

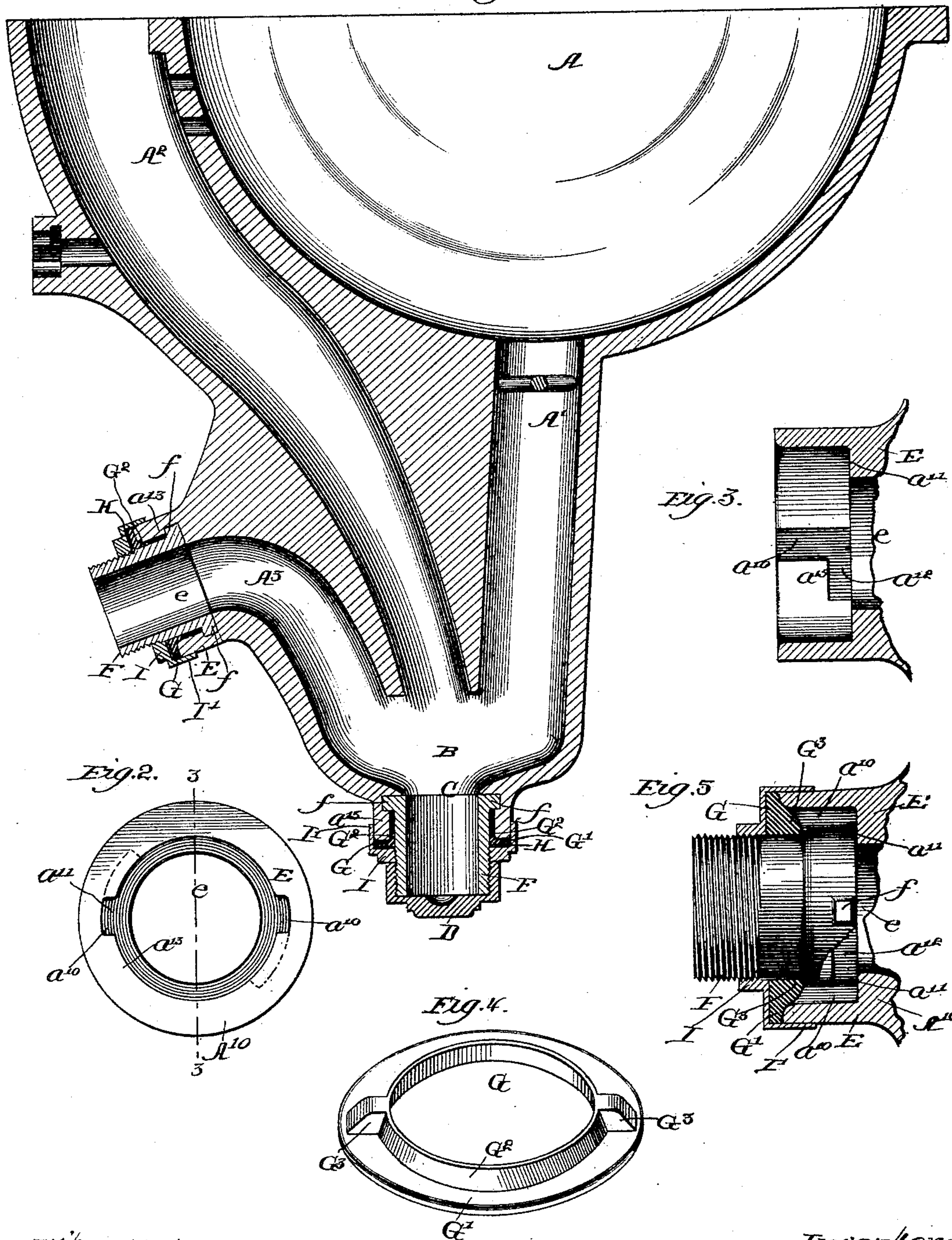
(No Model.)

J. J. WADE.  
BASIN.

No. 459,058.

Patented Sept. 8, 1891.

*Fig. 1.*



Witnesses:

Jean Elliott  
Julia Usher.

*Inventor:*

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James J. Wade  
By Burton & Burton  
his atty



# UNITED STATES PATENT OFFICE.

JAMES J. WADE, OF CHICAGO, ILLINOIS.

## BASIN.

SPECIFICATION forming part of Letters Patent No. 459,058, dated September 8, 1891.

Application filed September 11, 1890. Serial No. 364,607. (No model.)

*To all whom it may concern:*

Be it known that I, JAMES J. WADE, a citizen of the United States, residing at Chicago, county of Cook, and State of Illinois, have invented certain new and useful Improvements in Basins, which are fully set forth in the following specification, reference being had to the accompanying drawings, forming a part thereof.

In the drawings, Figure 1 is a right and left vertical section of a basin which embodies my invention. Fig. 2 is an end view of a boss for pipe connections. Fig. 3 is a sectional detail elevation, section being made at line 3 3 on Fig. 2. Fig. 4 is a perspective of a rubber gasket employed in securing the metal fitting for pipe connections. Fig. 5 is an enlarged sectional detail of the pipe connection in the boss formed for that purpose in the earthenware.

