The present invention is the only universal attachment known, which is able to be attached to any existing laundry collection device, and allow for the presorting, separation, and maintaining of matched or grouped items throughout the wash and dry cycles without the need for repetitive matching and sorting. The invention accomplishes the desired goals of sorting, separating, mating, and preventing odor accumulation in the laundry collection bin, during the collection and storage phase of the laundry duty. Additionally, during the wash and dry cycles the present invention prevents the loss of smaller articles being laundered such as socks and hosiery and also protects more delicate articles from the machines rigorous wash cycle.

The User of the invention saves both real energy in terms of saving drying time, and also personal energy by cutting out the repetition of mating and sorting. Additionally, the invention at hand is extremely easy to use, and since the detachable mesh pouch components (15) of the invention hang on the inside of the laundry collection bin, the invention requires no extra external living space in addition to the collection bin that it is attached to. The present invention is inexpensive to store and manufacture, and takes up little retail shelf space, which ultimately leads to a more inexpensive product for the consumer. The Universal attachment feature of the present invention allows the owner of an existing laundry hamper to easily attach the invention to their present laundry collection device and enjoy the benefits that it provides immediately.
LAUNDRY SORTER ATTACHMENT

BACKGROUND—FIELD OF INVENTION

[0001] This invention relates to devices used to sort laundry prior to and during the wash and dry cycles. Specifically, attachments for laundry hampers or other laundry collecting devices, for the primary purposes of presorting, maintaining a sorted status, and loss prevention of smaller articles throughout the wash and dry cycles.

BACKGROUND—DESCRIPTION OF PRIOR ART

[0002] Clothes hampers, Laundry bags, and other collection devices of various types have been used for many years to collect and more recently to help pre-sort ones laundry. The old way of doing it either included not presorting or sorting the laundry at all, or using compartmentalized hampers, which still required the sorting of items which needed sorting after the wash cycle. Inventors have created many variations that focus on the pre-sorting and separation of laundry items. Many Prior art inventions have designs, which exhibit rigidly constructed compartments for the separation of items to be laundered. While the goal of immediate separation is achieved here, this methodology does not provide for continued separation throughout the wash and drying cycles. Additionally, this type of separation leads to an unnecessarily large and bulky laundry collection device that is difficult to move, and takes up much space.

[0003] Consider the following relevant prior art:

[0004] U.S. Pat. No. 6,062,416 to Smillie (2000) features rigid inserts to keep the desired items separate until it is time for them to be laundered. The rigid inserts are removed when it is time for washing; the laundry items are then emptied directly into the washing machine.

[0005] U.S. Pat. No. 5,484,078 to Bronović (1996) features removable solid partitions which adjust for the purpose of pre-sorting laundry items. While this accomplishes presorting the clothes must still be handled again and emptied into the washing machine. Furthermore the adjustable partitions exhibited by Bronović conform only to the accompanied hamper, not to any others.

[0006] U.S. Pat. No. 4,057,309 to Fragale (1977) exhibits removable rigid built in sub-containers for the purpose of pre-sorting laundry, which is later to be dumped into the washing machine with the other contents of the container.

[0007] U.S. Pat. No. 3,958,715 to Capelli (1976) features a compartmentalized solid construction laundry hamper with ventilation holes for the purpose of presorting laundry prior to placement in the washing machine. Although the right idea is applied here, unfortunately, the ventilation holes are inadequate for proper ventilation, allowing for only items on the top to be properly ventilated.

[0008] U.S. Pat. No. 2,895,782 to Fragale (1959) features a plurality of open topped containers used for the segregation and storage of soiled items prior to placement in the washing machine.

[0009] U.S. Pat. No. 5,690,217 to Friday (1997) features a compartmentalized laundry container of rigid construction for the sorting of clothes prior to laundering.


[0011] There are many unsolved problems with the prior art inventions, which are discussed within this application.

[0012] Such prior art inventions are cumbersome and often difficult to move. Often such prior art inventions are not purchased because they take up too much of a person’s living space. It is clear that such prior art inventions do not keep smaller matching articles mated during the entire wash dry cycle, causing the user to sort and match these items unnecessarily, resulting in the user of prior art inventions spending more time doing laundry than is necessary. The aforementioned Prior art inventions do not have the ability to prevent the smaller items like socks from being lost during the wash and or drying cycle. A single sock or small article of clothing is often lost when it adheres temporarily to a larger article during removal of laundry from the washer or dryer. This can happen when a small item is wadded up amongst other wet clothes coming from the washer, and also when coming from the dryer by statically clinging to another item. Prior art inventions, such as the aforementioned class of rigidly constructed partitioned laundry collection devices, do nothing to prevent this. Also, the prior art inventions are difficult to assemble and require a level of skill to assemble, causing a rise in price if to be assembled prior to purchase, or costing the consumer his/her time if to be assembled by the consumer.

