

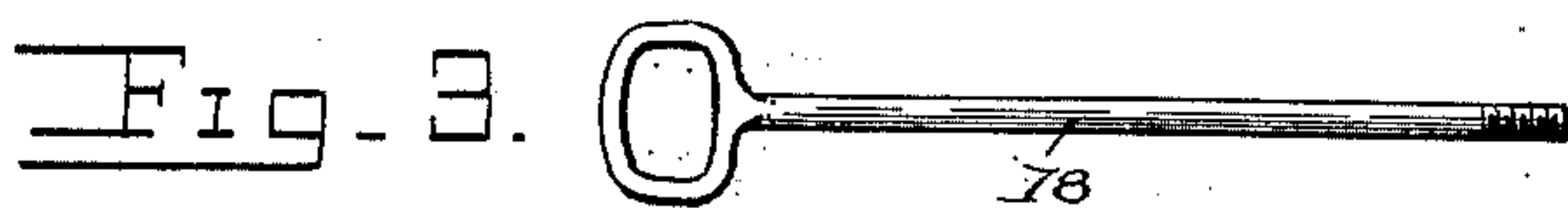
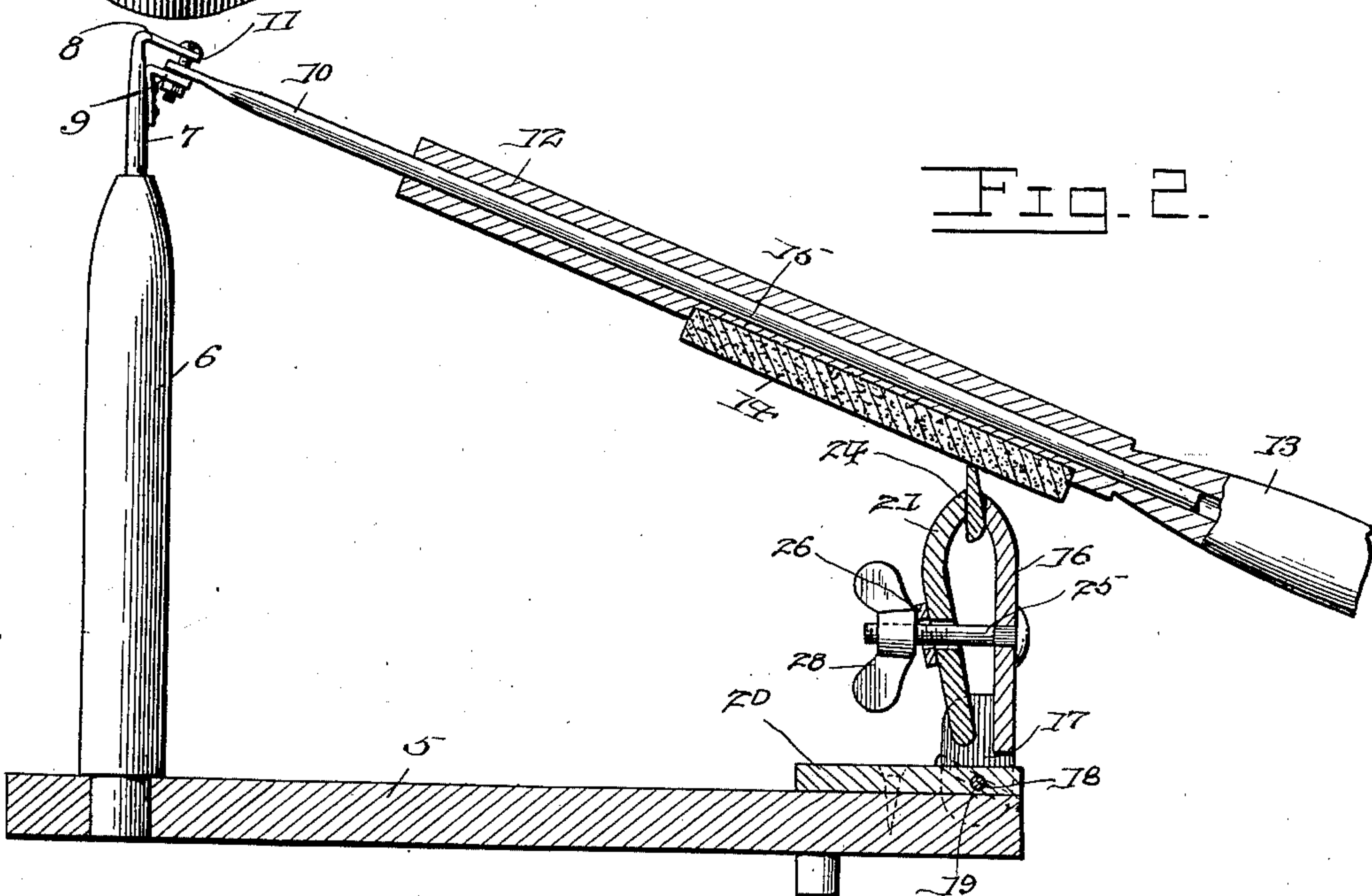
