



US00D864042S

(12) **United States Design Patent**
Shang

(10) **Patent No.:** **US D864,042 S**
(45) **Date of Patent:** **** Oct. 22, 2019**

(54) **ELECTRIC STAIR CHAIR**
(71) Applicant: **Youwei Shang**, Jiangsu (CN)
(72) Inventor: **Youwei Shang**, Jiangsu (CN)
(**) Term: **15 Years**
(21) Appl. No.: **29/626,834**
(22) Filed: **Nov. 21, 2017**
(51) **LOC (12) Cl.** **12-12**
(52) **U.S. Cl.**
USPC **D12/128**
(58) **Field of Classification Search**
USPC 280/29, 47.38, 74, 200, 642, 647, 648,
280/649, 650, 658; 296/65.04; 5/81.1,
5/81.1 R, 83.1, 87.1; D12/128, 129, 130,
D12/131, 132, 133; D34/28, 33, 35
CPC . A47C 20/041; Y10S 280/10; B60L 2200/34;
B66F 5/02; B66F 7/246
See application file for complete search history.

6,843,500 B2 * 1/2005 Li A61G 5/08
280/250.1
D519,064 S * 4/2006 Schrand D12/130
7,066,484 B2 * 6/2006 Willis A61H 3/04
280/47.4
7,520,347 B2 * 4/2009 Chambliss A61G 5/061
180/8.2
7,523,950 B2 * 4/2009 Meyers A61H 3/04
280/23.1
7,540,527 B2 * 6/2009 Willis A61G 5/08
280/47.4
7,758,063 B2 * 7/2010 Johnson A61G 5/045
280/647
7,774,873 B2 * 8/2010 Martin A61G 5/10
5/611

(Continued)

OTHER PUBLICATIONS

Amazon, "MS3C . . . Emergency Stair Chair", May 31, 2019.
https://www.amazon.com/dp/B07J2WXZ76/ref=sspa_dk_detail_3?psc=1&pd_rd_i=B07J2WXZ76&pd_rd_w=Kly6G&pf_rd_p=8a8f3917-7900-4ce8-ad90-adf0d53c0985&pd_rd_wg=ZdwWv&pf_rd_r=TW4X6Z9K9C9T5CMEM2F3&pd_rd_r=d3ebd490-82ff-11e9-97ac-510cb5876d74. (Year: 2019).*

Primary Examiner — Cynthia Ramirez
Assistant Examiner — Michael A Maharajh

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,214,184 A * 10/1965 Kemm A61G 5/061
280/11
3,227,465 A * 1/1966 Massie A61G 5/061
188/85
3,896,949 A * 7/1975 Shipley B60P 3/127
280/402
4,045,044 A * 8/1977 Bierer A61G 5/10
128/202.13
4,457,551 A * 7/1984 Anthony A61G 3/0808
296/65.04
D286,626 S * 11/1986 Britz D12/128
D365,907 S * 1/1996 Mishler D12/128
5,772,234 A * 6/1998 Luo A61G 5/00
280/47.38
D409,120 S * 5/1999 Aughpin D12/128
D430,078 S * 8/2000 Ellis D12/128
6,648,343 B2 * 11/2003 Way A61G 5/061
280/250.1

