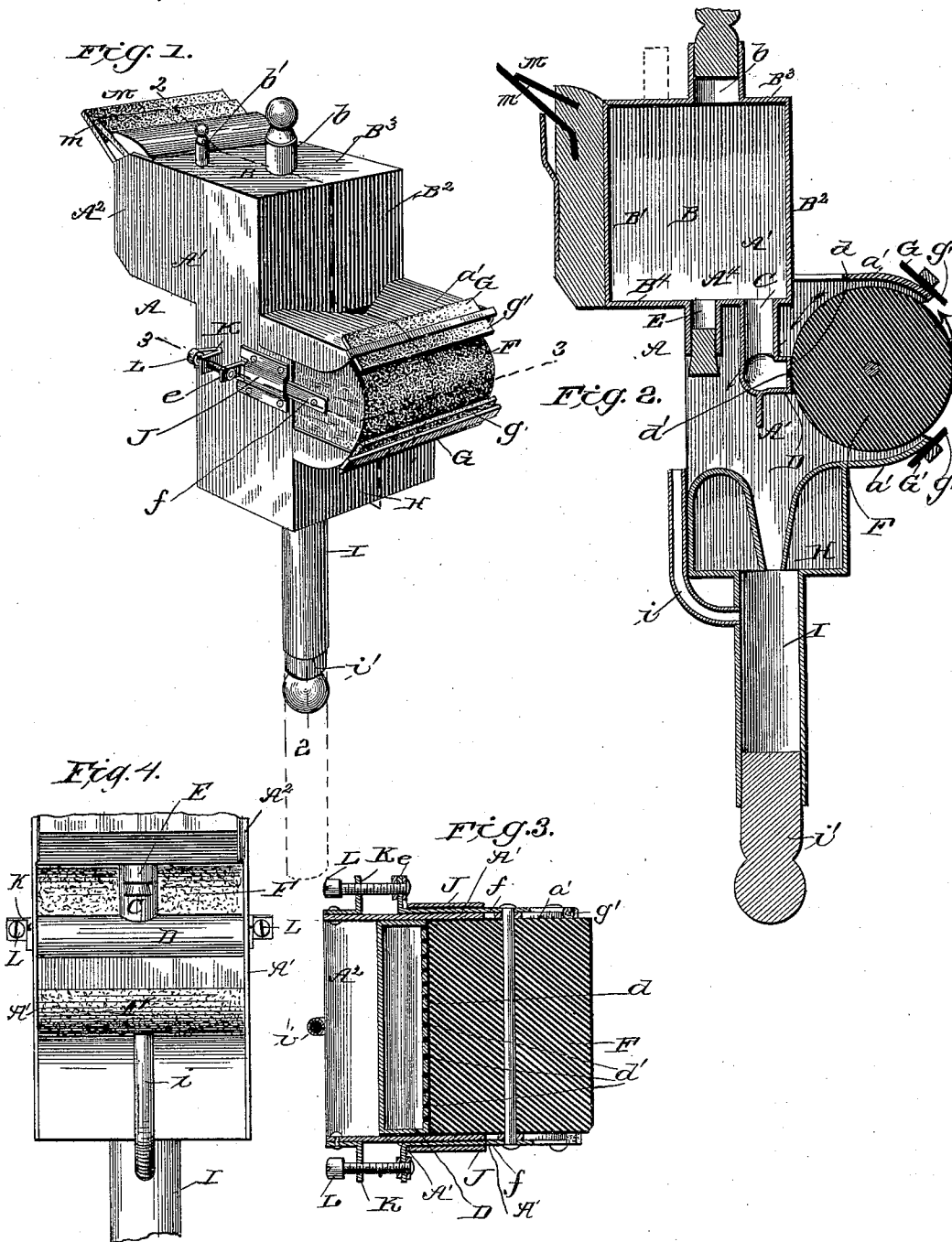


(No Model.)

H. C. ROSE.
FOUNTAIN WINDOW CLEANER.

No. 403,218.

Patented May 14, 1889.



WITNESSES:

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HENRY C. ROSE, OF LEADVILLE, COLORADO.

FOUNTAIN WINDOW-CLEANER.

