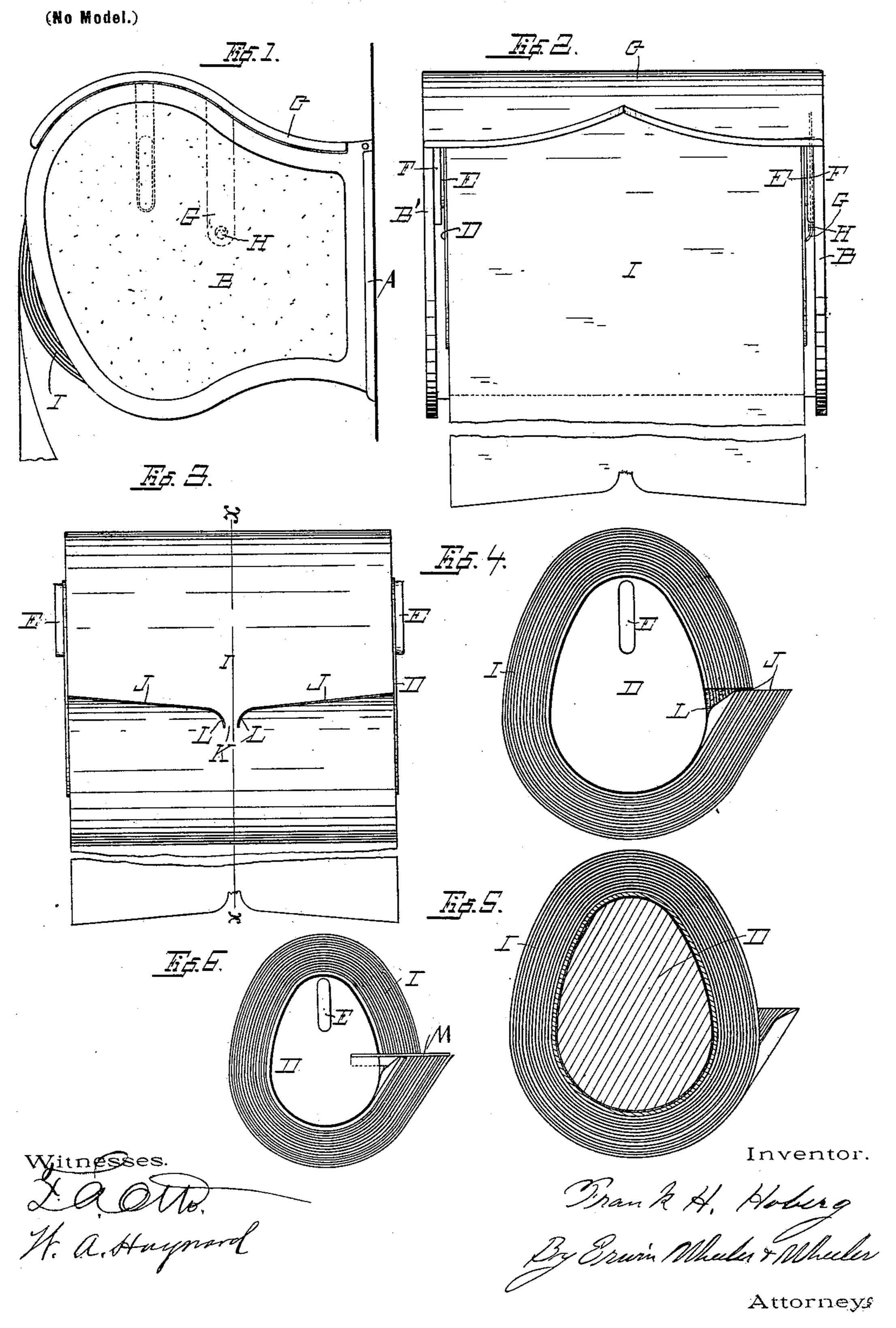
Patented Mar. 28, 1899.

F. H. HOBERG. TOILET PAPER FIXTURE AND ROLL.

(Application filed Jan. 5, 1898.)



