B. HEMPSTEAD.

BALE-TIE.

No. 186,560. Patented Jan. 23, 1877.

Fig. 1.

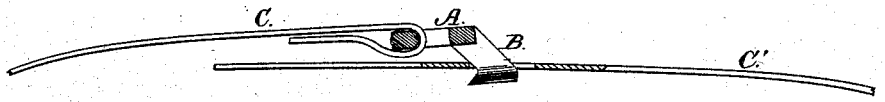


Fig. 2.

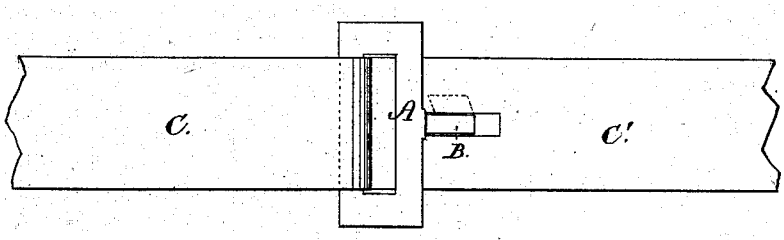


Fig. 3.

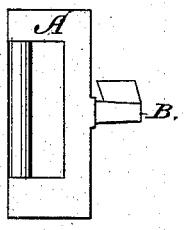
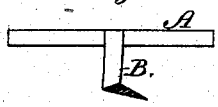


Fig. 4.



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UNITED STATES PATENT OFFICE.

BEALL HEMPSTEAD, OF PULASKI COUNTY, ARKANSAS.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **186,560**, dated January 23, 1877; application filed October 26, 1876.

To all whom it may concern:

Be it known that I, BEALL HEMPSTEAD, of the county of Pulaski and State of Arkansas, have invented an Improved Bale-Tie, of which the following is a specification:

My invention has reference to a species of bale-ties in which a fastening is formed by a hooked shoulder device and slots, the one working within the other, and in structure the former being part of a bar or tie-frame, to which one end of the bale-band is attached, while the slots themselves are arranged along the band at such intervals as necessity may require.

My improvement consists in constructing an open rectangular frame with a hook upon one of its bars, which hook is extended laterally to the bale-band, as hereinafter more fully described.

Figures 1 and 2 are respectively a plan and longitudinal section of the tie applied to a bale-band; and Figs. 3 and 4 are plan and end views of the tie detached.

In the drawing, A represents the open rectangular frame, upon the middle portion and under side of one of the bars of which is constructed a shoulder, B, formed solid and homogeneous with the frame and of the same piece of metal. This shoulder is made of a hooked shape, with the hook end portion extended laterally to the bale-band, and with an oblique base. Around one side of the rectangular frame A is bent one end of the bale-band C, while the other end of the bale-band C′ is slotted to receive the hooked shoulder.

In inserting and adjusting the tie the frame is tilted to one side to introduce the hooked portion of the shoulder, after which the tension of the bale draws the rectangular frame flat and parallel, and brings the hooked shoulder into such a position as to prevent its accidental displacement.

The points aimed at in the improvement are, first, strength of the tie; second, band economy and bale-compression; third, ease and permanency of adjustment.

First, strength of the tie.—The catch for the fastening or the shoulder is made solid with the tie-frame, and not riveted to the band, as some that employ a button.

Second, band economy and bale-compression.—The tie is so formed that, should it give away in any of its parts, it is readily removable, and a new one may be substituted, while in other ties this is not so easily accomplished, those employing a riveted button requiring an abandonment of the band for the time being.

In the matter of bale-compression, the formation of the shoulder is such in my tie that I am enabled to reach the minimum dimension for the band-slots, and the maximum in their number, and thus giving the greatest possible compression.

Third, ease and permanency of adjustment.—The shoulder is so placed as to be readily seen, and thus easily adjusted, and, when adjusted, the lower portion of the shoulder is oblique with the slot, and requires no closeness of fit to bring this about, and as this oblique position constitutes the permanence of the fastening, the slots may be made sufficiently large to let the shoulder through without resistance.

In the permanence of fastening, there is no force within the bale itself that can possibly give the tie the necessary twist to throw it from its hold, the lower base of the shoulder being always oblique with the spring of the cotton-bale, whereas should it be in the same straight line it possibly could be sprung from its place.

Having thus described my invention, what I claim as new is—

The bale-tie, composed of the open rectangular frame A, and shoulder B, having a hook extended laterally to the band, and formed of one and the same piece of metal, substantially as and for the purpose described.

BEALL HEMPSTEAD.

Witnesses:

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