Dec. 20, 1966 W. F. TINKHAM 3,292,874

ROLL HOLDER

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Fig. 1.

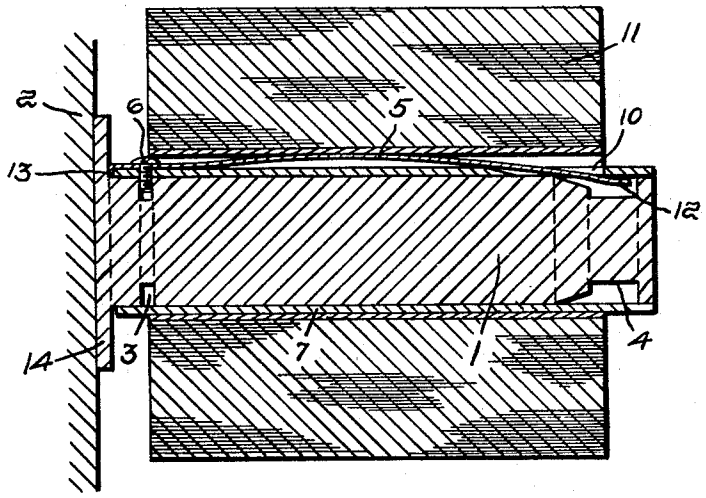
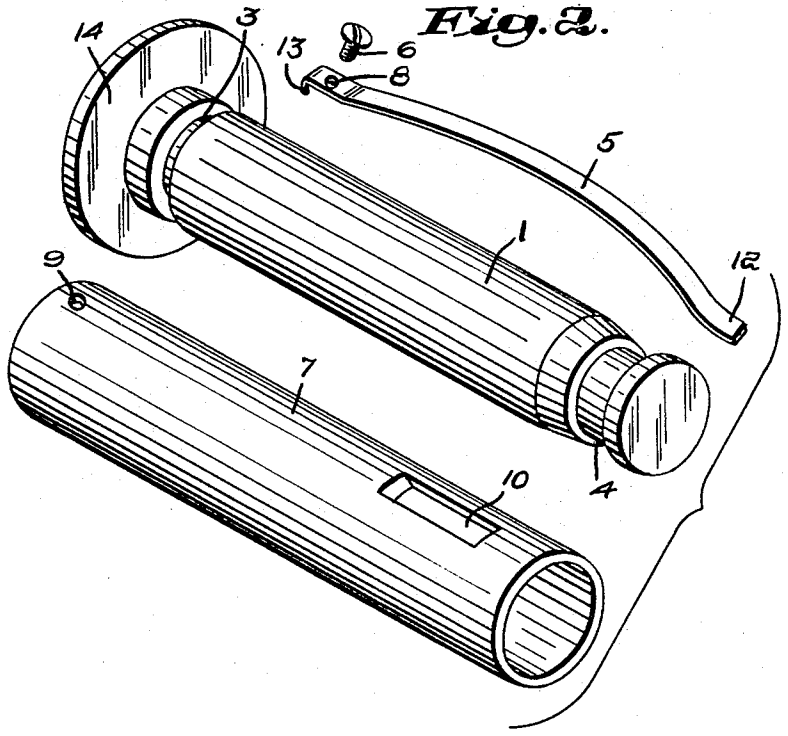


Fig. 2.



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Fig. 3.

