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LID FOR RECEPTACLES

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Certain products, which may or may not be perishable, and especially products in powder form, are delivered to consumers in tins which are hermetically closed but which are provided with a lid of large diameter so that after the tin has been opened, the user can readily remove the contents in small portions, for example with a spoon. These tins are often manufactured with great care, for example the interior is tinned, and it is an advantage for the housewife to use them again when they are empty, for the storage of other products.

The present invention has been particularly developed with the object of providing a removable lid or cover which gives a hermetically-sealed closure for receptacles which are tinned, still containing the original perishable product, and is constructed so as to provide various facilities for the user, especially that of being able to remove the product in measured quantities and to be employed as a pouring lid.

A special feature of the lid which forms the object of the invention is that it comprises an orifice which is closed by a fluid-tight diaphragm and is edged with a collar so as to hold by friction a measuring top which can serve as a closure device after removal of the diaphragm.

By virtue of this particular feature, when once the hermetically-closed receptacle has been opened, it is possible to reclose it with a removable lid which itself provides a good air-tightness, to put in its place, without risk of losing it and also without becoming buried in the contents of the receptacle, a cup which enables measured quantities to be taken out, and finally, when the receptacle has been emptied and it is desired to keep another product in it, to tear-off the diaphragm so as to expose the orifice which can then be used as a pouring orifice, the cup being then used as a stopper.

In accordance with a further special feature of the invention, the pouring cup is provided with a handle which is in turn provided with a hanging lip, by means of which the user can hook it, for example on the edge of the receptacle when it is not required for taking out the product.

The lid can finally be provided, in the vicinity of the orifice, with retaining members such as clips, and the cup can be provided with lugs intended to be engaged in these retaining members so as to ensure a better fixation of the cup in the position in which it serves as a stopper for the orifice.

The lid may be of flexible plastic material and may be provided with a wide peripheral edge so as to ensure a good air-tightness when it is fitted on the receptacle; the collar which borders the orifice of the lid may form a projection on the outer face of the latter and may carry the diaphragm at its upper portion.

The cup and its handle are preferably made of a plastic material which can be sterilized.

The description which follows below with reference to the accompanying drawings (which are given by way of example only and not in any sense by way of limitation) will make it quite clear how the invention may be carried into effect, the special features which are brought out, either in the drawings or in the text, being understood to form a part of the said invention.

Fig. 1 is a view in elevation with a partial diametral cross-section, of a receptacle provided with a lid produced in accordance with the invention; Fig. 2 is a partial plan view of the cover; Fig. 3 is a plan view of the measuring cup.

Fig. 4 is a partial cross-section taken along the line IV—IV of Fig. 3.

In the example chosen to illustrate the invention, the lid constructed in conformity with the invention has been shown in position on a cylindrical receptacle for the conservation of powdered milk in an atmosphere of nitrogen after the air has been exhausted. This receptable, the body of which is shown at 1, is normally closed by a soldered upper plate 2 which is depressed to have a dished form. The plate 2 is joined to the body 1 of the tin by a peripheral band 3 which is removed in known manner by means of a key. Internally, the body of the tin 1 is provided at its upper part with a sleeve 4 of plastic material, which has a lower rolled edge 10, imprisoned in a peripheral fold 1a of the body 1 and having an upper rolled edge 9 which protects the user’s fingers, when the receptacle has been opened, against direct contact with the upper edge of the body 1 which has a sharp edge.

The lid formed in accordance with the invention and delivered with the receptacle, comprises a disc 6 surrounded by an edge 7 forming a thick rolled portion 1a above the disc and extending below a thin sleeve 7b.

A groove 8 along the edge 7 under the lid is intended to receive the edge of the upper plate 2 of the receptacle and inside the sleeve 7b is provided a peripheral groove 9 in which is engaged the lower rolled portion 10 of the ring 4 when the plate 2 is removed. By virtue of this fitting, a good fluid-tightness is obtained between the lid 6 and the body 1.

The disc 6 is provided on one side with an opening 11 having at its edge a collar 12 projecting from the top of the lid and closed at its upper portion by a diaphragm 13 which can be removed by tearing.

In the collar 12 is fitted underneather a measuring cup 14 provided with a handle 15 which is provided with a hooking member 16. Between the cup 14 and the hook 16, the handle 15 is provided with two lugs 17; directly above these lugs (the cup being assumed to be in position inside the collar 12) the disc 6 is provided on its upper face with two projecting clips 18, the openings of which are adapted to receive and grip the lugs 17.

The disc 6, the roll 7, the collar 12 and the clips 18 are preferably made from a single piece of flexible plastic material; the handle 4 may be of relatively hard plastic material; finally, the cup 14, its handle 15, its hook 16 and its lugs 17 are for their part, preferably made of a plastic material which can be sterilized.

When the upper plate 2 has been detached and it is desired to take out measured quantities of the contents from the receptacle 1, the cup 14 is removed from the lid. It is then used as a spoon, and when it is not so used and the lid is removed, it may for example, be hung by its hook 16 on the edge of the receptacle.

When the receptacle has been emptied and it is desired to use it for another purpose, it is only necessary to tear-off the diaphragm 13 so as to free completely the orifice 11, which can then be used as a pouring orifice.

In order to close this orifice, the cup 14 is turned upside down with respect to its position shown in the drawings and it is engaged in the collar 12, the lugs 17 being engaged in the clips 18. Since the handle 15 has in general
not longer any useful function, it can very simply be removed by cutting it off with scissors between the lugs 17 and the hook 16.

It will of course be understood that modifications may be made to the forms of embodiment which have just been described, in particular by the substitution of equivalent technical means, without thereby departing from the spirit or from the scope of the present invention.

What I claim is:
1. A removable lid for a receptacle comprising a disk having a peripheral flange to overlie the side wall of the receptacle, said disk having inner and outer faces and being formed with an opening, a collar upstanding from the outer face and surrounding the opening, a frangible diaphragm secured to the outer edge of the collar and closing off the opening, a reinforcing member fitted in the opening and having a side wall shaped complementary to the opening and frictionally fitted therein, said member having a flat wall connected to one end of the side wall and underlying and reinforcing the diaphragm, a flat marginal flange on the opposite end of the side wall engaging the inner face of the disk to limit the insertion of the reinforcing member into the opening, a flat co-planar appendage on the flange serving to act as a lever in the removal of the reinforcing member from the opening, said reinforcing member when the diaphragm is removed being adapted to be inserted into the collar and close off the opening with the flange seating on the edge of the collar and said outer face of the disk having supporting means, said appendage and the supporting means being formed with inter-engaging means for pivotally mounting the member on the outer face of the disk.
2. A removable lid as claimed in claim 1, wherein said disk on its inner face adjacent the peripheral flange is formed with a groove to receive the edge of the side wall of the receptacle.

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