

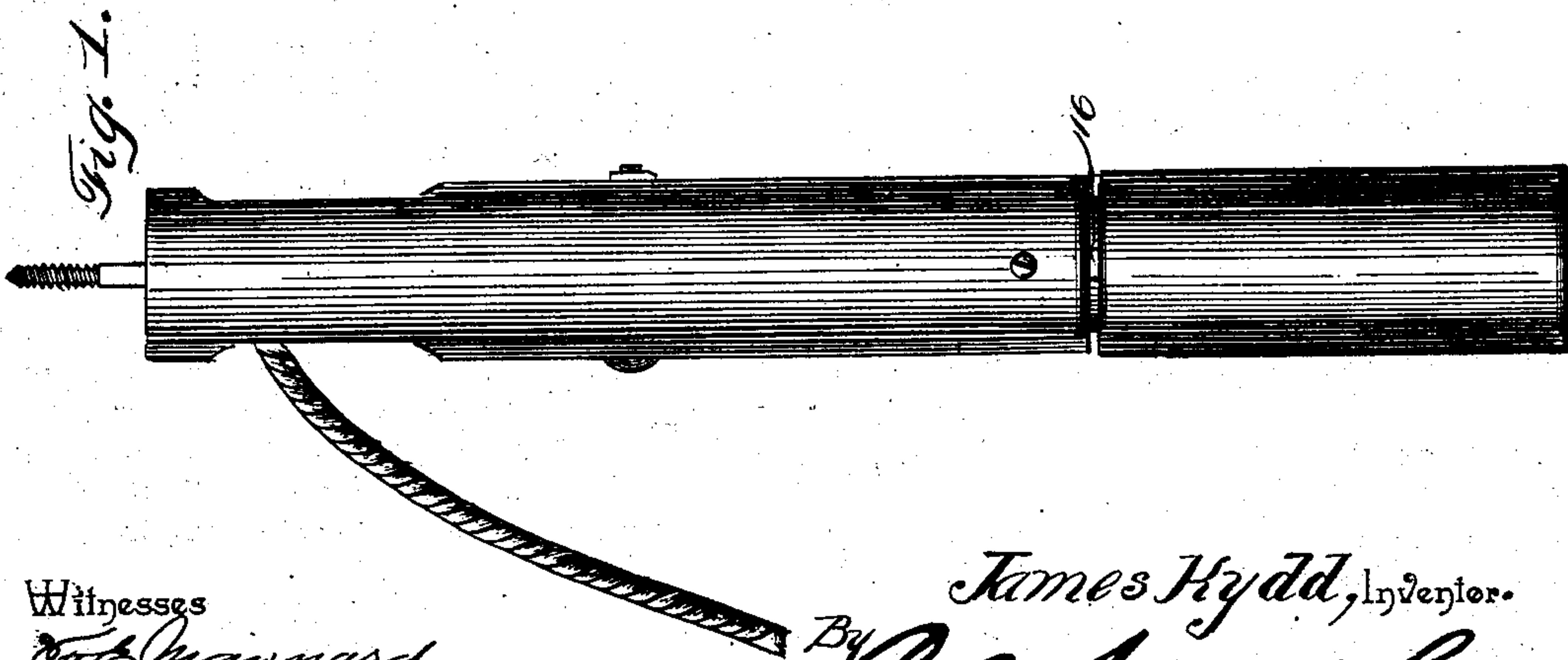
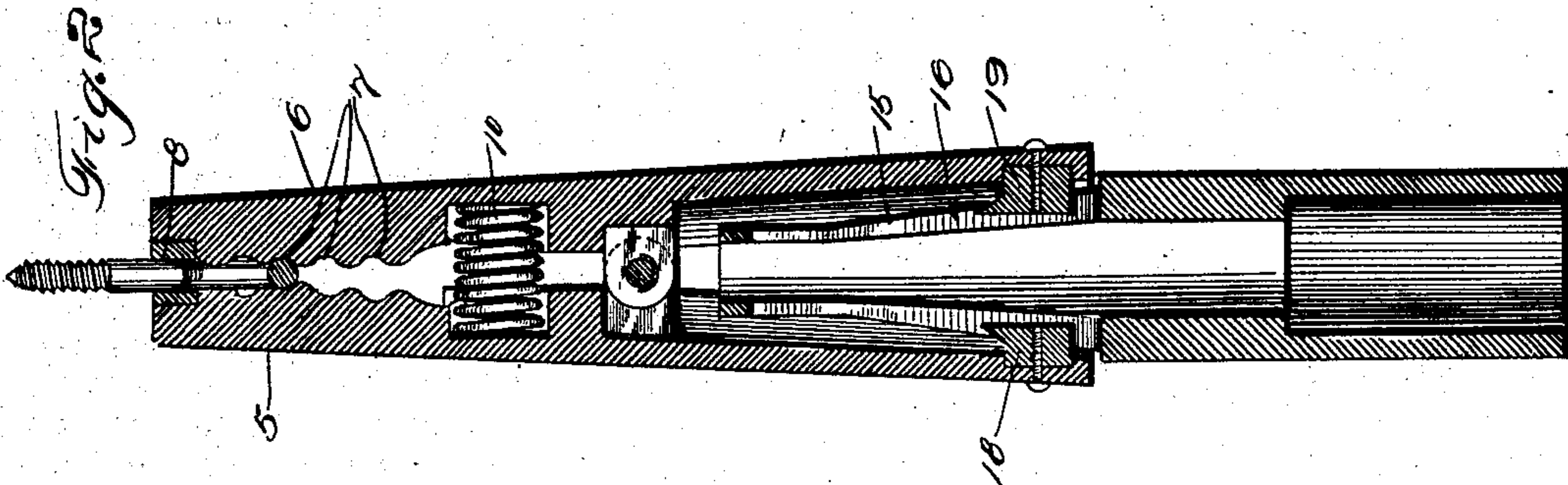
