

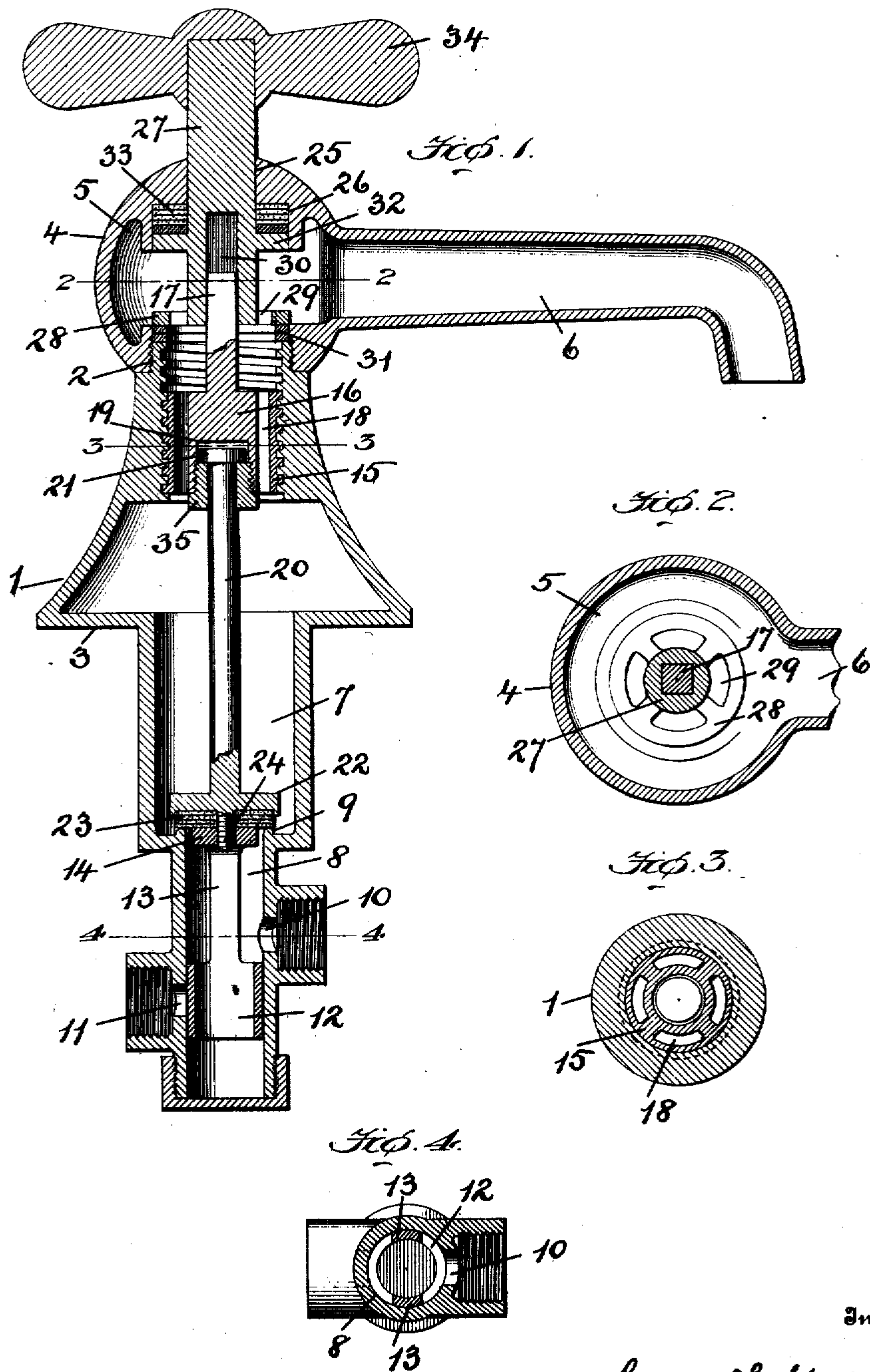
G. T. KENLY.

