CONVENTION. By one or more persons and/

COMMONWEAL

Patents

CONVENTION APPLICATION FOR A PATENT

XX

We hereby apply for the grant of a Patent for an invention entitled:

AN APPARATUS FOR RECEIVING WASTE MATERIAL AND THEIR TRANSFER OR DISCARDING INTO A SUBSTANTIALLY HERMETICALLY SEALED RECEPTACLE,

which is described in the accompanying complete specification. This application is a Convention application and is based on the application numbered

for a patent or similar protection made in


Dated this 25th day of November 1974

SOCIETE FRANCO-HISPANO-AMERICaine (FRANCIISPAN)

Edw. Waters Sons, Patent Attorneys,
50 Queen Street, Melbourne, Victoria, Australia.

To:

THE COMMISSIONER OF PATENTS.

Edw. Waters & Sons, Melbourne.
COMMONWEALTH OF AUSTRALIA
Patents Act 1952-1969

DECLARATION IN SUPPORT OF A CONVENTION APPLICATION FOR A PATENT OR PATENT OF ADDITION

In support of the Convention Application made by the applicant for a Patent for an invention entitled,

AN APPARATUS FOR RECEIVING WASTE MATERIAL AND THEIR TRANSFER OR DISCARDING INTO A SUBSTANTIALLY IRREMUTICLALLY-SEALED RECEPTACLE.

of 17-19 rue Robert Joubel - 95210 Saint-Ouen, France. do solemnly and sincerely declare as follows:

1. I am authorised by the applicant for the patent to make this declaration on its behalf.

2. The basic application as defined by Section 141 of the Act was made in France on the 3rd day of December 1973, by PIERRE ANDRE TOURNIER.

3. The said PIERRE ANDRE TOURNIER, of Residence 24, 5, rue des Clos de la Famille - 78240 Chambourcy, France, is the actual inventor of the invention and the facts upon which the applicant is entitled to make the application are as follows:

The applicant is the assignee of the said PIERRE ANDRE TOURNIER.

4. The basic application referred to in paragraph 2 of this Declaration was the first application made in a Convention country in respect of the invention the subject of the application.

DECLARED at Paris, France this 15th day of November 1974.

Signature:
Edw. Waters & Sons, Melbourne.

To: THE COMMISSIONER OF PATENTS.
Name of Applicant: SOCIETE FRANCO-HISPANO-AMERICAINE (FRANCISPAM).

Address of Applicant: 17-19 rue ROBERT JOUBEL - 95210 SAINT-GRATIEN, FRANCE.

Actual Inventor: PIERRE ANDRE TOURNIER.

Address for Service: EDWD. WATERS & SONS, 30 RUSSELL STREET, MELBOURNE, AUSTRALIA. 3000.

Complete Specification for the invention entitled:

"AN APPARATUS FOR RECEIVING WASTE MATERIAL AND THEIR TRANSFER OR DISCARDING INTO A SUBSTANTIALLY HERMETICALLY SEALED RECEPTACLE"

The following statement is a full description of this invention, including the best method of performing it known to us:

1.

3, 3, 77.
The present invention relates to an apparatus for receiving waste material and the transfer thereof into a substantially hermetically sealed receptacle. This apparatus can be used in particular as an ash tray, crumb tray etc.

It is known that the transfer or discarding of waste material of relatively small dimensions presents problems due to their dispersion, particularly in the case when an ash tray is emptied into a waste-paper basket where frequently some of the cigarette ends and ash pass through the lateral openings generally provided in waste-paper baskets. Furthermore, there is a certain fire risk due to incompletely extinguished cigarette ends. It is also known that the cleaning of ash trays is particularly unpleasant and difficult due to tar deposits.

The apparatus according to the present invention obviates the above disadvantages because it makes possible the discarding of waste into a substantially enclosed receptacle which can be made from a non-inflammable material.

The object of the present invention is an apparatus for receiving waste and the transfer thereof into a substantially hermetically sealed receptacle, whereby the said apparatus has a support plate comprising two rigid members articulated to one another which can have an open position wherein the upper portion of the said support plate has a slot, a removable receptacle made from thin pliable material arranged in the said slot having a shape corresponding to that of the slot, and provided with a ledge whereby the said support plate can occupy a closed position obtained by pivoting the said two members about an opening axis of symmetry of the said slot, and wherein the edges of the receptacle located on
either side of the axis of symmetry are applied to one another by folding the said receptacle along the said axis of symmetry, so that waste material in the receptacle is enclosed in a substantially sealed space.

