



US00D824533S

(12) **United States Design Patent** (10) **Patent No.:** **US D824,533 S**
Shimobayashi et al. (45) **Date of Patent:** **** Jul. 31, 2018**

(54) **MEDICAL CLEANING AND DISINFECTION APPARATUS**

(71) Applicant: **OLYMPUS CORPORATION**, Tokyo (JP)

(72) Inventors: **Koji Shimobayashi**, Tokyo (JP);
Chikayoshi Meguro, Tokyo (JP);
Hiromasa Akahori, Tokyo (JP)

(73) Assignee: **OLYMPUS CORPORATION**, Tokyo (JP)

(**) Term: **15 Years**

(21) Appl. No.: **29/579,003**

(22) Filed: **Sep. 27, 2016**

(30) **Foreign Application Priority Data**

Mar. 28, 2016 (JP) 2016-006696

(51) **LOC (11) Cl.** **24-01**

(52) **U.S. Cl.**
USPC **D24/217**

(58) **Field of Classification Search**
USPC D24/216-218, 227-232; D32/1, 25
CPC A61L 2/26; A61L 2/24; A61L 2/17; A61L 2/18; A61L 2/025; A61L 2202/122; A61L 2202/10; A61L 2202/11; A61L 2202/14; A61L 2202/23; A61L 2202/24; A61L 2202/182; A61B 1/123; A61B 2090/701
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,489,741 A * 12/1984 Ogasawara A61B 1/123
134/179
D313,679 S * 1/1991 Sakamoto D32/6
D347,696 S * 6/1994 Tominaga D24/217
D433,147 S * 10/2000 Florkey D24/217

(Continued)

OTHER PUBLICATIONS

2014 Endoscope Product Spotlights, posted at hponline.com, Nov. 2014 issue, [online], [site visited Nov. 14, 2017]. Available from Internet: URL:https://www.hponline.com/inside/2014-11/1411-EndoSpots.html.*

(Continued)

Primary Examiner — Anhdao Doan

Assistant Examiner — Mary Malley

(74) *Attorney, Agent, or Firm* — Scully, Scott, Murphy & Presser, P.C.

