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(12)

United States Design Patent

Akervall et al.

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(54) MOUTHGUARD

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(**) Term: 15 Years

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(58) Field of Classification Search USPC D24/110.5, 176, 181, 180, 194; D29/100, 105, 106, 108, 122 (Continued)

(56) References Cited

U.S. PATENT DOCUMENTS

3,112,744 A 12/1963 Grossberg
3,532,091 A 10/1970 Lerman
(Continued)

FOREIGN PATENT DOCUMENTS

CA 2649179 A1 10/2007
DE 202007016030 U1 11/2007
(Continued)

OTHER PUBLICATIONS

Sisu 3D 2mm Sports Mouth Guard, available in Amazon.com, date first available Apr. 15, 2021 [online], [site visited Mar. 30, 2023],

Available from the internet URL: <https://www.amazon.com/dp/B08ZHDD4MK?th=1> (Year: 2021).*

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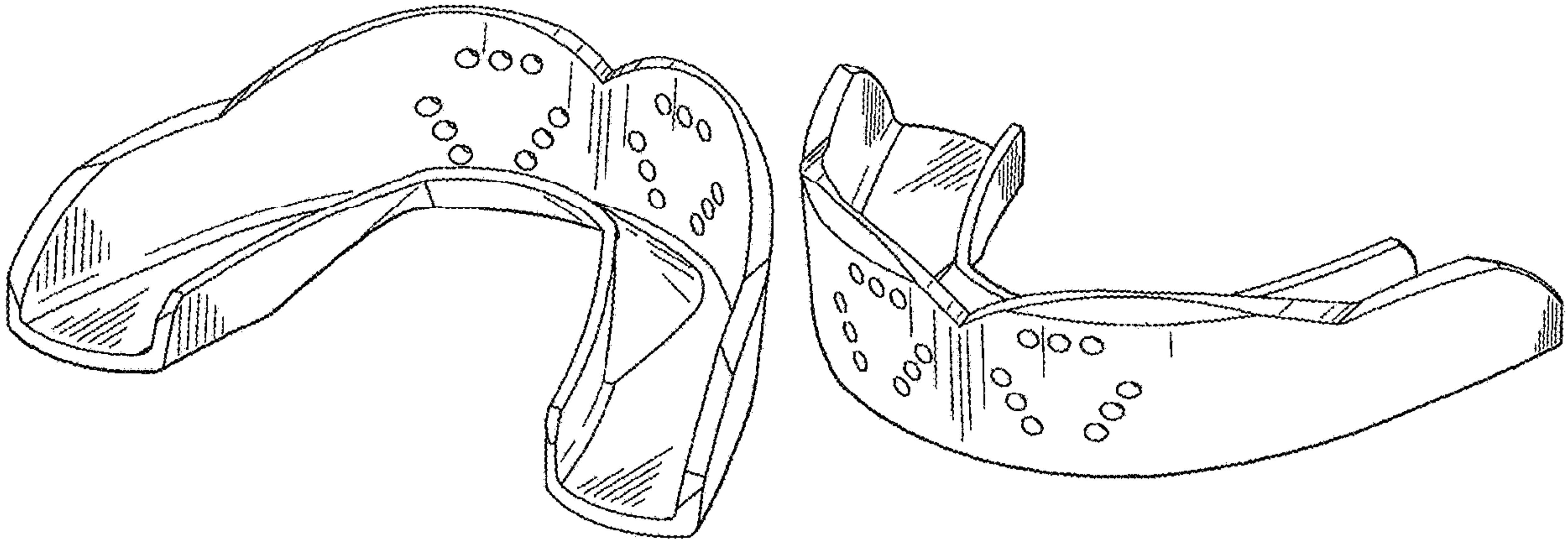
(57) CLAIM

The ornamental design for a mouthguard, as shown and described.

DESCRIPTION

FIG. 1 is a top, rear view of a mouthguard showing a first embodiment of our new design;
FIG. 2 is a top, front view thereof;
FIG. 3 is a top plan view thereof;
FIG. 4 is a bottom plan view thereof;
FIG. 5 is a front view thereof;
FIG. 6 is a rear view thereof;
FIG. 7 is a side view thereof;
FIG. 8 is a top, rear view of a mouthguard showing a second embodiment of our new design;
FIG. 9 is a top, front view thereof;
FIG. 10 is a top plan view thereof;
FIG. 11 is a bottom plan view thereof;
FIG. 12 is a front view thereof;
FIG. 13 is a rear view thereof;
FIG. 14 is a side view thereof;
FIG. 15 is a top, rear view of a mouthguard showing a third embodiment of our new design;
FIG. 16 is a top, front view thereof;
FIG. 17 is a top plan view thereof;
FIG. 18 is a bottom plan view thereof;
FIG. 19 is a front view thereof;
FIG. 20 is a rear view thereof; and,
FIG. 21 is a side view thereof.
The broken lines in the drawings are included to show portions of the mouthguard that form no part of the claimed design.

1 Claim, 6 Drawing Sheets



(58) **Field of Classification Search**

CPC A61C 7/08; A61C 19/066; A61C 9/00;
A61M 16/0488; A63B 71/085; A63B
2071/088; A63B 2071/086; A63B 23/032
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,112,934 A 9/1978 Rizk
4,640,273 A 2/1987 Greene et al.
4,718,662 A 1/1988 North
4,955,393 A 9/1990 Adell
5,051,476 A 9/1991 Uji et al.
5,082,007 A 1/1992 Adell
5,165,423 A 11/1992 Fowler et al.
5,293,880 A 3/1994 Levitt
5,313,960 A 5/1994 Tomasi
D382,965 S * 8/1997 Wagner D29/108
5,692,523 A 12/1997 Croll et al.
D406,647 S * 3/1999 Wagner D24/231
6,036,487 A 3/2000 Westerman
6,080,923 A 6/2000 Austin
6,109,266 A 8/2000 Turchetti
6,295,988 B1 10/2001 Sue
D500,895 S * 1/2005 Manzo D29/108
7,226,878 B2 6/2007 Wagner et al.
7,404,403 B2 7/2008 Farrell
7,498,276 B2 3/2009 Wagner et al.
7,825,045 B1 11/2010 Wagner et al.
D629,909 S * 12/2010 Chiu D24/181
8,087,101 B2 1/2012 Ferguson
8,100,131 B2 1/2012 Swan et al.
D658,813 S * 5/2012 Manzo D29/108
D663,486 S * 7/2012 Turkbash D29/108
8,510,863 B2 8/2013 Ferguson
D693,966 S * 11/2013 Hanson D29/108
8,739,316 B1 6/2014 Norton
8,894,594 B2 11/2014 Pfaster et al.
D727,571 S * 4/2015 Brett D29/108
D771,876 S * 11/2016 Hazard D29/108
9,517,400 B2 * 12/2016 Akervall A63B 71/085
9,550,106 B1 * 1/2017 Schwank A63B 71/085
D792,028 S * 7/2017 Muenchinger D29/108
D830,640 S * 10/2018 Supple D29/108
D833,621 S * 11/2018 Tolentino D29/108
D853,655 S * 7/2019 Turkbash D29/108
D857,998 S * 8/2019 Turkbash D29/108
D908,972 S * 1/2021 Akervall D29/108
D928,966 S * 8/2021 Lehtonen D24/181

2002/0144687 A1 10/2002 Kittelsen et al.
2004/0112389 A1 6/2004 Abraham
2005/0034733 A1 2/2005 Liddle et al.
2007/0084471 A1 4/2007 Napoli et al.
2007/0084472 A1 4/2007 Berghash
2007/0148612 A1 6/2007 Massad
2007/0151568 A1 7/2007 Maurello
2007/0235040 A1 10/2007 Salcedo et al.
2008/0156331 A1 7/2008 Isenberg et al.
2008/0289639 A1 11/2008 Bancroft
2009/0038624 A1 2/2009 Akervall et al.
2009/0114232 A1 5/2009 Landi et al.
2009/0117514 A1 5/2009 Massad
2009/0223526 A1 9/2009 Berghash et al.
2010/0051038 A1 3/2010 Quigless
2011/0220124 A1 9/2011 Vaska et al.
2011/0242746 A1 10/2011 Hoffman et al.
2012/0085355 A1 4/2012 Swann et al.
2012/0325225 A1 12/2012 Small
2013/0068236 A1 3/2013 Lovat
2013/0247922 A1 * 9/2013 Kamradt A63B 71/085
128/862
2013/0338554 A1 12/2013 Pflaster et al.
2013/0338555 A1 12/2013 Pflaster et al.
2014/0148746 A1 5/2014 Pflaster et al.
2015/0013039 A1 1/2015 Parker et al.
2015/0328526 A1 * 11/2015 Schwank A61C 5/90
128/862
2019/0090807 A1 * 3/2019 Goode, II A61B 5/1126
2022/0088462 A1 * 3/2022 Settele A63B 71/085
2023/0129171 A1 * 4/2023 Trenerry A63B 71/085
128/861

FOREIGN PATENT DOCUMENTS

EP 2004298 B1 10/2009
EP 2174978 A1 4/2010
EP 2482942 B1 1/2017
JP H105023353 A 2/1993
JP H08206272 A 8/1996
JP 2005342133 A 12/2005
KR 3011589760001 * 4/2022
KR 3011635920001 * 5/2022
TW 223535-0001 * 2/2023
WO 2007116213 A1 10/2007
WO 2009142491 A1 11/2009
WO 2011036466 A1 3/2011
WO 2013045892 A1 4/2013
WO 2013096466 A1 6/2013
WO 2013132212 A1 9/2013

