

C. O. DIETSCH & T. KURRELL.
DISPENSING APPARATUS.
APPLICATION FILED APR. 24, 1911.

1,005,519.

Patented Oct. 10, 1911.

2 SHEETS—SHEET 1.

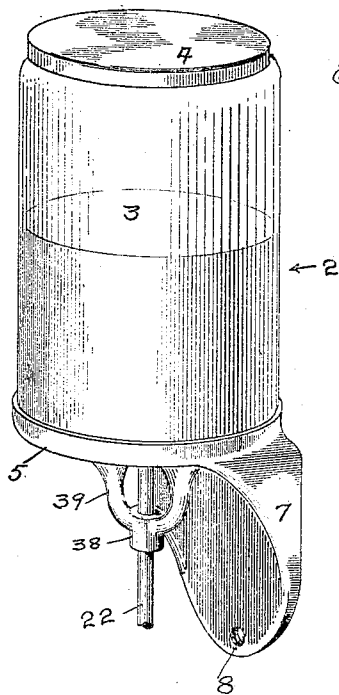


Fig. 1

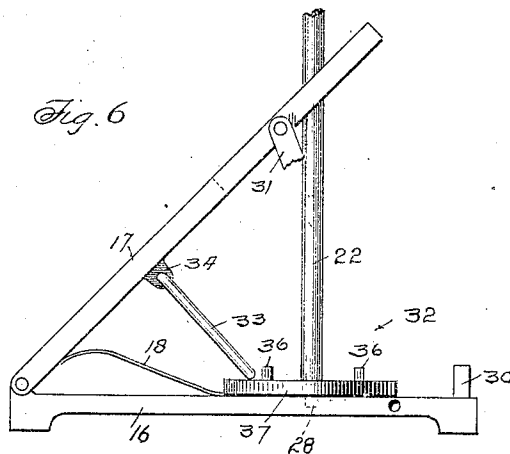
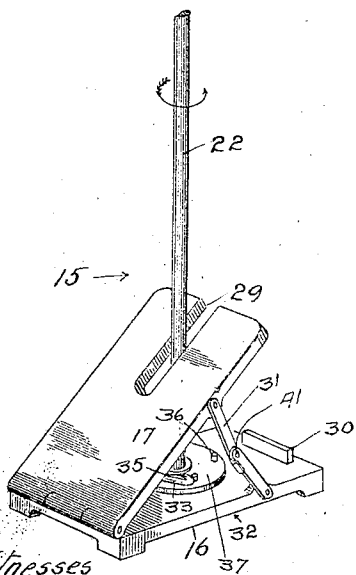


Fig. 6



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2 SHEETS—SHEET 2.

Fig. 2

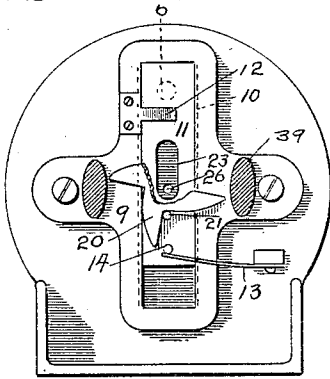


Fig. 3

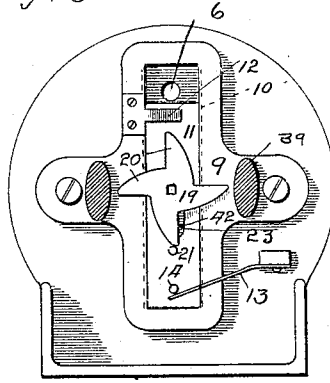


Fig. 4

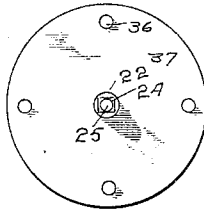
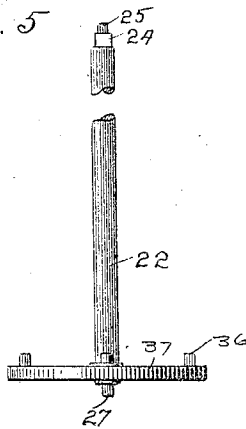


Fig. 5



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UNITED STATES PATENT OFFICE.