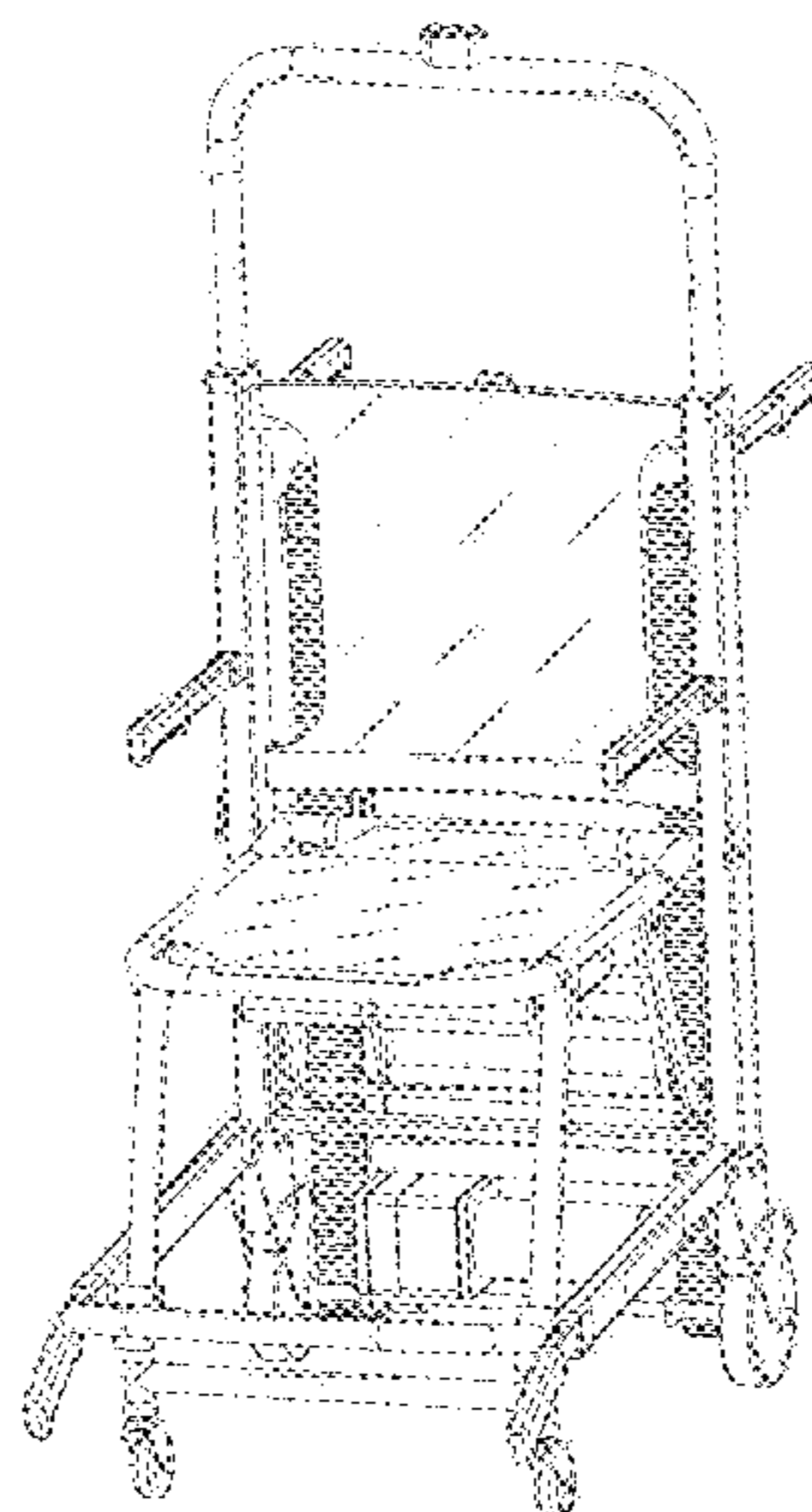
(57) **CLAIM**

I claim the ornamental design for an electric stair chair, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an electric stair chair showing my new design;
FIG. 2 is a front elevational view thereof;
FIG. 3 is a rear elevational view thereof;
FIG. 4 is a left side elevational view thereof;
FIG. 5 is a right side elevational view thereof;
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom plan view thereof.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

7,837,208 B2 * 11/2010 Willis A61H 3/04
280/642
D633,830 S * 3/2011 Derks D12/131
7,950,684 B2 * 5/2011 Borisoff A61G 5/08
280/304.1
D648,248 S * 11/2011 Braaten D12/133
D674,729 S * 1/2013 Goldstein D12/133
8,360,518 B2 * 1/2013 Braaten A61G 5/1054
297/183.6
8,419,047 B2 * 4/2013 Chen A61G 5/08
280/639
8,439,376 B2 * 5/2013 Willis A61H 3/04
280/642
8,469,431 B2 * 6/2013 Andersson A61G 3/0808
296/65.04
D693,745 S * 11/2013 Zhu D12/129
8,585,076 B2 * 11/2013 Thorne B62B 7/068
280/650
9,010,773 B2 * 4/2015 Horst B62B 7/008
280/47.38
9,027,953 B2 * 5/2015 Funakura B62B 7/08
280/650
9,039,032 B2 * 5/2015 Saville B62B 7/10
280/650
D749,465 S * 2/2016 Reaux D12/133
D751,468 S * 3/2016 Stryker D12/131
D754,034 S * 4/2016 Wang D12/130
D754,568 S * 4/2016 Wang D12/130