[0013] Prior art inventions do nothing to keep the odor filled articles separated from the less odoriferous articles. Most simply pile the laundry all together not allowing for the necessary air circulation needed to prevent the accumulation of odors. Some use mesh bags or holes... but they are not suspended or separated from the rest of the laundry, allowing them to breathe better, and allow for the necessary air circulation to prevent the accumulation of odors.

[0014] Furthermore, prior art inventions in this area are not universal attachments which can be used as an inexpensive option to buying a new sorting hamper. Prior art inventions are costly to manufacture due to elaborate structure and unnecessary parts and costly to ship due to added weight of the hamper itself, and therefore are unduly costly to purchase for the consumer. The costliness of the prior art inventions are increased by the inability of the prior art inventions to be stored in a space efficient manner, causing them to take up unnecessary warehouse and shelf space resulting the retailer to charge more for the prior art inventions. Shelf space and warehouse space are limited commodities.

[0015] Other Inventors have chosen to make use of laundry bags of various designs, to achieve the ability to separate and store laundry items, which are desired separated. Please consider the following relevant prior art:

[0016] U.S. Pat. No. 5,102,208 to Joyce (1992) features a clothes container having two external clothes bags at opposite ends of the hamper to be used for storing and sorting of soiled clothes prior to placement of clothes in the washing machine. The external clothes bags take up space, which is a precious commodity in many smaller homes.

[0018] U.S. Pat. No. 4,585,283 to Redmon (1986) features removable inner hamper bags to accomplish the pre-sorting of items to be laundered.

[0019] U.S. Pat. No. 5,503,476 to Hamden (1996) features a partitioned laundry bag designed and used for the purpose of sorting and storing of soiled items prior to laundering.

[0020] U.S. Pat. No. 4,979,705 to Bovitz (1990) features a plurality of bags hung on support rails and used for sorting laundry prior to it’s washing and drying.

[0021] U.S. Pat. No. 4,773,585 to Lehrman (1988) features a combined laundry bag and clothes hamper, which has internal partitions to be used for the segregation of clothes. Each partition contains a zipper at the bottom for removal of the soiled contents of that partition.

[0022] U.S. Pat. No. 2,736,454 to McConnell (1953) features a plurality of removable bags, which are to be emptied into the washing machine after they are filled with sorted soiled laundry.

[0023] The Use of Mesh Bags to hold and sort soiled laundry is not new. U.S. Pat. No. 5,833,336 to Dean (1998) features removable mesh bag, which is specifically designed for Dean’s hamper apparatus. It is not a Universal attachment. The removable Mesh Bag is not constructed to be used in the wash and dry cycles, and therefore cannot keep items separated throughout these cycles. The hamper apparatus itself is prohibitively expensive, large, and bulky.

[0024] All of these Prior art inventions except possibly for U.S. Pat. No. 6,019,445 to Gades (1999) do nothing to keep the odor filled articles separated from the less odiferous articles. Most simply pile the laundry all together not allowing for the necessary air circulation needed to prevent the accumulation of odors. Some us mesh bags or holes . . . but they are not suspended or separated from the rest of the laundry, allowing them to breathe better, and allow for the necessary air circulation to prevent the accumulation of odors. U.S. Pat. No. 6,019,445 to Gades (1999) features mesh bag like containers, which are attached to a frame that is designed to be suspended above the washer dryer units.

This device does seem to separate articles of clothing prior to washing and also to do an adequate job of allowing for more odiferous articles such as socks to remain separate from the rest of the wash while providing air circulation to keep these articles of clothing from accumulating odors. Gades, however is not a Universal attachment to a laundry collection device, does not keep paired articles separate from the rest of the laundry during the washing and drying process, is expensive to construct, and is impractical in that it is only appropriately used in a laundry room due to it’s intruding structure.

[0025] As a whole, the immediately aforementioned prior art inventions using Laundry bags instead of rigid compartments to separate items are often large and bulky, difficult to move, take up too much space (not desirable for smaller living accommodations), can be aesthetically unappealing, and are difficult to move when full. They can also be expensive to manufacture and store if they are simply a part of another larger laundry collection unit.

[0026] Prior art inventions focusing on use of laundry bags have shown some improvement in terms of mobility to and from the washing and drying machines, but have shown very limited improvement in terms of air circulation (only in the case of larger mesh bags and not at all in non-porous bags), and cost to consumer. Such Prior art inventions do not keep smaller matching articles mated during the entire wash and dry cycles, causing the user to sort and match these items unnecessarily. The result is that the user of prior art inventions spend more time doing laundry than is necessary.

[0027] Additionally, prior art inventions do not have the ability to prevent the smaller items like socks from being lost during the wash and or drying cycle since the smaller items remain with the larger ones during the wash and dry cycles. (Often a single sock or small article of clothing is lost when it adheres to a larger article during removal of laundry from the washer or dryer and is lost.) This can happen when a small item is wadded up amongst other wet clothes coming from the washer, and also when coming from the dryer by statically clinging to another item.

