

W. CLARK.
Cotton-Bale Tie.

No. 197,602.

Patented Nov. 27, 1877.

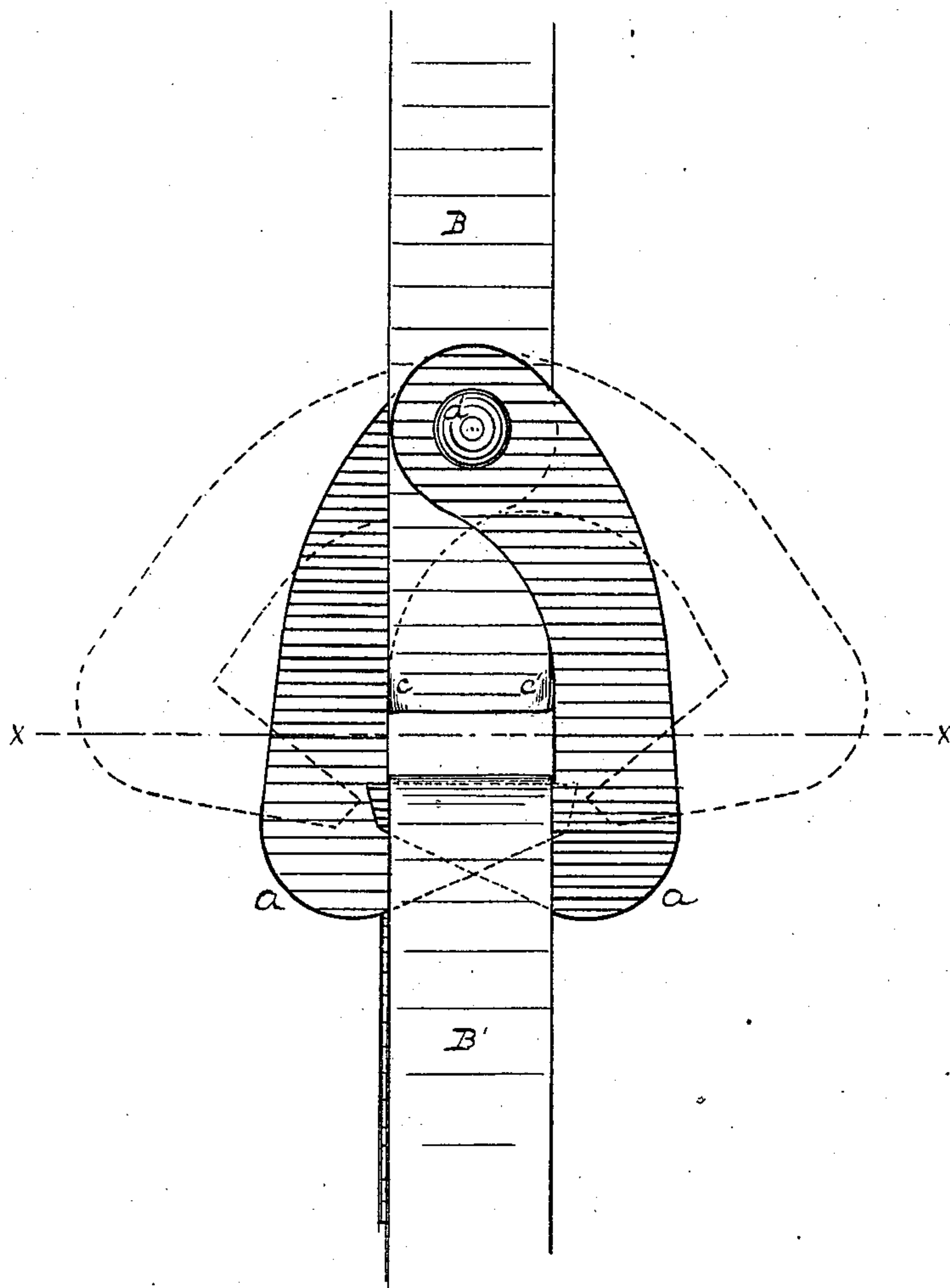


Fig. 1.



Fig. 2.

Witnesses
C. L. Parker
Jno. S. Kennedy

Inventor William Clark,
By Attorney George H. Christy.

UNITED STATES PATENT OFFICE.

WILLIAM CLARK, OF PITTSBURG, PENNSYLVANIA.

IMPROVEMENT IN COTTON-BALE TIES.

Specification forming part of Letters Patent No. **197,602**, dated November 27, 1877; application filed September 18, 1877.

To all whom it may concern:

Be it known that I, WILLIAM CLARK, of Pittsburg, county of Allegheny, State of Pennsylvania, have invented or discovered a new and useful Improvement in Cotton-Bale Ties; and I do hereby declare the following to be a full, clear, concise, and exact description thereof, reference being had to the accompanying drawing, making a part of this specification, in which—like letters indicating like parts—

Figure 1 is a plan view of my improved tie, showing it closed or fastened in full lines and open or unfastened in dotted lines; and Fig. 2 is a cross-section through $x x$ of Fig. 1.

My present invention relates to an improvement in the class of cotton-bale ties referred to in the Field patent, No. 140,024, June 17, 1873, which I now own.

Under a separate application I have made provision for two swinging hooks, riveted to one end of the band or hoop, so as to be swung into position through and engaging a loop on the other or free end of the hoop.

I have found that a still further improvement can be made in this class of fastenings by providing stops in such position that each hook may be swung into position, and no farther, as a result of which the line of maximum strain will coincide exactly or nearly with the line of greatest resistance, and the hooks can more quickly and easily be brought into the proper relative positions in the loop with reference to this end.

The hooks $a a$ are pivoted by a rivet, a' , to one end, B, of an ordinary hoop or band, and the opposite or free end B' of the latter is bent to form the usual loop, into which the hook ends of the hooks are to be swung in making the connection. These hooks are, preferably, pivoted on opposite faces of the hoop B. In order, now, to provide a stop which shall at the proper point arrest the swinging motion of each hook as it comes into fastening position, I turn up or down the end cor-

ners of the hoop end B, as represented at $c c'$, so that each such bent corner shall engage the edge of the hook adjacent thereto, as shown in the drawings. Preferably the parts are shaped and proportioned about as shown, so that the space between the inner sides of the hooks, when closed together, shall equal, or about equal, the width of the hoop at the end of the latter; but such shape may be varied from somewhat, and the space between the inner sides of the hooks, when closed together, may be less than the width of the hoop. In the latter case lips, lugs, or projections may be struck up, bent, or punched in the edges of the hoop, or in its body, at the proper points for engaging the inner sides or edges of the hooks when they come to a fastening position, or so that they shall not pass far beyond it; and, as a mechanical equivalent of the devices described, the bends, lugs, lips, or projections referred to may be made in the hooks, so as to be caused to engage the projecting end of the hoop B under the circumstances named. Obviously both hooks may be riveted to the same side of the hoop, and the like stops may be made in like manner, but a little higher, for the outer hook, with useful results, though such construction would be on some accounts objectionable.

It will also be seen that by the use of the stops the hooks will be prevented from shutting past or overlapping each other, after manufacture and before use, such as to interfere with their ready adjustment for engagement with the loop.

I claim herein as my invention—

The combination of hoop, swinging hooks, and stops, substantially as set forth.

In testimony whereof I have hereunto set my hand.

WILLIAM CLARK.

Witnesses:

J. J. McCORMICK,

CLAUDIUS L. PARKER.