Sept. 1, 1953 J. M. THAYER ET AL 2,650,784

HOLDER FOR PAPER DISPOSAL BAGS

Filed Oct. 1, 1948 2 Sheets-Sheet 1

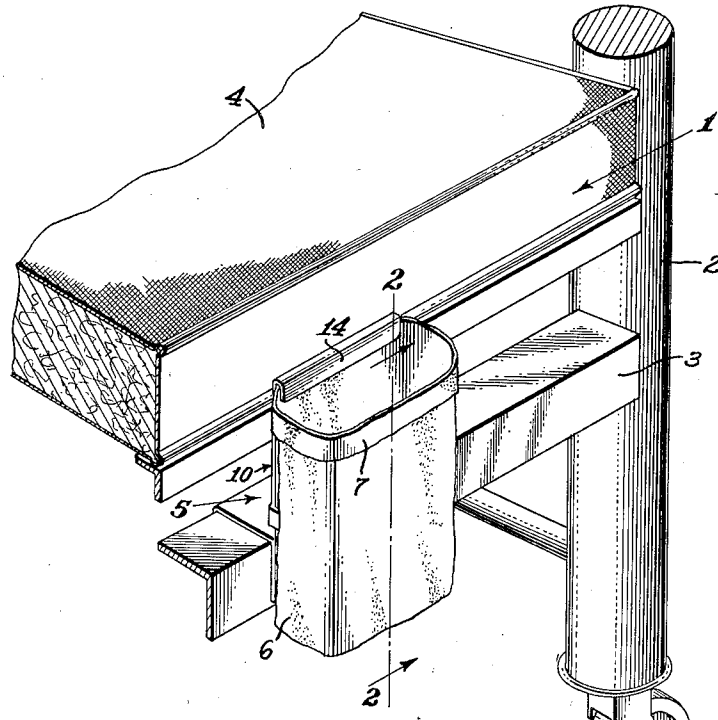


Fig. 1

