



US00D783798S

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

(10) **Patent No.:** **US D783,798 S**
(45) **Date of Patent:** **** Apr. 11, 2017**

(54) **SMOKE EXHAUST HOOD FOR A TILTING FURNACE**

(71) Applicant: **SUMITOMO METAL MINING CO., LTD.**, Tokyo (JP)

(72) Inventors: **Sachio Ura**, Tokyo (JP); **Takeshi Nakamura**, Tokyo (JP); **Daishi Ochi**, Tokyo (JP); **Hideki Kikutani**, Tokyo (JP)

(73) Assignee: **SUMITOMO METAL MINING CO., LTD.**, Tokyo (JP)

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

(21) Appl. No.: **29/503,859**

(22) Filed: **Sep. 30, 2014**

(51) **LOC (10) Cl.** **23-04**

(52) **U.S. Cl.**
USPC **D23/393**

(58) **Field of Classification Search**
USPC D23/329, 357, 365, 370-374, 393, D23/397-402; D6/657, 660, 661.3, 672; D7/402, 339, 347, 348, 403-407, 354, D7/323; D15/122, 135, 138, 140, 141, D15/144, 144.1, 144.2, 199; 126/79, 84, 126/299 C, 299 D, 299 R; 58/98; 55/358, 55/385.2
CPC F24C 15/00; F24C 15/12; F24C 15/20; F24C 15/2028; F24C 15/2042; F24C 15/36
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,467,005 A * 9/1923 Lawrence E06B 7/10
126/633
D203,569 S * 1/1966 Stephens et al. D6/672
D251,248 S * 3/1979 Olsen D15/141

4,177,975 A * 12/1979 Meyers C21C 5/40
266/158
D262,398 S * 12/1981 Syme D23/386
4,606,260 A * 8/1986 Cox A61F 9/06
454/56
D288,957 S * 3/1987 Olson D23/386
5,063,906 A * 11/1991 Rogers B03C 3/017
126/299 D
D323,085 S * 1/1992 Konkel 248/158
(Continued)

OTHER PUBLICATIONS

Tilting furnace for flue gas hood (Design -© Questel). orbit.com [online PDF] 3 pages. Print Date Apr. 20, 2015 [retrieved on Dec. 3, 2015]. Retrieved from Internet: <http://sobjprd.questel.fr/export/QPTUJ214/pdf2/5646bc2c-0212-4cf9-94d3-2fe29cb01df6-151836.pdf>.*

Primary Examiner — Susan Bennett Hattan

Assistant Examiner — Marie Fast Horse

(74) *Attorney, Agent, or Firm* — Osha Liang LLP

(57) **CLAIM**

An ornamental design for a smoke exhaust hood for a tilting furnace, as shown and described.

DESCRIPTION

FIG. 1 is a front view of a smoke exhaust hood for a tilting furnace, according to the new design.

FIG. 2 is a top plan view thereof.

FIG. 3 is a right side view thereof, the left being a mirror image.

