



US00D735171S

(12) **United States Design Patent**  
**Sunwoo et al.**

(10) **Patent No.:** **US D735,171 S**  
(45) **Date of Patent:** **\*\* Jul. 28, 2015**

- (54) **MICROPHONE LINE TUBE**
- (71) Applicant: **Freedman Electronics Pty Limited**,  
Silverwater NSW (AU)
- (72) Inventors: **Sun Kyung Sunwoo**, Silverwater NSW  
(AU); **Tom Ferghana Rogers Fereday**,  
Silverwater NSW (AU)
- (73) Assignee: **Freedman Electronics Pty Limited**,  
Silverwater, New South Wales (AU)
- (\*\*) Term: **14 Years**

3,989,905	A *	11/1976	Anderson et al.	.....	381/360
4,040,547	A *	8/1977	Dickey	.....	224/247
4,546,950	A *	10/1985	Cech	.....	248/610
4,577,070	A *	3/1986	Shulman	.....	381/366
D296,435	S *	6/1988	Kubota	.....	D14/228
4,757,546	A *	7/1988	Akino	.....	381/357
4,789,044	A *	12/1988	Akino	.....	181/158
4,991,220	A *	2/1991	Wolf	.....	381/368
D431,817	S *	10/2000	Yuyama et al.	.....	D14/227
D444,143	S *	6/2001	Andreini et al.	.....	D14/228
6,286,973	B1 *	9/2001	Thrower	.....	362/86
D478,068	S *	8/2003	Sundquist et al.	.....	D14/228
D479,227	S *	9/2003	Marshall	.....	D14/228
D479,837	S *	9/2003	Sundquist et al.	.....	D14/228

(Continued)

- (21) Appl. No.: **29/473,544**
- (22) Filed: **Nov. 22, 2013**
- (30) **Foreign Application Priority Data**  
Nov. 14, 2013 (AU) ..... 15858/2013
- (51) **LOC (10) Cl.** ..... **14-01**
- (52) **U.S. Cl.**  
USPC ..... **D14/225**
- (58) **Field of Classification Search**  
USPC ..... D14/224-229, 234; D16/208, 248;  
D17/99, 22; D21/513; 181/158, 242;  
381/26, 122, 355, 356, 357, 361, 365,  
381/366, 368, 369; 455/575.1, 90.3;  
D8/355, 394, 396  
CPC ..... H04R 1/342; H04R 1/02; H04R 1/38  
See application file for complete search history.

- (56) **References Cited**  
**U.S. PATENT DOCUMENTS**  
45,270 A \* 11/1864 Howser ..... 84/384  
1,703,382 A \* 2/1929 Bernard ..... 84/384  
2,910,539 A \* 10/1959 Hartsfield ..... 381/174  
D189,720 S \* 2/1961 Burroughs ..... D14/228  
3,095,484 A \* 6/1963 Beaverson et al. .... 381/357  
D233,669 S \* 11/1974 Plice ..... D14/228

**OTHER PUBLICATIONS**

External Microphone Advice(Ambient ATM216 Tiny Mike).  
dvforums.com(online) 1 pg. Uploaded May 16, 2013 2012 [retrieved  
on Jan. 2, 2015]. Retrieved from Internet: <<http://www.dvforums.com/forums/external-microphone-advice>>.\*