* cited by examiner

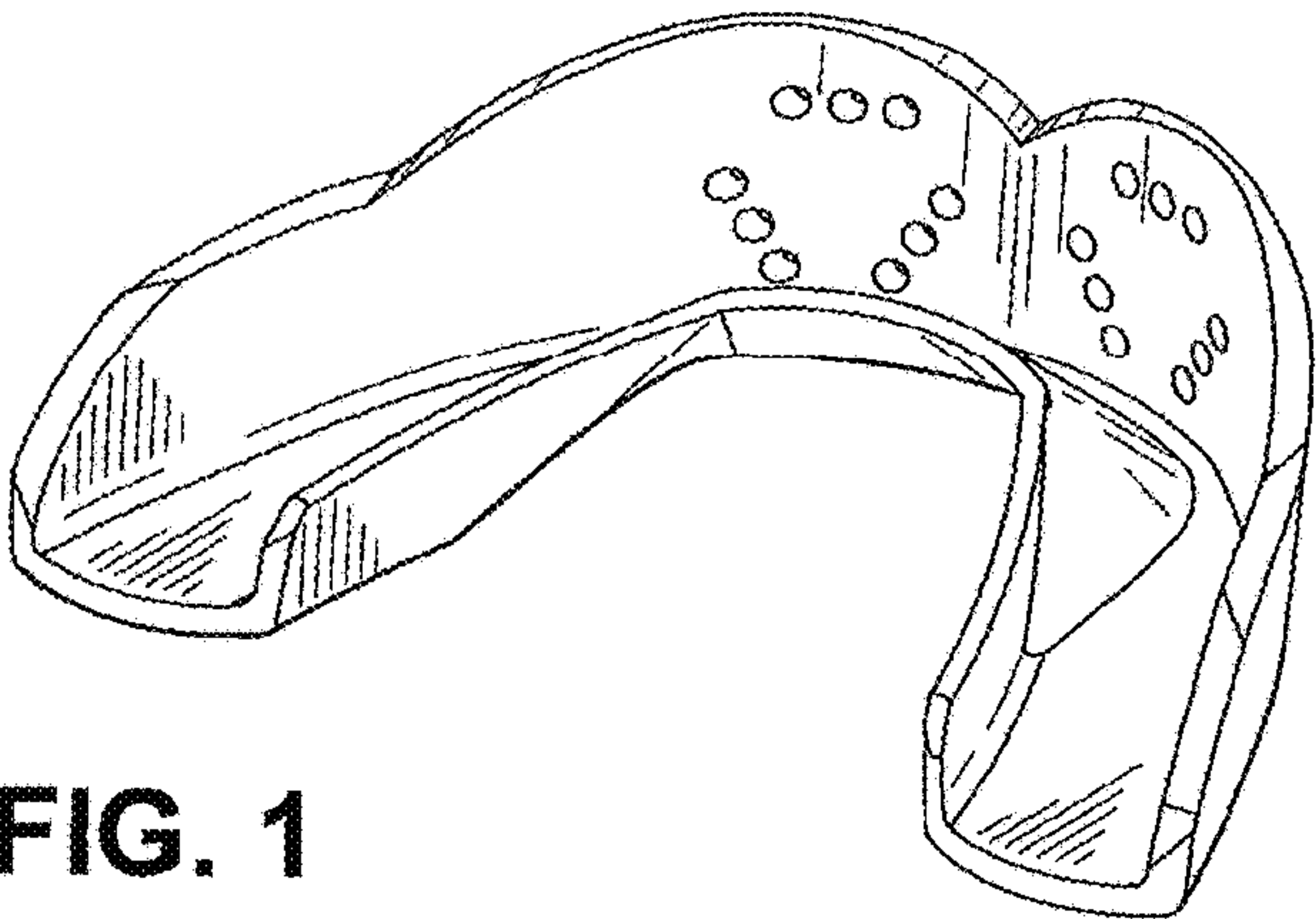


FIG. 1

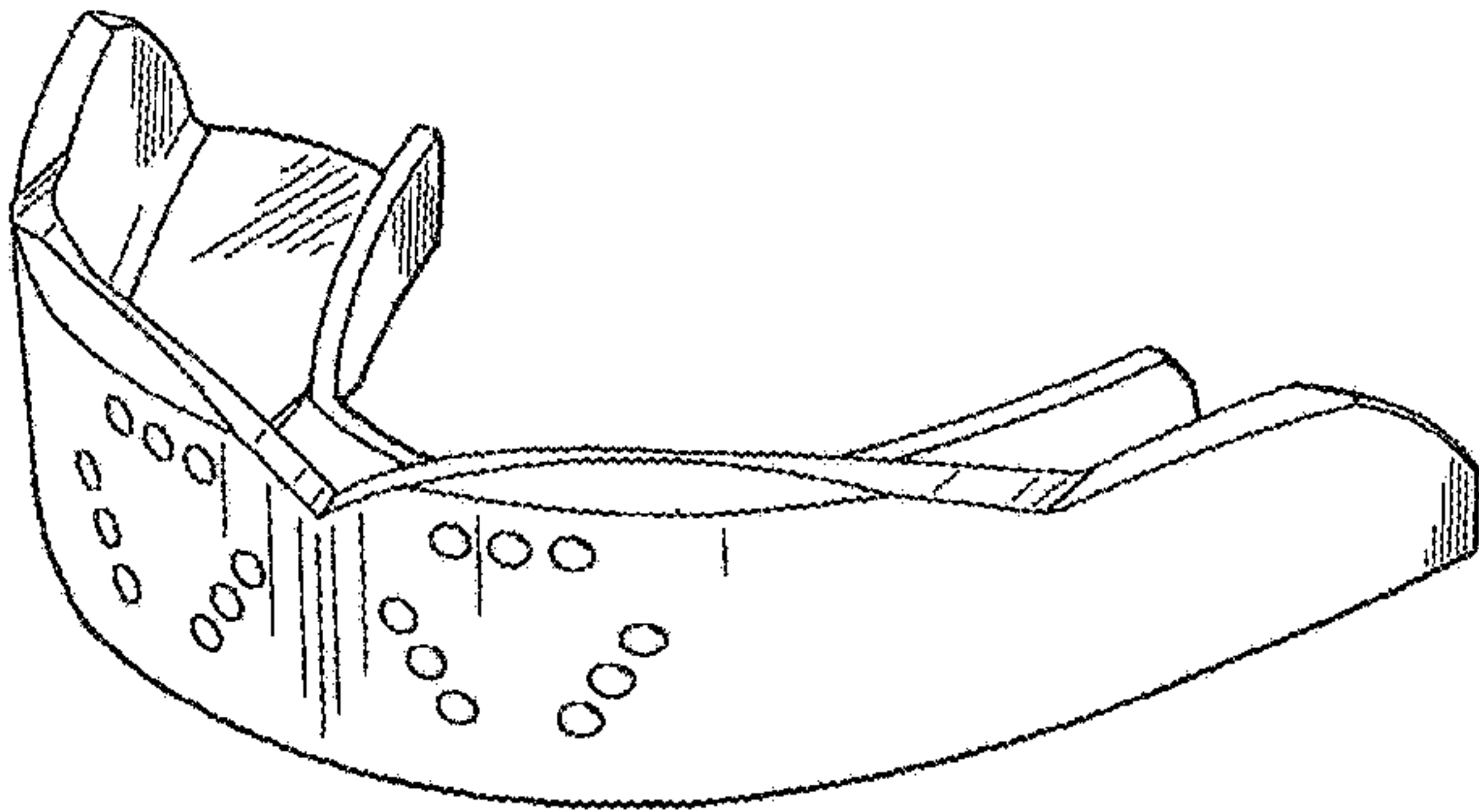


FIG. 2

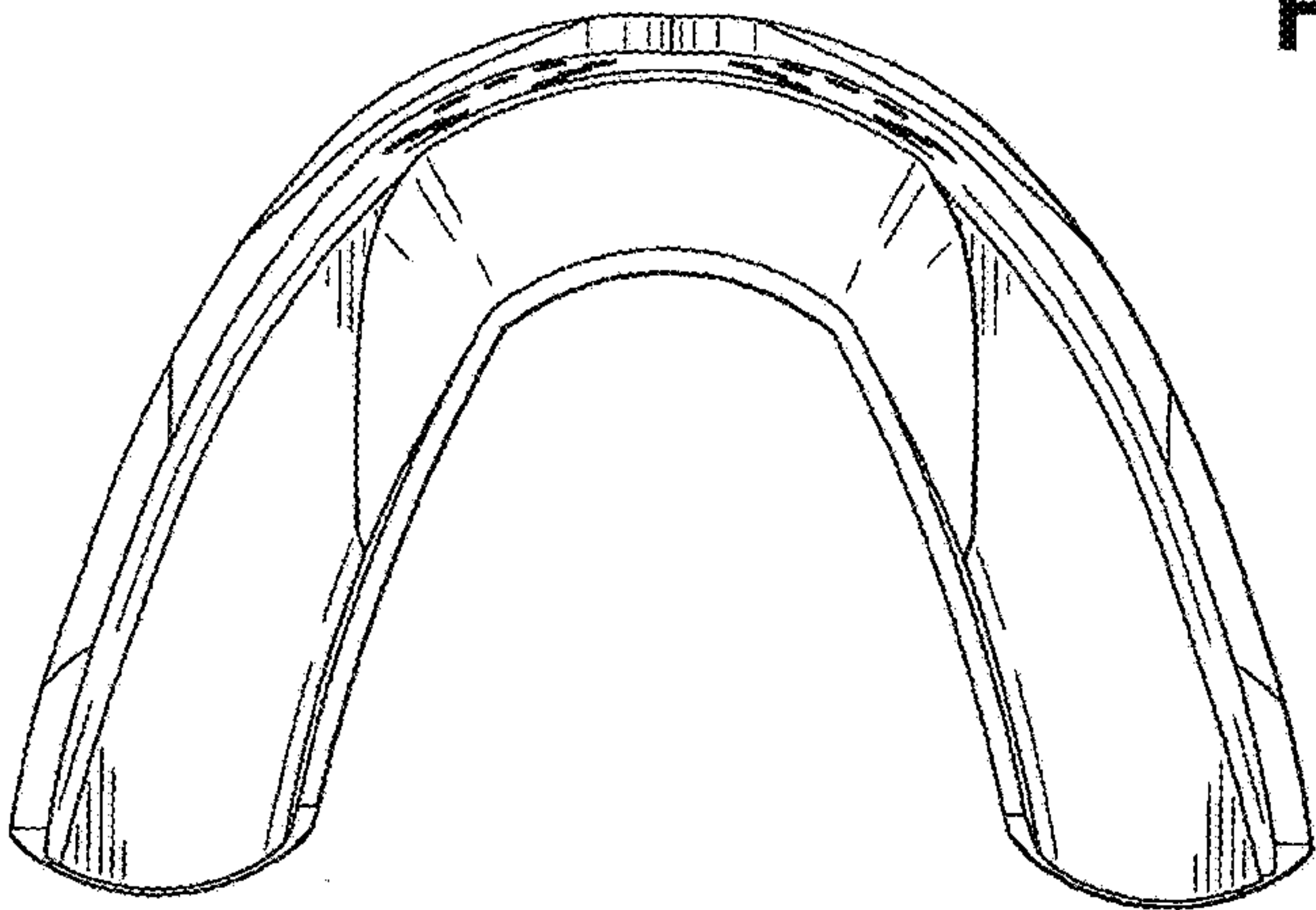


