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(12) **United States Design Patent**  
**Ely**

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(54) **EARPLUG SWITCH**

FOREIGN PATENT DOCUMENTS

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CN 3332809 10/2003  
CN 3475391 9/2005

(Continued)

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OTHER PUBLICATIONS

(73) Assignee: **3M Innovative Properties Company**, St. Paul, MN (US)

“3M Combat Arms Earplugs”, 3M Occupational Health & Environmental Safety Division Military Combat safety Gear, 2010, 2 pages.

(\*\*) Term: **14 Years**

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(21) Appl. No.: **29/482,288**

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(57) **CLAIM**

The ornamental design for an earplug switch, as shown and described.

(51) **LOC (10) Cl.** ..... **24-04**

(52) **U.S. Cl.**  
USPC ..... **D24/106**

**DESCRIPTION**

(58) **Field of Classification Search**  
USPC ..... D24/106, 173, 174; D8/16, 19;  
D13/169, 173, 174; D14/205, 206,  
D14/223; D29/112  
CPC ..... A61F 11/008; A61F 11/08; A61F 11/085  
See application file for complete search history.

FIG. 1 is a perspective view showing a new design for an earplug switch;  
FIG. 2 is a left side view thereof;  
FIG. 3 is a right side view thereof;  
FIG. 4 is a rear view thereof;  
FIG. 5 is a front view thereof;  
FIG. 6 is a top view thereof; and  
FIG. 7 is a bottom view thereof;  
FIG. 8 is a perspective view of the earplug switch shown on an alternate device;  
FIG. 9 is a left side view thereof;  
FIG. 10 is a right side view thereof;  
FIG. 11 is a rear view thereof;  
FIG. 12 is a front view thereof;  
FIG. 13 is a top view thereof; and  
FIG. 14 is a bottom view thereof.

(56) **References Cited**

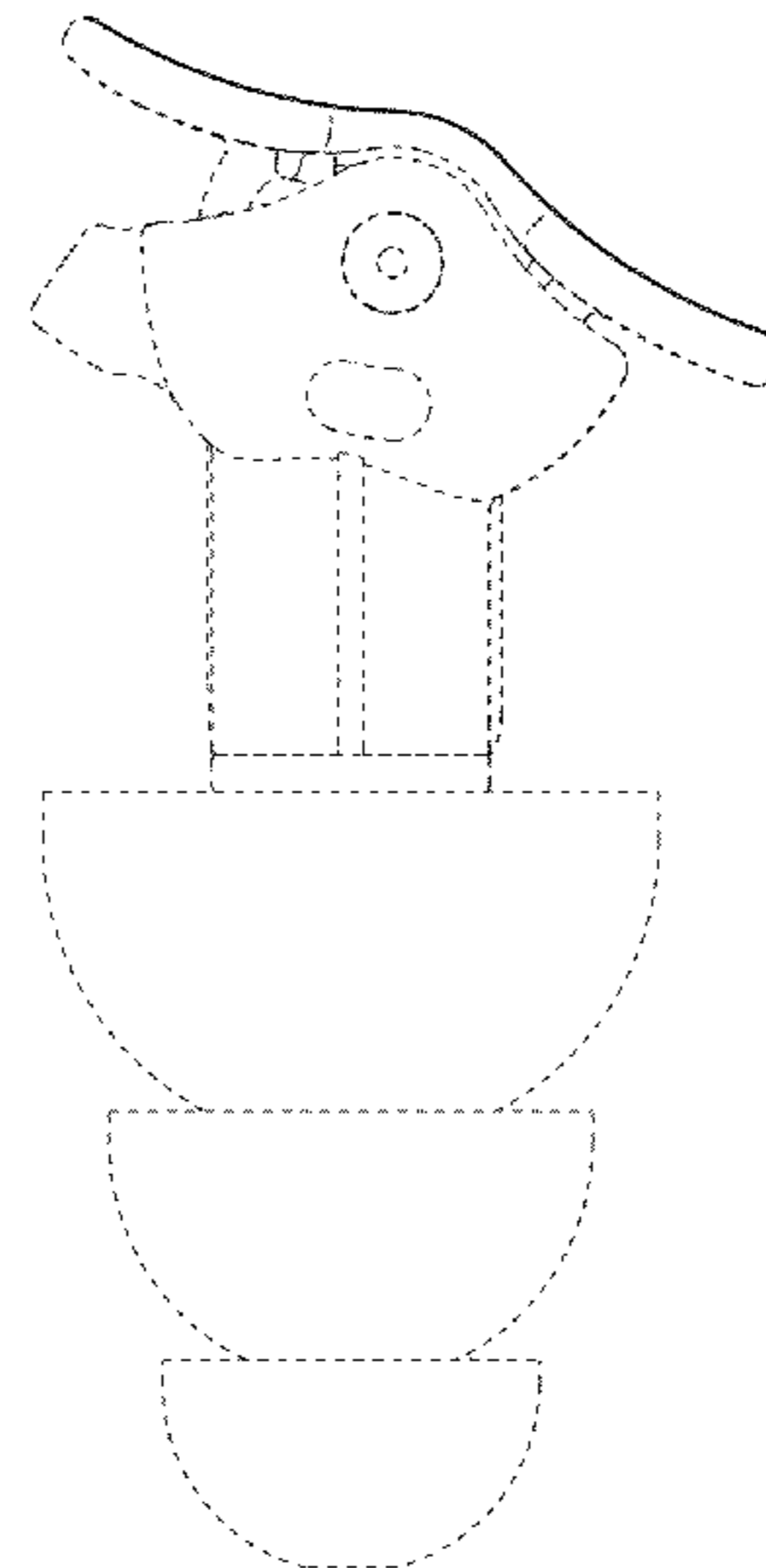
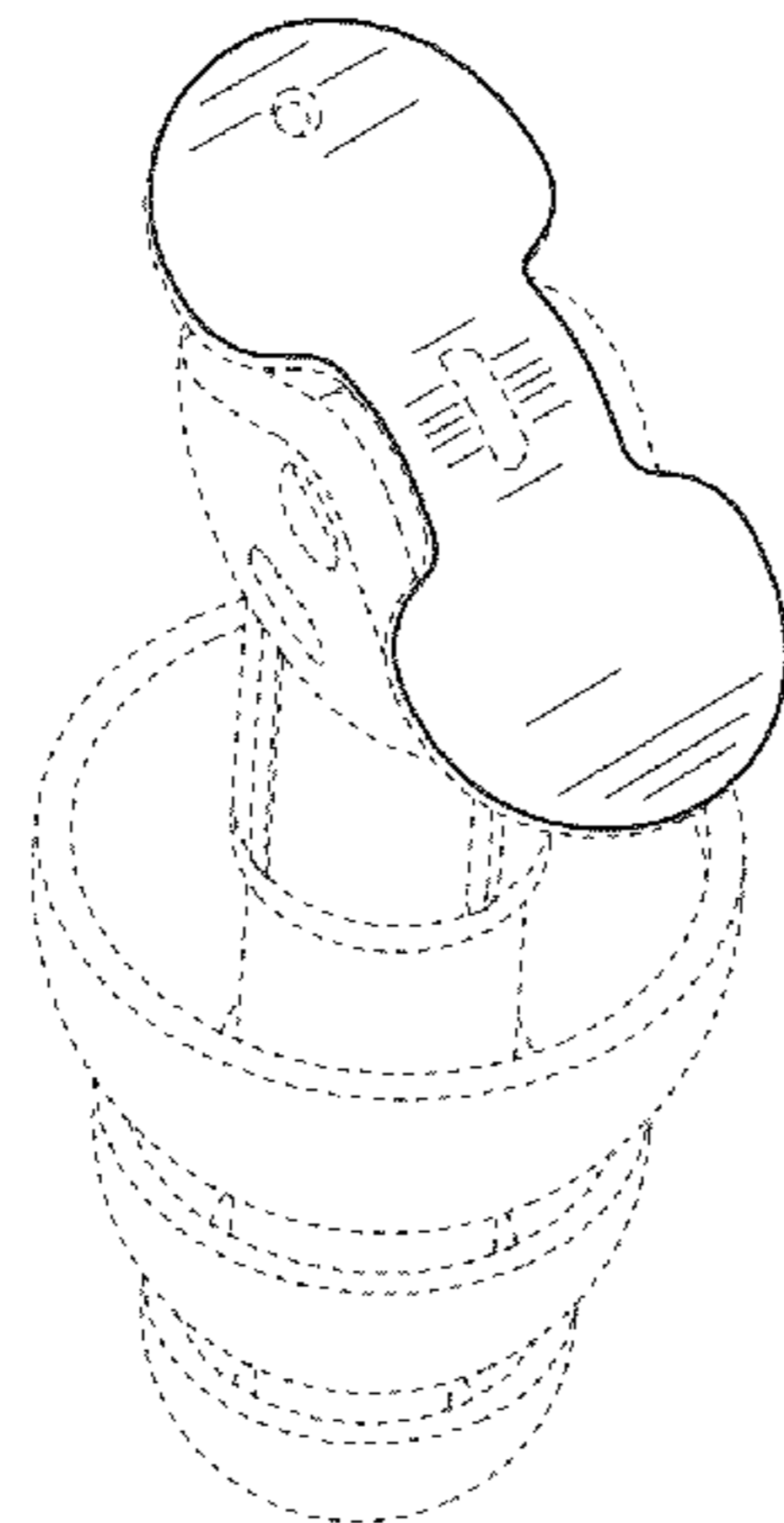
U.S. PATENT DOCUMENTS

