

No. 622,809.

Patented Apr. 11, 1899.

C. R. KEYSER.
WINDOW CLEANER.

(Application filed Apr. 20, 1898.)

(No Model.)

Fig. 1.

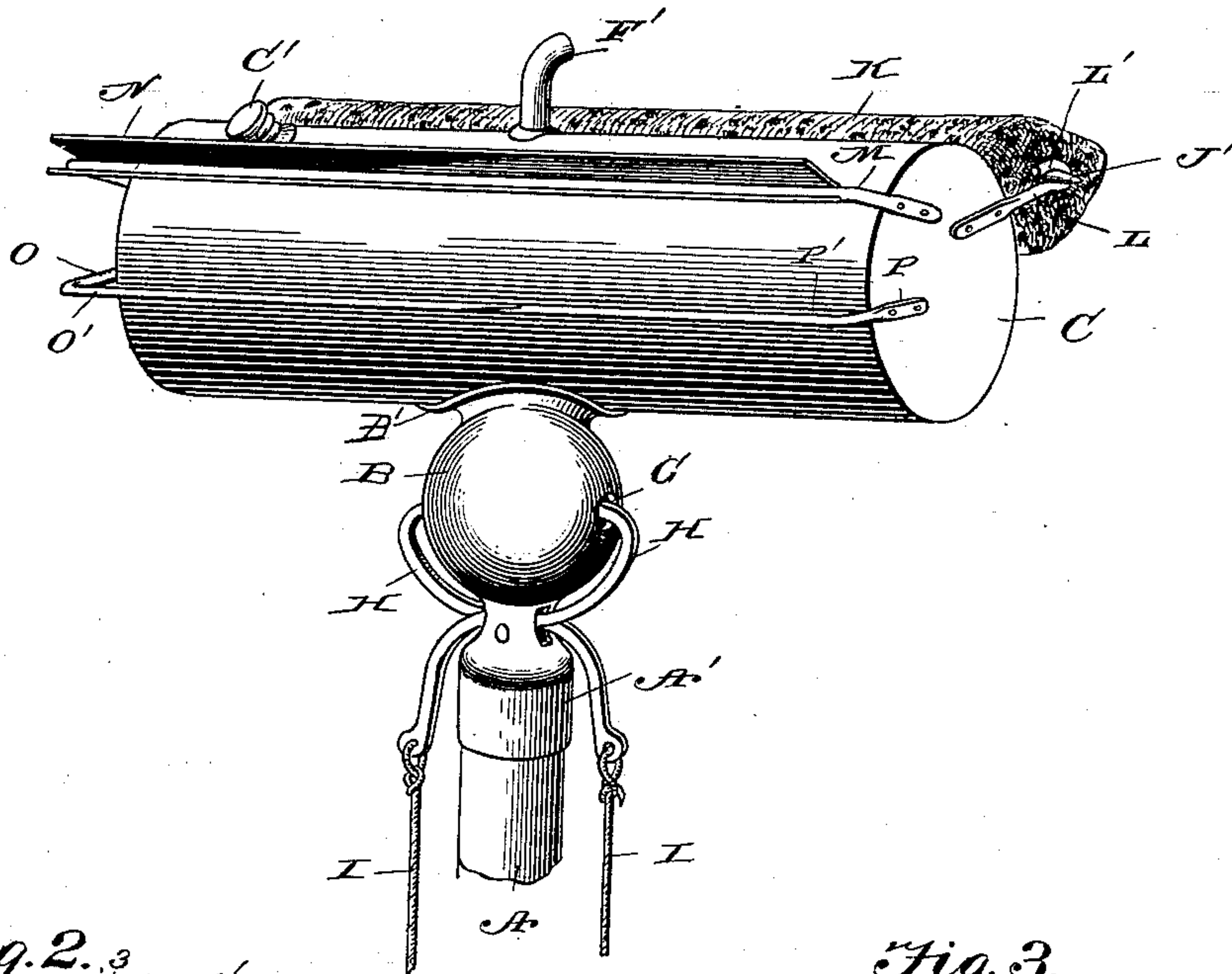


Fig. 2.