FIG. 3

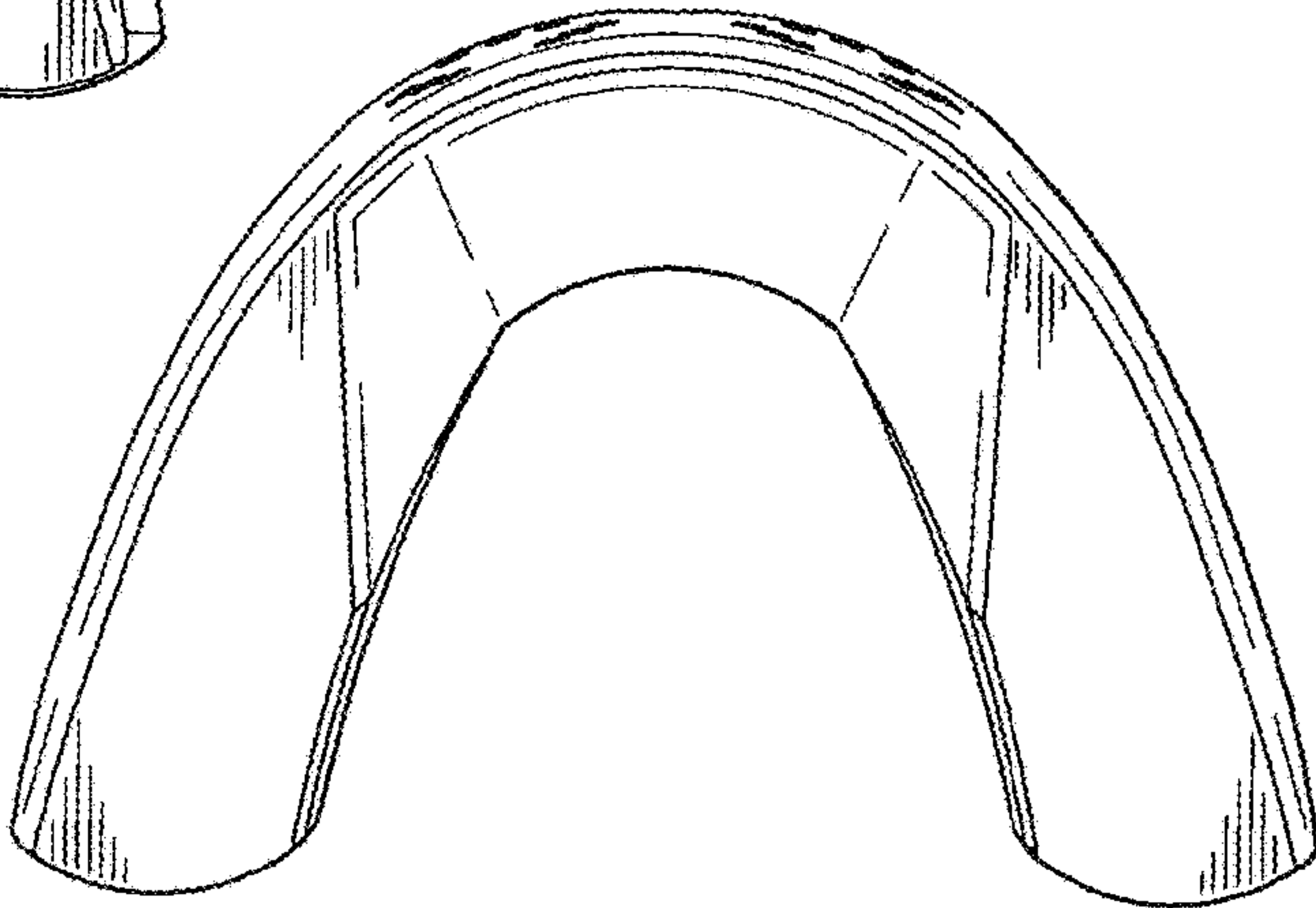


FIG. 4

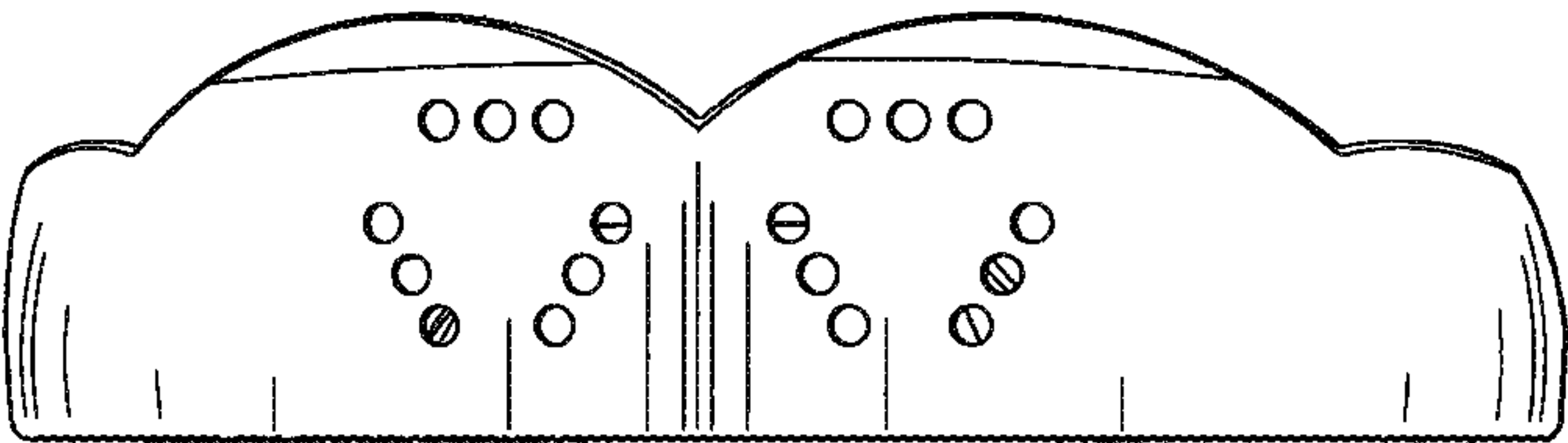


FIG. 5

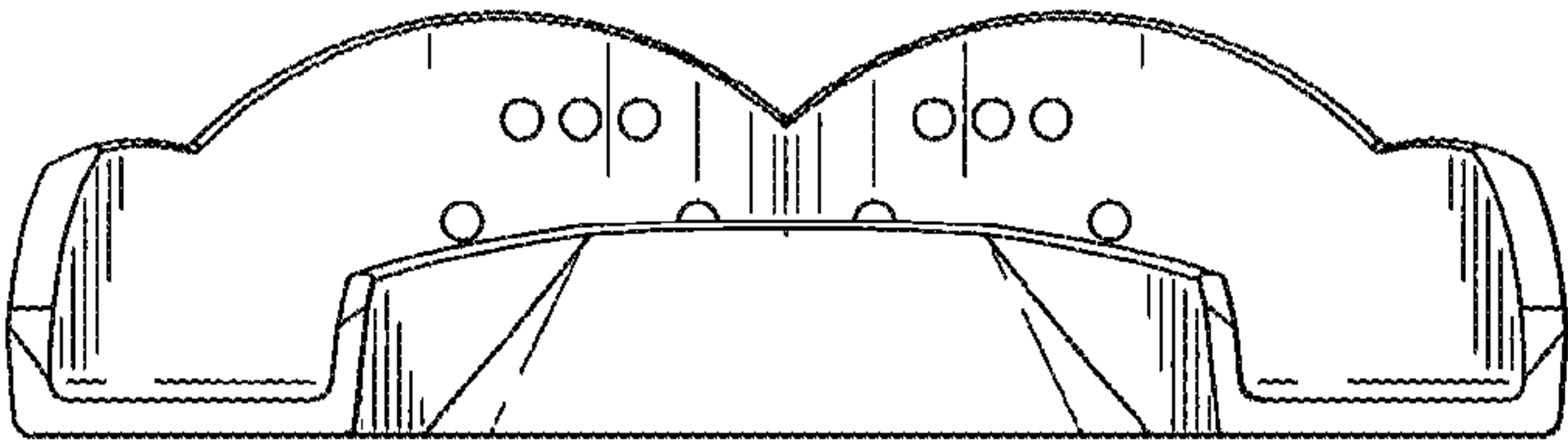