CURT O. DIETSCH AND THEODOR KURRELL, OF LOS ANGELES, CALIFORNIA.

DISPENSING APPARATUS.

1,005,519.

Specification of Letters Patent.

Patented Oct. 10, 1911.

Application filed April 24, 1911. Serial No. 623,117.

To all whom it may concern:

Be it known that we, CURT O. DIETSCH and THEODOR KURRELL, respectively a citizen of the United States and a subject of the Emperor of Germany, both residing at Los Angeles, in the county of Los Angeles, State of California, have invented a certain new and useful Dispensing Apparatus; and we 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 invention relates to dispensing apparatus, and it may be said to consist in the provision of the novel features and in the novel and improved construction, arrangement and combination of the parts and devices therein, as will be apparent from the description and claims hereinafter.

One object of the invention is to provide apparatus of the class specified which may be actuated by foot to thereby leave the hands of the operator free to receive the substance dispensed by the apparatus and to obviate any tendency of soiling the apparatus by the hands of the operator.

Further objects of the invention are to provide apparatus of the class specified which is practical and serviceable, simple in construction, economical to use, attractive in appearance, easy to operate, and effective in action.

Other objects and the advantages of the invention will be apparent to those skilled in the art from a consideration of the following description of the preferred form of construction in which the invention may be embodied taken in connection with the accompanying drawings, in which—

Figure 1 is a partly broken perspective view of apparatus having the invention applied thereto; Fig. 2 is a view of the underside of the container support and parts mounted thereon, the sliding cover being in closed position; Fig. 3 is a view similar to that of Fig. 2 but showing the sliding cover in open position; Fig. 4 is a plan view of a portion of the operating mechanism, and Fig. 5 is a partly broken elevation of the same; and Fig. 6 is a partly broken side elevational view of the base and treadle and parts mounted thereon.

While the apparatus is adapted for use to dispense any liquid or semi-liquid sub-

stance, it is more particularly designed to dispense liquid soap for use by surgeons in operating rooms of hospitals or the like. The container 2 for the liquid soap may consist of a glass jar 3 provided with a removable cover 4 and it may be mounted on a suitable support 5 to have the opening 6 in the bottom thereof in registry with an opening extending through the support. The support 5 may be carried by a bracket 7 having holes 8 therein whereby it is adapted to be secured in position on a wall by means of screws (not shown) passed through the holes and into the walls, as will be understood. On the underside of the support 5 may be secured a part 9 provided with a guideway 10 therein in which is slidably mounted a plate 11 adjacent to the opening 6, the plate 11 being pressed upwardly against said support by a suitable spring 12. A suitable spring 13 may be arranged to press against the projection 14 on the plate 11 to move the latter to cover the opening 6.

For the sake of convenience and to avoid soiling the apparatus by the hands of the user, foot operated mechanism 15 is preferably employed to move the plate 11 to uncover the opening 6 to permit a small amount of the liquid soap or the like to pass from the opening 6 to be received on the hands of the user. The mechanism 15 may consist of a base 16 arranged below the support 5, a treadle 17 hingedly connected with the base and pressed upwardly by a suitable spring 18 and provided with a slot 29, a member 19 disposed adjacent to a projection 21 on the plate 11 and preferably provided as shown with a plurality of cams 20, a shaft 22 passing through the slot 29 and also through a slot 23 in the plate 11 and having the cam member 19 affixed to the squared portion 24 near the upper end thereof—the upper end portion 25 of the shaft bearing in a socket 26 in the support 5 and the lower end portion 27 of the shaft bearing in a socket 28 in the base 16, and co-acting mechanism 32 on the treadle 17 and shaft 22 for rotating the shaft 22 when the treadle is depressed by the foot of the user of the apparatus. As shown, the mechanism 32 may consist of a link 33 having one end thereof pivotally mounted in a bracket 34 on the underside of the treadle 17 and provided at its other end with an offset portion 35 adapted to bear against one of a plu-

rality of projections 36 on the disk 37 which is secured to shaft 22 and preferably rests on the base 16.

