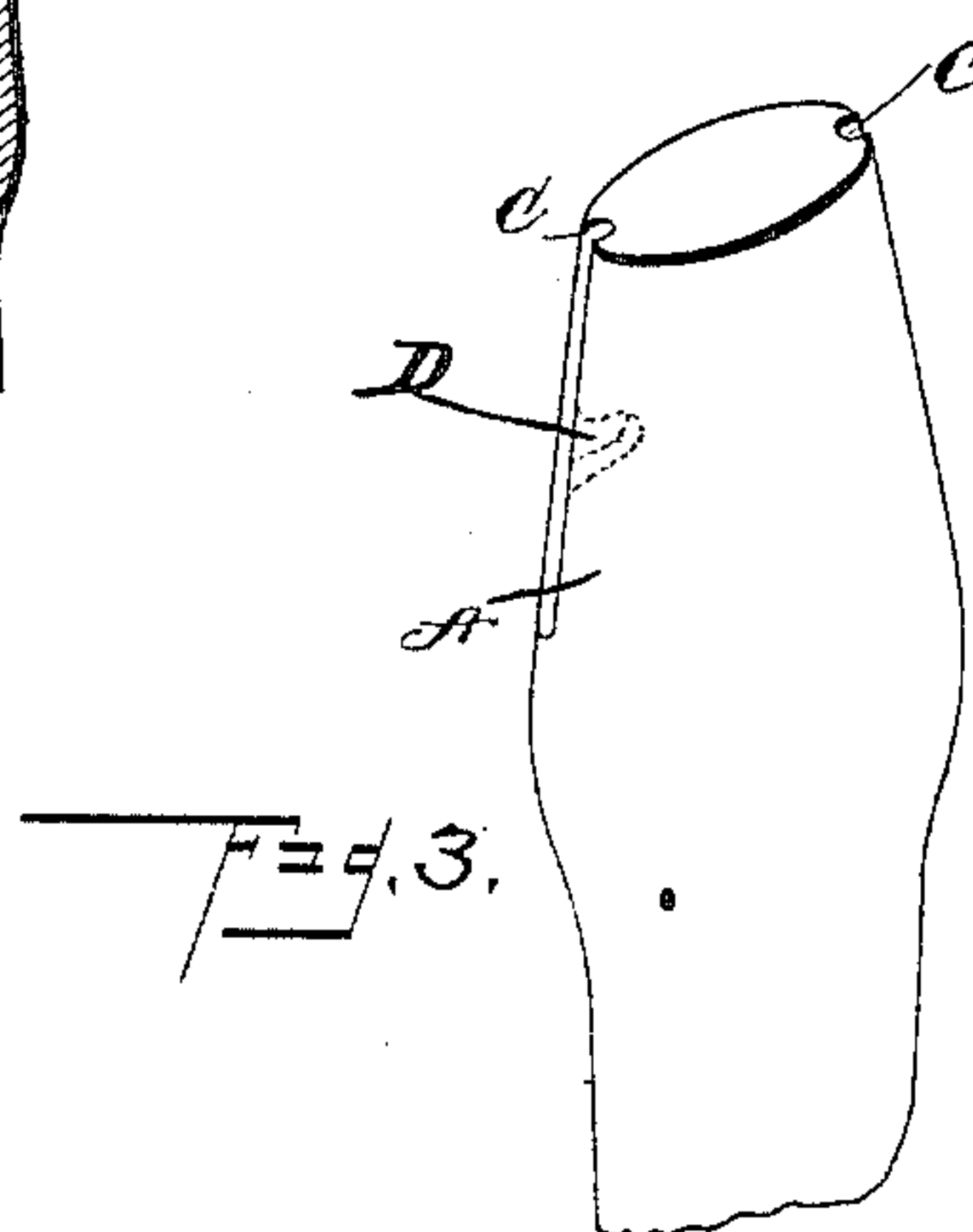
