

No. 837,185.

PATENTED NOV. 27, 1906.

C. L. BROWN.  
AERIAL CABLE SUPPORT.  
APPLICATION FILED JULY 21, 1905.

2 SHEETS—SHEET 1.

Fig. 1.

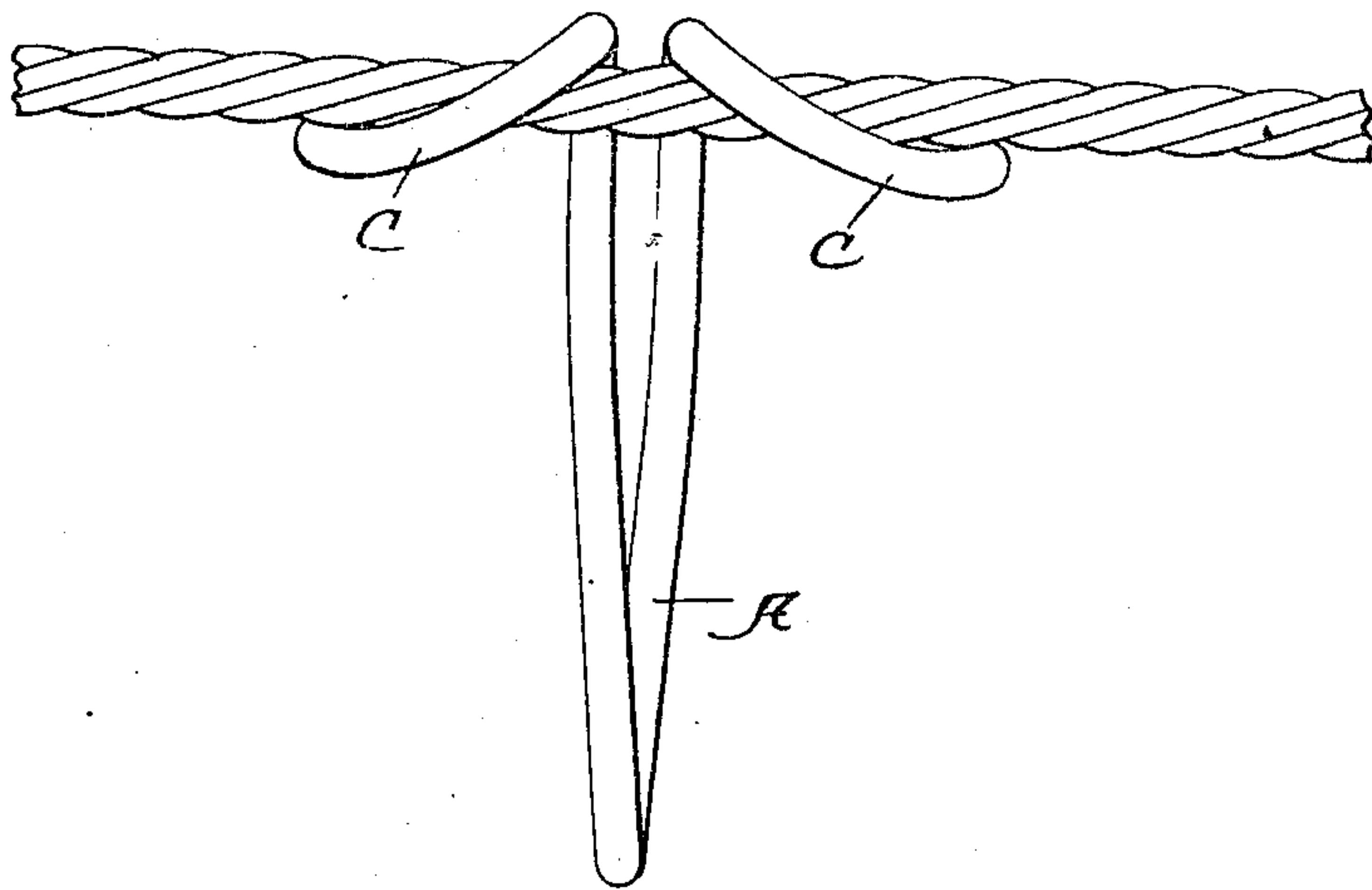
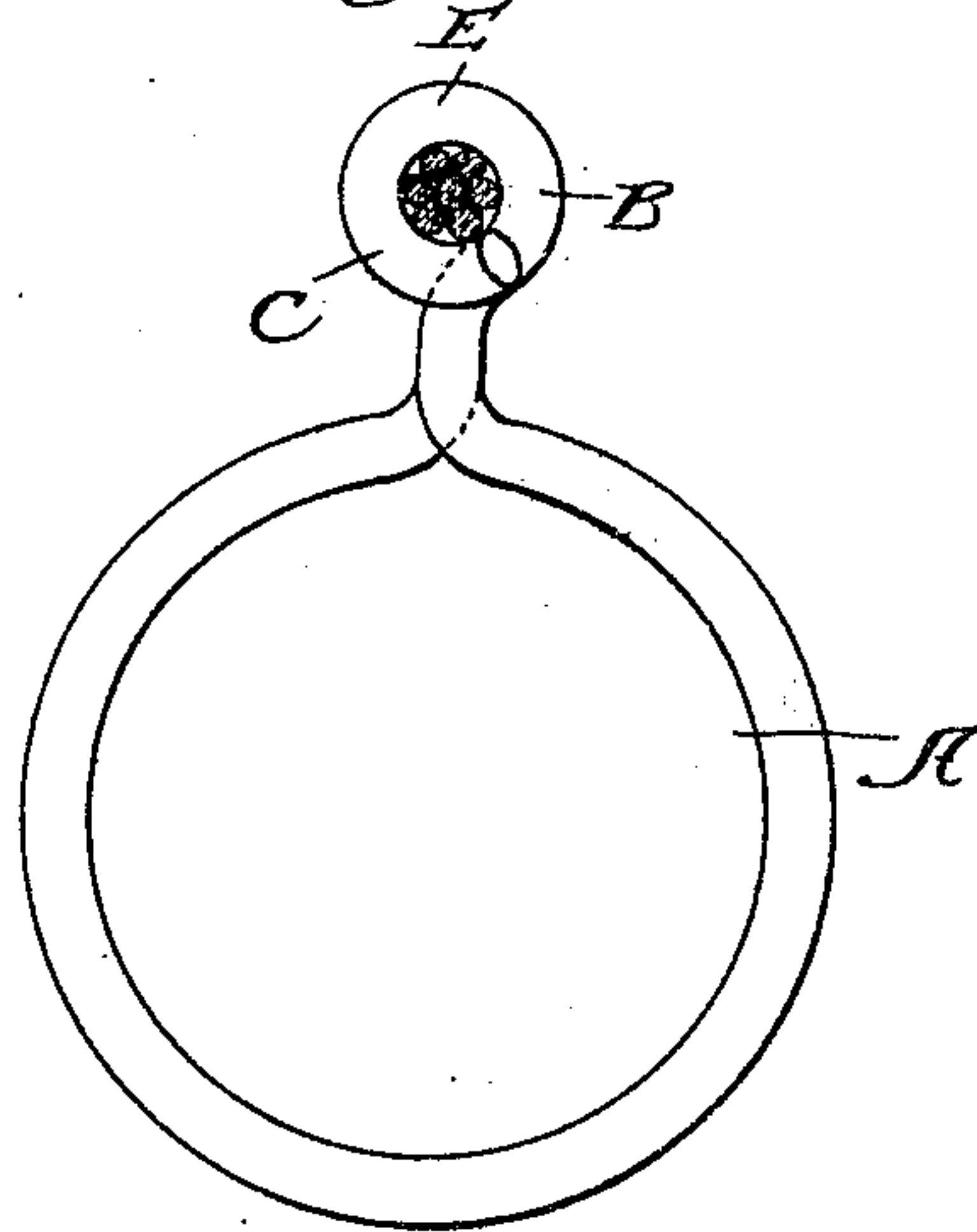


