

(No Model.)

P. LEONI.

AUTOMATIC PERFUME DELIVERY APPARATUS.

No. 504,842.

Patented Sept. 12, 1893.

Fig. 1.

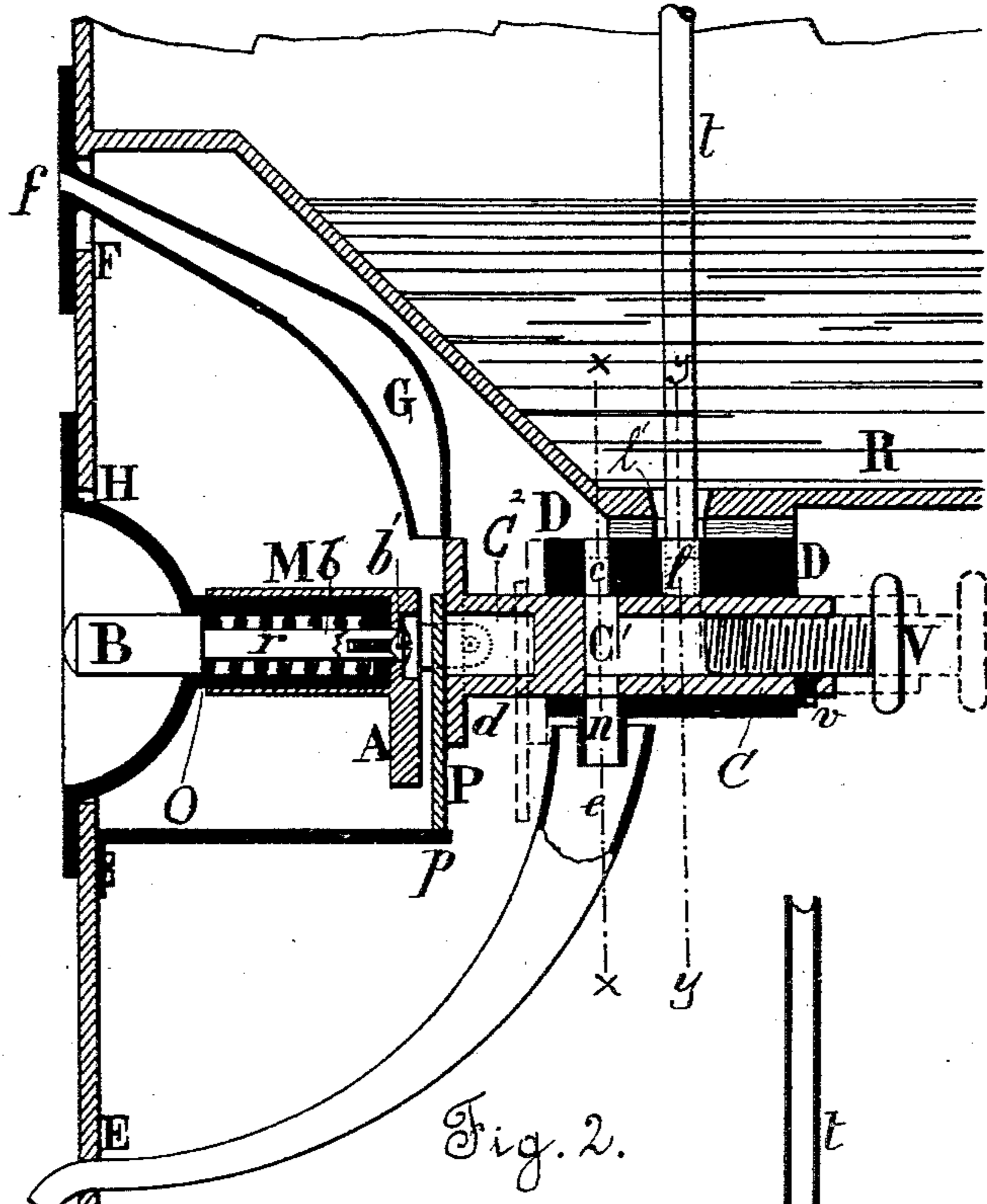


Fig. 2.

