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

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(54) **CLEANING SYSTEM**

46/0041; B01D 46/0013; B01D 46/2411;
B01D 46/001

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See application file for complete search history.

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(56) **References Cited**

U.S. PATENT DOCUMENTS

- 3,076,576 A * 2/1963 Cornelius B65D 45/16
220/243
- 3,286,884 A * 11/1966 Long, Jr. B67D 3/00
222/131
- 3,830,632 A * 8/1974 Guzay A62B 19/00
422/120
- 4,114,853 A 9/1978 Medvick
- 4,127,384 A 11/1978 Fahlvik et al.
- 4,253,684 A * 3/1981 Tolbert A61M 39/18
285/13
- 4,637,464 A 1/1987 Forgac et al.

(73) Assignee: **Veltek Associates, Inc.**, Malvern, PA
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(**) Term: **15 Years**

(21) Appl. No.: **29/583,855**

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FOREIGN PATENT DOCUMENTS

- CN 2817993 Y 9/2006
- CN 200967463 Y 10/2007

Related U.S. Application Data

(60) Continuation of application No. 15/099,894, filed on
Apr. 15, 2016, which is a continuation of application
No. 14/175,483, filed on Feb. 7, 2014, now Pat. No.
9,339,567, which is a continuation of application No.
12/980,122, filed on Dec. 28, 2010, now Pat. No.
8,702,869, which is a division of application No.
12/033,719, filed on Feb. 19, 2008, now abandoned.

(51) **LOC (11) Cl.** **15-05**

(52) **U.S. Cl.**

USPC **D32/15**

(58) **Field of Classification Search**

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D8/70

CPC .. B01D 46/002; B01D 46/4272; B01D 46/04;
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(Continued)

(Continued)

OTHER PUBLICATIONS

Veltek Associates, Inc., "Core2Clean Dual Nozzle Fogger," Model
C2C-100-3, Doc No. C2C-2000-D, Rev. Jan. 26, 2004; pp. 1-10.
(Continued)

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(57) **CLAIM**

The ornamental design for a cleaning system, as shown and
described.

DESCRIPTION

FIG. 1 is a front view of a first embodiment of a cleaning
system of our design;
FIG. 2 is a rear view thereof;
FIG. 3 is a top thereof;

(Continued)

