Feb. 16, 1954 W. S. REYNOLDS ET AL 2,669,243

CLEANING DEVICE FOR ARTIFICIAL DENTURES

Filed July 28, 1952

FIG. 1

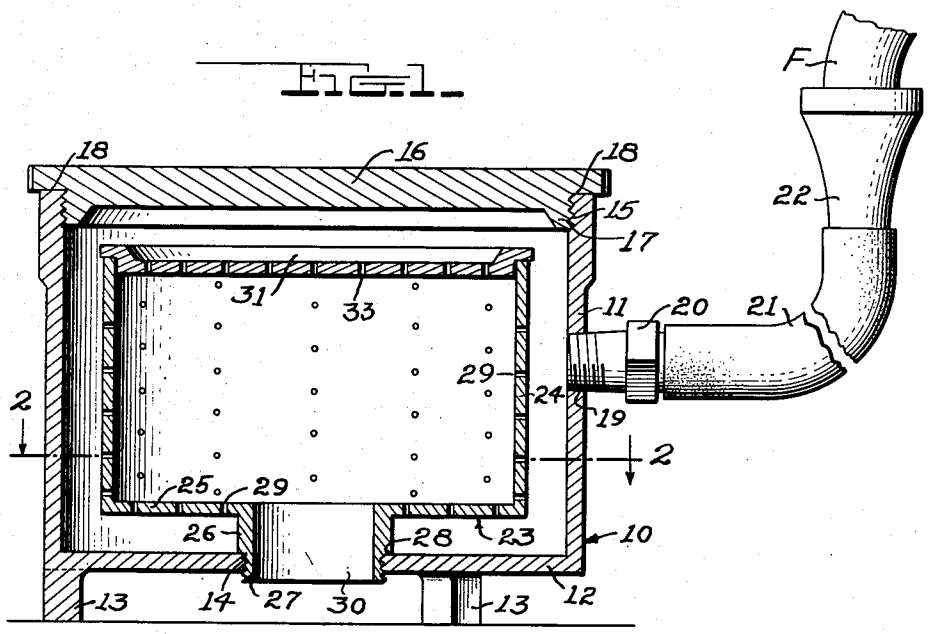
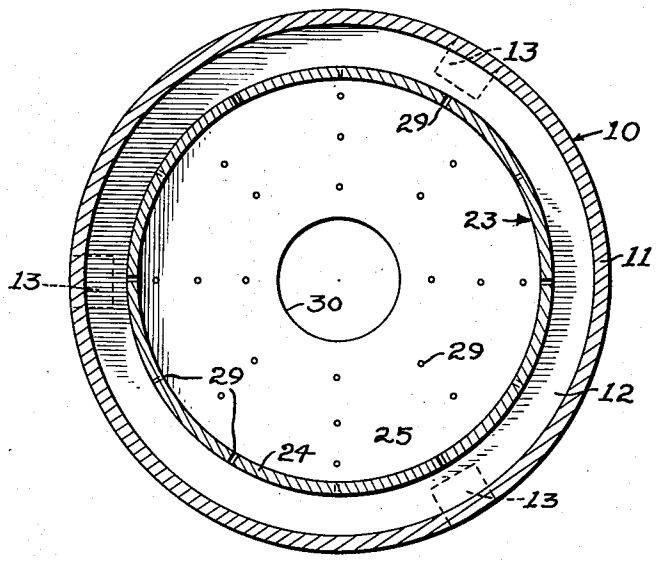


FIG. 2



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CLEANING DEVICE FOR ARTIFICIAL DENTURES

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2 Claims. (Cl. 134—167)

1

This invention relates to cleaning apparatus and more particularly to apparatus for the cleaning of artificial dentures.

It is an object of this invention to provide a cleaning apparatus whereby artificial dentures may be completely and thoroughly cleaned in a sanitary manner without use of the hands.

It is a further object of the invention to provide cleaning means for artificial dentures wherein a fine, strong spray may be applied to said dentures simultaneously from all directions.

Still another object of the present invention is to provide an inexpensive, simple cleaning apparatus which uses the pressure in any building water supply system for effective cleaning action.

A further object of the invention is to provide a compact portable unit which may be carried in the ordinary traveller's luggage and attached to any standard faucet.

A further object of the invention is to provide a cleaning unit which may be easily disassembled for cleaning and sterilization of the unit.

