

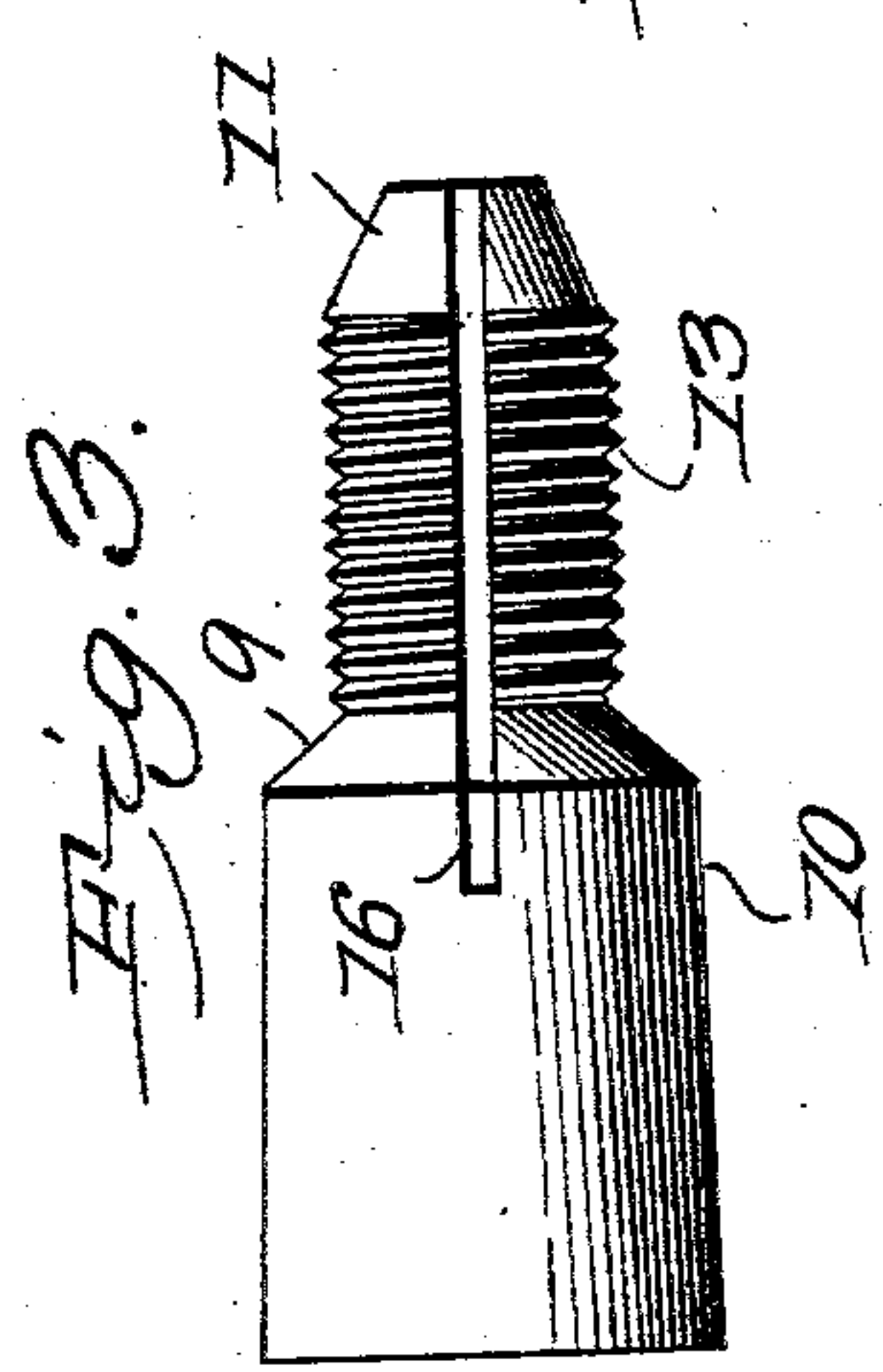
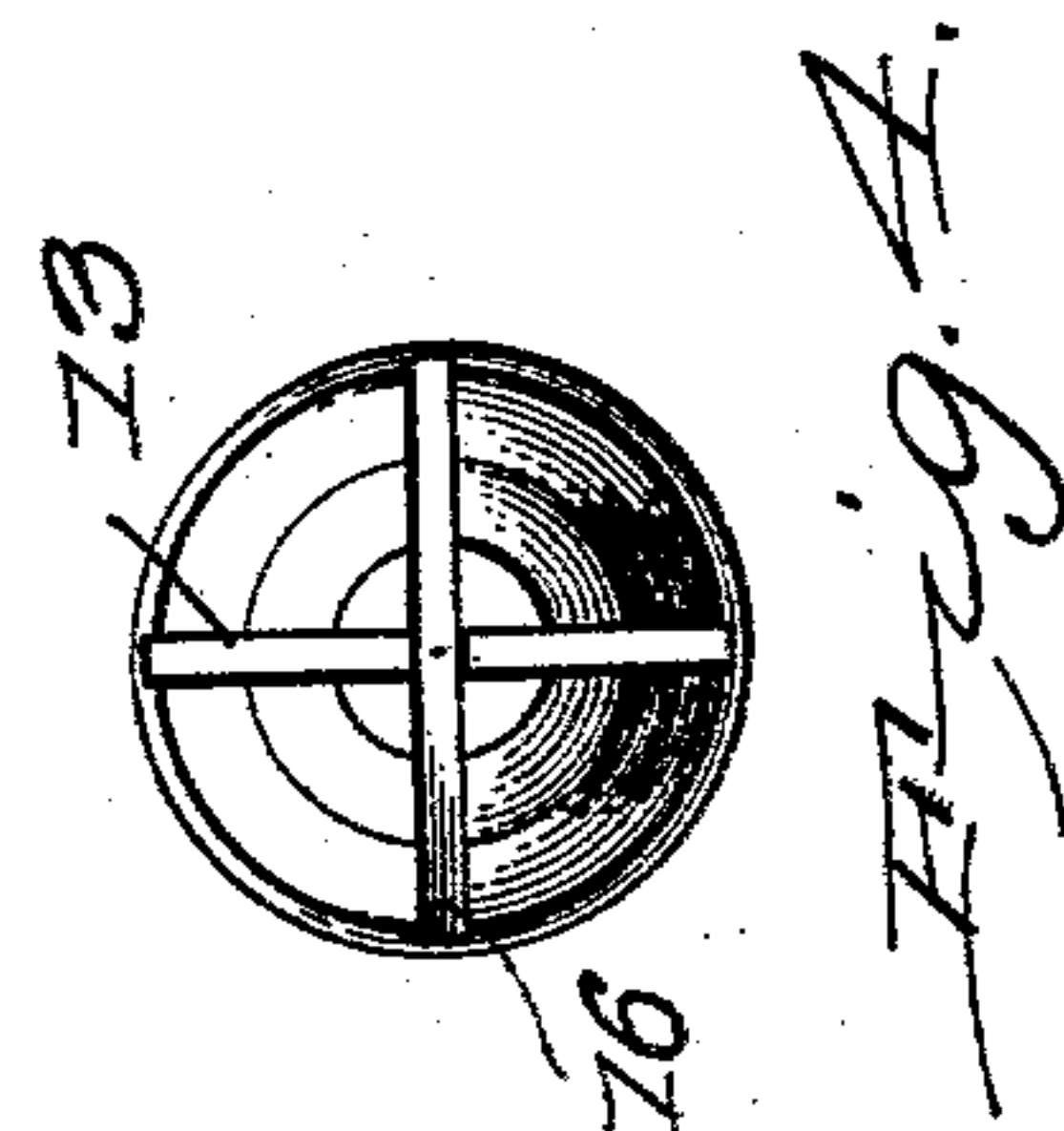
