



US00D614217S

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

(10) **Patent No.:** **US D614,217 S**

(45) **Date of Patent:** **** Apr. 20, 2010**

(54) **SIMULATOR WELDING COUPON STAND**

(75) Inventors: **Carl Peters**, Solon, OH (US); **Erin L. Justice**, Berea, OH (US); **Chris Gandee**, Bellville, OH (US); **David Anthony Zboray**, Trumbull, CT (US); **Matthew Alan Bennett**, Milford, CT (US); **Matthew Wayne Wallace**, Farmington, CT (US); **Jeremiah Hennessey**, Manchester, CT (US); **Zachary Steven Lenker**, Vernon, CT (US); **Andrew Paul Lundell**, New Britain, CT (US); **Lynn Briggs**, Bristol, CT (US); **Richard B. Droller**, New Hartford, CT (US); **Eric C. Briggs**, Bristol, CT (US)

(73) Assignee: **Lincoln Global, Inc.**, City of Industry, CA (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/339,979**

(22) Filed: **Jul. 10, 2009**

(51) **LOC (9) Cl.** **15-09**

(52) **U.S. Cl.** **D15/144**

(58) **Field of Classification Search** D8/30,
D8/54; D15/132, 144, 144.1, 144.2; 72/181,
72/239; 219/61.4; 228/147; 248/166, 176.1;
269/57

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,866,011 A 2/1975 Cole

(Continued)

OTHER PUBLICATIONS

Wang, et al., Study on welder training by means of haptic guidance and virtual reality for arc welding. 2006 IEEE International Conference on Robotics and Biomimetics, Robio 2006 ISBN-10; 1424405718, p. 954-958.

(Continued)

Primary Examiner—Sandra Snapp

Assistant Examiner—Patricia Palasik

(74) *Attorney, Agent, or Firm*—Louis F. Wagner; Hahn Loeser + Parks LLP

(57) **CLAIM**

The ornamental design for a simulator welding coupon stand, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an embodiment of a simulator welding coupon stand;

FIG. 2 is a front view of the simulator welding coupon stand of the embodiment illustrated in FIG. 1;

FIG. 3 is a right side view of the simulator welding coupon stand of the embodiment illustrated in FIG. 1;

FIG. 4 is a left side view of the simulator welding coupon stand of the embodiment illustrated in FIG. 1;

FIG. 5 is a top view of the simulator welding coupon stand of the embodiment illustrated in FIG. 1;

FIG. 6 is a rear view of the simulator welding coupon stand of the embodiment illustrated in FIG. 1, the bottom of which is unornamented;

FIG. 7 is a perspective view of a second embodiment of a simulator welding coupon stand;

FIG. 8 is a front view of the simulator welding coupon stand of the embodiment illustrated in FIG. 7;

FIG. 9 is a right side view of the simulator welding coupon stand of the embodiment illustrated in FIG. 7;

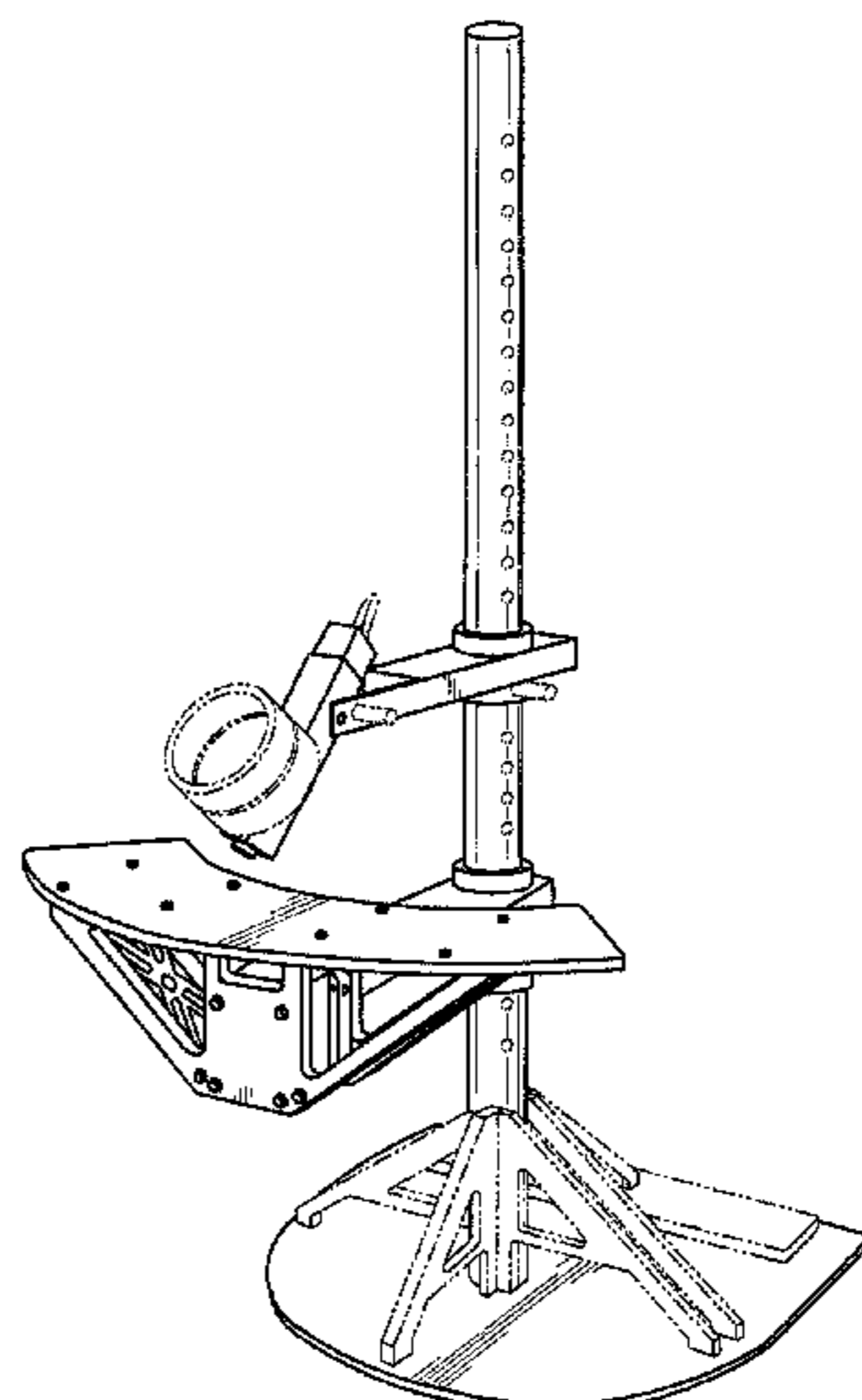
FIG. 10 is a left side view of the simulator welding coupon stand of the embodiment illustrated in FIG. 7;

FIG. 11 is a top view of the simulator welding coupon stand of the embodiment illustrated in FIG. 7; and,

FIG. 12 is a rear view of the simulator welding coupon stand of the embodiment illustrated in FIG. 7, the bottom of which is unornamented.

The broken lines shown in the Figures are for illustrative purposes only and form no part of the claimed invention.

