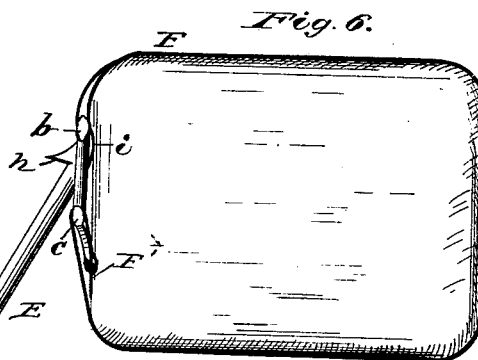
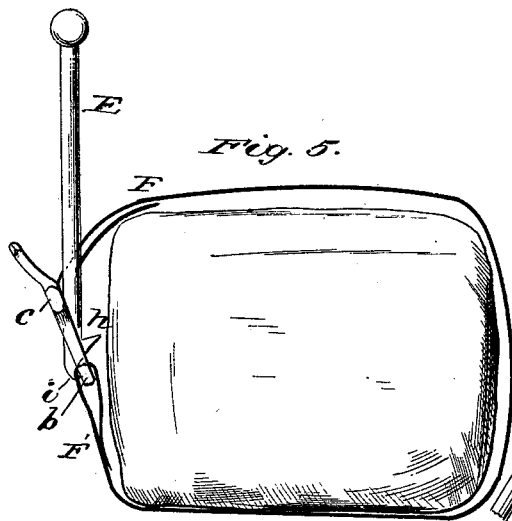
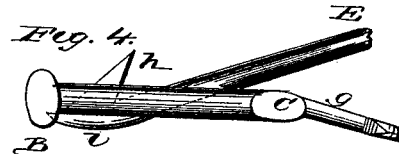
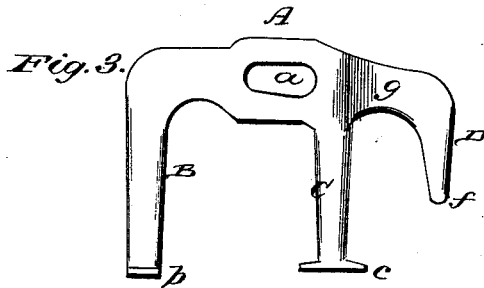
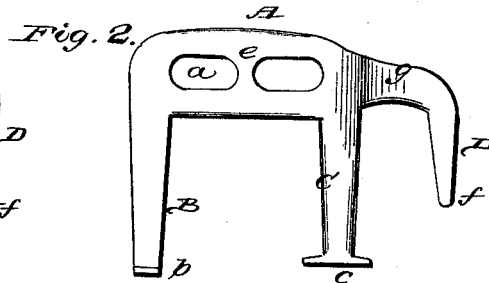
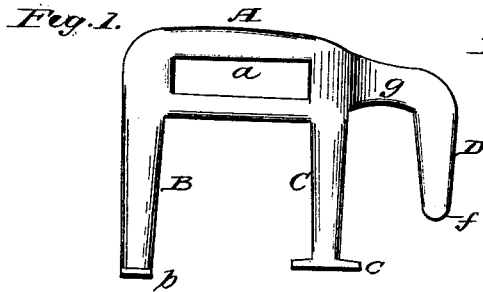


A. RAND.
Bale-Tie.

No. 218,314.

Patented Aug. 5, 1879.



Witnesses
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J. Walter Fowler.

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UNITED STATES PATENT OFFICE.

ANDERS RAND, OF GALVESTON, TEXAS.

IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. **218,314**, dated August 5, 1879; application filed April 7, 1879.

To all whom it may concern:

Be it known that I, ANDERS RAND, of Galveston, in the county of Galveston and State of Texas, have invented certain new and useful Improvements in Bale-Ties; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification, and in which—

Figures 1, 2, and 3 represent side elevations of my combined bale-tie and band or hoop tightener, showing slight modifications in the construction. Fig. 4 is an end view, showing the manner of applying the operating-lever. Fig. 5 shows the method of applying and tightening the band around a bale; and Fig. 6 shows the band and tie in proper position, fastened around the bale.

Similar letters of reference indicate corresponding parts in all the figures.

This invention relates to that class of bale-ties by which the ends of the strap or hoop are tightened around the bale during the operation of uniting them by twisting the tie around an imaginary fulcrum, and thus doubling the ends of the hoop; and it consists in providing a tie of this description with a slotted head to admit of the insertion and manipulation of the twisting implement or lever without interfering with the ends of the hoop, substantially as hereinafter more fully set forth.

In the drawings, A represents the head or body of the tie, which is provided with a slot, *a*. It may sometimes be found desirable to bridge this slot by a brace, as shown at *e* in Fig. 2, or the head A may be enlarged and thickened on both sides of the slot, as shown in Fig. 3, both of these modified forms being simply for the purpose of adding strength to that part of the tie.

Projecting laterally from one side of the head A are three or more arms, B C D, arranged parallel to each other, two of which, B C, terminate in buttons or projections *b c*, while the third, D, which is shorter than the two others, is set to one side of these by a curve or bend in the part *g*, by which it is connected to the head A, as shown more clearly in Fig. 4, and is flattened or compressed lat-

erally, terminating in a point, *f*. The arm B is preferably a little longer than its neighbor C, as shown in Figs. 1 and 2.

To apply this tie to the bale I use a short lever, E, which terminates in a broad hook, *h*, the point of which forms a toe, *i*. One end of the band is doubled around the arm B, being prevented from slipping off by its terminal button *b*, and the other end is likewise secured to the opposite arm C, as shown in Fig. 5. The hand-lever E is then inserted through the slot *a* in the tie from the top, as shown in said Fig. 5, with its toe *i* catching in under and bearing against that side of head A, which is adjacent to its arm B. The projecting hook *h* will prevent the lever from entering too far into the slot, so that the proper bearing upon the tie may readily be obtained. By a quick twist of the hand the lever is then bent down into the position represented in Fig. 6, which draws the two ends F F' of the band together, a point midway between arms B and C of the tie constituting the fulcrum around which lever E turns, so that both ends of the band are operated upon simultaneously and to the same extent. When the tie assumes a flat position its point or prong D is inserted sidewise in under the lower end, F', of the band, and the job is complete, the band being securely locked around the bale in such a manner that it cannot by any possibility become accidentally detached.

To prevent the toe or point of lever E from entering into the bale during the operation of tightening and locking, the toe *i* is rounded off on the under side, and its hook *h*, besides serving as a stop, in the manner described, enables the implement to be used as an ordinary cotton-hook for handling the bales, and for a variety of other purposes.

Having thus described my invention, I claim—

In a bale-tie provided with the fingers B C and lip D, the slotted head or body A, substantially as and for the purpose set forth.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

ANDERS RAND.

Witnesses:

J. CHOVENBERG,
A. J. WALKER.