[0028] Prior art inventions do nothing to keep the odor filled articles separated from the less odiferous articles, they simply pile the laundry all together not allowing for the necessary air circulation needed to prevent the accumulation of odors. Some us mesh bags or holes . . . but they are not suspended or separated from the rest of the laundry, allowing them to breathe better, and permit the necessary air circulation to prevent the accumulation of odors.

[0029] Furthermore, like their rigidly constructed counterparts already discussed, prior art inventions in this area are not universal attachments which can be used as an inexpensive option to buying a new sorting hamper, and although cheaper than solid construction are still prohibitively expensive. Prior art inventions are much more costly to manufacture due to more elaborate structure and unnecessary parts and more costly to ship due to added weight of the laundry collection device itself, this leads them to be more costly to purchase for the consumer. The costliness of the prior art inventions is increased by the inability of the prior art inventions to be stored in a space efficient manner causing the prior art inventions to take up unnecessary warehouse and shelf space causing the retailer to charge more for the prior art inventions. Shelf space and warehouse space are limited.

[0030] Prior art inventions can either cause damage, or do nothing to prevent damage that can be done to items during the washing cycle. Bag/hamper combination Prior art inventions are difficult to assemble and require a level of skill to assemble, causing a rise in price if to be assembled prior to purchase, or costing the consumer his/her time if to be assembled by the consumer.

[0031] The idea of laundry bags, which would allow for the preserved items to be washed and dried separate from other items, has been a major advance for those who do laundry. Unfortunately, until the application of the present invention, there have remained many problems and apparent shortcomings with this type of laundry bag, which have prevented many from using these prior art inventions.

[0032] Please consider the following relevant prior art:

[0033] U.S. Design Patent 294757 to Kahane (1988) provides for multiple pockets for separating laundry into desired units of separation. However, due to its construction, the separating pockets are locked in tightly together and often back-to-back. This construction does not allow for proper circulation of water when in the washing cycle,
resulting in poor rinsing, which in turn leads to soap build up within the laundry and in itching for the user. Another consequence of Kahane’s construction is poor air circulation during drying in the dry cycle, resulting in longer drying times, which uses more energy and in turn costs more money and time to the user than would a more efficiently constructed invention. Kahane’s invention is a single unit with multiple pockets; this construction necessarily keeps the wet clothes within the units close together causing the need for more dry time due to poor airflow amongst the various articles within the pockets.

[0034] Additionally, the Kahane invention is not a universal attachment designed to have the ability to work with any laundry collection device.

[0035] Another shortcoming of Kahane, is that because of the separate pockets being attached the user does not have the flexibility to wash the contents of one pocket from those of another, as may be necessary if one or more pockets are filled with colored articles, and one or more pockets are filled with white articles. Also, permanent press or very delicate articles may need to be further separated, from articles of sturdier construction so that they may be washed and or dried separately from each other, as their suggested laundering instructions indicate. Some articles are meant for the gentle cycle, while others may not require such care, and are better suited going through a more vigorous cycle.

[0036] U.S. Pat. No. 5,746,514 to Orensten (1998) features a large laundry container of spherical shape, which is claimed to maintain its shape to some degree when placed in the clothes washer and drier. If used with today’s standard home machine that has an agitator in the middle, Orensten’s device seems to have inherent problems that in the device will need to collapse to such an extent that there will be a necessary bunching together of clothes within the bag. This leads to poor water circulation in the washing machine. Orensten also does not solve, or address the problem of keeping mated items together during the wash and dry cycles. Therefore the need for this type of mating and sorting still exists for the user of the Orensten invention. To this inventor’s knowledge, utilizing small separated compartments can only do this. Additionally, the Orensten invention is not a Universal attachment.

[0037] U.S. Pat. No. 6,224,259 to Guerra (May 1, 2001) features a large mesh bag which results in too many clothes packed together, resulting in poor water circulation in the washing machine resulting in poor rinsing capabilities, soap build up, and all too often itching to the user. Guerra’s invention has the same problem in the dryer as the other prior art-poor air circulation leading to additional drying time (Energy inefficient) only to a greater extent due to the severe wadding up of wet clothes. Additionally, Guerra doesn’t allow for the sorting, mating and/or separation of paired items previously mated. Furthermore, Guerra is not a Universal attachment.

[0038] U.S. Pat. No. 5,253,775 to Gould (1993) features a combined hamper and laundry bag comprised of an ordinary rectangular hamper that has a medium to large sized mesh bag attached to the inside of the hamper. Gould’s major shortcomings come in the design of the bag, which is too large to allow for adequate water and airflow during the washing and drying cycles. Another problem with Gould’s invention is that the design necessitates that the mesh bag be pressed between the wall of the hamper and soiled clothes if the hamper is full. The mesh bag, which is meant to hold items such as socks, undergarments etc. does not provide for adequate air circulation as to prevent the build up of odors, of these often smelly items. Gould’s invention does not allow for free airflow for the items within the mesh bag, and results in a build up of odors in the items within the bag. Gould does not recognize or address the need for the items within the bag to be separate from the items within the hamper itself in order to maximize airflow and minimize odor accumulation.