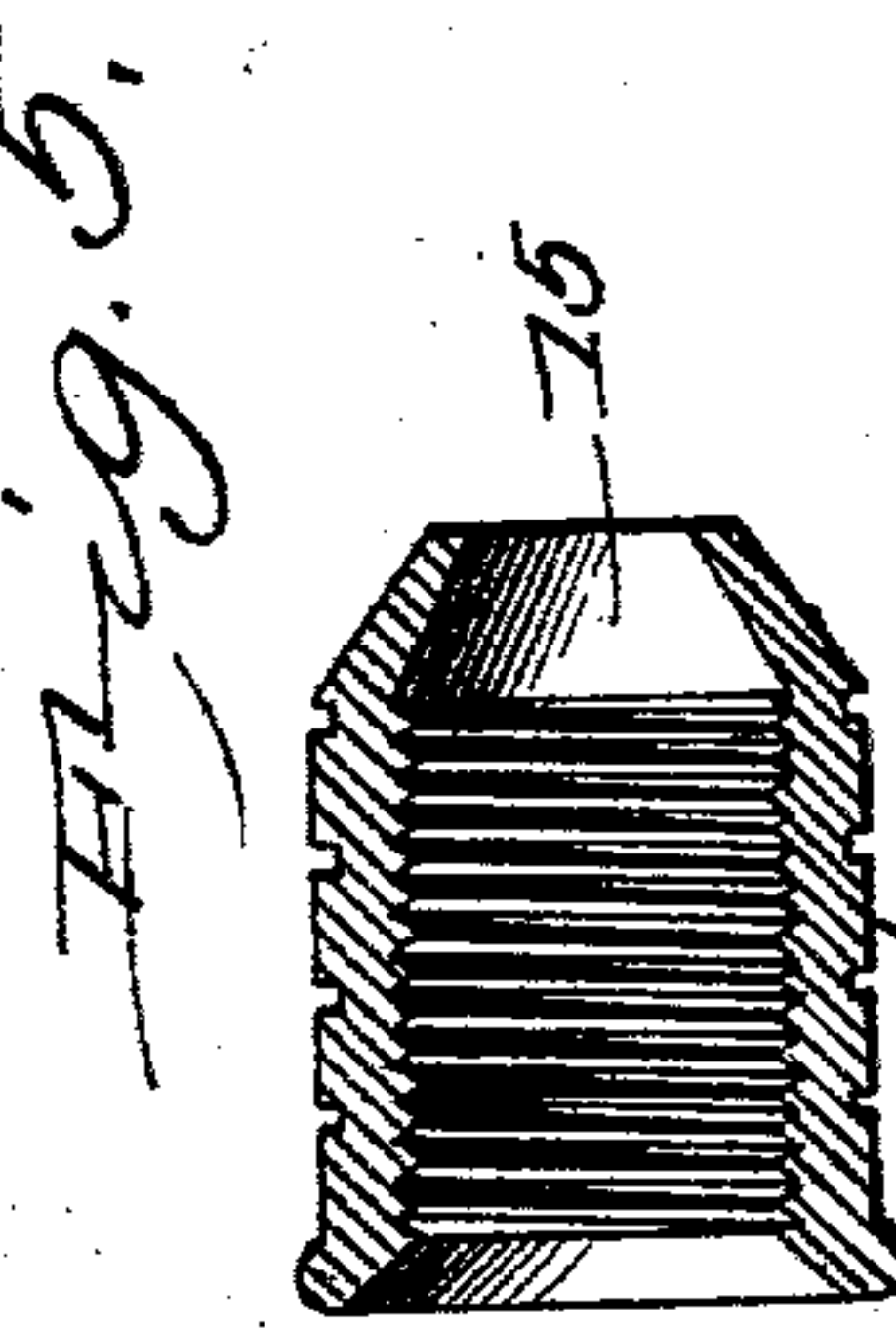
