No. 636,727. Patented Nov. 7, 1899.

W. E. HINSDALE.

LAVATORY BASIN WASTE.

(Application filed Oct. 20, 1898.)

(No Model.)

Fig. 1.

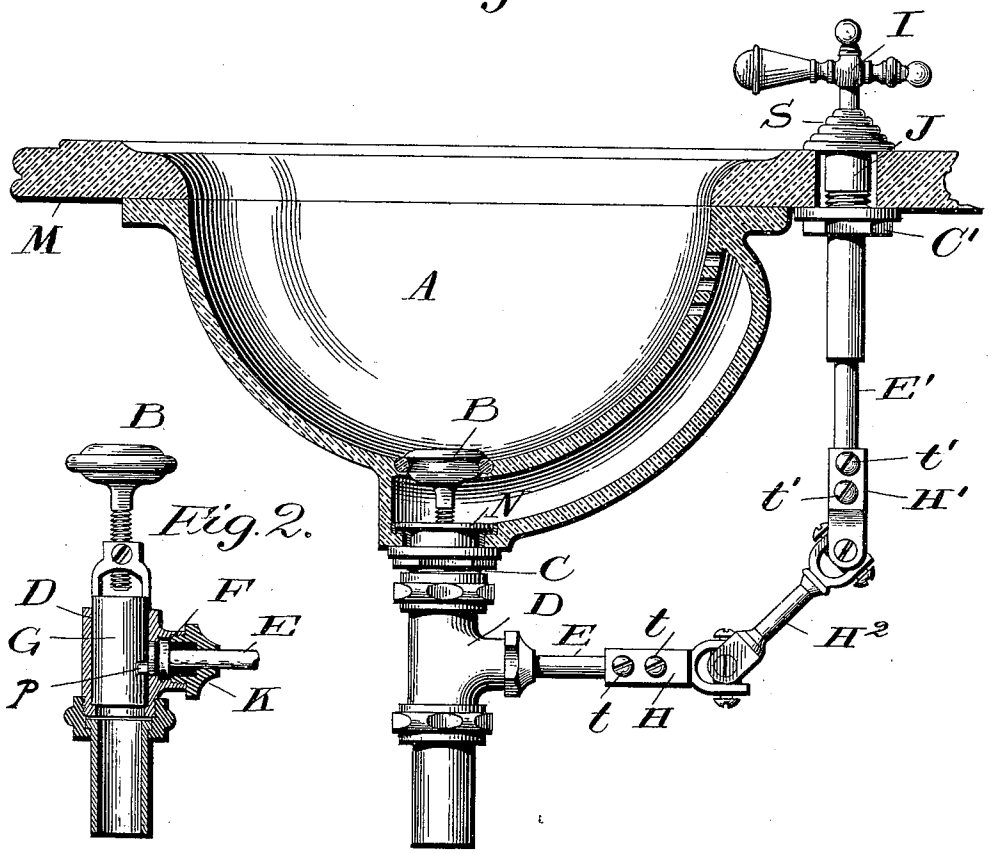

Fig. 2.

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UNITED STATES PATENT OFFICE.

WINFIELD E. HINSDALE, OF NEW YORK, N. Y.

LAVATORY-BASIN WASTE.

SPECIFICATION forming part of Letters Patent No. 636,727, dated November 7, 1899.

Application filed October 20, 1898. Serial No. 694,150. (No model.)

To all whom it may concern:

Be it known that I, WINFIELD E. HINSDALE, a citizen of the United States, residing at New York, in the borough of Manhattan and State of New York, have made a new and useful Improvement in Lavatory-Basin Wastes, of which the following is a specification.

My invention has for its objects, first, the construction of a lavatory-basin waste so that the valve or stopper thereof may be operated by two spindles, one journaled in the marble slab of the basin and the other in the fitting beneath the basin, and in such manner that the operating-handle which controls the movement of the valve in the bottom of the basin may be rotated in either direction with perfect freedom of movement and with an absolute certainty of operation; second, to provide a universal connecting-joint with means for adjustably attaching said spindles together, so that it (the joint) may be applied thereto under all conditions of usage, and such adjustment effected as to give the best resultant action of all of the parts.