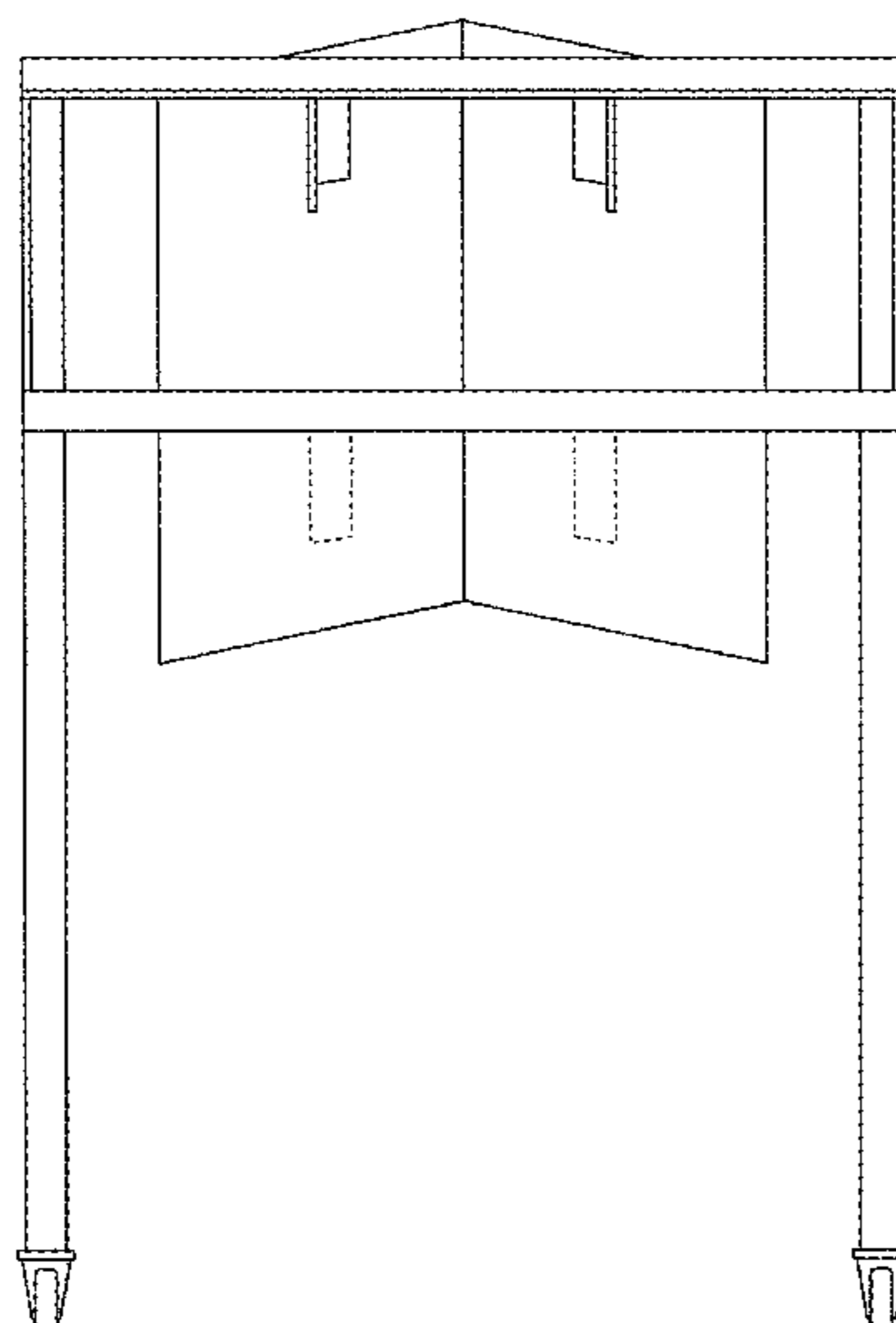
FIG. 4 is a rear view thereof.

FIG. 5 is a bottom view thereof; and,

FIG. 6 is another right side view of the smoke exhaust hood, according to the design shown in FIG. 1, with an environmental tilting furnace for clarity of disclosure.

The elements shown in broken lines depict environmental subject matter only and form no part of the claimed invention.

1 Claim, 6 Drawing Sheets



US D783,798 S

(56)

