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73 Proprietor: **R.B. BLOWMOULDERS LIMITED**
Butchers Road
London E16 1PH (GB)

72 Inventor: **Bowers, Henry Frederick**
38 Farm Way
Elm Park Hornchurch Essex (GB)

74 Representative: **Mayes, Stuart David et al**
BOULT, WADE & TENNANT 27 Farnival Street
London, EC4A 1PQ (GB)

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Description

This invention relates to a barrel assembly comprising a hollow barrel and a skirt of plastics material for supporting the barrel.

Barrel assemblies of this type are known and an example is described in GB—A—2001032. The containers shown therein are fitted with supporting chimes which may be attached by shape locking, but the containers have only an upper opening and thus there is no need to provide for a lower, radial opening. Another barrel assembly of the aforesaid type, for brewing beer, is shown in GB—A—1437321, but this assembly has the disadvantage of bad stability due partly to the fact that the supporting base member engages the hollow body at its lower end, below the opening in the body.

The invention seeks to alleviate this disadvantage and provides a barrel assembly comprising a hollow barrel of plastics material and having at least a lower opening therein facing substantially radially adjacent the lower end of the barrel, and a skirt of plastics material for supporting the barrel, either the barrel or the skirt having a lip formed thereon and resiliently engageable in a complementary groove formed in the skirt or the barrel respectively to attach the skirt to the barrel and the skirt having an aperture therein for cooperation with the lower opening in the barrel to allow emptying of the barrel through the lower opening and aperture.

Thus the invention has the advantage that the skirt can engage the barrel above the lower opening resulting in good stability.

The invention has the further advantage that the lip and groove engagement allows easy attachment and detachment of skirt and barrel.

Preferably, the lip is formed on the skirt and the groove is formed in the exterior of the barrel. For convenience, the groove may extend around the barrel in a direction perpendicular to the axis of the barrel. The plastics material of the skirt may have sufficient resilience that the engagement of the lip with the groove is a snap-fit, this having the advantage that the skirt can exert a good grip on the barrel.

The skirt is preferably substantially bowl-shaped with a base portion from which a peripheral wall extends upwardly for interengagement with the barrel, this shape allowing convenient blow-moulding of the skirt. The base portion may be recessed so that one assembly may be stacked on top of a second assembly with the base portion of the one assembly resting on an upper surface of the barrel of the second assembly. If the barrel has an upper projecting opening, this recessed base has the further advantage of providing clearance for such opening in stacking of several barrel assemblies.

The barrel and skirt may be shaped so that the assembly has a substantially symmetrical external shape when the skirt is engaged with

the barrel, giving a good external appearance and allowing the assembly to be given the general appearance of a traditional beer barrel of wooden staves and iron hoops.

The lower end of the barrel may be substantially rounded in shape, this having the advantage of easier blow-moulding than a flat or recessed end. Such a rounded lower end is further advantageous in providing better resistance to internal pressure such as is caused when brewing beer or making wine in the barrel.

An embodiment of the invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Figure 1 is a front elevation of a barrel assembly for brewing beer;

Figure 2 is a sectional view of the assembly of Figure 1 taken on the plane X—X.

A barrel assembly generally designated 1 comprises a barrel 10 and a peripheral supporting skirt 11. The skirt 11 and barrel 10 are attached together by means of an inner lip 12 formed on the skirt 11 and a complementary annular groove 13 formed in the exterior of the barrel. The skirt 11 is formed such that the lip 12 has an inner diameter when relaxed slightly less than the outside diameter of the barrel adjacent the groove 13 so as to provide a "snap-fit" of the lip 12 and groove 13. The barrel 10 and skirt 11 are of blow-moulded thermoplastics material which has sufficient resilience to permit the snap-fit of the skirt onto the barrel and gives an external appearance similar to the traditional form of wooden barrel with iron hoops.

The barrel 10 has an upper opening 16 the exterior of which is threaded for closure by a screw cap 17. The barrel 10 also has a lower opening 18 which may be fitted with an outlet tap (not shown) for dispensing beer or other liquid from the barrel. An aperture 19 aligned with the opening 18 is formed in the skirt 11 to allow the outlet tap to project outwardly there-through.

