

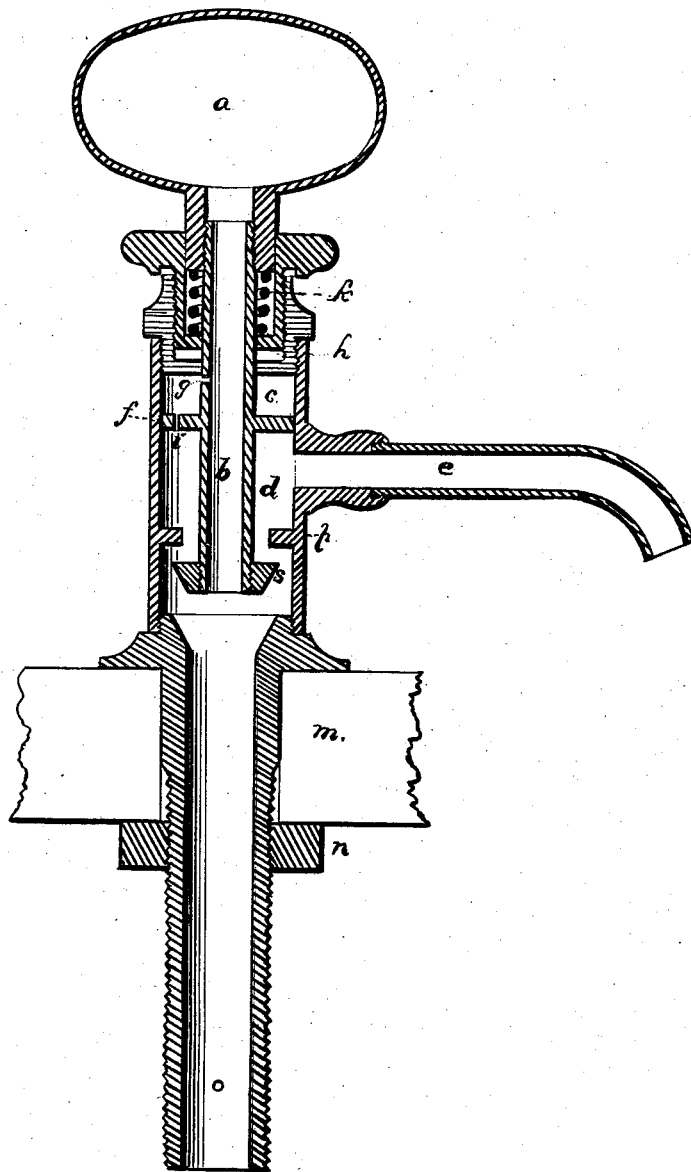
(No Model.)

E. O. McGLAUF LIN.

BASIN BIB.

No. 260,217.

Patented June 27, 1882.



Witnesses

Geo. H. Strong
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Inventor:

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UNITED STATES PATENT OFFICE.

EUGENE O. McGLAUF LIN, OF SAN JOSÉ, CALIFORNIA.

BASIN-BIB.

SPECIFICATION forming part of Letters Patent No. 260,217, dated June 27, 1882.

Application filed March 18, 1882. (No model.)

To all whom it may concern:

Be it known that I, EUGENE O. McGLAUF LIN, of San José, county of Santa Clara, and State of California, have invented an Improved Basin-Bib; and I hereby declare the following to be a full, clear, and exact description thereof.

My invention relates to certain improvements in that class of devices known as "basin-bibs," and more particularly to what are known as "percussion" basin-bibs, and which will be fully described in the following description, reference being made to the accompanying drawing, in which the figure is a vertical sectional view of my device.

Heretofore basin-bibs have been made of several kinds, all of which are divided into two classes, self-closing, or percussion, and those which do not close of themselves, known as "compression." The objection to the latter is that they may be left open by careless persons, thus causing a great waste of water, and even when not left open they use much more water than self-closing ones, as most persons leave them running for a longer time than they would if required to hold them open. Thus the compression-bib is expensive where water has to be pumped or otherwise brought to the basin at any considerable cost. The principal objection to the self-closing or percussion bib is the thumping noise made in the pipe by the sudden stopping of the column of water in the pipes, and which by its force of inertia sometimes bursts strong iron pipes.

The object of this invention is to supply a comparatively noiseless percussion basin-bib, the working of which is described as follows:

In the drawing, *a* is an air-chamber within the handle of the bib, said air-chamber being connected with the supply-pipe *o* by the hollow valve-stem *b*.

The bib is represented as open, which allows the water in the supply-pipe *o* to pass by the valve *s* into the cylinder *d* and out through the spout *e*. When the pressure is taken from the handle of the bib the valve is raised by the spring *k*, aided by the pressure of the water until the valve *s* closes against its seat *p*, thereby stopping the water, and the elasticity of the air in the chamber *a* in a measure prevents the thumping noise before mentioned.

The piston or collar *f*, on the hollow stem *b*, fits and slides within the cylinder *d*, thereby forming a chamber, *c*. The chamber *c*, at each operation of the bib, is filled with water through the opening *g* in the stem *b*. A needle-hole, *i*, is in the collar for the water to escape through. When the chamber *c* is full of water it must escape before the valve can rise to its seat, and as it will take an instant of time for it to escape through the needle-hole *i* the chamber *c*, with these openings, forms a water-cushion, which prevents the instantaneous closing of the valve, but allows it to close more gradually, being a further prevention of the thumping noise before mentioned. When the bib is closed the water is drained to the level of the lower side of the spout *e*, and the air enters and fills the barrel of the bib above the water. When the bib is opened the air rises through the water, and at the time when the pressure is removed to a great extent from the air-chamber by the water passing the valve a small amount of air passes into the air-chamber through the opening at *g*. This will continue until an equilibrium is established, which will be sustained in the same manner, thus preventing the air in the chamber from being absorbed by the water and the air-chamber from becoming filled with water.

m is the marble slab or top of the wash-stand; and *n* is the lock-nut, which secures the bib to the slab in the ordinary way.

I am aware that air-chambers are used to relieve the shock of water under pressure. I am also aware that the principle of the "water-cushion" has been applied to various devices for various purposes, and these principles I do not claim broadly; but

What I do claim as new, and desire to secure by Letters Patent, is—

1. In a percussion basin-bib, the upwardly-closing perforated valve *s*, having the hollow operating-stem *b*, perforated at *g*, with its collar or piston *f* fitting the exterior cylinder, so as to form a chamber, *c*, above the piston, and having the passage *i*, substantially as and for the purpose herein described.

2. In a percussion basin-bib, the upwardly-closing perforated valve *s*, the hollow operating-stem *b*, perforated at *g*, and the perforated piston or collar *f* upon the stem and fitting the

exterior cylinder, in combination with the air-chamber *a* upon the stem and opening into it, substantially as herein described.

3. In a percussion basin-bib, the air-chamber *a*, the hollow stem *b*, connecting the air-chamber with the perforated valve *s*, and having the collar *f*, forming the chamber *c*, the stem *b* and collar *f* being perforated at *g* and *i*, respectively, together with the exterior barrel,

d, stuffing-box *h*, and spring *k*, substantially as herein described.

In witness whereof I have hereunto set my hand.

EUGENE O. McGLAUFILIN.

Witnesses:

GEO. H. STRONG,
S. H. NOURSE.