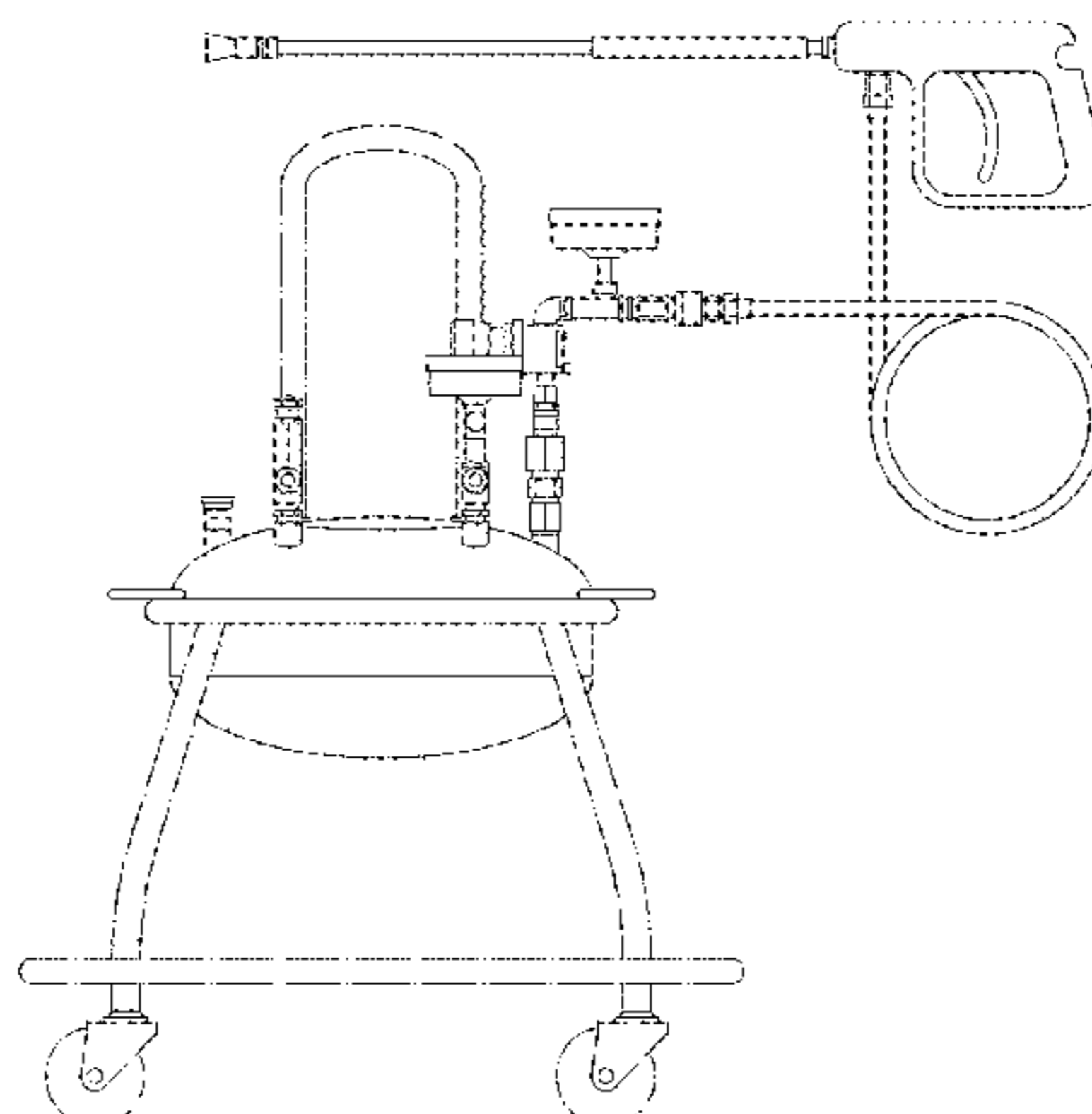


FIG. 4 is a bottom view thereof;
 FIG. 5 is a left-side view thereof; and,
 FIG. 6 is a right-side view thereof.

1 Claim, 4 Drawing Sheets

(56)

References Cited

U.S. PATENT DOCUMENTS

4,834,293	A *	5/1989	Lichfield	B05B 1/304 239/447
4,889,812	A	12/1989	Guinn et al.	
4,898,212	A	2/1990	Searfoss et al.	
4,898,812	A	2/1990	Aoki et al.	
5,016,817	A	5/1991	Ghate et al.	
5,045,055	A *	9/1991	Gonser	A61C 1/18 137/454.2
5,064,614	A	11/1991	Reiss et al.	
5,277,876	A	1/1994	Wagner	
5,424,046	A *	6/1995	Smith	A61L 11/00 422/295
5,676,531	A	10/1997	Muscarella et al.	
5,678,278	A	10/1997	McBride et al.	
5,772,075	A *	6/1998	Ash, Jr.	B67D 1/04 222/1
5,906,151	A *	5/1999	Firestone	C12H 1/22 426/11
6,216,921	B1 *	4/2001	Spruill	A21C 5/006 222/399
6,305,393	B1 *	10/2001	Lin	B08B 3/026 134/102.2
6,379,615	B1	4/2002	Ogle	
6,455,017	B1	9/2002	Kasting, Jr. et al.	
6,645,429	B1	11/2003	Raniwala	
7,237,695	B2 *	7/2007	Dee	E04F 21/12 222/394
7,798,373	B1	9/2010	Wroblewski et al.	

8,702,869	B2 *	4/2014	Churchvara	B08B 3/00 134/22.15
D763,525	S *	8/2016	Barrett	D32/15
D813,474	S *	3/2018	Holtby	D32/15
D835,369	S *	12/2018	Thakur	D32/15
2003/0007914	A1	1/2003	Ongaro	
2003/0044312	A1	3/2003	Takano	
2007/0264138	A1	11/2007	Mandell et al.	
2008/0292515	A1	11/2008	Ongaro et al.	