The skirt 12 comprises a base portion 20 with a recess 21 and a platform 22 on which the barrel 10 rests in use. One barrel assembly 1 may be stacked on another by virtue of the recess 21 of the one assembly giving clearance for the cap 17 of the other assembly, the weight of the one assembly being transferred by the base portion 20 thereof to the upper end of the barrel 10 of the other assembly. Thus several barrel assemblies may be stacked on top of each other.

A handle may be attached to the upper end of the barrel 10 to facilitate transport of the barrel manually.

A hole may be formed in the centre of the platform 22 with slots in the platform 22 extending radially from the hole.

An advantage of the assembly described above is that the skirt provides a rugged support and firm footing for the barrel. The skirt also protects the lower part of the barrel from

impact.

The barrel and skirt may alternatively be formed by rotation moulding, a process in which a predetermined amount of plastic powder is poured into a hollow mould which is then heated until the plastic melts and then rotated so that the plastic forms a skin on the inside of the mould. An advantage of using this rotation moulding technique is that a very even wall thickness and surface finish of moulded article results.

A further alternative for forming the skirt is to use the technique of injection moulding.

It will be clear that it is not necessary to use the same method for forming both skirt and barrel.

Claims

1. A barrel assembly (1) comprising a hollow barrel (10) of plastics material and having at least a lower opening (18) therein facing substantially radially adjacent the lower end of the barrel, and a skirt (11) of plastics material for supporting the barrel, either the barrel (10) or the skirt (11) having a lip (12) formed thereon and resiliently engageable in a complementary groove (13) formed in the skirt or the barrel respectively to attach the skirt to the barrel and the skirt having an aperture (19) therein for cooperation with the lower opening (18) in the barrel (10) to allow emptying of the barrel through the lower opening (18) and aperture (19).

2. A barrel assembly as claimed in claim 1 characterised in that the lip (12) is formed on the skirt (11) and the groove (13) is formed in the exterior of the barrel (10).

3. A barrel assembly as claimed in claim 2 characterised in that the groove (13) extends around the barrel (10) in a direction perpendicular to the axis of the barrel.

4. A barrel assembly as claimed in any preceding claim characterised in that the skirt (11) is formed of resilient material such that the engagement of the lip (12) with the groove (13) is a snap-fit.

5. A barrel assembly as claimed in any preceding claim characterised in that the skirt (11) is substantially bowl-shaped, having a base portion (20) from which a peripheral wall extends upwardly for interengagement with the barrel (10).

6. A barrel assembly as claimed in claim 5 characterised in that the base portion of the skirt (11) is recessed so that one assembly may be stacked on top of a second assembly with the base portion of the one assembly resting on an upper surface of the barrel (10) of the second assembly.

7. A barrel assembly as claimed in any preceding claim characterised in that the barrel (10) and skirt (11) are shaped so that the assembly has a substantially symmetrical external shape when the skirt is engaged with the

barrel.

8. A barrel assembly as claimed in any preceding claim characterised in that a lower end of the barrel (10) is substantially rounded in shape.

Revendications

1. Ensemble tonneau (1) comprenant un tonneau (10) en matière plastique et ayant au moins une ouverture inférieure (18) d'orientation sensiblement radiale au voisinage de l'extrémité inférieure du tonneau, et une jupe (11) en matière plastique pour supporter le tonneau, soit le tonneau (10) soit la jupe (11) présentant une lèvre (12) adaptée à s'engager élastiquement dans une rainure complémentaire (13) formée soit dans la jupe soit dans le tonneau, respectivement, pour solidariser la jupe avec le tonneau et la jupe présentant une ouverture (19) pour coopérer avec l'ouverture inférieure (18) dans le tonneau (10) en vue de permettre le prélèvement du contenu du tonneau à travers l'ouverture inférieure (18) et l'ouverture (19).

2. Ensemble tonneau selon la revendication 1, caractérisé en ce que la lèvre (12) est formée sur la jupe (11) et la rainure (13) est formée dans l'extérieur du tonneau (10).

