

(No Model.)

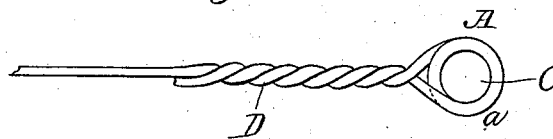
E. S. LENOX & J. HENTZ.

BALE TIE.

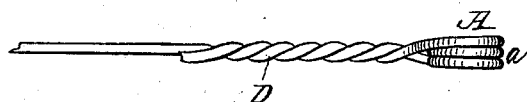
No. 302,009.

Patented July 15, 1884.

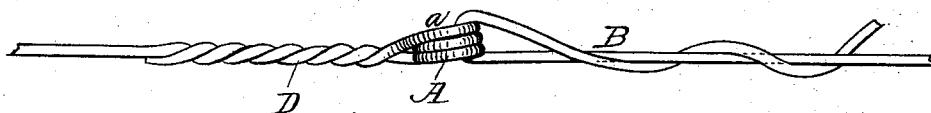
*Fig. 1.*



*Fig. 2.*



*Fig. 3.*



Witnesses;

*John C. Dewey*  
*George T. Dewey*

Inventors;

*Edwin S. Lenox*  
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# UNITED STATES PATENT OFFICE.

EDWIN S. LENOX AND JACOB HENTZ, OF WORCESTER, MASSACHUSETTS,  
ASSIGNORS TO THE WASHBURN & MOEN MANUFACTURING COMPANY,  
OF SAME PLACE.

## BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 302,009, dated July 15, 1884.

Application filed January 21, 1884. (No model.)

*To all whom it may concern:*

Be it known that we, EDWIN S. LENOX and JACOB HENTZ, both of the city of Worcester, in the county of Worcester and State of Massachusetts, have invented a certain new and useful Improvement in Bale-Ties; and we do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and in which—

Figure 1 represents a top or plan view of the manufactured end of our improved bale-tie. Fig. 2 represents a side view of the part shown in Fig. 1; and Fig. 3 represents the manufactured end of the tie shown in Figs. 1 and 2, combined with the other free end of the tie, which is made straight, and in the process of baling is passed through the eye at the manufactured end of the tie and bent back and twisted upon itself.

Our invention relates to a certain improvement upon the invention in wire bale-tie fastenings for which Letters Patent of the United States were granted to Charles Brown, dated May 7, 1872, and numbered 126,515; and it consists in the interposition of one or more additional coils of the wire in the manufactured end of the tie, for purposes to be hereinafter stated.

To enable those skilled in the art to which our invention belongs to make and use the same, we will proceed to describe it more in detail.

In the drawings, A represents the manufactured end of the tie, and B the straight and free end, which is combined with the end A, after the tie has been passed around the bale, by passing it through the eye or loop and then bending it back and twisting it with the body of the tie in the manner shown in Fig. 3 of the drawings.

Our improved bale-tie may be made in the following manner: After the wire has been straightened from the coil, it is cut into suit-

able lengths, as may be desired, and then three or more complete circular coils, *a*, are formed in it by a machine adapted for the purpose at a suitable distance—some two or three inches from one end—to make the large eye C. The end D, extending from one of the coils *a*, is then intertwisted with the body of the tie, as shown in the drawings, and the tie is finished and ready for use.

Those skilled in the art to which our invention belongs will readily appreciate the value of our improvement, and see that by the interposition of one or more additional coils in the manufactured end of the tie patented to the said Brown, the loop or eye will be rendered much stiffer and stronger, and a larger eye or loop may be used, and when the tie, after having been applied to the bale, is subject to great strain or tension, the eye or loop made of three or more coils of the wire, will remain firm, and will not draw down and abrade the wire passed through it, as is liable to happen when the loop or eye is made of only two coils of the wire.

Having described our invention in bale-ties, what we claim therein as new and of our invention, and desire to secure by Letters Patent, is—

1. A wire bale-tie provided at one end with an eye or loop, C, made of three or more coils, *a*, of the wire, the projecting end D being intertwisted with body of the tie, as shown, and the other end, B, of the tie being left free and straight, substantially as described.

2. The combination, with the loop C, made of three or more coils, *a*, of the wire, the projecting end D being intertwisted with the body of the tie, as shown, of the free and straight end B, in substantially the manner shown in Fig. 3 of the drawings.

EDWIN S. LENOX.  
JACOB HENTZ.

Witnesses:

JOHN C. DEWEY,  
GEORGE T. DEWEY.