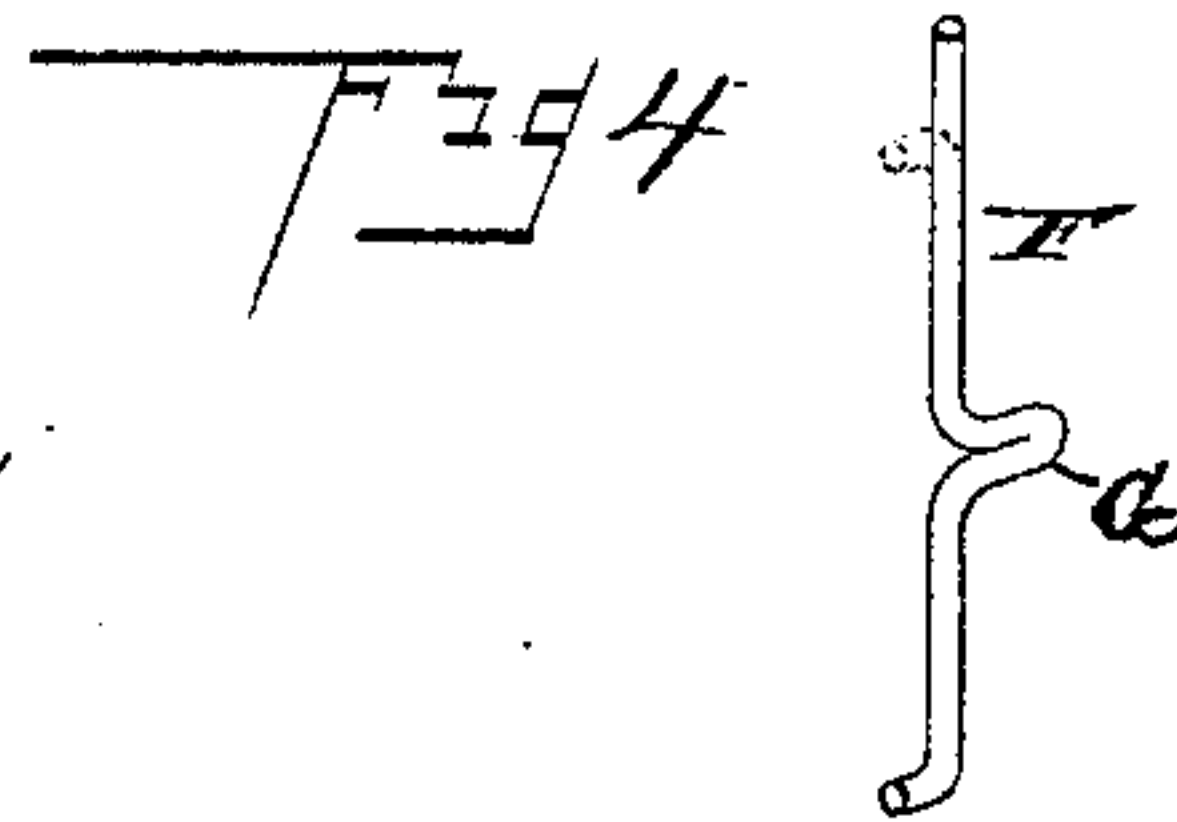
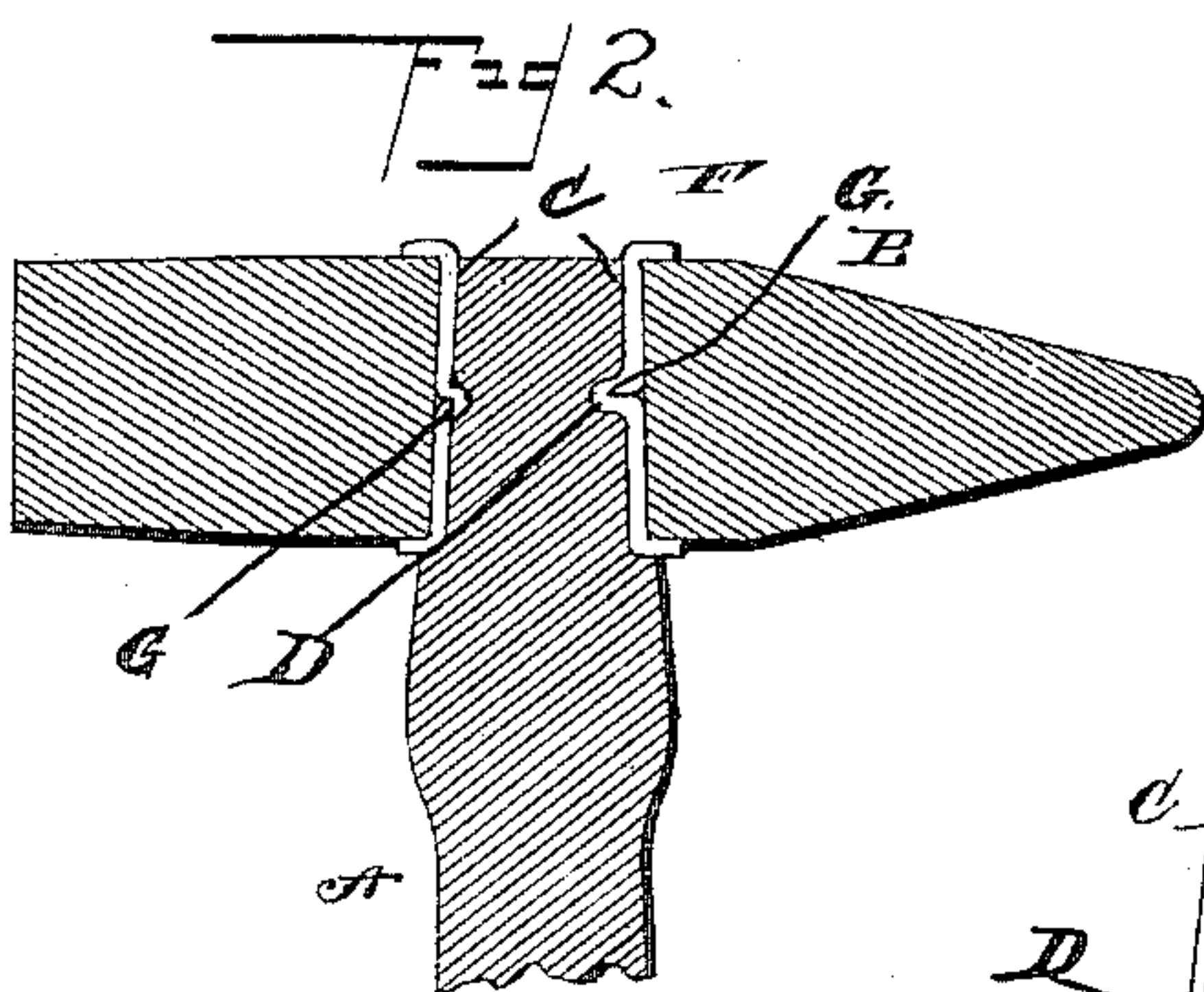
