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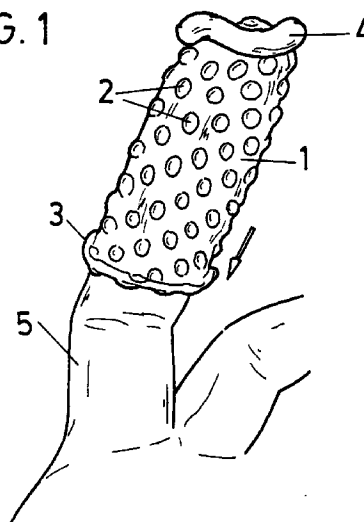
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**(54) ANATOMICAL THIMBLE FOR BUCCAL CLEANING**

(57) The present invention relates to an anatomical thimble configured like a sheath made of latex, plastic or other material, used as a means for covering one finger in order to clean the mouth, and susceptible of being used for other hygienic applications such as the cleaning of the ears and the like. It is comprised of said enveloping sheath (1) closed at one of its extremities and open at the other extremity wherein is provided a ring (3) limiting and surrounding the sheath when fitting the latter to the finger, the sheath having along its body a series of projecting contact and friction means which consist of flexible protuberances (2) or a series of filaments of bristles (10).

**FIG. 1**



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## Description

### OBJECT OF THE INVENTION

The present invention relates to an anatomic thimble in the form of a sheath made of latex, plastics or some other material used mainly as a finger cover for mouth-cleaning purposes and which may also be used for other sanitary applications such as ear-cleaning and similar functions.

The surface of the thimble may be provided with a series of resilient semispherical protrusions or a series of filaments or bristles - to which toothpaste has been initially added, or is added at some later stage - which guarantee accessibility to the overall tooth surface.

The object of the invention is to provide an easily transportable cleaning means that takes up little space when rolled up and which may be readily unrolled and coupled onto a finger without resorting to any form of supporting handle.

### BACKGROUND OF THE INVENTION

Conventionally designed toothbrushes used for mouth-cleaning purposes have an elongated hand-held body ending in a series of filaments or bristles used for the brushing of the teeth with the aid of toothpaste deposited thereon.

Certain designs provide a toothpaste container in the handle of the toothbrush, the toothpaste being supplied over the group of bristles with the aid of a dispenser and thus providing an added convenience in that a toothpaste tube is not required at the time of the cleaning of the teeth, particularly when the user is away from home.

A person dining at a restaurant and wishing to clean his/her teeth after eating seldom has a toothbrush or toothpaste tube on hand mainly because they are awkward to transport because of their volume.

The development of an easily transportable, small volume mouth-cleaning device is therefore feasible, as described hereunder.

### DESCRIPTION OF THE INVENTION

In order to solve the above problems, a mouth-cleaning means is presented in the form of an anatomic thimble that fits in an enveloping fashion over a finger, comprising a sheath made of latex, plastics or some other material initially rolled up and subsequently extending over any of the fingers used as a means of accessing the section of the mouth to be cleaned.

The anatomic thimble incorporates a tooth contact and rubbing means which may consist of protrusions distributed throughout the body of the thimble onto which the toothpaste or other mouth-cleaning product is added, said protrusions being resilient and therefore adaptable to the shape of the teeth over which the finger

is applied.

Other means used for contacting and rubbing the teeth may comprise a series of filaments or bristles extending perpendicular to the thimble.

In any case, the thimble or sheath is initially rolled-up, with only the end protrusions - or filaments, depending on the selected rubbing means - extending therefrom, the sheath unrolling downwards, coupled onto the finger tip and covering it to prevent contact with the saliva or the teeth, applicable through the protrusions or filaments on which the toothpaste, or some other cleaning product, is deposited.

The thimble incorporating the protrusions can also be used for the internal and external cleaning of the ear pavilions, for the mouth-cleaning of babies who have not yet grown their teeth and for further applications of a sanitary nature.

Accessibility of the thimble to extreme locations in the denture is achieved through the finger fitted with the sheath, which acts in the manner of a conventional toothbrush holder.

The cleaning paste, gel or liquid may be contained in a receptacle or container associated to the end of the sheath, so that upon pressure being applied it ruptures and distributes the product over the end protrusions or bristles, the thimble being thus ready for use.

In a further embodiment, the toothpaste or gel, etc., may be contained at the tip of the rolled-up thimble or sheath, the overall assembly being placed inside a sealed plastic container which preserves the sanitary product and allows for ease of transport.

The sealed plastic container may adopt multiple forms, such as a rigid shape adapted to the form of the sheath to prevent the cleaning product from coming in contact with the seal walls, or it may be divided into two sectors, one for the sheath and the other for the cleaning product, the latter sector being fitted with a small hole for allowing the product to pass to the thimble protrusions or filaments, among other possible arrangements.

