



US00D888253S

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

(10) **Patent No.:** **US D888,253 S**  
(45) **Date of Patent:** **\*\* Jun. 23, 2020**

(54) **MASTICATION MONITORING DEVICE**

D827,143 S \* 8/2018 Dayal ..... D24/187  
D832,824 S \* 11/2018 Kim ..... D14/223  
D836,194 S \* 12/2018 Cindrich ..... D24/141

(71) Applicant: **Sharp Kabushiki Kaisha**, Sakai, Osaka  
(JP)

(Continued)

(72) Inventor: **Shunsuke Nara**, Sakai (JP)

**FOREIGN PATENT DOCUMENTS**

(73) Assignee: **Sharp Kabushiki Kaisha**, Sakai, Osaka  
(JP)

JP D1347547 1/2009  
JP D1524929 6/2015

(Continued)

(\*\*) Term: **15 Years**

**OTHER PUBLICATIONS**

(21) Appl. No.: **29/640,037**

Counting calories from . . . the ear. Online, published date Nov. 7,  
2014. Retrieved on May 28, 2019 from URL: <https://news.yahoo.com/counting-calories-ear-161407510.html>.\*

(22) Filed: **Mar. 12, 2018**

(30) **Foreign Application Priority Data**

Sep. 27, 2017 (JP) ..... 2017-021132

(51) **LOC (12) Cl.** ..... **24-02**

(52) **U.S. Cl.**  
USPC ..... **D24/187**

(58) **Field of Classification Search**  
USPC ..... D24/107, 136, 165-168, 173-175, 186,  
D24/187, 191, 193, 194, 200; D14/188,  
D14/192, 204, 205, 206, 209, 223, 224,  
D14/225, 240

CPC ..... A61B 5/14552  
See application file for complete search history.

*Primary Examiner* — Susan Bennett Hattan

*Assistant Examiner* — Omeed Agilee

(74) *Attorney, Agent, or Firm* — Nixon & Vanderhye P.C.

(57) **CLAIM**

The ornamental design for a mastication monitoring device,  
as shown and described.

**DESCRIPTION**

FIG. 1 is a front, left perspective view of a mastication  
monitoring device in accordance with my new design;  
FIG. 2 is rotated, rear, left perspective view thereof;  
FIG. 3 a front elevation view thereof;  
FIG. 4 is a rear elevation view thereof;  
FIG. 5 is a top plan view thereof;  
FIG. 6 is a bottom plan view thereof;  
FIG. 7 is a right side elevation view thereof; and,  
FIG. 8 is a left side elevation view thereof.

The mastication monitoring device may be hooked on an ear  
to measure data of mastication frequency and speed.

