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(12) **United States Design Patent** (10) **Patent No.:** **US D932,530 S**
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(54) **MECHANICAL ARM**
(71) Applicant: **UBTECH ROBOTICS CORP LTD,**
Shenzhen (CN)
(72) Inventors: **Brandon Jon LaPlante,** Pasadena, CA
(US); **Liang Huang,** Shenzhen (CN);
Chengkun Zhang, Pasadena, CA (US);
Jianbo Li, Shenzhen (CN); **Jingchen**
Li, Shenzhen (CN); **Francisco Jose**
Hernandez, Pasadena, CA (US);
Shixun Chen, Pasadena, CA (US);
Hongyu Ding, Shenzhen (CN);
Wenhua Fan, Shenzhen (CN); **Xinshui**
Huang, Shenzhen (CN); **Huan Tan,**
Pasadena, CA (US); **Youjun Xiong,**
Shenzhen (CN)

D287,368 S * 12/1986 Shibayama D15/122
D293,449 S * 12/1987 Kaufmann D15/122
D296,790 S * 7/1988 Tsuburaya D15/122
D300,935 S * 5/1989 Maddock D15/122
D307,282 S * 4/1990 Suica D15/199
D334,581 S * 4/1993 Yoshikawa D15/199
D344,279 S * 2/1994 Koyama D15/199
D344,280 S * 2/1994 Koyama D15/199
D410,477 S * 6/1999 Nihei D15/199
D440,241 S * 4/2001 Kawahara D15/199
D443,287 S * 6/2001 Kawahara D15/199
D444,488 S * 7/2001 Selic D15/199
D449,057 S * 10/2001 Selic D15/199
D615,574 S * 5/2010 Liu D15/199
D616,477 S * 5/2010 Long D15/199
D616,909 S * 6/2010 Long D15/199
D624,104 S * 9/2010 Miyake D15/199
7,810,765 B2 * 10/2010 Burlot H02G 3/0481
248/75

(Continued)

(73) Assignee: **UBTECH ROBOTICS CORP LTD,**
Shenzhen (CN)

Primary Examiner — Patricia A Palasik

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

(57) **CLAIM**

The ornamental design for a mechanical arm, as shown and described.

(21) Appl. No.: **29/738,499**

DESCRIPTION

(22) Filed: **Jun. 18, 2020**

(51) **LOC (13) Cl.** **15-99**

(52) **U.S. Cl.**
USPC **D15/199**

(58) **Field of Classification Search**
USPC 15/122, 199; 21/578-583; 32/21; 34/34
CPC B25J 9/046; B25J 9/042; B25J 9/06; H01L
21/67766

See application file for complete search history.

FIG. 1 is a first perspective view of a mechanical arm showing the claimed design in accordance with the present disclosure;
FIG. 2 is a second perspective view thereof;
FIG. 3 is a third perspective view thereof;
FIG. 4 is a front elevational view thereof;
FIG. 5 is a rear elevational view thereof;
FIG. 6 is a left side elevational view thereof;
FIG. 7 is a right side elevational view thereof;
FIG. 8 is a top plan view thereof; and,
FIG. 9 is a bottom plan view thereof.

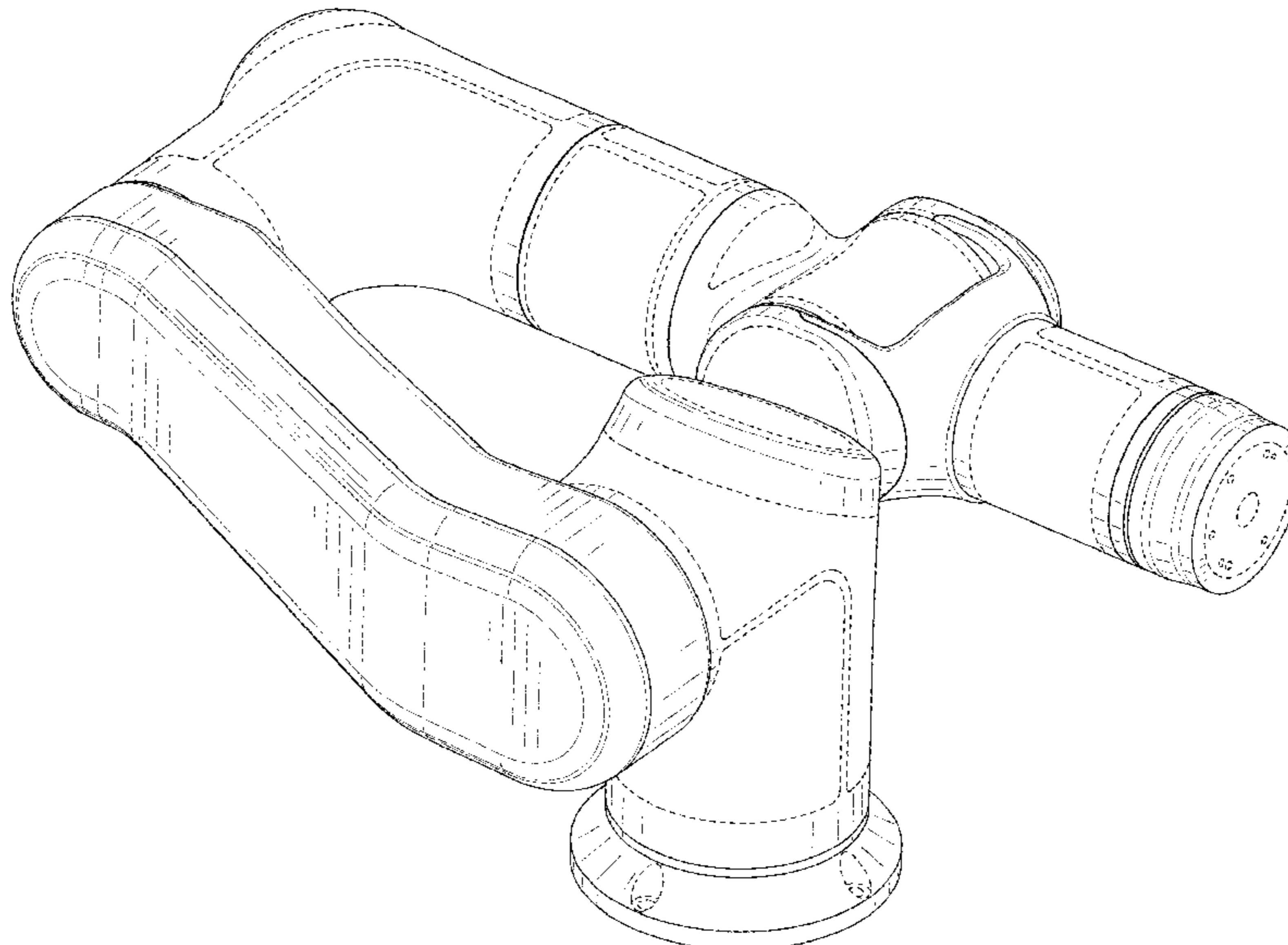
The broken lines in the Figures are for the purpose of illustrating portions of the article that: form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D267,883 S * 2/1983 Susnjara D15/122
D269,681 S * 7/1983 Morser D15/122
D279,572 S * 7/1985 Yasuoka D15/122

