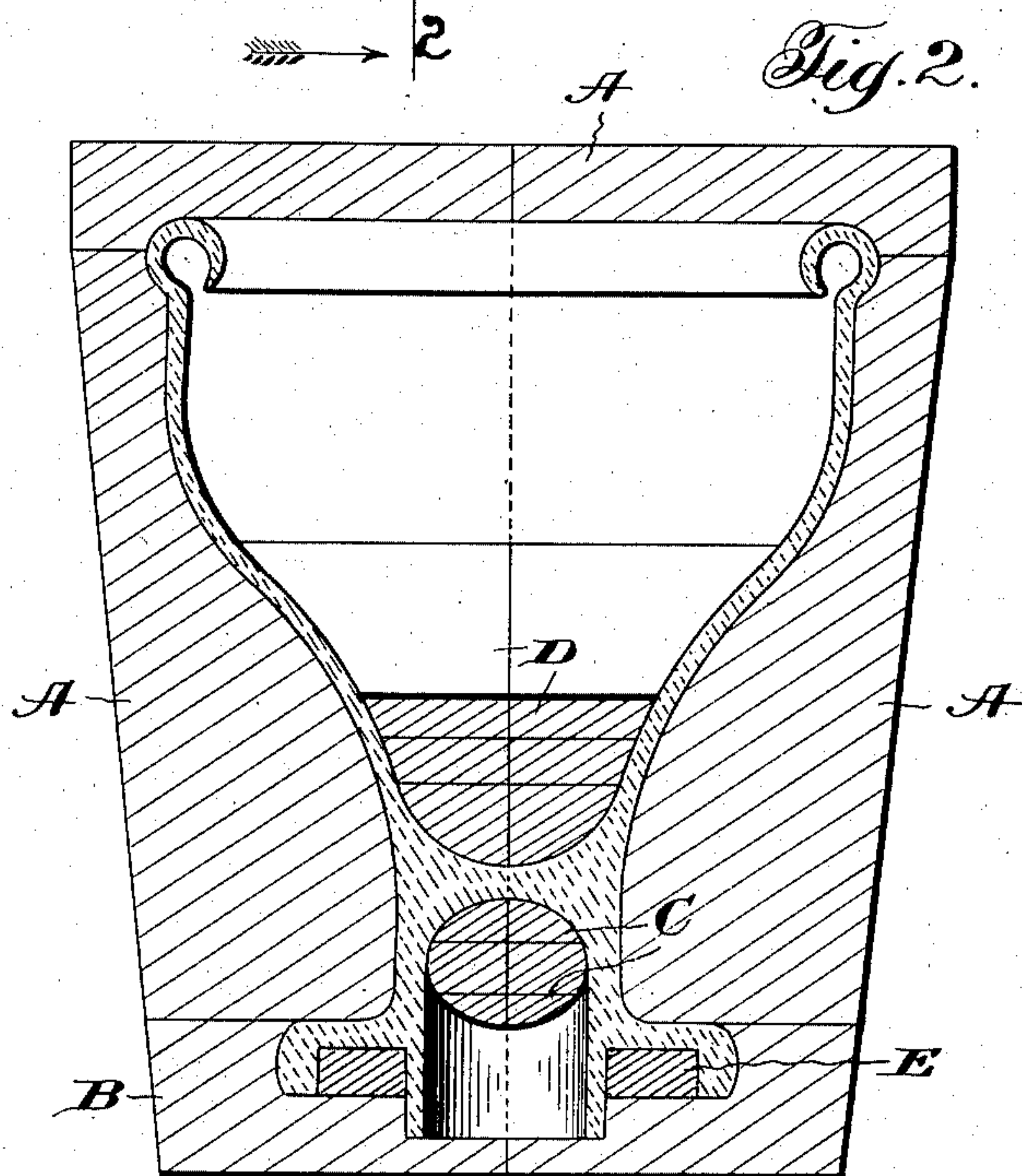
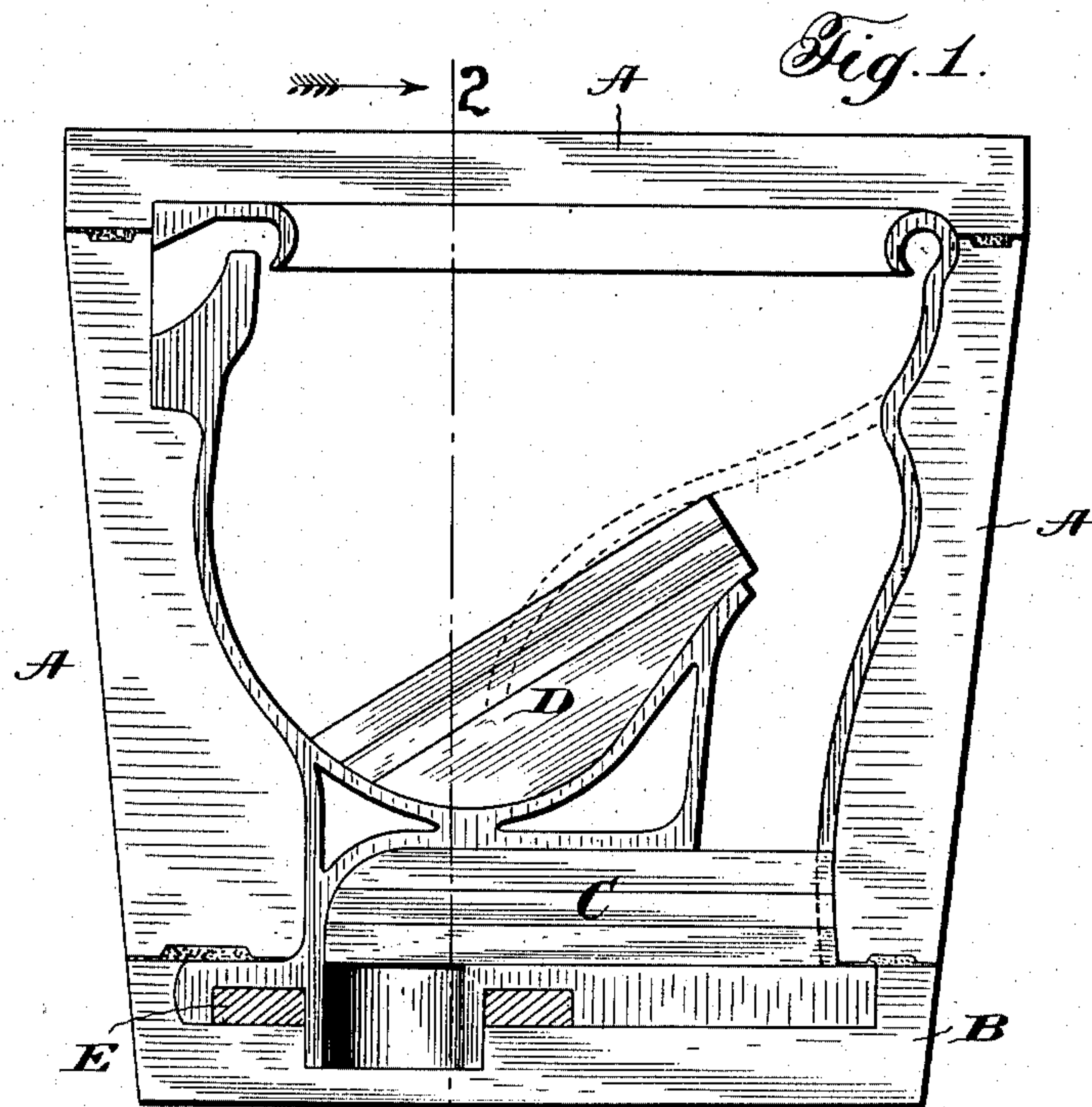


