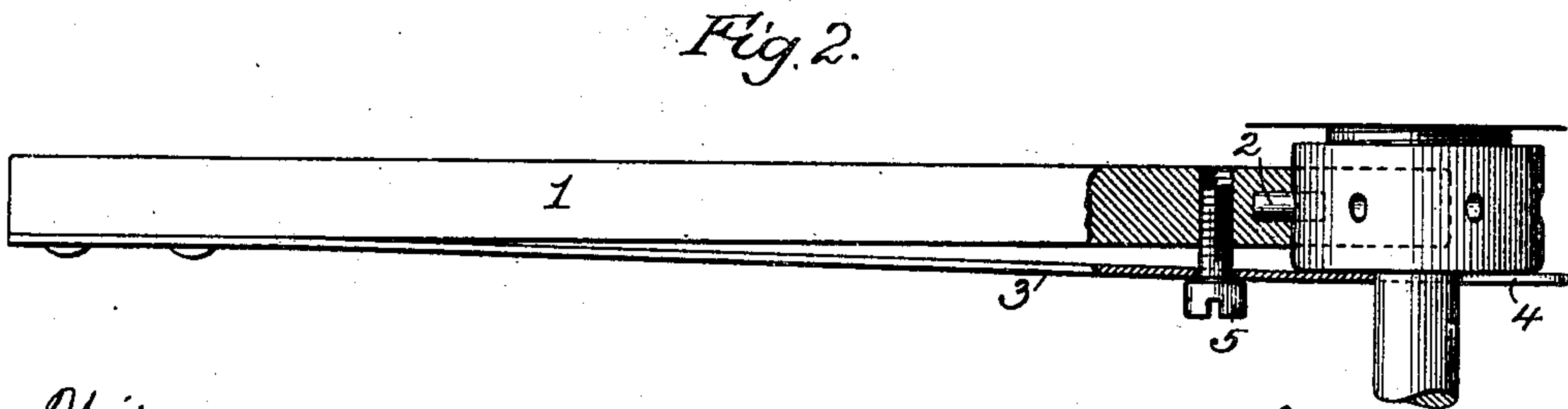
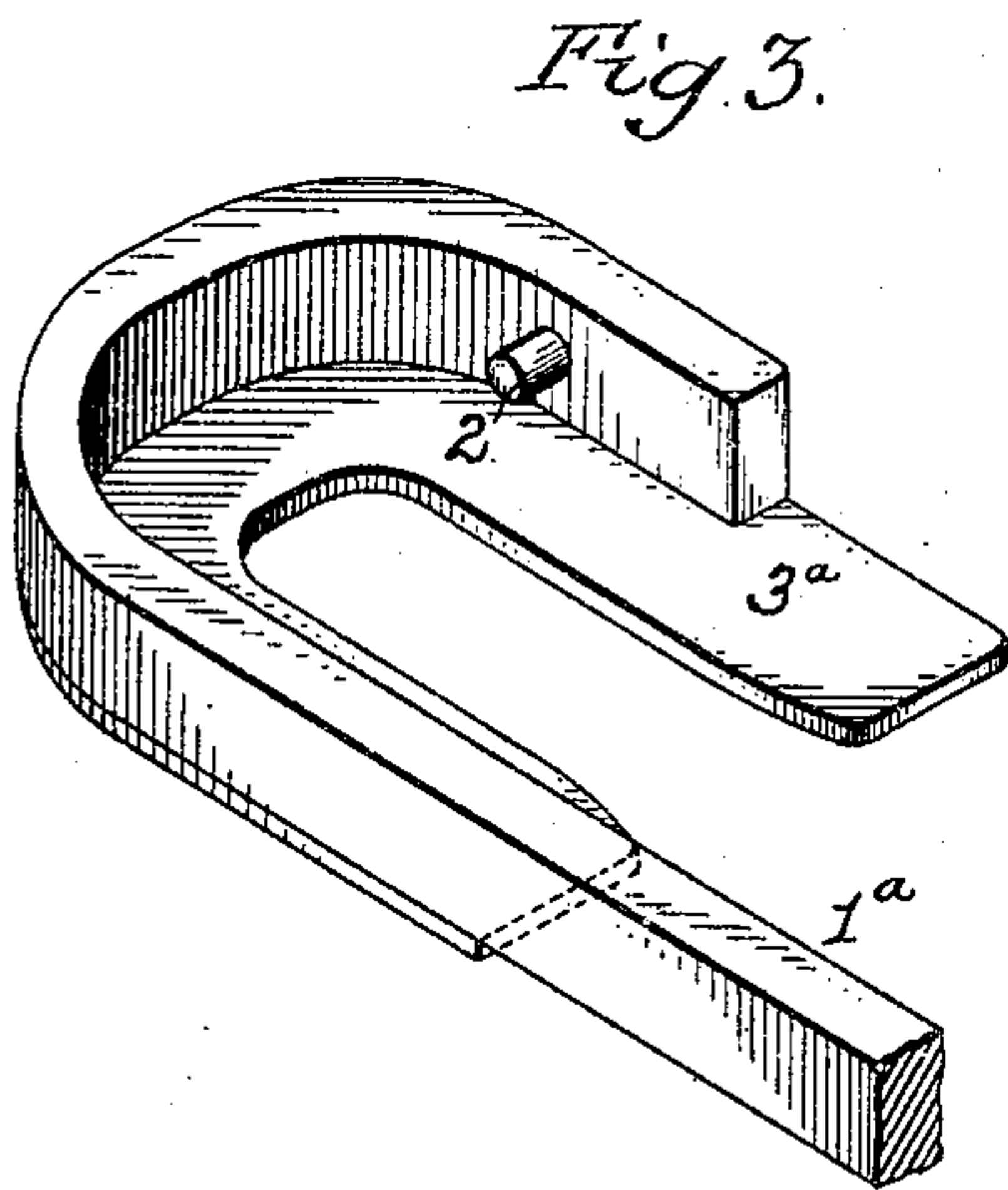
