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BOWL DEODORANT HANGER

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Fig. 1.

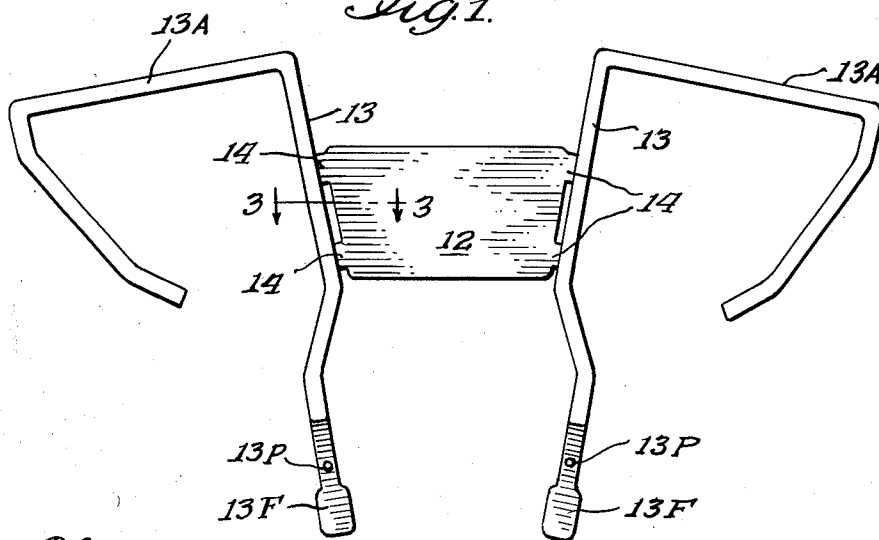


Fig. 2.

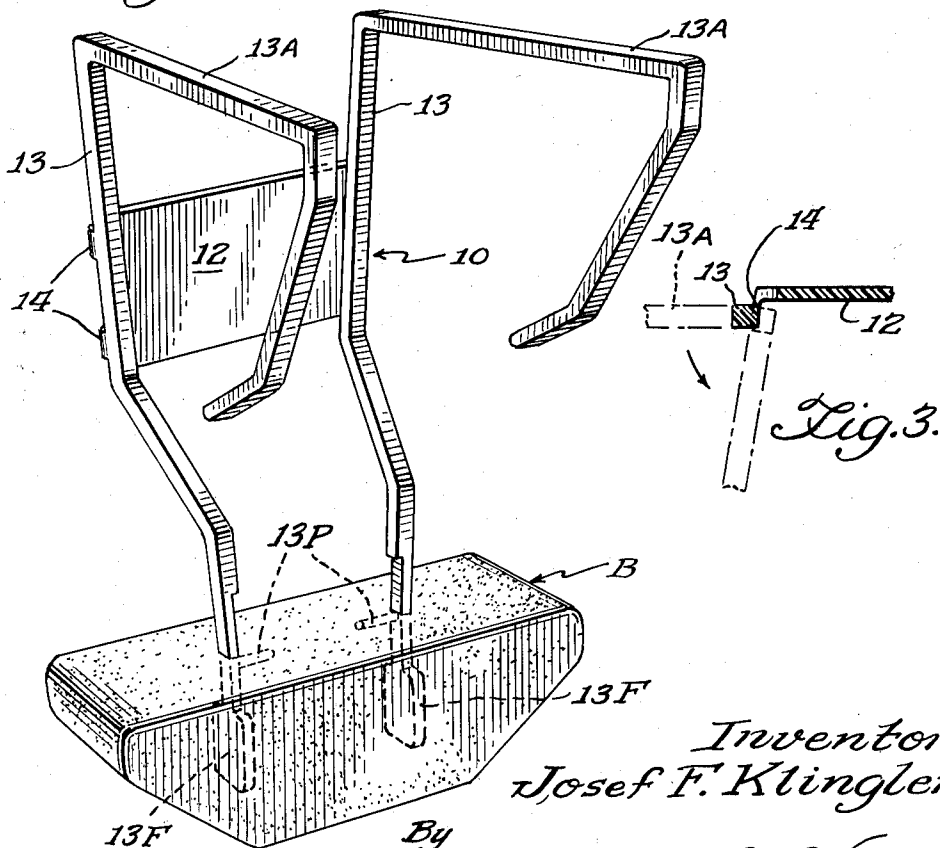


Fig. 3.

