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Johnson et al.

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[54] **TOILET PAPER HOLDER**

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[52] **U.S. Cl.** **242/55.2**

[51] **Int. Cl.** **B65h 19/00**

[58] **Field of Search** 242/55.2, 55.3, 55.53; 225/45, 65

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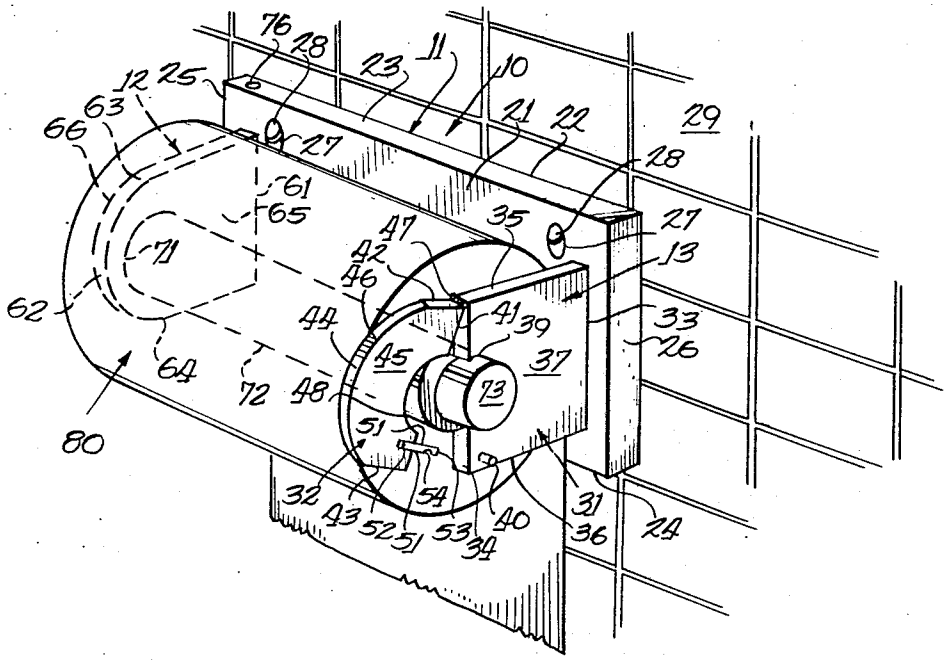
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Primary Examiner—Leonard D. Christian

[57] **ABSTRACT**

A spring loaded easy-on easy-off toilet paper holder consisting of a base having a pair of arms extending at right angles from the base and longitudinally spaced apart, one of the arms being hinged to the base by a spring loaded hinge normally urging the arm into the normal position with a toilet paper holding spool projecting perpendicular from the end of the hinged arm in the direction of the other arm, the other of the arms being fixedly mounted on the base and aligned with the first arm and adapted to receive and retain the free end of the toilet paper holding rod projecting from the hinged arm such that a roll of toilet paper may be easily placed onto and removed from the toilet paper holder.

4 Claims, 5 Drawing Figures



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Fig. 1.