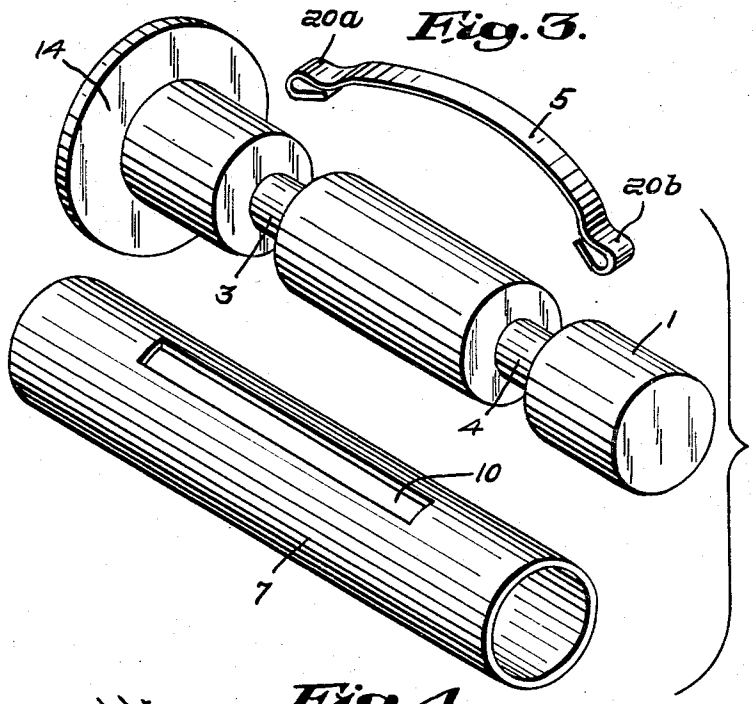
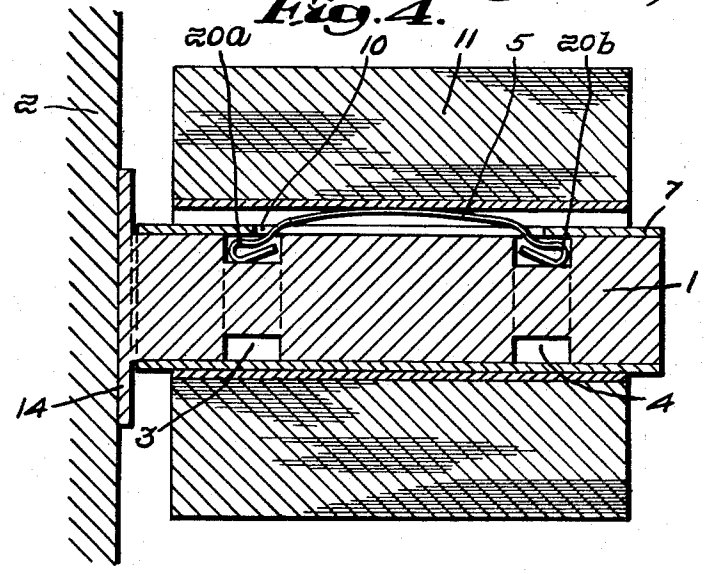


Fig. 4.



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Fig. 5.

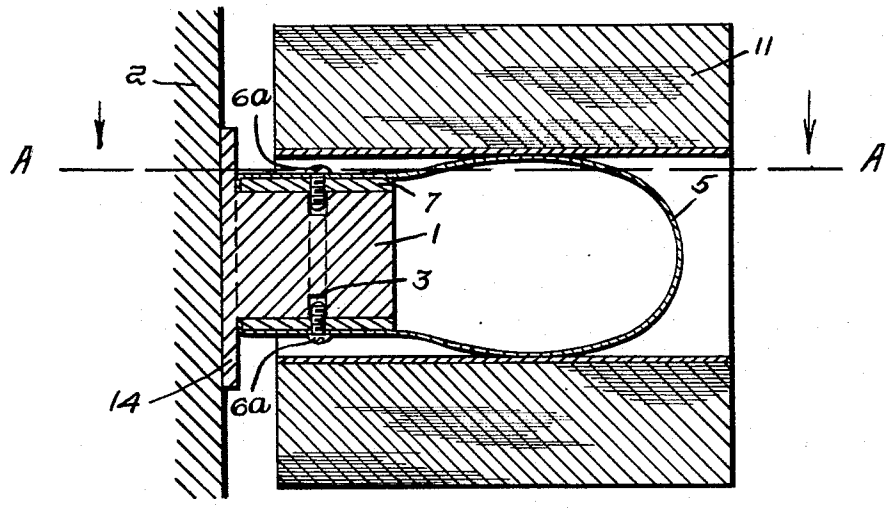
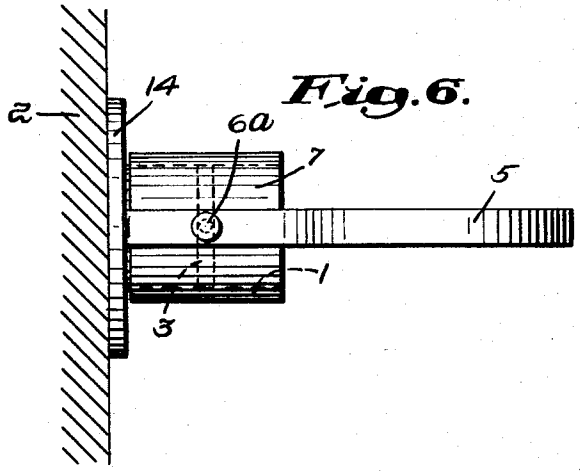