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BOWL DEODORANT HANGER

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5 Claims. (Cl. 4-231)

This invention relates to a hanger for suspending a solid deodorant block in a toilet bowl, or the like, and more particularly is concerned with a molded plastic hanger embodied as a one-piece collapsible skeleton frame.

The principal object of the invention is the provision of a skeleton frame hanger construction that is particularly suited to automatic injection molding techniques.

Another object of the invention is the provision of a skeleton hanger having a face plate interconnecting a pair of suspension legs through bendable connection tabs to permit of molding the skeleton in a generally planar configuration and thereafter bending the tabs to rotate the legs to a generally parallel final position wherein they project away from the plane of the face plate.

Still another object of the invention is the provision of a skeleton hanger of the above type wherein the legs are of minimum cross-sectional dimensions consistent with their function of supporting the deodorant block from the rim of a toilet bowl such that the legs are individually collapsible.

This collapsible feature facilitates reclaiming the hanger should it drop into the toilet bowl and become fouled within the drain pipes. Alternatively, the collapsible feature in some instances permits simple flushing to carry the hanger through the drain pipes and into the sewer system.

Other objects and advantages of this invention will become apparent during the course of the following description.

In the accompanying drawings forming a part of this specification and in which like numerals are employed to designate like parts throughout the same:

FIG. 1 is a rear elevational view illustrating the initial molded configuration of the skeleton hanger of this invention;

FIG. 2 is a rear perspective view illustrating the hanger of this invention equipped with a deodorant block; and

FIG. 3 is an enlarged fragmentary sectional view taken on the line 3-3 of FIG. 1.

Referring now to the drawings, in FIG. 2 there is shown for purposes of illustrative disclosure, a completed deodorant block hanger that comprises a skeleton frame type hanger 10 of one-piece molded plastic construction and a deodorant block B pressed on to the lower ends of the hanger and comprising, for example, a mixture of paradichlorobenzene and a deodorant perfume material.

The skeleton frame has a central stabilizer element 12 in the form of a face plate and interconnected immediately between a pair of generally parallel extending support legs 13, the upper end of each of which is provided with a correspondingly rearwardly extending hook-shaped integral attachment arm 13A, shaped to engage upon the rim of a toilet bowl. Integral connection tabs 14 are provided along each end of the face plate 12 to connect it to the skeleton legs. These tabs are easy to bend to accommodate swivelling of the legs 13 relative to the face plate 12 (see FIG. 3). It is apparent from a consideration of FIG. 3 that the bendable tabs 14 are of substantially less thickness than the legs 13 or the plate 12.

The lower end of each support leg 13 has integral enlargements or feet 13F and also may have lateral projections 13P to provide a firm anchorage of the legs within the deodorant block B.

A principal feature of the present hanger construction

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is its convenience of manufacture. In the preferred practice of the present invention, the hanger is initially formed to the generally planar skeleton configuration of FIG. 1 by conventional automatic injection molding techniques.

The integral bendable connection tabs 14 are thereafter bent to permit of rotating the legs 13 until the arms 13A project generally rearwardly from the plane of the face plate 12. The legs 13 are then set in a deodorant mold where the deodorant block is pressed onto the anchorage facilitates provided at their lower ends. The block, together with the lower ends of the legs is then packaged and sealed in any suitable cellophane bag.

It sometimes happens that hangers, of the general type described herein, are knocked into the toilet bowl by children at play and the hanger can become lodged in the drain pipes and clog the toilet. In the hanger of the present invention, the legs 13 and arms 13A are of minimum cross-section to permit free flexing which, in conjunction with the swivelling accommodated by the bendable tabs 14 results in a substantially completely collapsible frame. By way of example, in a presently preferred commercial embodiment, the legs 13 have a 1/8" square cross-section. This collapsible feature facilitates withdrawing the present hanger should it become clogged in the drain pipes. In some instances, it is even capable of being flushed right on thru the drain pipes and into the sewer.

