E. C. B. JUDD.

CLOSET SEAT HINGE.

APPLICATION FILED JUNE 18, 1915.

1,194,392. Patented Aug. 15, 1916.

Fig. 1.

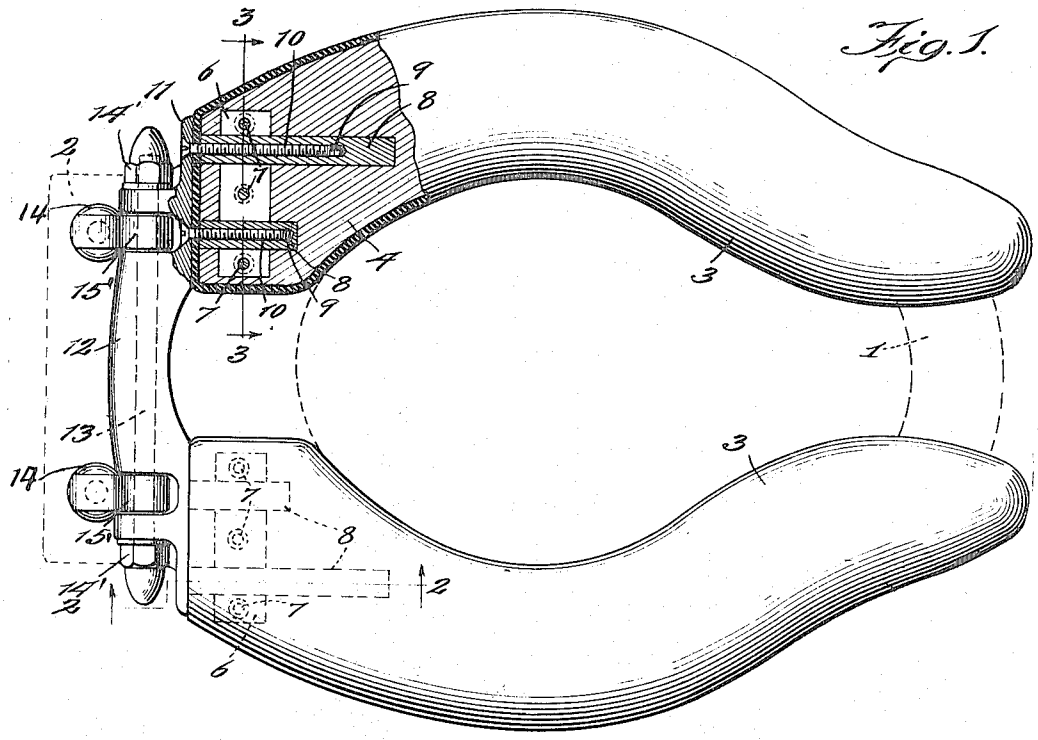


Fig. 2.

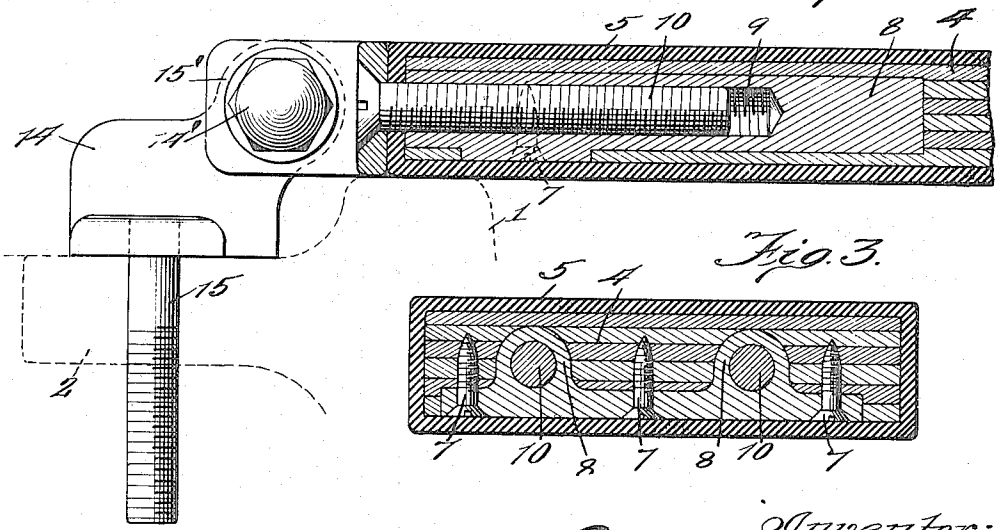


Fig. 3.

Witnesses:
Ba[illegible]
Ernest H. Merchant.

Inventor:
Earldley C. B. Judd
By [illegible]
Atty.

UNITED STATES PATENT OFFICE.

EARLDLEY C. B. JUDD, OF CHICAGO, ILLINOIS, ASSIGNOR TO THE BRUNSWICK-BALKE-COLLENDER COMPANY, OF CHICAGO, ILLINOIS, A CORPORATION OF DELAWARE.

CLOSET-SEAT HINGE.

1,194,392. Specification of Letters Patent. Patented Aug. 15, 1916.

Application filed June 18, 1915. Serial No. 34,811.

To all whom it may concern:

Be it known that I, EARLDLEY C. B. JUDD, a subject of the King of Great Britain, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Closet-Seat Hinges, of which the following is a specification.

This invention relates to hinges for water closet seats having novel means for securing the seat thereto.

Heretofore hinges have been secured to closet seats by means of screws passing through a plate on the under side of the seat and into the body of the seat. While this is a cheap and fairly satisfactory arrangement with wood seats, previously in common use, the introduction of molded hard rubber seats makes it possible to provide a much stronger and better hinge, presenting a neater appearance than previously known hinges.

