Oct. 27, 1925. 1,559,283

C. C. SCHLEGEL

COVER ATTACHING MEANS

Filed April 21, 1925

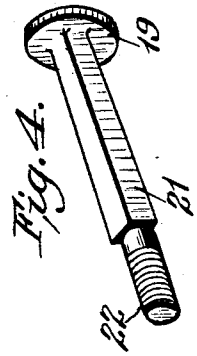


Fig. 4.

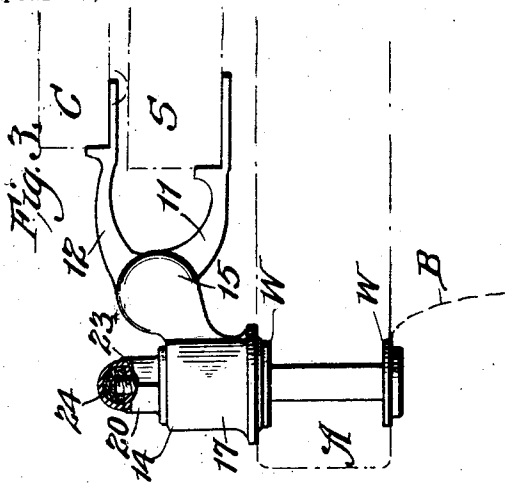


Fig. 3.

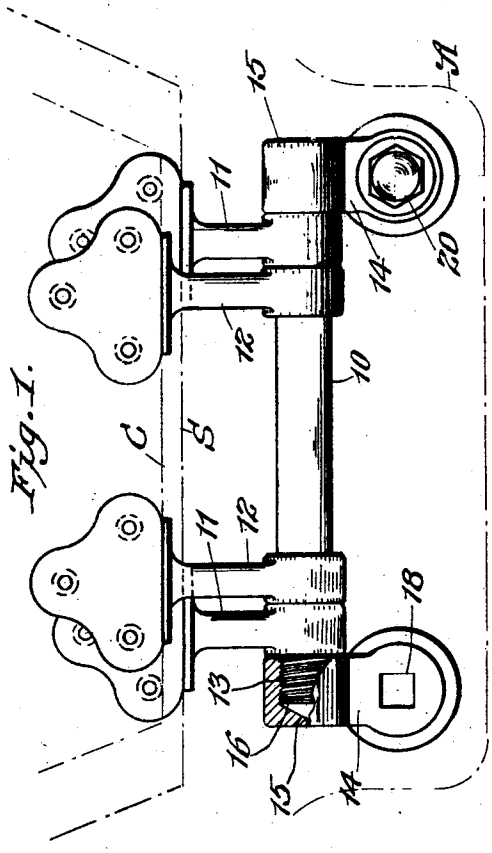


Fig. 1.

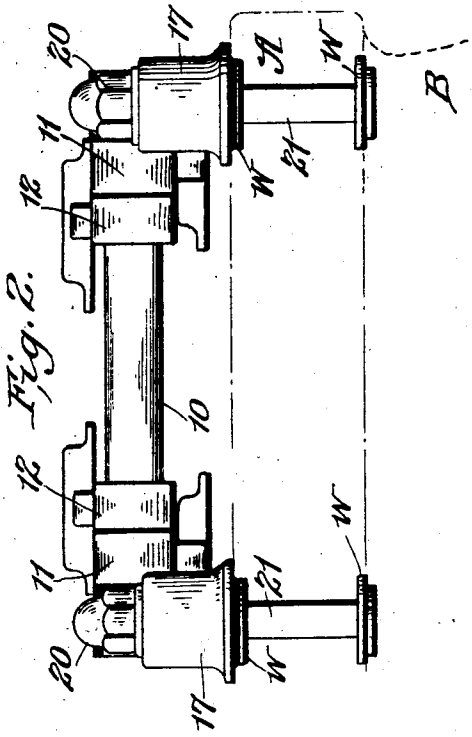


Fig. 2.

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UNITED STATES PATENT OFFICE.

CHRISTIAN C. SCHLEGEL, OF LONG ISLAND CITY, NEW YORK.

COVER-ATTACHING MEANS.

Application filed April 21, 1925. Serial No. 24,715.

To all whom it may concern:

Be it known that I, CHRISTIAN C. SCHLEGEL, a citizen of the United States, and a resident of Long Island City, county of Queens, and State of New York, have invented certain new and useful Improvements in Cover-Attaching Means, of which the following is a specification.

This invention relates to hinge members particularly adapted for seats and covers for water closet hoppers with the main purpose of providing fittings for facilitating the attachment or removal of the seat and cover.

At present, the attaching bolts for the lugs in which the hinge pintle is mounted extend through the rearwardly extending flange on the water closet hoppers and have nuts threaded on their lower ends. In practice it is found very difficult to remove these nuts as they are quite close to the curved surface of the hopper and a wrench cannot be readily applied thereto, and also, due to corrosion, it is sometimes impossible to turn these nuts and the end of the bolt has to be cut off.

The object of the present invention is to overcome the above difficulties, and in one embodiment of the invention as hereinafter described in detail, the securing bolts are reversed and are projected upwardly through the rear flange of the hopper and the seat lugs in which they are secured against turning and above which they are threaded to receive cap nuts which secure the attaching parts in assembled position on the hopper. These securing nuts are in a position where they may be readily engaged, for securing or removing the members, and at an elevation where they are not so apt to be subject to corrosion. In order to further facilitate the operation in applying and removing the nuts, they are formed with cavities on their beads for receiving a suitable grease or lubricant for the threads on the bolts and nuts.

