

(Specimens.)

3 Sheets—Sheet 1.

T. C. BATCHELOR & A. LATCH.

WIRE CABLE.

No. 401,112.

Patented Apr. 9, 1889.

Fig. 1.

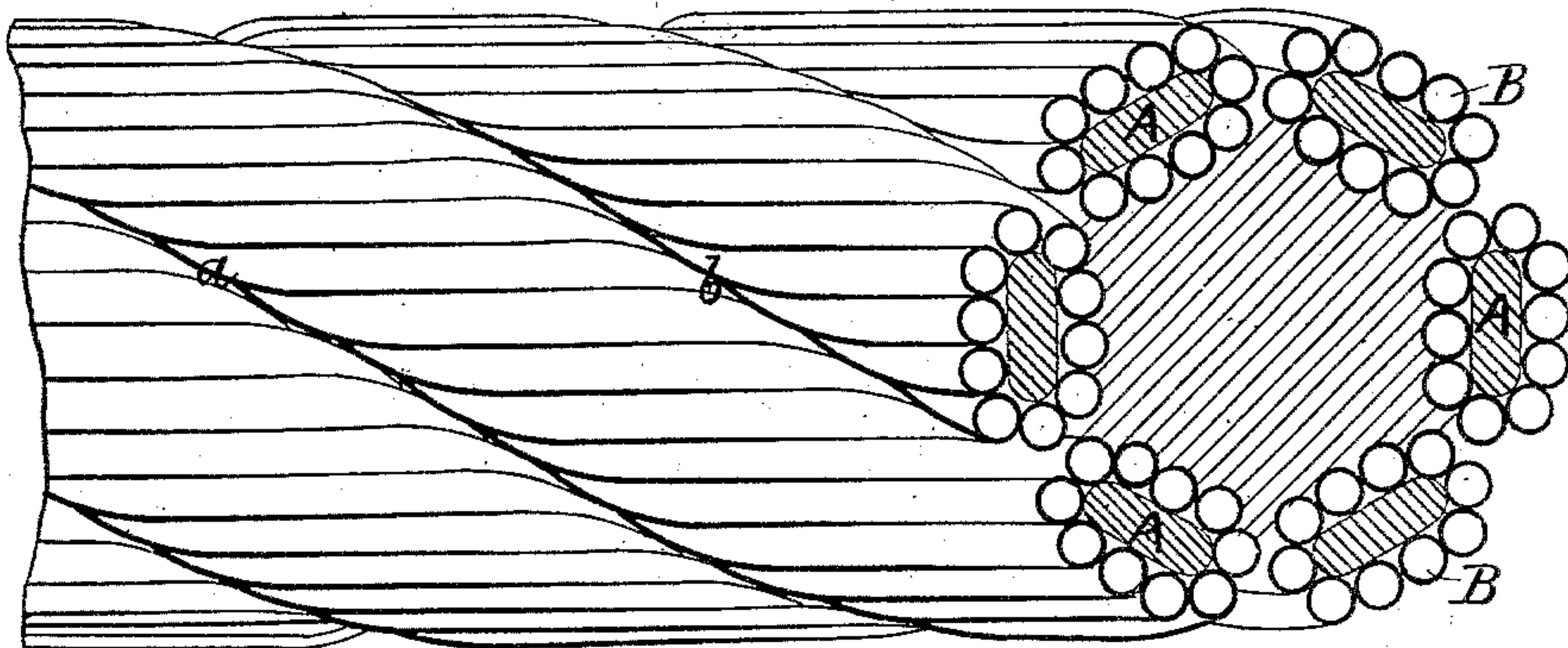


Fig. 2.