1 Claim, 9 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D629,030	S *	12/2010	Long	.....	D15/199
D636,803	S *	4/2011	Nakagiri	.....	D15/199
D650,820	S *	12/2011	Long	.....	D15/199
D651,627	S *	1/2012	Long	.....	D15/199
D678,378	S *	3/2013	Selic	.....	D15/199
D681,708	S *	5/2013	Miyake	.....	D15/199
8,434,387	B2 *	5/2013	Nakagiri	.....	B25J 9/104 74/665 R
D690,753	S *	10/2013	Liu	.....	D15/199
D707,277	S *	6/2014	Olsson	.....	D15/199
D713,436	S *	9/2014	Liu	.....	D15/199
D766,348	S *	9/2016	Long	.....	D15/199
D769,343	S *	10/2016	Bordegnoni	.....	D15/199
D769,954	S *	10/2016	Kinoshita	.....	D15/199
D778,971	S *	2/2017	Long	.....	D15/199
D802,041	S *	11/2017	He	.....	D15/199
D837,294	S *	1/2019	Ciniello	.....	D19/59
D841,707	S *	2/2019	Yamamoto	.....	D15/199
D852,863	S *	7/2019	Dosho	.....	D15/199
D865,828	S *	11/2019	Bogart	.....	D15/199
D870,169	S *	12/2019	Dosho	.....	D15/199
D877,787	S *	3/2020	Kinoshita	.....	D15/199
D881,251	S *	4/2020	Abe	.....	D15/199
D896,859	S *	9/2020	Naitou	.....	D15/199
D905,774	S *	12/2020	Inoue	.....	D15/199
D911,408	S *	2/2021	Okada	.....	D15/199
2005/0092122	A1 *	5/2005	Markert	.....	B25J 19/0075 74/490.01
2005/0126327	A1 *	6/2005	Markert	.....	B25J 19/0054 74/490.02
2008/0271561	A1 *	11/2008	Ohara	.....	B25J 9/0018 74/490.01

