R. M. HOLLINGSHEAD.

SPRINKLER SCREW CAP.

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1,125,322.

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Fig. 1.

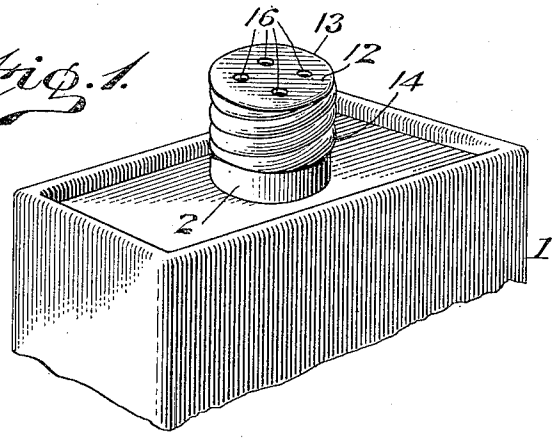


Fig. 2.

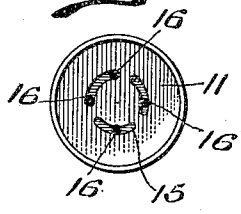


Fig. 3.

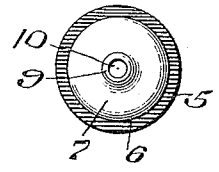
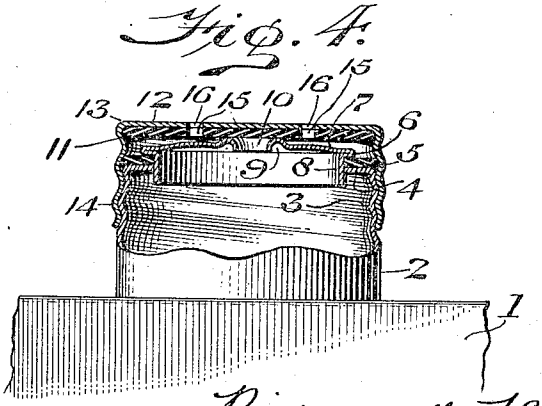


Fig. 4.



WITNESSES

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SPRINKLER SCREW-CAP.

1,125,322. Specification of Letters Patent. Patented Jan. 19, 1915.

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To all whom it may concern:

Be it known that I, RICHARD M. HOLLINGSHEAD, a citizen of the United States, residing at Riverton, county of Burlington, State of New Jersey, have invented a new and useful Sprinkler Screw-Cap, of which the following is a specification.

My invention consists of a novel construction of a sprinkler screw cap or closure and its adjuncts wherein means are provided for forming a tight joint and preventing leakage when the cap is screwed down, provision being also made for permitting egress of the contents of the can or container to which the cap is attached when said cap is unscrewed, means being also provided for preventing leakage down the inner sides of the cap when the latter is unscrewed slightly to enable the container to be used as a sprinkler.

It further consists of other novel features of construction, all as will be hereinafter fully set forth.

For the purpose of illustrating my invention, I have shown in the accompanying drawing one form thereof which is at present preferred by me, since the same has been found in practice to give satisfactory and reliable results, although it is to be understood that the various instrumentalities of which my invention consists can be variously arranged and organized and that my invention is not limited to the precise arrangement and organization of these instrumentalities as herein shown and described.

Figure 1 represents a perspective of the top of a container having attached thereto a screw cap and its adjuncts, embodying my invention. Fig. 2 represents a plan showing the interior of the cap in detached position. Fig. 3 represents a plan showing the top of a plug employed together with the outlet port and washer therefor. Fig. 4 represents a vertical section through the cap and plug showing the position the parts assume when the cap is screwed tightly in place.

Similar numerals of reference indicate corresponding parts in the figures. Referring to the drawings, 1 designates the top of a can or container for the liquid dispensed which, in the present instance, is a high grade liquid antiseptic toilet soap but it will be apparent that my invention is adapted generally to any kind of a container irrespective of the use to which the contents of the same may be put, so long as the contents to be dispensed are of a liquid character.

