

Sept. 4, 1928.

1,682,798

I. C. RICHARDS

TOILET BOWL ATTACHMENT

Filed Nov. 3, 1927

FIG. 1.

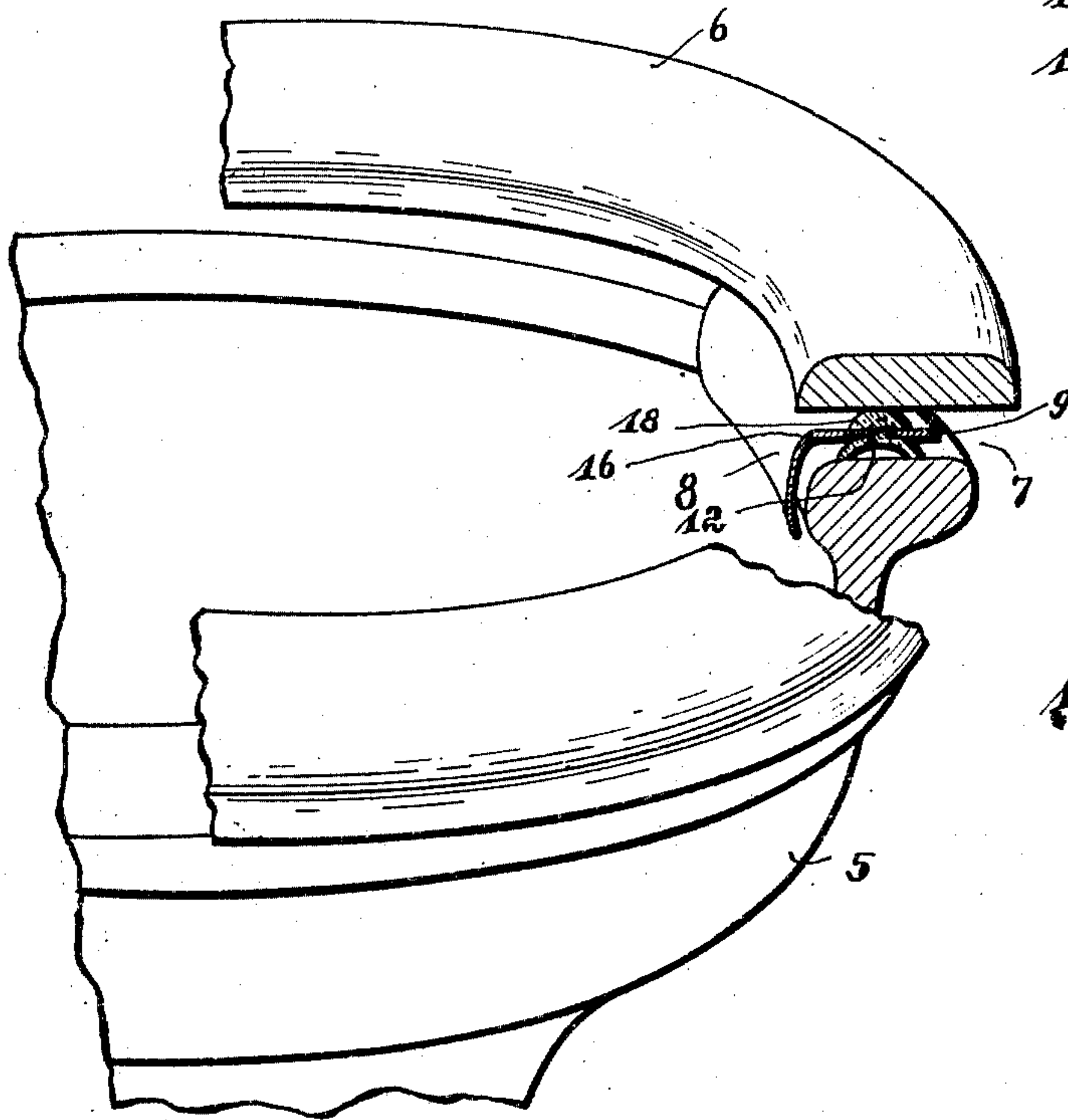


FIG. 4.

