fixed by law or custom.

The object of my invention is to provide a buckle that shall be adapted for use both in country bales and on the same bales after compression, in the manner usual in both cases heretofore.

In carrying out my invention I punch slots in the band for only about two feet from its free end, and I provide a buckle having a rectangular frame with a cleat or lug, which is so located that its end is in line with, or a little in rear of, the shoulders of the bar on which it is formed.

Referring to the drawing, Figure 1 is a top-plan view of the buckle. Fig. 2, is a section at line x x of Fig. 1; Fig. 3, the same, and Fig. 4 a reverse view of the buckle, or of the side placed next the bale.

The buckle consists of the parallel side bars a' a'', joined at one end by an oval bar, b, and at the other by the broad flat bar or plate b', with cleat or lug c. The inner edge of this plate b' and the point of the cleat c are of the same length, the plate being cut away, as shown, in order to facilitate molding, leaving the shoulders d d, upon which and the point of the cleat the bight of the loop rests when the tie is used on the compressed bale, as shown in Fig. 3. To use the tie in this manner the slotted ends of the bands are cut near the buckle, the bands removed, and pieces thrown aside. Then, when the bale is compressed, the bands are again put around it. The buckles being still in position, the free ends of the bands are thrust through the opening in the buckles and bent and folded back, as shown in Fig. 3, which completes the fastening.

It is apparent that were this portion h of

the band slotted it would tend to bend at one of the slots, and at so acute an angle as to greatly impair the fiber of the iron at a point already weakened by a portion of the metal having been cut away.

This has been, and is, the most series objection to the use of button-ties; but by leaving the band free from slots at the point used on the compressed bales, I secure the full strength of the metal where it is most need.

It is also apparent that by the relative construction and arrangement of the bar *b'* and its cleat *c*, the latter offers no obstacle to the use of the buckle on compressed bales, since the end of the cleat does not project beyond the shoulders *d d*, but is in line therewith.

As applied on a country bale, the side of the buckle opposite that on which the cleat is formed is placed next the bale, the cleat being then, of course, upon the outer side. The free end of the band is passed around the bale, the cleat end of the buckle is tilted slightly inward, and the slotted end of the band inserted, the same passing across the bar *b'* and cleat *c*, and under the bar *b* and loop E, as in Fig. 1. When the band is drawn sufficiently tight, the cleat is slipped through one of the slots by the cleat end of the buckle being pressed outward, and the fastening is completed, and the tie cannot become unfastened save by a movement of the buckle inward.

I thus combine, in a simple and practical form, two essentially different methods of fastening the band, retaining the peculiar excellence and advantage of each, while dispensing with serious objections and disadvantages heretofore found in each, this double feature being the gist of my invention.

It will be understood I do not claim a bale-tie formed of a slotted band, and a buckle provided with a cleat; but

What I claim is—

In a bale-tie buckle, a bar, *b'*, provided with cleat C and shoulders *d d*, the cleat being flush with the shoulders for securing the slotted band when the cleat is not used, substantially as specified.

In testimony whereof I have signed my name hereunder in presence of two witnesses.

J. M. POLLARD.

Witnesses:

ANDREW HERO, Jr.

C. H. STOCKER.