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M. F. NEWMARK
ANTITHUMB-SUCKING DEVICE

2,633,126

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FIG. 1

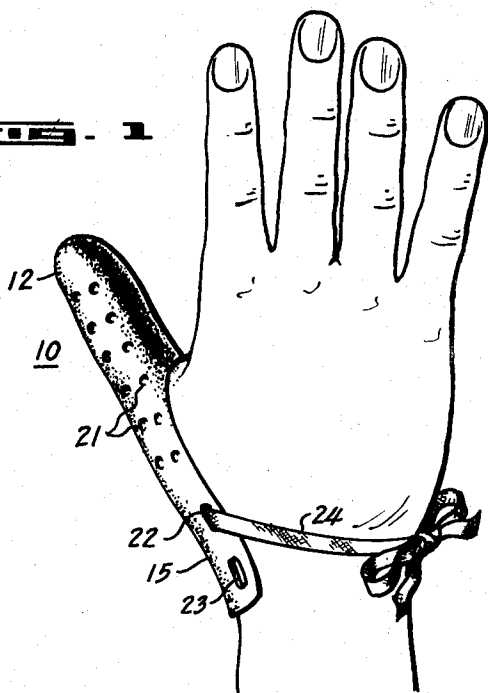


FIG. 3

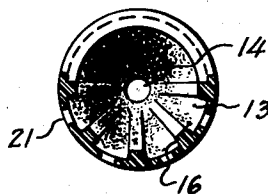
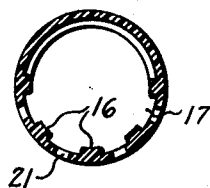


FIG. 4

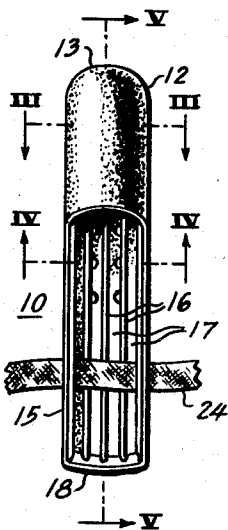


FIG. 2

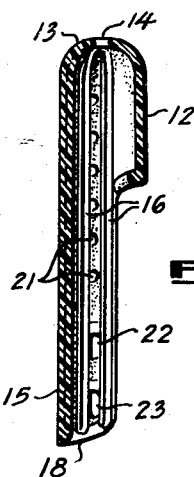


FIG. 5

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ANTITHUMB-SUCKING DEVICE

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3 Claims. (Cl. 128—133)

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This invention relates to thumb or finger guards and more particularly to guards whose primary purpose is to prevent and discourage the habit of thumb or finger sucking.

An important object of the invention is to provide a guard of the character above which is made of a material which offers no danger of injury to a child's mouth and which is durable and sanitary, and which guard is afforded a design most effective in the performance of the purpose for which it is intended.

Another object of the invention is the provision of a guard formed of a pliable material having a construction embodying a series of ribs and perforations which in cooperation prevent the formation of a vacuum and offer no resistance to the sucking action which encourages the habit of thumb and finger sucking.

Another object of the invention resides in the provision of a thumb or finger guard having an improved construction permitting its ready and convenient attachment to a child's hand, which construction is non-chafing, and further is one which does not prevent use of the thumb or finger in the picking up or grasping of objects.

Other objects and features of the present invention will be readily apparent to those skilled in the art from the following specification and appended drawing wherein is illustrated a preformed form of the invention, and in which:

Figure 1 is a perspective view illustrating a guard embodying the present invention and applied to the thumb of a child's hand.

Figure 2 is an elevational view of the rear of the guard.

Figure 3 is a sectional view taken along the line III—III of Figure 2.

Figure 4 is a sectional view taken along the line IV—IV of Figure 2; and

Figure 5 is a sectional view taken on the line V—V of Figure 2.

Having reference now with greater particularity to the drawings, a guard, constructed in accordance with the present invention, is indicated therein generally by the numeral 10, and in Figure 1 is shown applied to the thumb of an infant's hand.