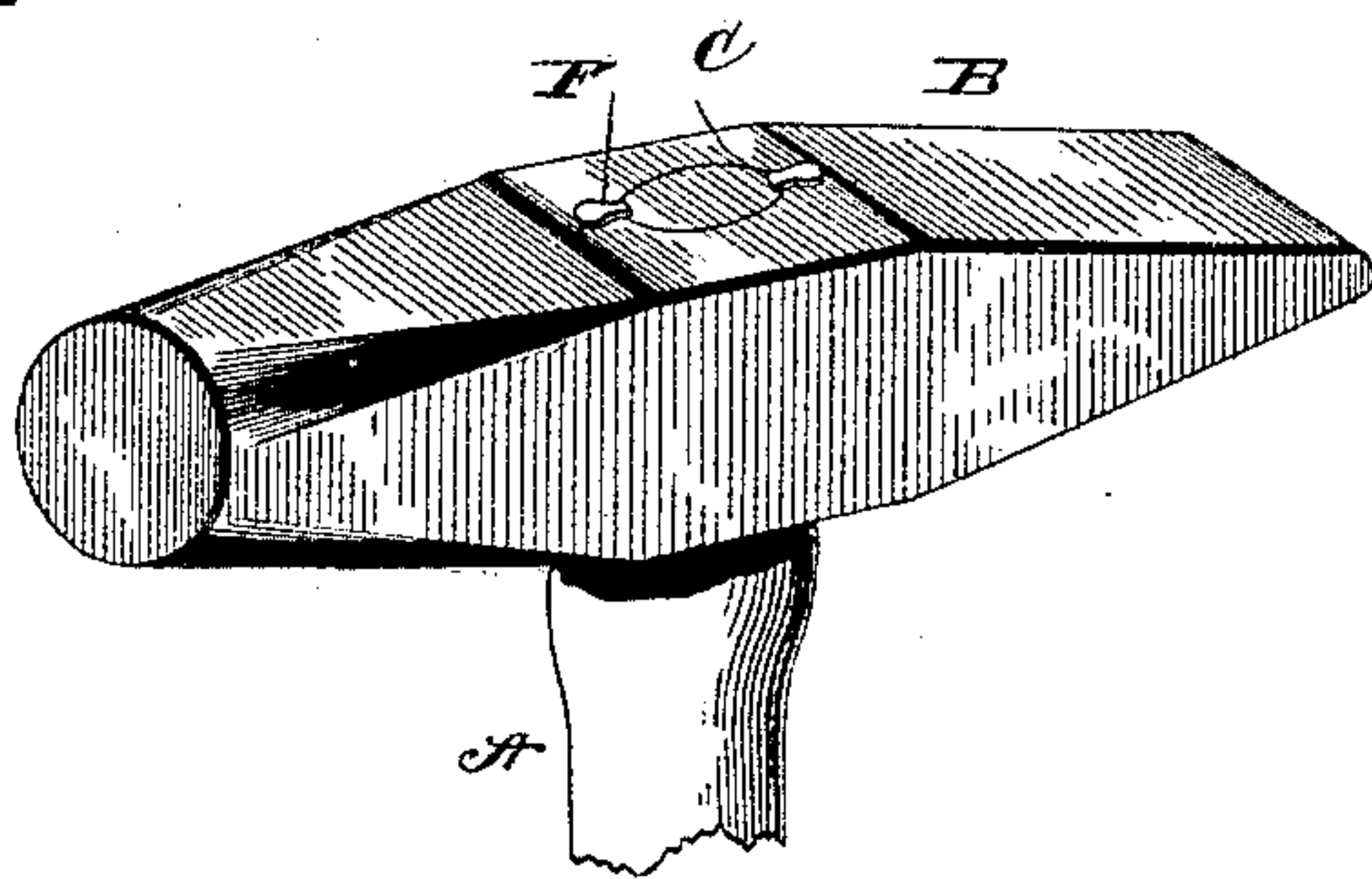