1 Claim, 12 Drawing Sheets



US D614,217 S

U.S. PATENT DOCUMENTS

3,867,769	A	2/1975	Schow et al	
3,904,845	A	9/1975	Minkiewicz	
4,041,615	A	8/1977	Whitehill	
4,124,944	A	11/1978	Blair	
4,132,014	A	1/1979	Schow	
4,314,125	A *	2/1982	Nakamura	219/609
4,452,589	A	6/1984	Denison	
4,611,111	A	9/1986	Baheti et al.	
4,677,277	A	6/1987	Cook et al.	
4,680,014	A	7/1987	Paton et al.	
4,689,021	A	8/1987	Vasiliev et al.	
4,716,273	A	12/1987	Paton et al.	
4,867,685	A	9/1989	Brush et al.	
4,897,521	A	1/1990	Burr	
4,907,973	A	3/1990	Hon	
4,931,018	A	6/1990	Herbst et al.	
5,320,538	A	6/1994	Baum	
5,676,503	A *	10/1997	Lang	408/234
D392,534	S *	3/1998	Degen et al.	D8/71
5,823,785	A	10/1998	Matherne, Jr.	
6,155,928	A	12/2000	Burdick	
D461,383	S *	8/2002	Blackburn	D8/29.1
6,506,997	B2	1/2003	Matsuyama	
6,647,288	B2	11/2003	Madill et al.	
6,655,645	B1 *	12/2003	Lu et al.	248/176.1
6,750,428	B2	6/2004	Okamoto et al.	
7,021,937	B2	4/2006	Simpson et al.	
7,414,595	B1	8/2008	Muffler	
7,465,230	B2	12/2008	LeMay et al.	
2002/0032553	A1	3/2002	Simpson et al.	
2003/0172032	A1	9/2003	Choquet	
2004/0035990	A1 *	2/2004	Ackeret	248/176.1
2005/0230573	A1 *	10/2005	Ligertwood	248/158
2005/0275913	A1	12/2005	Vesely et al.	
2005/0275914	A1	12/2005	Vesely et al.	
2006/0136183	A1	6/2006	Choquet	
2006/0258447	A1	11/2006	Baszucki et al.	
2007/0045488	A1 *	3/2007	Shin	248/176.1

2007/0198117	A1	8/2007	Wajihuddin	
2007/0221797	A1 *	9/2007	Thompson et al.	248/176.1
2008/0038702	A1	2/2008	Choquet	
2008/0233550	A1	9/2008	Solomon	

OTHER PUBLICATIONS

White, et al., Virtual welder trainer, 2009 IEEE Virtual Reality Conference, p. 303, 2009.

Mavrikios et al., a prototype virtual reality-based demonstrator for immersive and interactive simulation of welding processes, International Journal of Computer Integrated Manufacturing, vol. 19, Issue 3, Apr. 3, 2006, p. 264-300.

N.A. Tech., P/NA.3 Process Modelling and Optimization, 11 pages, Jun. 4, 2008.

FH Joanneum, Fronius—virtual welding, 2 pages, May 12, 2008.

Arc Simulation & Certification, Weld Into The Future, 6 pages, May 2008.

CS Wave, A Virtual learning tool for the welding motion, 10 pages, Mar. 14, 2008.

The Fabricator, Virtual Welding, 4 pages, Mar. 2008.

NSRP Ase, Low-Cost Virtual Reality Welder Training System, 1 page, 2008.

Edison Welding Institute, E-Weld Predictor, 3 pages, 2008.

CS Wave, The Virtual Welding Trainer, 6 pages, 2007.

ASCIENCETUTOR.COM, A division of Advanced Science and Automation Corp., VWL (Virtual Welding Lab), 2 pages, 2007.

Cooperative Research Program, Virtual Reality Welder Training, Summary Report SR0512, 4 pages, Jul. 2005.

Porter, et al., Virtual Reality Welder Training, Paper No. 2005-P19, 14 pages, 2005.

Arc Simulation & Certification, Weld Into the Future, 4 pages, 2005.

Ars Electronica Linz GmbH, Fronious, 2 pages, May 18, 1997.

Simfor / Cesol, "RV-Sold" Welding Simulator, Technical and Functional Features, 20 pages, no date available.

U.S. Appl. No. 12/501,263, filed Jul. 10, 2009.

U.S. Appl. No. 12/501,257, filed Jul. 10, 2009.

U.S. Appl. No. 29/339,980, filed Jul. 10, 2009.

U.S. Appl. No. 29/339,978, filed Jul. 10, 2009.

