No. 715,005. Patented Dec. 2, 1902.

J. C. BLAIR.

FOUNTAIN SPITTOON.

(Application filed Apr. 14, 1902.)

(No Model.)

Fig. 1.

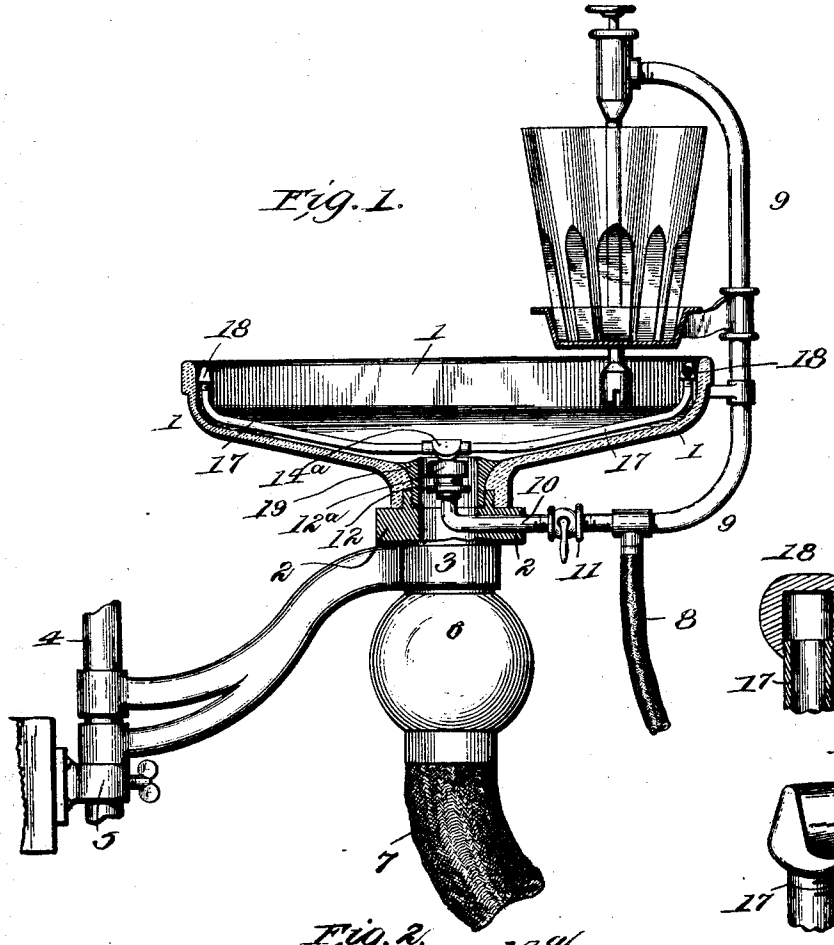


Fig. 4.

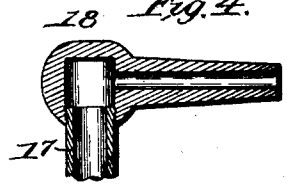


Fig. 5.

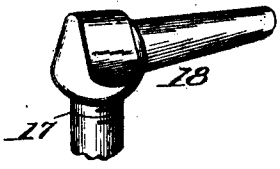


Fig. 2.

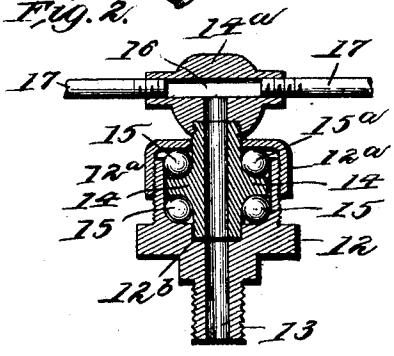
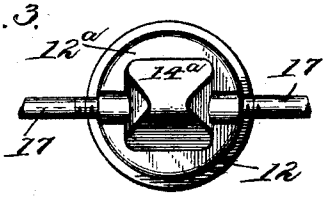


Fig. 3.



WITNESSES:

Fred. D. Bradford.

Amos W. Hart

INVENTOR

John C. Blair.

BY Munn & Co.

ATTORNEYS

THE NORRIS PETERS CO. PHOTO-LITHO., WASHINGTON, D. C.

UNITED STATES PATENT OFFICE.

JOHN CARLISLE BLAIR, OF LOUISVILLE, KENTUCKY.

FOUNTAIN-SPITTOON.

SPECIFICATION forming part of Letters Patent No. 715,005, dated December 2, 1902.

Application filed April 14, 1902. Serial No. 102,760. (No model.)

To all whom it may concern:

Be it known that I, JOHN CARLISLE BLAIR, a citizen of the United States, and a resident of Louisville, in the county of Jefferson and State of Kentucky, have invented certain new and useful Improvements in Fountain-Spittoons, of which the following is a specification.

My invention is an improvement in the class of fountain-spittoons in which water is discharged from a device adapted to rotate within the bowl. The improvement relates to the construction of the rotatable attachment proper and its antifriction-bearings, also to the construction and arrangement of parts whereby the water descending the side of the bowl is thrown up at the center thereof, so as to wash the hub of the rotatable attachment.

The details of construction, arrangement, and operation are as follows:

In the accompanying drawings, Figure 1 is in part a side view and in part a vertical section of a fountain-spittoon embodying my invention. Fig. 2 is an enlarged vertical section of the antifriction-bearing of the revolving portion. Fig. 3 is a plan view of the same. Fig. 4 is a section of one of the nozzles of the water-discharge pipes. Fig. 5 is a perspective view of the same.