D765,561 S * 9/2016 Reaux D12/133
D766,781 S * 9/2016 Knopow D12/130
D789,256 S * 6/2017 Kutsch D12/131
D795,753 S * 8/2017 Wang D12/133
D801,231 S * 10/2017 Wang D12/130
D808,868 S * 1/2018 Cheng D12/128
D813,106 S * 3/2018 Hopkins D12/129
D815,992 S * 4/2018 Augustijn D12/130
9,962,302 B2 * 5/2018 Lau A61G 5/061
D819,503 S * 6/2018 Huang D12/130
D823,175 S * 7/2018 Theilmann D12/131
D826,795 S * 8/2018 Soliz D12/131
D829,137 S * 9/2018 Hommen D12/131
D833,920 S * 11/2018 Grant D12/133
D834,462 S * 11/2018 Kutsch D12/133
D838,215 S * 1/2019 Wu D12/131
D840,878 S * 2/2019 Lan D12/133
2008/0135077 A1 * 6/2008 Meyers A61H 3/04
135/66
2008/0202571 A1 * 8/2008 Meyers A61H 3/04
135/66
2008/0252043 A1 * 10/2008 Willis A61H 3/04
280/639
2009/0033052 A1 * 2/2009 Bradshaw A61H 3/04
280/87.021
2013/0292916 A1 * 11/2013 Nabeta A61H 3/04
280/47.371
2014/0084559 A1 * 3/2014 Fang A61H 3/04
280/47.38
2015/0182394 A1 * 7/2015 Kutsch A61G 5/10
280/33.991