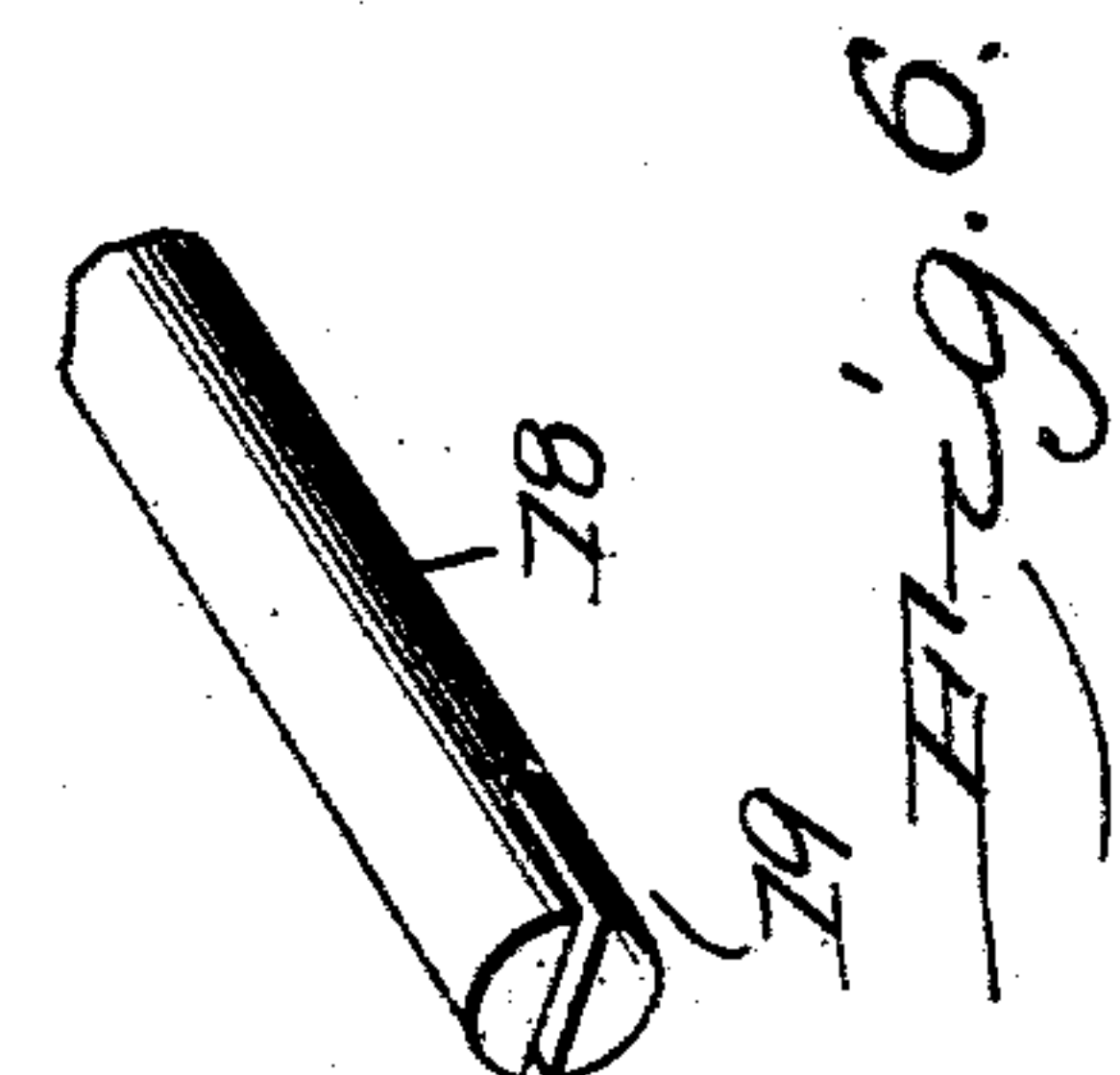
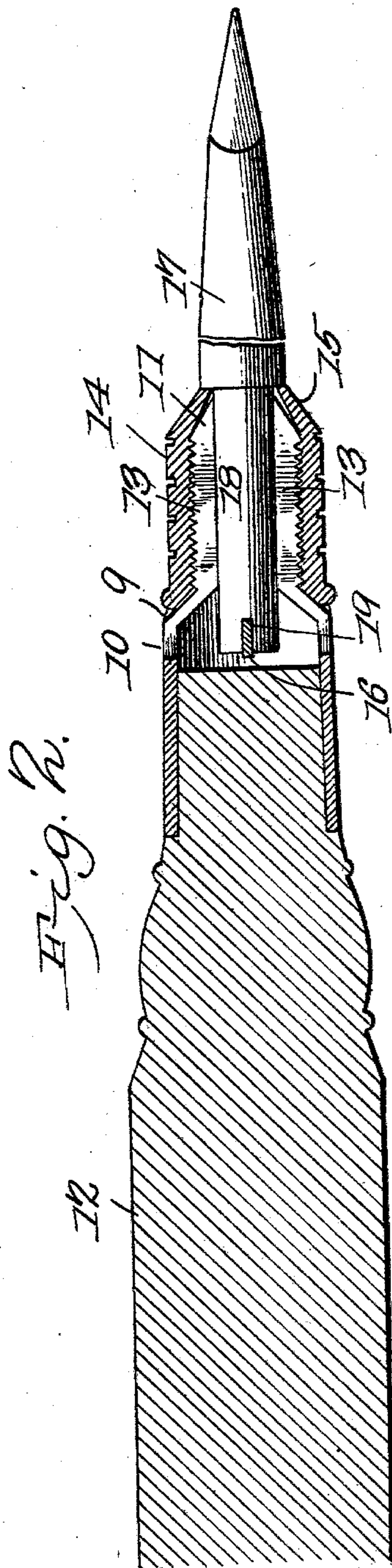