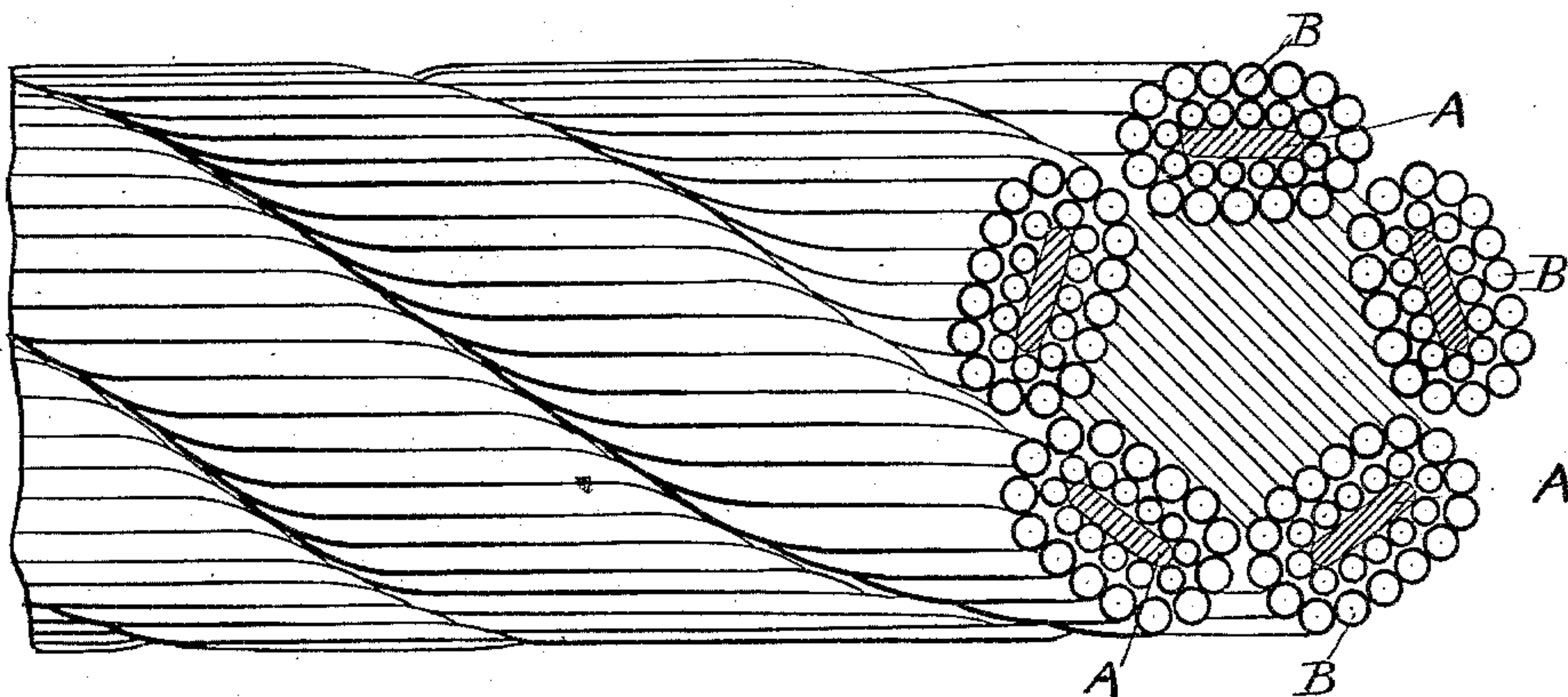
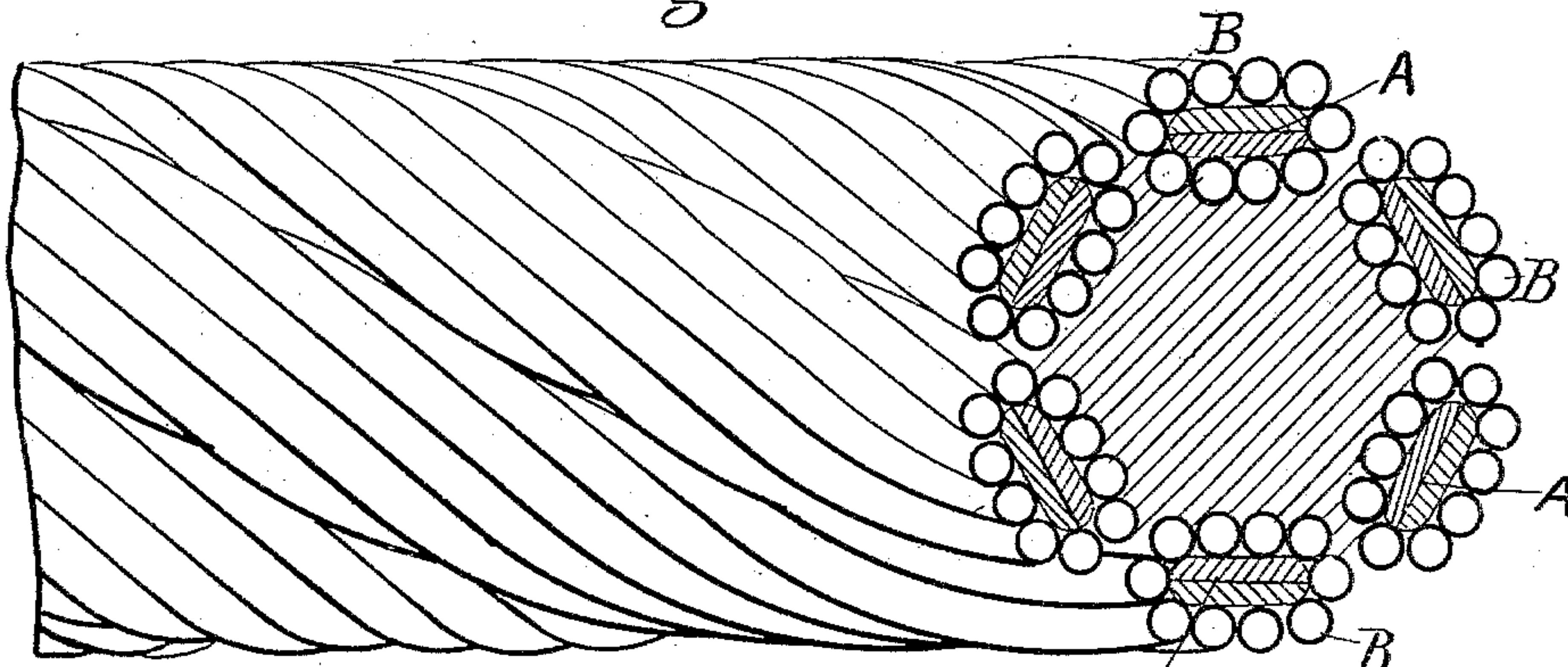


