W. S. DAVIS.
Bale-Tie.

No. 202,242. Patented April 9, 1878.

Fig. 1.

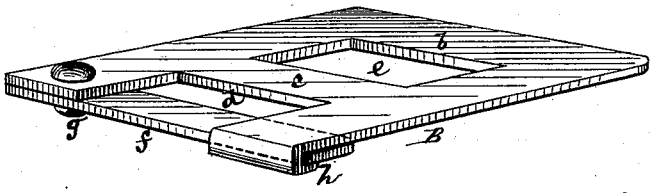


Fig. 2.

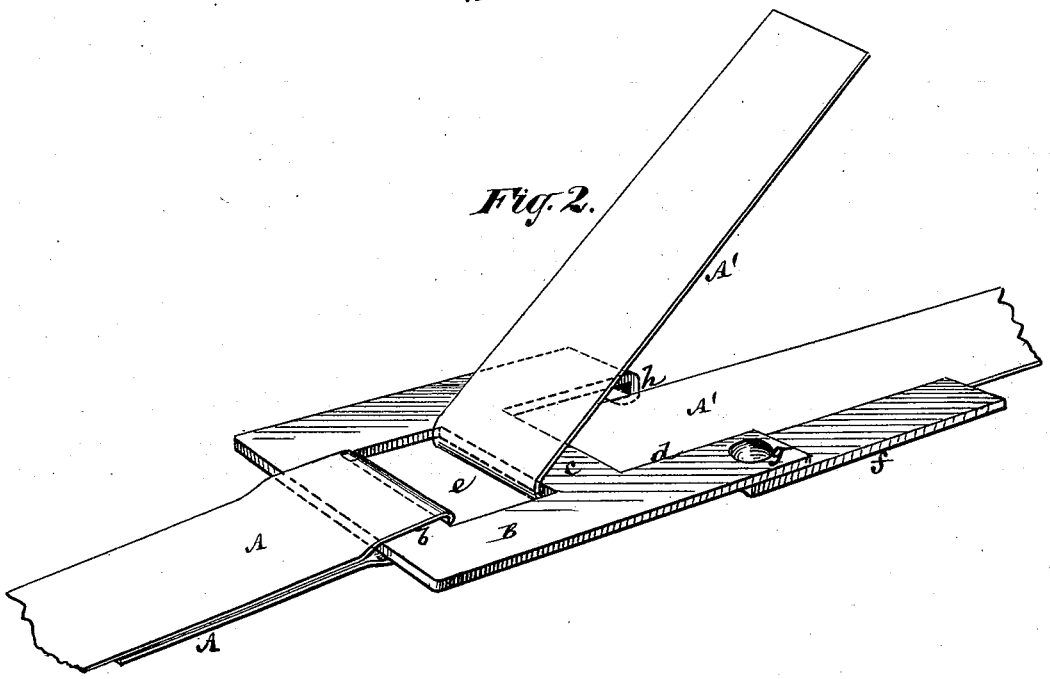
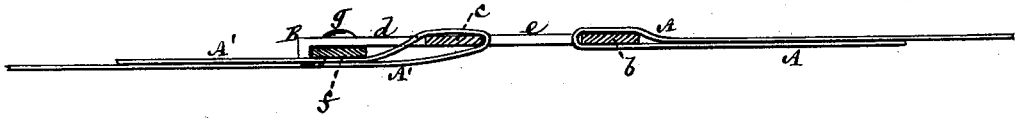


Fig. 3.



Witnesses
John Becker.
Fred. Haynes

Inventor
Waters S. Davis
by his Attorneys
Brown & Allen

UNITED STATES PATENT OFFICE.

WATERS S. DAVIS, OF GALVESTON, TEXAS.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **202,242**, dated April 9, 1878; application filed March 16, 1878.

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 certain new and useful Improvements in Bale-Tiles, of which the following is a description, reference being had to the accompanying drawings, forming part of this specification.

