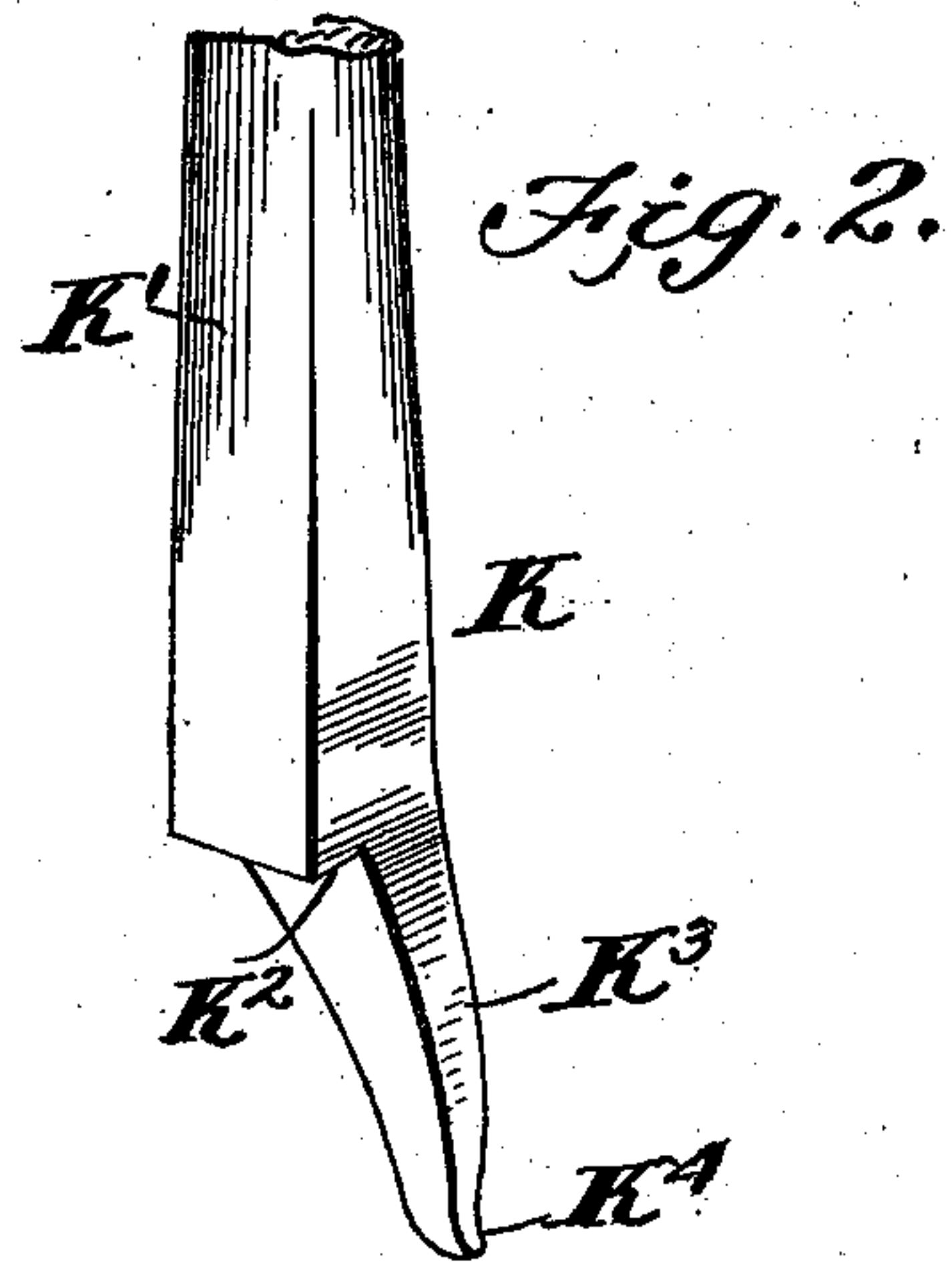