References Cited

U.S. PATENT DOCUMENTS

5,154,161	A *	10/1992	Rogers	B03C 3/017 126/299 D	2004/0103625	A1 *	6/2004	Nakano	B01D 46/10 55/385.2
5,211,159	A *	5/1993	Lieblein	F24C 15/2042 126/299 D	2006/0032490	A1 *	2/2006	Johnson	F23C 3/002 126/92 B
D341,500	S *	11/1993	Klein	D6/407	2007/0294985	A1 *	12/2007	Leseman	B01D 46/002 55/385.2
D349,158	S *	7/1994	Lieblein	D23/371	2008/0121224	A1 *	5/2008	Giles	F24C 15/2035 126/299 R
5,569,074	A *	10/1996	Gressel	B22D 31/002 108/142	2010/0218441	A1 *	9/2010	Stancel	F24J 2/5207 52/173.3
D376,161	S *	12/1996	Bergersen	D15/141	2010/0236164	A1 *	9/2010	Chuang	A01G 9/243 52/173.3
6,058,929	A *	5/2000	Fritz	F24C 15/2035 126/299 D	2010/0267321	A1 *	10/2010	Huang	B08B 15/023 454/56
D436,163	S *	1/2001	Peterson	D23/393	2010/0269428	A1 *	10/2010	Stancel	F24J 2/5205 52/173.3
D454,136	S *	3/2002	Deuschle	D14/447	2011/0081850	A1 *	4/2011	Wright	B08B 15/00 454/56
D487,505	S *	3/2004	Grobleben	D23/371	2013/0008429	A1 *	1/2013	Colburn	F24C 15/2028 126/299 D
D489,805	S *	5/2004	Vetter	D23/371	2013/0052927	A1 *	2/2013	Broemsen	B08B 15/023 454/56
D527,088	S *	8/2006	Hendrickx	D23/372	2013/0122798	A1 *	5/2013	Miani	B08B 15/00 454/237
7,189,272	B2 *	3/2007	Cheng	B05B 15/1203 118/326					
D563,693	S *	3/2008	Calleja	D6/682					
D576,264	S *	9/2008	Grobleben	D23/372					
D605,422	S *	12/2009	Wenning	D6/672					
D617,113	S *	6/2010	Wenning	D6/672					
D617,115	S *	6/2010	Wheeler	D6/300					
D675,723	S *	2/2013	Garcia	D23/393					
8,940,065	B2 *	1/2015	Rindoks	B08B 15/023 454/56					