In any event, the container housing the anatomic thimble may be supplied through dispensing machines installed in public facilities, ensuring the user of the availability of a mouth-cleaning means.

### DESCRIPTION OF THE DRAWINGS

In order to complement the description and help provide a better understanding of the characteristics of the invention, a set of drawings is attached to this specification and forms an integral part thereof, wherein the following is represented in an illustrative and non-limiting character:

Figure 1 shows the anatomic mouth-cleaning thimble with toothpaste on the tip, in a partially unrolled condition over a finger.

Figure 2 shows the anatomic thimble applied over

the teeth through its end protrusions.

Figure 3 shows the anatomic thimble with a partially cutout end container for supplying the cleaning product.

Figure 4 shows a view of the thimble in its rolled-up condition and inserted in a plastic container, ready for dispensing.

Figure 5 shows a view of the anatomic thimble inserted in a sector of the plastic container, the other sector of said container holding the cleaning product.

Figure 6 shows a view of the extended anatomic thimble, fitted with filaments or bristles which extend from its tip.

#### PREFERRED EMBODIMENT OF THE INVENTION

In the light of the above figures, a form of embodiment of the anatomic mouth-cleaning thimble of the invention is described, the thimble being essentially formed by a body (1) made of latex, plastics or similar material, closed at one end and open at the other, fitted with a ring (3) which limits and surrounds it and wherefrom unrolls a sheath upon being coupled onto the finger, a series of prominent contact and rubbing means being distributed throughout the body.

Said prominent contact and rubbing means may consist of a series of resilient protrusions (2) of a semispherical or some other geometrical nature, over which lies the toothpaste (4) for the cleaning of the teeth (6).

The prominent contact and rubbing means may likewise consist of a series of filaments or bristles (10) extending perpendicular to the body of the sheath (1).

The thimble may be fitted on its closed end with a container (9) for the toothpaste, gel or some other cleaning product which extends over the prominent contact and rubbing means upon rupturing the container (9).

The thimble may be housed inside a sealed plastic container (7) having various possible shapes which allow for easy transport in a minimum space, and may be dispensed through vending machines readily accessible to the user at specific locations.

The toothpaste (4) or other cleaning product may likewise be contained in a sector of the plastic container (7), from where it is poured onto the thimble in the other sector of the container via a pass-through hole (8) when ready for use.

This description need not be more extensive for an expert on the subject to grasp the scope of the invention and the advantages deriving therefrom.

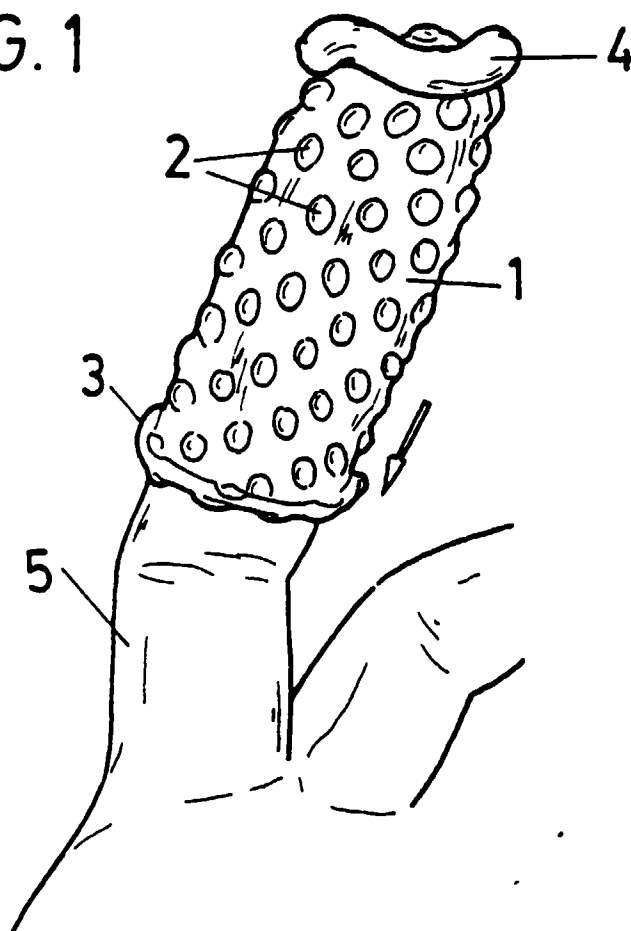
The materials, shape, size and arrangement of the elements may be varied provided the essence of the invention is not altered.

The terms used in describing this specification must at all times be taken in an ample, non-limiting sense.