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METHOD OF MANUFACTURING SIPHON CLOSET BOWLS.
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927,906.

Patented July 13, 1909.



Witnesses:

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UNITED STATES PATENT OFFICE.

CHARLES B. WALTON AND GEORGE E. PAUCK, OF TRENTON, NEW JERSEY.

METHOD OF MANUFACTURING SIPHON CLOSET-BOWLS.

No. 927,906.

Specification of Letters Patent.

Patented July 13, 1909.

Application filed February 6, 1908. Serial No. 414,612.

To all whom it may concern:

Be it known that we, CHARLES B. WALTON and GEORGE E. PAUCK, citizens of the United States, residing at Trenton, in the county of Mercer and State of New Jersey, have invented certain new and useful Improvements in Methods of Manufacturing Siphon Closet-Bowls, of which the following is a specification, reference being had therein to the accompanying drawing.

This invention relates to an improvement in the method of manufacturing siphon closet bowls and in an apparatus therefor.

The invention relates more particularly to the method of forming closet bowls of the siphon type, whereby the bowl as a whole when completed has a single main seam extending across the same from front to rear, as distinguished from bowls heretofore constructed which have a multiplicity of seams.

The object of the invention is to provide a method of forming closet bowls whereby the proper shaping of the bowls and the uniting of the parts can be readily and easily effected with but little trouble and with the minimum number of joints or seams.

In the drawings, Figure 1 represents a plan view of a one-half section of the mold showing the prepared material as fashioned to fit the mold, the upper leg of the siphon removed, but the position of the said upper wall is indicated in dotted lines. Fig. 2 is a section taken at right angles to Fig. 1 on line 2—2—said figure.

Before describing the method, we shall describe the particular construction of mold which, briefly stated, consists of the outer mold section A, shaped to conform to one-half of a bowl and having its inner contour of the exact shape of the outer walls of the bowl.

