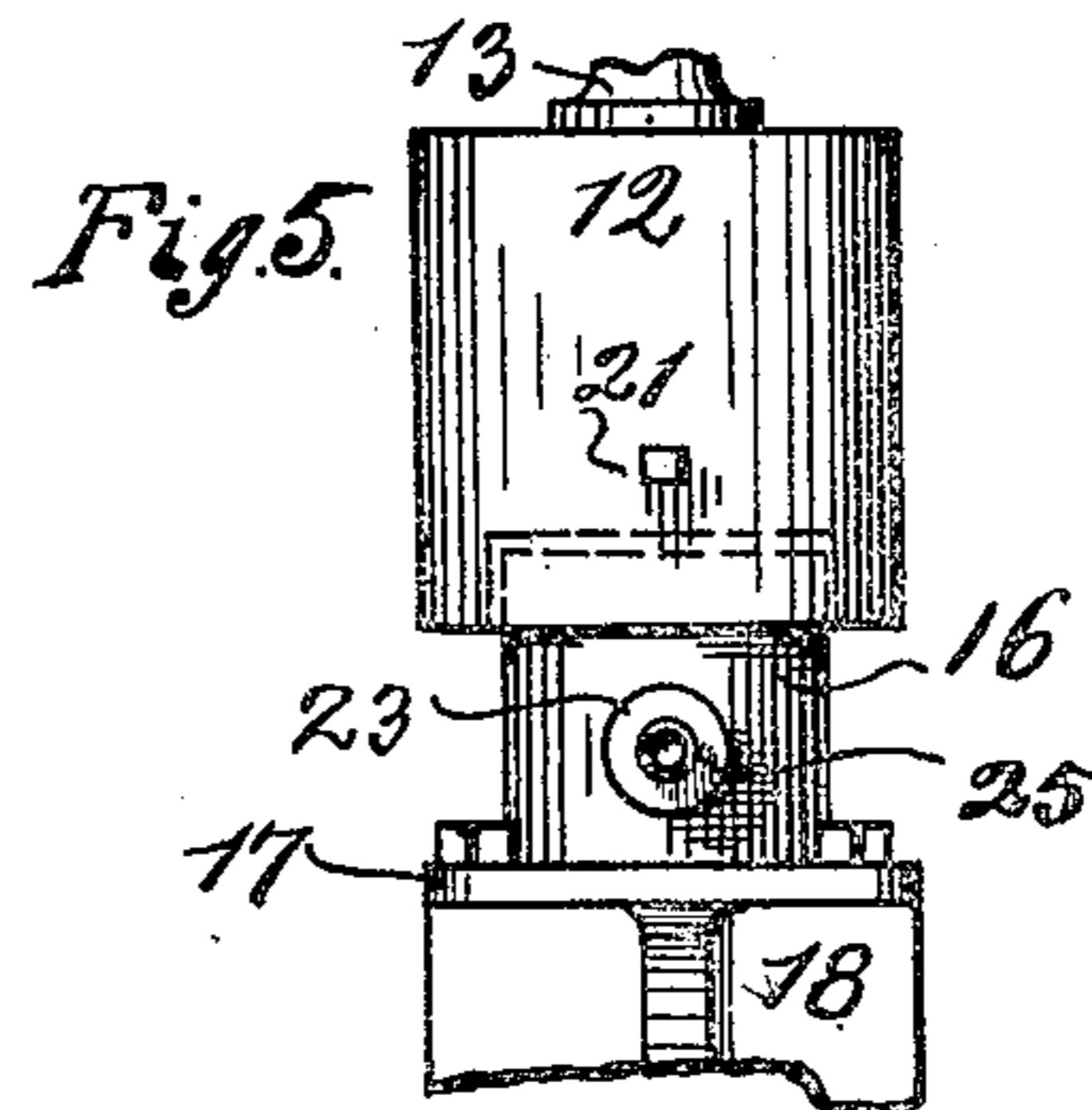