3. Ensemble tonneau selon la revendication 2, caractérisé en ce que la rainure (13) s'étend autour du tonneau (10) dans une direction perpendiculaire à l'axe du tonneau.

4. Ensemble tonneau selon l'une quelconque des revendications précédentes, caractérisé en ce que la jupe (11) est formée en matériau élastique de sorte que l'engagement de la lèvre (12) avec la rainure (13) constitue en encliquetage.

5. Ensemble tonneau selon l'une quelconque des revendications précédentes, caractérisé en ce que la jupe (11) présente une forme de bol ayant une partie de base (20) à partir de laquelle s'étend vers le haut une paroi périphérique pour engagement avec le tonneau (10).

6. Ensemble tonneau selon la revendication 5, caractérisé en ce que la partie de base de la jupe (11) est évidée de sorte qu'un ensemble puisse être gerbé sur un second ensemble, la partie de base d'un des ensembles reposant sur la surface supérieure du tonneau (10) du second ensemble.

7. Ensemble tonneau selon l'une quelconque des revendications précédentes, caractérisé en ce que le tonneau (10) et la jupe (11) sont conformés de telle sorte que l'ensemble présente une forme externe sensiblement symétrique lorsque la jupe est engagée sur le tonneau.

8. Ensemble tonneau selon l'une quelconque des revendications précédentes, caractérisé en ce qu'une extrémité inférieure du tonneau (10) présente une forme sensiblement arrondie.

Patenansprüche

1. Faßanordnung (1), umfassend ein hohles

Faß (10) aus Kunststoff mit mindestens einer unteren Öffnung (18), die nahe dem unteren Faßende radial gerichtet ist, und eine Einfassung (11) aus Kunststoff zum Tragen des Fasses (10), wobei entweder das Faß (10) oder die Einfassung (11) einen Rand (12) hat, der elastisch in eine komplementäre Vertiefung (13) in der Einfassung (11) bzw. in dem Faß (10) eingreift, um die Einfassung (11) an dem Faß (10) zu befestigen, und wobei die Einfassung (11) eine Öffnung (19) in Bereich der unteren Öffnung (18) des Fasses (10) hat, um ein Entleeren des Fasses (10) durch die untere Öffnung (18) und die Öffnung (19) hindurch zu ermöglichen.

2. Faßanordnung nach Anspruch 1, dadurch gekennzeichnet, daß der Rand (12) an der Einfassung (11) und die Vertiefung (13) an der Außenseite des Fasses (10) ausgebildet ist.

3. Faßanordnung nach Anspruch 2, dadurch gekennzeichnet, daß die Vertiefung (13) um das Faß (10) herum in Richtung rechtwinklig zu dessen Achse verläuft.

4. Faßanordnung nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, daß die Einfassung (11) aus elastischem Material besteht, so daß das Eingreifen des

Randes (12) in die Vertiefung (13) nach Art eines Schnappsitzes erfolgt.

5. Faßanordnung nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, daß die Einfassung (11) im wesentlichen becherförmig ist und einen Grundteil (20) mit einer nach oben stehenden Umfangswand hat, die mit dem Faß (10) in gegenseitigem Eingriff steht.

6. Faßanordnung nach Anspruch 5, dadurch gekennzeichnet, daß das Grundteil (20) der Einfassung (11) eingezogen ist, so daß eine Faßanordnung (1) auf einer Zweiten Faßanordnung gestapelt werden kann, wobei der Grundteil (20) der einen (1) auf einer oberen Fläche der anderen Faßanordnung ruht.

7. Faßanordnung nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, daß das Faß (10) und die Einfassung (11) so geformt sind, daß die Faßanordnung (1) bei in der Einfassung sitzendem Faß (10) eine im wesentlichen symmetrische Außenform hat.

8. Faßanordnung nach einem der vorhergehenden Ansprüche, dadurch gekennzeichnet, daß ein unteres Ende des Fasses (10) eine im wesentlichen abgerundete Form hat.

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