[0039] The size of Gould’s Mesh bag inherently allows for more items to be packed within it, which necessarily increases the mass within the bag. Size of Gould’s mesh bag results in bunching together of wet items, resulting in difficulty in cleaning and drying of items sufficiently due to poor water circulation, and poor air circulation in the washing and drying machines respectively. This poor air circulation increases the time and energy for drying the same articles that separate smaller bags can do in less time and utilization of less energy. The size of the Gould bag also causes, problems of entanglement with washing machine parts such as the agitator. Additionally, Gould’s Mesh bag does not consider, nor allow for the separation of items into mated categories. Furthermore, Gould’s invention is costly to manufacture, ship, and warehouse. Another shortcoming of Gould’s invention is that it is not suitable to be used as a universal attachment to other hampers. Gould uses a bag attachment that is proprietary (useful) to the hamper that it attaches to and no other.

[0040] U.S. Pat. No. 5,803,605 to Masi (1998) features a bag for washing and drying of small articles, consisting of a main pocket and multiple smaller individual pockets. A major flaw of the Masi invention is that the configuration of the smaller mesh bags overlapping the larger main mesh bag inhibits water flow during the wash cycle and air flow during the drying cycle, as well as, air flow during the laundry collection/storage phase, resulting in odor accumulation. The difference in washing ability and drying time is the flow of the water and air. As previously discussed, this is very important.

[0041] During the laundry storage phase the poor airflow caused by the overlapping pockets feature of Masi and others allows for the accumulation of odors/odor buildup. The shear fact that the separate pockets do not detach, also suggests that the user of the Masi invention wait until the bag is sufficiently full to warrant throwing the entire bag in the washing machine/dryer, or else washing a mostly empty bag, with just a few items in it. The Masi invention does not allow for the effective separation of whites and darks. Because of the attached nature of the mesh bag pouches whites and darks within the invention must all be washed together, resulting in possible damage to the articles of clothing contained within.

[0042] Masi, in the prior art discussion of her application, knocked Kahane for many of these same problems, but has done little to improve upon Kahane. Masi still has a necessary 2 layers of thickness, since the main pocket is attached to the separate smaller pockets, and the volume of the larger bag which the pockets are attached to creates a problem with bunching together of wet items within this bag, which has already been pointed out to be a major problem during the dry cycle (time and energy is wasted).
[0043] Furthermore, a major disadvantage of Masi’s invention is that it is not a universal attachment able to be adapted to any laundry collection device. The major advantages of being a universal attachment become clear in later discussion.

[0044] On the whole, large mesh bag prior art inventions result in poor water flow by holding too many items too closely together during the wash process, and poor airflow, by holding too many items close together during the drying process. Large mesh bag prior art inventions have the undesirable consequences of trapping and wadding smaller items in their corners. Prior art inventions which use a larger mesh type bag throughout the wash and dry cycle have the problem of poor dry time and of smaller items becoming wadded up in the corners of the bag, resulting in uneven drying of enclosed articles. The wadded items take a much longer time to dry, often requiring intervention, and removal of the items in order to finish the drying process. The end result is the poor use and wasting of energy. Both the energy used by the drying machine itself (which cost real dollars), and the energy of the person doing the laundry (in terms of unnecessary effort and time that a person uses to intervene, when the users time could be better spent.) Prior art inventions can either cause damage, or do nothing to prevent damage that can be done to items during the washing cycle. Large mesh bag prior art inventions can easily have the undesirable consequences of becoming damaged in the washing machine by the agitator, and sometimes can cause larger items within the bag to become entangled with the agitator, causing damage to the items inside, and possibly to the washing machine itself, by causing frequent unbalanced loads during the spin cycle.

[0045] The use of large mesh bags does not allow for the separation of smaller matted articles such as socks and undergarments, and the use of inventions that have smaller mesh bags attached to larger mesh bags fall prey to the above listed shortcomings in airflow and water flow.

[0046] After a thorough investigation, to the inventor’s knowledge, there is no relevant prior art that claims to be an attachment for hamperers or any other laundry collection device except for perhaps U.S. Pat. No. 3,995,924 to Jones (1976). An obvious shortcoming of the Jones invention is that it is not an universal attachment, but constructed so as to adjust only to rectangular shaped hamperers, it cannot adjust/conform to a round, oval or many other of today’s designs.

[0047] Jones, like all of the other prior art inventions, does not keep smaller matching articles mated during the entire wash and dry cycles, causing the user to sort and match these items unnecessarily, resulting in the user of prior art inventions spending more time doing laundry than is necessary.

[0048] Additionally, the complexity of the Jones invention makes it cost prohibitive. There are many parts, which require manufacture and assembly, necessarily increasing the cost to be passed onto the consumer.

