Nov. 6, 1934. P. A. MARTIN 1,979,978

HAND BAG AND CASE

Filed June 27, 1932 5 Sheets-Sheet 1

Fig. 1.

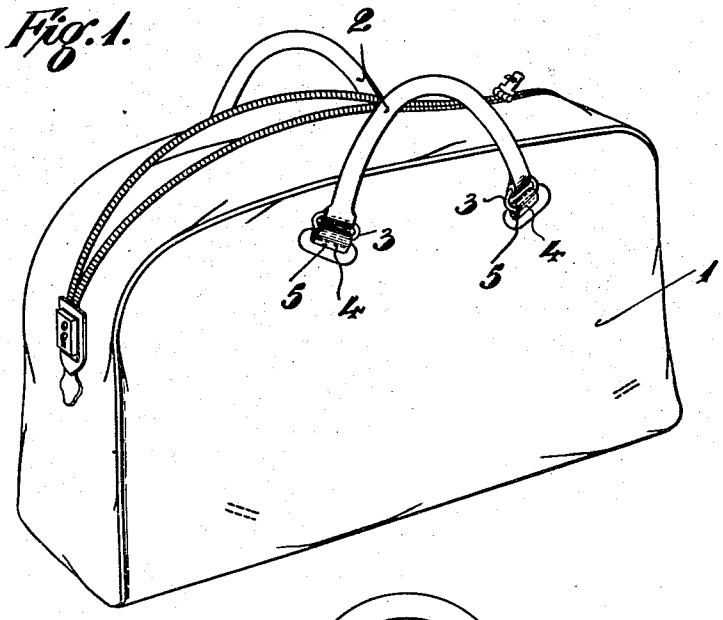
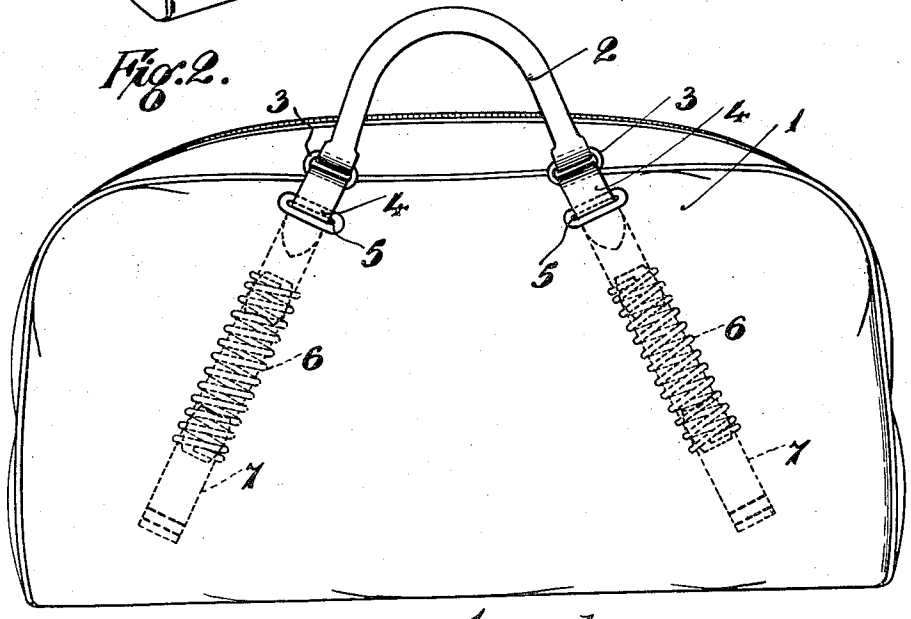


Fig. 2.



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Nov. 6, 1934. P. A. MARTIN 1,979,978

HAND BAG AND CASE

Filed June 27, 1932 5 Sheets-Sheet 2

Fig. 3.

