

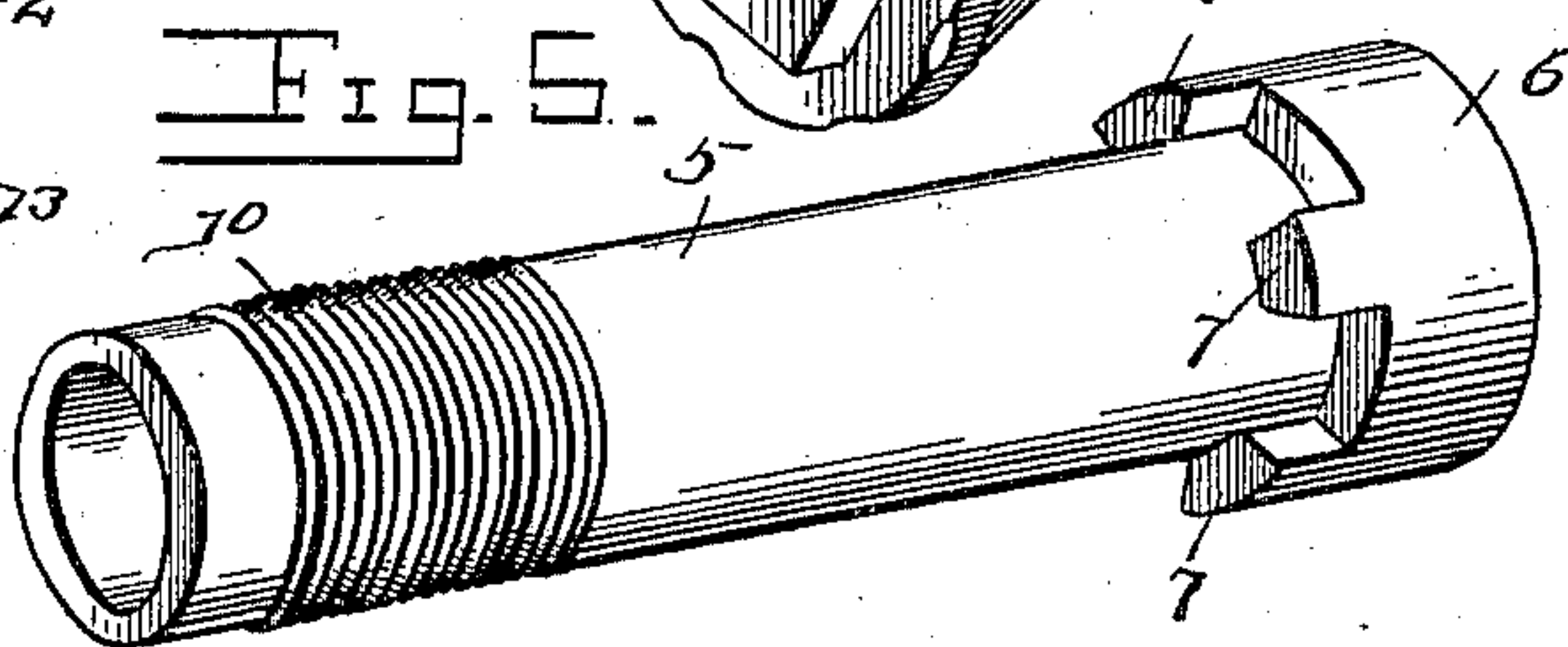
