

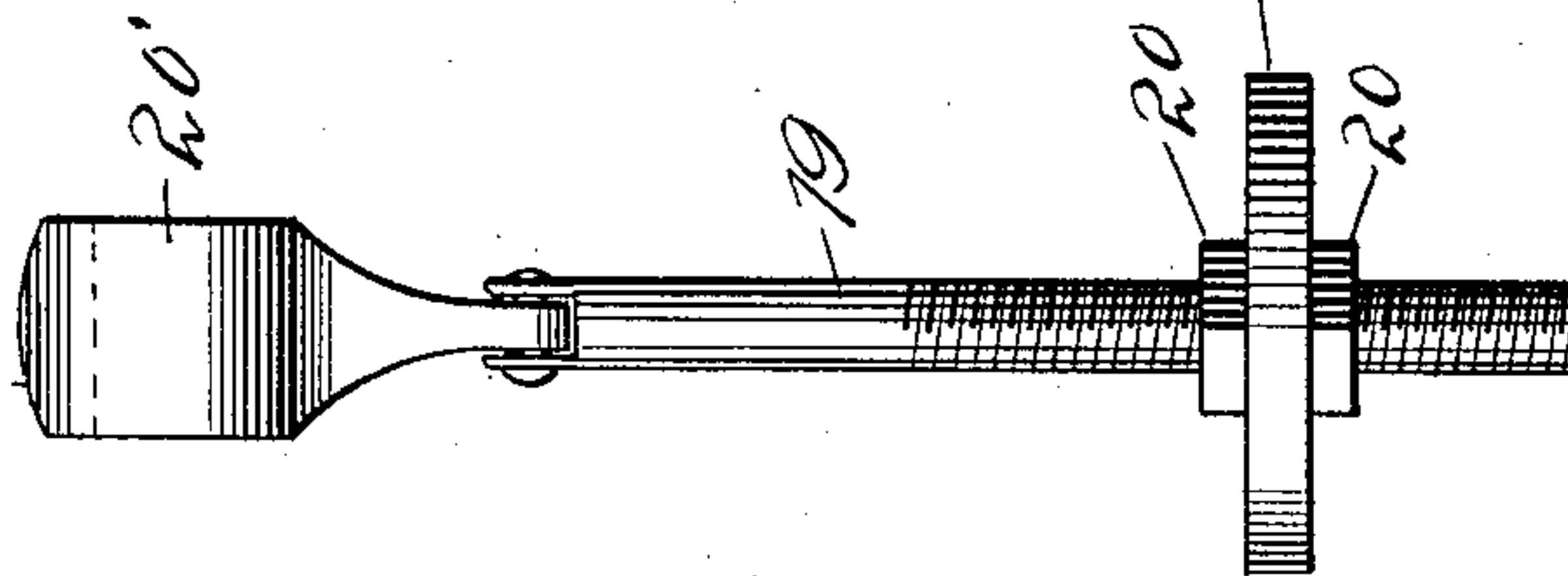