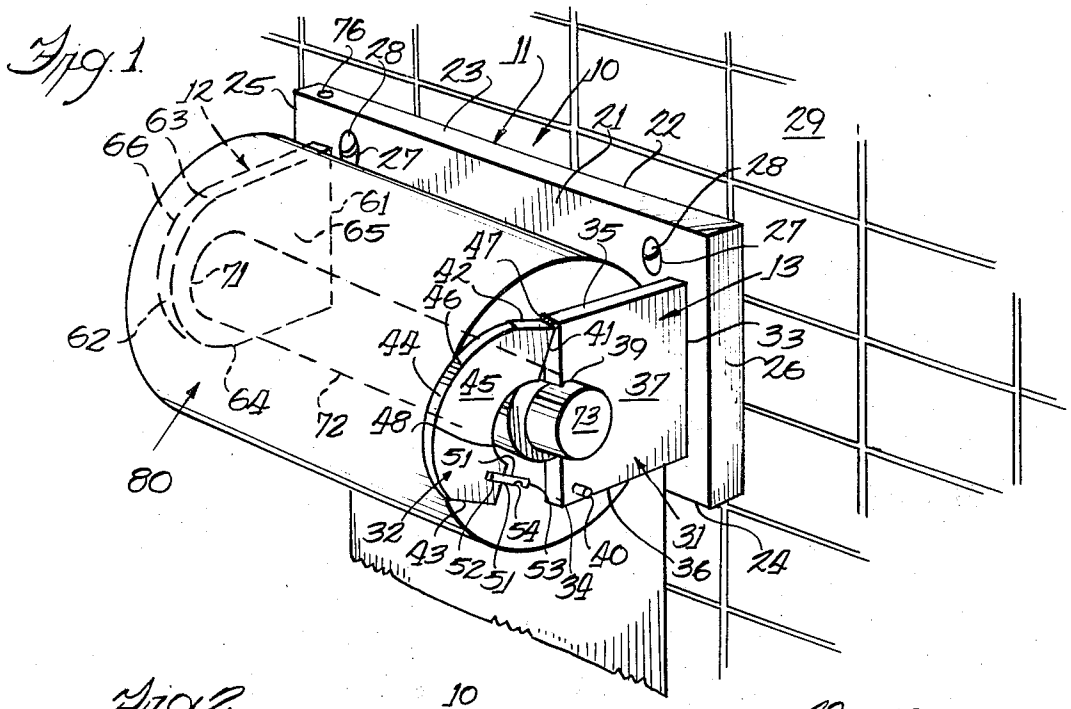


Fig. 2.

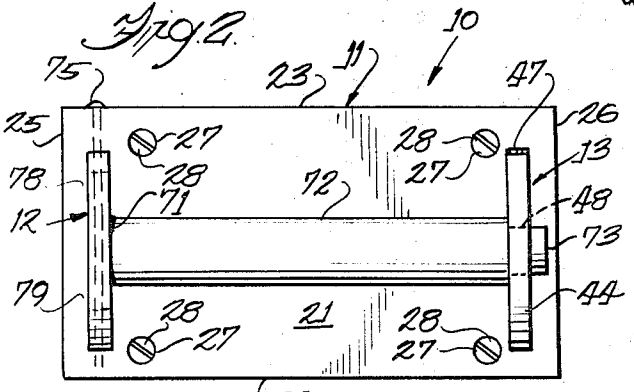


Fig. 3.

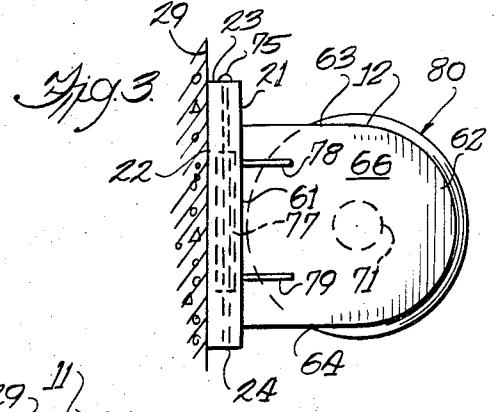


Fig. 4.

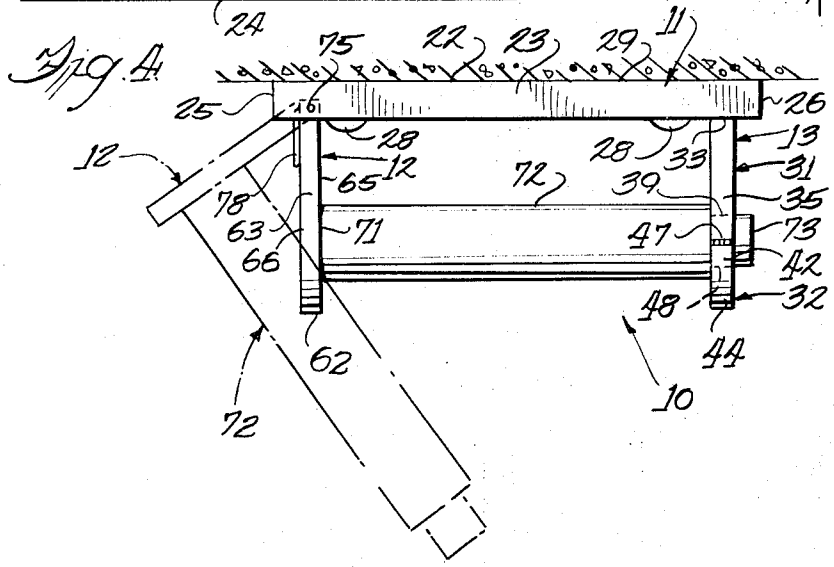
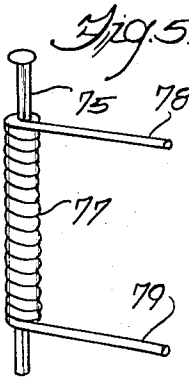


Fig. 5.