* cited by examiner

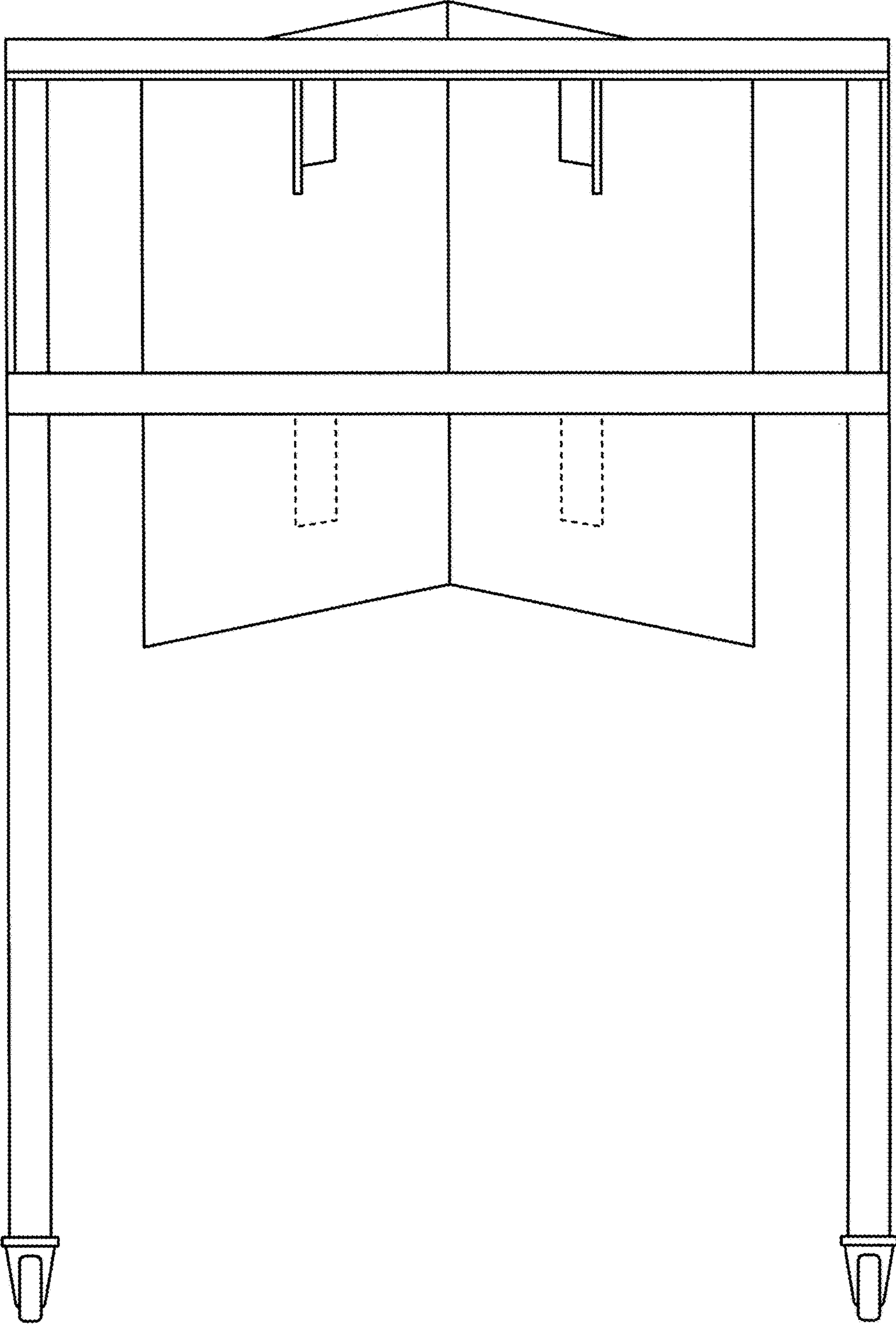