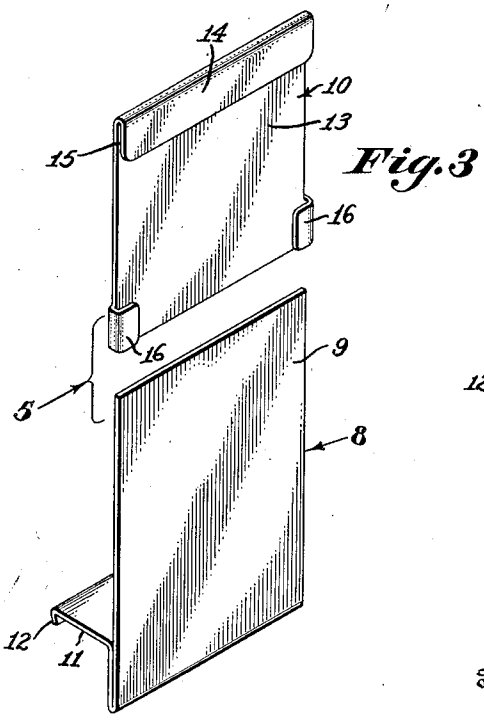


Fig. 3

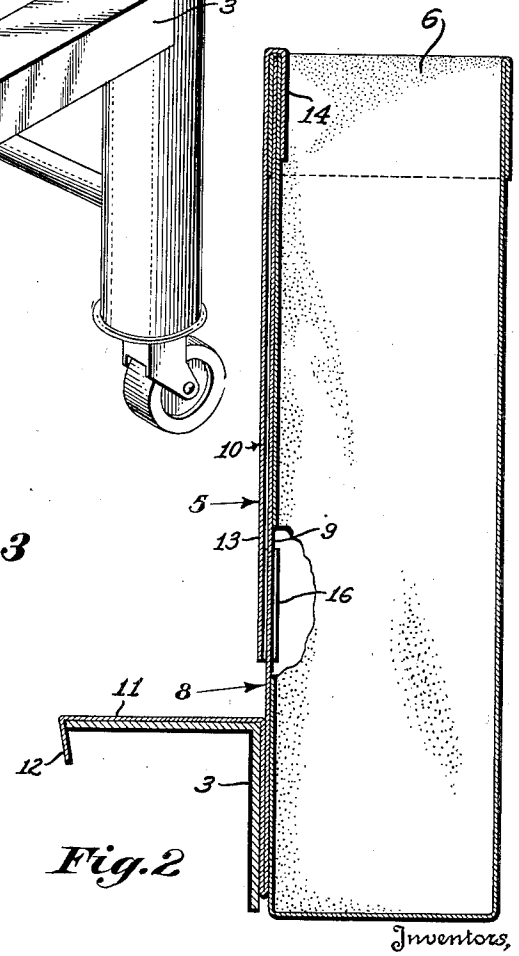


Fig. 2

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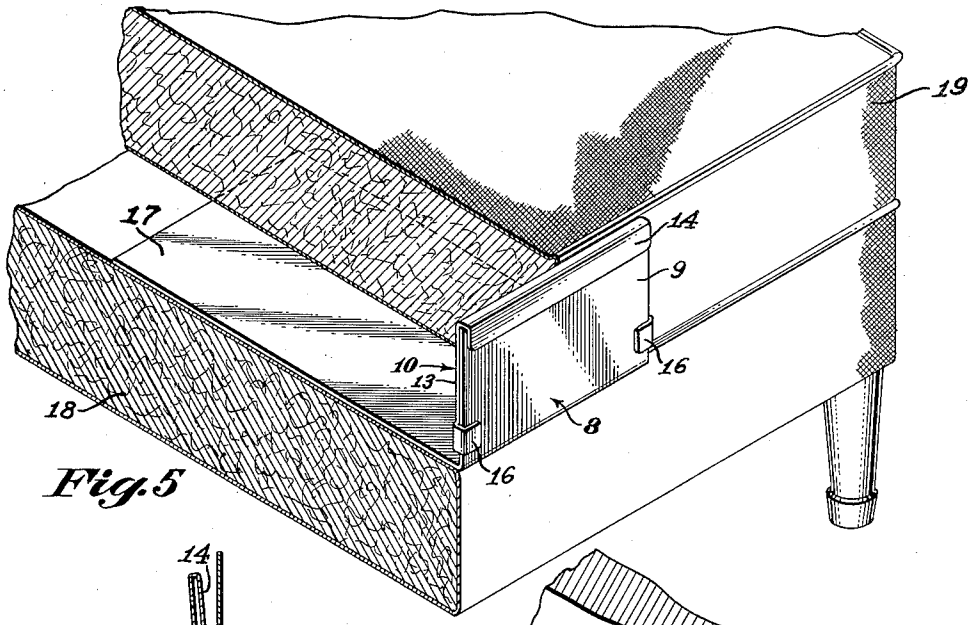


