(No Model.)

J. McPHERSON.

DEVICE FOR CLEANING CUSPIDORS.

No. 444,710. Patented Jan. 13, 1891.

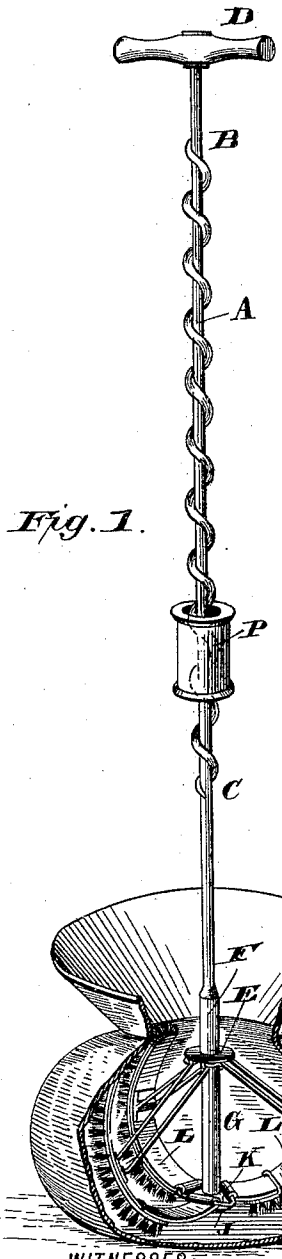


Fig. 1.

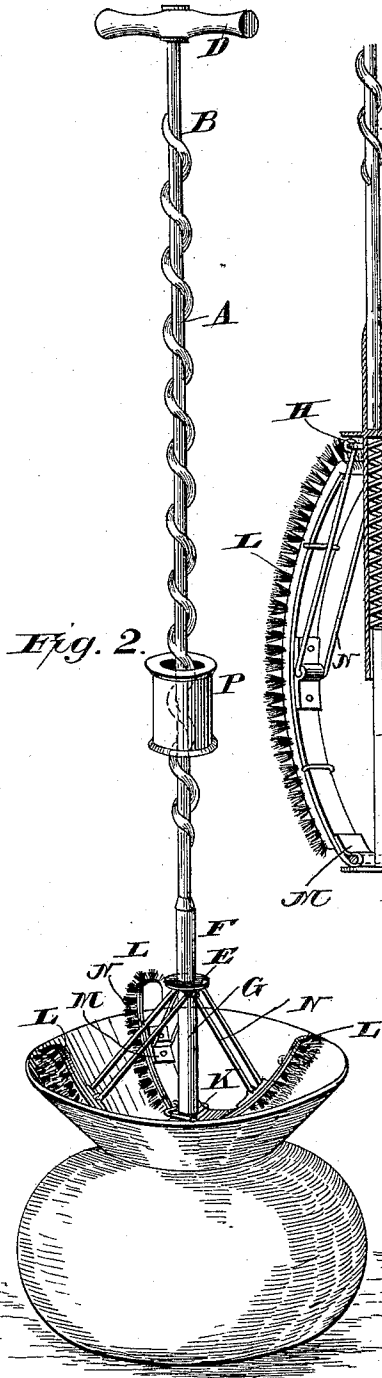


Fig. 2.

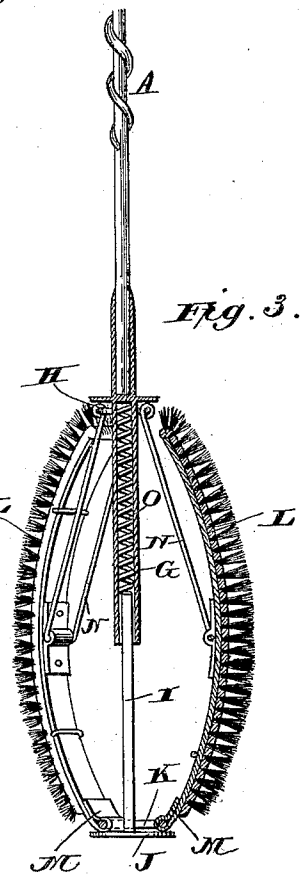


Fig. 3.

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UNITED STATES PATENT OFFICE.

JOHN McPHERSON, OF WELLSVILLE, NEW YORK.

DEVICE FOR CLEANING CUSPIDORS.

SPECIFICATION forming part of Letters Patent No. 444,710, dated January 13, 1891.

