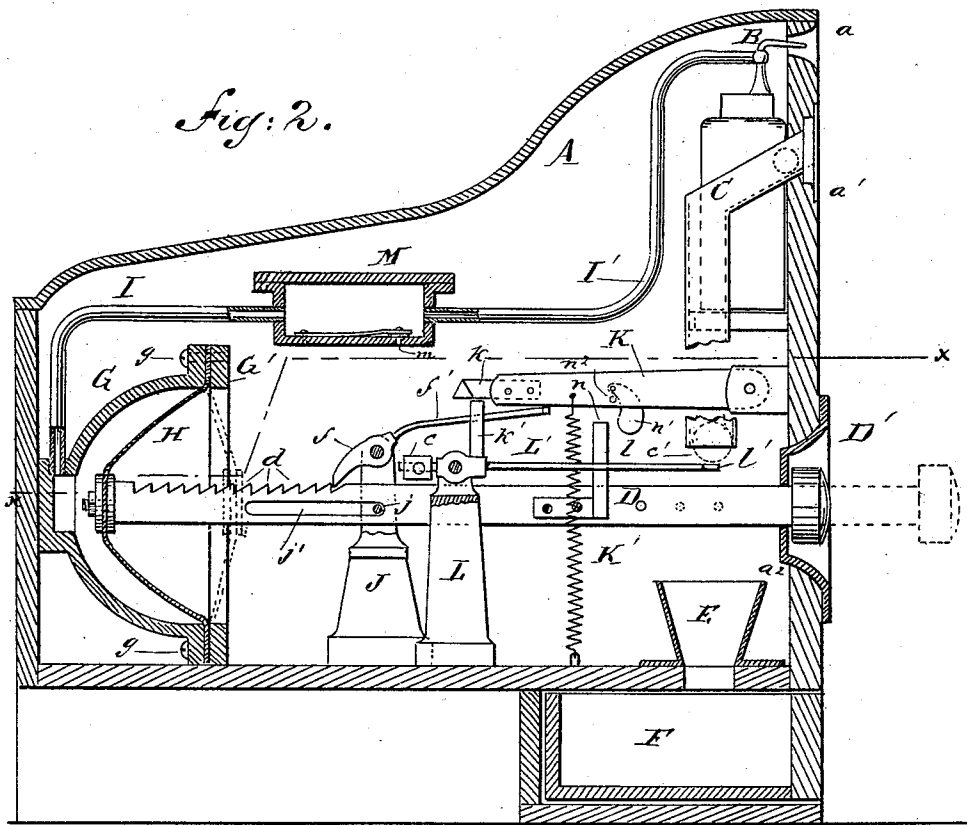
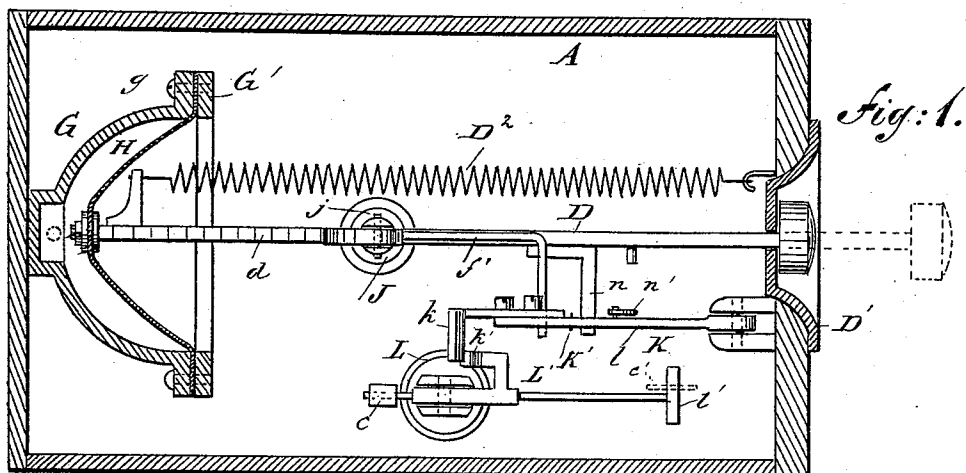


(No Model.)

J. C. MAYRHOFER.
APPARATUS FOR DISPENSING LIQUIDS.

No. 471,821.

Patented Mar. 29, 1892.



WITNESSES:

Chas. Viola.
S. Sedgwick

INVENTOR:

J. C. Mayrhofer
BY Munn & Co.
ATTORNEYS

UNITED STATES PATENT OFFICE.

JOSEPH CARL MAYRHOFER, OF NEW YORK, N. Y., ASSIGNOR TO THE AMERICAN AUTOMATIC SPRAY PERFUME COMPANY, OF SAME PLACE.

APPARATUS FOR DISPENSING LIQUIDS.

SPECIFICATION forming part of Letters Patent No. 471,821, dated March 29, 1892.

Application filed May 27, 1890. Renewed April 25, 1891. Again renewed December 3, 1891. Serial No. 413,877. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH CARL MAYRHOFER, of the city, county, and State of New York, have invented a new and Improved Apparatus for Dispensing Liquids, of which the following is a full, clear, and exact description.

