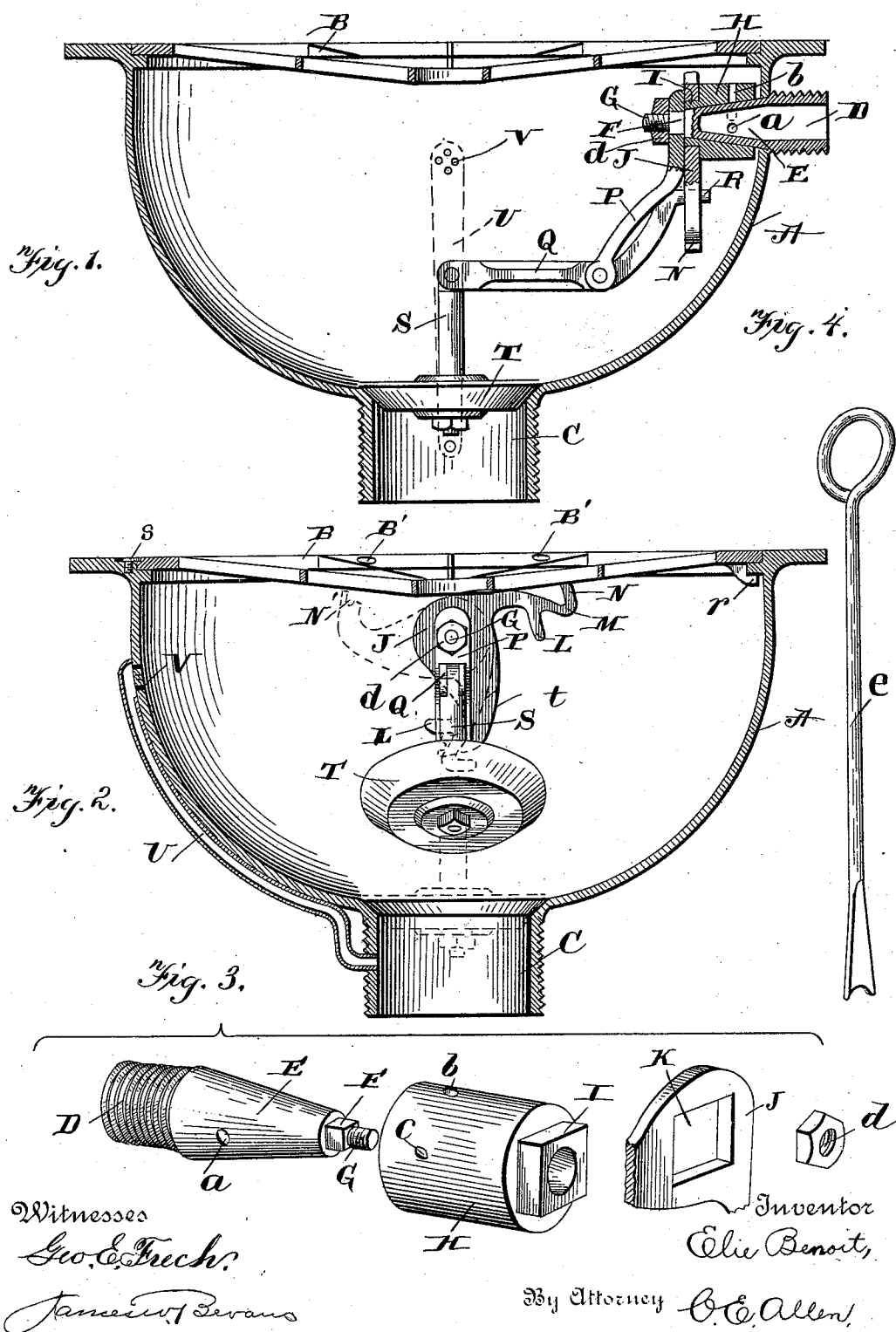


(No Model.)

E. BENOIT.
SELF CLEANING CUSPIDOR.

No. 570,217.

Patented Oct. 27, 1896.



UNITED STATES PATENT OFFICE.

ELIE BENOIT, OF PAWTUCKET, RHODE ISLAND.

SELF-CLEANING CUSPIDOR.

SPECIFICATION forming part of Letters Patent No. 570,217, dated October 27, 1896.

Application filed March 26, 1896. Serial No. 585,003. (No model.)

To all whom it may concern:

Be it known that I, ELIE BENOIT, a citizen of the United States, residing at Pawtucket, in the county of Providence and State of Rhode Island, have invented certain new and useful Improvements in Self-Cleaning Cuspidors; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

My invention relates to improvements in self-cleaning cuspidors, and pertains to a cuspidor adapted to be set in the floor and be flushed at the will of the operator.

The object of my invention is to provide a cuspidor having a valve and a water-inlet, the valve being adapted to be opened for flushing the cuspidor and the outlet-valve adapted to be opened to permit the escape of the contents thereof.

In the accompanying drawings, Figure 1 is a vertical section taken longitudinally of the water-inlet. Fig. 2 is a vertical section at right angles to Fig. 1. Fig. 3 is a detached perspective view of the water-regulating valve. Fig. 4 is a rod used to operate the valve mechanism.

A represents a cuspidor in basin form adapted to be depressed in the floor of a car, hotel, or other room, so that it is below the surface and not in the way to be knocked or kicked over, the same having an open-work top B, capable of being removed. The top B is preferably held in place by means of lugs *r* and a screw *s*, having a part of its head cut away in the usual manner, so that when turned in one direction it will engage the top and when turned in the opposite direction it will permit the top to be removed. The outlet C is adapted by screw-threads or other construction to receive an outlet-pipe which may communicate with a sewer or with any other receiver.