[0049] As claimed and designed the Jones invention is to be used as a storage container/not throughout the wash/dry cycles. The separation bags themselves are not constructed for use in the washer and dryer, and even if they were they would encounter the previously mentioned problems of poor water flow and airflow, as does the other prior art due to the size and construction of the bags.

[0050] The Jones invention does little or nothing to prevent odor accumulation since it does not allow for maximum airflow during storage. The depth of the separated containers allows for the smelliest of articles to remain buried, not separated, and without adequate airflow to prevent buildup of odors. To allow for maximum airflow and prevent the buildup of odors successfully, the smelliest articles must be suspended, or otherwise separated from the mass of laundry while being stored previous to washing and drying.

[0051] To this inventor’s knowledge all of the relevant prior art inventions do nothing to keep the odor filled articles separated from the less odiferous articles. Most simply pile the laundry all together not allowing for the necessary air circulation needed to prevent the accumulation of odors. Some use mesh bags or holes . . . but they are not suspended or separated from the rest of the laundry, allowing them to breathe better, and allow for the necessary air circulation to prevent the accumulation of odors.

[0052] To this inventor’s knowledge none of the relevant prior art allows for keeping smaller mated items (such as dress socks) mated throughout all of the laundry processes’ (of storage, washing and drying), and still allows for adequate water flow and airflow resulting in the respective benefits of cleaner laundry, energy efficiency, and less odor accumulation.

[0053] To present inventor knowledge there is no known apparatus available at present that can serve as a universal attachment and attach to any hamper/laundry collection device, and will allow the type of separation as mentioned.

[0054] The present inventor recognizes the need for a device, which can act as a universal attachment to any existing laundry collection device with the purpose of pre-sorting and keeping sorted, and mated, items as desired throughout storage, wash and dry cycles. The present inventor also recognizes that this must be achieved in conjunction with achieving maximum efficiency in terms of energy and effort put forth by the user. The present inventor also recognizes the importance of addressing these needs in a simple and low cost manner. My Laundry sorter attachment achieves these goals, and others, while improving on all prior art.

OBJECTS AND ADVANTAGES

[0055] Accordingly, several objects and advantages of my laundry sorter attachment are that it can be attached to virtually any hamper, and after an exhaustive search, is the only known existing Universal hamper attachment for the purpose of sorting, and/or mating of garments. People will not be as likely to buy a new hamper if the old one is still in operation; but an inexpensive attachment that improves the functionality, and appearance of their existing hamper will be considered a more worthwhile investment.

[0056] Another object and advantage of my laundry sorter attachment is that its use saves valuable time which prior art inventions do not. When using my laundry sorter attachment, by Pre-sorting/matching, and subsequently maintaining the sorted and matched status throughout the wash and drying cycles, the user only sorts and mates articles once, as opposed to sorting before washing, perhaps again before drying, and then matching/mating like articles (ie. Dress socks) again after drying them. The matching and mating of
like patterned socks or other patterned articles, is perhaps the most dreaded part of the entire laundry process. My laundry sorter attachment allows the user to sort/pair these articles and have them remain together throughout the laundry process, cutting the time spent doing laundry significantly. It is of advantage to the user to immediately, after undressing, place any matching articles in one of the small detachable mesh pouches, and then immediately seal the pouch via sealing mechanism. The articles then remain in the pouch, suspended towards the top of collecting bin via invention to prevent odor accumulation, until they are finished going through the washing and drying process. The end result is a clean and mated pair of articles/garments ready to be put away or worn.

[0057] Yet another object and advantage of my laundry sorter attachment is that it is less expensive to manufacture than all known prior art, making my laundry sorter attachment more affordable to the public than prior art inventions. There are few parts and materials needed for assembly of the invention, and those that are necessary for assembly are readily available.

[0058] Additional object and advantages are that, my laundry sorter attachment can be collapsed to be extremely compact and is very light, making it much more affordable to ship than known prior art inventions. This is a major plus for all major retailers; this feature also makes it a more viable catalog, and/or mail order item. This feature is beneficial in any instance where the consumer bears the brunt of the shipping costs as they “feel the sting” more when a heavier, bulkier item is being shipped to them.

[0059] Another advantage of my laundry sorter attachment, which is not readily apparent in the prior art inventions, is that it can be easily stored and will take up relatively little warehouse space when storing, and store shelf space when retailing, which is a major consideration for retailers.

[0060] Still another object and advantage of my laundry sorter attachment is that it also saves energy, where other prior art inventions do not at all or to a diminished extent. The smaller mesh pouches of my laundry sorter attachment allow for better water circulation and air circulation. The better water circulation results in cleaner clothes, and dryer clothes than with larger mesh bags since more water can move in and out during the wash process, and more out during the spin cycle, allowing for a dryer article to be placed into the dryer. The smaller mesh pouches also allow for better air circulation between items than a larger mesh bag does, therefore the articles in the smaller mesh pouches need less drying time and use less energy to be dried in the dryer. My laundry sorter attachment is a plurality of separate small mesh pouches, not attached permanently to any other structure. This allows for more movement within the respective washing and drying machines, which results in less bunching of wet items. Separate and detached mesh pouches also allow for better air, and water circulation/flow in all phases of the laundry process (collection and storage, washing, drying).

