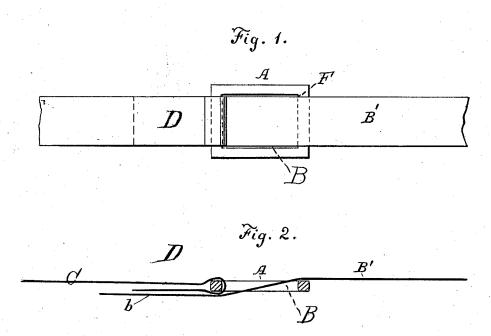
## J. M. CUTLIFF. Bale-Tie.

No. 203,599.

Patented May 14, 1878.



Witnesses: Muckingham. & H. Bradford Inventor: John M. Cutliff By. Henry J. Ennis. his attorney

## UNITED STATES PATENT OFFICE.

JOHN M. CUTLIFF, OF ALBANY, GEORGIA.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. 203,599, dated May 14, 1878; application filed April 29, 1878.

To all whom it may concern:

Be it known that I, John M. Cutliff, of Albany, in the county of Dougherty and State of Georgia, 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 thereof, 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, and to letters of reference marked thereon, which

form a part of this specification.

This invention relates to an improvement in bale-ties for cotton, hay, &c.; and consists in a clamp or clasp, of metal or other suitable material, preferably of rectangular form, having a rectangular opening or slot in the same, into which one end of the strap or band forming a part of the bale-tie is hooked, after being first bent so as to draw inwardly against the clamp at one end of the slot, the other end of the said strap or band being inserted into the slot to traverse it diagonally from the upper side of the slot at the unoccupied end to the lower edge of the slot at the opposite end, to be driven by compression beneath the hooked end of the strap, in which position the parts will be held by the expansion of the material in the bale after the compressive force by which it was formed has been removed, all of which will be hereinafter more fully described, and particularly pointed out in the claims.

In the accompanying drawing similar letters of reference indicate like parts of the in-

vention.

The clamp or clasp A is of metal or other suitable material, and has the rectangular slot or opening B made therein. The strap or band C is of sheet metal, cut into strips to suit the purpose for which it is to be used.

Cotton and hay presses are ordinarily provided with doors that may be opened to expose the partially-formed bale, for the pur-

pose of applying the bale-ties.

The mode of applying this improved baletie is very simple and is as follows, to wit: the band or strap C is placed around the bale before it is quite fully compressed, and one end of it is bent to form the hook D, which is

hooked into the slot B, as shown, so that it will draw inwardly upon the clamp A. The straight or unbent end B' of the strap C is then cut, if not already of the proper length to reach far enough to be introduced into the slot, and put beneath the hook D a sufficient distance to retain it in its place until the bale can be fully compressed.

The straight or unbent end B' of the strap C bears against the corner F of the edge of the slot B at the end opposite the hook D, and traverses the slot B diagonally, and passes under the hook D, which also bears against it, thus furnishing two points of bearing for

the clamp A upon the strap C.

After the bale-ties have all been placed as above described, the bale is fully compressed, and said final compression drives the straight or unbent end E' farther under the hook D of the strap, and they are held at the point where the compression leaves them by the force exerted against the clamp and strap by the expansion of the material in the bale after the compresion has been removed therefrom, from the fact that the force resulting from such expansion is exerted upon the two points of bearing before mentioned, causing the clamp to bite or bind the strap C so firmly as to prevent its withdrawal from the slot B.

Having thus described my invention, what I claim as new and useful, and desire to secure by Letters Patent of the United States, is—

1. A bale-tie composed of the clamp A, having the true rectangular slot B, in combination with the end of the plain strap C, having the hook D and straight end B', constructed and operated substantially as described.

2. A bale-tie in which one end of the plain strap C is hooked into the slot B of the clamp A and bent inwardly, and the other end traverses said slot B from one upper corner diagonally to the opposite lower corner, substantially as and for the purpose set forth.

tially as and for the purpose set forth.

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

JOHN M. CUTLIFF.

Witnesses:
D. W. KIRKMAN,
JOHN A. DAVIS.