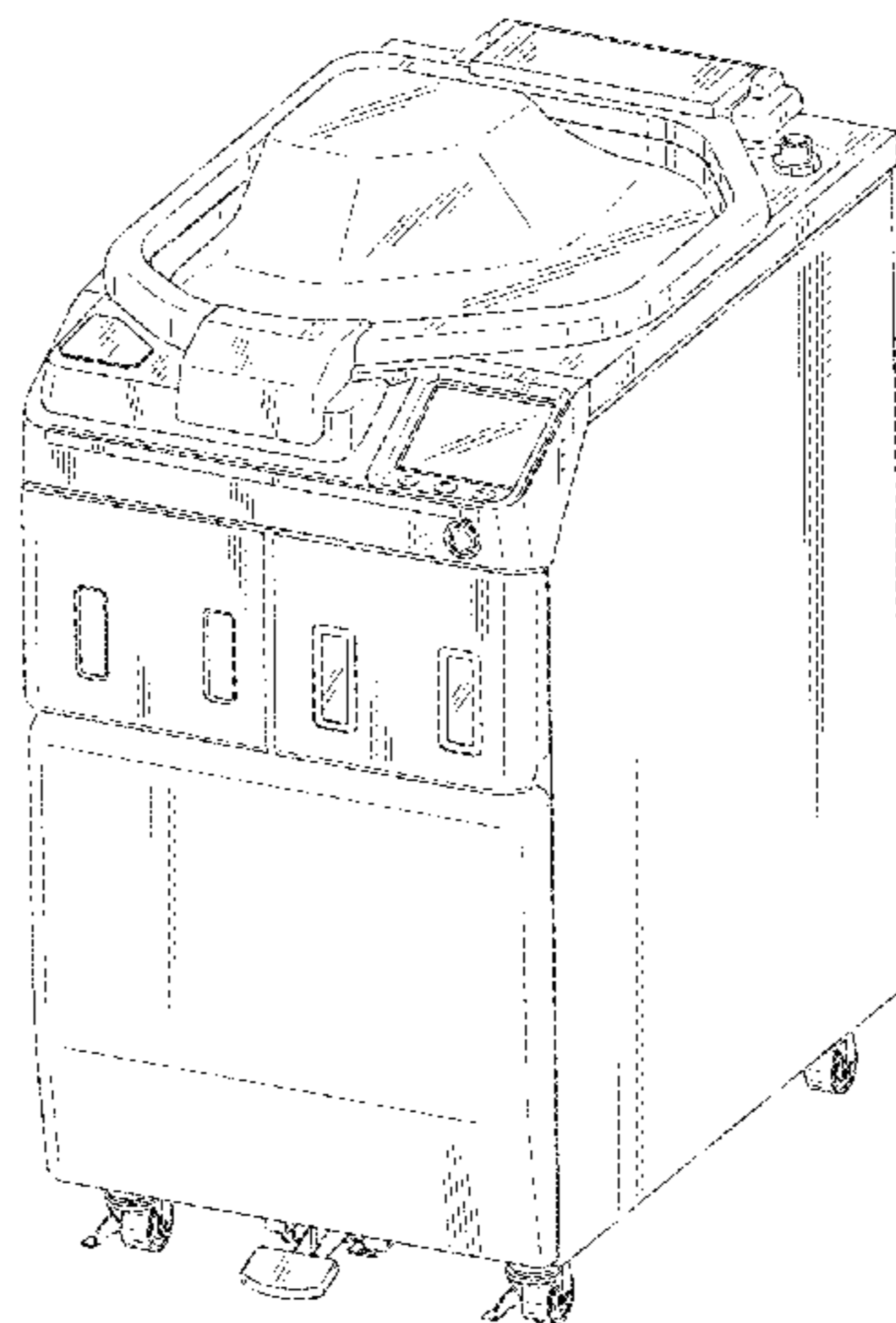
(57) **CLAIM**

The ornamental design for a medical cleaning and disinfection apparatus, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a medical cleaning and disinfection apparatus, showing our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a top view thereof;
FIG. 5 is a bottom view thereof;
FIG. 6 is a left side view thereof;
FIG. 7 is a right side view thereof;
FIG. 8 is an enlarged sectional view, taken along line 8-8 in FIG. 2 of a portion thereof indicated by line a-a in FIG. 7;
FIG. 9 is an enlarged sectional view, taken along line 9-9 in FIG. 2 of a portion thereof indicated by line b-b in FIG. 7; and,
FIG. 10 is an enlarged sectional view, taken along line 10-10 in FIG. 4 of a portion thereof indicated by line c-c in FIG. 2.
The broken lines show portions of the medical cleaning and disinfection apparatus that form no part of the claimed design.

1 Claim, 9 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D546,473 S * 7/2007 Xu D24/217
 D560,814 S * 1/2008 Briussell D24/217
 D711,605 S * 8/2014 Jo D32/25
 9,278,149 B2 * 3/2016 Suzuki A61L 2/18
 D776,293 S * 1/2017 Cerasi D24/217
 2008/0115814 A1 * 5/2008 Hasegawa A61B 1/123
 134/56 R
 2008/0271270 A1 * 11/2008 Sawada A61B 90/70
 15/1
 2014/0256025 A1 * 9/2014 Esquenet C11D 3/38645
 435/264
 2014/0326282 A1 * 11/2014 Kawachi A61B 19/34
 134/99.1
 2016/0302654 A1 * 10/2016 Ogawa B08B 3/102
 2017/0036253 A1 * 2/2017 Lukac A61L 2/0029

OTHER PUBLICATIONS

Olympus Endoscope Reprocessing With OER-Pro, posted at
 youtube.com, posted on Feb. 12, 2016, [online], [site visited Nov.
 15, 2017]. Available from Internet: URL:[https://www.youtube.com/
 watch?v=WZqzlnekS2M](https://www.youtube.com/watch?v=WZqzlnekS2M).*

