Aug. 10, 1926. 1,595,324

R. H. VAN SANT

MASSAGE INSTRUMENT

Filed May 1, 1922

Fig. 1

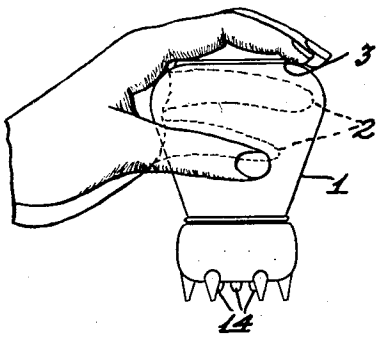


Fig. 4

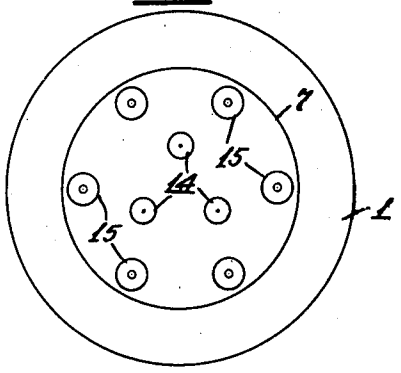


Fig. 2

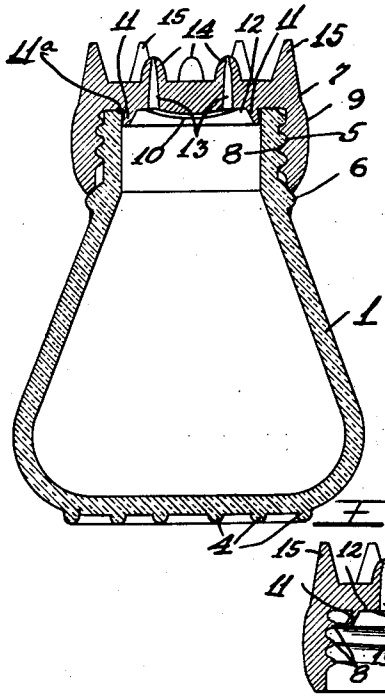


Fig. 3

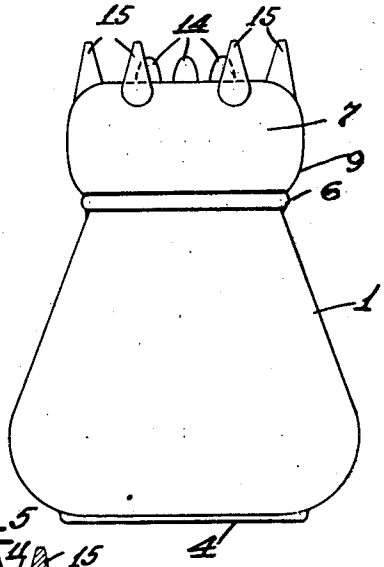
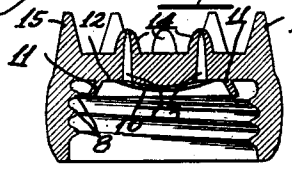


Fig. 5



Witnesses

H. G. Parks

Inventor

Robert H. Van Sant

By Atty.

Patented Aug. 10, 1926. 1,595,324

UNITED STATES PATENT OFFICE.

ROBERT H. VAN SANT, OF CHICAGO, ILLINOIS, ASSIGNOR, BY MESNE AND DIRECT ASSIGNMENTS, TO VAN ESS LABORATORIES, INC., OF CHICAGO, ILLINOIS, A CORPORATION OF DELAWARE.

MASSAGE INSTRUMENT.

Application filed May 1, 1922. Serial No. 557,539.

This invention relates to a massage instrument of the sort described in my application for patent Serial No. 419,161, filed October 25th, 1920.

It is the primary object of the present invention to provide a device of the character described, wherein there are embodied perforate and imperforate projections, said perforate projections being disposed within said imperforate projections and being shorter than said imperforate projections.

It is a further object to provide a device so shaped that when the same is held down for use the operator's fingers will have a firm grip thereon.

These objects I accomplish in the manner and by the means hereinafter described and claimed, reference being had to the accompanying drawing, in which:

Figure 1 is a view showing the way of handling the massage instrument.

Figure 2 is a vertical section through the instrument.

Figure 3 is a side elevation.

Figure 4 is a top plan view.

Figure 5 is a section through the closure.

As shown on the drawings:

The instrument consists of a pear-shaped bottle 1 of convenient size to be readily grasped by the hand as shown in Figure 1. The preferable way of manipulating the bottle in use is to grasp the neck of the bottle between the thumb and two fingers as shown at 2 and to rest the other two fingers on the bottom of the bottle as shown at 3. In order to make sure that the fingers have a good grip on the bottom of the bottle, it is supplied with a number of ridges 4 preferably circular.

The mouth of the bottle is smaller than the bottom and the sides converge toward the mouth. At the mouth, the bottle is cylindrical, the outside of the cylindrical part being provided with screw threads 5. Below the screw threads is a flange 6, the upper surface of which is beveled toward the cylindrical part of the bottle and the lower surface of which meets the conical surface of the bottle at a gentle angle.

