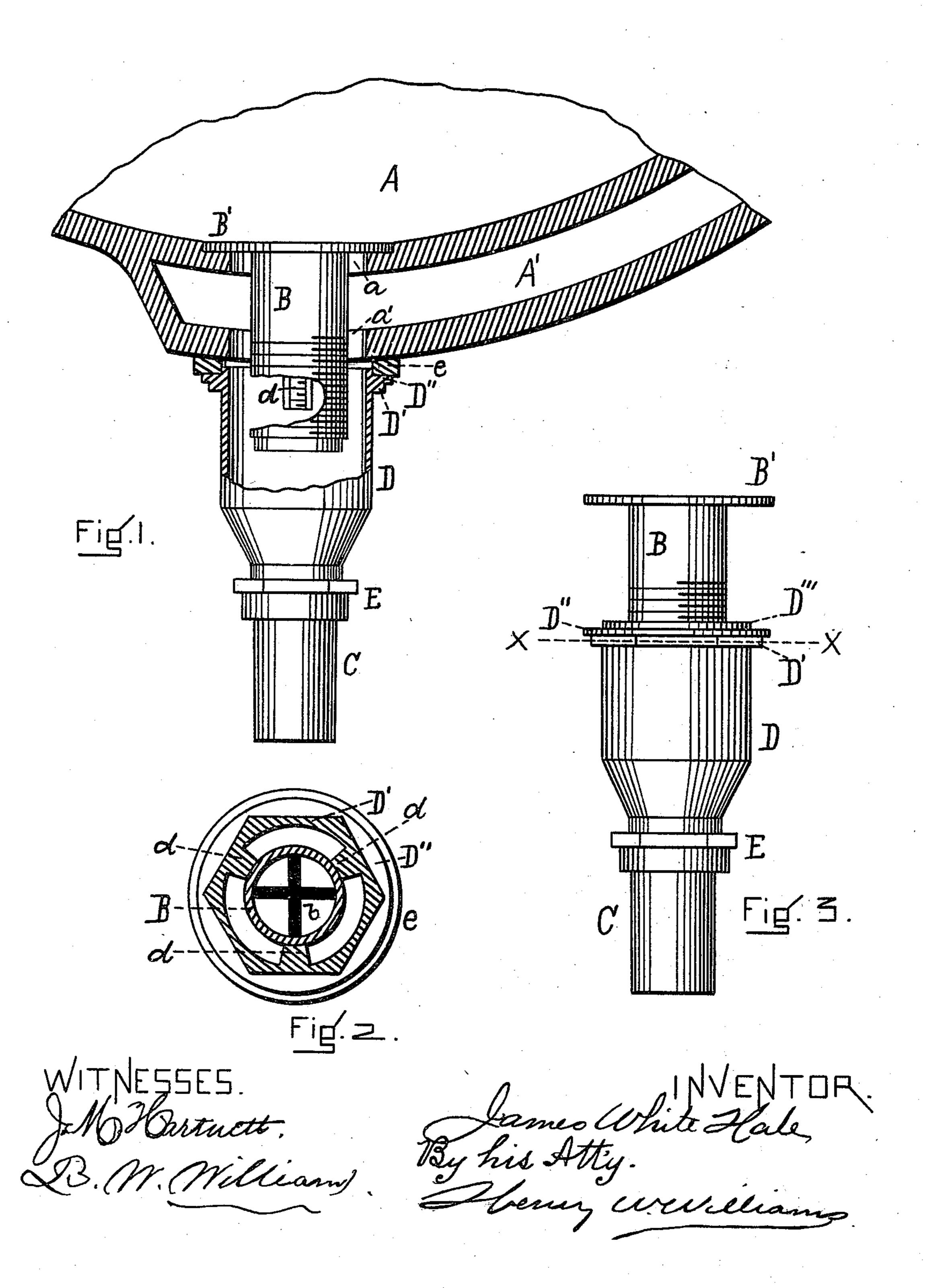
(No Model.)

J. W. HALE.
BASIN COUPLING.

No. 451,324.

Patented Apr. 28, 1891.



## United States Patent Office.

## JAMES WHITE HALE, OF NEWBURYPORT, MASSACHUSETTS.

## BASIN-COUPLING.

SPECIFICATION forming part of Letters Patent No. 451,324, dated April 28, 1891.

Application filed February 11, 1891. Serial No. 381,051. (No model.)

To all whom it may concern:

Be it known that I, JAMES WHITE HALE, of Newburyport, in the county of Essex and State of Massachusetts, have invented a new 5 and useful Improvement in Basin-Couplings, of which the following is a specification.

This improvement relates to basin-couplings for overflow wash-bowls; and it has for its principal objects to prevent the waste wa-10 ter from backing into the overflow, to do away with a separate nut and thereby prevent leaking at that point, and to tap the overflow at its lowest point, thus preventing any waste water or substance from settling therein or 15 thereabout.

The nature of the invention is fully described below, and illustrated in the accom-

panying drawings, in which—

Figure 1 is a part elevation and part verti-20 cal section of my improved coupling and a portion of the bowl. A portion of the pipe leading directly to the hole in the bowl is represented as broken out. Fig. 2 is a cross-section taken on line x, Fig. 3, looking up. Fig. 25 3 is an elevation, the bowl and washer next its under side being omitted.

'Similar letters of reference indicate like

parts.

A is the basin or bowl provided with the

30 waste-hole a, and A' is the overflow.

B is the pipe which leads directly downward from the waste-hole a, being supported on the edge thereof by the ordinary flange B' and provided internally with the usual cross-35 pieces b for arresting solid matter. This pipe or tubular plug leads directly through the overflow A' without opening into it, and extends through its lower wall by means of a hole a', larger in diameter than the diameter 40 of the pipe and projects for a considerable distance below it. It is provided externally at its lower portion with a screw-thread.

C is the pipe leading to the sewer, con-

structed as usual.

D is a coupling-pipe, in the construction, arrangement, and combination of which my invention principally consists. To the lower

end of this coupling-pipe the pipe C is secured by a nut E. The upper end is provided with a polygonal shouldered portion D', which 50 has a flange D", between which and the bowl a washer e is interposed. The main and upper portion of this coupling-pipe D is made larger in diameter than the pipe B, which extends down centrally into it, and is provided 55 on its inner surface with integral vertical narrow ribs d, which are threaded to receive the external thread on the pipe B. Thus the coupling-pipe D is screwed onto the pipe B and against the bowl.

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It will readily be seen that all the water in the overflow A' passes through the hole a'and through the coupling-pipe D to the pipe C and thence to the sewer, and as the overflow is tapped at its lowest point no water can 65 remain therein and none can back into it. The polygonal shouldered portion D' and pipe D being integral a separate nut is done away with, together with all possibility of leakage at that point. Preferably the portion D' is 70 formed a trifle below the upper end of the coupling-pipe D, thereby leaving a rim or extension D''', around which the washer e lies, and by which it is prevented from working out of place as the coupling is screwed up. 75

Having thus fully described my invention, what I claim, and desire to secure by Letters

Patent, is—

In a basin-coupling, the combination, with the basin A, overflow A', provided with the 80 hole a', and pipe B, extending from the basin down through said overflow and hole, said pipe being externally screw-threaded, of the coupling-pipe D, provided on its inner surface with the vertical screw-threaded ribs d 85 and on its outer surface with the polygonal shouldered portion D', whereby said couplingpipe is screwed onto said pipe B, substantially as set forth.

JAMES WHITE HALE.

Witnesses:

LUCY B. HALE, CHARLOTTE E. MACE.