

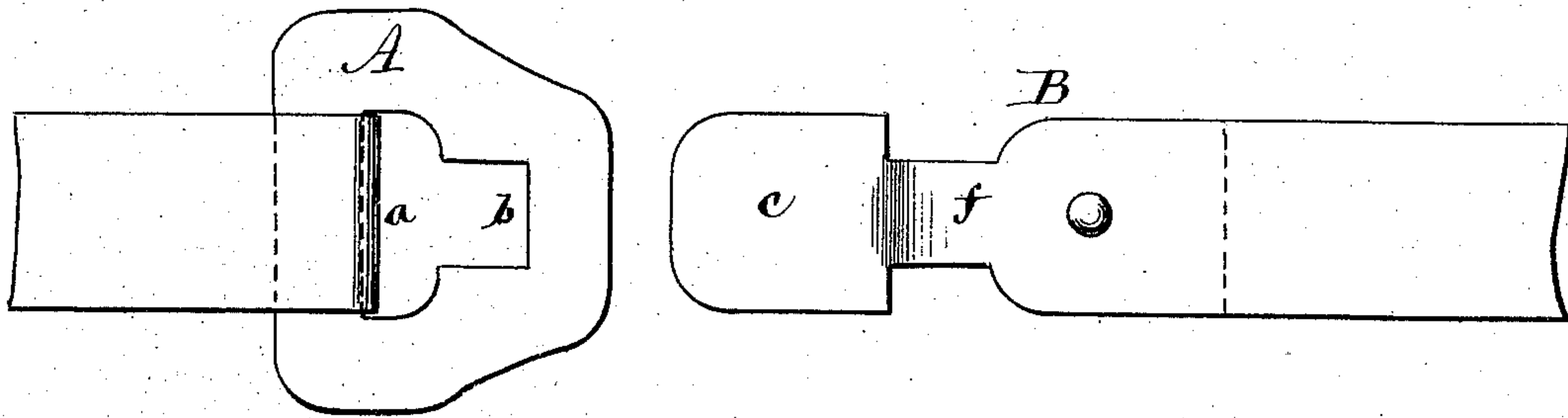
W. S. DAVIS.

Bale-Ties.

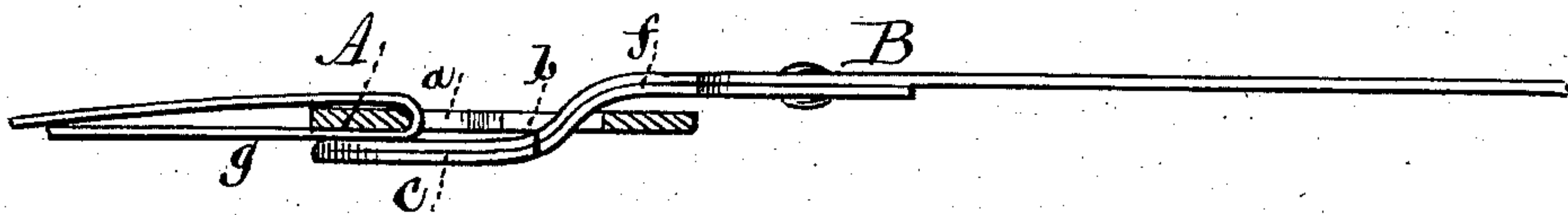
No. 156,547.

Patented Nov. 3, 1874.

