



US00D802769S

(12) **United States Design Patent** (10) **Patent No.:** **US D802,769 S**
Robertson et al. (45) **Date of Patent:** **** Nov. 14, 2017**

(54) **THROMBECTOMY HANDLE ASSEMBLY**

- (71) Applicant: **TELEFLEX MEDICAL INCORPORATED**, Morrisville, NC (US)
- (72) Inventors: **Taylor Robertson**, Sinking Spring, PA (US); **Brian K. Roth**, Wyomissing, PA (US); **Wade K. Trexler**, Coopersburg, PA (US); **Richard E. Bohn**, Leesport, PA (US); **David Rowe**, Fleetwood, PA (US); **Rodney Wilmer Denlinger**, Lancaster, PA (US); **Eugene Skelton**, Dublin (IE); **Anthony Wright**, Co. Waterford (IE); **Darren Corner**, Derbyshire (GB)
- (73) Assignee: **TELEFLEX MEDICAL INCORPORATED**, Morrisville, NC (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/564,824**
- (22) Filed: **May 16, 2016**
- (51) **LOC (10) Cl.** **24-02**
- (52) **U.S. Cl.**
USPC **D24/167; D24/146**
- (58) **Field of Classification Search**
USPC D24/107, 133, 146, 167, 168, 169, 186, D24/187; D8/300; 600/509; 604/509; 606/159, 200; 345/163

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 2,730,101 A 1/1956 Hoffman et al.
- 2,816,552 A 12/1957 Hoffman et al.

(Continued)

OTHER PUBLICATIONS

“Arrow-Trerotola PTD—Percutaneous Thrombolytic Device Insertion Poster,” Teleflex Incorporated (2012).

Primary Examiner — Wan Laymon

Assistant Examiner — Clint A Samuel

(74) *Attorney, Agent, or Firm* — Baker & Hostetler LLP

(57) **CLAIM**

The ornamental design for a thrombectomy handle assembly, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a thrombectomy handle assembly, showing our new design.

FIG. 2 is a front view of the thrombectomy handle assembly, showing our new design.

FIG. 3 is a rear view of the thrombectomy handle assembly, showing our new design.

FIG. 4 is a top plan view of the thrombectomy handle assembly, showing our new design.

FIG. 5 is a bottom plan view of the thrombectomy handle assembly, showing our new design.

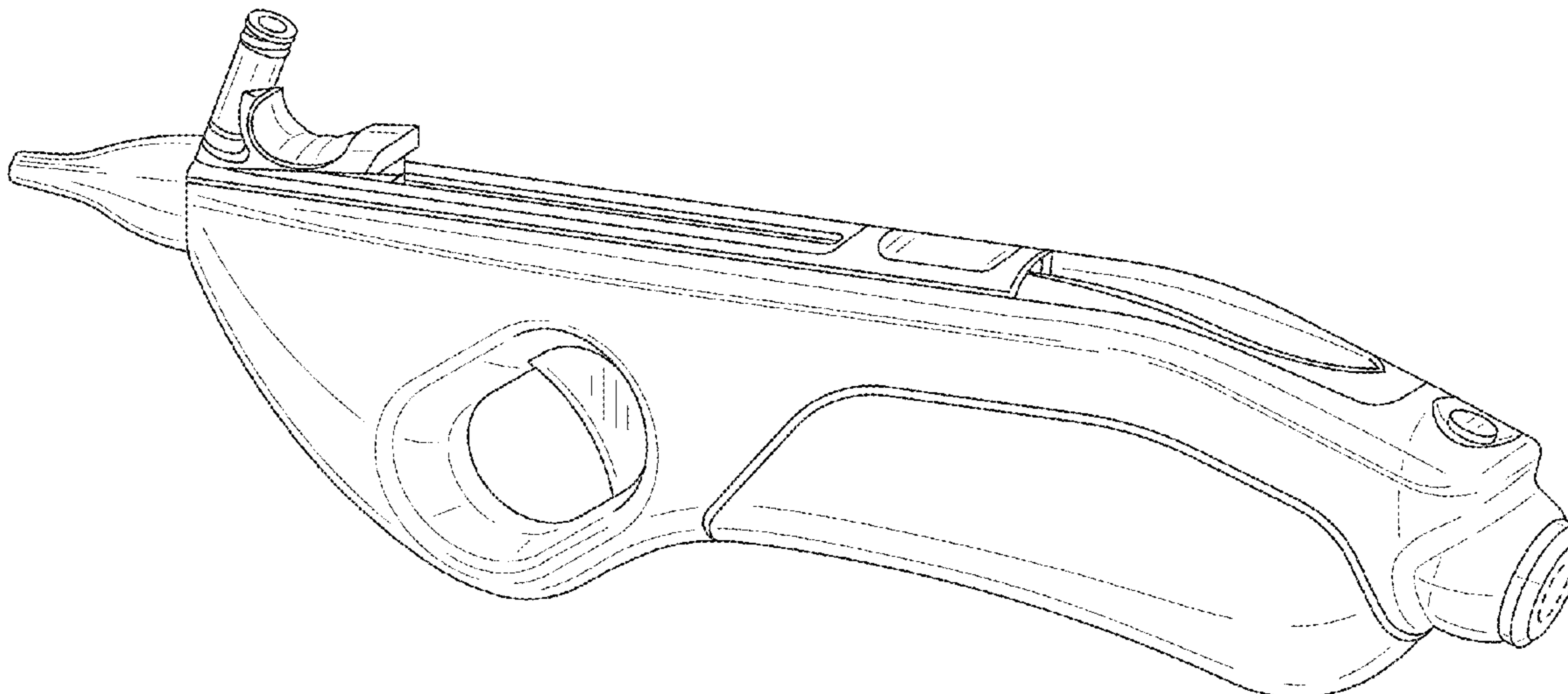
FIG. 6 is a right side view of the thrombectomy handle assembly, showing our new design.