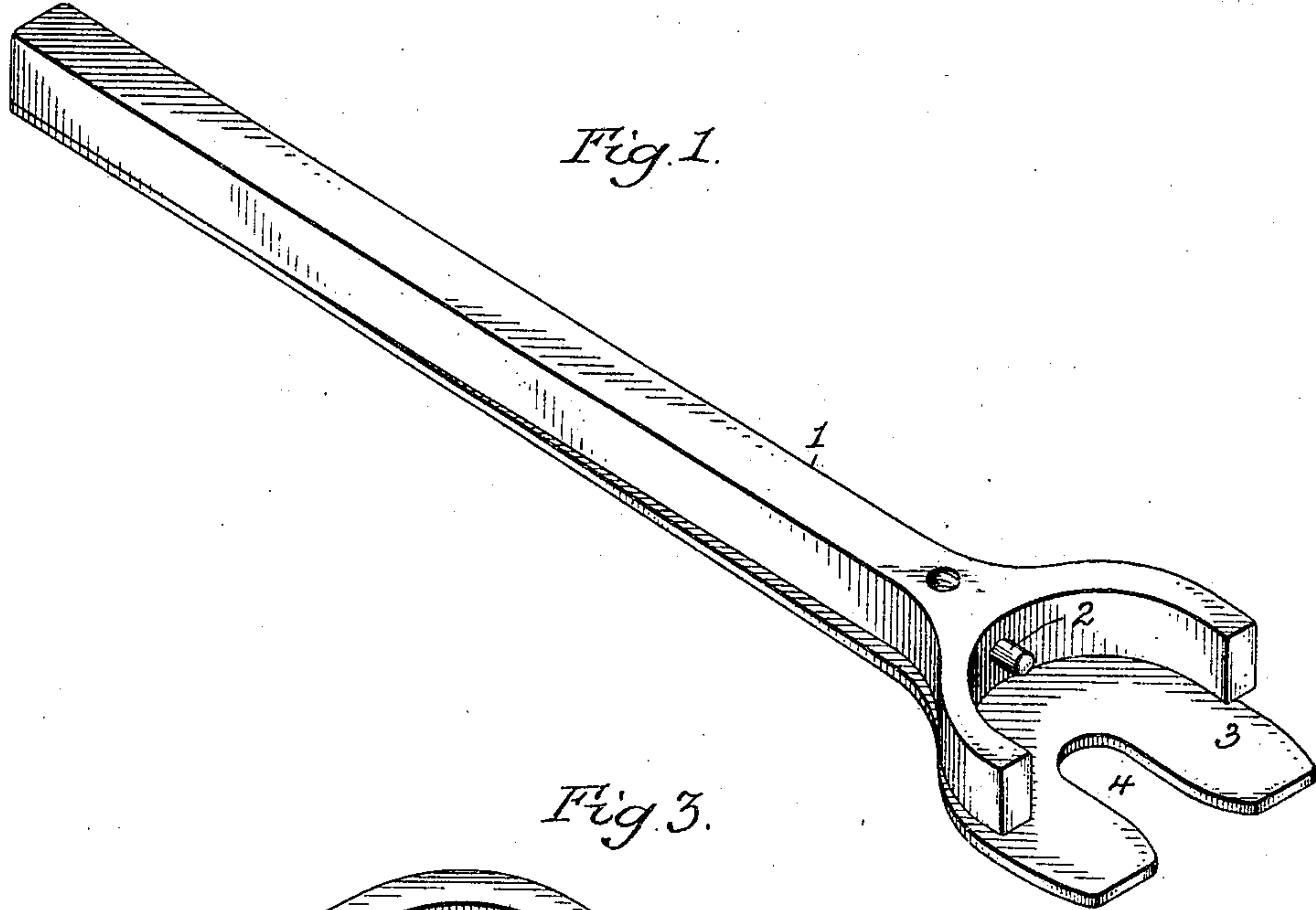


