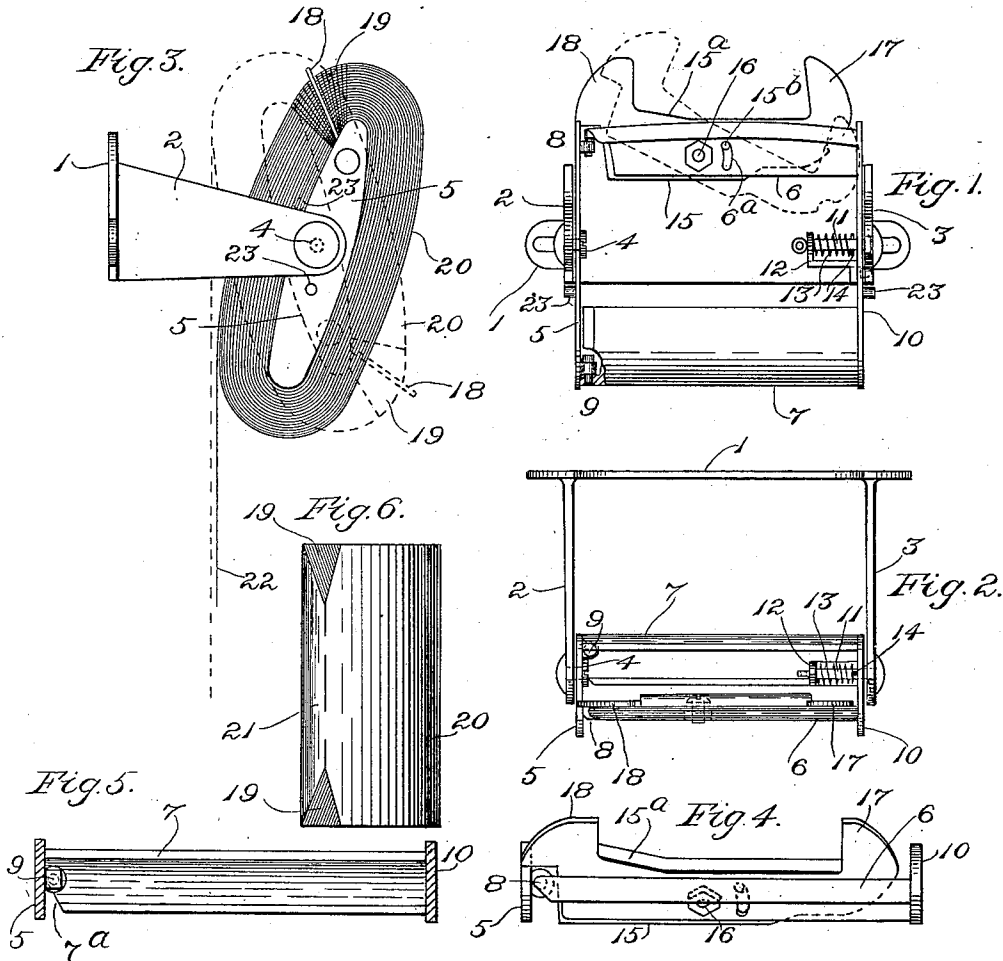


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TOILET PAPER FIXTURE..
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1,095,640.

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UNITED STATES PATENT OFFICE.

GEORGE T. JOHNSON, OF MELROSE, MASSACHUSETTS.

TOILET-PAPER FIXTURE.

1,095,640.

Specification of Letters Patent.

Patented May 5, 1914.

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To all whom it may concern:

Be it known that I, GEORGE T. JOHNSON, a citizen of the United States, residing at Melrose, in the county of Middlesex, State of Massachusetts, have invented a certain new and useful Improvement in Toilet-Paper Fixtures, of which the following is a specification, reference being had therein to the accompanying drawings.

10 The invention relates to toilet paper fixtures of the type in which a wound package of paper is mounted upon a core-piece arranged to rock or oscillate to facilitate the unwinding and detaching of successive sections of the paper.

15 The invention comprises improvements in or in connection with the core-piece of a fixture of the said type.

20 One part of the invention is a stay-piece, for engagement with the package to facilitate the tearing apart of the sections, movably mounted upon the core-piece to facilitate the said application.

