(No Model.)

J. M. FLETCHER.

FOUNTAIN SPITTOON.

No. 369,174. Patented Aug. 30, 1887.

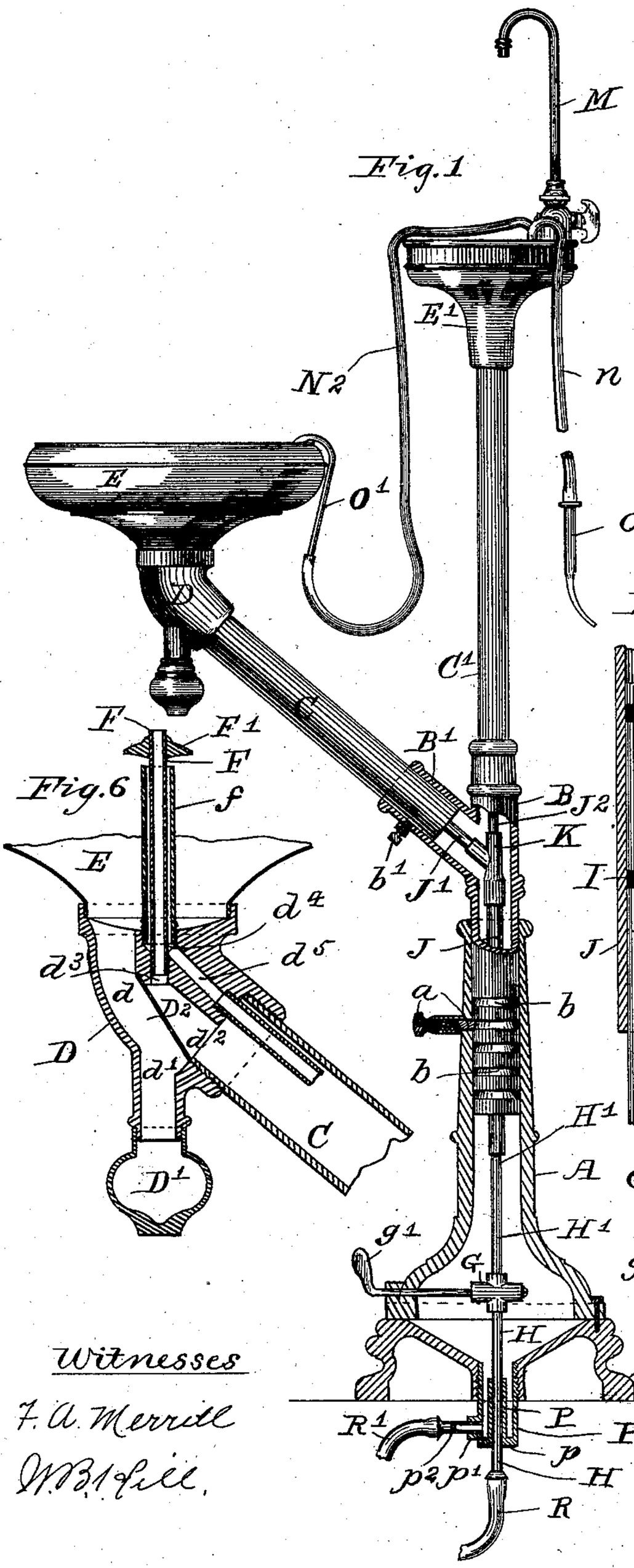

Fig. 1

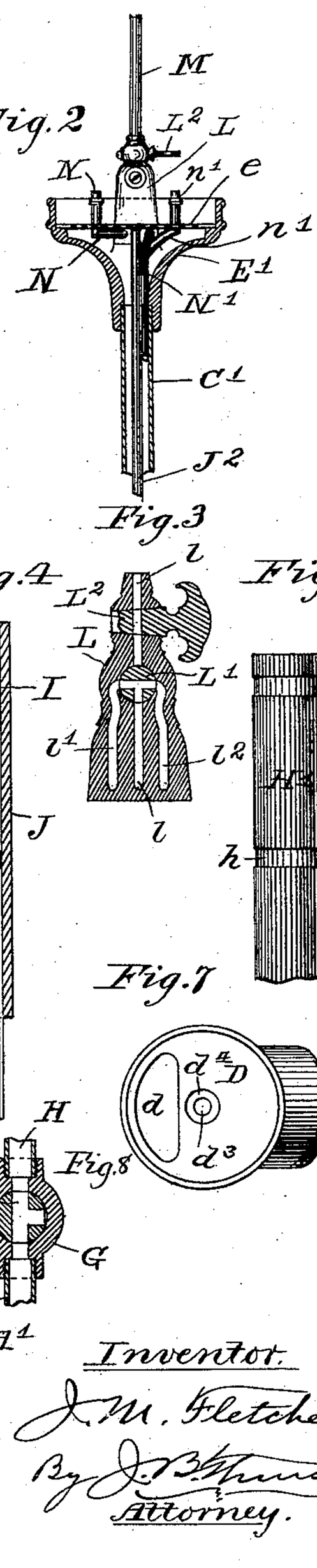

Fig. 2

Fig. 3

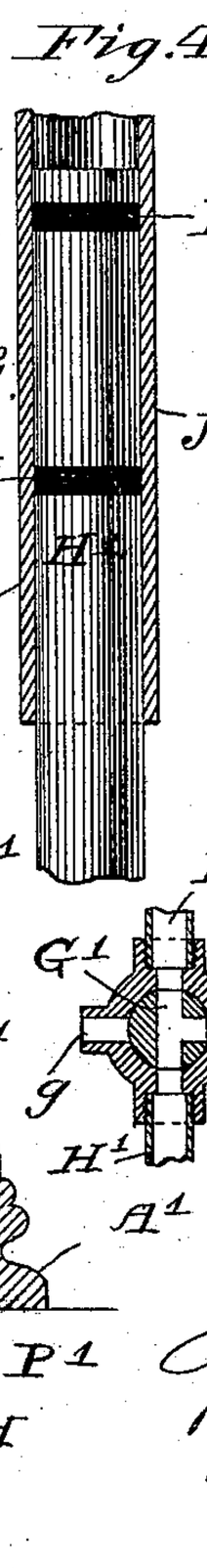

Fig. 4

Fig. 5

Fig. 7

Fig. 6

Fig. 8

Witnesses

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JOHN M. FLETCHER, OF CONCORD, NEW HAMPSHIRE.

FOUNTAIN-SPITTOON.

SPECIFICATION forming part of Letters Patent No. 369,174, dated August 30, 1887.

Application filed May 16, 1887. Serial No. 238,317. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. FLETCHER, a citizen of the United States, residing at Concord, in the county of Merrimac and State of New Hampshire, have invented certain new and useful Improvements in Fountain Spittoons for Dentists' Use, of which the following is a specification.

This invention relates to fountain-spittoons especially adapted to the use of dentists; and it consists of the various devices illustrated in the accompanying drawings and pointed out in the following specification and claims, of which they form an inseparable part, and of which—

Figure 1 is a sectional elevation of the entire machine. Fig. 2 represents a detailed sectional elevation of the urn into which a glass for drinking may be placed. Fig. 3 is a vertical section of the cock used in the supply-pipe for said urn. Fig. 4 is a portion of the supply-tubes, part section and part elevation. Fig. 5 is a detached view of a portion of said supply-tube shown in Fig. 4. Fig. 6 is a sectional view showing part of the spittoon-bowl, its supply and drain pipes, and a trap for catching gold or other similar material. Fig. 7 is a plan view of the casting to which the spittoon-bowl is fitted, and Fig. 8 is a sectional view of the supply-cock.

Similar letters indicate corresponding parts throughout.

