

(No Model.)

C. A. HITCHCOCK
FAUCET.

No. 505,105.

Patented Sept. 19, 1893.

Fig. 1.

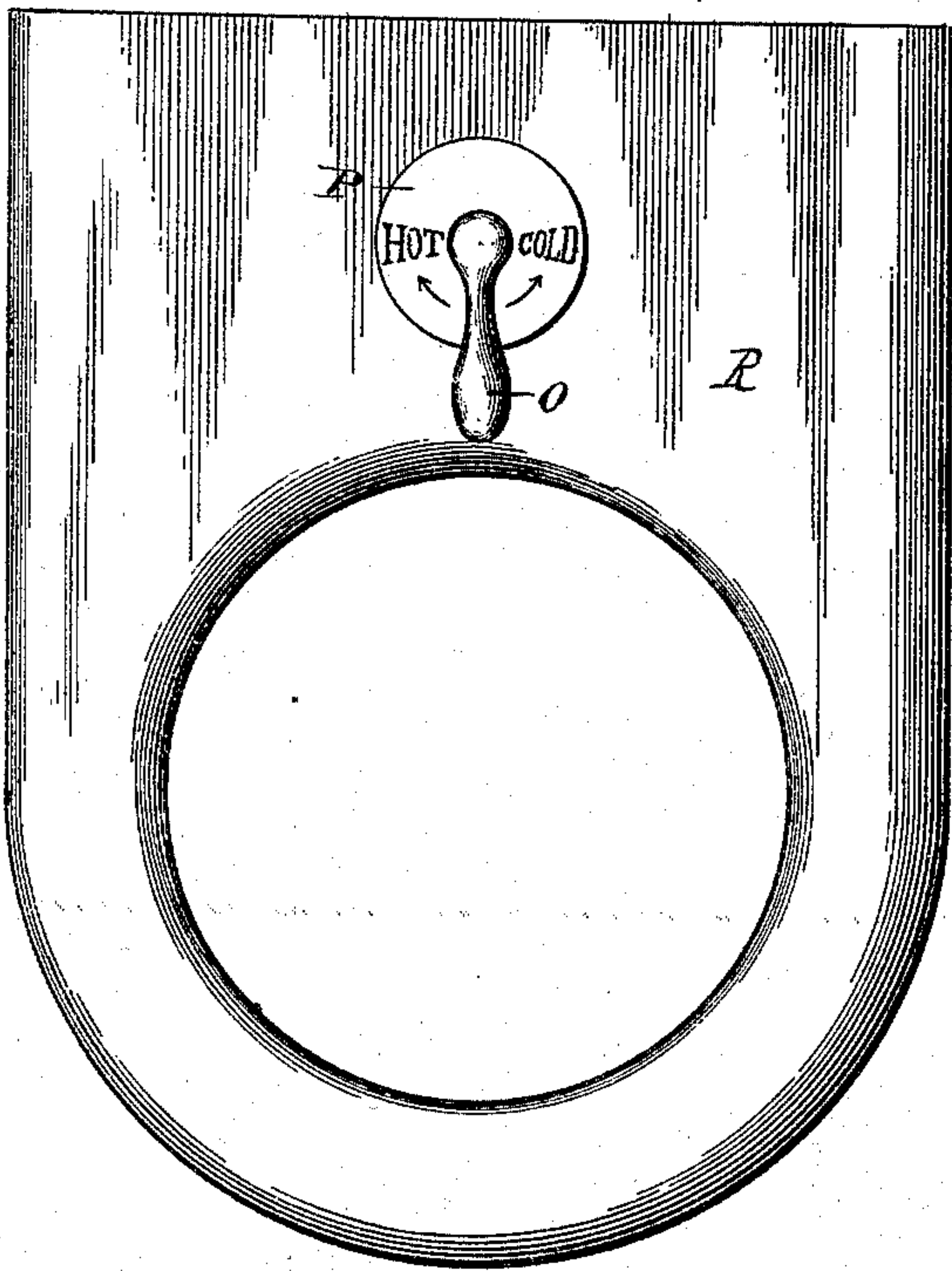


Fig. 3.