25 The invention is illustrated in the accompanying drawings, in which latter,—

30 Figure 1 is a front elevation of a fixture having the invention embodied therein, a small portion of the body of the core-piece being broken away in order to show more clearly the hinge-connection between said body-portion and an end-bar of the core-piece. Fig. 2 is a plan view of the said fixture. Fig. 3 is an end elevation thereof, with a toilet-paper package applied thereto. Fig. 35 4 is a top view of the core-piece, shown separately and on a slightly enlarged scale. Fig. 5 is a detail view of the core-piece in horizontal section and on a slightly enlarged scale. Fig. 6 is a top view of the toilet-paper package of Fig. 3, shown separately.

40 Having reference to the drawings, the back of the stand or bracket is marked 1 and the opposite arms of the said stand or bracket, constituting supporting arms for the core-piece, are marked 2 and 3, respectively. One of the said supporting arms, namely that marked 2, is furnished with a horizontal pivot 4 for the adjacent end-bar, 5, of the core-piece. The said pivot in this instance is a screw, the threaded stem of which enters a threaded hole tapped in the supporting-arm 2, the end-bar 5 having a hole which receives and fits the plain or unthreaded portion of the said stem, and being 55 mounted upon the latter portion between the

flanged head of the screw and the supporting-arm. Thereby the end-bar 5 is connected pivotally with the supporting-arm 2 with capacity to swivel or swing in a vertical plane alongside arm 2, and is held in working relation with the said arm. The said end-bar is restricted or confined to the said plane, which latter corresponds with the plane in which the core-piece rocks or oscillates as the unwinding and detaching of the successive sections of paper take place. The body of the core-piece comprises upper and lower longitudinal bars 6 and 7. The said bars are connected to the end-bar 5, at their ends adjacent the latter, by upper and lower hinge-joints 8, 9. Their opposite ends are fixedly combined with the opposite end-bar 10 of the core-piece. The described construction provides for swinging movement of the body of the core-piece relative to the end-bar 5, upon the hinges 8, 9. To permit a swinging movement of said body relative to end-bar 5 to take place in the direction from front to rear, the front corners of the hinged ends of the longitudinal bars 6, 7, are beveled off, as shown in Figs. 4 and 5. To prevent the body from swinging back beyond a position at right angles to the end-bar 5, the squared rear corners of said hinged ends are arranged to make contact with the inner face of end-bar 5 as in Fig. 5. The connection of the body-portion with the end-bar 5 is essentially a knuckle-joint, the body-portion being capable of swinging forwardly, but being restricted as to the extent of its backward swinging movement. A bolt 11 working in holes in end-bar 10 and in a bracket 12 attached to said end-bar, and projected endwise by means of an expanding spiral spring 14, serves as a pivot for the corresponding end of the core-piece, and as a latching device to retain the core-piece locked in its working position, in well-known manner.

100 The stay-piece is marked 15. It is combined with the upper longitudinal bar 6 of the body of the core-piece, to which it is pivoted by a pivot 16. At 17 is a horn or stay-projection at the end of the said stay-piece next the forwardly swinging end of the core-piece. At 18 is a horn or stay-projection upon the opposite end of the stay-piece. These horns or stay-projections are intended to enter notches 19, 19, in the opposite ends of the package 20 of paper.

When the stay-piece is in its working position the horns or stay-projections project outwardly beyond the body of the core-piece. In order that the horn or stay-projection 17 may not constitute an obstruction to interfere with slipping the package 20 upon the core-piece, the stay-piece is pivoted at 16 so that it may be turned upon its pivot, as indicated by dotted lines in Fig. 1, to retract the said horn or stay-projection 17 so that the package may pass the same in being slipped on. To cause the stay-piece to swing back into its normal working position so as to project the horn or stay-projection 17 outward into the notch 19 which should receive it, and in order to hold the said horn or stay-projection in the said notch, I arrange the stay-piece so that its upper edge 15^a shall rise above the upper edge of the top-bar 6 of the core-piece when the stay-piece is positioned to retract the horn or stay-projection 17. See the dotted lines in Fig. 1. When the package is slipped on to the core-piece, over the retracted horn or stay-projection 17, the interior of the package acts upon the outturned edge of the stay-piece and presses the stay-piece back into its normal position shown in full lines in Fig. 1, thereby moving the horn or stay-projection 17 outward into its notch 19 in the package 20. While the package is in place upon the core-piece it acts by its continued engagement with the outer edge of the stay-piece to hold the latter in substantially full-line position with the horn or stay-projection 17 in the said notch 19. I have shown a second horn or stay-projection 18 upon the stay-piece at the end of the latter opposite that at which the horn or stay-projection 17 is located, to enter a second notch 19 in the package 20, namely at the end opposite that at which the notch engaged by the horn or stay-projection 17 is located, but the horn or stay-projection 18 may in some cases be omitted. I have shown at 15^b a stop-projection carried by the stay-piece 15 and working in a slot or opening 6^a in the bar 6 of the core-piece, this stop engaging with the end walls of the slot or opening to limit the extent of the swinging movement of the stay-piece. This stop, however, may be dispensed with if deemed advisable.

