P. A. CURTIN.

WATER CLOSET.

APPLICATION FILED JUNE 18, 1906.

975,678.

Patented Nov. 15, 1910.

2 SHEETS—SHEET 1.

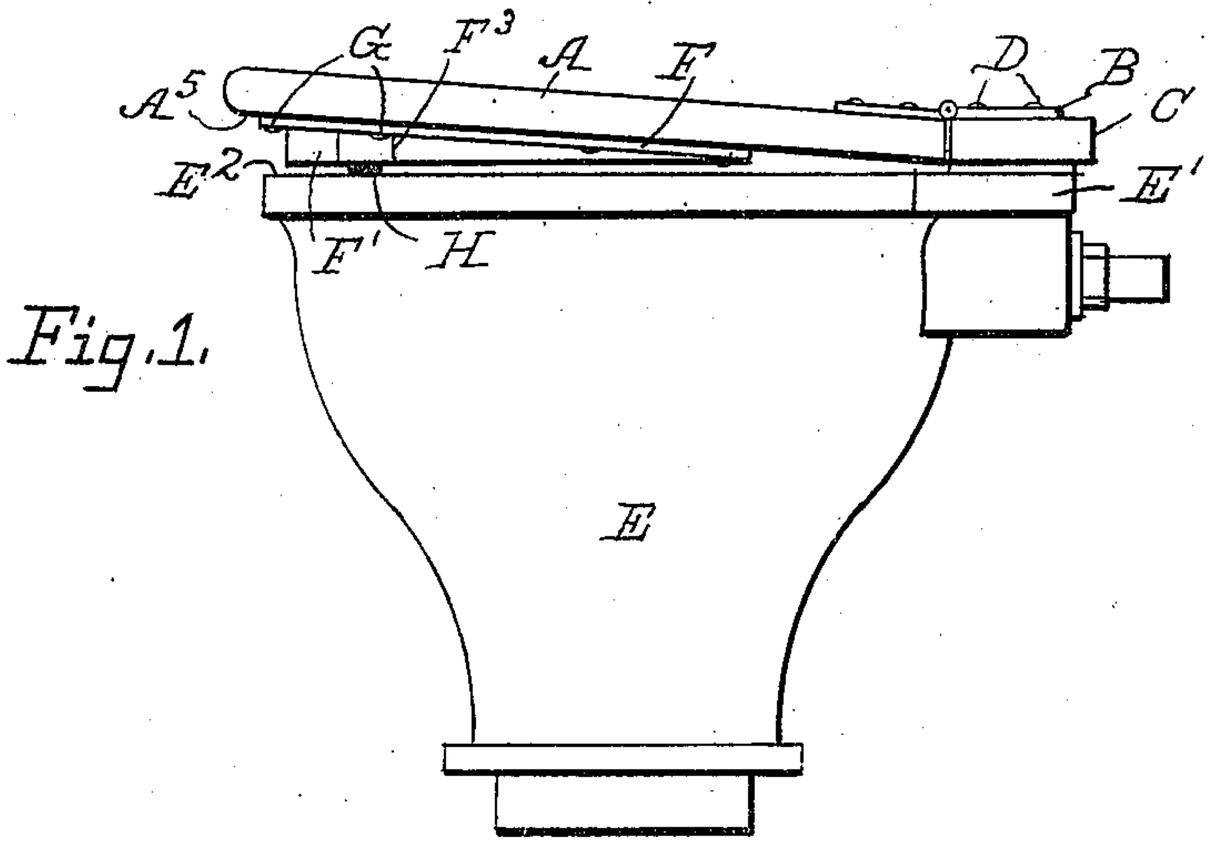


Fig. 1.

