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(71) Applicant: **NEPROMA B.V.**
Pieter Calandweg 2
NL-6827 BK Arnhem(NL)

(72) Inventor: **Eger, Arthur Otto**
Nieuwendammerdijk 120
NL-1025 LR Amsterdam(NL)
Inventor: **De Ligny, Tammo Hylke Ravia**
Floris Heermalestraat 13
NL-3514 VV Utrecht(NL)

(74) Representative: **Smulders, Theodorus A.H.J., Ir. et al**
Vereenigde Octrooibureaux Nieuwe Parklaan 107
NL-2587 BP 's-Gravenhage(NL)

(54) Dispenser for returnable articles.

(57) A dispenser having a substantially fixed form with a withdrawal opening. A storage receptacle portion (1) links up with a second receiving receptacle portion (2) comprising a chamber (5), there being provided a third collecting receptacle portion (3) fitting in said chamber (5), to provide substantial surface-to-surface contact with the walls of chamber (5). The walls of the storage and the receiving portion may define at least two contacting faces (12, 13), intersecting one another at right angles. Both the withdrawal opening (4) and, in the placed condition, the depositing opening (6) are disposed at an angle of about 45° with respect to these two contacting faces (12, 13) and parallel to the line of intersection (16) between said two contacting faces (12, 13).

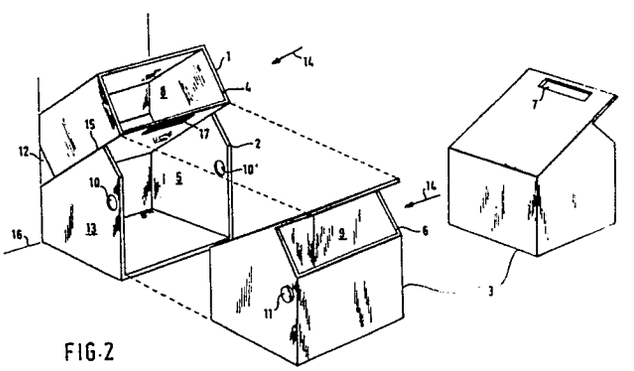

FIG.2

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Dispenser for returnable articles

This invention relates to a dispenser or receptacle having a substantially fixed form with a withdrawal opening.

For various applications, articles are collected again, after use, to be subsequently made suitable for reuse by means of cleaning. This is in particular the case with towels, such as for drying and wiping. These cloths are deposited, after use, in a separate receptacle in which they are taken to laundry facilities. A problem is then that the two receptacles should be accommodated separately and should be readily accessible, so that the articles can be taken out and disposed of with facility. This situation entails a number of drawbacks, such as a cumbersome installation of the separate receptacles, a disorderly appearance, a relatively large occupied space and the risk of confusion with other receptacles for the collection of waste.

It is an object of the present invention to provide a dispenser which solves and removes these problems and drawbacks.

To that effect, the present invention provides for a storage receptacle portion linking up with a second receiving receptacle portion comprising a chamber, and a third collecting receptacle portion fitting said chamber to provide substantial surface-to-surface contact with the walls of said chamber.

In this manner, there is obtained a dispenser housing both the stock of unused articles and the used articles to be subsequently returned. It will suffice to place only one element, which is relatively simple and occupies only one readily accessible place, while the disposition of the collecting receptacle portion in the receiving receptacle portion provides for this collecting receptacle portion to be placed in position in a simple manner, in which position it is fixed, but yet quickly removable.

In particular when the device is used in moving objects, such as trains, ships, but in service cars and the like, too, it is advantageous when the collecting receptacle portion fits slightly clampingly in the chamber. Annoying vibrations and resonances are thus prevented, while there is also obtained a firm positioning of the collecting receptacle portion.

In the event of very heavy loads, there may be provided a detent for the collecting receptacle portion.

For obtaining a good accessibility of the openings for removing and depositing the articles when the dispenser is placed in position, with at least one contacting face parallel to a wall or floor, the present invention provides for the walls of the storage and the receiving receptacle portions to define at least two contacting faces intersecting one another at right angles, whereby both the withdrawal opening and, in placed position, the depositing opening are inclined relatively to said two contacting faces, and parallel to the line of intersection of said two contacting faces.

The openings are thus on the one hand always oriented upwards, so that articles will not easily fall out of the dispenser portions and can be easily deposited in the dispenser portions, while on the other hand the openings are also oriented sideways towards the user to provide good accessibility of said openings. Moreover, this provides for the possibility of placing the dispenser on each of these two contacting faces, so that a choice can be made between a position with the withdrawal opening substantially above the depositing opening and a position with the withdrawal opening substantially aside it. In both cases, the inclined orientation of the openings is obtained with the above described advantages.