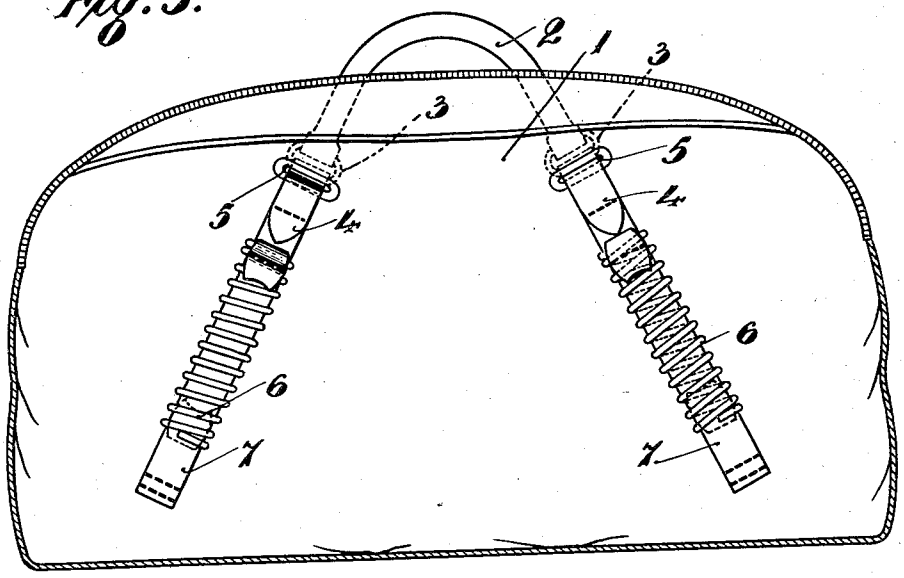
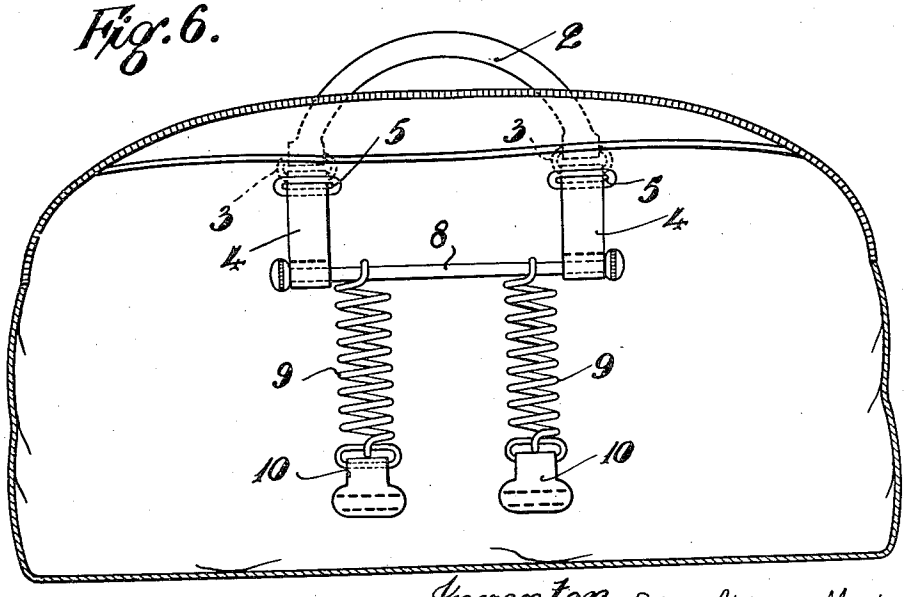


Fig. 6.



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Nov. 6, 1934. P. A. MARTIN 1,979,978

HAND BAG AND CASE

Filed June 27, 1932 5 Sheets-Sheet 3

Fig. 4.