My invention relates to a coin-operated apparatus for dispensing perfumery; and it consists in the construction, arrangement, and combination of parts, all as hereinafter described and claimed.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar letters of reference indicate corresponding parts in both the figures.

Figure 1 is a sectional plan view of my invention on line *xx* of Fig. 2, and Fig. 2 is a central sectional elevation.

A represents the casing, formed in the front with an aperture *a* for the atomizer-tip B, slot *a'* for the coin-tube C, and opening *a''* for the piston D. A bushing D' is fitted in the opening *a''* to form a bearing for the piston. The bottom of the casing is provided with a funnel E and drawer F underneath to catch the coins.

G is the air cup or chamber, fixed in this instance at the back of the casing, and H is a flexible diaphragm, of leather, rubber, or other material, secured at its edges over the cup or chamber by the clamp-ring G' and screws *g* or other fastening devices for holding the ring in place. The piston D is connected to the said diaphragm and is adapted to be moved longitudinally for vibrating the diaphragm for forcing air through the tubes I I' to the atomizer-tip B. The said piston is held by the standard J, and in this instance works on a pin *j*, passed through a slot *j'* in the piston, which limits the distance of its longitudinal movement. The upper edge of the piston is notched to form a series of teeth *d*, with which a pawl *f* engages for holding the piston in the position shown in full lines against the tension of the spring D², which constantly acts to force the piston forward to the position shown in dotted lines. The pawl *f* is pivoted in the standard J above the piston and is formed or provided with a bent arm *f''*, which extends forward and is bent at a right angle

to engage with the pivoted horizontal lever K, which is constantly acted upon by the spring K', tending to draw it downward. To the inner end of the lever K is attached a detent *k*, which normally rests upon the vibrating post *k'*, made a part of the rocker L', pivoted in the post L. This rocker is provided at its rear end with a counter-weight *c*, and its forward end *l* extends to and beneath the lower end of the coin-tube C, where it is provided with a cross-piece *l'*, on which a coin dropped in the slot will strike in its descent, said coin being clearly illustrated at *c'* in Fig. 2. The rocker L' is so balanced that the weight of the coin will cause it to tilt, thus carrying the post *k'* forward from under the detent *k*, whereupon the spring K' will draw the lever K downward. If this lever, however, is made of sufficient weight, the spring K' may be omitted. The downward movement of the lever K acts on the pawl *f* through the arm *f''* and disengages it from the rack-teeth *d*, releasing the piston D, whereupon the spring D² forces the piston and diaphragm to the position shown in dotted lines in Fig. 2. In this movement the diaphragm acts as a valve and fills the cup or chamber G with air through the valve *m* in the valve-box M, with which the pipes I I' are connected. When the parts are in this position, the operator holds his handkerchief over the aperture *a* and then presses the piston D quickly inward, whereupon the diaphragm forces the air rapidly from the air cup or chamber through the pipes I I' and through the atomizer B, causing a spray of perfumery to be deposited upon the handkerchief in a well-known manner. The inward movement of the piston lifts the lever K by means of an arm *n*, attached to the piston coming in contact with the stop-pawl *n'*, pivoted to the lever K, which permits the free backward movement of the said arm *n*; but owing to the stop-pin *n''*, seated in said lever K, it acts as a cam to cause the arm *n* to lift the said lever. When the lever K is thus lifted, the pawl *f* being overbalanced at the rear, drops into the rack-teeth *d* and locks the piston, and the rocker L' being also overbalanced at the front by the weight *c* tilts back of its own accord and carries the post *k'* under the detent *k*, thus locking the apparatus ready

for another operation on receiving another coin. The coin after lifting the rocker L' drops into the funnel E and drawer F, from which it may be taken by one having access 5 to the drawer.

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

1. In an apparatus for dispensing liquids, 10 the combination, with an air cup or chamber having a flexible diaphragm, of an atomizer connected by a pipe with said air-chamber, a piston connected with said diaphragm and extending to the exterior of the case of the 15 apparatus for direct operation, and a coin-operated locking mechanism controlling said piston, substantially as described.

2. The piston D, provided with an arm *n* and adapted to have longitudinal movement, 20 formed with notches and provided with a retracting-spring, in combination with a pawl

to engage with the notches and formed with a rear extension, a coin-operated lever provided with a post, the lever K, acted upon by a spring K' and provided with a pivoted 25 stop-pawl, and an arm to rest upon the post, substantially as described.

3. In an apparatus for dispensing liquids, the combination, with an air cup or chamber having a flexible diaphragm, of an atomizer 30 connected by a pipe with said air-chamber, a piston connected with said diaphragm and extending to the exterior of the case for direct operation, the said piston being formed with a rack, a pawl normally engaging said rack, 35 and a coin-controlled mechanism governing said pawl, substantially as described.

JOSEPH CARL MAYRHOFER.

Witnesses:

H. A. WEST,
EDGAR TATE,