This invention relates to ties for packages or bales of cotton, hemp, rags, or other substances, in which a divided metallic band or hoop encircling the package or bale is used, and an independent slotted tie-plate or fastening is employed to connect the two ends of the band.

The object of my invention is to improve upon and lessen the cost in the manufacture of that particular class of bale-ties in which a plate is employed having an elongated central slot and a slot at each end thereof, said plate being bent at or about its center so as to bring the two ends together and have the end slots coincide so as to receive the end of the packing-band, while the central slot is thus made, by the act of bending, to have an open end into which the loop end of the bale-tie is passed, and through which a sliding plate enters, said plate being made to pass between sockets formed in the members or side walls of said slot, and guided in its movements and prevented from being detached by means of a pin which passes through a slot in the sliding plate.

The invention consists in a certain novel construction and combination of the parts of the slotted tie-plate, whereby a stationary bar arranged to receive the tightening end of the band under and over it, has combined with it a pivoted or swinging bar, arranged to lie across the turned-over portion of said end, substantially as hereinafter described.

In the accompanying drawings, Figure 1 represents a view in perspective of a package or bale fastening constructed in accordance with my invention. Fig. 2 is a view in perspective of the same as applied to a metallic band or hoop; and Fig. 3, a longitudinal section thereof, showing the ends of the hoop after they have been fastened or secured.

Referring, in the first instance, to Figs. 1, 2, and 3 of the drawings, A is the one or fixed end of a metallic bale band or hoop, and A′ the opposite or tightening end thereof. B is the slotted tie-plate or fastening by which said ends of the band are joined together or secured.

When applying the fastening, the fixed or stationary end A of the band is secured to one end of the fastening B. This may be done by riveting or otherwise, but preferably by bending said end of the bands into a hook or loop, and passing such bent end forwardly over and backwardly under a back cross-bar or portion, *b*, of the slotted plate of which the fastening is formed. Said slotted plate is furthermore formed with a stationary cross-bar, *c*, between the bar *b* and the opposite or forward end of the plate, leaving an opening, *d*, between said end and the bar *c*, and a slot, *e*, between the bar *c* and the back portion or bar *b*. The slot *e* not only provides for the entry through it and engagement with the bar *b* of the bent fixed end A of the band, as described, but also for the passage through it, from the inside or beneath, of the opposite or tightening end A′ of the band, which end of the band is formed into a loop by drawing and bending it over the stationary cross-bar *c* in a forward direction on the outside of the latter. When the tightening end A′ of the band has thus been arranged, and the package or bale firmly bound by the band, a movable bar, *f*, is laid across the turned-over portion of said end of the band on the outside of the latter, and said movable cross-bar secured to the forward end of the slotted tie-plate or fastening B, to hold said turned-over portion of the band down or in place.

The bar *f* is secured to the plate B by a rivet or pin, *g*, and is arranged so as to lock when closed with a hook or turned-in portion *h* of the plate; and as thus constructed said bar *f* can be turned or oscillated on its axis, as illustrated in Fig. 2 of the drawings.

The following are a few of the advantages of my improved bale tie or fastening: It is cheap to construct; lies flat on the bale or package when applied; does not require any punching of the band or hoop, and enables the slack of the band to be easily taken up gradually, or without any fixed limit or limits, which adapts it to securing compressed bales.

One important feature in connection with it is that the end of the loop at the tightening end of the band is inserted under the stationary bar *c* and the free end of said loop is outside of said bar.

I claim—

1. The combination of the hinged or pivoted movable bar *f* with the stationary bar *c* of the slotted tie-plate or fastening B, essentially as described.

2. The tie-plate or fastening B, constructed with a fixed cross-bar at one end, a pivoted cross-bar at the other end, and an intermediate fixed cross-bar, substantially as and for the purpose herein set forth.

WATERS S. DAVIS.

Witnesses:
HENRY T. BROWN,
BENJAMIN W. HOFFMAN.