(No Model.)

M. CAMPBELL.

BALE TIE.

No. 263,761. Patented Sept. 5, 1882.

Fig 1

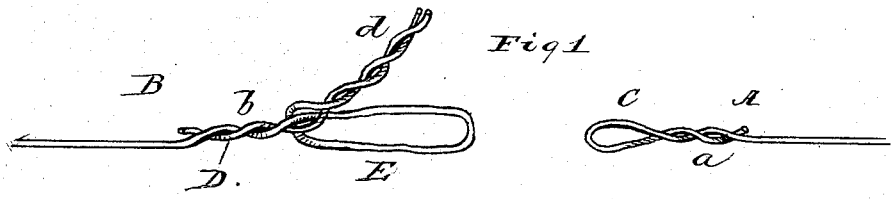


Fig 2

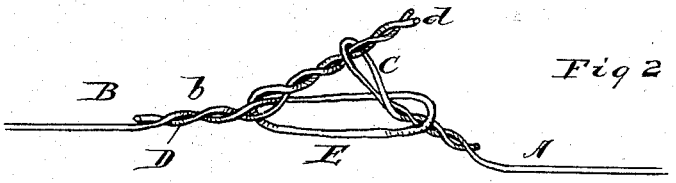
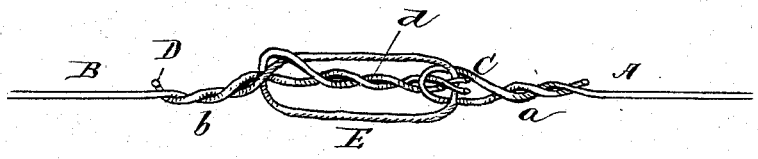


Fig 3



Witnesses

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UNITED STATES PATENT OFFICE.

MARVIN CAMPBELL, OF SOUTH BEND, INDIANA.

BALE-TIE.

SPECIFICATION forming part of Letters Patent No. 263,761, dated September 5, 1882.

Application filed March 31, 1882. (No model.)

To all whom it may concern:

Be it known that I, MARVIN CAMPBELL, a citizen of the United States, residing at South Bend, in the county of St. Joseph and State of Indiana, have invented certain new and useful Improvements in Bale-Ties, fully set forth in the following specification, reference being had to the accompanying drawings, in which—

Figure 1 represents a plan view of the two ends of a bale-tie embodying my invention, the body of the tie not being shown; Fig. 2, a side elevation of the same, showing the ends as they are brought together and united for fastening; and Fig. 3, a plan view of the same, showing the fastening after the ends are drawn down on the bale.

My invention relates to that class of bale-ties which are made of wire, and particularly to the fastening devices by means of which the ends are secured together.

In another application of even date herewith, (Case A,) I have claimed generally a loop and tongue fastening, and have shown two modes of carrying the invention into practice. The present improvement consists in the special construction of the loop and tongue fastening illustrated but not claimed in my other application mentioned above.

I will proceed to describe in detail the construction and operation of my present invention, and will then point out definitely in the claims the particular improvements which I believe to be new and desire to secure by Letters Patent.

In the drawings, A and B represent the respective ends of a wire bale-tie. In the end of the former a plain loop, C, is made by bending the wire back upon itself and forming a twist, *a*. A short section of wire, D, is applied to the end B, being secured to the latter by a twist, *b*, some distance from the end of the main strand, and leaving the free end of the latter considerably longer than the end of the wire D. A loop, E, is then formed in the wire B just in front of the twist *b* by bending the wire back on itself, as shown in Fig. 1 of the drawings, and the free ends of the two strands are fastened together by a twist, *d*, at the rear end of the loop, as shown in the same figure. This twist makes a tongue extending forward over the loop lengthwise, and the two ends of the tie are fastened together after the tie is placed around the bale, as usual, by passing the loop C through the loop E, and then over the end of the tongue *d*, as shown in Fig. 2 of the drawings. When the bale is released and strain is brought upon the tie the ends will be drawn down in the position shown in Fig. 3 of the drawings, and the loop C will be held within the loop E by means of the tongue *d*, which is somewhat longer than the loop E, and therefore will strike the forward end of the latter, as shown in the same figure, and stop the loop C from drawing out.

This fastening device is simple, cheap, and secure, and if the bale can be readily compressed slightly the ends may be unfastened without cutting, thereby permitting the tie to be used repeatedly.

As described above, the drawings show the tongue-loop formed in the main wire; but obviously it may be formed in the independent strand by reversing the relative lengths sufficiently for this purpose. If it is desired, the loop and tongue may also be formed entirely from the main strand by turning the end back and bending and twisting the two strands thus formed, substantially as described; but I prefer to employ a second independent strand, as it enables me to utilize refuse pieces of wire.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a wire bale-tie, a fastening loop and tongue formed from two strands of wire twisted together at two points, and the loop made by a bend in one of them, substantially as described.

2. The strands B and D, twisted together at the inner end of the latter, and of unequal lengths outward therefrom, the longer one being bent to form a loop, E, and the two extremities twisted together to form a tongue, *d*, at the rear end of the latter, substantially as described.

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Witnesses:

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