* cited by examiner

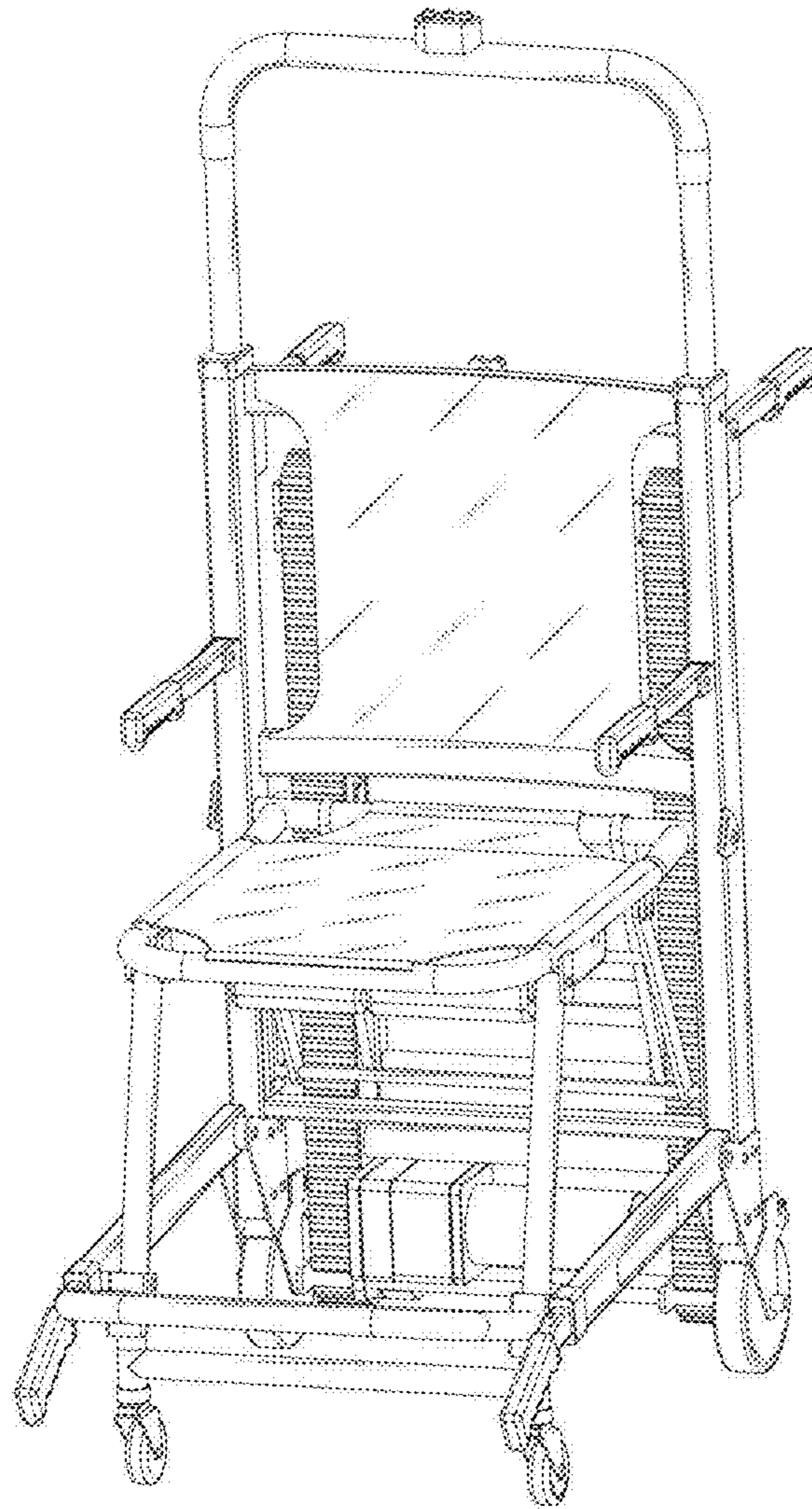


FIG.1