#### Claims

1. Anatomic mouth-cleaning thimble, essentially characteristic in that it comprises a body (1) made of latex, plastics or similar material, closed at one end and open at the other, to which a ring (3) is fitted that limits and surrounds it and from where the sheath unrolls upon being coupled onto the finger, a series of prominent contact and rubbing means being distributed throughout the body.
2. Anatomic mouth-cleaning thimble according to the preceding claim, characteristic in that it may comprise a container (9) at the closed end thereof for the cleaning product which extends over the prominent contact and rubbing means upon rupturing the container (9).
3. Anatomic mouth-cleaning thimble according to claims 1 and 2, characteristic in that the prominent contact and rubbing means may consist of a series of resilient protrusions (2) of a semispherical or some other geometrical nature over which the cleaning product is placed.
4. Anatomic mouth-cleaning thimble according to claims 1 and 2, characteristic in that the prominent contact and rubbing means for the cleaning product may consist in a series of filaments or bristles (10) extending perpendicular to the body of the sheath (1).
5. Anatomic mouth-cleaning thimble according to the preceding claims, characteristic in that the cleaning product used may be gel, toothpaste or some other sanitary liquid applicable to ear cleaning or other applications.
6. Anatomic mouth-cleaning thimble according to claims 1, 3, 4 and 5, characteristic in that the cleaning product used may be contained in a sector of a plastic container (7) from where it is poured over the thimble in the other sector of the container via a pass-through hole (8) when ready for use.