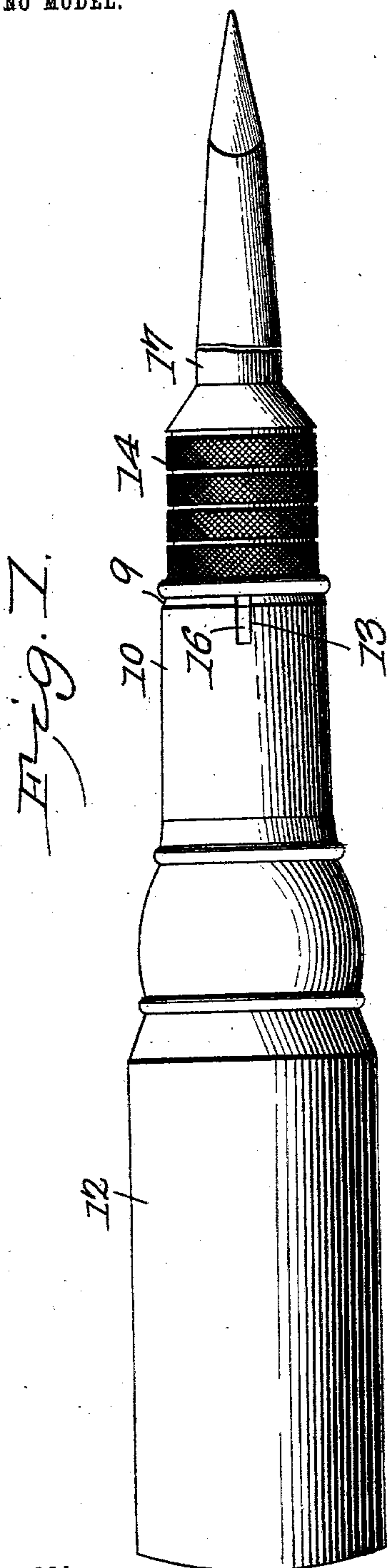
No. 753,241.

