

US00D982751S

(12)

United States Design Patent

Lee et al.

(10)

Patent No.:

US D982,751 S

(45)

Date of Patent:

** Apr. 4, 2023

(54) TROCAR FOR SURGICAL INSTRUMENT

(71) Applicant: LIVSMED INC., Seongnam-si (KR)

(72) Inventors: Jung Joo Lee, Seongnam-si (KR);
Heejin Kim, Seongnam-si (KR);
Dongkyu Jang, Seongnam-si (KR);
Jinho Kwon, Seongnam-si (KR);
Jaeyeong Lee, Seongnam-si (KR)

(73) Assignee: LIVSMED INC., Seongnam-si (KR)

(**) Term: 15 Years

(21) Appl. No.: 35/511,938

(22) Filed: Nov. 27, 2020

(80) Hague Agreement Data

Int. Filing Date: Nov. 27, 2020
Int. Reg. No.: DM/212339
Int. Reg. Date: Nov. 27, 2020
Int. Reg. Pub. Date: May 28, 2021

(30) Foreign Application Priority Data

Sep. 28, 2020 (KR) 30-2020-0046957
(51) LOC (14) Cl. 24-02
(52) U.S. Cl.
USPC D24/147
CPC B26B 3/00 (2013.01)
(58) Field of Classification Search
USPC D21/112, 138, 146–148, 108, 133, 140;
D16/130–133, 330, 334, 340; D24/112,
D24/138, 146–148, 108, 133, 140
CPC .. B26B 3/00; B26B 1/10; B26B 5/005; A61B
17/089; A61B 17/1617; A61B 17/3211;
A61B 17/3417; A61B 5/1411; A61B
17/3462; A61B 2017/3492; A61M
16/0672

See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

3,315,362 A * 4/1967 Palmer F41G 1/38
42/129
3,390,931 A * 7/1968 Luning G02B 23/16
356/213
3,669,523 A * 6/1972 Edwards, Jr. G02B 23/16
359/600
4,264,123 A * 4/1981 Mabie F41G 1/38
42/129
5,181,140 A * 1/1993 Brown G02B 23/18
42/129
5,377,668 A * 1/1995 Ehmsen A61B 1/00195
600/162
6,196,967 B1 * 3/2001 Lim A61B 1/00128
600/125

(Continued)

OTHER PUBLICATIONS

B&H Photo, Hoodman Glasses eyecup (Year: 2018).*
Amazon.com UTG Rubber Scope Eyeshade (Year: 2018).*

Primary Examiner — Richard E Chilcot
(74) Attorney, Agent, or Firm — Bridgeway IP Law
Group, PLLC; Sang Ho Lee; Hyun Woo Shin