FAUCET.

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925,436.

Patented June 15, 1909.



Witnesses

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UNITED STATES PATENT OFFICE.

GEORGE T. KENLY, OF BALTIMORE, MARYLAND, ASSIGNOR TO THE PLUMBING SPECIALTY COMPANY, OF BALTIMORE, MARYLAND, A CORPORATION OF DELAWARE.

FAUCET.

No. 925,436.

Specification of Letters Patent.

Patented June 15, 1909.

Application filed August 17, 1908. Serial No. 448,789.

To all whom it may concern:

Be it known that I, GEORGE T. KENLY, a citizen of the United States, residing at Baltimore, in the State of Maryland, have invented certain new and useful Improvements in Faucets, of which the following is a specification.

This invention relates to improvements in faucets and has particular reference to that class of faucets wherein either the cold or the hot water or both may be drawn through the single faucet.

The present invention is an improvement on the faucet shown and described in Letters Patent of the United States granted to me on April 21st, 1908 and numbered 885,347 and the invention consists in the novel construction, combination and arrangement of the parts as will hereinafter be described and particularly pointed out in the claims.

The accompanying drawing illustrates the invention in which,—

Figure 1 is a central sectional elevation of the entire faucet and valves controlling the passages therein. Fig. 2 is a horizontal cross-section on the line 2—2 of Fig. 1. Fig. 3, a cross-section on the line 3—3 of Fig. 1, and Fig. 4, a similar section on the line 4—4 of Fig. 1.

Referring to the drawing the numeral, 1, designates a hollow casing having an exteriorly screw-threaded upper end, 2, and a flared intermediate portion forming a horizontal flange, 3, which may form a seat for the casing when attached to a slab.

A spherical head, 4, has an interior chamber, 5, and a threaded opening at its lower side which engages the threaded upper end of the casing, and is also provided with a discharge nozzle, 6, that extends laterally from said interior chamber.

The casing has an intermediate chamber, 7, extending downwardly from the flared portion and a smaller valve chamber, 8, at its lower end and a valve seat, 9, is provided at the lower end of the intermediate chamber.

The wall of the small lower chamber, 8, is provided at one side with a port, 10, for the admission of cold water and at the diametrically opposite side said chamber wall is provided with another port, 11, for the admission of hot water.

A valve, 12, of a hollow cylindrical form, fits snugly into the small chamber and is open at both the top and bottom and said

valve is provided at opposite sides with vertically-extending arms, 13, which are connected at their upper ends by a cross bar, 14.

The upper end of the casing is provided with a central bore having a square thread therein which bore extends from the upper end downwardly and at said upper end is in communication with the chamber, 5, of the head.

A circular head, 15, is provided with circumferential square threads which engage the threads of the central bore and said head has an integral stem, 17, which projects upwardly through the center of the bore. A plurality of vertical passages, 18, are also in the head and said passages extend entirely through the head from end to end and open around the lower end of the central stem.

The bottom side of the head, 16, is provided with a central cavity, 19, into which a valve stem, 20, projects. This stem is provided at its upper end with a head, 21, which loosely fits into the cavity, 19. A screw threaded collar, 35, surrounds the stem beneath the head, 21, thereof and said collar screws up into the cavity of the head, 16, and holds the stem in a pendent position.

The valve stem extends down through the intermediate chamber, 7, and its lower end carries a head, 22, which has position immediately over the valve seat, 9. A washer or series of washers, 23, have position against the bottom side of the head, 22, and are held in place by the cross-bar, 14, at the upper ends of the arms, 13, that carry the cylindrical valve, 12,—a threaded bolt or extension, 24, from the head passes through the washers and enters said cross-bar whereby to draw the head and bar together to clamp the washers.

The spherical head, 4, at the upper end of the casing is provided with a central opening, 25, at its side and an enlarged circular recess, 26, around the inner end of said opening, and an operating rod, 27, passes through the central opening of the head and at its lower end carried a circular flange, 28, with a plurality of ports, 29, extending therethrough, which open into and communicate with the bore in the upper end of the casing.