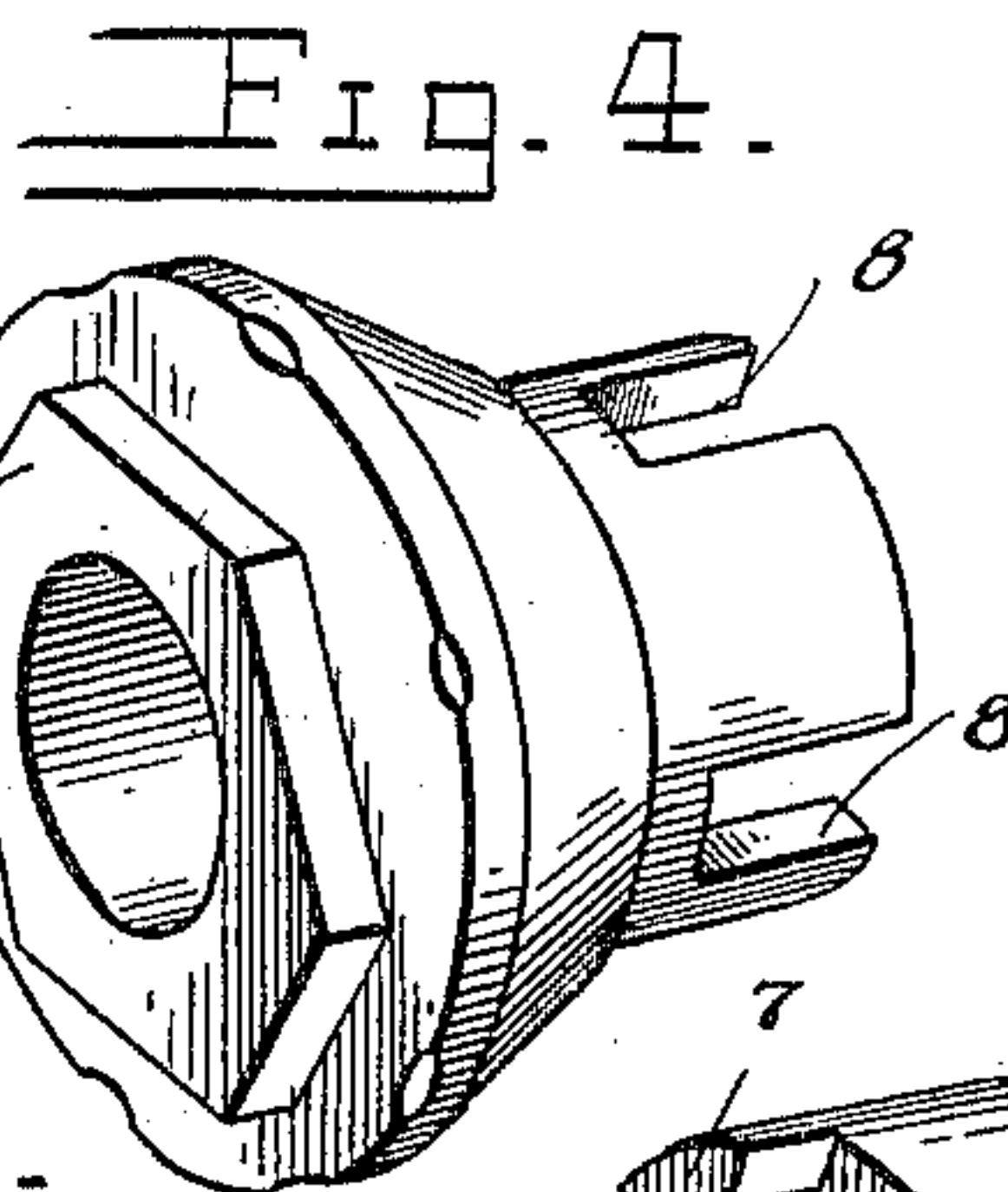
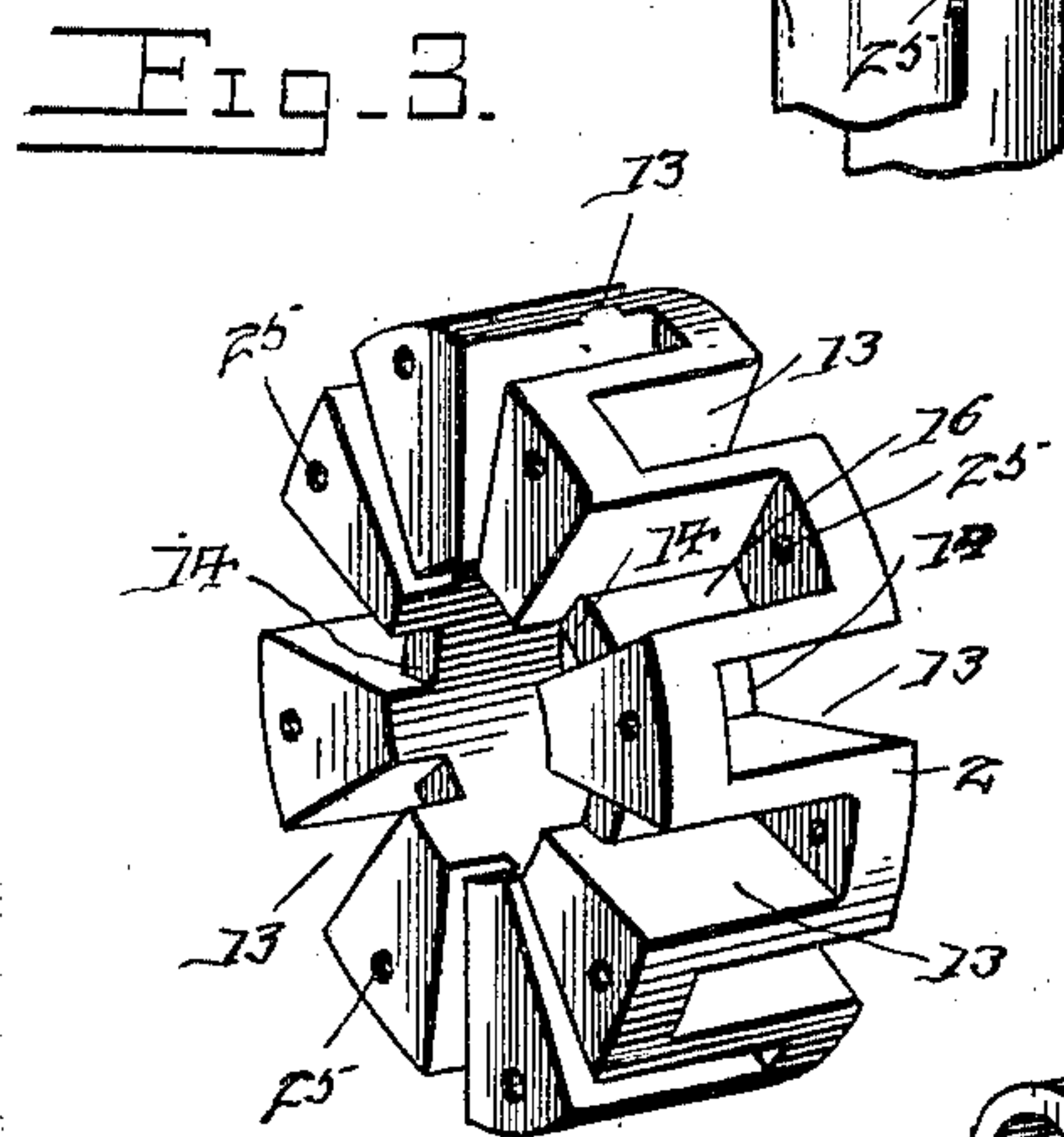