D188,325 S \* 7/1960 Brown ..... D13/174  
4,001,751 A \* 1/1977 Deubel ..... 337/343  
5,048,090 A 9/1991 Geers  
D350,757 S 9/1994 Carpenter  
D363,487 S 10/1995 Thurnau  
D375,313 S 11/1996 Jensen  
D377,796 S 2/1997 Hayashi  
D383,757 S 9/1997 Dobrusskin  
D384,958 S 10/1997 Shudo  
D388,093 S 12/1997 Frengley  
D391,576 S 3/1998 Mullin  
D402,661 S 12/1998 Hayashi

The broken line showing of portions of the article is included for the purpose of illustrating internal boundaries with the broken line itself and the area within forming no part of the claimed design, and is not an indication of texture, gloss, etc.

(Continued)

**1 Claim, 7 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

D403,327 S 12/1998 Landreth  
 D411,540 S 6/1999 Mavrakis  
 D419,564 S 1/2000 McDonald  
 D420,007 S 2/2000 Marshall  
 D421,755 S 3/2000 Pitel  
 6,068,079 A 5/2000 Hamery  
 6,070,693 A 6/2000 Hamery  
 D427,994 S 7/2000 Pirelli  
 D431,235 S 9/2000 Lyman  
 6,148,821 A 11/2000 Falco  
 D436,095 S 1/2001 Schmidt  
 D449,295 S 10/2001 Smith  
 D452,857 S 1/2002 Hong  
 D455,732 S 4/2002 Skulley  
 D460,436 S 7/2002 Bjorklund  
 D464,943 S 10/2002 Lai  
 D465,209 S 11/2002 Rath  
 D468,721 S 1/2003 Nguyen  
 D469,422 S 1/2003 Nguyen  
 D469,755 S 2/2003 Hlas  
 D470,121 S 2/2003 Nguyen  
 D470,478 S 2/2003 Kohli  
 D471,537 S 3/2003 Ham  
 D472,888 S 4/2003 Rath  
 D475,694 S 6/2003 Bey  
 D477,821 S 7/2003 Bieltvedt  
 D479,226 S 9/2003 Beauregard, Jr.  
 D480,073 S 9/2003 Jensen  
 D480,711 S 10/2003 Kuan  
 D487,078 S 2/2004 Chen  
 D498,227 S 11/2004 Dyer  
 D500,999 S 1/2005 Dyer  
 D501,196 S 1/2005 Dyer  
 D504,673 S 5/2005 Dyer  
 D508,911 S 8/2005 Sanders  
 D510,931 S 10/2005 Weikel  
 D512,049 S 11/2005 Yang  
 D512,984 S 12/2005 Ham  
 D521,492 S 5/2006 Ham  
 D523,845 S 6/2006 Smith  
 D533,867 S 12/2006 Koizumi  
 D533,868 S 12/2006 Koizumi  
 D537,812 S 3/2007 Erich  
 D539,266 S 3/2007 Bentley  
 D543,968 S 6/2007 Wong  
 D550,655 S 9/2007 Falco  
 D556,735 S 12/2007 Yeo  
 D557,688 S 12/2007 Lee  
 D562,808 S 2/2008 Gwee  
 D572,241 S 7/2008 Gwee  
 D573,137 S 7/2008 Polito  
 D575,767 S 8/2008 Lee  
 D576,155 S 9/2008 Wilson  
 D576,156 S 9/2008 Wilson  
 D576,610 S 9/2008 Johnson  
 D577,009 S 9/2008 Wilson  
 D579,444 S 10/2008 Ewert  
 D585,429 S 1/2009 Dean  
 D585,881 S 2/2009 Nam  
 D589,152 S 3/2009 Champkins  
 D593,075 S 5/2009 Williams  
 D593,076 S 5/2009 Kung  
 D593,077 S 5/2009 Williams  
 D595,273 S 6/2009 Kim  
 D597,084 S 7/2009 Gondo  
 D598,469 S 8/2009 Harris, Jr.  
 D599,329 S 9/2009 Champkins  
 D603,379 S 11/2009 Harbeke  
 D604,273 S 11/2009 Tamura  
 D609,699 S 2/2010 Burnham  
 D610,129 S 2/2010 Densho  
 D611,933 S 3/2010 Burnham  
 D617,780 S 6/2010 Jaakkola  
 D618,333 S \* 6/2010 Turdjian ..... D24/106  
 D618,669 S 6/2010 Johnson

D619,124 S 7/2010 Clay  
 D621,817 S 8/2010 Brickstad  
 D622,265 S 8/2010 Rye  
 D622,694 S 8/2010 Lascelles  
 D622,704 S 8/2010 Fahrendorff  
 D624,529 S 9/2010 Huang  
 D625,297 S 10/2010 Tseng  
 D628,990 S 12/2010 Pedersen  
 D629,397 S 12/2010 Hensen  
 D630,621 S 1/2011 Pedersen  
 D633,899 S 3/2011 Zheng  
 D634,306 S 3/2011 Pedersen  
 D635,559 S 4/2011 Rye  
 D635,960 S 4/2011 Gondo  
 D636,762 S 4/2011 Hensen  
 D639,283 S 6/2011 Ozawa  
 D640,670 S 6/2011 Rye  
 D641,008 S 7/2011 Lee  
 D641,011 S 7/2011 Gondo  
 D643,418 S 8/2011 Lee  
 D645,458 S 9/2011 Silvestri  
 D647,514 S 10/2011 Wikel  
 D647,877 S 11/2011 Son  
 D648,328 S 11/2011 Morimoto  
 D649,533 S 11/2011 Lee  
 D653,243 S 1/2012 Katsumata  
 D653,244 S 1/2012 Birger  
 D654,057 S 2/2012 Burgett  
 D655,693 S 3/2012 Silvestri  
 8,161,975 B2 \* 4/2012 Turdjian ..... 128/867  
 D661,284 S 6/2012 Brandis  
 D662,086 S 6/2012 Komiyama  
 D662,088 S 6/2012 Brandis  
 D662,915 S 7/2012 Halkosaari  
 D664,124 S 7/2012 Smith  
 D666,169 S 8/2012 Tucker  
 D667,123 S 9/2012 Takemoto  
 D667,124 S 9/2012 Takemoto  
 D668,631 S 10/2012 Katsumata  
 D668,632 S 10/2012 Enquist  
 D669,057 S 10/2012 Zheng  
 D672,874 S 12/2012 Ishibashi  
 D672,875 S 12/2012 Ishibashi  
 D676,954 S \* 2/2013 Turdjian ..... D24/106  
 D679,682 S 4/2013 Shimizu  
 D681,602 S 5/2013 Koch  
 D682,257 S 5/2013 Zheng  
 D685,351 S 7/2013 Morimoto  
 D685,768 S 7/2013 Mogili  
 D687,021 S 7/2013 Yuen  
 D693,326 S 11/2013 Takeno  
 D693,792 S 11/2013 Seto  
 2008/0181441 A1 7/2008 Smith  
 2012/0057739 A1 3/2012 Smith  
 2012/0073583 A1 \* 3/2012 Turdjian ..... 128/864  
 2012/0272974 A1 \* 11/2012 Magidson et al. .... 128/864

FOREIGN PATENT DOCUMENTS

CN 3597837 1/2007  
 CN 301104736 1/2010  
 CN 301139500 2/2010  
 CN 301365125 10/2010  
 CN 301759948 12/2011  
 CN 301768831 12/2011  
 EM 001202824-0004 4/2010  
 EM 001282388-0027 9/2011  
 EM 001982976-0002 5/2012  
 EM 001982976-0003 5/2012  
 EM 001982976-0005 5/2012  
 EM 001982976-0007 5/2012  
 GB 2052356 3/1996  
 GB 2055470 8/1996  
 GB 2073246 8/1998  
 GB 2086330 12/1999  
 GB 2103002 8/2001  
 GB 3004998 7/2002  
 GB 3005024 10/2002  
 GB 3006343 10/2002

(56)