Fig. 5

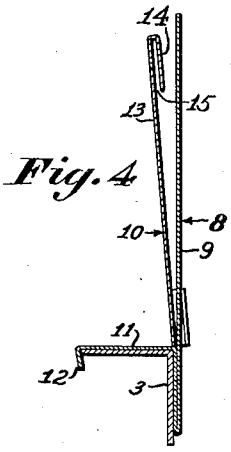


Fig. 4

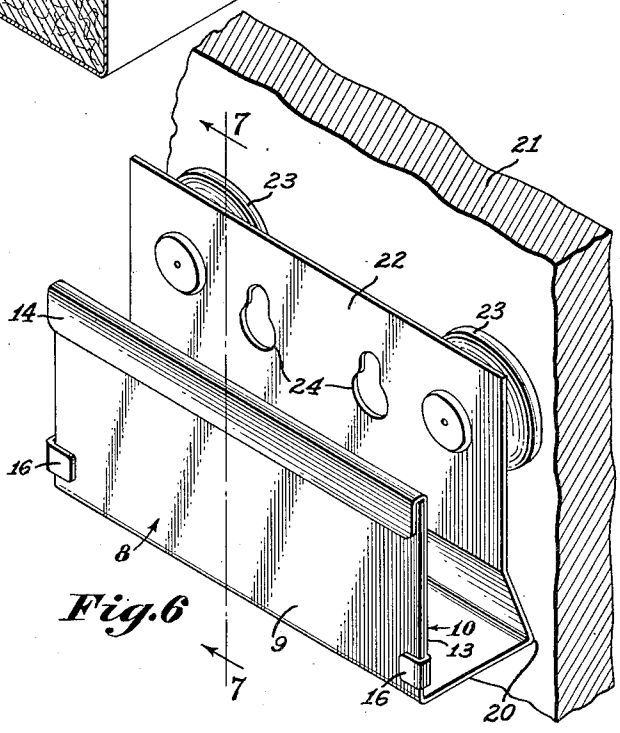


Fig. 6

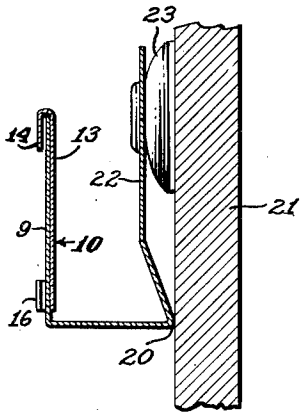


Fig. 7

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HOLDER FOR PAPER DISPOSAL BAGS

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6 Claims. (Cl. 248—95)

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This invention relates to holders for paper disposal bags, the term "disposal bag" connoting an ordinary paper bag which may be placed conveniently with respect to a bed for receiving paper handkerchiefs, fruit remnants, candy wrappers and like items discarded by a bed-confined patient, or which may be suitably positioned, convenient for general use, and which may be burned or otherwise disposed of without removing its contents.

One of the objects of the invention is to provide a bag holder adapted to receive an ordinary paper bag having its mouth end outwardly overfolded to form a surrounding stiffening margin that holds the bag open at the top, said holder comprising a vertical planiform portion affording support for the back of the bag, having a free edge extending into the crevice between the back of the bag and the adjacent part of the overfolded margin, for suspending the bag, and having means for securing said holder to a bed or other fixture, said holder including also a keeper slidable upon said planiform portion, having a channel at its upper end which telescopes over the free edge of the planiform portion and intervening bag, bearing gravitationally upon the latter to hold it in place.

Another object of the invention is to provide a bag holder as described, in which the keeper is swingable out of the plane of said planiform portion a sufficient distance to permit the removal or replacement of a bag without the necessity of removing the keeper from the holder.

Other objects of the invention will appear as the following description of practical embodiments thereof proceeds.

In the drawings which accompany the following specification, and in which the same reference characters have been used to denote identical parts:

Figure 1 is a perspective view of the corner portion of a bed, showing the bag holder supported by the bed rail;

Figure 2 is a cross-section through the bag holder, taken along the line 2—2 of Figure 1;

Figure 3 is a perspective view of the bag holder showing the keeper removed;

Figure 4 is a similar view showing the keeper in release position;

Figure 5 is a perspective view of a portion of a box spring bed showing a modified form of bag holder supported between the spring and mattress;

Figure 6 is a perspective view of a further modification of the invention, wall supported;

Figure 7 is a cross-section taken along the line 7—7 of Figure 6.

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Referring now in detail to the several figures, and first to that form of the invention shown in Figures 1, 2 and 3, the numeral 1 designates generally a bed having the leg 2, side rail 3, and mattress 4. The bag holder, designated as a whole by the reference character 5, is supported on the rail 3, and holds a replaceable paper bag 6, having its upper edge outwardly overfolded, forming a stiffening margin 7 about the mouth of the bag, which assists in holding the mouth open, as shown.

Referring now particularly to Figures 2 and 3, the bag holder comprises a bag support 8 and a keeper 10. The bag support consists of a sheet metal unit having a vertical planiform portion 9, the metal sheet at the lower end of said planiform portion being folded upwardly and rearwardly to form a bracket 11 for securing the bag holder to the bed rail. The bracket 11 has a terminal flange 12, inclined downwardly in a forward direction so as to slightly narrow the mouth of the bracket 11. Said bracket has inherent resiliency so that by tilting the bag support slightly, the bracket may be slipped over the bed rail 3, and when the bag support is moved to erect position the flange 12 grips the bed rail with resilient pressure, maintaining the bag holder in tight relation to the bed.