FIG. 7 is a left side view of the thrombectomy handle assembly, showing our new design; and,

FIG. 8 is a left side view of a thrombectomy handle assembly, with a slider of the thrombectomy handle assembly shown pulled back and a basket assembly of the thrombectomy device shown in an expanded state. The basket assembly and connecting shaft of the thrombectomy device are shown in broken lines for illustrating environmental structure only and form no part of the claimed design.

The broken lines showing in the drawings are included for the purpose of illustrating environmental structure of the thrombectomy handle assembly and form no part of the claimed design.

1 Claim, 8 Drawing Sheets



(58) **Field of Classification Search**
 CPC ... A61B 5/002; A61B 5/0404; A61B 5/04085;
 A61B 5/04282; A61B 5/04325; A61B
 5/6833; A61B 1/00; A61B 17/12013;
 A61B 17/3207; A61B 17/320758; G06F
 1/00

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,890,611 A 1/1990 Monfort et al.
 5,030,201 A 7/1991 Palestrant
 5,192,291 A 3/1993 Pannek, Jr.
 5,201,750 A 4/1993 Hocherl et al.
 5,261,877 A 11/1993 Fine et al.
 5,286,253 A 2/1994 Fucci
 5,358,509 A 10/1994 Fine et al.
 5,372,602 A 12/1994 Burke
 5,376,100 A 12/1994 Lefebvre
 5,485,042 A 1/1996 Burke
 5,766,191 A 6/1998 Trerotola
 5,882,329 A 3/1999 Patterson et al.
 5,902,263 A 5/1999 Patterson et al.
 5,941,869 A 8/1999 Patterson et al.
 6,001,112 A 12/1999 Taylor
 6,156,046 A 12/2000 Passafaro et al.
 6,206,898 B1 3/2001 Honeycutt et al.
 D450,843 S * 11/2001 McGuckin, Jr. D24/133
 6,319,242 B1 11/2001 Patterson et al.
 6,451,036 B1 9/2002 Heitzmann et al.
 6,454,717 B1 9/2002 Pantages et al.
 6,454,775 B1 9/2002 Demarais et al.
 6,454,779 B1 9/2002 Taylor
 6,475,224 B1 11/2002 Pantages et al.
 6,482,217 B1 11/2002 Pintor et al.
 6,660,014 B2 12/2003 Demarais et al.
 6,663,613 B1 12/2003 Evans et al.
 6,663,650 B2 12/2003 Sepetka et al.
 6,666,874 B2 12/2003 Heitzmann et al.
 6,702,830 B1 3/2004 Demarais et al.
 6,758,818 B2 7/2004 Pantages et al.
 6,824,551 B2 11/2004 Trerotola
 6,945,977 B2 9/2005 Demarais et al.
 D512,147 S * 11/2005 Barker D24/133
 7,052,500 B2 5/2006 Bashiri et al.
 D523,557 S * 6/2006 Jones D24/155
 7,108,704 B2 9/2006 Trerotola
 D533,274 S * 12/2006 Visconti D24/133
 7,172,610 B2 2/2007 Heitzmann et al.
 D540,947 S * 4/2007 Jung D24/167
 D543,630 S * 5/2007 Cullen D24/155
 D543,631 S * 5/2007 Cullen D24/155
 7,235,088 B2 6/2007 Pintor et al.
 7,479,147 B2 1/2009 Honeycutt et al.
 D604,855 S * 11/2009 Shearlaw D24/133
 D606,192 S * 12/2009 Summerer D24/133
 7,655,016 B2 2/2010 Demarais et al.
 7,749,243 B2 7/2010 Phung et al.
 7,766,921 B2 8/2010 Sepetka et al.
 7,771,445 B2 8/2010 Heitzmann et al.
 D625,212 S * 10/2010 Abo D10/80
 D627,066 S * 11/2010 Romero D24/133
 D628,289 S * 11/2010 Romero D24/133
 D628,290 S * 11/2010 Romero D24/133
 7,842,055 B2 11/2010 Pintor et al.
 7,862,575 B2 1/2011 Tal
 7,967,834 B2 6/2011 Tal et al.
 7,981,128 B2 7/2011 To et al.
 8,007,506 B2 8/2011 To et al.
 8,062,258 B2 11/2011 Demarais et al.
 8,066,757 B2 11/2011 Ferrera et al.
 8,070,762 B2 12/2011 Escudero et al.
 8,105,333 B2 1/2012 Sepetka et al.
 D659,828 S * 5/2012 Horning D24/146
 D660,430 S * 5/2012 Horning D24/146
 D665,909 S * 8/2012 Dodd D24/146