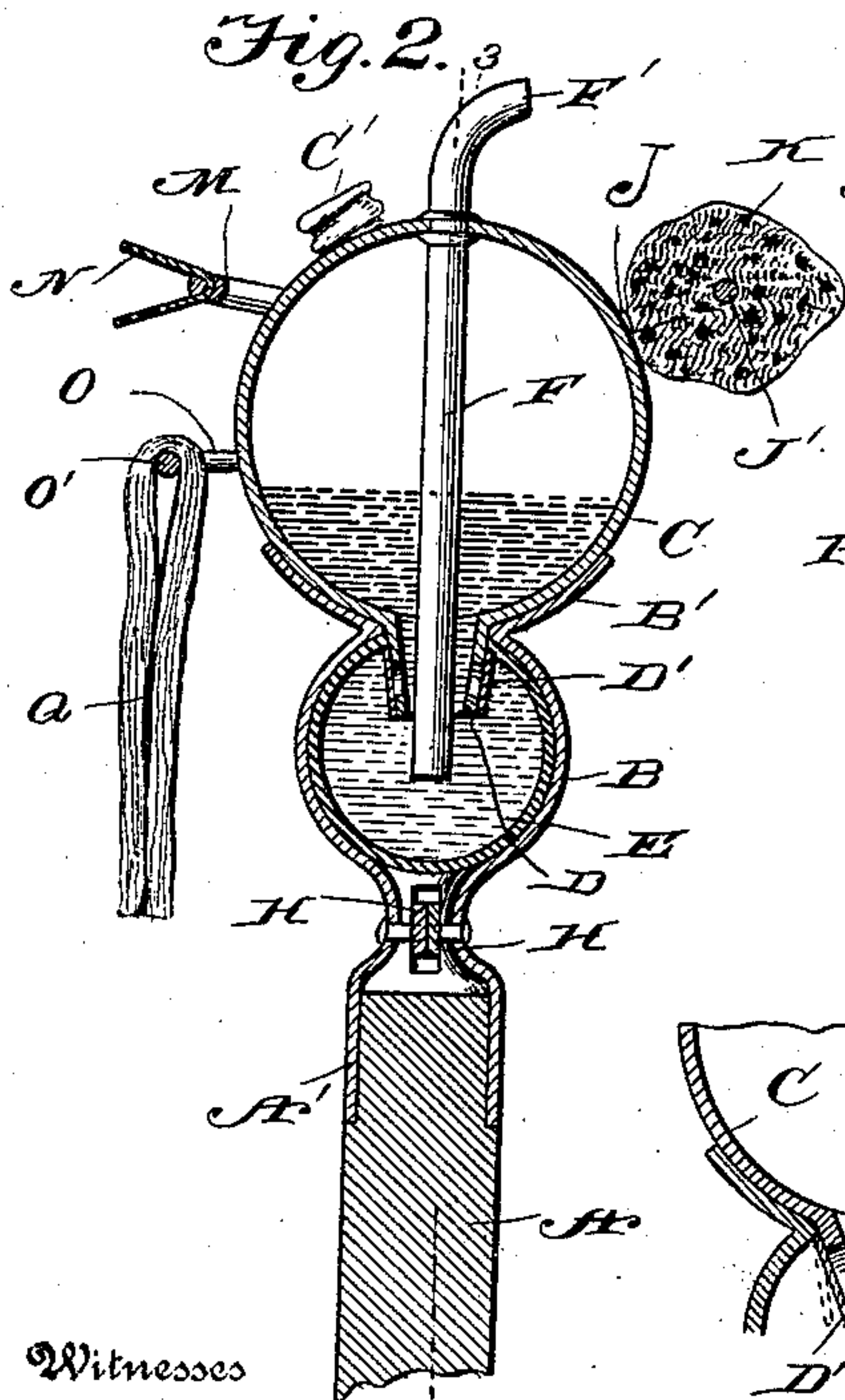


Fig. 3.