(No Model.)

R. W. JEFFERIS.
TOOL HANDLE.

No. 453,595.

Patented June 2, 1891.



Witnesses

John M. ...

R. W. Bishop.

Inventor

Richard W. Jeffers,

By *his* Attorney

W. W. Calmore.

UNITED STATES PATENT OFFICE.

RICHARD W. JEFFERIS, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF
THREE-FOURTHS TO WILLIAM H. MAGOFFIN AND ELMER E. BROWN,
BOTH OF SAME PLACE.

TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 453,595, dated June 2, 1891.

Application filed May 26, 1890. Serial No. 353,275. (No model.)

To all whom it may concern:

Be it known that I, RICHARD W. JEFFERIS, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Tool-Handles, of which the following is a specification, reference being had therein to the accompanying drawings.

My invention relates to improvements in tool-handle fastenings, and has for its object the provision of a cheap and simple device by means of which the tool-head will be effectually prevented from flying from the handle when the tool is subjected to hard usage.

The invention consists in certain novel features hereinafter described and claimed.

In the annexed drawings, Figure 1 is a perspective view of a hammer, showing my improved fastening applied thereto. Fig. 2 is a longitudinal section of the same. Fig. 3 is a detail view of the end of the handle, and Fig. 4 is a detail view of the fastening.

The handle A and the tool-head or hammer B may be of any desired size or preferred form. I desire to state at the outset that while I have shown a hammer in the drawings, it will be readily understood that I do not confine myself to that tool, as it will involve no departure from my invention to apply the fastening to any other tool. The end of the handle is provided on opposite sides with the longitudinal grooves C, and diametrical recesses or sockets D are formed in the bases of said grooves at intermediate points of the length thereof, as shown.

F designates the fastener, which is preferably made from stout wire and is provided with an offset G, which engages the recess or socket D in the handle, the body or shank of the fastener lying in the groove C, as clearly shown. The end of the fastener extends beyond the eye of the tool-head, and after the end of the handle and the fastener are inserted through the eye the projecting end of the fastener is bent down close upon the outer side of the tool-head, as shown in Figs. 1 and 2.

The inner end of the fastener is bent outward against the inner side of the tool-head, while the outer end thereof is bent outward against the outer side of the tool-head, thus

preventing the head from slipping in either direction. The device is thus especially adapted for use when the handle has been broken, and an ordinary cylindrical stick is utilized as a handle. I am also enabled to effect an economy in the cost of the tool when this device is used, as I overcome the necessity of forming an annular shoulder on the handle to prevent the tool-head from slipping inward, thus cheapening the cost of the same.

From the foregoing description, taken in connection with the accompanying drawings, the manner of using my device and the advantages to be derived from its use will be readily understood. The fasteners are fitted in the grooves in the end of the handle, and the end of the handle and the fastener are then inserted through the eye of the head, their outer ends bent down against the outer side of the tool-head, and their inner ends bent against the inner side of the same, thereby holding it upon the handle. It will be observed that the grooves in the handle provide sufficient room for the fasteners, so that they can pass through the eye of the tool-head without necessitating a special construction of said eye. The offsets by engaging the sockets in the handle effectually hold the fasteners against slipping, so that the tool-head will be positively held to its place and prevented from moving in either direction. The device is very simple in its construction, efficient in its operation, and can be manufactured at a slight cost.

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

The combination of the handle provided with longitudinal grooves and diametrical sockets in the bases of said grooves at intermediate points of the length thereof, the tool-head, and the fasteners fitted in the said grooves, having offsets engaging the sockets in the handle and having their ends bent outward closely against the opposite sides of the tool-head, as set forth.

In testimony whereof I affix my signature in the presence of two witnesses.

RICHARD W. JEFFERIS.

Witnesses:

W. I. RAYMOND,
JOHN F. HALBACH.