The base may be made in one piece; but for the sake of convenience in casting it is preferably composed of the parts A A′ and bolted together, as shown in Fig. 1, and the part A′ may be screwed to the floor, if desired. Into the part A is fitted the hollow adjustable part B, which is provided with annular grooves *b*, for the reception of some suitable spring-stop, *a*, which is adapted to spring into either of said grooves or from one to another successively when said part B is raised, but must be pulled or drawn out in order to lower the same. At one side, near the top of this hollow extension-piece B, a short arm, B′, also hollow, projects at an angle upward and receives the pipe C, a set-screw, *b*′, being all sufficient to secure it therein. To the upper end of this pipe C is threaded the piece D, which might properly be termed an "elbow," into the top of which is fitted the spittoon-bowl E. This elbow D must be cored, as shown in Fig. 6, in order to carry out the purpose of my invention—viz., the passage *d* must be formed substantially as there shown, having outlets *d*′ *d*², leading, respectively, to the gold catcher or trap D′ and the drain-pipe C, when, by securing a perforated plate or screen, D², at an angle, as in Fig. 6, gold or other material which it is desirable to save is dropped directly into said trap, the waste water only passing thence through the said screen into the waste-pipe C. A small air-tube, F, is threaded to a central vertical hole, *d*³, formed in the top of the elbow D, connecting the waste-passage *d* with the outer air, thus preventing that unpleasant gurgling sound which is usually heard in drain-pipes having no air-vent. This air-tube, however, was embraced in United States Patent No. 349,704, issued to myself, dated the 28th day of September, 1866. Further description of it, therefore, in this connection is unnecessary. The upper end of the hole *d*³ is enlarged, as at *d*⁴, and to this is threaded a tube surrounding the air-tube F, to be hereinafter described in connection with the supply-tubes and supply-passage *d*⁵ in said elbow D.

From the top of the adjustable extension B extends vertically a tube, C′, carrying at its top an urn, E′, which is provided with a perforated plate, *e*, upon which to place an ordinary drinking-tumbler. At some convenient place upon this urn is secured a cock controlling the supply, to be hereinafter described. The adaptation of suitable supply-pipes to my improved fountain-spittoon involves the use of telescoping tubes in order to use nothing but metal pipes throughout.

Within the larger part of the base A is located a cock, G, connecting the pipes H H′. This cock, it will be seen by reference to Fig. 8, may be turned, as at G′, so as to entirely cut off the supply, or so as to admit the water to the pipe H′ and thence to the spittoon bowl or urn; or it may be turned so as to cut off the supply to said pipe H′ and allow it to run off into the waste by means of the outlet-orifice *g*—*i. e.*, when the arm *g*′ is lying horizontal on one side, the supply is cut off; when it is placed vertical, the supply is permitted to enter the pipe H′ and its connections, and when said arm is placed horizontal in a position opposite to

the position first named the supply is kept freely circulating through the orifice *g* into the waste, and hence any danger from freezing is avoided. This arm *g'* may be readily moved by the foot of the operator. The stem leading from said arm to the cock may be easily packed to prevent leakage through the base A.

The tube H' is provided with one or more annular grooves, *h*, in which to insert packing I, in order that the said tube may be perfectly tight within the outer or telescoping tube, J, connected by the union K to the branch and extension tubes, respectively, J' J². The branch J' passes through the waste-tube C, and is threaded to the supply-passage d^5 in the elbow D, which connects with or opens into the enlarged portion d^4 of the hole d^3, as seen in Figs. 6 and 7, thus throwing the water in a cylindrical column upward through the tube *f* against the cap or button F', which may be threaded to the top end of the air-tube F and serve as a sprayer for supplying the water on all sides of the spittoon-bowl at once. By setting down the said button nearer to the upper end of the tube *f* the spray may be made finer, and vice versa.