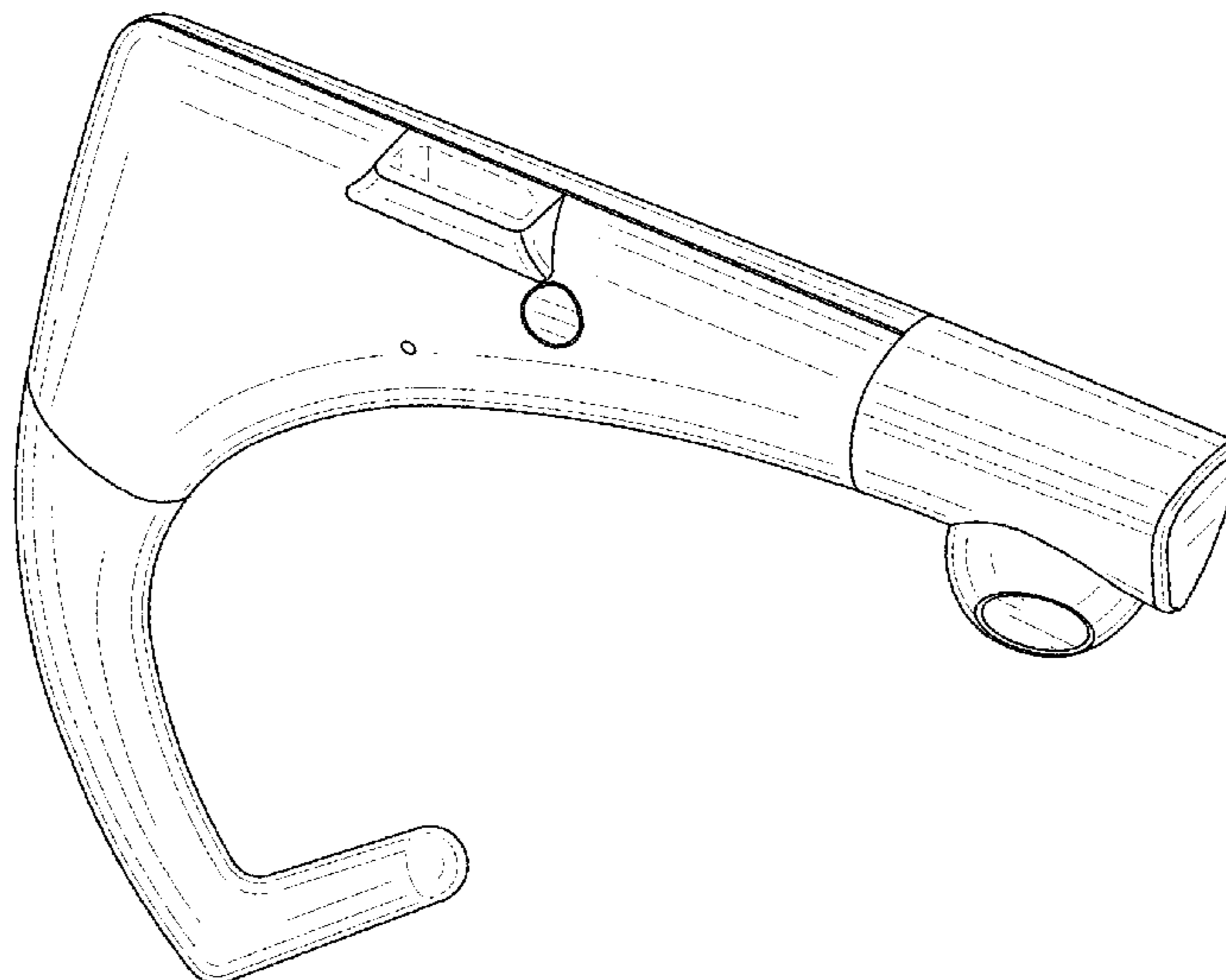
The broken lines in the drawings depict portions of the  
mastication monitoring device that form no part of the  
claimed design.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D468,299 S \* 1/2003 Boesen ..... D14/223  
D530,819 S \* 10/2006 Jurkiewicz ..... D24/174  
D565,022 S \* 3/2008 Belliveau ..... D14/205  
D575,872 S \* 8/2008 Pedersen ..... D24/174  
D603,379 S \* 11/2009 Harbeke ..... D14/223  
D681,002 S \* 4/2013 Ham ..... D14/205  
D723,171 S \* 2/2015 Ilic ..... D24/174  
D762,857 S \* 8/2016 Ilic ..... D24/174  
D774,021 S \* 12/2016 Pedersen ..... D14/223  
D788,751 S \* 6/2017 Pejaudier ..... D14/223  
D797,939 S \* 9/2017 Tipsmark ..... D24/174

**1 Claim, 6 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

D845,467 S \* 4/2019 Henne ..... D24/113  
D845,487 S \* 4/2019 Zheng ..... D24/174  
D847,794 S \* 5/2019 Guo ..... D14/223

