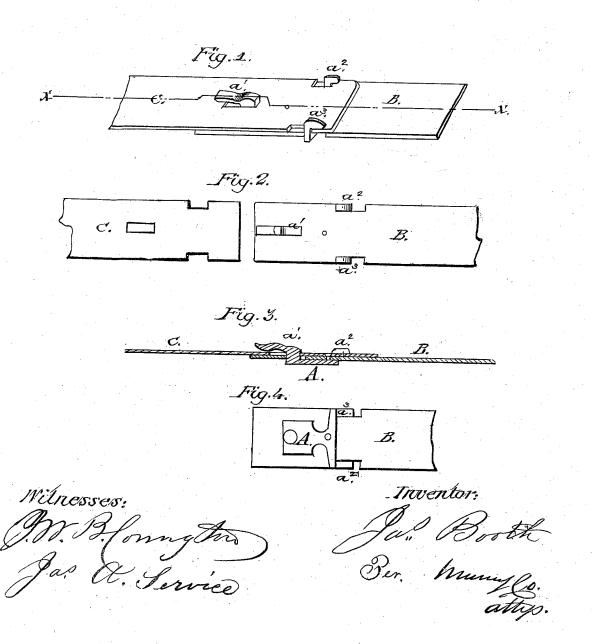
J. Buth,

Bale Tie.

No.54,675.

Patented May 15. 1868.



## UNITED STATES PATENT OFFICE.

JAMES BOOTH, OF ST. LOUIS, MISSOURI.

## IMPROVEMENT IN COTTON-BALE TIES.

Specification forming part of Letters Patent No. 54,675, dated May 15, 1866.

To all whom it may concern:

Be it known that I, JAMES BOOTH, of the city and county of St. Louis, State of Missouri, have invented a new and useful Improvement in Cotton-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 make and use the same, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of my improved cotton-bale tie, the ends of the hoop being attached to it. Fig. 2 is an outside view of the same, the one end of the hoop being detached. Fig. 3 is a longitudinal section of the same, taken through the line x x, Fig. 1. Fig. 4 is an under-side view of the end of the hoop to which the tie is permanently attached.

Similar letters of reference indicate like parts.

My invention has for its object to furnish an improved cotton bale tie by means of which the ends of the hoop may be easily secured to each other, and which will be strong enough to stand an immense strain; and it consists of a cotton-bale tie constructed and combined with the ends of the hoop as hereinafter decribed—that is to say, in such a way that the strain upon the hoops may be distributed between the three points of support, enabling the hoop to sustain an immense strain.

A is the tie, which is east of malleable iron in the form shown in Figs. 1, 3, and 4, having three hooks, a',  $a^2$ , and  $a^3$ , east upon it—two,  $a^2$  and  $a^3$ , upon the side edges, and one, a', upon the central front edge—the points of the edge hooks pointing in one direction and the point of the central hook pointing in the opposite direction. This tie A is also east with a projection upon the body of the tie, by which it may be riveted to the end B of the hoop. The end B of the hoop is prepared for the attachment of the tie by forming two square

notches in its edges of such a size as to receive the hooks  $a^2$  and  $a^3$  and a central slot for the reception of the hook a'. This slot is of such a size that the hook a' can only be passed through it by first entering the end of the said hook a' and then turning the body of the tie down to its place, the hooks  $a^2$  and  $a^3$  passing through the notches formed in the edges of the hoop, and the projection formed upon the body of the tie passing through a hole made in the said hoop for its reception. The said projection is then riveted down upon the hoop, as shown in Fig. 2, securing the said tie A firmly to the end B of the hoop. The end C of the hoop is also prepared with two notches in its edges corresponding with the two edge hooks,  $a^2$  and  $a^3$ , of the tie A. It also has a slot in the central part, as shown in Fig. 2, for the reception of the end hook, a'. This slot is of a size that the hook a' can only enter it by having its point passed through first, after which the end notches are passed down over the hooks  $a^2$  and  $a^3$ . The strain of the bale upon the hoop then draws the sides or shoulders of the side notched against the shanks of the hooks  $a^2$  and  $a^3$  and the end of the slot against the rear of the hook a', the hooks, slots, and notches being so arranged that the strain upon the hoop shall be equally distributed between the three points of support, which construction gives to the tie the power of resisting an immense strain.

I claim as new and desire to secure by Letters Patent—

An improved cotton-bale tie, A, constructed with three hooks, a'  $a^2$   $a^3$ , and combined with the ends B and C of the hoop, substantially in the manner described, and for the purpose set forth.

The above specification of my invention signed by me.

JAMES BOOTH.

Witnesses:

D. P. RICHARDSON, RALPH W. MILLS.