* cited by examiner

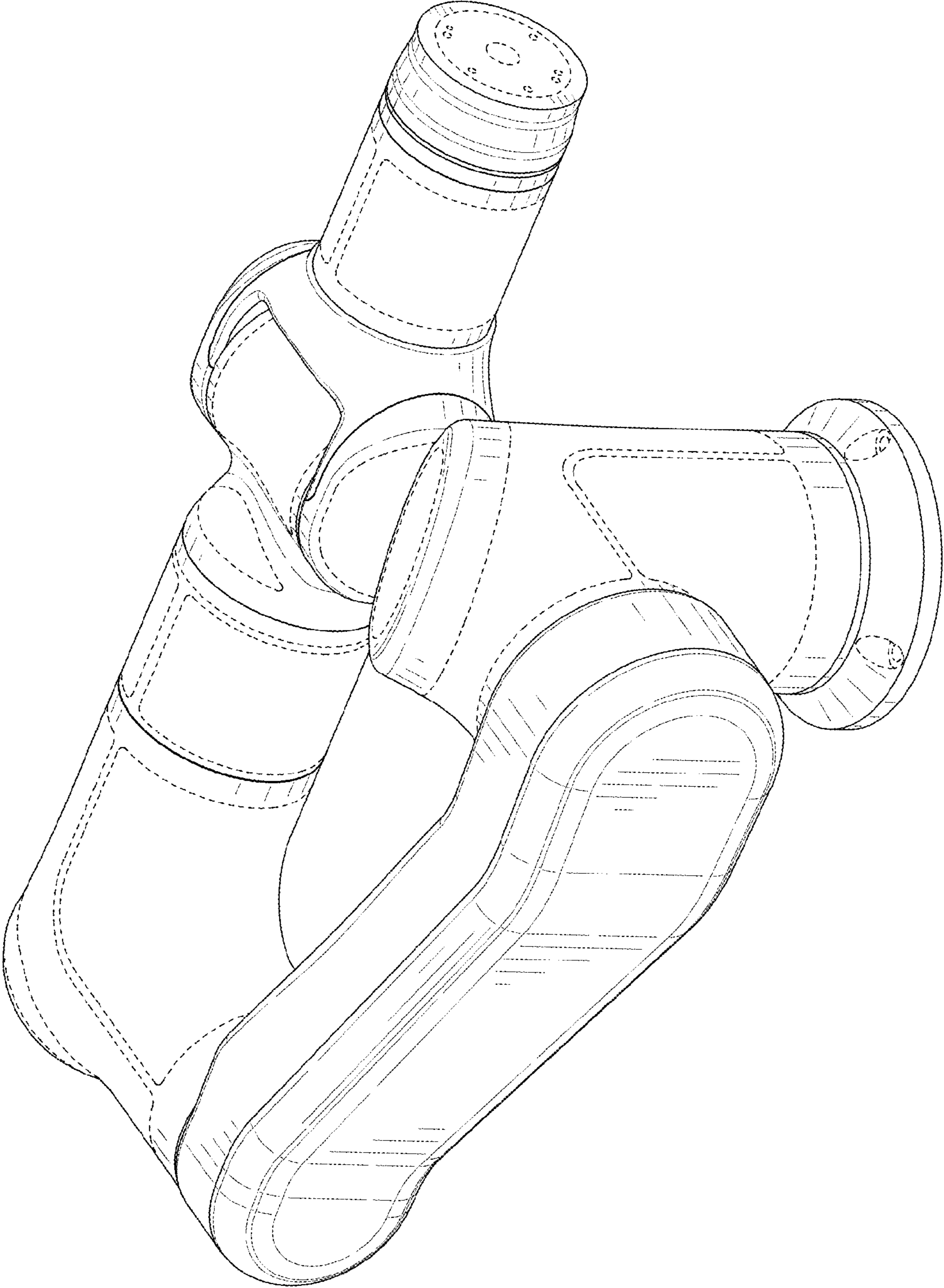


FIG. 1