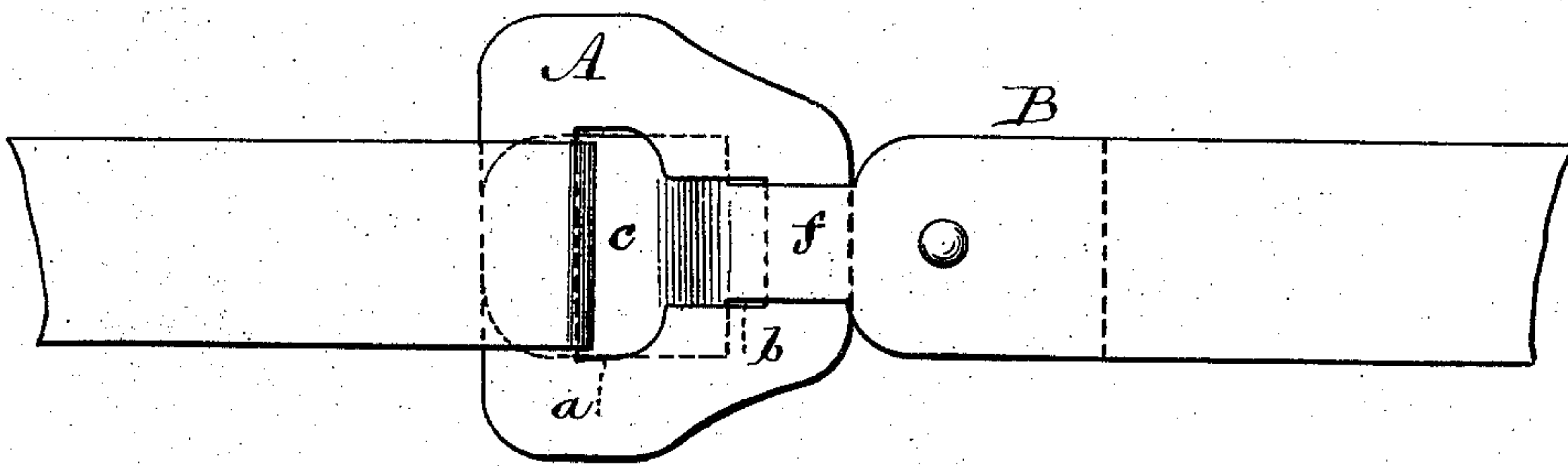
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses  
John Becker  
and  
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Waters S. Davis  
by his Attorneys  
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# UNITED STATES PATENT OFFICE.

WATERS S. DAVIS, OF GALVESTON, TEXAS.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **156,547**, dated November 3, 1874; application filed September 23, 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 consists in a novel construction of the tie, as hereinafter particularly described, whereby greater simplicity and security are obtained.

In the accompanying drawing, Figure 1 is a top view, showing the tie-plate and the end of the hoop. Fig. 2 is an edge view, partly in section. Fig. 3 is a top view, showing the end of the hoop engaged with the tie-plate.

The tie-plate A is provided with a slot, *a b*. The portion *a* near one end of the tie-plate is of a width to receive the hoop, but the portion *b* is narrower. One end of the hoop is attached to the tie-plate by passing it through the portion *a* of the slot and turning it in or under, as shown at *g* in Fig. 2. On the other end of the hoop is a tongue, B, provided with a head, *c*, and neck *f*. The portion *b* of the slot is or may be about half the width of the portion *a*, which is of a width to admit the passage of the whole width of the head *c* of the tongue. The length of the head *c* is greater than the length of the slot *a b*. The neck *f* has an offset formed by curving it so that the head *c* will lie in a lower plane than the remaining portion of the tongue B. The portion *a* of the slot runs transversely of the tie-plate, and the portion *b* runs longitudinally thereof. The head *c* is inserted in the transverse portion *a* of the slot until passed entirely through the same, and its extreme end is then elevated and its rear corners depressed so as to allow the neck *f* to engage with the narrow portion *b* of the slot, when it is moved backward to the position shown in Figs. 2 and

3, in which position the rear portion of the head is held under the tie-plate by the metal on each side of the slot *b*, and the extreme end is made to impinge on or pass under the turned-in portion *g* of the hoop, as shown clearly in Fig. 2. By this construction and arrangement the head *c* comes in contact with the portion *g*, and as the length of the head *c* is greater than that of the slot *a b*, should any longitudinal motion of the hoop result from slackening the same, or from rough handling of the bale, the head is prevented from displacement in consequence of its engagement with the slot *b* and by its sliding under the turned-in portion *g*.

If desired, there may be a separate and independent slot for attaching the hoop to the tie-plate instead of passing it through the slot *a b*, provided said independent slot is not placed at too great distance to prevent the impingement of the head on the turned in portion.

The tongue shown in the drawing is made in two thicknesses by doubling the metal at the end of the hoop; but said tongue may be constructed in any other suitable manner in the same form.

I claim—

The tongue B, provided with a head, *c*, and neck *f*, the latter having an offset, as described, in combination with the tie-plate A having a T-shaped slot, substantially as set forth, whereby the head *c* is made to impinge on the turned-in or end-lapped portion *g* at the other end of the hoop, as and for the purposes herein set forth.

WATERS S. DAVIS.

Witnesses:

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