United States Patent

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[54] **DISPENSING HOLDER FOR PAPER ROLLS AND THE LIKE**
2 Claims, 4 Drawing Figs.

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[51] Int. Cl. A47k 10/22, A47k 10/40, B65h 19/00
[50] Field of Search 242/55.2, 55.3, 55.53, 55.42, 55.54, 55.55, 68, 71.9, 73

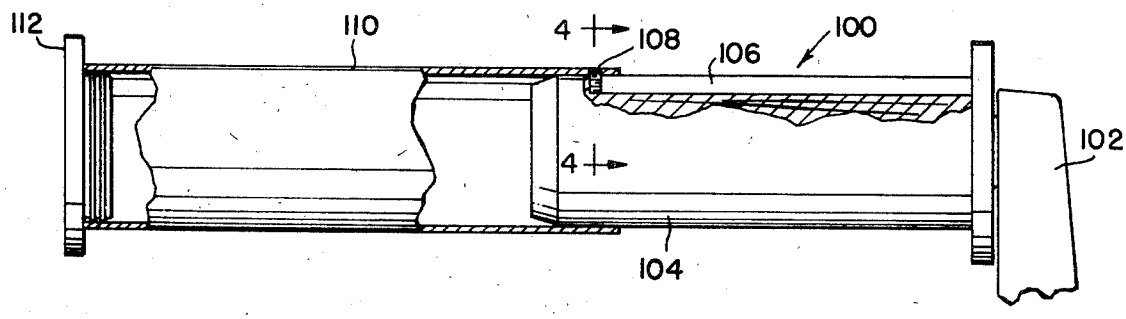
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ABSTRACT: A holder and dispensing means for rolls of paper and the like which comprises a support at one end and a sleeve rotatably connected to the support and constructed to snugly receive the core of the roll. The roll rotates together with the sleeve without bouncing or wobbling on the sleeve. The sleeve also acts as an anchor when a piece of the paper strip is pulled off the roll at one of the score lines. The sleeve slidably supports an extension sleeve in adjusted positions thereon whereby rolls of different lengths may be accommodated.