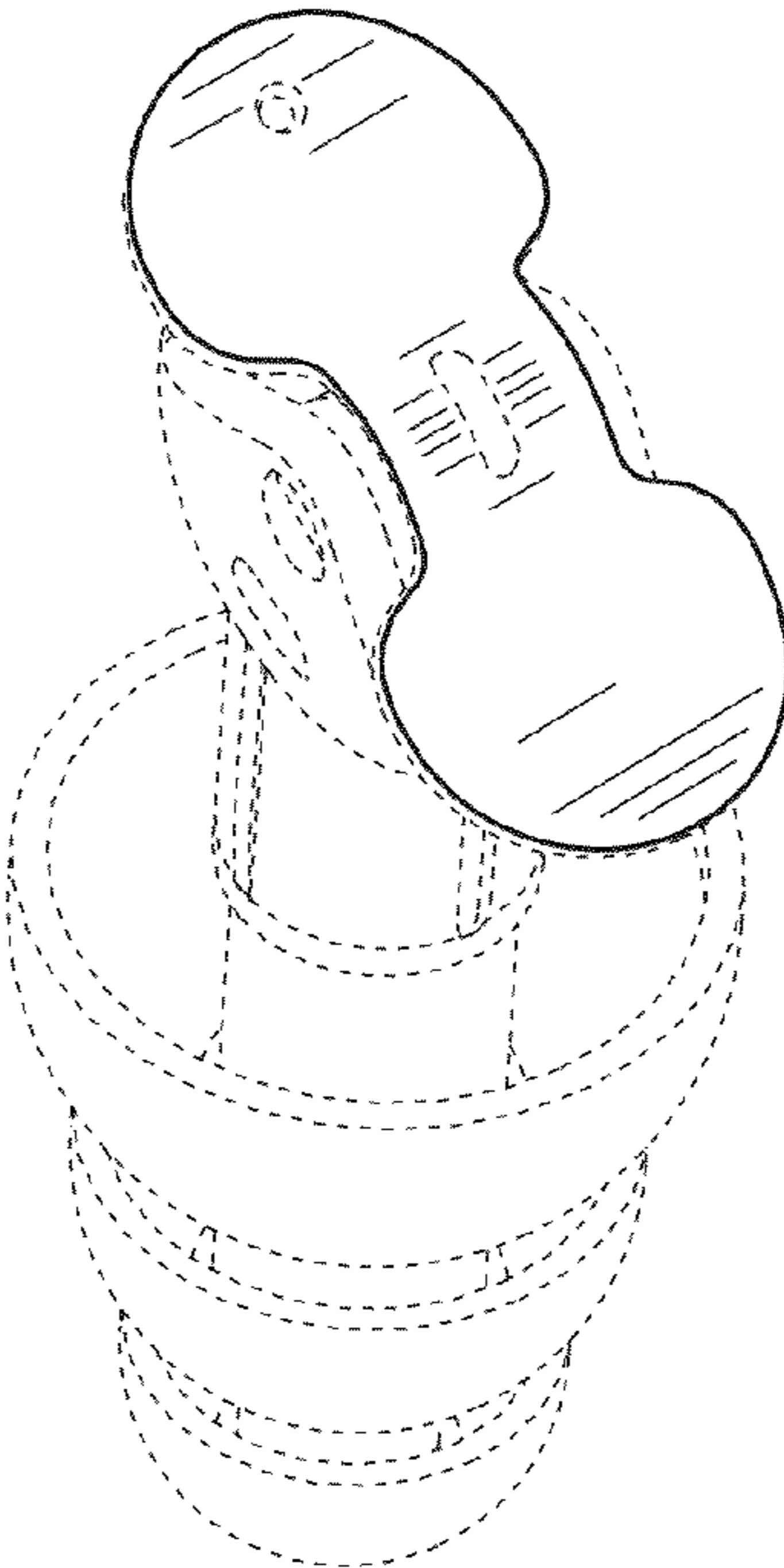
**References Cited**

FOREIGN PATENT DOCUMENTS

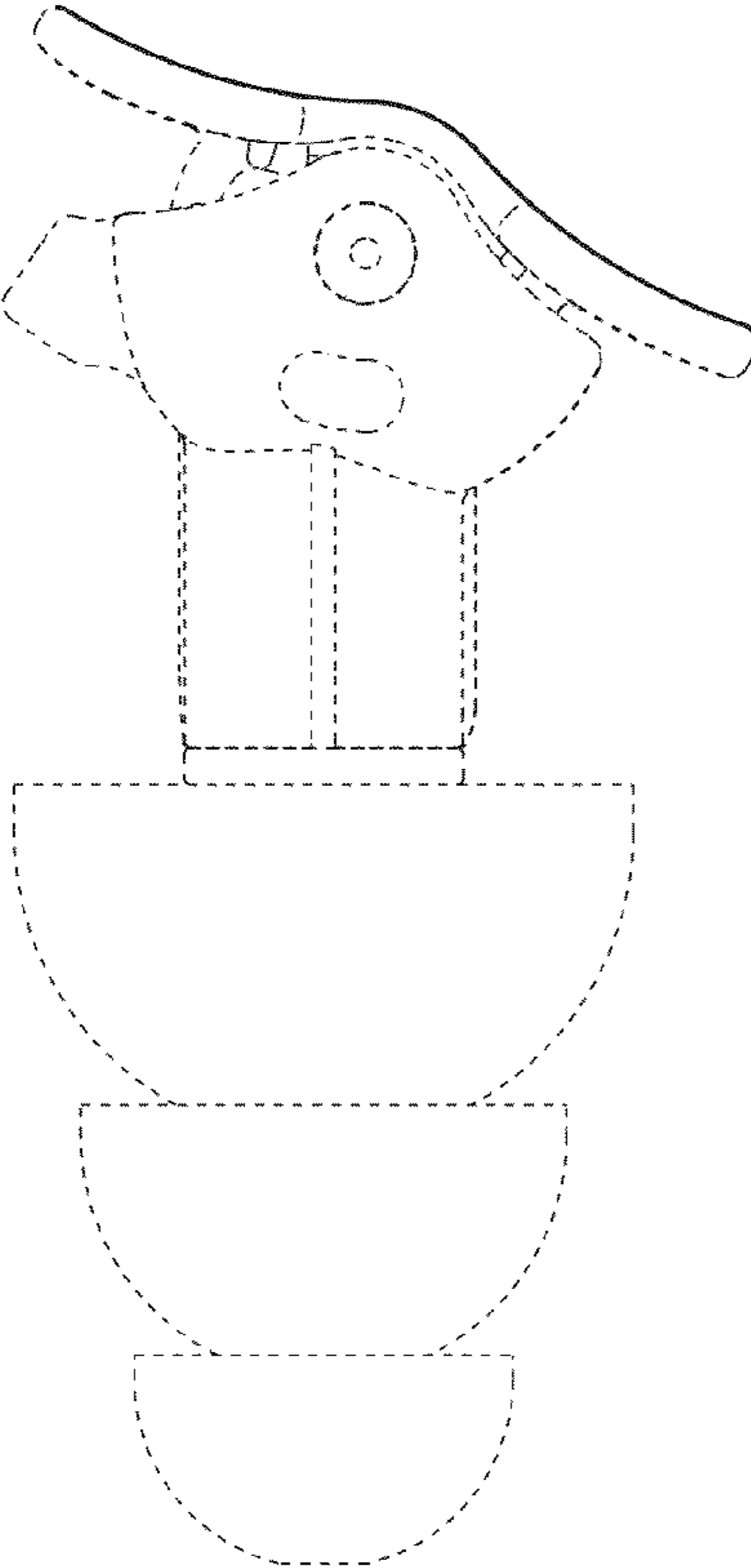
JP	D1232492	3/2005
JP	D1412316	4/2011
JP	D1422431	9/2011
JP	D1431262	1/2012
JP	D1432304	1/2012
JP	D1432305	1/2012

JP	D1436556	3/2012
JP	D1437169	4/2012
JP	D1472400	6/2013
JP	D1479882	9/2013
KR	300482159	3/2008
KR	300619595	11/2011
RU	00083284	10/2012
WO	WO 2011-075840	6/2011