The bowl 1 may be constructed of cast-iron, steel, or spun brass and provided with a glass or enamel or other smooth finish. Its tubular neck is screwed upon a tubular base-piece 2, which is supported in a bracket 3, adapted for attachment to and supported by a spindle 4, held in a keeper 5, clamped to a chair or an independent standard. A trap 6 is pendent from the base-piece 2 and provided with the usual waste-pipe 7. A flexible water-conducting pipe 8 connects a T-joint with rigid gooseneck 9, having a siphon and faucet attachment. A rigid pipe 10, provided with a stop-cock 11, extends from the T through the side of the aforesaid base-piece 2 and is turned upward within the latter. To this upturned or vertical part my improved rotatable water-discharger is applied. The same consists of the following parts: A cup 12, (see Fig. 2,) having an axial bore, is provided with a reduced screw-tenon 13, which is screwed into the mouth of pipe 10. Its enlarged upper portion, constituting the cup proper, is screw-threaded exteriorly to adapt it for attachment of a cap 12^a. Within the cup is contained a hollow rotatable hub 14, having a ball-bearing. The hub has a lateral circumferential flange, upon the upper and lower sides of which is arranged a series of balls 15. The reduced upper end of the hub 14 projects through an opening in the cap 12^a of the cup, and the similar lower end enters and fits loosely a socket 12^b in the bottom of the cup proper. Thus the hub 14 is supported vertically with its bore alined with that of the cup 12 by means of the balls 15 and is practically removed from contact with other adjacent parts, so that it is adapted to rotate with minimum friction. Upon the threaded upper end or neck of the hub 14 is screwed a conical head or cap 14^a, which is provided with communicating vertical and horizontal bores 16. The said head 14^a projects slightly above the hollow bottom of the bowl, and curved arms 17 are screwed into the lateral bores of the head and extend up alongside the bowl 1 to the rim thereof, where they are provided with nozzles 18. (See Figs. 4 and 5.) The nozzles have a head provided with a large vertical bore with which the bore of the tapered lateral nose communicates.

It is apparent that the plug or cock 11 being turned and water thereby admitted to the rigid pipe 10 the water will pass up through the cup 12, rotatable hub 14, and its head into the arms 17 and be discharged in small streams from the nozzles 18, and the latter being turned in opposite directions the impingement of the streams upon the air will cause more or less rapid rotation of the arms 17, and consequently of the hub 14 14^a. Thus the water is delivered upon the sides of the bowl 1 and flowing downward washes the same thoroughly on its way to the central point of discharge into the trap 6. The attachment of the nozzles 18 to the arms 17 is such as to permit them to be instantly adjusted or turned horizontally, so as to place their points or free ends in any desired proximity to the rim of the bowl 1 as may be required to change the direction of the discharge for the purpose of more thorough washing of the bowl.

It is obvious the parts constituting the bowl

attachment are adapted to be easily and quickly detached and separated when required for cleaning or repair.

In practice the rigid pipe 10 may be constructed with a form of joint at the junction of its lateral and vertical portions to facilitate inserting it in place or detaching it.

It remains to describe another feature of my invention—namely, the construction and operation of the bushing or hollow neck-piece 19, (see Fig. 1,) which is screwed into the base-piece 2 and fits in the neck of the bowl 1. The upper end of said bushing is flared to fit closely upon the adjacent portion of the bowl and provided with an elevated or raised portion around the large central opening. This portion is thus above the level of the adjacent portion of the bowl, toward which it slopes gradually. Thus water flowing down the bowl 1 with accelerating rapidity is diverted upward at a slight angle and strikes upon the head or cap 14^a of the hub, which is thereby thoroughly washed and cleaned free from sputa or other matter deposited thereon. This operation is aided by the rotation of the arms 17 and head 14^a, since they strike the converging sheet or streams of water and break the same, so that the water is spattered and thrown higher than it otherwise would be.

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

1. In a fountain-spittoon, the combination with the bowl having a tubular neck, a water-pipe arranged vertically in said neck and a detachable cup secured upon said pipe and having a central bore, of the rotatable hub having a lateral circumferential flange, and two series of balls arranged on opposite sides of said flange and serving to hold the hub out of contact with the surrounding portion of the bowl, and hollow arms connected with said hub and having nozzles on their outer ends, as shown and described.

2. In a fountain-spittoon, the combination with the bowl having a tubular neck, a water-pipe arranged vertically in said neck, and a detachable cup 12 having a base-socket, a screw-cap for said cup having an opening coincident with said socket, a rotatable hub arranged in the cup and having a central circumferential flange and reduced ends adapted to enter the said socket and opening, two series of antifriction-balls arranged to work in contact with opposite sides of the flange and the base and cover of the cup as specified, a removable head applied to the hub, and lateral arms connected with said hub and adapted for discharging water in the manner described.

3. In a fountain-spittoon, the combination, with a bowl and a water-conducting pipe projecting upward in its neck, of a rotatable water-discharging head and arms connected therewith, and a bushing arranged in said neck and having a portion around the opening raised above the adjacent portion of the bowl, whereby water flowing down the side of the latter is directed upward toward and upon said head, substantially as shown and described.

JOHN CARLISLE BLAIR.

Witnesses:
W. S. SMITH,
F. B. WILLIAMS.