W. S. BANGEN.

ATTACHMENT FOR WATER CLOSET SEATS.

APPLICATION FILED JULY 12, 1920.

1,435,685. **Patented Nov. 14, 1922.**

2 SHEETS—SHEET 1.

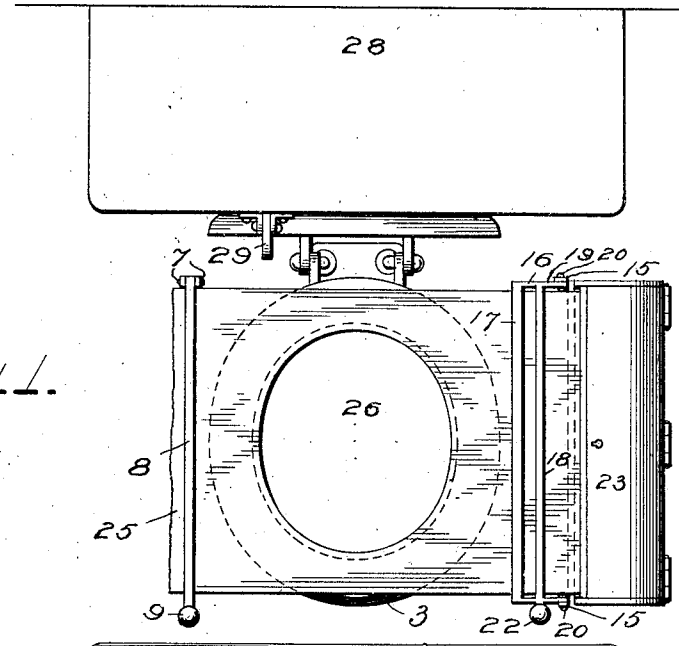


FIG. 1.

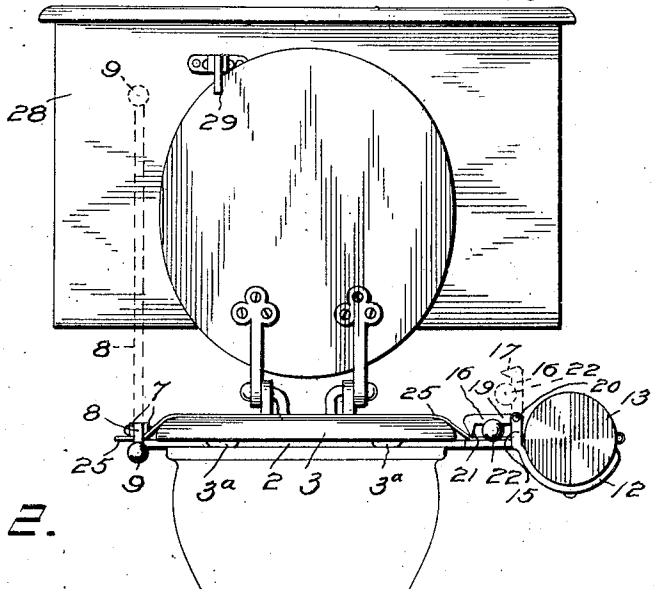


FIG. 2.

WITNESSES

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2 SHEETS—SHEET 2.

FIG. 3.

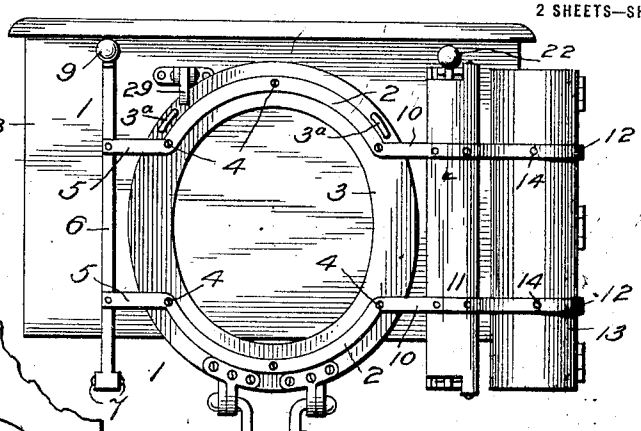


FIG. 6.

