

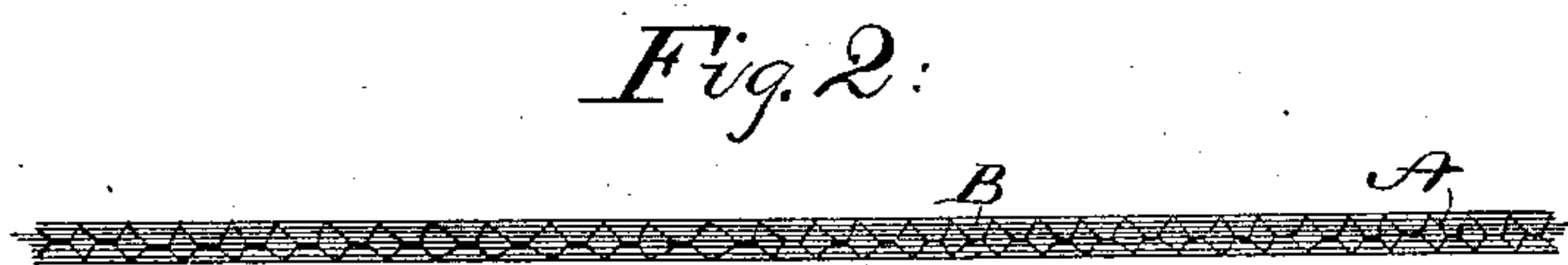
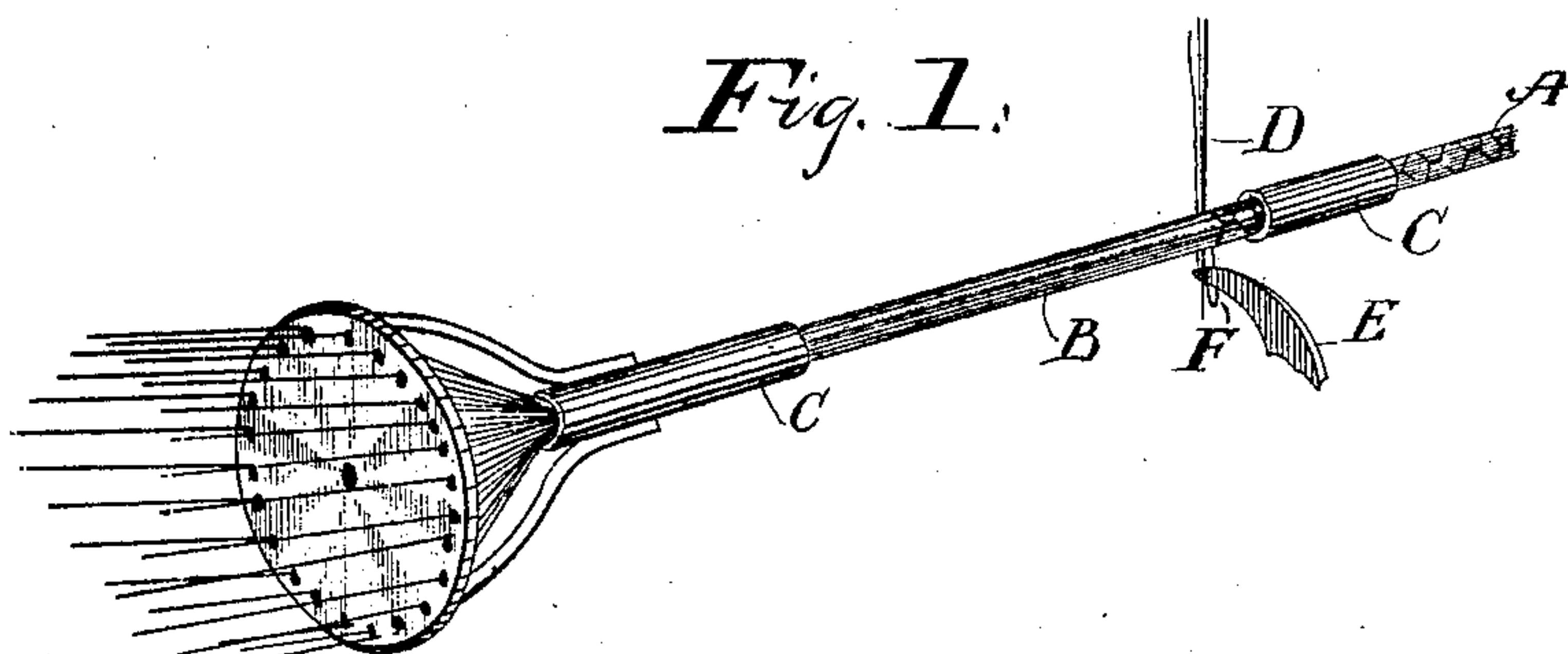
(No Model.)