Fig. 3.



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Fig. 4

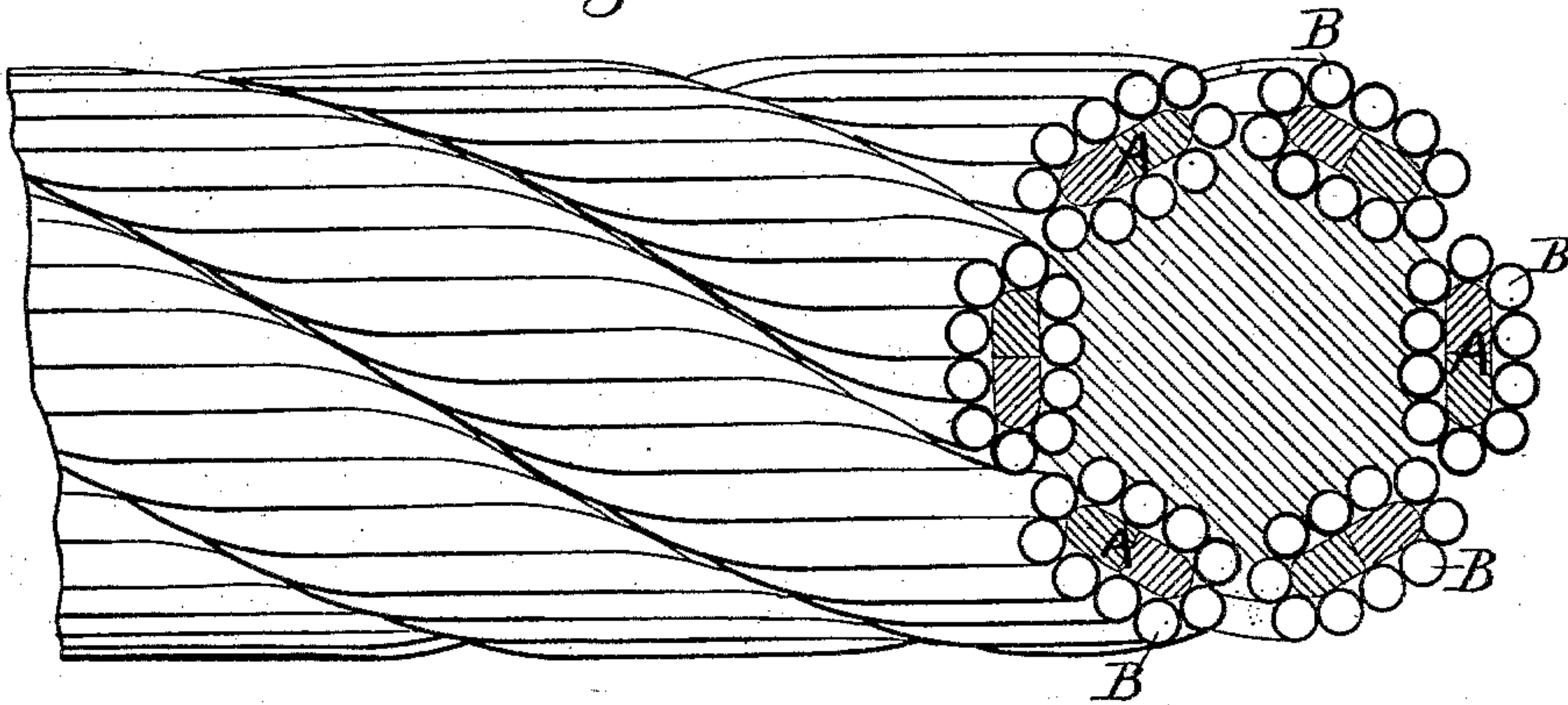
