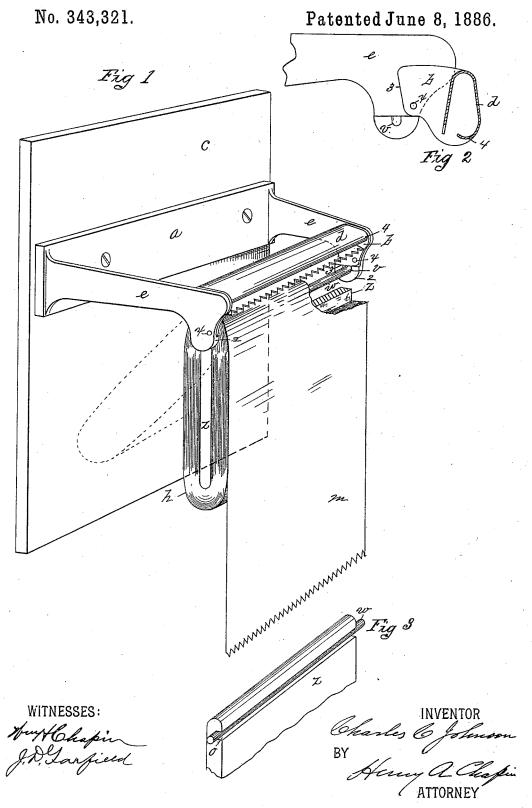
C. C. JOHNSON.

TOILET PAPER FIXTURE.



UNITED STATES PATENT OFFICE.

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TOILET-PAPER FIXTURE.

SPECIFICATION forming part of Letters Patent No. 343,321, dated June 8, 1886.

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To all whom it may concern:

Be it known that I, CHARLES C. JOHNSON, a citizen of the United States, residing at Springfield, in the county of Windsor and 5 State of Vermont, have invented new and useful Improvements in Toilet-Paper Fixtures, of which the following is a specification.

This invention relates to improvements in toilet-paper fixtures, the object being to provide improved means for maintaining a rolled strip of toilet-paper in an oval form and for attaching pivot-connections thereto, and to provide an improved supporting-frame for said roll, having a knife or paper-tearing bar which constitutes a lock for securing the roll

of paper in said frame.

In the drawings forming part of this specification, Figure 1 is a perspective view of a toilet-paper fixture constructed according to 20 my invention. Fig. 2 is a side view of the inner side of the end of one of the roll-supporting arms of the frame, together with a cross-section of the knife or tearing-bar and one of the end plates attached to the latter 25 and pivoted to said arm. Fig. 3 is a perspective view of the upper end of the roll center piece and the pivot-bar on which the roll hangs.

In the drawings, c is a suitable base, of wood 30 or other material, on which the frame a, hereinafter described, is secured, and which provides convenient means for supporting said frame in proper position on a wall or other place. A metallic frame, a, has two arms, e 35 e, thereon projecting horizontally therefrom, on the inner sides of which arms are two bearings, v, opposite each other, to receive each end of the pivot-bar w, said bearings being made in the upper edge of the part 2 of the 40 arm e, which is thicker than the part of the arm above it, as shown in Fig. 1, and the upper side of said bearings is open. A knife or tearing-bar, d, is shown in the drawings as formed from sheet metal, having one edge ser-45 rated and the other hanging nearly over the latter, and to each end of said bar is attached a plate, b, and the bar d is pivoted between the arms e by rivets or pins x, upon which the bar has a rocking motion, and when the 50 latter is in the position shown in Fig. 1 the edge 3 of plate b is directly across the upper | latter.

side of the bearing v, closing that side of it, and when the bar is rocked forward, as in Fig. 2, the upper side of the bearing is opened, as there shown. Said pins x pass through 55 arms e and the plates b. The bar d is made preferably of sheet metal, as described; for it is thus light and the serrated edge thereon is integral with the bar; but the latter may be made solid, if desired, and have a paper-tearing edge applied thereto, which may be serrated or not, as may be desired. The front side, 4, of the bar d is made to project sufficiently in advance of the tearing-edge of the bar to serve as a guard to protect the hand 65 from being inadvertently brought against said edge.

The paper-strip $\operatorname{roll} h$ is suspended between the arms e of frame a on the cylindrical bar w, made from suitable round wire, or upon 70 shorter separate pieces of the same material secured in each edge of the rigid roll center in the position occupied by the ends of said bar, as shown in Fig. 3. The employment, however, of the single bar w is preferable, as 75

it constitutes but one piece.

It is seen from the above description of the construction of frame a and the bar d that when the latter is rocked forward, as in Fig. 2, the bearings v in the arms of the frame are 80 open and that the bar w may be placed between the arms e back of bar d, and be freely moved to a position over said bearings and be dropped into the latter, and that by rocking said bar backward the edges 3 of plates b are 85 brought directly over the ends of the bar w, thereby locking it to the frame.