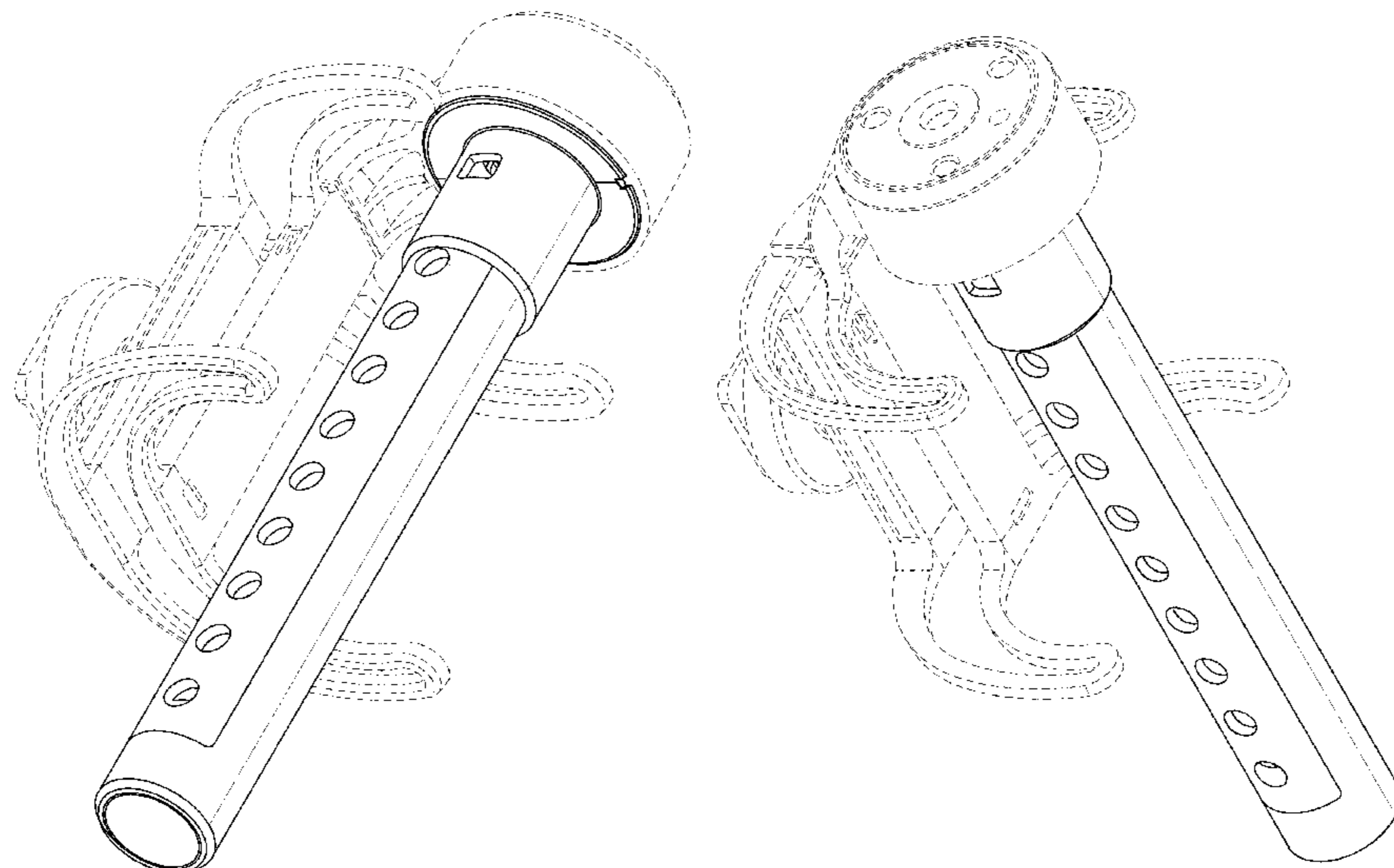
*Primary Examiner* — Susan Bennett Hattan  
*Assistant Examiner* — Marie Fast Horse  
(74) *Attorney, Agent, or Firm* — TraskBritt, P.C.

(57) **CLAIM**  
The ornamental design for a microphone line tube, as shown  
and described.

**DESCRIPTION**

FIG. 1 is a front view of a microphone line tube, showing our  
new design;  
FIG. 2 is a side view of the design;  
FIG. 3 is a top view of the design;  
FIG. 4 is a bottom view of the design;  
FIG. 5 is an isometric view of the design; and,  
FIG. 6 is an isometric view of the design.  
The broken lines in FIGS. 1-6 depict parts of the microphone  
line tube that form no part of the claimed design.

