March 29, 1927. 1,622,993

J. D. CAMERON

SUCTION DEVICE FOR WATER CLOSETS

Filed June 21, 1926

Fig: 1.

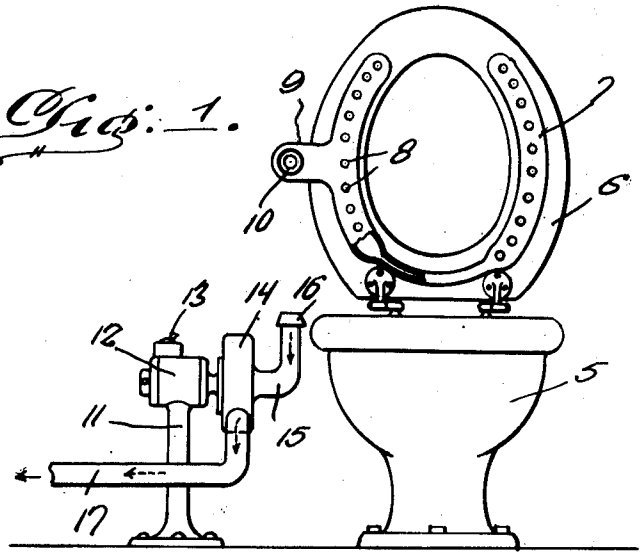
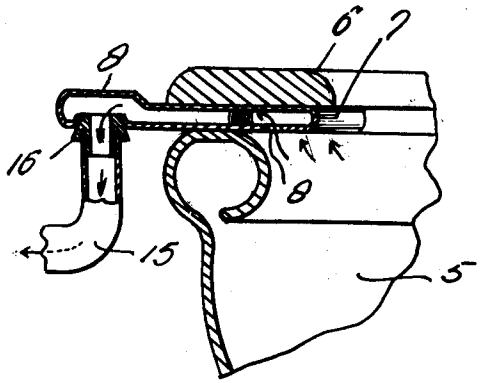



Fig: 2.




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# UNITED STATES PATENT OFFICE.

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## SUCTION DEVICE FOR WATER-CLOSETS.

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This invention relates generally to water closets and has more particular reference to a suction device constructed for association therewith, the invention aiming to provide means for eliminating the unpleasant odors which in the present time escape from water closets during use.

A further object of the invention aims to provide a suction device that is of relatively simple construction including means for disposition at one side of the closet and upon the under side of the usual seats cooperating with each other when the seat is lowered to withdraw the unpleasant odors that usually arise from the closet.

The invention is of such a nature as to permit the suction device to be employed during housecleaning to take the place of the well known vacuum cleaners now generally in use.

Other objects will become apparent as the nature of the invention is better understood, the same comprising the novel form, combination, and arrangement of parts hereinafter more fully described, shown in the accompanying drawing and claimed.

In the drawing wherein like reference characters indicate corresponding parts in both of the views:

Figure 1 is a front elevation of a conventional water closet, the seat thereof being raised, the suction device being shown as actually associated with the closet for the purposes heretofore mentioned, the seat attaching portion of the device being partly disclosed in cross section, and

Figure 2 is an enlarged fragmentary section through the water closet and seat for disclosing more clearly the relationship of the structural unit associated with the seat and the mechanism of the device arranged at the side of the closet.

Now having particular reference to the drawing, 5 represents the bowl of a conventional water closet, and 6 the usual hinged seat thereof. My invention per se constitutes the provision of a relatively horse-shoe shaped pipe 7 being flat in cross section, the same adapted for disposition upon the bottom of the seat 6 directly adjacent the opening thereof. The intermediate portion of this pipe 7 is of reduced area so as not to interfere with the usual hinged connection between the seat and bowl.

The bottom of the pipe is formed intermediate the center with air inlet openings 8 that will position within the bowl 5 when the seat thereof is lowered as clearly disclosed in Figure 2. At one side of this horse shoe shaped pipe 7 is a lateral extension 9 that extends outwardly beyond the seat and bowl as clearly disclosed. The under side of this extension 9 is formed with a tapered opening 10 for a purpose hereinafter more fully described.

Arranged at the side of the bowl 5 adjacent the extension 9 of the horse shoe shaped pipe is a standard 11 upon the upper end of which is mounted an electric motor 12, in normally open circuit with a suitable source of electric energy said circuit to be closed by reason of a switch 13 upon the top of the motor casing.

At the inner side of this motor is a suction fan 14 of conventional construction, the fan blade, not shown, being operatively connected to the armature shaft of said motor. At the inner side of the casing of the fan is an inlet pipe 15 that extends outwardly and then upwardly as disclosed and within the upper open end of which is a tapered nozzle 16 that is adapted to engage within the tapered opening 10 of the horse shoe shaped pipe extension 9 to provide a tight joint between said extension and the inlet pipe 15 of the suction fan.

Said fan further includes an exhaust pipe 17 that is preferably extended outwardly of the building within which the water closet is located.

It will thus be seen that I have provided a highly novel, simple, and efficient form of suction device for water closets that is well adapted for all the purposes heretofore designated. It will further be understood that when desired, the suction fan unit may be employed for purposes similar to those of a vacuum cleaner by the application to the pipe 15 of nozzle carrying pipes and the like.

Even though I have herein shown and described the invention as consisting of certain detail structural elements, it is nevertheless to be understood that departures may be had therefrom without affecting the spirit and scope of the appended claim.

Having thus described the invention, what I claim as new and desire to secure by Letters Patent is:—

In a suction device for water closets, a pipe for arrangement upon the bottom of the closet seat and having inlet openings communicating with the interior of the closet

bowl when lowered and having a lateral extension the under side of which is provided with an opening, a standard for arrangement alongside of the water closet independent thereof, a motor mounted on the upper end of the standard, a suction fan mounted to the inner side of the motor and oppositely connected to the shaft thereof, an inlet pipe extending horizontally from the suction fan and bent upwardly in a vertical extension, and a nozzle on the end of the vertical extension for engagement by the opening of the pipe extension.

In testimony whereof I affix my signature.

JAMES D. CAMERON.