8,236,016 B2 8/2012 To et al.
 8,277,470 B2 10/2012 Demarais et al.
 8,337,516 B2 12/2012 Escudero et al.
 8,361,094 B2 1/2013 To et al.
 8,465,508 B2 6/2013 Tal
 8,475,487 B2 7/2013 Bonnette et al.
 8,491,614 B2 7/2013 LeMaitre et al.
 D690,811 S * 10/2013 Horning D24/146
 8,545,447 B2 10/2013 Demarais et al.
 D693,466 S * 11/2013 Dallemagne D24/144
 8,579,915 B2 11/2013 French et al.
 8,579,926 B2 11/2013 Pintor et al.
 8,585,724 B2 11/2013 Palmer et al.
 8,628,549 B2 1/2014 To et al.
 8,647,355 B2 2/2014 Escudero et al.
 8,657,821 B2 2/2014 Palermo
 D700,966 S * 3/2014 O'Leary D24/146
 8,663,259 B2 3/2014 Levine et al.
 8,696,645 B2 4/2014 Tal et al.
 8,764,779 B2 7/2014 Levine et al.
 8,795,306 B2 8/2014 Smith et al.
 8,888,801 B2 11/2014 To et al.
 8,920,448 B2 12/2014 To et al.
 8,961,395 B2 2/2015 Suzuki et al.
 9,023,070 B2 5/2015 Levine et al.
 9,050,126 B2 6/2015 Rivers et al.
 9,050,127 B2 6/2015 Bonnette et al.
 D735,333 S * 7/2015 Allen D24/147
 9,095,371 B2 8/2015 Escudero et al.
 9,119,660 B2 9/2015 Rivers et al.
 9,119,661 B2 9/2015 Rivers et al.
 D745,166 S * 12/2015 Chang D10/78
 D759,246 S * 6/2016 Allen D24/146
 D764,657 S * 8/2016 Bokelman D24/113
 D782,054 S * 3/2017 Lim D24/187
 D785,185 S * 4/2017 Yang D24/186
 2001/0016751 A1 8/2001 Trerotola
 2002/0016624 A1 2/2002 Patterson et al.
 2002/0143350 A1 10/2002 Heitzmann et al.
 2002/0173812 A1 * 11/2002 McGuckin, Jr. A61B 17/22
 606/159
 2004/0138692 A1 7/2004 Phung et al.
 2007/0225739 A1 9/2007 Pintor et al.
 2007/0239201 A1 10/2007 Phung et al.
 2008/0045986 A1 2/2008 To et al.
 2009/0018566 A1 1/2009 Escudero et al.
 2009/0018567 A1 1/2009 Escudero et al.
 2009/0024085 A1 1/2009 To et al.
 2010/0174302 A1 7/2010 Heitzmann et al.
 2010/0222806 A1 9/2010 Phung et al.
 2010/0324576 A1 12/2010 Pintor et al.
 2011/0040314 A1 * 2/2011 McGuckin, Jr. A61B 17/22
 606/159
 2011/0040315 A1 2/2011 To et al.
 2011/0066142 A1 3/2011 Tal et al.
 2011/0112563 A1 5/2011 To et al.
 2011/0152906 A1 6/2011 Escudero et al.
 2011/0152907 A1 6/2011 Escudero et al.
 2011/0270289 A1 11/2011 To et al.
 2012/0116429 A1 * 5/2012 Levine A61B 17/320758
 606/159
 2012/0130410 A1 5/2012 Tal et al.
 2012/0130415 A1 5/2012 Tal et al.
 2013/0018399 A1 1/2013 Rivers et al.
 2013/0085515 A1 4/2013 To et al.
 2013/0096587 A1 4/2013 Smith et al.
 2013/0103062 A1 4/2013 To et al.
 2013/0103063 A1 4/2013 Escudero et al.
 2013/0253569 A1 9/2013 Sepetka et al.
 2013/0267974 A1 10/2013 LeMaitre et al.
 2014/0052103 A1 2/2014 Cully et al.
 2014/0052161 A1 2/2014 Cully et al.
 2014/0121688 A1 5/2014 Palermo
 2014/0135814 A1 5/2014 Sepetka et al.
 2014/0148831 A1 5/2014 Levine et al.
 2014/0207052 A1 7/2014 Tal et al.
 2014/0249554 A1 9/2014 To et al.
 2014/0324081 A1 10/2014 Levine et al.
 2015/0005792 A1 1/2015 Ahn