PATENTED MAR. 1, 1904.

I. S. DAVIDSON.  
TOOL HANDLE.

APPLICATION FILED SEPT. 5, 1903.

NO MODEL.



Witnesses  
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# UNITED STATES PATENT OFFICE.

ISAAC SHERWOOD DAVIDSON, OF KANSAS CITY, MISSOURI.

## TOOL-HANDLE.

SPECIFICATION forming part of Letters Patent No. 753,241, dated March 1, 1904.

Application filed September 5, 1903. Serial No. 172,153. (No model.)

*To all whom it may concern:*

Be it known that I, ISAAC SHERWOOD DAVIDSON, a citizen of the United States, residing at Kansas City, in the county of Jackson and State of Missouri, have invented a new and useful Tool-Handle, of which the following is a specification.

This invention relates to handles for the detachable support of tools and implements of various kinds, whereby the tools may be readily changed or firmly held while in use, and has for its object to simplify and improve the construction of devices of this character and produce a device by which the tools may be more securely held and supported and the cost of manufacture decreased; and the invention consists in certain novel features of construction, as hereinafter shown and described, and specified in the claims.

In the drawings illustrative of the invention, in which corresponding parts are denoted by like designating characters, Figure 1 is a side view of the improved device. Fig. 2 is a longitudinal section. Fig. 3 is a side elevation, and Fig. 4 is an end view, of the threaded stock detached. Fig. 5 is a longitudinal section of the compression-shell. Fig. 6 is a perspective view of the butt-end of one of the tools to be held.

