



ROLL PAPER HOLDER AND DISPENSING REGULATOR

This invention relates to a roll paper holder with a dispensing regulator.

Roll paper (of which toilet roll is but one example) are normally held by a rod or spindle which is loosely inserted through the hollow in the centre of the roll paper. The rod or spindle is then held in place in a holder set into or on a wall usually in the toilet.

The usual way of holding roll paper as described earlier lacks a device to control the free spinning of the roll when paper is taken from it. The result is that when a person takes paper from the roll with one hand the force of the snatch will cause the roll paper to spin freely so that excess length of paper will normally be drawn from the roll paper. This inevitably contributes to wastage of paper.

The present invention seeks to introduce a device to control or prevent the free spinning of the roll paper. This is done by mounting a gear to the near centre of the shaft or spindle. From the opposite end of the



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spindle a revolving ring is fitted over the spindle to meet the side of the gear at the centre. On opposite sides of the rotating ring are mounted two identical spring plates bent slightly outwards ending in a circular curve at each end. The rotating ring is prevented from rotating freely by means of two catches fixed at opposite sides of the rotating ring which rest on the gear. At one end of the shaft or spindle a hook is inserted through the spindle. This hook is meant for holding the spindle rigidly to the holder set in the wall and it can be adjusted for length to suit the appropriate length requirement. In this way, first, the spindle is held fast by the hook which hooks the spindle to the side of the holder set in or on the wall. Secondly the roll paper is held firmly in place by the spring plates on opposite sides of the rotating ring. The rotation of the ring is controlled by the catches resting on the gear. The motion of snatching paper from the roll will thus not produce the previous result of causing the roll paper to spin freely.

A specific embodiment of the invention will now be described by way of example with reference to the accompanying drawing in which:-

Figure 1 shows the cross section of the apparatus fully assembled;

Figure 2 shows the view from the top or a bird's eye view of the apparatus;

Figure 3 shows the female part of the apparatus with the gear mounted;

Figure 4 shows the cross section of the gear;

Figure 5 shows the top side of the female part of the apparatus;

Figure 6 shows the top side of the male part of the apparatus;

Figure 7 shows the hook meant for holding the spindle firmly to the holder set in or on the wall;

Figure 8 shows another dimension of the hook with its trap holes meant for regulating the length of its protrusion through the spindle;

Figure 9 shows the cross section of the spring plate;



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Figure 10 shows the top side of the spring plate;

Figure 11 shows a cross section of the rotating ring;

Figure 12 shows the top side of the rotating ring and its two catches;

Figure 13 shows the cross section of the knob meant for controlling the movement of the hook through the spindle; and

Figure 14 shows the cross section of the block for holding the spring coil in place.

Referring to the drawing the invention comprises a spindle assembled by fitting the male part 8 to the female part 1 on which is mounted a gear. A rotating ring 2 on opposite sides of which are mounted two spring plates 3 is fitted over the female part. The rotation of the ring is controlled by the two catches fixed at opposite side of the rotating ring which rest on the gear. A spring coil 6 is placed in the assembled spindle to allow for adjustment of length so as to fit the spindle into the holder in the wall. This spring coil is held back by a block 7 inserted into the female

part of the spindle. A hook 4 is inserted through the spindle at the end of the female part. This hook is adjustable for length and its movement through the heart of the spindle is controlled by a knob 5.

The whole instrument is then inserted through the centre of roll paper and the spring plates will hold and support the roll paper in place. The roll paper with the instrument inserted through its centre and holding it is then placed into the holder set in or on the wall. The hook is then adjusted so that it neatly hooks the side of the holder thereby immobilising the spindle. In this position when paper is taken from the roll only the rotating ring will move as regulated by the gear.

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1. A roll paper holder and dispensing regulator comprising a spindle made up of two parts (male and female) with a gear fixed to the female part to regulate the movement of a rotating ring which is fitted onto the female part through its near end, the rotating ring being provided with catches and spring plates, the catches being fixed on the opposite sides of the rotating ring and made to rest on the gear so as to regulate the movement of the rotating ring, the spring plates being mounted on the other opposite sides of the rotating ring for the purpose of holding a roll of paper in place, an adjustable hook being inserted through the extreme end of the female part for the purpose of holding the spindle rigid when the whole apparatus is inserted or set in a holding frame or container already fixed on the wall.

2. A roll paper holder and dispensing regulator as claimed in claim 1 wherein the movement of the rotating ring is regulated by two catches fixed on opposite side of the ring which rest on the gear mounted on the spindle.



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3. A roll paper holder and dispensing regulator as claimed in claim 1 or claim 2 where the hook is adjustable for length and may be moved forward and backwards through one end of the spindle.

4. A roll paper holder and dispensing regulator as claimed in any of the preceding claims where the movement of the hook through the spindle is controlled by a knob.

5. A roll paper holder and dispensing regulator substantially as described herein with reference to Figures 1-14 of the accompanying drawing.