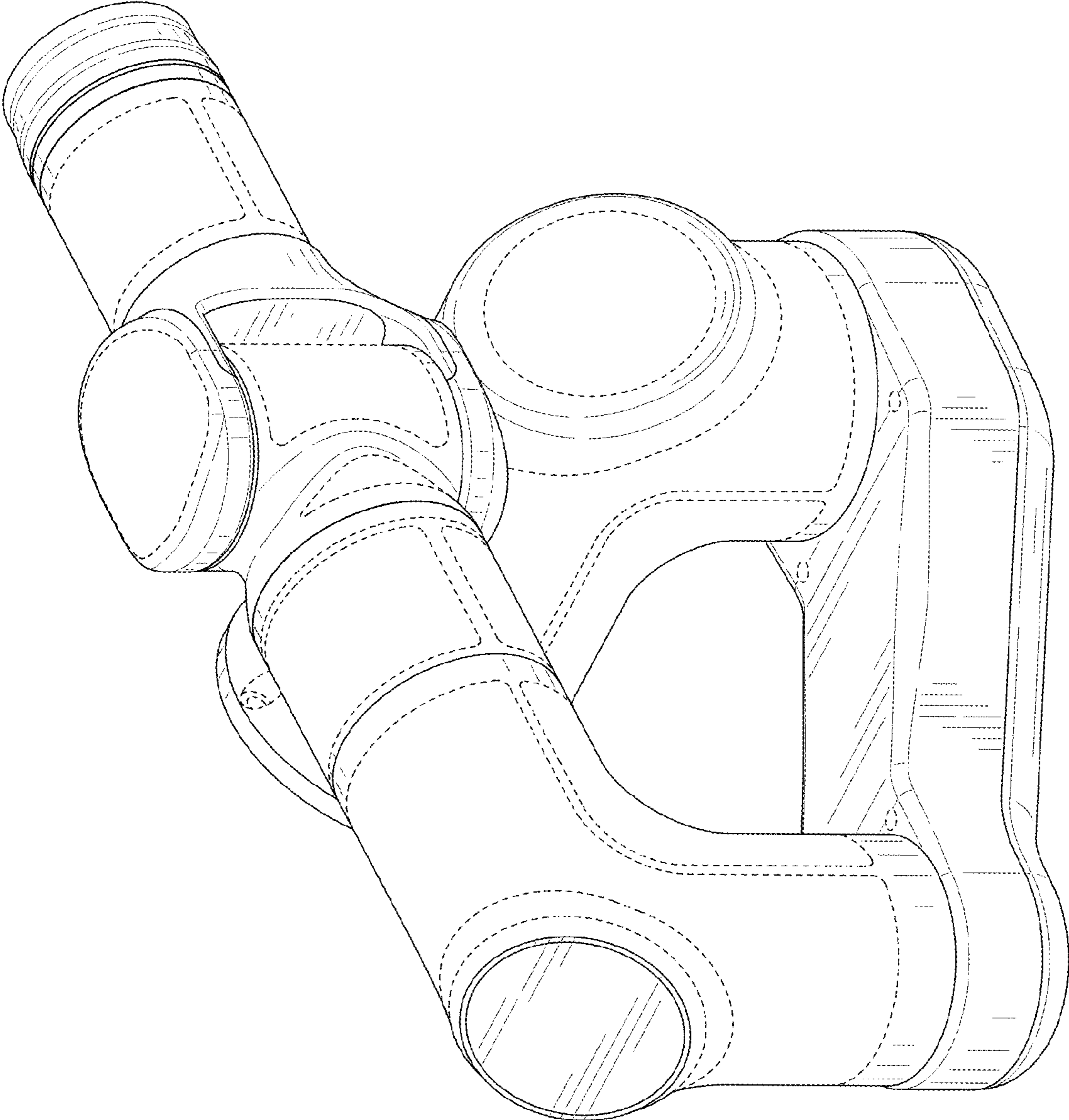


FIG. 2

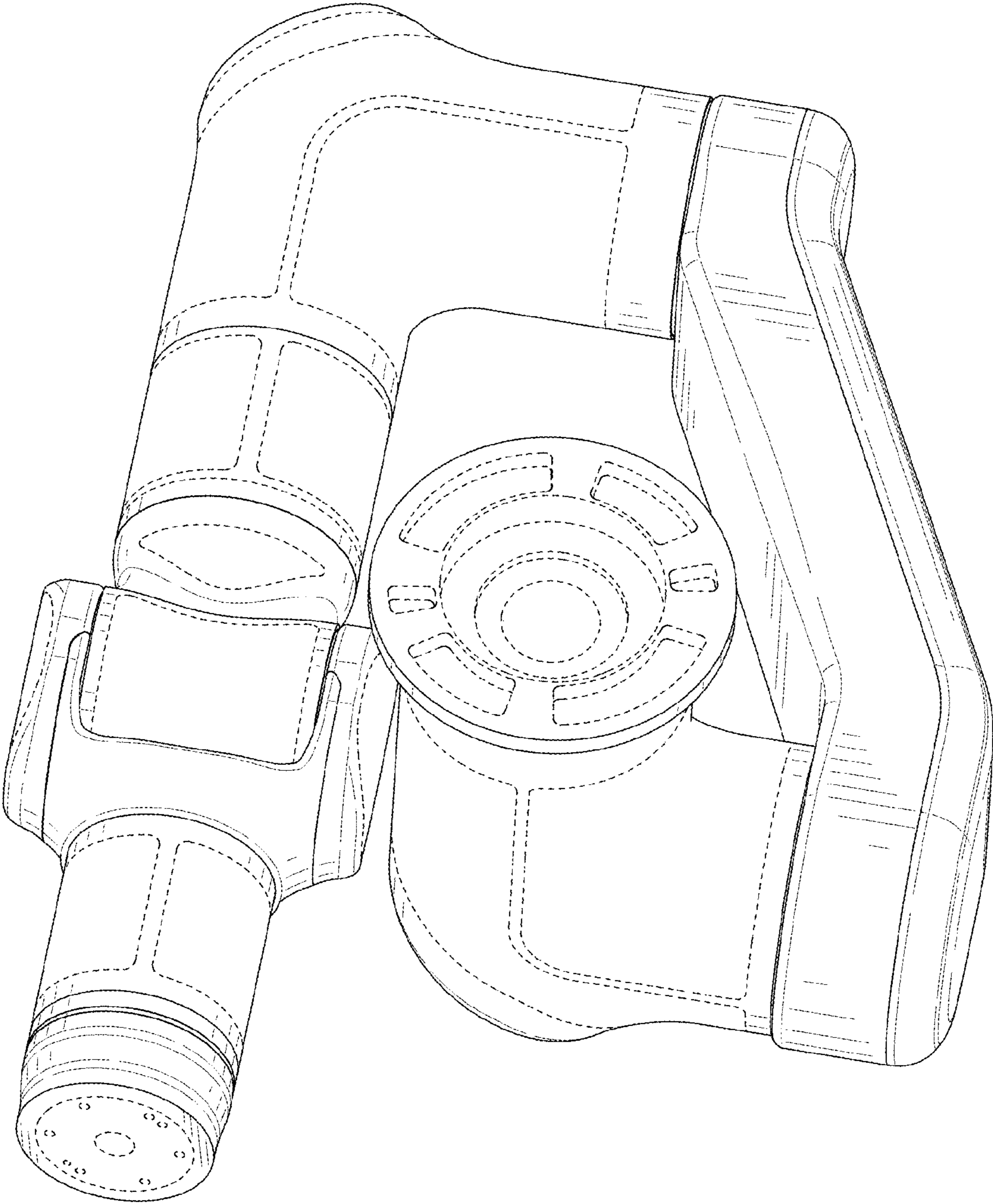