FOREIGN PATENT DOCUMENTS

CN	101090774	A	12/2007
CN	201606514	Y	1/2008
DE	19711435	C1	11/1998
EP	1287751	A2	3/2003
JP	06049057	A	2/1994
JP	2004147967	A	5/2004
JP	2004188111	A	7/2004

OTHER PUBLICATIONS

Veltek Associates, Inc., "Validation of the Core2Clean Spray-Mop-Fog Systems," Doc No. C2C-2000-C, Rev. Jan. 26, 2004; pp. 1-26.

Veltek Associates, Inc., "Core 2 Clean Systems [online]"; Jan. 22, 2008, p. 2; [ptp://web.archive.org/web/20080122060238/http://www.sterile.com/pages/products/products-cor-2-clean-system.htm](http://web.archive.org/web/20080122060238/http://www.sterile.com/pages/products/products-cor-2-clean-system.htm).

The State Intellectual Property Office of the People's Republic of China; First Office Action and Search Report; 11 pgs., dated Aug. 27, 2012; Application No. 200810161063.X; Applicant: Felteck Associates, Inc.

"The Core 2 Clean® Spray-Mop-Fog System—Operations Manual", The Core2Clean® Systems, Veltek Associates, Inc., Jun. 2003, C2C-2002-F, pp. 1-65.

"Swagelok® Quick Connect Valve Catalogue", Swagelok, www.swagelok.com, Aug. 2005, 12 pages.

Search and Examination Report for SG 2013088190, dated Sep. 23, 2016, 5 pages.

