



US00D754569S

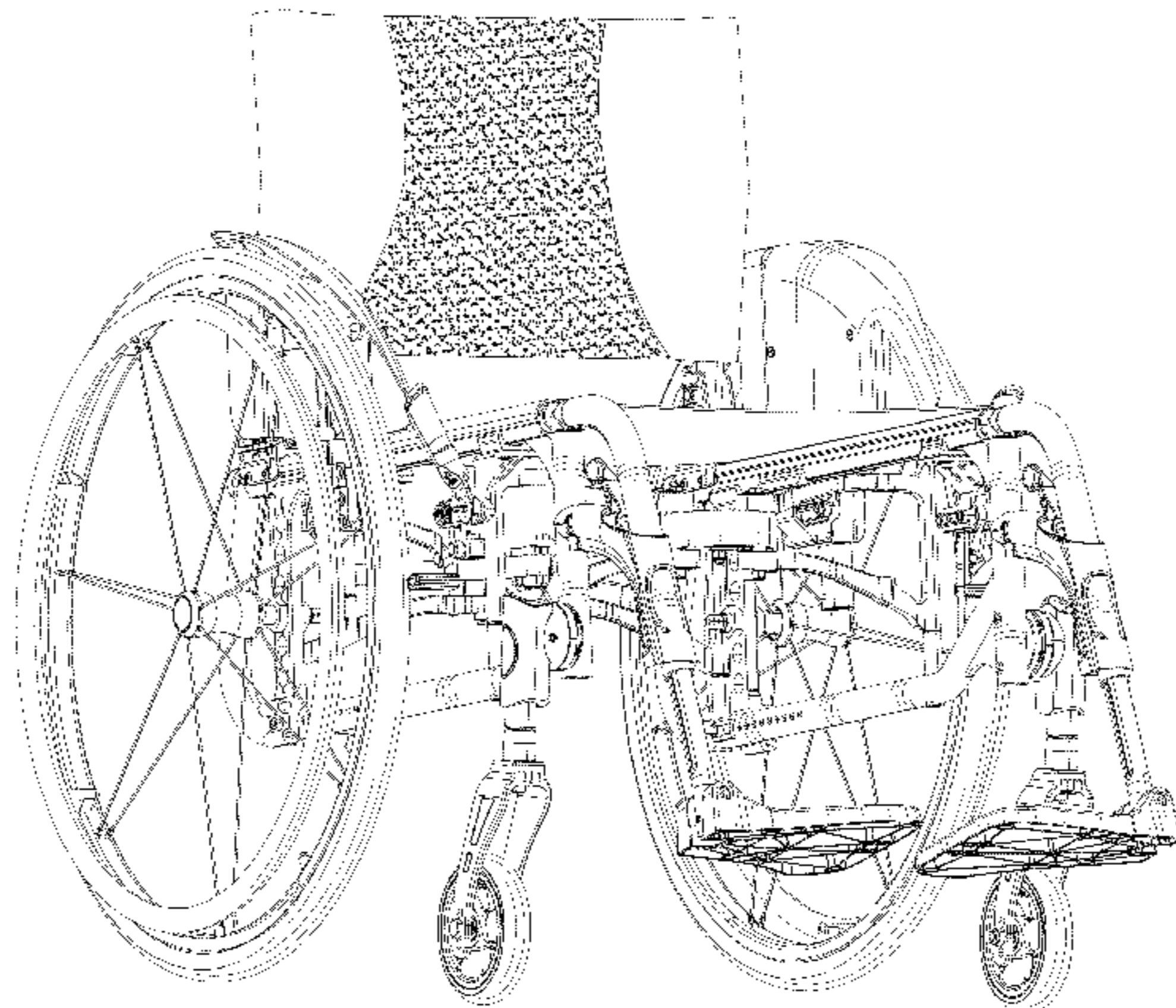
(12) **United States Design Patent**  
**Da Cunha et al.**

(10) **Patent No.:** **US D754,569 S**  
(45) **Date of Patent:** **\*\* Apr. 26, 2016**

- (54) **WHEELCHAIR**
- (71) Applicant: **Invacare International Sarl, Gland (CH)**
- (72) Inventors: **Wifrid Da Cunha, Druye (FR); Aurelie Lauret, Lignieres de Touraine (FR); Mael Robert, Tours (FR); Jean-Michel Roncin, Tours (FR)**
- (73) Assignee: **Invacare International Sarl, Gland (CH)**
- (\*\*) Term: **14 Years**
- (21) Appl. No.: **29/442,310**
- (22) Filed: **Jan. 29, 2013**
- (30) **Foreign Application Priority Data**  
Jul. 31, 2012 (WO) ..... 683407601
- (51) **LOC (10) Cl.** ..... **12-12**
- (52) **U.S. Cl.**  
USPC ..... **D12/131**
- (58) **Field of Classification Search**  
USPC ..... D12/128-133; 280/62, 647-650, 29, 280/200, 47.38, 250.1, 259, 642, 658, 280/304.1; 128/99.1, 100.1, 102.1, 876, 128/877  
See application file for complete search history.

4,592,570 A	6/1986	Nassiri	
4,721,321 A *	1/1988	Haury et al. ....	280/250.1
4,793,022 A	12/1988	Raffaelli	
4,961,610 A	10/1990	Reeder et al.	
D315,463 S	3/1991	Spiegel	
5,018,788 A	5/1991	Cedergreen	
5,033,792 A	7/1991	Kanazawa	
5,160,156 A *	11/1992	Mendon .....	280/250.1
5,176,393 A *	1/1993	Robertson et al. ....	280/250.1
D333,737 S	3/1993	Adams	
D337,289 S *	7/1993	Constantine et al. ....	D12/131
D339,315 S *	9/1993	Lindkvist et al. ....	D12/131
5,254,007 A	10/1993	Eagan	
D341,344 S	11/1993	Counts et al.	
5,275,466 A	1/1994	Rentchler, Jr.	
5,294,172 A	3/1994	Dubus	
5,366,037 A	11/1994	Richey	
5,421,692 A *	6/1995	Varrichio et al. ....	414/678
5,427,398 A *	6/1995	Weybrecht .....	280/304.1
D365,786 S	1/1996	Peterson	
D365,787 S	1/1996	Peterson et al.	
D365,788 S	1/1996	Peterson	
D380,991 S	7/1997	Deming	
D383,911 S	9/1997	Conforti	
5,820,221 A	10/1998	Greaves et al.	
D401,540 S *	11/1998	Yamamoto .....	D12/131
D403,280 S	12/1998	Diestel	
D412,141 S	7/1999	Dickie et al.	
D414,453 S	9/1999	Tsai	
6,003,891 A	12/1999	Broadhead	
6,015,190 A	1/2000	Wend	
D427,949 S *	7/2000	Schlangen .....	D12/131
D431,502 S *	10/2000	Schlangen .....	D12/131
D433,968 S	11/2000	Mascari et al.	
6,202,773 B1	3/2001	Richey, II et al.	
6,352,273 B1	3/2002	Dickie	
D455,376 S	4/2002	Lindenkamp	
6,386,638 B1	5/2002	Strauch	
6,425,597 B1	7/2002	Peterson	
D462,639 S	9/2002	Lin	
6,459,962 B2	10/2002	Ulrich et al.	
D468,669 S	1/2003	Hopely, Jr.	
D477,261 S	7/2003	Lin	
6,615,937 B2	9/2003	Richey, II et al.	
6,669,299 B2	12/2003	Carlson et al.	
D486,762 S	2/2004	He	
D489,653 S	5/2004	Tsai	
D491,115 S	6/2004	Taylor	
D491,494 S	6/2004	Lippert	
D494,110 S	8/2004	Cheng	
6,926,106 B2	8/2005	Richey, II et al.	
6,938,923 B2	9/2005	Mulhern et al.	
D521,909 S	5/2006	Gillett et al.	

- (56) **References Cited**  
U.S. PATENT DOCUMENTS
- 2,490,560 A 12/1924 Urquhart, Jr.
- D114,527 S 5/1939 Boden
- 2,181,722 A 11/1939 Butter et al.
- 2,481,948 A 9/1949 Pruitt
- 2,634,986 A 4/1953 McDaniel
- 2,770,832 A 11/1956 Claude
- D218,759 S 9/1970 Foster
- 3,718,942 A 3/1973 Arenson
- D231,801 S 6/1974 Pivacek
- 3,865,427 A 2/1975 Delany
- 4,025,112 A 5/1977 Hale





7,040,429	B2	5/2006	Molnar	
D523,788	S	6/2006	Jones et al.	
D524,196	S	7/2006	You	
D529,844	S	10/2006	Chen et al.	
D536,187	S	2/2007	Goebert et al.	
D536,887	S	2/2007	Goebert et al.	
D540,221	S	4/2007	Cartellone et al.	
7,204,556	B2	4/2007	Schwerdtner et al.	
7,229,132	B2	6/2007	Meeker et al.	
7,231,689	B2	6/2007	Scheiber et al.	
D559,741	S	1/2008	Lasher, III	
7,353,566	B2	4/2008	Scheiber et al.	
D569,769	S	5/2008	Chiu et al.	
7,370,876	B2	5/2008	Hsu et al.	
D573,861	S	7/2008	Hammer	
7,413,045	B2	8/2008	Tien	
7,472,959	B1	1/2009	Ratza et al.	
D585,794	S	2/2009	Lin	
D588,051	S	3/2009	Moller et al.	
D589,411	S	3/2009	Brown et al.	
D590,304	S	4/2009	Kruse	
D602,404	S	10/2009	Cusack	
D608,550	S	1/2010	Scollberger et al.	
D614,541	S	4/2010	Storm	
7,694,991	B2	4/2010	Mills	
D615,461	S	5/2010	Storm	
D622,641	S *	8/2010	Chen et al. ....	D12/131
D627,271	S	11/2010	Knopf	
D631,403	S	1/2011	Knopf	
7,866,613	B2	1/2011	Cramer	
D632,229	S	2/2011	Kruse	
D636,299	S	4/2011	Knopf	
D642,499	S	8/2011	Tuckowski et al.	
D642,500	S	8/2011	Tuckowski et al.	
D642,963	S	8/2011	Greiner	
8,065,051	B2	11/2011	Chopcinski et al.	
8,073,588	B2	12/2011	Peters et al.	
D652,357	S	1/2012	Jurkiewicz et al.	
D653,176	S	1/2012	Jurkiewicz et al.	
D654,408	S	2/2012	Spalding et al.	
D656,070	S	3/2012	Spalding et al.	
D682,748	S	5/2013	Horacek	
D690,190	S	9/2013	McGrath	
D703,107	S	4/2014	Moller	
8,727,048	B2	5/2014	Jurkiewicz	
D720,666	S	1/2015	Farmer	
D721,017	S	1/2015	Spalding	
D722,286	S	2/2015	Da Cunha	
D731,366	S	6/2015	Gingras	
D731,931	S	6/2015	Gingras	
D735,622	S	8/2015	Spalding	
2001/0013437	A1	8/2001	Husted et al.	
2003/0056329	A1	3/2003	Coman et al.	
2004/0239169	A1	12/2004	De Nichilo	
2006/0082098	A1	4/2006	Harris	
2007/0107963	A1	5/2007	Chiu	
2007/0195081	A1	8/2007	Fischer	
2008/0087481	A1	4/2008	Gry	
2009/0172915	A1	7/2009	Hunziker	
2010/0212108	A1	8/2010	Yang et al.	
2011/0131761	A1	6/2011	Campbell	

FOREIGN PATENT DOCUMENTS

FR 2845893 4/2004

OTHER PUBLICATIONS

Invacare Corporation, product Catalog, copyright 2004, printed Feb. 18, 2011, 14 pgs.  
 Invacare Corporation, At'm (Take Along Chair), 2 page brochure, copyright 2009.  
 Invacare Corporation, FDX Front-Wheel Drive Power Wheelchair, 4 page brochure, copyright 2010.  
 Invacare Corporation, Nutron R51, 2 page brochure, copyright 2006.  
 Invacare Corporation, P9000 XDT, 2 page brochure, copyright 2007.  
 Invacare Corporation, Pronto M51, 4 page brochure, copyright 2010.  
 Invacare Corporation, Pronto M51 with Formula CG Seating, 2 page web printout, printed Feb. 18, 2011.