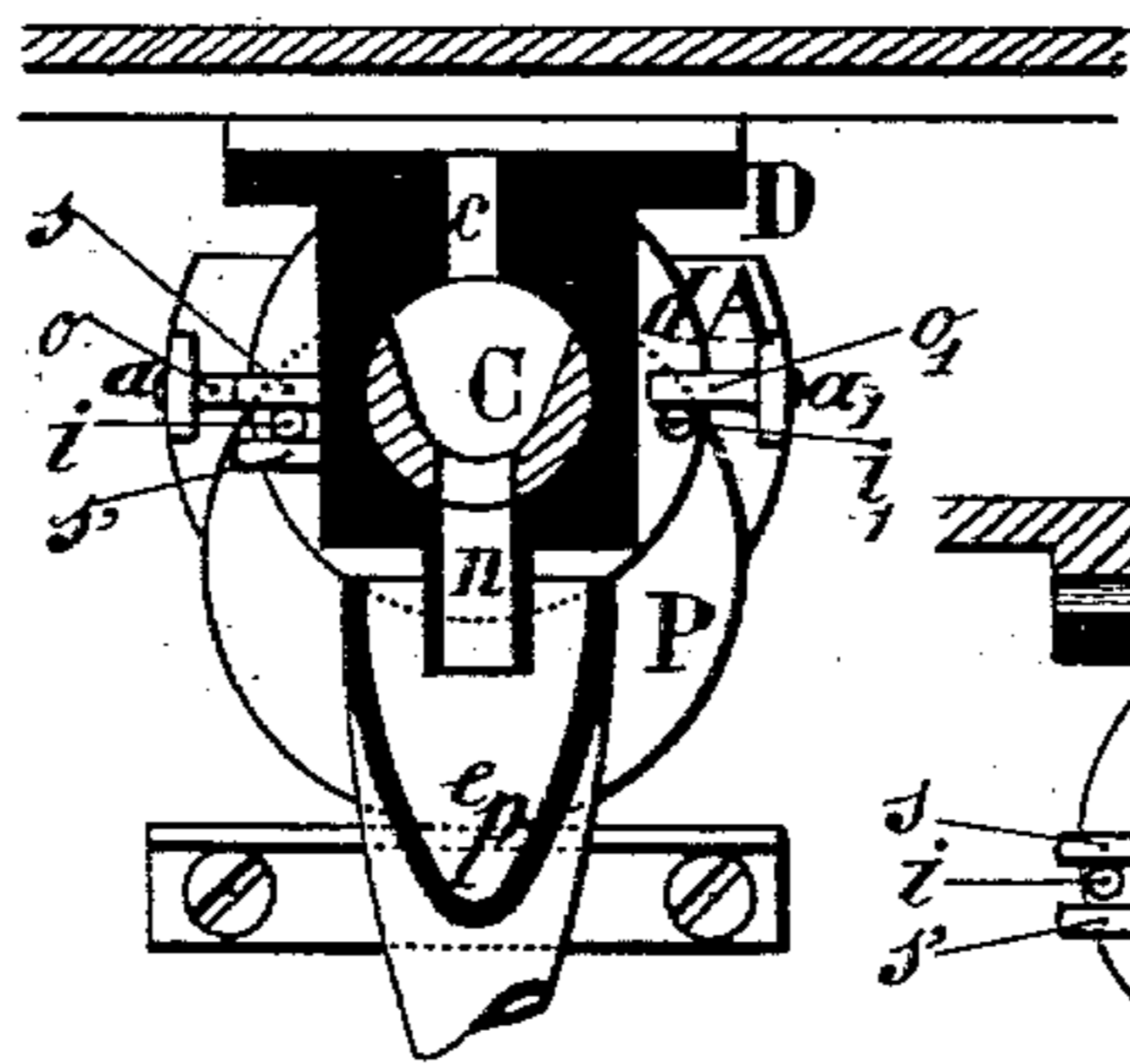


Fig. 3.