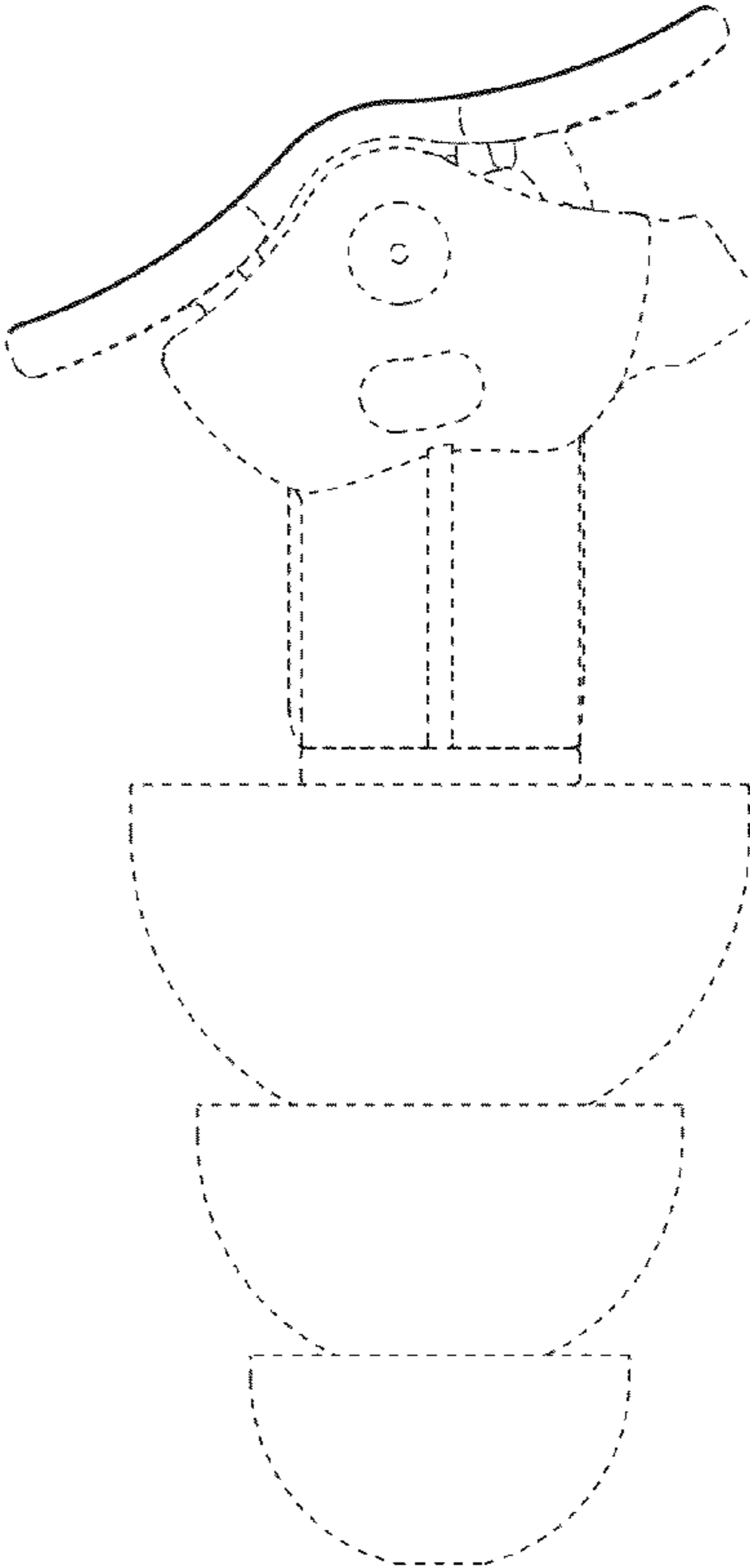
\* cited by examiner



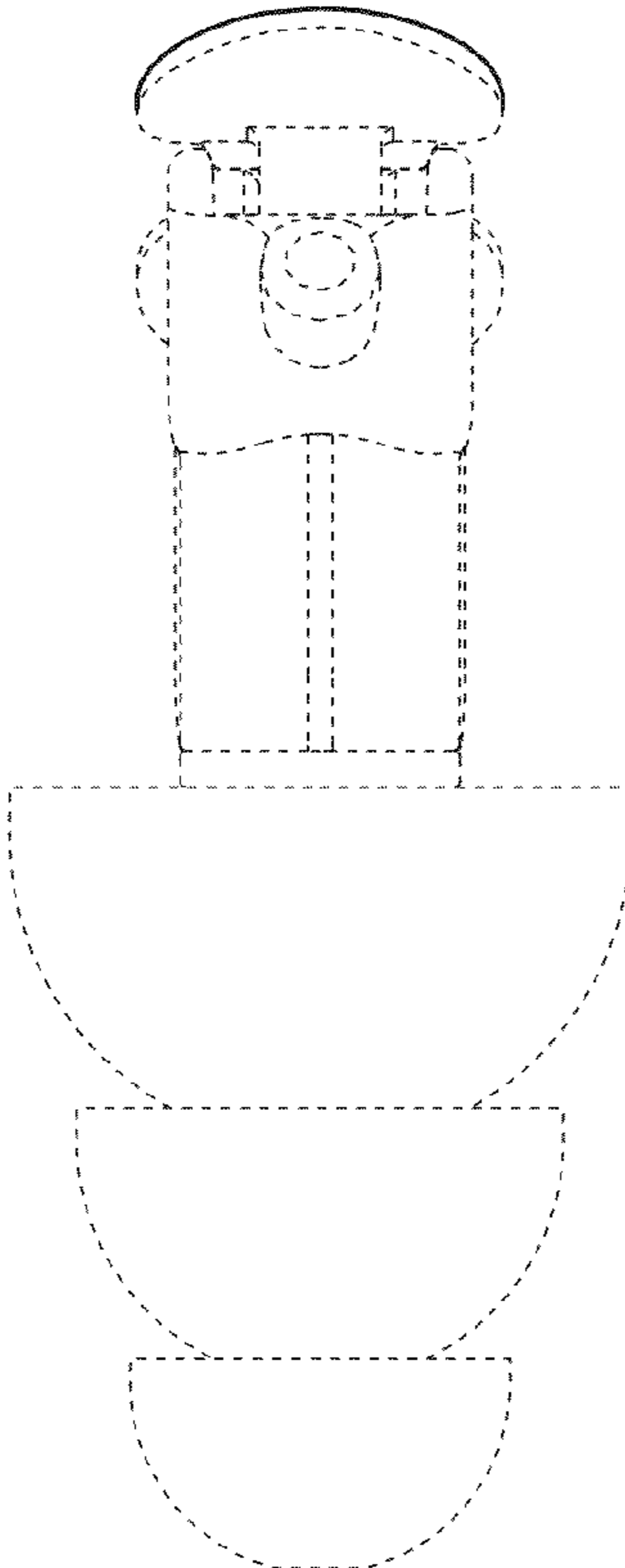
**FIG. 1**