United States Patent Office.

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TOILET-PAPER FIXTURE AND ROLL.

SPECIFICATION forming part of Letters Patent No. 622,046, dated March 28, 1899.

Application filed January 5, 1898. Serial No. 665,714. (No model.)

To all whom it may concern:

Be it known that I, Frank H. Hoberg, a citizen of the United States, residing at Green Bay, in the county of Brown and State of Wisconsin, have invented new and useful Improvements in Toilet-Paper Fixtures and Rolls, of which the following is a specification.

My invention relates to improvements in that class of toilet-paper fixtures and rolls in 10 which the end of a continuously-wound strip is automatically thrown off from the roll and permitted to hang below the roll after the separation of each sheet or section of the strip, and thus facilitates grasping the end prepara-15 tory to the separation of the next sheet, the roll being usually partially inclosed in a box or easing in order to prevent waste or the theft of the entire roll. So far as I am aware, in all the devices of this class heretofore con-20 structed an eccentrically-hung and partiallyrotatable core has been employed to support the roll and cause the disengagement of the end of the strip, the core and roll being turned by the force applied in detaching the sheet 25 and the jar caused by the return movement of the core against a projecting stop being relied upon to throw off the end of the strip remaining after each sheet is separated. It has been found, however, that the jar caused by 30 the return movement of the roll is frequently insufficient to dislodge the end of the strip from the roll, that the rolls frequently wind up as the strip is pulled, thus shifting the position of the tearing-lines to a point where the 35 free end of the strip is too short to hang from the roll, and that the cores do not always turn with uniform ease and frequently fail to acquire momentum with the return movement sufficient to affect the paper. The movement 40 of the core is an awkward one and productive of noise, which is also objectionable.

The object of my invention is to provide a form of fixture and roll in which the end of the strip remaining after the removal of each sheet will uniformly drop and hang below the roll and in which the dropping of the end of the strip is not dependent upon the movement of the roll.

In the following description reference is to had to the accompanying drawings, in which—

Figure 1 is a side view of my improved fixture. Fig. 2 is a front view of the same. Fig.

3 is a rear view of my improved toilet-paper roll. Fig. 4 is an end view of the same, showing also the core of the fixture. Fig. 5 is a 55 cross-section drawn on line xx of Fig. 3. Fig. 6 is an end view of core and roll, showing the former provided with a flange or tongue adapted to facilitate the separation of the end of the strip from the roll.

Like parts are identified by the same reference-letters throughout the several views.

My fixture comprises a back plate A, side plates B and B', hinged covers C, and removable core D, the latter being provided with 65 end projections E E, which are adapted to fit into channels F F in the plates B and B' to support the core. The projections E E are preferably flattened vertically to prevent the core from turning, although a partial rotation 70 may be permitted, if desired. The cover is adapted to be locked by means of a hasp G, which automatically engages a stud H projecting from the side of the plate B when the cover is closed. The core may be round, egg-75 shaped, oval, or of any other suitable shape.

The roll of paper I is prepared in a continuous strip, which is preferably wound upon a pasteboard base, and the roll thus formed is cut or slitted along the lines J J from each 80 end to partially separate the strip into sheets, each of which is united to the others by a narrow tongue of paper K in the center of the strip between the converging ends L L of the slits J.

It will be observed that the slits J have a somewhat diagonal trend running in the opposite direction from that in which the paper is wound and the roll is placed upon the fixture with the slits at the rear side and con- 90 verging downwardly. The strain of the tongues K, which unite the upper and lower halves of the roll on its rear side, is exerted over the curved or angular surface of the core to hold the central portion of the strip to the 95 core, and as the pull of the tongues on the lower half of the roll is exerted below the cuts J J the edges of the sheets below the cut spring away from the core, while the edges above the cut are held approximately thereto. 100 This tendency is increased where the core is provided with a lip or outwardly-projecting plate M, as shown in Fig. 5, which lip is adapted to enter one of the slits J when the core is

inserted in the roll and which crowds the edges of the paper outwardly. It is obvious that the same result can be attained with a single cut running nearly through the roll 5 from one end to the other or in a variety of other ways without departing from the scope

of my invention.

