

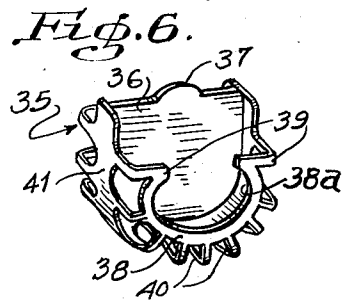
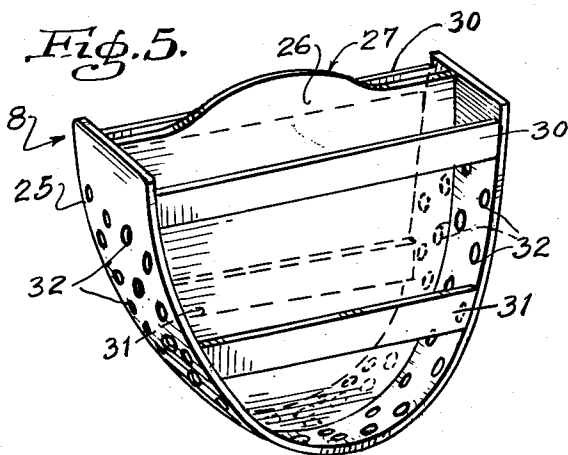
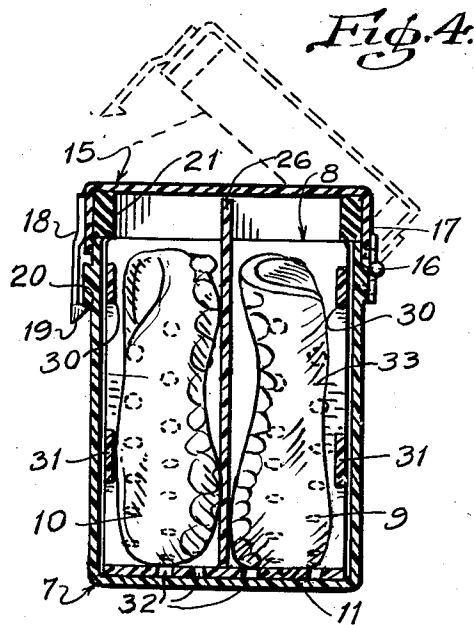
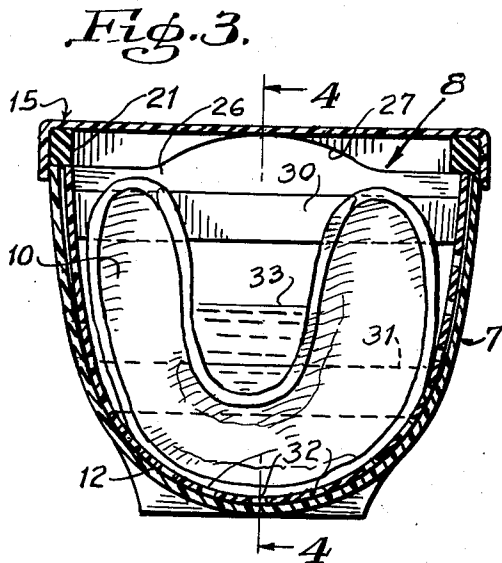
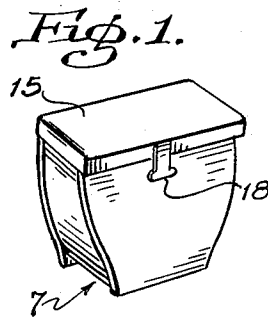
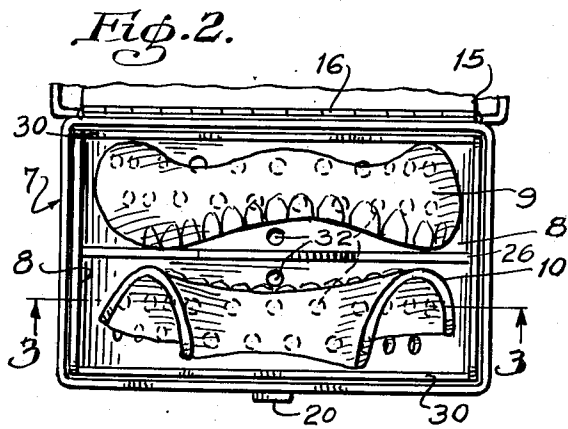
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2,617,519

RECEPTACLE FOR DENTAL PLATES

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# UNITED STATES PATENT OFFICE

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## RECEPTACLE FOR DENTAL PLATES

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7 Claims. (Cl. 206—1)

1

This invention relates to a denture holding and handling device.