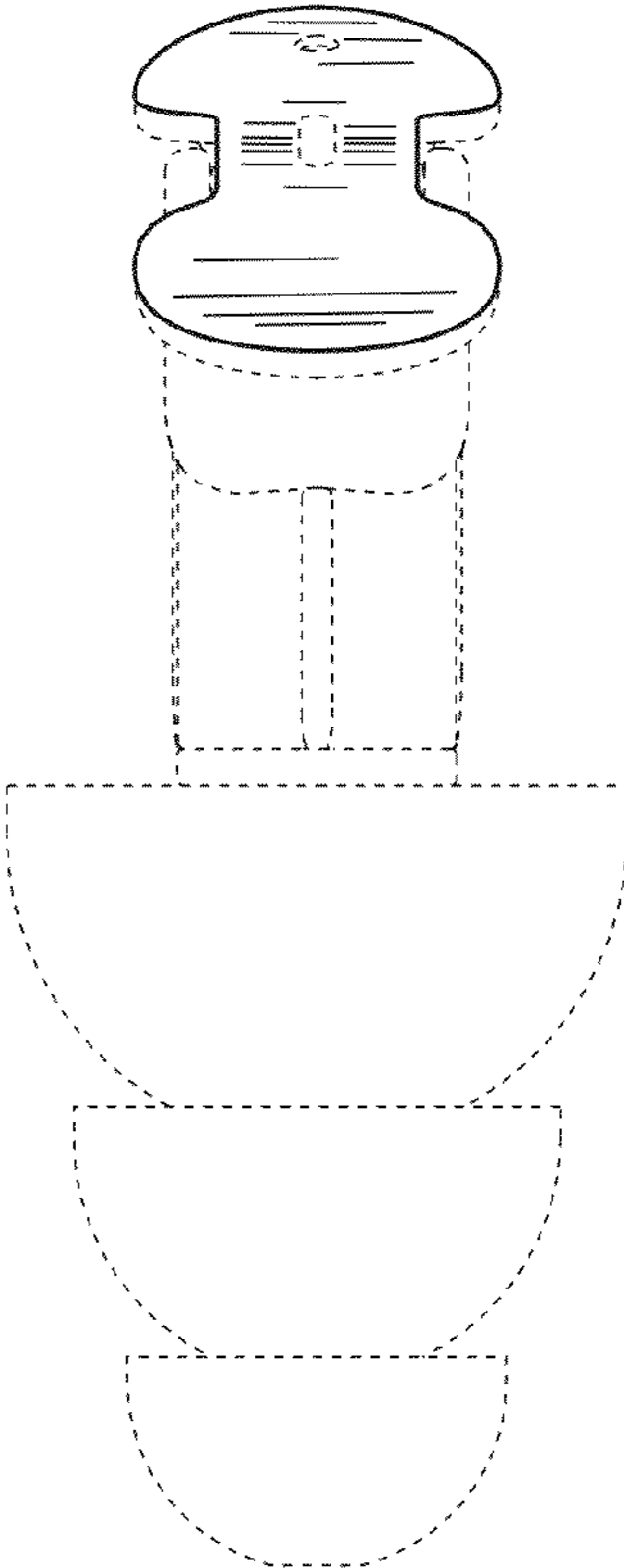
**FIG. 2**



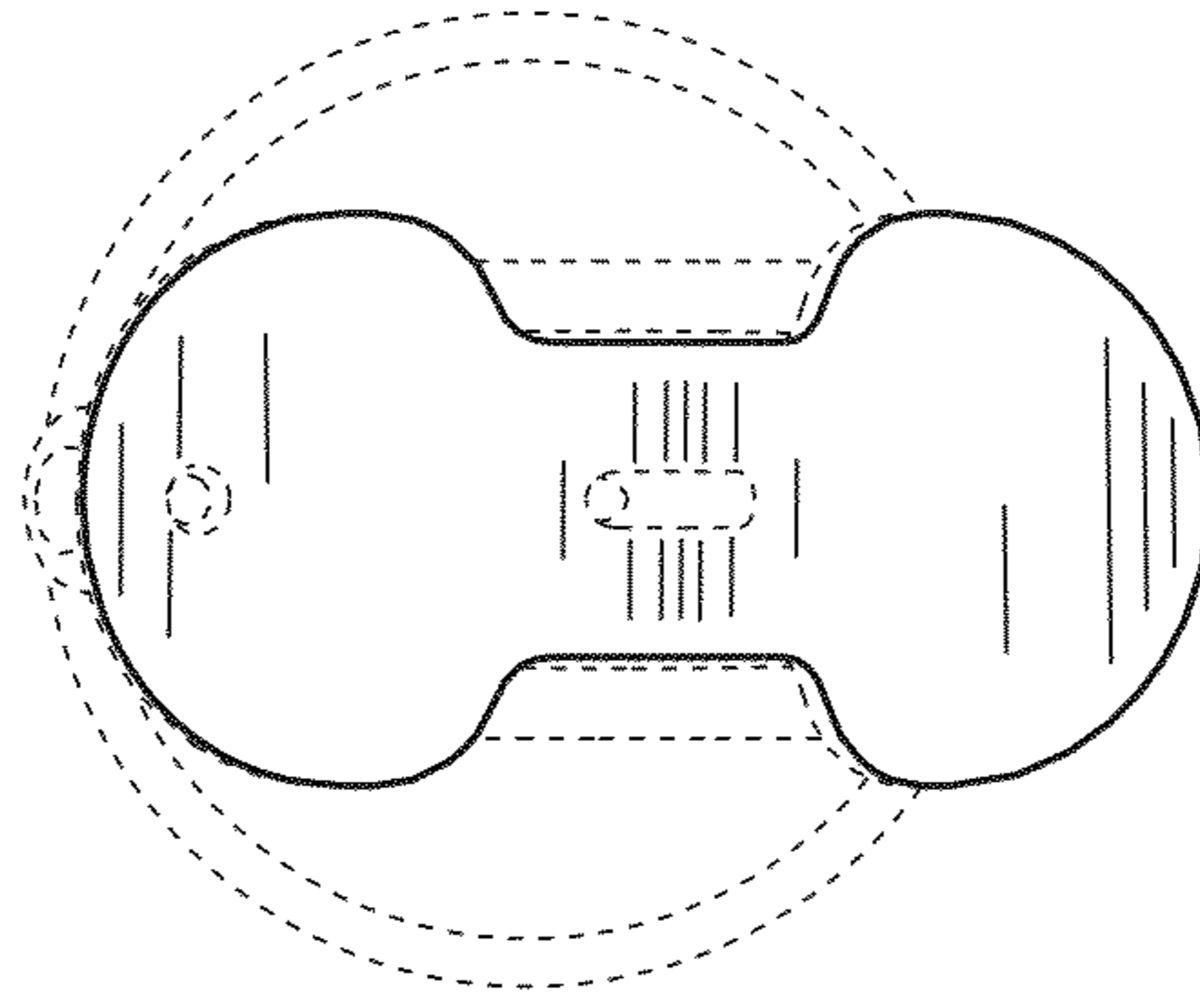
**FIG. 3**



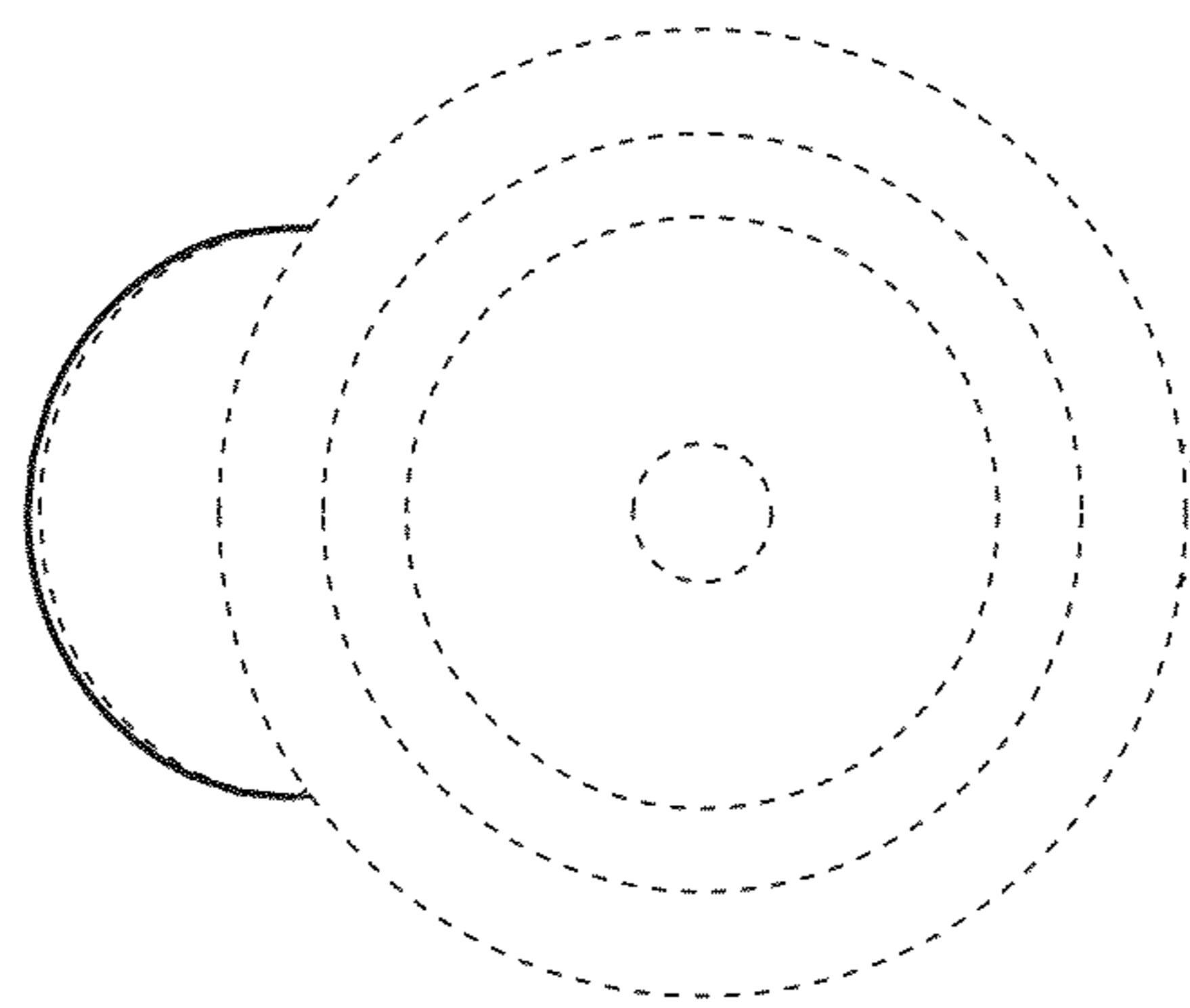
