

E. HAIMAN.
Bale-Tie.

No. 226,851.

Patented April 27, 1880.

Fig. 1.

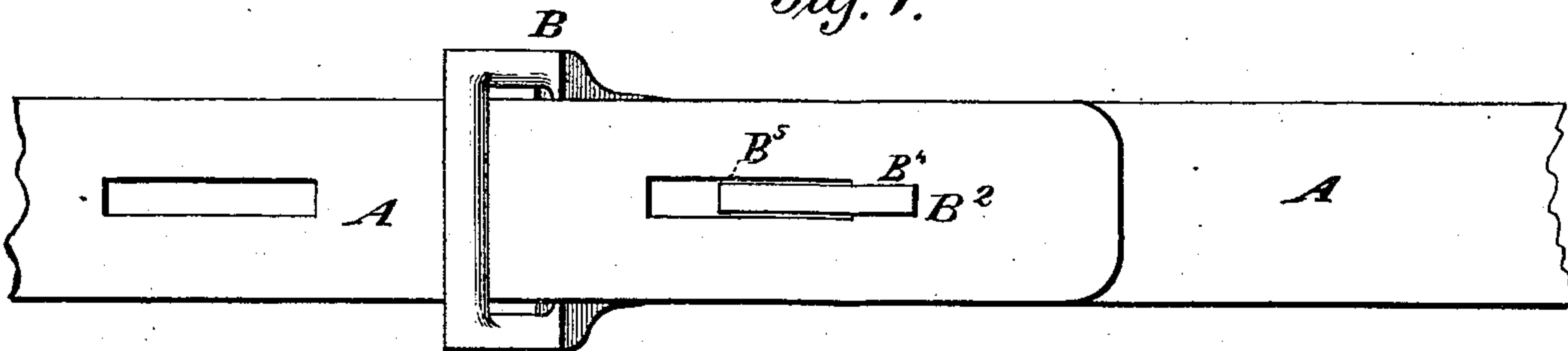


Fig. 2.

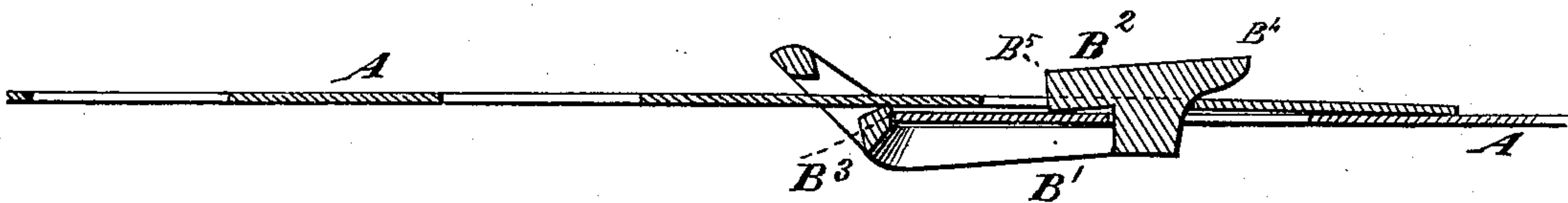


Fig. 3.