To insert the paper in the fixture, the coverfastening is released by inserting a knife or to other tool behind it to crowd it away from engagement with the pin, then raising the cover, removing the core, and inserting it in the roll, the core and roll being then replaced in the fixture with the slit or cut side to the rear, as 15 before explained. It will thus be observed that the core cooperates with the peculiarlyformed roll in the production of the desired result, for the rolls when shipped assume a flattened position and are expanded when the 20 cores are inserted, the curved or angular sides of the core or the projecting lip when the latter is used being effective in producing the requisite bulge or projection of that portion of the paper between the tongue K and 25 the end of the roll on the lower side of the slit. When the roll is in place, as above described, with the end of the strip hanging below the roll, a pull upon such portion of the strip is exerted upon the paper around and 30 over the front side of the roll and detaches a sheet or portion of the strip by tearing across the outer leaf or winding of the tongue K. The elastic reaction of the paper below the point of severance, due to the sharp bulge of 35 the slitted portion, causes the end of the remainder of the strip to spring away from the roll and drop down and hang below the roll, when it can also be grasped and torn off, the operation being repeated until the roll is ex-40 hausted.

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

Patent, is—

1. The combination of a toilet-paper roll 45 cut or slitted to partially sever the same longitudinally, a toilet-paper fixture adapted to support the roll, and means for causing the paper on one side of the cut or slit to bulge or project outwardly, whereby the end of the 50 strip remaining after the separation of a sheet will be thrown out by the elastic reaction of the paper along the severed edge and permitted to drop and hang below the roll, substantially for the purpose set forth.

55 2. The combination of a toilet-paper roll, cut or slitted to partially sever the same longitudinally, said slit or slits having a diagonal trend at their inner ends, in the opposite direction to that in which the paper is wound

60 upon the roll and forming a narrow tongue of paper uniting the parts of the roll, a fix-

ture adapted to support the roll, and means for causing the paper to bulge outwardly along the side of the slit between said tongue and the end of the roll, substantially for the 65

purpose set forth.

3. The combination of a toilet-paper roll cut or slitted to partially sever the same longitudinally, a toilet-paper fixture, a papersupporting core, connected therewith, and a 70 slip projecting from said core and adapted to enter the slit in the roll and press the paper outwardly, substantially for the purpose set forth.

4. The combination of a toilet-paper roll, 75 cut or slitted to partially sever the same longitudinally, said slit or slits having a diagonal trend at their inner ends, and leaving the parts of the roll united by a narrow tongue of uncut paper, a toilet-paper fixture pro-80 vided with a removable core adapted to be inserted in said roll and adapted to cause the paper to bulge or project outwardly on one side of the slit or slits, substantially for the purpose set forth.

5. A toilet-paper roll formed with a cut or slit extending inwardly from one or both ends and nearly severing the roll, said cut or slit having a diagonal trend, whereby that portion of the roll in the angle formed by said 90 cut or slit tends to bulge outwardly away from the line of curvature of the roll, substantially

for the purpose set forth.

6. A toilet-paper roll formed with a cut or slit extending inwardly from one or both ends 95 and nearly severing the roll, said cut or slit having a diagonal trend at its inner end extending in the opposite direction to that in which the paper is wound, whereby that portion of the roll in the angle formed by said 100 cut or slit, tends to bulge outwardly away from the line of curvature of the roll, sub-

stantially for the purpose set forth. 7. A toilet-paper roll formed with a cut or slit extending inwardly from both ends and 105 nearly severing the roll, said cut or slit having a diagonal trend at its inner end running in the opposite direction from that in which

the paper is rolled, and forming a narrow tongue of paper which preserves the conti- 110 nuity of the roll, the portions of the roll between said tongue and the ends of the roll being adapted to bulge outwardly, away from the line of curvature of the roll, substantially for the purpose set forth.

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

FRANK H. HOBERG.

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Witnesses:

W. P. WAGNER, W. J. McCormick.