* cited by examiner

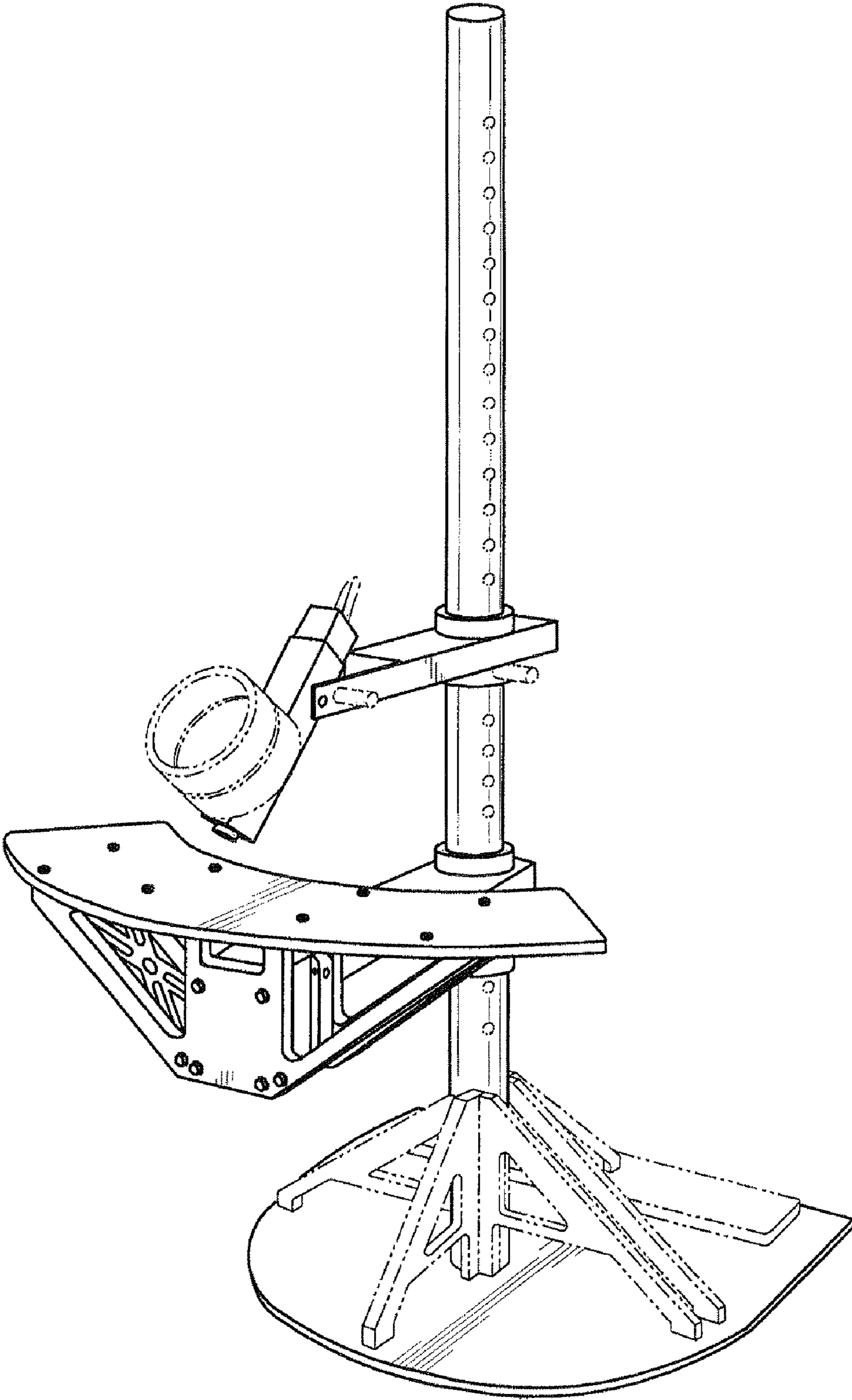


FIG.-1

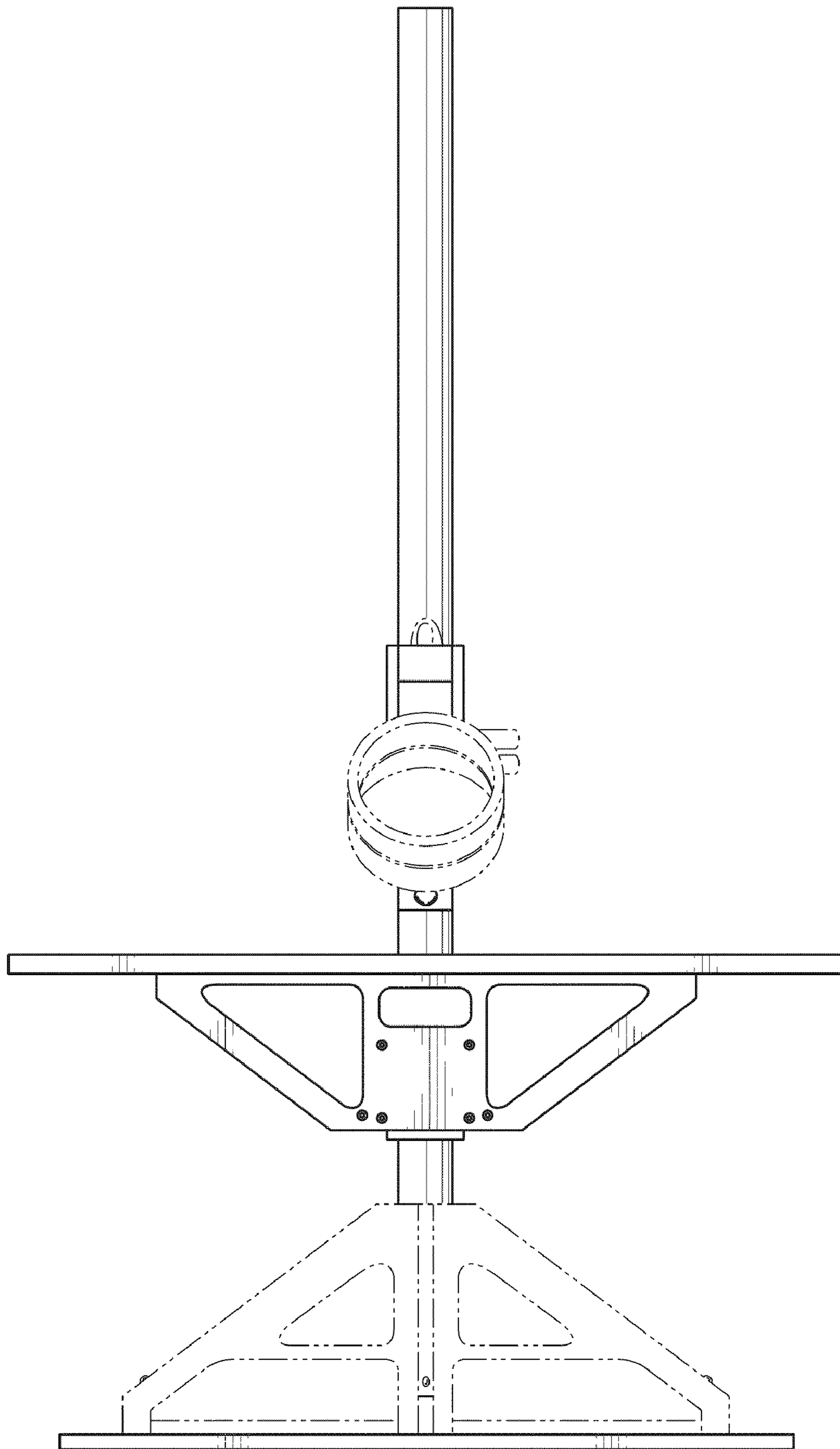


