*Elisha Fitzgerald's Safety measuring Faucet.*

71865

PATENTED
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Fig. 1

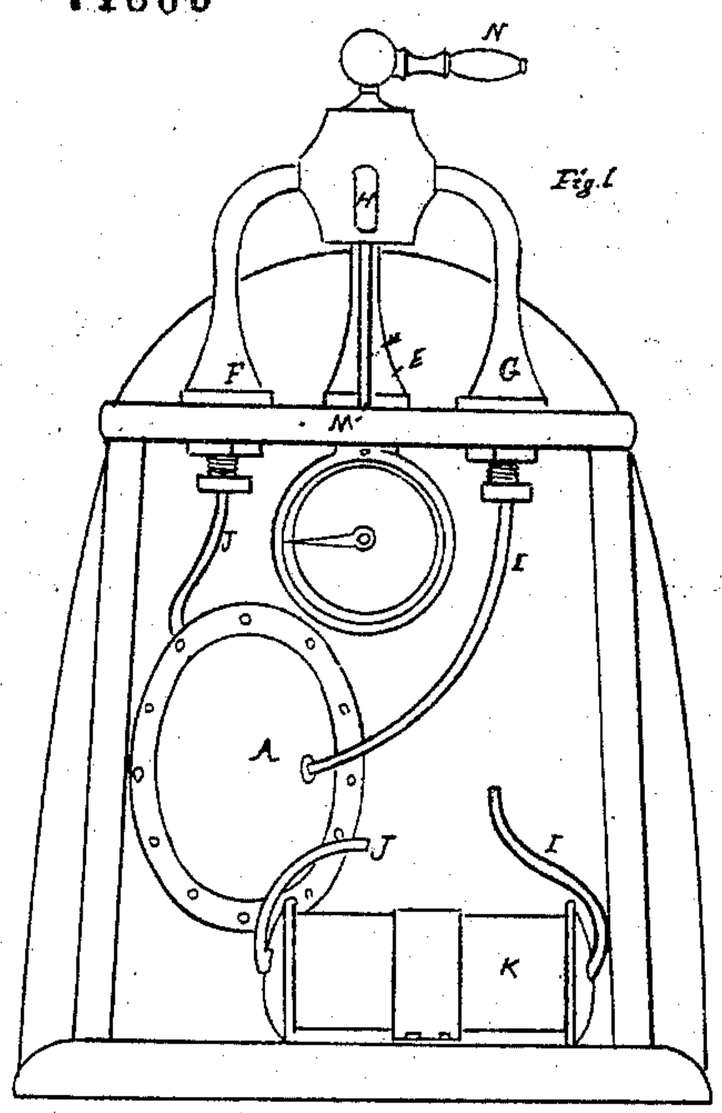



Fig. 2

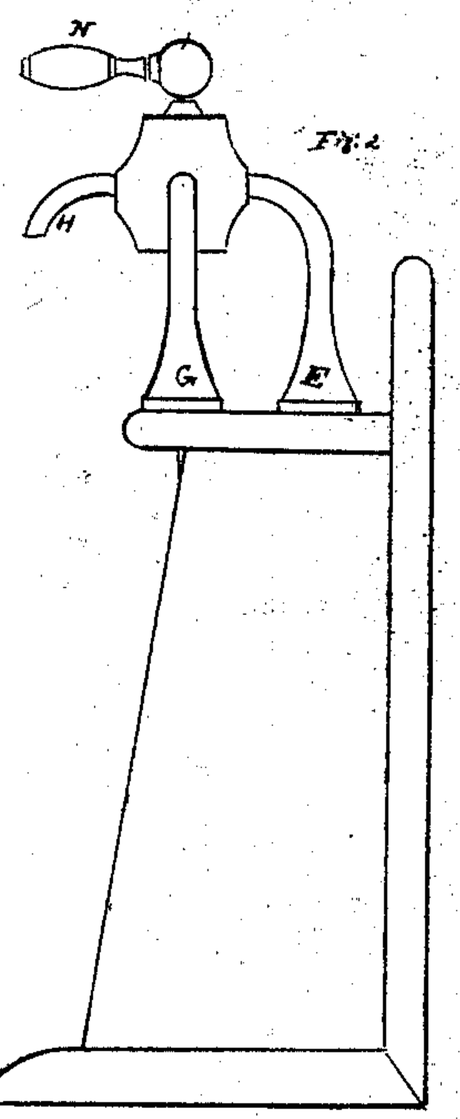



Fig 3

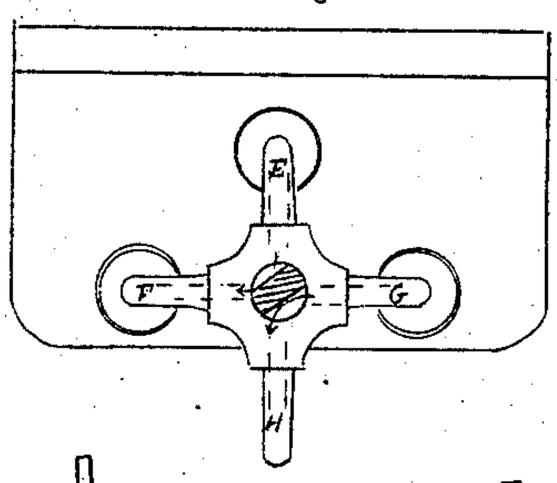



Fig 4

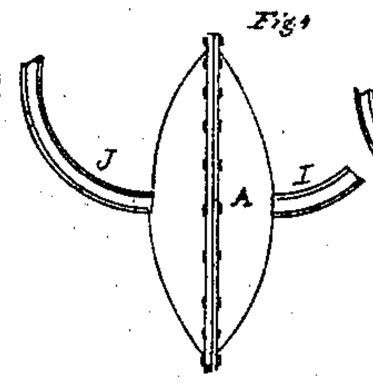



Fig 5

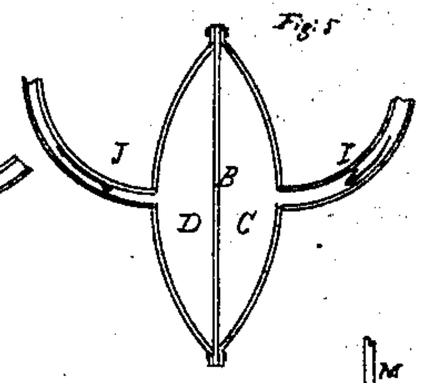