Fig. 6.



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3,292,874

ROLL HOLDER

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2 Claims. (Cl. 242—55.2)

This invention relates to open end holders adapted for dispensing roll type toilet paper, paper towels and other roller products on tubes, such as industrial tapes, aluminum foil, saran wrap, wax paper, etc. More particularly the invention is directed to holders which are supported at one end and open at the other end providing simple and convenient facility for removal of the depleted roll and instant slip-on reloading for continuity in the dispensing of such materials as toilet paper, paper towels, etc.

The common type holders for dispensing sheet materials as contemplated herein are fixed at both ends to a wall or upright surface, and offer various inconveniences and difficulties in the reloading of a depleted roll. In addition, some open end dispensing holders are known but for various reasons are troublesome in their reloading and require many parts in the construction of the same, resulting in a comparatively expensive assembly with frequent repairing for distribution.

One object of the present invention is to provide a roll holder, extremely simple in character and unfailing in operation which can be manufactured at very low cost.

Another object of this invention is to provide an open end holder for instant removal of a depleted roll with instant replacement of a new charge.

Another object of the present invention is to provide a roll holder having a rotating support for dispensing a recharageable roll of material.

Still another object of this invention is to provide a roll holder of the character hereinabove which is easy to install in upright or horizontal position and very efficient in use.

Other objects and advantages will be readily apparent from the description of the invention as illustrated in the accompanying drawings wherein like reference characters refer to like parts.

FIGURE 1 is a cross-sectional longitudinal sectional view of one form of holder with a paper roll thereon embodying the principles of the invention.

FIGURE 2 is an exploded perspective view of the parts of the holder of FIGURE 1 without the paper roll thereon.

FIGURE 3 is an exploded perspective view of the parts of a modified holder similar to that shown in FIGURE 2 in which the frictional holding spring is a modification of the spring shown in FIGURES 1 and 2.

FIGURE 4 is a sectional longitudinal view of the modified form of the holder shown in FIGURE 3 which includes the paper roll thereon.

FIGURE 5 is a sectional longitudinal view of a still further modified form embodying the principles of the present invention in which a U-type rotatable spring is attached to the rotatable support.

FIGURE 6 is a plan view on the line A—A of FIGURE 5 without the paper roll thereon.