**FIG. 4**



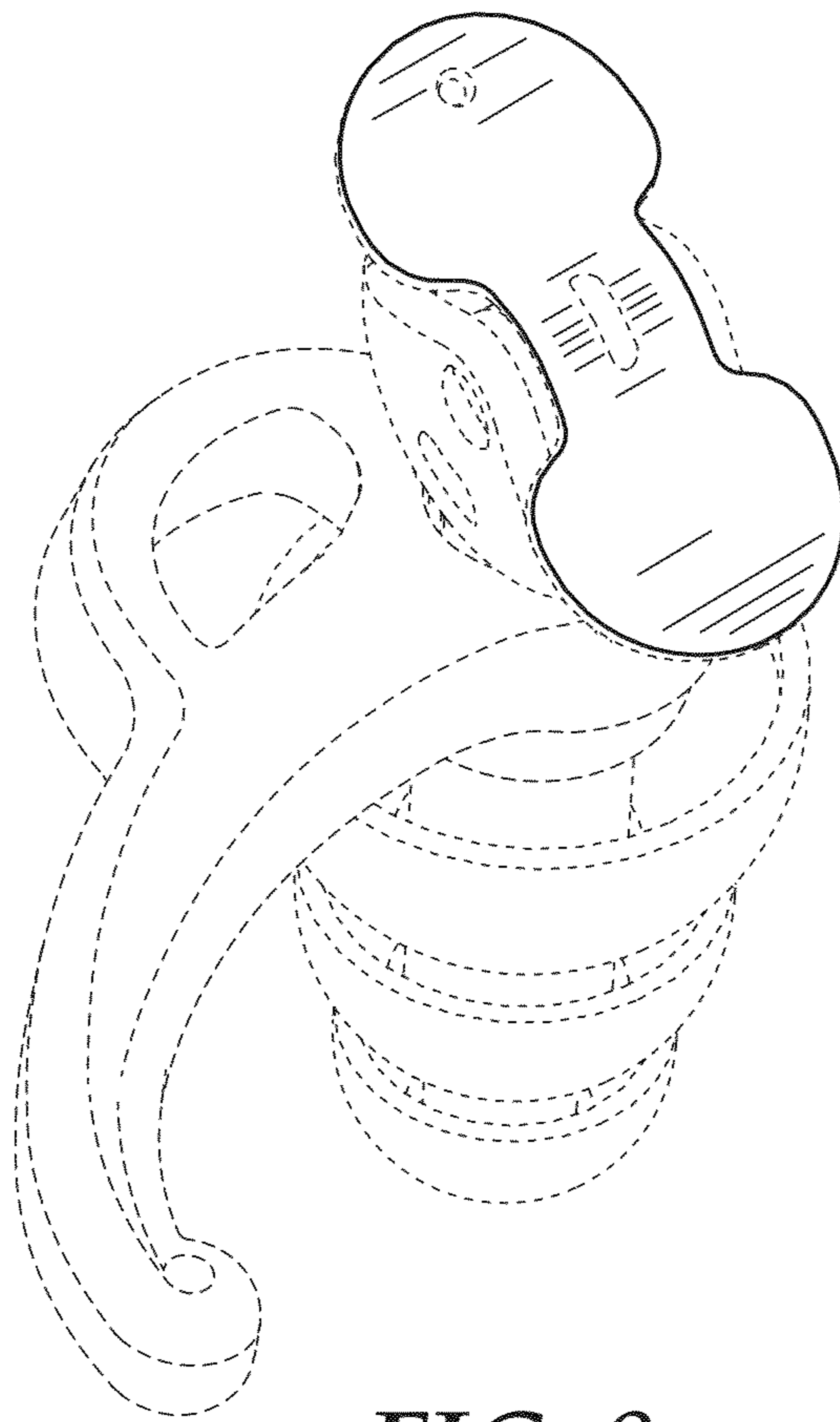
**FIG. 5**



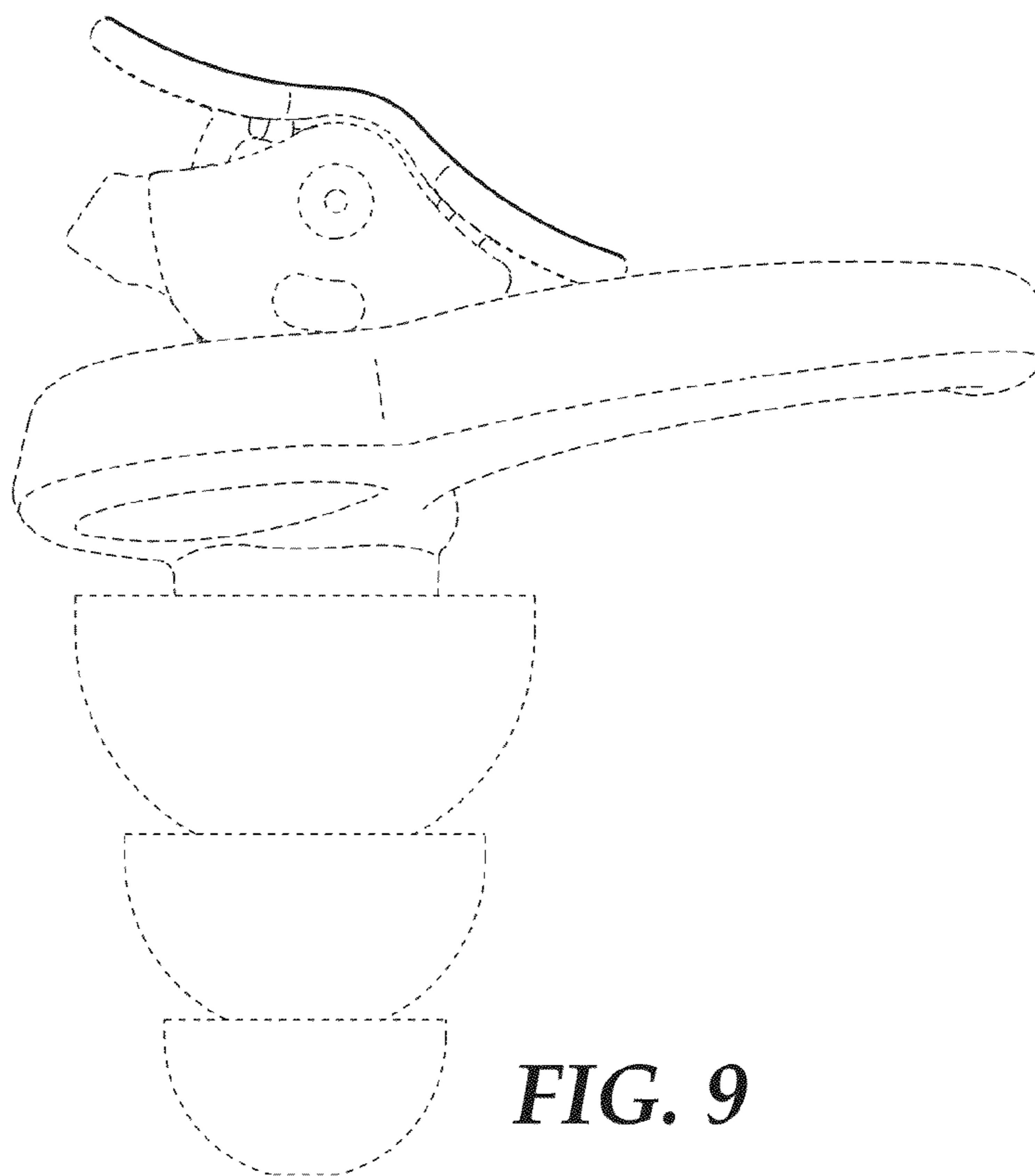
**FIG. 6**