It should be understood that the description of the preferred form of the invention is for the purpose of complying with Section 112, Title 35, of the U.S. Code and the invention is susceptible to modification without departing from the scope and meaning of the claims.

I claim:

1. A deodorant block hanger comprising a one-piece skeleton frame of molded plastic and having generally parallel spaced-apart support legs interconnected only by a stabilizer element in the form of a face plate extending endwise between corresponding intermediate portions of said legs and connected to said intermediate portions solely through bendable tabs of substantially less thickness than said legs and said plate, each leg having its lower end engageable in a common deodorant block and each leg having a hook-shaped arm portion at its upper end extending generally rearwardly from the plane of said face plate, with the arm portion of one leg being separate and independent of the arm portion of the other leg.

2. In a deodorant block hanger, a one-piece skeleton frame of molded plastic and comprising generally parallel spaced apart support legs interconnected only through a stabilizer plate by means of bendable tabs, each leg having its lower end engageable in a common deodorant block and each leg having an angularly extended hook shaped portion at its upper end, with the arm portion of one leg being separate and independent of the arm portion of the other leg, said stabilizer plate extending substantially the full distance between corresponding intermediate portions of said legs and said bendable tabs being of substantially less thickness than said plate and said legs and joining adjacent regions of said stabilizer plate and said intermediate portions of said legs to accommodate rotation of each leg in an opposite direction relative to said plate from a position substantially planar with said plate to a position wherein the said arm portion of each leg extends generally rearwardly of the plane of said stabilizer plate.

3. The method of manufacturing a bowl deodorant device that comprises a deodorant block carried on a one-piece skeleton frame hanger of molded plastic wherein said frame hanger has generally parallel spaced-apart support legs interconnected by a stabilizer plate extending endwise between corresponding intermediate portions thereof, each leg having at its upper end a hook-shaped rearward-

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ly extending arm, and said legs at their lower ends jointly engaging and supporting a common deodorant block, said method comprising molding said frame in planar configuration with said arms projecting in opposite endwise outward directions in the plane of said plate and thereafter rotating said legs each in opposite direction relative to the plane of said plate to locate said arms in generally parallel rearwardly extending relation to the plane of said plate, thereafter setting the lower ends of said legs in a deodorant mold, and pressing the common deodorant block into supported engagement on the lower ends of said legs.

4. The method of manufacturing a molded plastic one-piece skeleton frame hanger wherein said frame hanger has generally parallel spaced-apart support legs interconnected by a stabilizer plate extending flatwise between corresponding intermediate portions of said legs, each leg having at its upper end a hook-shaped rearwardly extending arm portion, said method comprising molding said frame hanger in planar configuration to dispose said plate, said legs and said arm portions in a substantially common plane with an integral hinge connecting each leg to said plate and with said arm portions projecting in opposite endwise outward directions in the plane of said plate, and thereafter flexing each hinge to rotate said legs each in an opposite direction relative to the plane of said plate to locate said arms in generally parallel rearwardly extending relation to the plane of said plate.

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5. In a deodorant block hanger, a one-piece skeleton frame of molded plastic and comprising generally parallel spaced-apart support legs interconnected only through a stabilizer plate that has on each side thereof one bendable tab adjacent its top edge and one bendable tab adjacent its bottom edge, each leg having its lower end engageable in a common deodorant block and each leg having an angularly extended hook-shaped arm portion at its upper end, with the arm portion of one leg being separate and independent of the arm portion of the other leg, said stabilizer plate extending substantially the full distance between corresponding intermediate portions of said legs and said bendable tabs constituting the sole connections between said plate and said legs and being of substantially less thickness than either said legs or said plate to accommodate rotation of each leg from a position substantially planar with said plate to a position wherein the said arm portion of each leg extends generally rearwardly of the plane of said plate.

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