It should be noted that the slot in the support plate can have various configurations corresponding more particularly to a circular cross-section (e.g. in the form of a coupler or cup) or a parallelogram-shaped cross-section (e.g. a lozenge, rectangle or square) when, for example the slot is trough-shaped. Hereinafter for reasons of simplicity reference will be made solely to "a slot having substantially the shape of a cup", whereby it is to be understood that this expression must be broadly interpreted to cover slots with the shape of a coupler, trough etc.

According to an advantageous embodiment of the invention, the support plate comprises two half-cups whose upper portion comprises a ledge extending over the entire periphery thereof, articulation means being arranged between the corresponding ends of the edges. The rigidity of the support plate can be improved by reciprocal centering and maintaining means for the two half-cups. Each half-cup can, for example, have a projecting member located at its lower end, whereby the lower wall of one half-cup is supported on the projecting member of the outer half-cup in the open position of the support.

Preferably the articulation means of the two rigid members (such as half-cups) of the support plate comprise an elastic hinge, whereby the elastic force of the said hinge maintains the two rigid members in a position corresponding to the open position of the support.
The present invention also has for its object a support plate which can be used in an apparatus of the type described hereinbefore, and having the characteristics indicated hereinbefore.

The present invention also has for its object a receptacle which can be used in an apparatus of the type indicated hereinbefore. This receptacle preferably comprises a cup made from thin pliable material whose upper portion is bordered by a flange which rests on the peripheral ledge of the support plate. In order to facilitate the adhesion of the edges of the receptacle after folding, the latter can be coated with a self-adhesive coating and/or the edges of the half-cups can have reciprocal engagement means in the closed position of the support.

The present invention also has for its object a base which receives the said support plate in detachable manner with nest fitting. The said base can advantageously form a reserve for receptacles.

The invention will be better understood from reading the following detailed description with reference to the attached drawings which show as non-limitative examples several embodiments of the invention.

In the drawings show:

Fig. 1, a perspective view of the apparatus according to a first embodiment of the invention;

Fig. 2, a plan view on a different scale of the support plate of the apparatus of fig. 1;

Fig. 3, a sectional detail along the line III-III of fig. 2;

Fig. 4, a sectional detail along the line IV-IV of
Fig. 2; Fig. 5, a support plate in the intermediate position between the open and closed positions;
Fig. 6, a perspective view of a receptacle according to the invention;
Fig. 7, a perspective view of the receptacle of fig. 6 after folding;
Fig. 8, a perspective view of a support plate according to a variant of the invention;
Fig. 9, a plan view of a support plate according to another variant;
Fig. 10, a plan view of a support plate according to another variant;
Fig. 11, a section of a detail of the support plate with maintaining means for a receptacle edge;
Fig. 12, the base of the apparatus shown in fig. 1.
The apparatus according to the embodiment of the invention shown in fig. 1 has a base 1, a support plate 2 and a detachable receptacle 3.
The support-plate 2 (fig. 2) has two rigid half-cups 4,5 with respectively a ledge 4a and 5a. The two half-cups 4,5 are articulated to one another and can occupy an open position (position shown in fig. 2) wherein the support plate 2 has a slot 6 which can be cup-shaped, as well as a closed position obtained by pivoting the two half-cups 4,5 about an axis of symmetry A-A' of the opening 7 of slot 6. Fig. 5 shows support plate 2 in an intermediate position between the open and closed positions, whereby the arrows indicate the respective displacement directions of each half-cup 4,5 towards a completely closed position, wherein the ledges 4a
and 5a are applied against one another. The two half-cups 4,5 are articulated to one another by means of two elastic hinges 8,9 arranged between and underneath the corresponding ends of ledges 4a and 5a. Each hinge (fig. 3) comprises a ring 10 made from elastic material connecting ledges 4a and 5a, and engaged under each of these ledges in a notch 4b and 5b respectively of a projecting member 4c and 5c respectively. The elastic force of ring 10 maintains the two half-cups 4,5 in the open position. Reciprocal centering and maintaining means of the two half-cups are provided in the form of two projecting members 4d and 5d (see figs. 2 and 4) located at the lower end of the half-cups. In the open position of the support plate, the lower wall of each half-cup is supported on the projecting member of the other half-cup. Each half-cup 4,5 has in addition a lug 4e, 5e located in an extension of ledges 4a and 5a respectively. The lugs 4e and 5e facilitate the gripping of support plate 2 and its positioning on base 1.