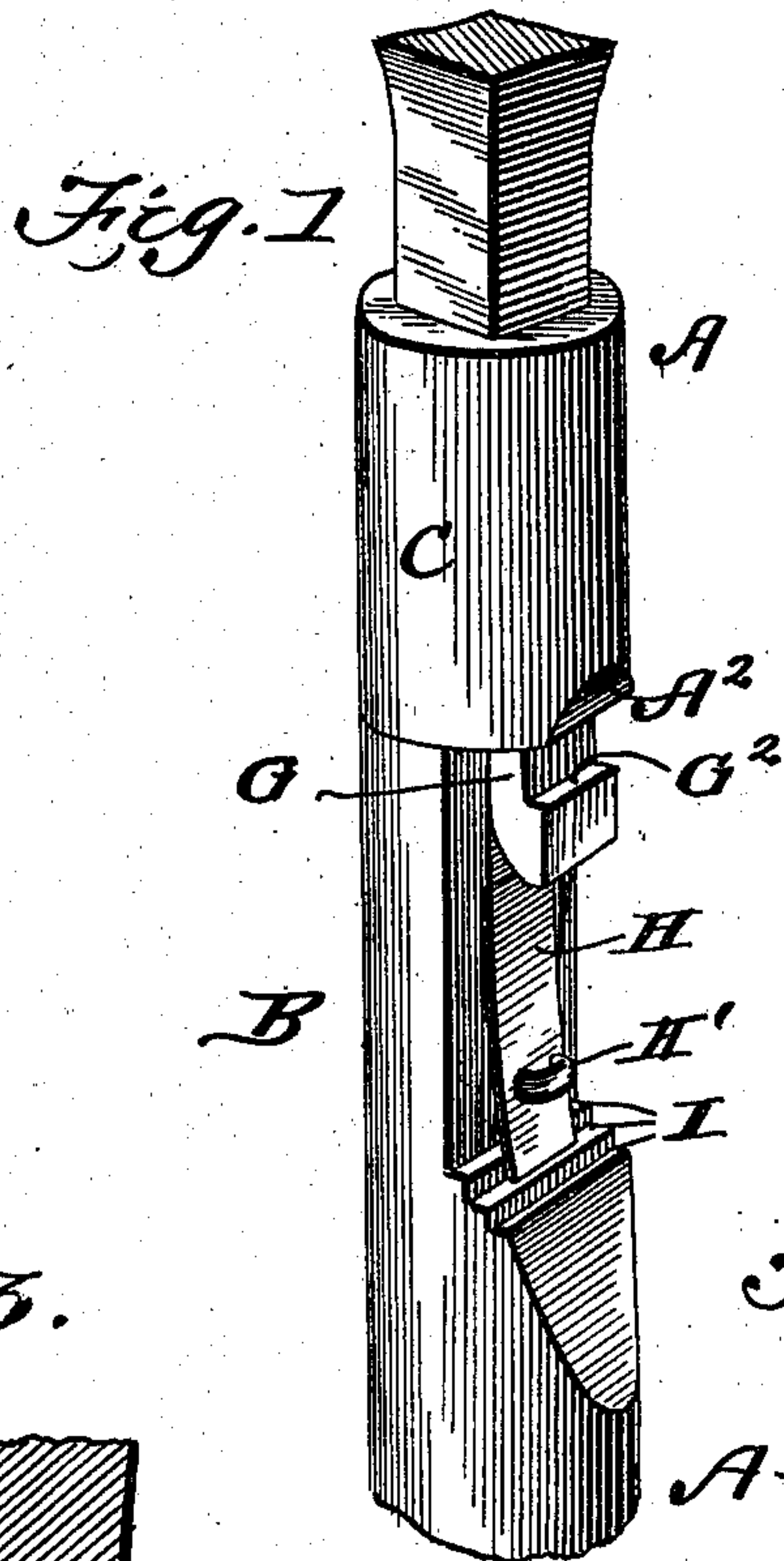


