Dec. 20, 1960 R. L. BAKER 2,965,344

REFUSE BAG HOLDER

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Fig. 1

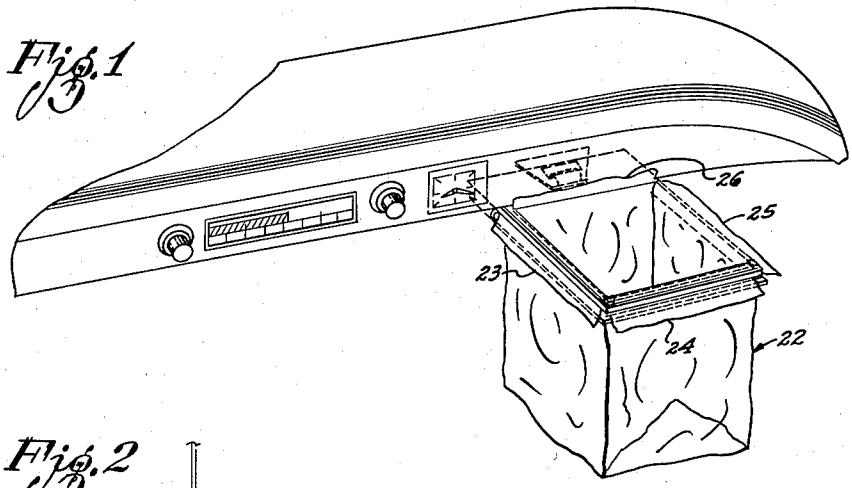


Fig. 2

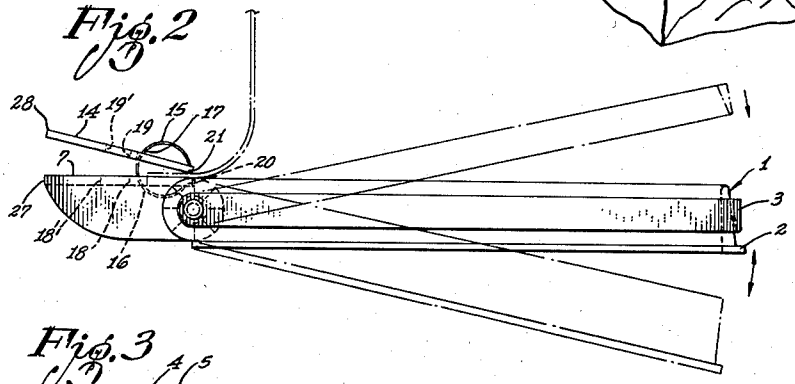
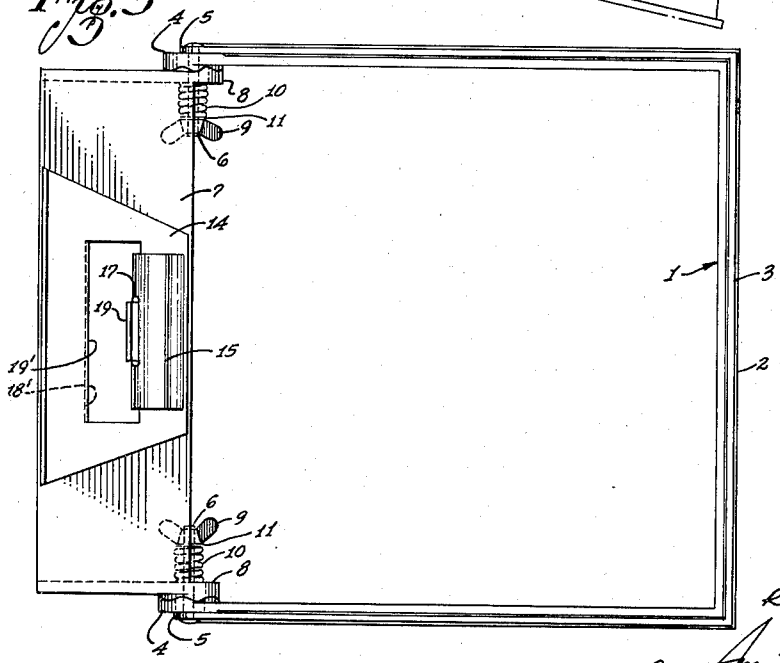