* cited by examiner

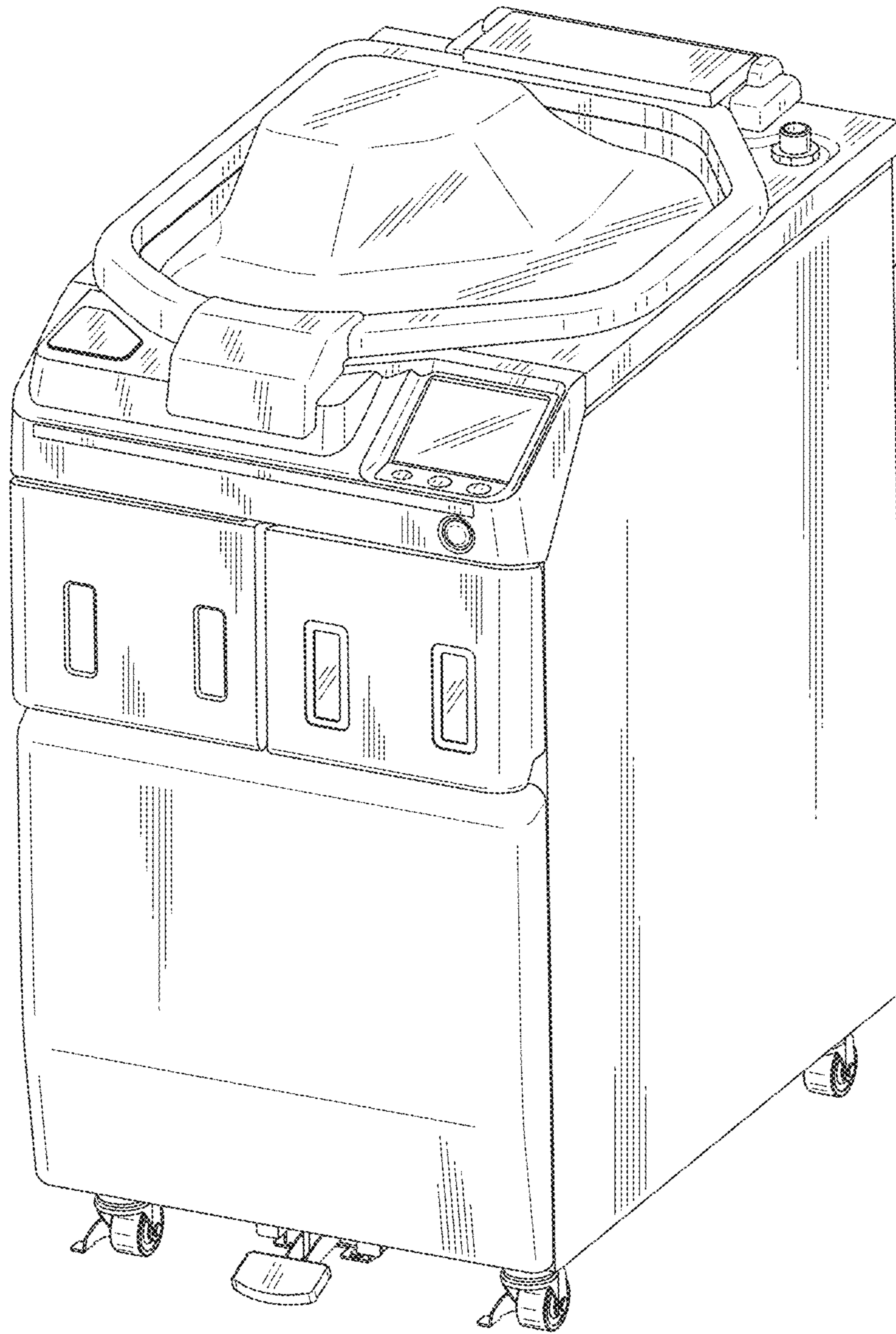