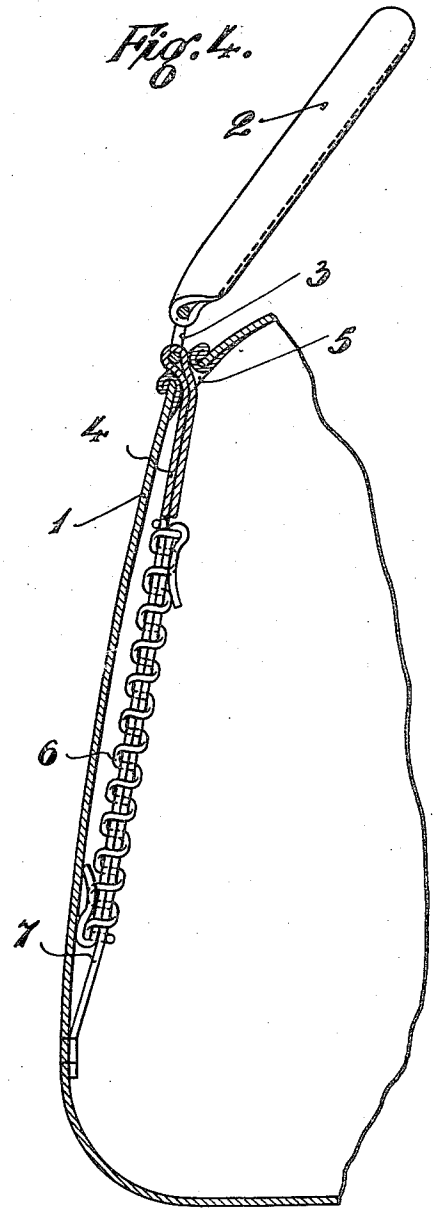
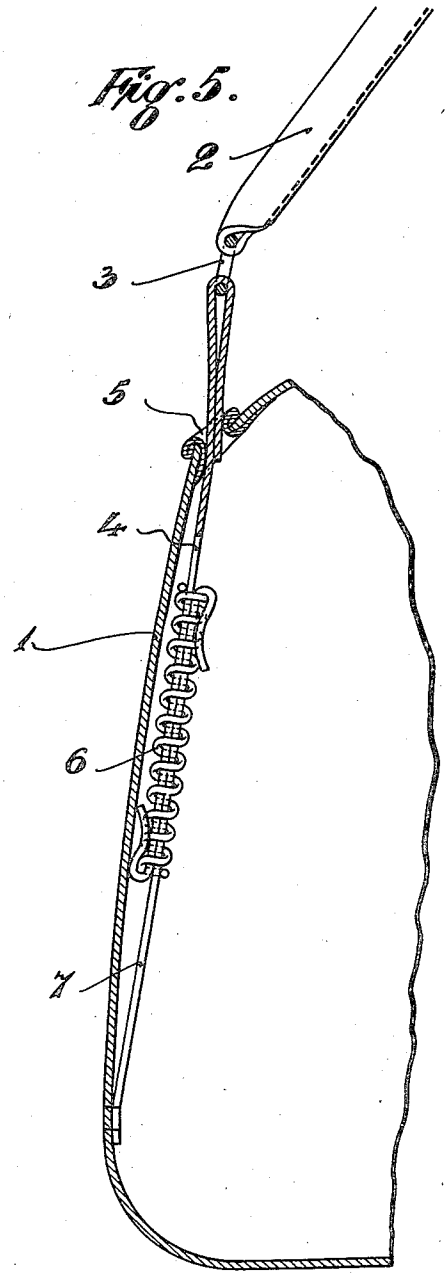


Fig. 5.



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Nov. 6, 1934. P. A. MARTIN 1,979,978

HAND BAG AND CASE

Filed June 27, 1932 5 Sheets-Sheet 4

Fig. 7.

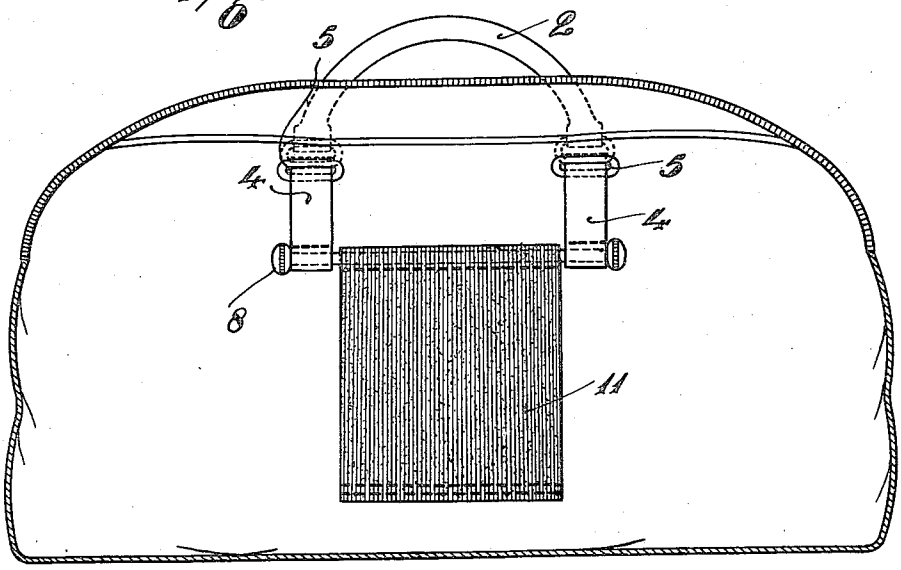
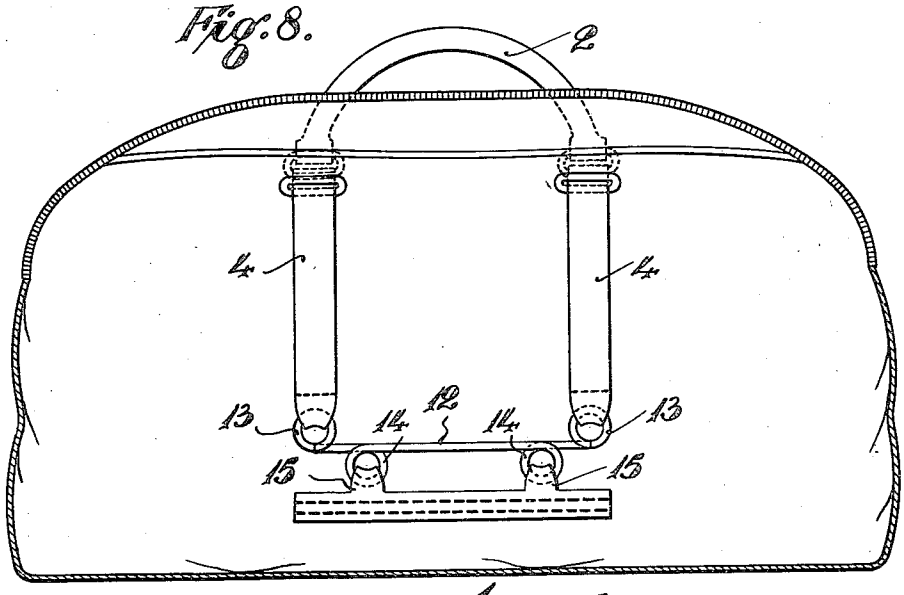


