

No. 766,011.

PATENTED JULY 26, 1904.

W. AINLAY.  
POLE TIP.

APPLICATION FILED OCT. 12, 1903.

NO MODEL.

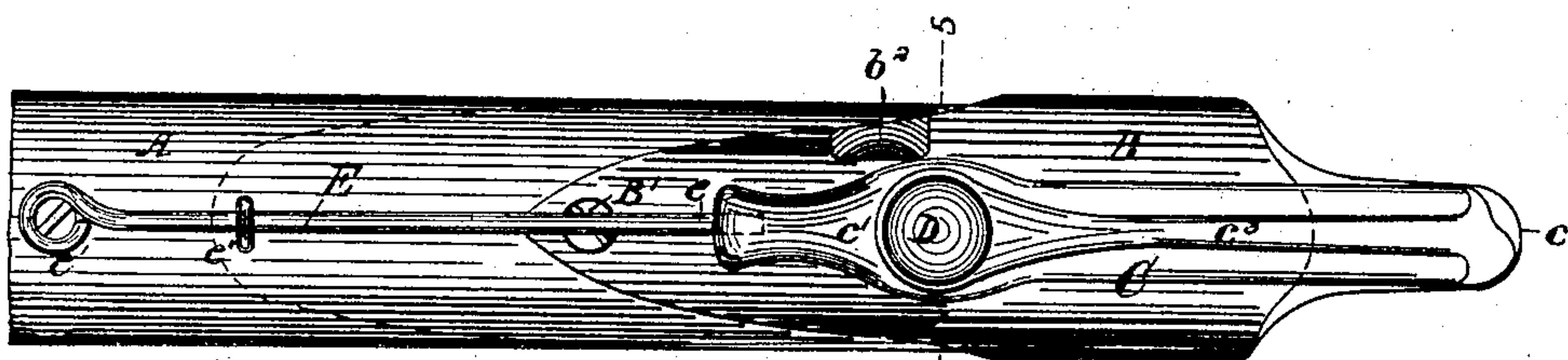


Fig. 1.

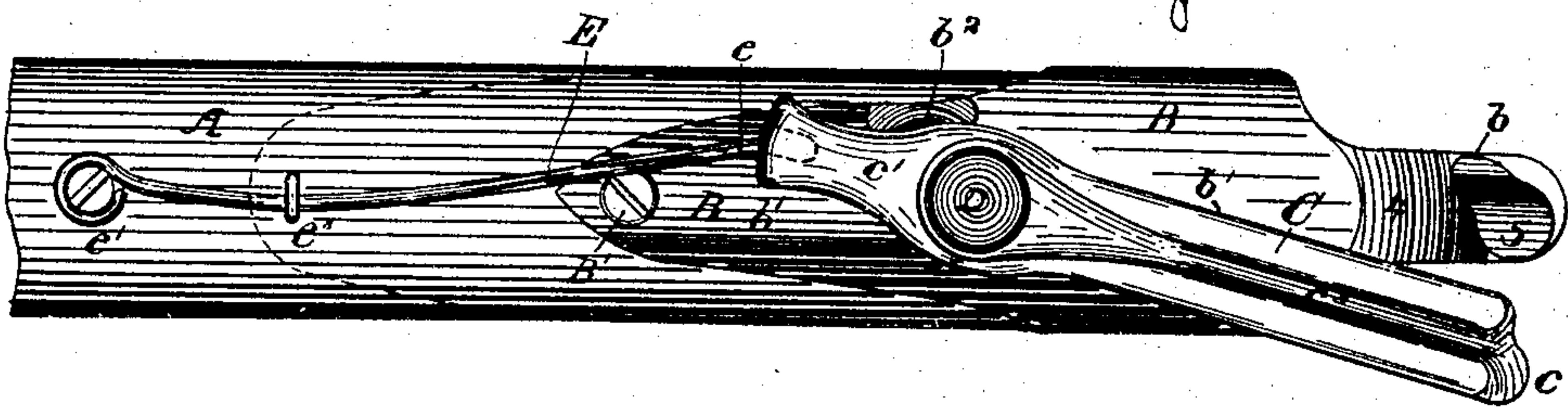


Fig. 2.