Fig. 3



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Fig. 4

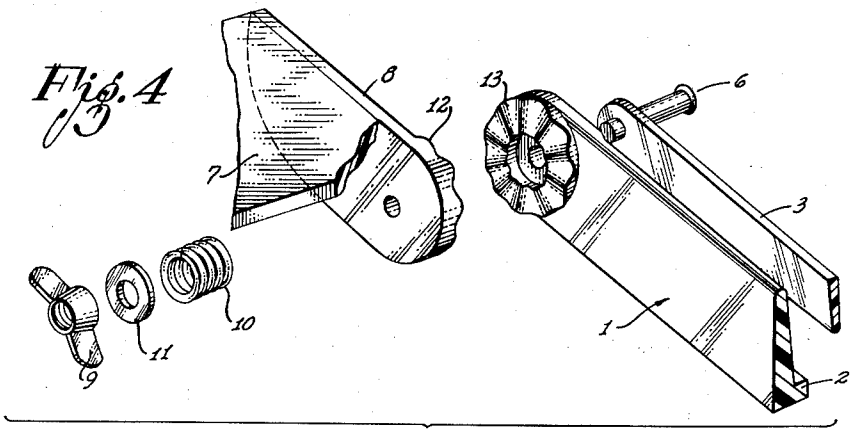


Fig. 5

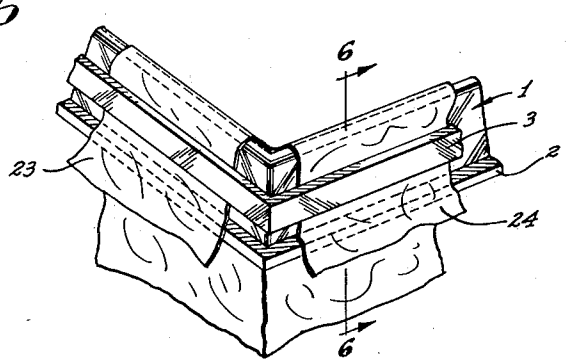


Fig. 6

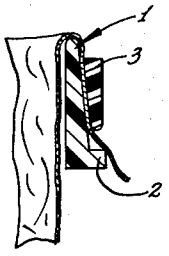
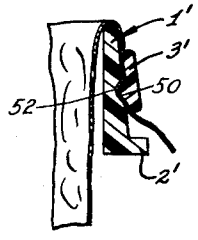


Fig. 7



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REFUSE BAG HOLDER

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7 Claims. (Cl. 248—101)

This invention relates to refuse bag holders of the type particularly suited for temporary attachment to the lower horizontal edge of the dashboard of an automobile.

While many refuse bag holders of different types have been devised, and a number of these, with particular reference to their utilization in automobiles, none which I have seen attains the advantages and objects of the apparatus of my present invention.

It is an object of my invention to provide a refuse bag holder which may be removably attached to any part of the lower horizontal edge of a car dashboard, and by means which will not mar the painted surface of the dashboard.

It is also an object to provide a holder which may utilize standard throw-away waxed paper garbage bags or containers.

It is a further object to provide a holder which is insulated from contact with the refuse.

It is a still further object to provide a receptacle support which holds the mouth of the bag open for easy insertion of the refuse.

It is a still further object to provide a holder which, with its refuse bag, may be pivoted back under the dashboard and largely out of sight.

It is a still further object to provide for positive clamping of the paper bag.

The foregoing and other objects are accomplished by my invention, which, in the preferred embodiment shown in the accompanying drawings, and hereinafter described in detail, is comprised of an inner frame consisting of three sides of a rectangle, and a parallel outer frame adapted to fit closely against the inner frame, both frames being pivotable relative to each other and about an axis through the free extremities of both frames. Between these extremities I dispose a clamping plate by angular attachments at the pivot points of the framing, said plate being provided with spring biased means which, with said plate, form a jaw to clamp the framing onto a horizontal edge.