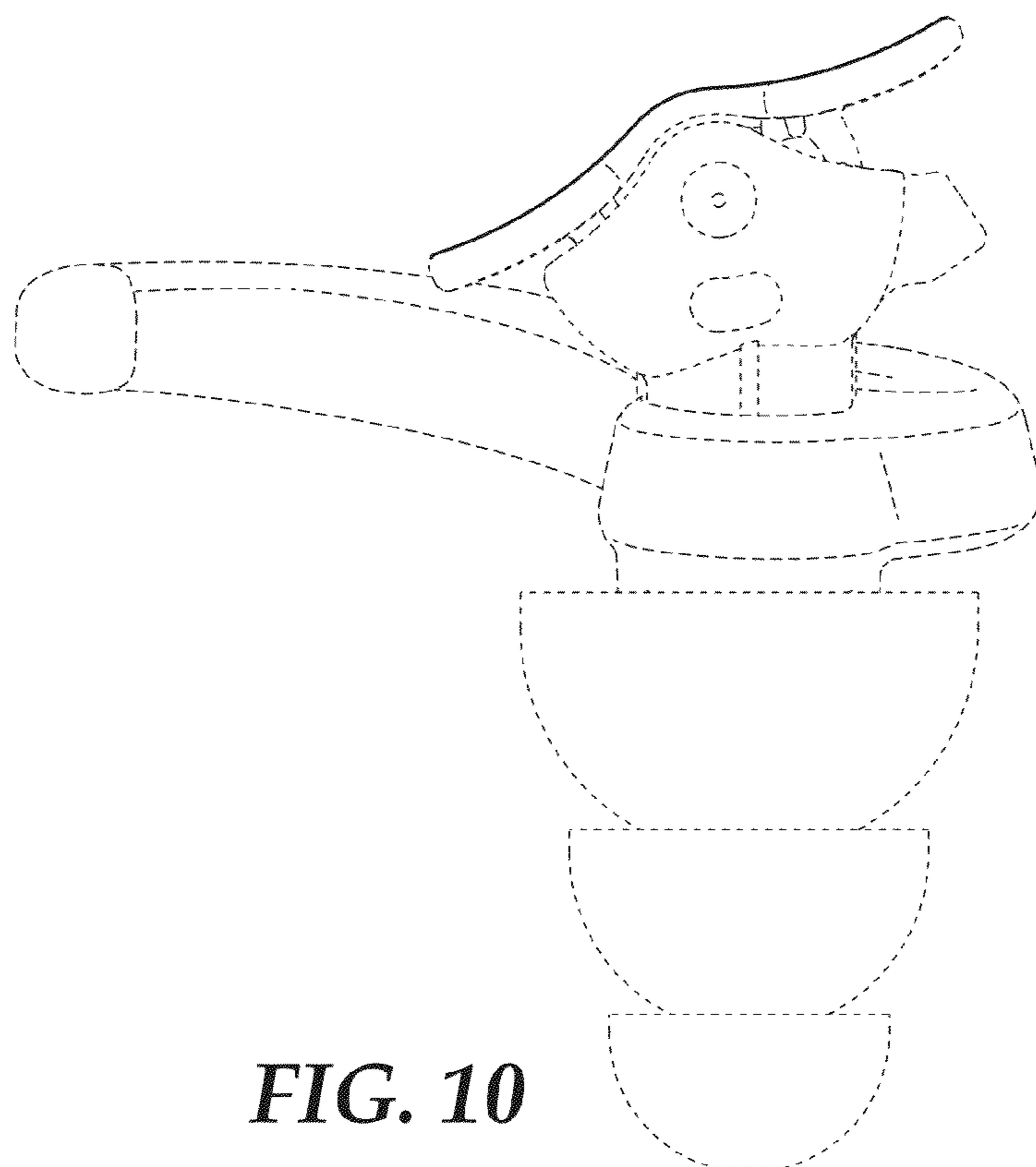
**FIG. 7**



**FIG. 8**

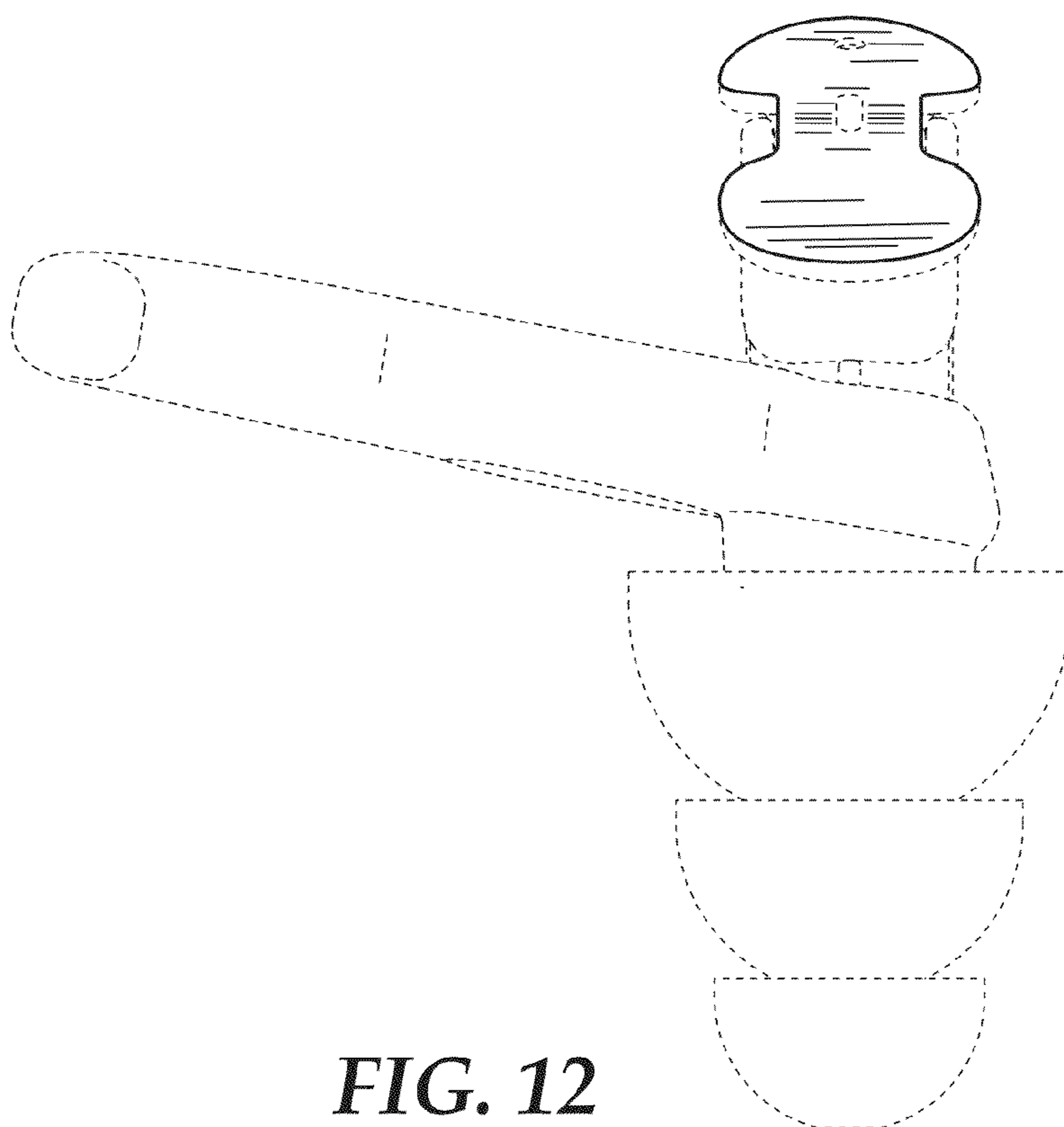
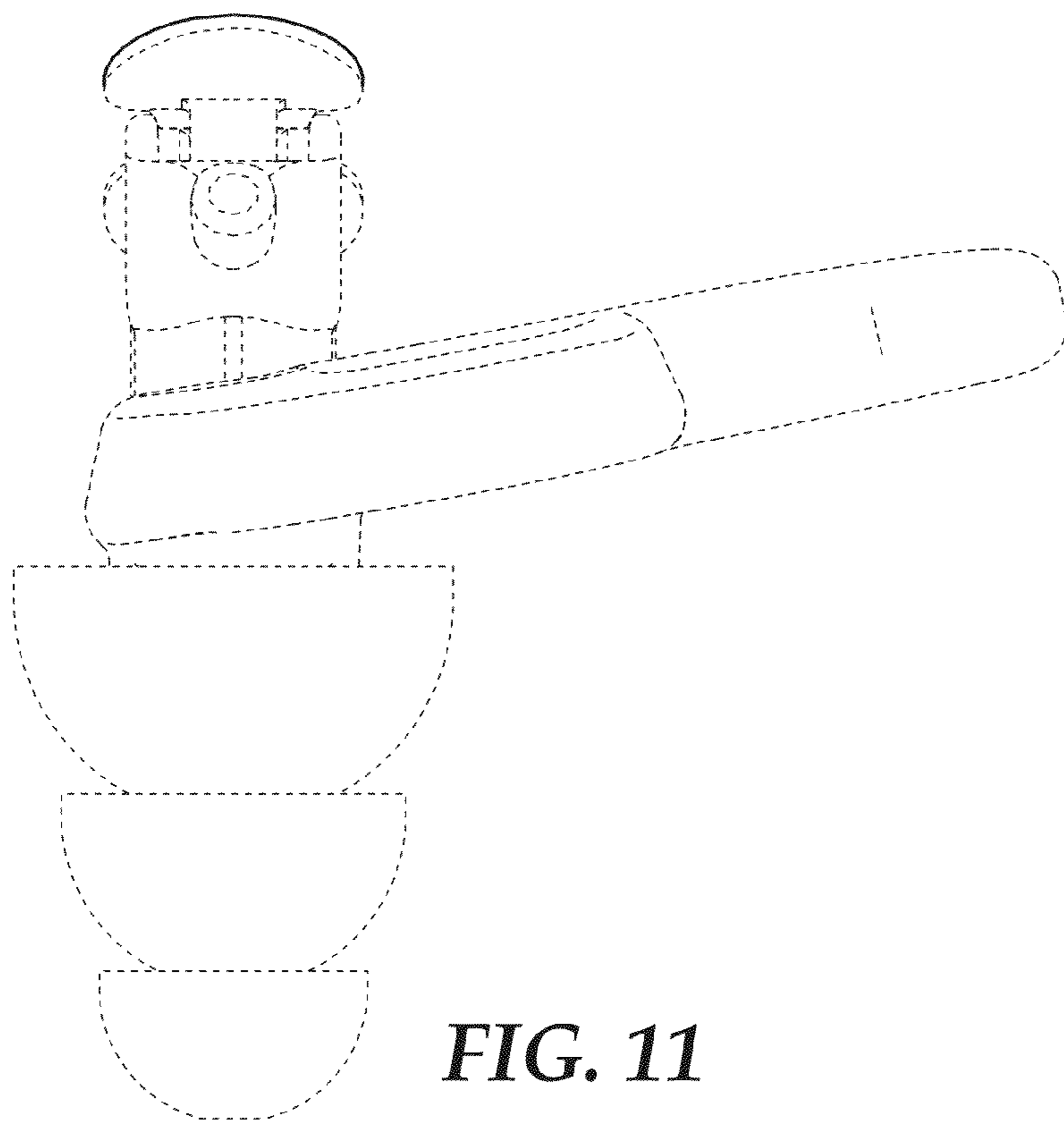