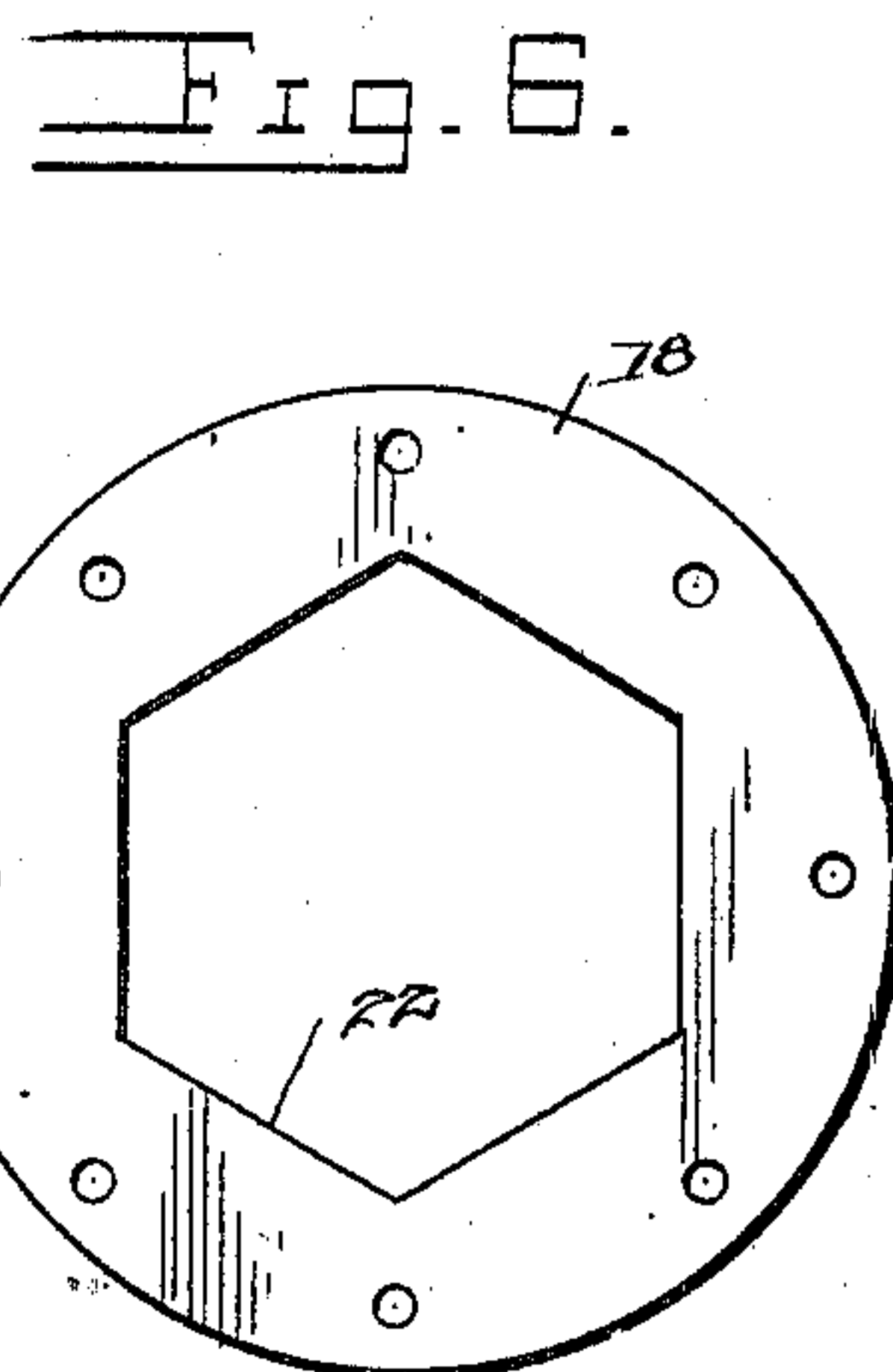