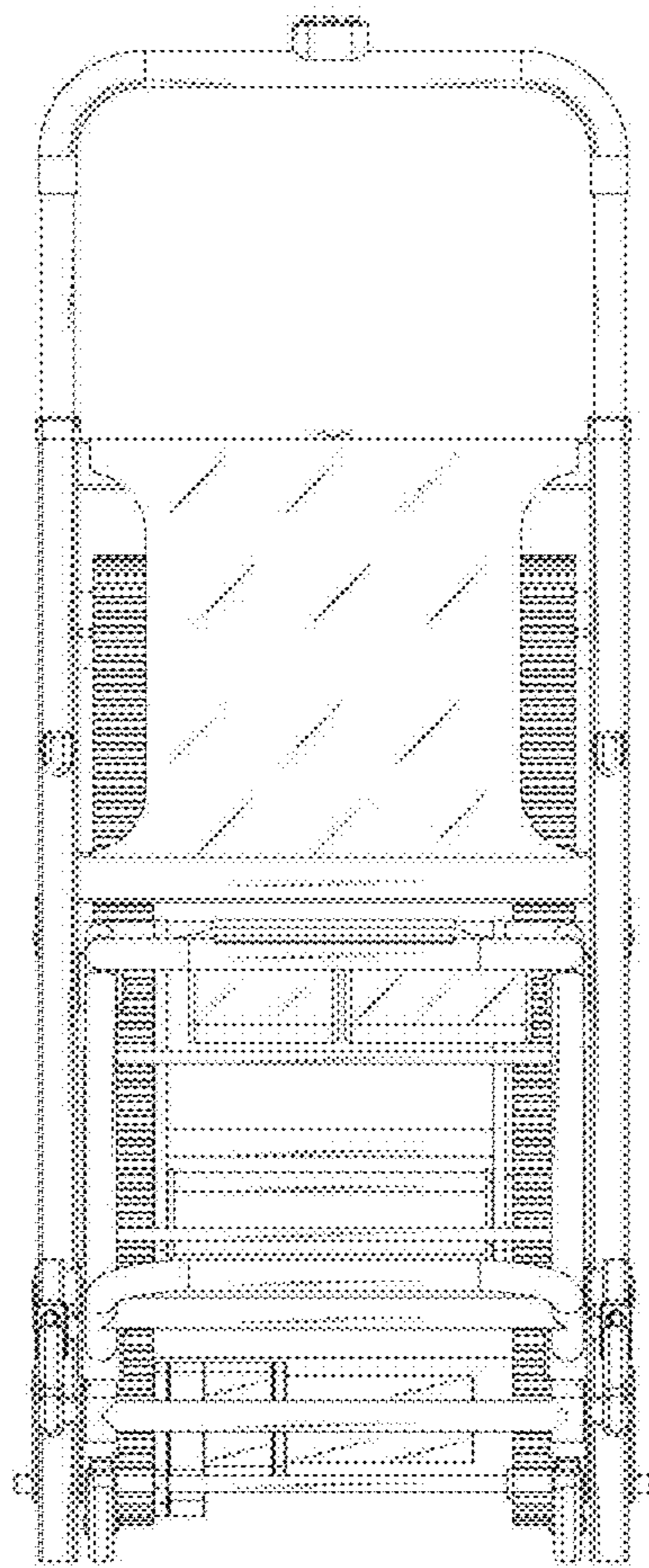


FIG.2

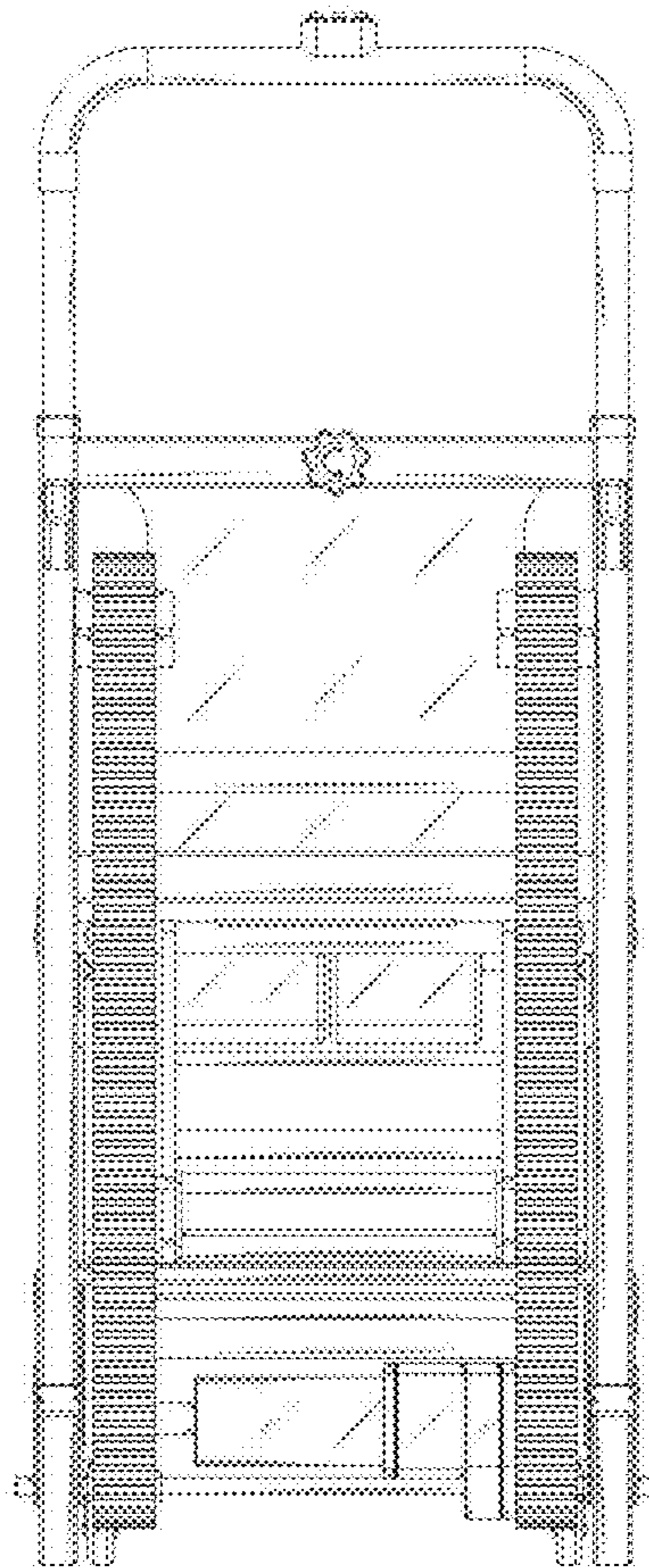