FIG. 6

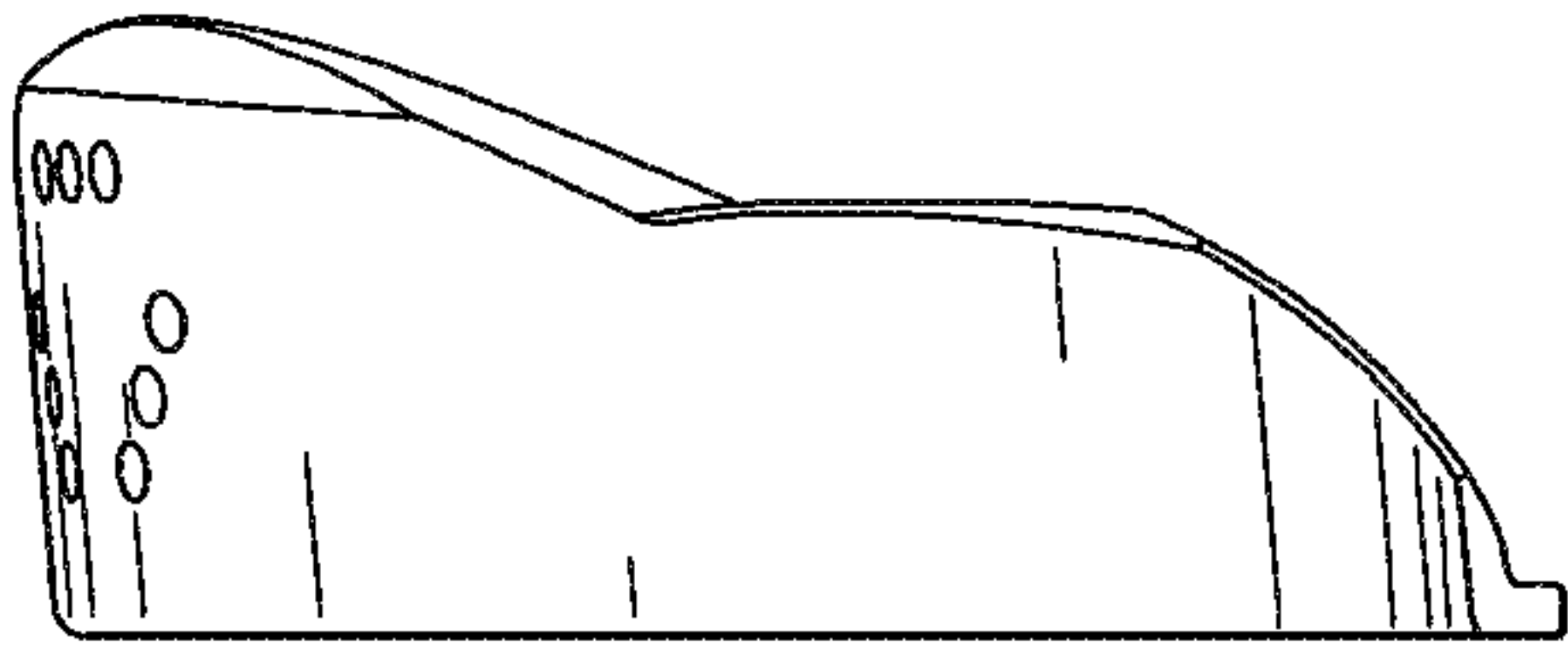


FIG. 7

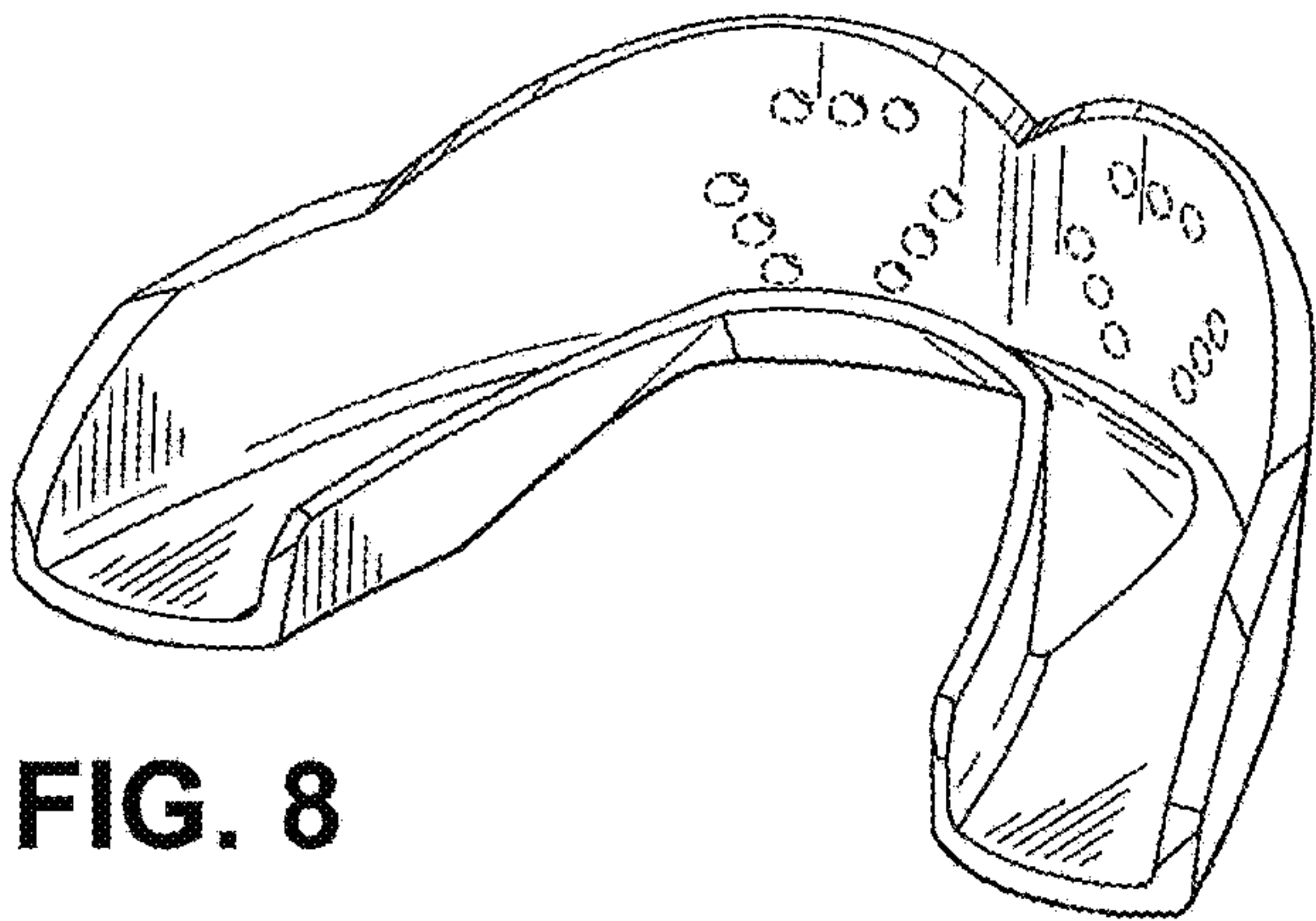


FIG. 8

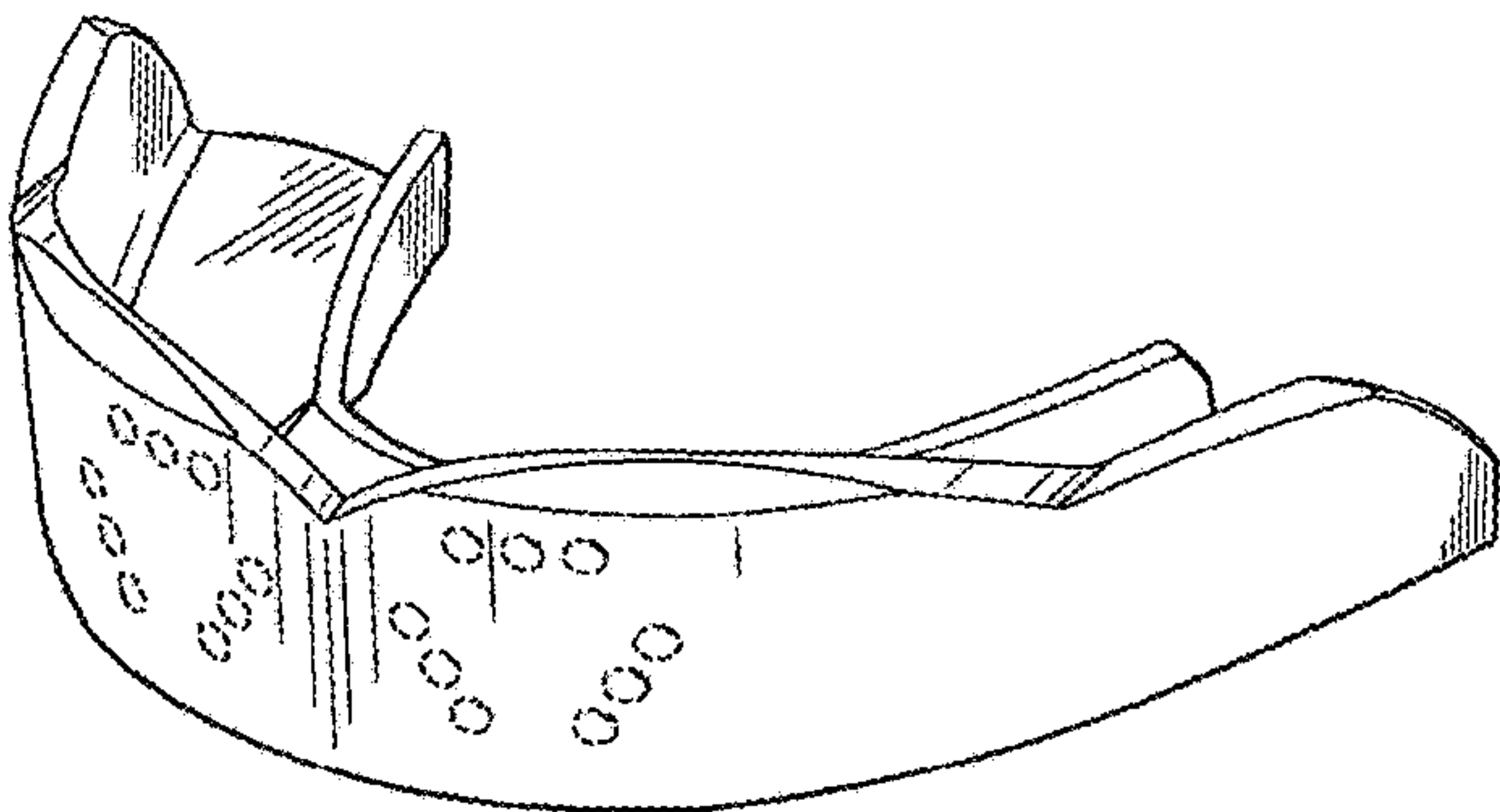