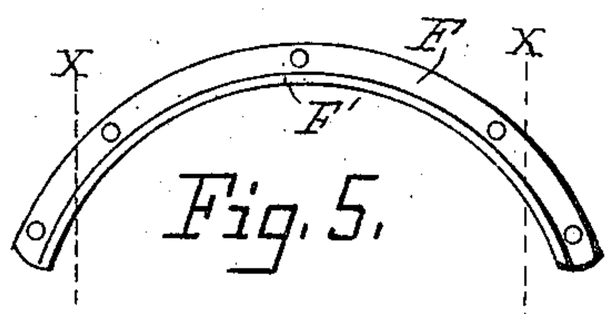


Fig. 5.

Fig. 3.

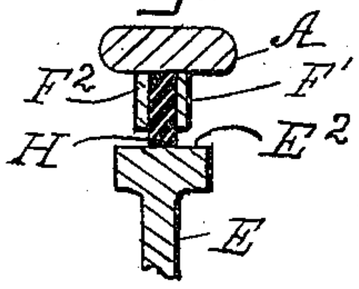
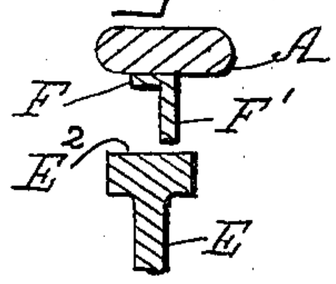


Fig. 4.



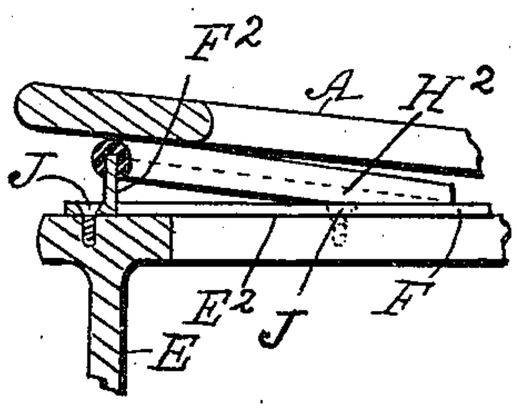


Fig. 7.