Fig. 2

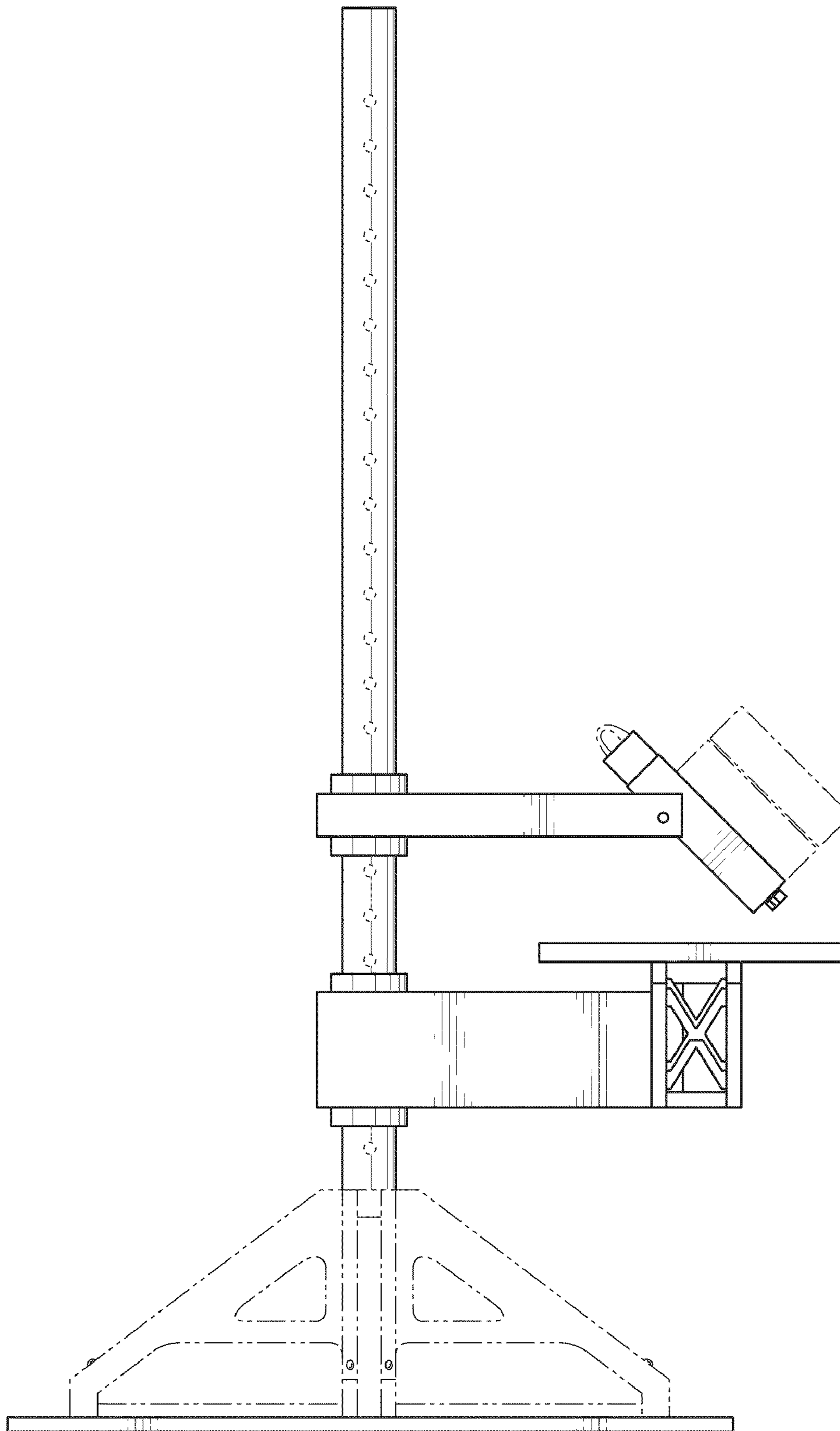


Fig. 3

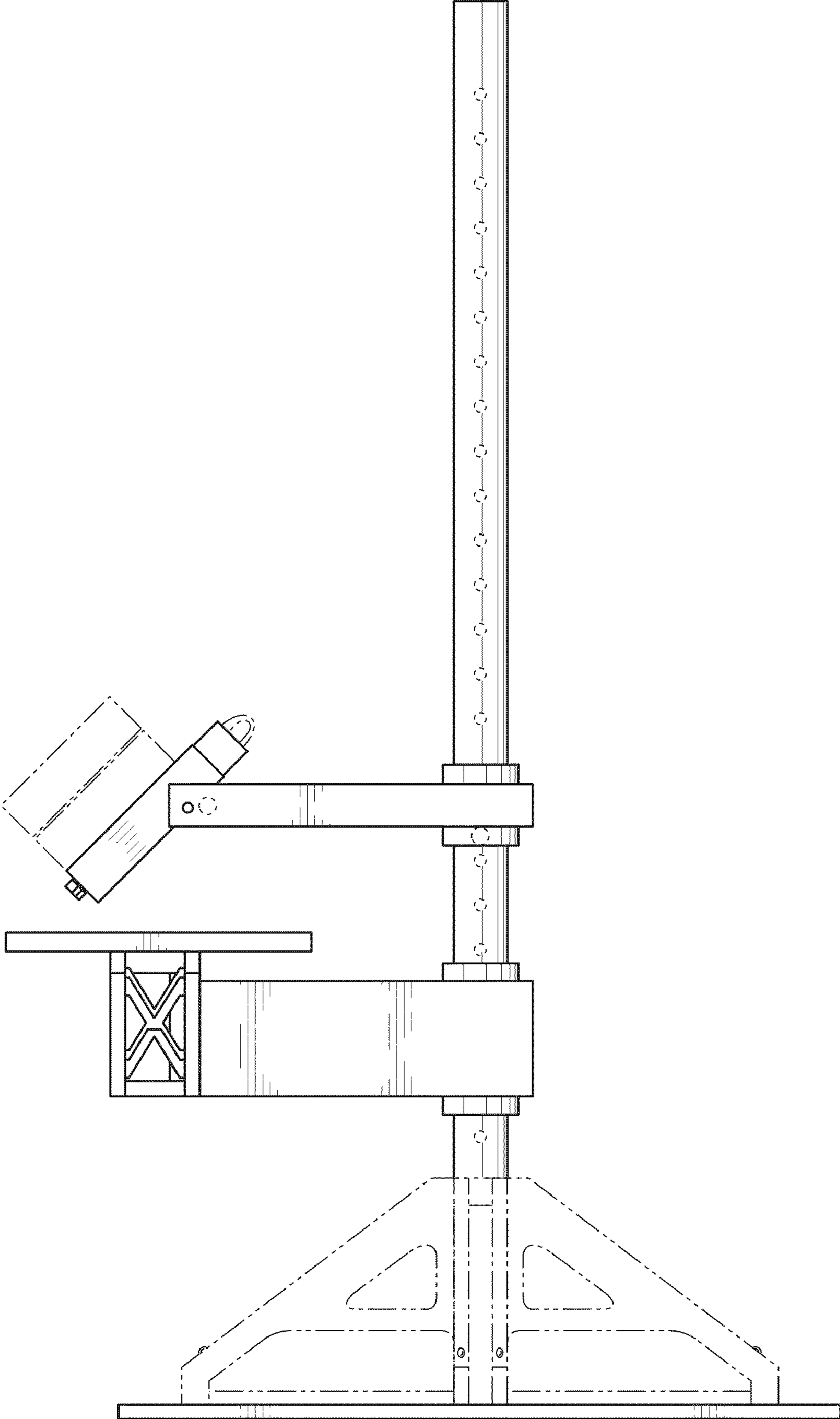