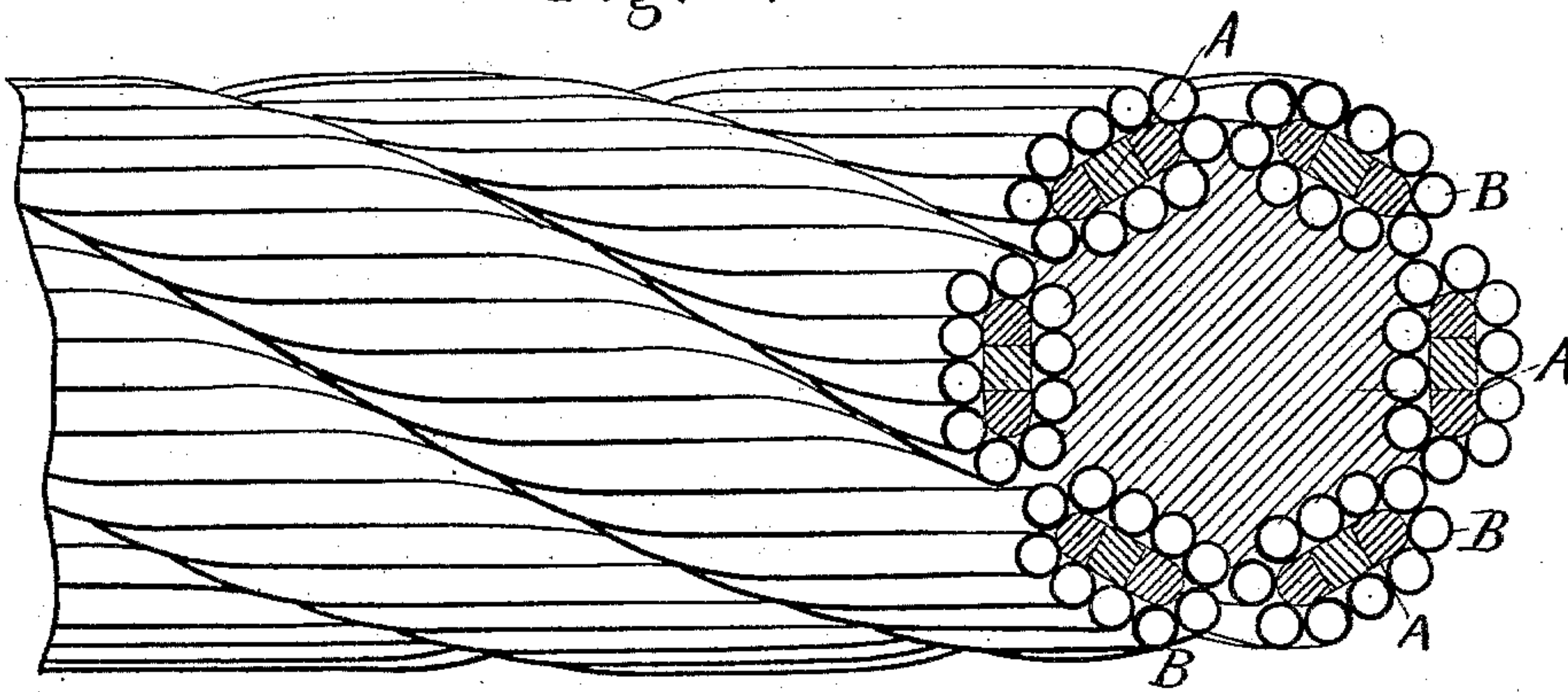


Fig. 5



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3 Sheets—Sheet 3.