Fig. 2.



Witnesses.

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L. H. Morrison

Inventor.  
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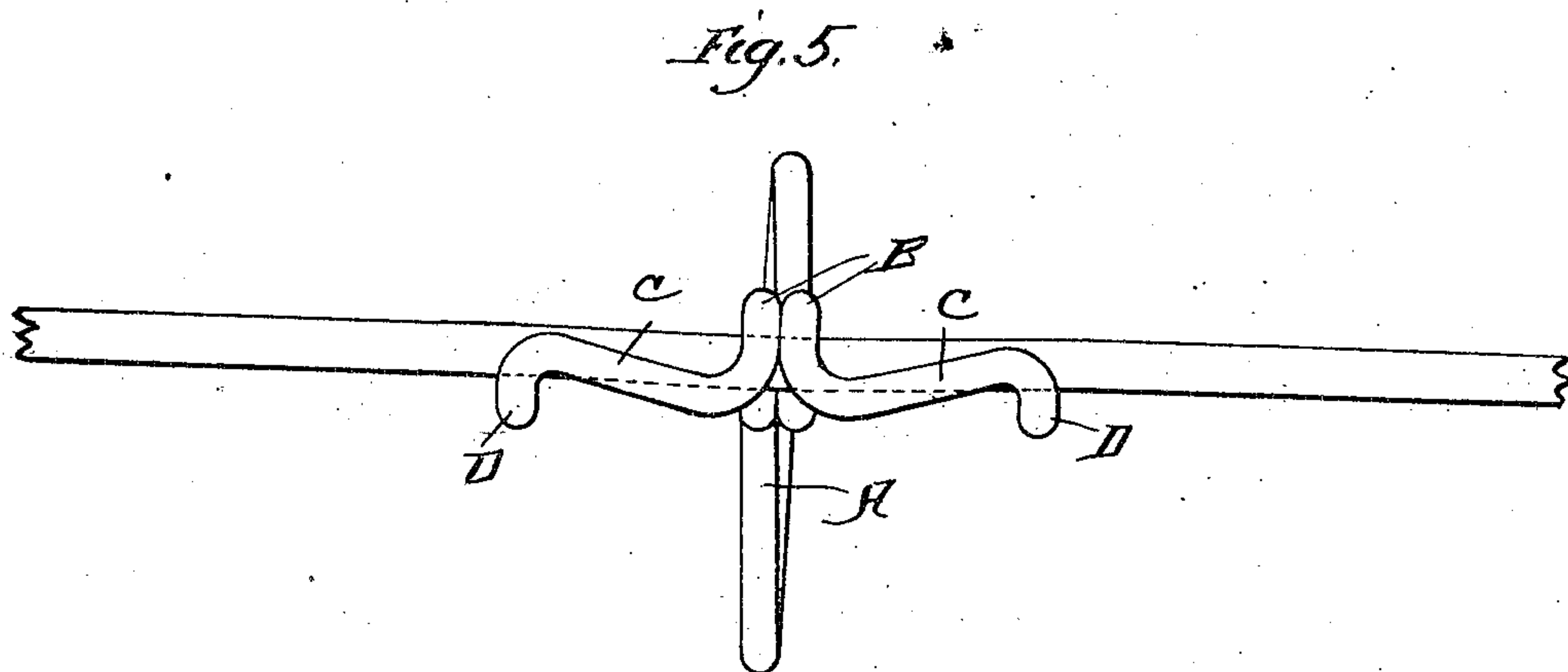
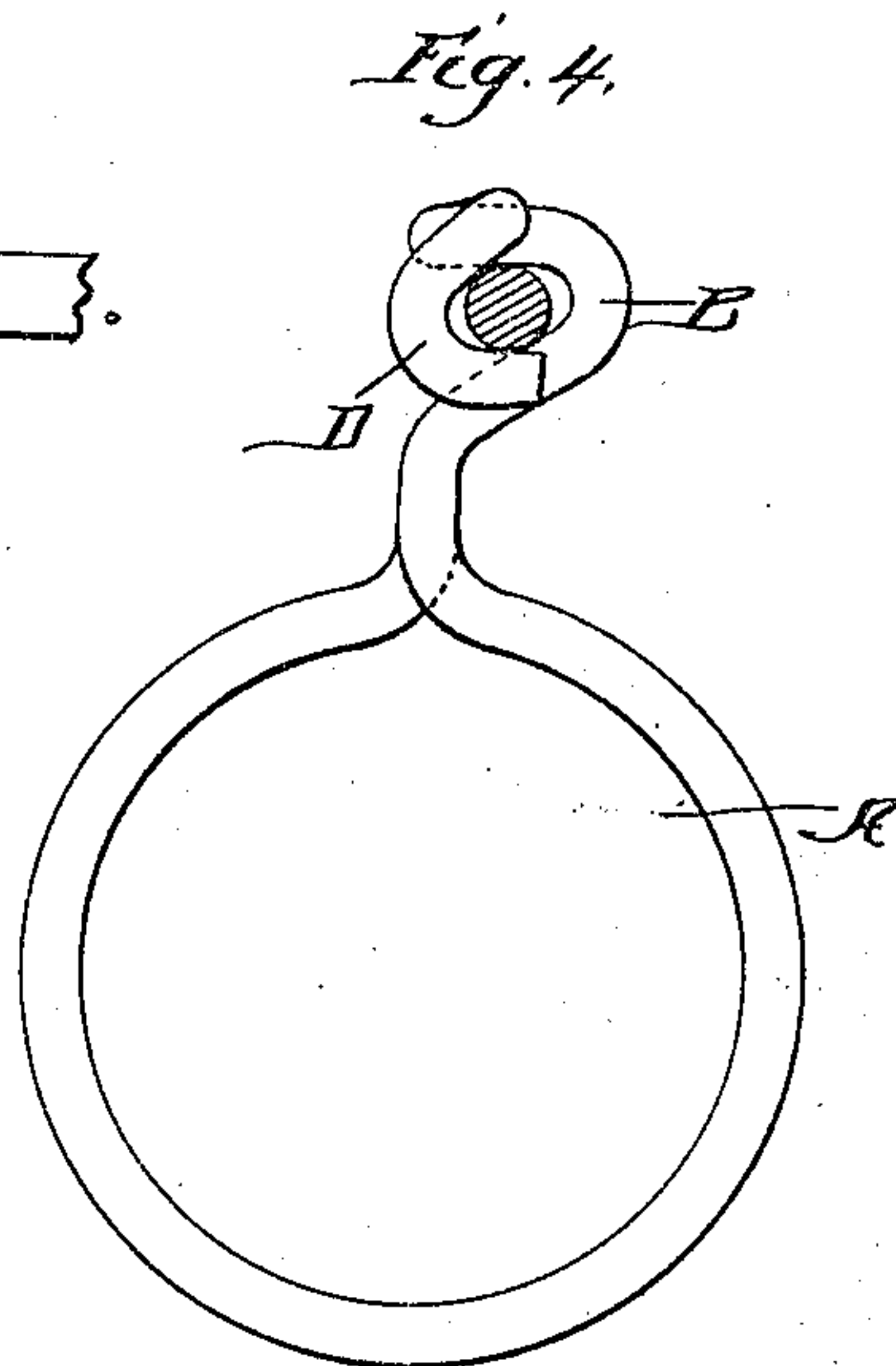
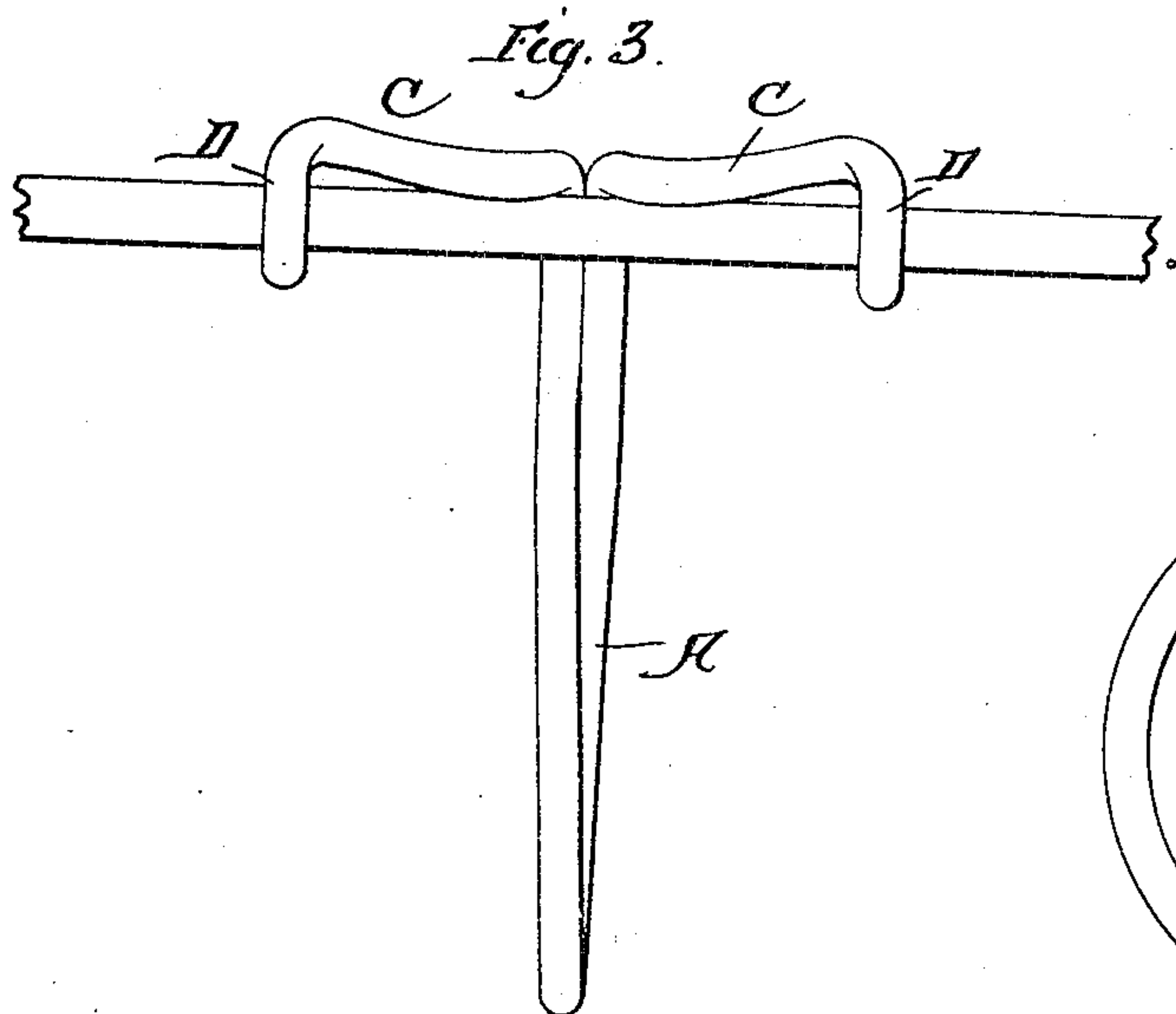
By *W. P. Williams*  
Att'y.