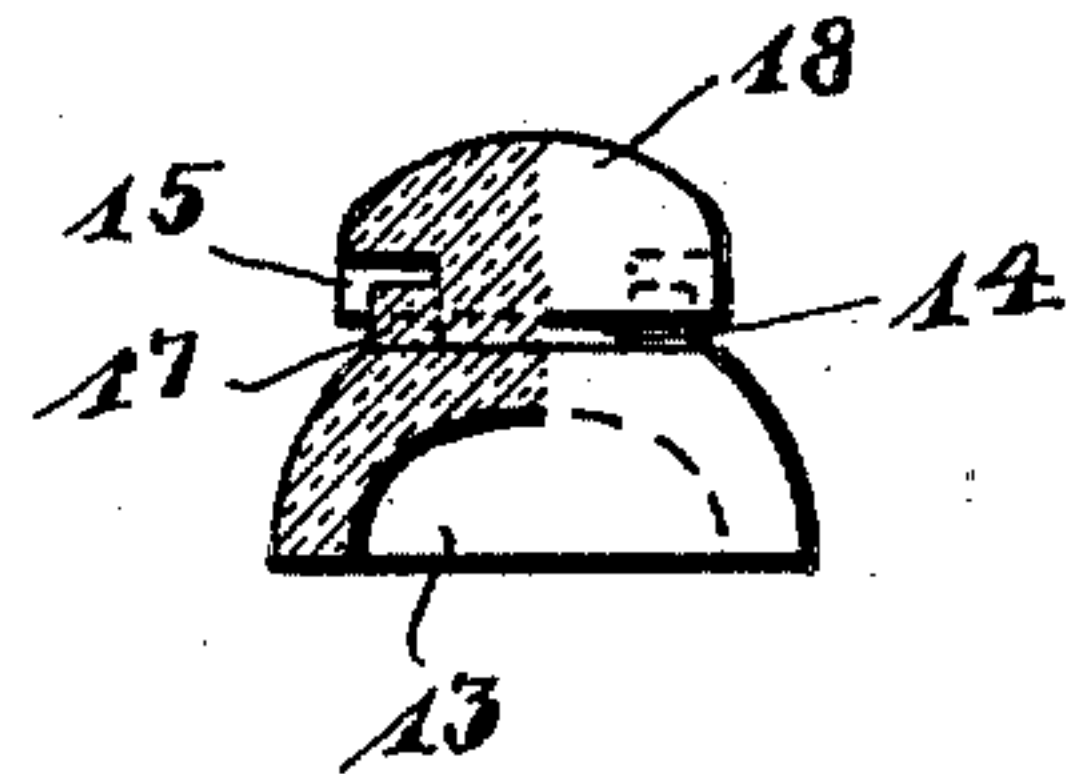


FIG. 3.