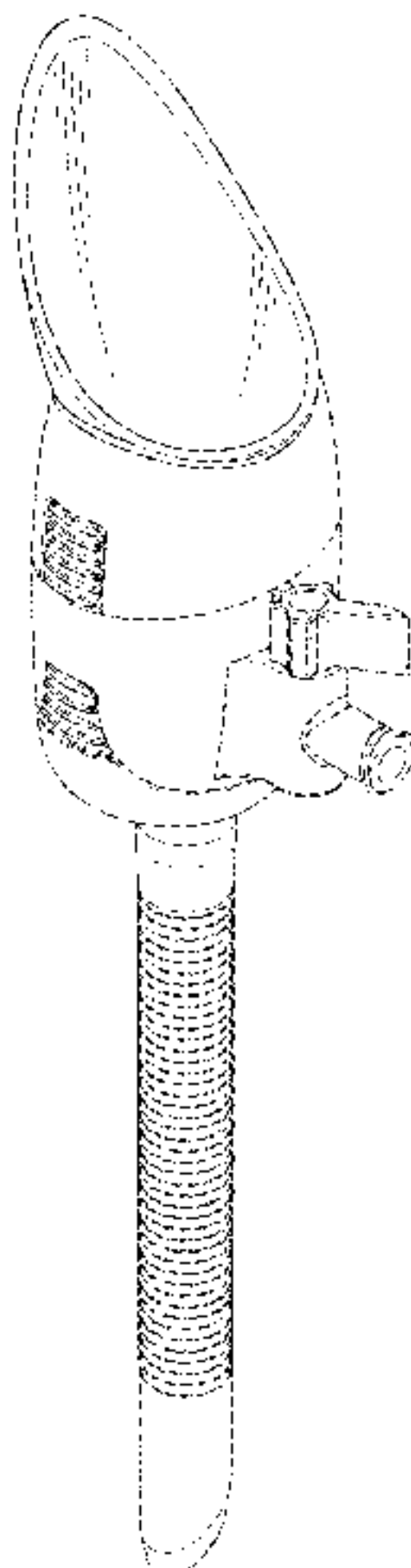
(57) CLAIM

The ornamental design for trocar for surgical instrument, as shown and described.

DESCRIPTION

1. Trocar for surgical instrument
1.1 : Perspective
1.2 : Front
1.3 : Back
1.4 : Left
1.5 : Right
1.6 : Top
1.7 : Bottom
The dashed broken lines in the drawings show portions of the trocar for surgical instrument that form no part of the

(Continued)



claimed design. The dot-dash broken lines in the drawings depict boundaries that form no part of the claimed design.

1 Claim, 7 Drawing Sheets

(56)

References Cited

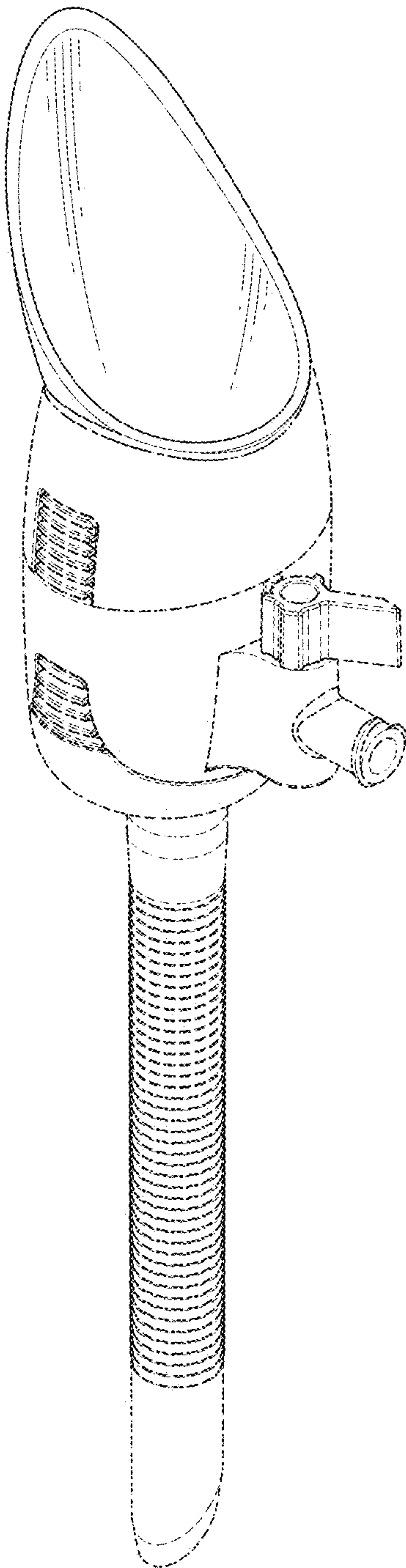
U.S. PATENT DOCUMENTS

6,254,240 B1 * 7/2001 Maciejewski G02B 23/16
359/405
6,488,381 B2 * 12/2002 Morgan, III G02B 23/14
359/600
7,703,679 B1 * 4/2010 Bennetts F41G 3/02
235/404
7,805,877 B2 * 10/2010 McCarty F41G 1/38
42/129
D633,617 S * 3/2011 Bricker D24/150
8,201,741 B2 * 6/2012 Bennetts F41G 3/06
235/454
D663,838 S * 7/2012 Mastri D24/146

