(No Model.)

B. HAVANAGH.

FLOOR CONNECTION FOR WATER CLOSETS.

No. 363,956. Patented May 31, 1887.

Fig. 1.

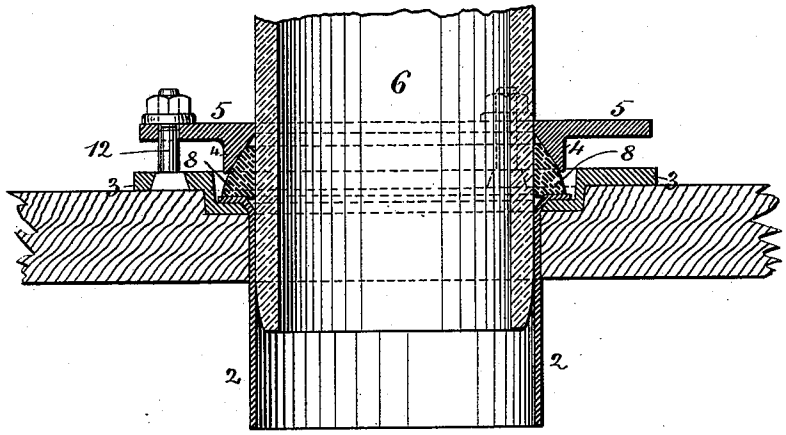
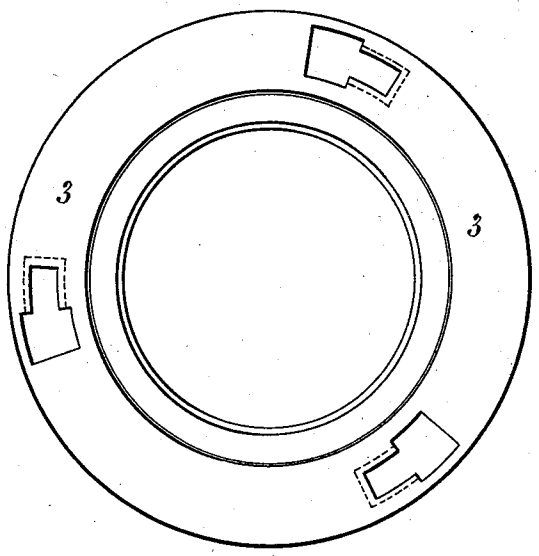


Fig. 2.



Witnesses:
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Inventor:
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UNITED STATES PATENT OFFICE.

BERNARD HAVANAGH, OF NEW YORK, N. Y.

FLOOR-CONNECTION FOR WATER-CLOSETS.

SPECIFICATION forming part of Letters Patent No. 363,956, dated May 31, 1887.

Application filed March 14, 1887. Serial No. 230,846. (No model.)

To all whom it may concern:

Be it known that I, BERNARD HAVANAGH, of the city and State of New York, have invented an Improvement in Floor-Connections for Water-Closets, of which the following is a specification.

The porcelain discharge-pipe at the lower end of the closet-trap has usually been provided with a flange to be bolted to the metallic ring or floor-connection of the sewer-pipe; but the porcelain is liable to be cracked or injured, or the putty or similar cement to be broken in consequence of shrinkage of timbers or settling of the building.

My present invention is for making a tight joint at the floor-connection where the closet-pipe joins upon the sewer-pipe, and for allowing the slight motion usually necessary in properly adjusting the closet, and that may result from shrinkage of the support without injuring the tightness of the joint.

In the drawings, Figure 1 is a vertical section of the floor-connection, and Fig. 2 is a plan of the lower ring.

The upper end of the sewer-pipe is usually of lead, at 2, and the same is dressed over flat upon the floor or lower ring, 3, which is recessed for its reception and for the reception of the lower part or conical flange, 4, of the upper ring, 5, and the discharge-pipe 6 at the lower end of the closet or trap, which is often of porcelain, passes through the upper ring, 5, down into the sewer-pipe 2, and there is an elastic packing, 8, around the pipe 6 and within the conical flange 4, so that as the ring 5 is screwed down toward the ring 3 the conical flange presses the packing 8 firmly down upon the upper or flanged end of the sewer-pipe 2, and also laterally against the outer sides of the discharge pipe 6, rendering the joint perfectly tight, at the same time allowing the closet to be slightly raised or lowered in leveling or adjusting it, and there is no risk of the porcelain being broken or the packing injured by the slight motion resulting from shrinkage or settling in the building.

The packing 8 may be a ring of india-rubber properly shaped, or it may be a winding of fibrous material with adhesive water-proof substance—such as tar—thereon.

The bolts 12, for drawing the ring 5 toward the ring 3, may be of any suitable character. I prefer to use square bevel-edged heads on the bolts, so that the heads may be passed down into holes or mortises and slipped along into the undercut or dovetailed slots extending out from the holes, so that the bolts will be removable without disturbing the ring 3.

I claim as my invention—

1. The combination, with the water-closet discharge-pipe 6 and the sewer-pipe 2, into which the same passes, of the surrounding floor-ring 3, with the flange of the pipe 2 resting on its upper surface, and the upper ring, 5, having the conical flange 4 and the packing between the flange and the pipes, and bolts to draw the upper ring toward the lower ring, substantially as set forth.

2. The combination, with the water-closet discharge-pipe and the sewer-pipe, of a floor-ring around the pipes, having holes and dovetailed slots, in combination with screw-bolts with heads fitting the dovetailed slots, and an upper ring with a conical flange and packing that is clamped by the ring around the pipes, substantially as set forth.

Signed by me this 10th day of March, 1887.

BERNARD HAVANAGH.

Witnesses:
GEO. T. PINCKNEY,
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