

No. 675,116.

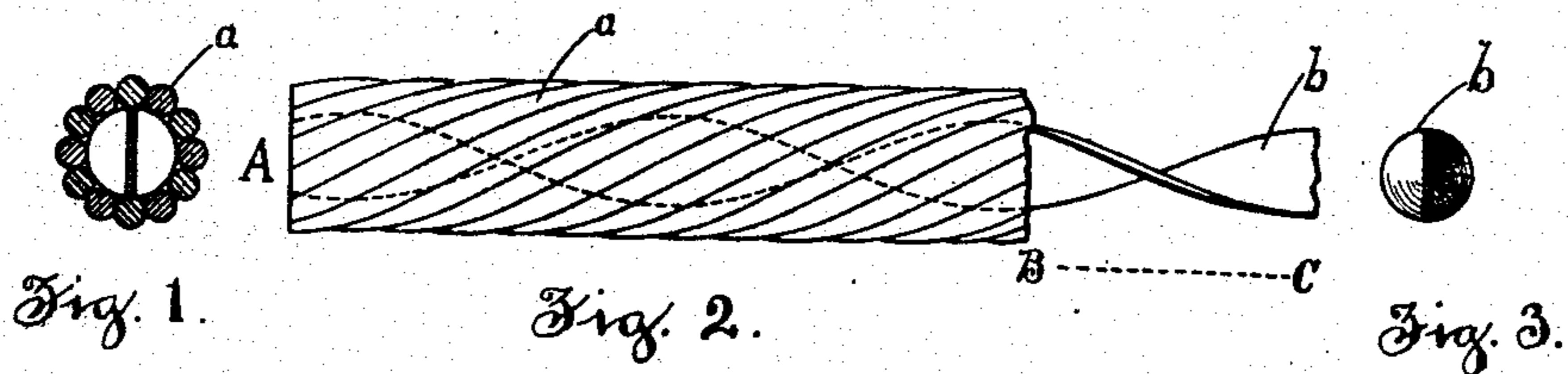
Patented May 28, 1901.

J. B. STONE.

WIRE CABLE.

(Application filed July 12, 1898.)

(No Model.)



Witnesses
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JAMES B. STONE, OF WORCESTER, MASSACHUSETTS.

WIRE CABLE.

SPECIFICATION forming part of Letters Patent No. 675,116, dated May 28, 1901.

Application filed July 12, 1898. Serial No. 685,799. (No model.)

To all whom it may concern:

Be it known that I, JAMES B. STONE, of the city of Worcester, county of Worcester, and State of Massachusetts, have invented a new and useful Improvement in Wire Cables or Rods Used for Various Purposes; and I do declare that the following is a full and exact description of the invention, which will enable others skilled in the art to make and use the same, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to wire cables or rods such as are commonly used for guy-ropes, clothes-lines, lightning-rods, &c., and has for its object to provide a smooth round cable which while it is light in weight has great tensile strength, is highly flexible, and may be made of large diameter without adding materially to its weight or destroying its flexible qualities.

In the manufacture of wire cables it is customary to lay the strands of wire of which the cable is formed over a core in order to give the proper shape to the cable and maintain it in cylindrical form under the varying conditions in which it is used. It is also customary to provide a solid core, which not only adds to the weight of the cable, but interferes somewhat with the flexibility of the same, and it is with the object of overcoming the objections to the ordinary solid-core cable that I have devised the cable which I will now describe in detail.

In the accompanying drawings, which form a part of this specification, Figure 1 is a transverse sectional view of a cable constructed in accordance with my invention to show the relation of the strands of which the cable is composed and the core. Fig. 2 is a view in elevation of a section of the cable with a portion of the spiral core uncovered, and Fig. 3 is an end view of the core about which the strands are laid.

Referring to the drawings by letters, A indicates the cable, which, as shown, is preferably formed with a core *b*, of flat metal of any desired width, according to the size of the rope or cable which it is desired to produce, said strip *b* being twisted into spiral form, as clearly shown in Fig. 1. About the

said core *b* a series of wire strands *a*, of any suitable gage, are laid in spiral courses, said strands being preferably laid in spiral courses opposite to the twist of the spiral core *b*, the said strands being placed close together, as shown in Fig. 2, so as to form a smooth round continuous envelop or covering for the core *b*.

While I prefer that the strands *a* be laid in spiral courses running against or opposite to the spiral twist of the core *b*, I do not deem this absolutely essential, as by giving a different pitch to the course of the strands *a* than that of the spiral core the edges of the latter will support the strands *a* and preserve the tubular form of the cable.

It will be seen from the foregoing that the cable which I have invented is composed of a series of strands spirally laid up, so as to form a smooth continuous hollow cylinder or tube, which tube is supported interiorly along regular lines by the spiral edges of the core, thus producing a very light, strong, and cheaply-constructed cable and one which while highly flexible will retain its form under all conditions.

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

1. A wire cable or rod composed of a series of strands laid up in spiral courses so as to form a tube, and a core formed of a spirally-twisted strip supporting the strands of said cable interiorly upon its spiral edges.

2. A wire cable or rod composed of a series of strands laid up in spiral courses so as to form a tube, and a core formed of a spirally-twisted strip having a pitch different from that of said spiral strands, said spiral core supporting the strands of said cable interiorly upon its spiral edges.

3. A wire cable or rod comprising a core formed of a spirally-twisted metal strip, and a series of wire strands spirally laid up in courses opposite to the direction of the twist of said core and interiorly supported upon the spiral edges thereof.

JAMES B. STONE.

Witnesses:

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