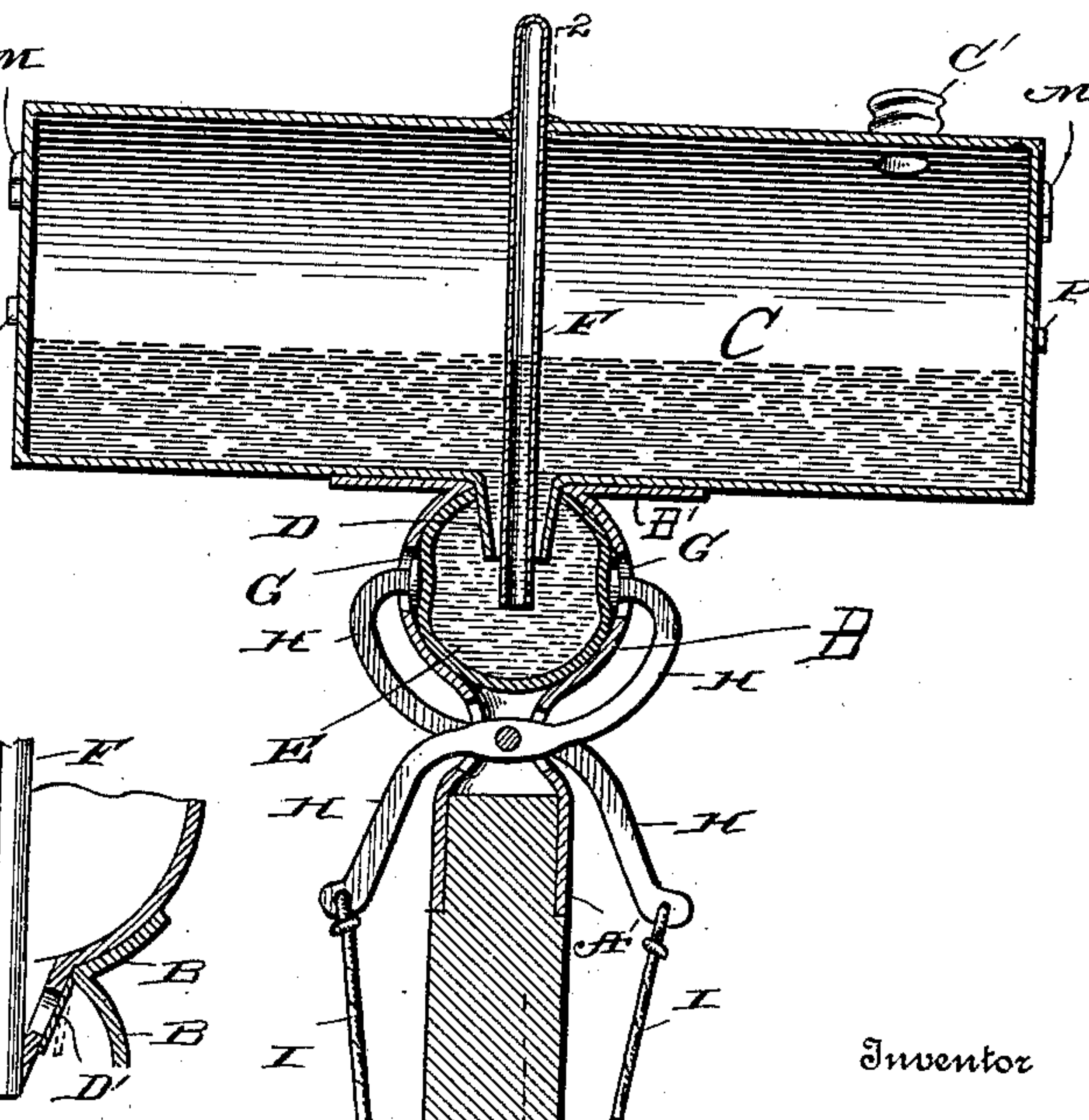
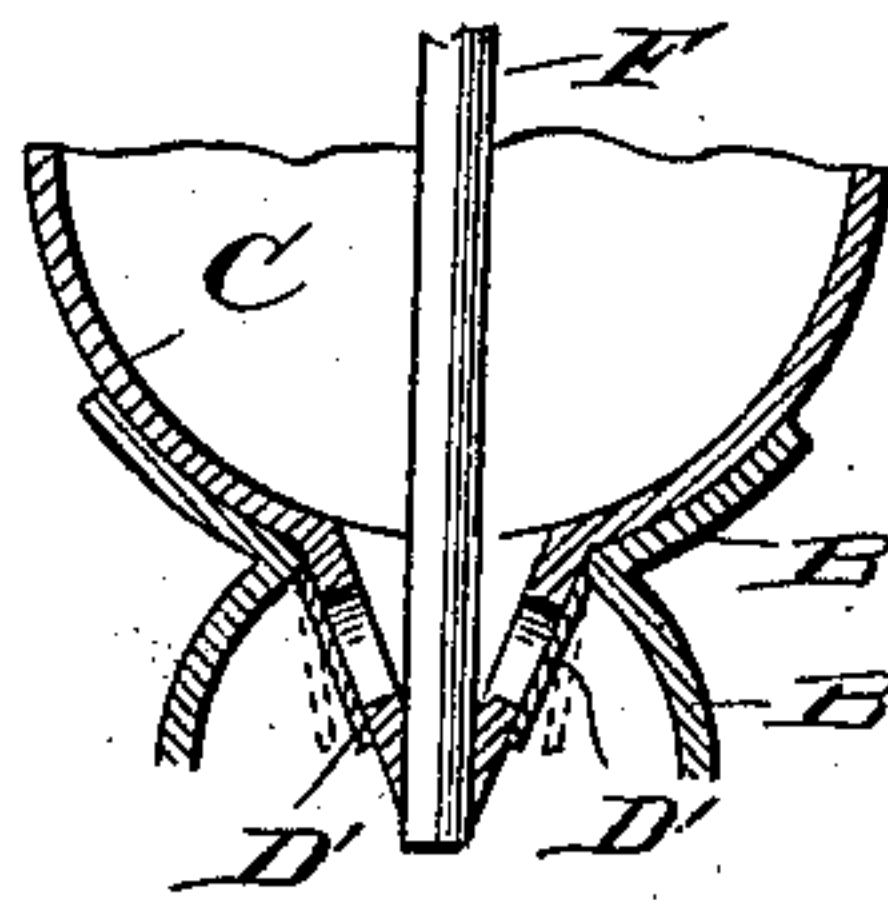