FOREIGN PATENT DOCUMENTS

JP D1524930 6/2015  
JP D1575943 5/2017

\* cited by examiner

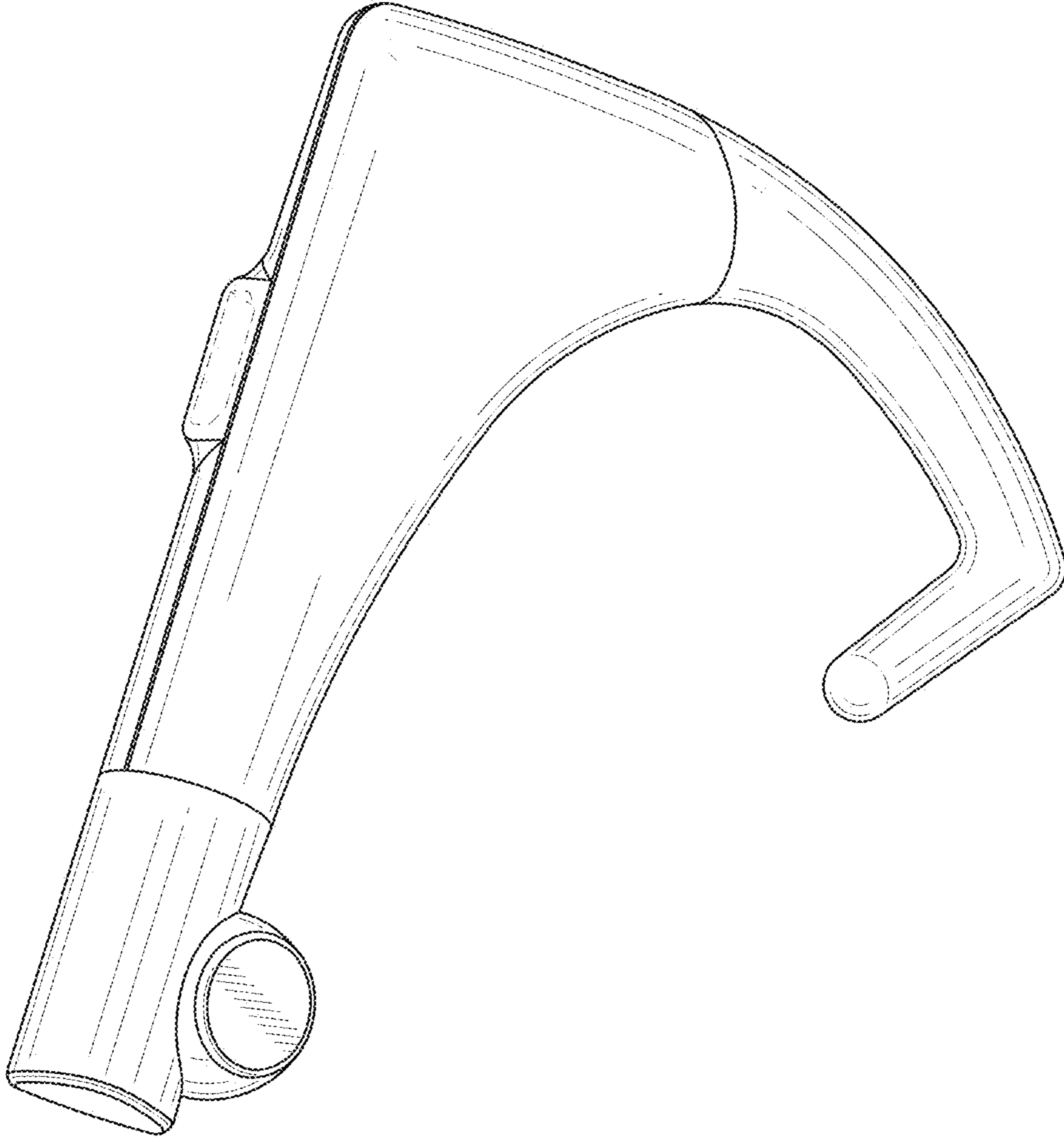


FIG. 1

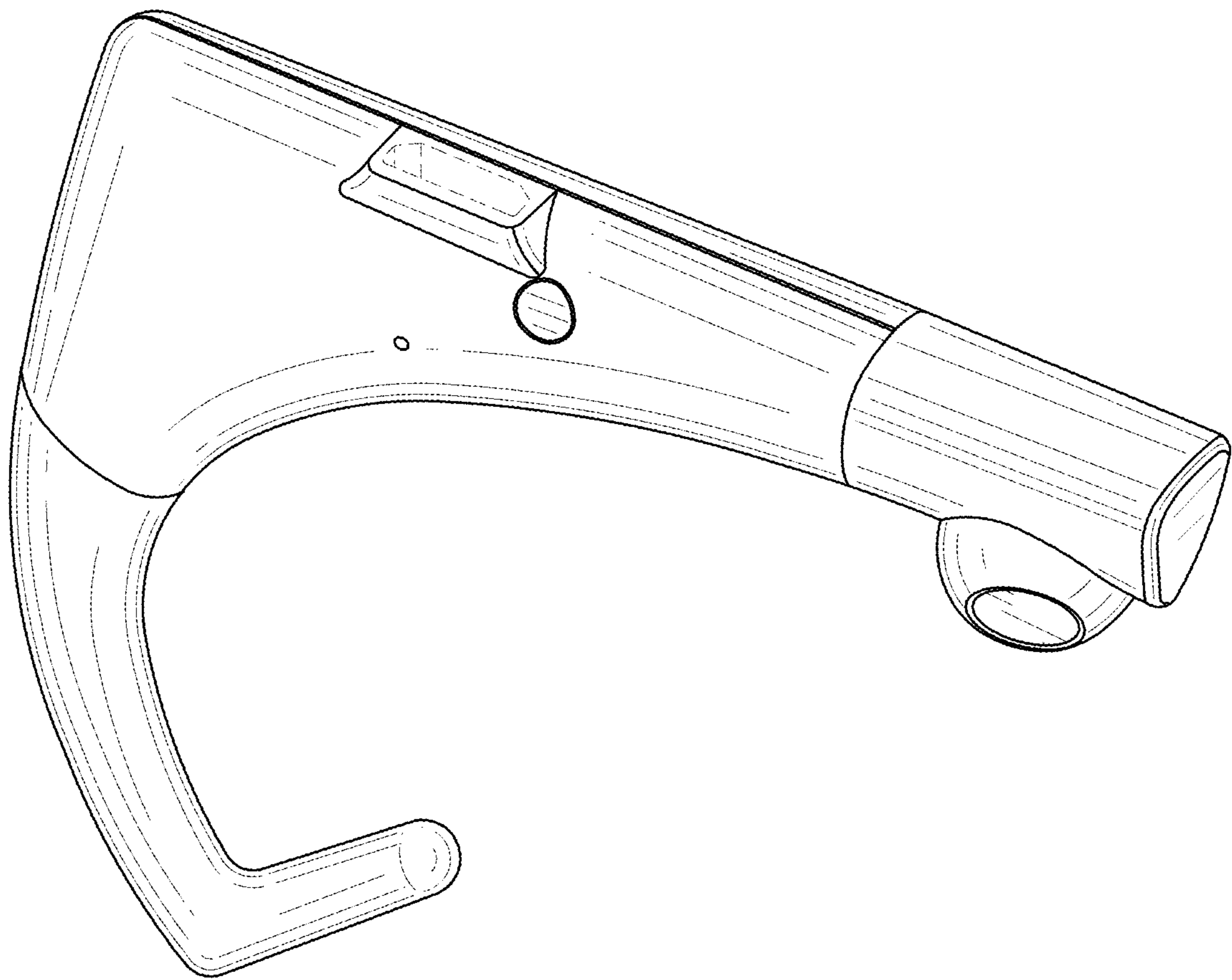


FIG. 2