**1 Claim, 6 Drawing Sheets**



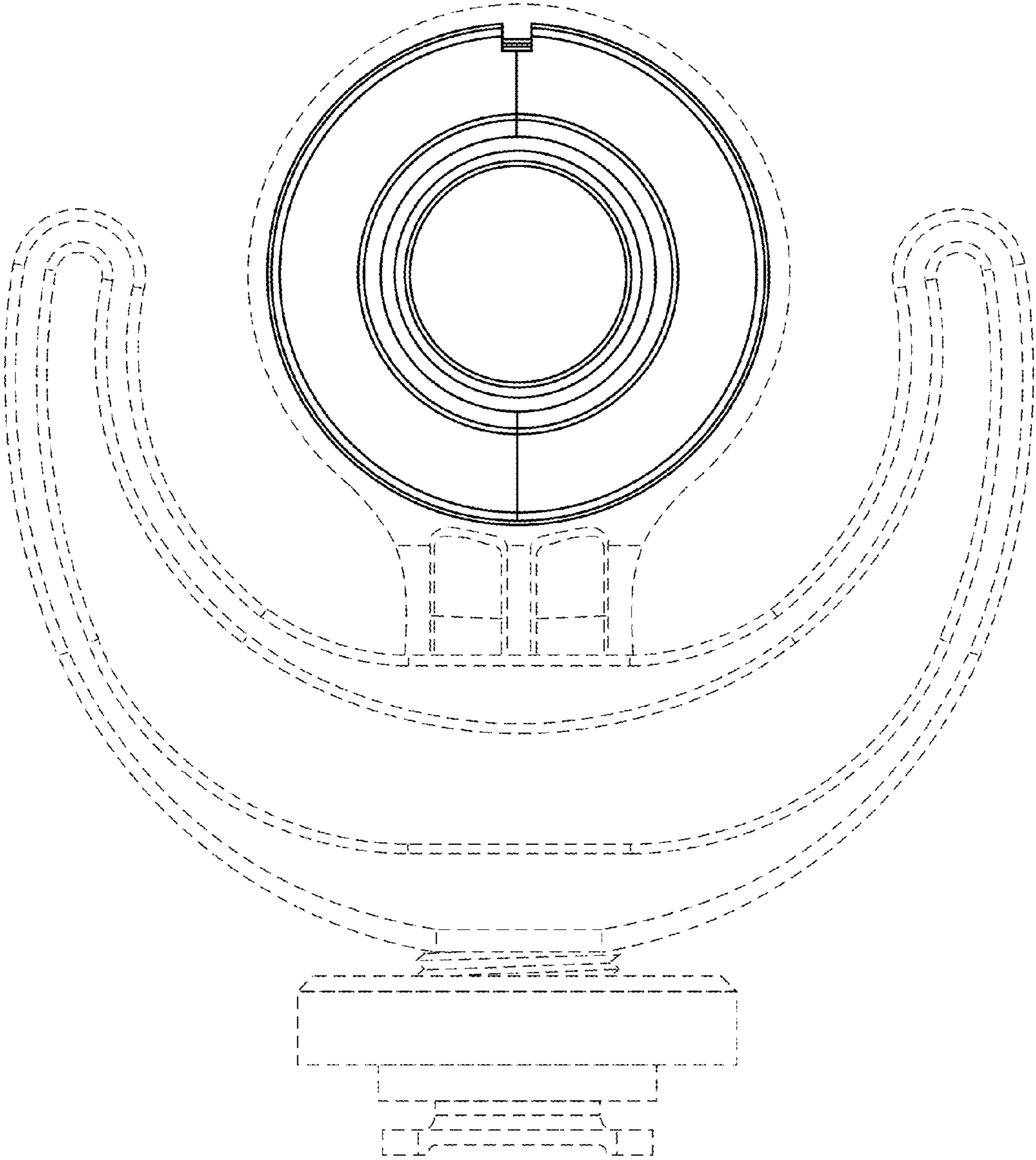
(56)