FIG. 1

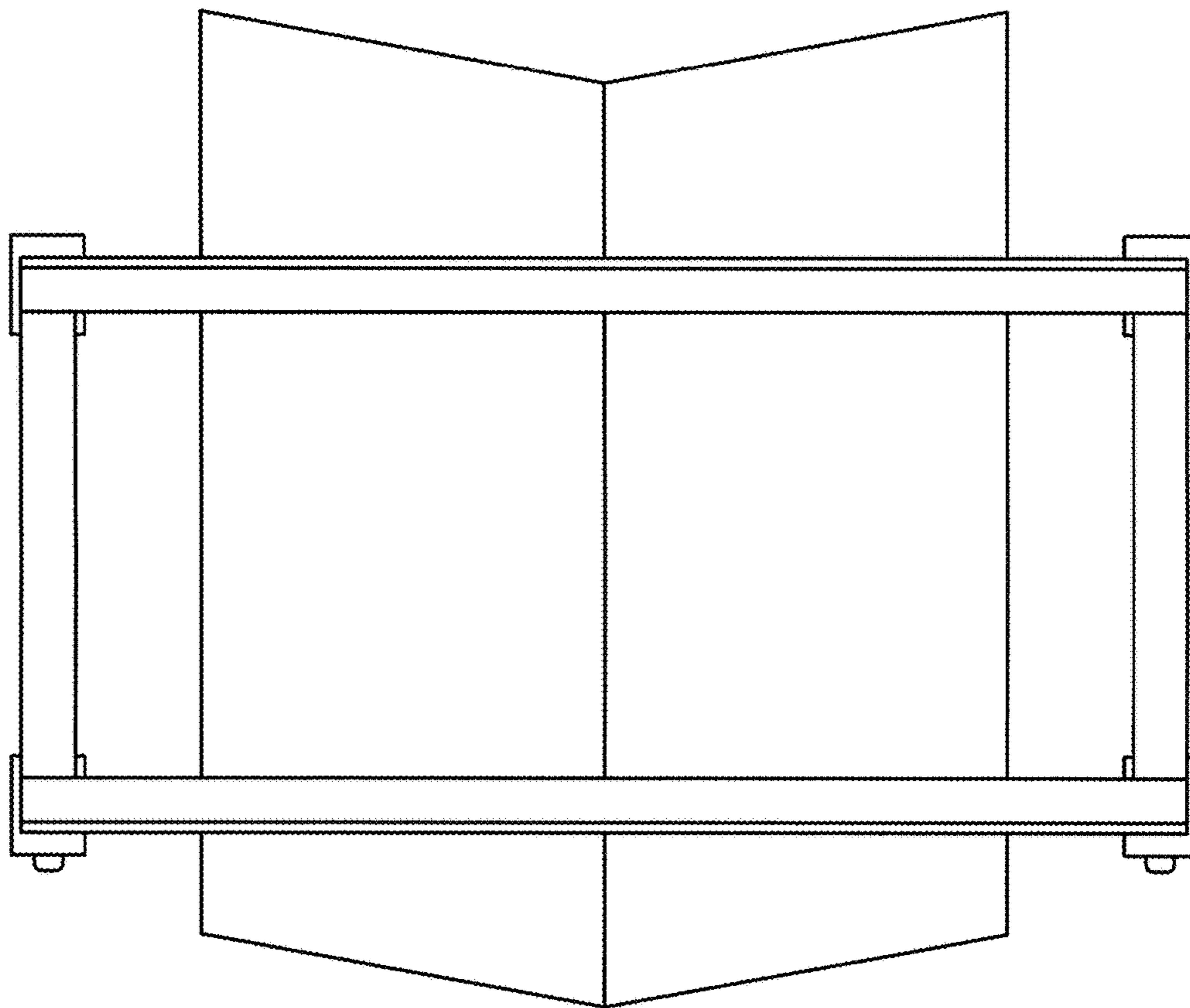


FIG. 2