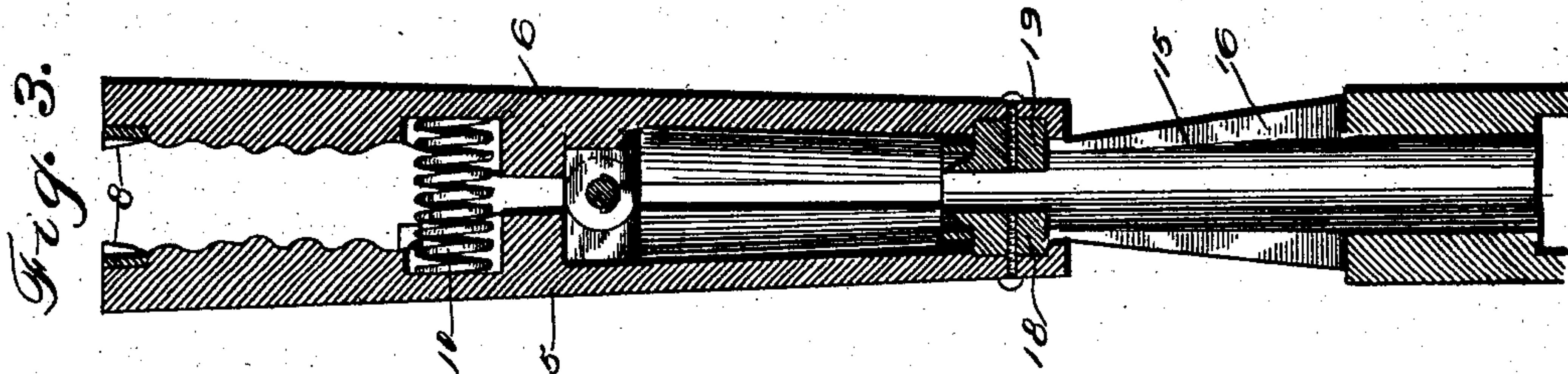
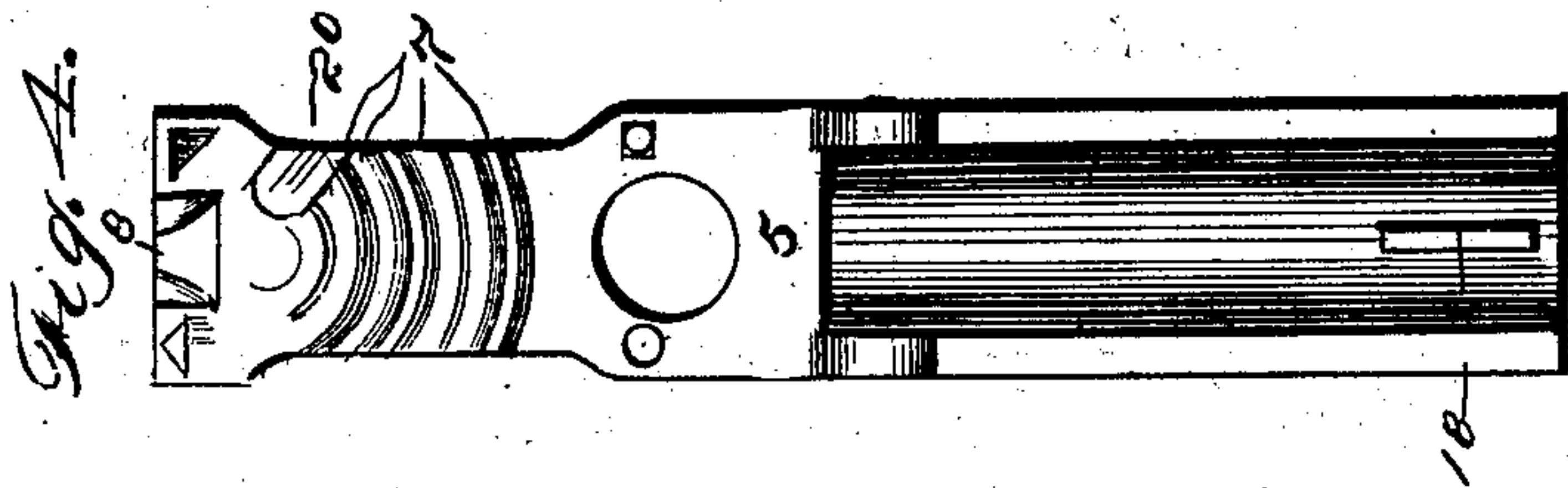
No. 693,406.