Invacare Corporation, The New TDX Family, 26 page brochure, copyright 2008.  
 Invacare Corporation, Storm Series, 16 page brochure, copyright 2010.  
 Invacare Corporation, User Manual, FDX Power Wheelchair Base FDX, FDX-CG, FDX-MCG, 96 pgs., Rev A, Sep. 2010. copyright 2010.  
 Invacare Corporation, Operator and Maintenance Manuel, Pronto M51 and M561 with SureStep, 80 pgs., Rev. J—Oct. 2008, copyright 2008.  
 International Search Report and Written Opinion from PCT/US2011/28626, dated May 20, 2011.  
 Invacare Corporation, Product Brochure, “IVC” Standard Manual Wheelchairs, 30 pages; Form No. 00-261; Rev. Apr. 2011.  
 Invacare Corporation—Product Catalog, Tilt-in-Space, website printout; [http://invacare.com/cgi-bin/imhqprd/inv\\_catalog/prod\\_cat.jsp?catOID=536885269](http://invacare.com/cgi-bin/imhqprd/inv_catalog/prod_cat.jsp?catOID=536885269); 2 pages;copyright 2013.  
 Invacare Corporation—Product Catalog, IVC Manual Wheelchairs; website printout: [http://invacare.com/cgi-bin/imhqprd/inv\\_catalog/prod\\_cat.jsp?catOID=536885295](http://invacare.com/cgi-bin/imhqprd/inv_catalog/prod_cat.jsp?catOID=536885295), 3 pages; copyright 2013.  
 Invacare Corporation—Product Catalog, Custom Manual Wheelchairs; website printout: [http://invacare.com/cgi-bin/imhqprd/inv\\_catalog/prod\\_cat.jsp?catOID=536885343](http://invacare.com/cgi-bin/imhqprd/inv_catalog/prod_cat.jsp?catOID=536885343); 1 page; copyright 2013.  
 Invacare Corporation—Product Catalog, Top End Everyday Chairs; website printout: [http://invacare.com/cgi-bin/imhqprd/inv\\_catalog/prod\\_cat.jsp?catOID=536885323](http://invacare.com/cgi-bin/imhqprd/inv_catalog/prod_cat.jsp?catOID=536885323); 2 pages; copyright 2013.  
 Invacare Corporation—Product Catalog, IVC Manual; website printout: [http://invacare.com/cgi-bin/imhqprd/inv\\_catalog/prod\\_cat.jsp?s=&sideButCatEdn . . .](http://invacare.com/cgi-bin/imhqprd/inv_catalog/prod_cat.jsp?s=&sideButCatEdn...); 3 pages; copyright 2013.  
 Invacare Corporation—Product Brochure; The Rea Focus; EU-May 2012; 6 pages.  
 Invacare Corporation—Product Brochure; Rea Spirea 2-EU-Jun. 2011; 4 pages.  
 Invacare Corporation—Product Brochure; The Invacare Spin; SpinX-EU-Jun. 2011; 4 pages.  
 Invacare Corporation—Product Brochure; The Invacare Topaz; Topaz-EU-Jun. 2011; 2 pages.  
 Invacare Corporation—Product Brochure; The Invacare Alu Lite; Alu Lite-EU-Jun. 2011; 2 pages.  
 Invacare Corporation; “Action NG Family Accessories Brochure”; The Invacare Action NG; The changing face of mobility; Action NG Accessories-EU-May 2012; 8 pages.  
 Invacare Corporation; “Action 1 NG”;EU-Nov. 2012; 4 pages.  
 Invacare Corporation:“Spirea4 NG”; Rea Spirea4ND-EU-Jun. 2011.

\* cited by examiner

Primary Examiner — Susan Hattan

Assistant Examiner — Charles Hanson

(74) Attorney, Agent, or Firm — Calfee, Halter & Griswold LLP

(57) CLAIM

The ornamental design for a wheelchair, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a wheelchair of the new design;  
 FIG. 2 is a rear perspective view of the wheelchair of FIG. 1;  
 FIG. 3 is a front elevational view of the wheelchair of FIG. 1;  
 FIG. 4 is a right side elevational view of the wheelchair of FIG. 1;  
 FIG. 5 is a rear elevational view of the wheelchair of FIG. 1;  
 FIG. 6 is a top plan view of the wheelchair of FIG. 1;  
 FIG. 7 is a right side elevational view of a frame element of the wheelchair, wherein the left side elevational view is a mirror image thereof;

FIG. 8 is a front perspective view of a first embodiment of a caster wheel housing of the wheelchair;

FIG. 9 is a rear perspective view of the caster wheel housing of FIG. 8;

FIG. 10 is a front elevational view of the caster wheel housing of FIG. 8;

FIG. 11 is a left side elevational view of the caster wheel housing of FIG. 8;

FIG. 12 is a rear elevational view of the caster wheel housing of FIG. 8;

FIG. 13 is a top plan view of the caster wheel housing of FIG. 8;

FIG. 14 is a front perspective view of a second embodiment of a castor wheel housing of the wheelchair, wherein the wheel cap and spacer portions of the castor wheel housing are shaded to show a contrast in appearance from the other portions of the castor wheel housing;

FIG. 15 is a front perspective view of a frame element of the wheelchair;

FIG. 16 is a front elevational view of the frame element of FIG. 15;

FIG. 17 is a right side elevational view of the frame element of FIG. 15, wherein the left side elevational view is a mirror image thereof;

FIG. 18 is a top plan view of the frame element of FIG. 15;

FIG. 19 is a rear perspective view of the frame element of FIG. 15;

FIG. 20 is a front perspective view of a backrest fixation element of the wheelchair;

FIG. 21 is a rear perspective view of the backrest fixation element of FIG. 20;

FIG. 22 is a right side elevational view of the backrest fixation element of FIG. 20;

FIG. 23 is a front elevational view of the backrest fixation element of FIG. 20;

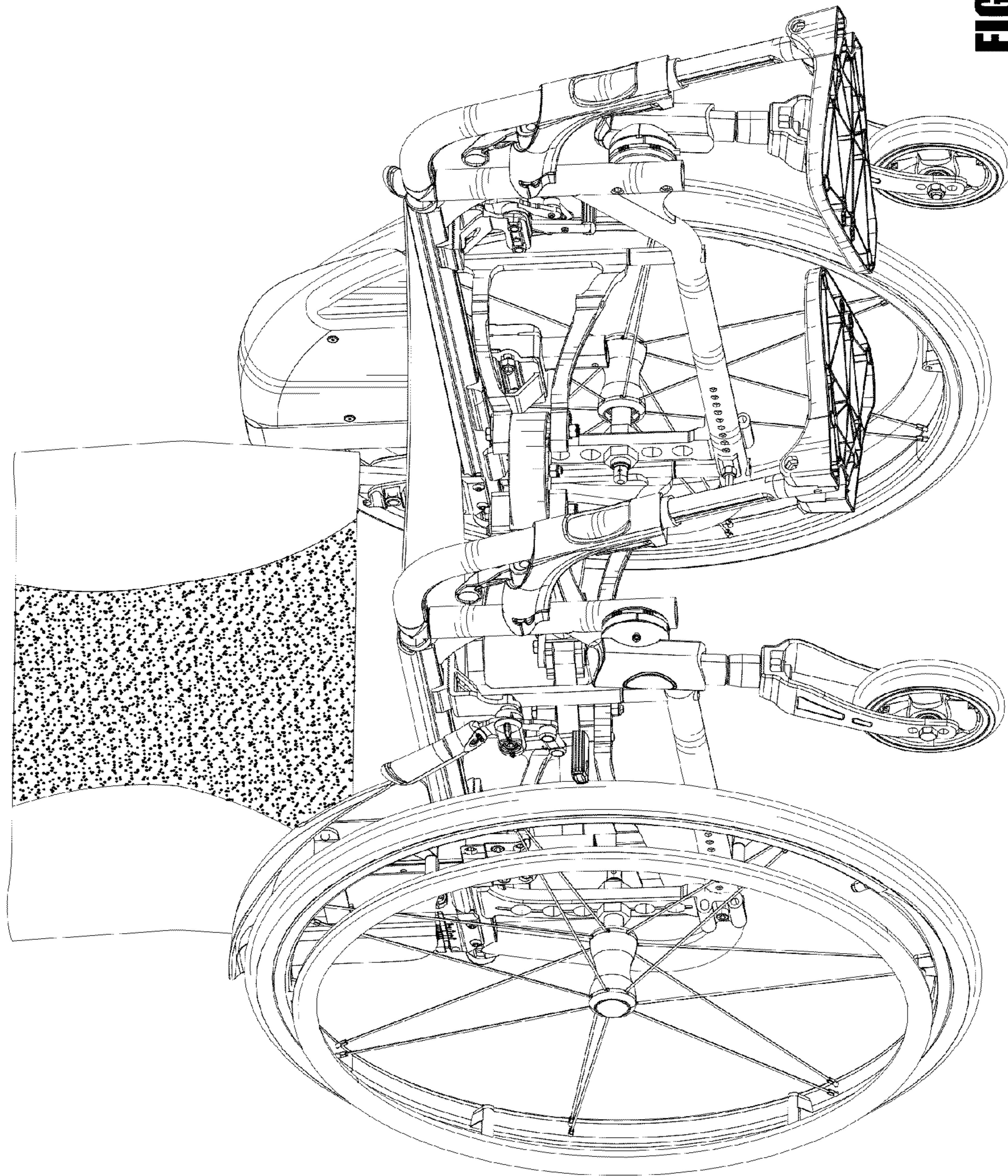
FIG. 24 is a left side elevational view of the backrest fixation element of FIG. 20;

FIG. 25 is a front elevational view of a backrest of the wheelchair; and,

FIG. 26 is a rear elevational view of the backrest of FIG. 25. The broken line showing in FIGS. 25 and 26 is included for the purpose of illustrating stitching.