The cock L is provided in its lower part with three passages—viz., *l l' l²*—all of which connect with the valve L', which has three ways, as seen in Fig. 3. The pipe J² connects with the passage *l*, which passes centrally from near the bottom of the cock L to its top, where a tube, M, is attached. This may be bent, as seen in Fig. 1, so as to throw water into a tumbler, and above the three-way valve L' the said passage *l* is provided with a valve, L², for cutting off the supply of water to the bent pipe M. To the passage *l'* is connected a short tube, N, having its free end bent upward through the perforated plate *e*. To this is attached a flexible tube, *n*, having at its outer end a suitable tip, O, for throwing a small stream of water into the mouth of a patient; or an injector may be used upon this tube. To the passage *l²* a short tube, N', is connected. This runs down part way into the waste-tube C', and about three inches (more or less) from the said cock L. This tube N' is provided with a branch, *n'*, as seen in Fig. 2, which, like the tube N, is bent upward through the plate *e*, and to which is attached a flexible tube, N², for drawing the saliva from the mouth of a patient. If desired, a tip, O', as seen in Fig. 1, may be attached to the free end of said tube to be used as an ejector, and an injector, O, may be used, upon which is provided a stop-valve, so that, even though the valve L' be placed in the position shown in Fig. 3, no water shall be permitted to escape from the injector. This would also be desirable on account of the passage *l²*, which would then get the benefit of the full force of the supply, the principle of the ejector being that of suction—to wit, when the valve L' is turned, as indicated in Fig. 3, the supply passes from the passage *l* into the said valve and thence into either of the passages *l' l²*. The passage of said water downward through the tube N' creates a suction in the branch tube *n*, and immediately acts as a siphon-pump in the flexible tube N².

A simple and effective means for connecting the base and the supply-tube H with the lead or other pipes within the floor of a building is shown in Fig. 1. The tube H is passed up through a telescoping tube, P, which is rigidly secured to an inside collar, *p*, at the bottom of the waste-pipe P'. The lower end of said tube H may be connected by a wiped joint to a lead pipe, R, and after the base of the machine is set in place the upper end of said tube H may be then threaded to the cock G, as previously stated.

The waste-pipe P may be provided with a boss, *p'*, on its side, to which is threaded a short pipe, *p²*, by which the waste is conducted to the leaden waste-pipe R', which may also be attached to the pipe *p²* by a wipe-joint, as in Fig. 1.

By telescoping the tubes H' J and forming the parts A B vertically adjustable and capable of rotary movement one within the other the spittoon-bowl E and the urn E' may be elevated or lowered and revolved at will without the necessity of using flexible supply and waste pipes, from which there is constantly more or less danger of leakage.

Having described my improvements, what I claim as new, and desire to secure by Letters Patent, is—

1. In a fountain-spittoon, the combination of telescoping supply-tubes and telescoping standards through which the waste is passed, formed in two or more parts capable of vertical adjustment and rotative one within the other, substantially for the purpose set forth.

2. In a fountain-spittoon, the combination, with the spittoon-bowl and its supporting-arm, of an interposing section connecting the two, provided with supply and waste passages, as shown, and a cup attached thereto and connected with said waste-passage for catching the particles of gold and other filling materials, and means whereby everything passing from said spittoon-bowl must first enter said cup before passing into the waste-pipe, substantially as described.

3. In a fountain-spittoon, the combination of the tumbler rest or urn, a perforated plate or grate, a suitable standard cored substantially as shown and connecting the supply-pipe, the pipes carrying an injector and an ejector, a pipe or faucet for supplying drinking-water, and the necessary valves operating, in connection with the cored passages, within said standard, substantially as set forth.

4. Telescoping supply-tubes within telescoping standards, adapted for carrying off the waste, the interior tube being provided with annular serrations, and the exterior tube having a spring-catch for engaging said serrations, all combined and arranged in a fountain-spittoon, substantially for the purpose explained.

5. In a fountain-spittoon, the combination

of a base and standard provided with a passage for waste water, a spittoon-bowl, a supply-pipe, and a three-way cock adapted to admit water to pipe leading to said bowl, to admit water directly to said waste-passage, and to shut the water from either or both said outlets, all constructed and operating in the manner and for the purpose herein described.

6. In a fountain-spittoon, the combination of a base or standard provided with a passage for waste water, a spittoon-bowl, a supply-pipe, a three-way cock adapted to admit water to pipe leading to said bowl, to admit water directly to said waste-passage, to shut the water from either or both said outlets, and means for connecting said supply-pipe and waste-passage with their respective pipes underneath the floor, all substantially as and for the purpose set forth.

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

JOHN M. FLETCHER.

Witnesses:
J. B. THURSTON,
FRANK S. STREETER.