In the embodiment of the invention as shown in FIGURES 1 and 2, the holder assembly comprises a stationary cylindrical arbor **1** having two spaced annular recesses therein, retaining recess **3** and expansional recess **4** for spring **5**, said arbor **1** having an enlarged flange **14** attachable to a wall **2** by any common means (not shown). The flange mounting **14** is obviously optional for fixing the holder to the wall. Roller **7** is in the form of a sleeve which slides over the stationary arbor **1** and

has a clearance slot **10** near its outer end for receiving the upward slanting lip **12** at the outer end of spring **5**. The roller **7** also has a retaining opening **9** (threaded, if desired) for receiving retaining means such as screw **6** or like element, near its other end. Spring **5** is provided with an opening **8** for receiving the retaining means **6** so that the latter, when roller **7** is mounted on the stationary arbor **1**, is lodged in recess **3** short of the depth of said recess for free rotation therein; and the lip **12** in slot **10** is lodged and retained in recess **4** of said arbor but freely rotatable therein. The spring **5** is provided with a downward right-angle bend or flange **13** for retention of said spring **5** on the inner end of roller **7**. Flange **13** may be dispensed with, if desired, but it functions to better secure the spring **5** to the roller **7**. It is clear that flange **13** would have a slight clearance from wall flange **14**. As will be seen in FIGURE 2, spring **5** is provided with an opening **8** for allowing retaining means (screw **6**) to pass therethrough into opening **9** of roller **7**. It will be apparent that retaining opening **9** of the roller **7** may be threaded for screw **6** or the retaining means may be nothing more than a press fit for whatever retaining means other than a screw is desired.

It will now be apparent that the assembly of the parts of FIGURE 2 as shown in FIGURE 1 forms a frictional retention of the dispensing roll **11** by means of spring **5** and that the roller **7** is revolvable about the stationary arbor **1**. Roll **11**, when depleted, is easily removed from the holder, being held on the latter merely by the friction retention of spring **5**; and similarly the new roll is conveniently, easily, and instantly replaceable on the holder by the mere slipping of the new roll back onto the spring **5**. All parts of the holder, which are very few in number, are easily removed, if desired for any reason whatever, and easily replaced. The assembly is most economical and conveniently mountable on any wall, either horizontally or vertically.

The slight modifications of the holder of FIGURES 3 and 4 over that of FIGURES 1 and 2 are shown to consist of a pair of inward bent ends 20^a and 20^b on spring **5** forming the retaining means in the spaced recesses **3** and **4**, respectively, of stationary arbor **1**. Also the slot **10** in roller **7** of this modification may be longer than the slot **10** of FIGURE 2, extending short of the full length of roller **7** in order to retain spring **5** in fixed contact with roller **7**.

The holder assembly of FIGURES 5 and 6 modify that of FIGURES 1 and 2 in that spring **5** is U-shaped and secured to roller **7** by a pair of retention means 6^a and 6^b in the recess **3** of arbor **1** at opposite points (180°) of the roller **7**. Also in this modification that stationary arbor **1** and roller **7** is much shorter in length in order to provide ample contact of the spring **5** with the paper roll **11**, said spring **5** extending out beyond the arbor and roller.

It will now be apparent that the operation of the holder of the present invention in its broadest view, as shown in all the forms of FIGURES 1 to 6, is that paper roll **11** is slipped onto the holder and also removable therefrom at the open end of the latter and frictionally engages a spring **5**, the latter being retained to a roller **7** which assembly is revolvable around a stationary arbor **1** by virtue of a freely revolvable but attached insert **6** in the recess **3** of said stationary arbor **1**. It will be apparent that other modifications of the present invention may be made without departing from the spirit of the invention as claimed.

What is claimed is:

1. A roll holder comprising a stationary cylindrical arbor with means at one end thereof to secure the same to a wall, two spaced annular recesses in said arbor, a

cylindrical hollow roller in the form of a sleeve having at least one slot therein, and a spring having means at both ends thereof for securing the roller to said arbor through said slot in said roller, said roller and spring being adapted to rotate around said stationary arbor.

2. A roll holder having means at one end thereof to secure the same to a wall, said holder comprising a stationary cylindrical arbor, said arbor having an annular recess therein, a hollow roller encompassing said arbor and adapted to rotate around said arbor, a U-shaped spring adjacent said roller, and means passing into said recess for securing said spring to said roller and arbor.

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