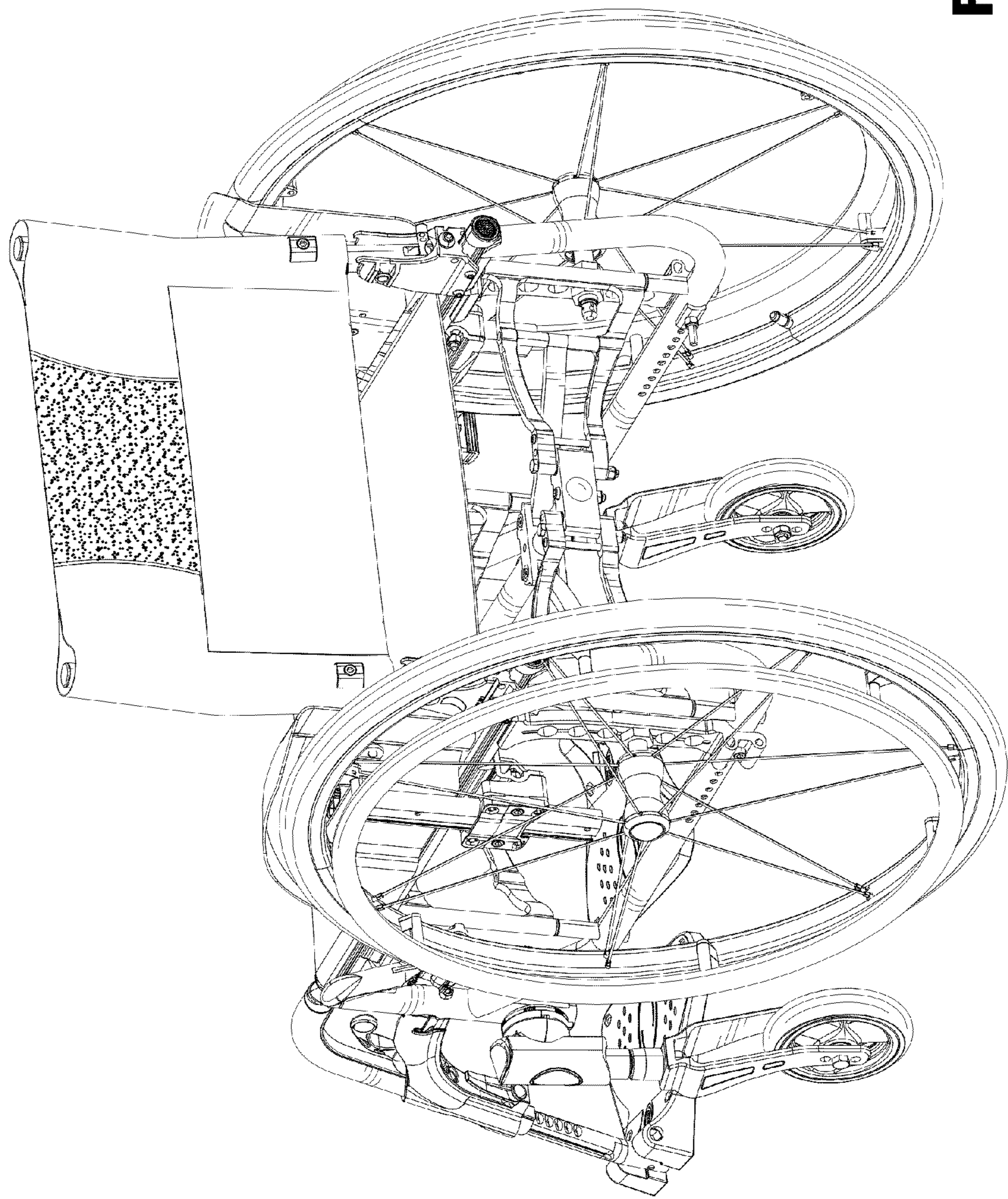
**1 Claim, 26 Drawing Sheets**



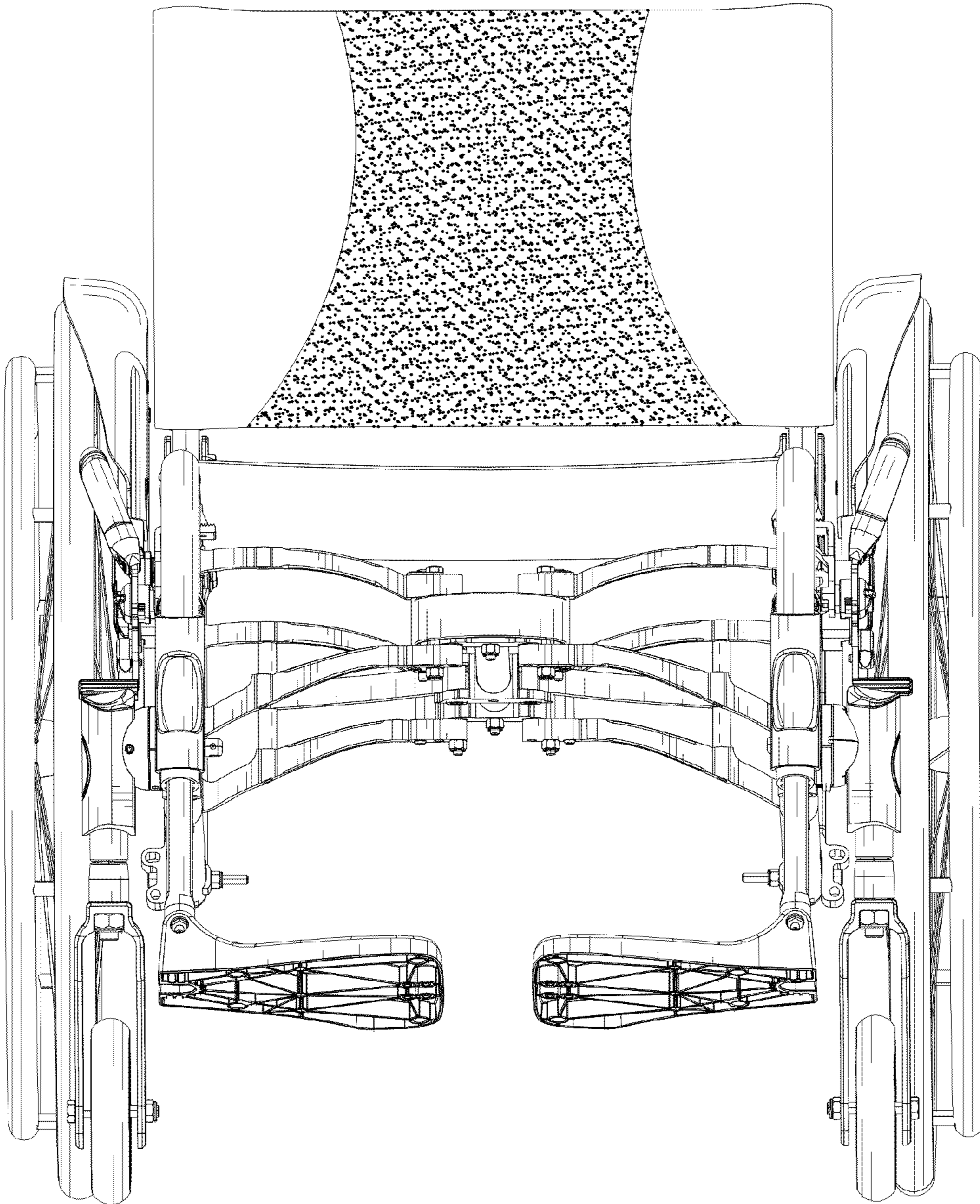


**FIG. 1**





**FIG. 2**



**FIG. 3**



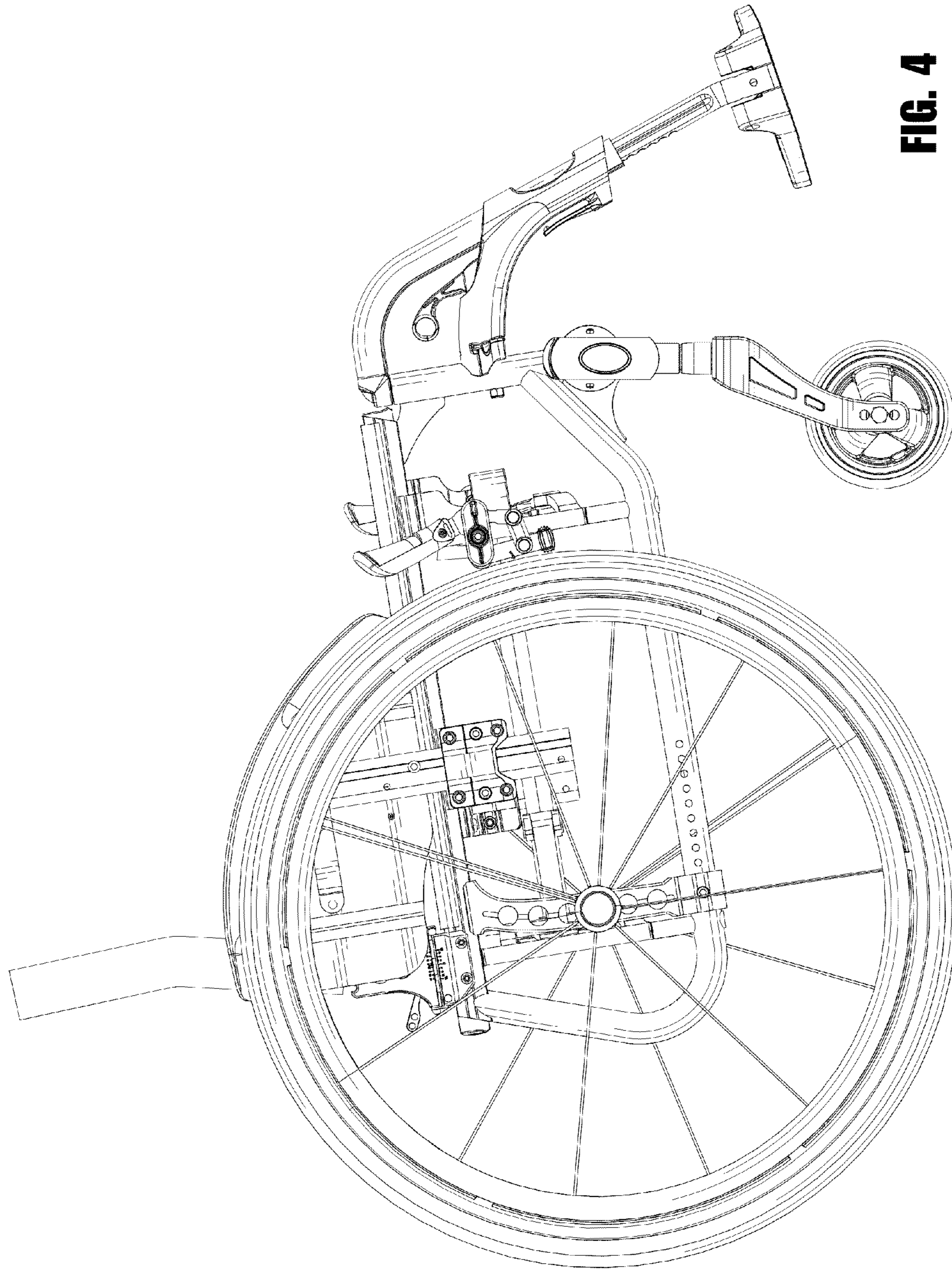
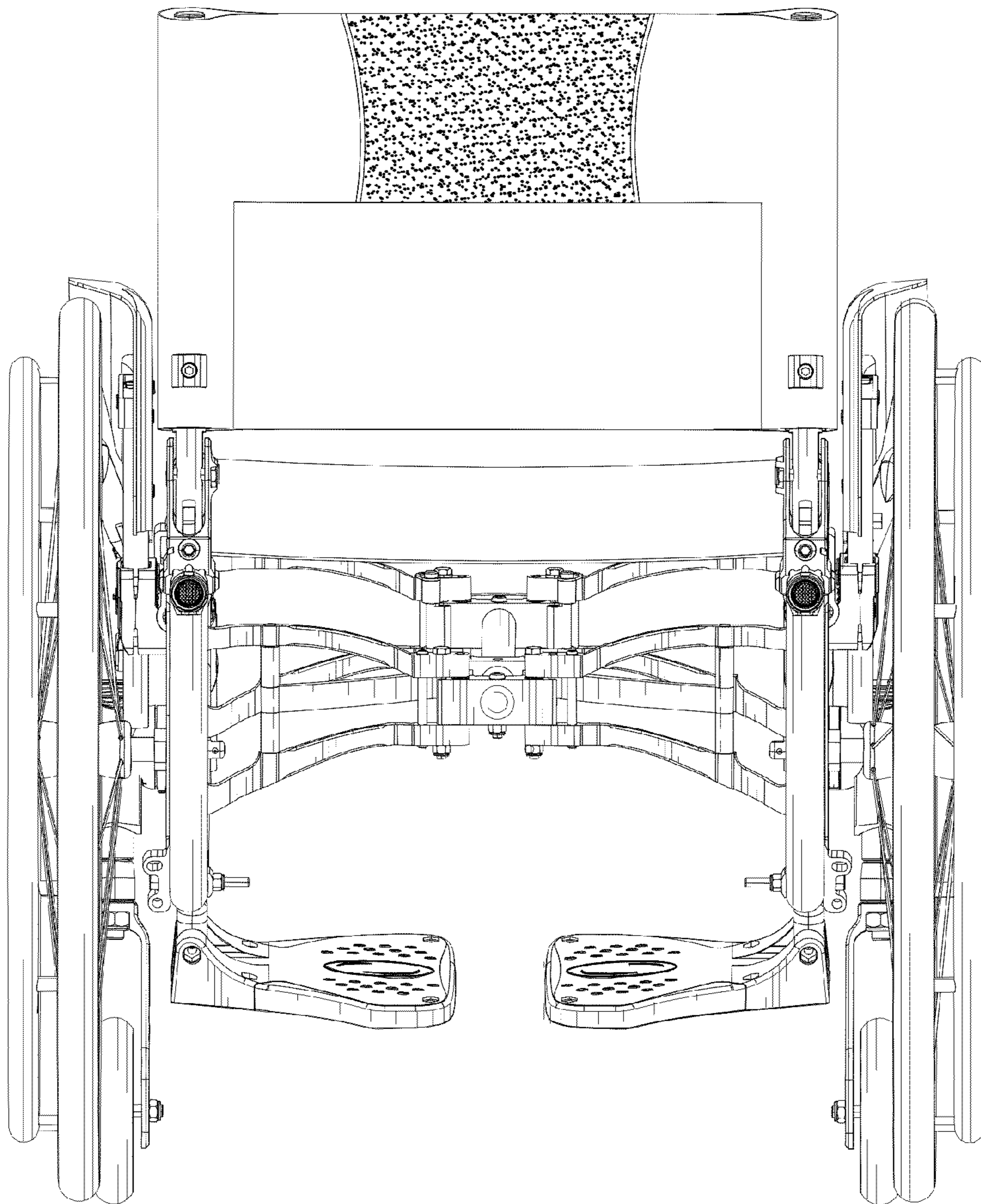
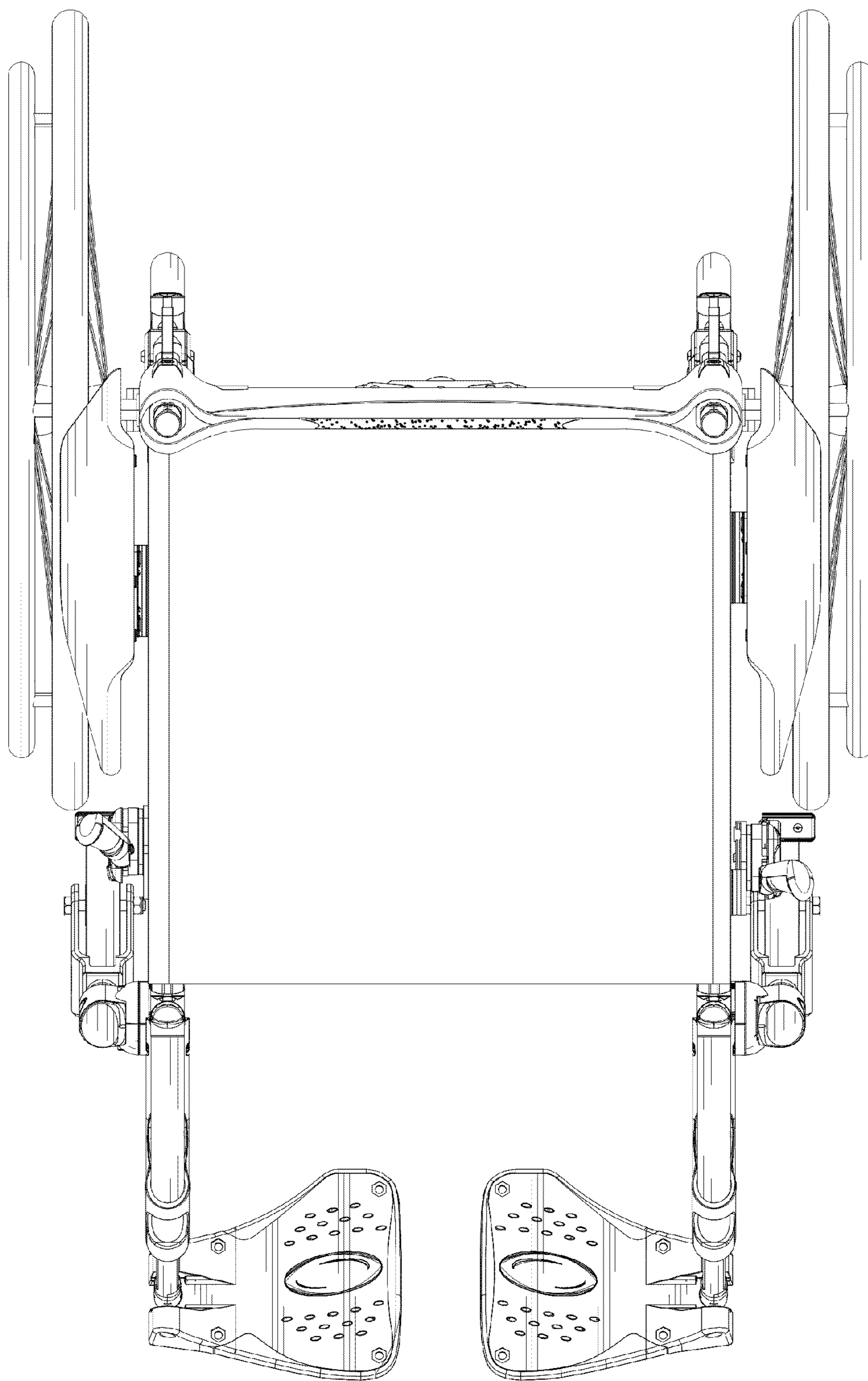