When the angle which the openings make with the contacting faces is 45°, the obliquity of both openings relative to a floor or wall surface against which the dispenser is installed is independent of the choice which of the contacting faces is placed against the wall or the floor.

In order that the receiving and the collecting receptacle portions may be gripped and carried jointly with facility, preferably the collecting receptacle portion is provided with one or more grips, which, when the collecting receptacle portion is placed in the chamber of the receiving portion, together with griplike openings in the receiving portion form handles for jointly gripping the collecting receptacle portion and the other receptacle portions.

The openings corresponding with the grips can be provided either in the side walls or in the top of the receiving portion. In the latter case, the openings form a passage from the collecting portion to the receiving portion through which a hand can be inserted for lifting the dispenser.

In addition to the force fit and/or locking fit of the collecting receptacle portion in the chamber of the receiving receptacle portion, as described above, in particular when the dispenser is placed in moving objects, such as vehicles, the stability of the dispenser is enhanced by attaching it to the floor or the wall of that object. To that end, the dispenser is preferably provided adjacent at least one of the contacting faces with attachment means. These attachment means may consist of holes, through which screws are passed, or engagement means, which are adapted to coact in detachable

manner with corresponding engagement means affixed to the floor or wall.

In certain applications, the collecting receptacle portion will be quickly fouled by the soiled articles deposited therein. To prevent the necessity of frequent cleaning of this receptacle portion, a preferred embodiment of the present invention provides for the collecting portion being fitted with means for detachably installing a bag therein. In these bags, the used articles may also be transported to the location where they are cleaned.

According to an alternative elaboration of the present invention, the necessity of frequent cleaning of the collecting receptacle portion is avoided by designing this portion in such a manner that it can be made at such low cost that it can be discarded after a limited period of use, without resulting in unacceptable cost. To that end, the collecting receptacle portion is made from cardboard, synthetic plastics material or the like.

Two embodiments of the dispenser according to the present invention will now be described, by way of example, with reference to the accompanying drawings, in which:

Fig. 1 is a perspective exploded view of a dispenser with a collecting portion; and

Fig. 2 is a perspective exploded view of another embodiment of the dispenser, likewise with a collecting portion.

In the drawings, corresponding parts are designated with identical reference numerals.

Fig. 1 shows the dispenser from which a collecting portion 3 has been removed. A storage receptacle portion 1 links up with a receiving receptacle portion 2. A storage space 8 in the storage portion 1 is accessible via a withdrawal opening 4. The receiving portion 2 contains a chamber 5 fitting the collecting portion 3. Collecting portion 3 has a storage space 9 accessible via a depositing opening 6. Furthermore, the collecting portion 3 is provided with grips 7 for simplifying the carrying thereof. Said grips 7 and 7′, after placement, coincide with openings 17, 17′ in the receiving portion 2, so that the collecting and receiving portions can be gripped and carried jointly. As shown in the drawings, the dispenser combines an easy placeability and accessibility of openings 4 and 6 with a small occupied space.

Moreover, after placement of the collecting portion 3 in chamber 5, it is held in place in said chamber 5. When the collecting portion 3 is full, it can be detached in a simple manner and serve as a transport dispenser. The full collecting portion 3, is then replaced by an empty collecting portion brought along.

Fig. 2 shows a second embodiment of the present invention wherein the openings 4 and 6 are oriented obliquely relatively to faces 12, 13 defining a line of intersection 16, and parallel to said line of intersection. The contacting surface 15 of the storage receptacle portion 1 extends perpendicularly to withdrawal opening 4, so that the storage space 8 is disposed substantially right behind withdrawal opening 4. This region, right behind withdrawal opening 4, is easily accessible through said opening 4, since the user approaches the dispenser in an oblique direction indicated by arrows 14, 14′. Moreover, articles stored in the storage space 8 cannot fall out of said storage space, because withdrawal opening 4 is oriented obliquely upwards. For the purpose of locking the collecting portion 3 in chamber 5, there are provided engagement means. These engagement means in this embodiment comprise openings 10, 10′ in side walls of chamber 5, which openings are adapted to cooperate with raised portions 11, 11′ in side walls of collecting portion 3.

As shown in the drawings, the dispenser can rest on either of the two contacting faces 12, 13 intersecting one another at right angles, so that a vertical and a horizontal arrangement is possible, while the withdrawal opening and the depositing opening are always directed obliquely upwards.

It is observed that many other embodiments than these shown are possible within the scope of the present invention. For instance, the storage and the receiving receptacle portion may jointly form an assembly adapted for swivelling suspension in a bracket or clip, so that the openings can be oriented so as to correspond with the placement of the dispenser.