**References Cited**

U.S. PATENT DOCUMENTS

6,721,432 B1 *	4/2004	Yamamoto	.....	381/355	D652,025 S *	1/2012	Deberard et al.	.....	D14/227
D594,856 S *	6/2009	Marshall	.....	D14/228	8,121,333 B2 *	2/2012	Woolf et al.	.....	381/368
D602,920 S *	10/2009	Fleischer et al.	.....	D14/227	D655,696 S *	3/2012	Lee	.....	D14/228
D603,381 S *	11/2009	Fleischer et al.	.....	D14/227	D676,428 S *	2/2013	Trewartha et al.	.....	D14/225
D605,183 S *	12/2009	Fleischer et al.	.....	D14/227	D678,253 S *	3/2013	Lee et al.	.....	D14/225
D606,051 S *	12/2009	Fleischer et al.	.....	D14/228	D687,420 S *	8/2013	Trewartha et al.	.....	D14/225
D608,768 S *	1/2010	Ikeda et al.	.....	D14/228	D694,221 S *	11/2013	Shears et al.	.....	D14/225
D615,529 S *	5/2010	Kearns	.....	D14/207	D707,661 S *	6/2014	Okita et al.	.....	D14/228
7,769,408 B2 *	8/2010	Hansson	.....	455/550.1	D710,831 S *	8/2014	Cooper et al.	.....	D14/229
					D719,140 S *	12/2014	Sanhui	.....	D14/225
					2009/0016558 A1 *	1/2009	Woolf et al.	.....	381/368
					2013/0004010 A1 *	1/2013	Royer et al.	.....	381/368