TOILET PAPER HOLDER

BACKGROUND OF THE INVENTION

1. Field of the Invention

This invention relates generally to paper roll holders and more particularly to a novel and improved toilet paper holder permitting a roll of toilet paper to be easily placed onto and removed from the holder with a minimum of time and effort.

2. Description of the Prior Art

While it has been known in the prior art to provide toilet paper holders of different sizes and configurations adapted for rotatably supporting a roll of toilet paper thereon, such normally require that an individual insert their hand into a restricted area to release the roll on which the toilet paper is suspended, or otherwise provide a holding device which is overly complex and requires some knowledge on the part of the individual changing the toilet paper roll as to the correct method of operating the same in order the free the old core of the old roll from the holder and insert the new roll of toilet paper thereon.

SUMMARY OF THE INVENTION

The present invention remedies and overcomes all of the foregoing deficiencies and disadvantages of presently available toilet paper holders by providing a novel holder permitting the old roll of toilet paper to be removed from the holder and a new roll inserted in place thereof in a simple and efficient manner requiring no special skills or expertise on the part of the individual performing the work, and requiring no tools or special parts to achieve the end result.

It is a feature of the present invention to provide a simple and efficient toilet paper holder which facilitates the insertion of as well as the removal of a roll of toilet paper onto and off of the holder.

A further feature of the present invention provides a toilet paper holder which is of an aesthetically pleasing and refined appearance and which is adapted for operation easily by individuals of all ages in such an easy manner that the roll of toilet paper may be inserted thereon in the dark if necessary.

Still a further feature of the present invention provides a toilet paper holder having no complicated mechanisms to get out of working order nor requiring any mechanisms to operate while inserting or removing the roll of toilet paper therefrom or thereonto.

The provision of a toilet paper holder, such as briefly outlines above, and possessing the stated advantages, constitutes the principal features of the present invention. The provision of a toilet paper holder which is relatively simple in its construction and which therefore may be readily manufactured at a relatively low cost and by simple manufacturing methods; one which is relatively devoid of moving parts and which therefore is unlikely to get out of order; one which is rugged and durable and which therefore may be guaranteed by the manufacturer to withstand many years of intended usage; one which operates in a simple and efficient manner; one which is readily operable by individuals of all ages from the youngest child to the oldest adult; one which may be manufactured of metal, plastic or the like to facilitate assembly thereof and reduce the costs to a minimum; and one which, otherwise, is well adapted to perform the services required of it, are further desirable features which have been borne in mind in the production and development of the present invention.

Other features and advantages of this invention will be apparent during the course of the following description.

BRIEF DESCRIPTION OF THE DRAWINGS

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

FIG. **1** is a front perspective view of a toilet paper holder constructed in accordance with the present invention and illustrated mounted on a vertical supporting wall surface;

FIG. **2** is a front elevational view of the toilet paper holder;

FIG. **3** is a side elevational view of the toilet paper holder;

FIG. **4** is a top plan view of the toilet paper holder and showing in phantom configuration the loading and unloading position thereof; and

FIG. **5** is a perspective view of the spring loaded hinge pin assembly for the toilet paper holder.

DESCRIPTION OF THE PREFERRED EMBODIMENT

Referring now to the drawings there is illustrated a preferred form of a toilet paper holder constructed in accordance with the present invention and designated in its entirety by the reference numeral **10,** and which is comprised of a base **11** having a hinged arm **12** and a stationary arm **13** projecting outwardly at right angles thereto. The toilet paper holder **10** may be manufactured out of metal, wood, hard rubber, plastic, or any other suitable satisfactory material providing an aesthetically pleasing and refined appearance, with the preferred embodiment being manufactured of either a high density polystyrene plastic or of a lightweight metal having a decorative chrome like finish thereon.

The base **11** is of an elongated rectangular configuration having a top surface **21,** a bottom surface **22,** opposed sides edges **23** and **24,** and opposed end edges **25** and **26,** the base being provided with four spaced apart openings **27** extending therethrough between the top and bottom surfaces with each opening adapted to receive therethrough an associated screw like fastener **28** which passes therethrough and is threadedly received into a suitable vertical support surface **29** such as a wall, door, or the like.