It is the object of my invention to provide a hinge of strong construction and neat appearance, which may be easily applied to and is particularly adapted for use with molded seats.

A further object of my invention is the provision of a hinge having concealed strengthening means disposed within the seat and particularly adapted for use with two-winged non-fouling seats.

Other objects and advantages of my invention will be apparent as it is better understood by reference to the following specification when read in connection with the accompanying drawing in which—

Figure 1 is a plan view, partially in section, of a closet seat provided with my improved hinge; Fig. 2 is an enlarged vertical section on the line 2—2 of Fig. 1, and Fig. 3 is an enlarged vertical section on the line 3—3 of Fig. 1.

Referring to the drawings, 1 indicates a closet bowl provided with a rearwardly extending flange 2. A seat is shown which may be of any suitable conformation consisting, for example of two separate wings 3, each preferably constructed of a core 4 comprising a plurality of layers of wood forming a laminated structure covered with a veneer 5 of hard rubber vulcanized to the core 4. While the core 4 is described as of a laminated wood construction it may obviously consist of other material of relatively low cost, such as inexpensive vulcanized rubber compound consisting largely of reclaimed rubber, the invention in the present instance residing in the hinge and the means for securing it to the seat.

Embedded within the cores 4 of the wings 3 near the rear ends thereof are transversely extending members 6, preferably of metal, secured to the cores 4 by screws 7 and having elongated upstanding lugs 8, preferably integrally formed therewith. As will be apparent from an inspection of Fig. 1 of the drawings the lugs 8 differ in length so that the outer lugs in each of the wings 3 extend a considerable distance therein, whereby the wings are materially strengthened. It will be obvious, however, that the length of the lugs 8 as well as their exact conformation may be varied so long as they are of sufficient strength to properly protect the hinge connections from the stresses incident to the use of the seat. The lugs 8 are provided with threaded openings 9 adapted to receive the screws 10, whereby the flanges 11 of the hinge member 12 are secured to the wings 3.

The hinge member 12 is provided with an opening extending longitudinally therethrough to receive a rod 13, which is held in position by nuts 14′ on the ends thereof. Hinge elements 14 are provided with threaded extensions 15 adapted to be secured in any suitable manner to the flange 2 of the bowl 1 and with upwardly extending portions 15′ having openings therein to receive the rod 13, whereby the complementary hinge elements 12 and 14 are pivotally secured together.

The structure and operation of my improved hinge and means for connecting the hinge to the seat should be apparent without further description thereof. While I have shown and described the invention as embodied in a closet seat having a laminated core covered with a veneer of hard rubber vulcanized to the core, I reserve the right to embody the invention in seats of other construction, as for example laminated or solid wood seats, as well as seats having a core of relatively inexpensive material and a veneer of hard rubber vulcanized thereto. Furthermore, while my invention is shown in connection with a seat *per se*, it is to be understood that it is equally applicable to

the cover which forms a part of the seat in the broader sense of the word and the word "seat" as used in the accompanying claims is intended for the broader meaning so that the application of the invention is not limited to the specific disclosure in the drawing.

It will be apparent that various changes may be made in the form, construction and arrangement of the parts without departing from the spirit and scope of the invention or sacrificing any of its material advantages, the form hereinbefore described being merely a preferred embodiment thereof.

I claim:

1. The combination of a closet seat and a hinge therefor, an anchor for said hinge embedded within said seat and comprising a plate extending transversely of the seat at or adjacent the bottom thereof and bearing on its upper side elongated lugs spaced apart and extending lengthwise of the seat and transversely of said plate, in parallel relation, and having threaded openings therein, and screws engaging said openings for securing the hinge to the seat.

2. The combination of a closet seat and a hinge therefor, an anchor for said hinge embedded within said seat and comprising a plate extending transversely of the seat at or adjacent the bottom thereof and bearing on its upper side elongated lugs spaced apart and having threaded openings therein, one of said lugs being longer than the other, and both extending lengthwise of the seat and transversely of said plate, and screws engaging said openings for securing the hinge to said anchor.

3. The combination of a closet seat and a hinge therefor, and anchors for said hinge embedded within said seat and comprising plates extending transversely of the seat at or adjacent the bottom thereof and bearing lugs on their upper sides spaced apart, the outer lug on each plate being longer than the inner lug.

4. A water closet seat hinge, comprising members adapted to be secured to a closet bowl, a complementary hinge member secured in pivotal relation therewith, a pair of members adapted to be embedded within the closet seat and each consisting of a plate bearing elongated lugs extending lengthwise of the seat and beyond the edges of said plate and having threaded openings therein, and means engaging said threaded openings for securing said complementary hinge members to said embedded members.

5. A closet seat hinge comprising members adapted to be secured to a closet bowl, a spindle disposed therebetween, a complementary hinge member pivotally mounted on said spindle, a pair of members adapted to be embedded within the closet seat and each consisting of a plate extending transversely of the seat and bearing elongated lugs extending lengthwise of the seat and beyond the edges of said plate and having threaded openings therein, and screws engaging said threaded openings for securing said complementary hinge members to said embedded members.

6. The combination of a closet seat and a hinge therefor, and an anchor for said hinge embedded within said seat and comprising a plate extending transversely of the seat at or adjacent the bottom thereof and bearing lugs on its upper side extending lengthwise of said seat and transversely of said plate and beyond both edges of the plate.

7. The combination of a closet seat and a hinge therefor, and an anchor for said hinge embedded within said seat and comprising a plate extending transversely of the seat at or adjacent the bottom thereof and bearing lugs on its upper side, one of said lugs being longer than the other and both extending lengthwise of said seat and transversely of said plate and beyond both edges of the plate.

EARLDLEY C. B. JUDD.

Witnesses:
ERNEST H. MERCHANT,
W. T. WESTERBERG.