H. CHANNON.

METHOD OF SPLICING WIRE ROPE.

No. 190,823. Patented May 15, 1877

Fig. 1.

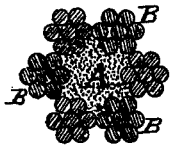


Fig. 2.

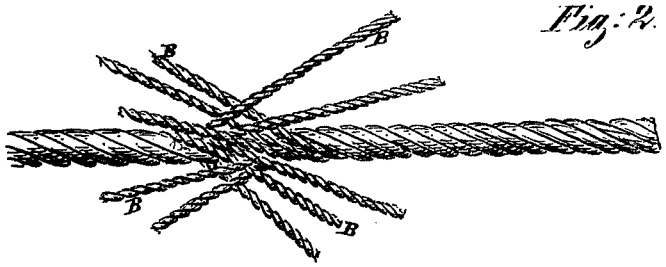


Fig. 3.

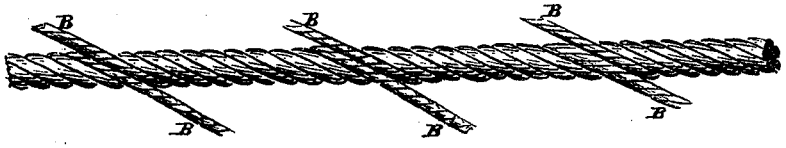
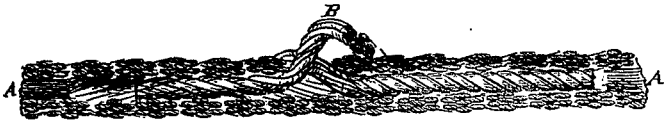


Fig. 4.

Fig. 5.



Witnesses

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HENRY CHANNON, OF CHICAGO, ILLINOIS.

IMPROVEMENT IN METHODS OF SPLICING WIRE-ROPE.

Specification forming part of Letters Patent No. **190,823**, dated May 15, 1877; application filed February 10, 1877.

To all whom it may concern:

Be it known that I, HENRY CHANNON, of Chicago, in the county of Cook and State of Illinois, have invented a new and Improved Method of Splicing Wire-Rope, of which the following is a true and accurate description, reference being had to the accompanying drawing, in which—

Figure 1 is a cross-section of a wire-rope. Fig. 2 represents the strands of the wire-ropes unlaid for the required distance of making a splice, and the rope ends butted against each other, with the strands of one placed between the strands of the other. Fig. 3 shows the strands of each rope laid into the scores formed by unlaying the strands of the other rope at different distances. Fig. 4 is the rope after being spliced at a point where two strands cross each other, and not being drawn taut yet; and Fig. 5 is a longitudinal section of the spliced rope, showing how the strands are placed into the heart of the rope after crossing each other.

The nature of my invention relates to the splicing of wire-ropes which are to pass through blocks or over pulleys, and which, therefore, should be of equal thickness over all; and it consists in the making of a long splice, the same as sailors make on ropes, with the difference, however, that after the opposite strands have crossed each other, they are passed into the center or core of the rope, to take the place of the hemp heart, which previously is removed.

For making the splice I unlay about ten feet of each rope end, after which I place the ropes so together that the strands of one rope will interlock with the strands of the other rope, as shown in Fig. 2. Now I unlay a strand to the length of about eight feet of one rope, and into the score formed thereby I lay the strand of the other rope. The next strand I unlay but five feet, and into the score formed thereby I lay the strand opposite to it of the other rope again, and the third strand I unlay but two feet, which operation I repeat on the other rope end, when the splice will have the appearance as shown in Fig. 3. Now I cut off the projecting strands to an equal length of from one foot and a half to two feet, and one by one I cross each pair of strands, so that they interlock each other, and pass them into the center of the rope in opposite directions, as shown in Fig. 5, which I accomplish by means of a tool made for that purpose, which will pass in between the strands, and will follow the coil of the strands, removing the hemp heart and drawing the strand in place of it.

Where the strands cross each other before entering the heart of the rope, by untwisting each strand a little, so as to be more flat, said crossing-point becomes almost invisible.

With the above-described splice the rope will be of uniform thickness and strength, and perfectly smooth everywhere, as no cut wires will project from or work out to the surface of the same.

Although my splice has some similarity with the long splice heretofore used for hemp and Manila ropes, yet it has a very important advantage over it, and that is the drawing of the ends of the strands into the axis of the rope, where they are firmly held, and are out of sight.

What I claim as my invention is—

The method of forming a splice in wire-ropes having a hempen heart or core, consisting in unlaying the strands of opposite ropes in interlocking them and fastening the ends by inserting them in the heart of the ropes, substantially as set forth.

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