Guard 10 comprises an elongated, generally cylindrical cup or cap portion 12 constructed and shaped to fit upon a thumb or finger. The outer or closed end 13 of cup portion 12 is rounded and has an aperture 14 provided centrally therein. The opposite and open end of cap 12 is of a diameter which will readily receive a thumb or finger. Integral with and depending from the

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lower end of cup portion 12 is a tongue portion 15 which is generally arcuate in cross-section. Cup portion 12, as shown, is of a length which adapts it to encase the thumb to a point just below the first joint thereof. Tongue portion 15 extends from cap 12 longitudinally along the back of the thumb and terminates at the wrist. The generally concave formation of tongue portion 15 is provided to adapt it to conform closely to the contour of the thumb and hand so as not to be easily dislodged therefrom.

The material employed in the construction of guard 10 may be rubber, such as gum rubber, or a suitable plastic, such as "Vinylite," a vinyl chloride-vinyl acetate resin, or any other flexible, resilient material which will have no tendency to injure the infant's mouth and which will not materially restrict the thumb or finger in bending.

As shown, the inner surface of the elongated tongue portion 15 is provided with a series of circumferentially spaced, longitudinally extending integral ribs 16 separated by grooves 17. It is noted that the ribs 16 extend from the outer end 18 of tongue portion 15 along the entire length of this portion and into the rounded outer end 13 of the cap 12 converging toward and terminating short of opening 14 therein. It is further noted that only that portion of the interior wall surface of cup 12 which is in effect an extension of tongue portion 15 is ribbed, the remainder of the interior wall surface, that which fits upon the inner surface or pad of the thumb, is smooth. Thus approximately half of the interior wall surface is ribbed and half is smooth. Providing a smooth portion permits a user to grasp objects more easily. The ribs 16 are adapted to lie upon the skin of the thumb and their spacing is such that the skin cannot fill the grooves 17 between the ribs, thus the ribs 16 define a plurality of unrestricted air passages opening to the exterior at the lower end of tongue portion 15 and at aperture 14 in the rounded end 13 of cap 12. It is through these open-ended channels that air is drawn in the sucking action. To prevent the formation of a vacuum and allow air to be drawn freely into the mouth a plurality of rows of perforations 21 are provided between adjacent pairs of ribs in the tongue portion 15 and cap 12 through the bottom walls of the various grooves or air passages 17. By effecting a construction which prevents the formation of a vacuum and which allows air to enter freely into the mouth, no resistance is offered to the sucking effort and therefore no sensation is realized which would encourage continued sucking.

Spaced from the outer end 18 of tongue portion 15 and provided through the walls of such portion are two pairs of opposed openings 22 and 23. Either pair of openings is adapted to receive a securing cord or tape 24 which is adapted to be tied around the wrist to maintain the guard 10 in place. The particular pair of openings utilized is dependent on the size of the hand.

Provision of a plurality of air channels in the elongated tongue portion 15 and cap 12 and a plurality of rows of perforations in association with ribs 16 affords much less chance that a clogging could occur which would prevent air flowing into the mouth. Also by locating ribs interiorly and by providing smooth exterior surfaces much less interference is offered to the use of the thumb or finger in grasping or picking up objects.

While certain preferred embodiments of the invention have been specifically disclosed, it is understood that the invention is not limited thereto as many variations will be readily apparent to those skilled in the art and the invention is to be given its broadest possible interpretation within the terms of the following claims.

What I claim is:

1. A device of the character described, comprising a cap formed of yieldable material adapted to be fitted upon a thumb, said cap having an opening in its outer end, a tongue portion depending from said cap below the thumb, a plurality of spaced longitudinally extending ribs provided on the inner wall of said tongue portion, said ribs extending into the cap and along the interior wall surfaces thereof to terminate short of said opening in the cap, said tongue portion and said cap having a plurality of perforations through the walls thereof and adjacent said ribs.

2. A guard of the character described, comprising a generally cylindrical cap of yieldable material adapted to receive the end of a thumb, said cap having an aperture in its outer end, an integral tongue portion depending from said cap formed to fit over the back of the thumb and terminating adjacent the region of the wrist, and a plurality of spaced longitudinally extending ribs provided on the inner wall of said tongue portion, said ribs extending into the cap and along the interior wall surfaces thereof to terminate short of said aperture in said cap, and a plurality of perforations through the walls of said tongue portion and said cap between each pair of adjacent ribs.