Receptacle 3 (fig. 6) comprises a cup made from a thin pliable material, for example, paper, a plastic film or an aluminium sheet, and its upper portion is bordered by a flange 11. Preferably a fireproof material is used. When the receptacle 3 is placed on support plate 2, flange 2, flange 11 rests on ledges 4a and 5a and in the closed position of support plate 2 the portions of flanges 11 corresponding to ledges 4a and 5a are applied against one another. The waste material in receptacle 3 is then enclosed in a substantially sealed area (fig. 7). In order to facilitate the sealing of receptacle 3, flange 11 can advantageously have a self-adhesive coating so that when no further pressure is exerted by ledges 4a and 5a the corresponding portions of the flange
11 remain applied against one another. To improve contact between the portions of flange 11 applied to one another, the corresponding zones of ledges 4a and 5a can have grooves (not shown). It is also possible to provide the ledges of the half-cups with reciprocal engaging means in the closed position. According to the embodiment shown in fig. 8, these reciprocal engaging means comprise studs 12 and recesses 13.

According to another embodiment shown in fig. 9, ledge 14a and 15a of each half-cup 14 and 15 respectively has a groove 14r and 15r and a rib 14n and 15n respectively. Groove 14r and rib 14n each have the form of a half-circle of the same radius whose respective centres Or and On located on the axis of symmetry BB' are staggered by the same distance on either side of the median axis MM'. Groove 15r and rib 15n are arranged in similar manner, but the centre of rib 14n corresponds to the centre of groove 15r and the centre of groove 14r corresponds to the centre of rib 15n. Thus when the half-cups 14 and 15 are in the closed position, rib 14n engages in groove 15r and rib 15n in groove 14r.

According to another embodiment shown in fig. 10, each half-cup 16, 17 has a groove 16r, 17r respectively, and a rib 16n, 17n respectively. Groove 16r and rib 16n on the one hand, and groove 17r and rib 17n on the other are symmetrical relative to the median axis NN'. Half cups 16, 17 can also have means for maintaining the peripheral edge of the receptacle. These means prevent sliding of the edges of the receptacle during the passage from the open position to the closed position. The means for maintaining the receptacle edge comprise a groove 18, 19 on half-cups 16, 17 respectively. In this case a receptacle 22 is used whose edge 20 of flange 21
is turned downwards and engages in grooves 18 and 19 (fig. 11).

It should be noted that in the embodiments described and represented, the two half-cups are identical, i.e. they can be made with the same mould.

The apparatus according to the embodiment shown in fig. 1 has a base 1 receiving the support plate 2 in a detachable manner with sitting by nesting. Base 1 (fig. 12) has a base wall 23 and a lateral wall 24, whose upper portion has a shoulder 25 which supports plate 2. Lateral wall 24 has two notches 26, 27 which are adapted to receive lugs 4e and 5e of the support plate (fig. 1). Base 1 can constitute a reserve for receptacles whereby notches 26 and 27 make it possible to check this reserve of receptacles 3' (fig. 1). The lower surface of base 1 can have reliefs and hollows (not shown) which are complementary to the reliefs and hollows on the upper surface, making it possible to nest several bases in one another.

An advantageous manner of packaging receptacle refills, particularly for sale, consists of placing several nested receptacles in a base whose upper portion optionally has detachable protection or retaining means. After separating the retaining means the base can receive a supporting plate.

Obviously the invention is not limited to the embodiments described and represented and the skilled expert can make numerous modifications thereto depending on the envisaged applications and without passing beyond the scope of the invention.

For example, the refills can also be packaged by placing the receptacles in an external protection of shape 28
in fig. 12. In this case the base comprises two parts, an external lateral wall 24 and a base 23 on the one hand, and an inner lateral wall 28 which is detachable and also serves as a shoulder 25.
CLAIMS
The claims defining the invention are as follows:

1. An apparatus for receiving waste material and their transfer or discarding into a substantially hermetically sealed receptacle, wherein the said apparatus comprises a support plate comprising two rigid members articulated to one another which can have an open position wherein the upper portion of the said support plate has a slot, a removable receptacle made from thin pliable material arranged in the said slot having a shape corresponding to that of the slot, and provided with a ledge whereby the said support plate can occupy a closed position obtained by pivoting the said two members about an opening axis of symmetry of the said slot, and wherein the edges of the receptacle located on either side of the axis of symmetry are applied to one another by folding the said receptacle along the said axis of symmetry, so that waste material in the receptacle is enclosed in a substantially sealed space.