Fig. 4

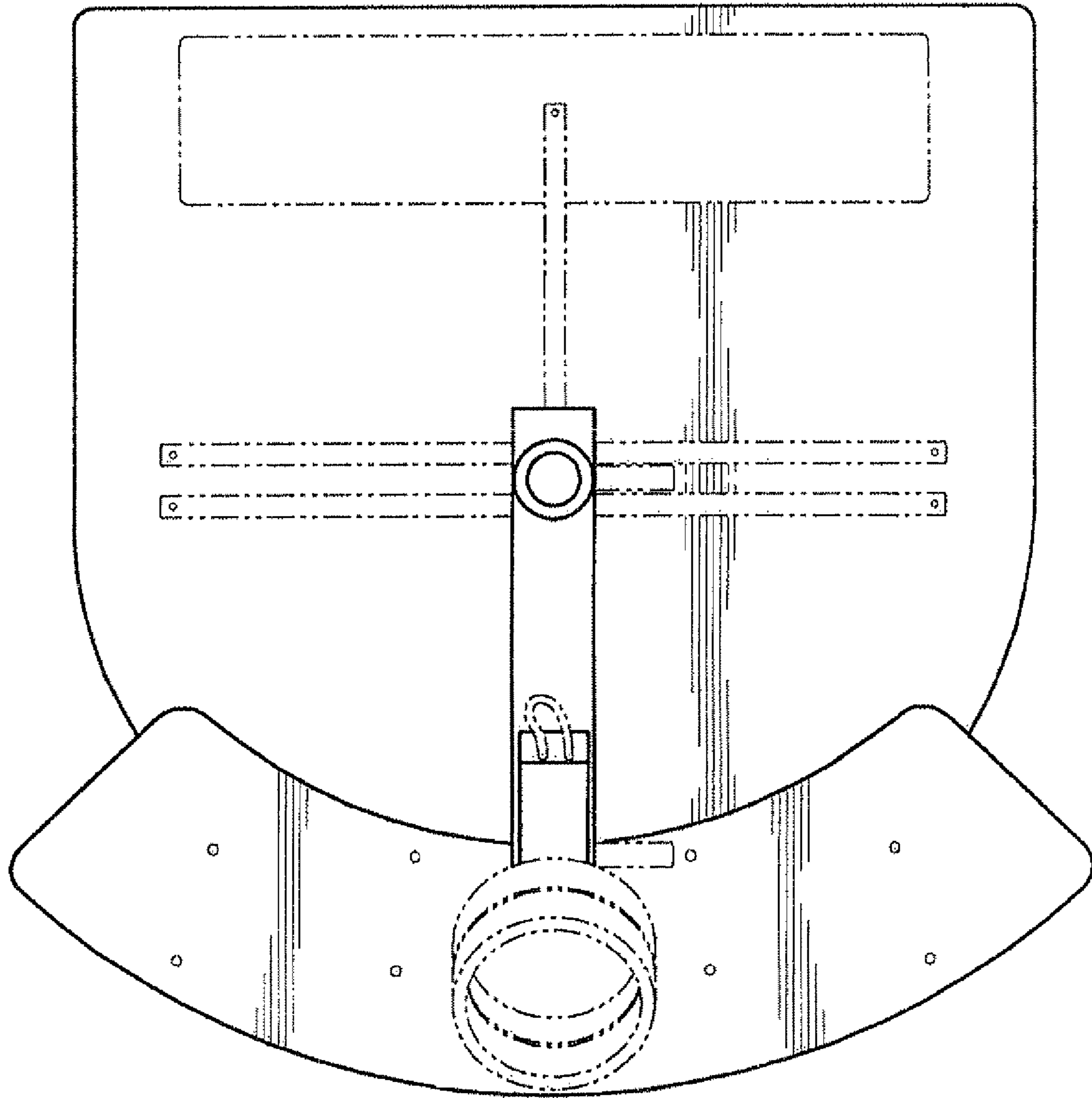


FIG.-5

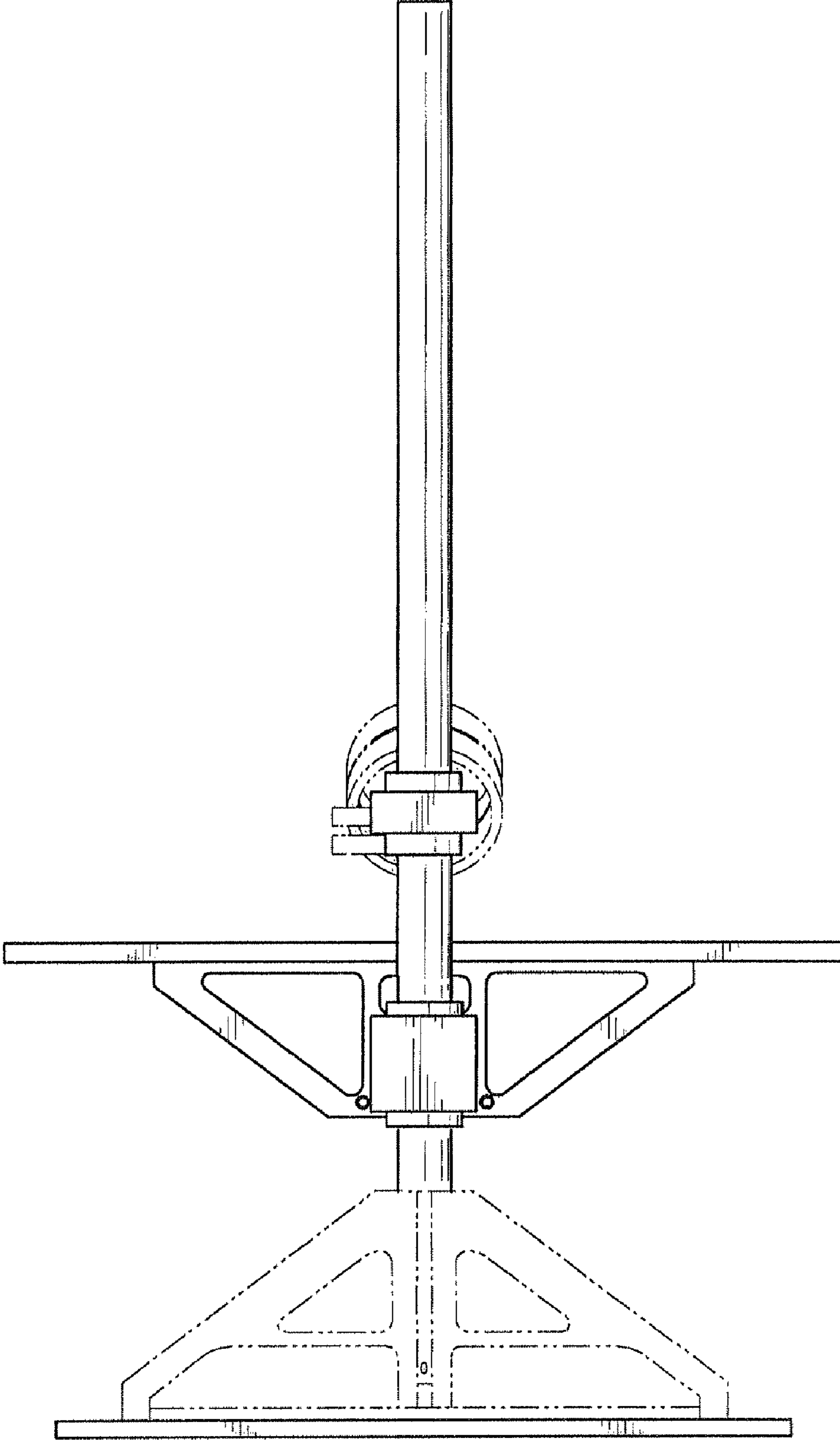