FIG. 4

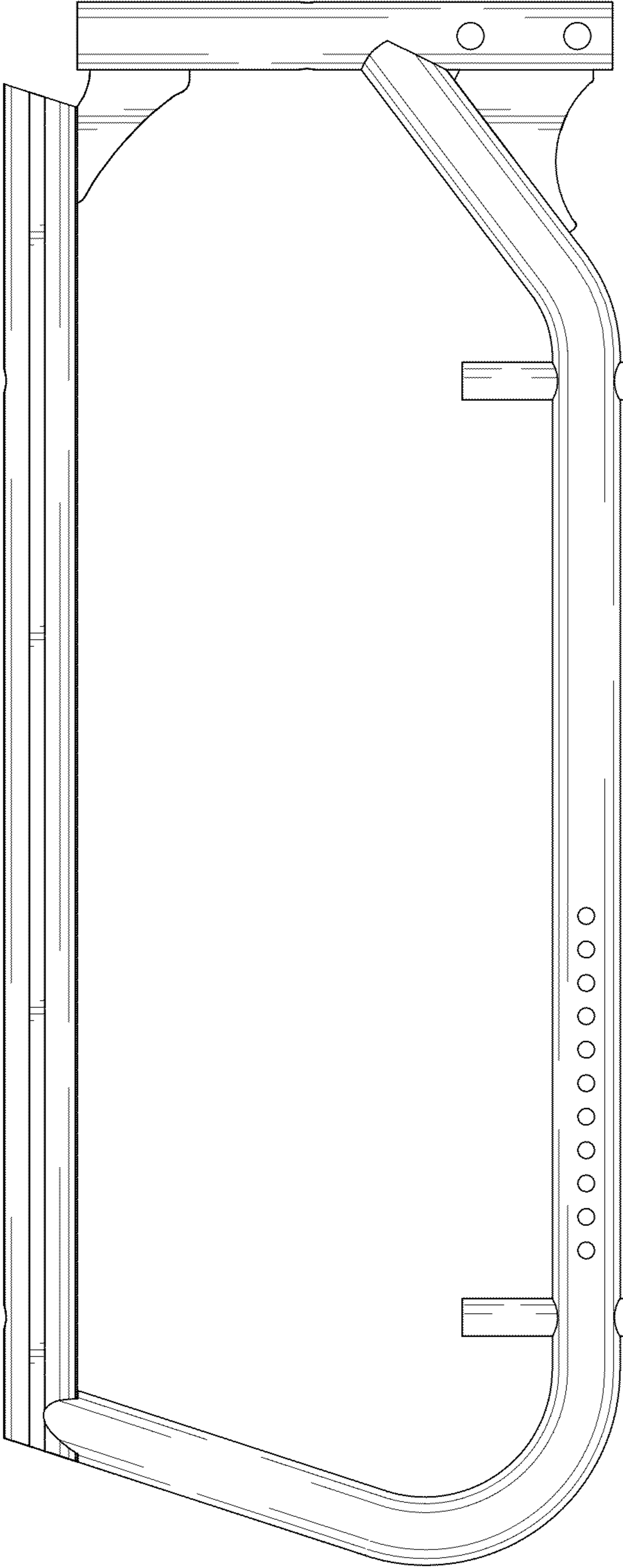


**FIG. 5**



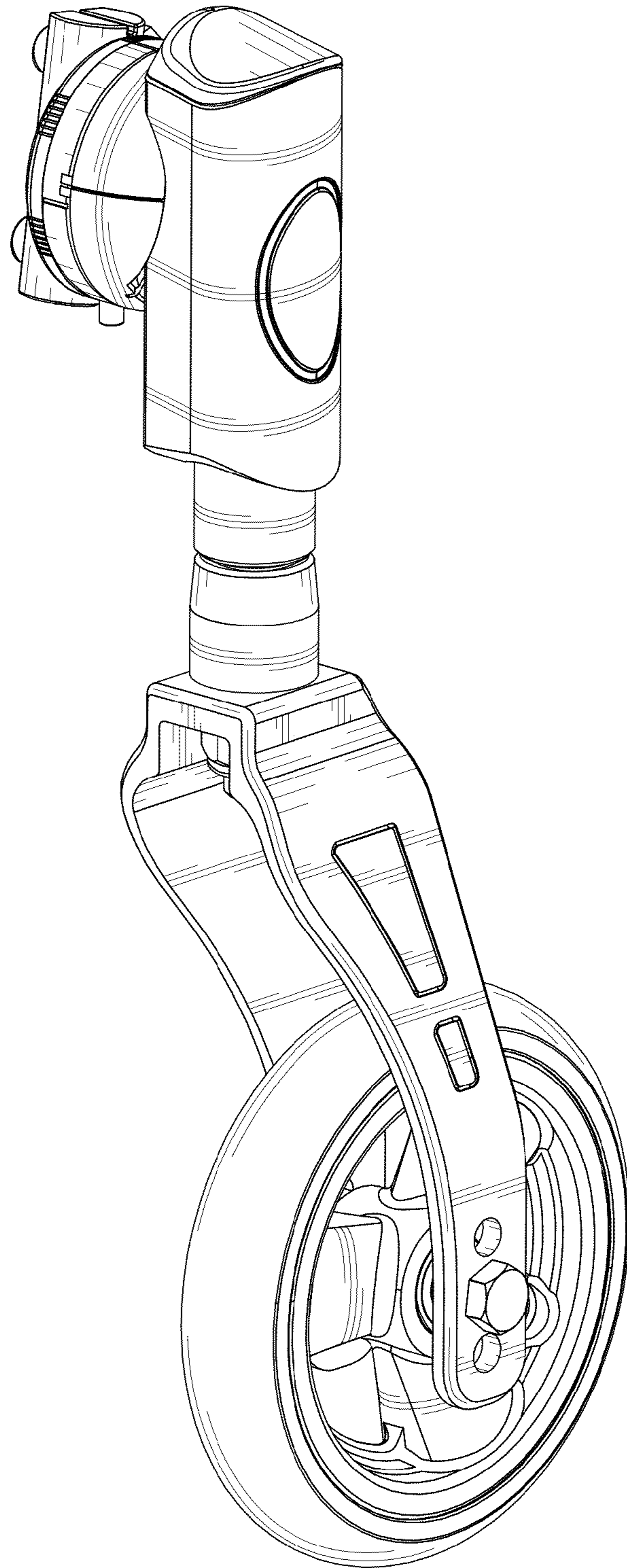


**FIG. 6**



**FIG. 7**



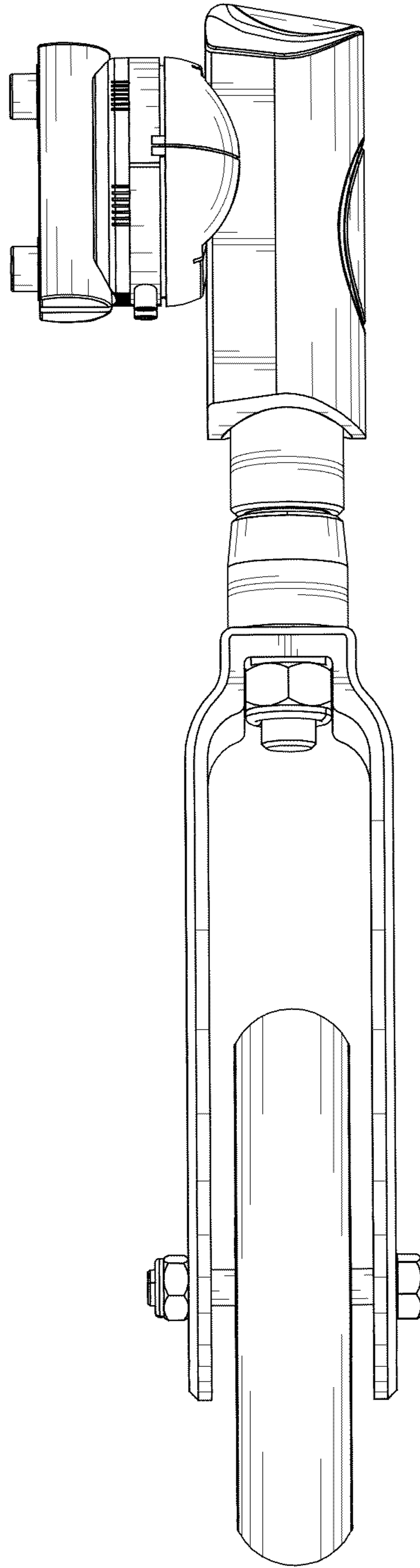


**FIG. 8**

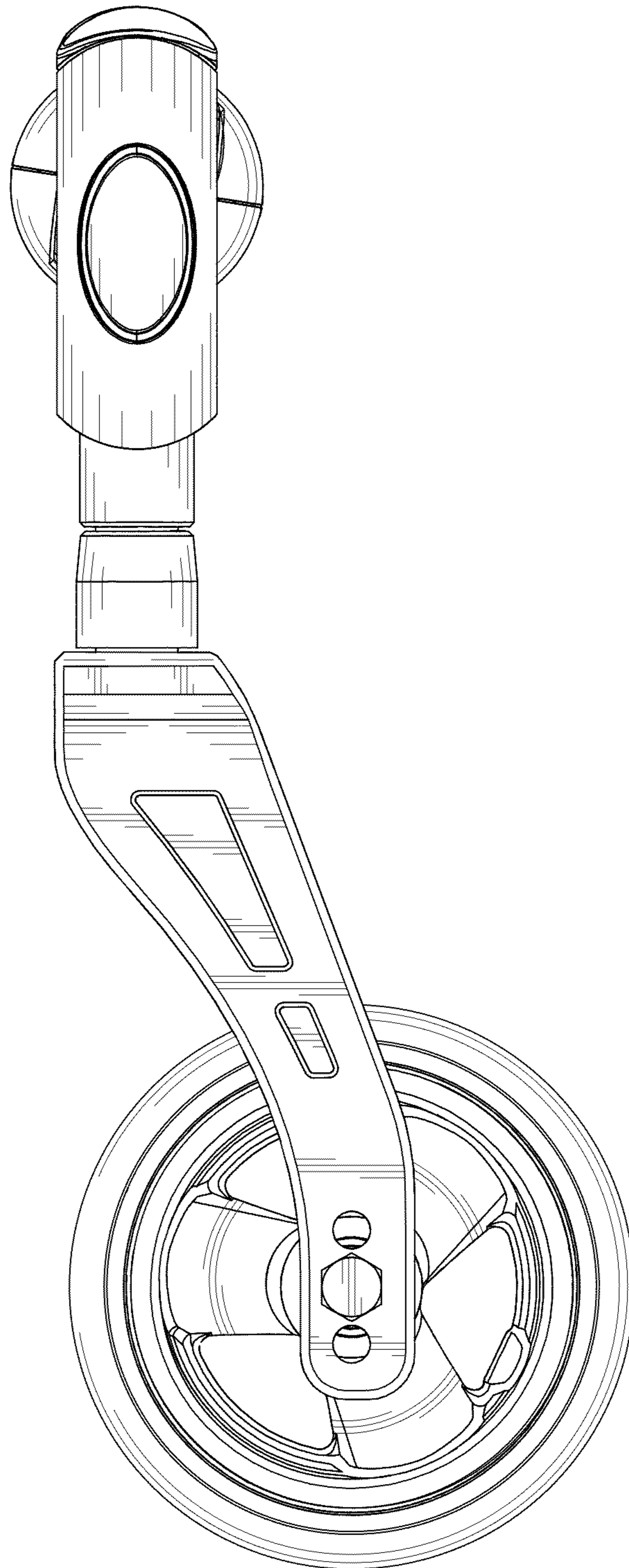