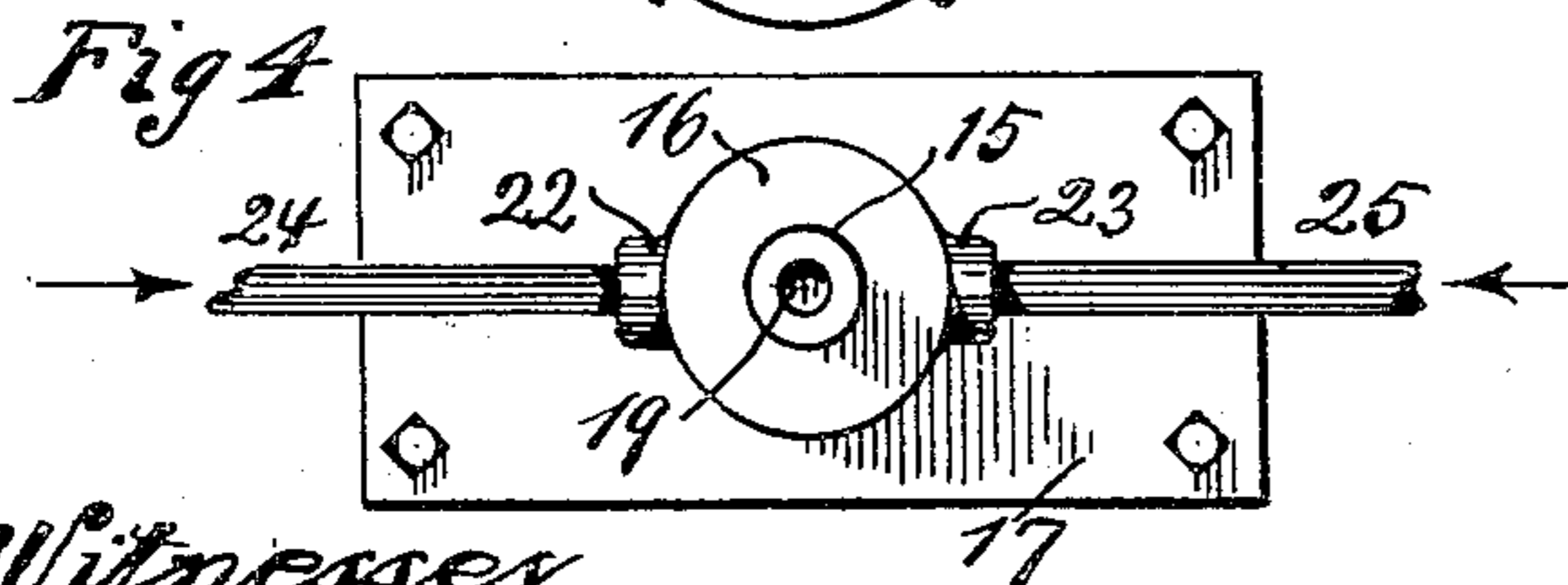
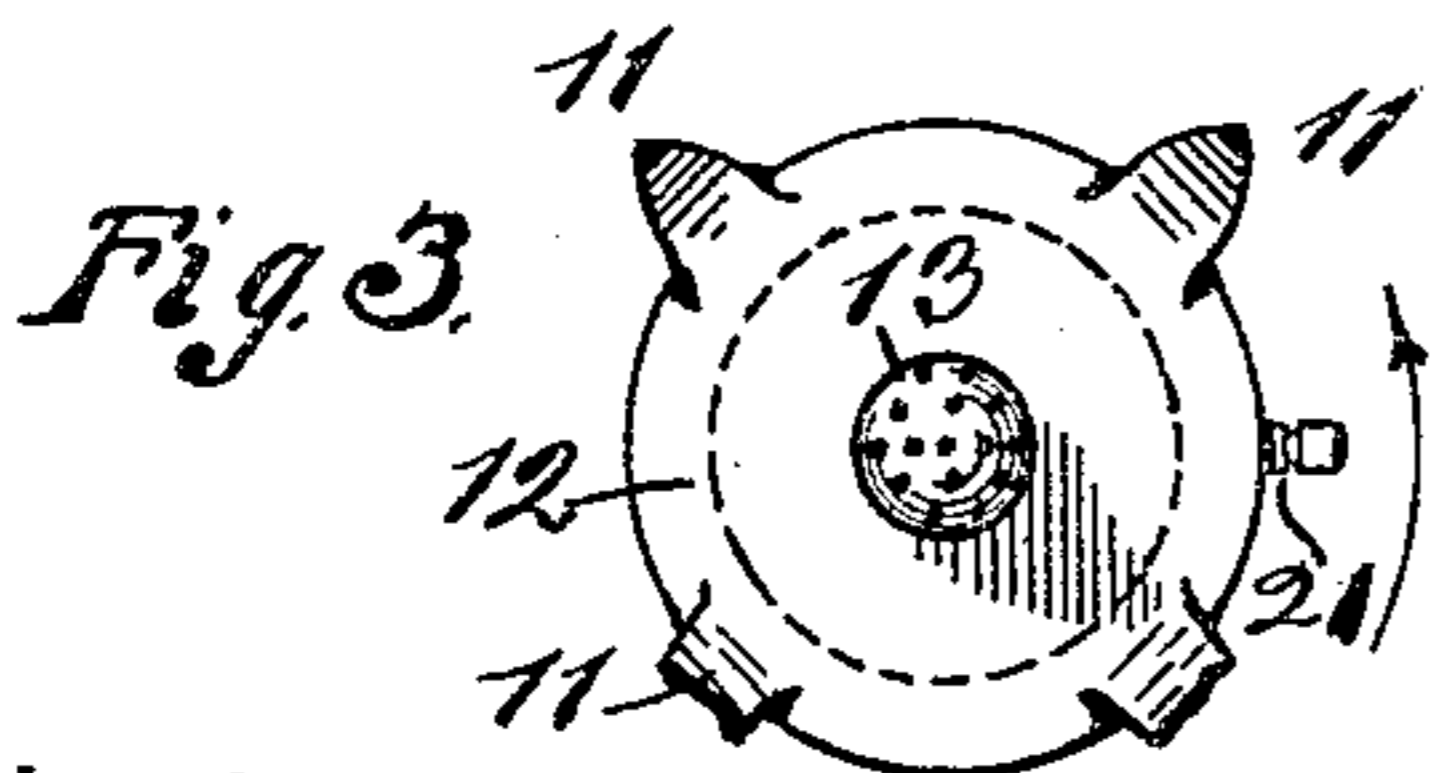