FIG.-6

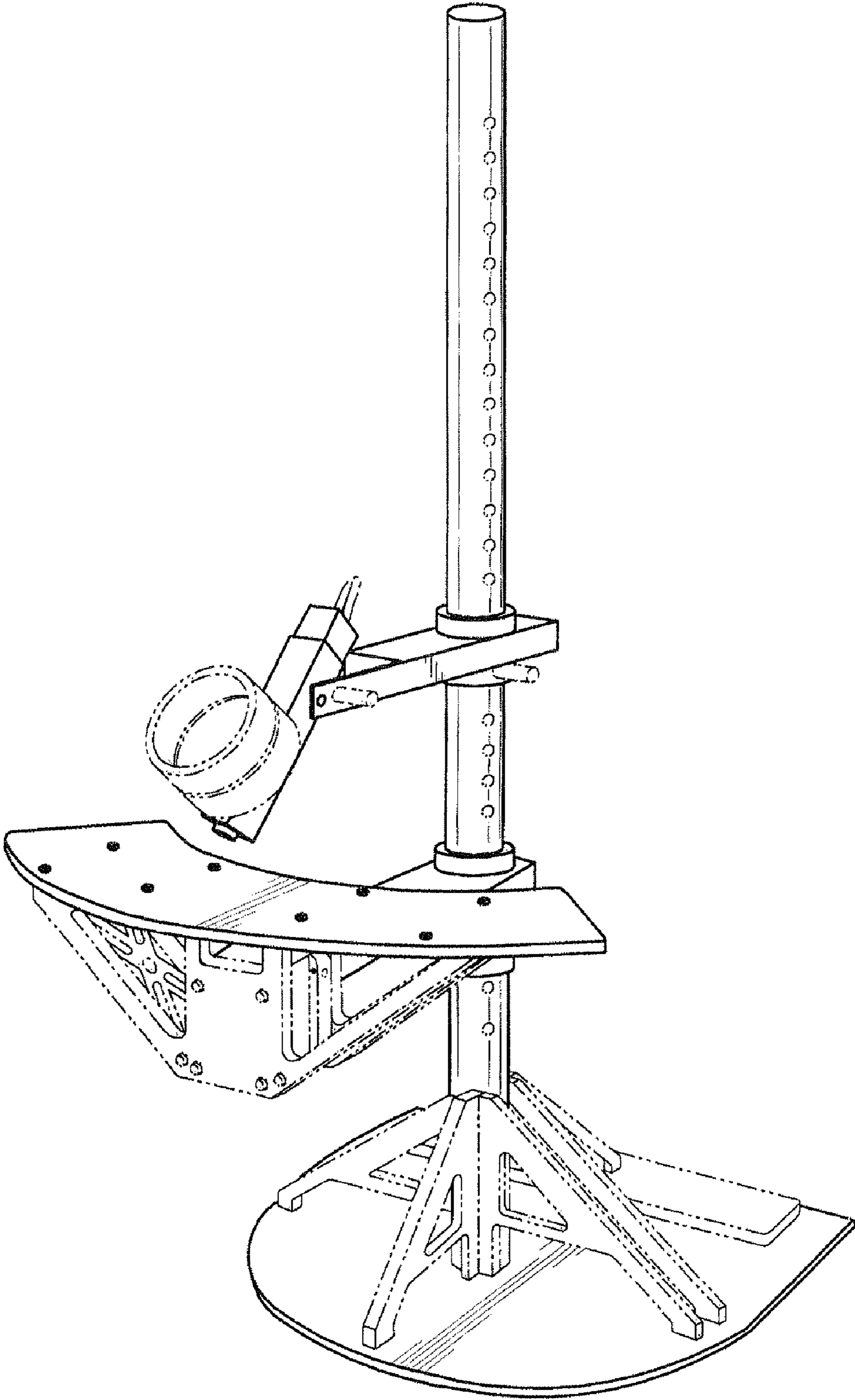


FIG.-7

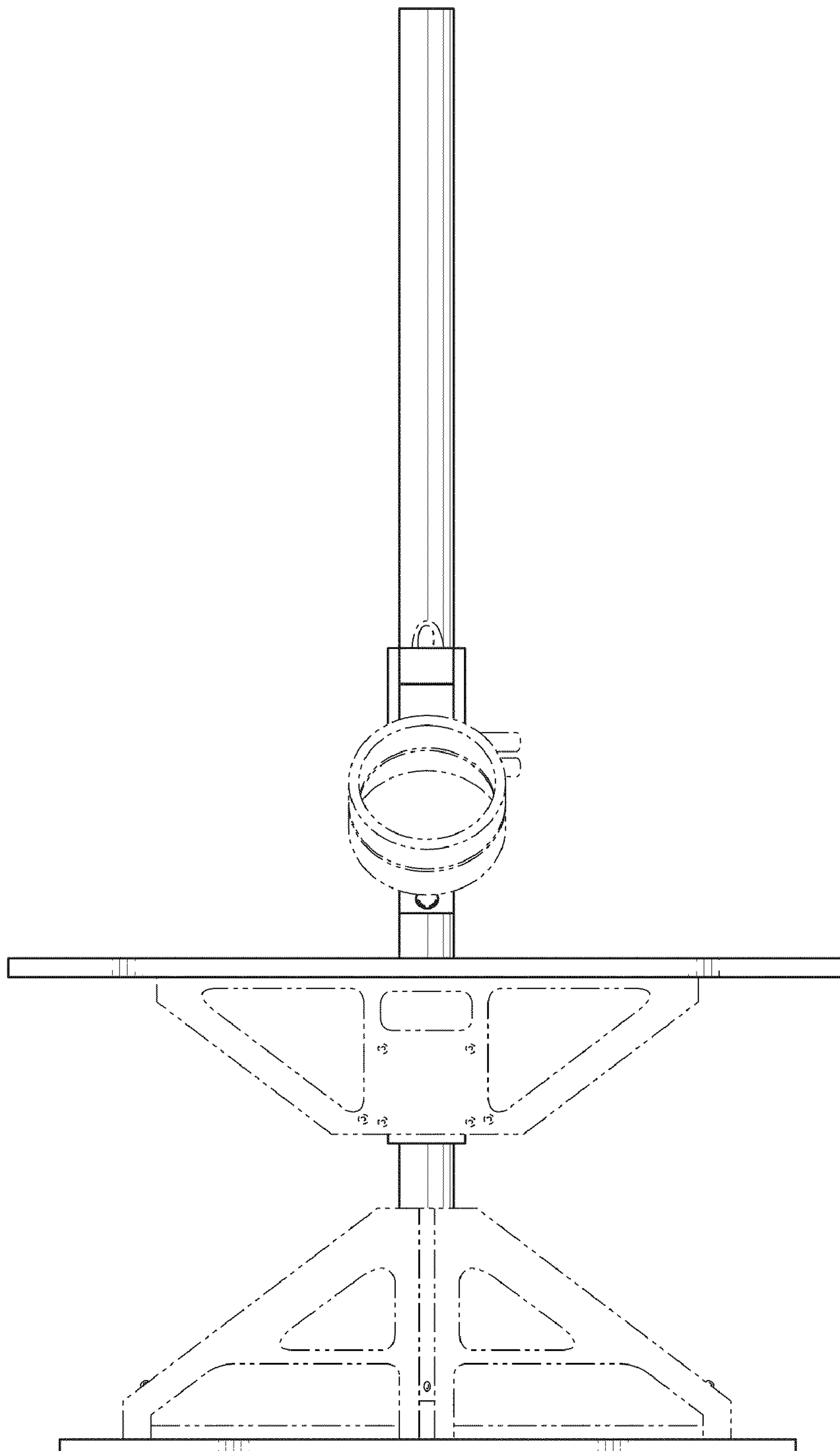