* cited by examiner

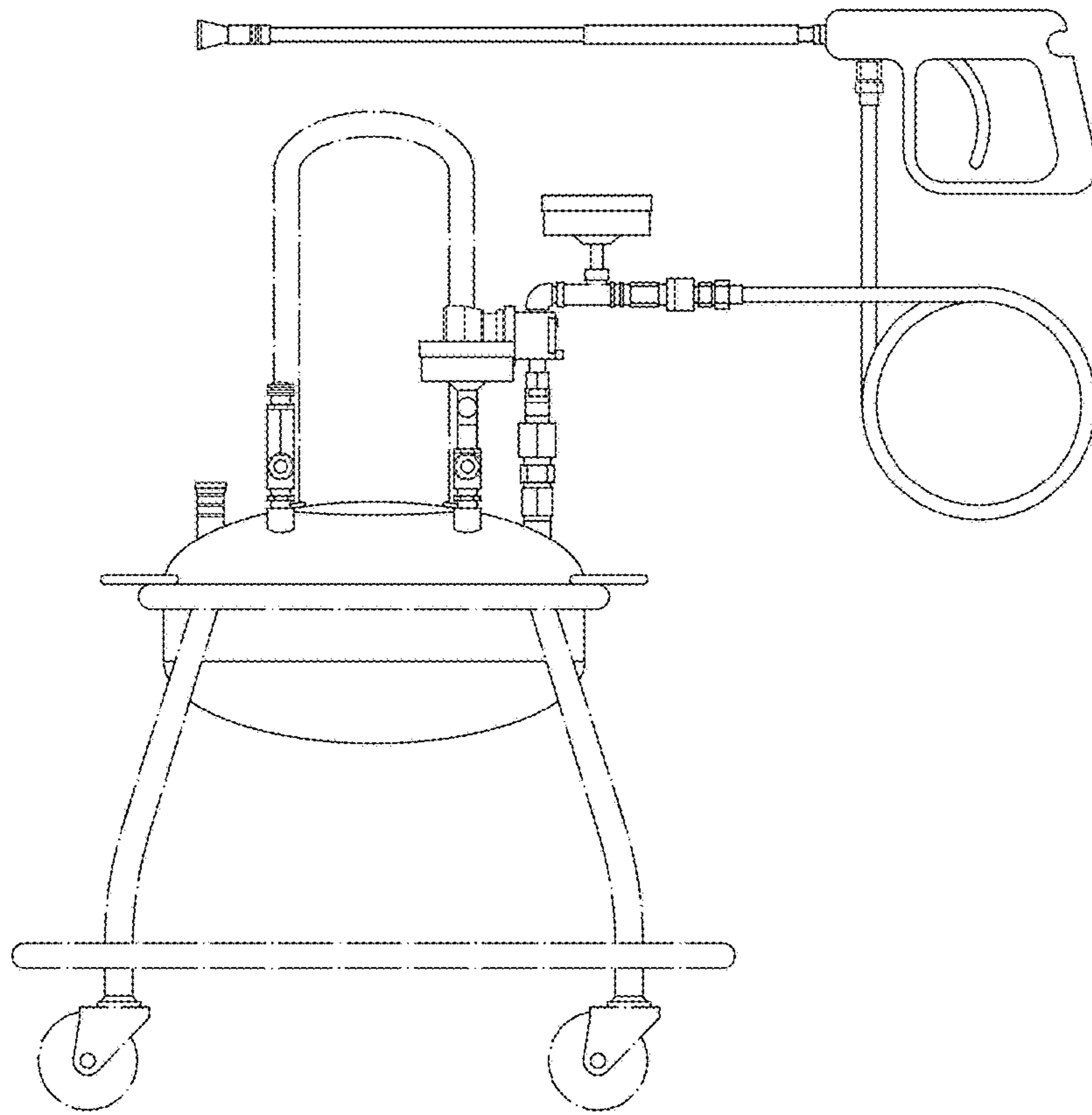