SPECIFICATION forming part of Letters Patent No. 403,218, dated May 14, 1889.

Application filed August 15, 1888. Serial No. 282,943. (No model.)

To all whom it may concern:

Be it known that I, HENRY C. ROSE, of Leadville, Lake county, Colorado, have invented a new and useful Improvement in Fountain Window-Cleaners, of which the following is a specification.

This invention relates to fountain window-cleaners; and it consists in the arrangement of a device which will operate to clean window-glass in a quick and effective manner without making it necessary to remove the curtain or draperies of the windows, and whereby the soiling of such curtains and drapery is entirely avoided.

It further consists in the peculiar construction and novel combinations of parts, as will be hereinafter fully described, and pointed out in the claims, reference being had to the accompanying drawings, in which—

Figure 1 is a perspective view of the improvement. Fig. 2 is a central longitudinal section on the line 2 2, Fig. 1. Fig. 3 is a horizontal section on the line 3 3, Fig. 1; and Fig. 4 is a detail rear view of the improvement.

In the drawings, A indicates a metallic frame, in which is formed, at its upper end, the water fountain and discharging devices A¹, and at its lower with a handle or tube adapted to receive the waste or dirty water. The water box or fountain B is formed by the side pieces, A', and extensions A² of the frame A, the front and rear plates, B' B², and the top and bottom pieces, B³ B⁴. In the top B³ is formed the inlet-opening b and an air-inlet, b', provided with suitable covers or stoppers, and the bottom B⁴ has an outlet-pipe, C, which connects with a transverse jet-tube, D, disposed between the side pieces, A', below the water front, as shown. The front edge, d, of the tube is slightly extended, and is provided with a series of small apertures, d', through which the water escapes from the receptacle A⁴. An outlet-pipe, E, which is normally closed by a stopper, is also arranged in the bottom of the fount, said pipe permitting the ready discharge of the water when the stopper is removed, which operation, however, is only necessary when it is desired to clean the fount. In bearings f, projecting forward from the side pieces, A' A', is journaled a transverse elastic (preferably rubber) roller, F, which has its inner peripheral face arranged

in contact with the pipe D and serves to close the apertures d'. In forward extensions, a' a', of the frame are secured the upper and lower rubber scrapers, G G', the operating ends g g' of which, however, project, one outward and downward, and the other outward and downward toward said roller, but not quite in line with the outer peripheral edge of the same, for reasons which will hereinafter be referred to. The extensions a' a' are arranged, respectively, above and below the roller, the lower one of which serves as a gutter to guide the waste water to within the frame, the lower end of which is formed into a receiving-chamber, H, having a downwardly-projecting hollow handle, I, provided with an air-pipe, i, and which may have its lower end held closed by a stopper, i', or, when the device is used on windows of considerable height, by the handle-pole, which is inserted into the hollow handle. By this arrangement it will be seen that the water in the fount will be entirely shut off by the rubber roller being held against it. Now, as said roller is turned when being rubbed against the glass, the outer surface will become thoroughly wet through the series of jet-openings.

To permit the supply of the water upon the face of the roller to be increased or decreased, it is but necessary that the roller bear with a greater or less pressure against said openings. To this end I form the journal-bearings adjustable, the construction of which is clearly set forth in Fig. 3 of the drawings. By reference to said figure it will be seen that I arrange the bearings to pass through keepers J J, secured to the side pieces, A', and provide their inner ends with angular projections e, arranged parallel to a fixed angle-plate, K, formed upon the sides A', through which plate K is entered a set-screw, L, which is passed through and connected with the angle projection e. Thus it will be seen that by adjusting the screw L to the right or left the pressure of the rollers F upon the apertured tube D may be easily regulated.

At the upper rear edge of the frame is secured a drier, M, consisting of transverse rubber plates m, projecting beyond the edge of the frame, as clearly shown in Fig. 2.

