No. 819,682. PATENTED MAY 1, 1906.

H. J. WILLIAMS.

TOILET PAPER FIXTURE.

APPLICATION FILED JAN. 30, 1906.

Fig. 4.

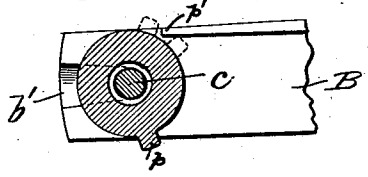


Fig. 1.

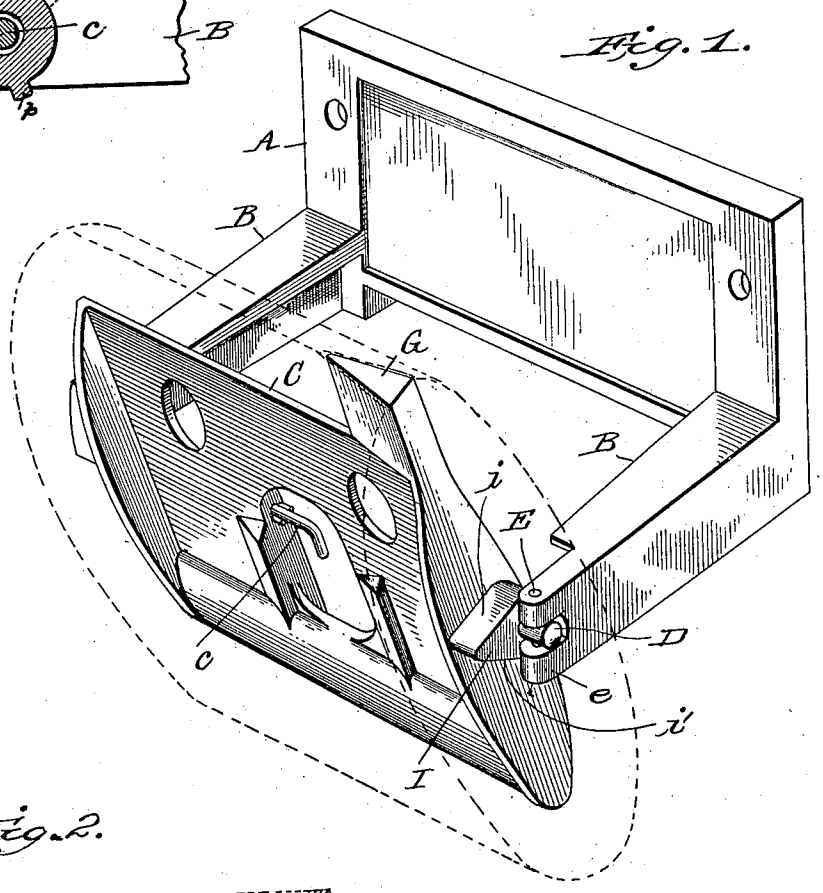


Fig. 2.

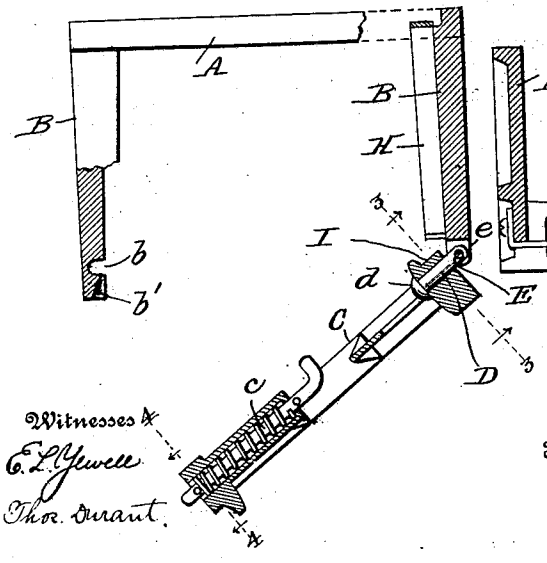
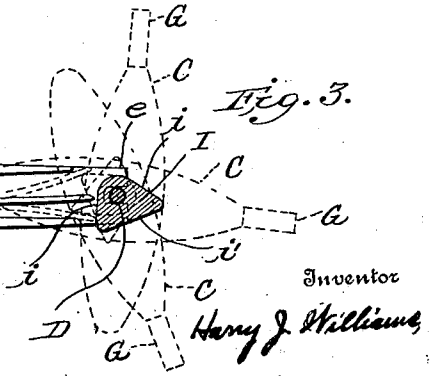


Fig. 3.



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TOILET-PAPER FIXTURE.

No. 819,682. Specification of Letters Patent. Patented May 1, 1906.

Application filed January 30, 1906. Serial No 298,661.

To all whom it may concern:

Be it known that I, HARRY J. WILLIAMS, a citizen of the United States, residing at Meriden, in the county of New Haven and State of Connecticut, have invented certain new and useful Improvements in Toilet-Paper Fixtures; and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, forming a part of this specification, and to the letters of reference marked thereon.

This invention relates to that class of toilet-paper fixtures in which the core carrying the roll and the roll itself are designed to oscillate, means being provided for preventing complete rotation.

