Dec. 10, 1946. J. H. DEVINE ET AL 2,412,325

RECEPTACLE AND COVER THEREFOR

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Fig. 1.

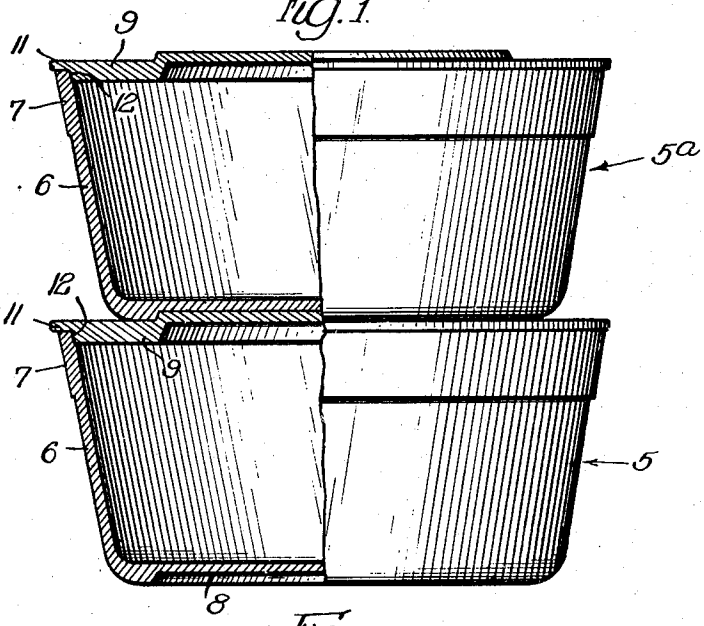


Fig. 2.

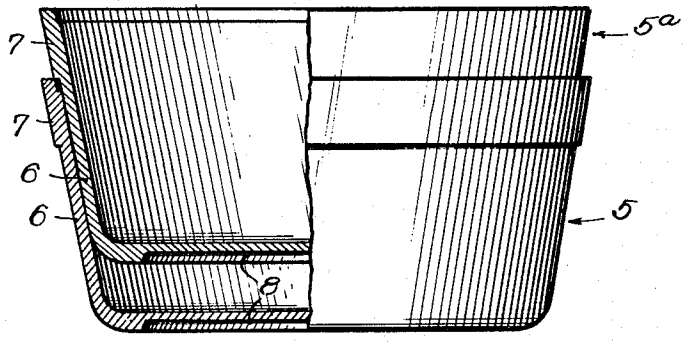
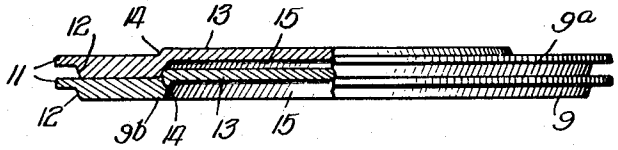


Fig. 3.



INVENTOR.
James H. Devine,
BY William T. Halvorsen,
Brown Jackson Boettcher Dennis
attys

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RECEPTACLE AND COVER THEREFOR

James H. Devine and William T. Halvorsen,
Chicago, Ill.

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1 Claim. (Cl. 220—97)

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This invention relates to receptacles and covers therefor.

As its principal object, the invention contemplates the provision of a new and improved form of receptacle and cover therefor of a type that may be stacked one upon another, that is, one receptacle seating on the cover of a lower receptacle. Particularly, the invention contemplates the provision of cooperating means formed on the receptacle and cover for restraining or preventing lateral sliding movement of the stacked receptacles with respect to each other. The receptacle may be of any desired shape, cylindrical, square or rectangular. It is of tapered shape in order that a plurality of them may be nested together, and is provided with a shoulder that, when the receptacles are nested together by one being placed within another, seats on the rim or edge of a lower receptacle, so that where there is an appreciable number of receptacles nested together, the lowermost receptacles will not become wedged together by the weight of the uppermost receptacles and be subjected to breakage. The covers are practically uniform in dimensions and may be used interchangeably with any receptacle. The means for restraining lateral movement of the stacked receptacles comprises a recess formed in the bottom wall of the receptacle, and an outwardly pressed portion or shoulder formed on the cover. When the receptacles are stacked, the shoulder on a cover engages in the recess in the bottom wall of the receptacle seating on that cover. The walls defining the recess and shoulder are correspondingly tapered. In forming the outwardly pressed portion on the cover, a recess is also formed on the opposite side of the cover. This permits stacking of the covers one upon another, with the shoulder on one cover engaging in the recess of a cover seating thereon, whereby lateral movement of the covers with respect to each other is prevented. The structure of the shoulder and recess on the cover is such that there is no possibility of the lowermost covers of the stack becoming wedged together by the weight of the uppermost covers in the stack. The ability to nest and stack the receptacles, and to stack and nest the covers, without the possibility of their being deranged by relative sliding movement, is an important factor in the conservation of space where the space afforded in washing and packing the receptacles is limited.