Fig. 1

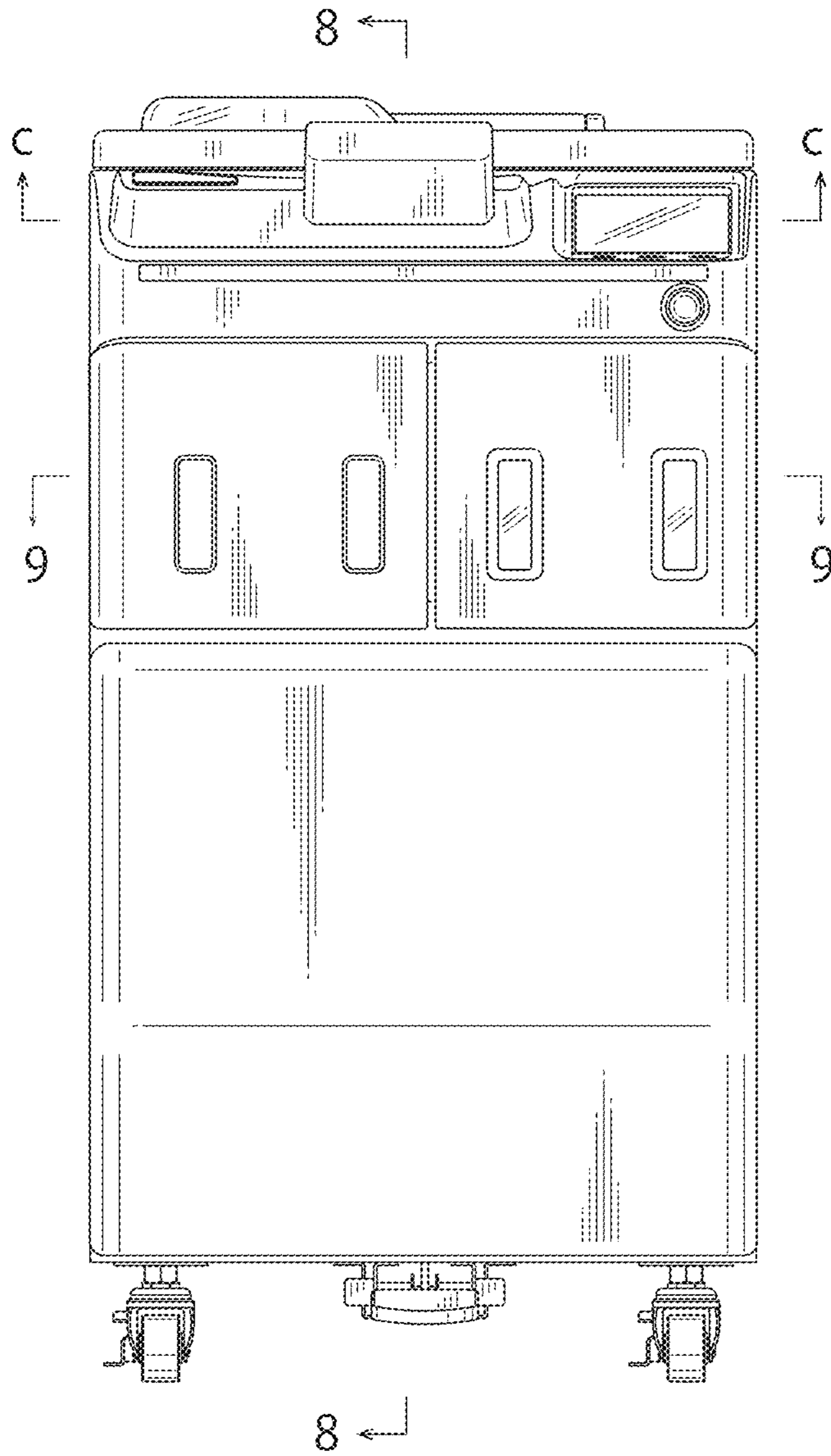