FIG. 3

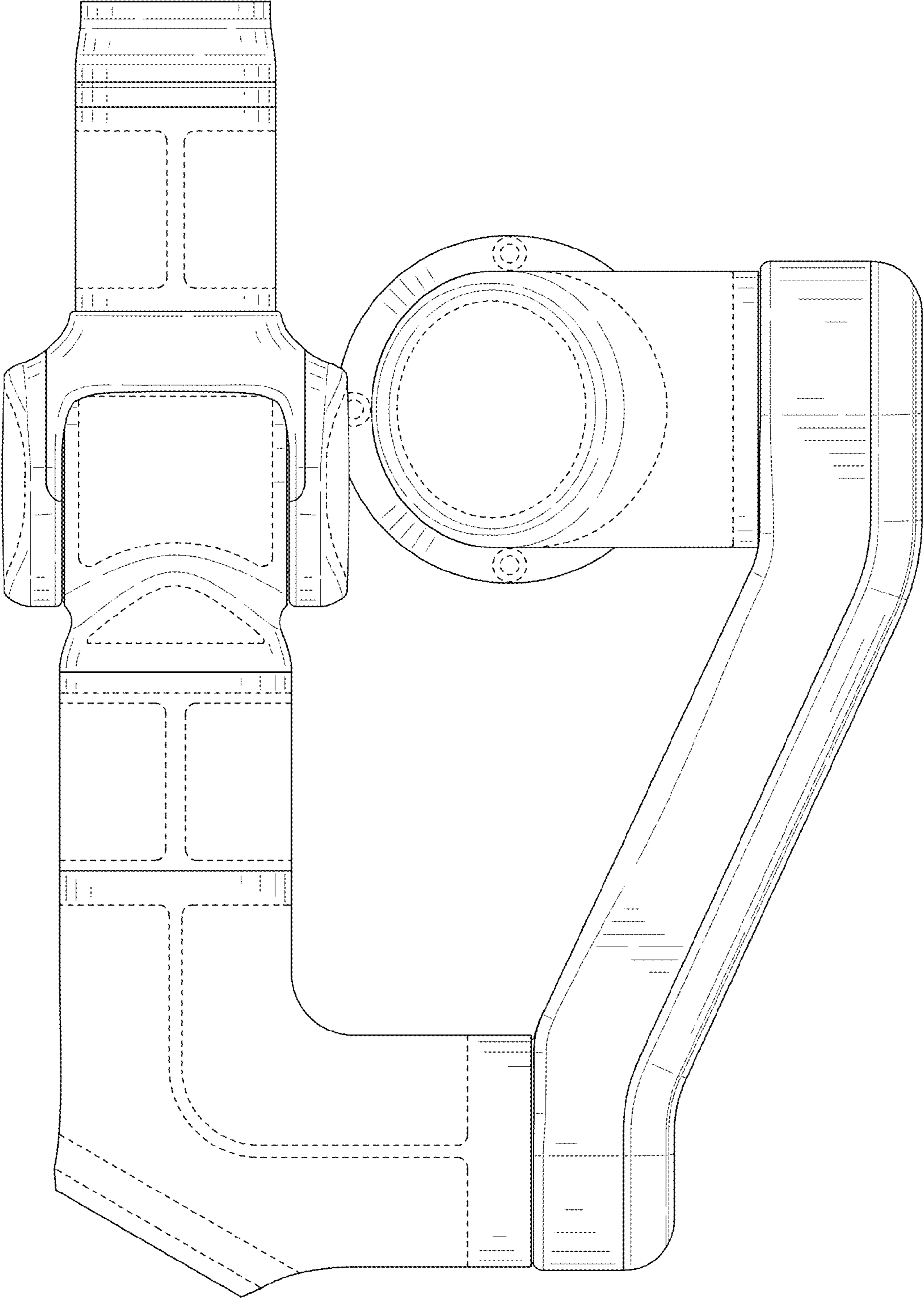


FIG. 4

