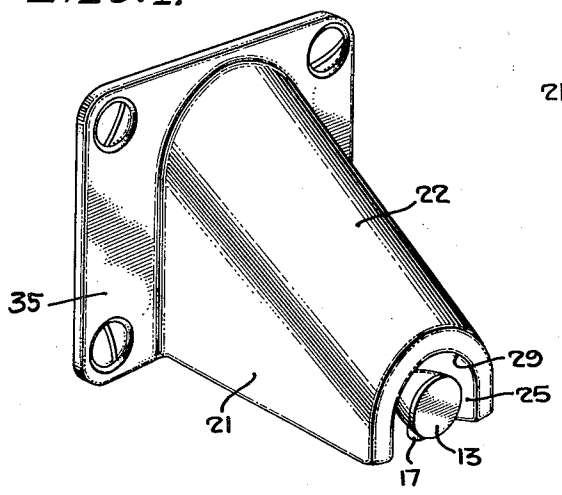
June 30, 1953 H. H. LOGAN 2,643,669

SOAP DISPENSER

Filed Jan. 17, 1949

FIG. 1.



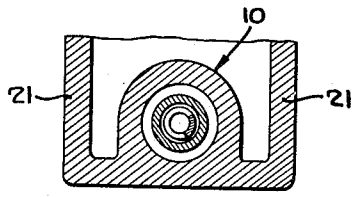
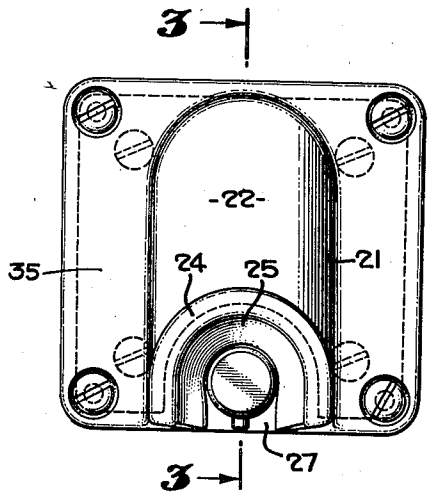


FIG. 4.

FIG. 2.



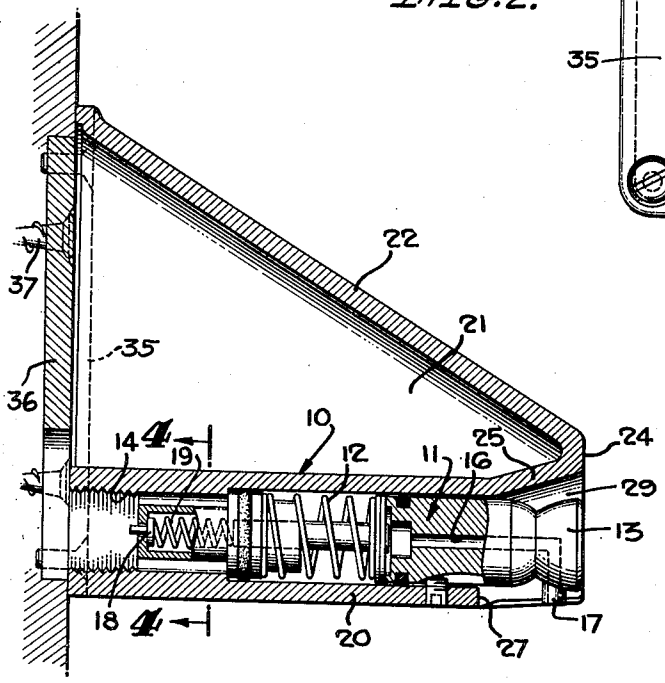


FIG. 3.

INVENTOR.
HUGH H. LOGAN
BY Ernest J. Tilley
ATTORNEY.

Patented June 30, 1953

2,643,669

UNITED STATES PATENT OFFICE

2,643,669

SOAP DISPENSER

Hugh H. Logan, La Canada, Calif.

Application January 17, 1949, Serial No. 71,296

3 Claims. (Cl. 137—382)

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This invention relates generally to hoods or casings for liquid soap dispensers, and the object of the invention is the provision of a novel and improved hood for a plunger type liquid soap dispenser, provided with formations guarding the dispenser against "vandalism."

Particularly for institutional use, such as State asylums and prisons, but also in certain schools, and in places open to the public generally, plumbing fixtures are subject to theft, mutilation, and general vandalism. It is a common occurrence, for instance, for a towel tied into a loop to be slung around a soap dispenser, and used as a sling by which the dispenser may be bent and broken from the wall. For instance, the foot of the person may be placed inside the "sling," and enough leverage or weight so exerted to pry the fixture from the wall. The present invention deals with the provision of a liquid soap dispenser fixture having a casing or hood so formed as to defy the usual attempts to bend or break it from its mounting.