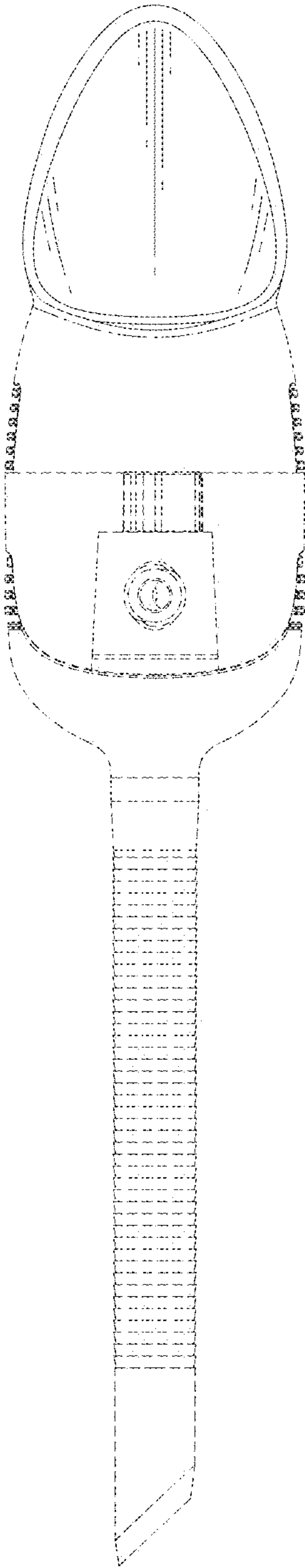
D667,954 S * 9/2012 Mastri D24/146
8,833,655 B2 * 9/2014 McCarty F41G 1/00
359/422
9,038,901 B2 * 5/2015 Paterson F41G 3/08
235/407
9,091,507 B2 * 7/2015 Paterson F41G 1/38
9,250,036 B2 * 2/2016 Farca F41G 3/06
D790,700 S * 6/2017 Zhou D24/146
D794,791 S * 8/2017 Zhou D24/146
D813,389 S * 3/2018 Zhou D24/146
D814,032 S * 3/2018 Zhou D24/146
D814,035 S * 3/2018 Fuchs D24/147
D814,036 S * 3/2018 Fuchs D24/147
10,132,593 B2 * 11/2018 White F41G 1/16
10,139,197 B1 * 11/2018 Horton F41G 1/383
10,415,934 B2 * 9/2019 Babbitt F41G 11/001
D887,002 S * 6/2020 Geng D24/146
D951,445 S * 5/2022 Lee D24/146
D954,940 S * 6/2022 Vijayachandran D24/146
D956,219 S * 6/2022 Seow D24/129
D958,360 S * 7/2022 Vijayachandran D24/146
2022/0096122 A1 * 3/2022 Lee A61B 17/3423