Fig.2

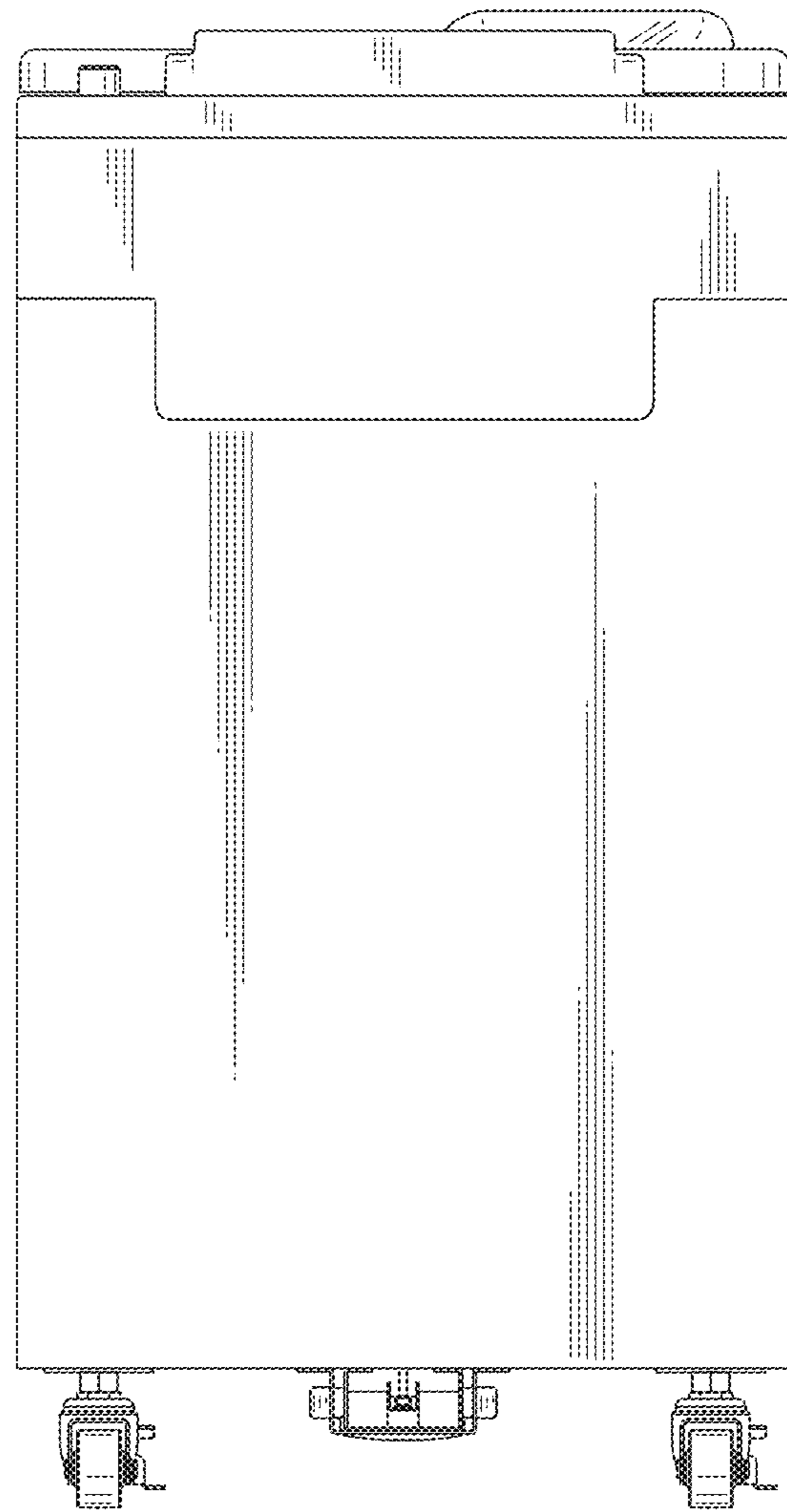