\* cited by examiner



**FIG. 1**

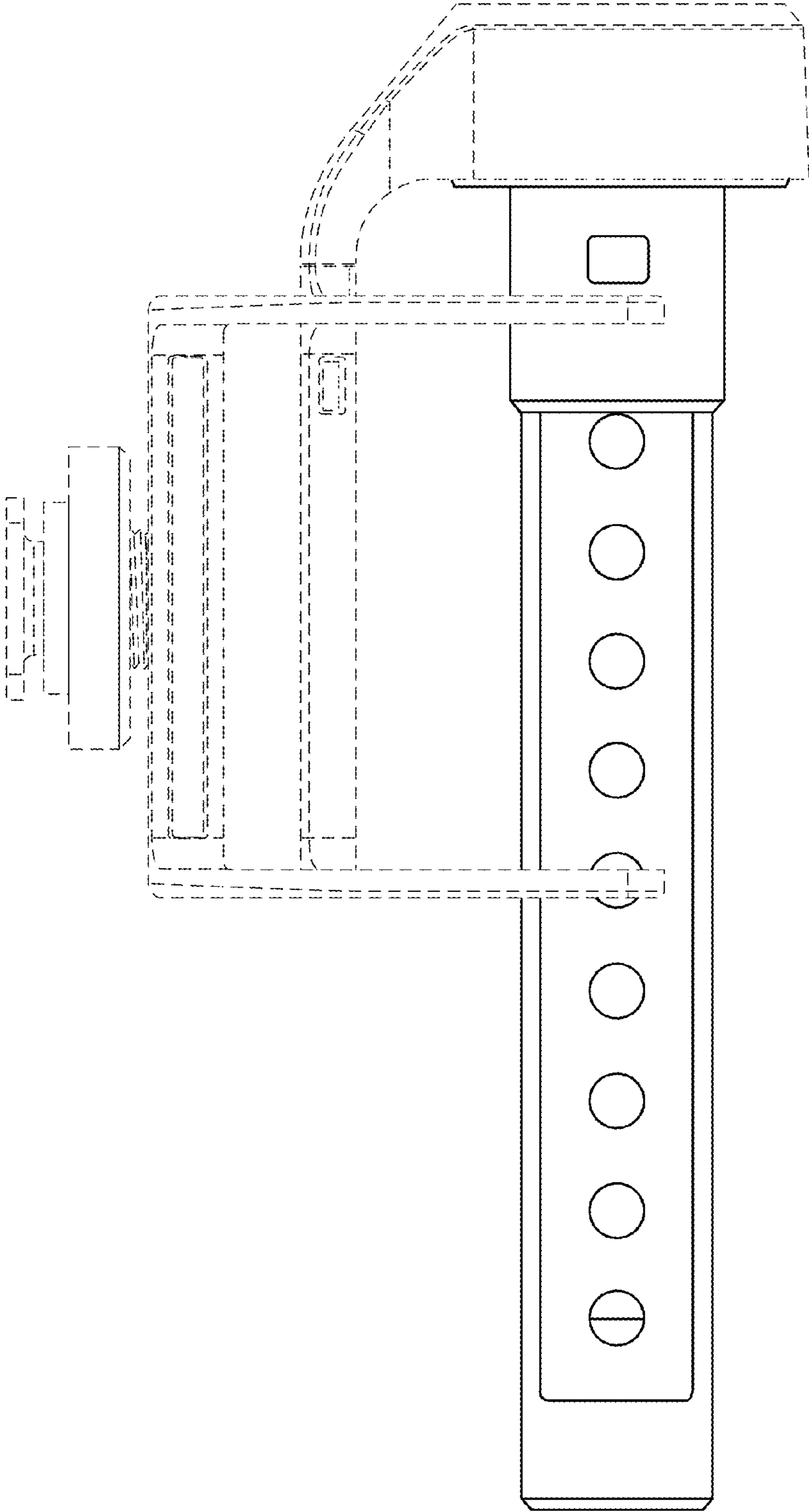