Fig. 8.



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Nov. 6, 1934. P. A. MARTIN 1,979,978

HAND BAG AND CASE

Filed June 27, 1932 5 Sheets-Sheet 5

Fig. 9.

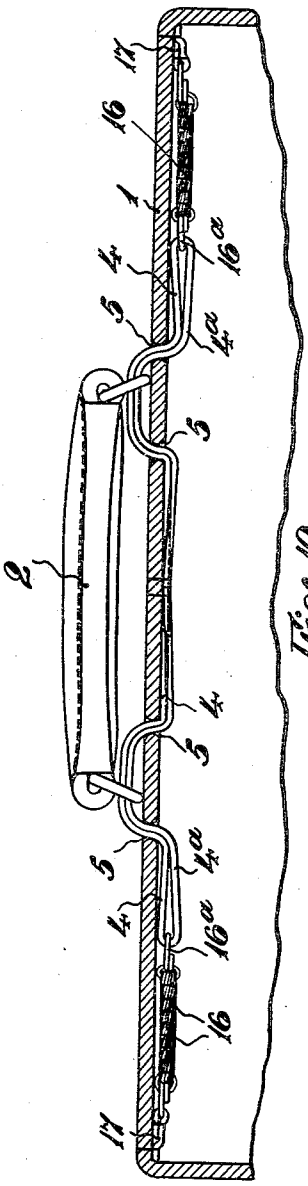
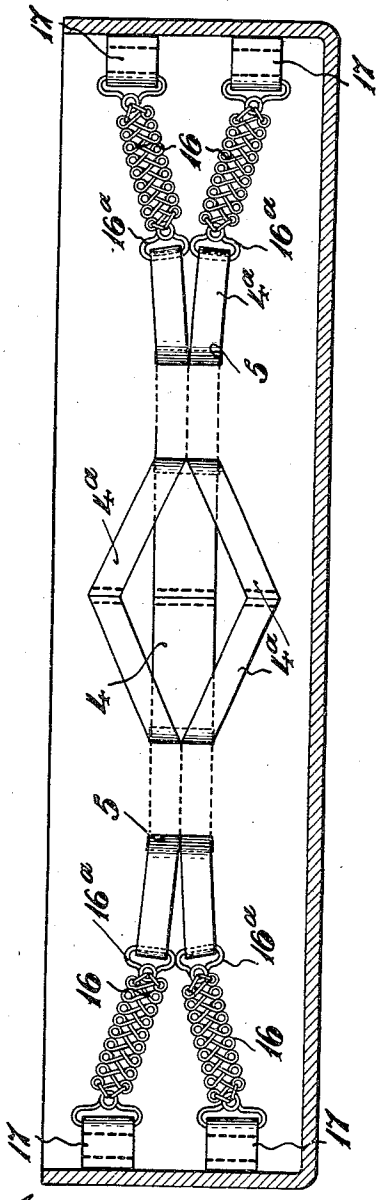


Fig. 10.



