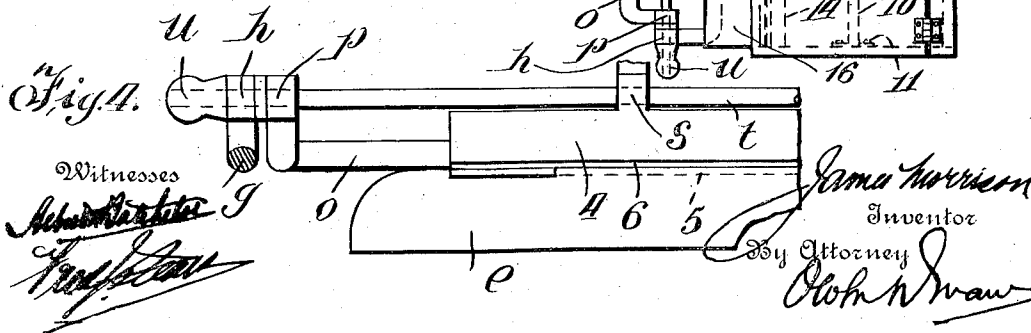
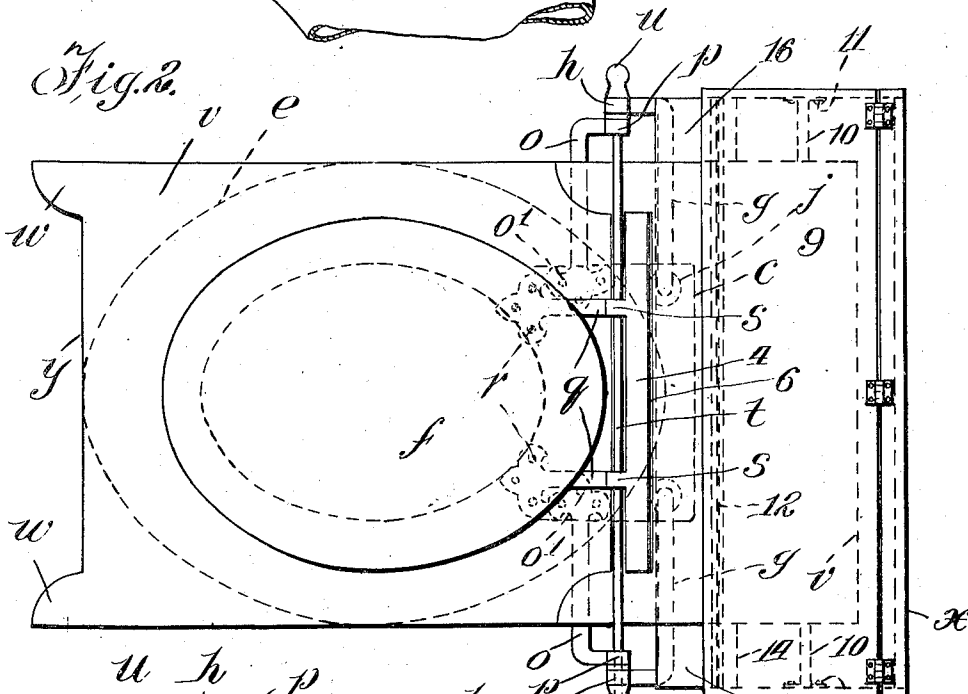
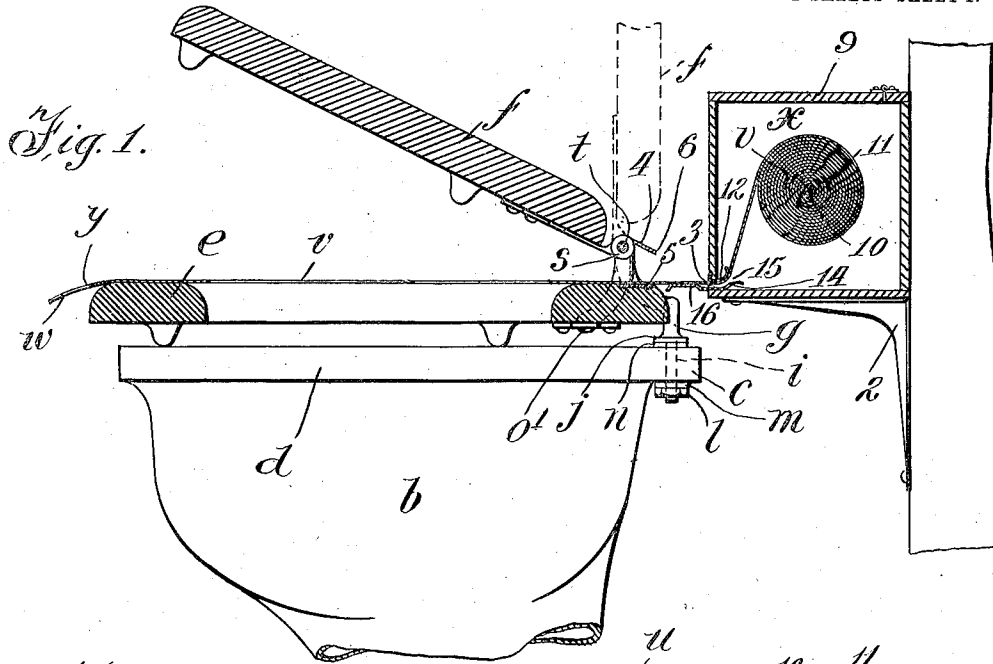