[0061] The present inventor recognizes that the use of the smaller multiple mesh pouches allows for maximal airflow between enclosed articles. Smaller mesh pouches prevent articles within the pouches from wadding up in the corners and requiring intervention, or significantly more drying time, as happens with larger bags.

[0062] The present inventor also recognizes that the use of smaller multiple mesh pouches is also better during the washing process as a small mesh pouch with fewer items which are able to move within the pouch are better cleaned because of better water flow than many items within a larger bag. Also, small multiple small mesh pouches do not encounter the problem of becoming entangled in the washing machine, often around the agitator, that many larger bags will. This entanglement can result in not only a destroyed laundry bag and articles within, but also do damage to the machine itself, by creating an unbalanced machine during the spin cycle. Smaller multiple mesh pouches avoid this entanglement problem. The small Mesh pouch helps protect and prevent articles that may otherwise entangle themselves with other clothes or a washing machine agitator, such as longer socks and hosiery, from doing so by keeping them enclosed in the pouch. The fact that the pouches are detached from any larger unit also allows the user to select exactly which items are to be washed, without mixing them with other items.

[0063] Additionally, the present inventor recognizes that the plurality of small mesh pouches it utilizes with my laundry sorter attachment act as a way to prevent smaller garments from becoming statically charged enough to cling to larger items, which often results in loss. Many socks have lost their mate in this very way.

[0064] My Laundry sorter attachment prevents odor accumulation. The present invention is attached to the top of the laundry collection device, and functions to suspend individual pairs of like garments away from the main clothes collection device. These smaller articles of clothing such as socks underwear, hosiery, etc. are known to be the main source of odors. By separating these items, and suspending them in separate mesh pouches above the main laundry mass, air circulation is maximized, and odors much better controlled than with prior art inventions.

[0065] My laundry sorter attachment takes up no extra exterior space since the holding straps hold the mesh pouches inside the laundry container, an important consideration if in tight quarters.

[0066] Still another advantage of my laundry sorter attachment over all prior art is that it can more easily be moved from one location to another. Even when full, the invention is lightweight and easily transported.

[0067] Furthermore, my laundry sorter attachment can easily be made aesthetically appealing by placing patterns on the elastic holding band.

[0068] Other Objects and advantages will become obvious to those skilled in the art in light of the following descriptions and accompanying drawings.

SUMMARY

[0069] My laundry sorter attachment is the only Universal attachment for a laundry collection device that can sort, separate, and maintain a mated status for matched or grouped items throughout the wash and dry cycles without the need for repetitive matching and sorting. The result is a saving of significant personal time and energy during the laundry process for the user of my laundry sorter attachment. The added benefits of features for the prevention of odor accumulation and garment protection result in a more odor
free laundry collection process and a safer wash and dry cycle for delicates. Socks and other smaller laundry items, that are prone to loss during the laundry duty, are not subject to loss when my laundry sorter attachment is used since these items are parted within the closable mesh pouch components of my laundry sorter attachment. My laundry sorter attachment is attractive, takes up no additional external space, inexpensive, lightweight and extremely easy to use.

DRAWING FIGURES

BRIEF DESCRIPTION OF THE DRAWINGS

[0070] FIG. 1 shows a side view of the invention at the point that the invention connects together to form a continuous loop attachment.

[0071] FIG. 2 shows a side view of the invention, not to be limited by number of mesh pouches, as this can vary.

[0072] FIG. 3 shows an enlarged view of the buckle attachment device

[0073] FIG. 4 shows a side view of the invention as attached to a collection device (labeled A).

[0074] FIG. 5 shows a side view of the Mesh pouch as attached to the connecting strap.

[0075] The numbers and letters within the drawing figures represent as follows:

[0076] A. Clothes Hamper or any other collection device that the invention is to be attached to.

[0077] B. Contents of the mesh pouch

[0078] 11—Elastic band (or similar material) that can be adjusted to fit the outside of a container or collecting device.

[0079] 12—A Connecting strap of material (i.e. Nylon) for connecting the mesh pouches the Elastic band.

[0080] 13—The Receiving end of a buckle attachment, used to join the two ends of the band together around the collecting device.

[0081] 14. The Protruding end of the buckle attachment, which locks into the receiving end of the buckle to form a continuous band attachment round the collection device.

[0082] 15—A Mesh pouch, whereas more fully described within the application.

[0083] 16—A Holding loop, which slides freely around the band, and is used to hold any extra slack band after adjust to fit the collection device.

[0084] 17—Velcro or other means of temporary attachment, which allows for the mesh pouch to be removed from and re-attached to the connecting strap of material (#12) at will.