T. C. BATCHELOR & A. LATCH.

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Fig. 6

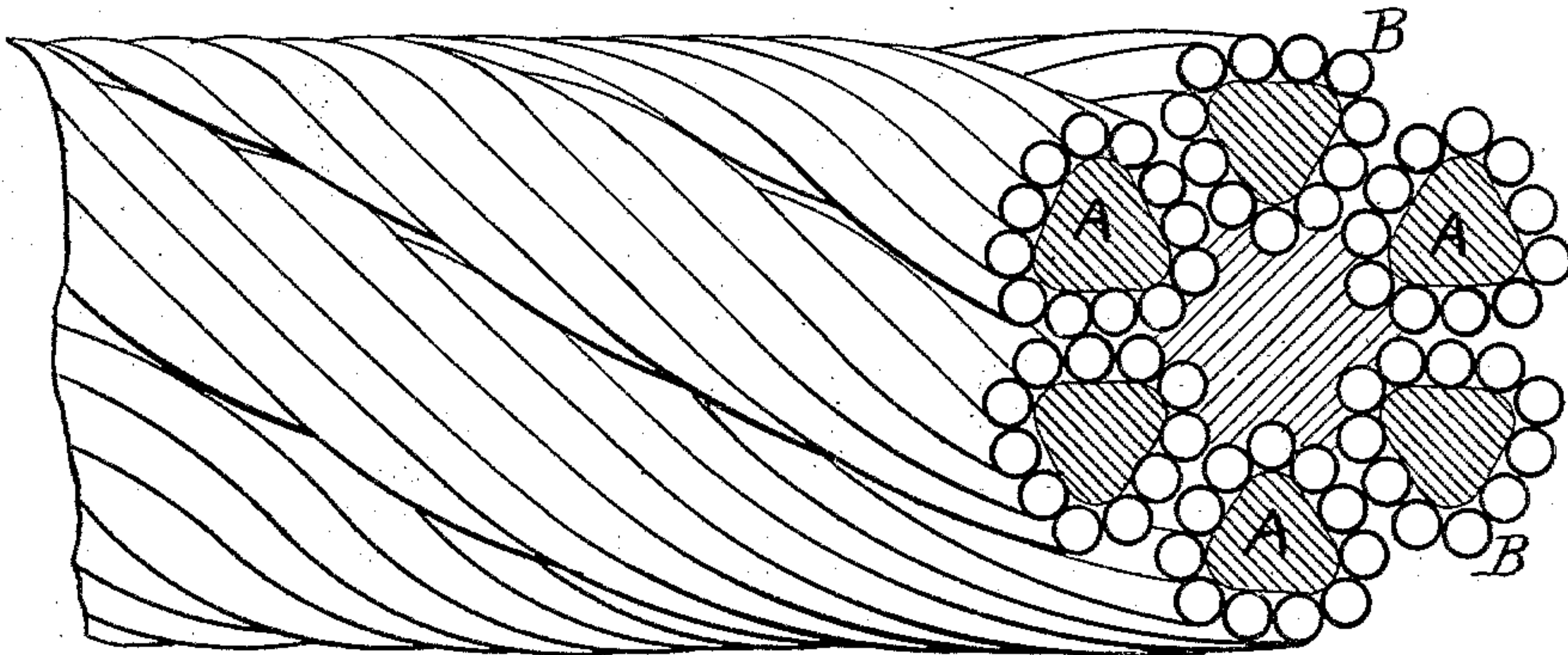
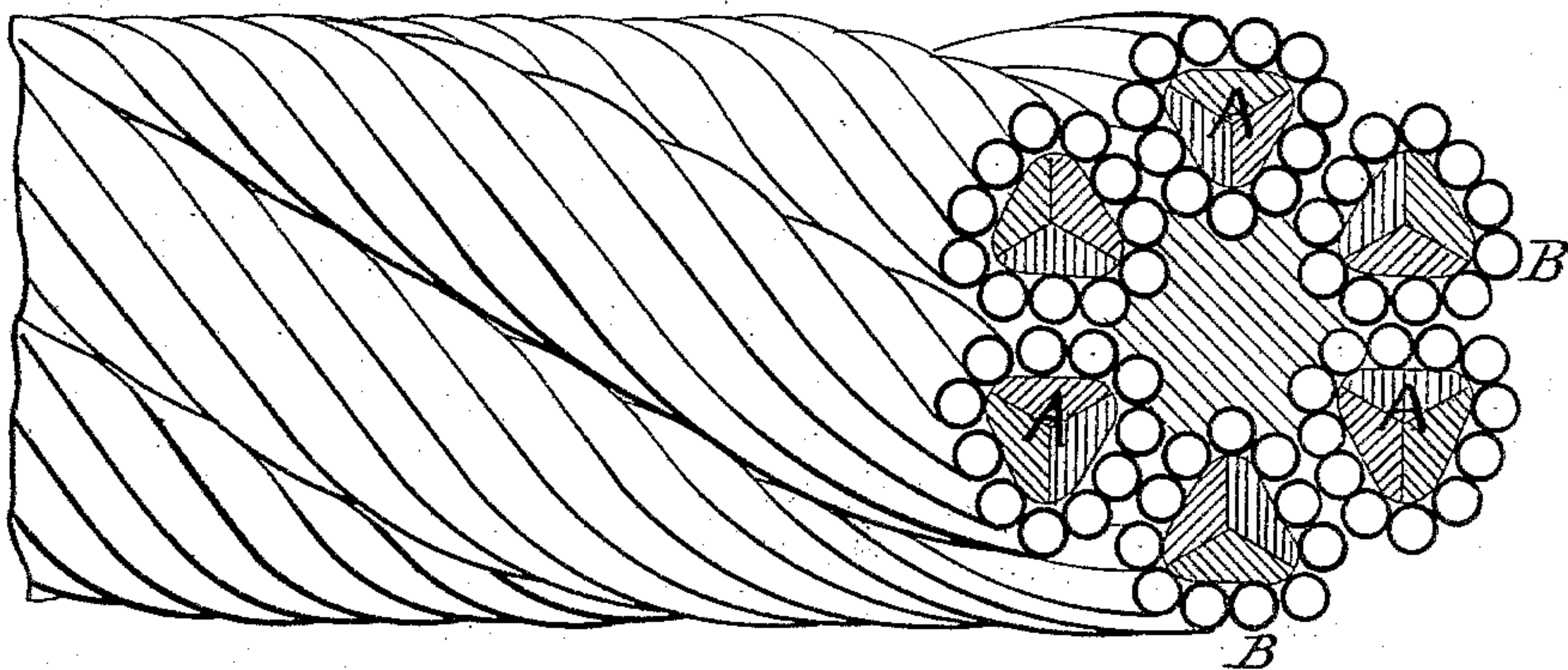