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Patented Nov. 6, 1934 1,979,978

UNITED STATES PATENT OFFICE

1,979,978

HAND BAG AND CASE

Patrick Alphonsus Martin, Birmingham, England

Application June 27, 1932, Serial No. 619,555

3 Claims. (Cl. 190—58)

This invention relates to the carrying handles of hand bags, cases and similar receptacles and has for its object to provide improved means for attaching or anchoring the handle or handles to the body of the bag or case which gives greater comfort in carrying, and whereby the weight carried is evenly distributed upon the handle or handles and the material of the said bag or case relieved of sudden detrimental strains due to the weight of the contents.

According to the invention the ends of the carrying handle or handles are anchored or attached to the body of the bag or case through the medium of a spring or springs or an elastic device preferably concealed or located within the interior of the bag or case. The ends of the handle may be attached to running straps, bands or the like passing through slots or apertures in the bag or case and attached to interiorly-located anchored springs.

Figure 1 of the accompanying drawings shows a perspective view of a hand bag provided, in accordance with this invention, with resiliently attached handles, the latter being connected to compression springs, located inside the bag, by straps passing through slots in the latter.

Figure 2 is a side view with the handle straps extended and the springs, shown dotted, compressed by the weight of the contents of the bag when the latter is in use.

Figure 3 represents a vertical longitudinal section through the bag, showing the springs, before being compressed, in elevation.

Figure 4 illustrates upon a larger scale a vertical cross-section through the wall of the bag, showing one of the springs in side view before being compressed.

Figure 5 shows a similar view to that illustrated in the preceding figure, but with the spring compressed under a load.

Figure 6 illustrates a modified arrangement in which the ends of the handle are attached to a cross-bar anchored to the body of the bag, shown in section, by coiled tension springs.

Figure 7 shows a further arrangement in which the springs are replaced by elastic webbing.

Figure 8 shows a still further arrangement which may be employed.

Figure 9 illustrates the application of the invention to a suit case, showing the upper portion of the latter.

Figure 10 represents an underside view of the top wall of the case shown in the preceding figure.

Referring to Figures 1 to 5 of the drawings, the bag is formed with a flexible-sided body 1 provided with a pair of bow-shaped side handles 2 at opposite sides of the mouth (which may be closed by any suitable fastening device or may be open). Each handle 2, which is inextensible and may be composed of fibrous material covered with leather, has its opposite ends connected to metal loops or rings 3 secured to the looped upper ends of leather or other flexible straps 4 which are passed in downwardly-diverging directions through oblique slots 5 formed in the side of the body, so that the said straps are in substantial alignment with the end portions of the handle. These straps 4 lie close to the inside wall of the bag with their upper looped ends projecting from the slots outside the bag. The lower end of each strap 4 is connected, through the medium of a coiled spring 6, to a strap 7 which is sewn or attached to the inner face of the wall of the bag, near the bottom of the latter. These two straps 4 and 7 are of equal width and normally overlap one another for the greater portion of their length, being held together in sliding relationship by the spring 6 itself. The latter is of the compression type and is formed with flattened coils, both straps being passed axially through the coils, as illustrated, the lower end of the strap 4 attached to the handle being connected to the lower end coil of the spring 6 and the upper end of the strap 7 being connected to the upper end coil of the spring, the arrangement being such that the spring 6 is compressed when the straps 4 and 7 are pulled apart. The said straps may be connected to the spring 6 in any suitable manner, such as by folding their extremities over the respective end coils of the spring, and securing the folded-over portions by sewing. If desired, the springs and straps may be concealed and kept out of contact with the contents of the bag by suitable covering or lining.

In use, the straps 4 connecting the handles 2 to the springs 6 are free to run through the slots 5 in the wall of the bag, and the springs 6 will thus be compressed in accordance with the weight of the bag and its contents. The said springs will thus absorb any sudden shocks that may result from jolting or the like, thereby relieving the body of the bag from detrimental strains and enabling the bag to be carried in comfort. The springs also serve to distribute the load evenly upon the ends of the handle.