DETAILED DESCRIPTION OF INVENTION/DRAWINGS

[0085] Referring now in detail to the drawings, and in particular to FIG. 1.

[0086] There is shown an elastic band 11 which forms a continuous loop around the collection device A when the receiving end of the interlocking buckle attachment 13 is joined with the protruding end of the interlocking buckle attachment 14. The connecting strap 12 is permanently affixed to the band 11 via any permanent affixing method such as sewing connecting strap 12 directly to the band 11. The connecting strap 12 is temporarily affixed to the mesh pouch 15 allowing the mesh pouch 15 to be attached and unattached to the connecting strap 12 at will. Attached directly and permanently to the top back side of the mesh pouch 15 and the front bottom side of connecting strap 12 is the Velcro or other means of temporary attachment 17. Holding Loop 16 is a free sliding loop that holds any extra slack of band 11 after the invention has been attached to collection device A.

[0087] FIG. 5 shows the contents B of mesh pouch 15. Mesh bag 15 is able to be closed and opened at will via a temporary sealing method such as a zipper, snap, or other equivalent temporary sealing method.

[0088] Operation—Main Embodiment

[0089] The attachment and use of the invention at hand is as follows:

[0090] The attachment of the Invention at hand is done by stretching band 11 around the top rim of container A as shown in FIG. #4 of the drawings, and connecting the receiving end of the buckle attachment 13 to the protruding end of the buckle attachment 14 to form a continuous loop around the top of collection bin A. The Buckle Mechanism allows for the adjustment of the said band, thereby allowing said band to conform to various size collection containers.

[0091] The elastic material should be stretched enough so as to allow a snug fit to the laundry collection device to be attached to. The Holding loop 16 being used to hold any slack of the elastic band 11. The attachment is so attached so that the Mesh Pouches 15 are hanging to the inside of the collection bin A, as in the case in drawing #4 allowing the said pouches 15 to hang freely separated from the rest of the items within the collection bin A. The articles of clothing (i.e., a mated pair of patterned socks) desired to be separated and sorted from the rest of the laundry is placed into one of the mesh pouches 15, which are hanging from the band 11 via a connector strap 12. The Mesh Pouch 15 is then closed via a chosen closing mechanism such as a snap, Velcro, zipper, etc. so as to keep the items contained within from escaping during the wash and dry process.

[0092] As previously mentioned, the Mesh Pouch 15 is connected to a connector strap 12 via a temporary fastening means such as Velcro. When it is time for the desired article to be washed the mesh pouch 15 is easily unattached from the Velcro on the connecting strap and placed in to the washer and dryer respectively. After the wash and dry cycles are complete, the contents are removed from the mesh pouch 15 completely dry and still mated. The mesh pouch 15 is then re-attached to the connector strap 12, which is still attached to the band 11. The Mesh Pouch 15 is ready for the next desired article to be placed into it.

[0093] Considerations

[0094] The holes in the mesh pouch 15 should be large enough to permit adequate air and water flow, but small enough to prevent small articles of clothing such as socks from escaping through the holes.

[0094] Multiple hanging mesh pouches 15 allow for multiple mated/matched articles to be washed and stored simultaneously.
Conclusion, Ramifications, and Scope

Accordingly, the reader will see that the present invention is the only known existing universal clothes hamper attachment for the purpose of sorting, and of matting of garments. It can be attached to any clothes collection device. My laundry sorter attachment improves the appearance and functionality of the collection device that it is attached to, and saves valuable time for the person in the house who does the laundry by pre-sorting/matching articles of clothing, and maintaining the sorted and matched status throughout the washing and drying cycles. The user needs only sort and mate once, as opposed to sorting before washing, perhaps again before drying, and then matching and mating articles (ie. dress socks) again after drying them. My laundry sorter attachment thus cuts the time doing laundry significantly.

My laundry sorter attachment also prevents odor accumulation by lifting and separating. The invention lifts and suspends the smallest articles away from the general mass of laundry during the collection/storing process, allowing for better air circulation, and preventing a build up of odors.

My laundry sorter attachment is less expensive to manufacture, due to readily available and inexpensive parts needed for assembly of the invention. This results in a more affordable product than previously known.

My laundry sorter attachment is also lightweight, easy to assemble, cheap to warehouse, inexpensive to ship, and compact so it takes up very little retail shelf space. All of these factors make the item inexpensive for the consumer, and more profitable for the retailer. These factors also make my laundry sorter attachment a more viable mail order item than, heavier/bulkier items.

My laundry sorter attachment saves personal energy by making the entire laundry process easier and quicker for the user, and also actual energy by cutting down on drying time significantly. The present invention helps protect the items within it from becoming damaged by the machine, and also by preventing the items from becoming lost. Smaller articles of clothing such as socks have a mysterious way of disappearing by statically cling to another item and dropping off somewhere else to never be found, or by being swallowed up by the washing machine itself. My laundry sorter attachment prevents such common occurrence.

