

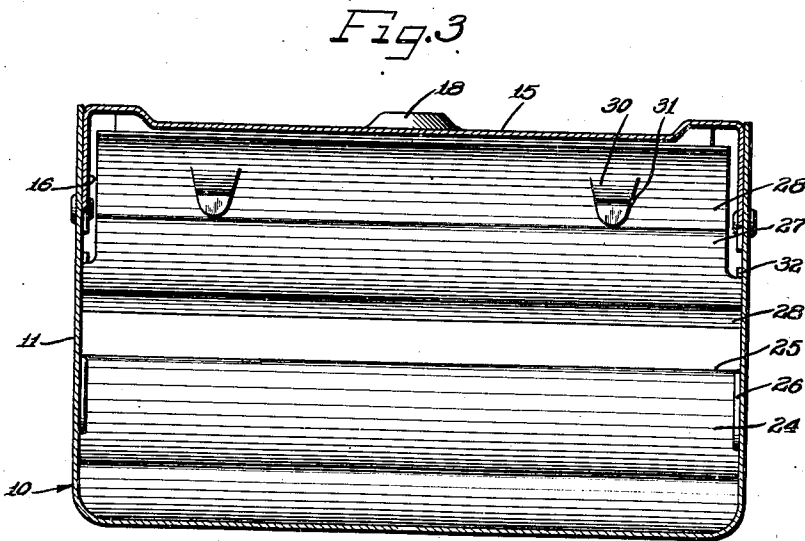
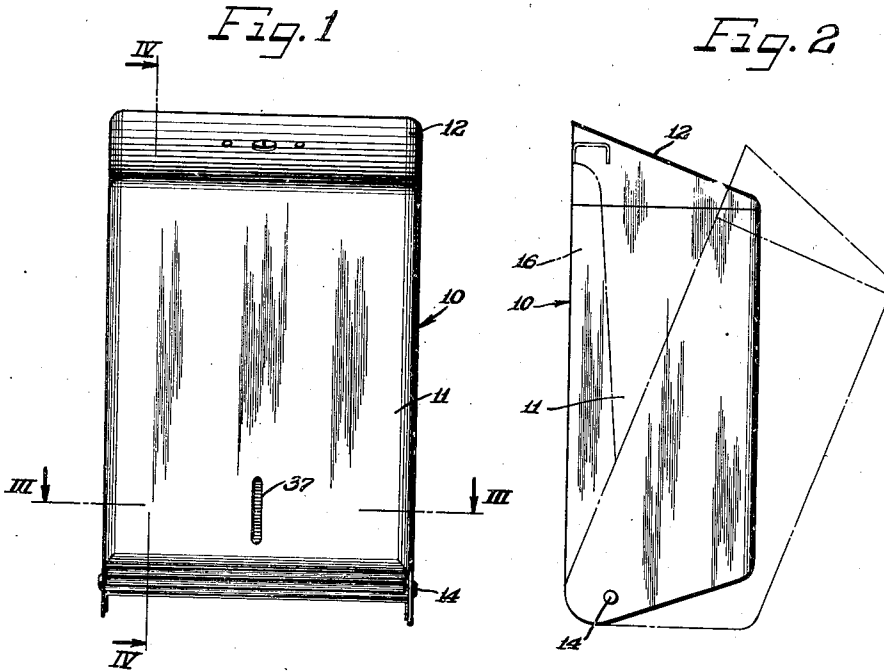
Nov. 15, 1949