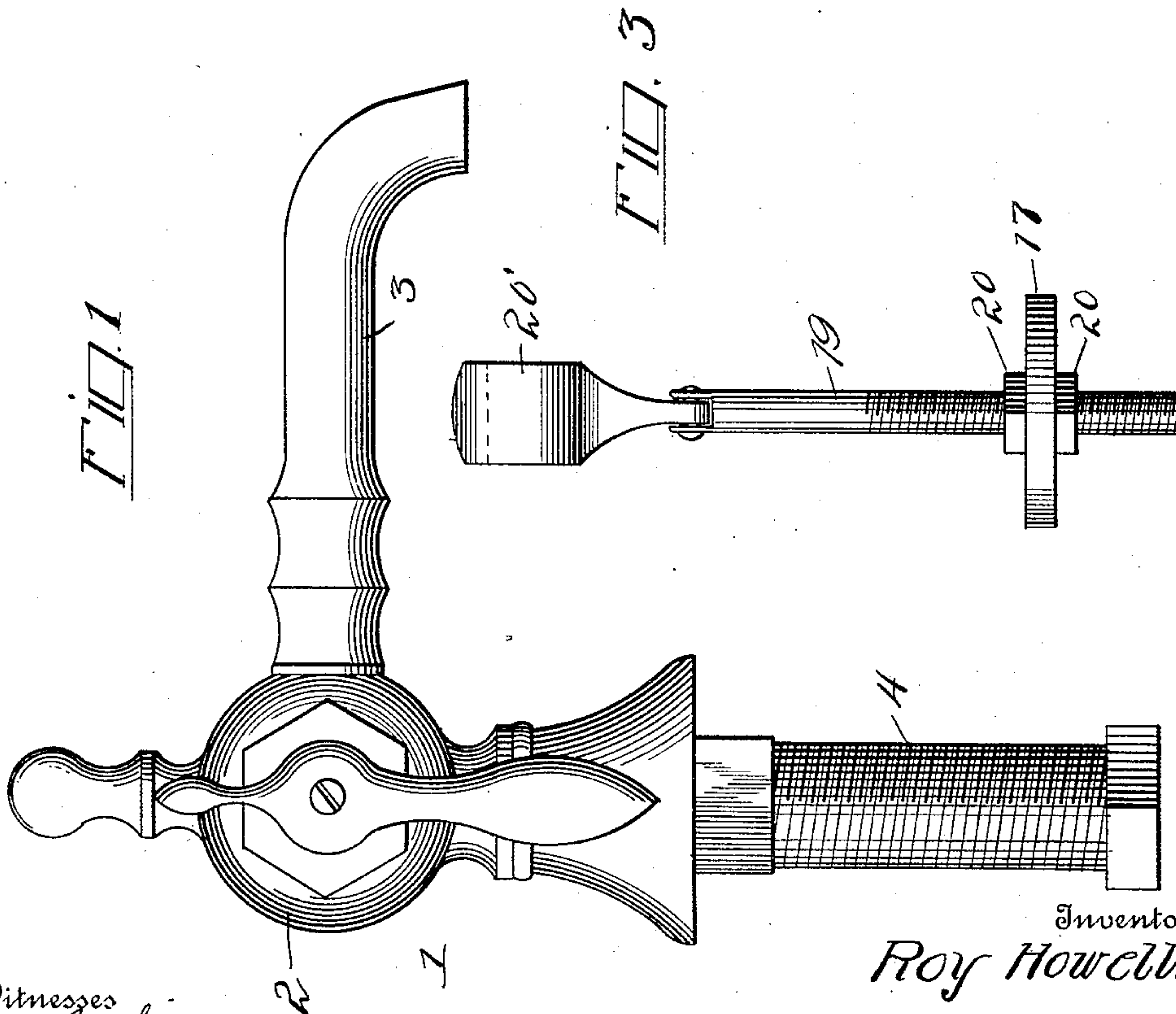