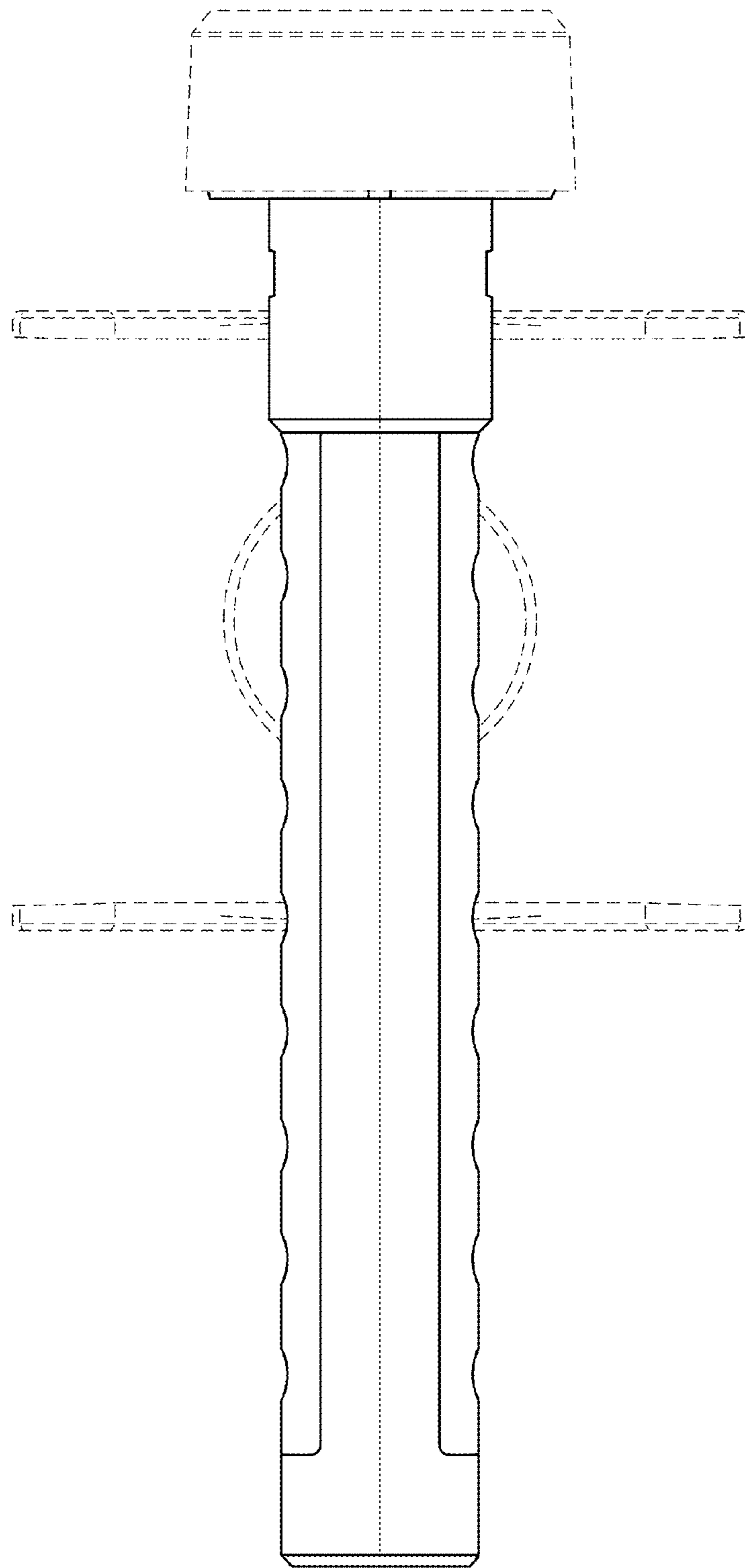
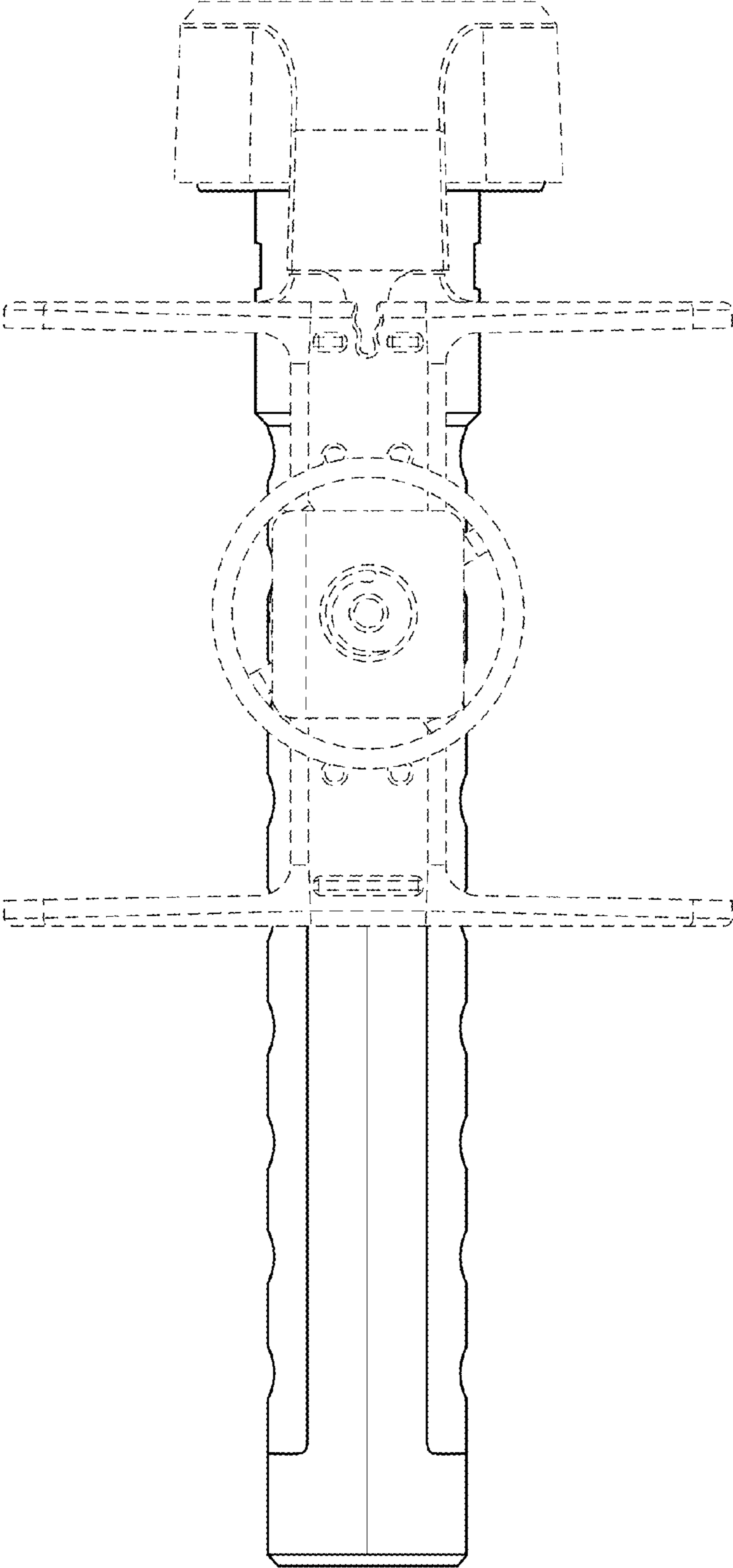