E. L. STRAUBEL
TOILET TISSUE DISPENSER

2,488,040

Filed July 13, 1948

2 Sheets-Sheet 1



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2 Sheets-Sheet 2

Fig. 4

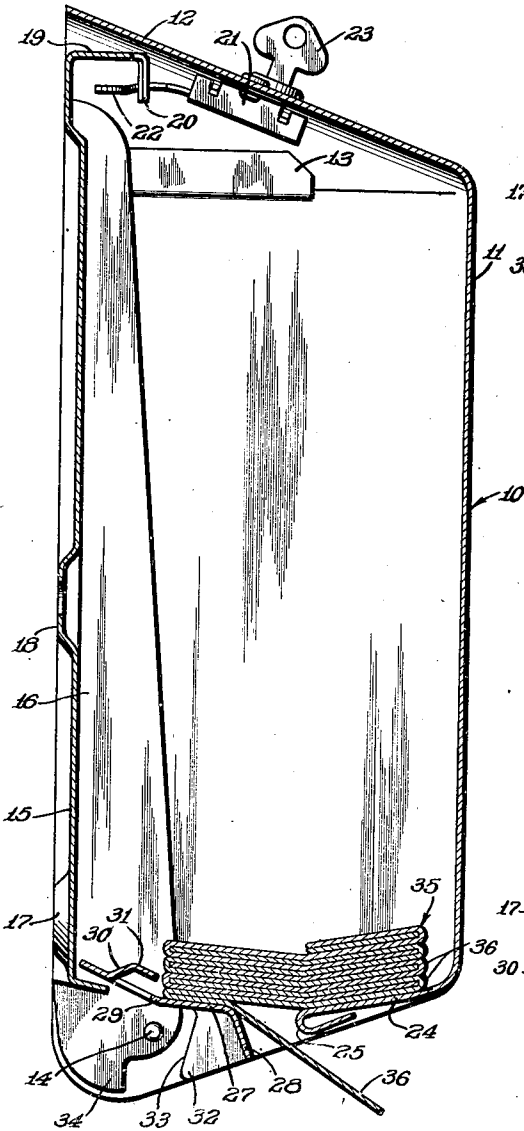


Fig. 5

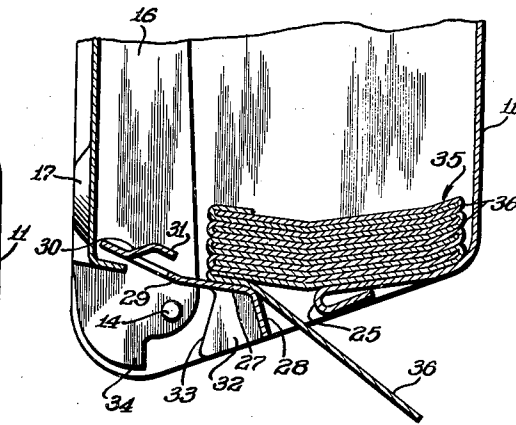
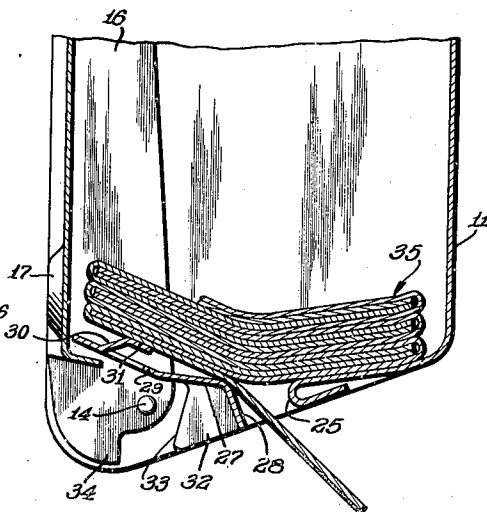


Fig. 6



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TOILET TISSUE DISPENSER

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2 Claims. (Cl. 312-60)

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The present invention relates to a toilet tissue dispenser and more particularly to a cabinet-type dispenser capable of dispensing toilet tissue sheets from interfolded stacks of varying widths.

Toilet tissue is generally supplied for public toilets in the form of a plurality of stacked, interfolded sheets disposed within a dispenser capable of releasing the sheets individually, or in multiple, as they are pulled therefrom by the user. As the use of interfolded toilet sheets has expanded, two general types of paper have become widely adapted. These types are known as the "single-fold" and the "multi-fold" or "double-fold" papers. The "single-fold" type is so called since a sheet of tissue is merely folded once to form a double thickness sheet with the ends of the sheet being interfolded with those sheets adjacent thereto so that the pulling of one sheet from the dispenser will expose an extremity of the adjacent sheet. In the "multi-fold," in which the sheets are of less width than the "single-fold," the individual sheets of paper are folded at least twice with each extremity of each sheet being interfolded with adjacent sheets on either side so that the removable of one sheet positions the next in the dispenser opening. Due to the difference in the width of the sheets, a separate dispenser was formerly necessary for each type of folded paper. This, of course, lead to difficulties.

The present invention now provides a novel type of dispenser whereby both the single-fold and multi-fold types of toilet tissue may be dispensed from a single dispenser. The dispenser of the present invention is simple and economical to manufacture, the entire dispenser being fabricated from sheet metal stock. The dispenser is adapted to be placed against a plane surface, such as a wall, and may be readily opened by means of a simple latch and key for filling or replenishing the paper supply. The dispenser is generally rectangular in configuration and is of sufficient width to accommodate both single-fold and multi-fold tissues. A slot is provided in the lower portion of the dispenser so that the tissue may be removed from the dispenser by merely grasping the protruding paper edge and pulling the same. The interfolded relation of the tissue within a dispenser makes possible the removal of individual sheets easily and expeditiously.