Fig. 3

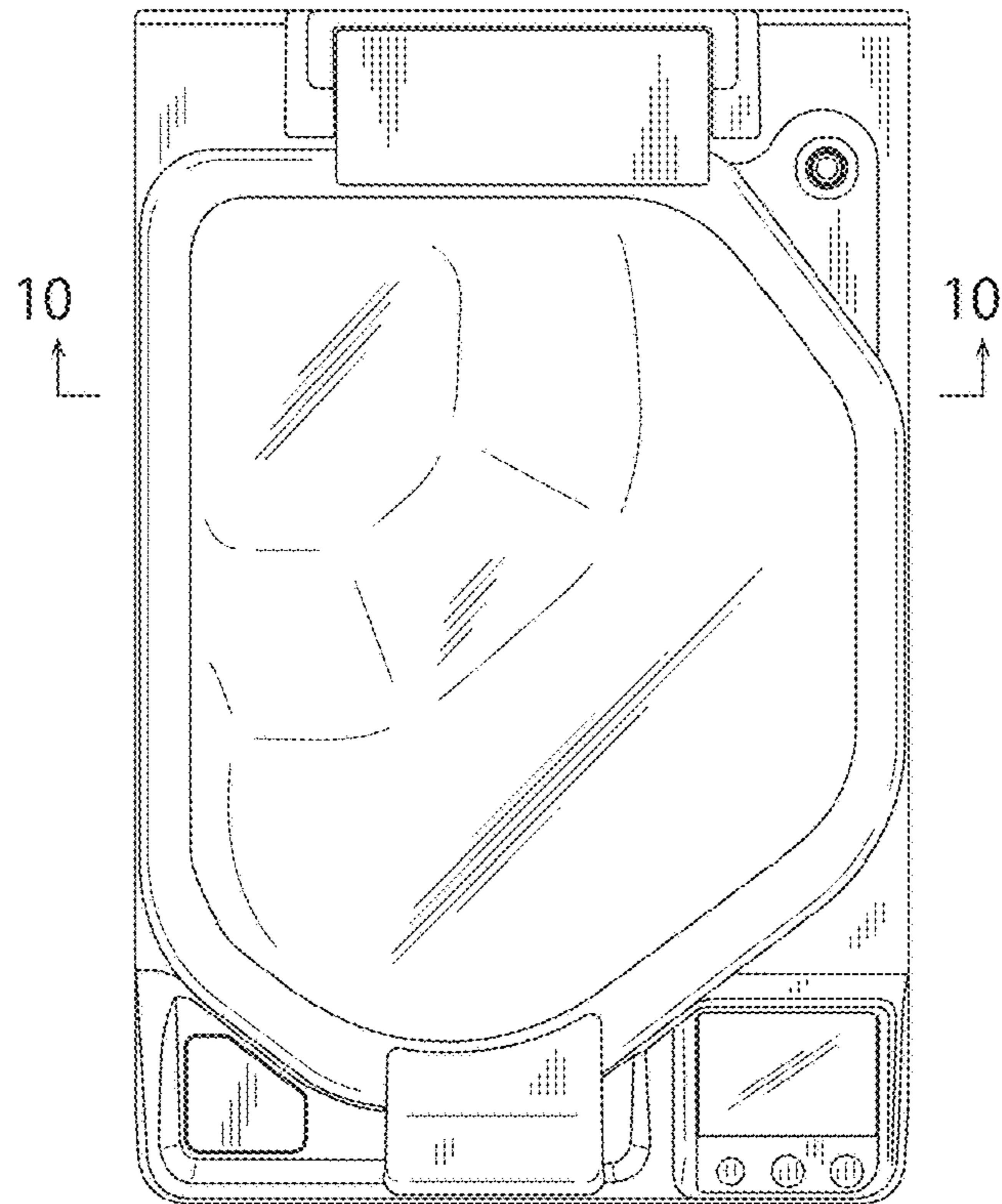


