Oct. 21, 1924. 1,512,849

J. B. ISHAM

TOILET PAPER HOLDER ATTACHMENT

Filed May 15, 1923

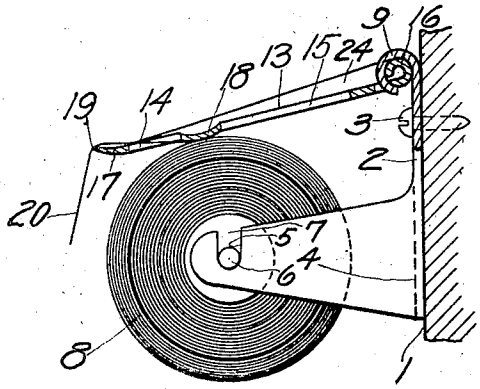


FIG. 1.

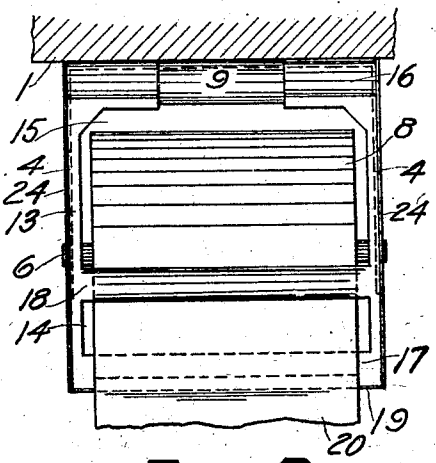
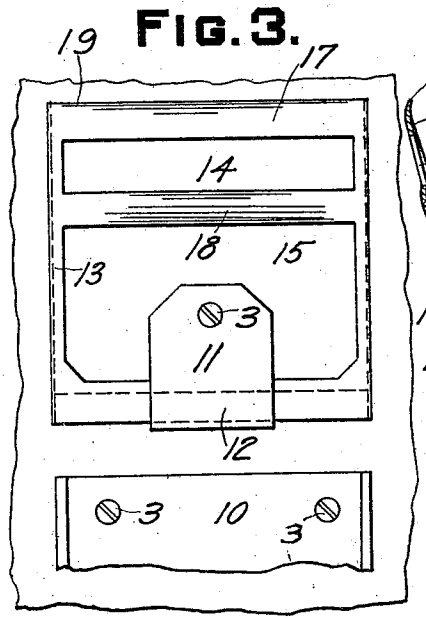


FIG. 2.

FIG. 3.



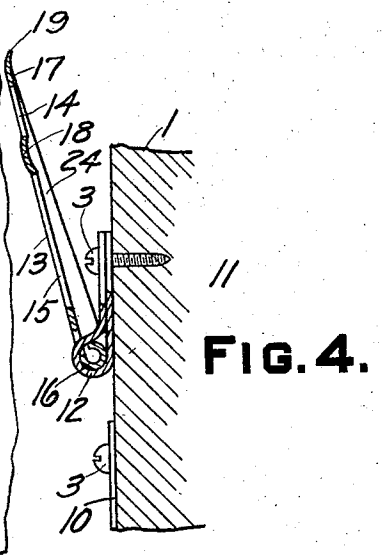


FIG. 4.

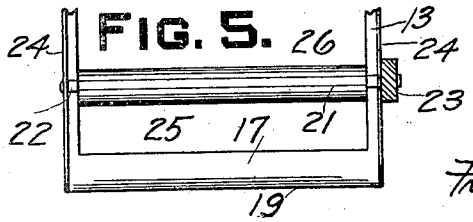


FIG. 5.

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UNITED STATES PATENT OFFICE.

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TOILET-PAPER-HOLDER ATTACHMENT.

Application filed May 15, 1923. Serial No. 639,123.

To all whom it may concern:

Be it known that I, JOHN B. ISHAM, a citizen of the United States of America, and a resident of Hampden, in the county of Hampden and State of Massachusetts, have invented a new and useful Toilet-Paper-Holder Attachment, of which the following is a specification.

My invention relates to improvements in devices used in connection with rolls of paper from which the paper is torn off in sheets or lengths, and consists essentially of a pivotally mounted, gravity frame having a part that may be either fixed or rotative to rest and bear on a roll of paper, which frame is perforated, slotted, or recessed for the passage of the paper from such roll, and provided with a knife or blade against one edge of which such paper is torn off, all as hereinafter set forth.

This device or attachment may be either incorporated directly with a holder of any common or ordinary type for roll-toilet paper, by being pivotally connected with such holder, or pivotally supported from a wall adjacent to such a holder.

Although my attachment is intended especially for use in connection with toilet paper, it may be used in connection with wrapping or other paper which is supplied in roll formation and designed to be drawn off and detached in sheets or lengths.

In most forms of holders for roll-toilet paper the roll is loosely supported in the holder, and both hands are required in order to separate the sheets or tear pieces therefrom, and this regardless as to whether or not the paper be perforated, one hand being employed in holding the roll stationary while the other hand is engaged in tearing off the sheet or piece, and the primary object of my invention is to obviate this difficulty and enable the tearing-off operation to be performed with one hand only.