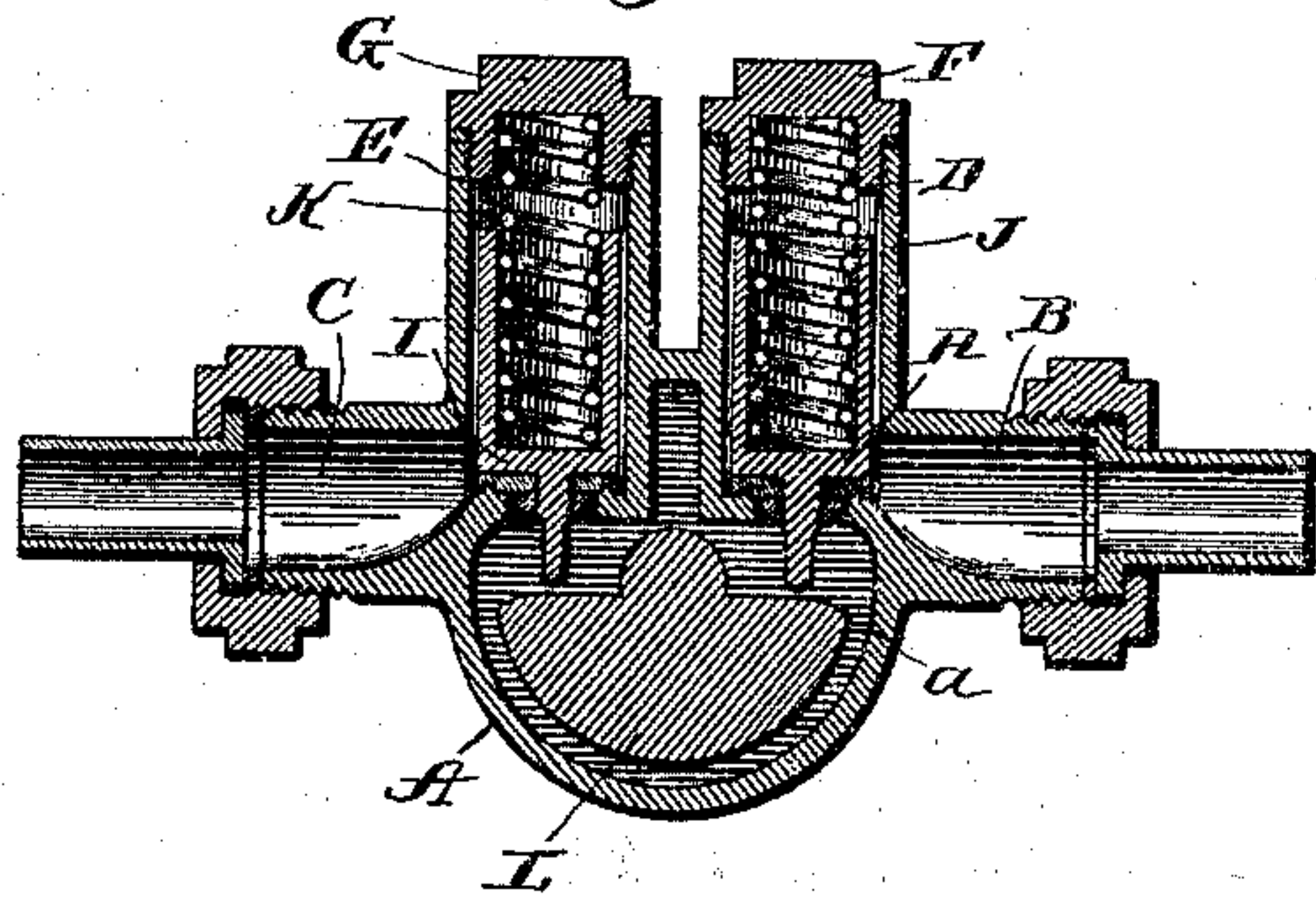


Fig. 4.