More specifically speaking this invention pertains to a sanitary device for supporting a pair of dentures, which has been removed from the mouth, in such a manner that said dentures can be handled and cleaned without coming into contact with the fingers, and can also be maintained immersed in a sterilizing liquid while not in use, the device being provided with a handle means usable to insert the supported dentures into and remove them from a sterilizing liquid and also usable to move them about as desired.

It is not altogether new, in the art to which this invention pertains, to provide means for housing dentures and for supporting them, when desired, in a sterilizing liquid or in a position for being cleaned by a brush; but a search of the prior art discloses that there remains ample room for improving upon such devices so as to render them better adapted for the required uses.

Accordingly, among the objects of the present invention are: to provide an improved two-part container for a set of dentures, said container having partition means between the two compartments thereof to keep out of contact with each other the upper and lower dental plates of a dental set, thus safeguarding against either of them becoming marred or "chipped" by contact with the other; to provide, in a two-part denture container a partition member which affords a convenient handle means for the operator to grasp when handling the device; and to provide the device with an improved skeletal or spacedly apertured side wall structure which will afford a more free access to the contained set of dentures of the tooth brush for the purpose of cleaning them.

Other objects, advantages and features of invention will hereinafter appear.

Referring to the accompanying drawing which illustrates preferred embodiments of the invention, which has been reduced to practice,

Fig. 1 is a perspective outside view showing the device on a smaller scale than in the remaining views.

Fig. 2 is a plan view of the device with the cover fragmentarily shown in the open position, a set of dentures being contained within the receptacle provided for them.

Fig. 3 is a vertical section on line 3—3 of Fig. 2, the cover being shown in the closed position.

Fig. 4 is a vertical section on line 4—4 of Fig. 3, the cover being shown in full lines in the closed position and in broken lines partly open.

2

Fig. 5 is a perspective view of the inner unit of the device.

Fig. 6 is a perspective view on a reduced scale of a modification of the inner unit of the device.

Referring in detail to the drawing, the device comprises two main units, namely, an outer, liquid tight container 7 and a denture holder 8 which fits removably within said container 7.

Said container is substantially rectangular as viewed in plan and is desirably about twice as long as broad so as to be properly dimensioned to have removably fitted into it said denture holder 8, the latter being so proportioned as to have fitted into it side by side the set of dentures 9 and 10 shown in Figs. 2 and 4. The width of the bottom wall 11 of said container is shown as being substantially equal to that of the mouth portion thereof, but the bottom portion of the container is shown incurved at 12 at each end so that the aforesaid denture holder 8, which is of an inverted dome shape as viewed from the side, will fit more closely within said container.

A cover 15 is hinged to the otherwise open top of the container by means of a hinge 16, said hinge being connected to one side portion of a dependent marginal flange 17 which extends around said cover. The opposite side portion of said dependent flange carries a catch 18 having a hook 19 to engage under a shoulder 20, thus releasably to latch the cover in its closed position. Said flange 17 is shown lined on the inside by a compressible gasket 21, to make a liquid tight seal between the container and its cover.

The denture holder 8 comprises a U-shaped strap 25 of form retaining material, desirably a plastic, the curvature of the U being in a plane which extends at substantially a right angle to the breadth of the strap. At the time of the molding of said U-shaped strap a vertical partition 26 is secured within the U-shaped strap 25 in such a position that said partition spans the space between the midwidth portions of the arms of the U. Said partition is contoured to provide it with an arcuate rise 27 in the middle part of its upper edge, thus providing a convenient manually grippable handle means for the denture holder.