In accordance with the principles of the present invention, a pair of spacing members in the form of lugs are provided within the interior of the dispenser to prevent excessive displacement of the narrower multi-fold tissues when a tissue is pulled from the dispenser. These members are

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struck from the bottom of the dispenser and are completely contained within the dispenser housing. The wider single-fold tissue sheets rest upon the lugs within the housing and the sheets of toilet tissue ride over the lugs when one of the sheets is pulled from the housing. Thus the lugs make it possible to employ a plurality of sizes of toilet tissue within a single dispenser.

It is, therefore, an object of the present invention to provide a toilet tissue dispenser from which a plurality of sizes of interfolded toilet tissue may be dispensed.

It is a further important object of the present invention to provide a toilet tissue dispenser of simple, economical construction which may be employed with a plurality of sizes of interfolded toilet tissue, the dispenser being provided with means disposed therein to limit the relative movement of smaller sizes of paper while permitting the dispensing of larger sizes of paper.

It is a still further important object of the present invention to provide a dispenser for toilet tissue having means disposed therein to maintain relatively narrow individual sheets of tissue in position adjacent the dispensing slot while permitting the employment of the dispenser with wider sizes of tissue.

On the drawings:

Figure 1 is a front elevational view of a toilet tissue dispenser of the present invention;

Figure 2 is a side elevational view of a toilet tissue dispenser of the present invention showing in dotted lines the opening of the dispenser for the filling of the same;

Figure 3 is a cross-sectional view taken along the line III—III of Figure 1;

Figure 4 is a view taken along the line IV—IV of Figure 1 illustrating the position of multi-fold tissue within the dispenser;

Figure 5 is a fragmentary cross-sectional view similar to Figure 4 illustrating the movement of multi-fold tissue within the dispenser during the removal of a sheet of tissue; and

Figure 6 is a cross-sectional view similar to Figure 5 illustrating the position of the single-fold tissue within the dispenser.

As shown on the drawings:

Reference numeral 10 refers generally to a toilet tissue dispenser of the present invention. The dispenser 10 comprises a body member 11 stamped from sheet metal and provided with a cut and folded top closure portion 12 secured to the body member 11 by means of flange 13 formed integrally with the body member 11 as shown in Figure 4. The body member 11 is pivotally

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secured by means of rivets 14 to a back closure member 15 having integral side flanges 16 fitting within the body portion 15 when the dispenser is in closed position. The backing plate 15 is stamped to provide a recessed central portion bearing ribs 17 and 18 so that the backing plate may be secured to a plane surface, such as a wall. The backing surface 15 carries an integral flange 19 extending into the interior of the body member 11 underlying the top closure 12, the flange 19 carrying a depending portion 20. The top closure member 12 carries a simple lock 21 having an extending latch member 22 for engaging the depending portion 20. A suitable key 23 may be provided for releasing the latching 22 from the flange 20 so that the body and top portion of the dispenser may be pivoted about the rivets 14 in the manner shown in Figure 2 in dotted lines. The dispenser may thus be opened to allow filling of the dispenser with tissue, and the body member may be latched against the backing plate 15 by means of the lock 21.

As shown in Figures 3 and 4, tissue is dispensed from the interior of the dispenser through a dispensing slot provided in the lower section of the body portion 11. The front wall of the body portion 11 is bent backwardly and inwardly as at 24 to provide a plane surface underlying the forward portion of the body 11. The portion 24 is doubled back as at 25 to form a double thickness, smooth lip area. As shown in Figure 3, integral flanges 26 are formed integrally with the plane surface 24 and are secured to the side walls of the body member to maintain the lip 25 in position as illustrated.

A separate member 27 is disposed within the body member 11 and extends transversely across the bottom portion thereof. The member 27 is formed with a downwardly and forwardly projecting flange 28 spaced from and parallel to the doubled lip 25 of the plane surface 24. The rear portion of the member 27 slopes upwardly and backwardly as at 29 to provide an additional plane surface. Lugs 30 are stamped from the plane surface provided by the member 27, the lugs being bent to provide forwardly projecting ears 31 parallel to the additional plane surface. Flanges 32, formed integrally with the member 27 at the ends thereof, are secured to the side walls of the body member 11 to maintain the member in position therein. The flanges 31 are formed with rearwardly sloping end surfaces 33 which contact the ears 34 formed in the backing plate 15 to limit the downward movement of the body member 11 when pivoted about the pivots 14 as shown in dotted lines in Figure 2.