FIG. 1

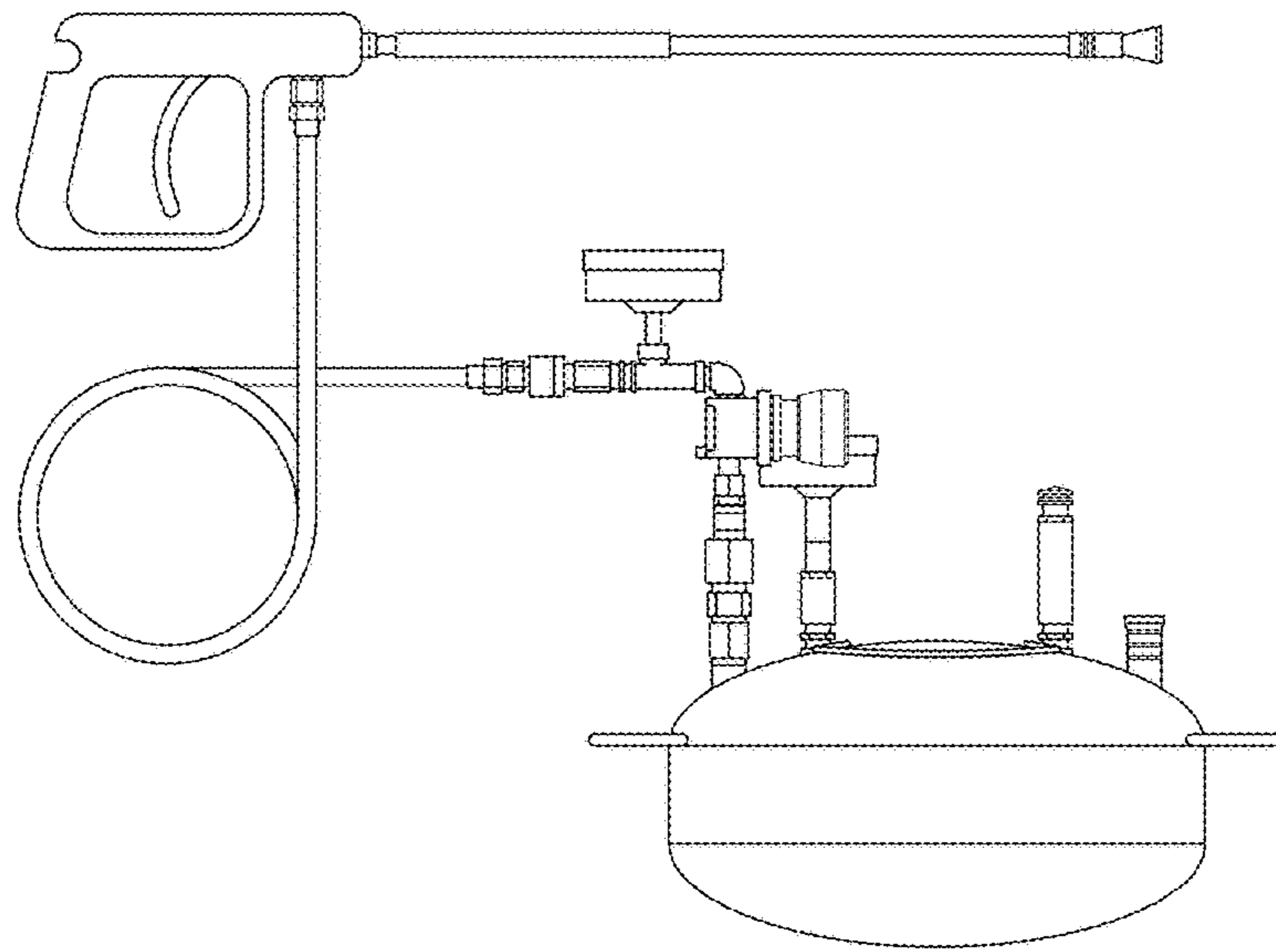