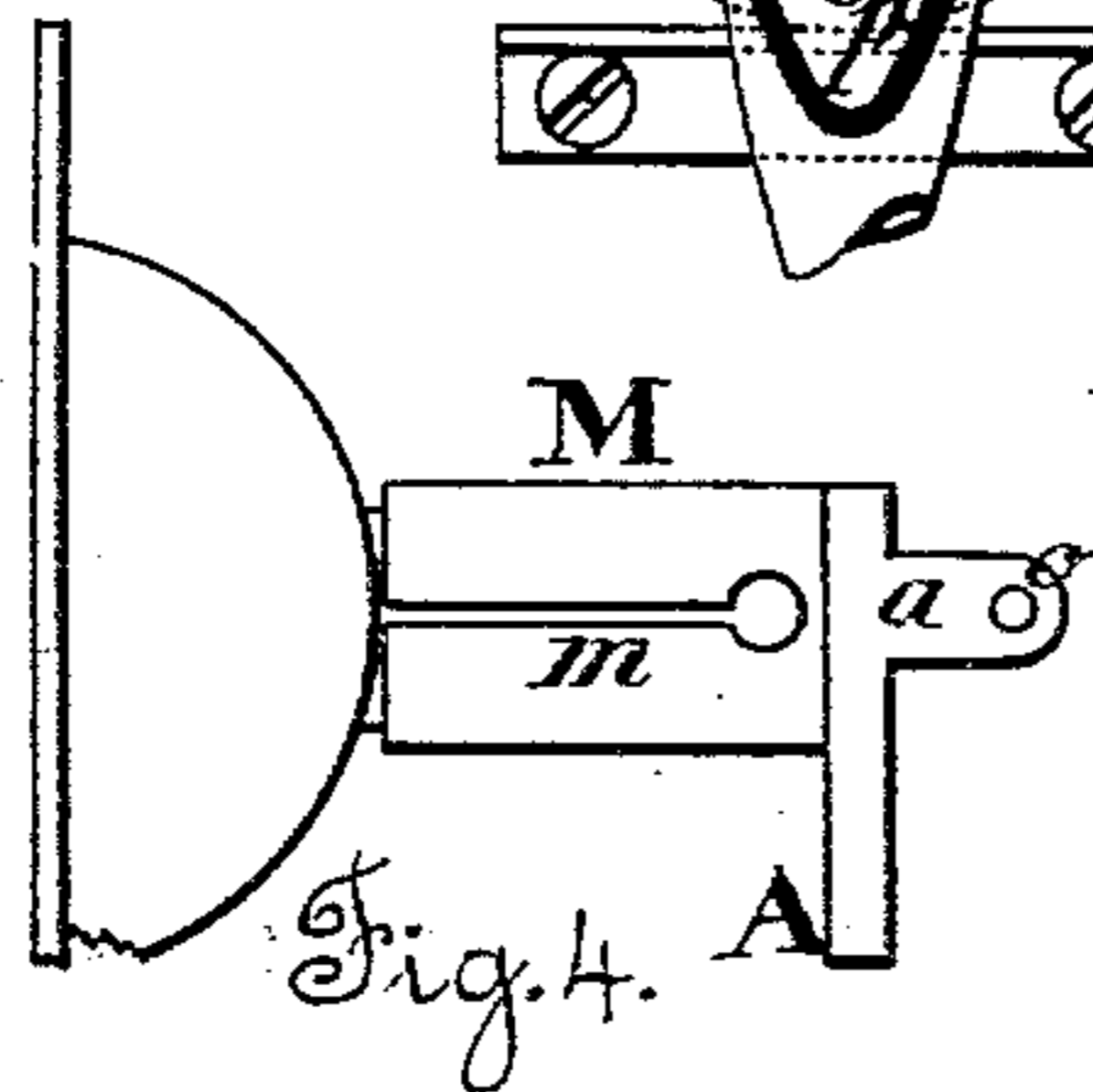
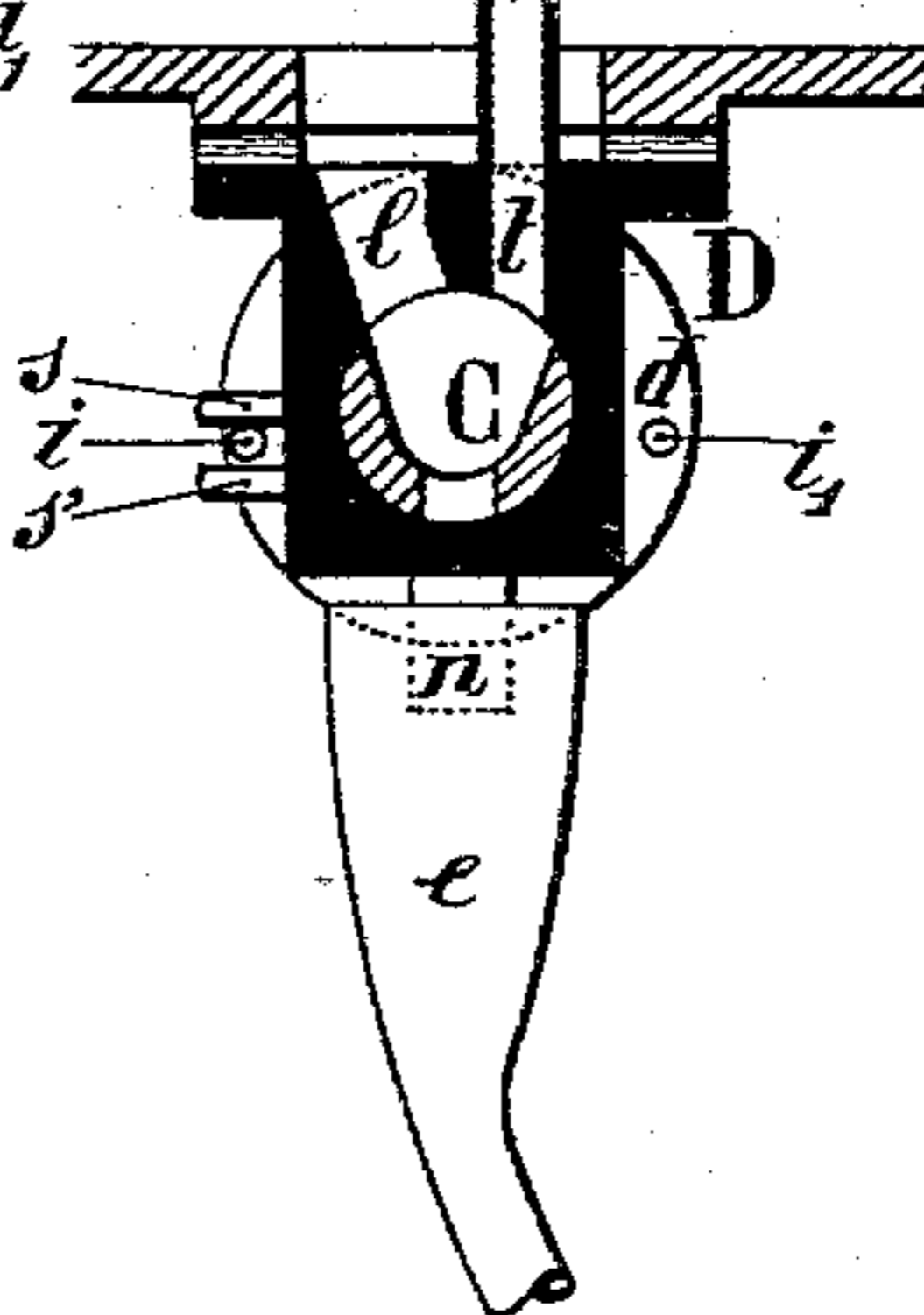