In the form of fixture in which the invention is preferably embodied it is designed to carry a roll which is elongated or substantially oval in cross-section and the lines of perforations or weakness determining the points of severance are substantially coincident and at or near one end of the oval.

The objects of the invention are, first, to provide a fixture of the character indicated in which the parts are inseparably connected, so that parts cannot be lost or stolen to render the fixture useless, and, secondly, to provide a fixture in which the roll-carrying core cannot be returned to the supporting-arms in any position save that which is correct for the proper operation of the fixture.

In the accompanying drawings, Figure 1 is a perspective view of a fixture embodying the present improvements, the roll being shown in dotted lines. Fig. 2 is a horizontal section with the core swung to its open position ready to receive a roll of paper. Fig. 3 is a detail sectional view showing the leaf-spring and irregular-shaped projection on the core for coöperation therewith. Fig. 4 is a similar section at the opposite end of the core, showing the safety-stop shoulders.

Like letters of reference in the several figures indicate the same parts.

The body of the fixture (indicated by the letter A) is adapted to be secured to the wall or other support and is provided with forwardly-extending arms B, in the ends of which the oscillatory core C for the roll of paper is hung. One of the arms is provided with the usual socket *b* for an axially-sliding spring-pin *c* in the core and an incline *b'* for guiding the pin into its socket when the core is swung into position. An axial pivot-pin D, on which the opposite end of the core is journaled and having a head *d* on its inner end, is hinged at its outer end in the end of the other arm, the hinge connection being preferably formed by a vertical pintle-pin E passing through the bifurcated ends *e* of the arm and through the end of the pivot-pin D, as shown. The core itself is of such shape as to receive the oval roll of paper, one edge being provided with a projection G, adapted to enter a correspondingly-shaped recess in one edge of the paper to insure correct positioning, and the opposite edge being weighted to cause the core and roll to return to and normally stand in correct position with the free end of the paper depending in convenient position to be grasped. A leaf-spring H, secured in proximity to one of the arms, is employed to check the rotation of the core and to return it to normal position with a quick flirt well calculated to loosen the free end of the paper from the body of the roll and at the same time prevent noise in operation, such as would be caused by the contact of rigid stops or shoulders. For coöperation with the leaf-spring H the end of the core is provided with a projection I, two faces *i* of which are stop-faces and adapted to contact with the spring to check the rotation of the core in opposite directions. The two stop-faces *i* are so located as to permit the core to turn somewhat more than half a revolution, and while the projection and spring will permit the core to be returned to position after being opened for the application of a roll when the spring is in the space formed by the wider angle between the faces *i* the points of the projection and the portion *i'* comprehended in the lesser angle between the faces *i* will contact with the spring and prevent the core from being returned to place should an attempt be made to return it in an incorrect position. This portion of the invention is applicable to fixtures in which the core is adapted to be entirely removed from the supporting-arms, for while in the structure shown the parts operate as described the action would be the same were the pivot-pin not hinged in the arm.

With the construction of fixture described it will be noted that not only are the parts of the fixture inseparable, but it is impossible either to place the paper on the core incor-

rectly or to return the core and paper to the arms in any but correct relation. The combination whereby these results are secured is important, because the spring-pressed pin is concealed by the roll of paper, and once the roll is returned to the supporting-arms the core cannot be released until the roll is used up, and hence if it be in incorrect position the inconvenience attendant upon the removal of the paper is exceedingly aggravating to all users until the roll is consumed or else the roll must be cut off and wasted to correct the error.

The ultimate throw of the roll may be checked without bringing undue strain on the spring by means of the projection p on the core coming into contact with the shoulder p' on the arm B, as shown in Fig. 4.

Having thus described my invention, what I claim as new, and desire to secure by Letters Patent, is—

1. In a toilet-paper fixture, the combination with the base and supporting-arms, of a core adapted to support the roll of paper, a pivot-pin on which one end of the core is inseparably journaled, said pivot-pin being itself hinged to one of the arms whereby the pivot-pin and core may be moved in unison and means for detachably connecting the core and other arm; substantially as described.

2. In a toilet-paper fixture, the combination with the base, the forwardly-projecting supporting-arms, one of which has a socket therein, and a pivot-pin permanently hinged in the end of the other of said arms, of a core for the roll of paper inseparably pivoted on said pin, and a sliding pivot-pin on the core adapted to engage the socket in the other arm; substantially as described.

3. In a toilet-paper fixture, the combination with the base having the forwardly-extending supporting-arms, one of which is provided with a socket and a pivot-pin permanently hinged in the other of said arms, of a core inseparably pivoted on said pin, a sliding pivot-pin mounted on the core in position to enter the socket and stops coöperating to prevent the complete rotation of the core when in operative position, said stops being so positioned with relation to each other as to prevent the entry of the core between the arms in any but the correct position for operation; substantially as described.

4. In a toilet-paper fixture, the combination with the base having the forwardly-projecting arms and the leaf-spring carried thereby in proximity to one of said arms, of a core pivoted in said arms on axially-projecting pins and a projection on one end of the core having stop-faces adapted to contact with said spring to retard rotation of the core and a part intermediate said faces adapted to engage said spring to prevent the entry of the core between the arms when not in position for the spring to coöperate with said stop-faces; substantially as described.

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Witnesses:
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