No. 809,222. PATENTED JAN. 2, 1906.

C. H. ROLLINS.

WATER CLOSET.

APPLICATION FILED MAY 27, 1903.

Fig. 1.

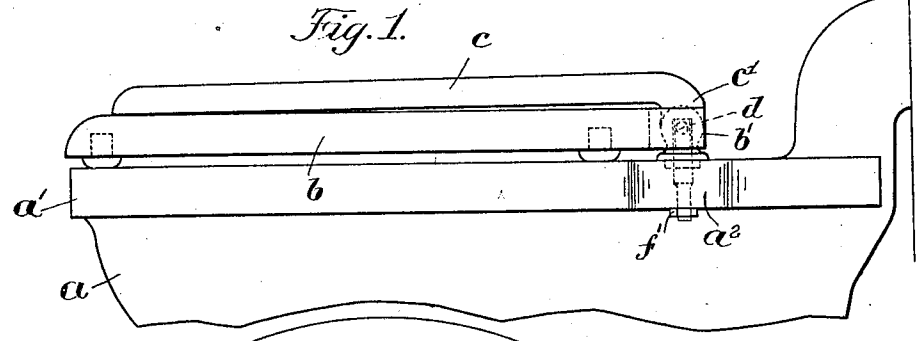

Fig. 2.

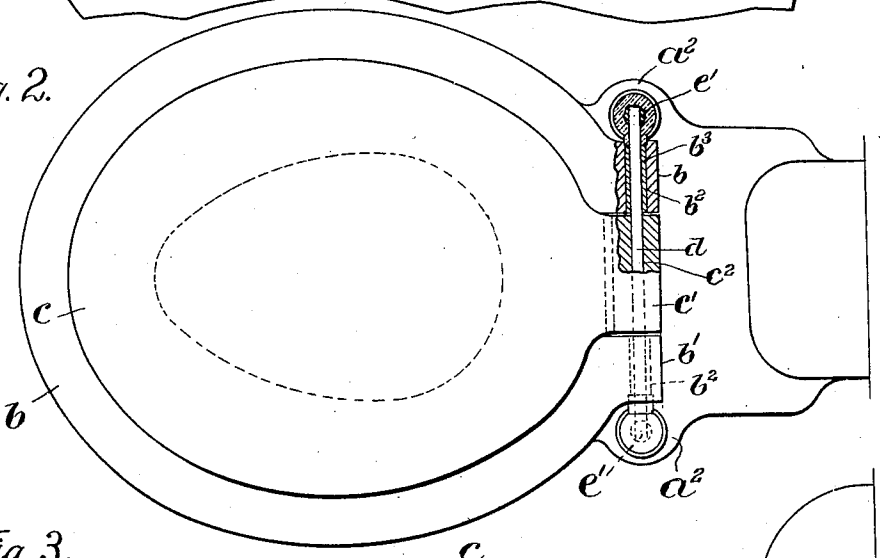

Fig. 3.

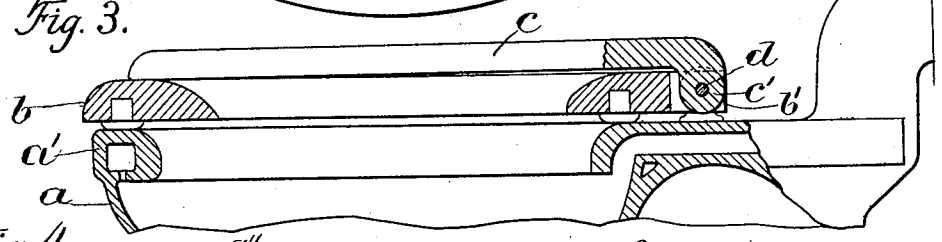

Fig. 4.