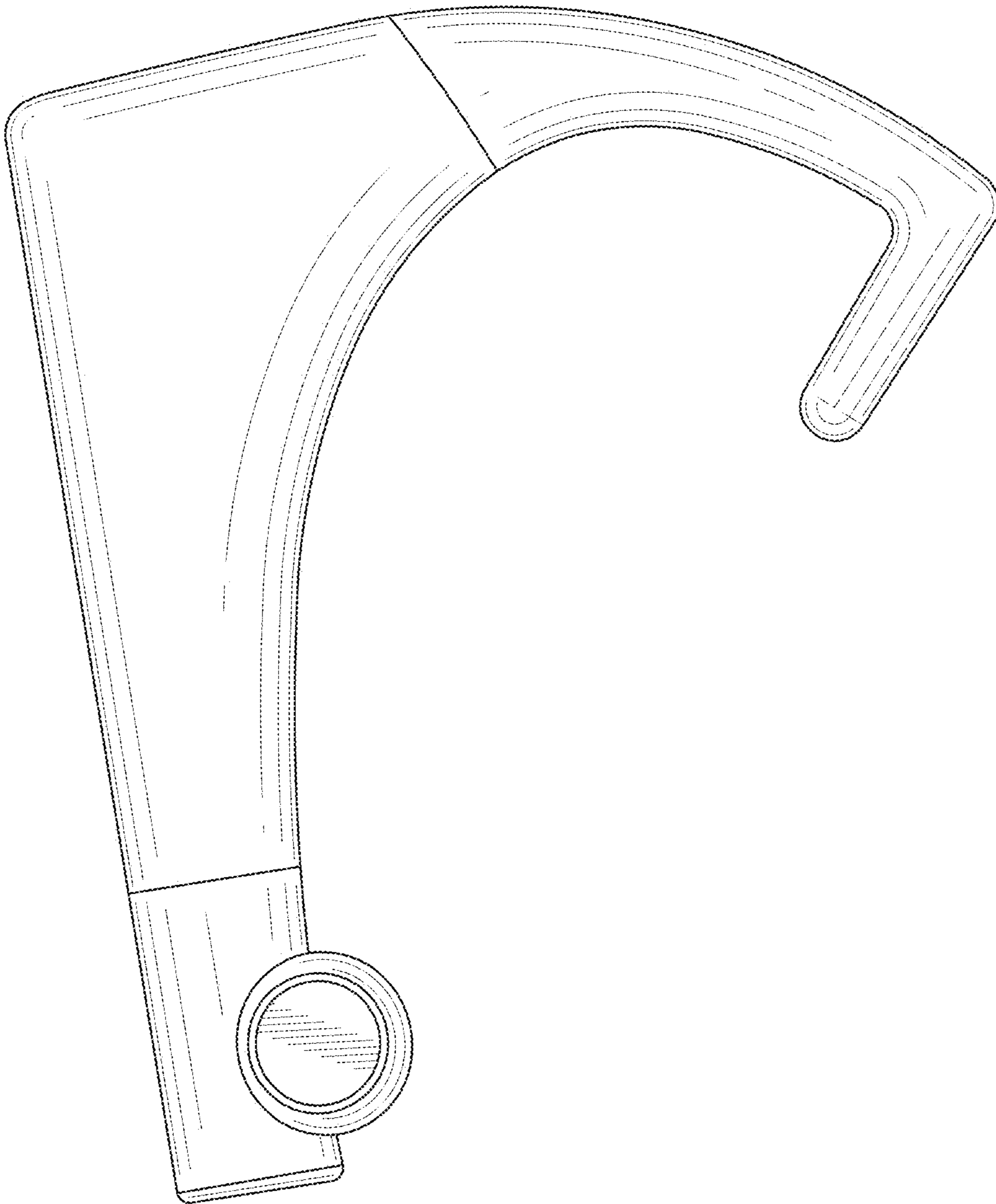


FIG. 3



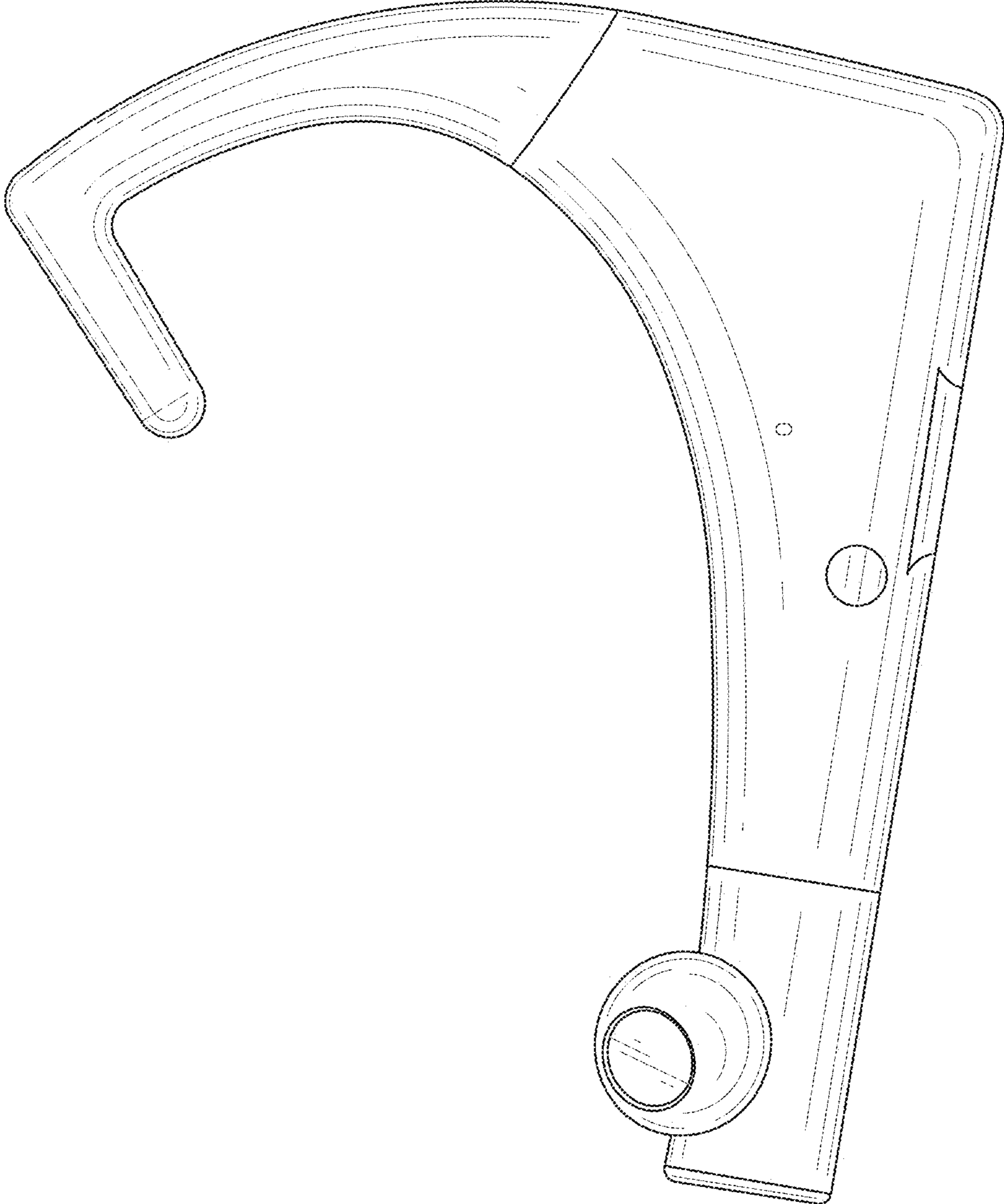


FIG. 4