With the above and other objects in view, the invention consists in the improved seat cover hinge and in the form, construction and relative arrangement of its several parts as will be specifically described in conjunction with the drawings, and subsequently incorporated in the subjoined claims.

In the drawing wherein one simple and practical embodiment of the invention is illustrated and in which similar reference characters designate corresponding parts throughout the several views.

Figure 1 is a plan view with parts broken away of a seat cover hinge according to the present invention,

Figure 2 is a rear elevation of said seat cover hinge,

Figure 3 is a side elevation thereof, and

Figure 4 is a perspective view of one of the hinge lug bolts.

In the drawings, fragmentary portions of a water closet hopper, sufficient for illustrating the present invention are shown in broken lines, likewise, portions of the seat and cover members secured to the hinges.

The closet hopper is of the usual type, provided with rearwardly extending flange portions A which are provided with apertures for receiving hinge elements for seats and covers in positions adjacent to the downwardly extending hopper portion B. It is in the locality of the apertures through the flange A that the bolts and nuts are subject to corrosion and nuts on the lower end of bolts passing through these apertures are difficult to grip with wrenches on account of the adjacent hopper construction; in the hinge construction according to this invention these difficulties are overcome.

The hinge members comprise a pintle 10 upon which are loosely pivoted seat hinge members 11 and cover hinge members 12 and the ends of the pintle are threaded as indicated at 13. The ends of pintles are engaged by hinge lugs 14 forwardly extending portions 15 thereof being apertured and threaded at 16 so as to engage the ends of the pintle member. The lugs and pintles are thus united as a unit which carries the hinge members 11 and 12 with the seat and cover members, S and C respectively.

The upright portions, 17, of the hinge lugs, may be cylindrical as shown, and are preferably formed with square central apertures 18. The lugs are positioned over the corresponding apertures in the hopper flange A and bolts 19 are inserted upwardly through the apertures and on the upper end of these bolts are positioned cap screws 20 which hold the members in position on the hopper. The bolts 19, as shown are formed with square shanks 21 which fit nonrotatably within the apertures 18 through the lugs 14, and their upper ends are made cylindrical and threaded at 22 for receiving the nuts 20.

As shown in Figure 3, the cap nut 20 is preferably formed, above its interior cylindrical threaded portion with a cavity 24

formed therein as a container for a grease or other suitable lubricant for the bolt member, and with which the upper threaded end 22 of the bolt may project.

In assembling the lugs upon the flange A the usual type of washers W may be arranged upon the bolts 19 so as to engage the lower and upper sides of the flange A, and the lugs 14 are mounted on the bolts above the upper washers and the nuts are screwed upon the ends of the bolts until the members are securely fastened in place. In applying or removing the nuts 20, the nut is freely accessible for turning with a wrench which is unobstructed in any position, these nuts being located above the bowl flange may be easily manipulated in the operation of assembling and disassembling. The lubricant in the head of the nut prevents corrosion from holding the nut against disengagement from bolt when desired.

In the foregoing description, an embodiment of the invention which is satisfactory in practical use has been disclosed. Nevertheless, it will be manifest that the novel features of the invention might be exemplified in numerous other alternative constructions and accordingly the privilege is reserved of resorting to all such legitimate changes in the form, construction and relative arrangement of the several parts as may be fairly embodied within the spirit and scope of the invention as claimed.

What is claimed as the invention and is desired to be secured by Letters Patent is:—

1. In combination with a closet hopper seat hinge construction comprising a pintle member carrying pivotally mounted hinge members and having vertically apertured lug members on the ends thereof, bolt members adapted to be inserted upwardly through the closet hopper flange member and the apertures in said lugs, and nuts on the upper ends of said bolt members above said lugs for securing the hinge members in position on the closet hopper.

2. In combination with a closet hopper seat hinge construction comprising a pintle member carrying pivotally mounted hinge members and having vertically apertured lug members on the ends thereof, bolt members adapted to be inserted upwardly through the closet hopper flange member and the apertures in said lugs and held against turning by said lugs, and nuts on the upper ends of said bolt members above said lugs for securing the hinge members in position on the closet hopper.

3. In combination with a closet hopper seat hinge construction comprising a pintle member carrying pivotally mounted hinge members and having vertically apertured lug members on the ends thereof, bolt members adapted to be inserted upwardly through the closet hopper flange member and the apertures in said lugs and held against turning by said lugs, nuts on the upper ends of said bolt members above said lugs for securing the hinge members in position on the closet hopper, each nut having a cavity therein communicating with the bolt receiving portion of the nut for containing a lubricant for the threads of the bolt and nut.

4. In a closet hopper seat hinge, a pintle member, lug members engaging the ends of the pintle member and provided with vertical apertures of square cross section through them, bolts having square shanks projecting upwardly through said square apertures and cylindrical threaded upper ends extending from said square shanks above the lugs, and nuts on said threaded ends of said bolts engaging the upper portion of said lugs.

5. In a closet hopper seat hinge, a hinge pintle lug for supporting the seat hinge members on the hopper and provided with a square shanked bolt receiving aperture therethrough, a bolt adapted to fit in said aperture for securing the lug to the hopper, and nut for engaging the bolt for securing the hinge members in place.

6. In combination with a hinge construction for closet hopper seats including hinge lugs and pintle, bolts each having a square shank for securing the hinge members to the hopper by extending upwardly through said lugs and a cap nut on the upper end of each bolt above the lugs and provided with a cavity containing lubricant for the bolt shank.

In testimony that I claim the foregoing as my invention, I have signed my name hereto.

CHRISTIAN C. SCHLEGEL.