FIG. 2



**FIG. 3**





**FIG. 4**

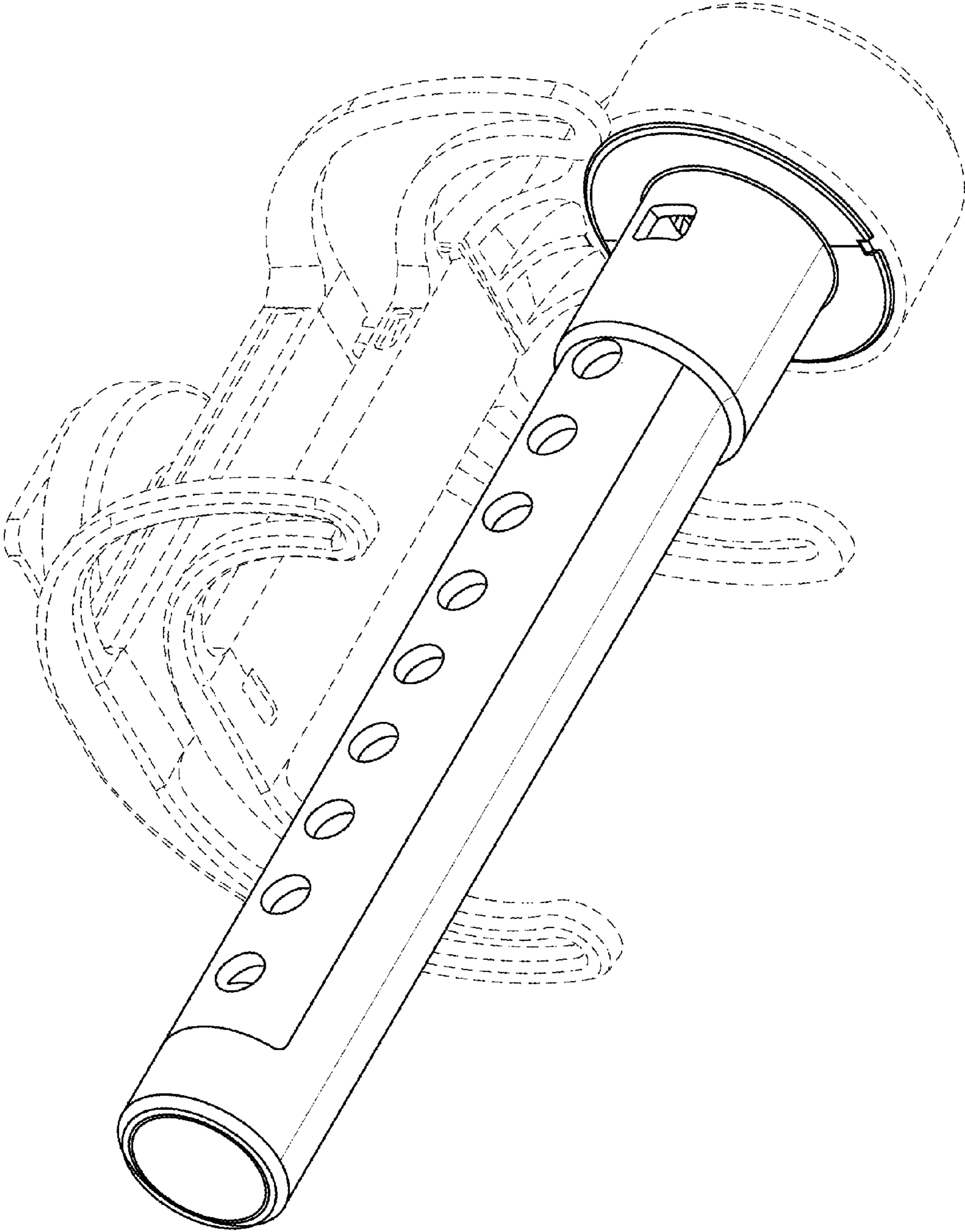