Fig. 4.

WITNESSES

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PHILIPPE LEONI, OF PARIS, FRANCE.

AUTOMATIC PERFUME-DELIVERY APPARATUS.

SPECIFICATION forming part of Letters Patent No. 504,842, dated September 12, 1893.

Application filed May 31, 1893. Serial No. 476,177. (No model.) Patented in France February 8, 1893, No. 227,742, and in Belgium February 15, 1893, No. 103,478.

To all whom it may concern:

Be it known that I, PHILIPPE LEONI, a citizen of France, residing at Paris, in the Department of the Seine, France, have invented certain new and useful Improvements in Automatic Perfume-Delivery Apparatus, (already patented in France by Letters Patent dated February 8, 1893, No. 227,742, and in Belgium by Letters Patent dated February 15, 1893, No. 103,478;) and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This automatic perfume delivery apparatus is characterized by the simplicity of its mechanism and by the employment of a push button on the outside like that of an electric bell.

In the accompanying drawings—Figure 1 represents a vertical section of the apparatus showing the distributor in repose awaiting the exterior action which will cause the emission of the liquid. Fig. 2 represents a cross section on the line $x-x$ of Fig. 1. Fig. 3 represents a cross section on the line $y-y$ of Fig. 1; and Fig. 4 represents a side elevation of the socket M.

As shown in Fig. 1 the front wall of the apparatus is provided with three openings, F, H, and E. For the opening F, I have provided a covering-plate f having attached to it an inwardly extending tube or passage G for introducing money. Opening H allows the entrance of the bushing O, through which slides the shank b of the push-button B. Opening E allows the protrusion through the said front wall of the tube E, which discharges the liquid perfumery. A replacing spring r for push-button B surrounds the stem b of the said button within the bushing O. This bushing fits into a socket M, which is capable of sliding on it with gentle friction in consequence of the moderate pressure obtained by the arrangement of two clefts m (Fig. 4) opposite each other in the said socket. The end of the push-button stem b when pressed inward passes through the said socket M and through a plate A at the rear or inner end thereof, but the screw b' which turns into the end of the said stem, being too large to pass through the opening in said plate, makes the

