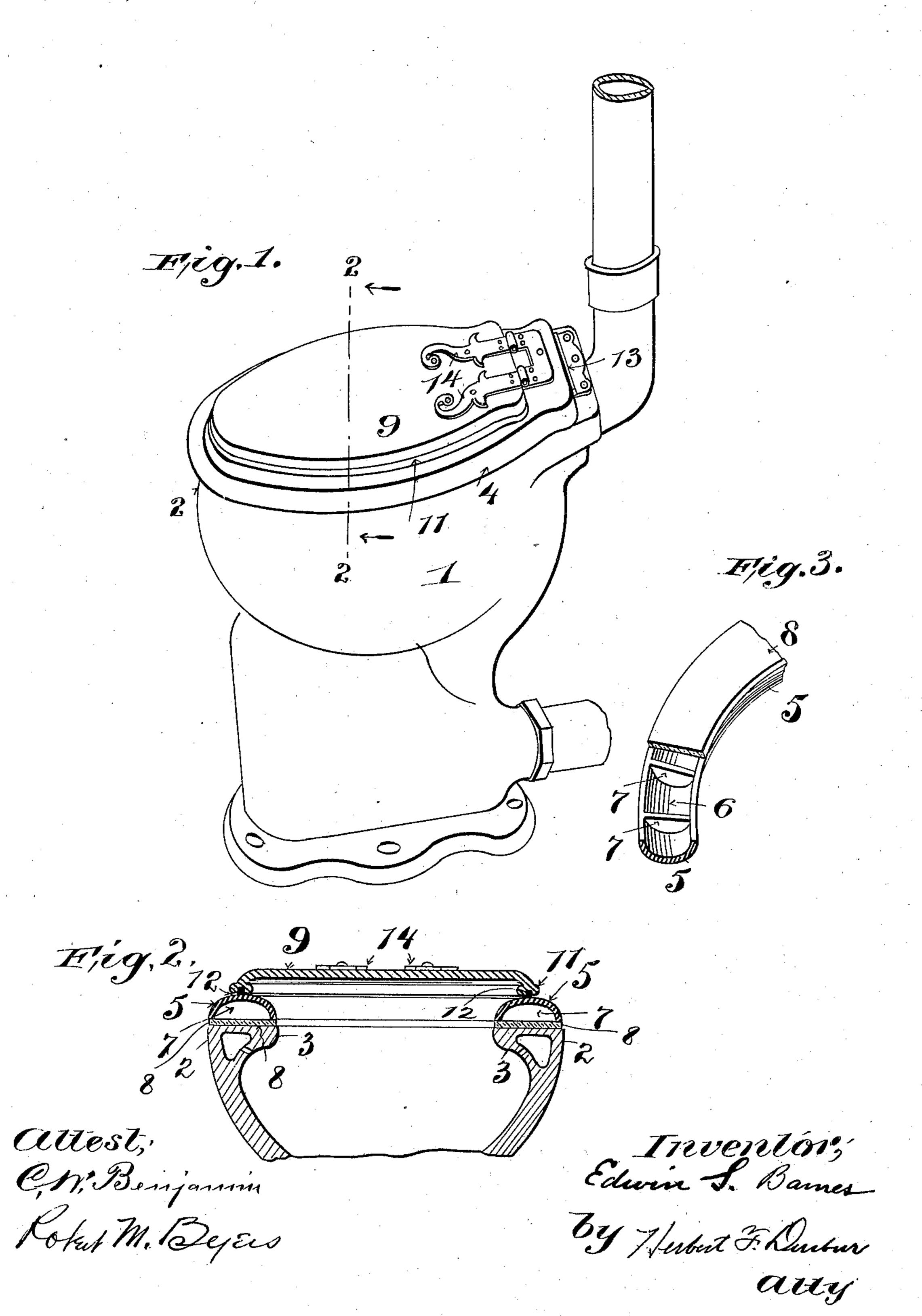
E. S. BARNES. CLOSET SEAT.

(Application filed Oct. 19, 1899.)

(No Model.)



United States Patent Office.

EDWIN S. BARNES, OF NEW YORK, N. Y., ASSIGNOR OF ONE-HALF TO ROBERT M. BYERS, OF SAME PLACE.

CLOSET-SEAT.

SPECIFICATION forming part of Letters Patent No. 654,301, dated July 24, 1900.

Application filed October 19, 1899. Serial No. 734,052. (No model.)

To all whom it may concern:

Be it known that I, EDWIN S. BARNES, a citizen of the United States, residing at New York, (West New Brighton,) county of Richmond, State of New York, have invented certain new and useful Improvements in Closet-Seats, of which the following is a specification.