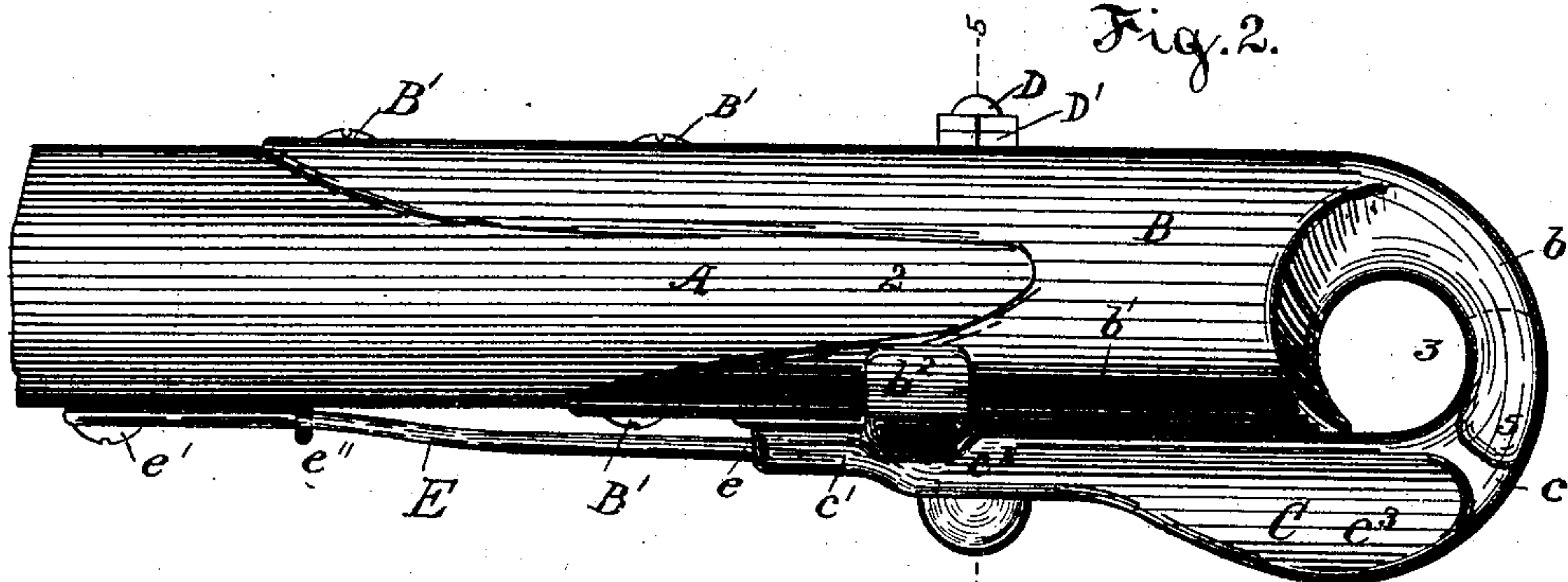


Fig. 3.