Further features and advantages of the invention will appear from the following detailed description when taken in connection with the accompanying drawing, in which:

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Figure 1 is a view, partly in front elevation and partly in vertical section, showing a pair of stacked receptacles embodying the principles of the present invention;

Figure 2 is a view similar to Figure 1 but showing the receptacles in nested relation; and

Figure 3 is a view partly in vertical section and partly in front elevation, showing a pair of stacked and nested covers embodying the principles of the present invention.

Referring now in detail to the drawing, it will be noted that the receptacle chosen for purposes of illustration is generally cylindrical in form, although it may be of rectangular or square shape. It is preferably constructed from a plastic material, although any other suitable or preferred material may be employed, and is of approximately one quart capacity. The side wall 6 is preferably tapered downward to permit of one receptacle being nested in another receptacle as shown in Figure 2, and an outwardly extending annular shoulder 7 is formed adjacent the upper open end of the receptacle. This shoulder is of such dimensions that when the receptacles are nested together, as shown in Figure 2, it will seat on the peripheral edge of the receptacle below it and limit movement of the receptacles into each other. The receptacles may thus be nested to any desired height, and without the possibility of the lowermost receptacles becoming wedged together and being subject to breakage by the weight imposed on them by the uppermost receptacles. An annular recess 8 is formed in the bottom wall of the receptacle. This recess, it will be noted, is of appreciable diameter.

Cover 9 is also preferably formed from a plastic material and is of substantially disc-shape, being provided with the outwardly extending annular flange 11 for seating on the peripheral upper edge of the receptacle. The shoulder 12, of course, prevents lateral sliding movement of the cover with respect to the receptacle. Centrally, the cover is provided with the circular outwardly pressed portion 13 forming the annular shoulder 14, and on its opposite face with the circular recess 15. The shoulder 14 and the wall defining recess 8 in the receptacle are correspondingly tapered, as is likewise shoulder 14 and the wall defining recess 15 in the cover.

The receptacles may be stacked, as shown in Figure 1, the receptacle 5a having its bottom wall seating on the cover of the receptacle 5 and with shoulder 14 of cover 9 engaging in the recess 8

in the bottom wall of receptacle 5ª with a relatively snug fit. Additional receptacles may be stacked in a similar manner one upon another. It will be noted, that by reason of engagement of shoulders 14 in recesses 8, lateral movement of the receptacles with respect to each other will be prevented. Likewise, the covers may be stacked one upon another as shown in Figure 3. In this instance, shoulder 14 of lower cover 9 engages in the recess 15 in upper cover 9ª, whereby lateral movement of the covers is prevented. The thickness of portion 9ᵇ of the covers is so proportioned with respect to the height of shoulder 14 that such portion 9ᵇ of the covers will seat on a similar portion of the cover therebeneath and the weight of the uppermost covers will not, therefore, cause the shoulder 14 to become jammed in the recess 15 with consequent possible splitting or breakage of the lowermost covers of the stack.

While a preferred embodiment of the invention has been illustrated and described, by way of example, it will be obvious changes may be made therein within the spirit and scope of the invention and, therefore, the invention is not to be limited to the precise form herein described, except in so far as it may so be limited by the appended claim.

We claim:

In combination, two similar receptacles, and similar covers therefor, each of said receptacles being provided in the under face of its bottom wall with a concentric recess, each of said covers having an outer thickened portion of a size to fit within the upper end of said body and a peripheral flange of reduced thickness disposed to seat upon the upper end of said body, each of said covers being further provided with a concentric recess in its under face of substantially the same diameter as the recess in the bottom and a projection at its upper face concentric with and of less height and less diameter than said recess of said cover, said projection of each cover being adapted to fit into the recess of the other cover and into the recess in the bottom wall of either receptacle body, said receptacles and covers being disposed in stacked relation with the cover of the lower receptacle body fitting therein and seating thereon with its projection fitting into the recess in the bottom wall of the upper receptacle.

JAMES H. DEVINE.
WILLIAM T. HALVORSEN.