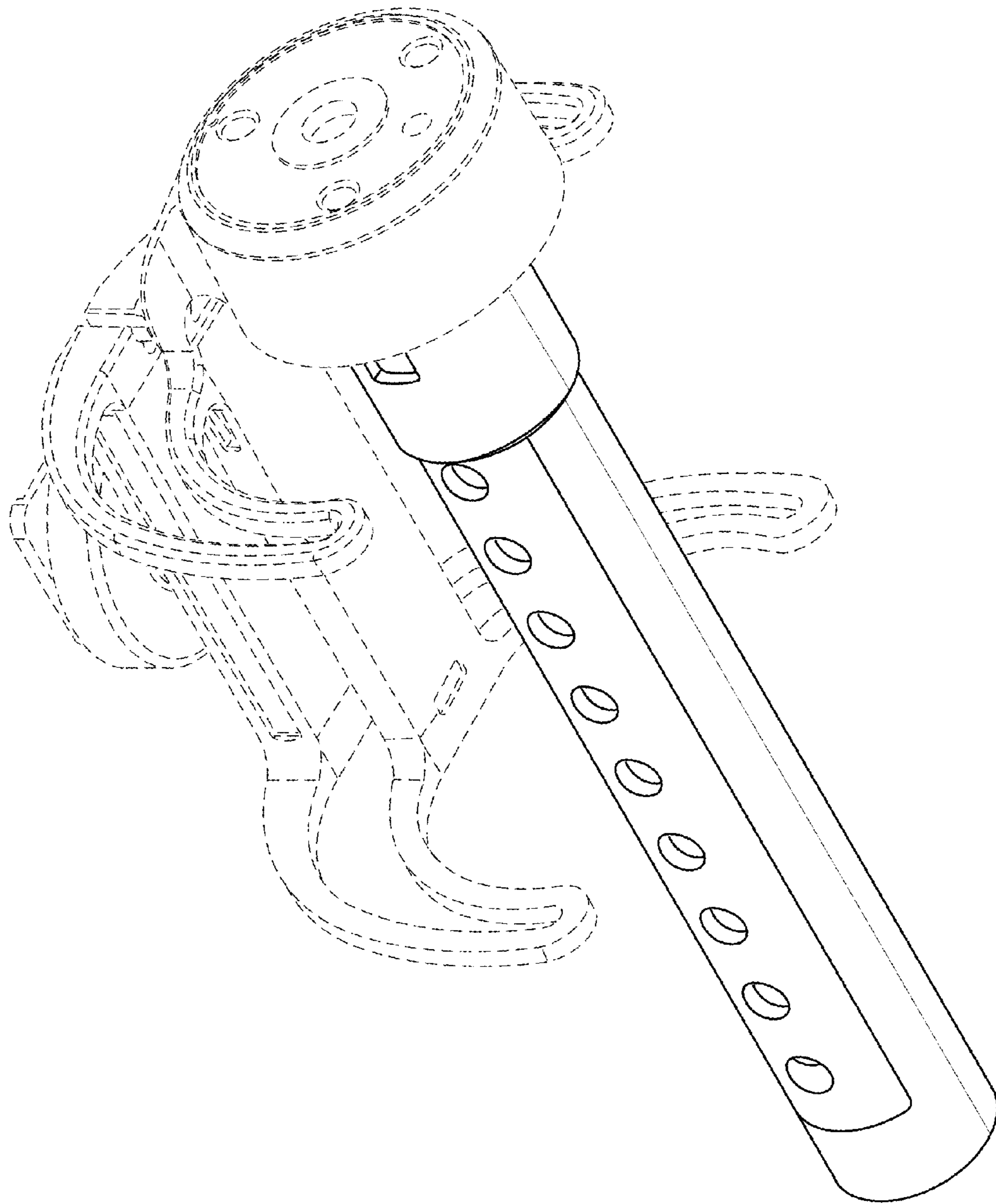


FIG. 5



**FIG. 6**