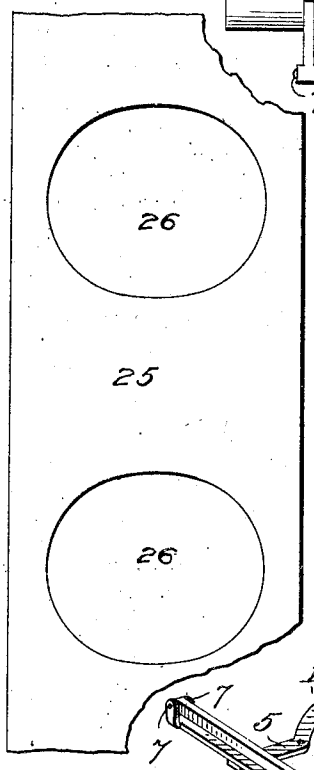
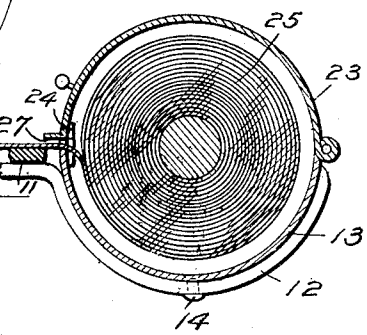


FIG. 5.



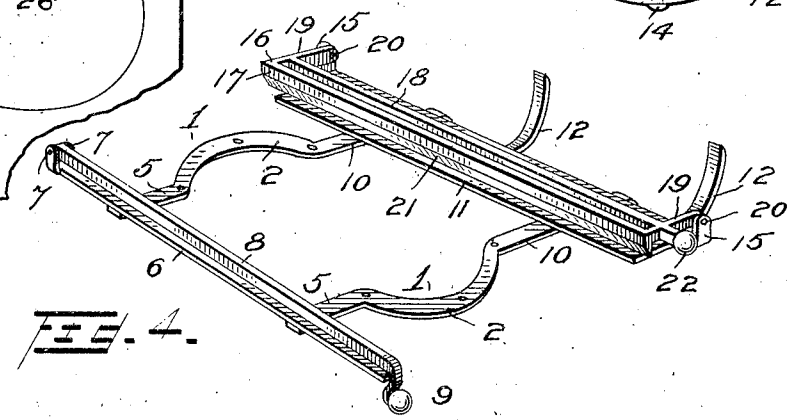


FIG. 4.

WITNESSES

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UNITED STATES PATENT OFFICE.

WILLIAM S. BANGEN, OF HAVANA, NORTH DAKOTA.

ATTACHMENT FOR WATER-CLOSET SEATS.

Application filed July 12, 1920. Serial No. 395,472.

To all whom it may concern:

Be it known that I, WILLIAM S. BANGEN, a citizen of the United States, residing at Havana, in the county of Sargent and State of North Dakota, have invented a new and useful Attachment for Water-Closet Seats, of which the following is a specification.

This invention relates to attachments for water closet seats.

The object is to provide a device which may be readily attached to any of the well-known styles of hinged water closet seats, for the purpose of maintaining the seat in a sanitary condition.

Another object is to provide a device of this character which, when properly secured to the seat, is arranged in an out-of-the-way location at one side of the seat so as not to interfere with the use of the same, said device comprising a magazine within easy reach of the user, who may readily draw from the same a fresh sheet of paper having openings corresponding with the opening in the seat and stretch said sheet across the same for the purpose of preventing the skin of the user from coming in contact with the seat.

A further object is to provide in such a device means for holding the free end of the sheet of paper at the opposite side of the seat from the magazine, and thus maintain the said sheet in a taut condition and to incorporate, adjacent to said magazine, severing means whereby the sheet may be cut between the openings of the same and close to the magazine in such manner as to prevent any wastage in the paper sheets.

A full and complete understanding of the invention may be obtained from a consideration of the following detailed description, taken in connection with the accompanying drawings forming a part of this specification, it being understood that while the drawing shows a practical form of the invention, the latter is not confined to any strict conformity therewith, but may be changed and modified, so long as such changes and modifications mark no material departure from the salient features of the invention, as expressed in the appended claims.

In the drawing in which similar reference characters designate corresponding parts throughout the several figures.