A final object of the invention is to provide a cleansing unit for artificial dentures wherein the cleaning fluid and all waste matter will automatically flow from the unit during operation and into the waste pipe of the building plumbing system.

With the above and other objects in view, as will be presently apparent, the invention consists in general of certain novel details of construction and combinations of parts hereinafter fully described, illustrated in the accompanying drawings and particularly claimed.

In the accompanying drawings, like characters of reference indicate like parts in the several views, and

Figure 1 shows a cross-sectional view of the cleaning chamber, with the fluid supply conduit being shown in side elevation; and

Figure 2 is a cross-sectional view taken on the line 2—2 of Figure 1.

In the drawings, the reference numeral 10 indicates the outer sealed chamber of the cleaning apparatus. The outer chamber is preferably circular in cross-section and is formed with the cylindrical side wall 11 and the bottom wall 12. Integrally formed with the side and bottom walls are the feet 13 by means of which the chamber is supported and the exhaust opening, later described, is spaced from the sink, lavatory or the like in which the device is used.

In the center of the bottom wall 12 is formed a threaded aperture 14 for a purpose to be later described.

2

The upper end of the cylindrical wall 11 is internally threaded as at 15 to receive a cover 16. The cover has a reduced portion 17 which defines an annular shoulder 18. The reduced portion 17 is threaded and the shoulder 18 contacts the end of the cylindrical side wall 11 to provide a fluid tight seal. The ports may be accurately formed or provided with a gasket to insure a fluid tight fit.

In the side wall 11 is provided a threaded aperture 19 to receive the standard threaded nipple 20. A rubber or plastic hose 21 is placed over the nipple and at the outer end of said hose is placed an elastic coupling 22 of standard make designed to be slipped over the end of any faucet F. All fittings are such that the outer sealed chamber and hose will withstand and hold the pressure of the water system.

Within the outer sealed chamber 10 is placed an inner chamber 23. The chamber has a cylindrical side wall 24 and a bottom wall 25. Depending from said bottom wall is an annular skirt 26. This skirt has a reduced threaded neck 27 which defines a shoulder 28. The threaded neck 27 engages the threaded aperture 14 in fluid tight fit, and the inner chamber 23 is supported in spaced relation to the outer sealed chamber 10. The side wall 24 and bottom wall 25 have a plurality of very small perforations 29. The opening 30 defined by the skirt 26 serves as an exhaust opening for the inner chamber.

The inner chamber is provided with a cover 31 which is preferably cup shaped and provided with a sealing shoulder 32. If desired this shoulder may also be provided with a gasket. In the cover 31 are a plurality of very small perforations 33.

In the operation of the device, the dentures are placed in the inner chamber 23 and the inner cover 31 is put in place. A small quantity of detergent may then be placed in the outer chamber and the cover 16 tightly closed. The coupling 22 is then connected to the faucet F and the valve opened to permit substantial pressure to build up in the outer chamber 10. Water and detergent will then be forced under pressure through the small holes 29 and 33 in a fine but effective spray which strikes the dentures from all directions. The cover 31 will be forced into tight relation by the fluid pressure. Spent cleaning fluid and waste substances will exhaust through the opening 30 into the sink or lavatory. Continued movement of the fluid will exhaust the detergent and rinse the dentures thoroughly.

While there is herein shown and described the

preferred embodiment of the invention, it is nevertheless to be understood that minor changes may be made therein without departing from the spirit and scope of the invention as claimed.

What is claimed is:

1. In a cleaning device for artificial dentures, an outer presure chamber open at one end, a removable cover adapted to seal said open end, means to supply fluid under pressure to said chamber, a denture containing chamber supported within said outer chamber and in spaced relation thereto, said inner chamber being open at one end and having a sealing cover therefor, and an exhaust conduit opening exteriorly of said outer pressure chamber, the cover, bottom and side walls defining said inner chamber having a plurality of fine perforations therethrough whereby a strong, fine spray may be directed on the dentures from all directions.

2. In a cleaning device for artificial dentures, an outer pressure chamber having an aperture in the bottom wall thereof, means to supply fluid under pressure to said chamber, and a perforated denture containing chamber positioned within said outer chamber, said denture chamber having an opening in the bottom wall thereof and an annular depending skirt surrounding said opening and projecting through the aperture in the bottom wall of said outer chamber, said depending skirt thus serving as an exhaust conduit for said inner chamber and as supporting means to maintain said inner chamber in spaced relation to said outer chamber.

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