Furthermore, my laundry sorter attachment is extremely space efficient for the user, since it is hung on the inside of the laundry collection device, a very important consideration for tight quarters. Additionally, my laundry sorter attachment is easily moved due to its detachable feature and it’s lightness of weight. An important consideration if the user is disabled, feeble, or otherwise unable to manage heavy bulky objects.

Additional Ramifications

The preferred embodiment of my invention is for the elastic type band (which adjusts amount of slack by use of a buckle apparatus) to stretch around the outside of the laundry collection device, but if the collection device that the invention is being attached to is not of rigid construction then the use of clips (similar to alligator clips, or ordinary clothes pins) or another fastening means may be used to attach the elastic band to the collection device. In this case the band may be more easily clipped to the inside of the hamper depending on design of the non-rigid collection device.

The present invention should not be limited to its main embodiment and is able to be used in many other ways. Alternative embodiments may include a way for extra empty mesh bags to be placed one in front of the other for storage purposes, until they are filled, and sealed, and then dropped into the general laundry container. Slightly larger bags may be used to accommodate larger matching pairs of items. Specialized design bags may be used for baby items. For example, the elastic strap could bear a more appealing baby design (e.g. little cuddly animals, etc.) The preferred embodiment is as an attachment, but the invention could be permanently affixed to an existing structure/product at a very low cost who is licensed to do so.

Alternatively, it can be hung in a closet for similar purpose of holding and sorting laundry items, or any other closeted item. Travelers could use the invention or a modification of it in a suitcase to hold and separate items. It should be clear that the invention could be used for many other purposes with slight and insignificant modifications, such as size, material, shape, color, etc. The attachment of the invention to another object other than mentioned, or it’s use in another way, should be obvious to one skilled in that art and should be considered within the scope of the appended claims.

While the fundamental and novel features of the invention have been shown and described, it should be understood that various substitutions, modifications, and variations may be made by those skilled in the art without departing from the spirit or scope of the invention. Thus, the scope of the invention should be determined by the appended claims, and their legal equivalents, rather than by the examples given. Accordingly, all such modifications, or variations are included in the scope of the invention as defined by the following claims:

1. What is claimed is in combination an apparatus comprising:
   a. an elongated band of sufficient length to be able to be adjusted to fit the outside of a container
   b. a means for attaching said band around said container
   c. A plurality of porous pouches large enough for the containment of a few items, but small enough so as to adequately allow for air movement and water movement throughout said pouch and its contents.
   d. a Means for closing said pouches whereby the contents are contained during the wash and dry cycles.
   e. a means for connecting said pouches to said band
2. The band of claim 1 wherein, said band is of an elastic or equivalent stretch material allowing a tight fit around the collection device
3. The attachment device in claim 1 wherein said attachment device has a male end and a female end that interlock to make the band of claim 1 continuous.
4. The attachment device of claim 3 further including a slotted buckle like feature which allows for the adjustment and tightening of said band of claim 1.
5. The band of claim 2 having a looped feature that holds the slack of said band after the attachment of said band to the collection device.

6. The Pouches of claim 1 wherein said pouches resemble or replicate a mesh woven pattern having holes large enough to allow sufficient air and water flow through them, but small enough to not allow escape of the articles contained within.

7. The means for connecting of claim 1 being permanently affixed to said band of claim one.

8. The means for connecting of claim 7, further including a temporary fastening mechanism on the end that is not permanently attached to said band of claim 1.

9. The Pouches of claim 6 further including a snap, Velcro, keyhole, or other temporary, but strong closing means.

10. The pouches of claim 9 being made of nylon or an equivalent material, which does not absorb water readily, dries quickly, and is of tough construction.

11. The Pouches of claim 10 further including a temporary fastening means located on the back side of said pouches, enabling said pouches to be attached and detached from the connecting means of claim 8.

12. The Means for connecting of claim 8 said pouches of claim 11 to said band of claim 5, wherein the said connecting means is a strap of material long enough to allow suspension of the pouches inside the collection device, but short enough to keep said pouches near the top of said collection device.

13. The means of connecting of claim 12, wherein said connecting means is a strap of material being made of nylon or a substantially equivalent material.

14. The Means for connecting said pouches of claim 11 to said connector strap of claim 12, wherein said pouches attach to the connector straps fastening mechanism via a corresponding fastening mechanism located on the back side of said pouches.

15. The temporary fastening mechanism of claim 11, wherein, said fastening mechanism is Velcro tm, or it’s equivalent, keyhole, or other temporary means of attachment, which is permanently affixed, to the backside of the pouch.

16. The connecting means of claim 14, further including a receiving Velcro tm, or other means of attachment, wherein said receiving Velcro or other means of attachment must be located on the said connector strap of claim 14 so that the connector strap forms a temporary fastened state to the said pouches so that the pouch can be attached when desired and the pouch can be removed when desired.

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