Figure 1 is a plan view of a water closet seat of a well-known type having the improved sanitary attachment applied thereto, the lid of the seat being shown in elevated position;

Figure 2 is a front elevation of the same, the elevated positions of the holding means and the severing means being shown in dotted lines;

Figure 3 is a similar view, the seat being also shown in elevated position and disclosing the attachment in inverted plan view;

Figure 4 is a detail perspective view of the frame for supporting the attachment;

Figure 5 is an enlarged detail cross section through the magazine;

Figure 6 is a fragmentary plan view of a portion of the strip of paper having the openings therein and being adapted to be drawn across the seat from the magazine.

Devices of the character of the herein-disclosed improvement have heretofore been of such large and cumbersome construction as to prove impracticable for the reason that they occupied so much space as to be materially in the way of the user, and a further hinderance in the same for practicable purposes has resided in the fact that the devices were not applicable to any and all makes or designs of seats. Another defect has been that the operations necessary to properly apply one of the seat covering sheets in position has been so complex as to cause the user of the seat to discard the same entirely, thus dispensing with the sanitary protection afforded by the same.

The object in the present invention is to avoid all these and other objections, and to provide a simply constructed and cheaply manufactured attachment which may be easily and quickly secured in position to the under-side of any of the well-known makes of water-closet seats, in such manner as to readily permit of the raising or lowering of the same independently of the lid, and to comprise means for supporting and permitting the unrolling of a strip of paper or other material having openings adapted to register with the hole in the seat and having means for holding the said strip in taut condition over the seat and of severing the same between the holes or openings when a fresh covering is desired.

To this end the invention comprises a pair of similar metallic brackets 1—1 formed of suitable lengths of strap iron or other metal, and having their intermediate portions oppositely bent or bowed, as at 2—2 to conform to the front and rear curved portions of the

opening in the water-closet seat 3, as clearly shown in Figure 3 of the drawing. These bowed portions are suitably apertured for the reception of screws 4 which are driven into the under side of the said seat and securely hold the brackets 1—1 in position.

At one end, each of the brackets is provided with opposed parallel short extensions 5—5 projecting beyond the edge of the seat at one side thereof, and connected at their free ends by a transversely disposed bar 6 formed of similar material, the bar 6 extending, when the seat 3 is in lowered position, from front to rear thereof, and having at its rear end a pair of upstanding ears 7, between which is pivoted a holding bar 8 in the form of a strip of metal of substantially equal length with the bracket bar 6, and provided at its front free end with a knob or handle 9. The holding bar 8 is adapted to lie flat upon the upper face of the bar 6 when the seat is in lowered position ready for use, and is adapted to hold in taut condition a sheet of paper for covering the seat proper and rendering the same sanitary.

The brackets 1—1 are provided at their opposite ends with similar extensions 10—10 somewhat longer than the extensions 5—5 and in alinement therewith, said extensions projecting outwardly from the under side of the seat 3 and carrying on their upper surfaces a tranversely disposed base plate 11 suitably riveted thereto in parallel relation to the said bar 6 and extending from front to rear of the seat 3 and in close proximity to the edge of the same.

The extensions 10—10 are continued beyond the outer edge of the base plate 11 where they are downwardly bent, as at 12—12, to form curved supports conforming to the curvature of a cylindrical, metal magazine 13, which rests within the same and is secured thereto, as by rivets 14—14.

Upon the upper surface of the base plate 11, at each end of the same and close to the outer edge thereof, there is provided an upstanding ear 15—15, between which is adapted to be pivotally mounted, a holding and severing device 16, comprising a pair of spaced, elongated bars 17 and 18 co-extensive with the base plate 11 and extending longitudinally thereof and joined at their ends by transversely disposed arms 19—19, adapted to fit between the said ears 15—15 and to be pivoted thereto by rivets 20—20.

The bar 17 is located adjacent to the inner edge of the base plate, next to the edge of the seat 3, and is provided with a knife edge 21, which is adapted to bear throughout its length upon the upper surface of the said base plate. The outer end of the holding and severing device 16 is provided with a knob or handle 22 which, like the aforesaid knob 9, may be grasped to release the sheet of paper by simply raising the holding devices 8 and 16, as will be readily understood.

The magazine 13, which is in the form of a cylinder, closed at each end, is of a length substantially equal to the length of the seat 3, from front to rear thereof and is adapted to lie in a horizontal position within the supporting arms 12—12, when the seat is in lowered position, the said magazine having, on its upper surface an opening of equal length therewith, and adapted to be closed by a suitable hinged lid 23, conforming to the curvature of the cylinder and adapted to be locked thereto by any suitable locking means 24, said lid being spaced at its free edge from the adjacent edge of the magazine, as shown in Fig. 5.