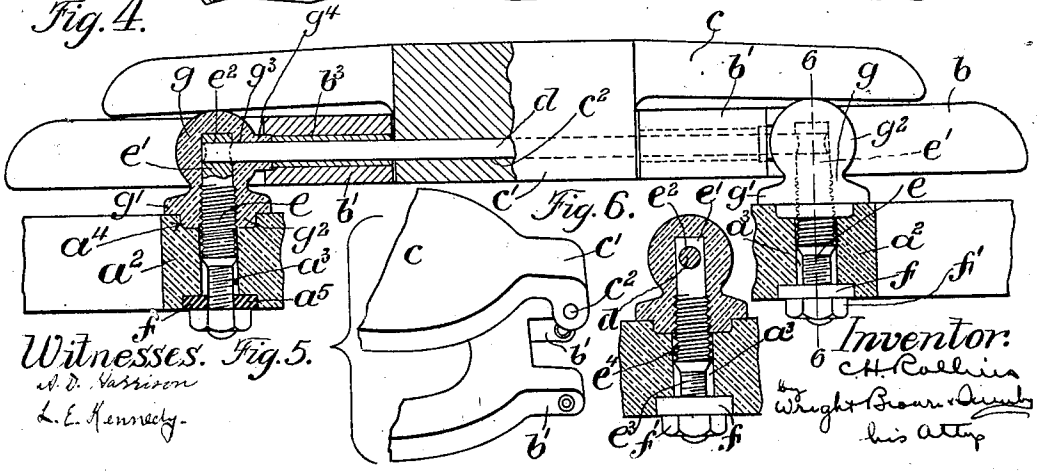

Fig. 5.

Fig. 6.

Witnesses.
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Inventor:
C. H. Rollins
by Wright Brown Quinby
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UNITED STATES PATENT OFFICE.

CHARLES H. ROLLINS, OF WATERTOWN, MASSACHUSETTS.

WATER-CLOSET.

No. 809,222. Specification of Letters Patent. Patented Jan. 2, 1906.

Application filed May 27, 1903. Serial No. 159,005.

To all whom it may concern:

Be it known that I, CHARLES H. ROLLINS, of Watertown, in the county of Middlesex and State of Massachusetts, have invented certain new and useful Improvements in Water-Closets, of which the following is a specification.

This invention has relation to water-closets, and has for its object to provide certain improvements in the seat and cover and their connection with the porcelain bowl.

It has been customary in the modern closet to connect the seat and cover by metallic hinges to ears or lugs formed on a rearward extension of the porcelain bowl. This occasions the exposure of considerable metallic surface, which is subject to corrosion, particularly in localities near the salt water. The leaves of the hinges are usually secured to the seat and cover by screws, which are apt to work loose and become a source of trouble and inconvenience. In accordance with the present invention the seat and cover have a hinged connection with the porcelain bowl; but provision is made for covering the metallic parts, so that none of them shall be exposed to the atmosphere. The uprights or studs to which the hinged pintle is connected are preferably covered with a casing which for the sake of an ornamental finish may be constructed of porcelain to have an appearance as of a part of the bowl.

On the drawings, Figure 1 represents in side elevation the upper part of a porcelain closet equipped with the invention. Fig. 2 represents a plan view of the same, partially in section. Fig. 3 represents a longitudinal section through the bowl, seat, and cover. Fig. 4 represents a rear elevation of the upper part of the bowl, partially in section. Fig. 5 represents in perspective view the rear portions of the seat and cover detached. Fig. 6 represents a section on the line 6 6 of Fig. 4.

Referring to the drawings, the bowl of the closet is indicated at a, and it has the usual flanged flushing-rim a' and the ears or lugs a^2 at its rear sides. In each of these ears or lugs is an aperture a^3 for a purpose to be described. The seat b and the cover c may be formed of wood. Their exact shape in plan view is practically non-essential, except for their construction at their rear portions. It will be observed from Fig. 2 that the seat b is provided with two rearwardly-projecting arms b' b', provided with apertures b^2, which are in alinement, as shown in the drawings. These two arms form, as it were, a fork or yoke to receive between them a rearwardly and downwardly projecting arm c' on the rear of the cover c. The arm c' is in substantially the shape of a right angle, so that when the cover c is borne upon the seat b the arm c' projects into the yoke formed by the arms b'. The arm c' is likewise formed with an aperture c^2, which may be brought into alinement with the apertures b^2, hereinbefore referred to. Passing through the apertures b^2 c^2 there is a metallic rod or pintle d. Preferably this rod fits tightly in the aperture c^2, so as to be held frictionally against rotation therein, whereas the arms b' are equipped with sleeves or bushings f^3, forced into the apertures b^2, and in which the rod or pintle d may rotate. The bushings b^3 are somewhat shorter than the width of the arms b', as illustrated in Fig. 4.

