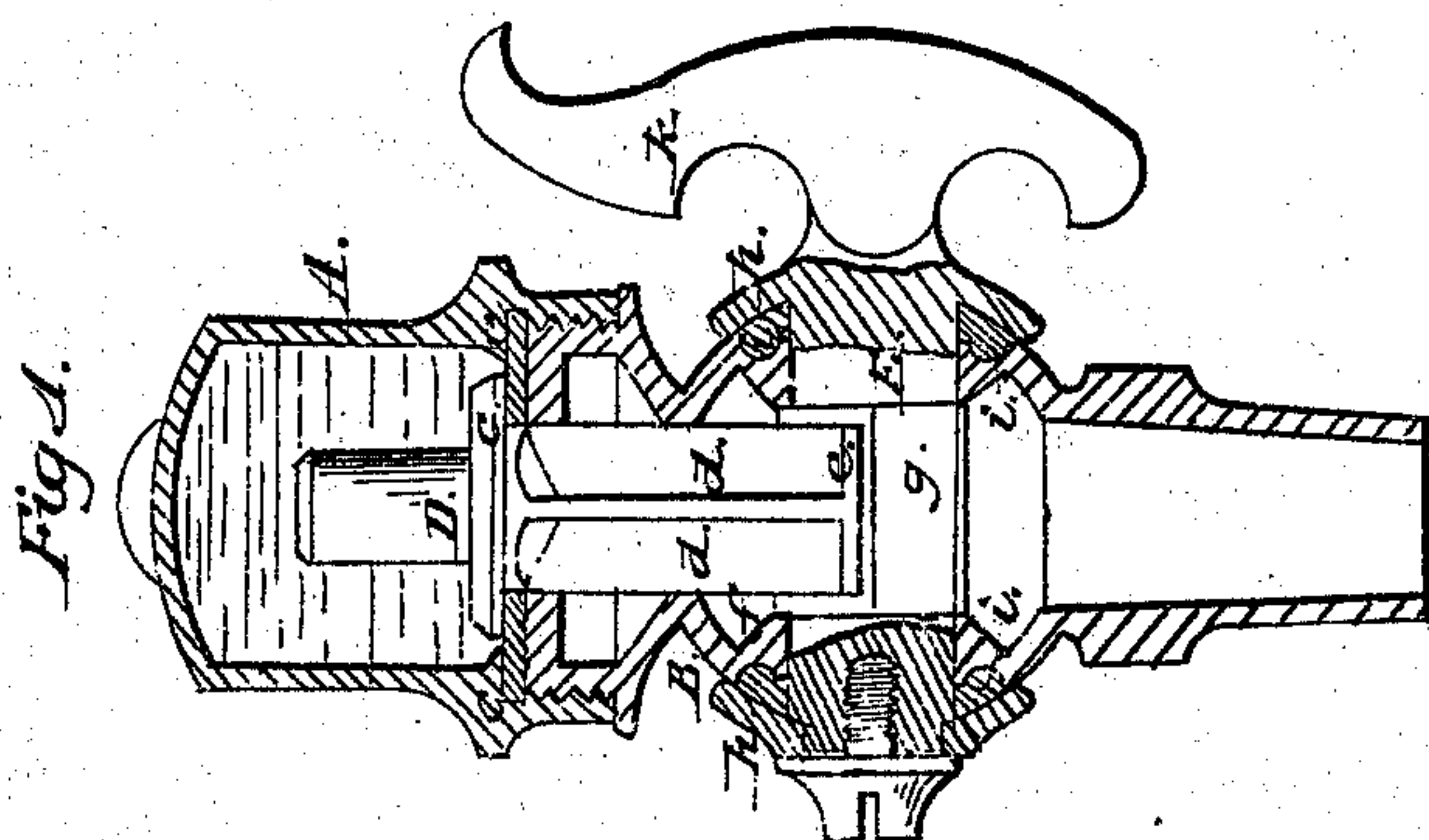