986,586.

Patented Mar. 14, 1911.

2 SHEETS-SHEET 1.



APPLICATION FILED AUG. 30, 1909

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Fig. 5

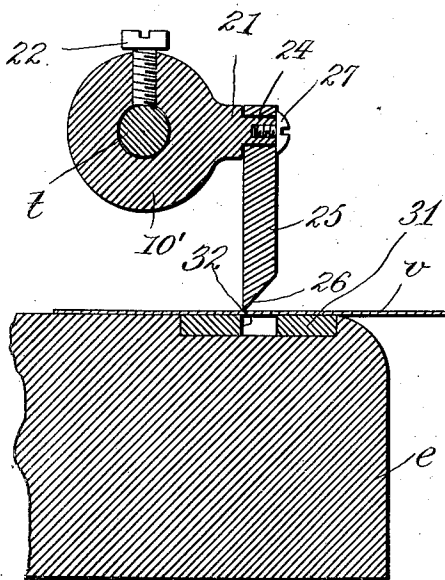
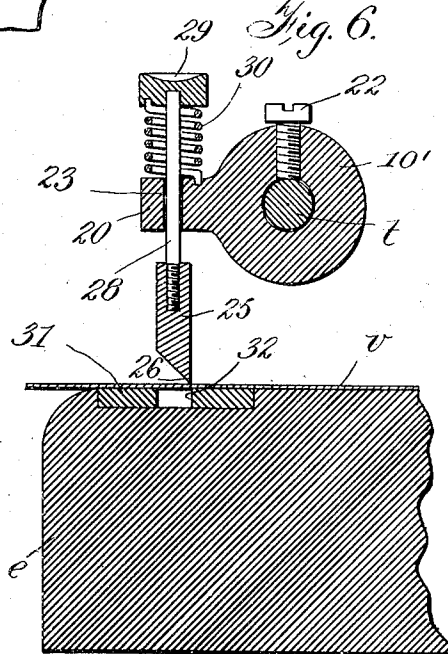


Fig. 6.



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JAMES MORRISON, OF MONTREAL, QUEBEC, CANADA.

WATER-CLOSET.

986,586.

Specification of Letters Patent. Patented Mar. 14, 1911.

Application filed August 30, 1909. Serial No. 515,158.