e e indicate two upright studs which are passed through the apertures a^3 in the lugs a^2. Each of these studs has a cylindrical upper end e', with an aperture e^2 for the reception of the end of the pintle d, and is threaded at its lower end, as at e^3, for the reception of a collar or washer f and a nut f', said collar being loose on the said stud. The metal portion of the stud is formed with a coarse thread e^4, so that a knob-like casing g may be screwed on the upper end of the stud. This casing g is preferably formed of porcelain, wood, or any other non-metallic substance, and it has a base g', with an annulus g^2, adapted to project into a socket a^4 in the top of the lug a^2, and also with a ball-like upper portion g^2, with an aperture g^3 for the reception of the pintle d. The upper ball-like portion of the casing is provided with an annular flange g^4, which is adapted to extend into the end of the aperture b^3 in one of the arms b' to abut against the bushing b^2 therein. The collar or washer f, as shown in Fig. 4, fits in a socket a^5, formed in the under face of the lug a^2. According to this construction the pintle d passes directly through arms or hinged members formed on the cover and seat, so that the cover and seat both swing upon the same axis. The ends of the pintle are supported rotatively by the upright studs e.

In assembling the parts together the studs e are first screwed into the casing g. The rod or pintle d is passed through the apertures in the seat and cover, and its ends are passed through the aperture g^4 in the casing g into the apertures e^2 in the studs. The studs are then inserted in the apertures a^3 in the lugs a^2, and the washers f are then placed upon the

lower ends of the studs and the nuts f' are screwed home, so as to tightly clamp the lugs between the washers and the bases g' of the casing. When a seat and cover are thus secured in place upon a closet, there is absolutely no exposure of any metallic parts, the knobs or casings forming, to all intents and purposes, a part of the porcelain-bowl structure.

Having thus explained the nature of the invention and described a way of constructing and using the same, although without attempting to set forth all of the forms in which it may be made or all of the modes of its use, I declare that what I claim is—

1. For employment with a water-closet, a seat having two integral rearwardly-projecting arms, a cover having an integral arm which projects into and fills the space between the said arms on the seat, and a rod or pintle passing through apertures in all of said arms and adapted to be connected to a closet, said rod or pintle being covered and concealed substantially from end to end by the cover and seat.

2. For employment with a water-closet, a seat having one or more rearwardly-projecting arms, a cover adapted to rest upon the top of said seat and having an integral arm which projects rearwardly and downwardly into the plane of the last-mentioned arm or arms, and a rod passing through said arms and adapted to be connected to the closet, said arms being contiguous so as to substantially cover and conceal the rod from end to end thereof.

3. For employment with a water-closet, the combination of a seat and a cover, said seat and cover having non-metallic arms, the ends of which are in the same plane and substantially contiguous, said arms having alined apertures, a straight rod or pintle passed through said apertures and covered substantially from end to end by said arms.

4. For employment with a water-closet, a seat having two integral rearwardly-projecting arms, a cover having an integral arm which projects downward between the arms of said seat and fills the space between the said arms, all of said arms having alined apertures, a straight rod or pintle passing through said apertures and covered substantially from end to end by said arms, and studs by which said pintle or rod may be connected to said closet.

5. In combination with a water-closet, upright studs at the sides thereof, non-metallic casings inclosing said studs, a rod supported by said studs, and a non-metallic seat and a non-metallic cover having apertures for receiving and concealing said rod, at all points between said studs.

6. In combination with a water-closet, non-metallic knobs secured to said closet at the rear sides of the top thereof, studs loose within said knobs, a metallic rod having its ends terminating in said knobs and studs, and a non-metallic seat and a non-metallic cover hinged to and concealing said rod, whereby no metallic surfaces are exposed.

7. In combination with a water-closet, upright metallic studs secured to said closet, non-metallic knobs or casings entirely concealing said studs, a metallic rod supported by said studs, a non-metallic seat having separated arms apertured to receive said rod and held against lateral movement by said knobs or casings, and a non-metallic cover having a downwardly-projecting arm which extends between the arms of the seat and which is apertured to receive said rod.

In testimony whereof I have affixed my signature in presence of two witnesses.

CHARLES H. ROLLINS.

Witnesses:

MARCUS B. MAY,

LAURENCE E. KENNEDY.