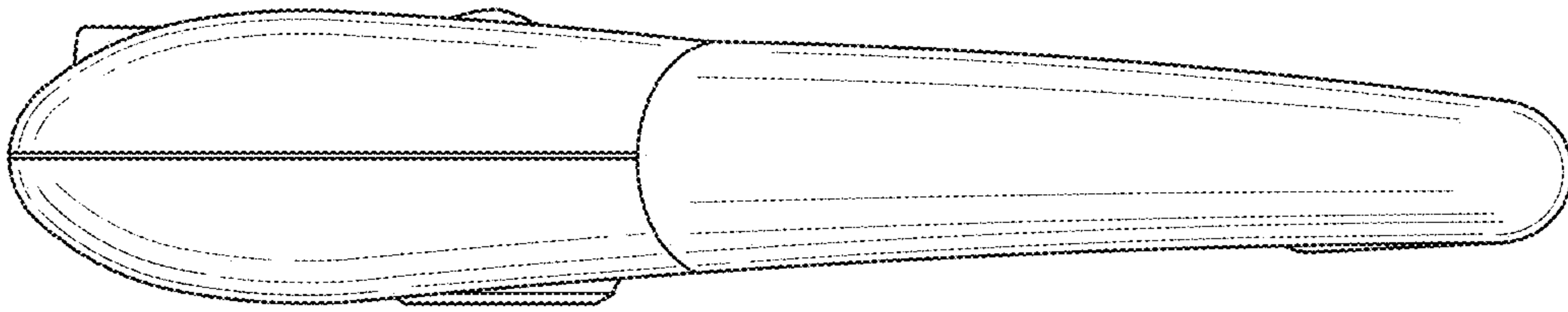


FIG. 5

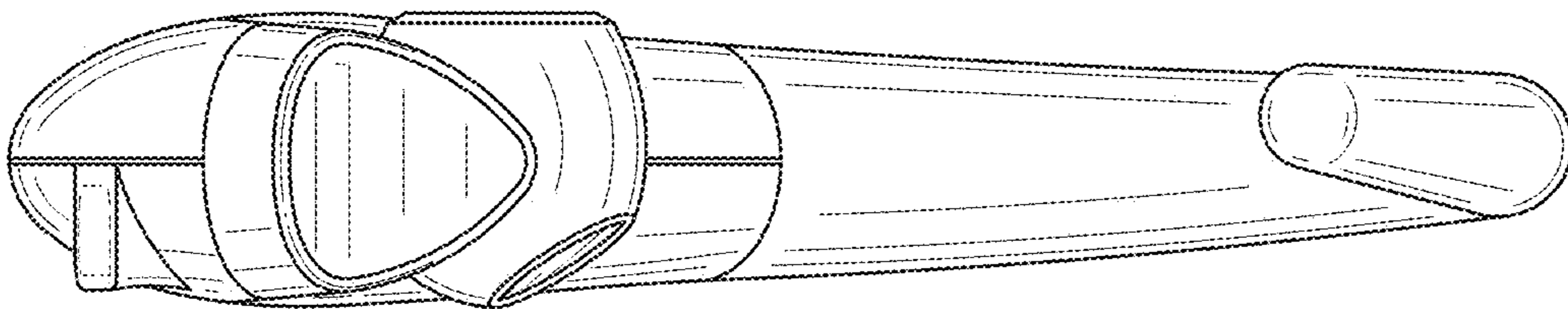


FIG. 6