(56)

References Cited

U.S. PATENT DOCUMENTS

2015/0051626 A1 2/2015 Rivers et al.
2015/0057691 A1 2/2015 To et al.
2015/0073447 A1 3/2015 Rydberg et al.
2015/0073448 A1 3/2015 Rydberg
2015/0112371 A1 4/2015 Rydberg et al.
2015/0119909 A1 4/2015 Rydberg
2015/0127033 A1 5/2015 Rydberg et al.
2015/0133974 A1 5/2015 Karasti et al.
2015/0133975 A1 5/2015 Rydberg et al.
2015/0133976 A1 5/2015 Johnson et al.
2015/0133977 A1 5/2015 To et al.
2015/0142027 A1 5/2015 Rydberg et al.
2015/0150588 A1 6/2015 Rydberg
2015/0164540 A1 6/2015 Higgins et al.
2015/0165100 A1 6/2015 Feltyberger et al.
2015/0182252 A1 7/2015 To et al.
2015/0257783 A1 9/2015 Levine et al.
2015/0297258 A1 10/2015 Escudero et al.

* cited by examiner

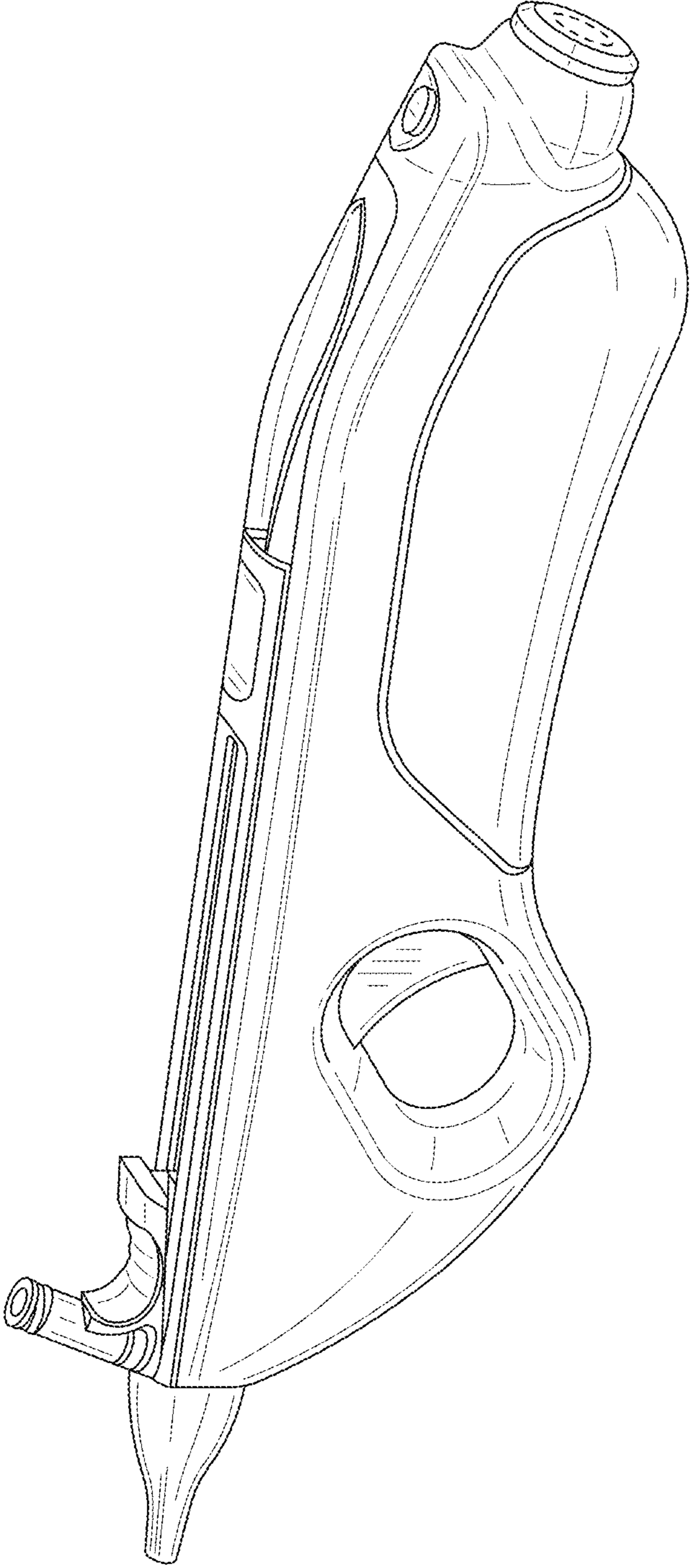


FIG. 1

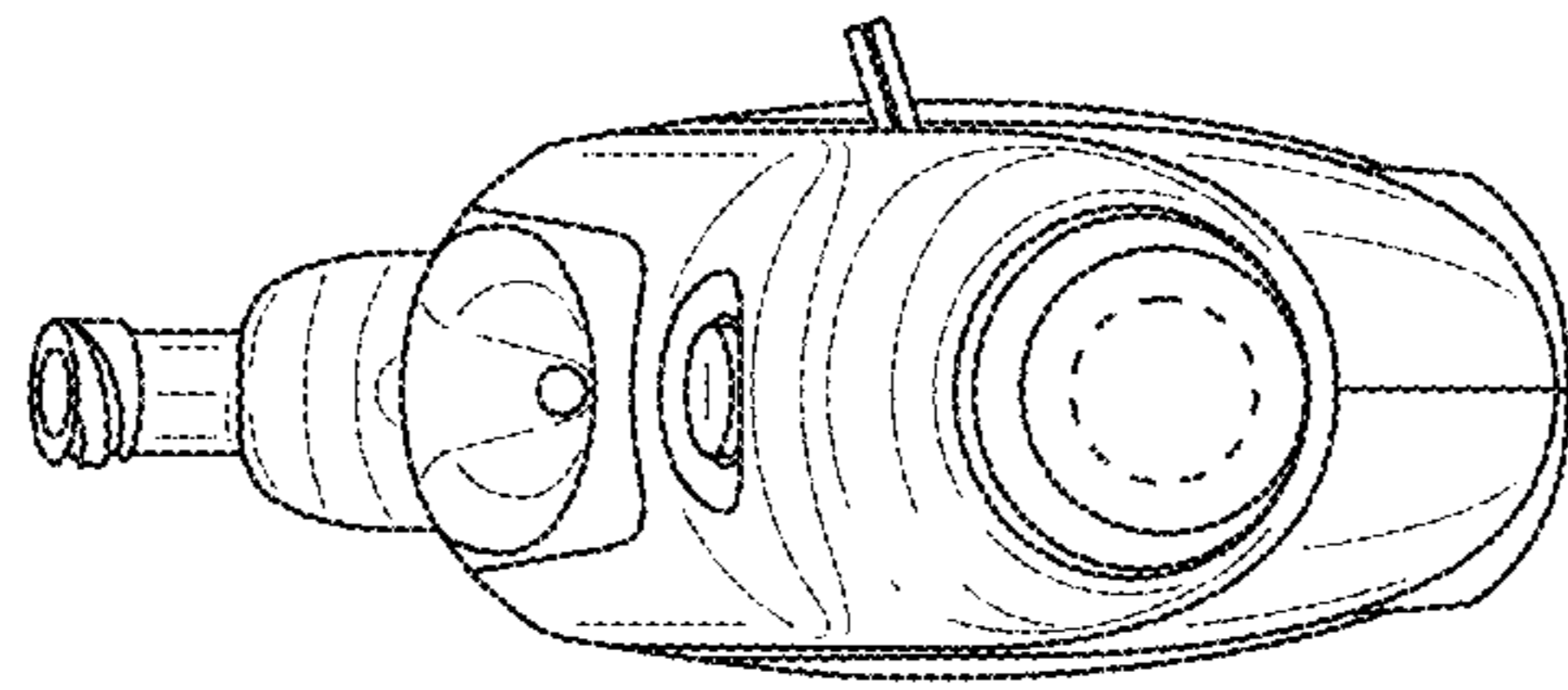


FIG. 2

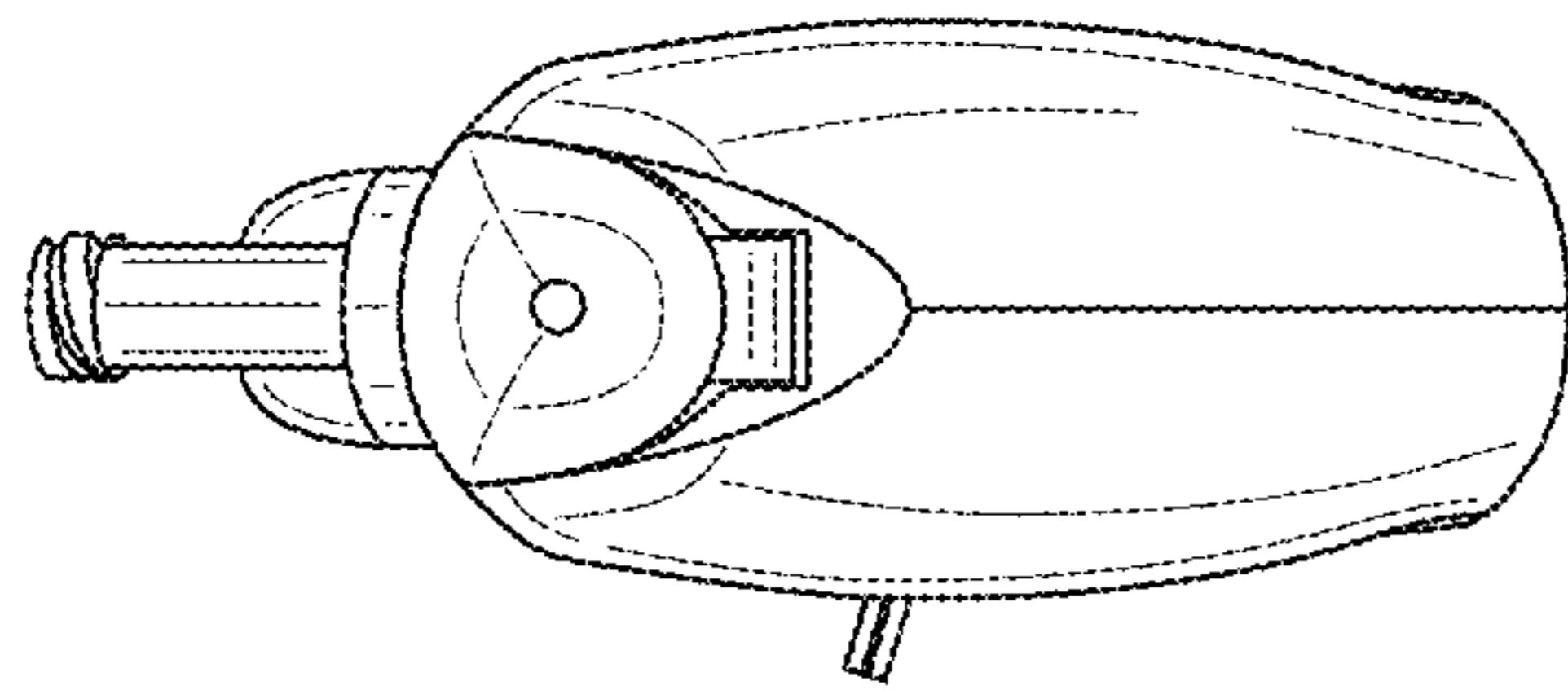


FIG. 3

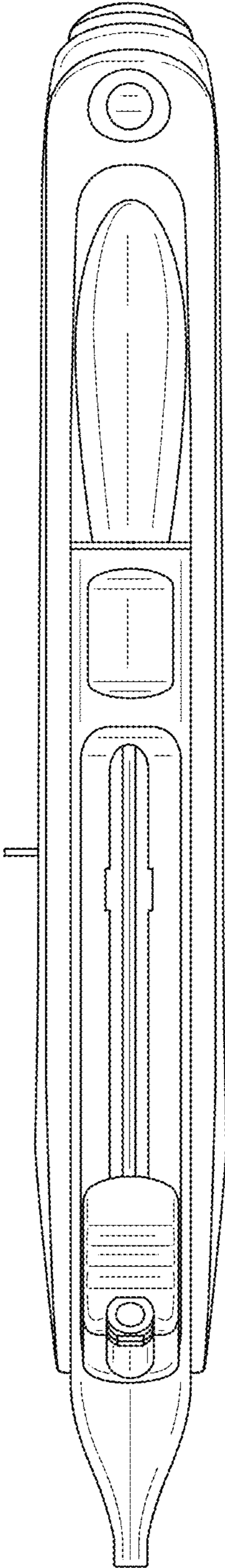