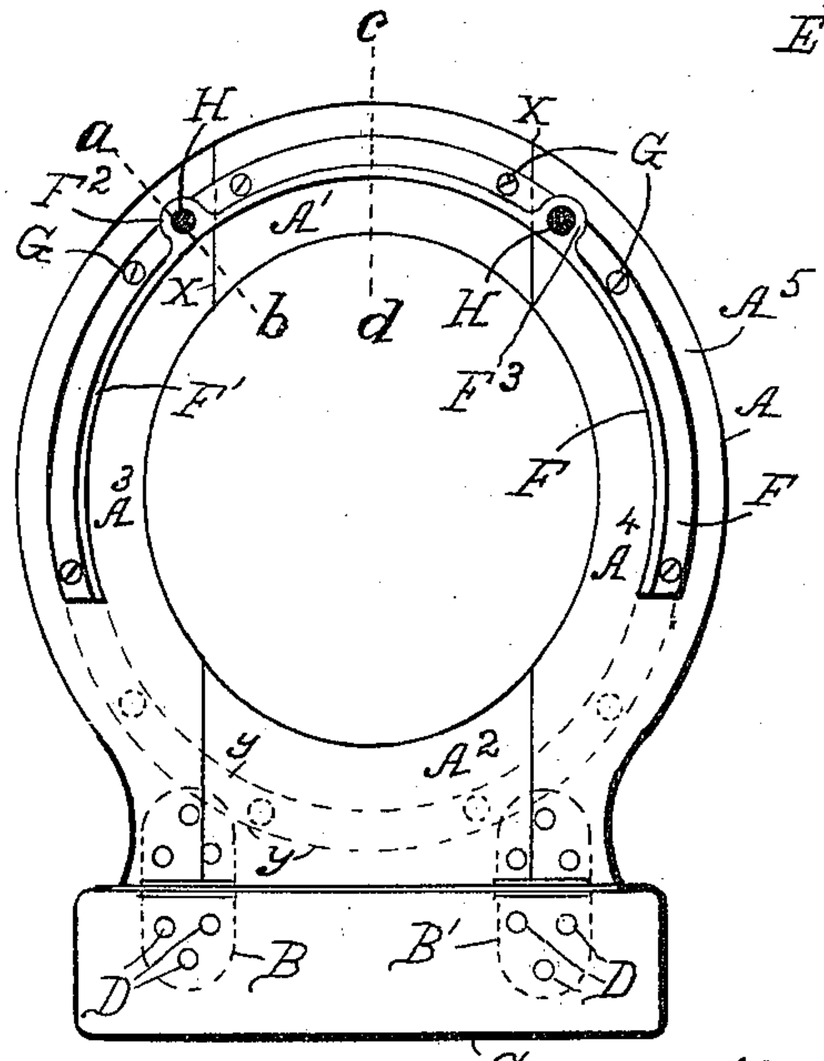


Fig. 2.

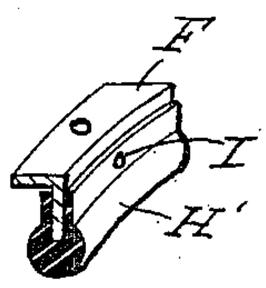


Fig. 6

WITNESSES:

Channing H. Hathaway

Charles H. Koyl

INVENTOR

Peter A. Curtin

BY

Thomas F. Gaynor,

ATTORNEY

P. A. CURTIN.

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2 SHEETS—SHEET 2.