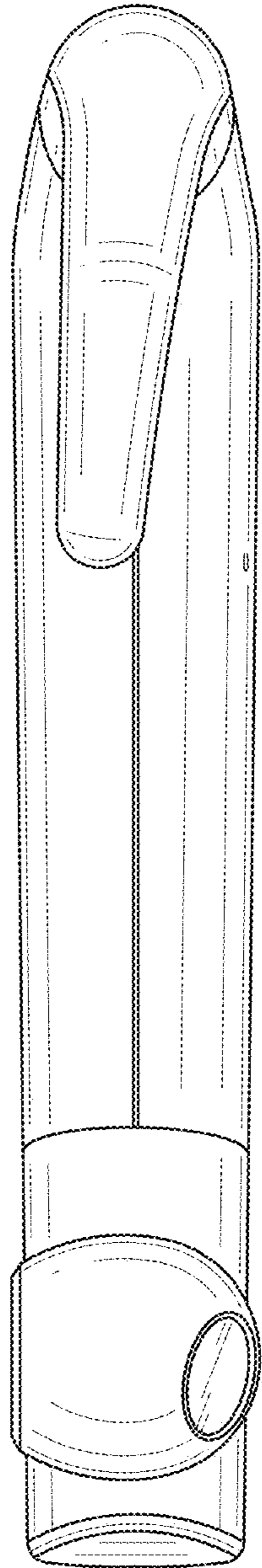


FIG. 7

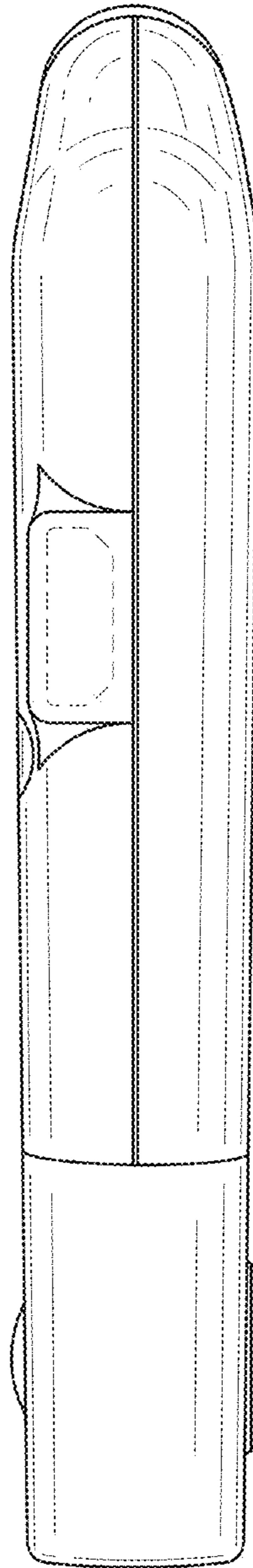


FIG. 8