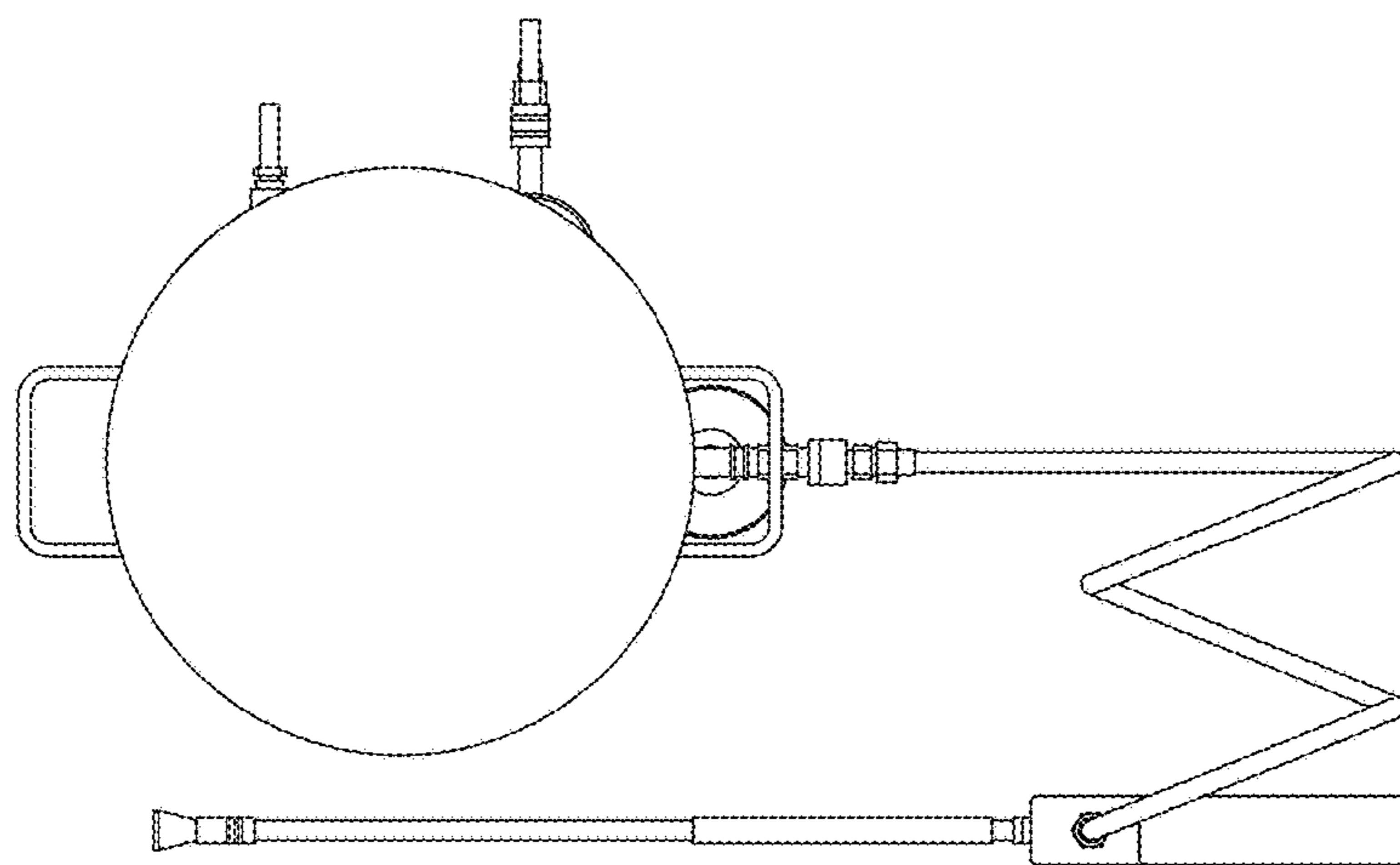
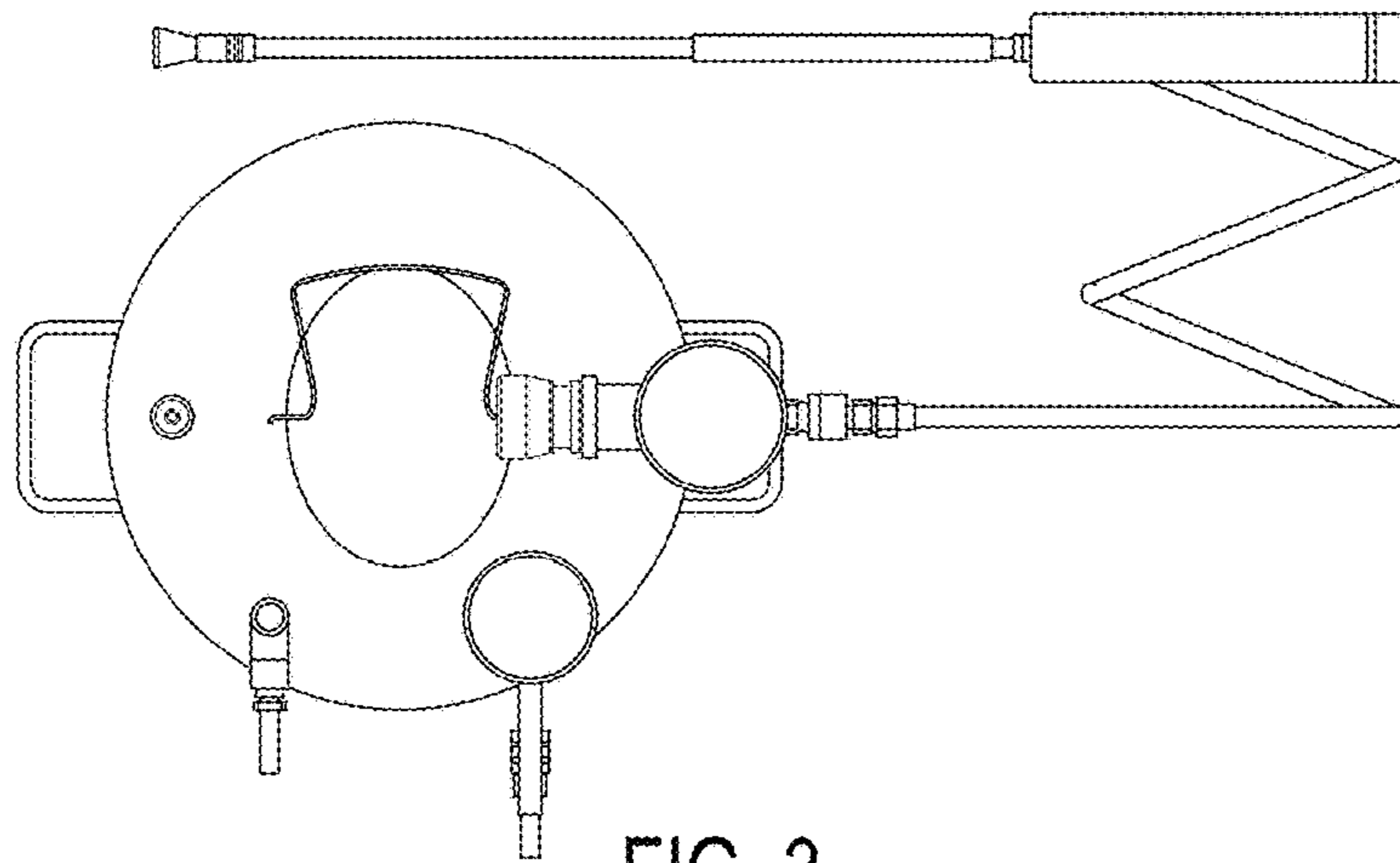