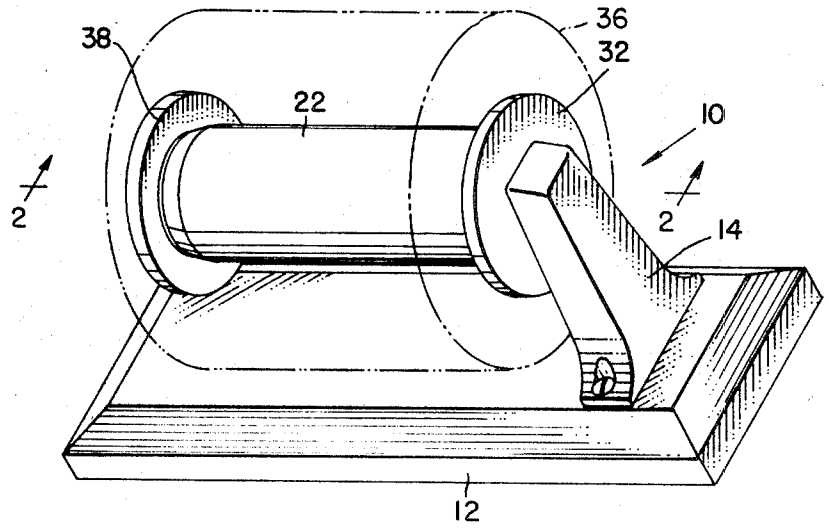


FIG. 1

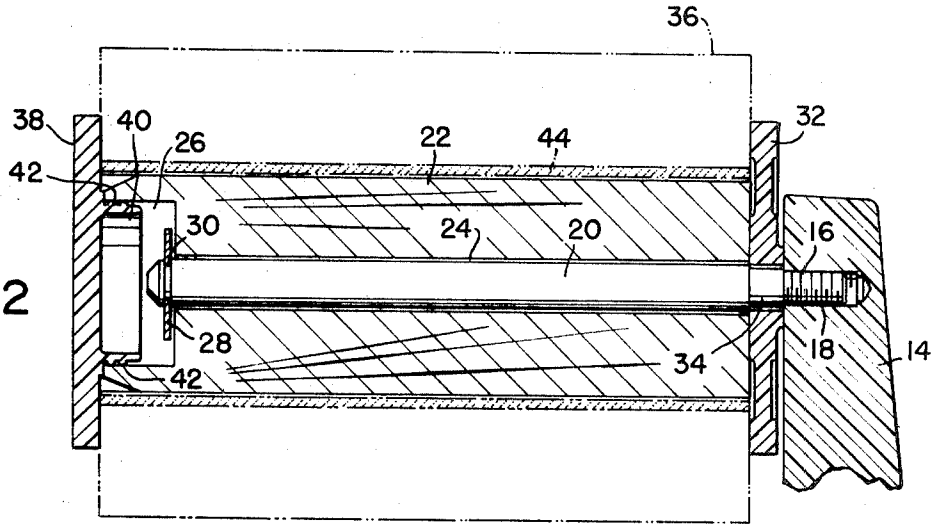


FIG. 2

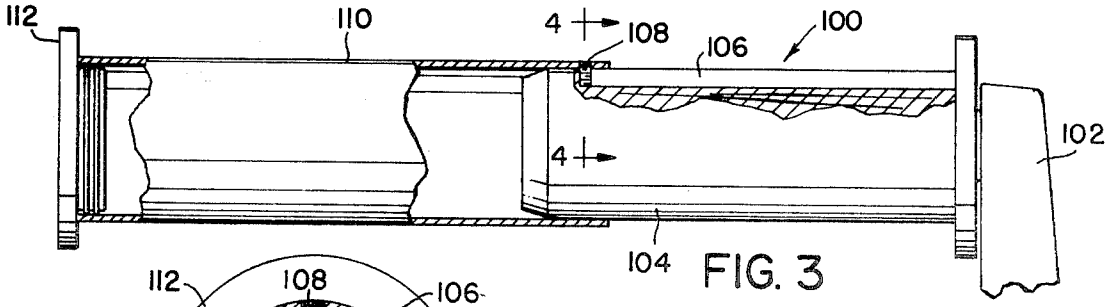


FIG. 3

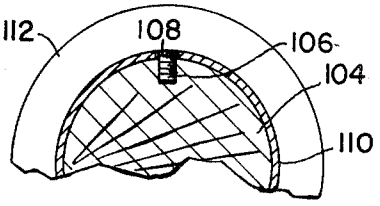


FIG. 4

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DISPENSING HOLDER FOR PAPER ROLLS AND THE LIKE

The invention relates to holders for rolls of strip material such as toilet paper, paper towels, etc., and it particularly relates to holders of the aforesaid type which can be mounted in various positions ranging from the horizontal to the vertical.

Many different types of paper roll holders have heretofore been used. Most of these holders have consisted of a rod or spindle mounted between two supporting brackets, with the roll adapted to be positioned for rotation on the spindle. The rolls generally consist of a tubular core or sleeve upon which the paper or the like is rolled up. In order to position the roll on the holder it is necessary to release one end of the spindle from its support and then slide the core of the roll thereover. The loose end of the spindle is then reattached to its support. When the roll is used up, it is again necessary to release one end of the spindle, remove the core and reposition another roll on the spindle, which is then again fixed in place.

The above type of construction is, in many ways, unsatisfactory because it requires two end supports. Furthermore, since these supports must be in fixed position, the roll can only be used in one position, generally the horizontal. Such holders are, therefore, not only more expensive to make and install but also less flexible in their manner of use.

Another unsatisfactory feature of most prior roll holders is that the core of the roll has a much larger diameter than the spindle of the holder so that the roll is only loosely held thereon in the radial direction. This gives an inordinately large amount of play so that when the strip is pulled from the roll, the roll itself bounces and wobbles on the spindle. Most rolls of paper and the like are provided with perforated or scored lines to permit a piece of paper to be pulled or torn off therefrom. In order to provide a clean break at the line of scoring, the roll should be firmly mounted. However, if it bounces and wobbles in a loose manner, it is not anchored in a sufficiently steady manner. As a result, the paper tends to tear raggedly and not cleanly at the score line.

Another disadvantage of most prior roll holders is that they are made for only one length of roll. Therefore, if a holder is of a longitudinal size for use with toilet paper it cannot be used for toweling, etc.

It is, therefore, one object of the present invention to provide a roll holder which is firmly supported at only one end and which can be mounted in any position desired.

Another object of the present invention is to provide a roll holder of the aforesaid type which provides a firm but rotatable grip on the core of the roll so that when the roll is rotated it does not bounce or wobble relative to the holder.

Another object of the present invention is to provide a roll holder of the aforesaid type which is adapted to be made adjustably extensible.

Another object of the present invention is to provide a roll holder of the aforesaid type which is simple in construction, inexpensive to manufacture and easy to install and use.

Other objects any many of the attendant advantages of this invention will be readily appreciated as the same becomes better understood by reference to the following description when read in conjunction with the accompanying drawings wherein:

FIG. 1 is a perspective view showing a holder embodying the present invention, a roll of paper being positioned thereon.

FIG. 2 is a sectional view taken on line 2–2 of FIG. 1.

FIG. 3 is an elevational view, partly broken away, showing an alternative embodiment of the invention.

FIG. 4 is a sectional view taken on line 4–4 of FIG. 3.

Referring now in greater detail to the various figures of the drawing, wherein similar reference characters refer to similar parts, there is shown in FIGS. 1 and 2 a roll holder, generally designated 10, comprising a base 12 to which is attached a bracket or pedestal 14. The pedestal 14 is provided with a screw-threaded aperture 16 which threadedly receives a screw-threaded extension 18 of a spindle 20.