Fig. 4

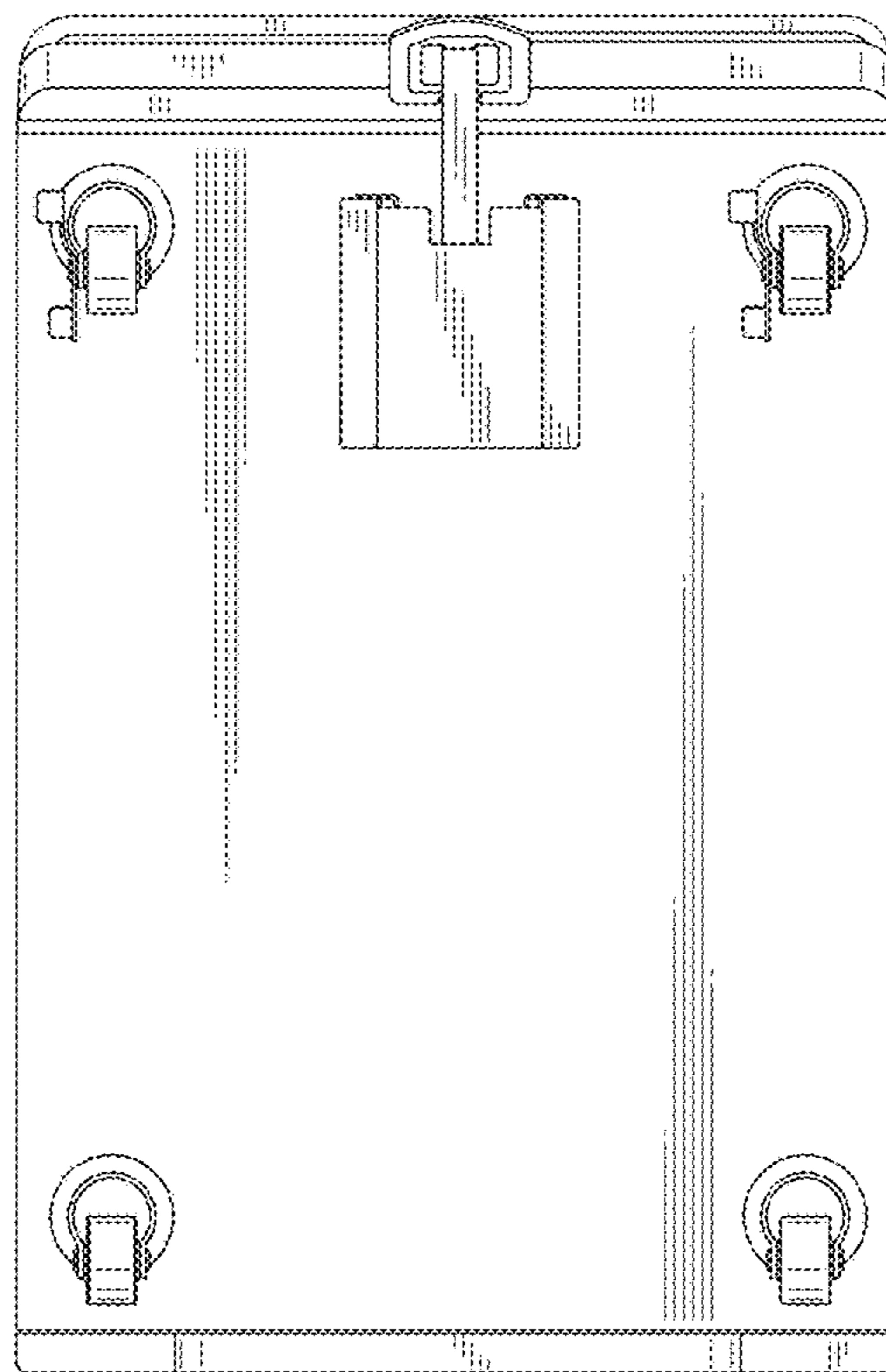


Fig. 5