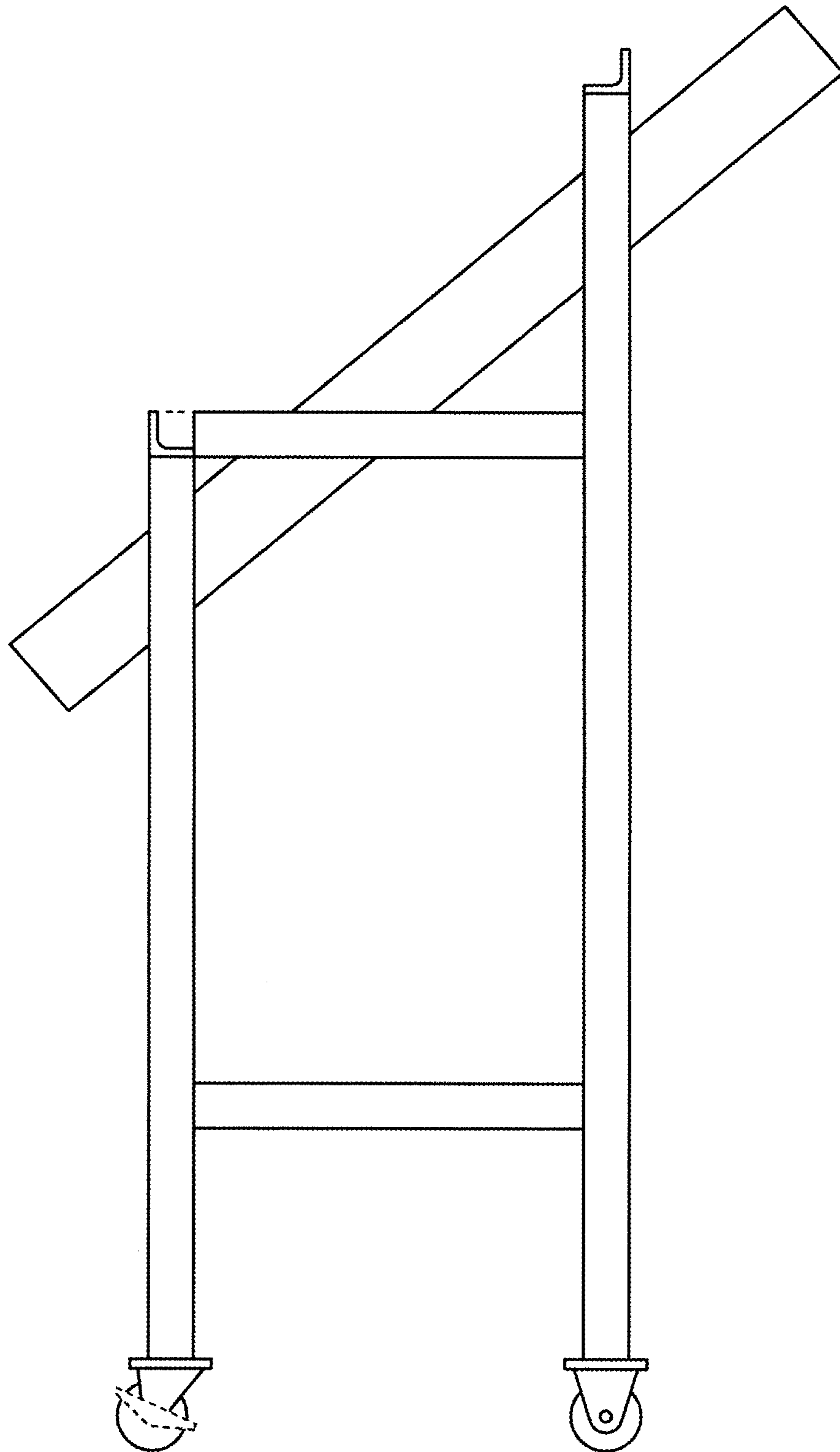


FIG. 3

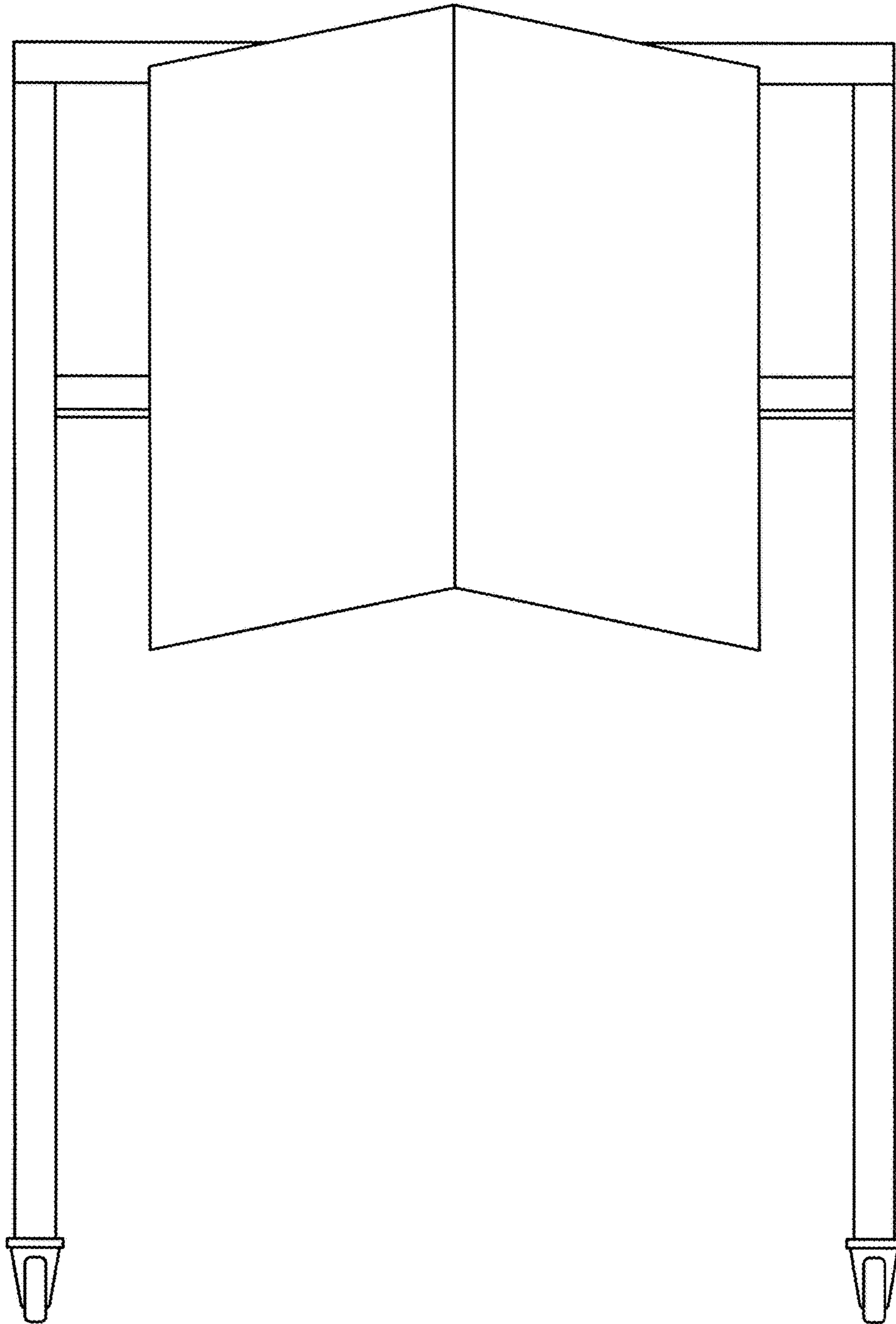