Each side edge portion of said U-shaped strap has connected to it an edge portion of a skeletal wall structure shown in Figs. 3, 4 and 5 as consisting of an upper panel 30 and a lower panel 31, said panels extending horizontally, there being between and below them ample space to brush the contained dentures. The two, spaced apart wall structures thus provided co-operate with said

3

U-shaped strap and the central partition 26 to form a container having twin, open-topped compartments contoured and dimensioned to have a set of dentures fitted into them, so that the upper plate of the denture set is contained in one of said compartments, and the lower plate in the other.

A plurality of spaced openings 32 are provided through the U-shaped strap 25 of the holder more freely to admit the sterilizing liquid 33 to the immersed dentures, to admit the bristles of a tooth-brush while being used to clean the contained dentures, as well as to aid in allowing said liquid to drain out of the holder when the latter is removed from said liquid.

In Fig. 6 is shown a modified inner unit or denture handling part 35 of the device, wherein the partition 36 and its handle portion 37 are shaped approximately the same as in the other views, but skeletal side wall structures are provided each consisting of an approximately semi-circular, narrow panel 38 carried by and between right-angular upper panels 39 in co-operation with a semi-circularly arranged series of lower right-angular panels 40 all of said panels 40 being widely spaced apart, as shown, and all of them being shown as integral with an intact U-shaped plate portion 41 which corresponds in position and function to the previously described U-shaped member 25.

The uppermost aforesaid pair of panels 39, of the aforesaid right-angular panels is located considerably below the upper edge of the partition plate 36, so that the upper part of the inserted denture is exposed for brushing, and the remainder of the surface of the outer side of said denture is nearly all of it exposed to the brush, owing to the fact that the arcuate panel 38 is narrow and borders a wide semi-circular opening 38a, while the space outside of said panel 38 is but slightly obstructed by the panels 40.

The only direct manual handling of the dentures that is necessary incident to brushing them is lifting each denture out of the holder after one side of the denture has been brushed and then reinserting the denture in reversed position so that its opposite side can be brushed. And even this handling may be unnecessary, for after taking the holder and contained dentures out of a sterilizing liquid the holder may be held under a faucet so that a stream of water therefrom may be used to cleanse all the surface portions of the dentures.

It will be seen that, in both embodiments of the invention the side wall structures of the unit or denture holder 8 are of a skeletal character, and it is evident that these wall structures may vary greatly in design without departing from the spirit of the claimed invention.

I claim:

1. In a device of the kind described, a U-shaped strap of form retaining material, the curvature of the U being in a plane which extends at substantially a right angle to the breadth of said strap, a vertical partition spanning the space between the midwidth portions of the arms of

4

said U, and a side wall structure carried by each side edge portion of said U-shaped strap, said wall structures co-operating with said partition and strap to form a two-part, detachable open-topped holder, one part of which is contoured to have removably fitted into it the upper and the other part the lower plate of a set of dentures, said U-shaped strap being provided with spaced openings to admit the bristles of a tooth-brush while being used to clean the contained dentures.

2. The subject matter of claim 1 and said side wall structures consisting of a plurality of widely spaced apart panels, to provide ample space to brush the contained dentures.

3. The subject matter of claim 1 and each said side wall structure consisting of a plurality of horizontal vertically spaced apart panels, to provide ample space to brush the contained dentures.

4. The subject matter of claim 1 and each of said side wall structures consisting of an arcuate outer panel and a plurality of substantially right-angular panels which are widely spaced apart, said rightangular panels bridging the space between said outer panel and said U-shaped strap.

5. In a device of the kind described, a detachable U-shaped strap of form retaining material, the curvature of the U being in a plane extending at substantially a right angle to the breadth of said strap, a side wall structure carried by each side edge portion of said U-shaped strap, the space between said wall structures being dimensioned to contain a pair of vertically disposed dentures having their curved end portions fitted into the curvature of said U-shaped strap, and a denture separating means spanning the space between the midwidth portions of the side portions or arms of said U-shaped strap to keep the aforesaid dentures from contacting with each other.

6. The subject matter of claim 5 and at least one of said side wall structures consisting of narrow panels widely spaced apart, to provide ample space to brush the contained dentures.

7. The subject matter of claim 5 and at least one of said side wall structures including an arcuate panel within which is a spacious opening and a set of angular panels circularly spaced apart uniting said arcuate panel to said U-shaped strap.

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