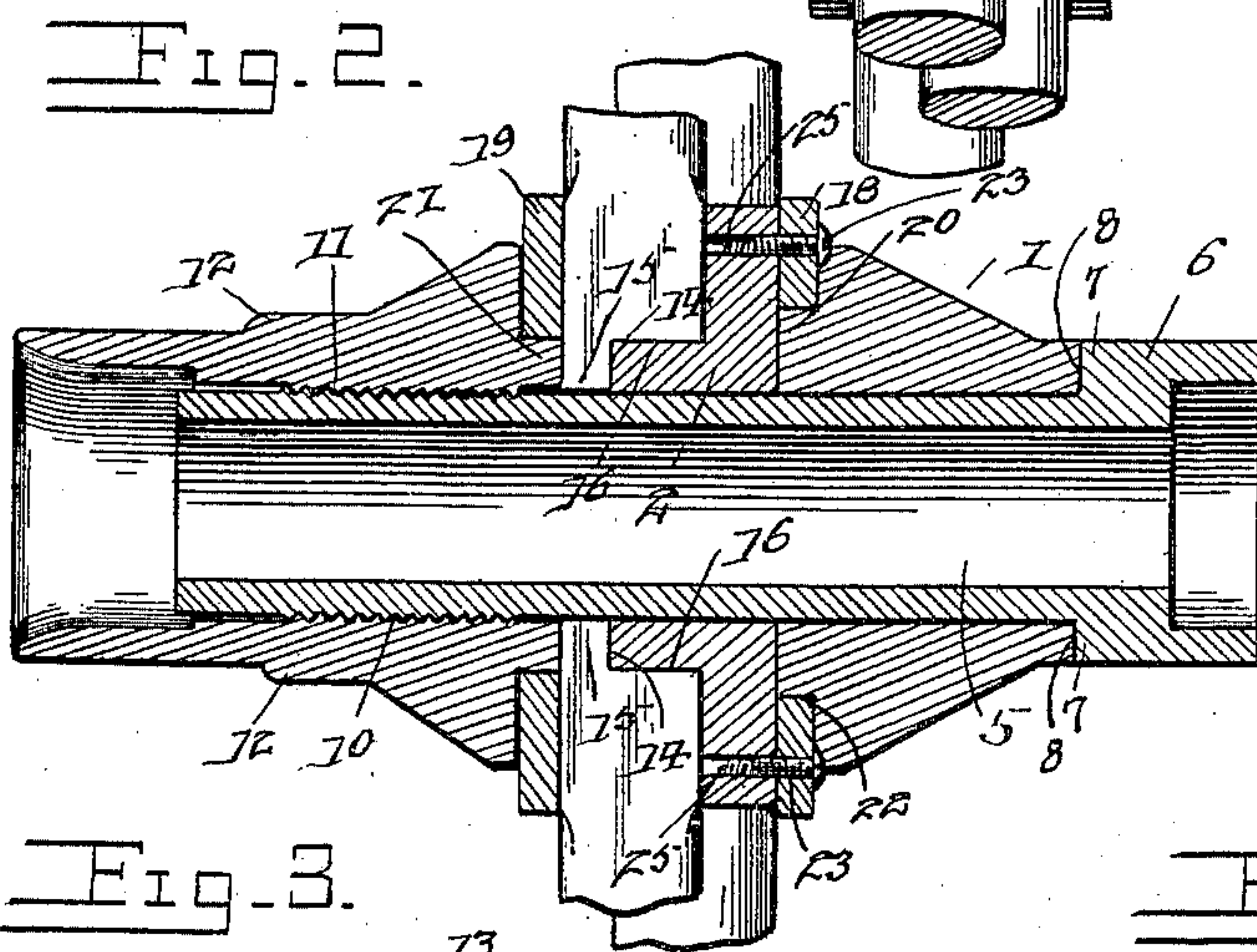