My improvement will be fully understood by referring to the accompanying drawings, in which—

Figure 1 illustrates in sectional view a well-known form of lavatory-basin and supporting marble slab therefor and my improvement attached thereto, the several parts thereof being shown in elevational view; and Fig. 2 is a sectional view of the valve-chamber, a portion of the valve and valve-controlling mechanism being shown in elevational view.

Referrring to the drawings in detail, A represents a well-known form of lavatory-basin secured to a marble slab M in the usual manner.

B represents a valve or stopper of well-known form seated in the bottom of the basin and adjustably secured to a hollow or tubular valve-stem G, adapted to move vertically in a valve-chamber D, which chamber is secured by a nut C and collar N to the bottom of the basin in a well-known manner.

E represents a horizontally-located spindle journaled at one end in a collar K, secured by a screw-thread to a neck or extension on one side of the valve-chamber D.

F represents a crank-disk secured to the inner end of a horizontal spindle E, and *p* is a pin in one face of the crank-disk F, adapted to move freely in a lateral slot in one side of the valve-stem G. E′ represents an additional spindle vertically located at substantially right angles to the spindle E and journaled in a journal-bearing J, which in turn is secured in the marble slab M by a shoulder S above the slab and a set-nut C′ below it, I being an operating-handle secured to the upper end of the spindle E′.

H H′ H² represent the individual parts of a double universal joint of well-known form designed to connect together the two spindles E and E′, the parts H H′ being hollow and adapted to be adjustably secured by set-screws *t t t′ t′* upon the ends of the two spindles E and E′, the arrangement being such that by means of said set-screws such an accurate adjustment of the parts may be had that the operating-handle I may be continuously rotated at all times in either direction with the least possible friction, it being obvious that but for such adjustability there might at times occur such strain upon the parts, owing to the difference in adjustment and the difference in location of the opening through which the upper journal-bearing J is located, that the parts would be placed under undue strain. My novel improvement makes it possible to place the two spindles E and E′ in position and to adjust the several parts with relation to the marble slab and the bottom of the basin, and afterward to effect the necessary adjustment by means of the parts H H′ and set-screws *t t t′ t′*.

In assembling the parts of my novel improvement in order to produce the best effects and be assured that the handle I may be rotated continuously in either direction and always operate the valve B the valve-chamber D should be so connected to and adjusted with relation to the basin A and the valve so adjusted upon its valve-stem G that when said valve has been brought firmly to its seat in the basin the pin *p* upon the disk F will be in its lowest position.

I am aware that lavatory-basin wastes have heretofore been devised in which the valve is operated by two rotary spindles located substantially at right angles to each other, one of said spindles being operatively connected

with the valve and the other with an operating-handle above the marble slab, one such instance being disclosed in United States Patent to Doyle and Bayles, No. 179,003, granted June 20, 1876, and I make no claim hereinafter broad enough to include such a structure. In the device disclosed in the aforesaid patent it is necessary to secure the intergeared ends of the rotary spindles by an independent support. My invention contemplates in its broadest sense the union of two such rotary spindles with the valve of a basin-waste by a universal joint in such manner that the two spindles are journaled one in the marble basin-slab and the other in the valve-chamber and without any intermediate means of support.

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

1. In a lavatory-basin waste a valve or stopper, a valve-chamber and a valve-stem, in combination with a spindle capable of complete rotation, journaled and supported at one end only in the valve-chamber and provided with means for raising and lowering the valve; together with a second spindle also capable of complete rotation, journaled and supported at one end only in the basin-slab and provided with an operating-handle, said spindles being connected together at their free and unsupported ends by a universal joint provided at its opposite ends with means for adjustably securing the parts together.

2. In a lavatory-basin waste a valve or stopper B provided with a tubular valve-stem G having a slot in one side, a valve-chamber D and a rotary spindle E, capable of complete rotation, journaled at one end only in said valve-chamber and provided with a crank-disk F having an operating-pin p adapted to engage in said slot to move the valve-stem and the valve in opposite directions; in combination with a second rotary spindle E′ also capable of complete rotation and having an operating-handle I at its upper end, said second spindle being journaled only in the basin-slab; together with a double universal joint H H′ H² having its opposite ends adjustably secured to the rotary spindles E E′ by set-screws t t t' t'.

Signed at New York, in the county and State of New York, this 14th day of October, A. D. 1898.

WINFIELD E. HINSDALE.

Witnesses:
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