The roll of toilet-paper h is formed from a strip thereof wound upon a rigid flat centerpiece, z, of suitable thickness, whose edges are 90 at right angles to each other, thereby producing a roll of oval form having a solid unyielding center, z, in direct contact with the paper itself. Said center-piece z is made preferably of wood, and has the groove o therein, as 95 shown in Fig. 3, through which the bar w can be easily passed, as shown, after the roll is formed; but, as above mentioned, the block or center z may have pins driven into its edges at or near the points where the ends of the bar w terminate, which may serve in place of the latter.

The frame a and bar w having been constructed and adapted to each other as aforesaid, and the said rolled strip of toilet-paper provided, the bar w is placed in the roll, the paper-tearing bar is rocked forward, the roll is hung in the frame in the position shown in Fig. 1, and there locked, as above described, and thereafter pieces of paper of given length

are torn from the strip, as follows: The end of the paper strip, which hangs in front of the roll, is seized and by drawing it about in a line with the arms e the roll is made to swing so that it takes about the position shown in dotted lines in Fig. 1, and then 15 said end is drawn upward against the serrated edge of the tearing-bar, whereby it is severed from the strip, whereupon the roll, which is now free, swings to a vertical position, and the end m of the strip falls from the rear side of 20 the roll to the position shown in Fig. 1. When said roll, by drawing and tearing off the piece of paper, as above described, is swung backward, its upper end is brought to such a position under the tearing-edge of bar d 25 that the separation of the torn-off piece occurs about on a line centrally between the sides of the roll, and hence the end of the strip is prevented from lapping over the upper end of the roll far enough to cause it to 30 be retained there, and hence, when the roll assumes a vertical position the end m drops down, as shown in Fig. 1, and is presented automatically in a convenient position to be

seized for tearing off. The end *m* of the pa-35 per may be torn off by drawing it sufficiently upward against said tearing edge on bar *d* without at the same time swinging the lower end of the roll backward; but under such conditions the end of the strip is not so likely to 40 drop down, as above described.

The length of each piece torn off is substantially that of the circumference of the roll

To place a full roll in frame a after the pa-45 per is unwound from one, bar d is turned outward, swinging the arms of the plates b, extending from the pivots x, off from the ends of the bar w. The latter is then removed from its bearings and placed in another roll, 50 as above described, and the roll is placed in the frame and locked there, as aforesaid, by swinging said arms over the bearings v in the

It is desirable that the above-described 55 means of locking the roll of paper in the frame a be provided to prevent the entire roll from being removed from the frame, except by persons having authority to do so.

What I claim as my invention is-

1. In a toilet-paper fixture, the paper-tear- 60 ing bar *d*, provided with a tearing-edge, substantially as described, the body of which bar above said edge projects forward horizontally beyond the latter, substantially as set forth.

2. Roll-holding devices for a roll of toiletpaper of oval form, consisting of a rigid center-piece of flat form and suitable thickness, whose edges are at right angles to each other, substantially as described, upon which the paper is wound, said center-piece having a groove 7° therein to receive a pivot-bar, combined with a pivot-bar passing through said groove, and having its ends projecting beyond the edges of said roll, substantially as set forth.

3. A roll-holding frame for toilet-paper, having two arms projecting horizontally therefrom, and having a paper-tearing bar pivoted between said arms, combined with an oval-shaped roll of toilet-paper suspended perpendicularly between said arms under said paper-80 tearing bar, substantially as set forth.

4. A toilet-paper holding device consisting of the frame a, provided with the arms ee, each having an open-sided pivot-bearing, v, thereon, and the knife-bar d, pivoted between said 85 arms over said bearings, and having the plates b thereon extending over the latter, combined with the pivot-bar w, and the rigid roll-center z, having the groove o therein, substantially as set forth.

5. A roll-holder for toilet-paper, consisting of a frame having two projecting arms having bearings on the inner sides thereof for the ends of roll-supporting pivots, and a knife-bar pivoted between the arms of the frame having 95 arms thereon which roll against and form one side of said pivot-bearings, combined and operating substantially as set forth.

6. A roll-holder for toilet-paper, consisting of a frame having two projecting arms with 100 bearings on the inner sides thereof for the ends of roll-supporting pivots, and a knife-bar pivoted between the arms of the frame having arms thereon, which roll against and form one side of said pivot-bearings, combined with a 105 roll of toilet-paper of oval form having pivot-connections near one end thereof engaging in the bearings in the arms of said frame, substantially as set forth.

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Witnesses:
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