FIG. 1



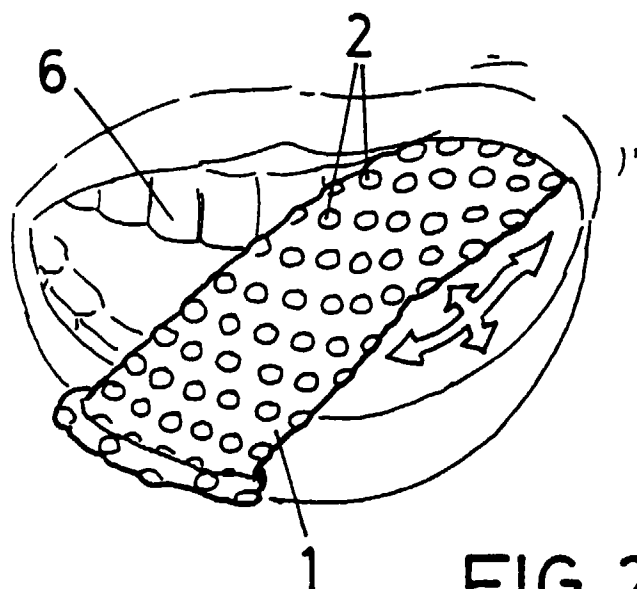


FIG. 2

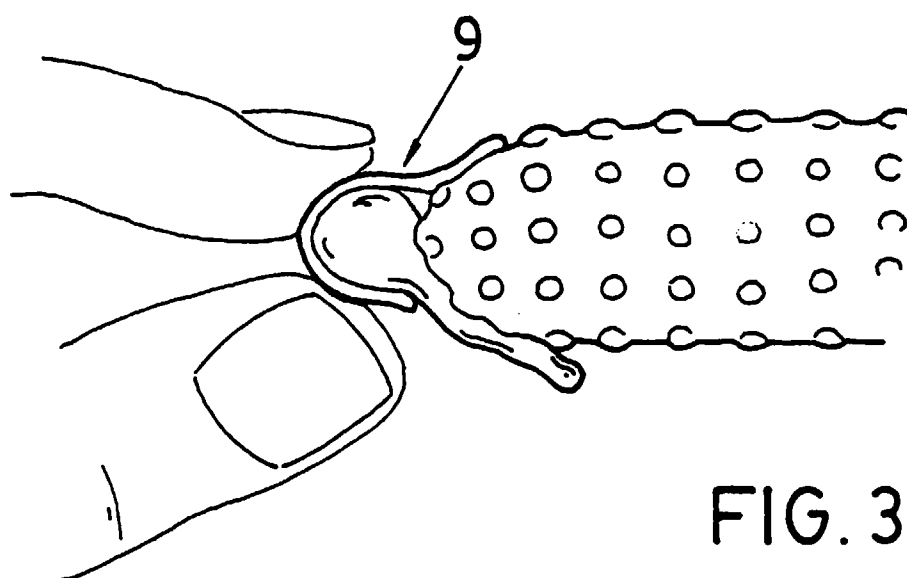


FIG. 3

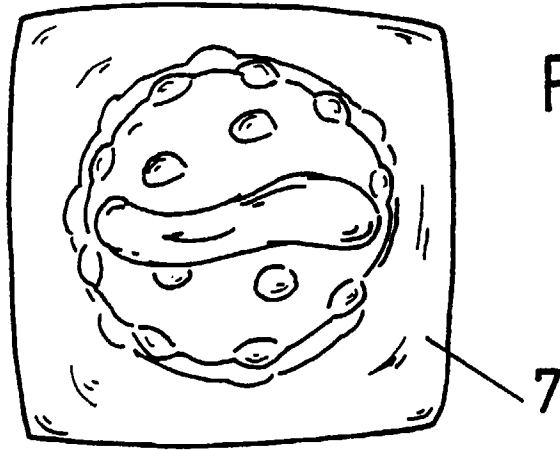


FIG. 4

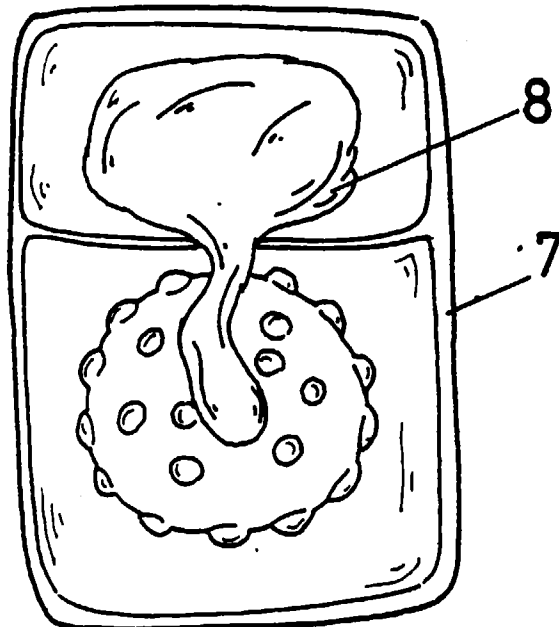


FIG. 5

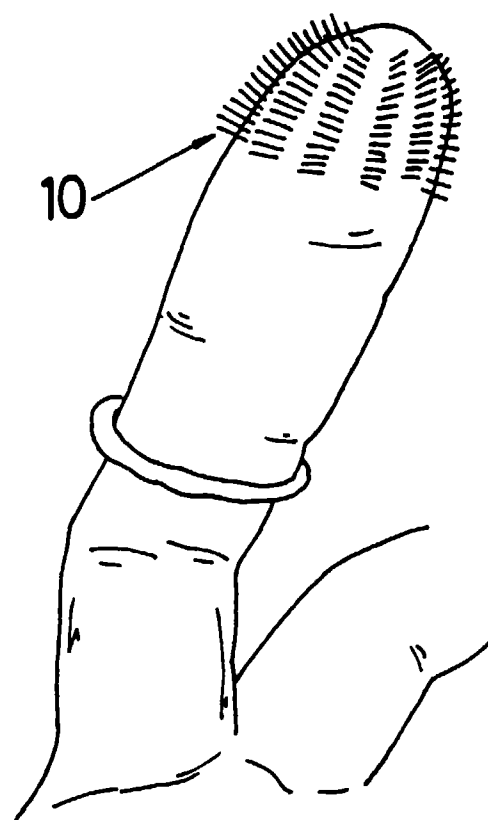


FIG.6



## INTERNATIONAL SEARCH REPORT

International application No.

PCT/ES97/00064

A. CLASSIFICATION OF SUBJECT MATTER		
Int. Cl. <sup>6</sup> A46B5/04		
According to International Patent Classification (IPC) or to both national classification and IPC		
B. FIELDS SEARCHED		
Minimum documentation searched (classification system followed by classification symbols)		
Int. Cl. <sup>6</sup> A46B		
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched		
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)		
EPODOC, CIBEPAT		
C. DOCUMENTS CONSIDERED TO BE RELEVANT		
Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	WO 9402048 A (FARNHAM, J.E.) 3 February 1997 (03.02.94) page 3, line 25 - page 5, line 12; claims 1,2,4-6; figures	1,3-5
P,X	WO 9616610 A (NAHUM) 6 June 1996 (06.06.96) page 9, line 21 - page 14, line 21; claims 1-3, 5-19; figures 4-15	1-5
A	WO 9531154 A (MITTIGA, M.I.) 23 November 1995 (23.11.95) page 6, line 6 - page 8, line 21; figures	1-5
A	GB 2162743 A (WEI-YI YUEH) 12 February 1986 (12.02.86) page 1, line 91 - page 2, line 13; claims 1,2	1-5
A	US 5213428 A (SALMAN NASER) 25 May 1993 (25.05.93) column 4; figures	1,6
A	US 3952867 A (MCCORD WILLIAM F) 27 April 1976 (27.04.76) column 2, line 15 - column 3, line 14; figures	1,6
<input type="checkbox"/> Further documents are listed in the continuation of Box C. <input checked="" type="checkbox"/> See patent family annex.		
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art "&" document member of the same patent family		
Date of the actual completion of the international search		Date of mailing of the international search report
24 June 1997 (24.06.97)		01 July 1997 (01.07.97)
Name and mailing address of the ISA/ SPT0		Authorized officer
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