**FIG. 9**



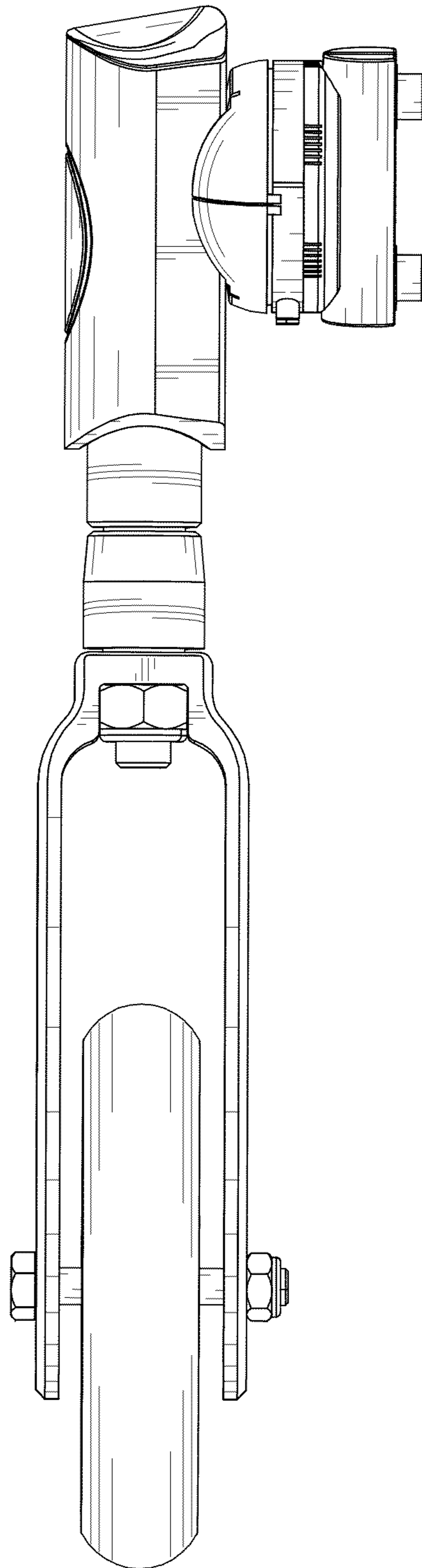


**FIG. 10**

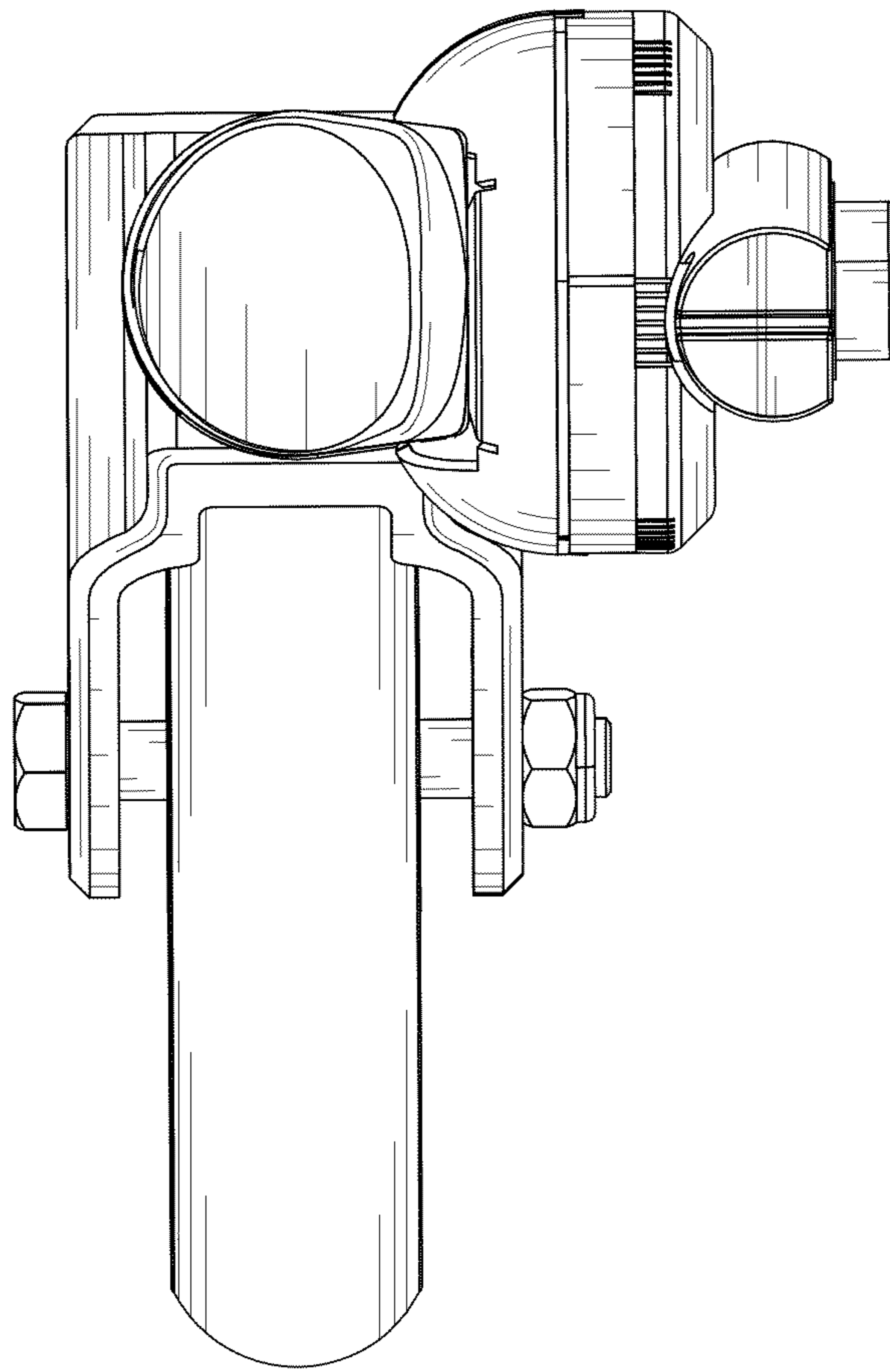


**FIG. 11**



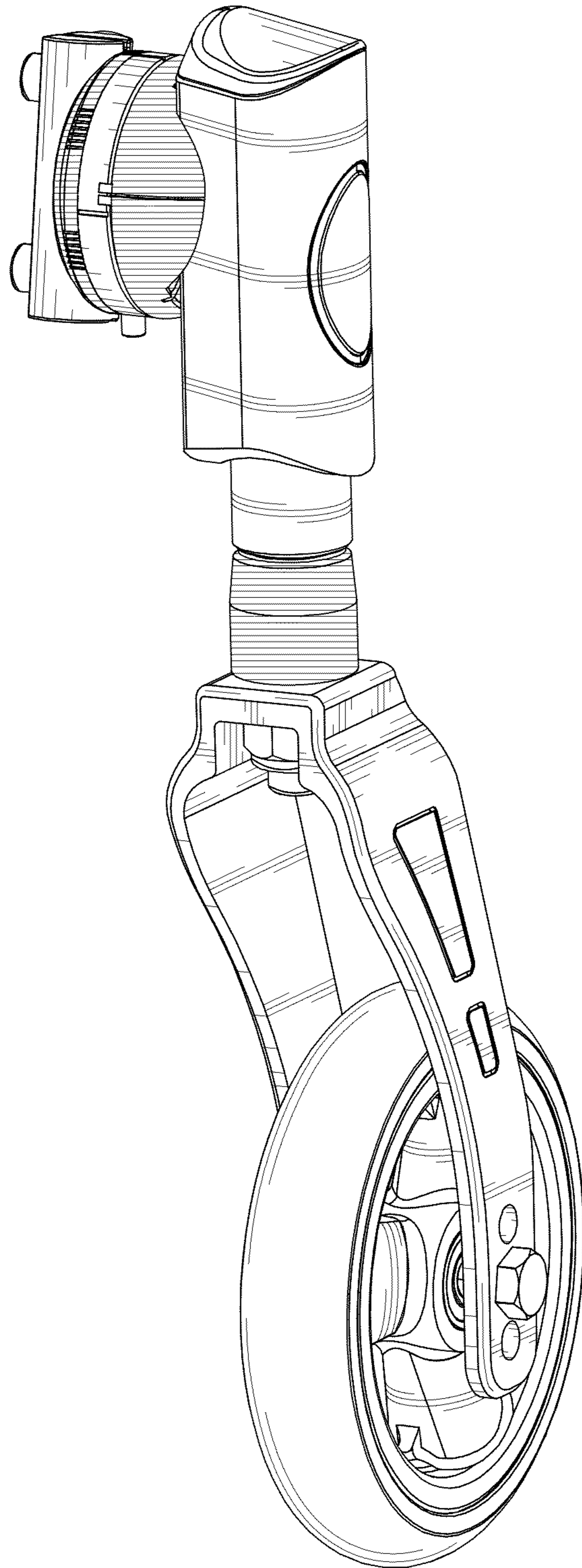


**FIG. 12**

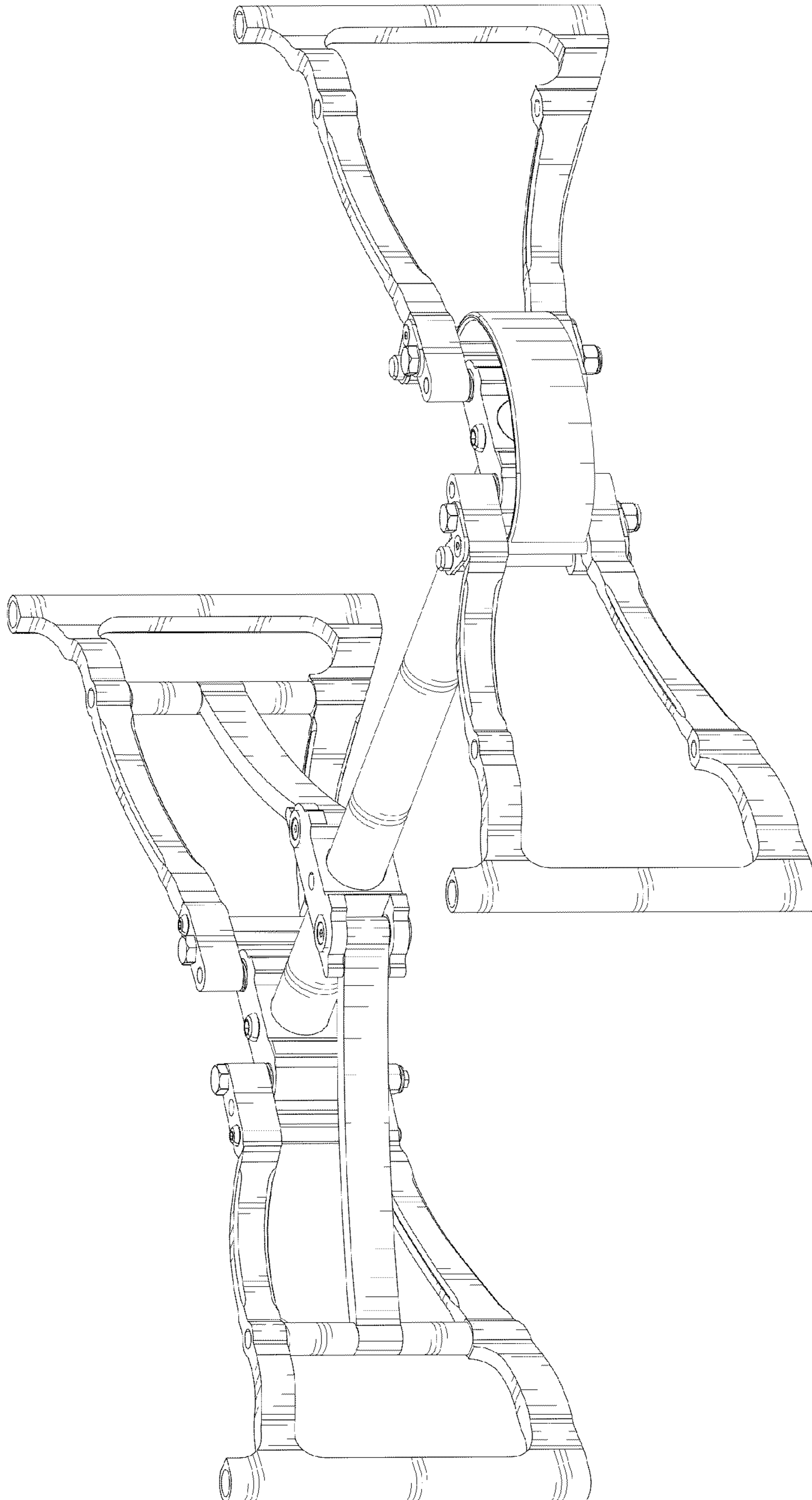