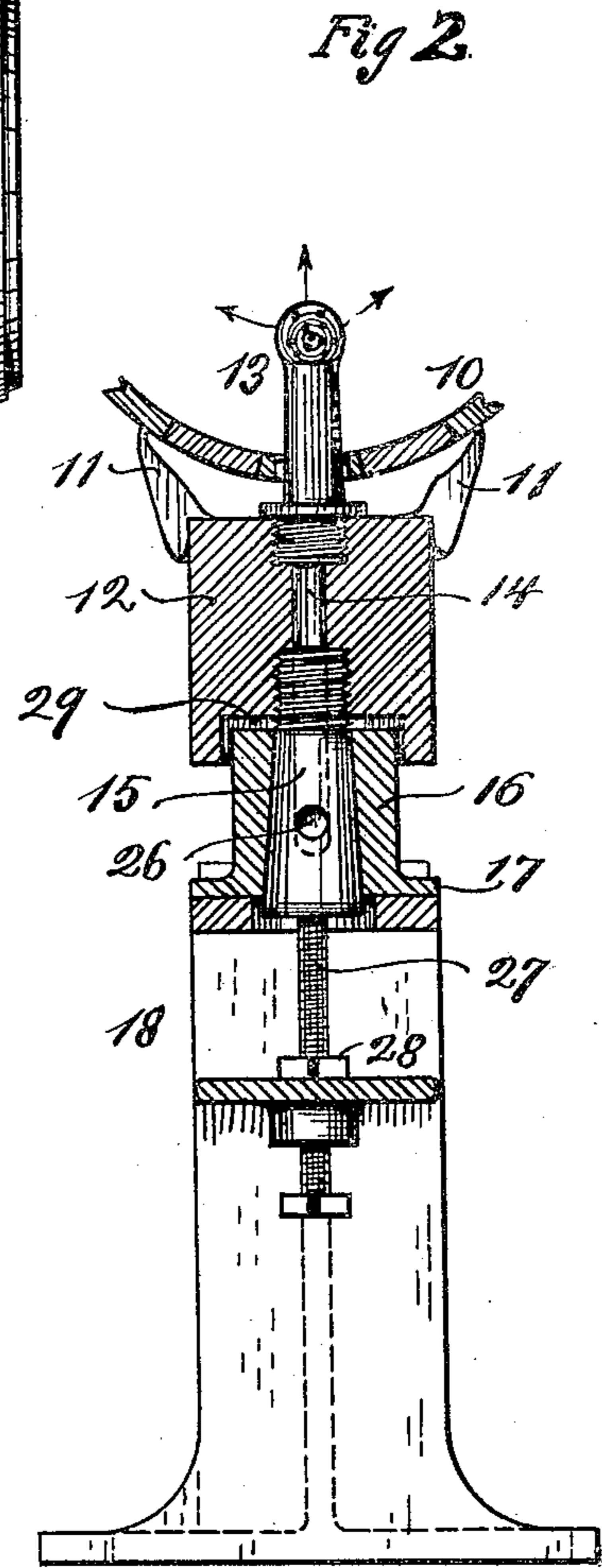