FIG. 2



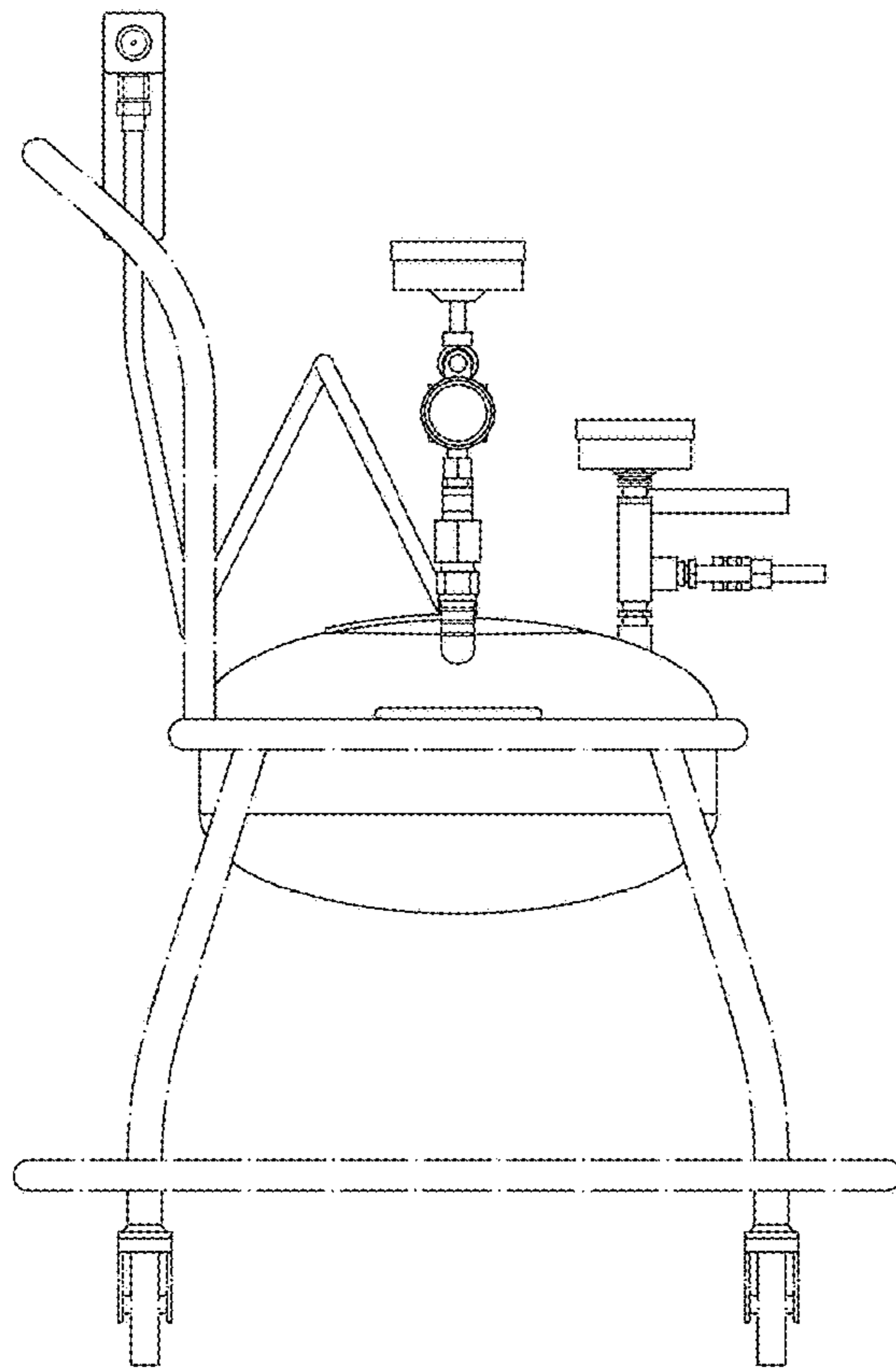