The pair of arms **12** and **13** are spaced longitudinally apart and project outwardly from the top surface **21** at right angles thereto, each of the arms being of a similar size, thickness and configuration to provide a somewhat symmetrical appearance to the toilet paper holder **10.**

The stationary arm **13** has a base portion **31** and a hinged top portion **32,** the base portion being rectangular in configuration and having a bottom edge **33,** a top edge **34,** opposed side edges **35** and **36,** an exterior surface **37,** and an interior surface **38.** A semi-circular aperture **39** is provided in top edge **34** and opens out of the same centrally thereof. Further, a pin like member **40** is disposed adjacent bottom edge **36** and projects outwardly from exterior surface **37** normal thereto, the use thereof which will be later described. The top por-

tion 32 has a bottom edge 41, side edges 42 and 43, a curved top edge 44, an exterior surface 45, and an interior surface 46. Top portion 32 is disposed in the plane of bottom portion 31 with side edge 42 adjacent bottom edge 41 hingedly connected to side edge 35 adjacent top edge 34 by means of a hinge 47 such that top portion 32 is swingably mounted for movement in the plane of the bottom portion in a manner toward and away therefrom about the hinge pin 47. The top portion bottom edge 41 is provided centrally thereof with a semi-circular opening 48 extending therethrough and disposed in a position to be aligned with opening 39 in bottom surface top edge 34 when the edges 41 and 34 are in adjacent juxtaposition, the openings 39 and 48 defining a circular opening, the use of which will be later described. Further, to retain the top portion 32 detachably connected to the bottom portion 31 to prevent rotation thereof about hinge pin 47 there is provided a rectangularly extending latch member 51 having one end pivotally connected by pin 52 adjacent top portion side edge 43 and in juxtaposition with exterior surface 45, with the member projecting outwardly from the top portion to terminate at end 53 which is provided with a semi-circular recess 54 therein opening out of a side edge of the member and adapted to engage pin 40 when the top portion is closed onto the bottom portion. Thus, when notch 54 engages pin 40 the top portion is prevented from rotation about pin 47, with latch member 51 being readily rotated about fastener 52 in a manner to free notch 54 from pin 40 so as to permit ease of rotation of the top portion about the pivot pin 47 to open the circular opening defined by semi-circular openings 39 and 48.

The spring loaded arm 12 consists of a bottom edge 61, a curved top edge 62, opposed side edges 63 and 64, interior surface 65, and exterior surface 66. Connected to interior surface 65 adjacent top edge 62 is an end 71 of a cylindrical rod 72 which projects outwardly from the arm 13 in a direction normal thereto and terminates at an end 73, the rod being of a sufficient length to overlap stationary arm 13 with the diameter of the rod being slightly less than the diameter of the circular opening formed in the stationary arm so as to be received therein and retained thereby when the top portion 32 is detachably connected to the bottom portion 31. The bottom edge 61 is pivotally connected to the base 11 by a spring loaded hinge pin 75 which is received in opening 76 in the base extending between sides 23 and 24 adjacent end 25, there being disposed about the hinge pin 75 a coiled spring 77 having a top terminal end 78 and a bottom terminal end 79, each of the ends projecting outwardly normal to the axis of the coil and adapted to be suitably fastened to the exterior surface 66 of the movable arm 12 in a manner strongly urging the arm into its normal right-angle projecting position with the rod 72 engaged in the arm 13. The arm 12 is swingable about hinge pin 75 in a direction to free rod end 73 from stationary arm 13, such as generally illustrated in phantom configuration in FIG. 4, it being understood that such rotation of the hinged arm 12 tensions the spring 77 such that as soon as the force is removed from the arm the hinge acts to automatically return the arm to the normal operational position with rod end 73 engaging stationary arm 13.

In operation, top portion 32 is unlatched from bottom portion 31 and swung about hinge 47 in a manner to free rod end 73 from stationary arm 13, after which an individual grasps the rod or movable arm 12 in a manner to forcably pivot the same about pivot pin 75 to the approximate position indicated in phantom configuration in FIG. 4, after which the core of the old roll of toilet paper is removed from the rod and a new roll of toilet paper, such as designated by reference numeral 80 is axially inserted onto the rod 72, after which the coiled spring 77 returns the arm 12 and rod 72 into the normal position with end 73 engaged in stationary arm 13, with top portion 32 being swung back about hinge 47 to retain rod end 73 in the opening defined by semi-circular openings 39 and 48, this position being retained by latch 51 engaging pin 40.