The keeper 10 is a sheet metal member having a flat portion 13, a forwardly and downwardly folded flange or lip 14 at its upper end forming a channel 15, and forwardly and inwardly extending lugs 16 at its opposite sides near the bottom. Said keeper slides upon the planiform portion 9 of the bag support 8 with the lugs 16 embracing the sides of said planiform portion and the channel 15 hooking over its upper edge. The height of the keeper 10 is less than the height of said planiform portion 9 above the bracket 11, so that the weight of the keeper bears upon the upper edge of said planiform portion.

In use, the upper edge of the planiform portion 9 extends into the crevice formed between the back of the open bag and the adjacent portion of the overfolded margin, the bag being suspended from said upper edge and supported against said planiform portion. The channel 15 of the keeper telescopes over the upper edge of the planiform portion 9 and the intervening portion of the bag, the weight of the keeper resting upon the bag and holding it in place. The flange 14 of the keeper is of considerable width, so as to assist materially in maintaining the mouth of the bag in open condition.

The inwardly directed ends of the lugs 16 are spaced from the flat portion 13 of the keeper a sufficient distance to provide lost motion between

the keeper and planiform portion 9 in the zone of said lugs, so that the keeper may be tilted out of the plane of said planiform portion, as shown in Figure 4, this being the normal release position when it is desired to remove or replace a bag.

The construction of bag holder as described, permits it to lie close to the side of the bed in a position where it does not interfere with the normal functions incident to caring for a bed-confined patient, such as adjusting and changing sheets. These operations may be accomplished without removing the bag holder or bag. The entire bag holder, including the keeper, may be left on the bed when not in use.

The replacement of a bag may be accomplished by the patient herself in a one hand operation. It is necessary merely to grasp the upper end of the keeper, lift it until the flange 14 has cleared the upper edge of the planiform portion 9, then to tilt the keeper in an inward direction and let it fall so as to rest upon the bracket 11. The whole bag may be removed and a fresh bag slipped in place. The keeper is then lifted sufficiently to enable the flange 14 to be hooked over the upper edge of the planiform portion 9 and the replacement has been completed. The fact that the keeper is altogether removable from the bag support as indicated in Figure 3, enables the parts to be separated for thorough sterilization.

Referring now to that form of the invention shown in Figure 5, the construction and relationship of the planiform portion 9 and keeper 10 are the same as in the form first described. The bracket 11 is, however, substituted by a flat portion 17, integral with the planiform portion 9 and at right angles thereto which slips between the box springs 18 and mattress 19 for securing the bag holder in place.

Figures 6 and 7 show a form of the invention adapted to be supported upon a wall. Here again the planiform portion 9 and keeper 10 are the same as in the modifications previously described, but the sheet unit of which the planiform portion 9 is a part is folded rearwardly at the bottom of said planiform portion and at right angles thereto and then upwardly in a forward direction forming an acute dihedral apex 20, which rests against the wall 21, the sheet unit continuing upwardly to form a wall plate 22 parallel to the planiform portion 9 and spaced from the wall. Suction cups 23 are secured to the rear of said wall plate occupying the space between said wall plate and wall, and adapted to grip the wall through vacuum. The dihedral apex 20 not only serves to support the bag holder in an upright position with respect to the wall, but affords a fulcrum about which the bag holder tends to tilt outwardly, pulling against the suction cups, increasing the vacuum pressure and preventing the cups slipping down relative to the wall.

Keyhole slots 24 are shown in this modification, so that if desired, it may be rigidly anchored to the wall by means of screws or like fastenings.

While we have in the above description disclosed practical embodiments of the invention, it will be understood by those skilled in the art that the specific details of construction and arrangement of parts, as shown, are by way of example and not to be construed as limiting the scope of the invention.

What we claim as our invention is:

1. A bag holder comprising a flat upright member having a transverse upper edge adapted to enter the crevice between the back of a bag and the adjacent portion of the mouth-surrounding margin of said bag when said margin is overfolded in an outward direction, as far as the foldline between the back of the bag and said margin, for suspending said bag, the forward face of said upright member being adapted to support the back of the bag, and a keeper solely supported by said upright member freely gravitationally slidable in a downward direction on said upright member, at the rear face thereof, said keeper having a forwardly and downwardly turned lip at the top adapted to hook over said upright member and the intervening part of said bag, when in lowermost position, imposing its weight on the top of said bag, said keeper having transversely aligned opposite guide lugs adjacent its lower end slidably embracing the side edges of said upright member with sufficient freedom in a front to back direction to permit said keeper to be tilted out of the plane of said upright member when said lip has been disengaged from the top of said upright member, and means for supporting said upright member.