Application filed June 13, 1890. Serial No. 355,294. (No model.)

To all whom it may concern:

Be it known that I, JOHN McPHERSON, a citizen of the United States, and a resident of Wellsville, in the county of Allegany and State of New York, have invented certain new and useful Improvements in Devices for Cleaning Cuspidors; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

Figure 1 is a perspective view of my device for cleaning the inside or bowl of a cuspidor, part of the cuspidor being broken away to show the operation of the device. Fig. 2 is a perspective view of the device as applied to the cleaning of the inside funnel-shaped portion of the cuspidor, and Fig. 3 is a perspective view of a portion of the device shown partly in section.

Like letters of reference denote corresponding parts in all the figures.

My invention has relation to devices for cleaning cuspidors, and more particularly such as are made of metal and of the general shape and construction shown in the accompanying drawings.

Heretofore in cleaning cuspidors it has been necessary to take a broom or cloth and sluice the water into the cuspidor, or by some means forcibly throw the water so that anything which adheres to the sides of the cuspidor might be washed off and afterward poured out; but these methods of cleaning have proved more or less ineffective and unsatisfactory, as neither a broom or cloth can be made to touch all the inside surface of the cuspidor.

The object of my invention is, therefore, to construct a cleaning device which may be brought into contact with all the inside surface of the cuspidor, and which may be easily operated by hand in such a manner as to effectually cleanse the cuspidor without danger of soiling the fingers.

Referring to the accompanying drawings, the letter A denotes a standard which is coiled or twisted to form a spiral from the point B to C, the portion above B and below C being perfectly straight. At the top of this standard is loosely fastened a knob or handle D, by which the device is held. At the lower end of the standard is secured a flange E and a strengthening-band F. Below this flange E is secured a cylindrical sleeve G. A piece of wire H, bent to form a triangle, is soldered or otherwise secured, about midway each of its sides, to both the cylinder G and the flange E, the wire being secured in such a way that there will be a slight space between its corners and the surface of the flange.

The letter I represents a wire rod, just large enough to slide easily in the cylinder G. Secured to the lower end of this rod is a flange J, which also has a wire triangle, (lettered K,) this one, however, being secured to the flange at its corners, so that the sides will be slightly raised above the flange.

The letters L L L denote brushes, which are hinged to the flange J by means of the triangle K, and a sheet-metal flange M, secured to the brushes. These brushes are curved so that they will fit against the sides of the cuspidor. Pivoted to each of the brushes, about midway their length, are wire arms N, one end of each being hinged to the flange E, the joint being formed by bending the end of the wire arms N around the wire triangle H. It will be seen that by the movement of the wire rod I in the cylinder G the brushes may be opened and closed. Inside the cylinder and bearing against the top of the wire rod is a coiled spring O, which is designed to force the rod downward, and thereby close or fold the brushes together.

The letter P designates a tubular sliding handle, the central bore of which is screw-threaded, so as to engage the spirally-twisted standard, so that if the handle D is held and the handle P be moved up and down with the other hand the whole device, except the handle D, will receive a reciprocating revolving motion.

It will be seen from the foregoing description, taken in connection with the drawings, that when the device is put into a cuspidor with a little water, and pressure be exerted upon the handle D, the brushes will spread and bear against the sides of the cuspidor, and the more power there is exerted upon the

handle the harder the brushes will bear against the sides of the cuspidor, thereby removing all impurities.

When it is desired to remove the device from the cuspidor, it should be lifted slightly from the bottom of the bowl, when the inside spring will operate to force the rod down, thereby closing or folding up the brushes, and the device may easily be withdrawn.

When it is desired to clean the funnel-shaped portion of the cuspidor, the brushes should be slightly opened or spread apart, so that the device will not go all the way into the cuspidor, the operation being otherwise as before described.

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

The herein-described implement or device for cleaning cuspidors, consisting of the spirally-twisted standard having a loose handle at its upper end and a flanged tubular extension at its lower end, the rod sliding in the tubular extension, the folding and yielding brushes hinged at the lower end of said rod, the spring and the arms connecting the brushes to the lower end of the standard, all constructed and combined to operate substantially in the manner and for the purpose shown and specified.

In testimony that I claim the foregoing as my own I have hereunto affixed my signature in presence of two witnesses.

JOHN McPHERSON.

Witnesses:
FRANK MACKEN,
FRANK V. R. STILLMAN.