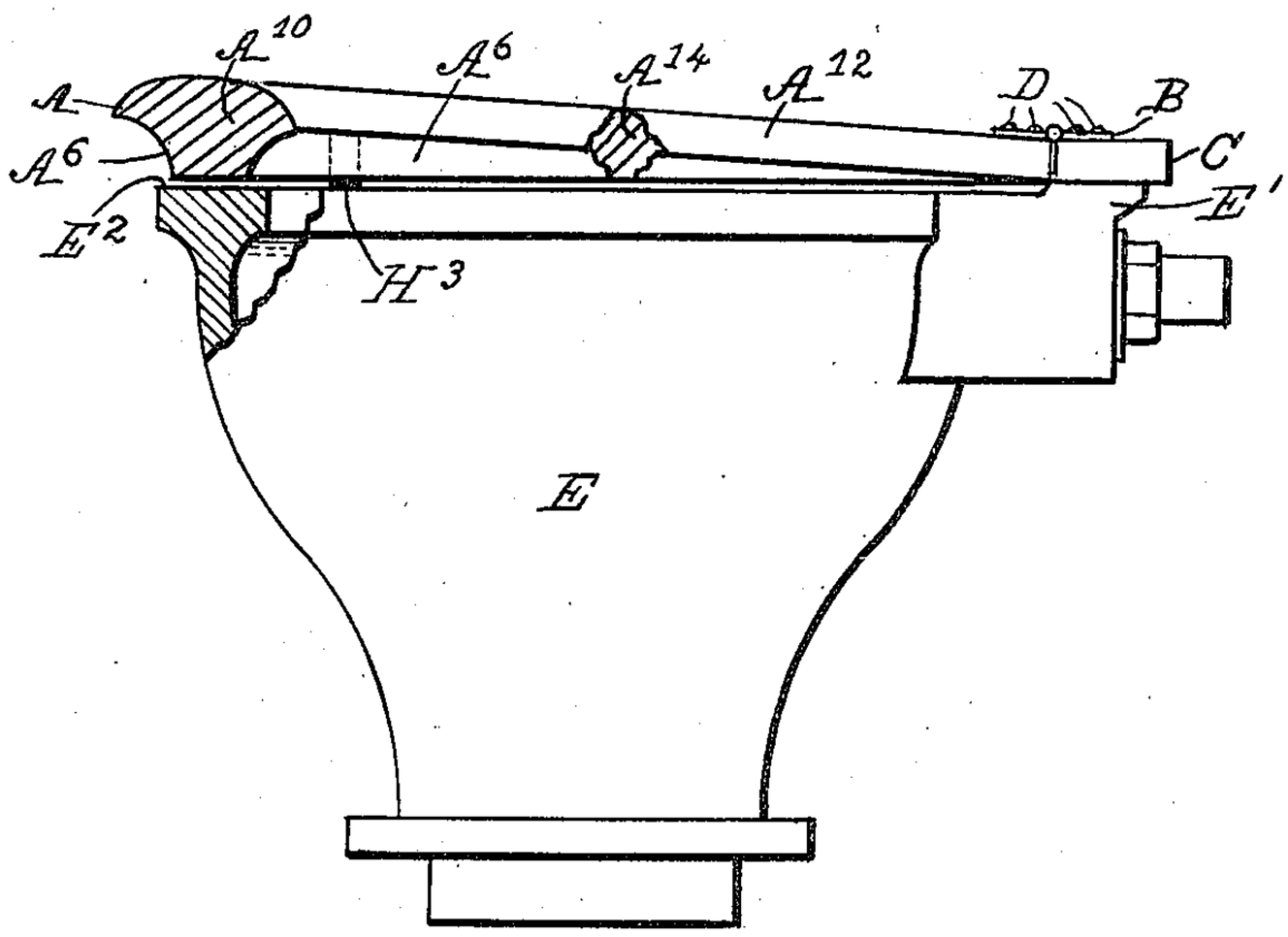

Fig. 8.