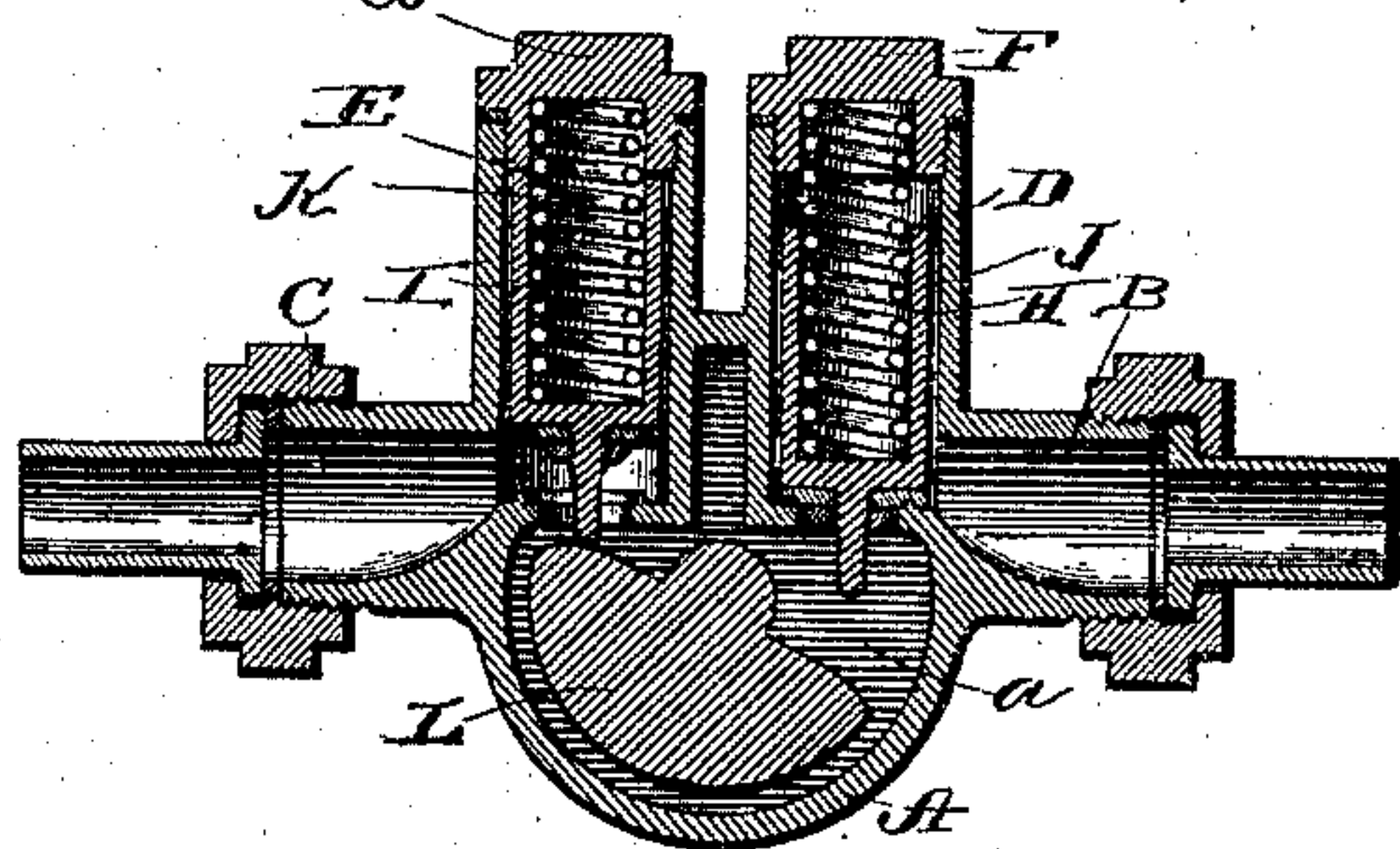