In the accompanying drawings:

Figure 1 is a perspective view of the preferred embodiment of my invention as attached to an automobile dashboard;

Figure 2 is a side elevation of my holder;

Figure 3 is a plan view;

Figure 4 is an enlarged perspective view of a corner assembly;

Figure 5 is a perspective view detailing the manner in which the corner of a paper bag is clamped;

Figure 6 is a section along the line 6—6 of Figure 5;

Figure 7 is a section of an alternative embodiment.

Referring to Figures 2 and 3, it may be seen that my novel refuse bag holder is constructed of a base frame 1 in the shape of three sides of a rectangle. This base frame may be fabricated of any rigid material, and is provided about its lower outside area with a shoulder 2 which extends most of the way around the three sides of the rectangle. The base frame may be made in any

desired dimensions but if it is desired to utilize the standard 6⅜" x 7¾" bottom waxed paper garbage bag, the inside dimensions of the base frame should be at least of the same dimensions and preferably slightly larger to accommodate the folded back edges of the bag. In a model which I have constructed and tested, the inside dimensions of the three sides of the rectangle have been 7¾" x 7⅜".

I next provide an outer frame 3 of such inside dimensions as to adapt it to fit closely about the outside of frame 1, and to rest upon the shoulder 2. The frame 3 is similarly shaped to form three sides of a rectangle. The free extremities 4 and 5 respectively of the frames 1 and 3 are drilled or otherwise orificed to receive bolts 6. Extending between the inner sides of the free extremities 4 of the base frame 1, I further provide a clip plate 7 at each end of which is a flange 8. This flange 8 is drilled to accommodate the bolts 6 which extend through the extremities 4 and 5 respectively of the frames 1 and 2. With the insertion of the bolts 6 through the holes in the extremities 4 and 5 of frames 1 and 2 respectively and in the flanges 8 at the ends of the plate 7, all three elements, namely, frames 1 and 2 and clip plate 7, will be secured together in pivotable relationship with each other about a horizontal axis. To assure that bolts 6 do not slip out from the holes in these three elements, I provide a wing nut 9, a spring 10 and a washer 11. It will also be noted that to enable the flange 8 to be locked in fixed positions in relationship to the base frame 1, I have provided on flange 8 a rough angular crown 12 and on the base frame 1 an annular mating crown 13. The spring 10 also serves to adjust the friction between the crowns 12 and 13. The crowns 12 and 13 may be provided with scalloped configurations, as best shown in Figure 4.

In addition, to enable the entire assembly to be clipped to a horizontal edge, such as the edge of the dashboard of an automobile, I further provide a second plate 14 of approximately the same dimensions as plate 7, except that no flanges such as 8 are required in the case of plate 14. In addition, I provide a cylindrical spring 15 which is orificed and has two longitudinal slots 16 and 17 to accommodate projections 18 and 19 respectively of the two plates 7 and 14 respectively. The last mentioned projections are formed by cut-outs 18', 19' in each of the plates 7 and 14 respectively. These cut-outs are required further to permit the cylindrical clip spring 15 to be inserted through the two plates 7 and 14 to urge their respective edges 20 and 21 together in angular engagement as shown in the left hand side of Figure 2.

In use, the wing nuts 9 may be looseend to enable the frame 3 to be pivoted upwardly away from the base frame 1. A paper bag 22 is then opened and inserted into the rectangle formed by the base frame 1 and the edge 20 of the plate 7. The upper edges of the bag 22 should be cut at each of its corners to remove an angular section of approximately 45° so that adjacent edges 23 and 24 may be folded back in the manner shown in Figures 1 and 5. Each of the edges is then brought over the top of the base frame 1, and down over the shoulder 2. The frame 3 is then pivoted downwardly to close against the outside of the frame 1 and against the shoulder 2, thereby to pinch the three edges 23, 24 and 25 of the bag 22. The paper bag edge 26 may be brought into the jaw formed by the two edges 20 and 21 of the plates 7 and 14 respectively, or the edge 26 may be simply allowed to extend upwardly without any support. In Figure 7, I have shown an alternative shaping of the frames 1 and 3 to effect a better securing of the bag.