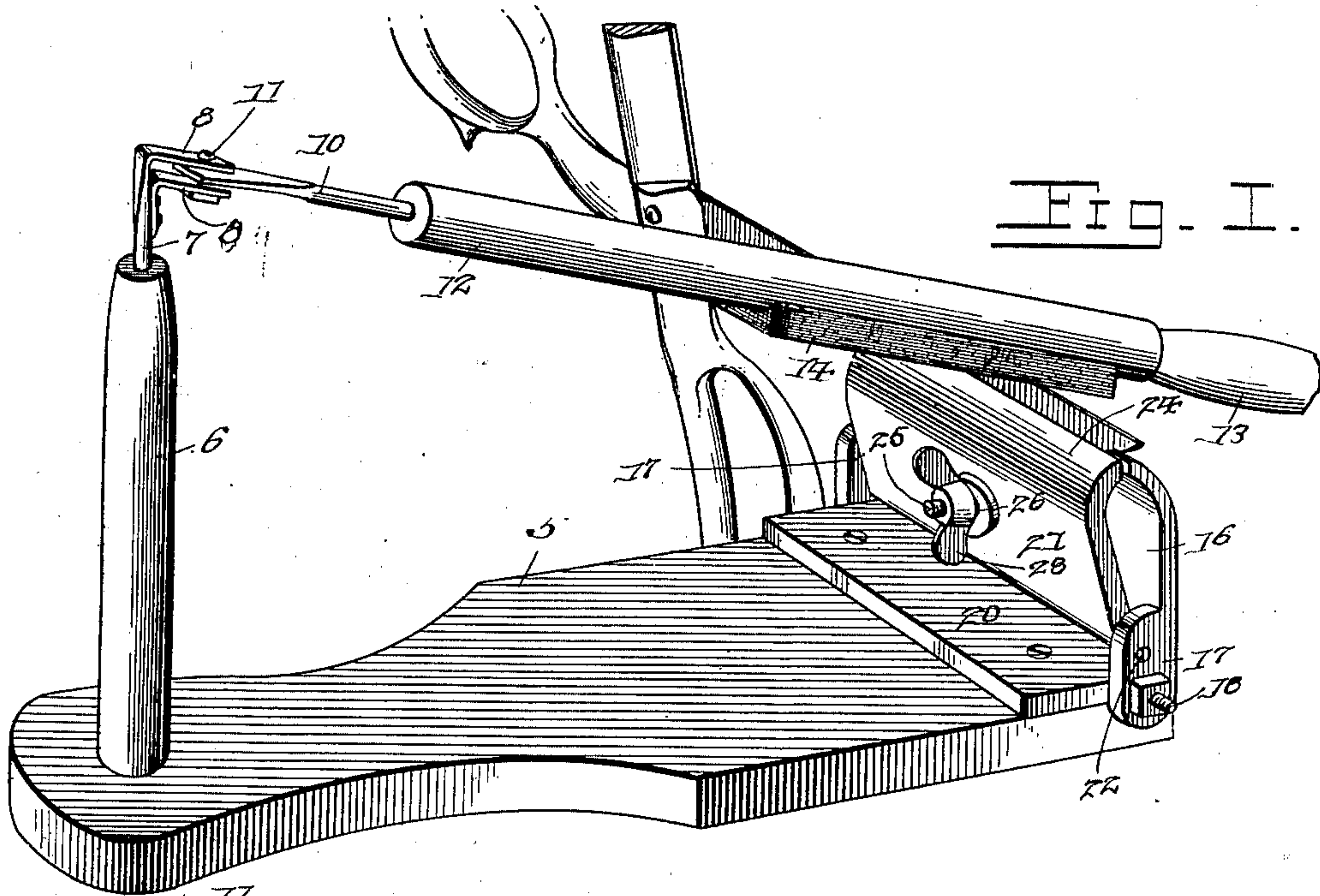
No. 663,787.