Fig. 7.



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UNITED STATES PATENT OFFICE.

TELFORD CLARENCE BATCHELOR, OF 8 BARONS COURT ROAD, WEST KENSINGTON, COUNTY OF MIDDLESEX, AND ARTHUR LATCH, OF BIDDICK HALL, SOUTH SHIELDS, COUNTY OF DURHAM, ENGLAND.

WIRE CABLE.

SPECIFICATION forming part of Letters Patent No. 401,112, dated April 9, 1889.

Application filed November 28, 1888. Serial No. 292,093. (Specimens.) Patented in England August 25, 1888. No. 12,285; in France September 1, 1888, No. 192,722, and in Belgium September 3, 1888, No. 83,110.

To all whom it may concern:

Be it known that we, TELFORD CLARENCE BATCHELOR and ARTHUR LATCH, subjects of the Queen of Great Britain, residing, respectively, at 8 Barons Court Road, West Kensington, in the county of Middlesex, England, and at Biddick Hall, South Shields, in the county of Durham, England, have invented certain new and useful Improvements in Wire Cables, (patented in Great Britain by Patent No. 12,285, bearing date August 25, 1888; in France by Patent No. 192,722, bearing date September 1, 1888, and in Belgium by Patent No. 83,110, bearing date September 3, 1888,) of which the following is a specification.