A is the bowl.

A' is the direct waste. A<sup>2</sup> is the overflow-passage. A<sup>3</sup> is the final waste-passage leading to the sewer. At the junction of these three passages there is formed a trap B. At the bottom of this trap there is provided the hand-hole C, which is closed by the cap D. It will be observed that all three passages are located in the same vertical plane, and that the overflow-passage is the middle one of the three and enters the belly of the trap, and that all the passages radiate from the hand-hole, so that they may all be easily swabbed out through it by direct action. The final waste-passage has its discharge-mouth, which is adapted for connection with a pipe to lead to the sewer in an approximately vertical plane transverse to the plane in which the three passages are located.

E is a boss on the outer surface of the overflow, having the duct *e* leading through it into the overflow. This passage is designed to admit a flushing-stream, and the boss is adapted to have a water-supply pipe coupled to it, branched from the principal supply-pipe of the bowl.

It is the purpose of this invention to make a basin which, being complete in respect to all the necessary passages and having those passages all properly trapped, may be made very cheaply.

For the purpose of compactness, which is

an important element of economy in setting, it is important that the arrangement of the three passages should be such as to afford in the least possible compass both laterally and vertically the necessary trappage and the direct access for swabbing all the passages through the hand-hole. This compactness is obtained by making the overflow-passage the middle one of the three, since any other order of arrangement which would be consistent with locating them all in the same vertical plane would either make the fixtures higher or would cause the extreme passages to diverge more and so be less accessible through the one hand-hole. Another purpose of this order of arrangement is that thereby the final waste has its discharge-mouth on the same side of the bowl as the boss E, which is provided for connection with the flushing-pipe, so that all the pipes are attached at the same side, a point which is often of great importance and convenience in setting basins.

I design to make the connection to the piece of earthenware without the use of cement, and for that purpose I form the bosses designed for pipe connections as shown in Figs. 2 and 3. All of the bosses are alike, except as to size, and the description of the final waste-boss will answer for all.

A<sup>10</sup> is the boss, having the two notches *a*<sup>10</sup> diametrically opposite and extending down to the stop shoulder *a*<sup>11</sup> and connecting each at the lower end with a horizontal recess *a*<sup>12</sup>, which is overhung by the lip *a*<sup>13</sup>, which is left standing above it.

F is the metal fitting provided for making connection with the earthenware. It has at the end which enters the boss the two opposite projections *f f*, which correspond to and enter the notches *a*<sup>10</sup> *a*<sup>10</sup>, and when the fitting rests on the shoulder *a*<sup>11</sup> and is slightly rotated said projections enter the recesses *a*<sup>12</sup> and engage under the shoulders *a*<sup>11</sup>.

G is a rubber gasket of peculiar form, having the lip G' adapted to cover the margin of the boss and the lip G<sup>2</sup> adapted to enter the aperture in the boss and stand between it and the fitting F. It has also the lugs G<sup>3</sup> G<sup>3</sup>, which enter the notches *a*<sup>10</sup> and serve both to render them water-tight and also to prevent the rotation of the gasket in the boss. A thin metal washer H is preferably placed



on the fitting F outside of the gasket to receive the friction of the cap-nut I, which is screwed onto the threaded end of the fitting F and draws it tight, clamping the gasket G 5 between the inner face of the nut and the end of the boss and swelling it laterally by that pressure, so that the lip G<sup>2</sup> is made to bind closely between the boss and the fitting, thus making a very securely water-tight joint 10 easily detached and connected. The flange I' of the cap-nut I embraces the boss and protects the edge from chipping, and also prevents the gasket from being crowded out and causes all the lateral expansion to take place 15 inward, where it will produce tightness of the joint. The threaded end of the fitting F, projecting beyond the end of the nut, affords means for coupling pipe in a familiar manner.

I claim—

20 1. A basin having direct waste-aperture and overflow-aperture, a direct waste-passage and an overflow-passage, and a final waste-passage, all said passages being in the same vertical plane, and the overflow-passage be-

ing the middle of the three and having an 25 aperture for connection of a flushing-pipe and adapted for connecting a final waste-pipe, the final waste-passage terminating on the same side of the bowl as the said flushing-pipe aperture, substantially as set forth. 30

2. In combination with the basin of earthenware having apertured bosses for pipe connections, such bosses having the notches  $a^{10}$  and recesses  $a^{12}$ , the pipe-fitting F, having the projections  $f$   $f$ , adapted to enter the 35 notches and recesses in the earthenware bosses, and the compressible gasket G, having the lips G' and G<sup>2</sup> and the lugs G<sup>3</sup> G<sup>3</sup>, adapted to enter the notches  $a^{10}$ , and the clamping-nut I, substantially as set forth. 40

In testimony whereof I have hereunto set my hand, at Chicago, Illinois, in the presence of two witnesses, this 8th day of September, 1890.

JAMES J. WADE.

Witnesses:

CHAS. S. BURTON,  
JEAN ELLIOTT.