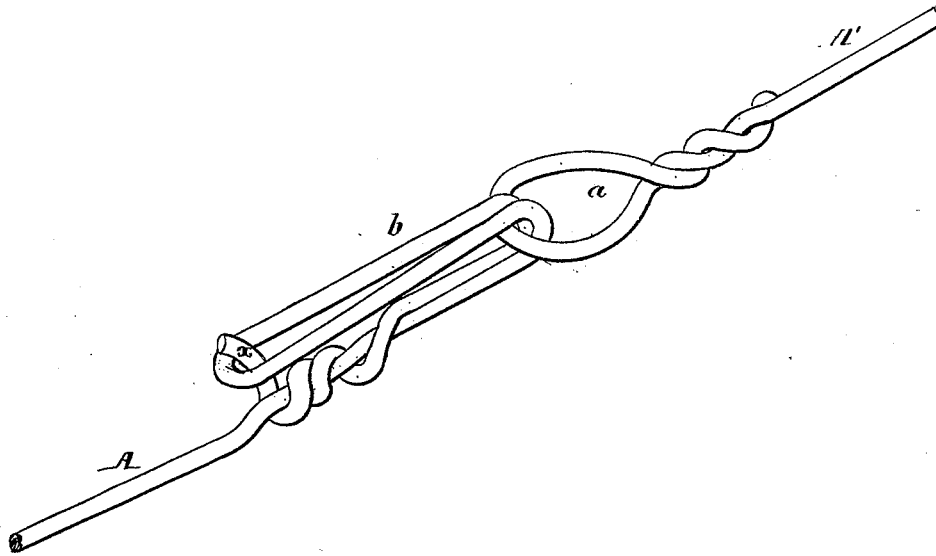


G. F. JONES.

BALE-TIE.

No. 187,284.

Patented Feb. 13, 1877.



*Attest:*

*F. McGraw*  
*Fred Conjarnon*

*George F. Jones*  
*By his attorney*  
*Charles V. Foster*

# UNITED STATES PATENT OFFICE.

GEORGE F. JONES, OF SCRANTON, PENNSYLVANIA, ASSIGNOR OF ONE-HALF OF HIS RIGHT TO CHARLES P. JONES, OF SAME PLACE; SAID GEORGE F. AND CHARLES P. JONES ASSIGNORS TO THEMSELVES, HENRY A. KINGSBURY, AND EDWARD P. KINGSBURY, OF SAME PLACE.

## IMPROVEMENT IN BALE-TIES.

Specification forming part of Letters Patent No. 187,284, dated February 13, 1877; application filed December 6, 1876.

*To all whom it may concern:*

Be it known that I, GEORGE F. JONES, of Scranton, Luzerne county, Pennsylvania, have invented Improvements in Bale-Ties, of which the following is the specification:

The object of my invention is a bale-tie, constructed, as fully described hereafter, to obtain a secure and effective fastening without the use of devices apart from the wire, and without using wire of a weight beyond that required for confining the bale.

The drawing shows, in perspective, one form of my improved tie.

A and A' are the two ends of the wire, of which the tie is made, one end being formed into a loop or eye, *a*, and the other being doubled, twisted round itself, and bent to form the hook *b*. As thus described the tie does not differ from others in use, which are objectionable, as the hook will yield under pressure; and the fastening can only be made secure by clamps applied to the hook, or by using wire thicker than is required, merely to confine the bale of such weight, as will form a hook of the required strength.

The rings, clamps, or other devices applied to the hooks are expensive, liable to get lost, and are often inefficient.

In my improved tie the extreme end of the wire A, after being twisted round itself, is bent upward to form a tongue, *x*, which is turned to one side to permit the loop *a* to be

passed over the hook *b*, and is then inserted in the latter and bent over to one side or backward, thereby effectually preventing the hook from rising or drawing back.

It will be seen that this simple device most effectually secures the fastening, so that it cannot give way under any possible pressure; that no attachments are required; that the cost of making the tie is not increased, and that much lighter wire may be used than in ordinary ties.

It will be apparent that the same principle of securing the loop by the end of the wire, of which it is made, may be embodied in fastenings of other forms, and that a separate piece of wire may be used to form the tongue *x*.

I claim—

1. A bale-tie provided with a bent looped hook, *b*, and with a tongue, *x*, extending through the loop of the hook, and securing the latter, as set forth.

2. A bale-tie made of wire doubled at one end, bent to form a looped hook, and twisted round itself, and bent upward into a tongue, *x*, adapted to the said hook, all as set forth.

In testimony whereof I have signed my name to this specification in the presence of two subscribing witnesses.

GEORGE F. JONES.

Witnesses:

C. F. WILCOX,  
F. W. COLVIN.