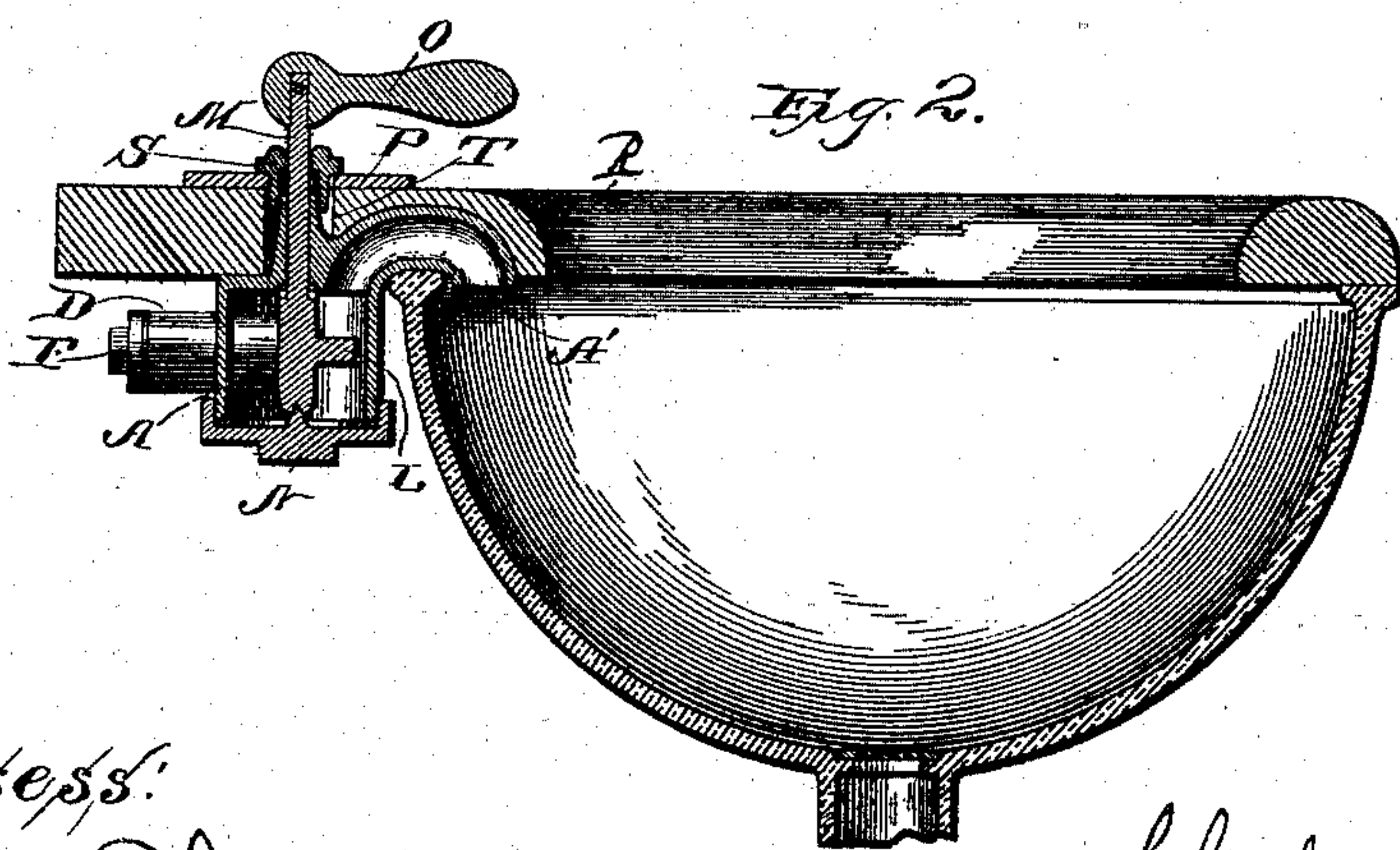