FIG. 9

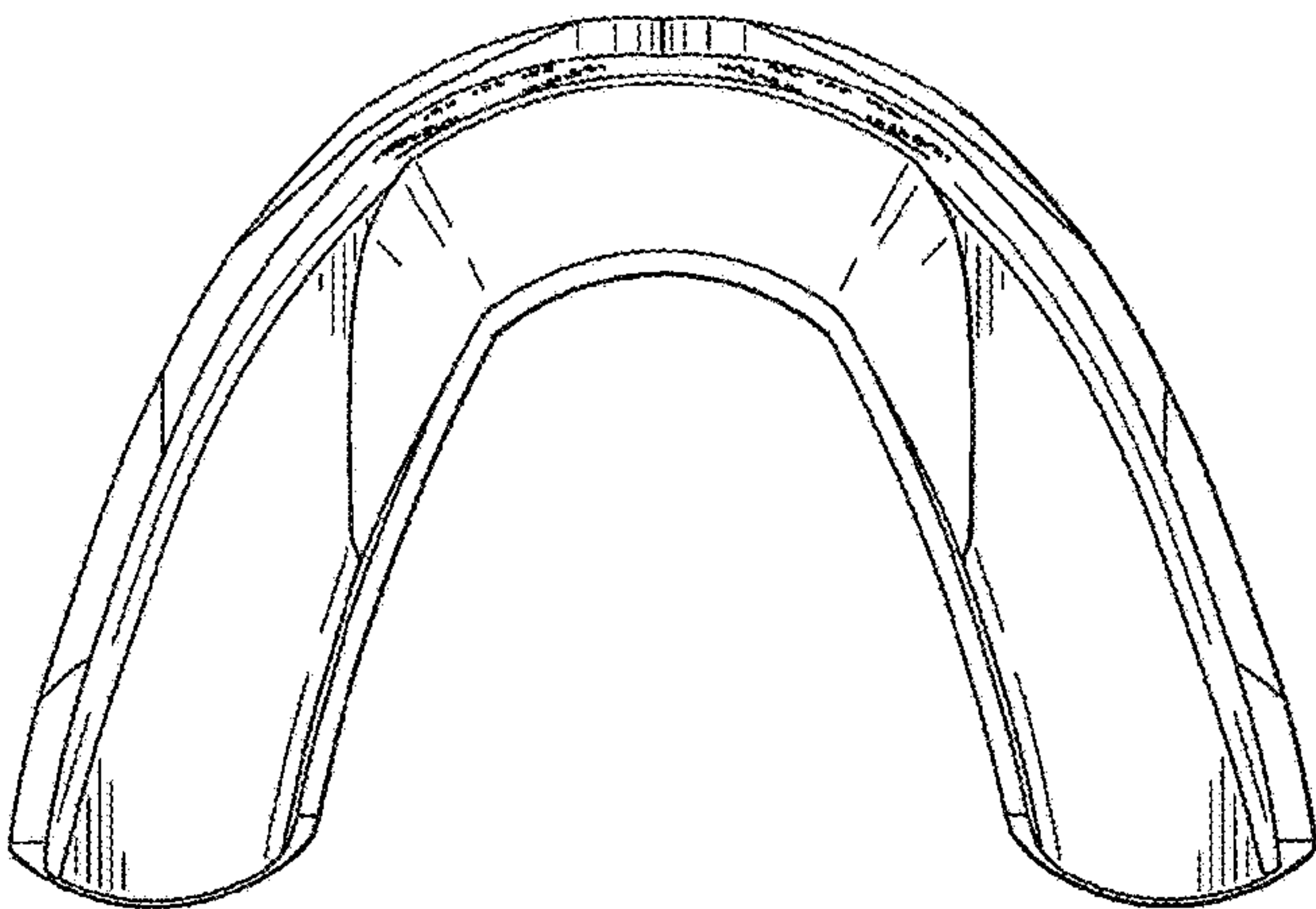


FIG. 10

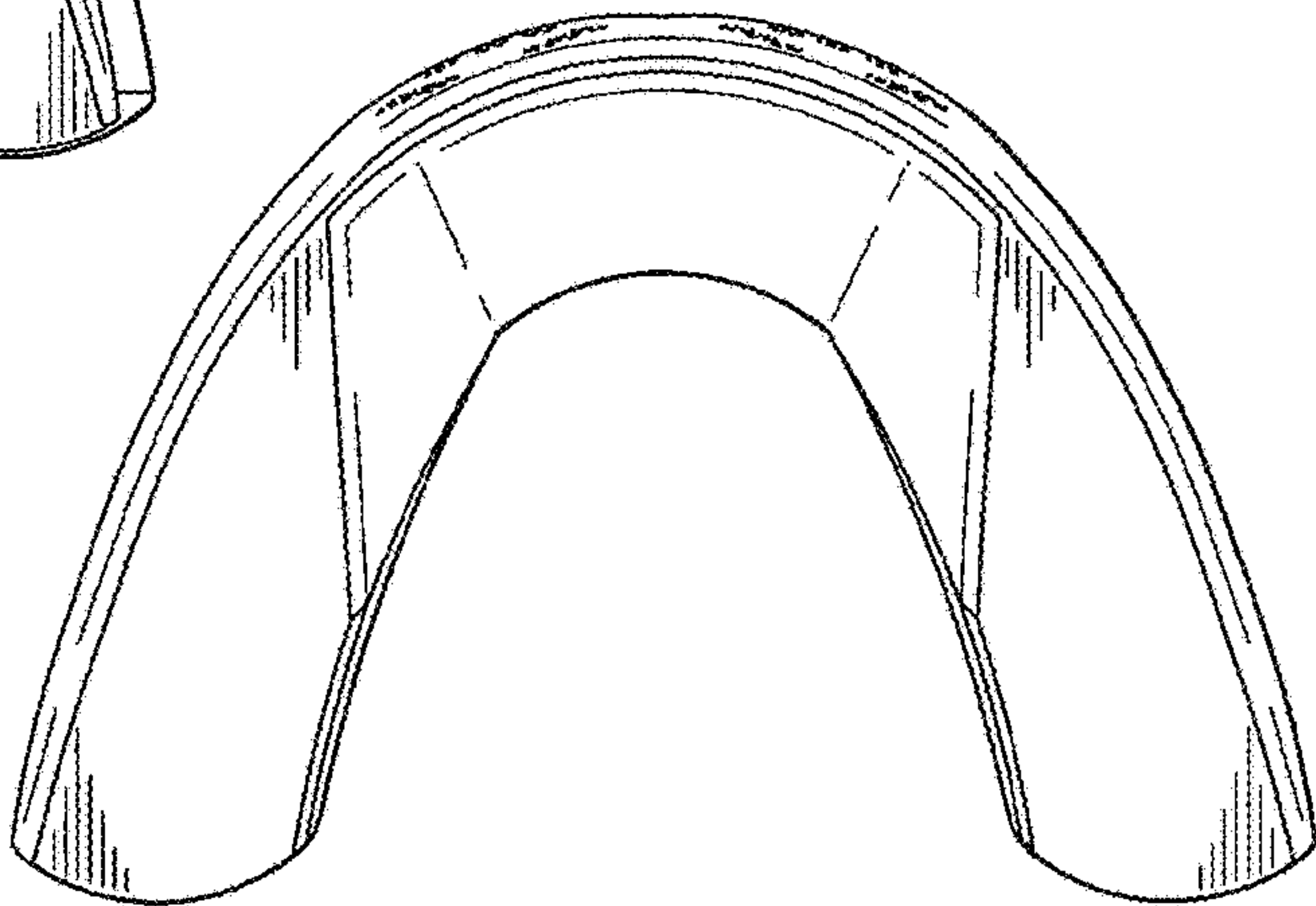


FIG. 11

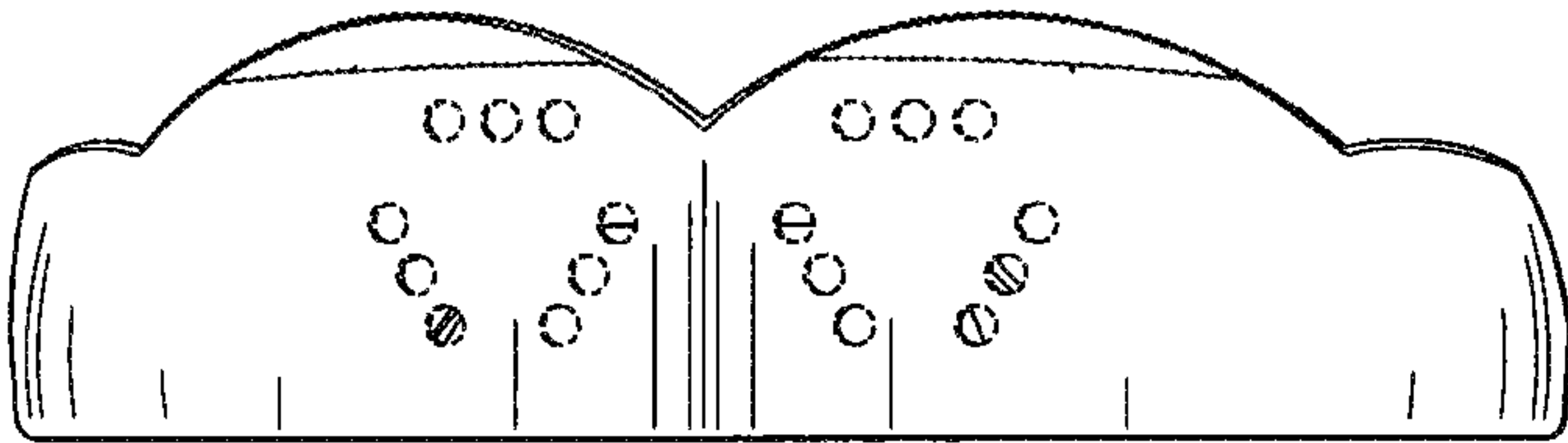