**FIG. 13**



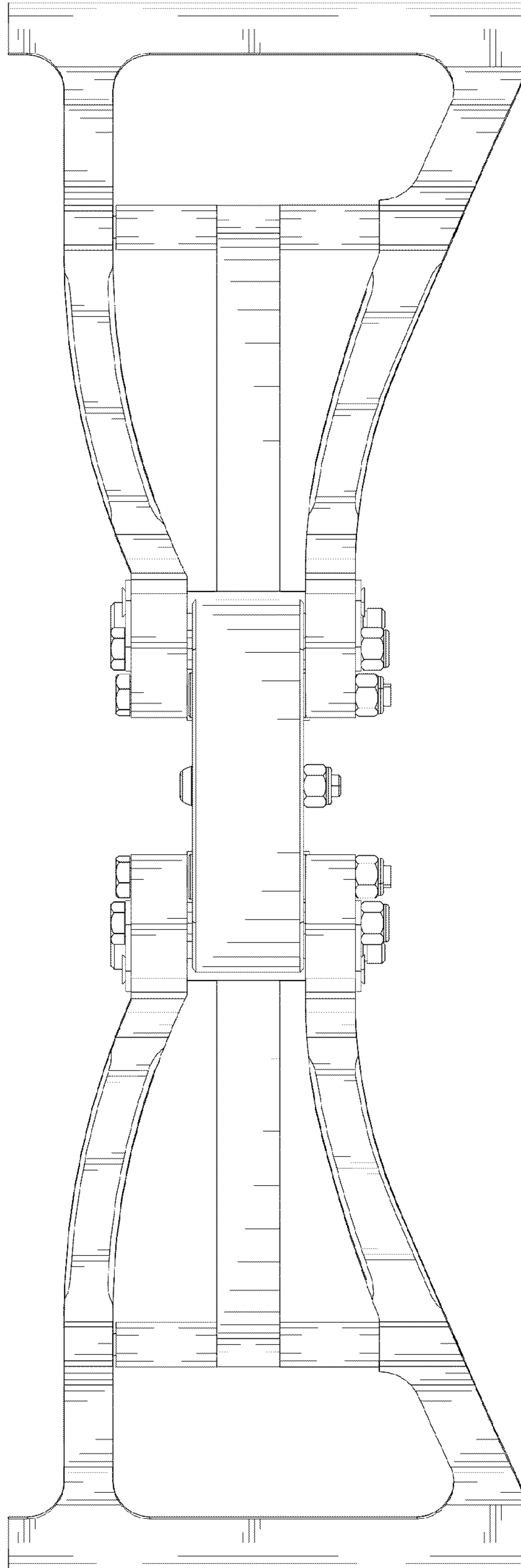


**FIG. 14**

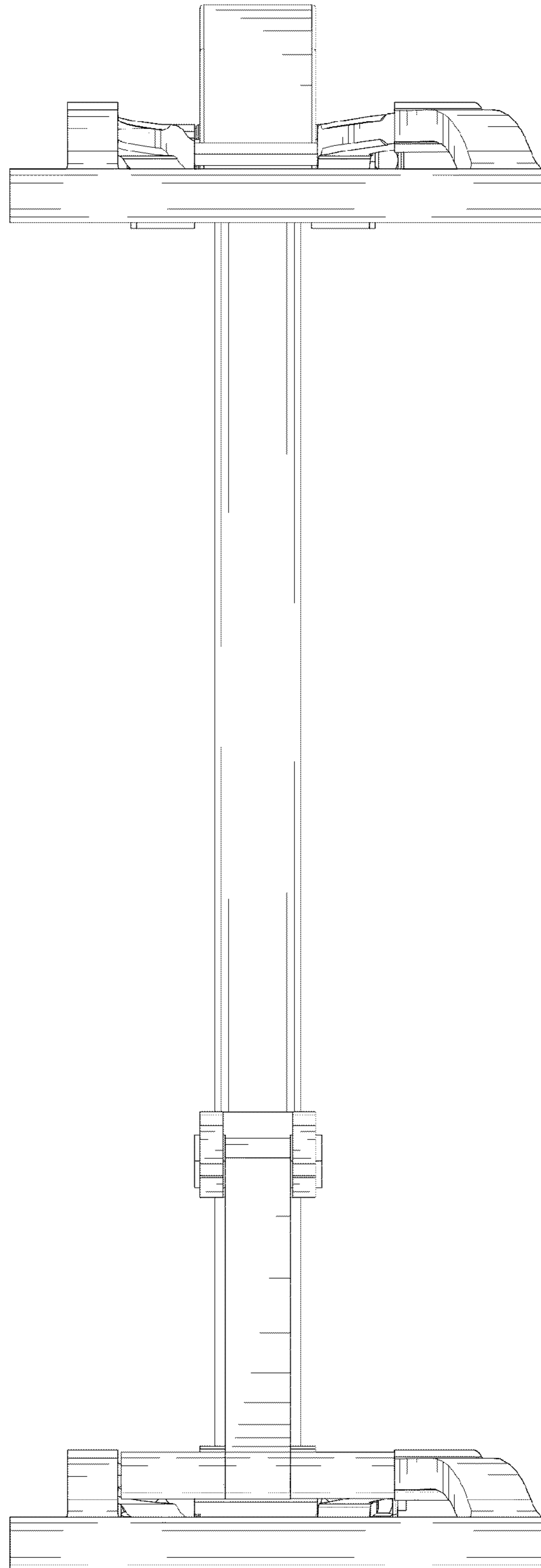


**FIG. 15**



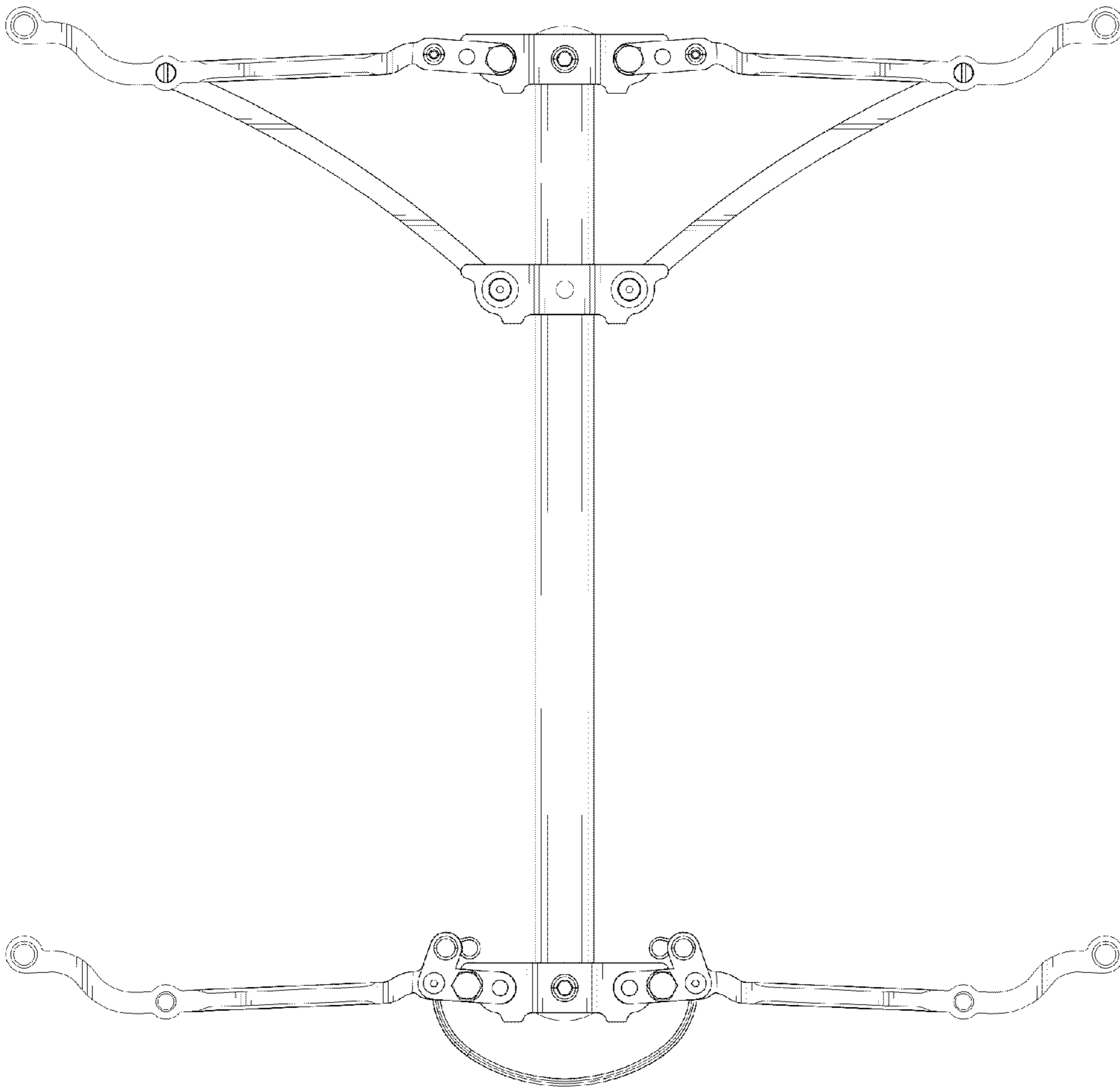


**FIG. 16**

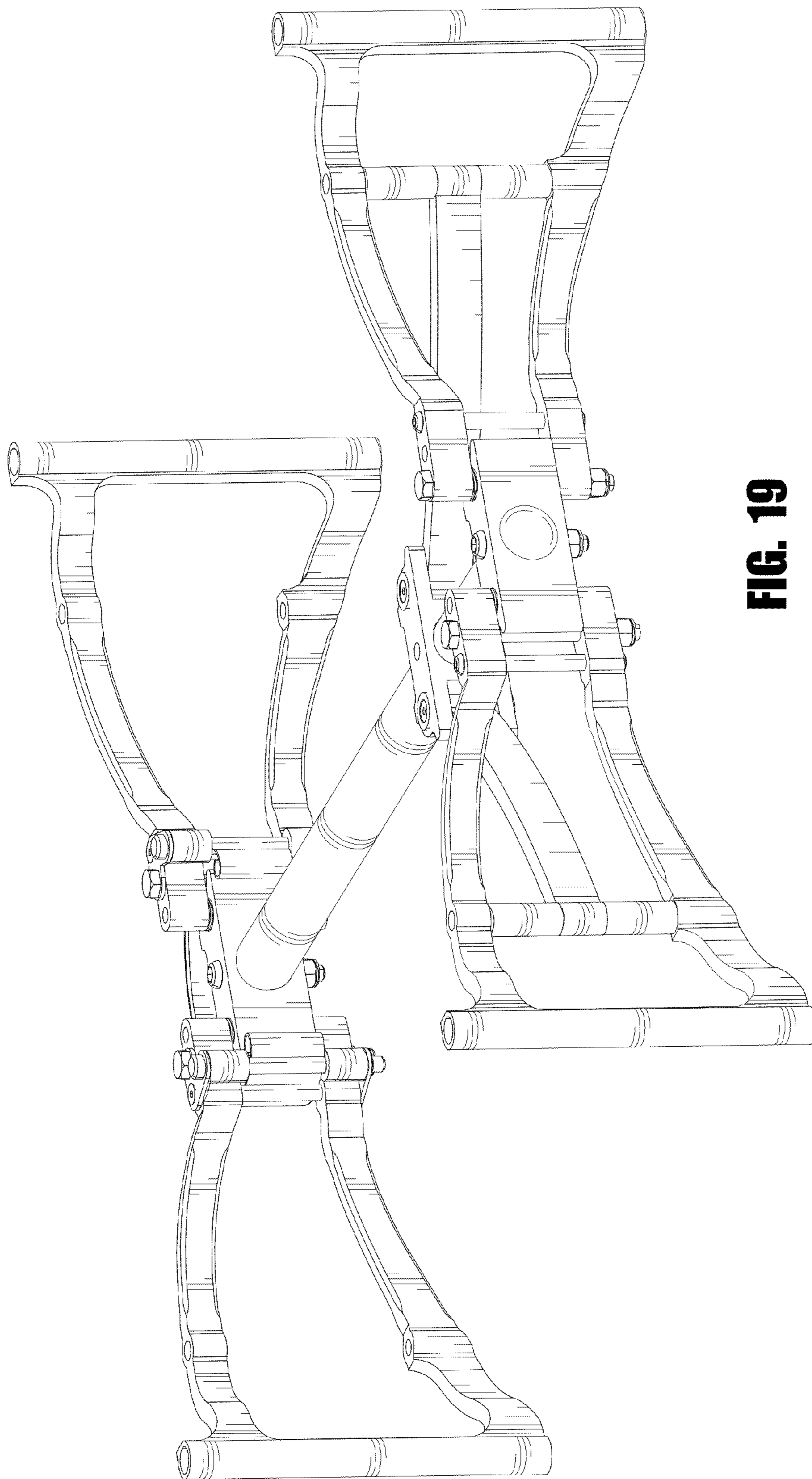