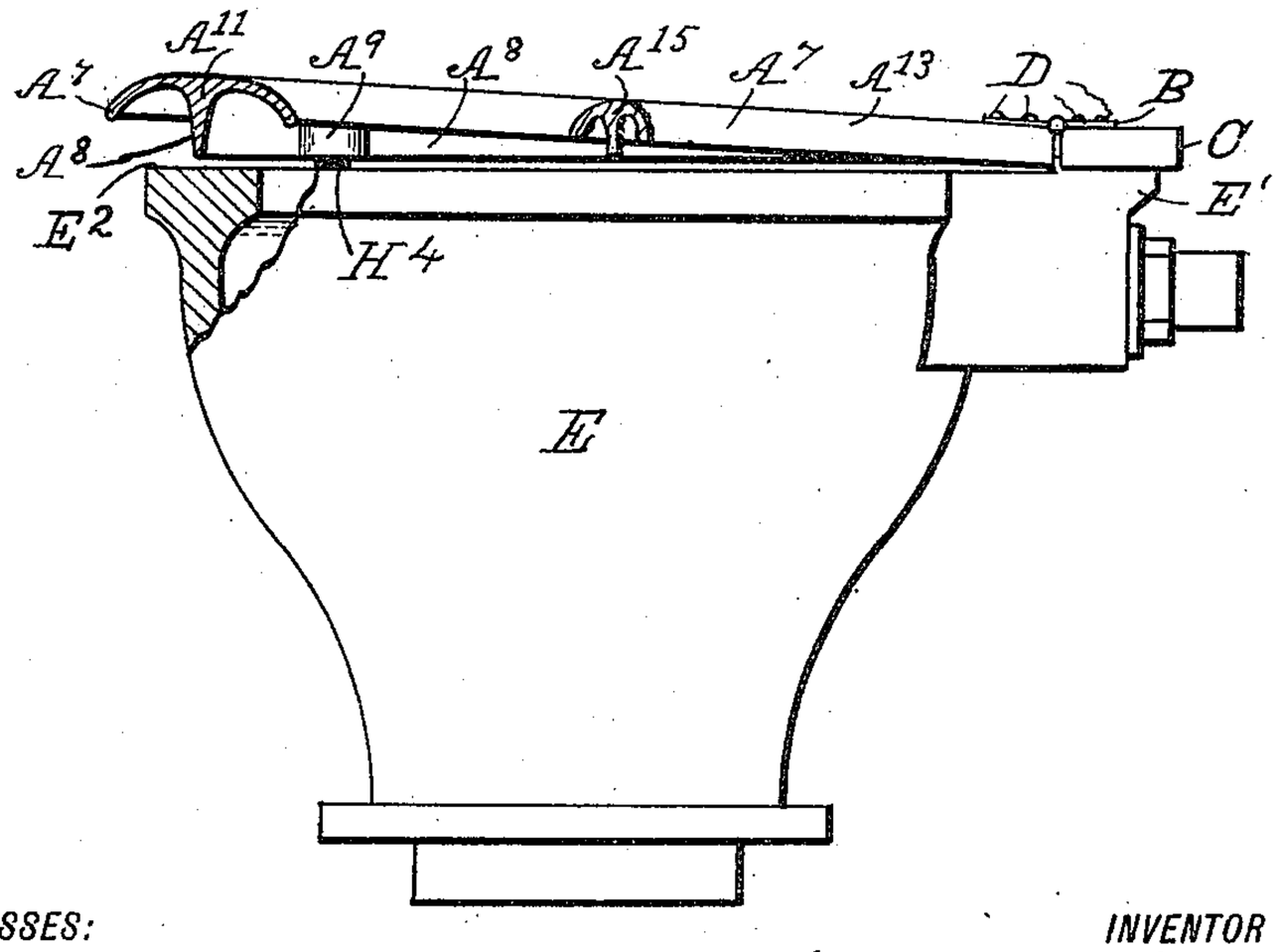

Fig. 9.

WITNESSES:

Chauncy H. Hathaway

Charles H. Koyl

INVENTOR

Peter A. Curtin

BY

Thomas F. Gaynor

ATTORNEY

UNITED STATES PATENT OFFICE.

PETER A. CURTIN, OF BUFFALO, NEW YORK, ASSIGNOR OF ONE-HALF TO THOMAS F. GAYNOR, OF NEW YORK, N. Y.

WATER-CLOSET.

975,678. Specification of Letters Patent. **Patented Nov. 15, 1910.**

Application filed June 18, 1906. Serial No. 322,128.

To all whom it may concern:

Be it known that I, PETER A. CURTIN, a citizen of the United States, and a resident of Buffalo, in the county of Erie and State of New York, have invented certain new and useful Improvements in Water-Closets, of which the following is a specification.

This invention relates to water closets, and it consists in shaping the seat so that it will be thicker in the front than in the rear parts, or else in providing a separate support that can be attached to the under surface of the seat or to the upper surface of the bowl rim, and in all cases so that the upper surface of the seat will slant downwardly and backwardly, like a rocking chair seat; and the object being to enable a person using the closet to sit in a more natural position than can be done on a closet where the seat is in a level position.

It is now claimed that a horizontal seat compels a person to assume an unnatural position while using a water closet, and that a slanting seat facilitates the objects of nature and is more hygienic under such conditions, and inventors of late, have met the requirements by either making the rim of the bowl of the proper slant to support the seat at the required angle, or else by means of a vertical standard arranged between the seat and the floor, so as to give the seat the desired slant, as the top and bottom surfaces of all such seats are made parallel with each other. Such designs, however, necessitate either new bowls provided with the desired top slant, or the use of those expensive and complicated standard supports which are unsightly and objectionable for sanitary reasons and require skilled persons to properly adjust them to closets.

All seats of closets as heretofore manufactured and in general use, with few exceptions, have their top surfaces horizontal and their bottom sides with the top rims of the bowls correspondingly level. This invention is intended to provide an attachment therefor, that can give the proper slant to the seat without otherwise altering the designs of the bowls or seats as now manufactured or sold on the market, or those in service, and so that this can be done without necessitating other change or removal from existing construction or location. By its aid, any existing design of level-top water closet can be given the desired slant of top to the seat, with a minimum loss of time and at a trifling cost, which is a great advantage to all who may have such closets, either as manufacturers, dealers or users, as the case may be.

The invention, however, broadly consists in making the support either as an integral part of the seat itself, or as a separate attachment that can be secured to either the seat or the top of the bowl rim, and be wholly within the outline of the seat and above the bowl rim and between these two elements of a closet, and adapted to give the top surface of the seat the desired slant downwardly from front to rear, as will be more fully hereinafter described.