No. 736,371.

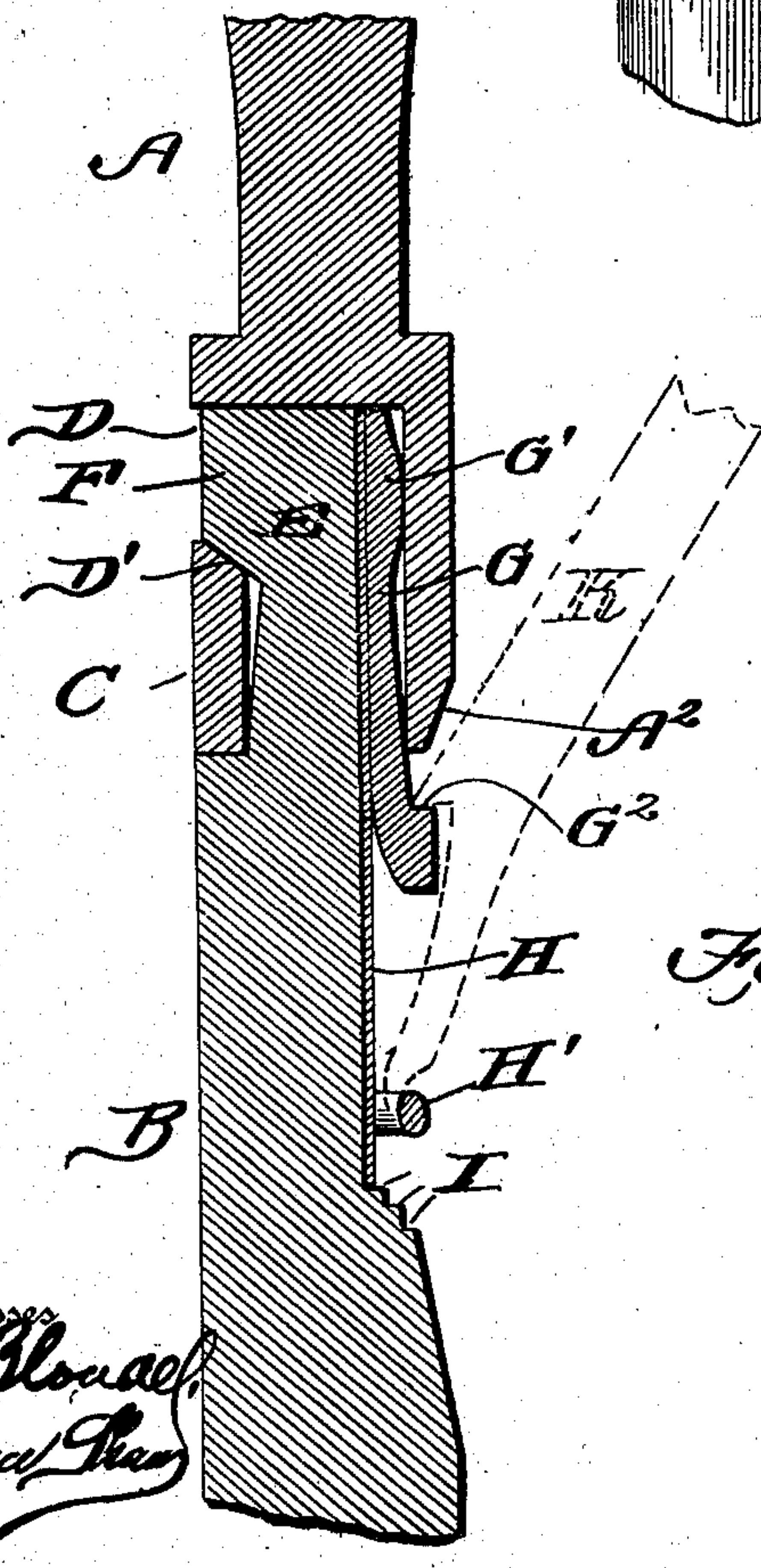
PATENTED AUG. 18, 1903.