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2 SHEETS—SHEET 2.



Witnesses:  
H. B. Hallock  
L. H. Morrison

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# UNITED STATES PATENT OFFICE.

CHARLES L. BROWN, OF PHILADELPHIA, PENNSYLVANIA.

## AERIAL-CABLE SUPPORT.

No. 837,185.

Specification of Letters Patent.

Patented Nov. 27, 1906.

Application filed July 21, 1905. Serial No. 270,706.

*To all whom it may concern:*

Be it known that I, CHARLES L. BROWN, a citizen of the United States, residing at Philadelphia, county of Philadelphia, and State of Pennsylvania, have invented a certain new and useful Improvement in Aerial-Cable Supports, of which the following is a specification.

My invention relates to a new and useful improvement in aerial-cable supports, and has for its object to provide an aerial-cable support which may be easily and quickly secured or clamped upon the supporting-strand and which will keep its place under all conditions and may be quickly removed from the strand at any time; and a further object of my improvement is to provide a support which can be manufactured at a comparatively small price and yet be extremely durable.

With these ends in view this invention consists in the details of construction and combination of elements hereinafter set forth and then specifically designated by the claim.

In order that those skilled in the art to which this invention appertains may understand how to make and use the same, the construction and operation will now be described in detail, referring to the accompanying drawings, forming a part of this specification, in which—

Figure 1 is a front elevation of my improved support attached to a supporting-strand; Fig. 2, a side elevation of my support attached to the strand; Fig. 3, a front elevation of a modified form of my improved support; Fig. 4, a side elevation of Fig. 3; Fig. 5, a plan view of Figs. 3 and 4.