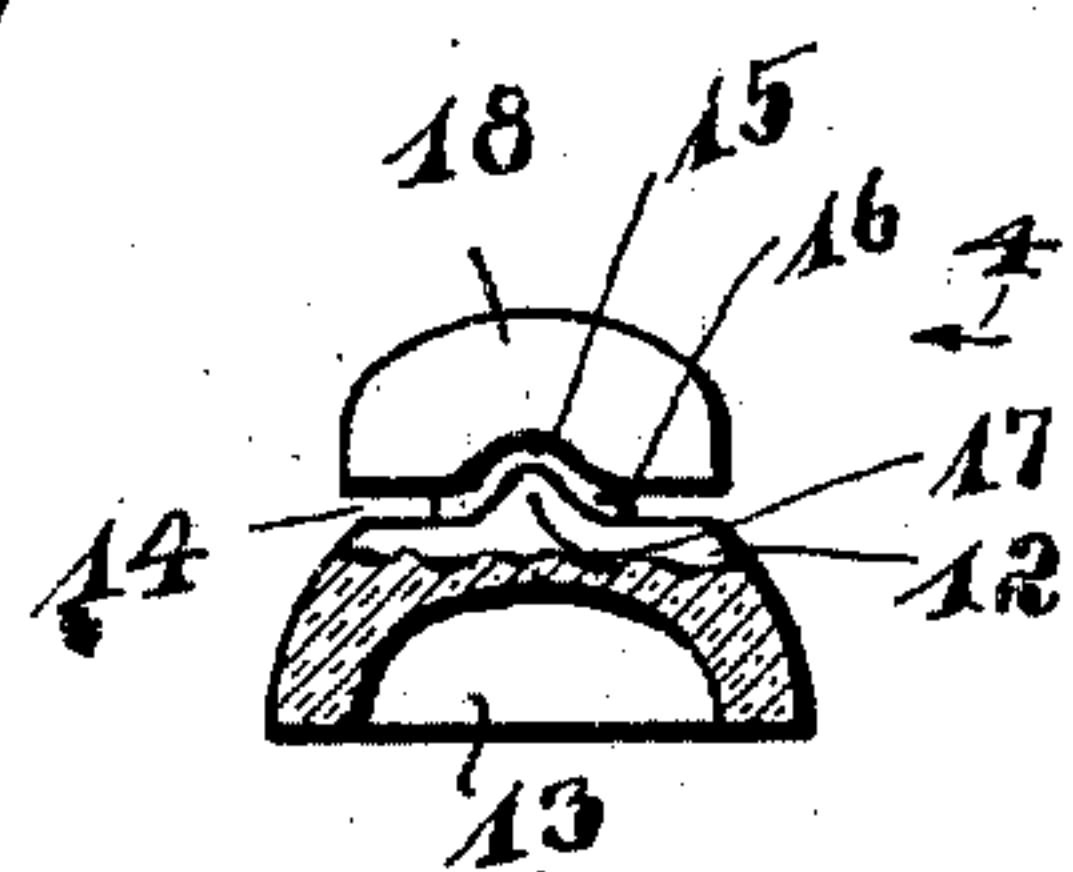
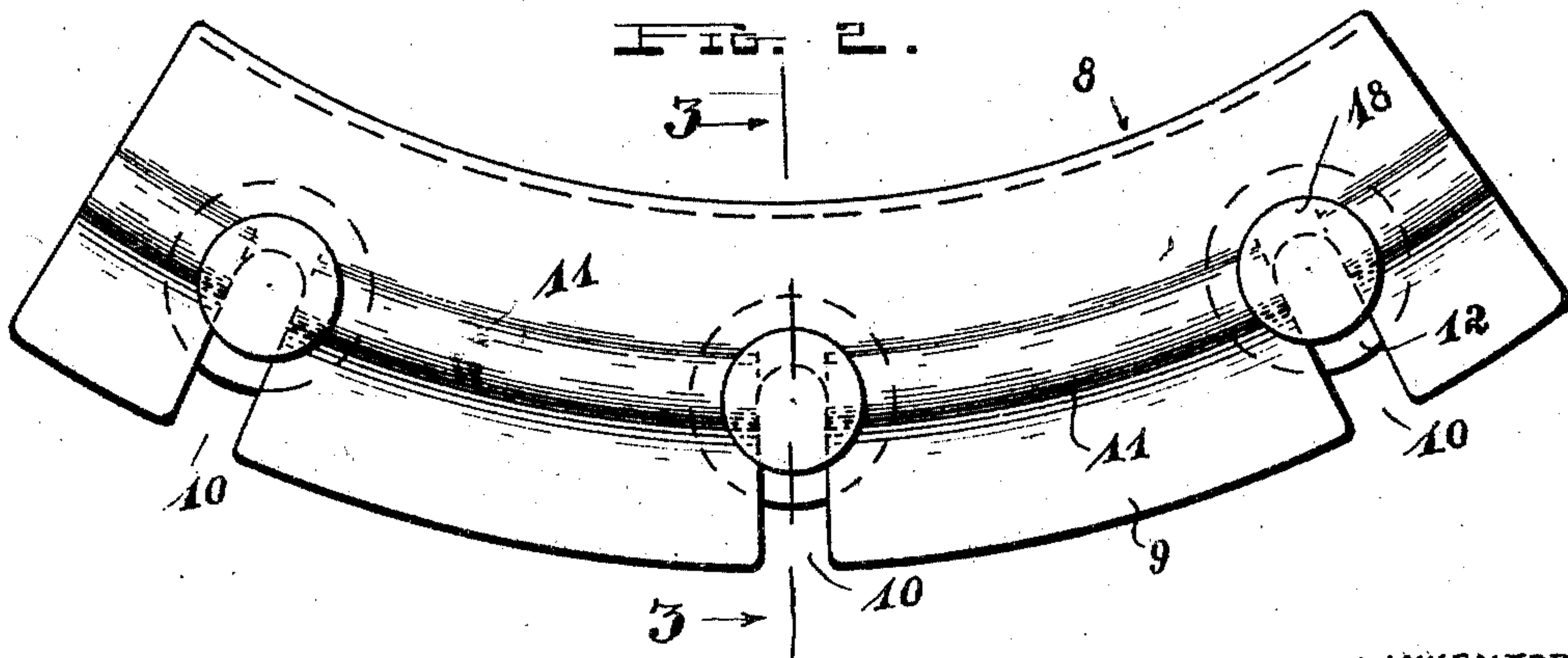


FIG. 2.



INVENTOR:

ITHIEL CHARLES RICHARDS,

By: Otto H. Klinger,
his atty.

UNITED STATES PATENT OFFICE.

ITHIEL CHARLES RICHARDS, OF LOS ANGELES, CALIFORNIA.

TOILET-BOWL ATTACHMENT.

Application filed November 3, 1927. Serial No. 230,838.

This invention relates to attachments inserted between the seat and bowl of a water-closet.