Patented Feb. 18, 1902.

J. KYDD.
SETTING TOOL.

(Application filed Apr. 3, 1901.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

JAMES KYDD, OF McPHERSON, KANSAS.

SETTING-TOOL.

SPECIFICATION forming part of Letters Patent No. 693,406, dated February 18, 1902.

Application filed April 3, 1901. Serial No. 54,212. (No model.)

To all whom it may concern:

Be it known that I, JAMES KYDD, a citizen of the United States, residing at McPherson, in the county of McPherson and State of Kansas, have invented a new and useful Setting-Tool, of which the following is a specification.

This invention relates to tools or devices for setting screw-hooks, screw-eyes, tacks, or similar securing or attaching devices in ceilings, walls, or other places inconvenient to reach, the object of the invention being to provide a device of this nature that may be quickly engaged with the article to be set and may be as easily disengaged therefrom after the setting operation, further objects and advantages of the invention being apparent from the following description.

In the drawings forming a portion of this specification, and in which like numerals of reference indicate similar parts in the several views, Figure 1 is an elevation of the tool engaged with a screw-eye having a string attached. Fig. 2 is a central longitudinal section of the tool with the jaws closed. Fig. 3 is a view similar to Fig. 2 with the jaws open. Fig. 4 is a detail elevation showing one of the jaws.