Another object is to provide an attachment of this character which is comparatively simple and inexpensive in construction, affords satisfactory means for severing the paper, and withal is highly practicable and efficient.

With this attachment the very act of severing the paper causes the paper roll to be securely held against rotation, so there can be no slipping of the paper strip, or other interference with the severing act.

Other objects and advantages will appear in the course of the following description.

I attain the objects and secure the advantages of my invention by the means illustrated in the accompanying drawings, in which—

Figure 1 is a side elevation of a roll-toilet-paper holder that is equipped with an attachment which embodies a practical form of my invention, the upper portion of said holder and said attachment being in section; Fig. 2, a top plan of said attachment and holder; Fig. 3, a front elevation of the attachment when the same is a separate and distinct unit apart from the holder, said attachment being raised, and a fragmentary portion of a holder being shown below the same; Fig. 4, a side elevation and partial section of the parts and members shown in the preceding view, and Fig. 5, a top plan of a portion of an attachment wherein a roller is substituted for the fixed cross piece of the attachments illustrated in the other views.

Similar reference characters designate similar parts throughout the several views.

In each of the first four views, a fragmentary portion of a wall is represented at 1. In Figs. 1 and 2, a toilet-paper holder is represented, the same comprising a back 2 which is secured to the wall 1 by screws, such as that represented at 3, and a pair of arm 4 extending forwardly from said back and having in each a slot 5. The slot 5 in each arm 4 opens through the upper edge of said arm, and is provided to receive one terminal of a spindle 6 that passes through a core 7 for a roll 8 of toilet paper. This is one of the simpler types of roll-toilet-paper holders.

The holder just described, and to which my attachment is applied, is but one of many types with which the attachment may be used.

The back 2 is extended upwardly and rolled over to form a central bearing 9.

In Figs. 3 and 4 the upper portion of a roll-toilet-paper-holder back is represented at 10, the same being secured to the wall 1 by screws 3, as in the other example. This back has no bearing like the bearing 9 with which the back 2 is equipped, but in place of such a bearing a clip 11 is provided, the same being looped to form a bearing 12. The clip 11 is secured against the wall 1 above the back 10 by means of another screw 3. The bearing 12 corresponds with the

bearing 9 and is for a similar purpose, as will hereinafter be clearly apparent.

The attachment itself as illustrated in Figs. 1 to 4, inclusive, consists of a rectangular frame 13 having therein a transverse slot 14 and a large opening 15, and provided at the rear edge with a rolled part 16 to form a pivotal connection with either the bearing 9 or the bearing 12, at the forward edge with a severing blade 17, and between said slot and opening with a cross piece 18. Preferably the under side of the cross piece 18 is convex, and the front edge of the blade 17 preferably has an upward bend or curve and may be sharpened as represented at 19. The cross piece 18 is the part of the attachment that bears on the paper roll 8, and, if such cross piece be convex on the underside, it makes a better contact with such roll, regardless of the size thereof, than would be the case always in the event the cross piece were flat.

The frame 13 is cut out behind the cross piece 18 merely for the purpose of improving the appearance of the device and rendering the manipulation of the same more convenient. The device could be successfully operated and would probably serve all practical purposes, if the aforesaid opening were not present therein. It is necessary, however, that there be the cross piece 18 or an equivalent part to bear on the paper roll 8, and to follow downwardly on said roll as the same diminishes in size, incidental to the withdrawing of the paper therefrom, until said cross piece rests on the core 7. To these ends the parts must be constructed and proportioned, paying particular attention to the location of the cross piece 18. The arrangement and construction should be such that the arc described by the cross piece, when the frame 13 is swung on its pivotal connection, passes through the core 7, so that said cross piece finally comes to rest on said core. It is this cross piece that holds the roll 8 stationary while the paper is being torn off, as will be more fully explained hereinafter.

The slot 14 is necessary in order that the paper may, as is necessary, be passed upwardly from beneath the cross piece 18 through said slot and over the blade 17 and the severing edge 19 thereof.

Being loosely pivoted at the back end, the frame 13 has a constant tendency to swing downwardly by gravity, and the practicability and efficiency of the attachment are due largely to such tendency.

The practical functioning of the attachment is described as follows, and this whether said attachment be connected directly with the toilet-paper holder, or directly with the wall above such holder, as when the clip 12 is used.

First, in order to place the roll 8 in position in the holder, it is necessary to swing the frame 13 upwardly on and in its pivotal connections (9 and 16 or 9 and 12), thus leaving the space above the arms 4 clear for the introduction of said roll and the core 7 between said arms with the terminals of the supporting spindle 6 in the notches 5. After the spindle 6 has been mounted in the arms 4, the frame 13 is swung downwardly until the cross piece 18 comes to rest on the roll 8. Then the leading end of the paper strip, as 20, from the roll 8, is passed upwardly through the slot 14 and forwardly over the severing edge 19 of the blade 17, being left hanging from such edge substantially as shown in Figs. 1 and 2; or said strip may be passed through said slot and over said severing edge while the frame 13 is in elevated position, or before the same is swung down far enough to enable the cross piece 18 to bear on the roll 8.