In the arrangement illustrated in Figure 6,

the ends of each handle 2 of the bag are attached by metal loops 3 to straps 4 extending through slots 5 in the wall of the bag as in the previous arrangement, but the lower ends of the straps 4 carried by each handle are connected to the opposite ends of a metal bar 8 disposed within the interior of the bag. This bar 8 is connected by a pair of coiled tension springs 9 to a pair of tabs or attachment members 10 secured to the inner face of the wall of the bag near the bottom of the latter. When the bag is in use the weight of the bag and its contents causes the springs 9 to be extended, the said springs absorbing the shocks, and giving greater comfort in carrying. The bar 8 may be attached to the body of the bag by any suitable number of springs.

The arrangement illustrated in Figure 7 is very similar to that shown in the preceding figure, each handle 2 of the bag carrying straps 4 extending into the interior of the latter through the slots 5, the lower ends of the straps being attached to a metal bar 8. In this case, however, the bar 8 is connected to the body of the bag by elastic webbing 11, which acts in the same way as the springs shown in the previous arrangement.

In the modification which is illustrated in Figure 8, the ends of each handle 2 are connected by straps 4 to a spring or resilient rod or wire 12 the ends of which are fashioned into coils 13 to form resilient eyes for the attachment of the lower ends of the straps 4, which pass through slots into the interior of the bag as in previous arrangements. The rod 12 is formed between the coils 13 with a pair of separated spring loops 14 by which the rod is anchored to attachment tabs 15 secured to the inner face of the body of the bag.

In applying the invention to a suit case or the like the arrangement shown in Figures 9 and 10 may be adopted. Referring to these figures the top wall 1 of the case is formed with transverse slots 5 arranged in pairs adjacent each end of the carrying handle 2. The latter is attached by a pair of folded or doubled-over straps 4 which are threaded through the slots 5 to provide a pair of external loop portions to which the respective ends of the handle are connected. The lower half of each folded or doubled-over strap 4 is divided longitudinally to provide a pair of narrow strips 4^a which are passed through metal loops 16^a attached to the ends of spring bands 16 the opposite ends of which are anchored to the adjacent part of the case, such as by tabs 17. The end of the main undivided portion of each strap 4 and the extremities of the divided portions 4^a are fixed to the underside of the top 1 of the case, and when the latter is in use the spring bands 16 yield or stretch under the weight of the case and its contents, allowing of the straps to move through the slots, thus providing a resilient support which absorbs sudden shocks.

The handle straps may obviously be of a single thickness only if desired, instead of being doubled over, each strap being connected at one end to the springs and at the other end to the case. Rollers may be fitted at the edges of the slots through which the straps pass to enable the said straps to run freely.

A spring or spring band, or an elastic or resilient device, of any suitable form may be employed whilst the invention may be applied to bags, cases or like receptacles of any suitable construction, or of any desired shape. If desired the spring or elastic device may be outside the bag or case.

Having fully described my invention, what I desire to claim and secure by Letters Patent is:—

1. A receptacle, a pair of carrying handles and a resilient device connecting each end of each handle to the body of the receptacle, the said resilient device comprising a coiled compression spring disposed within the receptacle, and a pair of relatively-sliding overlapping members anchored to opposite ends of the spring, the one member passing through an aperture in the side of the receptacle and being attached to the handle and the other member being attached to the body of the receptacle, the coiled spring and the said relatively sliding overlapping members lying close to and alongside the side of the receptacle.

2. A receptacle, a pair of carrying handles and a resilient device connecting each end of each handle to the body of the receptacle, the said resilient device being disposed within the latter and comprising a coiled compression spring and a pair of relatively sliding overlapping members passing through the spring and anchored to opposite ends of the latter, the said spring and overlapping members lying close to and alongside a side of the receptacle, one of the overlapping members passing through an aperture in the side of the receptacle and being attached to the end of the handle, and the other overlapping member being attached to the said side of the receptacle near the bottom of the latter.

3. A receptacle, a pair of carrying handles and a resilient device connecting each end of each handle to the body of the receptacle, the said resilient device being disposed within the latter and comprising a flattened coiled compression spring and a pair of relatively sliding overlapping straps passing through the spring and anchored to opposite ends of the latter, the said spring and overlapping members lying close to and alongside a side of the receptacle, one of the overlapping members passing through an aperture in the side of the receptacle and being attached to the end of the handle, and the other overlapping member being attached to the said side of the receptacle near the bottom of the latter.

PATRICK ALPHONSUS MARTIN.