FIG. 12

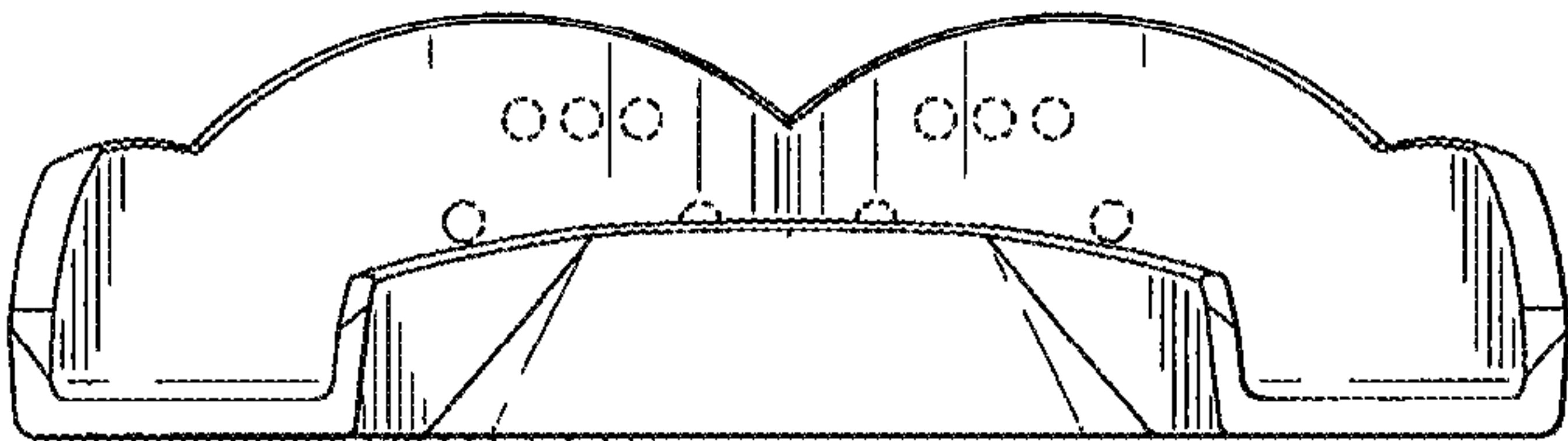


FIG. 13

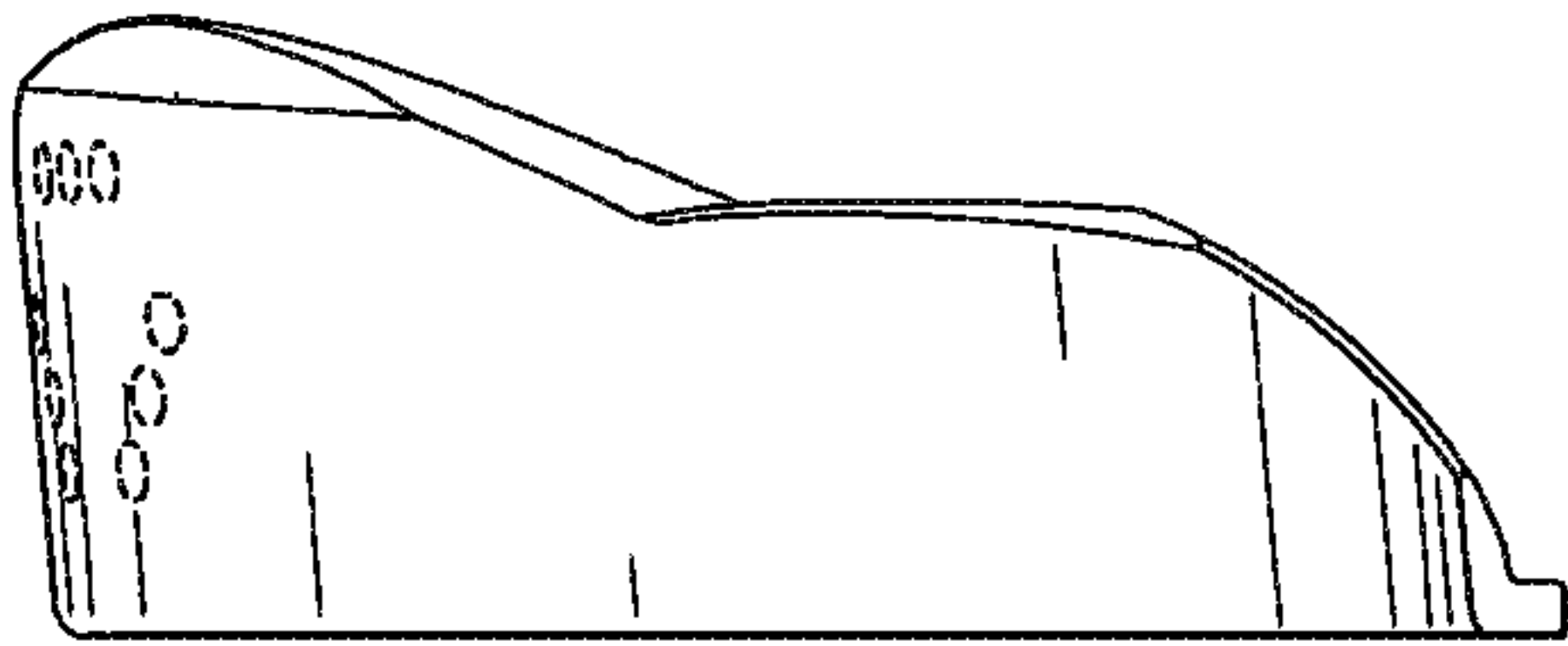


FIG. 14

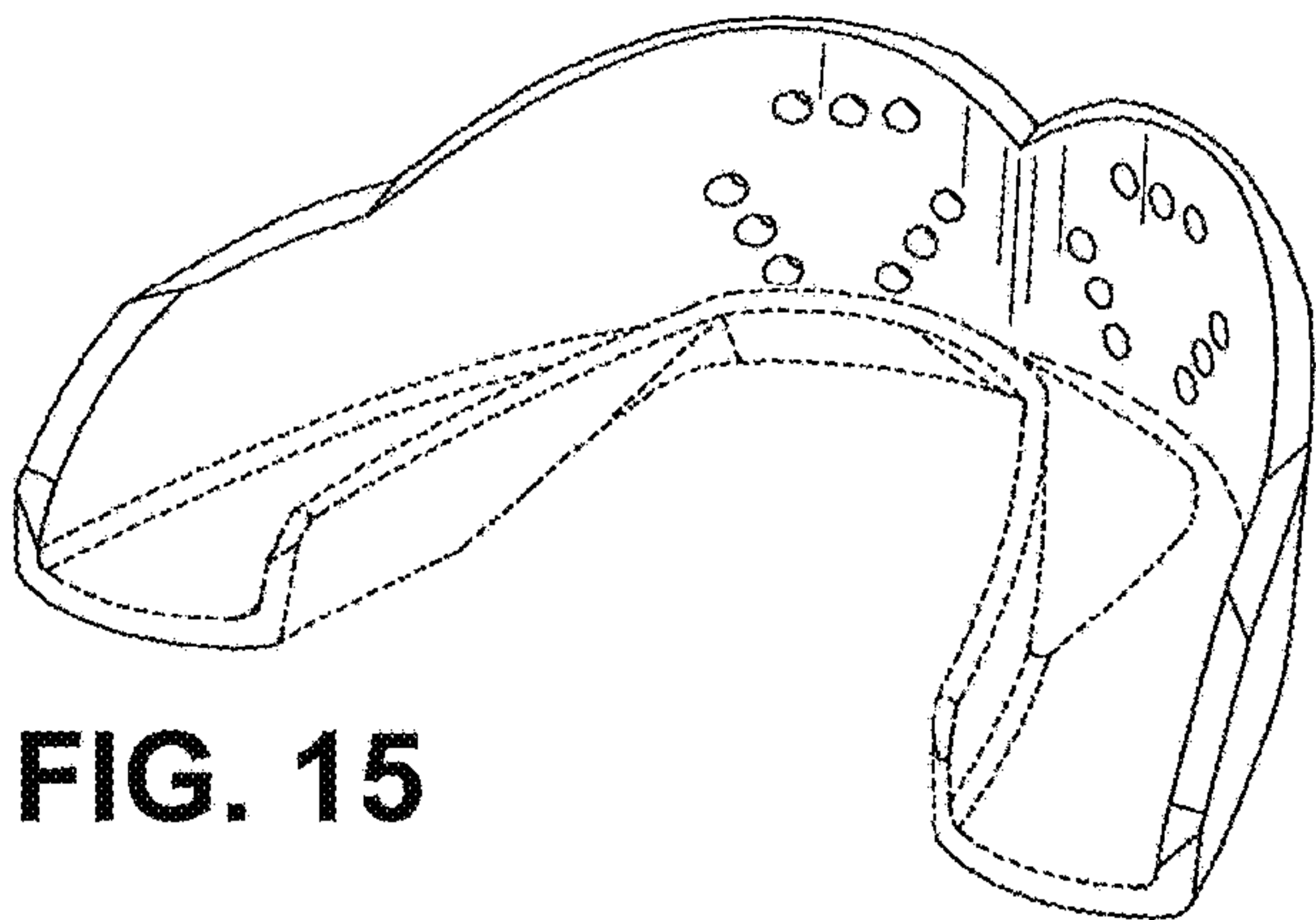


