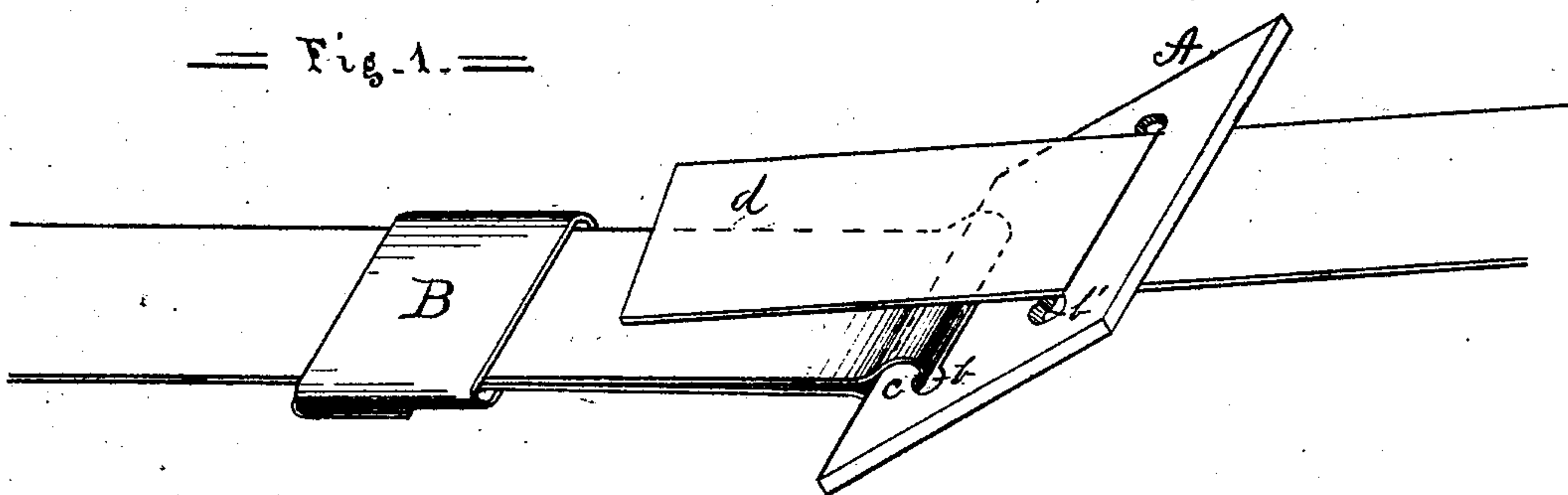


W. A. JORDAN.
Cotton-Bale Ties.

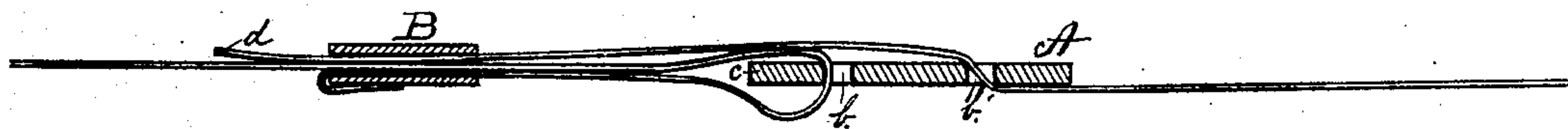
No. 146,911.

Patented Jan. 27, 1874.

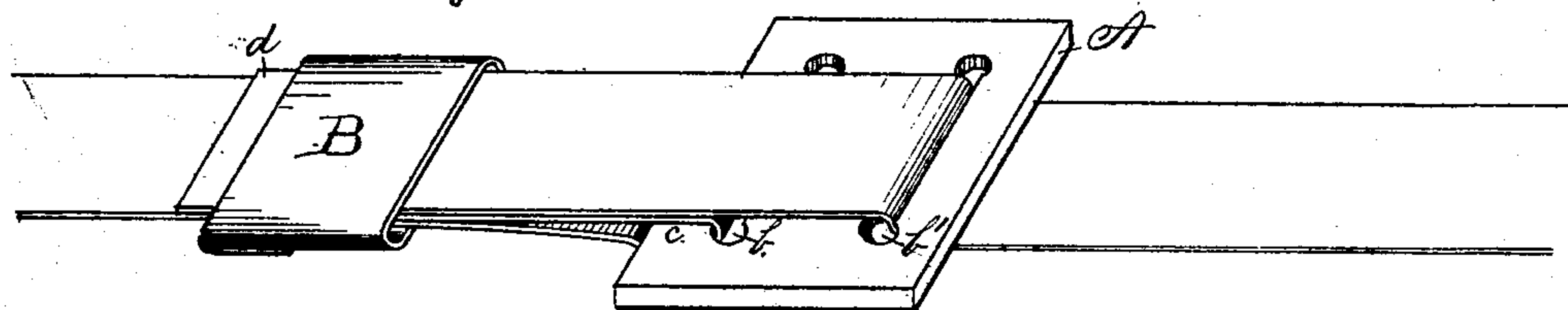
== Fig. 1. ==



== Fig. 2. ==



== Fig. 3. ==



WITNESSES.

