No. 653,644. Patented July 10, 1900.

E. B. WESTON.

TOILET PAPER FIXTURE.

(Application filed Mar. 29, 1899.)

(No Model.) 2 Sheets—Sheet 1.

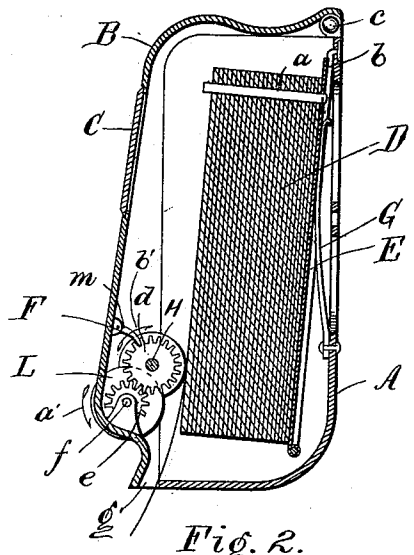


Fig. 2.

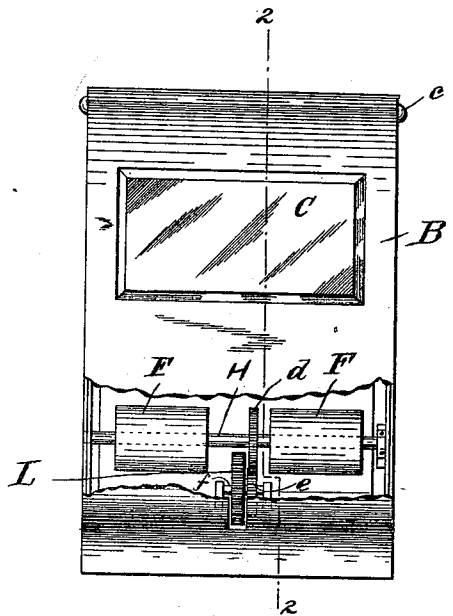


Fig. 1.

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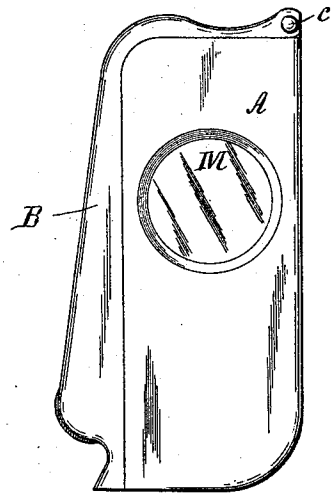


Fig. 3.

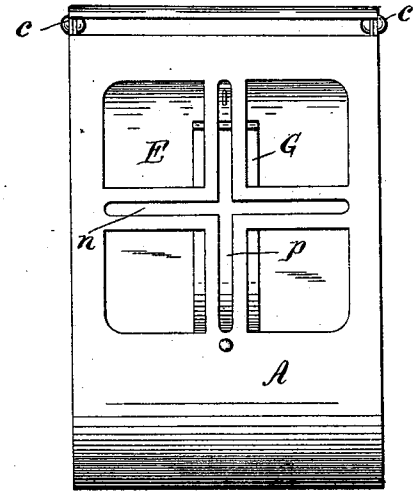


Fig. 4.

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UNITED STATES PATENT OFFICE.

EDWARD B. WESTON, OF DAYTON, OHIO.

TOILET-PAPER FIXTURE.

SPECIFICATION forming part of Letters Patent No. 653,644, dated July 10, 1900.

Application filed March 29, 1899. Serial No. 710,887. (No model.)

To all whom it may concern:

Be it known that I, EDWARD B. WESTON, a citizen of the United States, residing at Dayton, in the county of Montgomery and State of Ohio, have invented certain new and useful Improvements in Toilet-Paper Fixtures, of which the following is a full, clear, and exact description, reference being had to the accompanying drawings, forming part of this specification.

My invention relates to devices for holding and delivering sheets of thin paper, such as are used for toilet purposes, one sheet at a time from the package to prevent an unnecessary and wasteful amount being used; and it consists of the certain novel construction and arrangement of parts to be hereinafter more particularly pointed out and claimed.

The first part of my invention has for its object to provide a construction in which the sheets of paper may be delivered in an easier and more expeditious manner than heretofore employed, and the second part of my invention aims to prevent more than one sheet of paper being delivered at a time, especially when the package contains a large number of sheets.

Other features of novelty consist in the novel and useful construction of the rear of the case, whereby the fixture may be readily and easily attached to the closet-wall in any manner desired, and in the provision made to enable the user to determine at a glance when the paper package is about exhausted.

Heretofore the sheets have been delivered from the case by friction-rollers operated by a hand wheel or lever from one side, and the arrangement has been such that two movements have been necessary, one to actuate the friction-roller and the other to draw out the paper, requiring either the use of two hands, one to actuate the friction-roller, the other to draw out paper, or two separate and distinct movements with one hand, one movement to actuate the friction-roller at the side of the case, after which the position of the hand necessarily changed from the side of the cabinet to the bottom to grasp the paper to draw it out. The object of my invention in this particular is to provide a construction in which the same movement that is employed to actuate the feeding device shall enable the operator to grasp the sheets of paper as they are delivered. Furthermore, as heretofore constructed, the package of sheets has been held against the friction devices by springs of various kinds, in which the pressure has not been uniform. When the package is full, these springs have acted more strongly than when only a comparatively few sheets remain. As a result of this the tendency has been when the package is full to deliver more than a single sheet at a time, and it is to overcome this objection that my invention in this particular is directed.

