

No. 626,621.

Patented June 6, 1899.

G. L'HOIR & J. B. DEHAM.  
WIRE CABLE FOR CUTTING STONE.

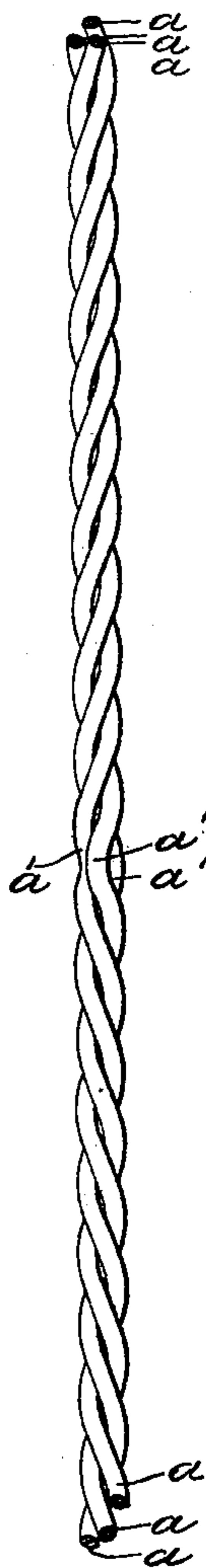
(Application filed Feb. 20, 1899.)

(No Model.)

Fig 2.



Fig 1.



Witnesses:

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# UNITED STATES PATENT OFFICE.

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BELGIUM.

## WIRE CABLE FOR CUTTING STONE.

SPECIFICATION forming part of Letters Patent No. 626,621, dated June 6, 1899.

Application filed February 20, 1899. Serial No. 706,189. (No model.)

*To all whom it may concern:*

Be it known that we, GEORGE L'HOIR and JEAN BAPTISTE DEHAM, subjects of the Kingdom of Belgium, residing at Hornu Hainaut, in the Kingdom of Belgium, have invented a certain new and useful Wire Cable for Cutting Stone, of which the following is a specification.

Our invention relates to an improved construction of stranded wire adapted for cutting rock and the like hard bodies in the manner of a saw, the object of same being to obtain from the wire a cleaner and clearer cut and with the operation of less power than is necessary with the stranded wire of the present style or profile.

Our invention is illustrated in the accompanying drawings, in which—

Figure 1 is an elevation of one form of stranded wire laid according to our invention, and Fig. 2 is a section of same.

According to our invention we modify the ordinary laying or stranding of the wires in order to increase the yield and to produce in the rock or the like to be cut a cut absolutely clear and larger than that yielded by a similar wire of the present form. At present this class of stranded wire is generally formed of three wires twisted around upon their own axes. In our profile or construction these wires *a a a*, as will be seen from the accompanying drawings, are alternately twisted or cabled in one direction, as shown in the lower half of Fig. 1, and then reversed, as shown by the bent por-

tions of the wire at *a' a' a'*, and subsequently twisted or cabled in the reverse direction, as shown in the upper half of Fig. 1. Our experiments show that this arrangement has somewhat the same effect as the setting of the teeth of a carpenter's saw, where they are alternately bent toward opposite sides to produce a clearance in the cut, so that, as in our arrangement, a wide and clear groove is obtained. The wire, moreover, works more expeditiously, as it has not a tendency to take a continuous rotary movement which impedes the forward movement and requires a greater power to be exerted.

Our invention is applicable to wire having any suitable number or section of strands, and the reversals of same may take place at any desired intervals according to the work the wire is required to do.

What we claim is—

A cable for cutting stone, composed of strands of wire which are at intervals twisted in one direction and then reversed and twisted in the opposite direction, substantially as described.

In testimony whereof we have hereunto set our hands in the presence of two subscribing witnesses.

GEORGE L'HOIR.

JEAN BAPTISTE DEHAM.

Witnesses:

F. D. PAUU,

GREGORY PHELAN.