One of the objects of this invention is to prevent water from being squirted through the space between the seat and bowl of a water-closet.

Another object is to provide a simple shield made of sheet material, embodying means by which the shield may be applied to the bowl of a water-closet.

Another object is to provide vacuum cups by which a shield can be applied and held to the bowl.

Other objects will appear from the following description and appended claims as well as from the accompanying drawing, in which—

Fig. 1 is a fragmentary perspective view of a toilet bowl and seat with a simple attachment inserted between the bowl and seat embodying this invention.

Fig. 2 is a top plan view of an attachment-shield with buttons inserted in slots embodying this invention.

Fig. 3 is a vertical section of the vacuum cup on approximately the lines 3—3 of Fig. 2, illustrating the peculiar cut around the middle of the upper button portion in side elevation by which the button and vacuum cup can be held to the shield.

Fig. 4 is an illustration partly in side elevation and the rest in vertical section as seen at right angles to the illustration of Fig. 3 in the direction of about the arrow 4.

As illustrated, there is commonly a space between the toilet bowl 5 and the seat 6, as indicated at 7 in Fig. 1.

In using a toilet it may happen that water passes through this space, especially when small children are placed on toilets.

The device disclosed herewith is principally designed to facilitate its use by its simplicity. The principal portion of this device is made of sheet-material, however, to eliminate any screws or other fastening means vacuum cups made of suitable material, as of rubber, are used in connection with the device.

The main portion above referred to consists principally of a downwardly hanging apron 8 and a practically horizontal flange 9. The apron 8 is formed to extend from the seat downwardly into the bowl, as illustrated in Fig. 1. A flange 9 is disposed in

the space between the top of the bowl and the underside of the seat.

The vacuum cups are designed of a form that they may be removably applied to the flange 9.

The flange is therefore provided with slots 10, three being shown in Fig. 2, however, more or less slots may be provided. The flange 9 is, furthermore, provided with a rib 11 throughout the length of the flange 9 interrupted by the slots 10.

A vacuum cup 12 as used in this device, preferably made of rubber, is hollowed in its underside, as indicated at 13 in Figs. 3 and 4.

A cut 14 provided at about its middle is shaped on opposite sides of the vacuum cup so that the cut may be engaged with the rib 11 of the flange 9. The shaping of this cut to fit on the rib 11 is clearly indicated at 15 in Fig. 3. The whole cut encircling the vacuum cup leaves a round neck portion 16, which may be slipped into the slot 10 of the flange 9.

This vacuum cup is simply applied to the flange by being pushed into the slot 10 with its neck 16. The upwardly projecting portion 17 below the cut portion 15 by the resiliency of the rubber yields enough to slide along the underside of the flange 9 until this portion 17 reaches the hollow of the rib 11, at which moment it may expand to seat itself within the hollow of the rib. While the vacuum cup is pushed into place on the flange 9, the neck 16 at the same time stretches sufficiently to facilitate a pushing of the head-portion 18 over the top edge of the rib 11.

The curved cut portion 15 seats over the top edge of the rib 11, while the upwardly projecting portions 17 on the opposite sides of the neck 16 project into the hollow of the underside of the flange when the vacuum cup is in its proper position on the flange 9.

When such a vacuum cup, one or more, is applied to the flange, the apron is held in proper position on the bowl by merely being pressed to the top edge of the bowl.

Having thus described my invention, I claim:

1. In a toilet bowl attachment, an apron shaped to extend from the underside of a toilet seat to within a bowl of a water-closet, and vacuum cups projecting from the underside of the apron adapted to be applied to the top edge of a water-closet bowl.

2. In a toilet bowl attachment, in combina-

tion with a toilet bowl and seat, an apron extending from the underside of the seat to within the bowl and embodying a flange portion to project between the seat and bowl, said
5 flange portion having slots, a vacuum cup for each of said slots having a hollowed portion projecting from the underside by which the vacuum cup and thereby the apron can be applied to the top edge of the bowl.

10 3. A toilet bowl attachment consisting of a main portion made of sheet material bent to extend from the underside of a seat to within the bowl of a water-closet and embodying a flange to project between the seat and the
15 bowl of a water-closet, the flange being pro-

vided with slots extending from one of its longitudinal edges into the flange and having a rib extending parallel to the longitudinal edge interrupted by the slots, and a vacuum cup for each of said slots provided with a
20 cut at about its middle of a width to correspond to the thickness of the flange leaving a neck portion adapted to slide into the slots, the said cut being shaped on opposite sides
25 of the neck to engage with the rib of said flange.

In testimony that I claim the foregoing as my invention I have signed my name.

ITHIEL CHARLES RICHARDS.