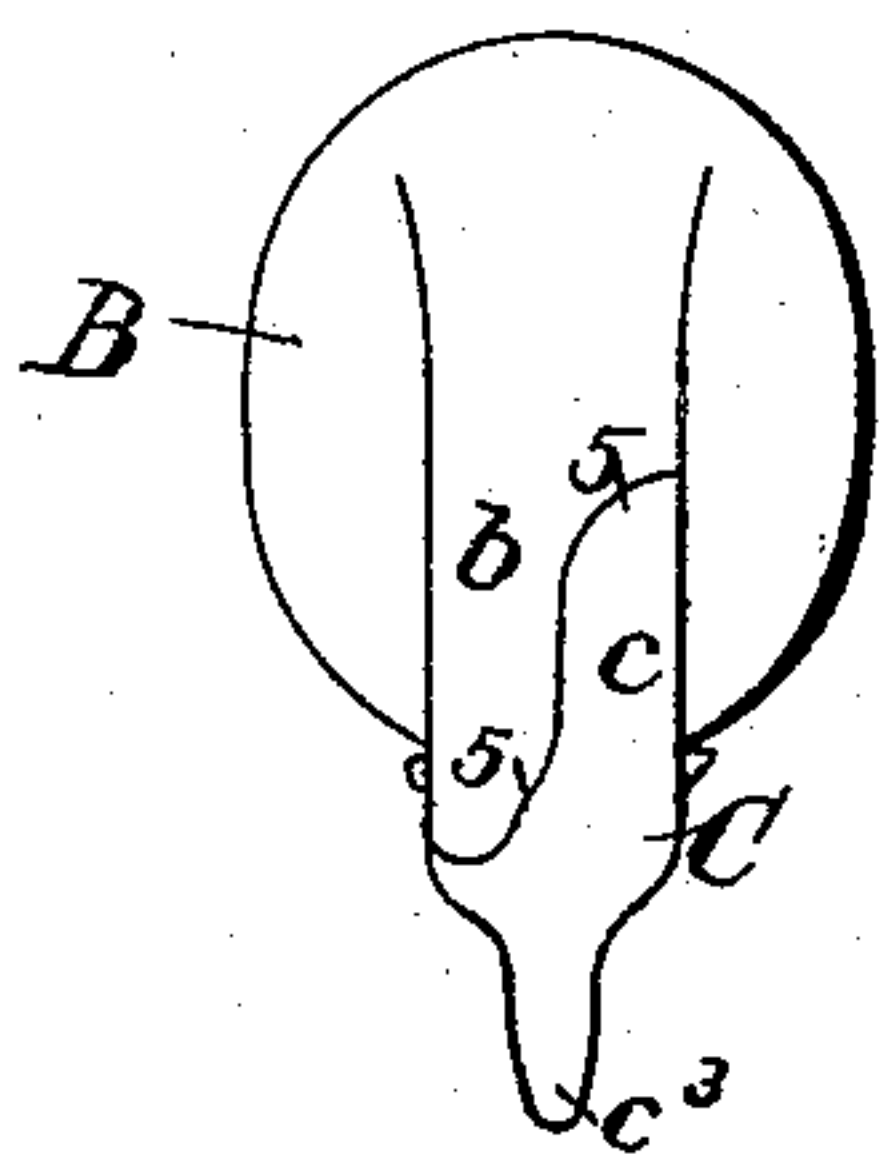


Fig. 4.