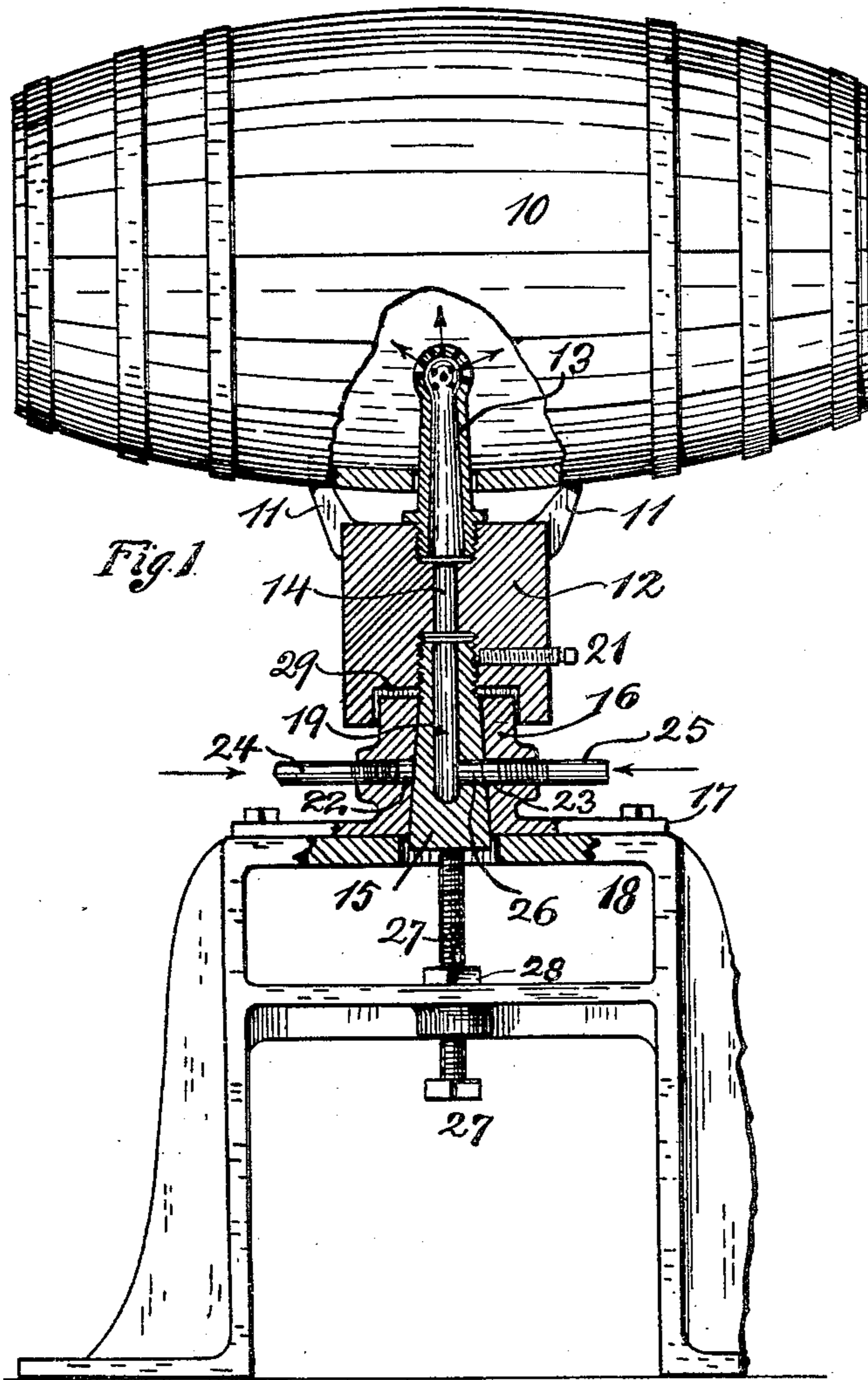