FIG. 4

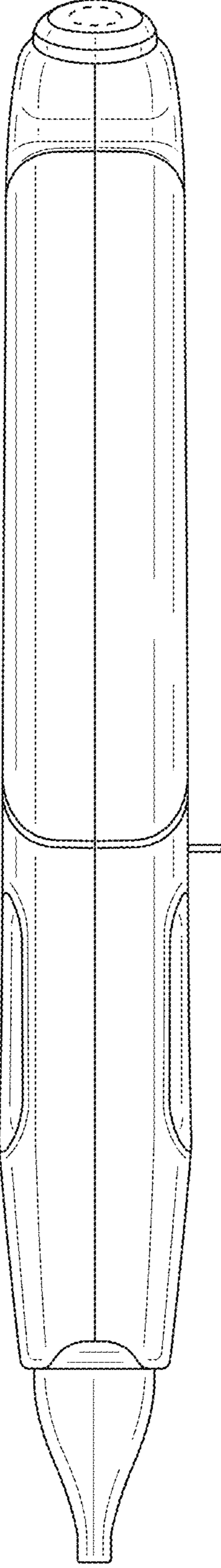


FIG. 5

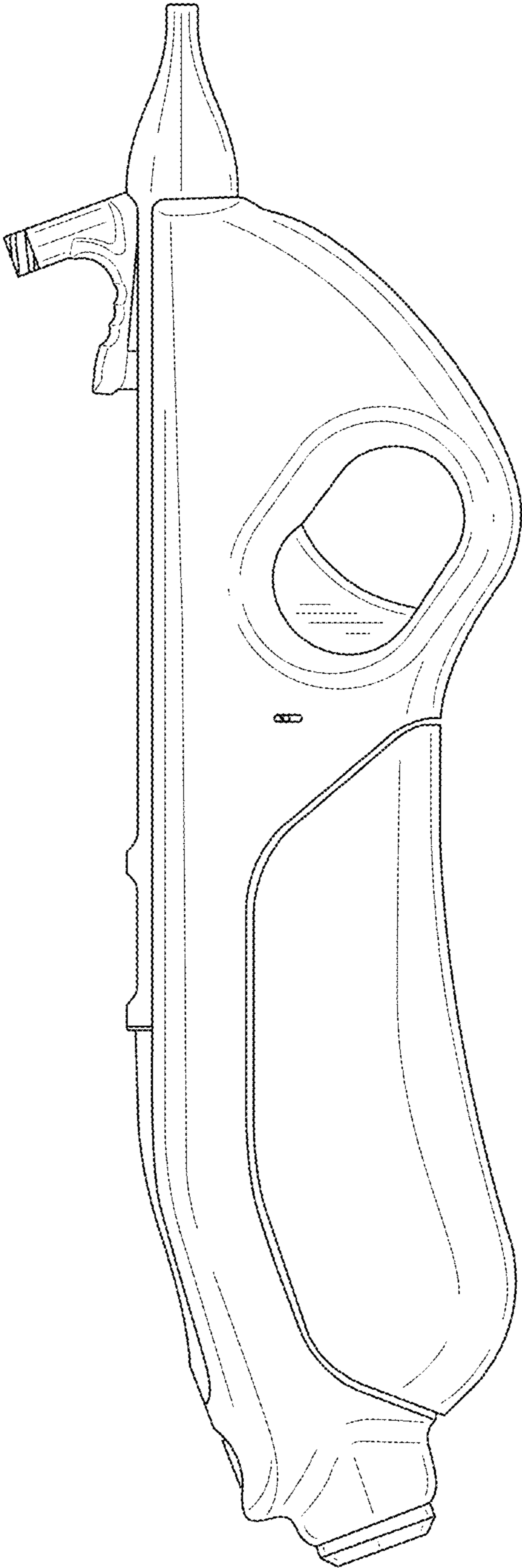


FIG. 6

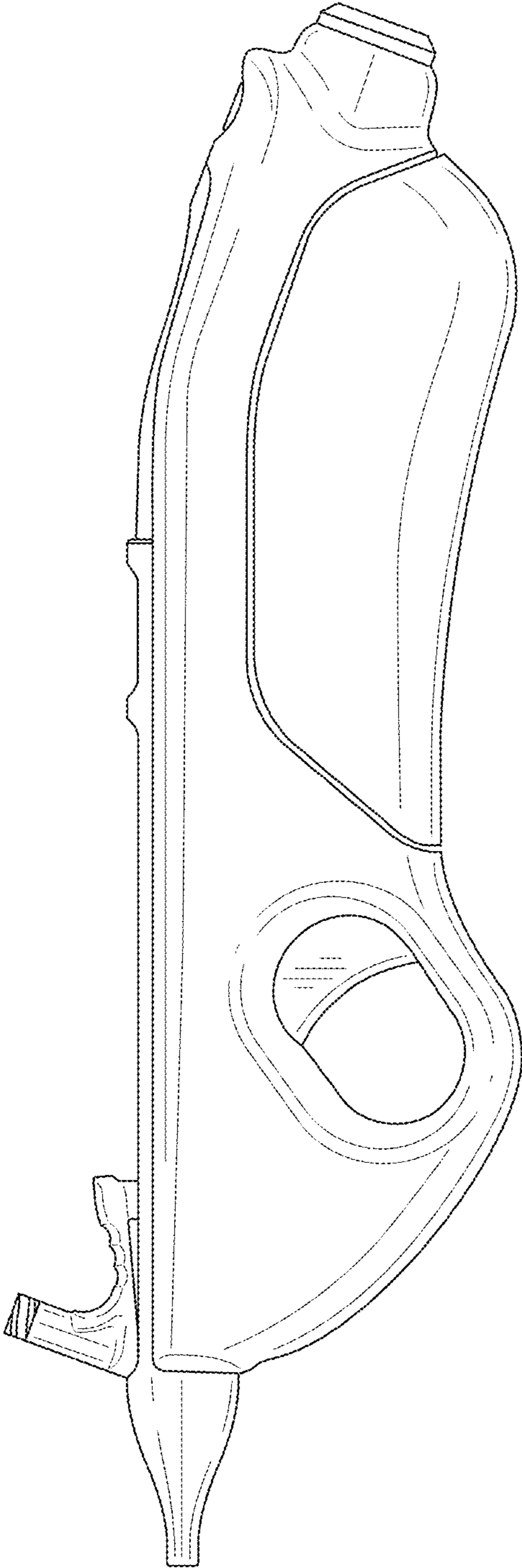


FIG. 7

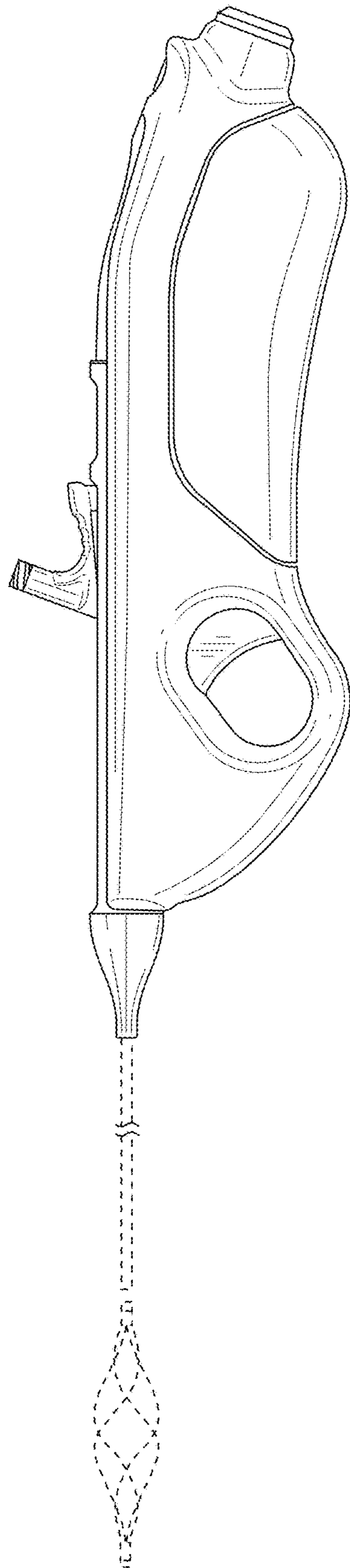


FIG. 8