Fig. 4.



Witnesses

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WINDOW-CLEANER.

SPECIFICATION forming part of Letters Patent No. 622,809, dated April 11, 1899.

Application filed April 20, 1898. Serial No. 678,306. (No model.)

To all whom it may concern:

Be it known that I, CHARLES R. KEYSER, a citizen of the United States, residing at Cumberland, in the county of Allegany and State of Maryland, have invented a new and useful Window-Washer, of which the following is a specification.

My invention relates to devices for washing and drying windows, and has for its object to generally improve, simplify, cheapen, and increase the utility of such devices.

With this object in view my invention consists in a device of the class described, comprising a handle upon which is surmounted a metallic sphere or hollow ball, above which is secured a horizontally-disposed cylindrical water-tank communicating with the hollow sphere by means of a spout projecting from the under side of the tank into the ball, a hollow rubber ball mounted upon the spout of the tank within the metallic ball, a rubber tube leading from the interior of the metallic ball through the spout and tank and ending in a nozzle at the upper end, means for compressing the rubber ball to discharge water from the nozzle, means for filling the tank, a sponge-holder connected to the tank, a holder for a rubber drier, and a holder for a drying-cloth or chamois skin also attached to the tank, the construction, arrangement, and combination of the parts composing such device being fully described hereinafter and afterward specifically pointed out in the appended claims.

In order to enable others skilled in the art to which my invention most nearly appertains to make and use the same, I will now proceed to describe its construction and operation, reference being had to the accompanying drawings, forming part of this specification, in which—

Figure 1 is a perspective view of a window-washer constructed in accordance with my invention, the lower portion of the handle being broken away. Fig. 2 is a vertical sectional view taken on the plane indicated by the dotted line 2 2 of Fig. 3. Fig. 3 is a vertical sectional view taken on the plane indicated by the dotted line 3 3 of Fig. 2. Fig. 4 is a detail sectional view illustrating the means for preventing the return of water from the hollow metallic ball to the tank.

Like letters of reference mark the same parts wherever they occur in the various figures of the drawings.