The nature and objects of this invention will be explained in detail in the following specification taken in connection with the accompanying drawings forming a part thereof, and in which, similar letters refer to similar parts in the several views, and as will be also pointed out in the claims.

In the drawings:—Figure 1 is a side elevation of a common level top bowl closet provided with my improvement as made and applied as a separate attachment thereto. Fig. 2, is a front elevation of the seat shown in Fig. 1, raised into a vertical position and looking at its under surface and showing the support as attached thereto. Fig. 3, is a cross section of the seat on line *a*—*b*, in Fig. 2; and Fig. 4, is a cross section of the seat on line *c*—*d*, in the same figure. In these two latter figures, a portion of the bowl rim is shown in relation with the support, that its position with reference to the support can be better seen. Fig. 5, is a modified form of the support shown in side view, and which might be made entirely of rubber, or metal. Fig. 6, is a modified form of the support and the cushion shown partly in section and partly in perspective. Fig. 7, is a side view partly in section, of the contiguous parts of the seat, the bowl rim and the support attached to the latter, instead of to the seat as an alternative form of construction. Fig. 8, is a side elevation of a closet with the bowl and seat shown partly in section, and in which the seat is made integral with support, and as it might be made of wood or the like. Fig. 9, is a view of a closet similar to that seen in Fig. 8, only that the seat is

shown as of a form in which the invention can be made if the seat is to be of aluminum, or other metallic construction, and the seat and support being also integral.

In the drawings:—A, represents the seat which is usually made of four sections of wood, A′, A², A³, A⁴; secured together by means of glue or screws, or otherwise, and the seat being connected by hinges B, B′, to the back block C, which is secured by screws D, D, D, to the bowl E, at its rear extension E′, in the usual manner. Against the under side A⁵, of the seat A, the curved support F, is secured by screws G, G, G, and so located thereon, as to register with the top rim E², of the bowl E, as seen in Figs. 1, 3, 4 and 7, and being provided with elastic cushions H, H, H′, H²; according to the design that may be preferred, and which cushion may be of rubber, or the like, to give a yielding bearing to the seat in the usual manner.

The support F, is preferably of an L shaped cross section, that it may be light and strong, and the vertical portion F′, extends downwardly so as to almost but not quite meet the bowl rim E², when applied in the form shown in Figs. 1, 2, 3 and 4, to the seat, which serves to almost close the opening between the seat and the bowl rim.

If the support is made as seen in Figs. 6 and 7, it will entirely close the opening where full contact is made between as the cushion being of an elastic substance, will adapt itself to the inequalities of the surfaces of the seat or bowl rim, as can be understood. The cushions H, H, seen in Fig. 2, are held in position with the support F, by being driven tightly into nipples F², F³, which may be integral with the support, or otherwise secured thereto.

In Figs. 6 and 7, the cushions H′, H², are shown as being long rubber slotted rods fitted over the vertical edges of the supports and secured thereto by rivets one of which may be seen in Fig. 6, at I, or otherwise as may be preferred.

In Fig. 5, the support is similar in section to the forms shown in the other figures, but of shorter length, and the dotted lines represent the joints of the seat sections shown in full at x—x, in Fig. 2, and so that the modification is intended to be long enough to secure the front and the two side seat sections together more firmly.

The dotted lines, y, y, in the lower portion of Fig. 2, shows that the support can be extended entirely around the surface of the seat, and be thus made to bind all the parts of the latter together, if so desired.

In Fig. 7, a modification is shown in which the support is attached to the top rim E², of the bowl E, by screws J, J, or it may be otherwise secured thereto. The vertical portion F², of the support projects upwardly and is capped by the rubber band cushion H², which is secured thereto and upon which, the seat A, rests and is supported at the proper slant.

In Fig. 8, the seat is shown as being of wood, or the like, and tapering down in thickness from front to rear, and its lower portion A⁶, extending downwardly, and serving as the supporting member, the bearing being the cushions of rubbers one of which is seen at H³, which is securely held in position by being tightly driven into the wood, which is suitably bored for the purpose.

