

J. L. SHEPPARD.
BALE-BAND TIGHTENER.

No. 188,195.

Patented March 6, 1877.

Fig. 1.

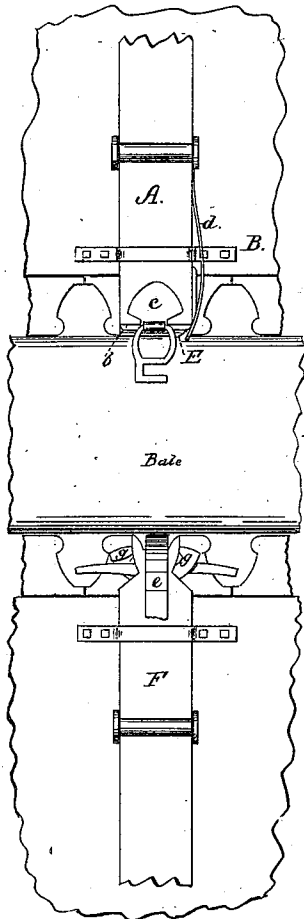


Fig. 2.

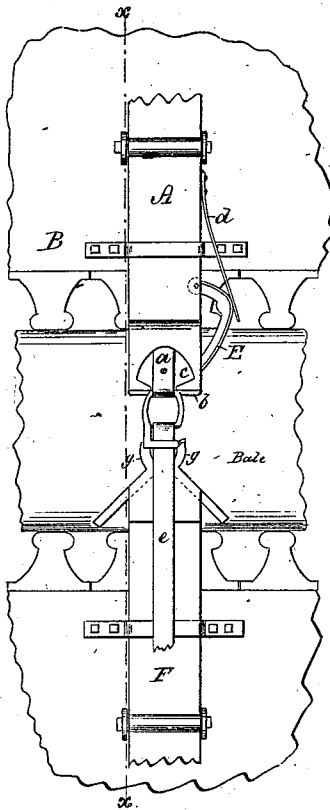


Fig. 3.

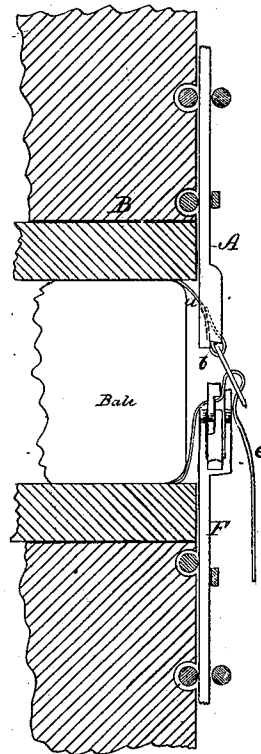


Fig. 4.

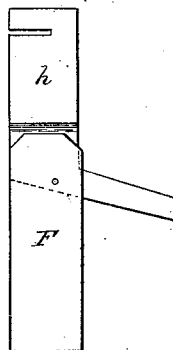
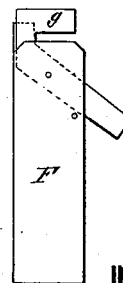


Fig. 5.



WITNESSES:

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UNITED STATES PATENT OFFICE.

JOHN L. SHEPPARD, OF CHARLESTON, SOUTH CAROLINA.

IMPROVEMENT IN BALE-BAND TIGHTENERS.

Specification forming part of Letters Patent No. **188,195**, dated March 6, 1877; application filed January 20, 1877.

To all whom it may concern:

Be it known that I, JOHN L. SHEPPARD, of the city and county of Charleston, and State of South Carolina, have invented a new and Improved Bale-Band Tightener; and I do hereby declare that the following is a full, clear, and exact description of the same.

The invention is an improvement in the class of bale-band tighteners in which sliding bars are attached vertically to the front of the platen and follower, and provided with grippers for seizing and holding the ends of the band.

The invention consists in the construction of parts, as hereinafter described and claimed.

In the accompanying drawings, forming part of this specification, Figure 1 is a front view of a fragment of a press and bale with my invention applied, the respective ends of the band being engaged with the bars by which they are brought together. Fig. 2 is a similar view, showing the bars to which the band is temporarily attached pushed toward each other, and the ends of the band locked together. Fig. 3 is a sectional view on line *x*, Fig. 2. Figs. 4 and 5 show modifications of the gripping or clamping jaws for holding the free end of the band.

The bar A, to which the buckle end *a* of the band is attached, is secured to the front of the platen B in vertical position, and arranged in suitable guides or ways, so that it may be slid up and down by means of a lever (not shown) or other device suitable for the purpose. The lower end of bar A is provided with a notch or shoulder, *b*, and also with an open slot, *c*, which is enlarged in its upper portion, Figs. 1 and 2. When the bar A is in the position shown in Fig. 1, the slot *c* is opposite the end of the groove in the under side of the platen B, in which the band lies. The buckle end of the band passes through the slot *c*, and the buckle itself lies in or engages the notch or shoulder *b* in the bar A. The said end of the band is supported in such position by the bar E, which is pivoted to the platen, and held in suitable position by the spring *d*; but when the bar A is moved downward the spring yields, and the bar E is turned on its pivot, and thus moved out of

the way, as shown in Fig. 2. The lower bar F is attached to the follower of the press in substantially the same manner as the upper bar A is attached to the platen, so that it may be slid up and down at the same time, and by similar means.

The upper end of the bar F may be provided with a pair of pivoted dogs, *g*, to clamp the free end of the band *e* against the end of bar, as shown in Fig. 1, or a single dog may be employed, as shown in Fig. 5; or, as a second modification, a short angular plate, *h*, may be pivoted to the bar F, and provided with a lateral open slot to receive the band, Fig. 4.

In any case it is requisite that whatever device be employed to secure the free end *e* of the band to the end of bar F, it shall be capable of being quickly and conveniently operated to release the band when the lock has been effected.

The operation is as follows: When the bale has been compressed, and the respective ends of the band engaged or locked, Fig. 2, with the bars A F, (of which there may be any required number,) the bars A F are forced toward each other, thereby taking up the slack, and drawing the band tight around the bale. The free end *e* of the band is passed through the slot of the buckle, and looped or bent down in the usual way. The bars A F are then released and drawn back to their original position, Fig. 1, and the bale removed from the press.

What I claim is—

1. The combination of the sliding bars A F, constructed to adapt them to bite or engage the buckle and free end of the band, substantially as shown and described.

2. The bar A, formed with an open slot, and an angular edge face or shoulder in the lower end of the same, whereby the band may pass through the slot, while the buckle rests against the angular-faced end of the bar, substantially as and for the purpose set forth.

3. The combination, with the bar A, the end of which is formed with an open slot, of a movable bar, E, which serves to retain the band in place, and is constructed to be auto-

matically opened and closed as the bar A is reciprocated, substantially as and for the purpose set forth.

4. The combination, with the bar F, sliding vertically in keepers on the front of the follower, of the locking device, pivoted to said bar, and serving to clasp the edge or

edges of the band, and securely retain the same as the bar is forced upward, substantially as and for the purpose set forth.

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Witnesses:

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