H. A. Jenkins
J. C. Hubbell

INVENTOR.

William A. Jordan

UNITED STATES PATENT OFFICE.

WILLIAM A. JORDAN, OF NEW ORLEANS, LA., ASSIGNOR OF ONE-HALF HIS RIGHT TO SAMUEL P. PARMLY AND HENRY SHAW, OF SAME PLACE.

IMPROVEMENT IN COTTON-BALE TIES.

Specification forming part of Letters Patent No. **146,911**, dated January 27, 1874; application filed December 9, 1873.

To all whom it may concern:

Be it known that I, WILLIAM A. JORDAN, of the city of New Orleans, parish of Orleans and State of Louisiana, have invented a certain new and useful Improvement in Bale-Ties; and I do hereby declare the following to be a full, clear, and correct description of the same, reference being had to the annexed drawing making a part of this specification.

My invention relates to an improved mode of securing the ends of metallic bands or hoops on bales of cotton or other merchandise.

The main object of my said invention is to construct a bale-tie, whereby the ends of metallic bands surrounding cotton or other bales may be securely fastened and held in position without in any manner depending upon the expansive force of the material contained within the bale.

By a glance at the annexed drawing, it will readily be perceived that I have not only accomplished the above main object in view, but that, while doing so, I have also succeeded in forming a tie, whereby all of the slack of the band may be easily taken up in the operation of tying, and securely held; hence insuring an equal tension upon each and every band surrounding a bale.

By the peculiar manner in which my said fastening is used much time is saved by the avoidance of all bending of the band, tucking the ends under, and also by avoiding the great difficulty always experienced in passing the ends of bale-bands under so that they come in contact with the cotton or the bagging.

My improvement consists, first, in a rectangular metal plate, provided with two parallel slots, through which the extreme ends of the bands are made to pass, as will hereinafter be described; and, second, in a metal sleeve or ring, the object of which will be at once understood by referring to the drawing, on which—

Figure 1 is a perspective view of the rectangular plate above referred to, with one end of the bale-band securely attached to the same, and likewise showing the manner in which the opposite end of the band, after being brought round the bale, is passed through the vacant

slot, and thence inserted in the sleeve. Fig. 2 is a sectional view of the tie as when both ends are secured; and Fig. 3, a perspective view of the same as when in use on a bale.

A is the rectangular tie-plate, above referred to; and *b b'*, the slots in same. B is the sleeve or ring, which may be made either of cast, wrought, or malleable iron.

The method of applying the band is as follows: One end of the same is first passed through the sleeve B, then over the bar *c*, and through the slot *b* of the tie-plate A. It is next brought back under *c*, and again through the sleeve B. The extreme end is next bent back on the outside of sleeve B, in order to prevent the said sleeve from releasing either the end of the band or the tie-plate A, hence securely fastening the said end, as well as the said sleeve B, in its proper position. This arrangement will also secure the transportation of bands without loss of ties, from the fact that the tie-plate and sleeve are secured to one end of the band at the factory.

The operation of securing my band is as follows: After the bands have been placed around the bale, the tie-plate A is inclined slightly outward, in order that the free end *d* of the band may be passed from the inner or side nearest the bale through the slot *b'*, and thence through the sleeve B, and drawn tight.

It will be seen that the band impinges upon the edges of the sides of the slot *b'*, in such a manner that the greater the strain brought to bear upon the same, the more firmly will it be held, and the band being passed through the sleeve B the end is held firmly down, so that the impinging force of the angular edges of the slot *b'* causes a friction which it is impossible to overcome without breakage of the band. The end of the band, after passing through the sleeve B, may also be turned back to the front over the said sleeve B.

After the bales have been pressed, and the bands secured upon the same, in the manner herein described, the end of the band projecting beyond the sleeve B may be clipped off or bent back, as described.

In compressing the bales for shipment, when it is desirable that the size of the bales shall

be permanently reduced as much as possible, the facility with which the slack of the band is taken up by my method of fastening prevents the bale from expanding after the pressure is withdrawn, and therefore holds it closely to the size to which it is brought by the press; an extra quantity of clipping of ends is also by this means economized.

I do not claim a tie-plate provided with slots, as described, nor do I claim the sleeve or slide, for I am well aware that neither are in themselves new or patentable; but

What I do claim as new, and desire to secure by Letters Patent, is—

A bale-tie, consisting of a plate, A, having slots *b b'*, sleeve B, and a band or hoop, the looped end of which is clinched over the sleeve B, and the free end passed through the slot *b'* from the under side, and secured in the said sleeve, substantially as and for the purpose set forth.

Witnesses: WILLIAM A. JORDAN.
H. N. JENKINS,
J. C. HUBBELL.