In the filling of a toilet tissue dispenser of the present invention, a stack 35 of superimposed multi-fold sheets 36 are placed within the body member 11, the lowermost sheets resting against the plane surfaces 24 and 27 in the lower portion of the dispenser. During the positioning of the stack 35 within the dispenser, the free edge of the lowermost sheet 36 is passed through the slot provided by the doubled lip 27 and the depending flange 28. This slot extends across the entire breadth of the dispenser and the edge of the lowermost sheet extends freely therethrough. To remove sheets from their position within the dispenser, the free edge is merely pulled until the sheet comes loose in the hand of the operator. One edge of the adjacent sheet is folded within the fold of the lower sheet so that this edge protrudes from the slot following removal of the

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lowermost sheet. In this manner, all of the sheets contained within the body 11 may be individually and easily removed from the dispenser. A slot 37 formed in the forward face of the housing 11 provides a visual indication of the amount of paper within the housing.

As shown in Figure 4, the stack of relatively narrow multi-fold sheets, since the sheets are of substantially less width than the width of the dispenser, rests entirely upon the plane surfaces provided by the forward portion 24 and the rear member 27. The sheets are thus positioned ahead of the protruding lips 31 of the lugs 30. As illustrated in Figure 4, upon pulling on the freely extending edge of the lowermost sheet to remove the same from the dispenser, the entire stack of tissues is moved forwardly within the dispenser. The forward movement is limited by the forward wall of the body portion 11. Upon the freeing of the rear edge of the lowermost folded sheet, further downward movement of the sheet moves the entire stack to the rear of the dispenser to abut against the protruding lips 31 of the lugs 30. If the lugs 30 were not provided, movement of the stack of tissues within the dispenser 10 would result in a rearward displacement of the entire stack so that the freely extending edge of the next sheet would not depend through the slot. The lugs 30, by preventing this movement toward the rear, as illustrated, restricts the movement of the stack within the dispenser so that the freely extending edge of the lowermost tissue will constantly be aligned with the slot of the dispenser.

As illustrated in Figure 6, the dispenser may also be employed with the wider single-fold tissues. The lowermost tissue of the stack of wider tissues rests upon the plane surface 24 and upon the upper surface of the protruding ears 31 of the lugs 30. The single-fold tissues, being wider than the multi-fold tissues, are capable of limited movement only within the dispenser, the movement being limited by the forward wall of the dispenser and the backing wall 15. There is no danger, in employing single-fold tissues, of displacing the tissue within the dispenser so that the free edge of the lowermost sheet 36 will fail to come in alignment with the slot, since the movement of the tissue within the dispenser is limited by the forward and rear walls of the dispenser itself.

Thus, it may be seen that the present invention provides an improved type of toilet tissue dispenser in which a plurality of sizes of tissue may be used. The provision of the lugs formed integrally with the member 27 insures the alignment of the free edge of the lowermost sheet of relatively narrow multi-fold tissue with the dispensing slot. Also, the plane upper surface of the ears 31 of the lugs 30 provides a surface upon which the single-fold tissue sheets are free to move so that these sheets may be readily removed from the dispenser.

It should be understood that the dispenser of the present invention may be employed for dispensing paper towels of varying widths, or with other types of flexible sheets furnished as stacks of superimposed interfolded sheets.

It will, of course, be understood that various details of construction may be varied through a wide range without departing from the principles of this invention, and it is, therefore, not the purpose to limit the patent granted hereon otherwise than necessitated by the scope of the appended claims.

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I claim as my invention:

1. A dispenser for stacked interfolded separate flexible sheets comprising a closed housing having a lower, inwardly directed, forwardly curved lip, a member secured to said housing in the lower portion thereof having a plane inclined surface spaced from said lip and cooperating therewith to define a dispensing slot, lugs struck out of said member adjacent said slot and spaced therefrom, said lugs having protruding ears for limiting sliding movement of a stack of relatively narrow sheets within said dispenser and having plane upper surfaces on which a stack of relatively wide sheets may ride, whereby stacks of both wide and narrow sheets may be dispensed from said dispenser.

2. A dispenser for stacked interfolded separate flexible sheets, comprising a closed housing defining a receptacle having a wall for supporting a plurality of said sheets, said wall having a central, elongated dispensing slot, and lugs on said wall extending into the interior of said receptacle

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in aligned spaced relation to said slot, said lugs having end surfaces spaced from said slot to prevent excessive sliding movement relative to said slot of relatively narrow sheets supported on said wall, and said lugs having plane surfaces extending transversely of said slot for supporting a stack of relatively wide sheets overlying said slot, whereby both narrow and wide sheets may be efficaciously dispensed from said dispenser through said slot.

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