Referring to the drawings by letters, A indicates a handle, which may be of any suitable material or length and which at the top receives a socket A', projecting below and preferably made integral with the hollow metallic sphere or ball B, upon which is mounted a horizontal cylindrical tank C, the tank and ball being secured together through the medium of a flange B', preferably made integral with the ball and closely fitting the under surface of the tank. In the upper surface of the ball is an opening through which is projected a tapering spout D, which affords, through the medium of outwardly-opening valves D', free egress downward into the ball of water from the tank. A rubber tube F, provided with a laterally-turned nozzle F', projects downward through the tank and its spout and ends in a rubber ball E, which is closely fitted within the metallic ball B and snugly clasps the spout D of the tank. In each side of the metallic ball B is an opening G, through which project the upper ends of crossed levers H, pivoted at their crossing to the socket A'. Cords I, attached to the outer ends of the lower arms of the crossed levers, hang downward within reach of the operator. Water can be poured into the tank C through a capped opening C'. A metallic arm J is secured to one end of the tank C, projects outward therefrom, and is bent to form a spear or stem J' a short distance from and parallel with the tank, upon which spear or stem a sponge K is impaled, the spear being secured at its outer end by slipping it under the hooked end L' of an arm L, secured to the opposite end of the tank and projecting laterally therefrom. A bail M, secured to the opposite ends of the tank and having its outer member parallel with the outer surface of the tank, serves as a holder for a folded rubber strip N, which may be secured thereto in any suitable manner, the outer edges of which are parallel with each other and arranged in position so that both may be rubbed over the window at the same time. An arm O, secured to one end of the tank, projects laterally beyond its surface and is bent at O' to lie parallel with the outer surface of the tank. A

similar arm P is secured to the opposite end of the tank and is bent at P', parallel with the outer surface of the tank and in line with the portion O' of the arm O, the meeting ends 5 of the parts O' and P' being beveled off and adapted to normally lie in contact with each other, it being permissible to spring them apart on account of the elasticity of the metal of which they are formed. These arms O 10 and P, with their sections O' and P', form a bail upon which may be hung a drying and polishing cloth or chamois skin, as at Q in Fig. 2.

The construction of my invention will be 15 readily understood from the foregoing description, and its operation may be described as follows: The tank having been supplied with water through the capped opening C', sufficient of the water will pass through the 20 spout D to keep the rubber ball E filled. By operating the levers H, either by hand or through the medium of the cords I, the inner upper ends of the levers will be pressed inward against the sides of the rubber ball and 25 cause a portion of the water therein to be expelled through the rubber tube F and its nozzle F' upon the window immediately above the sponge K, a portion of the water falling upon the sponge and saturating it. As soon 30 as the pressure of the levers H is communicated to the rubber ball the valves D' will close, thus preventing the water from being forced back into the tank. The window may now be thoroughly washed by rubbing it with 35 the sponge, and when it is desired to dry the glass the device is reversed to bring the edges of the rubber drier in contact with it, and substantially all moisture can be wiped off the glass by rubbing it downward with this rubber 40 drier. Should the glass be left streaked or otherwise not clean after manipulating the rubber drier thereon, the drying or polishing cloth or chamois skin Q may be wrapped

about the rubber drier and the window thoroughly dried and polished therewith. 45

After having once prepared the washer for operation no further handling of the sponge or drier with the hands is necessary, and the device can be used without interruption until the water in the tank is exhausted, when 50 it can be quickly replenished through the cap C'.

While I have illustrated and described the best means now known to me for carrying out my invention, I do not wish to be understood as restricting myself to the exact details 55 of construction shown, but hold that any slight changes or variations, such as might suggest themselves to the ordinary mechanic, would properly fall within the limit and scope 60 of my invention.

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

1. The combination of the handle, the metallic ball or sphere mounted on the top thereof, the tank above and communicating therewith, the spout projecting from the tank into the metallic ball, the rubber ball within the metallic ball, embracing the spout, the discharge-tube passing through the tank and 70 spout into the rubber ball, and the pivoted crossed levers, bearing upon the sides of the rubber ball, substantially as described.

2. The combination in a window-washer, of 75 a tank, arms secured to each end thereof, projecting laterally therefrom and bent at their outer ends parallel with and at a short distance from the outer surface of the tank, the inner ends of their outer sections being arranged in line with each other, beveled off and 80 overlapped, substantially as described.

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Witnesses:

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