F. H. CAVEN.
 SPANNER WRENCH.
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922,258.

Patented May 18, 1909.



Witnesses
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UNITED STATES PATENT OFFICE.

FRANK H. CAVEN, OF PHILADELPHIA, PENNSYLVANIA.

SPANNER-WRENCH.

No. 922,258.

Specification of Letters Patent.

Patented May 18, 1909.

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To all whom it may concern:

Be it known that I, FRANK H. CAVEN, a citizen of the United States, residing in Philadelphia, Pennsylvania, have invented certain Improvements in Spanner-Wrenches, of which the following is a specification.

The object of my invention is to so construct a spanner wrench as to facilitate the application of the same to a gland, collar, flange, or other machine element which has to be engaged and turned thereby.

In the accompanying drawing Figure 1 is a perspective view of one form of spanner wrench constructed in accordance with my invention; Fig. 2 is a view of said wrench partly in side elevation and partly in section, and illustrating the manner in which the wrench is intended to be used, and Fig. 3 is a perspective view of another form of spanner wrench embodying certain features of my invention.

In many classes of machinery portions which have to be manipulated by a spanner wrench are frequently in such locations that it is difficult to apply and adjust the wrench without careful manipulation, and this is especially true of motor cars, in which the machinery is usually crowded into such a relatively small space, that the proper adjustment of the wrench frequently necessitates the grasping of the same close to the head. As the use of the wrench is frequently required when the parts are at a very high temperature severe burns have resulted because of the contact of the hands with heated members of the machine.

Those parts of a machine which have to be manipulated by a spanner wrench are usually collars, flanges, glands, stuffing box followers, or the like, surrounding a rod or shaft of smaller diameter, and in carrying out my invention I have availed myself of this fact to provide the wrench with a guide member to engage such rod or shaft, and aid in the proper manipulation of the wrench by directing it to the member which it has to engage.

In Fig. 1 of the drawing, 1 represents an ordinary type of spanner wrench having, at one end, a semi-circular fork into which projects a pin 2 for engagement with an opening in the member of the machine which has to be turned. To one side of the wrench is secured a plate 3 having therein an open-ended slot 4, of lesser width than the diame-

ter of the forked end of the wrench, the inner end of this slot being preferably semi-circular and concentric with the curved fork. The outer end of the slot is also, by preference, flared slightly so as to facilitate the entrance into the slot of the rod or shaft which is surrounded by the gland, collar or other member of the machine to be engaged by the wrench. When the shaft or rod occupies the slot 4 it properly centers the wrench in respect to the member to be engaged, all that then remains to be done being to raise or lower the wrench until the plate 3 is in contact with said member, whereupon an inward movement of the wrench will bring the pin 2 into contact with the periphery of the member, in line with the openings therein, the wrench being then turned until its pin 2 registers with and can be forced into one of said openings. These operations can be readily performed when the wrench is grasped at the end of the handle, thus overcoming all risk of burning the hand, by thrusting it into a mass of heated machinery.

In order to adapt the wrench for use in connection with members of different thickness and having the openings for the reception of the pin of the wrench at different distances from their opposite faces, I prefer to so secure the plate 3 to the wrench that it can be adjusted from and toward the face of the same, and thereby vary the distance between the pin 2 and the inner or contact face of the plate, one method of accomplishing this result being to secure the outer end of the plate 3 to the handle of the wrench at or near the outer end of the same, and to provide said handle with a threaded opening for the reception of an adjusting screw having a head bearing upon the outer side of the plate 3, as shown in Fig. 2. In some cases this may not be necessary, and in such cases the slotted plate may be rigidly secured to the yoke portion of the wrench, as shown for instance at 3^a in Fig. 3, the latter view also illustrating the application of my invention to a somewhat different form of wrench from that illustrated in Figs. 1 and 2.

I claim:—

1. A spanner wrench having a yoke open at one side and provided on the other side with a guide plate having a slot less in width than the yoke.

2. A spanner wrench having a yoke open at one side and provided on the other side

with a guide plate having a slot less in width than the yoke, and having an inner end concentric with the latter.

3. A spanner wrench having a slotted
5 guide plate at its yoke end, said guide plate being adjustable to vary the distance between the same and the face of the wrench.

4. A spanner wrench having a slotted
10 guide plate at its yoke end, said plate being secured to the handle of the wrench at one

end and acted upon by a set screw which engages a threaded opening in the wrench.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

FRANK H. CAVEN.

Witnesses:

HAMILTON D. TURNER,
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