No. 838,670.

PATENTED DEC. 18, 1906.

R. TROEHLER.
BARREL WASHING MACHINE.
APPLICATION FILED MAY 25, 1906.



Witnesses:
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UNITED STATES PATENT OFFICE.

RUDOLPH TROEHLER, OF CINCINNATI, OHIO.

BARREL-WASHING MACHINE.

No. 838,670.

Specification of Letters Patent.

Patented Dec. 18, 1906.

Application filed May 25, 1906. Serial No. 318,603.

To all whom it may concern:

Be it known that I, RUDOLPH TROEHLER, a citizen of the United States, residing at Cincinnati, Hamilton county, State of Ohio, have invented certain new and useful Improvements in Barrel-Washing Machines; and I do declare the following to be a clear, full, and exact description of the invention, attention being called to the accompanying drawings, with the reference characters marked thereon, which form also a part of this specification.

This invention relates to improvements in the construction of barrel-washing machines and similar devices.

In such machines the vessel to be washed out and rinsed is usually mounted upon a head with the discharge-nozzle of the same projecting into it through one of the openings therein, usually the bung-hole, after which water is turned on and caused to be discharged into the vessel. Machines of this kind are most frequently used for the purpose of washing out beer kegs and barrels. A disturbing element in connection with such use is the fact that impurities, and particularly pitch, which coats the interior, are softened by the hot water injected, after which when running out with the water and carried up on the device they are apt to clog parts of the same, thus interfering with the operation.

The object of my invention is to construct such a device in a manner that it is secure against any interference due to such causes.

In the following specification, and particularly pointed out in the claims at the end thereof, is found a full description of my invention, together with its parts, operation, and construction, which latter is also illustrated in the accompanying drawings, in which—

Figure 1 shows in elevation, with its upper part partly in central longitudinal section, my improved device and the manner of its use. Fig. 2 is a vertical central cross-section of Fig. 1, the plane of view being at right angles to that of Fig. 1. Fig. 3 is a top view of the rinser-head. Fig. 4 is a top view of the parts below and as they appear when said rinser-head has been removed. Fig. 5 is a view complementary to Fig. 2 and shows in elevation the parts shown in section in the upper part of said figure.

In the drawings, 10 shows a barrel to be washed out, the same being mounted upon

horns 11, projecting upwardly and outwardly from the rinser-head 12. The support is such that the discharge-nozzle 13, which projects upwardly from said head, reaches at the same time through the bung-hole of the barrel into the interior of the same. This nozzle is attached to the rinser-head in a manner so that its bore is continuous with bore 14 of said head. 15 is a tapering valve-plug, fitted from below into a valve-housing 16, which is provided with flanges 17 and bolted to the general frame 18. The upper end of this valve-plug projects above its housing 16 and is threaded to engage a corresponding tap in the under side of the head 12, which tap is continuous with bore 14, and in line with the axial bore 19 of the plug, all as best shown in Fig. 1. A binding-screw 21 is used to firmly hold the plug to the rinser-head to prevent disengagement of one from the other after the parts are assembled. Housing 16 has at least one, but preferably two, inlet-ports 22 23 diametrically opposite each other, which receive the discharge ends of two water-supply pipes 24 and 25, one of which supplies hot water. These ports, as well as a radial extension 26 of axial port 19, are at one height, so that if plug 15 is rotated its bore 19 26 may be brought in communication with either one of the inlet-ports or either of these latter or both may be closed.

The ends of horns 11 are pointed, so that in case barrel 10 is rotated in a horizontal plane the engagement due to the pressure exerted by the weight of the barrel is sufficient to cause said horns, together with the rinser-head and valve-plug, to follow. This rotation of the barrel effects operation of the machine. Plug 15 is attached to head 12 in such a position with reference to set-screw 21 that this latter is in line with and above port 26, so that the operator by observing the position of this set-screw knows at the same time the position of port 26 with reference to the inlet-pipes 24 and 25. This enables him to properly manipulate the barrel, so that by rotating the same accordingly he may first admit hot water, next cold water, and finally he may turn the water-supply off entirely while removing one barrel and placing another one. A position of set-screw 21 between pipes 24 and 25 would indicate a condition in which both pipes are closed. Plug 15 is held in its housing by a set-screw 27, seated below it in frame 18 and reaching up

