Oct. 10, 1933. G. MONOPOLI 1,929,929

WIRE TIE AND METHOD OF FORMING SAME

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Fig. 1

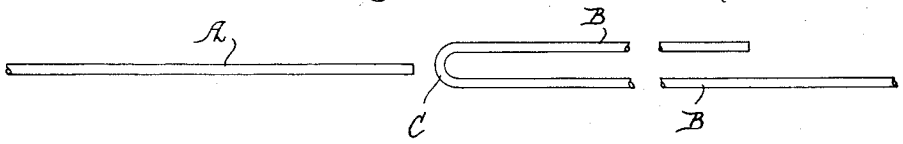


Fig. 2

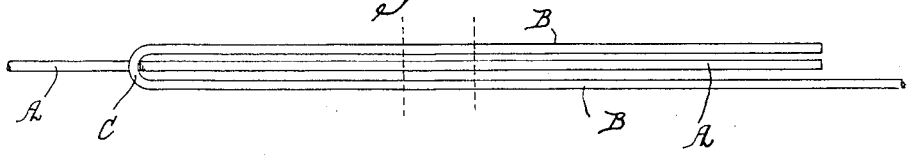


Fig. 3



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WIRE TIE AND METHOD OF FORMING SAME

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2 Claims. (Cl. 24—27)

This invention has been devised with the object of providing a tie for connecting together two ends of wire and is particularly adaptable for use in joining the two ends of a wire band around a packing case or package of any nature, the connection together of adjacent ends of fencing wires, or in other analogous circumstances requiring the making of a tie between two wire ends.

The invention provides an improved tie of the known class in which the two wire ends are overlapped and the overlapped ends gripped and helically twisted one upon the other to bind them together so that the convolutions of one wire upon the other will effect a grip against the two being longitudinally drawn apart and thereby to keep the strain. It has generally been customary hitherto to twist together merely the two overlapped ends and it has been found that such a form of tie may be broken by a strain on the wire band, if it be a band, drawing one end longitudinally out from the other. The present invention provides a tie of this nature that ensures of a much more effective gripping and binding of one end with the other so that the possibility of the two ends being drawn apart is practically eliminated.

This purpose is effected by providing that three overlapping members or strands shall be associated in the helical twisting of one wire end with the other. This is obtained by first bending back one wire end into an elongated loop, with its sides extending parallel, and then passing the other wire end across the loop end and along between the side members thereof, so that three overlapping parallel members are thus provided. These are then gripped in the middle of their length and twisted at right angles to the line of their length, by the use of any appliance adapted to making a wire tie of this description.

The invention therefore consists in a tie made by the helical twisting together of two ends of wire one of which is doubled back into elongated loop form, while the other is left plain and which two ends are associated by bringing the plain end in across the end of the loop of the other member to overlap between the two sides thereof, and also in the method by which the tie is effected under which the three overlapping members are gripped in the middle of the overlap and twisted helically one upon the other by winding them together in a direction at right angles with their length.

The invention is illustrated in the accompanying drawing, in which:—

Figure 1 is a plan view of the two ends to be tied, as prepared ready for the tie.

Figure 2 is a similar view, but showing the two ends arranged in the manner required to effect the tie.

Figure 3 is a plan of the tie, or knot, effected by the invention.

A is one wire end and B the other. The end A is left plain, while the end B at a distance in from its extremity, is doubled back to form a bend C and is then laid parallel with the main portion for a distance, to thereby provide the elongated loop with parallel sides. The extremity of the looped wire is left free.

In making the tie, the end A is carried lengthwise in across the bend C of the wire B until its end is about level with the inner end of the loop and so that it lies in between the two side members of the loop. The three strands thus overlapping are then gripped at the middle of their lengths, as between the points indicated by dotted lines in Figure 2, and the whole twisted for a number of turns in a direction at right angles to their length, by the use of an appropriate tool or machine. This will cause the three to helically intertwine outwardly, to right and left of the point of grip and to form respectively right and left hand twists.

The three strands will thus become firmly and tightly interwoven one with the other so that they shall be effectually tied together to secure the two wire ends. Moreover any extra strain placed longitudinally on the wires will cause a more effective grip by causing the two loop members of the joint to bind more firmly upon the single member.

I claim:—

1. A tie securing two wire ends together, comprising an elongated loop with parallel sides at one of the wire-ends, the other end lying in longitudinally overlapped relation with the sides of the loop, the relationship between the three strands being that of a triple, twisted helix.

2. A method of forming a tie between two wire ends comprising the doubling over of one wire end to form an elongated loop, disposing the other wire end to extend in across the bend and along between the sides of the loop, gripping the three overlapping strands at the middle of their lengths and then twisting them together by a twisting action directed in a plane at right angles with their length.

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