My bag holder, with its paper bag 22 thus mounted, may now be clipped on to the edge of the dashboard at some

convenient point. This is accomplished simply by pinching between the fingers the diverging edges 27, 28 of the two plates 7 and 14 respectively. Such pinching opens the jaw formed by the edges 20 and 21, and this jaw is then brought over the edge of the dashboard; the clip spring is then released to effect a gripping of the dashboard edge between the jaws thus formed. By adjusting the wing nuts 9 to vary the tension of springs 10, and swinging the base frame 1 and its superimposed frame 3, the bag may thus be mounted on the dashboard in any desired position, so that it will hold a reasonable amount of weight in such position. The holder position may be changed simply by grasping firmly and overcoming firmly the frictional force between the mating crowns 12 and 13. Whenever it is desired to remove the paper bag, it is simply necessary to lift the forward edge of the frame 3 and pivot it upwardly relative to the base frame 1. The bag may then be withdrawn from the base frame 1, and a new bag substituted. If this bag edge 26 is inserted in the jaw formed by the two edges 20 and 21, it will also be necessary to release the bite of this jaw to enable edge 26 to be removed.

Because of the clip spring mounting, my novel bag holder may be readily removed from the dashboard at any time. In practice, I have fabricated my bag holder from a rigid plastic material, but it is obvious that the holder could be constructed of any rigid type of material such as wood, aluminum, etc. I would recommend, however, that a material be selected which is not likely to mar the paint on the dashboard in the car, particularly if the lower edge of the dashboard does not extend in a horizontal plane rearward of the dashboard panel.

Because of the clip spring mounting and ability of the frames 1 and 3 to pivot about a horizontal axis, my holder may be mounted on an edge which extends in any type of downwardly extending or horizontal plane. In this connection, my novel holder would be suitable for mounting and use on other items than automobile dashboards. For example, my holder might well be employed at the side of a hospital bed by clipping it at the downwardly extending edge of the L-shaped cross section frame of the bed. In such use, the device might be employed for the deposit of disposable tissues by an invalid patient. Many other uses will be found for my novel refuse bag holder.

While I have shown, in my preferred embodiment, a second plate 14, the purpose of which is to provide, in conjunction with plate 7 and cylindrical spring 15, a spring-biased jaw which can be separated by pinching the angularly separated edges 27 and 28 in the manner heretofore described, it would be possible to dispense with the plate 14, and provide simply a spring clip with some levering means such as is commonly found on clipboard pads for writing. In short, any means for clipping the plate 7 to the edge of some item, such as a dashboard, I intend to comprehend within the scope of my invention.

Figure 7 illustrates a modification of the invention in which a tongue 50 is provided on the frame 3 and a groove 52 is provided on the frame 1 to receive the tongue. By providing the tongue 50 and the groove 52 the retention of the frames 1 and 3 in fixed position relative to each other is facilitated when the frame 3 is pivoted into coupled relationship with the frame 1.

I claim:

1. In apparatus for use in an automobile to hold a litter bag for the reception of litter and for support of the apparatus on the dashboard of an automobile, a base frame open at one end, a second frame open at one end and having a configuration corresponding to that of the base frame with dimensions slightly different from those of the base frame to provide a close fit between the first and second frames for a support of the litter bag between the base frame and the second frame, a pair of pins extending through the base frame and the second frame at opposite ends of the frame to support the frames, the base frame being provided with scalloped portions at position contiguous the pins, holder means supported by the pins in contiguous relationship to the base frame and provided with scalloped portions at positions contiguous to the pins and facing the scalloped portions in the base frame, and means including a pair of springs disposed on the pins for pressing the base frame and the second frame and the holder means against one another to maintain the scalloped portions on the base frame and on the holder means in mating relationship.