Referring now to the drawings, the present device comprises two jaws 5 and 6, which are pivotally connected at points intermediate of their ends, whereby when the jaws at one end are opened they will be closed at the opposite end, and the inner faces of the gripping portions of the jaws are provided with arcuate grooves 7, which are adapted to receive the curved portions of screw-eyes, screw-hooks, and other similar devices that are to be held and may thus hold them most securely. In the ends of the gripping portions of the jaws are formed longitudinal grooves 8, which engage over the stem of the article held. When a screw-eye is held in the jaws, the head enters corresponding grooves in the inner faces of the jaws, and the screw-eye is thus held securely. The jaws are held normally and yieldably with their gripping portions separated by a helical spring 10, which is disposed in recesses in the inner faces of the gripping portions of the jaws and adjacent to the pivotal connection thereof.

To force the opposite ends of the jaws apart, so that the gripping portions will be brought

together, a wedge 15 is provided, the inner faces of the jaws being concaved to receive the wedge, and through this wedge is formed a slot 16, passing diametrically thereof and opening into the cylindrical bore of the wedge, this slot being shown in Figs. 2 and 3 of the drawings. To limit the sliding movement of the wedge into and out of wedging position, stop-blocks 18 and 19 are attached to the inner faces of the jaws and lie in the slot 16, so that when the wedge is pressed inwardly these blocks strike against one end of the slot and when the wedge is drawn outwardly the blocks strike against the opposite end of the slot.

The bore of the wedge forms a socket to receive a handle.

When a screw-eye is to be set, it is disposed between the gripping portions of the jaws, and the wedge is pressed inwardly to cause the jaws to grip the eye, said eye lying in the grooves of the jaws corresponding to the position of the eye and the diameter thereof, it being noted that the arcuate grooves are of different radii, the grooves of least radii being nearest to the outer ends of the jaws. The tool is then raised by its handle and pressed, with the stem of the screw-eye, into the wood or other material into which the screw is to be engaged, and the handle is turned to screw the eye into the wood, the pressure of the tool in the initial engagement of the screw of course causing the jaws to grip all the tighter. When the screw-eye has been set, the handle is drawn downwardly. Then the wedge will be drawn from its wedging position, and the jaws will release the screw-eye, and the implement may be then lowered.

At times it is desired to set a screw-eye while a string is engaged therewith, and to permit this a channel 20 is formed in the gripping-faces of the jaws, and the string that is connected to the eye is laid in these channels, which register, and is taken therethrough and out from between the jaws. When a hook is to be set with a string attached, the string may be slipped onto the stem of the hook, and after the hook is set and the tool removed the string may be pulled down onto the hook.

In practice modifications of the specific con-

struction shown may be made and any suitable materials and proportions may be used for the various parts without departing from the spirit of the invention.

5 What is claimed is--

1. A device of the class described, comprising two jaws pivotally connected about mid-way of their length, a spring normally acting to keep the forward ends of the jaws separated, guiding-blocks carried by and projecting inwardly from the rear portions of said jaws, a conical, non-rotatable operating device 15 having a diametral slot for the passage of said guiding-blocks, and a handle or pole secured to said operating device, substantially as specified.

2. A device of the class described, comprising two jaws pivotally connected about mid-way of their length, the adjacent clamping- 20 faces of the forward portions of said jaws being provided with a series of arcuate grooves extending throughout the width of the jaws, said grooves being of different radii, a sliding, non-rotatable wedge engaged between 25 the jaws at the opposite side of the pivot-point, an operating handle or pole secured to

said wedge, and means for normally maintaining the forward portions of said jaws in open position, substantially as specified.

3. A device of the class described, comprising jaws pivotally connected, the jaws at one side of the pivot having grooves in their inner faces to receive an article to be placed and having other grooves leading from the first-named grooves outwardly through the 35 sides of the jaws, a wedge disposed slidably between the jaws at the opposite side of the pivot and having a slot therethrough and extending longitudinally thereof, blocks carried by the jaws and engaging the slot to limit 40 the movement of the wedge, said wedge having a socket to receive a handle for manipulating the device and operating the wedge, and means for holding the engaging portions of the jaws normally and yieldably separated. 45

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

JAMES KYDD.

Witnesses:

A. B. BANTA,
JOHN W. YOWELL.