Claims

1. A dispenser having a substantially fixed form with a withdrawal opening, characterized in that a storage receptacle portion (1) links up with a second receiving receptacle portion (2) comprising a chamber (5), there being provided a third collecting receptacle portion (3) fitting in said chamber (5), to provide substantial surface-to-surface contact with the walls of chamber (5).

2. A dispenser as claimed in claim 1, characterized in that the collecting portion (3) fits slightly clampingly in chamber 5).

3. A dispenser as claimed in claim 1 or 2, characterized in that the collecting portion (3) fits lockingly in chamber (5).

4. A dispenser as claimed in any one of the preceding claims, characterized in that the walls of the storage and the receiving portions define at least two contacting faces (12, 13), which intersect one another at right angles, with both the withdrawal opening (4) and, in placed condition, the

depositing opening (6) being at an angle to said two contacting faces (12, 13) and parallel to the line of intersection (16) between said two abutment faces (12, 13).

5. A dispenser as claimed in claim 4, characterized in that said angle is about 45°.

6. A dispenser as claimed in any one of the preceding claims, characterized in that the collecting receptacle portion (3) is provided with one or more grips (7, 7′), which, on placement of said collecting portion (3) in said chamber (5) of the receiving portion (2), together with griplike openings (17, 17′) in the receiving portion (2) form handles for jointly gripping the collecting portion (3) and the other receptacle portions (1 and 2).

7. A dispenser as claimed in claim 4 or 5, characterized in that the dispenser is provided adjacent at least one of the abutment faces (12, 13) with attachment means.

8. A dispenser as claimed in any one of the preceding claims, characterized in that the collecting portion (3) is provided with means for detachably installing a bag therein.

9. A dispenser as claimed in any one of the preceding claims, characterized in that the collecting portion (3) is made from cardboard, synthetic plastics material or the like.