2. A bag holder as claimed in claim 1, said supporting means for the upright member comprising a bracket unitary therewith including a wall engaging portion extending rearwardly from the lower end of said upright member and a portion extending upwardly from said wall engaging portion offset forwardly from the rearward end of said wall engaging portion, and a suction cup on the rearward face of said upwardly extending portion.

3. A bag holder comprising a flat upright member having a transverse upper edge adapted to enter the crevice between the back of a bag and the adjacent portion of the mouth-surrounding margin of said bag when said margin is overfolded in an outward direction, for suspending said bag, said upright member adapted to afford support to the back of said bag against its forward face, and a keeper slidable in an up and down direction on said upright member at the rearward face thereof having a forwardly overfolded flange at the top defining a channel for receiving the upper edge of said upright member and the intervening part of said bag, with said flange within the mouth of said bag, and guide means embracing the lateral edges of said upright member, and supporting means for said upright member comprising a bracket unitary therewith having a rearwardly extending portion in a plane perpendicular to said upright member adapted to rest on the upper face of a bed rail, and a downwardly and forwardly inclined resilient flange along the rear edge of said rearwardly extending portion adapted to press resiliently the inner edge of said bed rail.

4. A bag holder as claimed in claim 3, said guide means comprising a pair of transversely aligned lateral lugs at opposite sides adjacent the lower end of said keeper embracing said upright member, there being sufficient clearance between said lugs and upright member in a front to back direction to permit said keeper to be tilted rearwardly out of the plane of said upright member about a transverse axis in the zone of said lugs when the channel of said keeper has been disengaged from the upper edge of said upright member.

5. A bag holder comprising a sheet metal unit including a planiform upright portion having a transverse upper edge adapted to enter the crevice between the back of a bag and the adjacent portion of the mouth-surrounding margin

of said bag when said margin is overfolded in an outward direction, for suspending said bag, said planiform portion adapted to afford support for the back of said bag against its forward face, said unit being rearwardly overfolded at the lower end of said planiform portion in an upward direction, a rearward extension from the upper edge of said overfolded portion in a plane perpendicular to said planiform portion, and a terminal flange extending from the rear edge of said extension downwardly and forwardly directed, said overfolded portion, extension and terminal flange defining a bracket for embracing a bed rail, and a keeper slidable up and down on said planiform portion at the rear face thereof having a forwardly overfolded flange with top defining a channel for receiving the upper edge of said planiform portion and the intervening part of said bag, with said flange within the mouth of said bag, the length of said keeper being less than the distance from said extension to the top of said planiform portion whereby said keeper rests gravitationally upon said intervening part of said bag, said keeper having a pair of transversely aligned lateral lugs at opposite sides adjacent its lower end embracing the sides of said planiform portion, there being sufficient clearance between said lugs and planiform portion in a front to back direction to permit said keeper to be tilted rearwardly out of the plane of said planiform portion about a transverse axis in the zone of said lugs when the channel of said keeper has been disengaged from the upper edge of said planiform portion.

6. A bag holder comprising a flat upright member having a transverse upper edge adapted to enter the crevice between the back of a bag and the adjacent portion of the mouth-surrounding

margin of said bag when said margin is overfolded in an outward direction, for suspending said bag, said upright member adapted to afford support to the back of said bag against its forward face, a keeper slidable in an up and down direction on said upright member at the rearward face thereof having a forwardly overfolded flange at the top defining a channel for receiving the upper edge of said upright member and the intervening part of said bag, with said flange within the mouth of said bag, said keeper having a pair of transversely aligned lateral lugs at opposite sides adjacent its lower end embracing the sides of said upright member, there being sufficient clearance between said lugs and upright member in a front to back direction to permit said keeper to be tilted rearwardly out of the plane of said upright member about a transverse axis in the zone of said lugs when the channel of said keeper has been disengaged from the upper edge of said upright member, and supporting means for said upright member comprising a planiform extension extending rearwardly from the lower end of said upright member.

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