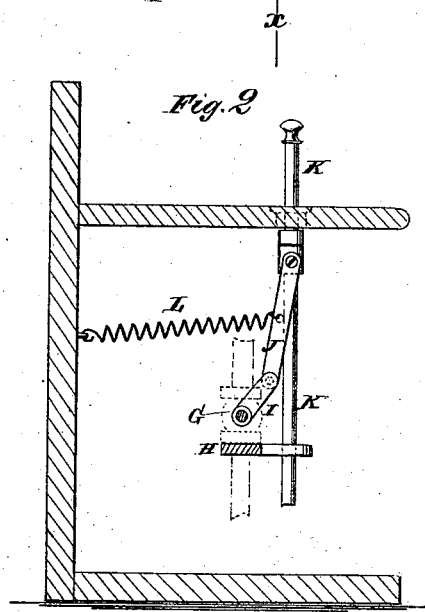
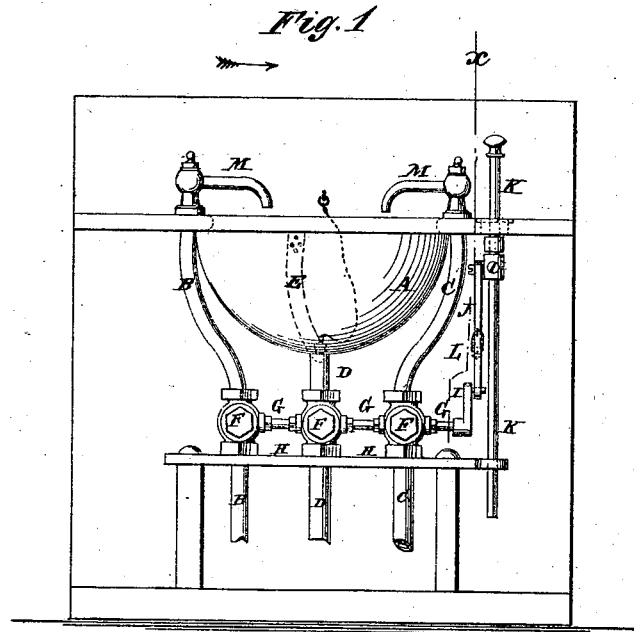


F. E. KERNOCHAN.

COMPOUND VALVE FOR WASH-BASINS, &c.

No. 185,240.

Patented Dec. 12, 1876.



WITNESSES:

H. W. Almgren
John Goethals

INVENTOR:

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UNITED STATES PATENT OFFICE.

FRANCIS E. KERNOCHAN, OF PITTSFIELD, MASSACHUSETTS.

IMPROVEMENT IN COMPOUND VALVES FOR WASH-BASINS, &c.

Specification forming part of Letters Patent No. 185,240, dated December 12, 1876; application filed September 16, 1876.

To all whom it may concern:

Be it known that I, FRANCIS E. KERNOCHAN, of Pittsfield, in the county of Berkshire and State of Massachusetts, have invented a new and useful Improvement in Compound Valve for Wash-Basins, Bath-Tubs, Water-Closet Basins, &c., of which the following is a specification:

Figure 1 is a front view of a wash-basin to which my improvement has been applied. Fig. 2 is a vertical section of the same, taken through the line *x x*, Fig. 1, and looking in the direction of the arrow.

Similar letters of reference indicate corresponding parts.

The object of this invention is to prevent sewer-gas from escaping into the house through the discharge-pipes of wash-basins, bath-tubs, water-closet basins, &c.

The invention consists in the combination of two or more valves, provided with a single valve-stem, with the inlet and discharge-pipes of wash-basins, bath-tubs, water-closet basins, &c., and in the combination of the crank, the connecting-rod, and the sliding rod with the single stem of the two or more valves, as hereinafter fully described.

A represents a wash-basin. B and C are the warm-water and cold-water inlet-pipes. D is the discharge-pipe. E is the overflow-pipe, which enters the upper end of the discharge-pipe D. In each of the pipes B D C is placed a stop cock or valve, F. The three valves F are arranged in line with each other, and are all attached to the same stem G, so that they may all be opened and closed at the same time and by the same operation.

The three valves F should all rest upon and be attached to a bar, H, so that they cannot be moved out of line with each other by the bending of the pipes B D C.

The shells of the valves F may be made solid, with or without the bar H, if desired.

The valve-stem G may be operated in various ways to open and close the valves F. I will describe a simple and convenient way of doing this, but do not wish to be limited to that arrangement.

To one end of the valve-stem G is attached a short crank, I, to which is pivoted the lower end of a connecting-rod, J. The upper end of

the connecting-rod J is pivoted to a rod, K, which slides up and down in bearings attached to some suitable support, and may have a knob or other handle attached to its upper end for convenience in operating it.

The rod K, when raised to open the valves F, may be held in place by friction, but, for greater security, a spring, L, may be attached to it and to some suitable support, to increase the friction.

When the valves F are open water may be admitted to the basin by operating the faucets K, and may be discharged the same as if no valves F were used.

When the valves F are closed no water can be admitted into the basin, and no sewer-gas can escape from the discharge-pipe into the room, so that there can be no overflowing on account of the closing of the valve in drain-pipe.

In the case of bath-tubs the same arrangement is used.

In the case of water-closet basins only two valves will be used, as said basin is never supplied with a warm-water pipe.

In the case of water-closet basins the inlet-pipe should be carried above the basin, and then brought down to it, so that the downwardly-extending part of said pipe may contain enough water to flow out after the valves have been closed for the after-wash, and to furnish the usual water-seal.

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

1. The combination of two or more valves, fastened side by side upon a common support and operated by a single shaft, stem, or lever, the latter being made to pass through all the valves and open or close all of them at once by a part or whole revolution, and being actuated by attachments, substantially as herein shown and described.

2. The combination of the crank I, the connecting-rod J, and the sliding rod K with the stem G of the valves F, substantially as herein shown and described.

FRANCIS E. KERNOCHAN.

Witnesses:

WILLIAM T. FILLEY,
E. K. McLAUGHLIN.