R. Lewis.

Cotton Bale Tie.

No. 23,474. Patented Apr. 5, 1859.

Fig. 1

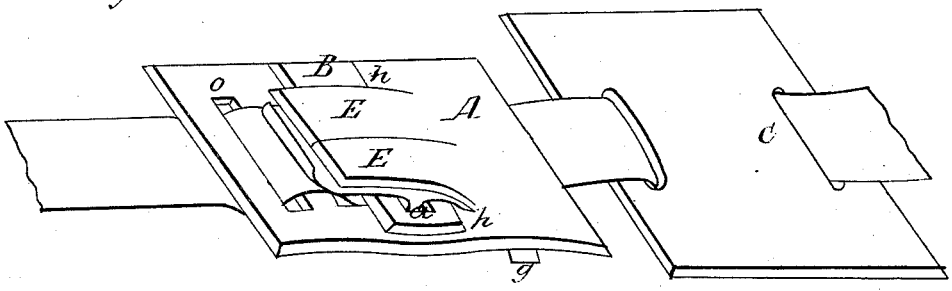


Fig. 2.

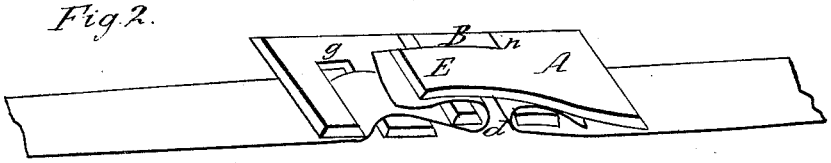


Fig. 3.

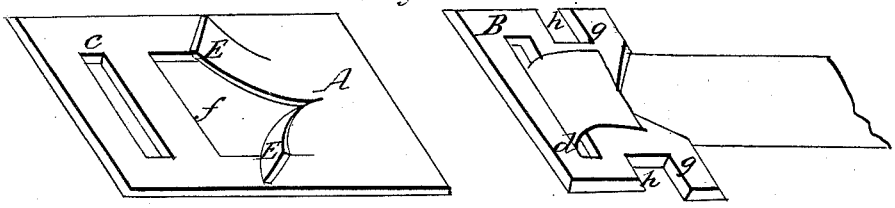
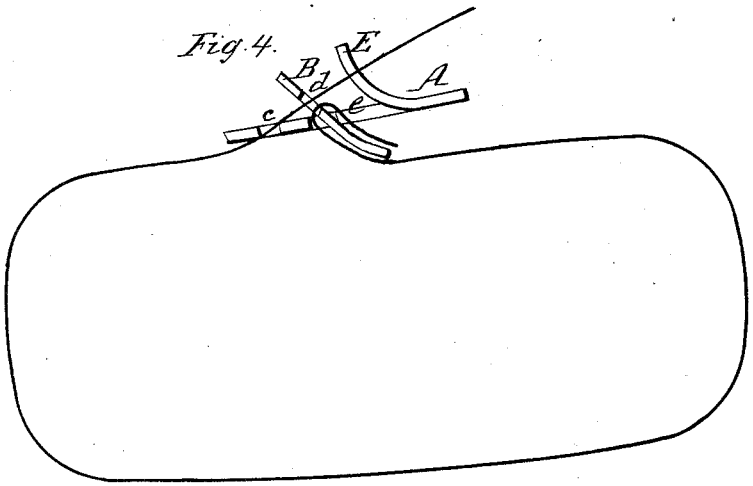


Fig. 4.



Witnesses.

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UNITED STATES PATENT OFFICE.

RICHARD LEWIS, OF CHARLESTON, SOUTH CAROLINA.

IMPROVEMENT IN METALLIC COTTON-BANDS.

Specification forming part of Letters Patent No. **23,474**, dated April 5, 1859.

To all whom it may concern:

Be it known that I, RICHARD LEWIS, of Charleston, district of Charleston, State of South Carolina, have invented a new and useful Metallic Cotton-Band, intended to be used chiefly for cotton, but may be used for other baled goods; and I do hereby declare that the following is a full, clear, and exact description of the construction and operation of the same, reference being had to the annexed drawings, making a part of this specification.

Figure 1 is a perspective view of that portion of the band which is united by the clasp or device, and in which the invention consists, as secured on the bale. Fig. 2 is a longitudinal sectional view of the above. Fig. 3 is a perspective view of plates A and B previous to being united. Fig. 4 is a sectional view of the band and clasp as being adjusted to the bale.

I construct my clasp of the best quality of strap-iron scant one-eighth of an inch in thickness. The plates or parts composing the clasp may be struck into form by any of the processes for punching and swaging iron, suitable dies being used for the purpose. The transverse slot *c* in plate A should have an opening in the plates, longitudinal direction, equal to twice the plate's thickness, and transversely an eighth of an inch larger than the band to be used. That portion E E of plate A that is struck up is divided in the center; for the purpose of allowing the band to be drawn through readily and in a more direct line, the center division should extend beyond the side division, that they may open in an oblique direction, for the purpose above specified. Plate B should have the form shown in Fig. 3. The slot *d* should have an opening of a quarter of an inch in the plates, longitudinal direction, and transversely the same as plate A. The small shoulder or legs *g g* on B should be so arranged that in its connection with A, when it is drawn down for the purpose of inserting the band, it may be stopped when the slots *c d* are opposite.

To unite the clasp and band the legs *g g* or small shoulders of B are passed through the opening *f* in A by constructing them. They are afterward expanded to secure the plates together. The end of the band is then secured to plate B, as shown in Fig. 3, when it is ready for use.

To operate the band, it having encircled the bale, plate B is drawn down. The slots *c d* in both plates being opposite, the band is passed through them until the reactionary force of the goods acts upon the plates, when they catch and hold every inch of the band that is drawn through them by the hinge and slide action of plate B, in combination with the slots *c d*. Plate B being actuated by the reactionary force in tightening the band, its tendency is by the hinge or lever action to press down the band on plate A, causing the band to bind on the edges of slot *c*, thereby causing sufficient friction and bending of the band to prevent slipping. The divided projections E E are not essential to the catching or self-fastening feature, and unless well spread apart will interfere with it by the sliding action of plate B. The band is drawn against the projections E E by the expansive force of the cotton when released from the press, plate B being stopped by shoulders *h h*. The projections E E are then struck down with a hammer, carrying the end of the band with them and firmly securing plate B to plate A both on its upper and under side.

To reuse the band at the shipper's press a suitable wedge is driven under the divided portion of A, and it is set up. This is done previous to cutting the band from the bale. The band should be cut close to the clasp at its adjustable end. The piece of band being removed from the slots, it is ready for reuse, and is operated in the manner above described.

The object sought for in this band is the adjustable and self catching and fastening feature, whereby the shortest possible space of time is required under the shipper's press.

I am aware that many good devices have been furnished to the planter, and for packing cotton on the plantation are all that is necessary; but at the shipper's press they are thrown aside and the banding replaced with rope, from its not being adjustable or requiring too much of the press's time in manipulating. All that is required in this band is to pass it around the bale, through the slots, and draw it taut under the press. It makes a perfect fastening, and is not liable to unlock when the

expansive force of the cotton is removed by stowing with the jack. When operated, is as firmly locked off the bale as on it.

I claim—

In the above device, plates A B, with slots *c d*, projections E E, opening *f*, legs *g g*, and shoulders *h h*, in combination, constructed, united, and operated in the manner substantially as above described, and for the purpose set forth.

RICHARD LEWIS.

Witnesses:
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