**FIG. 17**



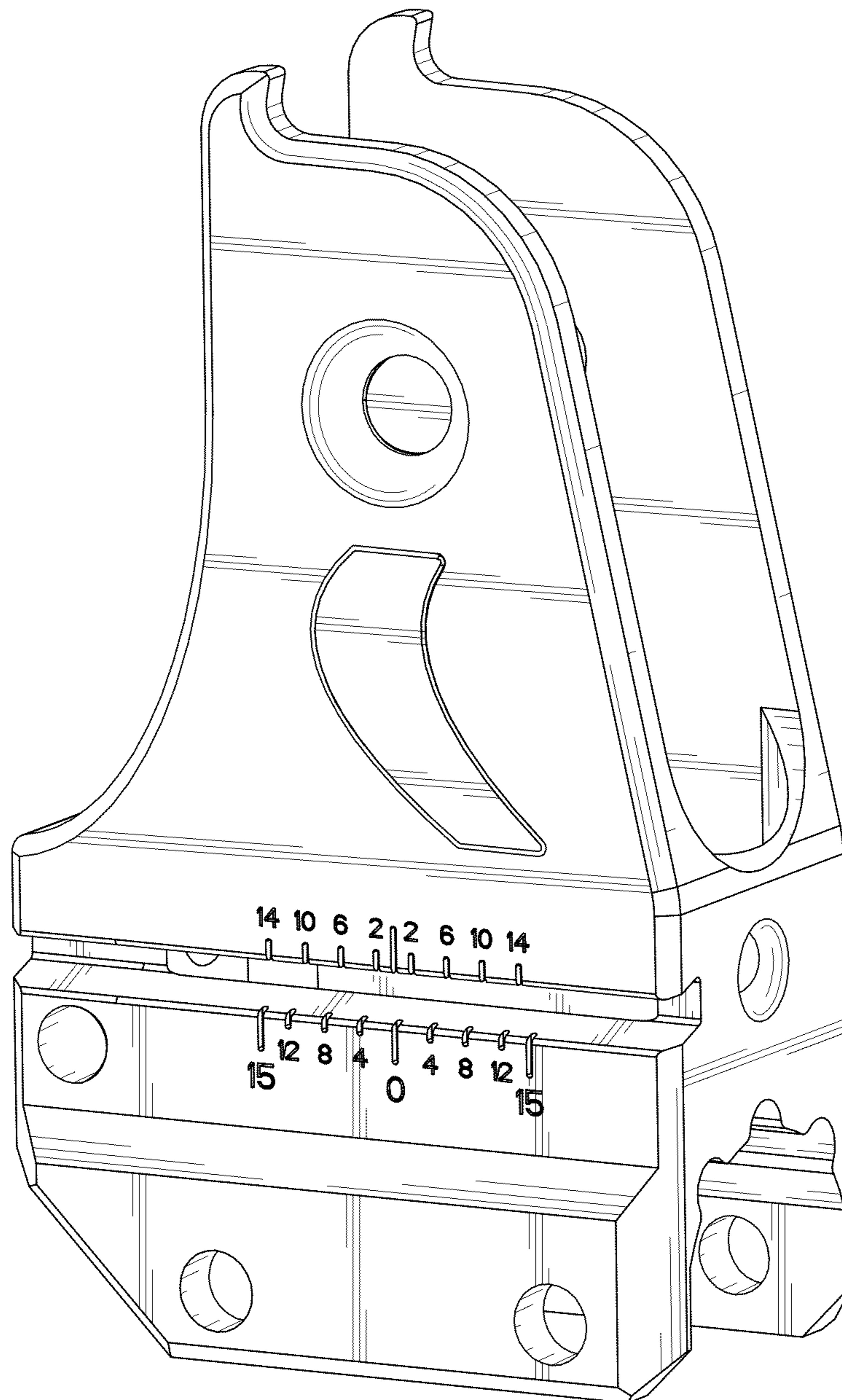


**FIG. 18**

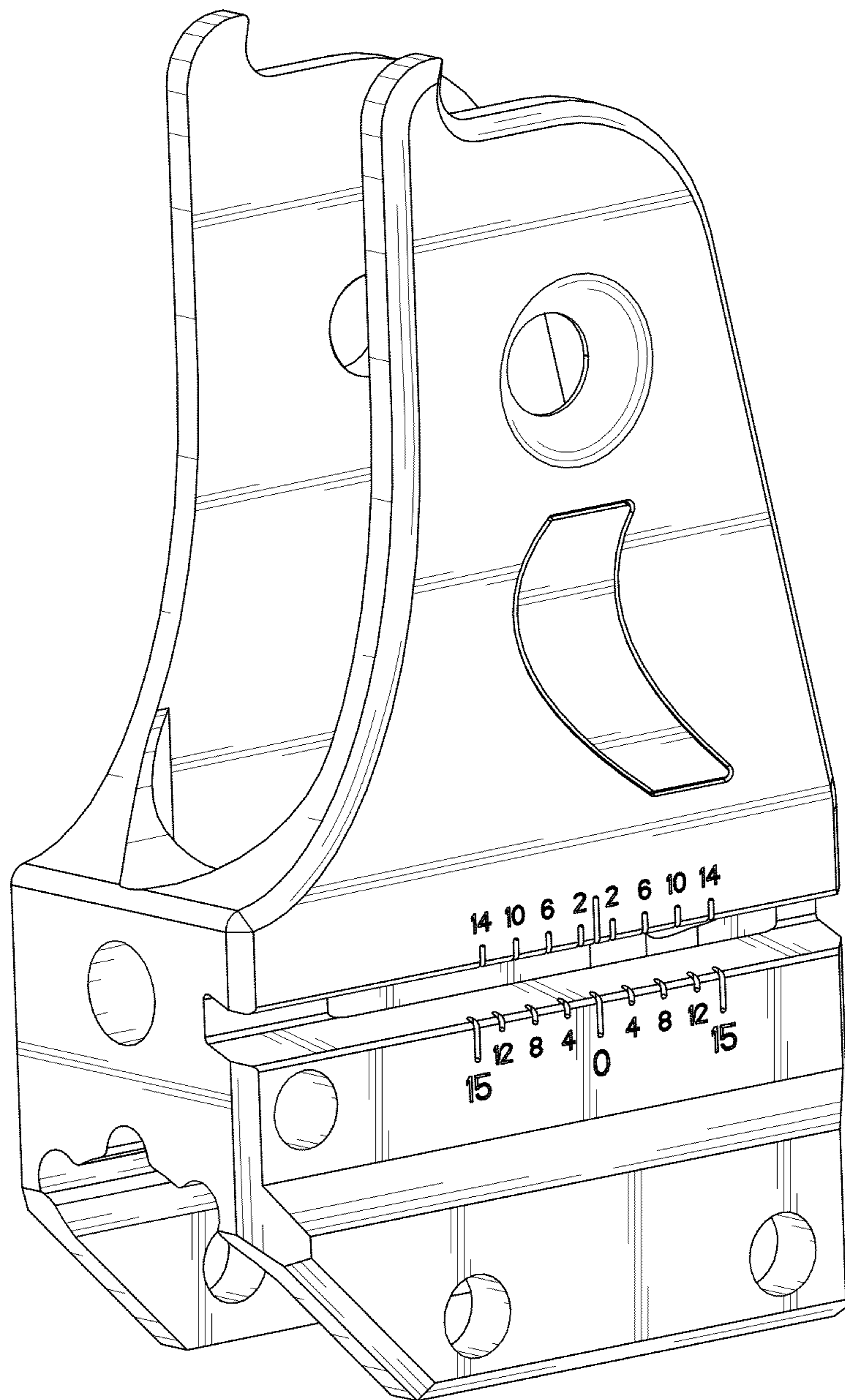


**FIG. 19**

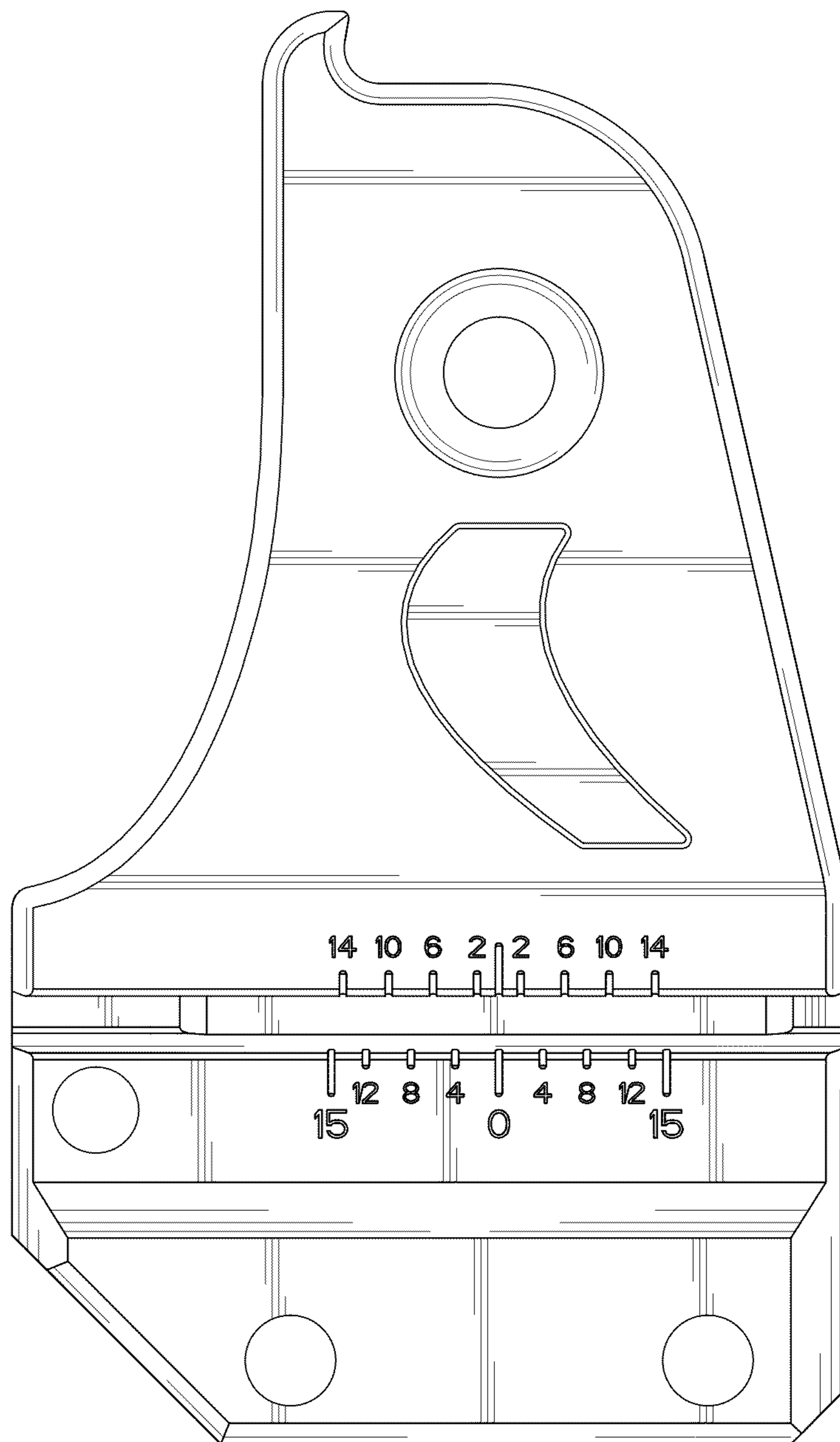




**FIG. 20**

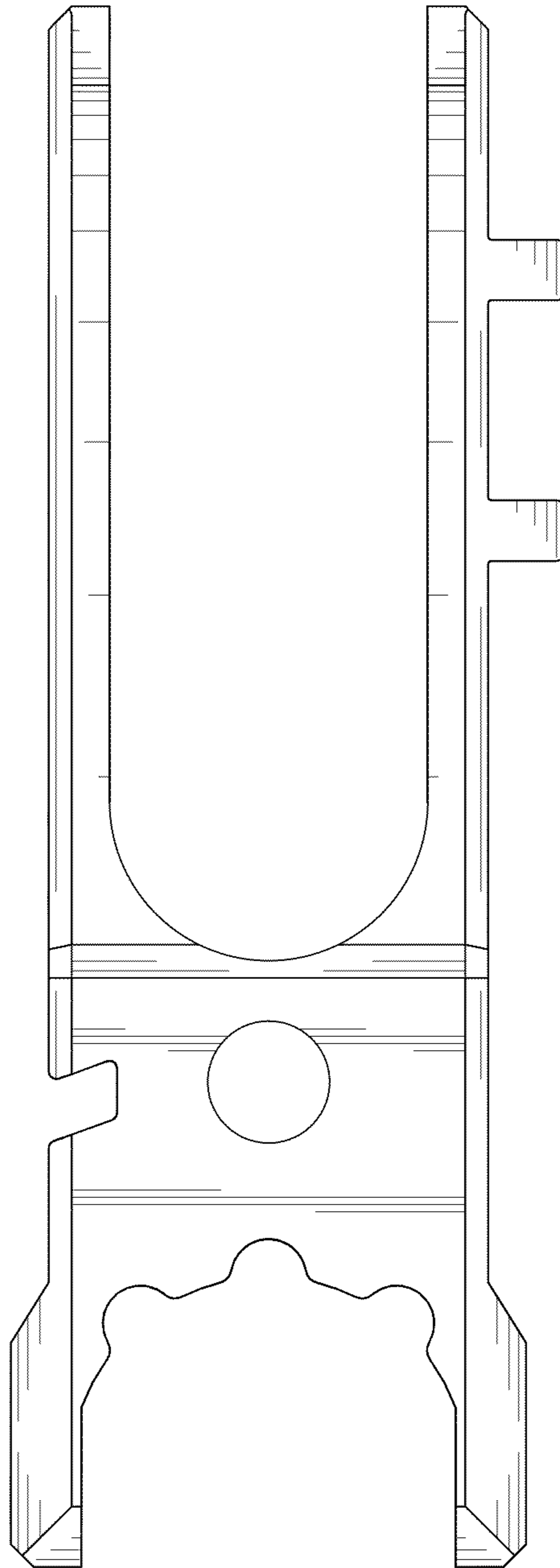