Fig. 8

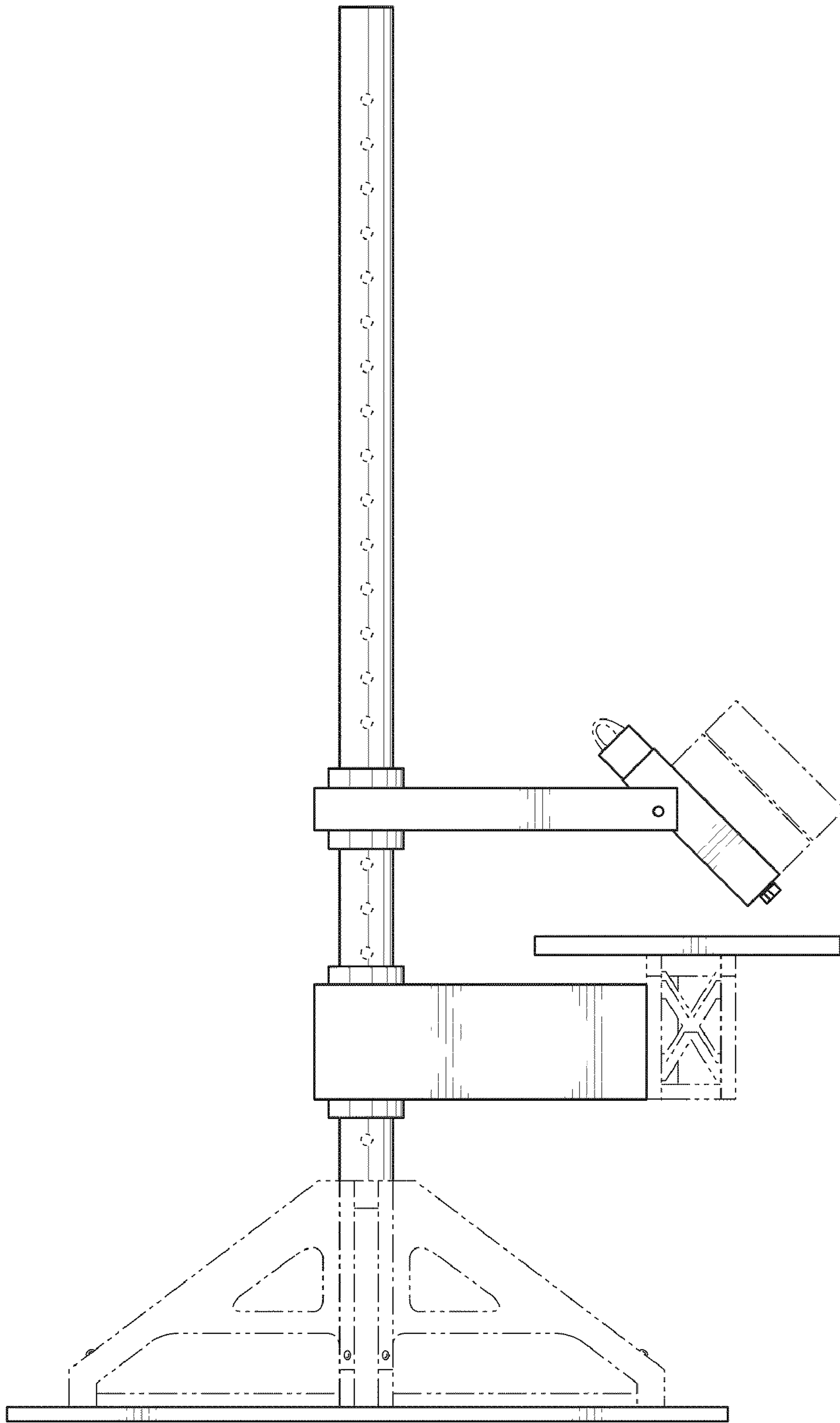


Fig. 9

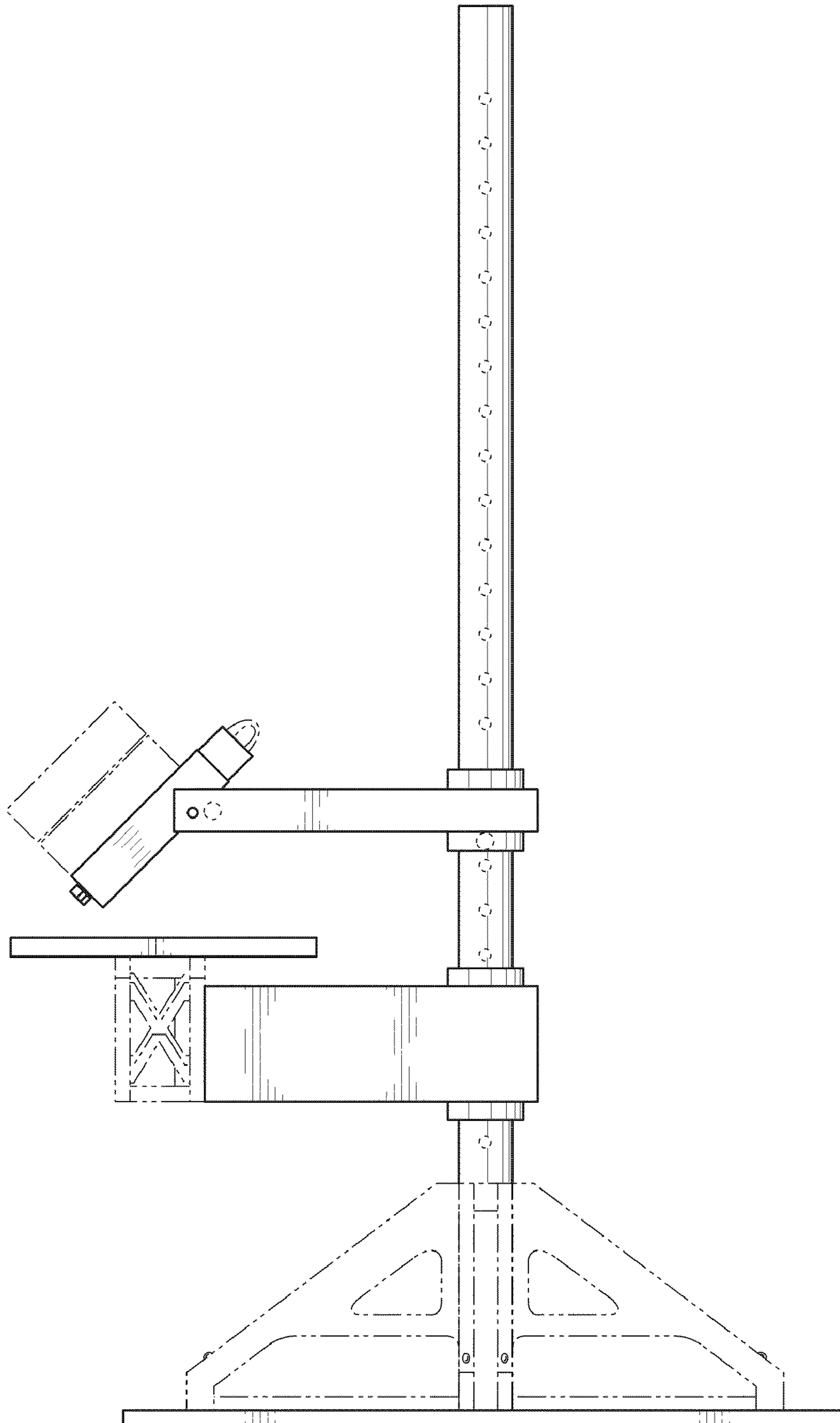


Fig. 10