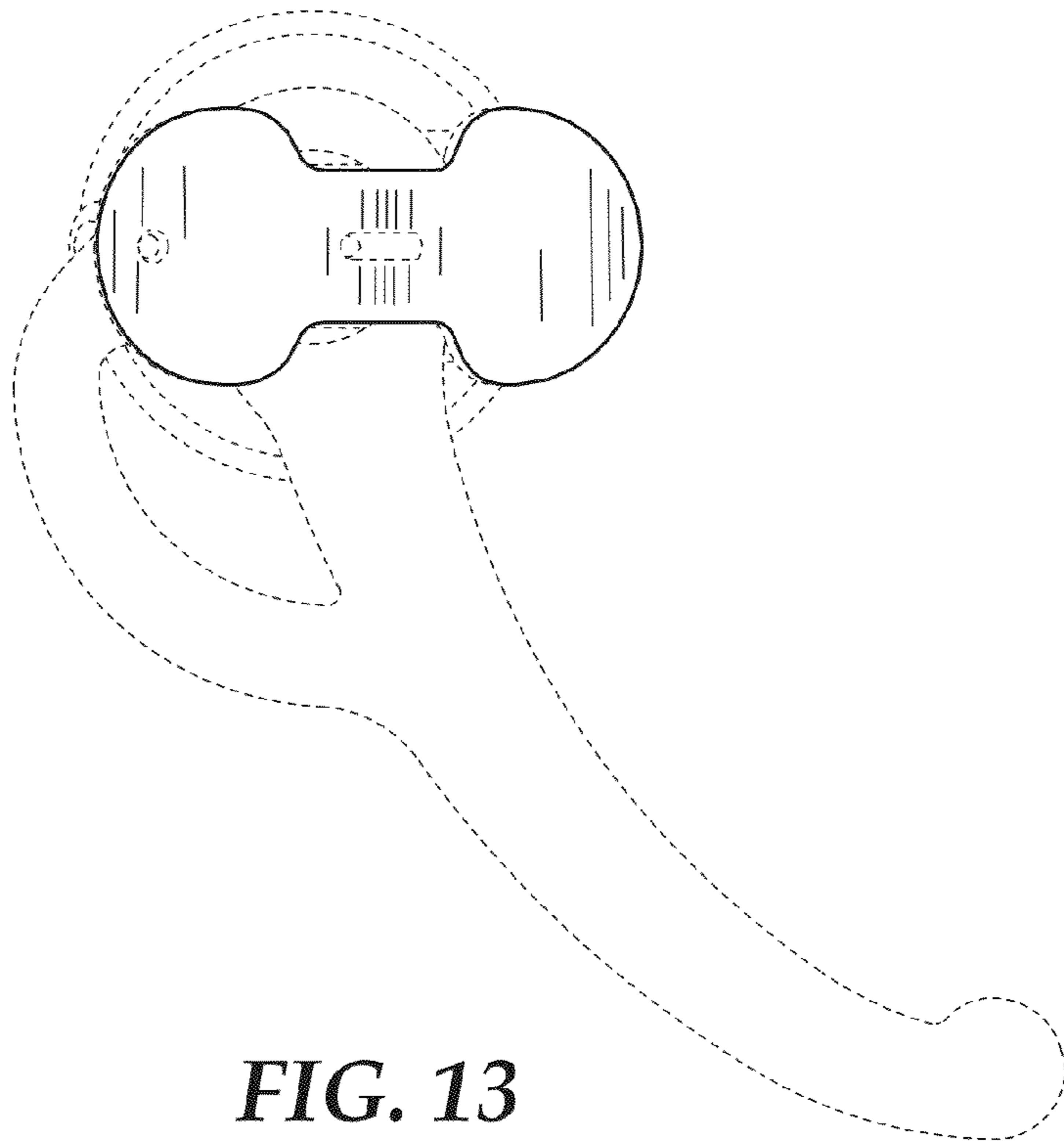
**FIG. 9**



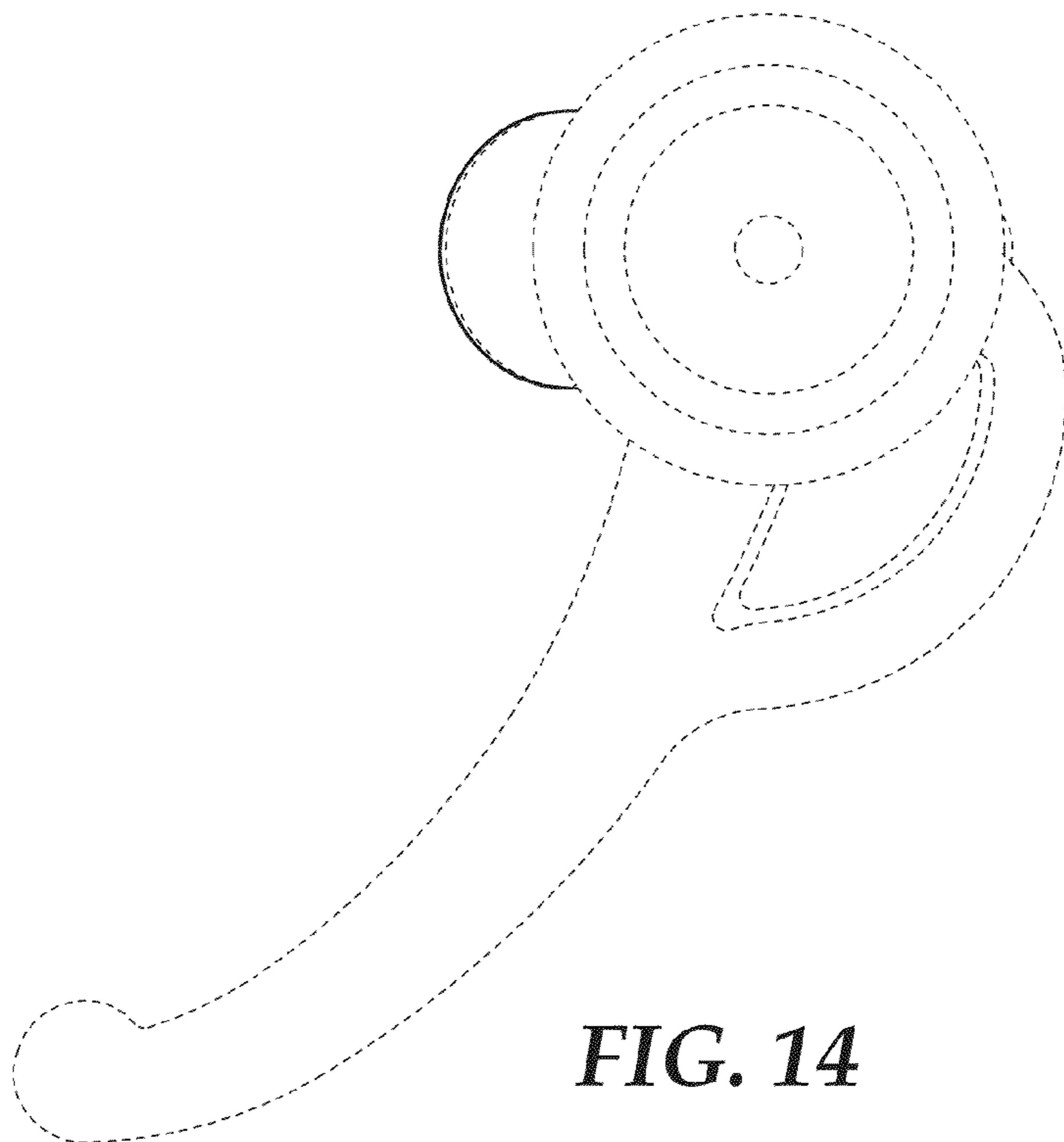
**FIG. 10**







**FIG. 13**



**FIG. 14**