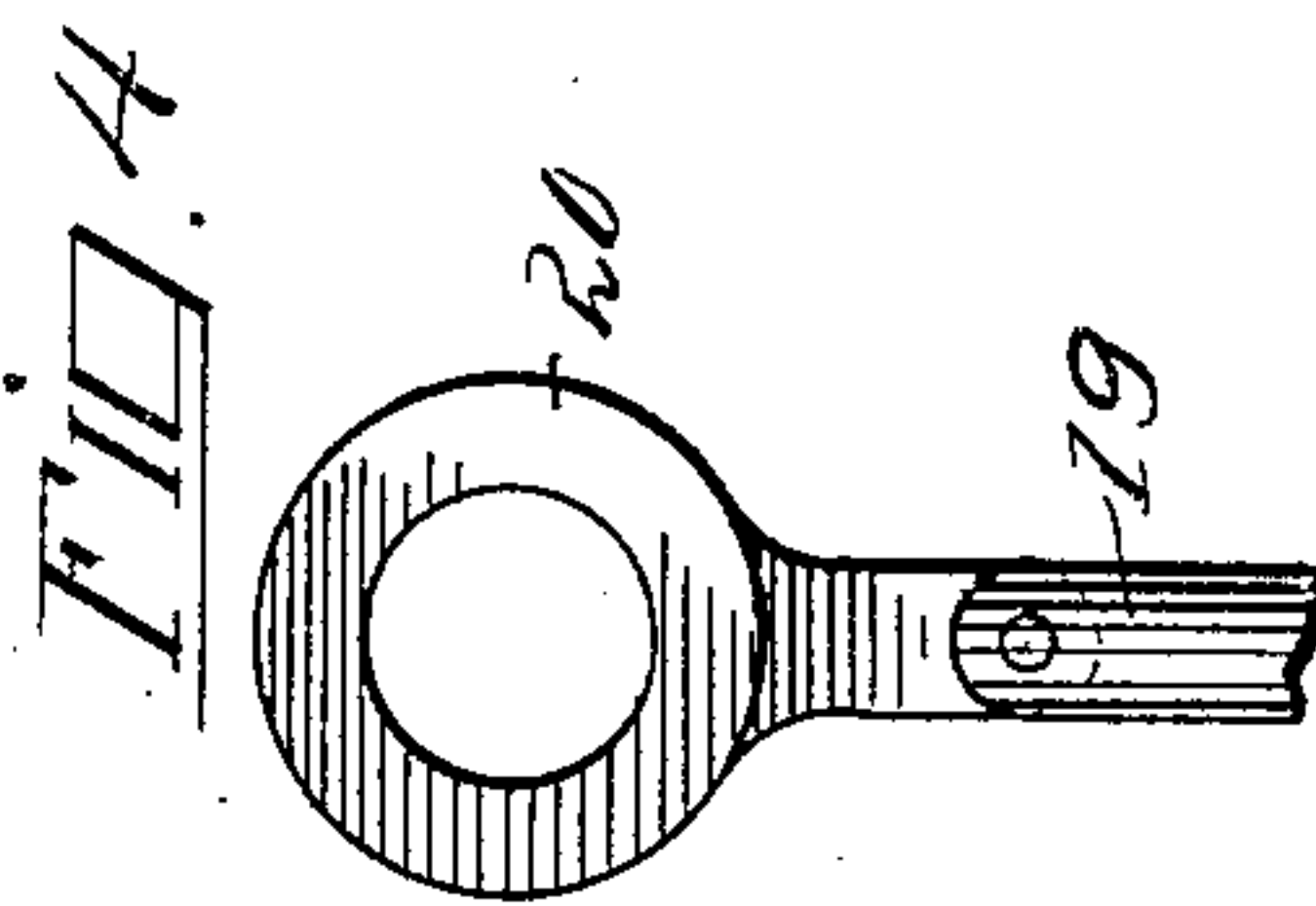