* cited by examiner

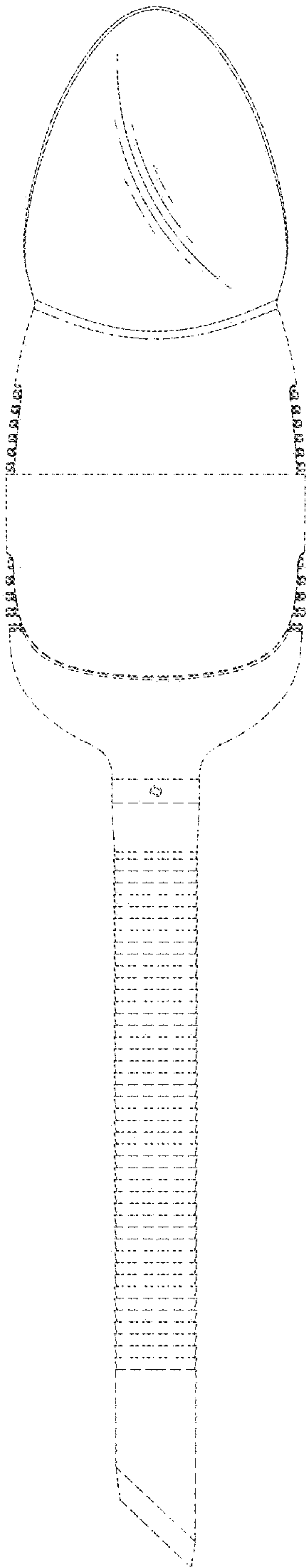
1.1



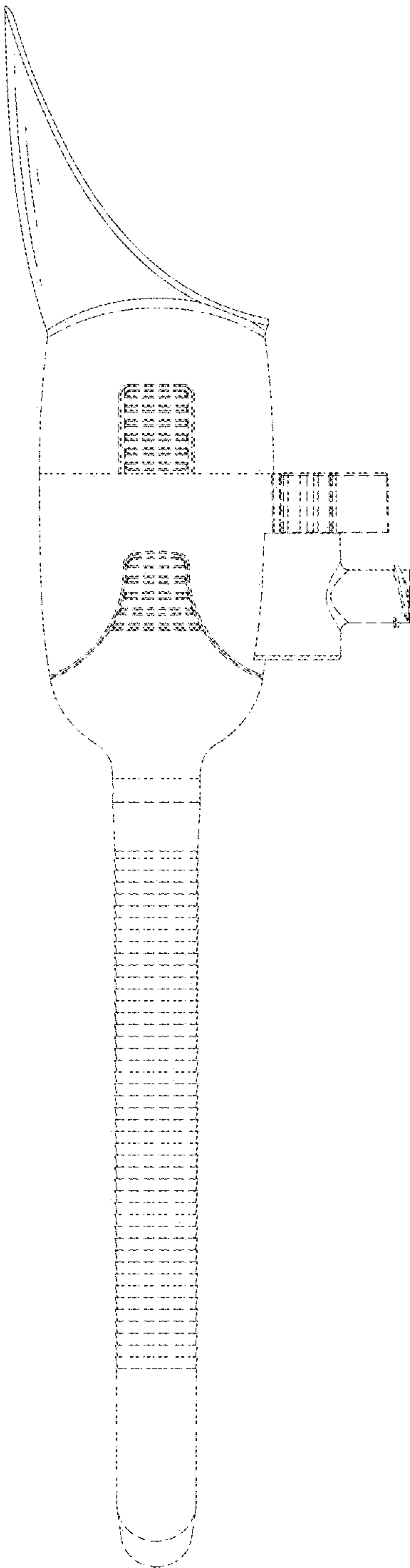
1.2