At one side of the cuspidor is the hollow inlet-stem D, adapted to receive a pipe in communication with a water supply, the said stem extending into the cuspidor, as clearly shown in Fig. 1, and has its inner end tapered. A collar H is provided with a tapered opening corresponding to the taper of the inner end of the stem and is placed thereon and

held in place by means of a nut *d* in a manner to be more fully described hereinafter. The inner end of the collar H has an angular portion I to receive a lever J, the lever intermediate its ends having an angular opening K, corresponding to the shape of the shoulder I, so that when the lever is oscillated the collar will be turned upon the tapered end of the stem. The inward extremity of the stem D has an angular portion F to receive an arm P, and outside of the portion F is a screw-threaded end G, receiving the nut *d*. In this way the nut *d* serves to clamp the arm P firmly in place, and the arm P by contact with the shoulder I at the inner end of collar holds it in place upon the inner tapered end of the stem.

A lever Q is intermediately pivoted at the lower and inner end of the arm P, the inner end of the lever being connected to the valve-stem S of the valve T, which is preferably made of rubber and adapted to close the exit C at the bottom of the basin. The lever J has one end provided with a cam or curved surface *t*, which is adapted to engage the inner end R of the lever Q when the cam or curved end of the lever is depressed. Each end of the lever is provided with a notch N, adapted to receive the end of an operating-rod *e* or similar device, by means of which the lever is readily oscillated. When the lever is depressed, as shown in Fig. 2, the curved surface *t* forces the inner end of the lever Q downward and raises the valve T from its seat, as clearly shown. When the lever is turned in the opposite direction, as shown in dotted lines in Fig. 2, the projection L passes below the lower or inner end of the lever Q and forces the valve tightly upon its seat.

The inner hollow tapered end of the stem has an opening *a*, and the collar H is provided with openings *c b*. When the lever K is turned so as to have its end substantially in a horizontal position both the openings *c* and *b* are out of line with the opening *a*, and when the lever is in such position the openings of the collar and stem are in the relative position shown in Fig. 3. By slightly depressing the curved or cam end of the lever the opening *c* will be brought in line with the opening *a* of the stem, permitting water to be

sprayed into the cuspidor, and the overflow will pass out the opening V into an overflow U, connected with the exit C, as clearly shown in Fig. 2. If desired, the water may be permitted to run continually slowly and pass out of the overflow-pipe. When the lever is forced in the position shown in Fig. 2, the valve T is raised from its seat, as clearly shown, and the opening *b* of the collar is brought in line with the opening *a*, so that the cuspidor is flushed and the contents thereof passed out the exit C.

From the above description it will be seen that I have produced a cuspidor capable of being flushed at any time desired or of having the water flowing therein continually and simultaneous with the flushing and opening of the exit for the outflow of the contents of the cuspidor.

The open-work top B is provided with the two openings B', so situated as to be over the notches in the ends of the valve-operating lever J, so that when the rod is inserted through these openings it will engage the ends of the lever.

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

1. A cuspidor having an exit-opening, a valve, an intermediately-pivoted lever having one end connected with the valve, an operating-lever having one end adapted to depress the free end of the intermediately-pivoted lever, and the opposite end of the operating-lever adapted to elevate the lever whereby the valve is raised from and depressed upon its valve-seat, according to the direction the operating-lever is oscillated.

2. A cuspidor having a hollow stem extending within the same and having an opening within the cuspidor, a collar surrounding the stem, the cuspidor having an exit, a valve adapted to close the same, a lever connected with the valve, an operating-lever connected with the collar for operating the collar and constructed to operate the valve-lever for the purpose described.

3. A valve-stem projecting within the cuspidor having an opening at a point inside thereof, a collar surrounding the inner end of the stem and having two openings adapted to register alternately with the openings of the stem, a lever connected with the collar, an exit for the cuspidor, a valve closing the same, and an operating connection between the collar-oscillating lever and the valve, the parts adapted to operate as described.

4. A cuspidor having an outlet, the valve-stem projecting in the same, a valve for the stem, an arm supported by the inner end of the stem, a lever pivoted to the opposite end of the arm and connected with the valve adapted to close the outlet of the cuspidor, and an operating means for the stem-valve and the outlet-valve.

5. A cuspidor comprising a hollow stem projecting within the cuspidor having an opening, a valve adapted to close the stem-opening, a lever intermediately supported upon said valve, the cuspidor having an outlet, a valve adapted to close the outlet, a lever connected with the outlet-valve and intermediately supported, the lever provided with a curve or cam adapted to depress the free end of the outlet-valve lever and the opposite end of the operating-lever having a shoulder or arm adapted to elevate the free end of the intermediately-pivoted outlet-valve lever, substantially as described.

6. A cuspidor having an outlet, a valve-stem projected within the same, a valve for the stem, a lever carrying a valve for the said outlet, an operating-lever carried by the valve of the stem and adapted to operate the same, the operating-lever also engaging the outlet-valve lever for the purpose of operating it simultaneous with the operation of the valve for the stem, substantially as described.

In testimony whereof I do affix my signature in presence of two witnesses.

ELIE BENOIT.

Witnesses:

FORTUNA GAGNOR,
CHARLES E. ALLEN.