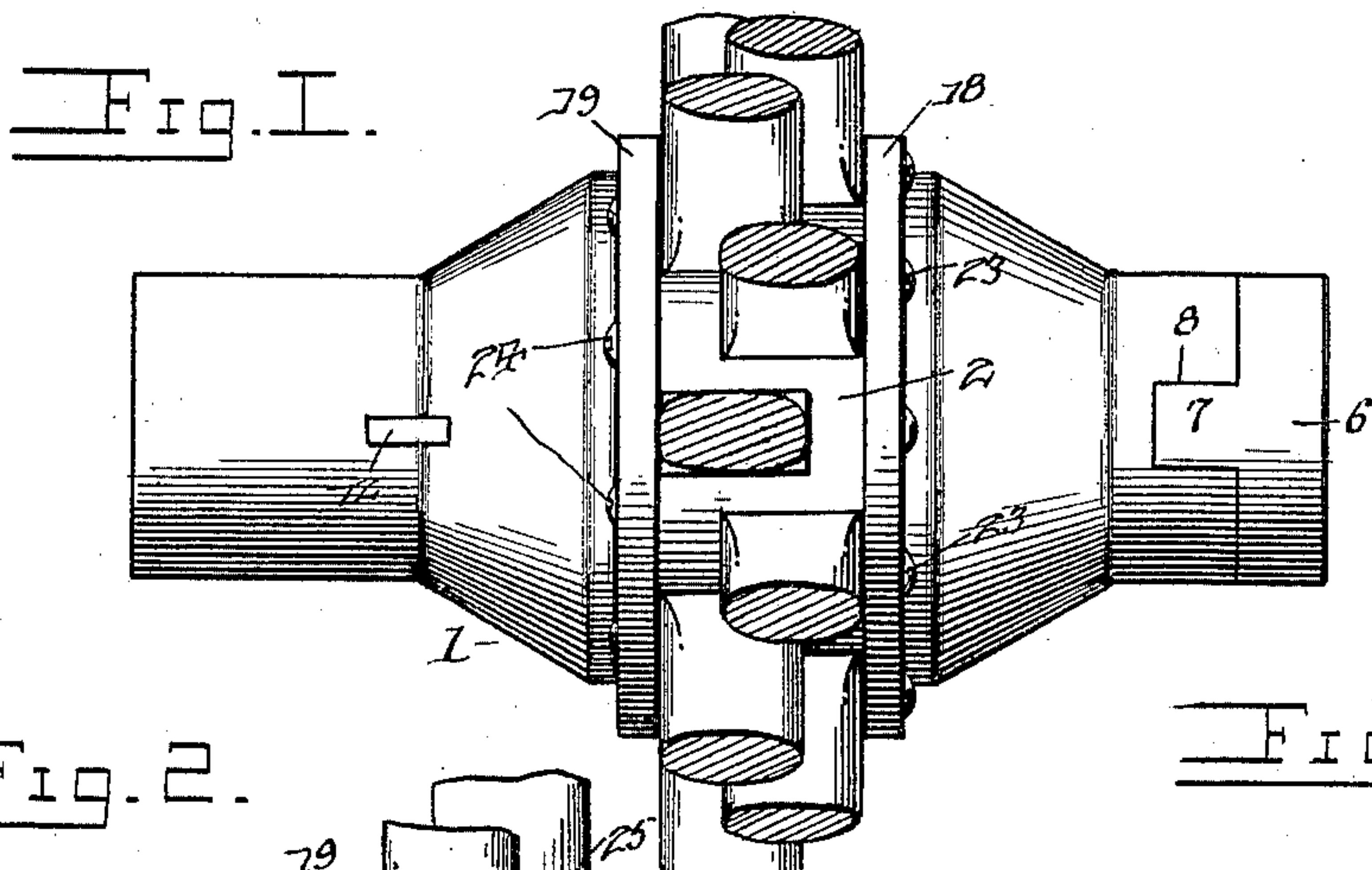
No. 652,416.

