A device used to immobilize the clothes that fill up a suitcase but not to capacity (11), thus preventing them from moving to the empty space that remains inside the suitcase, without adding any extra volume or weight. It is comprised by a balloon (21) similar in shape to the plan of the suitcase but slightly smaller, which is placed over the packed clothes (13) and accessories, with a nozzle (23) that extends to the outer part of the suitcase, through one of its walls. A valve (25) closes the nozzle so as to seal the balloon once inflated inside the suitcase in order to fill the empty space that remains above the clothes and apply uniform pressure thereon.
DEVICE TO IMOBLIZE CLOTHES AND OTHER ITEMS IN A SUITCASE DURING TRIPS

FIELD OF THE INVENTION

[0001] This invention is related to a bag used while traveling, in particular by air, sea, river or land. It is more specifically related to a device intended to protect and maintain the good order of clothes and other accessories that travelers generally carry in suitcases.

[0002] The problem is that travelers not always fill the suitcase to capacity, thus there is an empty space above allowing for the transported elements to scatter during normal transportation, when the suitcase is checked-in and when it goes down from the means of transportation, as well as during the trip itself. If the clothes, usually washed and ironed, are not fixed in place by some adequate means once inside the suitcase, they will end up wrinkled and crumpled due to the normal turbulence during the trip by the time the travelers arrive to destination. In the same way, fragile items may be damaged when the means of transportation is set in motion.

DESCRIPTION OF THE RELATED ART

[0003] It is known that modern suitcases include garment straps in their interior, which are fastened once all the clothes are packed so as to hold the contents in place inside the suitcase. The disadvantage of said straps is that they squeeze part of the clothes, thus wrinkling them especially in the area where the straps exercises pressure.

[0004] Therefore, almost always the traveler needs to iron the shirts, pants and jackets again when he/she arrives, usually at a hotel or some other lodging.

[0005] Another disadvantage is that the straps do not hold the smaller items efficiently, as for instance rolled up socks; as a result, these items end up out of the place where they were first packed and this slackens the straps, which may result in the scattering of the rest of the clothes.

SUMMARY OF THE INVENTION

[0006] One of the main objectives of this invention is a device capable of immobilizing clothes and other accessories after they are packed into a suitcase, protecting them, preserving the ironing and avoiding wrinkles.

[0007] Another objective of this invention is that the aforementioned immobilizing device does not add any extra weight to the piece of luggage and there is no need to use a larger suitcase.

[0008] These and other objectives and advantages that may become evident throughout the description of this invention are achieved by a device that not only has it been conceived to hold the clothes in certain places or areas but also to immobilize same thus preventing the clothes from moving to the empty space inside the suitcase which, once closed, is filled up with a balloon that gets the size of the suitcase interior and is placed over the packed clothes and accessories by a nozzle that extends from the balloon to the outer part of the suitcase, through one of its walls. Whatever the shape of the suitcase may be—the typical rectangular or any other piece of luggage—the balloon will adopt a similar shape but slightly smaller. A valve or other plugging means will close the nozzle in order to seal the balloon once inflated inside the suitcase.

[0009] It is worth mentioning that packing can be done with the suitcase in a normal position and then closed without making any effort, for the balloon is inflated once the suitcase is closed and the empty space that remains between the upper surface of the clothes or other packed accessories and the inner side of the suitcase shell is filled. As it is filled with air, no weight is added to the suitcase. Likewise, as only the empty space of the suitcase is used, the piece of luggage needs not be larger.

BRIEF DESCRIPTION OF THE DRAWINGS

[0010] These and other features and details of the subject matter of this invention as well as the possible ways in which it may be developed and carried out will be better understood through the following detailed description of one of the embodiments depicted in the drawings attached hereto, which are included for illustrative purposes and in no way do they limit the scope of this invention, notwithstanding any other variants, modifications, alterations and/or additions that may be introduced without changing the nature or the spirit of the invention. In the drawings:

[0011] FIG. 1 is a perspective view of a packed, open suitcase with the immobilizing device arranged according to a preferred embodiment of this invention.