FIG. 4

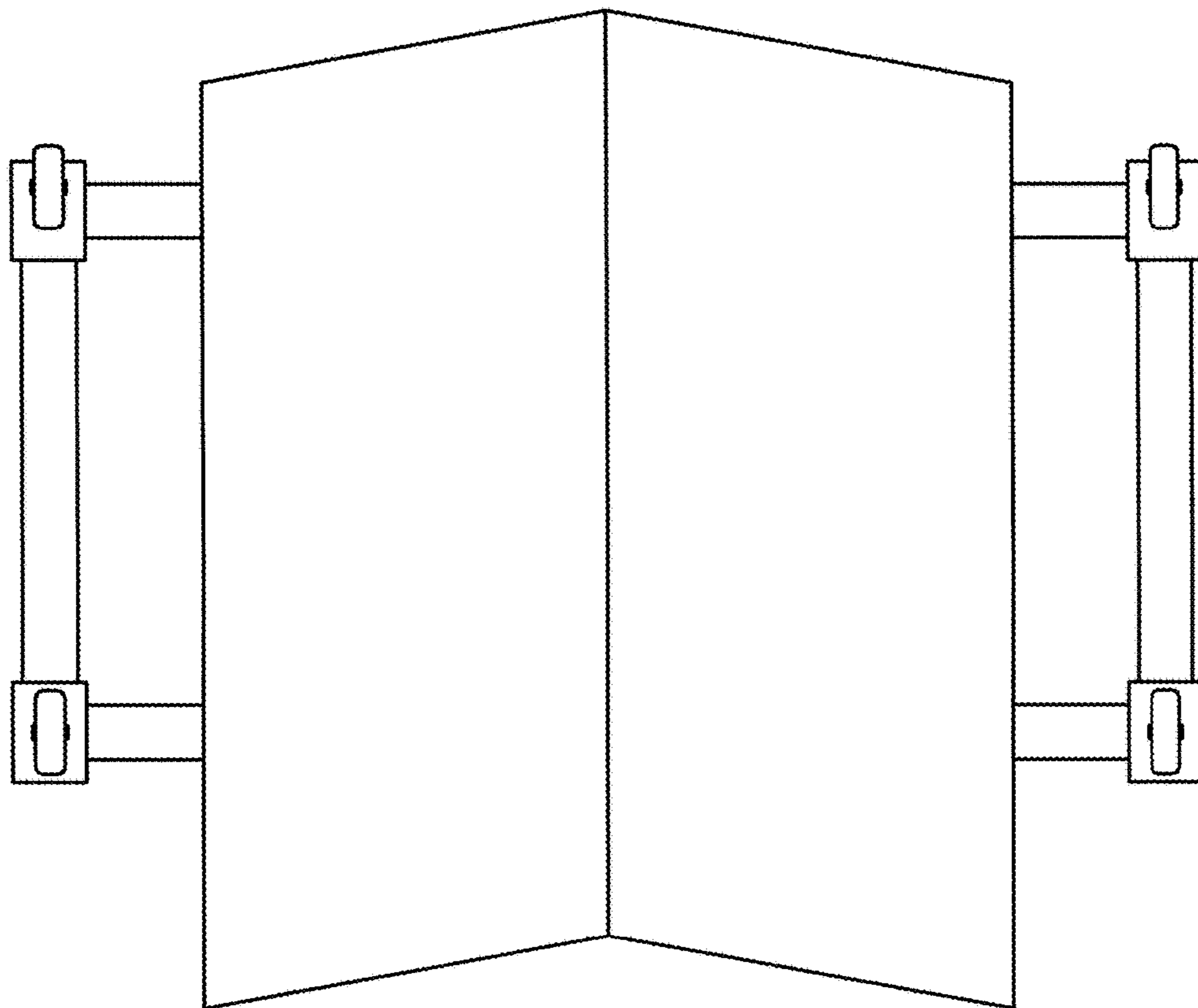