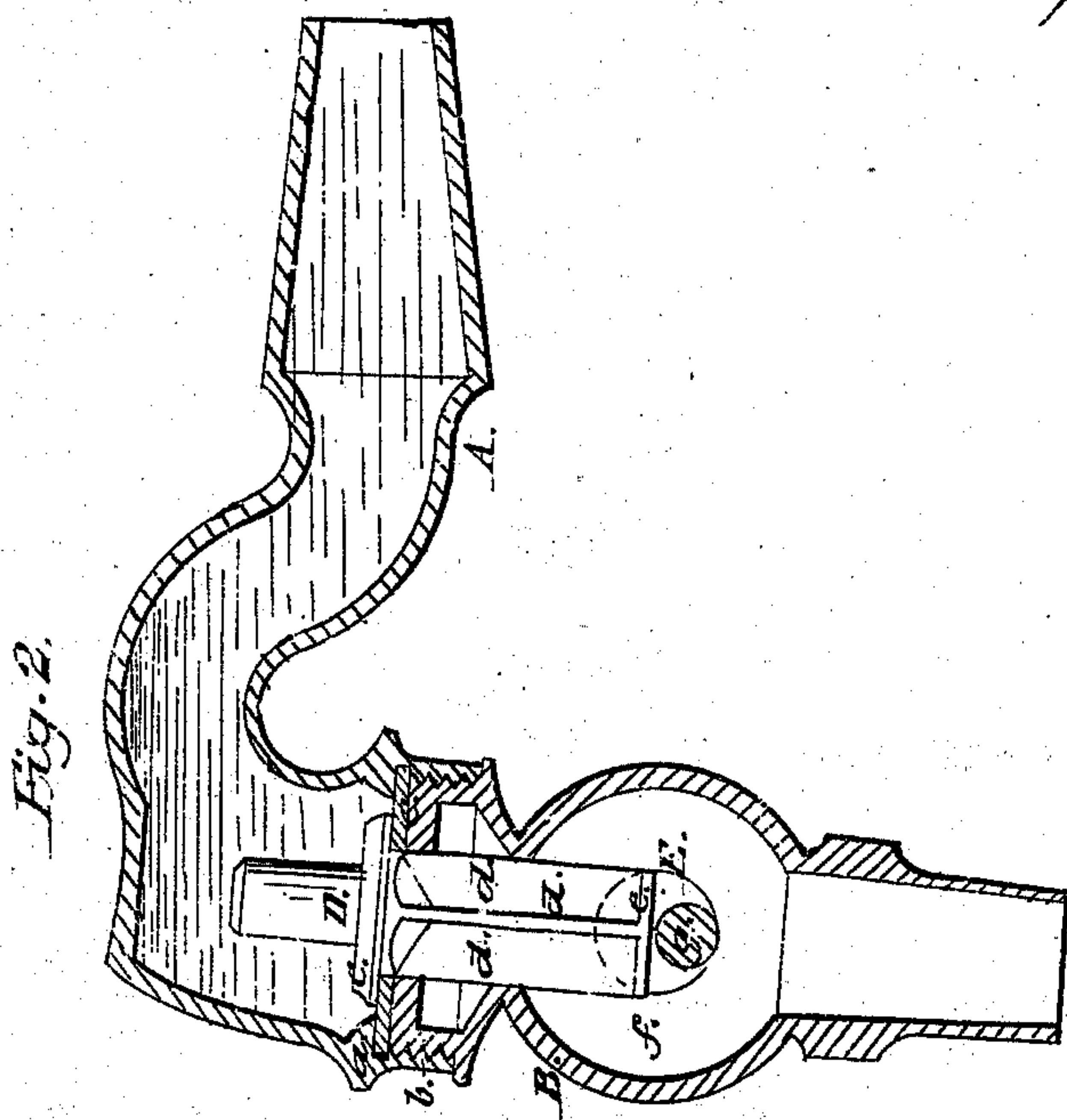