H. D. STANLEY & G. DOOLITTLE.

ELECTRIC CONDUCTOR.

No. 283,433.

Patented Aug. 21, 1883.



Witnesses

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UNITED STATES PATENT OFFICE.

HENRY D. STANLEY AND GEORGE DOOLITTLE, OF BRIDGEPORT, CONN.

ELECTRIC CONDUCTOR.

SPECIFICATION forming part of Letters Patent No. 283,433, dated August 21, 1883.

Application filed April 5, 1883. (No model.)

To all whom it may concern:

Be it known that we, HENRY D. STANLEY and GEORGE DOOLITTLE, citizens of the United States, residing at Bridgeport, in the county of Fairfield and State of Connecticut, have invented certain new and useful Improvements in Electric Conductors; and we do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

Our invention relates to certain novel and useful improvements in flexible conductors for electrical purposes, and has for its object to produce a conductor in which the strands of tinsel, wire, or other suitable material shall be confined without the usual method of braiding the tinsel, &c., or of covering the latter, in order to confine the strands by winding or braiding any material over the same; and with these ends in view our invention consists of a conductor such as described composed of strands of tinsel, wire, or any other suitable material assembled in parallel lines and confined and associated together by an open net-work of intersecting threads, as will be hereinafter fully and in detail explained, and specifically designated by the claim.

In order that those skilled in the art to which our invention appertains may more fully understand the construction of our improved article of manufacture, we will proceed to describe the same, referring by letter to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective, showing the strands condensed in a tube, with the latter broken away, and with a sewing-machine hook just entering the loop formed by a needle passed down one side of the strands. Figs. 2 and 3 show a series of strands confined by intersecting threads.

Similar letters denote like parts in the several figures.

Prior to our invention conductors of this description have been made by braiding the strands of tinsel or other material together; but this process not only takes considerable time, but nearly double the amount of material is required; also, a single conducting-wire in the shape of a spiral has been used, but with very unfavorable results. Our improved

conductor has very many advantages over these devices, is very economical, and presents less resistance to the electrical current than any flexible conductor now in use.

We have shown and described a machine for the manufacture of our conductors in an application for Letters Patent filed on an even date herewith, and by reference to the same it will be seen that the intersecting net-work of threads A is formed by oscillating the strands B in a condensing-tube, C, on the bed-plate of an ordinary sewing-machine, in such a manner that the needle D descends first on one side of the strands and then on the other, and the hook or shuttle E passes through the thread-loop F in like manner, thus forming the open net-work shown in the drawings. The strands might, of course, be bound together by stitching through the same and revolving the condensing-tube at each stitch; but it has been practically demonstrated that the needle will invariably cut and mutilate the tinsel or wire, thus rendering the latter unreliable, if not entirely useless.

In forming the net-work we are enabled to use fine wire or any flexible textile, and a core composed of any suitable material may be used, around which the strands may be congregated, thereby giving body to the conductor. This core may with equal facility consist of a substance which is a good conductor, and it will be readily understood that in the latter case we are enabled to produce a perfect conductor.

Having thus described our invention, what we claim as new, and desire to secure by Letters Patent, is—

As an improved article of manufacture, a flexible multiple conductor for electrical purposes, composed of strands of tinsel, wire, or other suitable material assembled parallel to each other and confined and associated together by an open net-work of intersecting threads, substantially as shown and described.

In testimony whereof we affix our signatures in presence of two witnesses.

HENRY D. STANLEY.
GEORGE DOOLITTLE.

Witnesses:

A. M. WOOSTER,
W. T. HAVILAND.