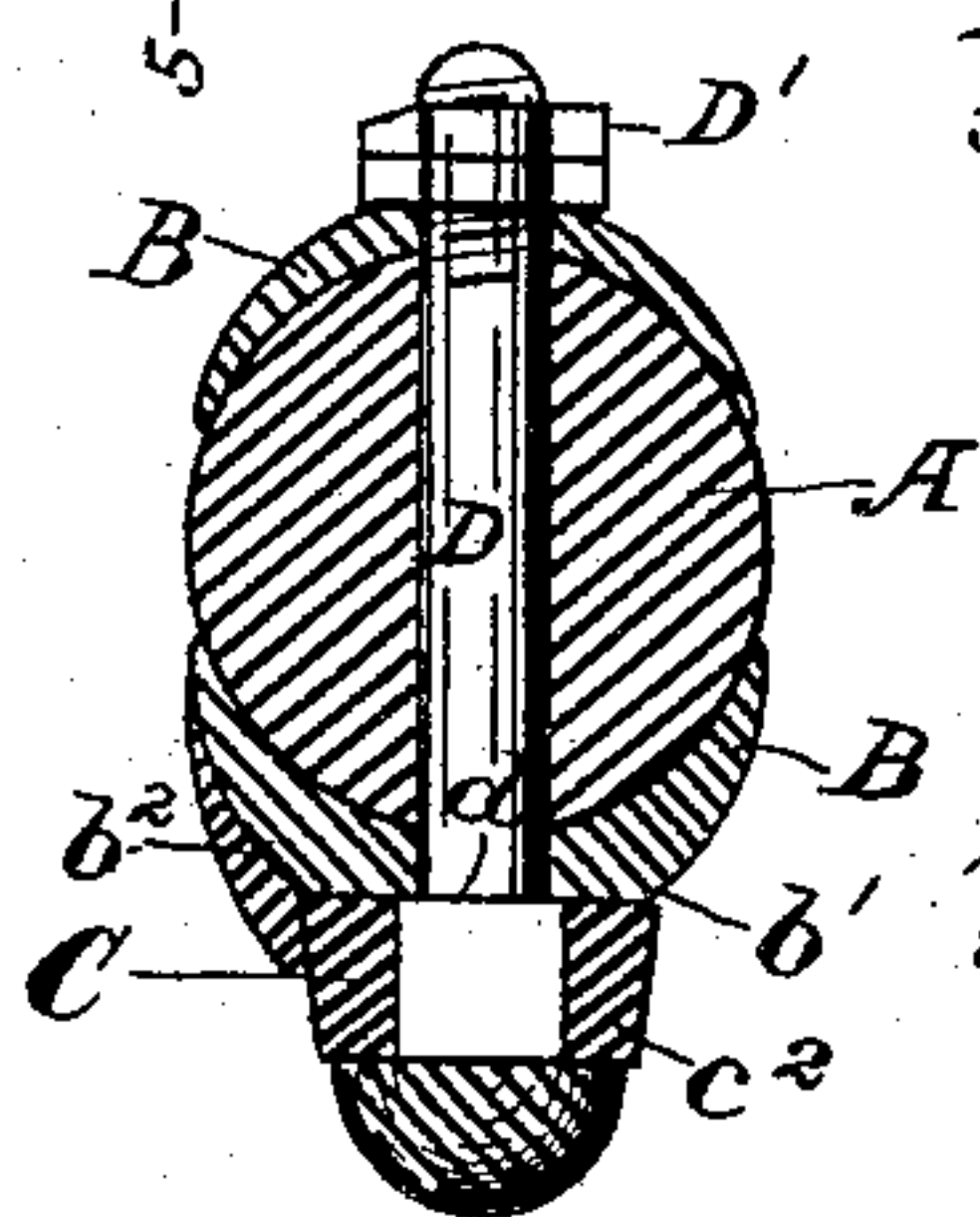


Fig. 5.

Witnesses  
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Inventor  
By

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his Attorney



# UNITED STATES PATENT OFFICE.

WILLIAM AINLAY, OF BRUSSELS, CANADA.

## POLE-TIP.

SPECIFICATION forming part of Letters Patent No. 766,011, dated July 26, 1904.

Application filed October 12, 1903. Serial No. 176,586. (No model.)

*To all whom it may concern:*

Be it known that I, WILLIAM AINLAY, of Brussels, in the county of Huron, Province of Ontario, and Dominion of Canada, have invented certain new and useful Improvements in Pole-Tips; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part hereof.

My invention, which will be hereinafter fully set forth and claimed, relates to devices for securing neck-yokes to poles.

The object of my invention is a pole-tip by which the neck-yoke will carry the pole in such a manner that the reins will not be caught by any projection.

Figure 1 is a bottom view of my improved pole-tip fitted to a pole and shown in its normal position. Fig. 2 is a similar view of the same with the swivel open. Fig. 3 is a side view of the same. Fig. 4 is an end view of the same; and Fig. 5 is a cross-section of the same on line 5, Figs. 1 and 3.

A is the pole.

