(No Model.)

L. E. EVANS.

BALE TIE.

No. 302,243.

Patented July 22, 1884.

Fig. I.

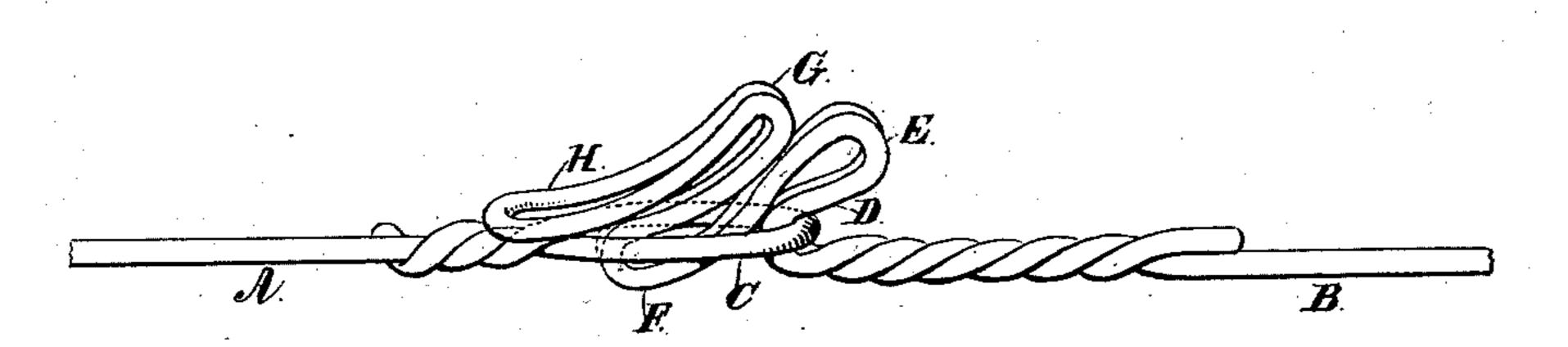
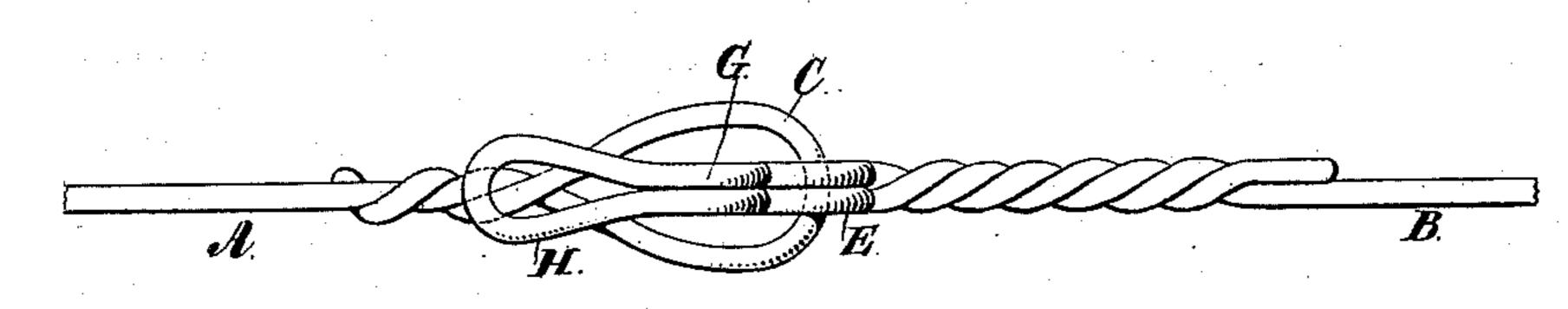


Fig. 2.



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## BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 302,243, dated July 22, 1884.

Application filed April 10, 1884. (No model.)

To all whom it may concern:

Be it known that I, Lemuel E. Evans, of East Orange, Essex county, New Jersey, have invented a new and useful Improvement in Bale-Ties, of which the following is a specification.

The invention relates to a means of securing bands of wire used for confining bales of cotton, hay, and analogous material; and it consists in providing the hook at one end of the band with two braces or supports, one of which rests upon the opposite wire, and the other enters the eye which engages with the hook, the principle being to support the hook and prevent its straightening under strain, first, by the jamming of one of the braces between the parts of the eye as the latter tends to elongate; and, second, by the bearing of the other brace upon the opposite part of the band.

In the accompanying drawings, Figure 1 is a side view of my improved bale-tie, and Fig. 2 is a view of the same from above.

Similar letters of reference indicate like

25 parts. A and B represent the ends of the wire band. In the end A, I form a loop or eye, C, by twisting, as shown. In the end B, I form another loop or eye longer than the loop C in 30 the end A. The parts of the loop in the end B are brought together side by side, and the loop is then bent four times, to form the hook D and bights E and F and G. The extremity H is flattened and forms a brace. When the 35 two parts of the tie are engaged, as shown in the drawings, the loop C is received in the hook D, the bight F enters the loop C, and the brace H rests upon the upper side of the wire A. When the band is under strain, the loop 40 C tends to close, and in so doing its parts meet and tightly grasp the bight F. The brace H is at the same time more firmly pressed against the wire A. Any tendency which the hook D may have to straighten is thus met by 45 two resistances, first, that due to the jamming of the bight F in the loop C; and, second, that I

due to the binding of the end H upon the wire A. The parts H and F thus act as braces to re-enforce the hook. The consequence is, as I find by practical experiment, that the hook D 50 will not straighten, and that the greater the strain that is applied the more firmly do the parts of the tie bind and jam together.

I claim as my invention—

1. A wire bale band or strap having in each 55 of its ends a loop or eye, one eye having its parts brought together and bent to form a hook, a downwardly-projecting bight, and an inclined brace, the said parts being adapted to engage in and with the loop on the opposite end of the band, substantially as described.

2. In a bale-tie, a loop or eye at one end of the band, and a hook at the opposite end, adapted to receive said eye, the said hook be-65 ing provided with a projecting arm adapted to enter and pass through said eye, and an inclined brace adapted to rest upon the opposite end of the band immediately in rear of said eye, when the parts of the tie are engaged, 70 substantially as described.

3. In a bale-tie, a loop or eye at one end of the band, and a hook at the opposite end, the said hook being provided with two braces, one resting upon the opposite wire, and the other 75 passing through the eye, and adapted to be jammed between the parts thereof when the eye is extended under strain, when the parts of the tie are engaged, substantially as described.

4. In a bale tie, the combination of the wire A, having a loop, C, at its extremity, and the wire B, having at its end a loop longer than the loop C, the parts of said last-mentioned loop being brought together and bent to form 85 a hook, D, bights E and F and G, and flattened extremity H, substantially as described.

LEMUEL E. EVANS.

Witnesses:

E. F. TOURTELLOT, W. A. FRENCH.