Patented June 26, 1900.

I. ALLAMAN.
VEHICLE WHEEL HUB.

(Application filed Mar. 28, 1900.)

(No Model.)



Witnesses
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UNITED STATES PATENT OFFICE.

ISAAC ALLAMAN, OF HUMMELSTOWN, PENNSYLVANIA, ASSIGNOR OF
THREE-FOURTHS TO S. F. ALLAMAN, J. H. ALLAMAN, AND ADAM
ALLAMAN, OF SAME PLACE.

VEHICLE-WHEEL HUB.

SPECIFICATION forming part of Letters Patent No. 652,416, dated June 26, 1900.

Application filed March 28, 1900. Serial No. 10,495. (No model.)

To all whom it may concern:

Be it known that I, ISAAC ALLAMAN, a citizen of the United States, residing at Hummelstown, in the county of Dauphin and State of Pennsylvania, have invented a new and useful Vehicle-Wheel Hub, of which the following is a specification.

The invention relates to improvements in vehicle-wheel hubs.

10 The object of the present invention is to improve the construction of hubs for vehicle-wheels and to provide a simple and comparatively inexpensive one which will be strong and durable and which will enable a worn or
15 broken spoke to be readily replaced by a new spoke without removing the tire from the felly.

The invention consists in the construction and novel combination and arrangement of parts hereinafter fully described, illustrated
20 in the accompanying drawings, and pointed out in the claims hereto appended.

In the drawings, Figure 1 is a plan view of a vehicle-hub constructed in accordance with this invention, the spokes being shown in section. Fig. 2 is a longitudinal sectional view
25 of the same. Fig. 3 is a detail perspective view of the central section which is provided with the reversely-arranged mortises or spoke-sockets. Fig. 4 is a detail perspective view
30 of the inner section of the hub. Fig. 5 is a similar view of the axle-box. Fig. 6 is a detail view of one of the rings.

Like numerals of reference designate corresponding parts in all the figures of the drawings.