2. Apparatus as set forth in claim 1 in which the holder means includes a first plate, a second plate and a spring clip, with the first plate extending from the second frame and the second plate being disposed in contiguous relationship to the first plate and with holes provided in the first and second plates and the spring clip extending in an arcuate configuration between the first and second plates and through the holes in the plates to obtain a gripping action by the plates upon a relative pivotal movement of the plates and upon a disposition of the plates against the dashboard of the automobile.

3. Apparatus for use in an automobile to hold a litter bag for the reception of litter and for support of the apparatus on the dashboard of an automobile, a base frame, a second frame having a configuration corresponding to that of the first frame and having dimensions slightly different from the first frame to provide a close fit of the second frame relative to the first frame for a support of the bag between the first and second frames, a pair of pins extending through the first and second frames to provide a support for the frames and a pivotal movement of the first frame relative to the second frame, means including a spring supported on the pin for pressing the first and second frames to maintain the first and second frames in fixed relationship to each other upon a pivotal adjustment of the frames, a first plate supported on the pins, a second plate disposed in pivotal relationship to the first plate, and a spring clip extending between the first and second plates to hold the plates in pivotal relationship to each other for a support of the plates on the dashboard of the automobile upon a pivotal movement of the first and second plates.

4. In apparatus for use in an automobile to hold a litter bag for the reception of litter and for support of the apparatus on the dashboard of an automobile, including, a base frame open at one end, a shoulder on the base frame at one extremity of the base frame, a second frame open at one end and provided with an external configuration corresponding to that of the base frame and with dimensions slightly different from that of the base frame to obtain a close fit between the base frame and the second frame for a support of the litter bag between the base frame and the second frame and to obtain a limit in the movements of the second frame relative to the base frame in accordance with the disposition of the shoulder, there being scalloped portions on particular surfaces of the base frame, a pair of pins extending through the base frame and the second frame at positions contiguous to the scalloped portions on the base frame, and means including a pair of springs disposed on the pins and including means adjustably positioned on the pins to press the base frame and the second frame together with a force dependent upon the positioning of the adjustable means for maintaining the base frame and the second frame in fixed position relative to each other upon a pivotal adjustment between these frames, the adjustable means including holder means having scalloped surfaces disposed in coupled relationship to the scalloped surfaces on the base frame and in contiguous relationship to the pins to maintain the frames and the adjustable means in fixed positioning after adjustment.

5. In apparatus as set forth in claim 4, the base frame and the second frame being provided with a tongue-and-groove arrangement to facilitate the disposition of the base frame and the second frame in fixed relationship

to each other upon a pivotal movement of the base frame and the second frame into coupled relationship with each other.

6. In apparatus for use in an automobile to hold a litter bag for the reception of litter and for support of the apparatus on the dashboard of an automobile, a first plate having a hole at an intermediate position in the plate, a second plate having a hole at an intermediate position in the plate, a spring clip supported at opposite ends on the first and second plates and extending through the holes in the plates to provide a constraining force on the plates upon a pivotal movement of the plates for maintaining the plates in fixed position on a dashboard, a base frame open at an end contiguous to the first and second plates and provided with a shoulder at one extremity and extending from the first and second plates, a second frame extending from the first and second plates and provided with a configuration corresponding to that of the base frame and with dimensions slightly different from that of the base frame to obtain a close fit between the base frame and the second frame in one disposition of the frames for a support of the litter bag between the frames, a pair of pins extending through the first and second frames at opposite ends of the frames to provide a

pivotal connection between the frames, a pair of nuts adjustably positioned on the pins, a pair of springs disposed on the pins with a constraint dependent upon the positioning of the nuts, and scallops provided on the contiguous surfaces of the base frame and the first plate in mating relationship in accordance with the force imposed on the frames and the first plate by the springs to maintain the frames and the plates in fixed disposition relative to one another upon a pivotal adjustment of the frames relative to the plates.

7. Apparatus as set forth in claim 6 in which the base frame and the second frame are provided with a tongue-and-groove configuration to facilitate a fixed disposition between the base frame and the second frame in the relative position of the frames for holding the bags.

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