socket M solid in a certain degree with the said stem so that the socket and stem will move outward together after the screw head comes in contact with said plate. This plate A is provided with two lugs $a a'$ opposite each other, so that when a coin P goes down the passage G it rests between the two lugs $a a'$ on the small platform p fixed by two screws to the said front wall. If the coin introduced is smaller than the dimension desired it escapes laterally between the parts a and p and the stop plate or front plate d of the sliding piece C. When the button B is pressed, the coin P occupying the position indicated by Fig. 1, the end of stem b is pushed against this coin, and by means of it presses the tubular sliding measuring piece C back through the tubular bearing D until the stop plate or front plate d of said piece C comes in contact with the said bearing. The cavity or recess C' made in the sliding piece or core C then comes under the opening l in bearing D and the tube t . This opening communicates with opening l' in the bottom of the perfumery tank R so that the liquid runs down from the said tank through openings $l l'$ to the recess C' of the core or sliding piece C, filling it, while the displaced air escapes through the pipe t , which rises above the top of the liquid in the tank R. The rear end of the cavity C' is closed by a screw plug V or other convenient stopple.

It should be remarked that when the movement of the core or sliding piece C pressed by the end of the button stem b , has first traversed the interval which separates it from the coin P (Fig. 1) without moving the socket M, it is not long before the stop d comes in contact with the two studs o and o' on the lugs a and a' of the socket M. The screw b' is then in advance of the plate A. When the push-button B is released, and moved backward toward its former position by spring r , the head of this screw does not return into contact with the said plate A until the end of an appreciable time, during which the coin P is no longer in contact with the screw b' , and not being held against the stop d is allowed to fall to the bottom of the apparatus. Since when the screw b' has come in contact with the plate A, this plate is brought back

again to the rear, and is followed by the core or sliding piece C, the stop plate *d* of which is engaged by the studs *o o'*. At the end of this retrograde movement, the cavity C' of the sliding piece C precisely registers with the outlet attachment *n* of the fixed bearing D through which the liquid passes to the discharge tube *e* below it; the emptying of the contents of the cavity C takes place instantly, an air hole *c* of bearing D being arranged over the said cavity to communicate therewith and facilitate such outflow. Thus each pressure and release of the push-button, after dropping in the proper coin, will result in discharging from the apparatus a measured quantity of the contents of the receptacle R. The screw V, which constitutes the adjustable end of the sliding measuring piece C, allows the quantity thus discharged to be regulated at will by screwing the said part V in or out of the end of the said piece C. If the coin P has not been put into the opening *f*, a pressure on button B will not cause the discharge of liquid because the end of stem *b* enters a recess C² in the proximate end of the sliding measuring piece C, and does not bear against the latter. It is easy, however to arrange for a gratuitous supply of the liquid by affixing to the stop plate *d* a disk or shield which will cover the said recess and take the place of the coin in the operation of the device. A stud or short rod *i* extending forward from the face of the stop plate *d* slides constantly between the two guide-pins *s s'* which are arranged at right angles to it and attached to the bearing D, so that the measuring piece C cannot turn in this last. The socket M also cannot turn because the studs *o* and *o'* aforesaid are in contact respectively with the said stud or small rod *i* and a similar stud *i'* arranged correspondingly on the face of the stop plate *d* at the opposite side

of its center. The positions of the lugs *a a'* and of the end of the little platform *p* will vary according to the dimensions of the coin to be introduced. It will be the same with the size of the opening in the plate *f* and the diameter of the guide tube G.

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

1. In combination with a liquid receptacle having an outlet, a discharge tube, a movable sliding measuring piece having a cavity which is alternately in communication with the said outlet or the said discharge tube according to its position, a push-button arranged to force backward the said measuring device when a coin is interposed between them, a spring which replaces the said push-button, and devices arranged to be actuated by the said button after a slight interval and engaging the said measuring piece to draw it into the position for discharge substantially as set forth.

2. The push button B having a stem *b*, a terminal piece *b'*, and a replacing spring *r*, in combination with the movable socket M having a hole which permits the inward and outward play of the said stem but not of the said screw head, this socket being also provided with lugs *a a'* and studs *o o'*, a sliding measuring piece C provided with a front plate *d* which is engaged by the said studs, and a liquid supply-tank and outlet arranged to be respectively in contact with the said sliding measuring piece in the one and the other of its two positions substantially as set forth.

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

PHILIPPE LEONI.

Witnesses:

J. PELLETIER,
LOUIS LOCHERT.