There is thus provided a toilet paper holder permitting the simple and efficient insertion of, as well as the removal of, a roll of toilet paper upon and from the toilet paper holder with a minimum of time and effort and permitting the same to be performed without requiring any special strength, skills, expertise or the like so that even a young child could change the roll of toilet paper in a home or the like.

It is to be understood that the form of this invention herewith shown and described is to be taken as a preferred example of the same, and that this invention is not to be limited to the exact arrangement of parts shown in the accompanying drawings or described in this specification as various changes in the details of construction as to shape, size, and arrangement of parts may be resorted to without departing from the spirit of the invention, the scope of the novel concepts thereof, or the scope of the sub-joined claims.

Having thus described the invention, what is claimed is:

1. A holder for a roll of toilet paper comprising an elongated rectangular base having a front surface, a back surface, opposed side edges, and opposed end edges, a plurality of mounting openings spaced apart on the base and extending therethrough between the front and back surface and adapted to receive suitable fastening means therethrough for mounting the base to a suitable support surface, a pair of longitudinally spaced apart and aligned arms extending from the top surface of the base at substantially right angles thereto, one of the arms being fixedly mounted on the base with the other arm being hinged to the base, an elongated cylindrical rod having one end fixedly connected to the hinged arm adjacent the outer end thereof and projecting outwardly therefrom in a direction toward the stationary arm, the rod being of a sufficient length to overlap the stationary arm and be detachably received therein, a spring loaded hinge disposed in the base extending parallel to the bottom edge of the hinged arm and having a spring coil wrapped thereabout over the midsection thereof with the opposed ends of the coil extending outwardly therefrom normal to the axis of the coil, the ends of the coil each being fixedly attached to spaced points on the hinged arm with the coil being tensioned in a manner to exert a constant force on the hinged arm in a direction to maintain the hinged arm in its normal operating position projecting at general right angles to the base with the rod engaged in the stationary arm, pivotal outward movement of the hinged arm about the spring loaded hinge pin in a manner to free the rod from the stationary arm effecting the tensioning of the coil spring about the hinge pin such that upon release of such forces the coil automatically returns the hinged arm to the normal operating position

with the rod terminal end engaged on the stationary arm.

2. The toilet paper holder as set forth in claim 1 wherein the stationary arm is comprised of a rectangularly shaped bottom portion and a top portion hingedly connected thereto, the bottom portion having a bottom end fixedly connected to the top surface of the base, a top end having a semi-circular notch extending transversely therethrough and disposed centrally thereof, a top side edge, and a bottom side edge, an elongated cylindrical pin like member connected to the bottom portion adjacent the top end and bottom side edge and projecting outwardly therefrom normal thereto, the top portion having a bottom end adapted to be placed in adjacent juxtaposition with the top end of the bottom portion, a semi-circular notch extending transversely through the bottom end in a position adapted to be aligned with the similarly shaped notch in the bottom portion so as to define a circular opening when the top portion is joined to the bottom portion, a top side edge, a bottom side edge, and a curved top end, the top portion lying in the plane defined by the bottom portion and having the top side edge hingedly connected to the top side edge of the bottom portion for pivotal movement of the top portion thereabout toward and away from the bottom portion, a rectangular elongated latch pivotally secured to the top portion adjacent the bottom side edge thereof and projecting outwardly therefrom in a direction parallel to the plane of the top portion with the opposite end of the latch member having a semi-circular notch defined therein adapted to engage the circumference of the pin projecting from the bottom portion in a manner to detachably latch the top portion to the bottom portion to retain the terminal end of the rod in the circular opening of the stationary arm.

3. The toilet paper holder as set forth in claim 2 wherein the hinged movable arm is of the same size and configuration as the stationary arm and is formed as a single unitary member having a bottom end disposed parallel to the top surface of the base, a curved top end, a top side edge, and a bottom side edge, the spring loaded pivot pin extending through the base and lying in the plane defined by the movable arm, the opposed ends of the pin projecting operatively out of the base adjacent the exterior surface of the movable arm and fixedly secured thereto at spaced points therealong.

4. The toilet paper holder as set forth in claim 3 wherein the base, the pair of arms, and the elongated rod are all manufactured of high density polystyrene plastic.

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