FIG.3

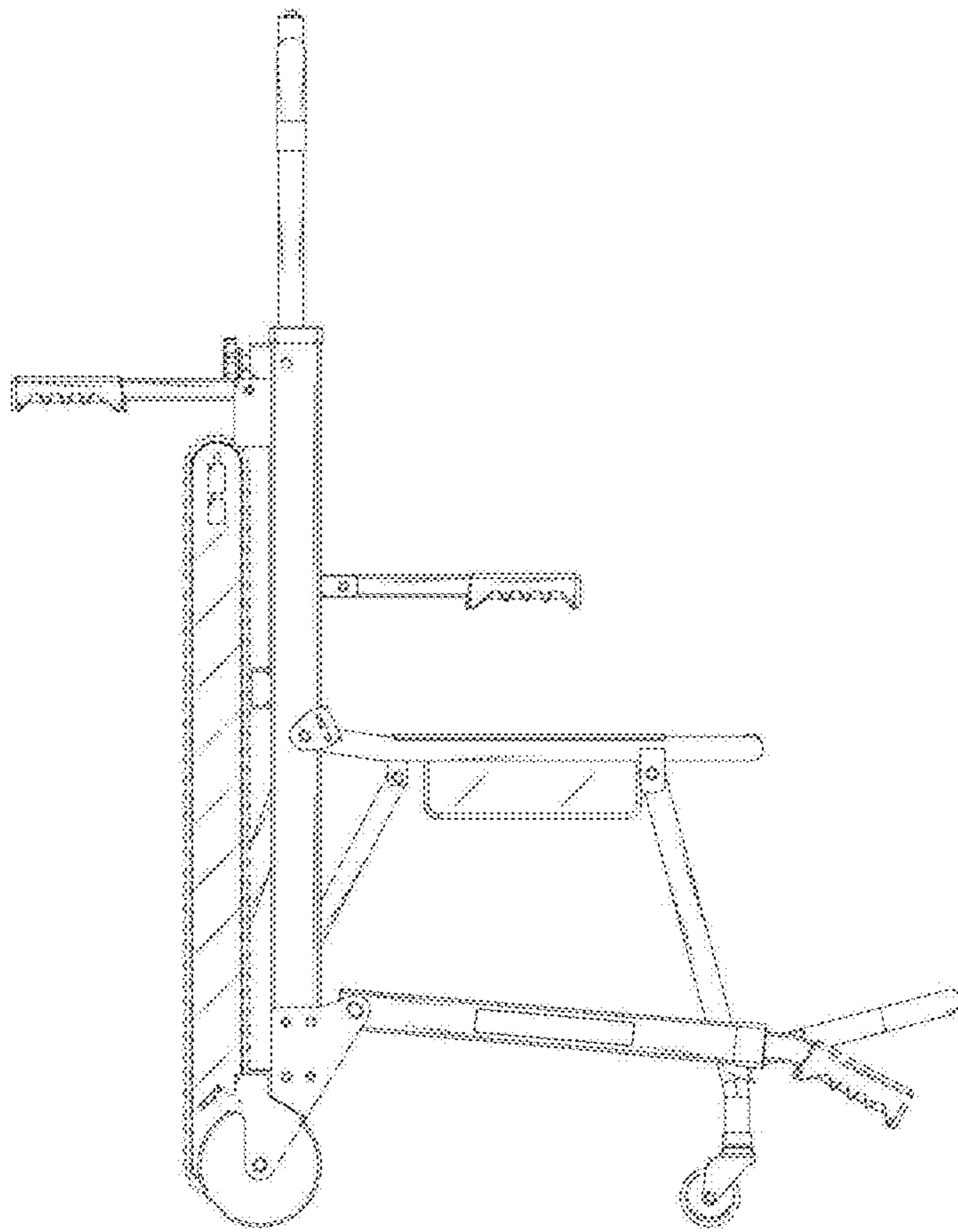


FIG.4