To all whom it may concern:

Be it known that I, JAMES MORRISON, of the city of Montreal, Province of Quebec, Canada, have invented certain new and useful Improvements in Water-Closets; and I do hereby declare that the following is a full, clear, and exact description of the same.

My invention relates particularly to water-closet seats of the type having means for supplying a paper protector for covering the seat, and it may be said briefly to consist of the combination and arrangement of parts hereinafter described and pointed out in the claims. For full comprehension, however of my invention reference must be had to the accompanying drawings, forming a part of this specification, wherein similar reference characters indicate the same parts and wherein—

Figure 1 is a longitudinal vertical sectional view of a closet with my invention applied thereto, the bowl being shown in elevation; Fig. 2 is a plan view thereof; Fig. 3 is a rear view thereof with the box removed, showing a slightly modified form of cutting device; Fig. 4 is an enlarged detail view of a portion of the cutter-bar; and Figs. 5 and 6 are enlarged detail sectional views taken respectively on lines A A and B B Fig. 3.

The bowl *b* in the present invention is of usual construction and has a rear extension *c*, formed by a continuation of the flange *d* at the top of the bowl, the seat *e* and cover *f* being supported on this rear extension *c* by a hinge of improved construction and constituting a portion of this invention.

My improved hinge is constructed as follows:—At each end of the extension *c* is a bracket arm *g*, of substantially Z-form, having an eye *h* at its upper end and at the lower end a screw-threaded bolt *i*, such bolt projecting through a hole in the extension, and the upper end thereof is formed with a head *j* while a nut *l* screwed upon the protruding end of this bolt secures the bracket rigidly in place, washers *n* and *m* serving as packing between the metal head and nut and the porcelain extension. The rear of the underside of the seat *e* has a pair of oppositely and laterally extending arms *o* fixed thereto as at *o'* the free end of each being bent rearwardly and curved upwardly and having an eye *p* through which is passed the fulcrum rod *t* to be presently further alluded to. The cover *f* has a pair of par-

allel straight arms *q* secured (as at *r*) to the underside thereof and extending rearwardly, such arms having eyes *s* at their free ends to afford a pivotal connection with the fulcrum rod *t*. These hinge parts are assembled by placing the seat and cover in position with the eyes of their arms and of the bracket arms in alinement, and the fulcrum rod *t* is then passed therethrough and fixed rigidly in place by nuts *u*. I prefer to place washers between the eyes *h* and *p*.

Situated directly behind the water-closet is a box containing a roll of tissue paper *v*, or other like covering of the same width as the seat and divided into a series of semi-detached sections slightly greater in length than such seat and presenting lugs *w*, while the middle portion of each is cut away as at *y* in conformity with the opening in the seat. This roll is contained in a box *x* supported by brackets 2 attached to any convenient wall or the like, and having a horizontal slot 3 through which the free end of the paper *v* passes, the object being to enable a person before using the closet to cover the seat with a paper protector, first however, usually, detaching the piece lying upon the seat and then drawing another section from the roll. To facilitate this detachment I provide a cutting blade 4 cast in one with or otherwise secured upon the eyes *s* and extending tangentially therefrom and disposed in position to, when the cover is raised, bear upon a bearing plate 5 embedded in the rear of the seat *e*, thus clamping the paper *v* which passes between such blade and plate and enabling the same to be torn along the knife-edge 6 formed at the outer edge of the blade. This blade also serves as a stop to support the cover in its proper position when raised which has the effect of causing the cover to exert a leverage upon the blade and insure an effective clamping action under which condition the used portion of the paper is readily detached from the main length, the lugs *w* extending in front of the blade in a position to be readily taken hold of and a new seat covering pulled from the roll at the rear. This blade is preferably equal in length to the space between each opposite pair of lugs.

The box *x* before mentioned has a hinged cover 9 by which the roll of paper is introduced the latter being supported therein by means of a rod 10 passing through the roll and bearing at its ends in brackets 11.