A preferred embodiment of the invention appears in the drawings, to which reference will be made in the course of the ensuing detailed description. In the drawings:

Figure 1 is a perspective view of a liquid soap dispenser and casing in accordance with the invention;

Figure 2 is a front elevational view thereof;

Figure 3 is a longitudinal section on line 3—3 of Figure 2; and

Figure 4 is a section on line 4—4 of Figure 3.

In the drawings, numeral 10 designates generally a horizontally disposed barrel, within which is slidably fitted the conventional reciprocating plunger 11 urged to its advance position by spring 12, and movable a limited distance in the reverse direction, against said spring, by pressure against thumb piece 13 formed on the outer end of the plunger. It will be understood that the plunger and associated soap feeding mechanism are entirely conventional, and that the details of structure need not be described herein, beyond to note that barrel 10 is internally screwthreaded at its rearward end, as at 14, for engagement with a liquid soap supply pipe (not shown) and that the plunger is longitudinally bored at 16 for passage of the liquid soap, and furnished with a downwardly discharging outlet 17 leading from said bore 16 through the bottom of thumb piece 13.

A check valve at 18, provided with a spring 19, controls the inlet to the feeding mechanism, and closes and opens respectively, as plunger 11 is alternately depressed, and permitted to return to its forward position. The invention, however, is entirely in the casing, and not in the soap feeding mechanism, and further description of the latter is unnecessary.

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Formed integrally with the bottom of barrel 10, and extending horizontally in both directions therefrom is a horizontal bottom wall 20, which extends the full length of the cylindrical extent of the barrel, and merges at the edges with the bottom edges of vertical side walls 21. Said side walls merge at the top with a top wall 22 which is arch-shaped in contour, and downwardly inclined at a substantial angle, preferably as illustrated, from the rearward end of the casing toward its forward end or nose portion 24. The latter is preferably approximately coplanar with the end of plunger finger-piece 13 when the latter is in its outermost position (Figure 3), and there is a short conical inwardly converging wall 25 joining nose 24 with the forward end of barrel 10. The entire nose 24 is arch-shaped, and the connecting wall 25 is therefore an incomplete cone, the forward end portion of the cylindrical extent of the barrel 10 being therefore exposed at the bottom, as appears at 27 in the drawings. Engagement of nozzle 17 with this end or shoulder 27 serves as a means limiting inward movement of plunger 11.

It will be seen that there is only a small or narrow annular space 29 between thumb piece 13 and the wall 25, insufficient for a towel sling or the like to be inserted and a purchase thereby gained against the exposed end portion of the plunger. It will further be seen that a towel sling or the like engaged over inclined top 22 will slide off if any weight is imposed. In fact, the casing of the invention successfully defies the usual types of effort made to break the article from the wall.

The casing is completed by a wall plate or flange 35 formed integrally with the side, top and bottom walls aforesaid, said plate being formed with holes for screws which may be engaged with threaded sockets in a sub-mounting plate 36 screwed to the wall as by wood screws 37.

I claim:

1. A casing for a liquid soap dispenser, comprising: a horizontally disposed plunger-receiving barrel having means at its rearward end for connection with a supply pipe, a hood of generally arch-shaped cross section over said barrel and projecting forwardly therefrom, said hood having a substantially arch-shaped front end wall, a top wall which slopes upwardly at a substantial angle to horizontal from said forward

end wall to the rearward end of the hood, and having also side walls on opposite sides of and spaced horizontally from said barrel, a bottom wall joining the lower edges of said side walls with the bottom of said barrel, and a diverging wall connecting the top and side portions of the front end of said barrel with said arch-shaped end wall of said hood, the lower portion of the front end of said barrel remaining exposed.

2. A casing for a liquid soap dispenser, comprising: a horizontally disposed plunger-receiving barrel having means at its rearward end for connection with a supply pipe, a hood of generally arch-shaped cross section over said barrel and projecting forwardly therefrom, said hood having a substantially arch-shaped front end wall, a top wall which slopes upwardly at a substantial angle to horizontal from said forward end wall to the rearward end of the hood, and having also side walls on opposite sides of and spaced horizontally from said barrel, and a bottom wall joining the lower edges of said side walls with said barrel.

3. A casing for a liquid soap dispenser, comprising: a horizontally disposed plunger-receiving barrel having means at its rearward end for connection with a supply pipe, a hood having upper and side walls over and around the sides of said barrel, said side walls joined to the forward end portion of the barrel and to the bottom of said barrel, a vertical wall flange integral with the rearward end of said upper and side walls of said hood, said upper wall sloping upwardly from the forward end of the hood substantially to the juncture of said upper wall with said wall flange at a substantial angle of inclination from horizontal.

HUGH H. LOGAN.

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