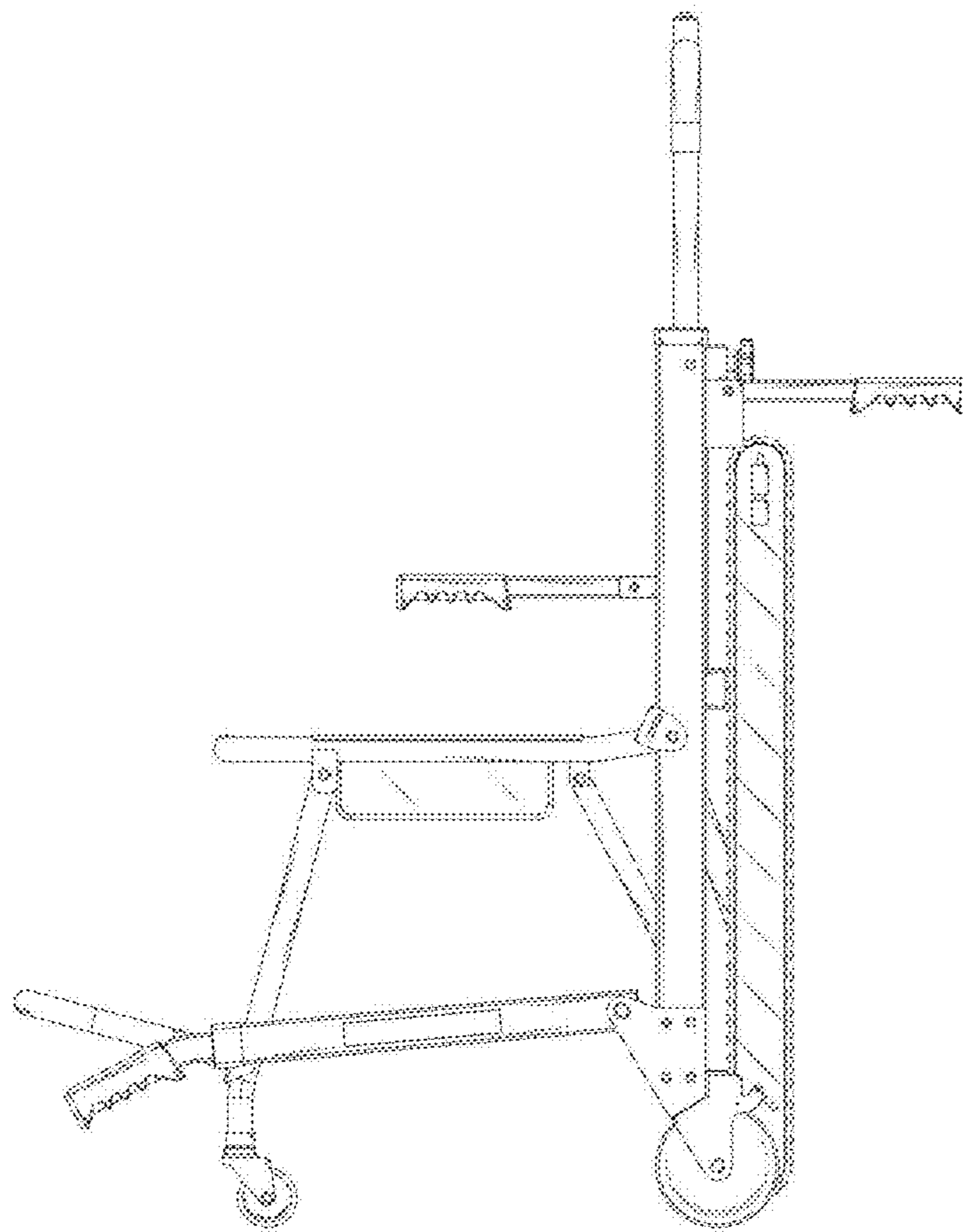


FIG.5

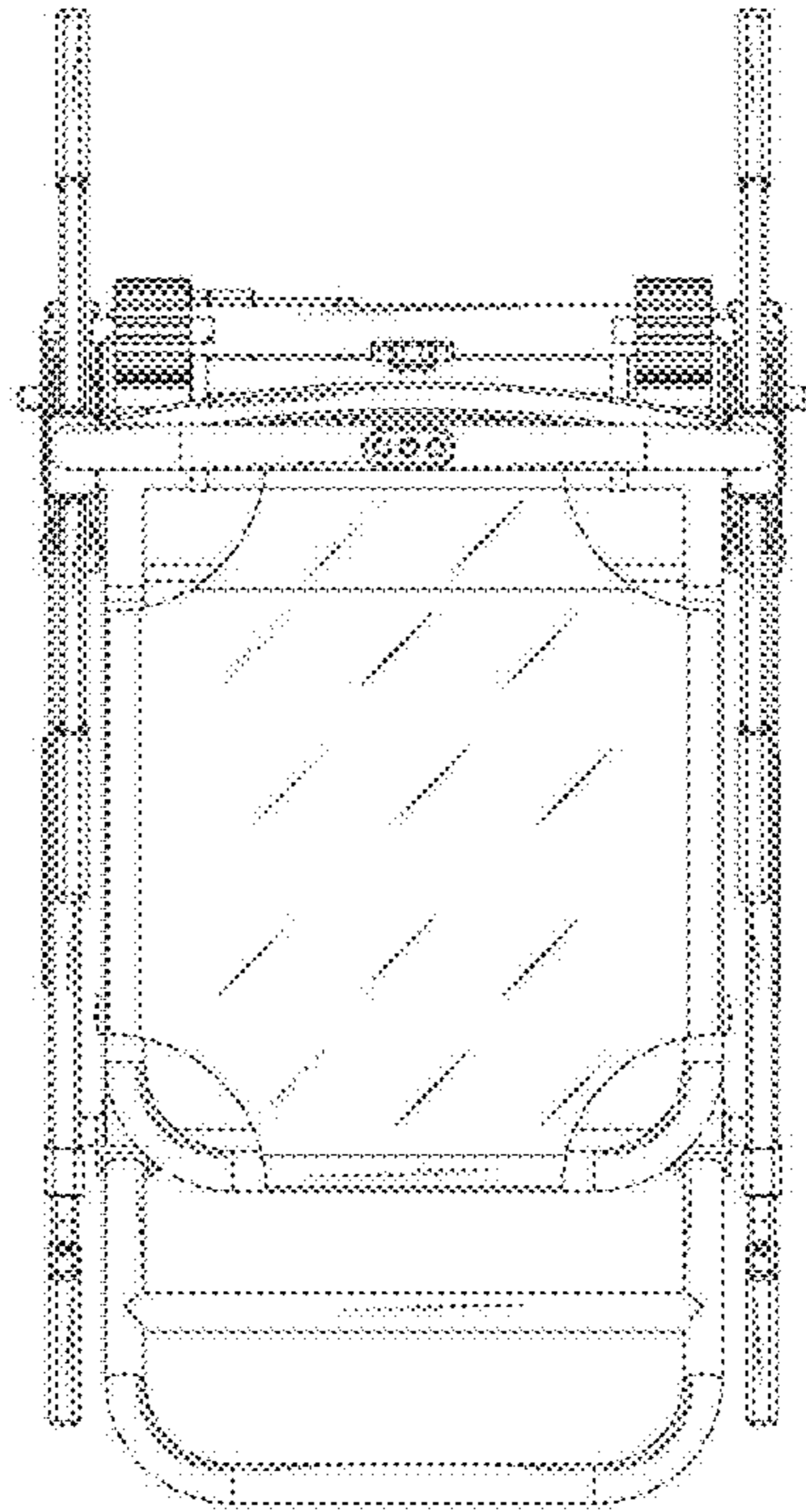