To facilitate passing the end of the paper outwardly from the box through the slot 3 I furnish the latter with a pair of metal lips 12 and 14 suitably fastened to the top and bottom sides of the slot and bent to form an inwardly flared mouth 15, the lower lip 14 being extended outwardly as at 16 over the horizontal portions of the bracket-arms *g* and curved slightly downwardly. This extended portion 16 acts as an apron or table for the lugs of the paper section behind the cutter bar when a soiled section has been detached and also acts to guide the edge of the paper beneath the cutter bar.

Other means whereby the tissue paper may be detached consists of the eyes 10' formed with rearwardly extending lugs 20 and 21 such eyes being rigidly fastened to the rod *t* by screws 22, and the lug 20 is vertically perforated as at 23 and the other 21 has a boss 24 extending from the center thereof. A flat cutting blade 25 equal in length to the distance between the lugs *w* of the paper is preferably tapered toward one end and has its lower edge sharpened as at 26. The large end of this blade is pivoted to the boss 24 by means of a screw 27 and the other end is connected to the lower end of a pin 28 slidably held in the perforated lug 20 and having a button 29 between which and the lug an expansible spring 30 is located thus providing for the manual depression of the blade and automatic return thereof to its normal position. A plate 31 fastened to the seat beneath this cutter is slotted to accommodate the latter and presents a shearing edge 32 with which the cutter coacts. The paper lies upon this plate and when it is desired to remove the covering and renew it the button 29 is pressed thus severing the used section from the main length.

With the combination and arrangement of parts above described individuals can provide for themselves a sterile covering for the seat of the water-closet and can conveniently detach the same when it is desired to do so; while my improved device in its entirety owing to its simple construction can be readily applied to any of the well known closets at present in use with a minimum amount of labor.

What I claim is as follows:—

1. The combination with the seat and cover of a water closet, and means for supplying covering material to said seat, of a cutter connected to the cover and adapted to permit the seat covering material to pass therebetween and the seat, said cutter being

located at the side of the seat at which the covering material first enters, and means whereby the said cutter is operated when the cover is raised.

2. In a water closet, the combination with a seat, a movable cover, means for supporting a continuous length of seat covering material, of a cutting device presenting a straight cutting edge arranged transversely of the seat covering material, and means attaching the cutting device to the cover in position to sever an end section of the material from the main length.

3. The combination with a water closet presenting a fixed part, and a seat for such closet and a cover for the seat, of a pair of fixed standards of substantial Z-form upon the fixed part of the closet, a hinge rod carried by such standards, a pair of bent hinge arms fixed to the seat and pivotally connected to the hinge rod, and means hinging the cover to the said hinge rod.

4. The combination with a water closet presenting a fixed part and a movable seat for such closet and a cover for the seat, of a pair of fixed standards upon the fixed part of the closet, a hinge rod carried by such standards, a pair of hinge arms fixed to the seat and pivotally connected to the hinge rod, a cutting blade carried by the said cover and disposed to permit a continuous length of flexible seat covering to pass beneath the same, and means carried by the cover whereby the cutting blade is lowered.

5. The combination with a water closet, presenting a fixed part and a movable seat for such closet, and a cover for the seat, of a pair of fixed standards of substantial Z-form upon the fixed part of the closet, a hinge rod carried by such standards, a pair of bent hinge arms fixed to the seat and pivotally connected to the hinge rod, and a pair of straight hinge arms fixed to the cover and pivotally connected to the hinge rod, a cutting blade carried by the said cover and disposed to permit a continuous length of flexible seat covering to pass beneath the same, and means carried by the cover whereby the cutting blade is lowered, the latter acting as a stop for the cover in such position.

In testimony whereof, I have signed my name to this specification, in the presence of two subscribing witnesses.

JAMES MORRISON.

Witnesses:

FRED. J. SEARS,
ALBERT M. BATCHELOR.