**FIG. 21**

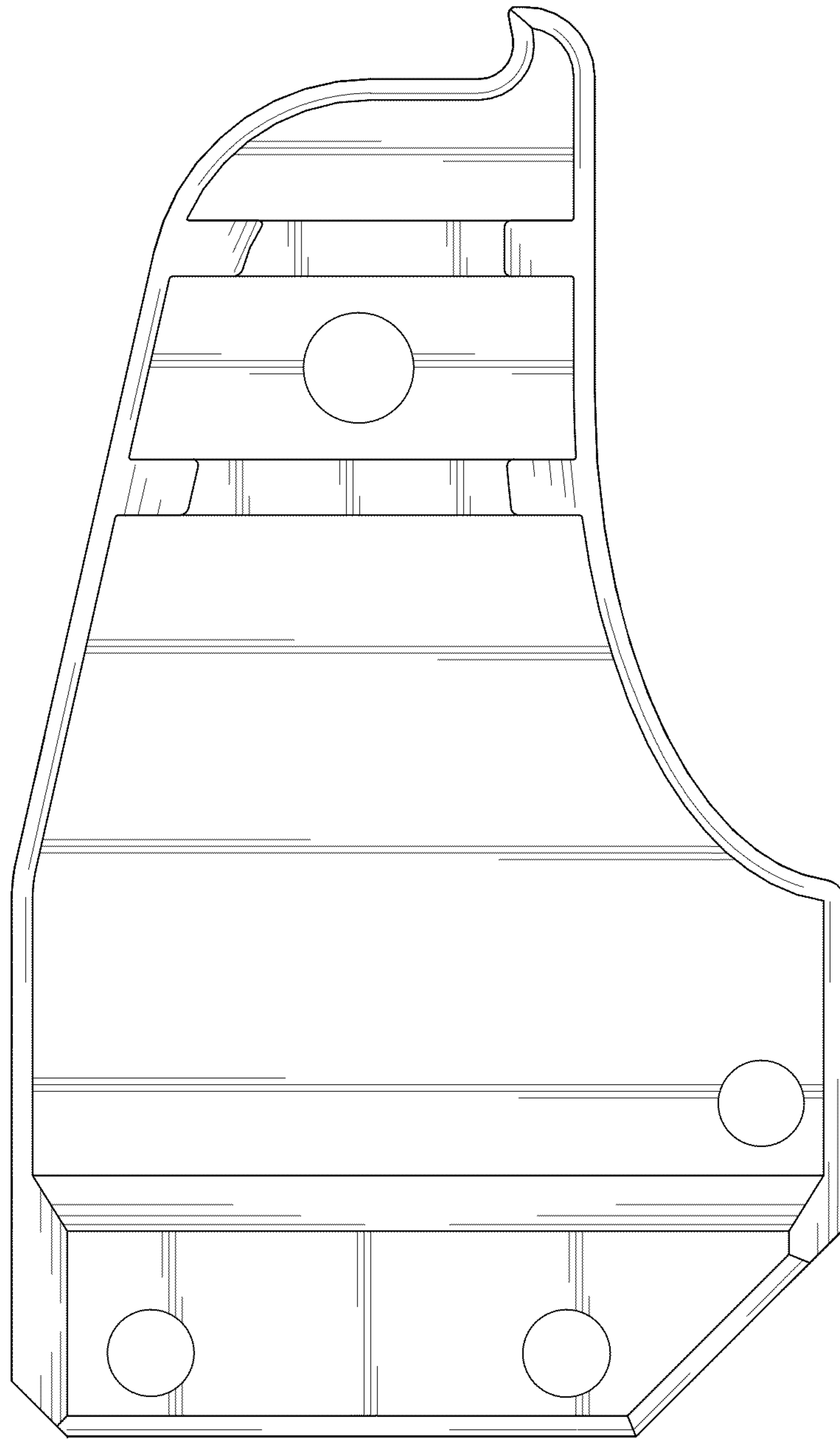


**FIG. 22**

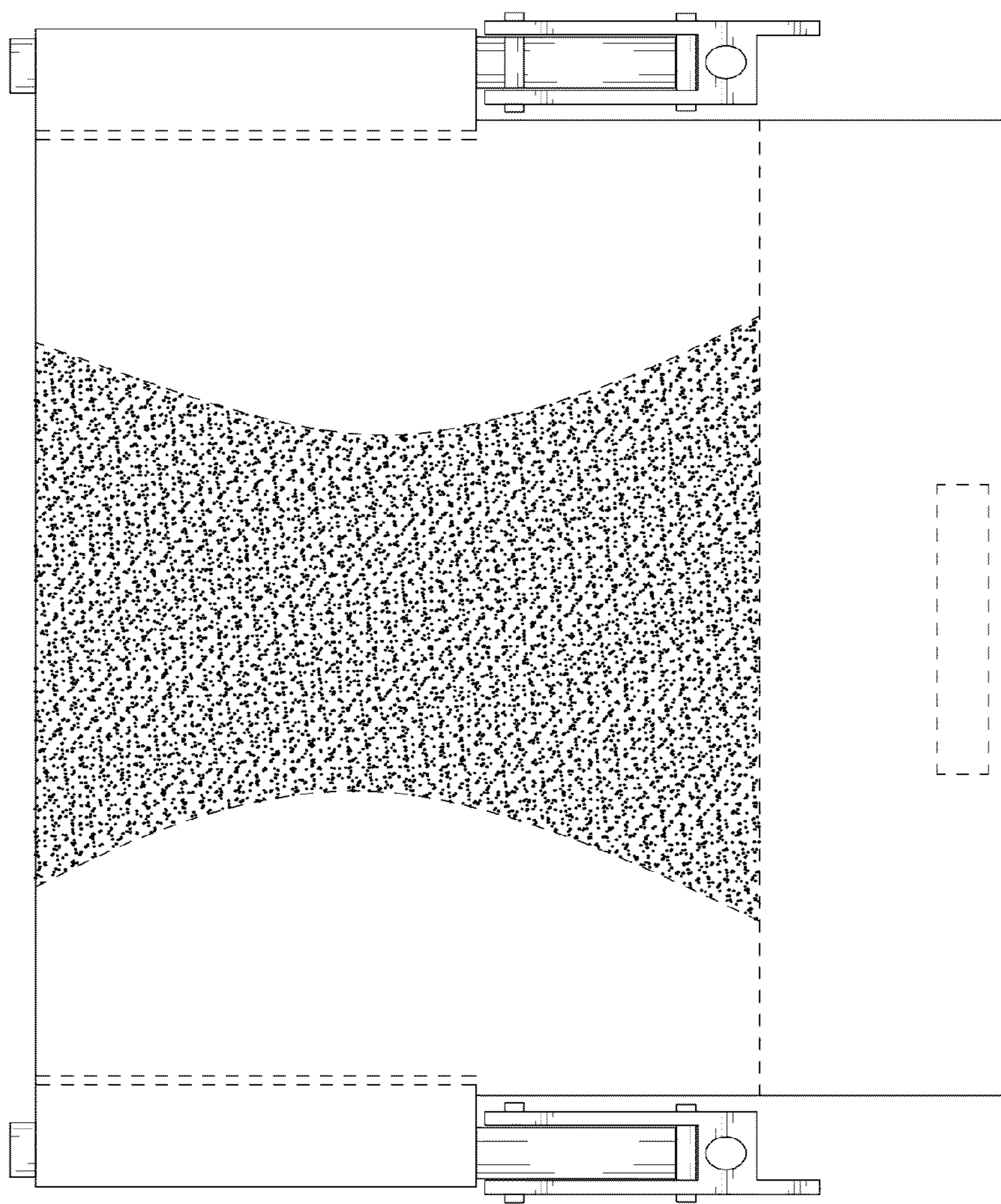




**FIG. 23**

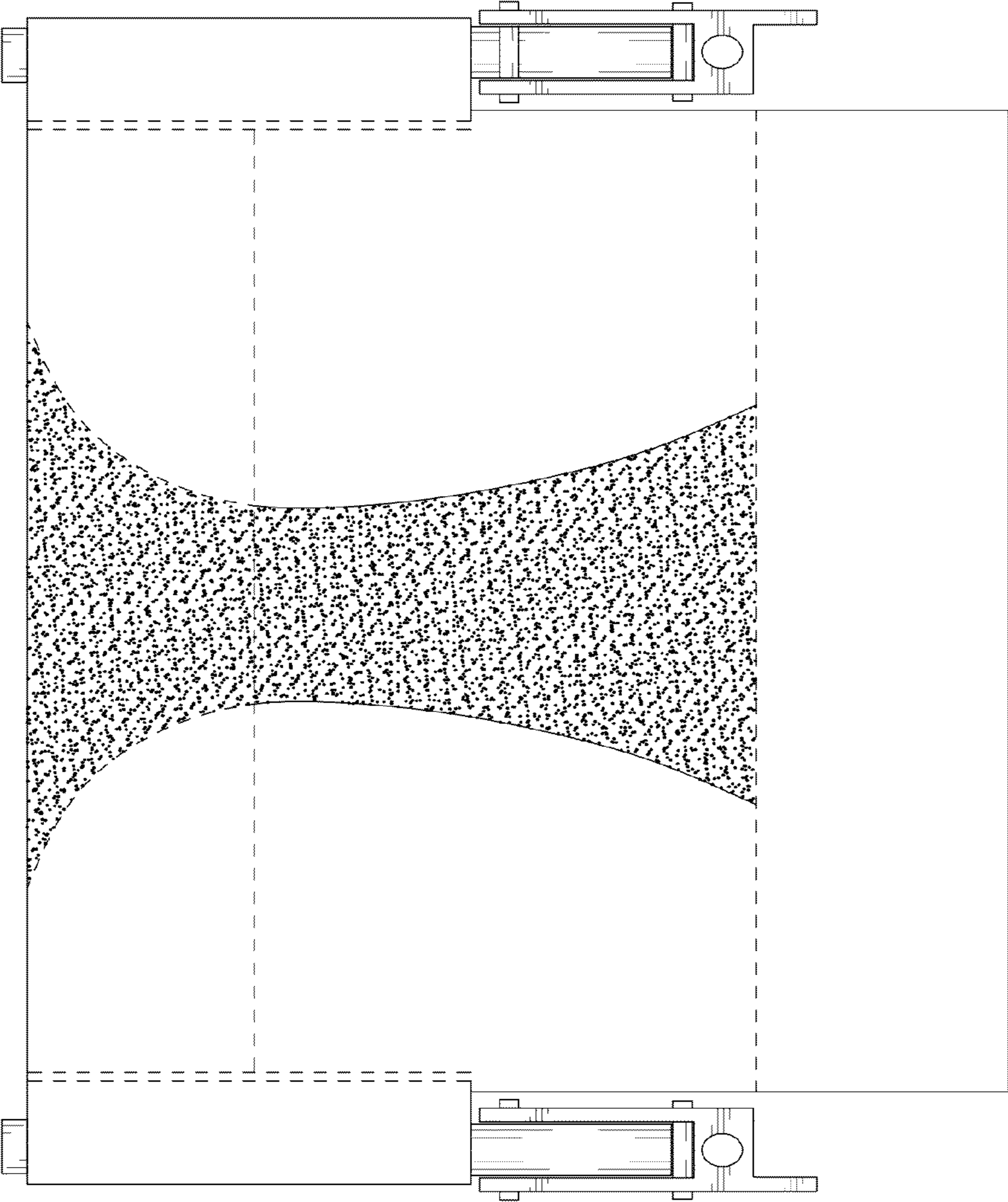


**FIG. 24**



**FIG. 25**





**FIG. 26**