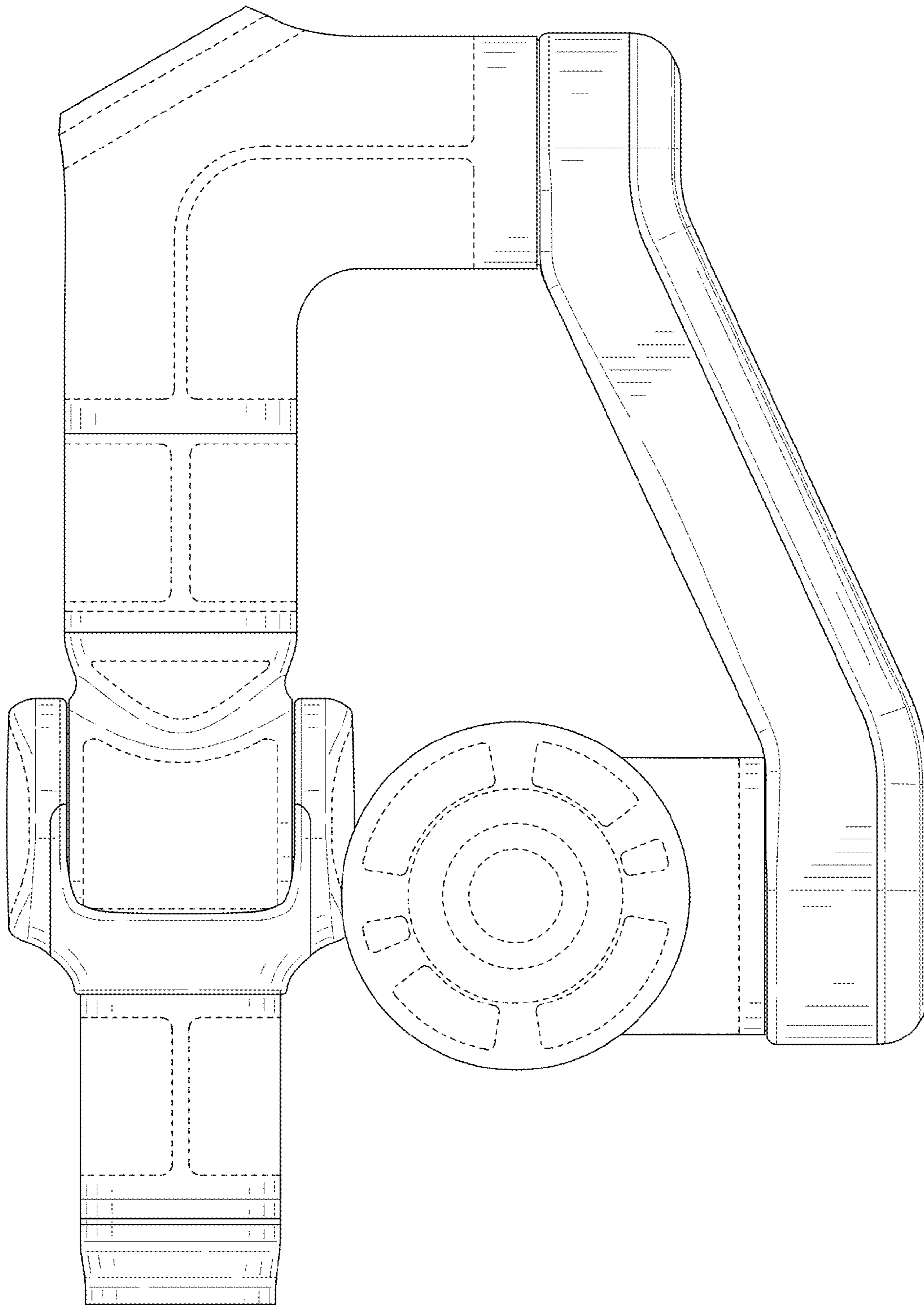


FIG. 5

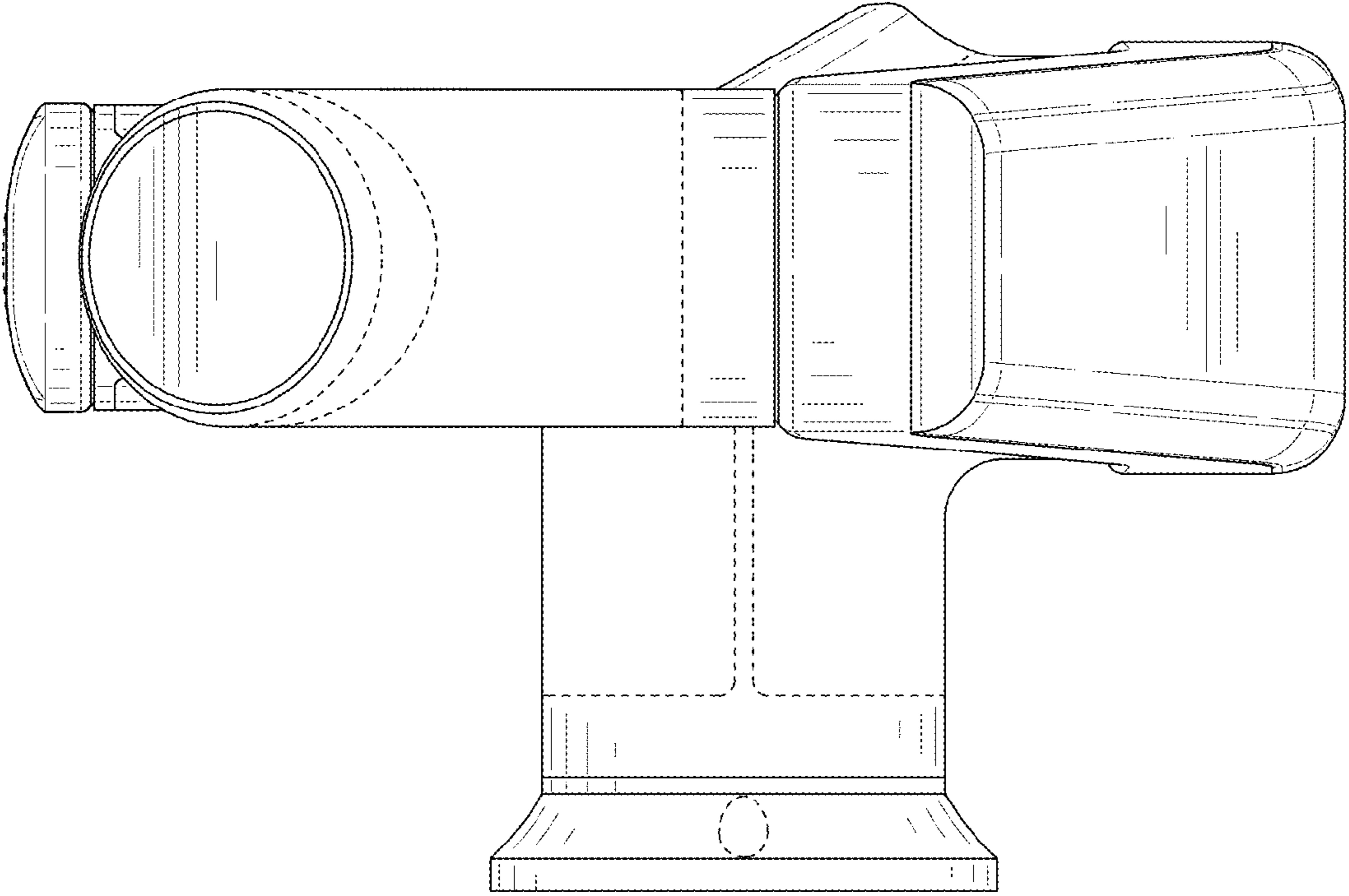