The operation of the device is as follows: The fount having been filled with water and the roller adjusted to admit of the required

discharge of water upon it through the jet-tube, and it being desirous of applying a quantity of water upon the glass, the device is operated parallel with the glass in such a manner that the rubber scrapers will not be in operation, as their outer edges do not extend out to the outer edge of the roller. After a sufficient quantity of water has been deposited upon glass the handle is brought to an incline to the glass and the scrapers brought into operation. On an upward movement, the handle is inclined toward the glass and the lower scraper brought in contact. On a downward movement, the same is inclined from the glass and the upper scraper brought in contact with the glass. By this arrangement it will be seen that fresh water is continuously applied to the roller and the glass, no matter which way the roller may be revolved, and by arranging the scrapers in the manner described they will scrape off the dirty water and carry it down into the receptacle near the handle. Should the upper scraper be brought into operation, the fresh water will be applied from the under side of the roller, and the scraper will remove the dirty water, and the same will be carried over the upper inner surface of the roller and be caught and scraped off at the jet-tube and discharged over the same into the lower receptacle. After the glass is thoroughly washed the machine is reversed, and the rubber drier brought into use for polishing and completing the work.

From the foregoing the advantages of my improvement will be readily understood.

It will be seen that the machine may be used up and down or crosswise upon the glass, and by making the wetting-roller adjustable the same will readily regulate the supply of the water, and by the arrangement of the scrapers, as shown, all of the dirt and dirty water is gathered in and none of it allowed to scatter and soil the draperies or curtains.

Having thus described my invention, what I claim is—

1. In a fountain window-cleaner, the combination of the framing provided with a water-receptacle at its upper end, a jet-tube connected with the water-receptacle, an elastic roller journaled in the sides of the frame, arranged to normally close the apertures in the jet-tube, and a receiving-chamber arranged below said roller, substantially as described.

2. The combination, with the frame A, provided with a water-receptacle at its upper end, a jet-tube connected with and disposed below said receptacle, and a receiving-chamber formed in the lower end of said frame provided with extensions, of an elastic roller adjustably journaled in the sides of the frame between the extensions, said roller adapted to normally close the apertures in the jet-tube, substantially as and for the purposes described.

3. In a fountain window-cleaner, the combination, with the frame A, provided with a

water-receptacle at its upper end, a jet-tube connected with and disposed below said receptacle, and a receiving-chamber formed in the lower end of said frame, provided with lateral extensions at one side thereof, of an elastic roller journaled in the sides of said extensions, and horizontal scrapers mounted in the outer ends of said extensions, their outer ends arranged slightly within the outer line of the peripheral face of the said roller, all arranged substantially as shown and described.

4. In a fountain window-cleaner, the combination, with the main frame provided with a water-receptacle at its upper end, a jet-tube arranged transversely in said frame, disposed below and connected with the said receptacle, and a receiving-chamber formed in said frame below the water-receptacle, having extensions $a' a'$, of an elastic roller adjustably journaled in the frame to the upper and lower edges of said roller, disposed with the extensions $a' a'$, and horizontal scrapers mounted in the outer ends of said extensions, said scrapers inclined toward the outer periphery of said roller, said extensions forming ways for leading the waste or dirty water to the receiving-chamber, substantially as shown and described.

5. In a fountain window-cleaner, the combination of the framing provided with a water-receptacle at its upper end, a jet-tube disposed below and connected with the water-receptacle, an elastic roller journaled in the sides of the frame, arranged to normally close the apertures in the said jet-tube, a receiving-chamber arranged below said roller, and a depending tube connected to the receiving-chamber, said tube adapted to form a receptacle for the waste or dirty water, and a socket for the reception of the operating-handle, substantially as shown and described.

6. The hereinbefore - described improvements in fountain window-cleaners, consisting of the main frame provided with a water-receptacle, B, at its upper end, a supplemental scraper, M, arranged at the upper rear edge thereof, a receiving-chamber arranged below said water-receptacle, a transverse jet-tube arranged therein, said tube connected with water-receptacle, an elastic roller, F, journaled in the front edge of said frame, extensions $a' a'$, formed on the side walls of the receiving-chamber and extended one over and the other under the roller F, horizontal scrapers mounted in the outer ends of extensions, their outer ends inclined toward the roller, and a depending tube projected from the lower end of said receiving-chamber, said tube forming a receptacle for the waste or dirty water, and a socket for the operating-handle, substantially as shown and described.

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Witnesses:

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