35 1 designates a hub provided with a central spoke-receiving section 2 and having inner and outer sections 3 and 4 located at opposite sides of the central spoke-receiving section, as clearly shown in Fig. 1 of the accompanying drawings. The sections 2, 3, and 4, which are circular, have central openings and receive an axle-box 5, which has its inner end
40 6 enlarged and provided with longitudinally-disposed lugs 7, arranged in an annular series and fitting in corresponding recesses 8 of a flange 9 of the inner section of the hub, whereby the axle-box is interlocked with the latter. The axle-box is provided near its outer end

with screw-threads 10, which are engaged by
50 interior screw-threads 11 of the outer section of the hub, and the said outer section is also provided with exterior lugs 12, adapted to be engaged by a wrench or other suitable tool for unscrewing it from the axle-box and for
55 screwing it on the same.

The central section 2 of the hub is provided at opposite sides with mortises or spoke-sockets 13, open at the top and outer side, as clearly shown in Fig. 3 of the accompanying
60 drawings, and provided at the bottom, adjacent to its outer side, with a recess or opening 14. The mortises or sockets taper to conform to the configuration of the tapering inner ends of the spokes, which are provided
65 at their outer sides with extensions or lugs 15, projecting beyond the bottom 16 of the mortises or sockets through the recesses and abutting against the axle-box, as clearly illustrated in Fig. 2 of the accompanying draw-
70 ings. The recesses or spoke-sockets are closed at their outer sides, when the parts of the hub are assembled, by inner and outer rings 18 and 19, provided with enlarged central openings and arranged concentric with
75 and spaced from the axle-box.

The inner and outer sections of the hub are provided at their inner ends with flanges or bosses 20 and 21, fitting within the openings of the rings, as clearly shown in Fig. 2. The
80 flange or boss 20, which extends around the opening of the inner section of the hub, has a polygonal outer edge and is preferably hexagonal to conform to the configuration of the hexagonal opening 22 of the inner ring 18; but the opening 22 and the boss or flange 20
85 may be of any other non-circular shape. The boss or flange 21 of the outer section is circular, and the opening of the outer ring 19 is also circular. The inner and outer rings are
90 provided with annular series of perforations for the reception of screws 23 and 24, which extend in corresponding threaded sockets 25 of the central spoke-receiving section of the hub. The enlarged inner end of the axle-
95 box is adapted to fit over the enlargement or collar of a spindle.

It will be seen that the hub is exceedingly

simple and inexpensive in construction, that it possesses great strength and durability, and that the spokes which fit against both the bottom of the sockets or mortises and the axle-box may be readily removed and renewed when worn or broken without removing the tire from the felly. Furthermore, it will be apparent that the spokes may be readily tightened by interposing a thin plate or wedge between them and the bottoms of the sockets.

What is claimed is—

1. A hub comprising a central section provided with oppositely-disposed mortises or sockets open at the bottom, top and outer side and provided at the bottom with a supporting portion, rings located at opposite sides of the central section, the inner and outer sections fitting against the rings and located at opposite sides of the central section, an axle-box fitted within the said sections and connected with the inner and outer ones, and spokes fitting within the sockets or mortises and abutting against the bottoms of the same and provided with extensions or lugs bearing against the axle-box, substantially as described.

2. In a device of the class described, the combination of a central hub-section provided with oppositely-disposed mortises or sockets open at the top and outer sides and provided with bottoms 16, having openings or recesses, an axle-box, inner and outer sections connected by the axle-box, and spokes fitting within the mortises or sockets and abutting against the bottoms 16 and provided with lugs extending through the recesses or openings

of the said bottoms 16, and abutting against the axle-box, substantially as described.

3. A hub comprising an axle-box having its inner end enlarged and provided with exterior longitudinal lugs, an inner section provided with recesses to receive the lugs and having a polygonal flange, a central section provided with spoke sockets or mortises, an outer section engaging the axle-box and provided at its inner end with a flange, and the inner and outer rings interposed between the sections and receiving the flanges and conforming to the configuration of the same, substantially as described.

4. A hub comprising a central section provided with oppositely-disposed mortises open at the top and outer sides and provided at the bottom with openings, said central section being also provided at opposite sides between the mortises with transversely-disposed sockets having interior threads, rings arranged at opposite sides of the central section, fastening devices passing through the rings and engaging the screw-threads of the transverse sockets, the inner and outer sections, and the axle-box interlocked with the inner section and detachably secured to the outer section, substantially as described.

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

ISAAC ALLAMAN.

Witnesses:

CHAS. F. GREENAWALT,
J. A. HUMMEL.