It frequently happens on account of the limited space in toilet-rooms and the kind of material used in the construction of these rooms—such as tile, slabs of marble, and other expensive material—that it is not convenient or practicable to drill holes in certain parts of the toilet-rooms at points where it would be the most satisfactory place to have the toilet-cabinet attached, so as to use the paper from it most conveniently; also, where fixtures have previously been attached, when it is desired to change one form of fixture for another, unless the place for attachment for the new fixture happens to correspond with that of the old, new holes will have to be bored, an expensive operation in itself, which inevitably mars the appearance and frequently cracks the marble or other slab. It is the purpose of my invention in this particular to provide such means for attachment that when it is required to attach my fixture by means of bolts already in place this may be done at once no matter in what position the old bolts may be located.

In the drawings, Figure 1 is a front elevation of my improved fixture with the front of the case broken away to show the feeding device. Fig. 2 is a vertical section of the fixture, taken on lines 2 2 of Fig. 1. Fig. 3 is a side elevation of the fixture, and Fig. 4 a rear elevation of same.

The case to hold the package of toilet-paper is made in two parts, A forming the back wall, sides, and bottom, B the front wall, top, and part of the sides, which portion B is hinged to the rear wall at *c*, so that the front can swing open to load the device. The front and side of the case are provided with windows C and M, fitted with glass, so that when

the toilet-paper package is exhausted this can be readily seen. The usual front window C is not sufficient for this purpose, as the fixture is frequently located in a dark place, and a front window alone will not show the state of the package. I therefore provide the side window M also, so that no matter what the light may be there is always sufficient to determine at a glance the condition of the package.

D is the package of paper mounted on the usual support *a*, which is attached to the plate E, suspended by the arms *b* to the back of the case, so as to swing easily.

G is a spring secured at its lower end to the back of the case and bearing against the plate E to keep the paper package in close contact with the feeding devices to be later described. As heretofore arranged, the pressure of the spring employed for this purpose in older fixtures has always been against the lower end of the plate-holder, which is hinged at the top. As a result the tension of the spring is increased or diminished to the full extent of the thickness of the package introduced, and the necessary use of a spring strong enough to feed off the paper when the package is almost exhausted is so strong when the package is full that more than one sheet and frequently a large number of sheets are very apt to be fed off at each operation. To remedy this, I apply the force of my spring at the upper end of the plate, as shown, and the variation in the tension of the spring is but very slight between the full package and the package when almost exhausted, so that a strong spring can be employed and a well-nigh uniform pressure be sustained.

Pivoted in suitable bearings in the side walls of the pivoted front B of the case is the spindle H, upon which are mounted the feed-rollers F F, usually with their cylindrical faces covered with sandpaper or otherwise roughened, so as to obtain a firm grip on the paper pressed against them by the spring G. On the spindle H, between these feed-rollers, is mounted the gear *d*, which meshes with the gear *e*, mounted below it on the spindle *f*. This spindle *f* also carries a milled thumb-nut L, whose periphery extends out through a slot in the front wall in a position to be actuated by the thumb or finger and rotated downward in the direction of the arrow *a'*. This downward rotation of the thumb-nut rotates the feed-roller F in the direction of the arrow *b'*, which in turn, by friction on the paper sheets, draws off one sheet at a time and feeds it downward through the slot *g* at the bottom of the case.

It will be evident that the hand of the user will be in a natural position underneath and at the mouth of the slot, and as the paper is fed out it will pass between the fingers or into the hand, ready to simultaneously grasp the sheet as it is fed out and draw it from the case.

In order to prevent the feed-rollers from being rotated in the wrong direction, a pawl *m* is provided to engage the gear *d*, as shown.

As has been stated above, it is frequently desired to substitute fixtures of one kind in place of others, and heretofore as no two fixtures provide the same location for attaching bolts other holes have had to be bored in the supporting-wall. In order to enable my fixture to be secured to old supports therefore and to avoid the necessity of drilling additional holes, I form a horizontal and a vertical slot *n p* in the back wall of the case, through which the supporting-bolts can be passed. It will be evident that with these two slots the fixture can at once be secured to the wall by the bolts already in place no matter whether they are found disposed vertically or horizontally or whether they are far apart or near together.

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

In a toilet-fixture, a combination with the case and a plate-holder for the package of paper suspended therein, and friction feed-rollers mounted to leave a space between them on a shaft journaled horizontally within the case, of a thumb-nut mounted at the middle of the case at the lower end thereof between said rollers, with connecting-gears between said nut and feed-rollers, and slot in the case for the delivery of the sheets of paper, below said actuating mechanism, but in close proximity thereto, and a flat spring secured at one end to the rear of the case at its lower end, and bearing against said plate-holder near the upper end to keep said paper package in contact with the feed-roller, substantially as shown and described.

EDWARD B. WESTON.

Witnesses:
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A. C. MEISUER.