FIG. 6

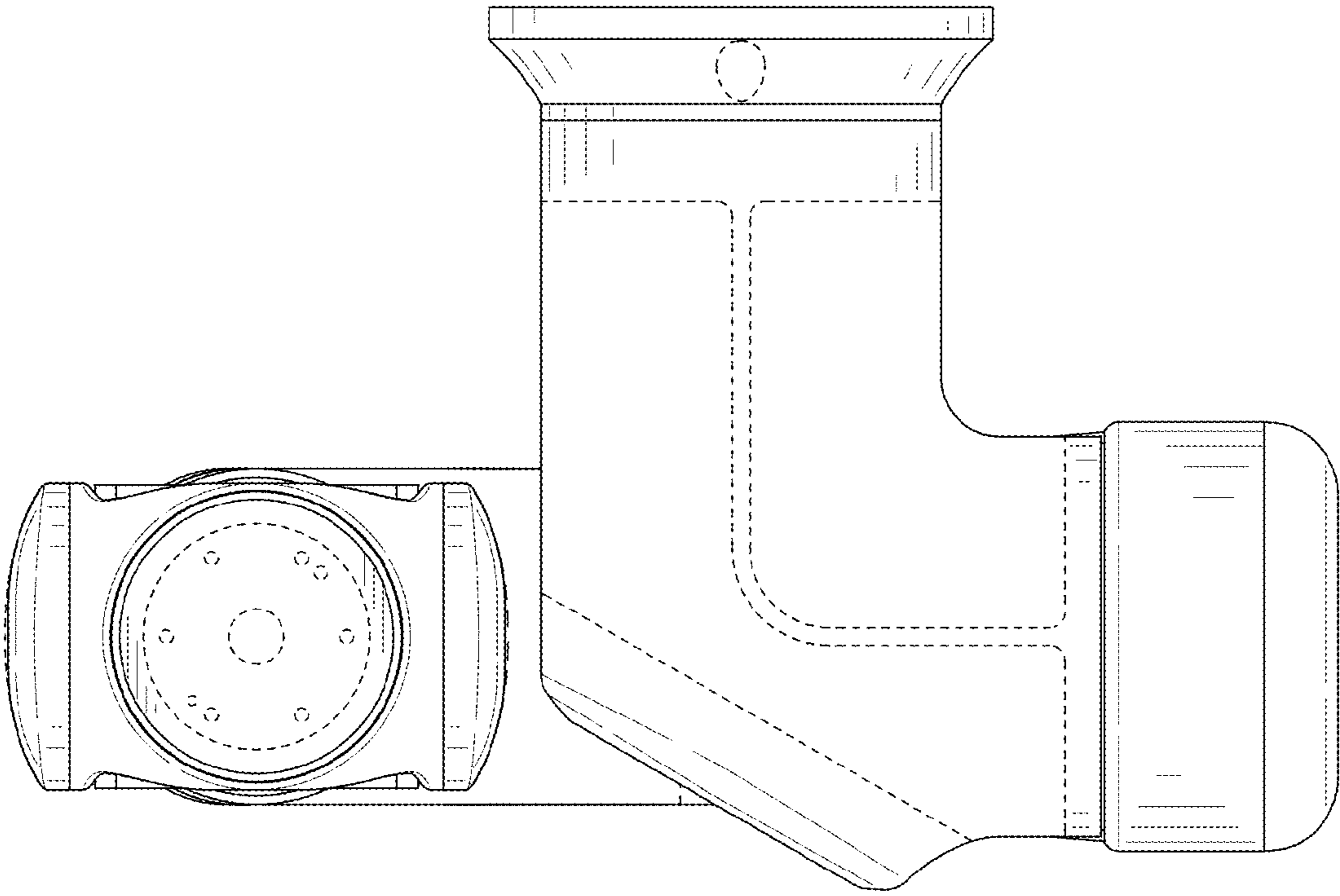


FIG. 7