through an opening in the top of said frame. This set-screw is also used to maintain a proper fit of said plug within its housing and serves to take up any wear. Its particular position is secured by lock-nut 28. As to diameter, head 12 is considerably larger than housing 16 below, and on its under side it is provided with a recess 29, into which the upper part of said housing extends. The upper part of this latter, as well as of plug 15, is thus completely covered, and impurities, molten pitch, &c., washed out of the barrel and emitted from its bung-hole are prevented from getting into said housing, where they would interfere with the plug. Such matter is simply washed down over the machine, but is prevented from entering anywhere. Neither can anything enter at the lower opening of the housing, since the same is above the upper part of frame 18 and above the opening therein. Furthermore, the taper of the plug and the bore of housing 16, which receives it, being larger at their lower ends favor the clearing and working out of any matter which might get in between the two.

Having thus described my invention, I claim as new—

1. In a barrel-washing machine, the combination of a cylindrical valve-housing, a rinser-head above the same and of larger diameter so as to project beyond the valve-housing, a tapering valve-plug fitted from below into this housing and projecting with its smaller end above this latter and engaging thereat the rinser-head whereby this latter is held in place on the valve-housing while the rinser-head serves to hold the plug within its housing.

2. In a barrel-washing machine, the combination of a tapering valve-plug, larger at its lower end, a corresponding housing for it, above which it projects, a frame provided with an opening above which this housing is supported, a set-screw seated in this frame and extending upwardly through this opening and bearing with its upper end against the lower end of the valve-plug so as to keep the same in position within the valve-housing above, and a rinser-head mounted on the upper projecting part of the plug.

3. In a barrel-washing machine, the combination of a rinser-head having barrel-supporting means and a discharge-nozzle at its upper end and a recess in its under side, a cylindrical valve-housing fitted with its upper end into this recess and a valve-plug within this housing beyond which it projects at its upper end for engagement thereat with the rinser-head.

4. In a barrel-washing machine, the combination of a valve-housing having circumferentially-spaced inlet-ports, a valve-plug seated in the same having an axial as well as a

communicating radial port adapted to be positioned opposite either one of the inlet-ports mentioned, or at any position intermediate the two, a rinser-head mounted at the upper end of the valve-plug, and an outwardly-projecting set-screw seated in the rinser-head and engaging the valve-plug so as to hold both in position on each other, the attachment of the plug with reference to the set-screw being such that the radial port in the former is in line with and below this set-screw whereby the latter serves as a means to indicate the position of the plug within its housing and with reference to the water-supply.

5. In a barrel-washing machine, the combination of a rinser-head having a discharge-nozzle and outwardly-extending barrel-supporting horns with upwardly and outwardly directed pointed ends which are adapted to engage the side of a barrel, a valve-plug connected therewith, a housing for this plug and water-supplying means in connection with this housing.

6. In a barrel-washing machine, the combination of a tapering valve-plug having an axially and a radially arranged port, a valve-housing with circumferentially-spaced inlet-ports into which housing this plug is fitted from below and for rotation, a frame upon which this valve-housing is supported, a screw vertically supported in this frame upon the upper end of which the valve-plug rests with its lower larger end and whereby it is held in the housing, a centrally-perforated rinser-head mounted on the upper end of the valve-plug and having a recess on its under side which recess is occupied by the upper part of the valve-housing which is thereby covered by the rinser-head, a discharge-nozzle mounted on the upper side of the rinser-head and pointed barrel-supporting arms projecting laterally and upwardly therefrom.

7. In a barrel-washing machine, the combination of a rinser-head having pointed barrel-supporting arms projecting from its upper side, a circular recess on its under side and an axial perforation terminating with its lower end within this recess, said perforation being diametrically enlarged at each end to form tapped sockets, a discharge-nozzle seated in the upper one of these sockets, a valve-plug fitted with its upper end into the lower one of these sockets, and a valve-housing for this plug which occupies with its upper end the recess in the rinser-head mentioned.

In testimony whereof I hereunto set my hand in presence of two witnesses.

RUDOLPH TROEHLER.

Witnesses:

C. SPENGEL,
T. LE BEAU.