The improved device comprises a stock 10, externally threaded and with a conical outer end 11, and a handle 12, secured in the other or inner end. The stock is formed with a central longitudinal aperture and preferably enlarged into a ferrule for engagement with the handle member, as shown, and with an inclined shoulder 9 between the ferrule and threaded portion, as shown. The stock 10 is also provided with transverse longitudinal clefts 13, oppositely disposed, and preferably four of these clefts will be employed, as shown in Fig. 4, the clefts providing for the compression of the stock, as will be obvious.

Engaging the threaded portion of the stock 10 is an internally-threaded compression-shell 14, with an internal conical portion 15 adapted for engagement with the conical end of the stock, so that when the shell is rotated upon the stock the reversely-conical surfaces will compress the divided portions of the stock

upon the butt-end of the tool when inserted into the aperture in the stock. The inner end of the shell 14 is flared outwardly to fit the tapered shoulder 9, as shown, whereby the outer milled or otherwise roughened surface of the shell is increased to correspondingly increase the "grip-surface" for the hand of the operator, as will be obvious.

Disposed in the stock 10 transversely of the aperture therein is a stop-bar 16, supported by its ends in two of the oppositely-disposed clefts 13, as shown, the stop-bar being preferably formed a trifle larger than the clefts, so that when forced therein it will be firmly held in position and will not require other fastening means.

The tools generally held in devices of this character are drills and other forms of borers, reamers, screw-drivers, key-wrenches, and the like, and for the purpose of illustration a screw-driver 17 is shown held in position therein, with the butt-end 18 conforming to the aperture in the stock and a cavity or recess 19 in its terminal for engagement with the bar 16, as shown. It will be understood that the butt-ends of all the tools will be of precisely the same form and size and each with a recess to engage the stop-bar 16, so that the tools are interchangeable in the handle member. By this arrangement the rotation of the shell 14 will compress the divided portions upon the butt-end of the tool and firmly support it from lateral movement, while the engagement with the stop-bar 16 will firmly support it from rotary or inward longitudinal movement. This twofold grip produces a very firm support for the tool, which is very desirable where severe strains are encountered, and will be found especially advantageous for piano-tuners, where the tools employed are subjected to very severe strains, both rotative and longitudinally.

The bars 16 may be of any required strength, and thus adapted to resist any strains to which they may be subjected, and when broken or worn can be quickly renewed at very slight expense and by any person without previous skill or knowledge, and the "life" of the implement thus indefinitely prolonged. The device can thus be very cheaply constructed and



will be found very convenient for the purposes described.

Having thus described the invention, what I claim is—

5 1. A tool-handle comprising a threaded compressible stock having a central longitudinal aperture, a stop disposed transversely of said aperture, an internally-threaded compression-shell for engagement with said threaded stock, and the tool to be held having a recess for engagement by said stop, substantially as specified.

2. A tool-handle comprising a threaded stock transversely divided longitudinally and with a central longitudinal aperture, a stop disposed transversely of said aperture, an internally-threaded shell for engagement with said stock, and the tool, to be held engaging said aperture and having a recess for engagement with said stop, substantially as specified.

3. A tool-handle comprising an externally-threaded transversely-divided stock having a conical extremity and central longitudinal aperture, a stop disposed transversely of said aperture, the tool to be held adapted for engagement with said aperture and having a recess for engagement with said stop, and an internally-threaded shell for engagement with said stock and having an internal conical por-

tion for engagement with the conical extremity of said stock, substantially as specified. 30

4. A tool-handle comprising an externally-threaded transversely-divided stock having a conical extremity and central longitudinal aperture, a stop disposed transversely of said aperture with its ends supported in the walls of said stock, a tool to be held engaging said aperture and having a recess for engagement with said stop, and an internally-threaded shell for engagement with said stock, substantially as specified. 40

5. A tool-handle comprising a threaded stock having transverse longitudinal clefts and a central longitudinal aperture, a stop disposed transversely of said aperture with its ends supported in said clefts, a tool to be held engaging said aperture and provided with a recess for engagement with said stop, and an internally-threaded shell for engagement with said stock, substantially as specified. 50

In testimony that I claim the foregoing as my own I have hereto affixed my signature in the presence of two witnesses.

ISAAC SHERWOOD DAVIDSON.

Witnesses:

W. M. TORBERT,  
CHAS. J. HERRIMAN.