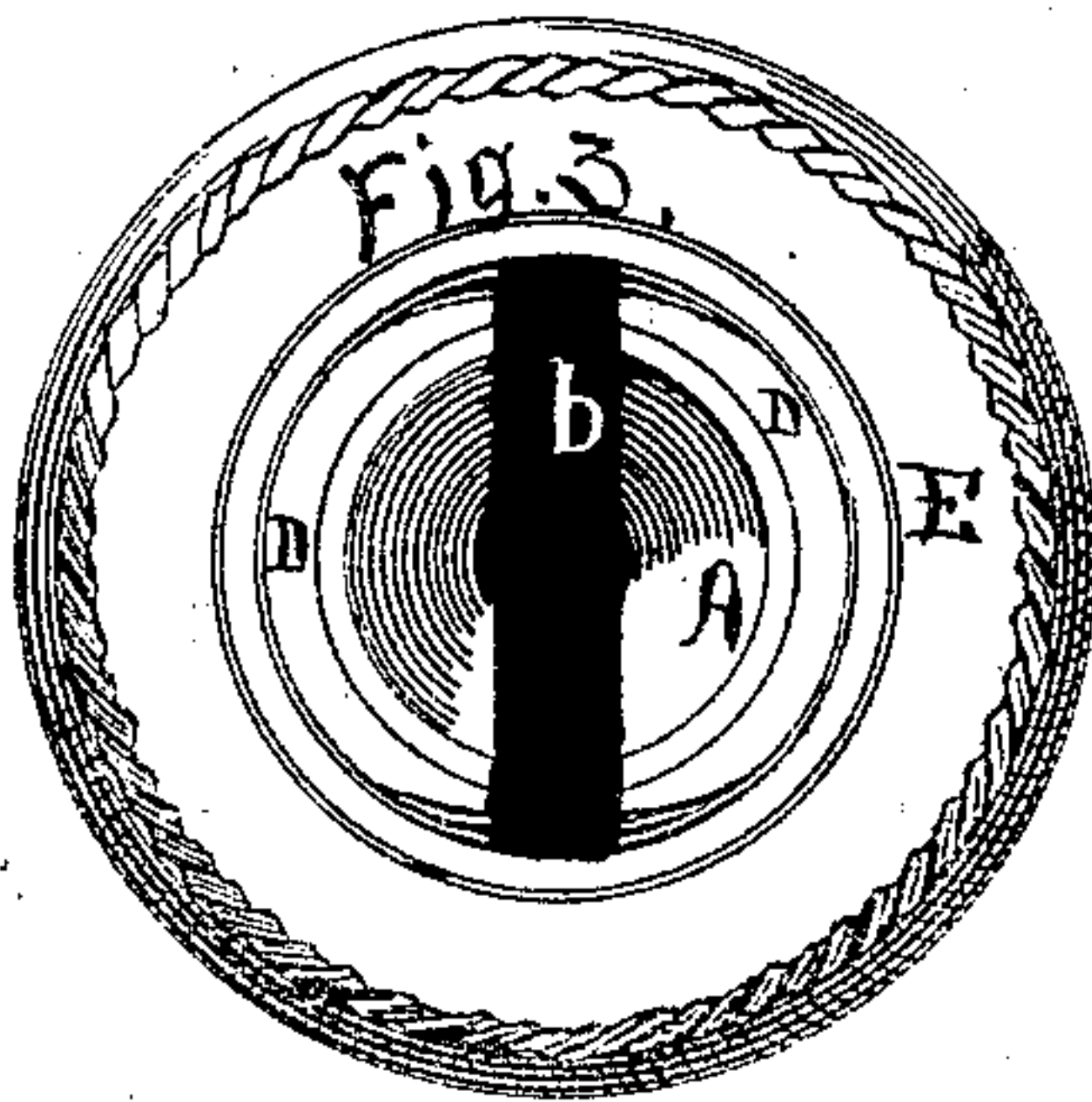
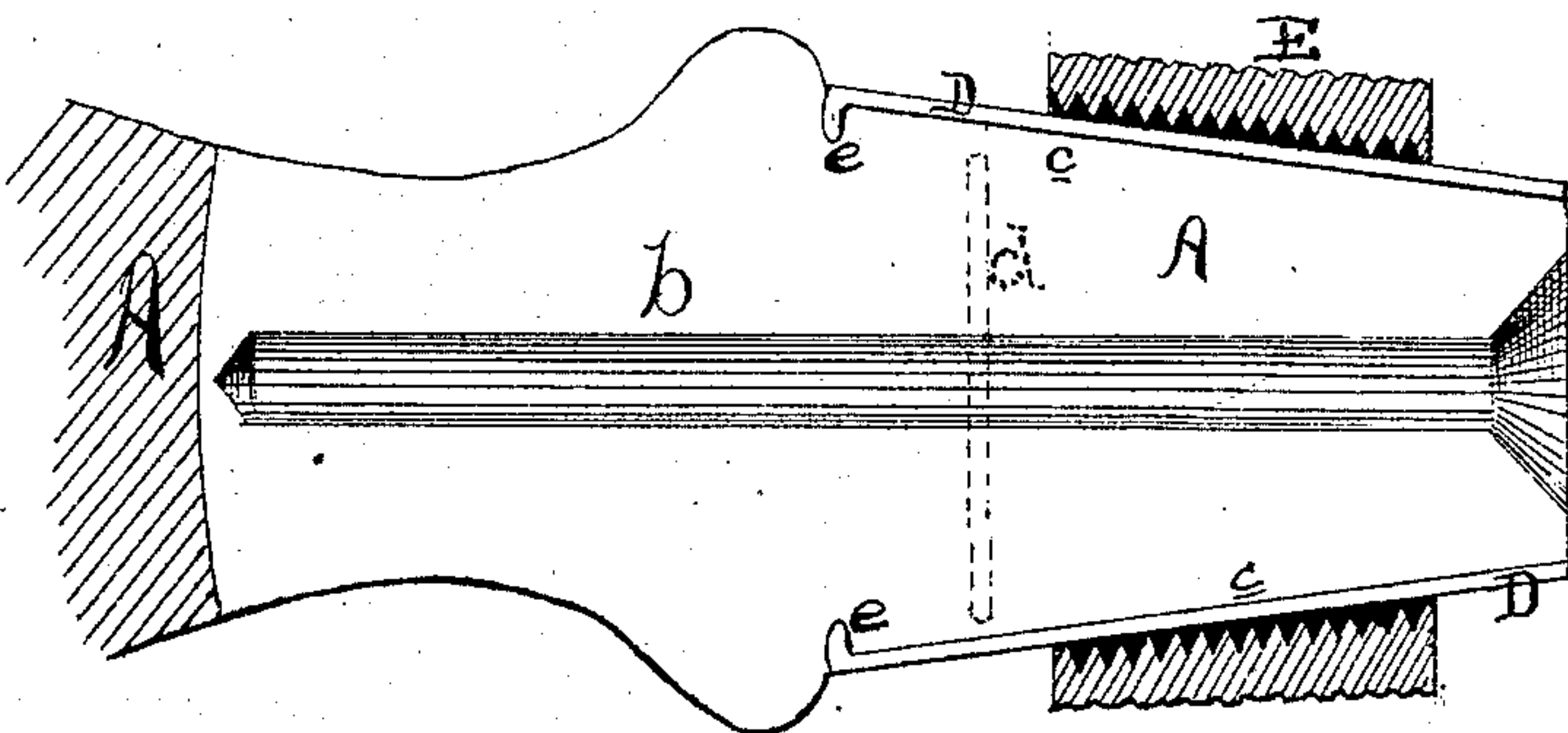