[0012] FIG. 2 is a cross-section view of the suitcase of FIG.11 once closed and after inflating the balloon.

DETAILED DESCRIPTION OF THE PREFERRED EMBODIMENTS

[0013] FIGS. 1 and 2 show a suitcase 11 containing clothes, typically including shirts and the like, and other items 13 that is not filled to capacity, so there is an empty space 15 above the clothes 13. For instance, the suitcase may be a standard parallelepiped piece of luggage made of plastic or leather of about 45 cm x 60 cm (base) rectangular plan and 20 cm high, with a shell 17 that swings over the back wall 19.

[0014] The device of this invention comprises a plastic balloon 21 that is 44 cm x 59 cm x 17 cm, i.e. slightly smaller than the plan of the suitcase 11. There is a nozzle 23 integrated to the same piece and made of the same material as the balloon, that contains a check valve inside, of the flap type 25 that is sealed by the sole pressure of the air inside the balloon.

[0015] Once the packing is done, but the suitcase 11 is not filled to capacity with clothes and other items 15, which may even be up to less than half of its capacity or almost full, the balloon 21 is placed over the clothes in a way that the nozzle 23 stands out from the edges of suitcase 11. This may be achieved by making a small hole in one side (or the front part) of the suitcase 11 or by putting it through one of the edges of the suitcase, depending on the type of suitcase 11 and its closing system.

[0016] Then, the suitcase 11 is closed by putting down the shell in a way so as to keep nozzle 23 exposed, then the traveler or packer may blow up the balloon 21 with his/her mouth until he/she feels that (due to the counter-pressure of
the air blown in the balloon) the balloon fills up all the empty space 15 above the clothes 13. The valve 25 then closes the nozzle 23, and the balloon keeps the air inside until the end of the trip. Whereupon the check valve 25 is simply opened, preferably by a simple movement with the fingers, as for example squeezing the nozzle in two opposite points until the balloon 21 is deflated, the shell 17 is opened and the clothes 15 are unpacked.

[0017] It will then be noted that neither the clothes nor the other items carried inside the suitcase are wrinkled or out of place, thanks to the uniform pressure that the balloon 11 exercises on the whole upper surface of clothes 15.

[0018] Finally, the devices 21-23-25 described above can be easily and inexpensively manufactured, by employing the same technology applied in life vests and air mattresses.

[0019] There is no doubt that when this invention is put into practice, several building, size and shape changes might be necessary, but always provided the spirit and scope of this invention are not altered. For example, even if we have mentioned the standard rectangular suitcase, it is clear that the immobilizing device is adaptable to the shapes of other bags used to carry personal items.

What is claimed is:

Having first described and stated the nature of the invention and the ways to carry it out, the following is claimed:

1. A device intended to immobilize clothes and other items carried inside a suitcase during trips, comprised by a balloon having the size of the suitcase interior, a nozzle attached to the balloon for the purpose of inflating and deflating the balloon, that extends to the outer part of the suitcase and a plugging means capable of shutting the nozzle.

2. A device intended to immobilize clothes according to claim 1, wherein the said nozzle goes through one of the suitcase sides.

3. A device intended to immobilize clothes according to claim 1, wherein said plugging means is a check or unidirectional valve.

4. A device intended to immobilize clothes according to claim 2, wherein said plugging means is a check or unidirectional valve.

5. A device intended to immobilize clothes according to any of the claims above, wherein the shape of the balloon is similar to the suitcase plan.

6. A device intended to immobilize clothes according to any of the claims above, wherein the balloon is slightly smaller than the suitcase plan.

7. A device intended to immobilize clothes according to any of the claims above, wherein the balloon and the nozzle form just one piece and are made of the same material.

8. A device intended to immobilize clothes according to claim 6 above, wherein the material used is rubber or plastic.

9. A device intended to immobilize clothes according to claim 6 above, wherein said plugging means also forms part of the same piece as the balloon and the nozzle.

10. A device intended to immobilize clothes according to claim 7 above, wherein said plugging means also forms part of the same piece as the balloon and the nozzle.

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