F. M. EGBERT.  
SUCKER ROD CONNECTOR.  
APPLICATION FILED JUNE 28, 1902.

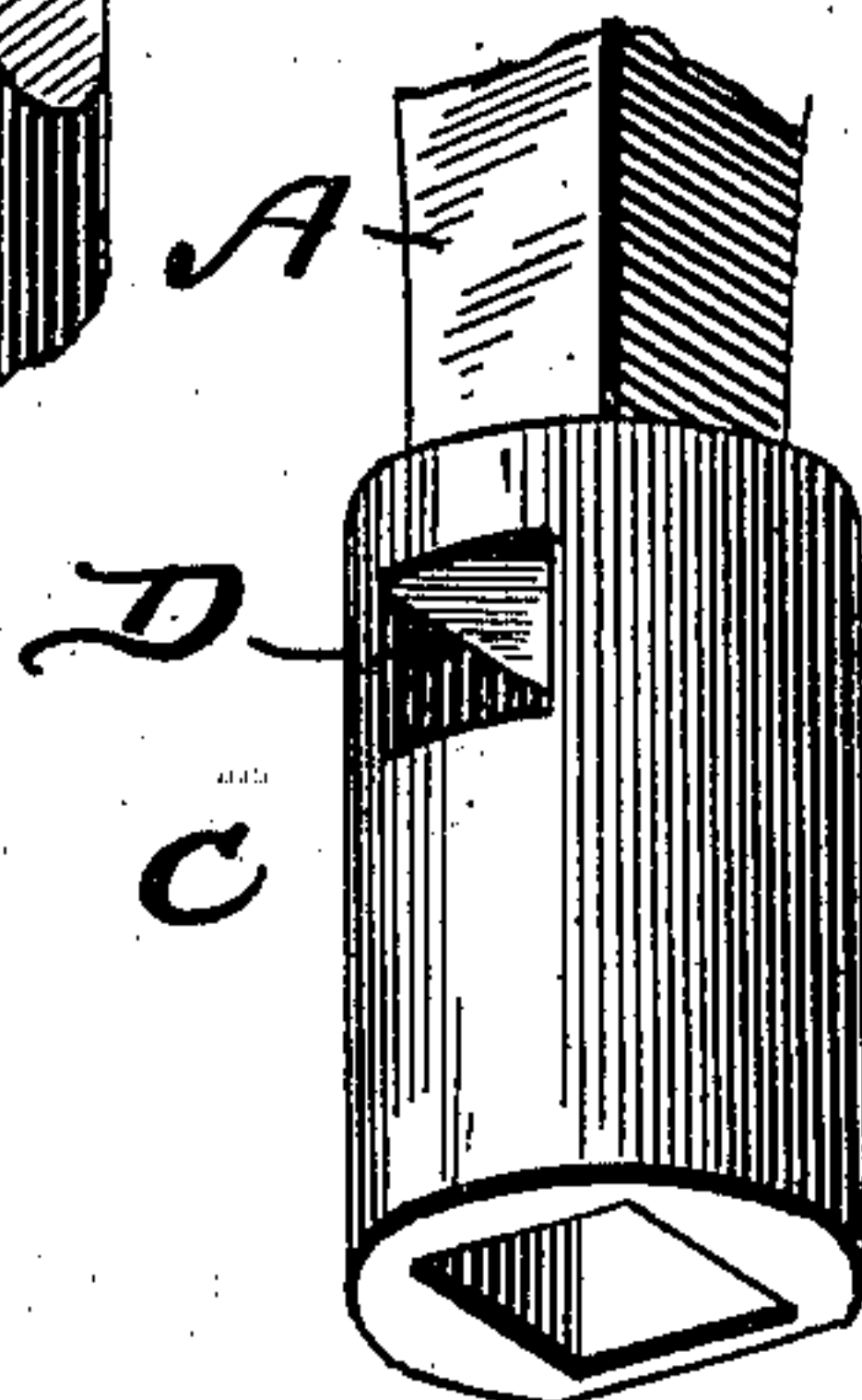
NO MODEL.