FIG. 15

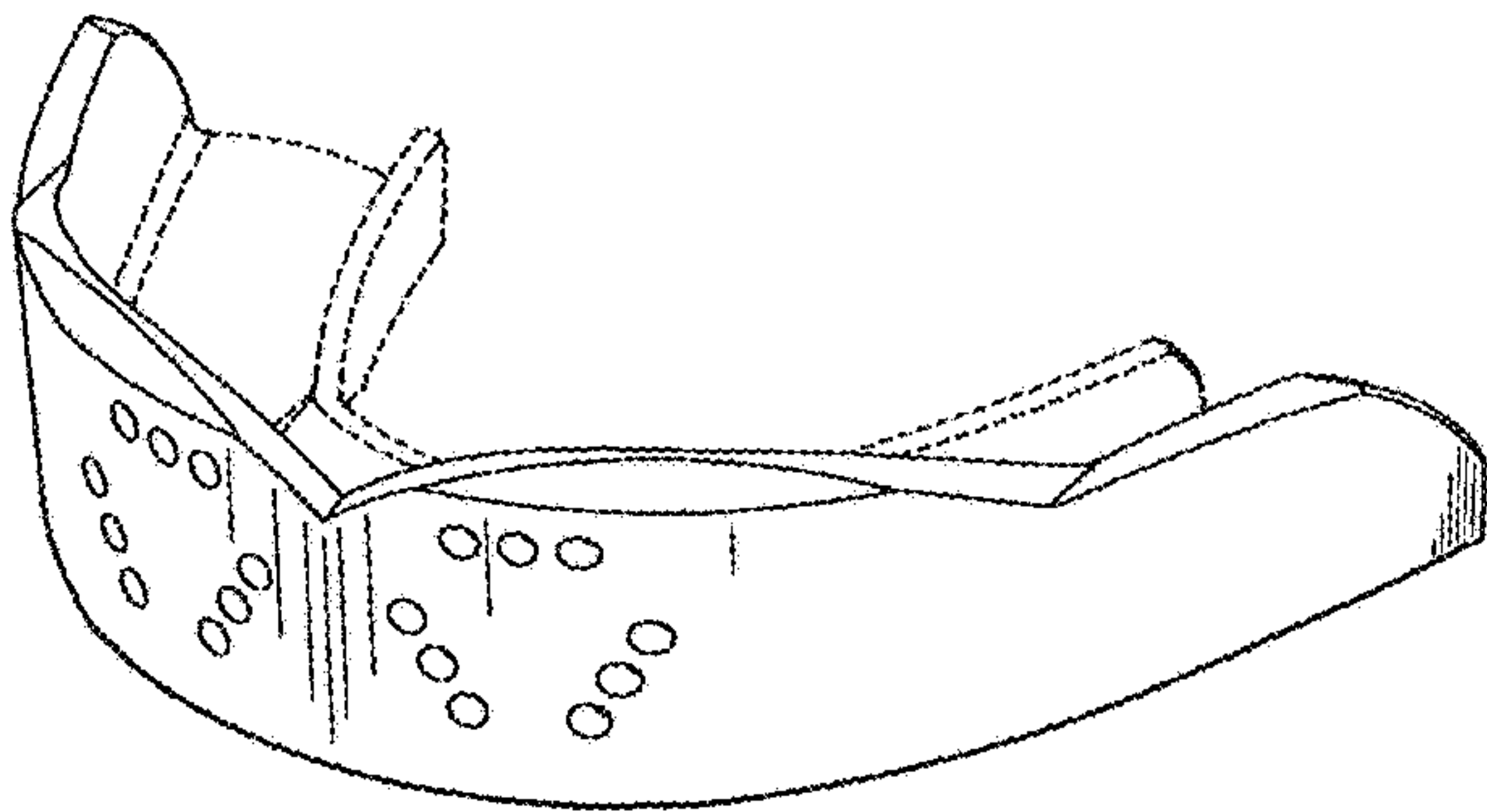


FIG. 16

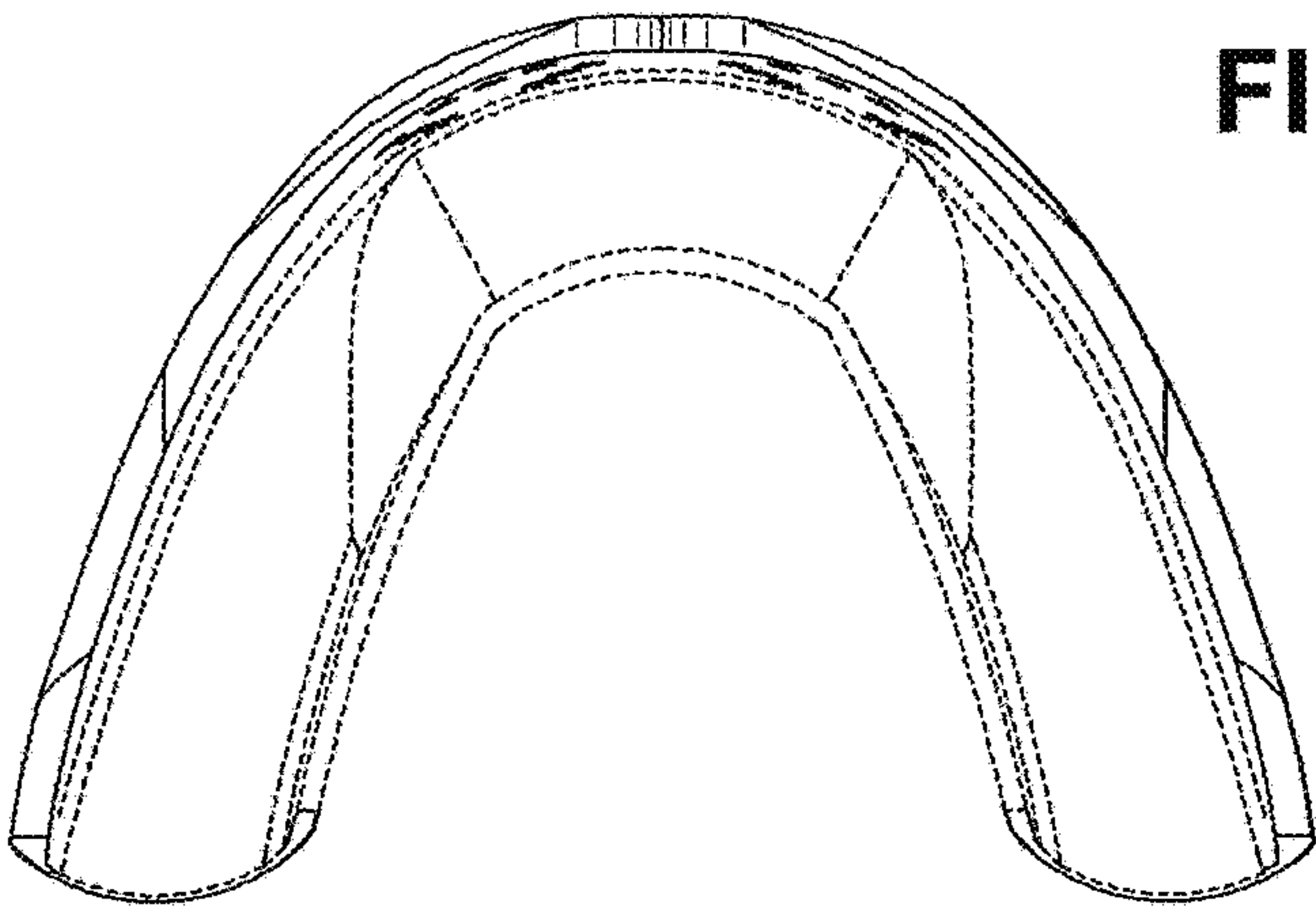


FIG. 17

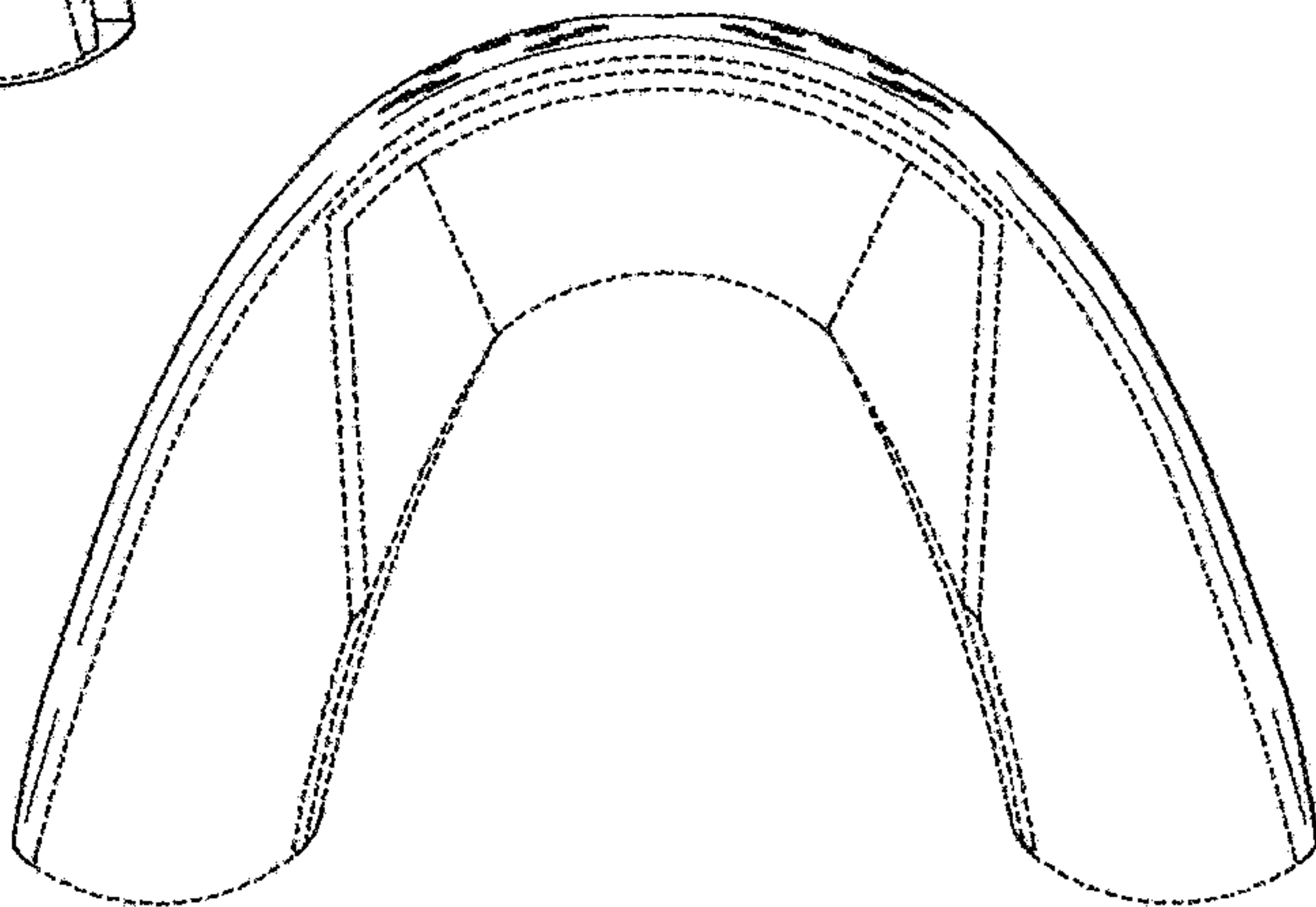


FIG. 18

