A. BUCKMAN.
Wire Bale-Tie.

No. 216,997. Patented July 1, 1879.

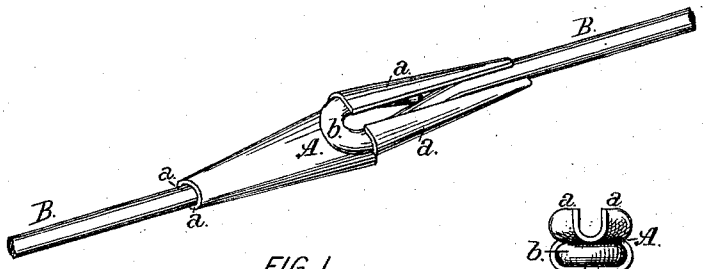


FIG. 1.

FIG. 2.

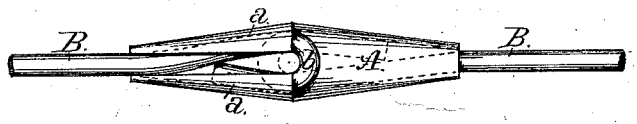


FIG. 3.

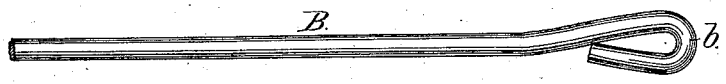


FIG. 4.

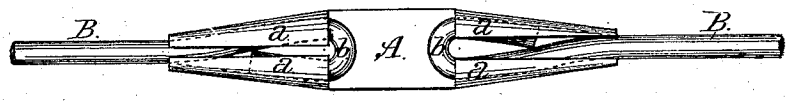


FIG. 5.

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UNITED STATES PATENT OFFICE.

ALEXANDER BUCKMAN, OF CASTLETON, NEW YORK, ASSIGNOR OF ONE-HALF HIS RIGHT TO FRANK P. HARDEE, OF SAME PLACE.

IMPROVEMENT IN WIRE BALE-TIES.

Specification forming part of Letters Patent No. **216,997**, dated July 1, 1879; application filed November 14, 1878.

To all whom it may concern:

Be it known that I, ALEXANDER BUCKMAN, of Castleton, in the county of Rensselaer and State of New York, have invented certain new and useful Improvements in Wire Bale-Ties, of which the following is a full and exact description.

My invention consists in the fastening device herein shown and described, and in combination with said device a wire tie having its end or ends re-enforced by bending the wire back on itself to form an eye, as herein set forth.

The object of my invention is to produce a cheap and reliable bale-tie that will be so simple in its construction and operation that it can be applied by the most inexperienced person.

In the accompanying drawings, which form a part of this specification, and to which reference is herein made, Figure 1 is a perspective view of the fastening device and the ends of the bale-tie as connected together; Fig. 2, an end view of same; Fig. 3, a plan view of same, Fig. 4, a plan view of the end of the bale-tie, and Fig. 5 a modified form of the fastening device.

As shown in the drawings, the fastening device A consists of a piece of either sheet or cast metal, provided at each of its edges with the curved lips *a*, arranged at opposite sides of the device. These lips at each end of the device are formed at a sufficient distance apart to just admit the body of the wire between them; but running thence toward the center of the device they increase in distance apart. Their overturned edges, by constantly increasing in width, maintain the opening between them at a uniform distance, or nearly so. In this manner a tapering socket is formed at each end of the device for receiving the end of the bale-tie, in the manner hereinafter described.

As shown in Figs. 1, 2, and 3, the fastening device has the tapering sockets arranged at opposite sides of the plates; but in the modification shown in Fig. 5 the two sockets are both arranged on the same side. When made in this form sufficient space must be left between the two sockets for entering the eye of the bale-tie therein.

B, Fig. 4, represents the end of the wire bale-tie, having the end of the wire doubled back to form a re-enforcement of it in the shape of an elongated eye, *b*, which, when inserted in the socket of the device, secures the wire therein against any endwise strain upon the tie.

In practical use the fastening device A is secured to one end of the tie before it is applied to the bale. For this purpose the lips *a* on one end of the fastening device are forced down upon the eye of the wire sufficiently close to securely hold the two parts together, the space between the edges of the lips at the other end of the device being left sufficiently large for freely admitting the body of the wire therein, the difference in the openings between the lips of the two sockets being clearly shown in Fig. 5.

In applying the tie to a bale the latter must be compressed until sufficient "slack" is obtained for the tie to permit the eye *b* to clear the large end of the socket. The body of the tie is then slipped into its place between the lips *a* of the fastening device, and the eye *b* drawn backward in the socket, in which position it is securely held by the force exerted by the compressed contents of the bale.

I claim as my invention—

1. The fastening device for securing the ends of wire bale-ties herein described, consisting of a metallic piece, A, having at both ends of it a tapering socket formed by bending over the lips *a*, in the manner and for the purpose specified.

2. The combination, with the fastening device A, as herein described, of the wire bale-tie B, having both of its ends re-enforced by bending back the wire upon itself, substantially as and for the purpose herein specified.

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Witnesses:

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