Prior to my invention closet-seats have 10 mainly been constructed of wood suitably configured and hinged to a hopper or other receptacle. In the employment of wood and the like considerable disadvantage has been encountered owing to the absorptive quali-15 ties of the material and constant breaking and warping, requiring frequent cleansing and repair. The same can be said of the seat cover or lid. The entire difficulty has been encountered in the employment of 20 wooden and other like seats in that the hopper at its upper rim or periphery has been rounded and the wood has been placed upon this rounded portion, the fit of the two being generally very poor, allowing of the escape 25 of obnoxious gases and generally resulting in uncleanliness. With my invention these difficulties are considerably, if not entirely, eliminated.

I employ for the lid one made of hard rub-30 ber, with a soft-rubber cushion set in its flange. For the seat I employ one suitably configured, constructed as to its upper or operative surface, of hard rubber having an annular interior chamber subdivided by lat-35 eral strengthening webs or diaphragms, and to give strength and lightness and a lower face or abutment (as to one feature of my invention) preferably flat and horizontally disposed and made of soft rubber, either vul-40 canized or cemented, but in either case firmly secured to the upper section of the seat, the soft-rubber base resting upon the flat horizontal top of the hopper, which is so configured for the purpose of making a seat for the 45 soft-rubber base.

My invention therefore consists in the construction and combination of parts hereinafter described, and further pointed out in the claims.

50 In the drawings forming part of this specification, Figure 1 is a perspective view of a

conventional hopper with my various improvements applied thereto. Fig. 2 is a sectional elevation of the upper portion of the hopper, the seat, and lid substantially on the 55 line 2 2, Fig. 1, looking in the direction of the arrow. Fig. 3 is a perspective view of a portion of the seat inverted, partly in cross-section.

Similar numerals of reference indicate cor- 60 responding parts throughout the several views.

In the drawings, 1 indicates the hopper, of conventional form or otherwise suitably constructed, except that I prefer that the up- 65 per rim be made flat on top, as at 2, with an interior projection or ledge 3 to form a seat for the soft-rubber base of the hopper-seat.

At 4 is the hopper-seat, which is of conventional shape generally and constructed as follows: The operative surface or crown portion 5 is segmental in form and is preferably made of hard rubber to give it stiffness and rigidity, the crown forming an interior channel or annulus 6, across which extend lateral webs 7, 75 perpendicularly disposed and formed integrally with the crown-piece 5. These webs give strength and rigidity to the crown-piece to reduce its weight and cost, and tend to keep the same cool, and add to the same many advantageous features.

At 8 is a soft-rubber base, which is a flat band of soft rubber either vulcanized, cemented, or otherwise suitably secured to the base of the crown-piece 5, as shown clearly in 85 Figs. 2 and 3, and the top of the hopper is formed by the rim 2, an inward extension 3 being suitably widened over the usual rim found in hoppers of this class in order to give a firm bearing transversely to the hopper-seat and 90 properly "seat" the latter on top of the hopper, thereby providing a more effective seal between the top of the hopper and the seat than has hitherto been accomplished in constructions of this class.

At 9 is the lid, preferably made of hard rubber, with a downwardly-extending periphery 10, ending in a transverse enlargement 11, in which is seated a soft-rubber gasket 12, which bears directly on top of the crown-piece 1005. The hopper-piece 4 may be suitably hinged to the top of the hopper, as at 13, and the lid

9 is likewise hinged to the extension 4^a, formed integrally with the hopper-seat 4, through the hinge 14, thereby completely sealing the space between the top of the hopper and the hopper-seat.

Having described my invention, I claim—

1. As an article of manufacture, an annular and hollow closet-seat, having an upper section of hard rubber, and an integrally-united base of soft rubber, substantially as and for the purposes set forth.

2. An article of the class described, comprising an annular and hollow upper section of hard rubber, interiorly channeled, transverse webs in the channel formed integrally with the upper section, and an integral base of soft rubber, substantially as and for the

3. In an article of the class described, the combination with the hopper having a plane seat formed at its upper rim, with the hopper-seat comprising an upper annular and channeled section of self-supporting material, and

purposes set forth.

a plane horizontal base of soft rubber seated upon the plane seat of the hopper-rim, sub- 25 stantially as described.

4. The combination in an article of the class described, of the hopper-rim comprising the rim 2, an inward extension 3, the hopper-seat

comprising the hard-rubber crown-piece 5, 30 transverse webs 7 and soft-rubber base 8 seated on the hopper-rim, substantially as described

described.
5. As an article of manufacture, the seat 4 comprising an annular hollow portion 6, with 35

comprising an annular hollow portion 6, with an integral rear extension 4^a, the base integrally united with the portion 6, the interior transverse webs integrally united with the portion 6, and the base 8, as and for the purposes specified.

Signed in the city, county, and State of New York this 14th day of September, 1899.

EDWIN S. BARNES.

Witnesses:

S. H. MOYLE, H. F. DURBUR.