The package 20 has the line of weakening 21, Fig. 6, extending across the same from the notch 19, or between the two notches in case the package is notched at both ends as in said figure.

To limit the extent of the backward and downward turning movement of the core-piece when the hanging end 22 of the paper is pulled upon, the side-arm 5 of the core-piece is or may be provided with a stop 23 projecting outwardly therefrom to engage the top edge of the supporting-arm 2. The stop 23 also serves by engagement with the

under edge of the said supporting-arm to limit the extent of the swinging movement of the core-piece in the opposite direction.

The stay-projection or projections of the stay-piece project upwardly from the core-piece, and backwardly at an angle to the latter, so that the said stay-projection or stay-projections and consequently the notch or notches 19 and the line of weakening 21 are located at the rear, where the said line of weakening is more or less hidden and is not so plainly observable as to suggest to a person the idea of breaking across a number of sheets by means of a knife, pencil point, or the like with resulting excessive waste of the paper. With the line of weakening thus located, the top of the package is more rounded then when the line of weakening is formed at the very top or edge of the package. When the hanging portion 22 of the strip of paper is taken hold of and pulled upon, so as to revolve the package until its turning movement is arrested by the stop 23, the tightening of the portion held by the hand causes the paper to unwind from the package to a point somewhat beyond the line of weakening. Consequently the outermost layer of paper is completely detached and separated from the next succeeding layers at the line of weakening, and also is opened away from the body of the package so as to permit entrance of air between it and the next inner layer to facilitate the separation of the free end of the outer layer from the rest of the package, and the dropping of the same into the position represented in Fig. 3 as the package and core-piece swing back to their normal position and oscillate after being released by the detaching of the portion which was grasped for detachment.

What I claim as my invention is:—

1. In a toilet-paper fixture, in combination, a core-piece adapted to enter a wound package, and a stay-piece provided with a horn or stay-projection for engagement in a notch in the outer end of said package, and pivotally mounted on said core-piece to enable the horn or stay-projection to be drawn inwardly to facilitate application of the package to the core-piece.

2. In a toilet-paper fixture, in combination, a core-piece adapted to enter a wound package, and a stay-piece provided with a horn or stay-projection for engagement in a notch in said package, said stay-piece movably mounted on said core-piece to enable the horn or stay-projection to be withdrawn to facilitate application of the package to the core-piece, and constructed to be moved by the applied package into working position thereby entering said horn or stay-projection into the said notch.

3. In a toilet-paper fixture, in combination, a core-piece adapted to enter a wound

package, and a stay-piece provided with opposite horns or stay-projections for engagement in notches in both ends of said package, said stay-piece movably mounted on
5 said core-piece to withdraw the horn or projection at the receiving end thereof to facilitate application of the package to the core-piece.

10 4. In a toilet-paper fixture, in combination, a core-piece adapted to enter a wound package, and a stay-piece provided with opposite horns or stay-projections for engagement in notches in both ends of said pack-

age, said stay-piece movably mounted on said core-piece to withdraw the horn or projection at the receiving end thereof to facilitate application of the package to the core-piece, and constructed to be moved by the applied package into working position.

In testimony whereof I affix my signature in presence of two witnesses.

GEORGE T. JOHNSON.

Witnesses:

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Copies of this patent may be obtained for five cents each, by addressing the "Commissioner of Patents, Washington, D. C."