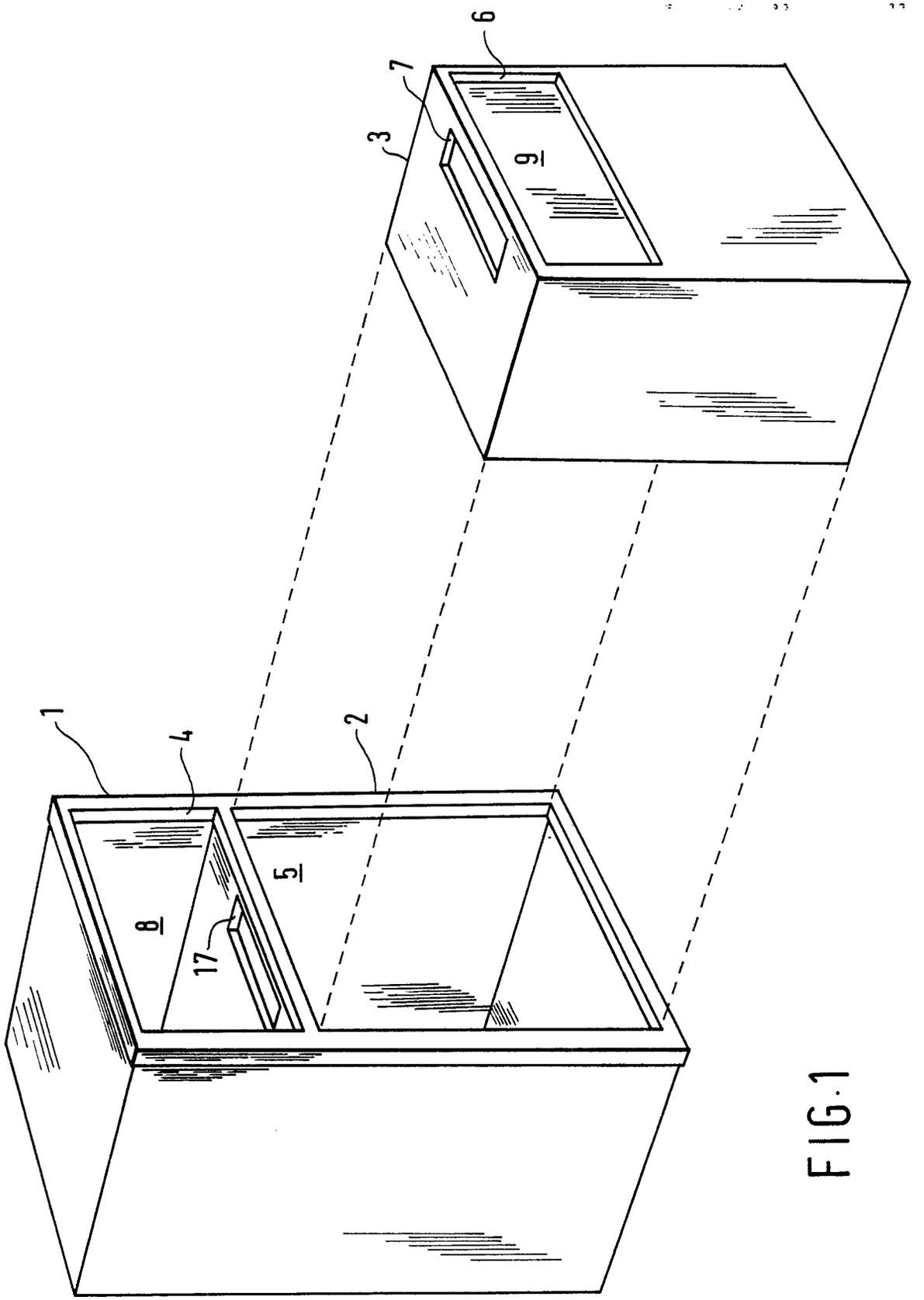

FIG.1

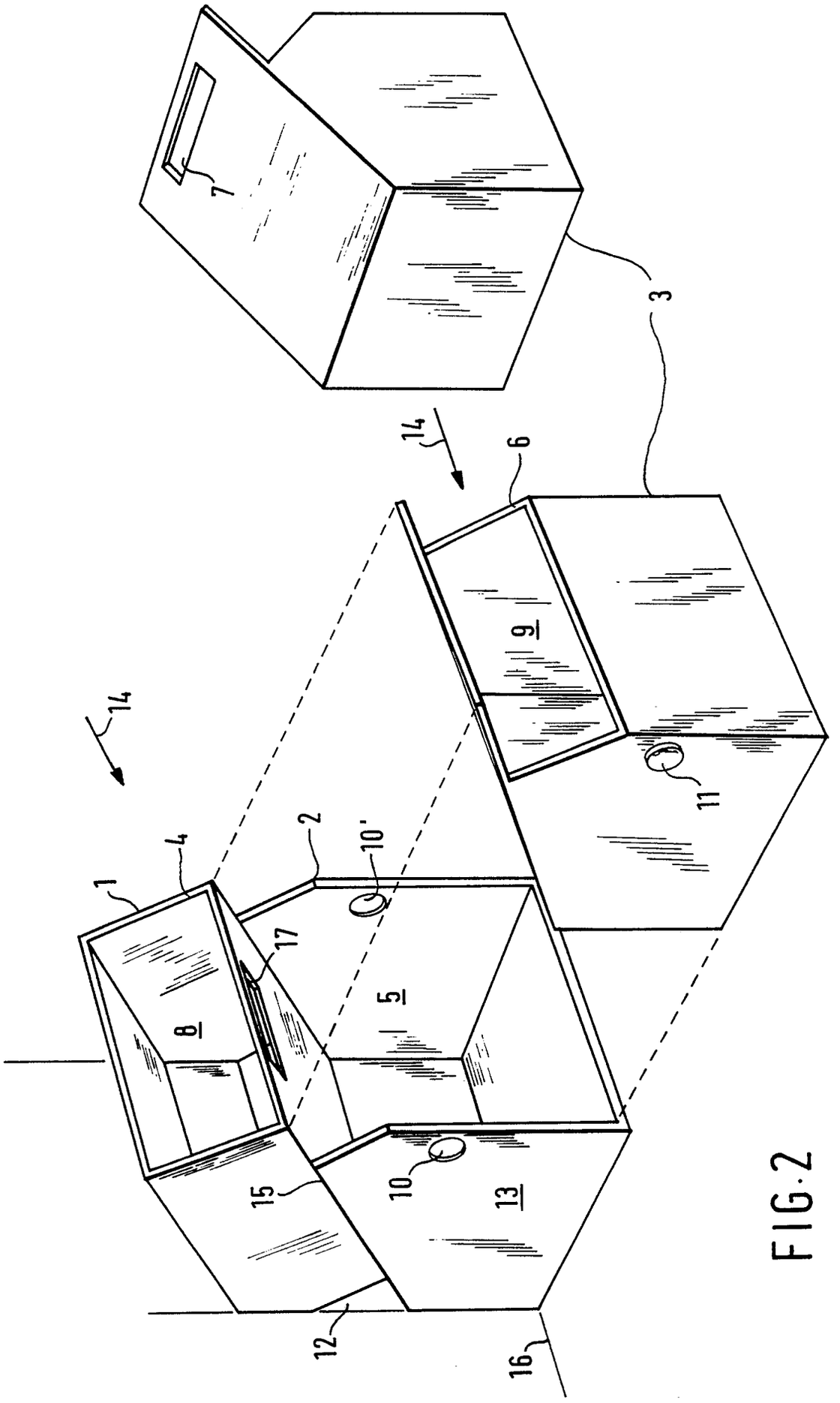

FIG.2