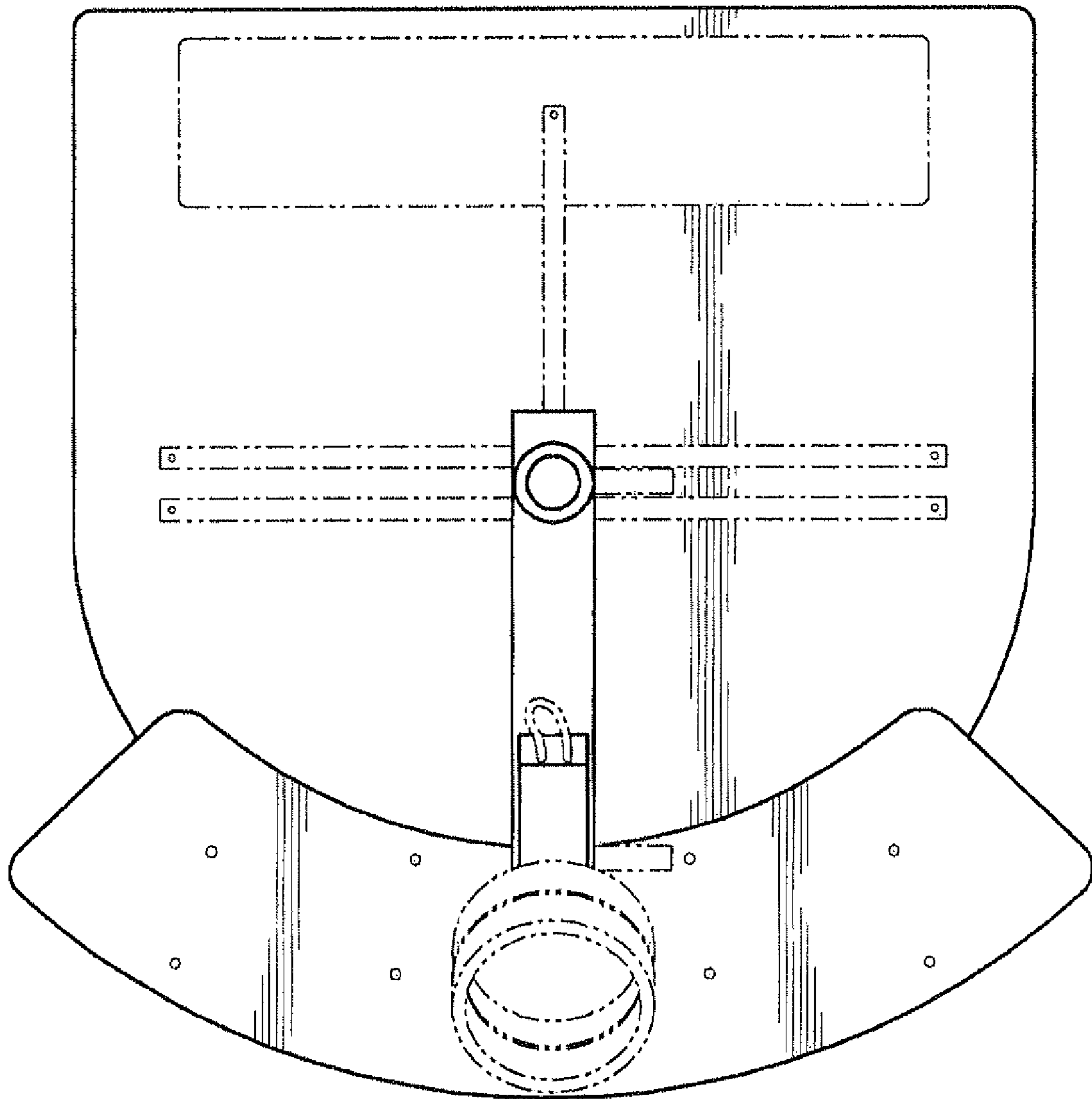


FIG.-11

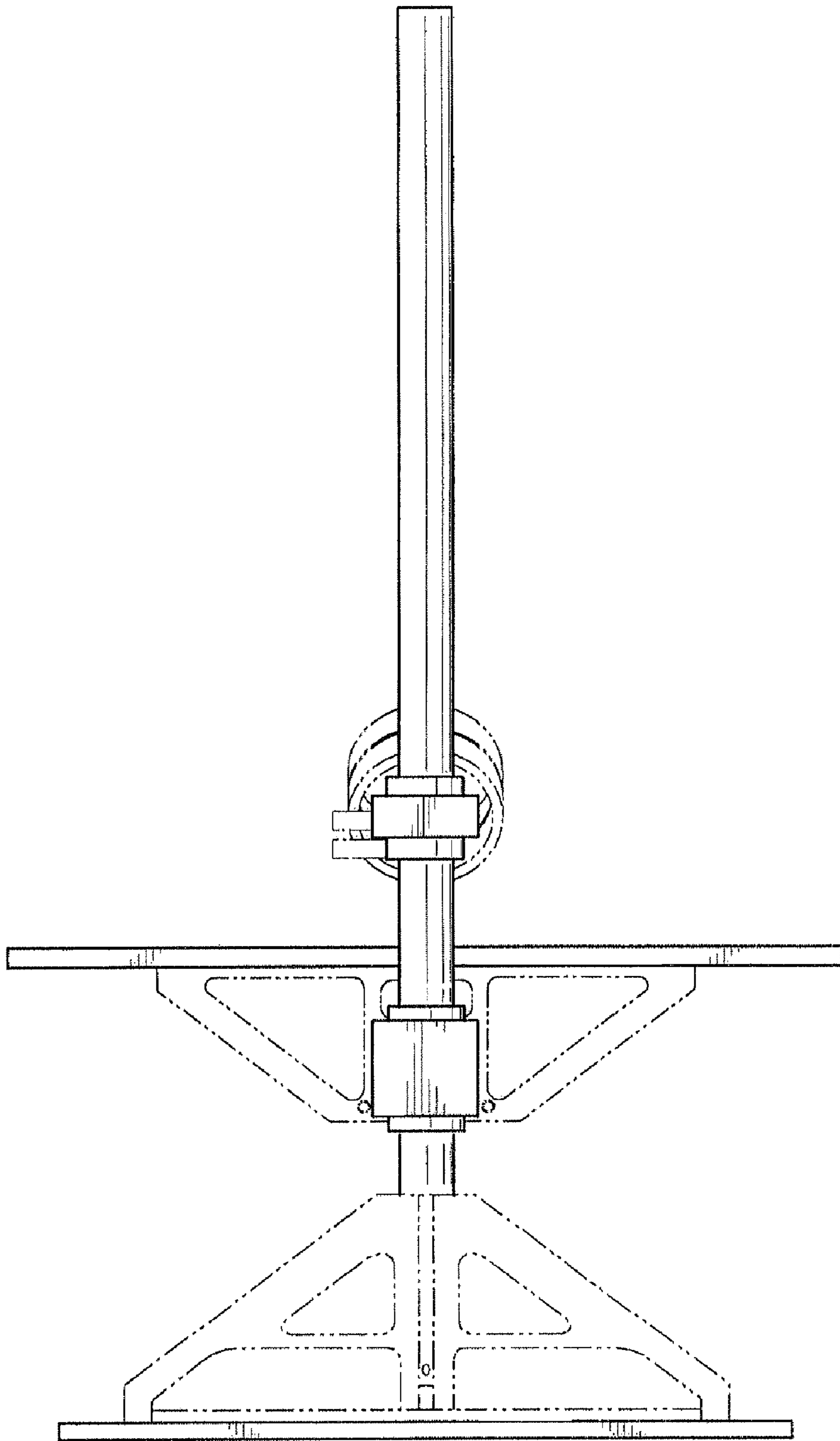


FIG.-12