In electrical work aerial cables are now used to a considerable extent, and these cables are supported from a suspension strand or wire which has previously been pulled up tightly from one pole to the other or wherever it is desired to suspend a cable, and from this suspension strand or wire depend hangers or cable-supports spaced, usually, from one to two feet apart, through which the cable passes. In attaching these cable-supports or hangers various methods are in use, some requiring the forming of a marline loop over the cable, others the use of pliers or clamps to properly adjust them in order to have the support or hanger remain in the position it is first placed.

My invention is for the purpose of providing a support or hanger which will automat-

ically clutch the strand of wire and does not need any clamping-tool or pliers to secure the support to the strand.

My improved support is made of one piece of wire, said wire being bent in the middle to form a ring or loop A, through which the cable is designed to be drawn. The two ends of the wire then pass upward side by side, said wires while still being in alinement with one another are bent so as to form a hook B, adapted to hook over the strand from one side, and then the ends of the wire at the point E are bent outward in two opposite directions, so as to form the arms C. Said arms pass downward around the strand upon the opposite side from the hook B, and the ends of said arms extend underneath the strand, as shown in Fig. 2, each arm thus forming an elongated spirally-formed hook engaging the strand from the opposite side of that engaged by the hook B, and the arms C and hook B are so formed with relation to one another that in order for the strand-wire to pass between the arms C and hook B in their normal position said strand-wire would have to be bent out of a straight line, or, in other words, the tendency of the arms C is always to press inward in the opposite direction to which the hook B would be pressing, and this would tend to force the strand-wire out of a straight line; but, as a matter of fact, the strand-wire is drawn so taut that it remains practically in a straight line, and the wire of the support gives, but still exerts a pressure, and thus forms an exceedingly strong and efficient clutch, and the clutch thus formed will cause the support to be held tightly upon the strand and prevent any sliding movement of the support along the strand. It will be seen that by this construction a great amount of tension can be exerted against the strand, although the support may be made of comparatively small wire, for the tension is caused by a twisting movement in the neck of the support.

In Figs. 3, 4, and 5 a modification is shown in which the arms C do not form the hooks themselves, but are provided upon their outer ends with vertical hooks D, engaging the strand-wire from the opposite sides to that engaged by the hook B. The arms C in this case extend above and parallel with the strand, the hooks D being formed integral with the wire at the outer end of each of the arms. The action in this case is exactly the same as that shown in Figs. 1 and 2, and the



principle of the invention is therefore the same. It will be noticed in Fig. 4 that the hook-shaped portions B and D, which contact the strand, are not formed so as to conform with the rotundity of the strand, but are so shaped that when the strand is engaged by these hook-shaped portions said portions will only contact the strand on its upper and lower surfaces, leaving a space between the strand and the bend of the hook, so that the strand can be wedged within the hook-shaped portions. This formation can also be applied to that form shown in Figs. 1 and 2.

15 In applying the cable-support to the strand one of the arms C, Fig. 2, or the hook-shaped portion D, Fig. 3, is hooked upon the strand, and the support being brought toward the strand will enter and be engaged by the hook-shaped portion B. Then by a twisting motion on the ring A the other arm C or hook-shaped portion D can be sprung by and snapped upon the strand and will clutch the same with a grip which will prevent any longitudinal movement of the support when the cable is being drawn therethrough.

Having thus fully described my invention, what I claim as new and useful is—

In combination with a supporting strand or wire, an aerial-cable support consisting of one piece of wire bent in the middle so as to form a ring or loop through which the cable is adapted to pass, the ends of said wire then extending upward side by side and being bent so as to form a hook-shaped portion to hook over the strand, said ends then extending outward upon each side and being bent so as to form hooks adapted to hook around the strand and underneath from the opposite side, said hook-shaped portion so positioned relative to one another as to exert tension upon the strand from opposite sides and clutch the strand-wire with a spring-grip, as specified.

In testimony whereof I have hereunto affixed my signature in the presence of two subscribing witnesses.

CHARLES L. BROWN.

Witnesses:

MARY E. HAMER,  
L. W. MORRISON.