In Fig. 9, the construction of the seat A⁷, is supposed to be of aluminum, or other metal, and in which the central rib A⁸, serves as the support, and having the cushion holding nipples similar to those shown in Figs. 1 and 2, and of which one is shown at A⁹, with the cushion H⁴, secured therein, in a manner similar to that in which the others already described are held in the other figures.

In both of these latter figures, (Figs. 8 and 9,) the invention is shown in its simplest form with seat and support integral, and the seats are shown in full cross section at A¹⁰, and A¹¹, and the portions A¹², A¹³, of the seats nearest to the observer are broken away in irregular sections at A¹⁴, and A¹⁵, that diminishing thickness from front to rear of the seats and the supporting portions thereof, may be better understood.

The bowl E, can be of any suitable height from the floor that will provide a natural seat for a person, and can be made as low as may be wanted by providing a foot rest or stool in front of the bowl and resting upon the floor, in the case of high seat closets now in service. Or the bowl can be manufactured so as to have a relatively low height, and with a level top rim, and thus give all the advantages of a very low closet as claimed for such low closets with a slanting seat, when this invention is attached thereto, or applied in any of the forms herein described. For children or adults of small stature, a relatively low seat is preferable, and it is claimed by some authorities that the present style of closets are excessively high, and lower ones with slanting seats are recommended, so all these requirements can be met by the use of this invention in some one of the forms herein described, and without other change in the existing or present styles of seats than what may be necessary as already explained.

The support can be made of angle shaped metal and bent to the proper curvature, or it can be cast in the shapes shown and described, and the rubber cushion in any of the forms shown can be applied thereto.

The support can be entirely of rubber and made in the form shown in Fig. 5, which is

a very simple and inexpensive design, (and it can be made much smaller still if economy is the chief consideration,) and can be applied as already explained, to any existing closet seat.

The support can be made of wood, iron, brass, aluminum, rubber, or any other suitable material, and either made as a separate attachment to be applied in the manner described to the seat or bowl, or it can be made integral with the seat, as has been explained.

The applicability and utility of the invention can be thus understood from the foregoing explanation, and it can be seen that I provide a simple and inexpensive means for producing an improved water closet and a desirable attachment therefor, that meets all the requirements of such a fixture.

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

1. In a water closet, the combination of a bowl, a seat, and a support secured to the under surface of the seat and arranged so as to be wholly within the outline of the seat and above the bowl rim and adapted to cause the adjacent surfaces of the seat and bowl rim to slant toward each other from front to rear when brought together, substantially as described.

2. In a water closet, the combination of a bowl, a seat, and a support secured to the under surface of the seat and arranged so as to be wholly within the outline of the seat and above the bowl rim and adapated to cause the upper surface of the seat to slant downwardly and backwardly from front to rear when the seat is in its normal position on the bowl, substantially as described.

3. In a water closet, the combination of a bowl, a seat, and a support secured to the under surface of the seat and arranged between the bowl and the seat so as to be wholly within the outline of the seat and above the bowl rim, and adapted to cause the adjacent surfaces of the seat and bowl rim to slant toward each other from front to rear when in the normal position for use, substantially as described.

4. In a water closet, the combination of a bowl, a seat, and a support curved to correspond with the curvature of the seat and bowl rim and secured to the under surface of the seat and being wholly within the outline of the seat and above the bowl rim, and adapted to give the seat a slanting position downwardly from front to rear, substantially as described.

5. In a water closet, the combination of a bowl having a level top, a seat having a hinged connection with the bowl, and a support curved to correspond with the opening in the seat and secured to the under surface of the seat and adapted to give the seat a slant downwardly from front to rear, substantially as described.

Signed at New York city, in the county of New York, and State of New York, this 12th day of June, A. D. 1906.

PETER A. CURTIN.

Witnesses:
CHAUNCEY H. HATHEWAY,
CHARLES H. KOYL.