The parts and members now being in condition and ready for use, in order to remove the first or leading sheet or length of paper from the roll 8, simply grasp the leading end of the strip 20, below the severing edge 19, draw said strip forwardly or outwardly in an approximately horizontal position until the required length passes over said edge, carry said leading end downwardly into a position which is approximately vertical, and with a shearing movement tear the same on said severing edge from the strip behind. The downward pressure incident to the above-described tearing-off action and applied to the frame 13 forces the cross-piece 18 hard against the roll 8 and prevents said roll from rotating during said tearing-off action. To obtain the second sheet or length of paper, apply the fingers to the leading end of the paper strip which is now resting on the blade 17, draw said strip forward the necessary distance or until the required length is in front of the severing edge 19, and then tear off such length in the same manner as before. These operations are repeated until the roll 8 is exhausted and the cross piece 18 rests on the core 7, when the frame 13 is again elevated, the spindle 6 and core 7 are removed from the holder, a fresh roll is slipped onto said core, the latter with the new roll is placed in position in said holder, the strip from said new roll is threaded through said frame, and the frame is swung down until said cross piece rests on said last-named roll.

When the frame 13 is swung upwardly and downwardly, the roll or pivot 16 partially rotates or rocks in either the bearing 9 or the bearing 12, as the case may be.

If desired a roller may be substituted for the cross piece 18, as shown in Fig. 5. The roller 21 is mounted on and secured to a spindle 22, and preferably said spindle is provided at one end with a knob 23. The

spindle is journaled in the frame 13. The frame 13 in the present case is provided at the longitudinal edges on the top with flanges 24—24, and these flanges afford bearings for the spindle 22. The knob 23 is outside of the right-hand flange 24. The frame 13 here has therein a large opening which is divided by the roller 21 into narrow and wide open spaces 25 and 26 corresponding respectively to the slot 14 and opening 15 previously described. The space 26 is of no more importance than is the opening 15, except that it affords clearance for the roller 21.

Although the roller 21 offers no resistance, like the cross piece 18 to the paper when the latter is drawn off of the roll 8, since said roller rotates under the influence of said paper, this may not be an important advantage, but, in the event the paper be torn off back of the severing edge 19, so that it is not convenient to grasp the leading end to draw it forward for the next sheet or length, said roller 21 can be used to advantage. In such event the knob 23 is grasped and turned in the direction to cause the roller 21 to actuate the paper forward over the severing edge 19, or into position on the blade 17, when said paper can be grasped without difficulty. When the paper is torn off, the roller 21 is forced hard against the roll 8 and holds the same against rotation, practically the same as does the cross piece 18. Otherwise the frame equipped with the roller functions in a similar manner as does the frame provided with the cross piece.

More or less change in the shape, size, and construction of this attachment, in addition to those hereinbefore specifically pointed out, may be made without departing from the spirit of my invention or exceeding the scope of what is claimed.

What I claim as my invention, and desire to secure by Letters Patent, is—

1. As an improved article of manufacture, an attachment, of the class described, comprising a frame having a transverse member adapted to rest on a paper roll, and a servering blade at the front end, for the paper from such roll, with an opening in said frame between said transverse member and said blade, for the passage of such paper to said blade, and pivotal attaching means for the rear end of said frame, the construction and arrangement of parts being such that the pull on the paper to sever the same on said blade causes said frame to rock downwardly on its pivot and said transverse member to bear on the roll and serve as a brake therefor.

2. The combination, in an attachment of the class described, with a member adapted to be attached to a wall, and rolled over at the top to form pivotal means, of a frame rolled over at the rear end to form pivotal means adapted to be engaged with said first-named pivotal means, and slotted for the passage of the paper from a roll below, said frame having a transverse member behind the slot therein to rest on such roll, and a severing blade in front of said slot, for such paper after it passes through said slot, the construction and arrangement of parts being such that the pull on the paper to sever the same on said blade causes said frame to rock downwardly on said pivotal means and said transverse member to bear on the roll and serve as a brake therefor.

3. As an improved article of manufacture, an attachment, of the class described, comprising a frame having its rear edge rolled over to form pivotal means, an integral cross piece which is convex on the under side to rest on a paper roll, and an integral blade which is turned upwardly and sharpened at the front edge, and with a slot in said frame for the passage of the paper from said roll to said blade, said slot being located between said cross piece and said blade, the construction and arrangement of parts being such that the pull on the paper to sever the same on said blade causes said frame to rock downwardly on said pivotal means and said cross piece to bear on the roll and serve as a brake therefor.

JOHN B. ISHAM.

Witnesses:
F. A. CUTTER,
R. E. ALLBEE.