FIG. 5

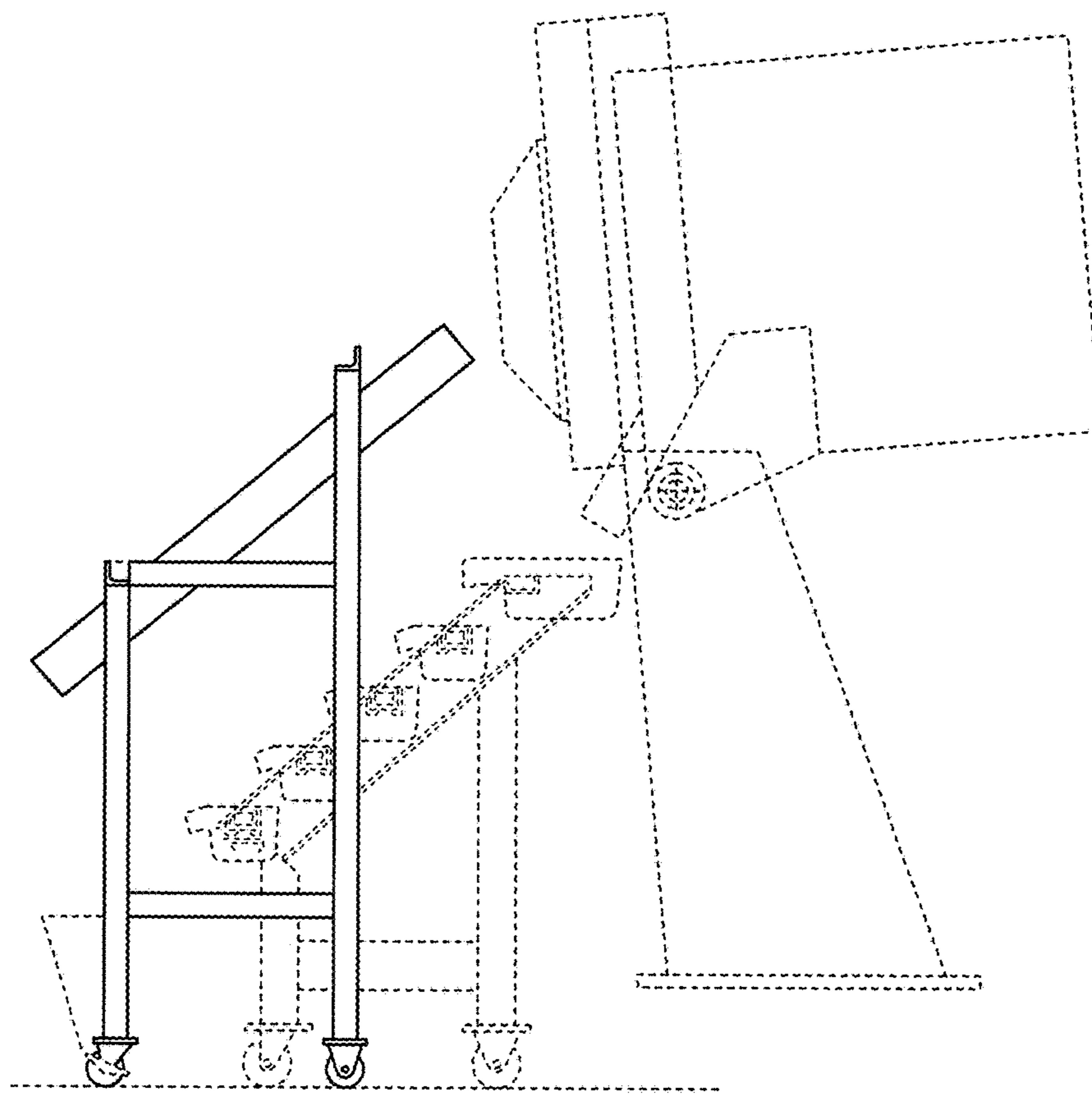


FIG. 6