Patented Dec. 11, 1900.

F. RIES.
SHEARS SHARPENER.

(Application filed June 20, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK RIES, OF TIFFIN, OHIO.

SHEARS-SHARPENER.

SPECIFICATION forming part of Letters Patent No. 663,787, dated December 11, 1900.

Application filed June 20, 1900. Serial No. 21,017. (No model.)

To all whom it may concern:

Be it known that I, FRANK RIES, a citizen of the United States, residing at Tiffin, in the county of Seneca and State of Ohio, have invented a new and useful Shears-Sharpener, of which the following is a specification.

This invention relates to sharpeners for cutlery in general, and more particularly to that class wherein the article to be sharpened is positively held and the grinding-stone is moved thereover, one object of the invention being to provide a construction especially adapted for the sharpening of shears and in which the shears may be held at the proper angle to the plane of operation of the sharpening-stone, additional objects and advantages of the invention being evident 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 a perspective view showing the complete apparatus and illustrating the position of the shears undergoing the sharpening operation. Fig. 2 is a longitudinal section of the sharpener with portions of the stone-carrying lever and its supporting-post shown in elevation. Fig. 3 is an elevation showing the combined clamping and pivot bolt for holding the clamp at different angles.

Referring now to the drawings, the present sharpener comprises a base 5, of suitable shape and at one end of which is erected a post 6, having a stem 7 extending axially from its upper end, the upper extremity of the stem being bifurcated and the resultant arms 8 and 9 being turned laterally and downwardly to lie parallel and receive between them the flattened end of a rod 10, the rod being pivotally connected with the arms 8 and 9 by means of a pivot-bolt 11, which is passed through alining perforations in the arms and the flattened end of the rod.

Disposed slidably upon the rod 10 is a tube 12, the outer end of which is shaped to form a handle 13, by means of which the tube and rod may be given a swinging movement. A grinding-stone 14 is fixed in a transverse slot 15 in the under side of the tube 12, so that it may be moved backward and forward over

the edge of the shears to be sharpened when the handle 13 is operated.

The shears to be sharpened are held in a clamp upon the base 5, this clamp consisting of a plate 16, having a width somewhat greater than that of the base 5 and provided at its ends with downwardly-extending ears 17, lying in planes parallel with the side edges of the base 5, these ears being perforated, as shown, to receive a combined pivot and clamping bolt 18, which is passed therethrough and through an alining perforation 19 in the base or in a supporting-plate 20, mounted upon the base.

The plate 16 forms one jaw of the shears-clamp, its upper part being bowed to produce a gripping edge, as shown, and cooperating with this jaw is a second jaw formed by a plate 21, which is pivotally mounted in the ears 17 above the base 5 by means of screws 22, which are passed through perforations in said ears and which engage the plate. This plate is likewise bowed, as shown, to form a gripping edge 24, which cooperates with the gripping edge of the plate 16. A clamping-bolt 25 has its squared portion adjacent its head engaged with a corresponding opening in the plate 16 and is passed loosely through an opening in plate 21, said bolt having a washer 26, against which impinges a thumb-nut 27, by means of which the jaws may be brought together to hold the shear-blade in proper position for sharpening.

In practice the shear-blade is disposed between the gripping edges and is clamped firmly in place, after which plate 16 is moved pivotally to hold the edge of the shear-blade in the proper position for engagement by the sharpening-stone, the plate being held in this position by manipulation of the thumb-nut 28 upon the clamping-bolt 18. The stone is then swung around into engagement with the edge of the shear-blade, after which it is moved laterally with an oscillatory movement, the sliding engagement of the handle-tube with the rod 10 permitting the stone to be moved inwardly and outwardly to present different portions of the surface of the stone to the shears. When the blade has been properly sharpened, it may be removed and

the second blade may be engaged with the clamp and properly adjusted for sharpening. With this construction it will be seen that the shear-blade is held positively in proper
5 relation to the sharpening-stone, which always moves in the same plane, and thus the bevel of the edge of the shear-blade is maintained.

Various modifications of the construction
10 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.

What is claimed is—

15 1. A device of the class described comprising a base having an upright thereon, a rod pivoted to the upright, a tubular handle slidably engaged over the rod, an abrading-body fixed to the handle, and a clamp adapted to
20 hold a body to be sharpened, in operative relation to the abrading-body.

2. A device of the class described comprising a pivotally-mounted rod, a handle slidably engaged with the rod, an abrading-body
25 carried by the rod, and a clamp for holding a body in operative relation to the abrading-

body, said clamp being adjustable to lie at various angles to the plane of operative movement of the abrading-body.

3. A device of the class described comprising 30
a base, a post mounted upon the base and having a bifurcated stem, the resultant arms of which are turned laterally and perforated, a rod having a perforated end disposed between the arms of the stem, a pivot-pin passed 35
through the perforations, a handle slidably engaged with the rod and carrying an abrading-body, and a clamp to hold a body in operative relation to the abrading-body, said
clamp consisting of a plate having ears dis- 40
posed at opposite sides of the base, a pivot and clamping bolt engaged with the base and ears, a second plate pivoted to the ears, said
plates having clamping portions, and a clamping-bolt engaged with the plates. 45

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

FRANK RIES.

Witnesses:

HARRY TAGGART,
A. D. HARMON.