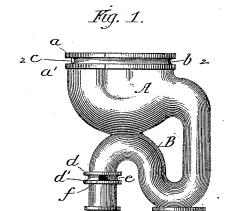
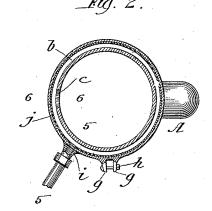
## J. KELLY.

## WATER CLOSET BOWL.

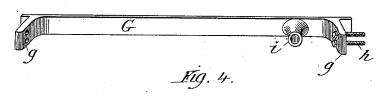
No. 346,922.

Patented Aug. 10, 1886.

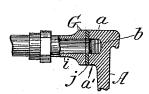




\_Fig. 3.







Witnesses:

Inventor: James Kelly By Mm 16 Lots Attorney.

## UNITED STATES PATENT OFFICE.

JAMES KELLY, OF CHICAGO, ILLINOIS.

## WATER-CLOSET BOWL.

SPECIFICATION forming part of Letters Patent No. 346,922, dated August 10, 1886.

Application filed December 28, 1885. Serial No. 186,884. (No model.)

To all whom it may concern:

Be it known that I, JAMES KELLY, a citizen of the United States of America, residing at Chicago, in the county of Cook and State 5 of Illinois, have invented certain new and useful Improvements in Water-Closet Bowls, of which the following is a specification, reference being had therein to the accompanying

drawings.

The nature of my invention relates to bowls or basins for water-closets, and particularly to those made of porcelain and arranged for a water-supply for emptying and cleaning the bowl and for filling the water-trap, 15 and that also are arranged to connect with a ventilator-flue. Such bowls heretofore had to be provided with nozzles for making the pipe-connections—one for the water-supply and the other for the ventilator-pipe-which 20 nozzles were difficult to mold, were liable to crack while being burned, and were apt to be broken off during transportation of the bowl, and these nozzles frequently were not in the best position with reference to the 25 location of the water-closet for making proper connections with the pipes; and it is the object of my invention to overcome these heretofore-experienced difficulties.

For this purpose my invention consists in providing the bowl or basin with an exterior annular groove in its upper rim as well as on its trap-neck, each such groove communicating with the interior of the bowl or trap neck through an opening of any usual size or shape, and each such groove I form into a

35 shape, and each such groove I form into a hermetic water or gas duct by clamping a metal band over it with a rubber packing between, this band of metal being provided with a nozzle for making the pipe-connection. As will be readily seen, by loosening

such metal band it can be turned to place the pipe-connecting nozzle at any desired point of the circumference of the bowl or neck where it is most convenient to connect the

45 pipe, and then by tightening such band again it will form a hermetic part of the annular duet that acts as the communicating channel between such pipe and the opening into the bowl or neck, all as more fully hereinafter de-

50 scribed and specifically claimed.

In the accompanying drawings, Figure 1 represents an elevation of a bowl provided

with the annular grooves; Fig. 2, a sectional plan on line 2 2 in Fig. 1, with the band in position; Fig. 3, a perspective view of the 55 band for the bowl developed; Fig. 4, a similar view of the band for the neck developed; Fig. 5, a section on line 5 5 in Fig. 2, and Fig. 6 a section on line 6 6 in Fig. 2.

Corresponding letters in the several figures 60

of the drawings designate like parts.

A denotes the bowl of the washout style, which, however, may be of any other style—as, for example, a hopper-basin. Two annular flanges, a a', are formed to the upper rim 65 of the bowl A, providing an endless groove, b, between such flanges, which groove b communicates with the interior of the bowl through an opening, c. The goose-neck B, forming the water-trap to the bowl and connecting 70 with the soil-pipe that leads to the sewer, I also provide with two annular flanges, d d', the endless groove e between which flanges communicating with the interior of the pipe through an opening, f.

G is a band of sheet metal, preferably of brass. This band has rigidly secured upon it, near each end, a lug, g, with holes for screwbolts h, and anywhere between such lugs this band is provided with a nozzle, i, for connecting a pipe. This band G is bent over and tightened upon the flanges a a' by drawing the nuts of the screw-bolts h, a band of sheet-rubber, j, of the same size as the metal band G being first interposed between such 85 band G and flanges a a'. The band H is in all respects the same as band G, excepting that it is shorter, and is clamped over flanges d d' of neck B in the same manner as described for band G. These bands G and H not only 90 provide universal pipe-connections to the bowl, but they also serve in adding to the strength of the bowl or basin, which thus becomes metal-bound, and thereby will resist breakage to a greater extent. 95

What I claim is-

1. A water closet bowl or basin provided exteriorly with annular grooves that communicate with openings leading into such bowl or its neck, in combination with suitable bands or 100 straps to form hermetic channels leading from the water-supply or ventilating pipes to such openings, as and for the purpose set forth.

2. The combination, with a water-closet bowl

or basin having exterior annular grooves connecting with suitable openings, of metal bands adapted to be clamped around such bowl and to render such grooves hermetic channels, substantially as set forth.

3. A water-closet bowl or basin provided with one or more exterior annular grooves communicating with one or more openings leading into such bowl or its neck, in combination with a metal band or bands having pipe con-

necting nozzle, and being adapted to be clamped over such groove for forming a hermetic channel therewith, substantially as and for the purpose set forth.

In testimony whereof I affix my signature 15 in presence of two witnesses.

JAMES KELLY.

Witnesses:

RICHARD REINBOLD, HARRIS W. HUEHL.