FIG.6

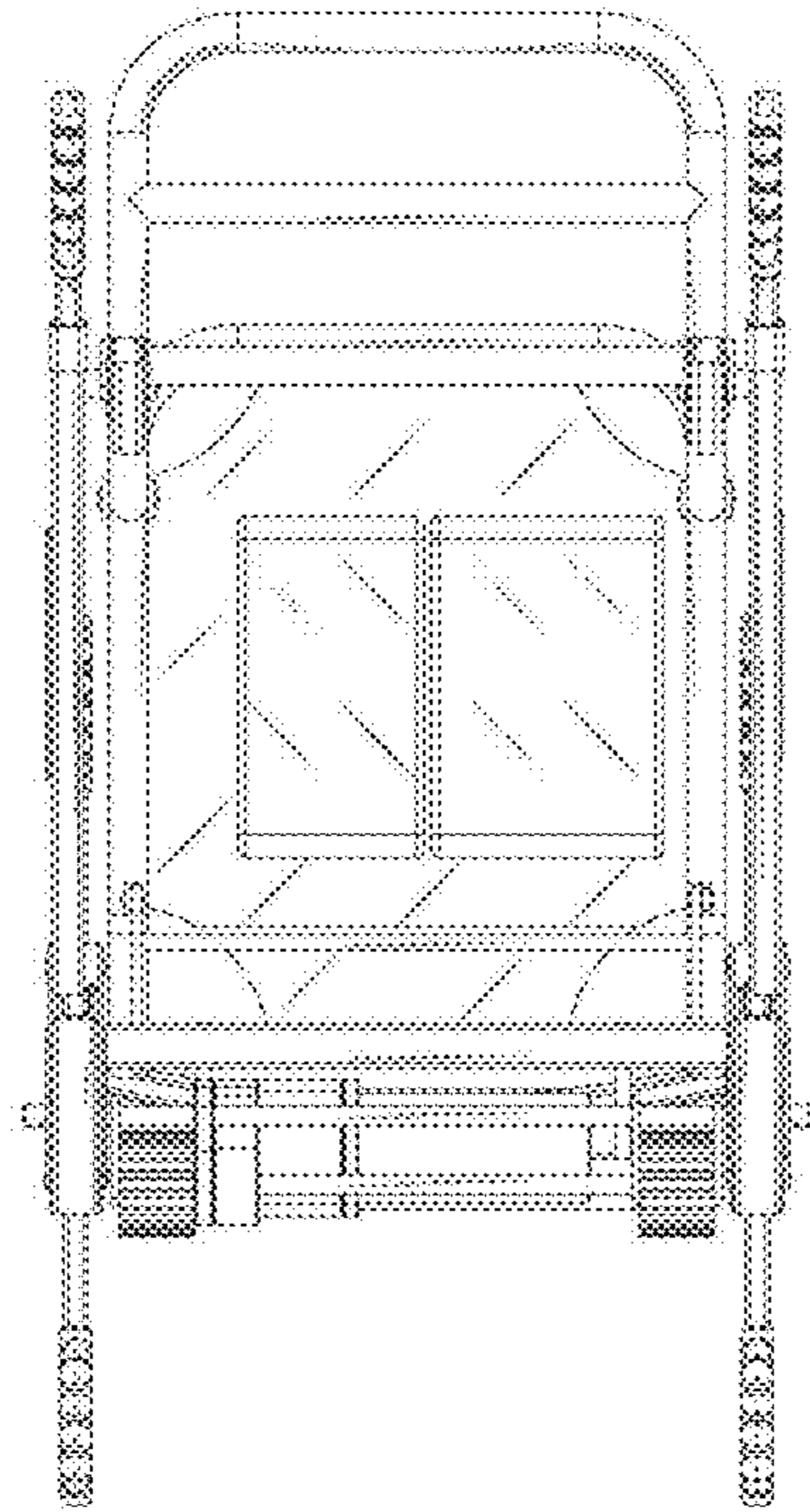


FIG.7