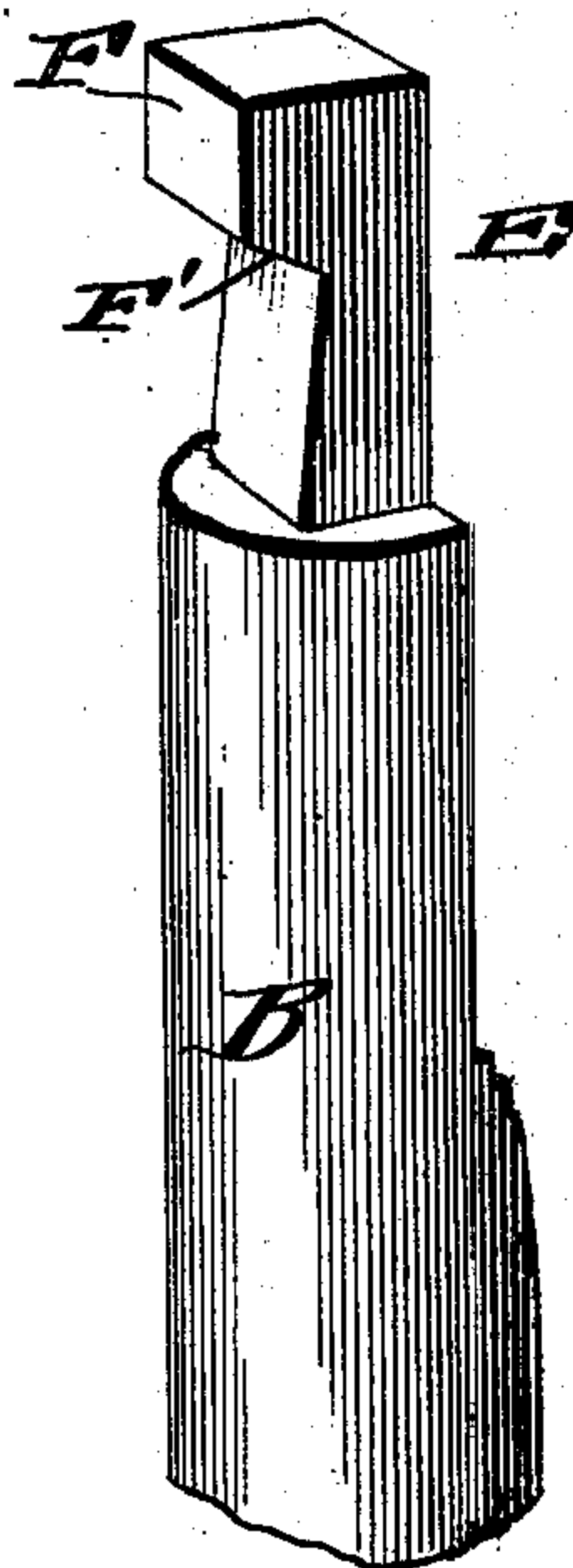
*Fig. 3.*



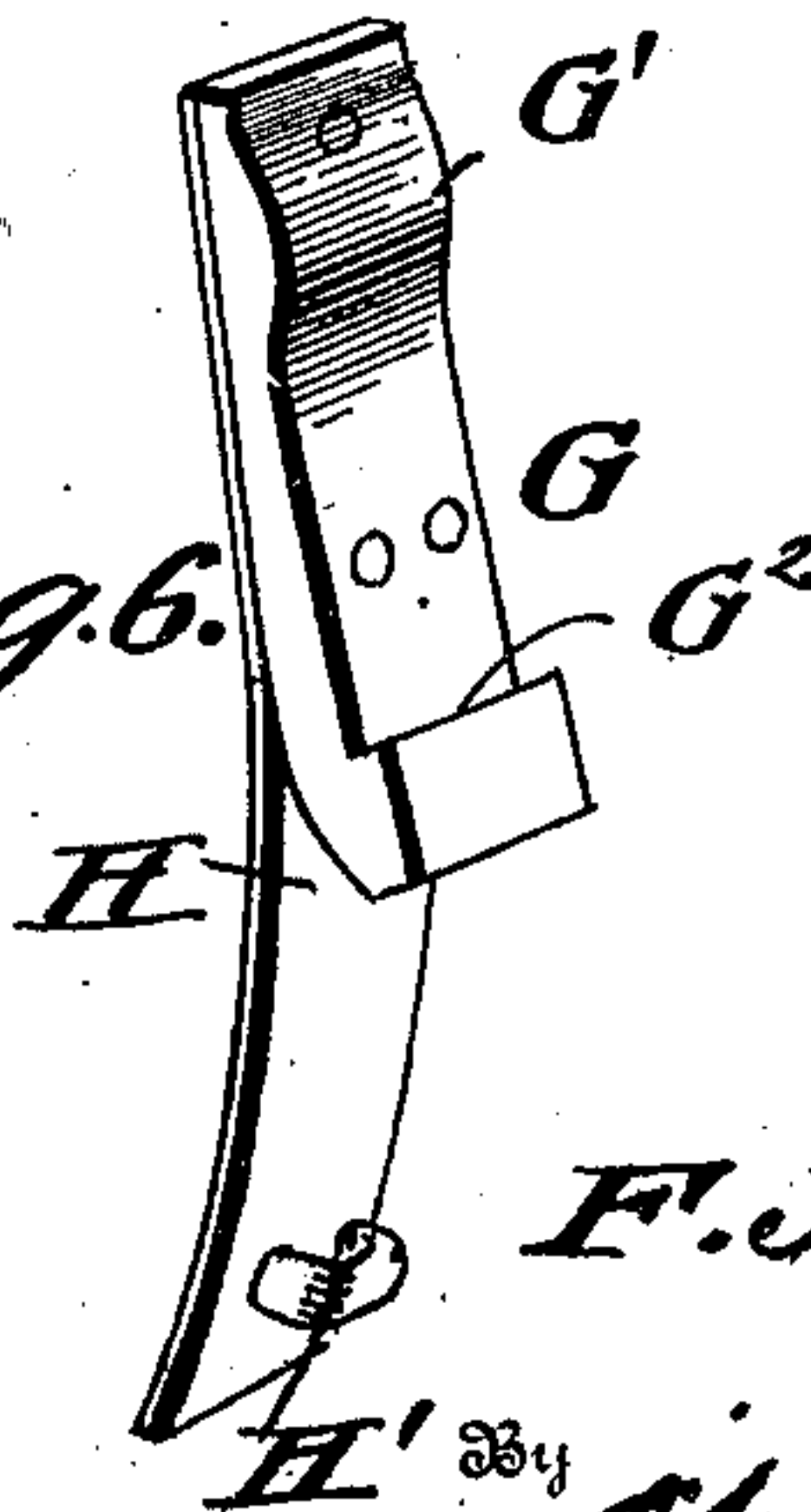
*Fig. 4.*



*Fig. 5.*



*Fig. 6.*



Witnesses  
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*F. M. Egbert.*  
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# UNITED STATES PATENT OFFICE.

FRANCIS M. EGBERT, OF BAIRDSTOWN, OHIO, ASSIGNOR TO GEORGE C. LEFLER, OF MARVEL, OHIO.

## SUCKER-ROD CONNECTOR.

SPECIFICATION forming part of Letters Patent No. 736,371, dated August 18, 1903.

Application filed June 23, 1902. Serial No. 112,922. (No model.)

*To all whom it may concern:*

Be it known that I, FRANCIS M. EGBERT, a citizen of the United States, residing at Bairdstown, in the county of Wood and State of Ohio, have invented a new and useful Improvement in Sucker-Rod Connectors, of which the following is a specification.

This invention is an improved construction of sucker-rod coupling or connector, the object being to provide an exceedingly simple and highly-efficient coupling or connector, whereby two sections of a sucker-rod may be quickly and easily connected or disconnected.