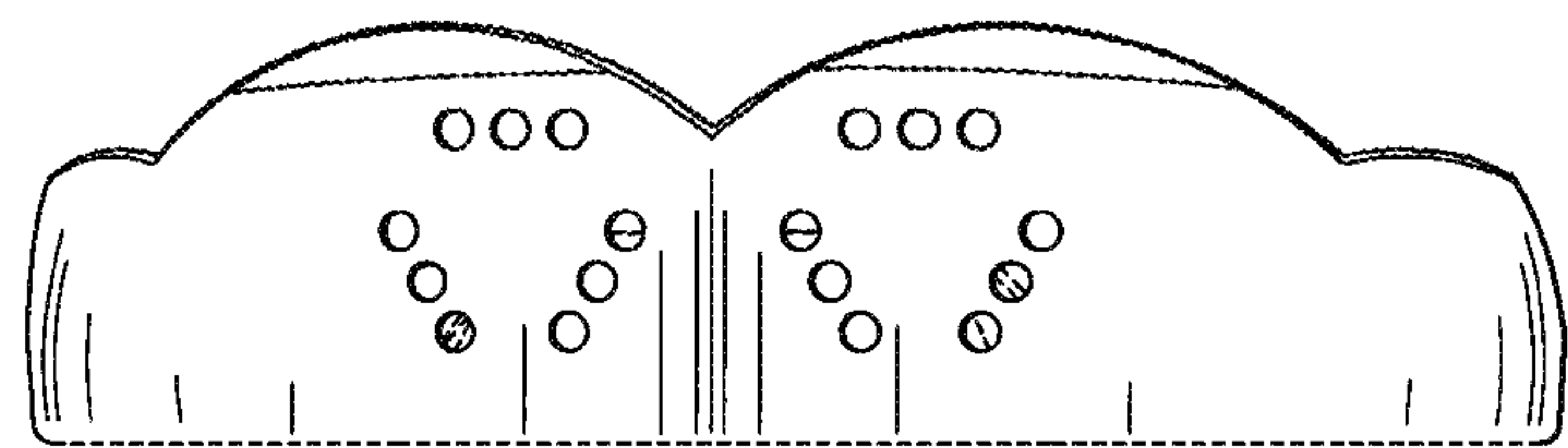


FIG. 19

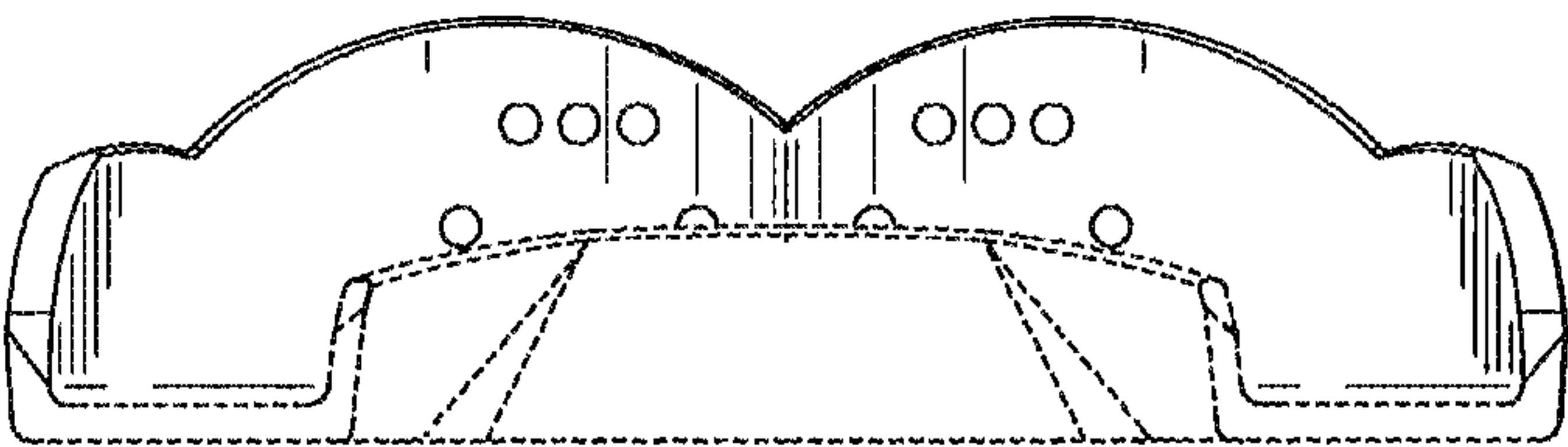


FIG. 20

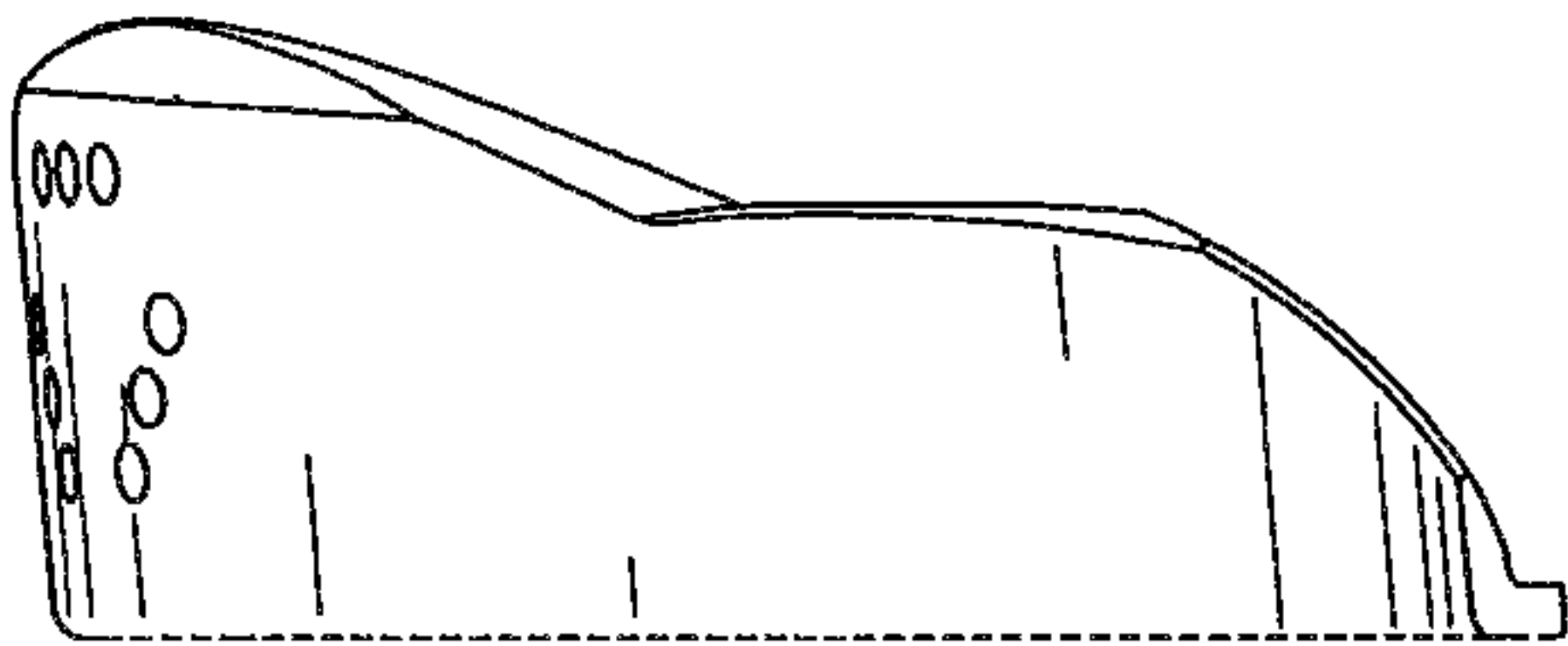


FIG. 21