The operating rod, 27, has a recess, 30, in its lower end which fits down over and receives the upper end of the stem, 17. The recess and stem are angular in cross-section

so that while the stem may move vertically in the recess of the rod the rotation of the rod will cause a rotation of the stem and at the same time the stem will travel vertically in the recess and carry the valve stem, 20, and the valves connected therewith.

The circular flange, 28, on the operating rod is seated on spring washers, 31, that rest upon the upper end of the casing so as to prevent downward movement of the said rod and to press the rod up. To prevent upward movement of the rod and also to provide a packing and thereby prevent leakage around the central opening of the spherical head, 4, I provide the operating rod with a circular flange, 32, which seats up in the circular recess, 26, and against packing disks, 33, of suitable material. A suitable valve or handle, 34, is mounted on the upper end of the operating rod whereby to conveniently turn the latter.

It will be understood that the operating rod has no vertical movement and is limited to a rotary movement and that upon rotating said rod a vertical movement of the head, 16, and stem, 17, will take place. This vertical movement of the head and stem will cause a like movement to the valve stem, 20; the head, 22, and washers, 23, and thereby cover or uncover the upper end of the small chamber, 8.

When the valve stem, 20, is moved vertically the cylindrical valve, 12, at the lower end of the small chamber, 8, is correspondingly moved so as to open or close one or the other of the inlet ports, 10, or, 11.

In the position shown in Fig. 1 the cold water port or inlet is open but the head, 22, and washer, 23, are seated on the valve seat, 9, and the water cannot pass from the small chamber, 8, into the intermediate chamber, 7. This is the normal inoperative condition.

It is obvious that by turning the handle or wheel, 34, so as to slightly raise the valve stem, 20, the water will pass up through the intermediate chamber; through the passages, 18, out through ports, 29, into the head and finally from the latter into and through the nozzle.

Having thus described my invention what I claim and desire to secure by Letters Patent is,—

1. The combination with a shell having a lower chamber and an intermediate chamber with water inlet ports in the wall of the lower chamber, of a valve and seat between said two chambers, a spherical head at the upper end of the shell and having a cham-

ber with a nozzle extending laterally therefrom, a circular head in the shell between the intermediate chamber and the spherical head,—said circular head having a central closed recess in its bottom and a plurality of passages extending vertically there-through around said central recess, a cylindrical valve in the lower chamber, a valve stem having its lower end rigidly connected to said cylindrical valve and its upper end loosely secured in the bottom recess of the circular head, and means for rotating said head.

2. The combination with a shell having a threaded central bore at its upper end and a lower chamber with water inlet ports in the wall thereof, of a valve in said lower chamber; a circular head in the bore at the upper end of said shell—said head having exterior screw threads, a bottom recess and a plurality of vertical passages extending therethrough; a stem projecting from the upper side of the head; means for rotating said stem and head, a valve stem having its upper end entered in the recess of the head, means for loosely sustaining the upper end of the valve stem in the head recess and means for connecting the lower end of the valve stem with the valve in the lower chamber.

3. The combination with a shell having a central threaded bore at its upper end and a chamber in its lower end with a plurality of water inlets, of a valve in said chamber to control said inlets, a circular head in the central bore and having a solid central vertical stem projecting upwardly therefrom,—said circular head having a plurality of vertical passages that extend from the bottom thereof and open at the upper side around the solid central stem, a valve stem having its upper end connected to the lower side of the circular head beneath the solid stem and its lower end connected with the valve in the lower end of the shell, a spherical head at the upper end of the shell and having an interior chamber with a nozzle extending laterally therefrom, an operating rod extending inwardly through the spherical head and provided with a central passage to receive the solid stem on the circular head.

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

GEORGE T. KENLY.

Witnesses:

JOHN W. HEWES,
CHAS. B. MANN.