Mounted on the spindle 20, for rotation relative thereto, is a sleeve 22 which is provided with an axial bore 24 through which the spindle 20 extends. The free end of the spindle 20 extends into an internal recess 26 in the corresponding end of the sleeve 22 and is held in position within that recess by a snapring 28 which is fixed in a peripheral groove 30 adjacent the free end of the spindle. This snapring 28 prevents any significant axial movement of the sleeve 22 relative to the spindle 20 but is sufficiently spaced from the inner wall of the recess 26 to permit free rotation of the sleeve relative to the spindle.

A spacer disc 32 is mounted on an intermediate, shouldered portion 34 of the spindle, adjacent the extension 18, this disc being freely rotatable and acting to space the sleeve 22 from the pedestal 14. It is also of a sufficiently wide diameter to act as an end support for the paper roll 36, as is clear from the drawing.

At the opposite end of the sleeve there is provided a disc 38, generally similar to the disc 32. However, the disc 38 is provided with an axially extending, integral annular flange 40. Although the discs 32 and 117 can be made of any desired material, such as nylon, vinyl, wood, metal, etc., they are preferably made of polyethylene or a similar material which has some inherent flexibility although it is substantially rigid. When made of such material, as in the device illustrated, the flange 40 is preferably slightly tapered with a base diameter closely approximating the internal diameter of the recess 26, and with peripheral ribs 42. In this manner, when the flange 40 is inserted into the recess 26, it is frictionally engaged in a tight but releasable manner similarly to a plug in a bottle. The disc 38 thereby is releasably fixed to the sleeve 22 and rotates along therewith.

The operation of the device is clear from the above description and drawing. Briefly, when a roll of paper or the like is to be mounted on the holder, the disc 38 is removed and the core 44 of the roll is slipped over the sleeve 22. The disc 38 is then replaced, and the roll is ready for use. In this respect, the core 44 fits sufficiently tight on the sleeve 22 so that there is a frictional binding therebetween. This friction is just sufficient to permit the roll to rotate together with the sleeve 22 when the strip of paper on the roll is pulled out. Furthermore, this friction acts to hold the roll sufficiently tight on the sleeve 22 to provide an anchor for the paper when a piece of it is torn away on one of the score lines.

The sleeve 22, as illustrated, is made of wood. However, it may be constructed of any other desirable material such as cardboard, metal, plastic, etc., as long as its surface is sufficiently frictional to prevent undue slippage between it and the core of the roll. If desired, it may even be provided with slight corrugations or ribs on its surface to increase the frictional binding, although this is usually not necessary except with certain very slippery materials.

It is further to be understood that although the spindle 24 is axially locked to the sleeve 22 by the snapring 28, any other feasible locking means can be substituted. In this same respect, although the spindle is attached to the pedestal 14 by screw-threaded means such as shown at 16 and 18, any other desirable and feasible connecting means be substituted.

The construction of the above-described device clearly indicates that it may be mounted in an position and facing in any direction, vertical, horizontal or angular. This is because it does not require a support at each end, but only at one end. This also permits attachment to almost any surface. In this respect, the base 12 can be foreshortened or elongated as desired or may be made of any desired contour to fit any particular supporting surface.

In addition, if the device is mounted so that the spindle and sleeve extend upwardly, the disc 38 can be eliminated and the roll will stay in place by gravity. This is useful if it is desired to use the holder for a roll, such as for paper towels, which is of much greater length than the toilet paper roll illustrated. In such case, the elongated core can extend upwardly for a substantial distance above the sleeve 22.

FIGS. 3 and 4 illustrate a modification of the device wherein the holder can be adjusted longitudinally to fit a variety of rolls of different axial length. This form of the holder, generally designated **100**, utilizes the same type of pedestal, indicated at **102** and the same type of spindle and sleeve construction. However, the sleeve **104**, similar to sleeve 22, is provided with a longitudinal slot **106** which receives a setscrew **108** projecting downward through a threaded countersunk bore in a telescoping sleeve **110**. The sleeve **110** is hollow to snugly fit over the sleeve **104** and is provided at its free end with a disc **112** similar to the disc **38** in FIGS. 1 and 2.

The sleeve **110** is slidable relative to sleeve **104** and is held in longitudinally adjusted position by the setscrew **108**. Although a setscrew and groove adjustment is illustrated, any other desirable and feasible means may be substituted.

The longitudinal adjustability of the holder of FIGS. 3 and 4 is possible only because of the fact that a support is necessary at only one end.

The invention claimed is:

1. A dispensing holder for rolls of strip material comprising a pedestal, a spindle fixed at one end to said pedestal and having a free opposite end, a cylindrical sleeve rotatably mounted on said spindle, and a frictional outer surface on said sleeve, said sleeve being constructed and arranged to snugly receive the cylindrical hollow core of a roll of strip material, said sleeve slidably supporting a hollow cylindrical extension sleeve, said extension sleeve being telescopically slidable over said first mentioned sleeve, and means to releasably secure said extension sleeve in longitudinally adjusted positions relative to said first mentioned sleeve.

2. The holder of claim 1 wherein a disc of larger diameter than said extension sleeve is releasably connected to the free end of said extension sleeve remote from said first mentioned sleeve.