With this object in view the invention consists in the novel features of construction and combination and arrangement, and also in the novel construction of tool to be used in connection with the coupling, all of which will be fully described hereinafter, and pointed out in the claims.

In the drawings forming part of this specification, Figure 1 is a perspective view showing the coupling complete. Fig. 2 is a detail perspective view of the tool to be used in connection with the coupling. Fig. 3 is a vertical sectional view taken through the coupling, the tool being shown in dotted lines. Fig. 4 is a detail perspective view of the socket. Fig. 5 is a detail perspective view of the head, and Fig. 6 is a detail perspective view of the wedge and attached spring.

Referring to the drawings, A indicates one section of the sucker-rod and B the other section, said section A terminating in a socket C, having an opening D at one side adjacent to the top. The section B terminates in a head E, having a laterally-projecting portion F, which is adapted to be projected into the opening D when the coupling or connecting operation is complete. The under side of the lateral extension F is beveled, as shown at F', and the lower edge of the opening D is beveled, as shown at D', the beveled face being adapted to contact, as most clearly shown in Fig. 3. The bore of the socket is square in cross-section, and the head E is also square in cross-section; but the main portion of said head is narrower than the bore of the socket, but the extreme end, or that portion having the lateral extension or projection, is of substantially the same size as the bore of the

socket. After the head has been inserted into the socket the projection is forced into the opening D and the coupling is completed by means of the wedge G, which is forced up into the socket alongside of the head, the head and adjacent portion of the sucker-rod being in alinement, as most clearly shown, thereby enabling the wedge to be pushed up into the socket, forcing the lateral projection of the head into the opening D, and it will be noted that the said wedge is formed with an enlargement G' adjacent to the upper end and a shoulder G<sup>2</sup> at its lower end. A leaf-spring H is riveted to the inner face of the wedge G and carries a staple H' adjacent to this lower end and upon the outer face.

I indicates a series of shoulders arranged in step order transversely across section of the sucker-rod a short distance below the head, the purpose of said steps being to serve as a stop against which the lower end of the spring rests when the coupling is completed. As before stated, the head is inserted into the socket and shifted laterally and wedge inserted, and the enlarged portion G' will serve to hold the lateral projection of the head always in close engagement with the opening latter from becoming loose, a band partly engaged. In order to disconnect the sections, I employ a tool K, comprising the shank K', shoulder K<sup>2</sup>, and finger K<sup>3</sup>, terminating in a point K<sup>4</sup>. The manner of using the tool is as follows:

The point K<sup>4</sup> is inserted in the shank H' of the spring and the shoulder K<sup>2</sup> brought into engagement with the shoulder G<sup>2</sup>, and then by rocking the tool upon the beveled end A<sup>2</sup> of the socket and pressing down upon the same the wedge is withdrawn from the socket and the parts can then be disconnected. The upper section of the coupling is preferably constructed to receive the gripping-tools, by means of which the rods can be withdrawn from the well or tubing, and it will thus be seen that I provide an exceedingly simple and highly-efficient construction of sucker-rod coupling or connection.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. A device of the kind described compris-



ing a socket having an opening at one side, a head adapted to enter the socket and having a lateral projection or extension, a wedge adapted to be inserted within the socket and  
5 alongside the head, and means attached to said wedge for holding the same in position and also for assisting in its removal as specified.

2. The combination with a socket having an  
10 opening in one side, of a head having a lateral extension, a wedge adapted to fit into the socket, a plate attached to said wedge and extending below the lower end of same, and a staple connected to the said plate for the purpose specified.  
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3. The combination with a socket having an

opening at one side, of a head carried at the upper end of the rod-section and having a lateral extension, said rod-section having a series of transverse shoulders arranged below the head, and a wedge having a curved enlargement adjacent to its upper end, and a transverse shoulder adjacent to its lower end, and a plate secured to the said wedge and extending below the same and carrying a staple adjacent to its lower end for the purpose specified.

FRANCIS M. EGBERT.

Witnesses:

W. D. CAMPBELL,

G. W. FRIES.