Fig 8

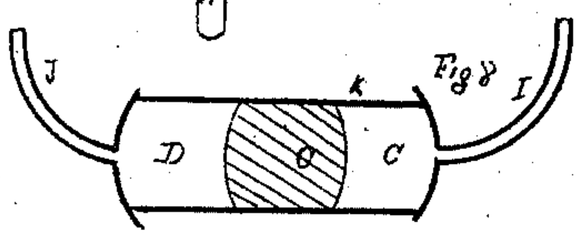



Fig 6

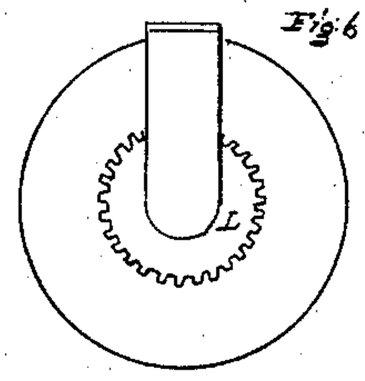
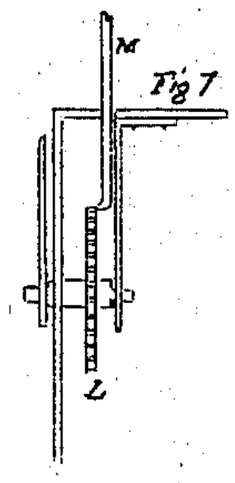



Fig 7




Witnesses,
Owen G. Warren
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# United States Patent Office.

ELISHA FITZGERALD, OF NEW YORK, N. Y.

*Letters Patent No.* 71,865, *dated December* 10, 1867.