FIG. 5

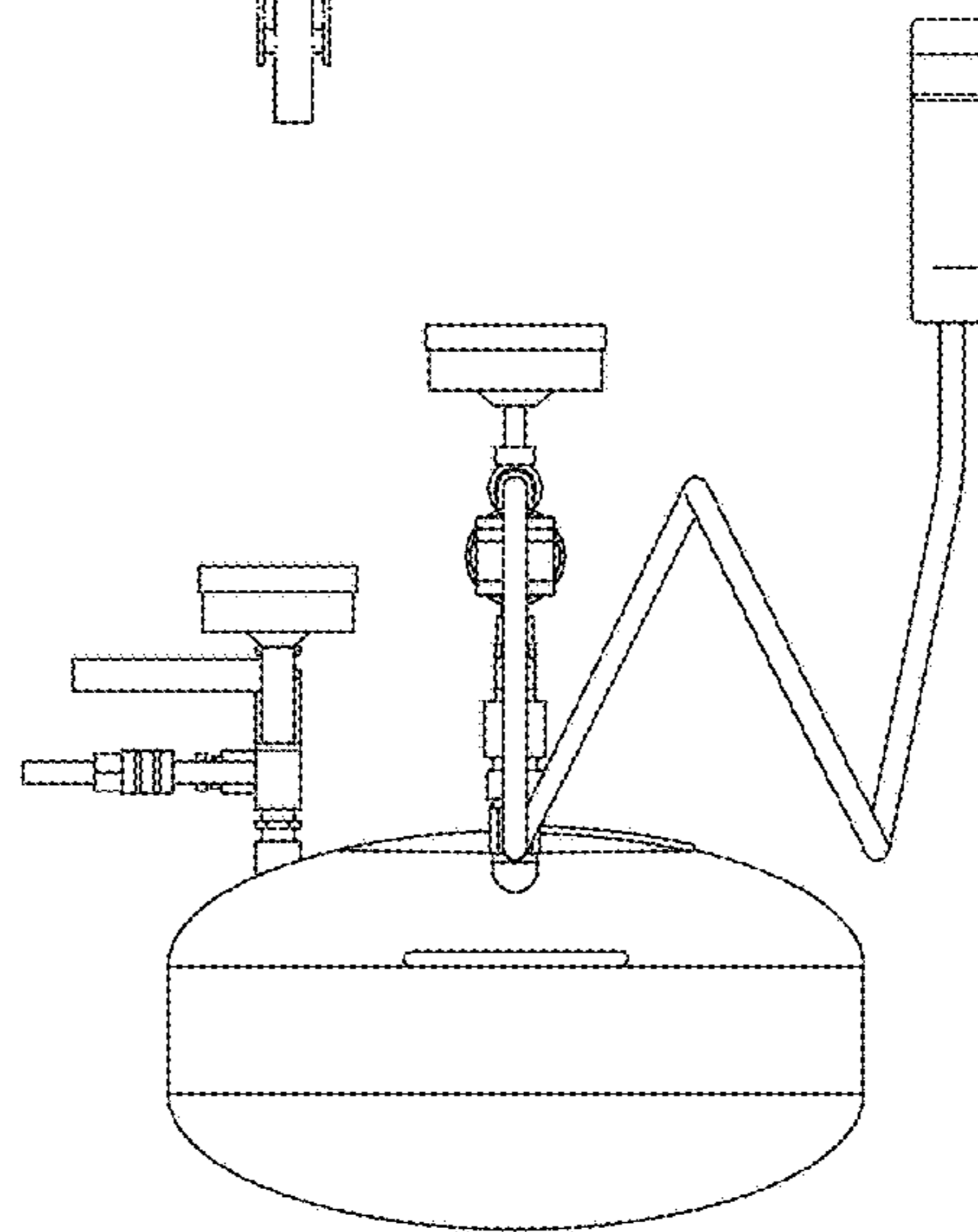


FIG. 6