This invention has for its object the manufacture of wire cables from a number of strands, each having one or more flattened surfaces or comparatively flat surfaces, so that when made up into cable form one flattened surface of each strand is exposed on the outside of the cable, such flattened surface remaining on the outside the full length of the cable.

In a previous application for patent, Serial No. 266,317, filed by us on the 6th day of March, 1888, we describe the construction of strands from two or more distinct wires as a core to the strand, said core being surrounded or encompassed by other wires to form the outside of the strand, so that the strands, with the two or more internal wires, constituted a strand of oval, elliptical, triangular, or a shape other than round, so that one of the flattened sides of each strand composing the cable appeared upon and was maintained upon the outside of the cable for its full length.

The object of our present invention is to improve the construction above mentioned; and to that end it consists, essentially, in a cable comprising a series of substantially-flattened strands laid together, and each strand composed of a single-wire core formed with substantially flat sides, and a series of wires covering such single-wire core, as more fully hereinafter described.

In the accompanying drawings, illustrating our invention, Figure 1 is a sectional eleva-

tion of a portion of a cable composed of six strands twisted among themselves around a core, each strand being composed of an inner wire core, A, of oval or oblong shape, surrounded by outer wires, B, twisted thereon and substantially conforming to the shape of the inner wire core, A, producing two flattened sides to each strand, and with the outer wires of each strand exposed for contact purposes with a drum or roller from the point *a* to the point *b*, each wire then passing to the inside of the cable, where it is locked for a given distance determined by the length or pitch of the twist.

Fig. 2 is a similar view to Fig. 1, with a double layer of encompassing wires B B.

Fig. 3 is a sectional elevation of portion of a cable in which the oblong or oval wire is composed of two pieces, which, when placed or cemented together by the soldering process, constitute a single-wire core, the division of said wire being transverse through its longest dimensions.

Fig. 4 is a view similar to Fig. 3, showing the wire core A, composed of two pieces with the joint between them arranged at right angles, or substantially so, to the parallel flat faces of the wire core instead of parallel to such flat faces, as shown in Fig. 3.

Fig. 5 is a similar view to Fig. 4, with this exception, that the inner wire, A, of each strand is composed of three pieces, which may be placed together or cemented by the soldering process to constitute a single-wire core, as described with reference to Fig. 1.

Fig. 6 is a sectional elevation of a cable in which the inner wire core of each strand is of three-sided form; but it may have any number of sides, so that one of the sides is of flattened formation to constitute, when other wires are laid or twisted around it, a strand having a flattened side appearing on the outside of the cable, and with the outer wires passing from the outside to the inside at intervals, as described with reference to the foregoing figures. This triangular wire core may be composed of two or more pieces, which, when placed together or cemented to-

gether by the soldering in adhesive contact process, constitute a single wire to be encompassed by other wires laid or twisted thereon, and with the part forming the outside portion of each strand somewhat flat, and with said
 5 outside wires passing from the outside to the inside alternately, yet reserving and maintaining the same flattened portion of each strand on the outside of the cable for its full
 10 length, as shown at Fig. 7.

It will be observed that each strand of the cable has a twisted formation given to it, so that the exposed or outside wires thereof pass at short distances from the outside to the in-
 15 side of the cable in such manner that should a fracture occur to any wire the unraveling would be limited to a few inches only, and would not materially weaken the cable if continued in use, because the other parts of the
 20 fractured wire are locked within the cable.

What we claim, and desire to secure by Letters Patent, is—

1. A cable consisting of a series of substantially flattened strands laid together and each
 25 strand comprising a single-wire core, A, formed with substantially flat sides, and a series of wires, B, covering the wire core.

2. In wire-cable strands, the combination of an inner wire of shape other than round and of ordinary wires on the outside, which sub-
 30 stantially conform to the contour of the inner wire and constitute a strand having one or more substantially flattened sides, substantially as described.

In witness whereof we have hereunto signed
 35 our names, in the presence of two subscribing witnesses, this 5th day of November, 1888.

TELFORD CLARENCE BATCHELOR.
 ARTHUR LATCH.

Witnesses to the signature of Telford Clarence Batchelor:

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