## IMPROVEMENT IN MEASURING-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, ELISHA FITZGERALD, of the city, county, and State of New York, have invented a new and useful Safety-Faucet; and I do hereby declare that the following is a full, clear, and exact description of the same, reference being had to the annexed drawing, which forms part of this specification.

My object is to provide means to prevent the accidental flooding of buildings by the reservoir-water with which cities are usually supplied, and my aim is to place it out of the range of ordinary possibility for the flow of water to continue from the faucet after a limited and given amount has been discharged, the faucet being and remaining wide open.

To enable others to make and use my invention, I will proceed to describe the same.

The principal elements I employ are a water-receptacle, of special construction, and a faucet of the kind generally known as a "four-way cock."

In the annexed drawing the same letters and marks of reference refer to corresponding parts in all the figures.

Figure 1 is a front elevation of the entire apparatus.

Figure 2 is a side elevation of the same.

Figure 3 is a plan of same, with transverse section of the faucet used.

Figure 4 shows the water-receptacle.

Figure 5 shows a section of the same.

Figure 6 shows the rear side of a dial, on which is indicated the water discharged.

Figure 7 is an edge elevation of the same.

Figure 8 is an alternative for the receptacle seen in fig. 4.

A is a suitable water-receptacle, divided into two compartments, C D, by a flexible diaphragm, B. E F G are three standard-pipes, connected with and supporting a faucet, N, which is the kind generally known as the four-way cock. The water from the mains is led into the standard-pipe E, and immediately opposite thereto, on the faucet N, is the discharge-spout H, from which the water is drawn. Each of the compartments C D of the water-receptacle A is provided with tubes, I J, which tubes are, respectively, connected with the standard-pipes G F.

Supposing the apparatus to be in full operation, and both the compartments full of water, with the diaphragm B in the position seen in fig. 4, the water from the mains comes up in the pipe E, passes the faucet in the direction of the arrow 1, goes down the standard-pipe F through the tube J, and enters the compartment D of the receptacle A, and, pressing against the partition or diaphragm B, forces the water out of C up through the tube I and standard-pipe G, past the faucet N, and out of the spout H, until all the water which was contained in the compartment C has been discharged, when the water ceases to flow.

To procure more water, it is necessary for some person to turn the faucet a quarter revolution, so as to change its position. The water, then continuing to flow in at E, this time turns down the standard-pipe G, enters the compartment C of the receptacle A, through the tube I, presses upon the diaphragm B, forcing the water in D through the tube J, up the standard-pipe F, and out of the faucet H again, delivering, at each time, a given quantity of water, when the flow ceases. Thus it will be seen that it is impossible to leave the faucet in any position that would allow of the discharge of an indefinite quantity of water, the amount being arbitrarily limited to the capacity of the receptacle.

For the purpose of reckoning the amount of water discharged by successive filling and emptying of the receptacle, there is a stem, M, fixed to the faucet N, reaching down, and, by a finger, operates to move a toothed wheel, L, and this moves the hand or pointer O around a dial, as shown in fig. 6, and indicates the sum or quantity delivered.

It is sometimes desirable to measure large quantities at a time, and I have therefore shown an alternative for the receptacle A. It is represented by K, in fig. 1, and in section in fig. 8. The shape of the alternative is cylindrical, and, instead of the diaphragm, another sort of movable partition is used, viz, a piston, the result and operation being the same as before described in explaining the action of the receptacle A.

Water-receptacles of different sizes may be connected with the faucet, varying in capacity according to requirements. The cylindrical form of the vessel K is the less expensive if the quantity must be large; but

if small, the form A is preferable; and where large quantities are wanted occasionally only, the two kinds may be used in the same apparatus. Furthermore, under some circumstance, one may be placed in another location, and made to communicate with the apparatus by suitable connecting-pipes. Many changes may be made in the apparatus without altering the essential principles of its operation.

What I claim as my invention, and desire to secure by Letters Patent, is—

The combination of a four-way cock with a receptacle having a movable partition operated by the water, substantially as described, for the purpose of limiting and determining the amount of water to be discharged, as specified.

Also, in combination with the above, the dial and pointer, to indicate the amount of water discharged, as described.

ELISHA FITZGERALD.

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