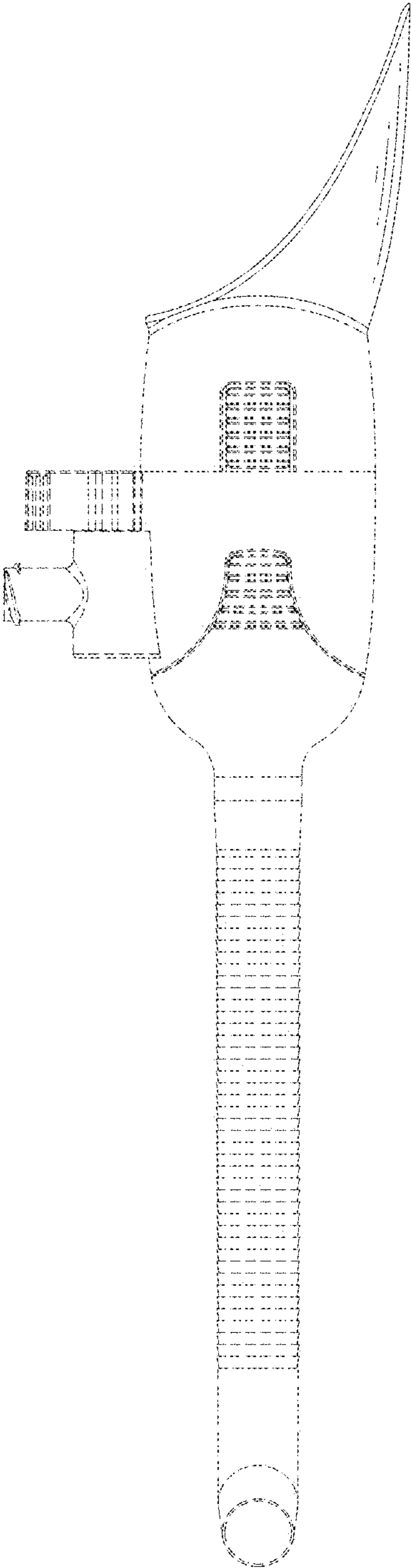
1.3



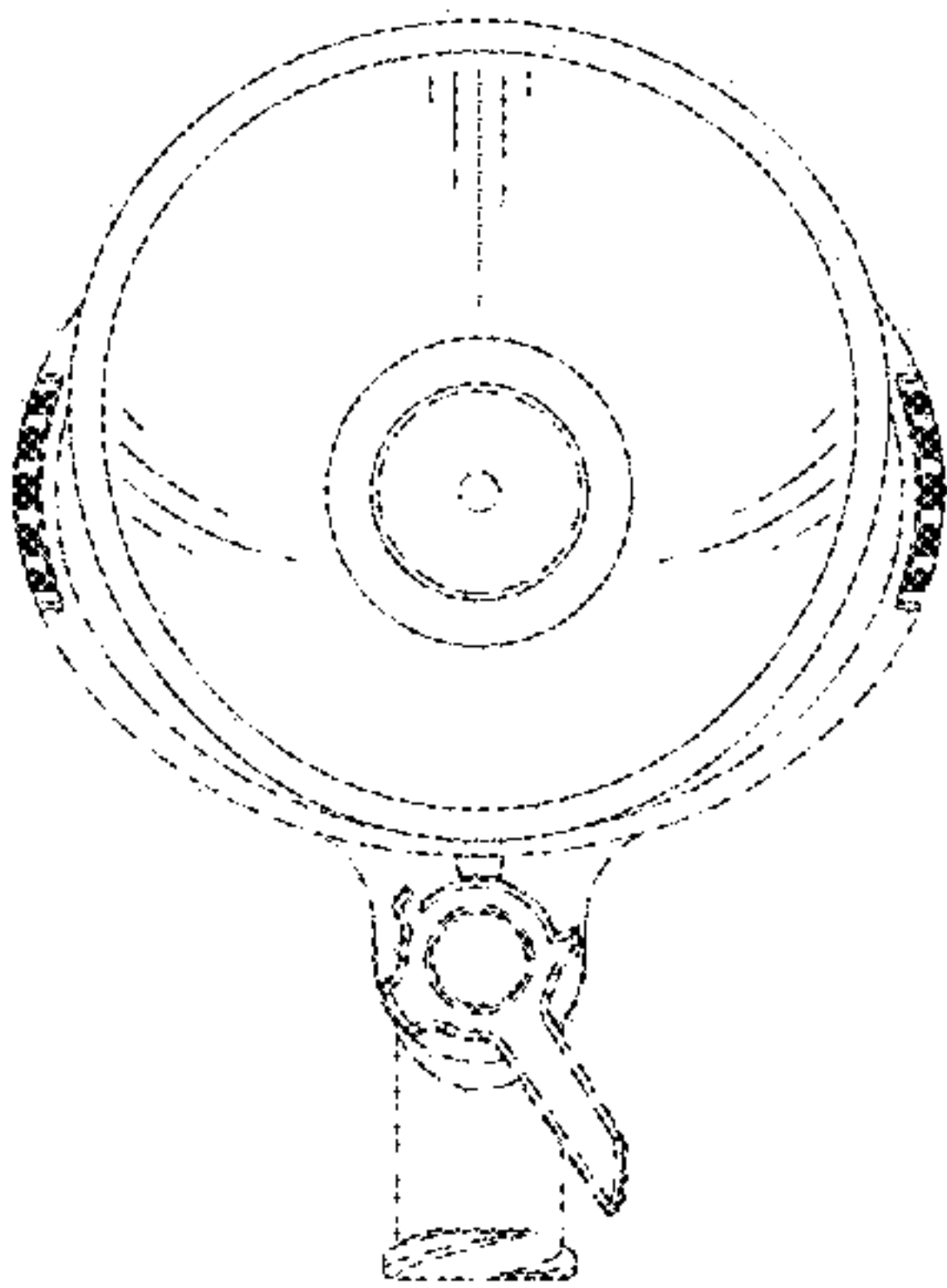
1.4



1.5



1.6



1.7