B designates the lower part of the mold which may be in use attached to the upper part in any convenient or well known manner. This lower part has the channels for the base of the bowl.

C designates a removable mold part or former designed to be located in the lower leg of the siphon and which is conveniently made in section. This part C is of a length slightly greater than the length of the lower siphon passage so that the ends of the former will extend to the outer face of the outer wall of the lower part of the bowl, as shown.

D designates a removable former located in the bottom of the bowl, its lower face

being fashioned to conform to the lower wall of the upper leg of the siphon. This upper conformer is made in section so that the same can be readily removed without danger of disfiguring the conforming surface.

E designates removable rings for the connecting rings of the bowl.

The method of operation may be stated as follows: The operator places the material to form the bowl in the mold A and with suitable means presses the same into conformity with the contour of the inner face of the mold, as is usual in this art. He then places the removable conformer C at the point where the lower leg of the siphon is to be located and applies the material, of which the bowl is formed, along the upper surface of the said conformer, so as to secure the exact and proper cross section of the lower leg. He then interposes the upper former D and fashions the lower part of the bowl to conform to the under surface of said conformer, such act being readily performed, and the proper shape being acquired while the half body of the bowl is still within the outer mold. In placing the lower conformers C in position, the ends are projected so as to have the ends of the conformer projecting beyond the sides of the rear part of the bowl. After the parts have been properly formed to fit the contour of the inner face of the mold and the curved surface of the formers, the bottom part B is placed on the mold and the base properly fashioned by well known manipulating methods. Having practically completed the one half of the bowl, the companion half is likewise completed in the same manner and the two halves, including the formers, are brought face to face or edge to edge, the abutting edges of the various parts of the bowl material being cemented or connected in the well known manner. During this act, the formers remain in position and maintain the walls adjacent thereto in proper position and thereafter the lower former C is removed through the opening in the rear of the bowl, while the upper former is removed section by section leaving the lower part of the upper leg of the siphon in its desired shape. The formers having been removed, the upper wall of the upper leg of the siphon is then placed in position, having previously been formed, and is secured in the usual manner by causing its edges to adhere to the inner faces of the bowl, this upper wall being in width equal to the combined width of both sections

of the bowl as originally formed. The molds having been removed, the bowl is then subjected to the usual treatment of firing and finishing.

5 From the above description, it will be observed that the body of the mold itself is fashioned in but two parts, saving only the opening at the lower part of the rear, which opening is readily closed by a small sheet or
10 film of the bowl material. We are enabled by the method above described, and as stated, to form the body in but two sections which are afterward united, and to fashion the inner walls of the siphon with exactness and
15 without danger of being improperly bent or twisted during the act of connecting, cementing, and uniting the two parts. It is also to be noted that the making of the bowl in two parts has obviously advantages and may be
20 used as well in connection with non-siphonic as well as siphonic bowls. Again, it is particularly to be borne in mind that the formers C and D make it possible to secure uniformity of siphonic action and the uncertain re-
25 sults of depending on the eye done away with.

Having thus described the invention, what is claimed as new and desired to be secured by Letters Patent is:—

30 1. The method of forming siphon closet bowls consisting in placing the desired material in plastic condition in a mold fashioned after the manner of one-half of the closet bowl, creating pressure on the said material
35 to conform to the inner surface of the mold, introducing a conformer at a point where the lower leg of the siphon is to be located, applying the material of which the bowl is formed along the upper surface of said conformer,
40 introducing a conformer above said applied material and working said material about the lower surface of the last mentioned conformer to form the lower surface of the upper

leg of the siphon, applying a similarly formed section of the bowl to the edges of the various
45 parts above formed while the conformers are still in position, subsequently removing the conformers, and finally applying sufficient material to the inner surface of the connected sections to form the upper wall of the upper
50 leg of the siphon.

2. The method of forming siphon closet bowls consisting in placing the desired material in plastic condition in a mold fashioned after the manner of one-half of the closet
55 bowl, creating pressure on the said material to conform to the inner surface of the mold, introducing a conformer at a point where the lower leg of the siphon is to be located, with the outer end of the conformer projecting
60 through the material, applying the material of which the bowl is formed along the upper and side surfaces of said conformer, introducing an auxiliary conformer above said
65 applied material and working said material about the lower surface of the last mentioned conformer to form the lower surface of the upper leg of the siphon, applying a similarly
70 formed section of the bowl to the edges of the various parts above formed while the conformers are still in position and the parts are in plastic condition, subsequently removing
75 the conformers, then applying sufficient material over the adjoining edges of the connected sections to form the upper wall of the upper leg of the siphon, and finally applying
sufficient material to the opening formed by the projecting end of the first mentioned conformer to close the same.

In testimony whereof we affix our signatures in presence of two witnesses.

CHARLES B. WALTON.
GEORGE E. PAUCK.

Witnesses:

H. I. O'SHEA,
M. E. MASTERSON.