The closure for the bottle is of rubber. The hardness of this rubber must be rightly chosen. It should possess sufficient stiffness to be screwed onto the screw threads 3 and yet be sufficiently flexible to be pushed on over these threads. The closure consists of a cap 7 having a cover and a depending skirt, the interior of which has screw threads 8 to cooperate with the screw threads 5. As just pointer out, the threads 8 can be forced past the threads 5 to bring the closure into position on the bottle but when the closure is given a twisting movement, there is sufficient stiffness in the threads 8 to enable them to coact with the threads 5 to bring the closure into tight contact. If, however, the twisting is carried too far, the threads 8 will yield and slip over the threads 5 and the threads 8 are flexible enough to thus slip without injury. The lower edge of the skirt 9 contacts with the beveled flange 6 to make a firm closure between the cap and the bottle. The lower edge of the skirt is shown as flat but if desired, it may be beveled to fit closely against the bevel of the flange 6. In the form illustrated, however, the fit is sufficiently close to prevent hair being caught between the rubber and the glass.

The top of the cap is flat as shown in Figures 2 and 5, but the inner side is convex as shown at 10. This convexity helps to prevent the cap from bulging outward under the pressure of the contents of the bottle when it is turned upside-down for use. A flange 11 projects from the inner face of the cover and is intended to contact with the inner face of the neck of the bottle close to the mouth. As shown in Figure 5, this flange flares outwardly so that, when the cover is forced into place as shown in Figure 2, the free edge of it will press outwardly against the bottle. This insures a tight joint between the flange and the bottle so that none of the contents of the bottle are likely to get to the edge of the mouth and so work in between the threads 5 and 8. If the contents are of a kind that tend to swell rubber, as many of the oily substances used in massage do, the swelling of the convex part 10 and of the flange 11 will tend to press the flange all the more closely against the glass and so make a still better protection against leakage. It should be noted also that this outward flare provides an air pocket 11^a at the point between the outer face of the inclined flange and the inner face of the upper end of the bottle. I have found that this pocket takes up all the increase in the lateral expansion of the top

of the cap and at the same time the confined air prevents any possibility of the liquid working up around the top of the bottle and thus leaking out.

The flat part 12 of the under surface of the cover between the flange 11 and the convex part 10 affords a space which accommodates most of the inner openings of the ducts 13 although these openings encroach to a slight extent upon the convex part 10. The ducts 13 extend through projections 14 located in the middle part of the outer surface of the cover. These ducts taper outward and at the ends of the projections become very small perforations. The liquid contents of the bottle cannot flow freely through these ducts because of the capillary effect at the small ends. The lotion or other liquid can be worked through the ducts by manipulation of the device but will not leak out of them even if the bottle be held inverted for considerable periods.

The outer part of the top of the cap is provided with imperforate projections 15. The projections 14 do not stand up as high as the projections 15, thus affording substantially concave points of contact adapted to more or less conform to the contour of the head. However, the difference in length of the projections 15 and the projections 14 are particularly important for the further reason that it has been found that in some cases the action of the liquid used in the container tends to expand the head and the hollow projections 14 which results in bringing the ends of the projections 14 out to a point more nearly in the same plane with the ends of the projections 15, and I have so designed the head that even where the head and projections 14 are expanded to their maximum, the ends of the projections 14 will not project beyond the plane of the ends of the projections 15. Whenever the restricted mouths of the ducts 13 are brought into contact either with the skin or the hair, the oily contents of the bottle can be worked out through the ducts because said contact overcomes the effect of capillary action.

The instrument is used by grasping the bottle in the way illustrated in Figure 1 and rubbing against the scalp or other part of the subject needing massage. The projections 15 will serve to give the needed friction. At the same time, whatever material is to be applied to the skin comes out of the bottle through the ducts 13 and is rubbed into the subject by the massaging.

In the form of device presented in the present application, hair from the scalp is less likely to be caught between the edge of the cap and the bottle because of the tight joint afforded between the skirt 9 and the flange 6. Also, the greater resistance to bulging afforded by the shape of the cover, by keeping the mouths of the ducts 14 away from the scalp most of the time, makes them less likely to become covered or choked with dandruff or other dirt.

I am aware that numerous details of construction may be varied through a wide range without departing from the principles of this invention, and I therefore do not purpose limiting the patent granted, otherwise than necessitated by the prior art.

I claim as my invention:

1. A massage instrument for use with a liquid tonic, comprising an open-mouthed bottle, and a massage device secured to said mouth, said massage device embodying an outer series of flexible imperforate projections and an inner series of flexible perforate projections communicating with the interior of said bottle, said outer series projecting beyond said inner series, said outer series acting to massage, while said inner series act to discharge the liquid tonic only when brought into contact with and rubbed against the surface to be treated.

2. A massage instrument for use with a liquid tonic, comprising an open-mouthed substantially pear-shaped bottle, and a massage device secured to said mouth, said massage device embodying an outer series of flexible imperforate projections and an inner series of flexible perforate projections having restricted outlets and communicating with the interior of said bottle, said outer series projecting beyond said inner series, said outer series acting to massage, while said inner series act to discharge the liquid tonic only when brought into contact with and rubbed against the surface to be treated.

In testimony whereof I have hereunto subscribed my name.

ROBERT H. VAN SANT.