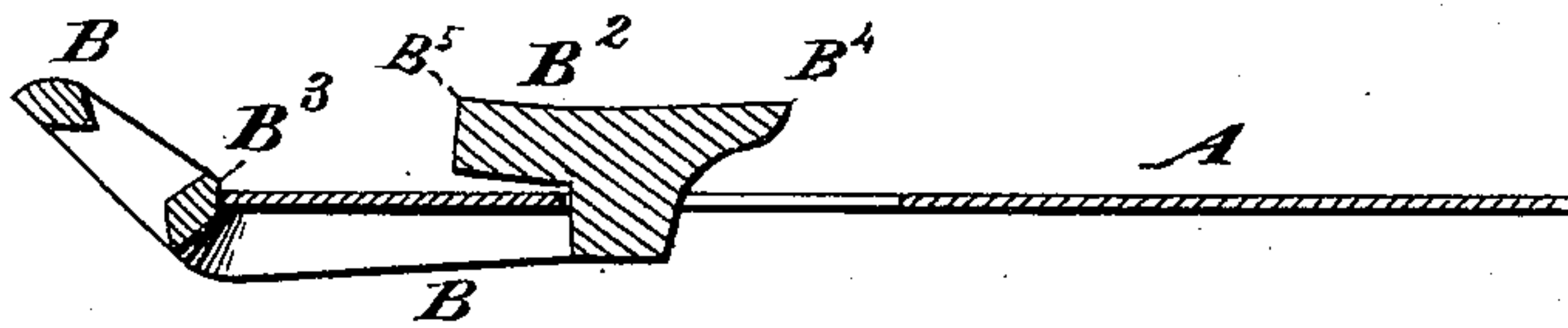
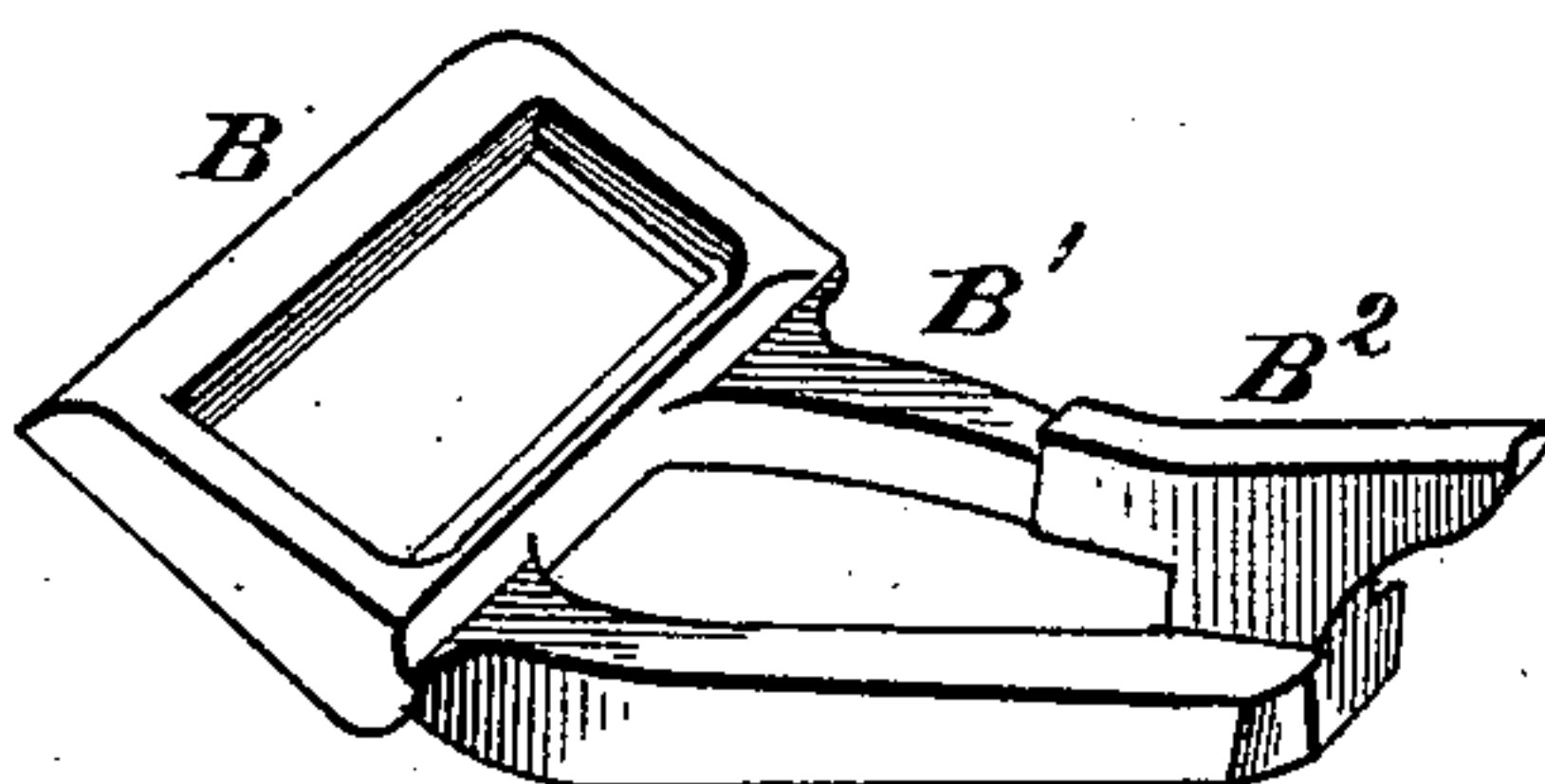


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

ELIAS HAIMAN, OF ATLANTA, GEORGIA.

BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 226,851, dated April 27, 1880.

Application filed February 19, 1880.

To all whom it may concern:

Be it known that I, ELIAS HAIMAN, of Atlanta, in the county of Fulton and State of Georgia, have invented certain new and useful Improvements in Bale-Ties; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, and to letters of reference marked thereon, which form a part of this specification.

