

W. S. DAVIS.
Bale-Ties.

No. 156,546.

Patented Nov. 3, 1874.

Fig. 1.

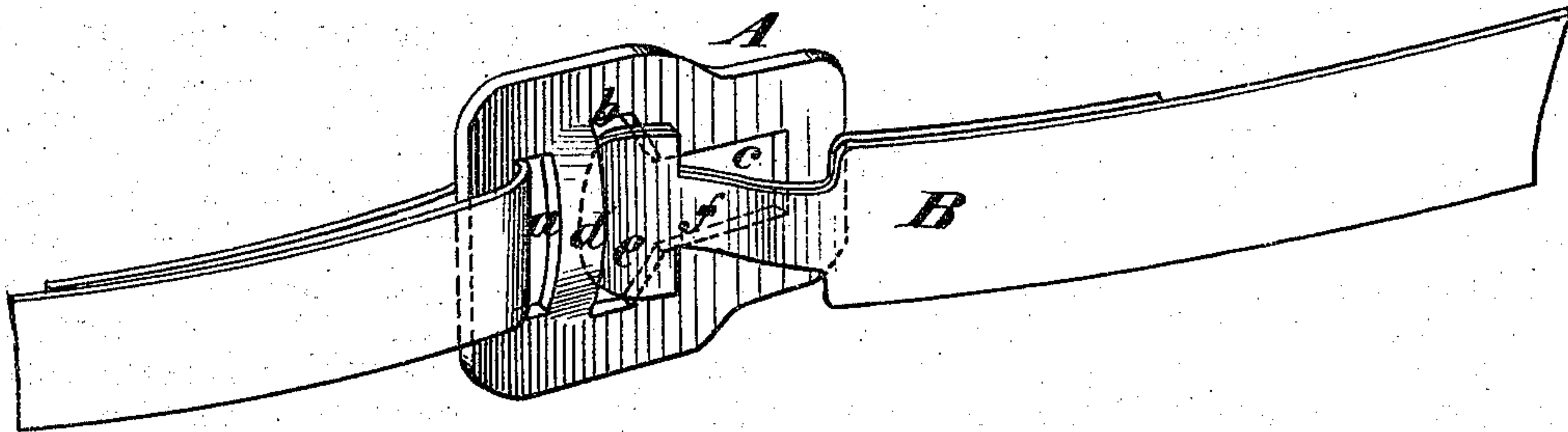


Fig. 2.