2. An apparatus according to claim 1, wherein the support plate comprises two half-cups whose upper portion has a ledge extending over the entire periphery thereof, whereby articulation means for the said half-cups are arranged between the corresponding ends of the ledges of the said half-cups.

3. An apparatus according to claim 2, wherein the ledge of each half-cup has a lug located in the extension of the said ledge.

4. An apparatus according to one of the claims 2 or 3,
wherein the said articulation means comprise an elastic hinge.

5. An apparatus according to any one of the claims 2 to 4, wherein the half-cups have reciprocal centering and maintaining means.

6. An apparatus according to claim 5, wherein the reciprocal centering and maintaining means comprise on each half-cup a projecting member located at the lower end of the said half-cup, whereby the lower wall of one half-cup is supported on the projecting member of the other half-cup in the open position of the support.

7. An apparatus according to any one of the claims 2 to 6, wherein the ledge of each half-cup has means for maintaining the peripheral edge of the receptacle.

8. An apparatus according to claim 7, wherein the means for maintaining the peripheral edge of the receptacle comprise a groove wherein engages the said peripheral edge.

9. An apparatus according to any one of the claims 2 to 8, wherein the ledges of the half-cup have grooves.

10. An apparatus according to any one of the claims 2 to 9, wherein the ledges of the half-cup have reciprocal engaging means in the closed position of the support.

11. An apparatus according to claim 10, wherein the reciprocal engaging means comprise studs and recesses.
12. An apparatus according to claim 10, wherein the reciprocal engaging means comprise at least one rib and one groove.

13. An apparatus according to claim 12, wherein the ledge of each half-cup has at least one groove and at least one rib symmetrical relative to the median axis of the upper portion of the said half-cup.

14. Apparatus according to claims 12 or 13, wherein the ledge of each half-cup has a groove and a rib, whereby each has the shape of a half-circle of the same radius whose respective centres located on the folding axis of the support plate are staggered by the same distance on either side of the median axis of the upper portion of the said half-cup.

15. An apparatus according to any one of the claims 1 to 14, wherein the two members forming the support plate are identical.

16. An apparatus according to any one of the claims 1 to 15, wherein it comprises a base which receives the support plate in detachable manner with nest fitting.

17. A base usable in an apparatus according to claim 16, wherein it comprises a base wall and at least one partial lateral wall, whereby the upper edge of the said lateral wall serves as a support for the support plate and the said support comprises a reserve for receptacles.
18. A base according to claim 17, wherein its lateral wall has at least two notches permitting a check to be made on the reserve of receptacles, facilitating the gripping and handling of the support plate, being adapted to receive lugs located in the extension of the support plate ledge.

19. A base according to either of the claims 17 or 18, wherein the upper surface has reliefs and hollows complementary to the reliefs and hollows of its lower surface so that several of the said bases can be nested in one another.

20. A receptacle which can be used in an apparatus according to any one of the claims 1 to 16, wherein it comprises a cup made from thin pliable material whose upper portion is bordered by a flange which rests on the peripheral ledge of the support plate.

21. A receptacle according to claim 20, wherein the flange is covered with a self-adhesive coating.

22. A receptacle according to either of the claims 20 or 21, wherein the thin pliable material from which the receptacle is made is fireproof.

23. A receptacle according to any one of the claims 20 to 22, wherein the edge of the flange is turned downwards.

24. A base according to any one of the claims 17, 18 or 19, wherein its upper portion has retaining or protection means for a plurality of receptacles according to any one of
the claims 20, 21, 22 or 23 which are placed nested in one another in the said base.

25. A support plate usable in an apparatus according to any one of the claims 1 to 16, wherein it comprises two half-cups articulated to one another.

26. A base according to any one of the claims 17, 18, 19 or 24, wherein the lateral wall serving as a support for the support plate is an inner detachable and interchangeable wall.

27. Apparatus for receiving waste material and its transfer or discarding into a substantially hermetically sealed receptacle substantially as described herein with reference to and as shown in the accompanying drawings.

DATED THIS 28TH DAY OF JANUARY, 1975.

SOCIETE FRANCO-HISPANO-AMERIKAINE
(FRANCISPAM).

I certify that this and the preceding pages are a true and exact copy of pages of the specification originally lodged.

J. A. Barnes.
30 Jan 1975

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DRAWINGS