My invention relates to an improved cotton-bale tie in which the ends of the tie or band are slotted, and a buckle, one portion of which when in use is in a horizontal position, and is provided with a projection for passing through the slots in the tie or band, the remaining portion of said buckle being placed at an obtuse angle, and provided with an aperture through which one end of the tie or band is passed, it being also provided with a transverse groove having a shoulder, against which one end of the tie or band rests when in place, and by which the buckle is prevented from being accidentally separated from the band, one arm of the projection formed on the buckle being bent down upon said band after one of its ends has been placed in the buckle, to aid in holding it in position, the object being to provide a tie for bales of cotton and other substances which can be readily applied, and which can have its buckle secured to one end of the band by a blow of a hammer or other suitable implement, and thus prevented from being accidentally separated from said band.

I attain this object by means of the devices shown in the accompanying drawings, in which—

Figure 1 is a plan view of portions of the band and of the buckle, the parts being shown as they appear when applied to a bale of cotton or other substance. Fig. 2 is a sectional elevation, showing the construction of the buckle, the slots in the band, and its ends in position for use. Fig. 3 is a sectional elevation of the buckle and a portion of the band, showing the shoulder against which its end rests; and Fig. 4 is a perspective view of the buckle, showing its construction.

Similar letters refer to similar parts throughout the several views.

In constructing ties of this type I use a band, A, of hoop-iron or other suitable substance, of a length sufficient to cause it to pass around the bale, its width and thickness being sufficient to give it the required strength, one of its ends being provided with a single slot, as shown in Figs. 2 and 3 of the drawings, while its opposite end is provided with two or more slots, so that as the substance composing the bale is more or less compressed the band may be lengthened or shortened to cause it to hold the bale in its proper dimensions. For holding the ends of this band in position there is provided a buckle, B, of peculiar construction, which, together with the band A, forms a complete bale-tie. This buckle consists of horizontal portions B', from which rises an engaging-hook, B², the thickness of which is such as to allow it to pass through the slots formed in the ends of the band A, it having upon its outer end extensions B⁴ and B⁵, as shown in Figs. 2, 3, and 4, the under surface of the one, B⁴, which is farthest from the angular portion of said buckle being curved or beveled for the purpose of causing that portion of the band which is passed over it to be pressed down firmly upon its opposite end, as shown in Fig. 2.

The opposite end B⁵ of projection B² has upon its under side a surface at a right angle, or nearly so, to the vertical projection, so that when the end of the band having in it the single slot has been passed over it it may, by a blow of a hammer, be bent down thereon, as shown in Fig. 2, by which means the end of the band is made to rest firmly upon the horizontal portion of the buckle.

As a further means of holding the last-named end of the band in position, and for preventing it from being separated from the buckle before that portion of the engaging-hook B² which is designated by B⁵ is forced down upon it, there is formed in the transverse portion thereof a groove or shoulder, B³, against which the end of the band abuts, the slot formed therein being at such a distance from its end as to cause the vertical portion of projection B² to press it against said shoulder or into said slot.

That portion of the buckle lettered B is placed at an obtuse angle to the portion B', and is provided with an aperture, through

which the end of the band having in it a series of slots is passed before being attached to the projection B², as shown in Fig. 2 of the drawings.

5 In practice I prefer to attach the buckle to the end by passing the end having in it a single slot over the projection B², thus causing its outer end to bear against the shoulder formed on the buckle, and then, by a blow, 10 bending down the arm B⁵ of the engaging-hook, as described; but if preferred, the blow and the bending may be omitted until the tie has been placed upon the bale.

I am aware that, broadly, it is not novel to 15 use a band having a single slot in one of its ends and a series thereof in its opposite one.

I am also aware that it is not novel to use a buckle having a horizontal portion with a projection formed thereon having arms extending 20 in two directions for the purpose of keeping the ends of the band from separating when applied to a bale; and, further, I am aware that it is not novel to combine such buckle and band for the purpose of forming a complete bale-tie; but I am not aware that such 25 buckles have ever been formed with a groove

or shoulder for the end of the band to abut against or rest in, or that the under surface of the arm of the projection has ever been constructed with a view of being bent down upon 30 the band—features which constitute the novelty of my invention.

Having thus described my invention, what I claim, and desire to secure by Letters Patent, is— 35

A buckle for bale-ties provided with a transverse groove or shoulder, B³, and an engaging-hook, B², the arm B⁴ of which has a rounded or beveled under surface, while its opposite arm B⁵ has its under surface at or 40 nearly at a right angle to the vertical portion of the engaging-hook, in combination with a slotted band, for the purpose of forming a complete bale-tie, substantially as set forth.

In testimony that I claim the foregoing as 45 my own I affix my signature in presence of two witnesses.

ELIAS HAIMAN.

Witnesses:

S. D. LAW,
JAMES T. LAW.