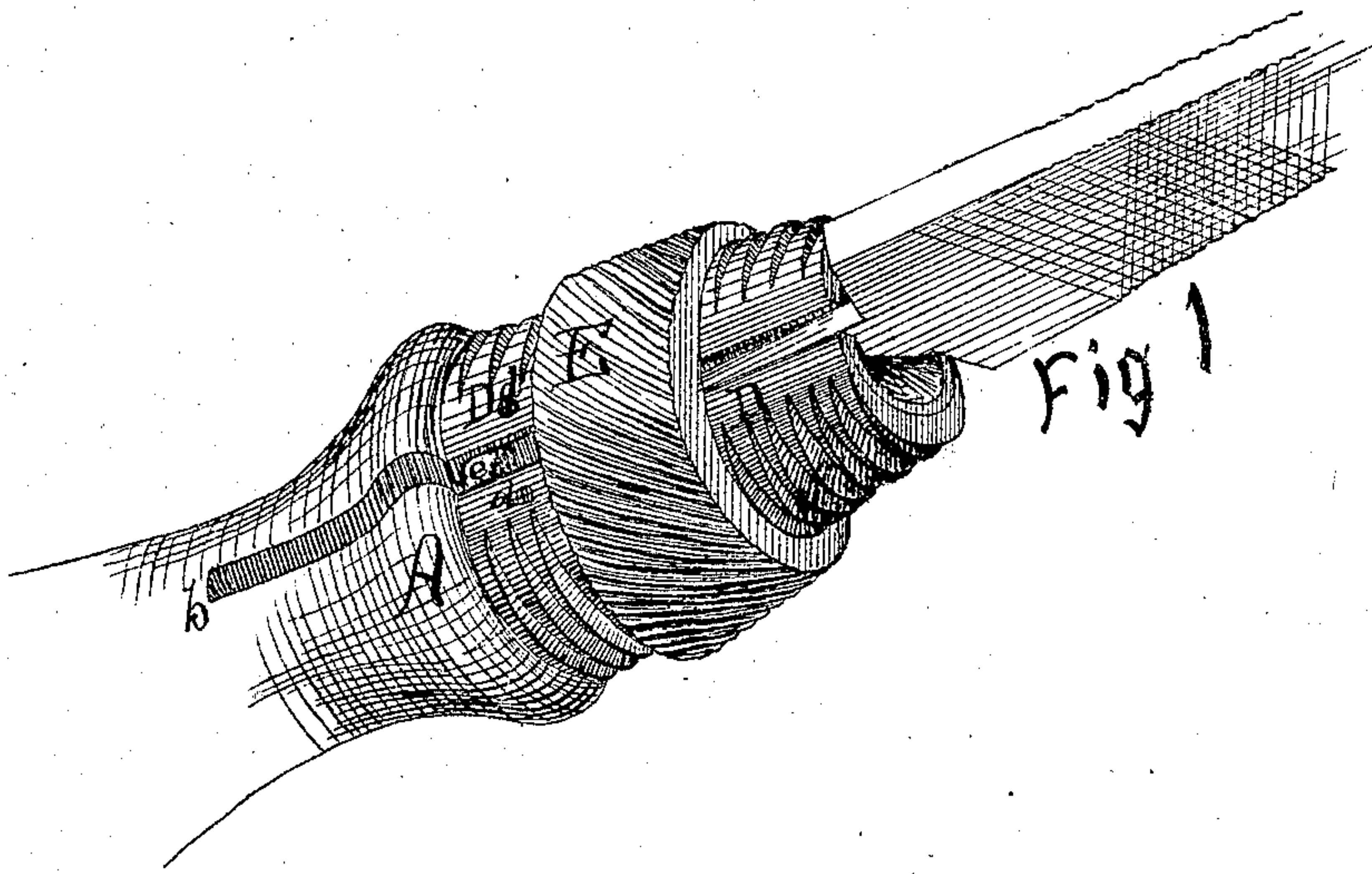