A bearing 38 carried by yoke 39 on part 9 may be provided for the upper portion of the shaft 22; also to limit the downward movement of treadle 17 an abutment 30 may be provided on the base 16, and, to limit the upward movement of the treadle, link 31 provided with a hinge joint 41 and having one end thereof pivotally connected with the treadle and the other end thereof pivotally connected with the base 16, may be employed.

With the construction as above described it will readily be understood that the parts are normally disposed to have the plate 11 cover the opening 6 as shown in Fig. 2, and that when the treadle 17 is depressed the offset 35 of the link 33 will engage with one of the projections 36 of the disk 37 and thereby the disk 37 will be moved to rotate shaft 22 to cause the cam 20 adjacent to projection 21 to move against the latter and thereby move the plate 11 against the pressure of the spring 13 to uncover the opening 6 (see Fig. 3); it being seen that as soon as the projection 21 passes the end of the cam, the projection 21 moves along the radial face 42 of the cam and the spring 13 acts to move the plate 11 to quickly cover the opening 6. It will be apparent that the amount of material dropped through the opening 6 may be controlled by the user by regulating the time taken to fully depress the treadle. It will be understood that upon release of the treadle after depression it is moved upwardly by the spring 18 and the link 33 is moved upwardly and forwardly to bring the offset portion 35 thereof to a position immediately forwardly of another of the projections 36 on disk 37.

While one form of construction in which the invention may be embodied has been illustrated and described, there are many changes and modifications thereof that will readily occur to those skilled in the art, and the right is therefore reserved to all such changes and modifications as do not depart from the spirit and scope of the invention as set forth in the appended claims.

We claim:

1. The combination of a container having an opening therethrough, a spring-pressed cover plate movably mounted adjacent to said opening, a base, a shaft rotatively mounted on said base, a cam member on said shaft adapted to move said plate to uncover said opening, a treadle, and co-acting means on said treadle and said shaft for rotating the shaft to actuate said cam member when the treadle is operated.

2. The combination with a container hav-

ing an opening therethrough, a slidably mounted plate arranged adjacent to said opening, a spring adapted to move said plate to cover said opening, a base, a shaft rotatively mounted on said base, a member on said shaft provided with a plurality of cams adapted to co-act with said plate to move the plate to uncover said opening, a treadle, and co-acting means on said treadle and said shaft for rotating the shaft to actuate said cam member when the treadle is operated.

3. The combination of a support, a container on the support, said container having an opening therethrough, a spring-pressed plate slidably mounted on said support adjacent to said opening, a base, a shaft extending between said base and said support, a cam member on said shaft adapted to move said plate to uncover said opening, a treadle, and co-acting means on said treadle and said shaft for rotating the shaft to actuate said cam member when the treadle is operated.

4. The combination of a container having an opening therethrough, a spring pressed cover movably mounted adjacent to said opening, a base, a shaft rotatively mounted on said base, a cam member on said shaft adapted to move said plate to uncover said opening, a treadle, a part on said shaft provided with projections thereon, and a link pivotally mounted on said treadle and adapted to engage with said projections to rotate said shaft when said treadle is operated, substantially as described.

5. The combination of a support, a container on the support, said support and container having an opening therethrough, a plate slidably mounted on said support adjacent to said opening, a spring adapted to move said plate to cover said opening, a base, a shaft extending between said base and said support, a cam member on said shaft adapted to move said plate to uncover said opening, a spring-pressed treadle, a part on said shaft provided with projections thereon, and a link pivotally mounted on said treadle and adapted to engage with said projections to rotate said shaft to actuate said cam member to move said plate to uncover said opening when the treadle is operated, substantially as described.

In testimony whereof, we have signed our names to this specification in the presence of two subscribing witnesses at Los Angeles, county of Los Angeles, State of California, this 18th day of April A. D. 1911.

CURT O. DIETSCH.
THEODOR KURRELL.

Witnesses:

ALEX. H. LIDDERS,
WM. HANLON.