3. A thumb or finger guard comprising a cup shaped portion formed of yieldable material having a rounded end with an aperture therein, said cup-shaped portion adapted to fit over the end of a thumb or finger, an elongated tongue portion of arcuate form in cross-section depending below the thumb from said cup-shaped portion, a plurality of spaced longitudinally extending ribs provided on a portion of the interior wall surfaces of said cup-shaped portion and extending from adjacent the aperture in the rounded end thereof along the inner wall of said tongue portion to the end thereof, said ribs defining unrestricted grooves therebetween affording air passages from the end of said tongue portion to the aperture in the rounded end of said cup-shaped portion, said cup-shaped portion and said tongue portion having a plurality of rows of perforations through the wall surfaces thereof and adjacent said ribs.

4. A thumb or finger guard comprising a generally cylindrical cap portion of yieldable mate-

rial having a rounded end with a central aperture therein, said cap portion adapted to fit over a thumb or finger, an integral tongue portion of arcuate form in cross-section depending below the thumb from said cap portion, a plurality of circumferentially spaced longitudinally extending ribs provided about a portion of the interior wall surfaces of said cap portion with the remaining portion of said interior wall surfaces being smooth, said ribs extending from adjacent the aperture in said rounded end of the cap along the inner wall of said tongue portion to the end thereof, said ribs defining unrestricted grooves therebetween effecting air passages between the end of said tongue portion to the aperture in said rounded end, and a plurality of perforations provided through the wall surfaces of said cap portion and said tongue portion between each adjacent pair of ribs.

5. A device of the character described, comprising a cap formed of yieldable material adapted to be fitted upon a thumb, said cap having an opening in its outer end, a tongue portion depending from said cap below the thumb, a plurality of spaced longitudinally extending ribs provided on the inner wall of said tongue portion, said ribs extending into the cap and along the interior wall surfaces thereof to terminate short of said opening in the cap, said tongue portion and said cap having a plurality of perforations through the walls thereof and adjacent said ribs, said tongue portion having opposed apertures provided adjacent the lower end thereof, and fastening means receivable by said opposed apertures adapted to be secured around the wrist of the hand.

6. A guard of the character described, comprising a generally cylindrical cap of yieldable material adapted to receive the end of a thumb, said cap having an aperture in its outer end, an integral tongue portion depending from said cap formed to fit over the back of the thumb and terminating adjacent the region of the wrist, and a plurality of spaced longitudinally extending ribs provided on the inner wall of said tongue portion, said ribs extending into the cap and along the interior wall surfaces thereof to terminate short of said aperture in said cap, a plurality of perforations through the walls of said tongue portion and said cap between each pair of adjacent ribs, and fastening means connected to said tongue portion adjacent the end thereof adapted to be secured around the wrist of the hand.

7. A thumb or finger guard comprising a cup-shaped portion formed of yieldable material having a rounded end with an aperture therein, said cup-shaped portion adapted to fit over the end of a thumb or finger, an elongated tongue portion of arcuate form in cross-section depending from said cup-shaped portion and terminating adjacent the region of the wrist, a plurality of spaced longitudinally extending ribs provided on a portion of the interior wall surfaces of said cup-shaped portion and extending from adjacent the aperture in the rounded end thereof along the inner wall of said tongue portion to the end thereof, said ribs defining unrestricted grooves therebetween affording air passages from the end of said tongue portion to the aperture in the rounded end of said cup-shaped portion, said cup-shaped portion and said tongue portion having a plurality of rows of perforations through the wall surfaces thereof and adjacent said ribs, and fastening means connected adjacent the lower

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end of said tongue portion for securing said guard to the wrist of the hand.

8. A thumb or finger guard comprising a generally cylindrical cap portion of yieldable material having a rounded end with a central aperture therein, said cap portion adapted to fit over a thumb or finger, an integral tongue portion of arcuate form in cross-section depending from said cap portion and terminating adjacent the region of the wrist, a plurality of circumferentially spaced longitudinally extending ribs provided about a portion of the interior wall surfaces of said cap portion with the remaining portion of said interior wall surfaces being smooth, said ribs extending from adjacent the aperture in said rounded end of the cap along the inner wall of said tongue portion to the end thereof, said ribs defining unrestricted grooves therebetween effecting air passages between the end of said tongue portion to the aperture in said rounded end, a plurality of perforations provided through the

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wall surfaces of said cap portion and said tongue portion between each adjacent pair of ribs, said tongue portion having opposed apertures provided adjacent the lower end thereof, and fastening means receivable by said opposed apertures adapted to be secured around the wrist of the hand.

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