Fig. 2.



Witnesses:

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UNITED STATES PATENT OFFICE.

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FAUCET.

SPECIFICATION forming part of Letters Patent No. 505,105, dated September 19, 1893.

Application filed June 6, 1890. Serial No. 354,485. (No model.)

To all whom it may concern:

Be it known that I, CHARLES A. HITCHCOCK, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Self-Closing Duplex Faucets, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming a part of this specification.

My invention relates to that class of faucets which are provided with a single handle and the valves of which are arranged to be opened by different movements of the handle so as to admit either hot or cold water.

My invention relates more particularly to valves for the lavatories of railway cars, boats, and similar situations where the utmost economy in the use of the water-supply is necessary and where also the utmost compactness of construction is desirable.

The primary objects of my invention are to produce a duplex faucet in which but one kind of water (that is, either hot water or cold water) can be let on at the same time and in which the letting on of the water shall be due to different movements of a single operating stem; also to produce a duplex faucet which shall automatically close itself as soon as the operating-stem is released by the user; furthermore, to produce a duplex faucet the casing and operative parts of which, excepting only the handle, shall be pressed below the top of the water-receptacle, thus leaving the top of the water-receptacle free for the reception of toilet-articles.

To the above purposes, my invention consists in certain peculiar and novel features of construction and arrangement, as herein-after described and claimed.

The more precise nature of my invention will be better understood when described with reference to the accompanying drawings, in which—

Figure 1. is a plan view of a lavatory-bowl having a self-closing duplex faucet embodying my invention. Fig. 2. is a certain vertical longitudinal section of the same. Fig. 3. is a horizontal section of the faucet detached from the bowl, both of the faucet-valves being closed. Fig. 4. is also a horizontal section

of the faucet detached from the bowl, the hot-water valve being shown as open.

In the said drawings, A designates the body-portion or main casing of the faucet, this casing being of cylindrical form and closed at its lower end by a screw-cap N.

B and C designate respectively the cold water inlet and the hot water inlet, said inlets being located at opposite sides of the casing A, between its upper and lower ends.

A' designates the outlet-passage of the faucet, which passage leads from the upper part of the casing A at a point opposite from and midway between the inlets for cold and hot water.

D and E designate respectively the casings for the cold water valve and for the hot water valve, said casings being of tubular form and extending parallel with each other outward from the rear side of the main casing A. The cold water inlet B opens into the outer side of the valve casing D while the hot water inlet C opens into the outer side of the valve-casing E. The outer end of the valve-casings D and E are closed respectively by removable screw caps F and G, and within the valve-casing D is located the cold water valve H, while within the valve-casing E is located the hot water valve I.

The seats for the valves H and I are at the inner ends of the valve-casings D and E, and said valves are respectively held normally upon their seats by spiral springs J and K; said springs being located within the valve-casings D and E and being interposed respectively between the inner ends of the valves H and I and the caps F and G of the valve-casings. The valves H and I are shown as tubular plugs closed at their inner ends and each provided with a nipple extending outward from its closed end and into the main casing A of the faucet.

Within the main casing A of the faucet is centrally placed an operating-stem M the lower end of which has a bearing upon the screw-cap N of the main casing and the upper end of which protrudes upwardly through the top of the said main casing and carries a handle O. Within the main casing A, the valve-operating stem M carries a horizontal enlargement or wing L the outer margin of which

may be semicircular in form, as shown, but the inner margin of which must be straight. This inner margin of the enlargement or wing L is divided into two equal portions which
 5 extend radially from opposite sides of the stem M and transversely with relation to the axes of the valves H and I. A plate P preferably surrounds the upper end of the valve-operating stem M and is held down upon the
 10 top of the bowl by a nut S which surrounds the upper end T of the main casing A. This plate is shown as inscribed at opposite points with the words "Cold" and "Hot" and with arrows pointing to said words so as to
 15 obviously imply that, by turning the handle O toward the word "Cold," cold water will be obtained, and by turning the handle oppositely toward the word "Hot," that hot water will be obtained. When the handle O is
 20 turned to the right, the right hand portion of the straight inner margin of the wing L strikes the nipple of the valve H, forcing said valve backward from its seat and compressing its spring J and letting on cold water. By turn-
 25 ing the valve-stem to the left, the left hand portion of the straight inner margin of the wing L strikes the nipple of the valve I, forcing said valve backward from its seat, compressing its spring K, and letting on hot wa-
 30 ter. Thus but one valve can be opened at a time, and if the handle be released when either valve is open, the spring of that valve will instantly seat the valve, shut off the water and

return the valve-stem to its normal intermediate position. 35

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

1. A self-closing duplex faucet, comprising a main casing having two oppositely disposed
 40 self-closing inlet-valves located side by side at one side of the casing, and an oscillatory valve-operating stem located within the main casing adjacent to the inner ends of said valves and provided with a wing having oppositely
 45 disposed margins radiating from the stem and extending transversely to the axes of the valves adjacent to the inner ends thereof substantially as set forth.

2. A self closing duplex faucet, comprising
 50 a main casing having two parallel valve-casings located side by side at one side of the main casing, a pair of self-closing spring pressed inlet valves each located in one of
 55 said valve-casings, an outlet-passage, leading from the main casing, and an oscillatory valve-operating stem mounted in the main casing and provided with a horizontal wing having oppositely disposed margins radiat-
 60 ing from the stem and extending transversely to the axes of the valves adjacent to the inner ends thereof, substantially as set forth.

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Witnesses:

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