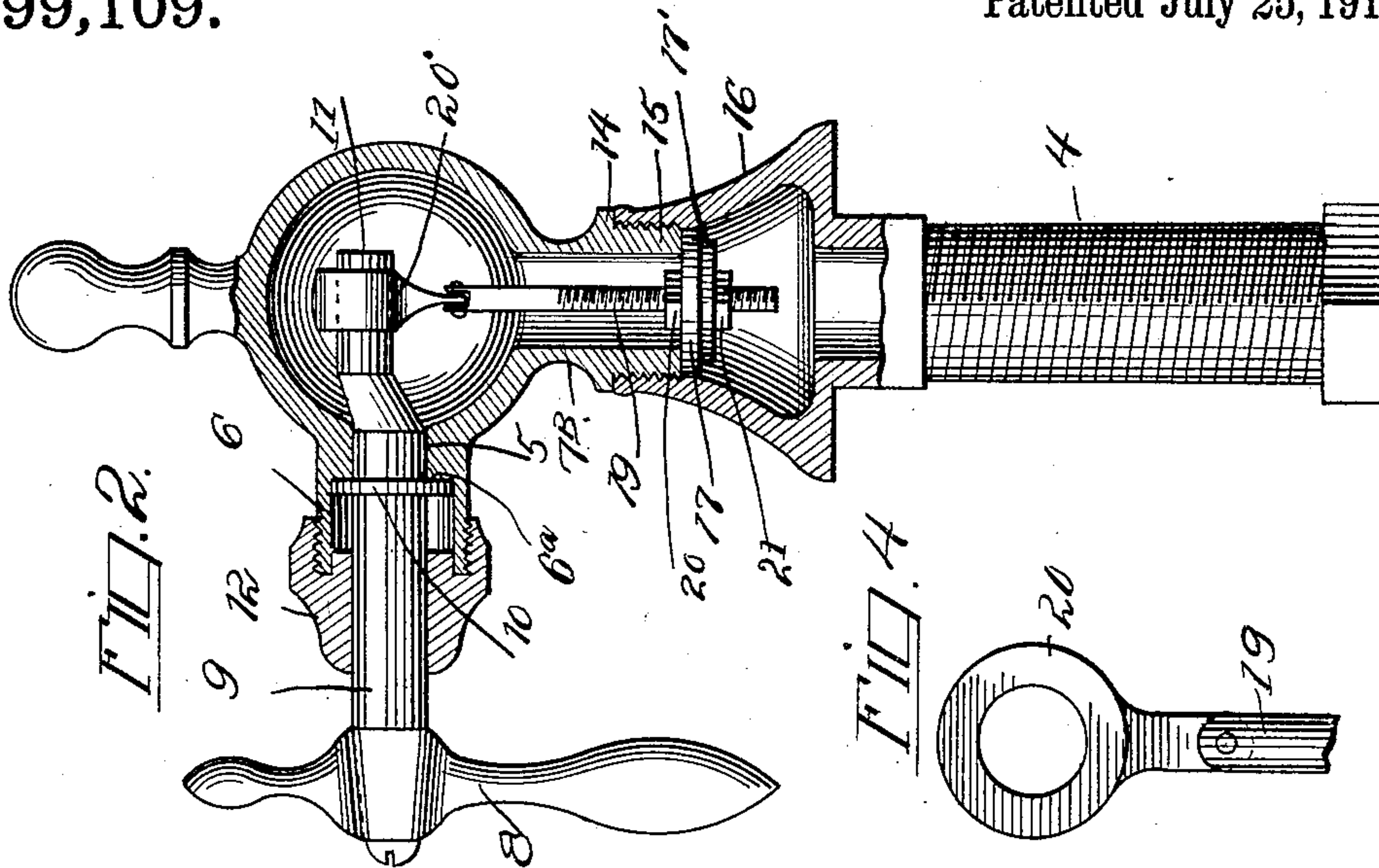
R. HOWELL.