2 designates an annular outlet tube or neck which is secured to the top of the container 1 by soldering or otherwise and provided with a screw threaded portion 3 and a laterally inwardly turned flange 4 on which is supported a washer 5, the outer edge or perimeter of the latter being of such extent as to slightly overhang the flange 4, as will be understood from Fig. 4. The inner periphery of the washer 5 is held in position by the flange 6 of the plug 7 which latter has the depending annulus 8, while the top of the plug has the raised central annular bead 9 around the outlet or orifice 10, said bead 9 being adapted to be engaged by the packing disk 11 of fiber or similar material which is contained within the top 12 of the screw cap 13, which is provided with the threaded portion 14 adapted to engage the threads 3 of the ring 2. The packing disk 11 is provided with a plurality of slots or apertures 15, as will be understood from Fig. 2, which are shown as cut and arranged that the outlet ports 16 will be stopped up at no time by the packing disk changing position.

The manner of assembling the parts will be readily understood from Fig. 4, it being seen that the washer 5 is held between the flanges 4 and 6 in a tight and rigid manner, whereby the container 1 can be readily filled with liquid after the ring or screw 2 has been soldered in position and the cap 13 removed therefrom. When the parts are in the position seen in Fig. 4 and the cap 13 is screwed so as to cause the internal packing disk 11 to properly seat upon the annular bead 9, it will be apparent that the device is closed so that no escape of the contents of the can or container 1 is possible. When, however, the cap 13 is slightly unscrewed and the can or container 1 is shaken or inverted, the contents thereof will flow out through the slots 15 and the ports 16. The washer 5 being of slightly greater diameter than the flange 4 will prevent the liquid flowing downward between the inner walls of the cap 13 and the screw threads 3 of the tube 2, so that no leakage or waste of the contents of the can 1 will be permitted when the contents thereof are dispensed after loosening the cap 13.

The device is simple in construction and

will not easily get out of order and after the contents of the can 1 have been used up the can can be used for other purposes, as is evident.

I desire to call special attention to the function of the washer 5 which is made of slightly greater diameter than the flange 4 for the purpose of preventing leakage, and it will also be evident that by the employment of the annular bead 9 the requisite tight joint will be formed between the internal packing disk 11 and the outlet or orifice 10 when the cap 13 is screwed down tight, as seen in Fig. 4.

It will now be apparent that I have devised a novel and useful construction of a sprinkler screw cap which embodies the features of advantage enumerated as desirable in the statement of the invention and the above description, and while I have, in the present instance, shown and described a preferred embodiment thereof which has been found in practice to give satisfactory and reliable results, it is to be understood that the same is susceptible of modification in various particulars without departing from the spirit or scope of the invention or sacrificing any of its advantages.

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

1. In a device of the character stated, an externally screw-threaded neck having an inwardly-extending annular flange, an annular washer supported upon said annular flange and of greater outer diameter than the same, a plug fitting within the annular flange and washer and formed with a central opening and with a raised annular bead around such opening, said plug having an annular flange bearing upon said washer a packing disk adapted to seat upon said bead and formed with slots, and a screw-cap adapted to screw on the neck and having an apertured top.

2. In a device of the character stated, an externally screw-threaded neck, a plug supported in said neck and formed with a central opening and a raised annular seat around said opening, a washer between said plug and said flange, a packing disk adapted to bear against said seat and formed with openings, and a screw-cap adapted to screw on the neck and having openings in its top registering with the openings in the disk.

3. In a device of the character stated, a neck having an internally extending flange and provided with screw threads, a washer supported upon said flange and of slightly greater outer diameter than the latter, a plug also provided with a flange and having an orifice therein, said washer being seated between said flanges, a raised annular bead on said plug encircling said orifice and an apertured screw cap adapted to fit upon said ring, in combination with a packing disk carried by said screw cap and interposed between the inner surface of the top of the latter and said orifice, said packing disk being provided with elongated slots registering with the ports in said cap whereby said ports will always be open.

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."