Within the magazine there is adapted to be placed a roll 25 of some suitable paper or other material having spaced openings 26 arranged throughout its length, said openings being oval in shape and conforming to the shape of the opening in the seat 3, and preferably of somewhat smaller dimensions than the same. The strip of paper comprising the roll 25 is adapted to be threaded through a slit 27 provided between the free edge of the lid and the adjacent edge of the casing, said slit being on a level with the top surface of the base plate 11 as clearly shown in Figure 5 of the drawing, and the said strip is then passed between the base plate 11 and the holding and severing device 16, thence across the upper face of the seat 3, and between the holding member 8 and the bar 6, where the free end of the said strip is securely held by reason of the weight of the bar 8 bearing upon said strip. At this time the opening 26 in the strip of paper or other material is centered over the opening in the seat 3, in overlapping relation thereto and entirely around the edge of the same in such manner as to effectually prevent the skin of the user from touching the seat at any point.

When it is desired to supply the seat with a fresh sheet of paper, it is only necessary to raise the holding device 8 and rest the same against the flush tank 28, as indicated in dotted lines in Figure 2, when, by holding the severing device down upon the sheet of paper and elevating the same, the sheet may be severed by the knife edge 21 in a well-known manner. The sheet of paper may be drawn across the seat 3 until the opening therein registers with the opening in the seat, and the holding means 8 and 16 lowered to retain the sheet in position when a fresh sheet is desired.

A gravity latch 29 suitably pivoted to the flush tank 27 is adapted to hold the seat and the lid in elevated position, and it will be noted that the brackets 1—1 may be secured to the under side of the said seat without interfering with the functioning of the

rubber cushions 3^a which are secured to the under side of said seat in the usual manner.

The position of the curved supports 12 may be altered to support the magazine in a lower plane if desired, and the slit 27 may also be placed nearer the top when the plane of the magazine is lowered.

What is claimed is:

1. A water closet seat attachment comprising a pair of spaced brackets adapted to be secured to the under side of the seat in a transverse position at the front and back respectively, and extended at each side of the seat, a paper roll holder supported on the extensions of the bracket at one side, a base plate mounted on the extensions between the paper roll holder and seat, a holding and severing device comprising a pair of spaced elongated bars substantially co-extensive with the base plate and extending longitudinally thereof, means for hinging said device to the base plate, and other means mounted on the extensions of the brackets at the other side of the seat for engaging the free edge of the paper to hold the same in taut condition.

2. A water closet seat attachment comprising a pair of spaced brackets adapted to be secured to the under side of the seat in a transverse position at the front and back, respectively, and extended at each side of the seat, a paper roll holder supported on the extensions of the brackets at one side of the seat, a paper-holding and severing device mounted on the extensions of the brackets between the paper roll holder and the seat, and a holding device for the free edge of the paper mounted on the extensions at the other side of the seat, said holding device consisting of a pivoted lever co-operating with a bar.

3. A water closet seat attachment comprising a pair of spaced brackets adapted to be secured to the underside of the seat in a transverse position at front and back and extended at each side, a paper roll holder supported on the extensions of the brackets at one side, pivoted levers carried by the extensions of the brackets at each side of the seat, one lever holding the free end of the paper and the other lever engaging the paper adjacent the magazine, the last-mentioned lever constituting paper-severing means.

4. A water closet seat attachment comprising a pair of spaced brackets secured to the underside of the seat and extending outwardly at each side thereof, a paper roll magazine supported by extensions of said brackets at one side of the seat and extending from front to rear thereof, said magazine having a supply opening for the roll and a closure therefor and a slit for the outward passage of the strip of paper comprising the roll, pivoted levers constituting holders carried by the extensions at each side of the seat, said levers being adapted to lie transversely on the strip of paper as it is drawn from the magazine across the seat and to hold the same taut, that lever located adjacent to the magazine having a knife edge for severing the strip, and the latter being provided with spaced openings adapted to register with the opening in the seat, and said strip being adapted to be severed between said openings when a fresh sheet is desired.

In testimony, that I claim the foregoing as my own, I have hereto affixed my signature.

WILLIAM S. BANGEN.