S. W. WEATHERHEAD.

Tool-Handles.

No. 133,908.

Patented Dec. 10, 1872.



Witnesses  
J. S. Brown  
L. H. Hudson

Inventor  
Saulford W. Weatherhead  
By his atty  
R. D. Smith



# UNITED STATES PATENT OFFICE.

SANFORD W. WEATHERHEAD, OF NORTHFIELD, MASSACHUSETTS.

## IMPROVEMENT IN TOOL-HANDLES.

Specification forming part of Letters Patent No. **133,908**, dated December 10, 1872.

*To all whom it may concern:*

Be it known that I, SANFORD W. WEATHERHEAD, of Northfield, in the county of Franklin and State of Massachusetts, have invented a new and useful Improvement in Tool-Handles; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawing, in which—

Figure 1 is a perspective view of my tool-handle; Fig. 2 is a longitudinal section of the same; and Fig. 3 is an end view of the same.

Hitherto when tool-handles have been constructed with jaws to receive and hold the tang of the tool and a conical screw, either internal or external, to move said jaws toward each other, said screw-clamp and the jaws have always been formed as an entire structure independent of the handle and designed to be attached thereto, but not dependent thereon for their joint operation in seizing and holding the tang of the tool.

The object of this invention is to construct a clamping-tool handle so that the material of said handle shall itself form the clamping-jaws, and to protect such of its surfaces as may be liable to abrasion with metallic shields, and thus produce a tool-handle of great simplicity, cheapness, and effectiveness; and it, therefore, consists in a wooden handle slit at one end to form jaws to receive the tang of the tool, and provided with metallic shields on the outer surfaces of the slitted end and a conical clamping-screw or thimble running on a screw-thread cut on said shields, as will be more particularly set forth.

A is the tool-handle, which, as usual, is made of some suitable hard wood. A longitudinal slit, *b*, is sawed through the center of the handle, as shown, sufficiently far to give the parts

thus separated sufficient elasticity and flexibility. The end of the handle A is made conical for a short distance, as shown at *c*, and said conical part is covered by the plates D D, which have a screw-thread cut upon their outer surface to engage with the corresponding screw-thread on the inner surface of the conical thimble or nut E. The plates D may be made of sheet metal struck to shape in dies, or they may be cast, as may be found to be most advantageous. They are applied to the surface of the wood and secured thereto by a wire rivet, *d*, which passes through the jaw and plate D parallel with the slit *b*. At the upper end of the plate D there is also a small flange, *e*, projecting inward, and said flange is seated in a groove formed for it in the handle. This flange and groove holds the plate D against movements in the direction of the axis of the handle, and thereby materially relieves the rivet *d* from strain.

It is important that the contact of the plates D D and the screw-thimble E should be confined mainly to those parts of said plates midway between the slit edges, and therefore the screw-thread near the edges of said plates is cut away and the jaws reduced to an elliptical form. This permits the jaws to open and close without being cramped by the screw-thimble.

Having described my invention, what I claim is—

The combination of the slitted handle A with the protecting shields or plates D and the conical screw-thimble E.

SANFORD W. WEATHERHEAD.

Witnesses:

L. J. GUNN,  
G. EDGERTON.