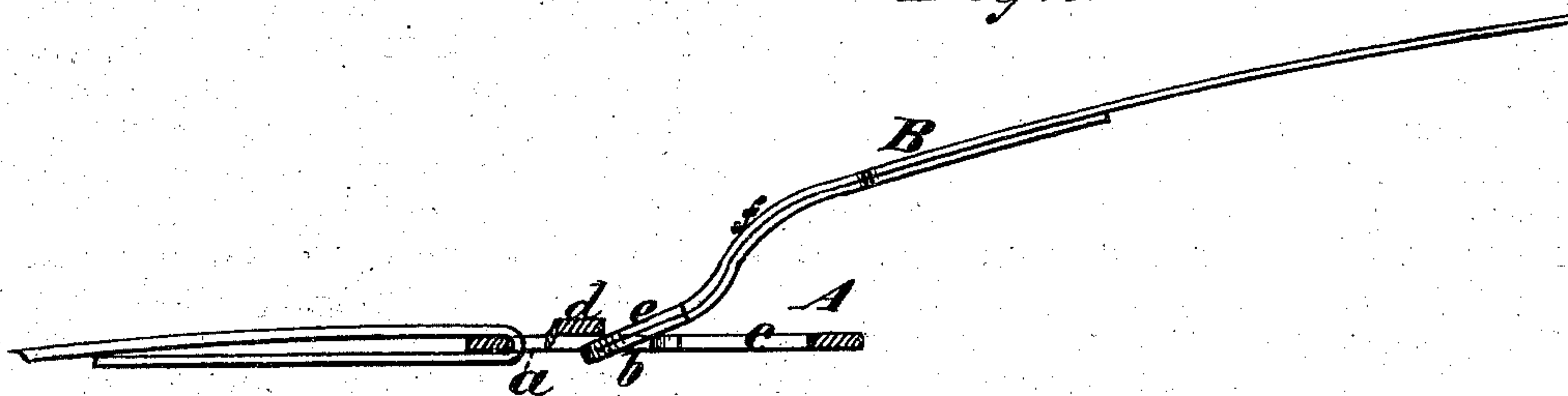


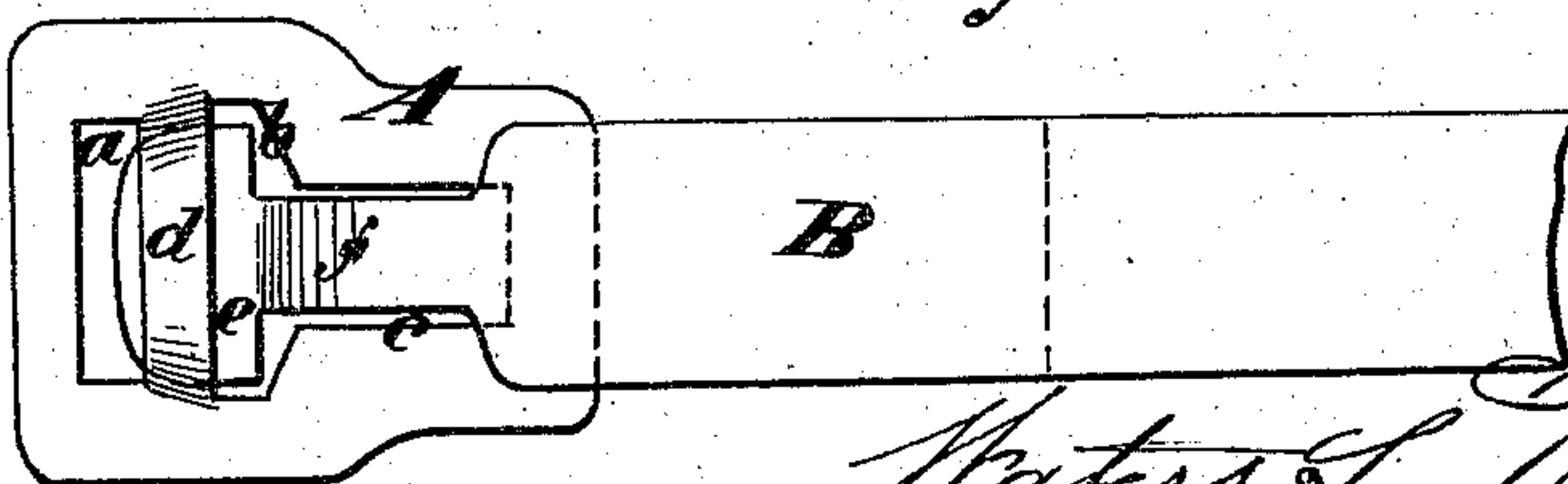
Fig. 3.



Fig. 4.



Fig. 5.



Witnesses.

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WATERS S. DAVIS, OF GALVESTON, TEXAS.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **156,546**, dated November 3, 1874; application filed September 22, 1874.

To all whom it may concern:

Be it known that I, WATERS S. DAVIS, of Galveston, in the county of Galveston and State of Texas, have invented an Improved Bale-Hoop Tie, of which the following is a specification:

My invention relates to an improved means of fastening the hoops or bands of cotton or other bales.

The invention consists in a plate provided with a slot for receiving one end of the hoop, and with a locking-slot and arched bar for engagement with a tongue at the other end of the hoop, whereby said tongue may be inserted in place without turning it to either side, and may be allowed a slight play in said slot without danger of displacement. The invention consists, further, in a tongue provided with a locking-head and a neck formed with an offset for engagement with the locking-slot in the plate, said tongue being formed on the end of the hoop, and made of double thickness by overlapping or doubling the metal, whereby the neck is rendered as strong as any other portion of the hoop.

In the accompanying drawing, Figure 1 is a perspective view of my improved bale-hoop tie, showing the manner of inserting the tongue in the slot. Fig. 2 is a longitudinal section of the same. Fig. 3 is a longitudinal section, showing the tongue locked in place. Fig. 4 is a longitudinal section, showing the manner in which the head is prevented from displacement when working loosely in the slot. Fig. 5 is a top view of the same.

The tie-plate A is provided with a slot, *a*, through which one end of the hoop is passed and bent back, so as to secure said hoop to said plate. The slot *a* is near one end of the plate, and the locking-slot *b c* near the other end. The portion *b* of the locking-slot runs transversely of the plate, and the portion *c* runs longitudinally and connects with the transverse portion. The metal which lies between the slot *a* and the slot *b c* forms a bar, *d*, which is arched upward for a distance nearly equal to the thickness of the locking-tongue, so as to allow said locking-tongue to be inserted in the transverse portion of the slot *b c* without the necessity for elevating said tongue at as great an angle as would be

necessary if said bar lay perfectly flat and in the same planes with the two surfaces of the plate. The portion *c* of the locking-slot connects with the transverse portion *b* by a diagonal line on each side, as shown clearly in Fig. 5, so that a part of the slot *b* is wider than the tongue, and allows it to be readily inserted therein, while the part nearest the slot *c* is narrower than the head of the tongue, and prevents displacement thereof.

The tongue B is formed on the hoop at the end opposite the tie-plate by overlapping or doubling the metal at that end, and then welding, brazing or soldering, riveting, or otherwise securing the fold. The head *e* and neck *f* are formed by stamping or striking out after the metal has been doubled, and the neck *f* is formed with an offset, so that the head will readily assume the proper position under the plate when inserted in the slot. Although the neck is but half the width of the hoop, yet, being of double thickness, it is quite as strong as any portion of the hoop between the tongue and the tie-plate.

By the construction and arrangement of parts shown herein, the head may be readily made to engage with the tie-plate without turning it to either side; and when in place, if the band should become so loose as to allow any longitudinal play, the head is prevented from displacement by reason of the passage of its rounded portion or extremity under the arched bar *d*, and its rear or angular portions under the diagonal portions of the slot *b*, as shown.

I claim—

1. The tie-plate A, provided with the slot *a*, for receiving the end of the hoop, and with the locking-slot *b c* and arched bar *d*, substantially as and for the purpose herein described.

2. The tongue B, constructed of a double thickness of metal, as described, and provided with a head, *e*, and neck *f*, said neck being formed with an offset, and the whole constructed substantially as herein shown and set forth.

WATERS S. DAVIS.

Witnesses:

MICHAEL RYAN,
FRED. HAYNES.