B is a socket, partly open at the sides 2 and conveniently produced in cast metal, holes being provided near the open ends for screws B', by which said socket is firmly connected to the pole end when fitted and inserted in said socket, as shown. The forward or closed end of the socket is thinned down laterally from both sides by a tapering curve or bevel, avoiding a square shoulder, as shown in Figs. 1 and 2, to form a nose b, which is shaped into a partial ring by being rounded in contour from the top downward and by an eye 3, open below to form a gap 4. The eye is of sufficient size to accommodate a neck-yoke ring, and the gap 4 is just wide enough to admit said ring into the eye.

The gap 4 is closed by a swivel C, pivoted to and bearing with a broad base on a flat face b', formed on the lower part of the socket, by a headed and shouldered stud D, passing upward through the swivel, socket, and pole, and having the shoulder d drawn tight against the face of the socket by lock-nuts D' at the threaded upper end. The forward end c of said swivel extends upward, conforming to the contour and forming part of the ring b,

to which it is joined laterally by a scarfed lap-joint 5, as seen in Fig. 4. The swivel has a tail c', projecting rearwardly, thus forming a lever of the first class. A spring E, secured to the under side of the pole at e' and e'', has its free end e inserted into a short groove in the free end of the tail c' and operates to press the swivel laterally, so as to keep the joint 5 closed.

To prevent the swivel C being opened too far, a stop is provided on the socket by a lug b'', placed close to the pivot-joint of the swivel, against which lug the tail c' abuts when the swivel is opened for the purpose of inserting or removing a neck-yoke ring. Between the pivot-joint hub c'' of the swivel and the point c the swivel is deepened by a rib c''.

As in operation the pole-tip is supported by the neck-yoke ring, the nose b is suspended in the latter, and its bearing-surface does not extend downward as far as the lap-joint 5, or at least not below the same. There is therefore no strain on the swivel C caused by the neck-yoke ring. In opening and closing the ring b for the insertion or removal of the neck-yoke ring the swivel C has merely to be pushed to one side against the pressure of the spring E, and the latter closes the joint again automatically when the pressure ceases.

I claim as my invention—

1. A pole-tip consisting of a socket fitting upon the end of the pole and tapering laterally to a nose shaped into a ring having a gap on the under side, a swivel pivoted to a facing on the under side of the socket and adapted to swing laterally thereon and having its forward end turned up and shaped into a part of a ring and closing the gap in the other part with a lateral lap-joint and a spring secured to the under side of the pole and having its free end engaging the tail of the swivel and pressing the lap-joint together, substantially as set forth.

2. The combination with a pole of a socket fitting upon its end and provided with screw-holes for securing the same in its position and provided at its forward part of the under side with a facing for a swivel, a nose on the forward end of said socket formed into a partial ring having a gap below, a double-ended

swivel seated on the facing on the lower part of the socket and having its forward end project upward and shaped to close the gap and complete the ring and lap-jointed thereto laterally, a headed and shouldered pivot-stud passing through said swivel, socket and pole and secured at its other end, a spring secured to the under side of the pole and having its free end in engagement with the tail end of the swivel and pressing laterally to keep the lap-joint at the front closed, substantially as set forth.

3. The combination with a pole of a socket fitting upon its end and provided with screw-holes for securing the same in its position, a nose formed on the forward end of said socket by tapering laterally and said nose formed into a ring having a gap below, a tail-ended swivel on the under side of said socket piv-

oted to swing laterally and having its forward end project upward and shaped to close the gap and complete the ring and lap-jointed thereto laterally, a headed and shouldered pivot-stud passing up through said swivel, socket and pole and secured at the upper end, a stop-lug on said socket limiting the play of the swivel, a spring on the under side engaging the tail of the swivel and pressing it laterally to close the lap-joint at the front, substantially as set forth.

In testimony whereof I have signed, in the presence of the undersigned witnesses, at Brussels, Ontario, this 13th day of October, 1902.

WILLIAM AINLAY.

Witnesses:

A. CONSLEY,  
S. McLAUCHLIN.