FAUCET.

APPLICATION FILED OCT. 14, 1909.

999,109.

Patented July 25, 1911.



Witnesses  
Wm. Smith.

*Wm. Smith*

Inventor  
Roy Howell.

By *Victor J. Evans*  
Attorney



# UNITED STATES PATENT OFFICE.

ROY HOWELL, OF KINGSTON, PENNSYLVANIA.

FAUCET.

999,109.

Specification of Letters Patent.

Patented July 25, 1911.

Application filed October 14, 1909. Serial No. 522,512.

*To all whom it may concern:*

Be it known that I, ROY HOWELL, a citizen of the United States, residing at Kingston, in the county of Luzerne and State of Pennsylvania, have invented new and useful Improvements in Faucets, of which the following is a specification.

This invention relates to faucets, the object of the invention being to provide means for eliminating the provision of screw-threads on the valve controlling portion of the faucet, and further the provision of a valve chamber having its walls tapered in the direction of the valve seat so that the full pressure of water will be applied to the valve to hold the same in effective contact with the seat.

Another object of the invention is to provide a valve seat which is removable from the valve chamber so as to permit the seat to be readily removed when it is desired to grind the same.

Another object of the invention is to provide in connection with a pressure controlled valve means for regulating the valve toward or away from its seat.

In the drawing, forming a portion of this specification and in which like numerals of reference indicate similar parts in the several views:—Figure 1 is a side view of the faucet. Fig. 2 is a front view of the same with parts in section. Fig. 3 is an elevation of the valve and the valve stem. Fig. 4 is an elevation of the valve stem support.

My improved faucet 1 comprises a casing 2 which is preferably spherical, being provided with a discharge nozzle 3 which may be of any approved well known construction. A bearing member 5 extends from one side of the valve casing, and as shown, said member is provided with communicating large and small passages 6 and 7 respectively, the construction, incident to the formation of the said passages 6 and 7, being such that the member 5 is provided with a vertically disposed circular flat shoulder 6<sup>a</sup>. A valve controlling member 9 extends through the member 5 and through the sleeve 12, the latter being threadedly connected with the member 5 as clearly shown in Fig. 2 of the drawing. The controlling member 9 is provided with a suitable actuating handle 8. The member 9 is provided intermediate of its ends with a combined bearing disk and stop 10 which bears against the shoulder 6<sup>a</sup> of the member 5 so as to

hold the valve actuating portion 11 of the member positioned in line with the axial movement of the valve. The portion 11 of the valve controlling member 9 is offset from the axis of that portion of the member which is rotatably mounted in the member 5 and the sleeve 12 so that the portion 11 is substantially a crank for a purpose to be hereinafter described.

The valve casing is provided with a depending vertically disposed neck 7<sup>b</sup> which is provided intermediate of its ends with a shoulder 14. The neck has integrally formed therewith an exteriorly threaded portion 15, the lower surface of which being horizontally disposed and perfectly flat. The portion 15 of the neck is fitted in a correspondingly threaded passage in the reduced end of a substantially bell-shaped valve chamber 16, the shoulder 14 of the neck bearing against one end of the valve chamber, as shown in Fig. 2, the walls of the chamber being flared upwardly and inwardly toward the valve seat of the casing so that the full pressure of the water will be applied to the underside of the valve to hold the same normally closed.

The valve 17 is of a diameter equal to the diameter of the small end of the valve chamber, being flat, as shown, so as to fully contact with the flat valve seat on the neck end of the valve casing. The valve is adjustably mounted longitudinally on the threaded valve stem 19. A reinforcing washer 17' is mounted on the valve stem and the washer and the valve respectively are confined between suitable clamping nuts 20 and 21 on the valve stem. The upper end of the stem is pivoted to a supporting member 20' which is fitted to the actuating portion 11 of the valve controlling member 9, the point of engagement of the member 20' with the valve stem being in exact axial alinement with the stem, as clearly shown. A water inlet pipe 4 opens into the bottom of the valve chamber 16.

From the construction described herein it will be seen that the water under pressure will be directed against the under surface of the valve 17 so as to normally hold the valve in a closed position. When it is desired to grind the valve seat for its effective contact with the valve, the casing 2 of the valve structure can be removed from the valve chamber. The valve 17 and the washer 17' are then removed from the valve



stem. Now, on actuating the member 9 the valve stem can be moved into the neck portion of the valve casing 2 so that the valve surface or seat of the casing will be wholly  
5 exposed.

I claim:

A faucet comprising a casing, a valve chamber having a decreasing diameter toward the axial line of the casing, the said  
10 casing having a valve seat at the small end of the chamber, a stem movable through the casing and extending into the chamber, a valve adjustably mounted on the stem and normally held under the pressure of the  
15 water against the seat of the casing, a valve

controlling member movably supported by the casing, means movably connecting the valve stem with the valve controlling member, a shoulder formed on the casing, and a member formed on the valve controlling  
20 means and bearing against the shoulder of the casing to hold the valve stem connecting means in axial alinement with the valve stem.

In testimony whereof I affix my signature  
25 in presence of two witnesses.

ROY HOWELL.

Witnesses:

EDWARD REES,  
JAS. LINDSAY.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents,  
Washington, D. C."

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