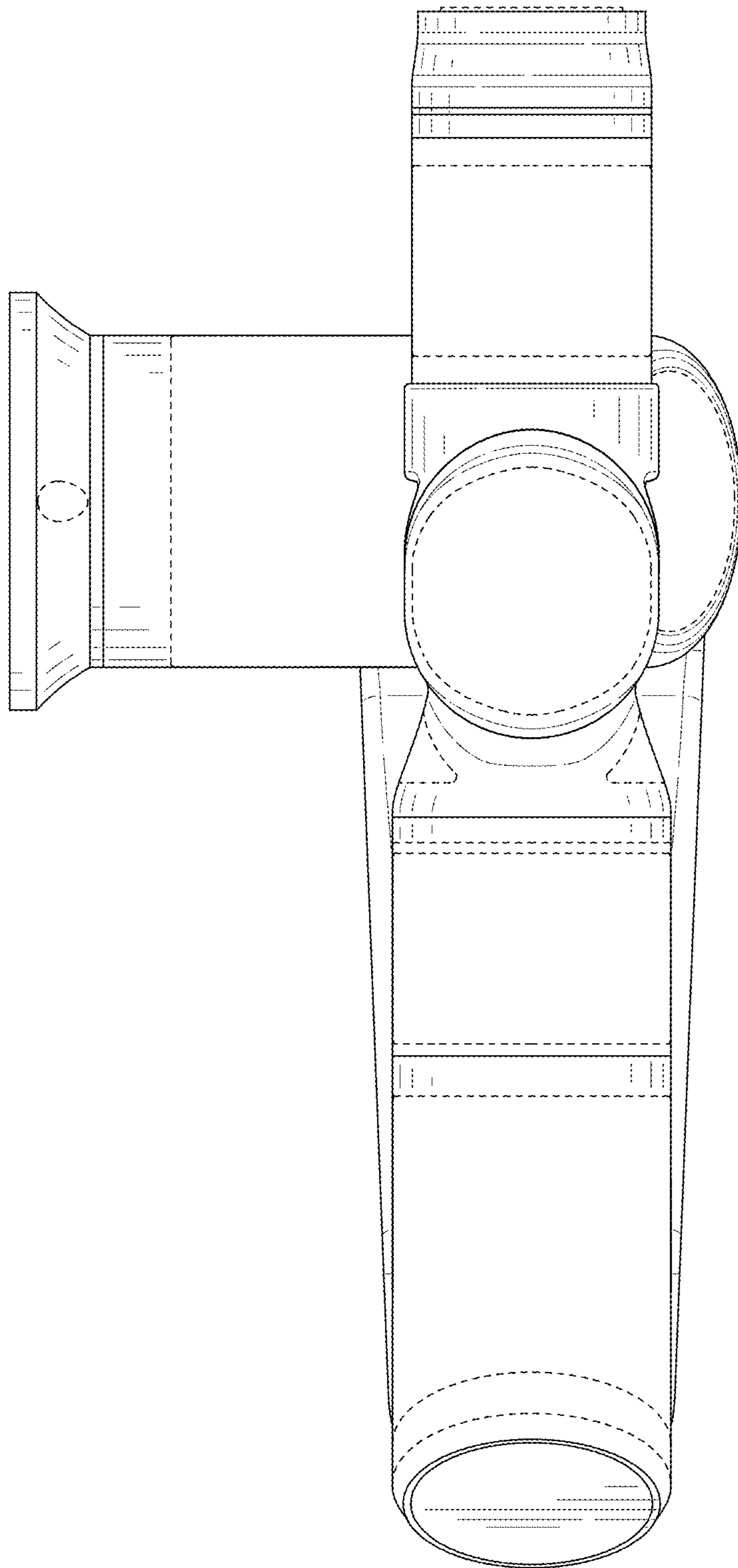


FIG. 8

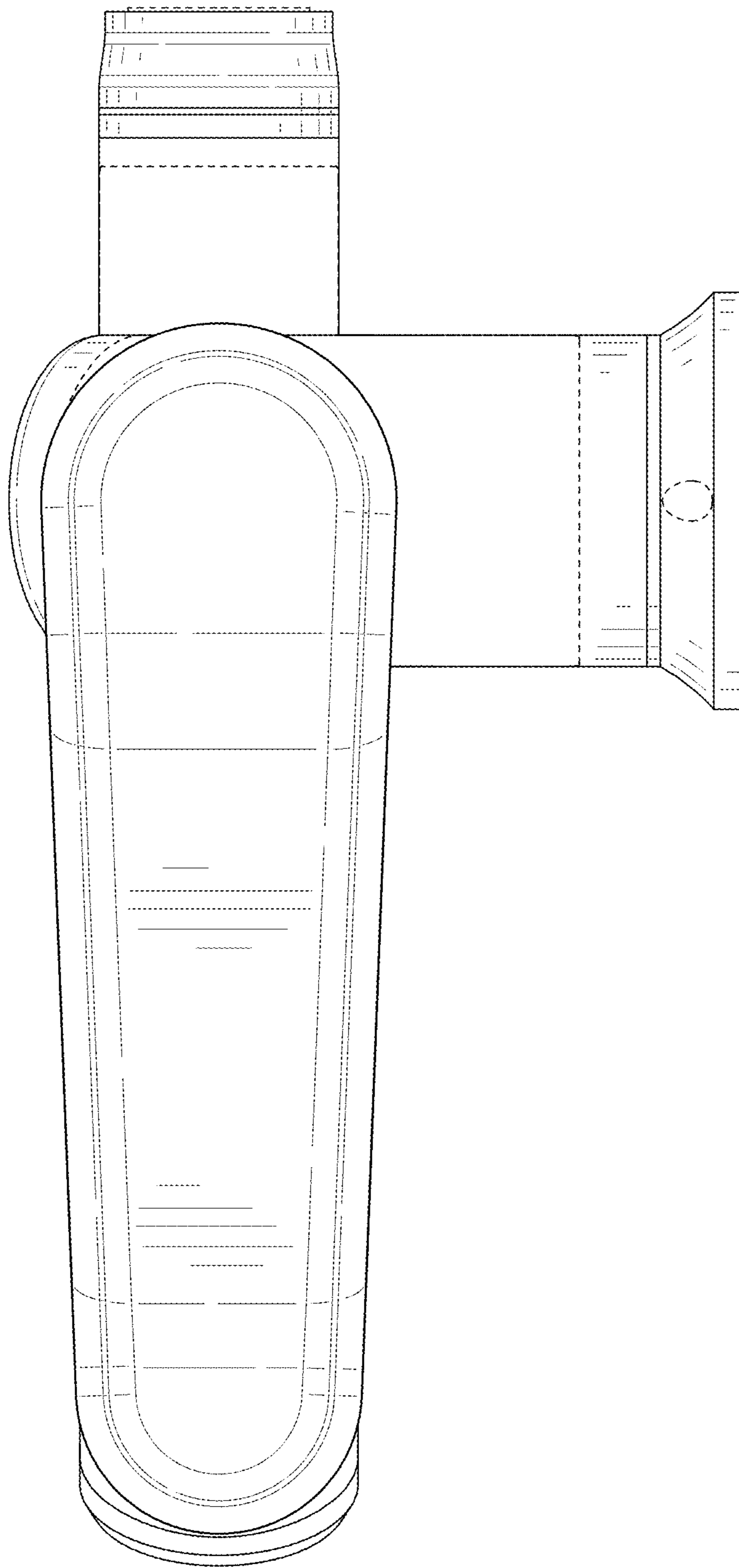


FIG. 9