J. Broughton,

Faucet.

No. 95077.

Patented Sep. 21. 1869



Witnesses:
J. Moorby.
Fred. Haynes.

Inventor:
John Houghdon

United States Patent Office.

JOHN BROUGHTON, OF NEW YORK, N. Y.

Letters Patent No. 95,077, dated September 21, 1869.

IMPROVEMENT IN FAUCETS.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that I, JOHN BROUGHTON, of the city, county, and State of New York, have invented a new and useful Improvement in Faucets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawing, forming part of this specification, and in which—

Figures 1 and 2 represent sectional views, at right angles to each other, of a faucet, constructed in accordance with my improvement.

Similar letters of reference indicate corresponding parts.

This, my improvement, relates to faucets of a compression character or action, and in which the valve is opened by a revolving, eccentrically-arranged pin or bar; and

The invention consists in a novel construction and arrangement of parts, in the combination of details of which the faucet is composed, including certain arrangements of packings thereto, whereby the faucet, as a whole, is greatly improved and rendered more efficient, durable, and easy in its action.

Referring to the accompanying drawing—

A is a horizontal shank or supply-pipe, and B, a pendent body or nozzle thereto, the latter being connected with the shank in such manner as that a flexible washer, C, laid upon the upper end of said body, and held down by a shoulder, *a*, in the shank, serves to both pack the connecting-joint of the body and shank, and to form a flexible seat for the valve D to rest upon.

Thus the flexible washer C performs a double function, namely, that of a stationary valve-seat and a packing to the joint *b*, which latter, by the arrangement shown, is not exposed to the pressure of the fluid in the supply-pipe, hence not so liable to leak as if so exposed.

The valve D is arranged to have a vertical play or action, and is opened by a cam action, but closes by its own gravity and the pressure of fluid above it, without, of necessity, the aid of a spring. Said valve is formed of one piece, its head *c* overlapping the discharge-opening in the valve-seat, and its body being made up of thin radial guiding-wings *d*, with a disk, *e*, at its lower end, which disk may be the full diameter of the discharge-passage. Such valve, which is of a solid character, having no joint at its head, and moving independently of the flexible seat C, that is free from all tendency to tear or lift, being held down by

the pressure of the fluid and shoulder *a*, presents, in all adjustments of it circumferentially, the same and like lifting-surface to the action of the opening-cam, by reason of its bottom disk *e*, which latter part also serves to break the force of the discharging current, and to distribute in an equal manner from off its top the effluent fluid to the nozzle.

Said disk *e* furthermore serves, by the action of the discharging current on it, to aid in closing the valve when the cam, which operates the latter, is turned to shut it. But this disk *e*, although of as large diameter as the discharge-passage above it, in no way chokes or lessens the discharge, as the central portion of the body of the faucet is constructed in the form of a globe, making an enlarged chamber or space, *f*, into which the lower end of the valve and its disk dips and works.

The cam, which lifts the valve to open it, is made up of a rotating shaft, E, cut away for an intermediate portion of its length, to form an eccentric lifting-bar, *g*, which acts against the underside of the disk *e*.

This shaft has its bearings in opposite sides of the globular portion of the body B, and is provided with flanges or shoulders *h*, that serve to retain in position flexible packing-rings *i*, which fit in recesses of an annular wedge-shape character, whereby the pressure of the fluid operates to tighten said packings, and escape in a lateral direction is prevented, while the flanges *h* act as shields to prevent all leakage in an endwise direction, that is, in direction of the length of the valve-shaft E, which is of a cylindrical character, consequently less liable to stick than if of a taper form, and does not require to be ground, yet is water-tight, and so free to move that a short handle or lever, *k*, suffices to turn it.

A faucet thus constructed in all its parts embraces or forms a practical combination of details, which make the device perfect in every respect.

What is here claimed, and desired to be secured by Letters Patent, is—

The valve D, formed with a lower disk, *e*, in combination with the enlarged chamber *f*, in or to the body of the faucet, and the shaft E, with its eccentric lifting-bar *g*, flanges *h*, and packing-rings *i*, essentially as shown and described.

JOHN BROUGHTON.

Witnesses:

LOUIS H. PIGUOLET,
HENRY PALMER.