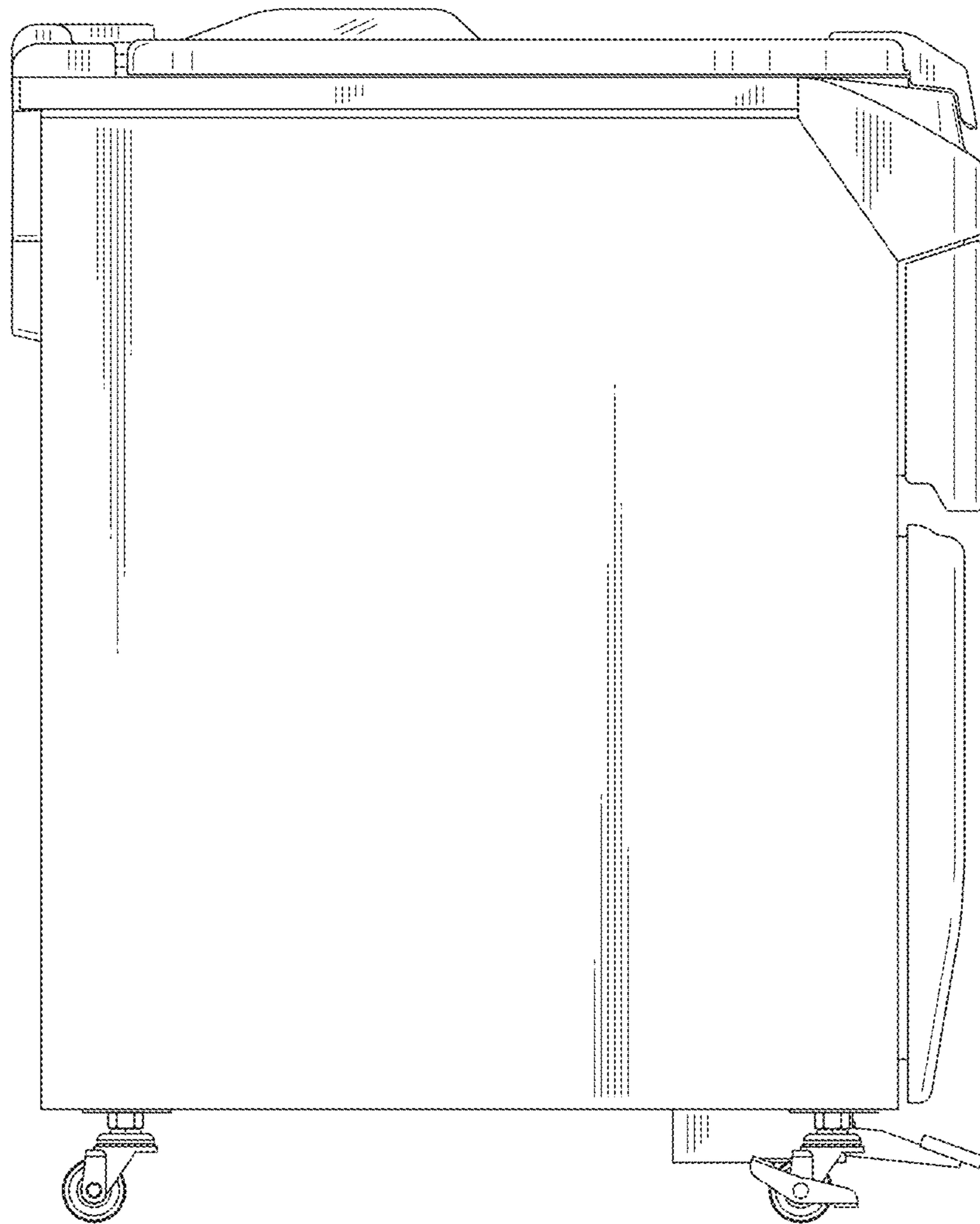


Fig. 6

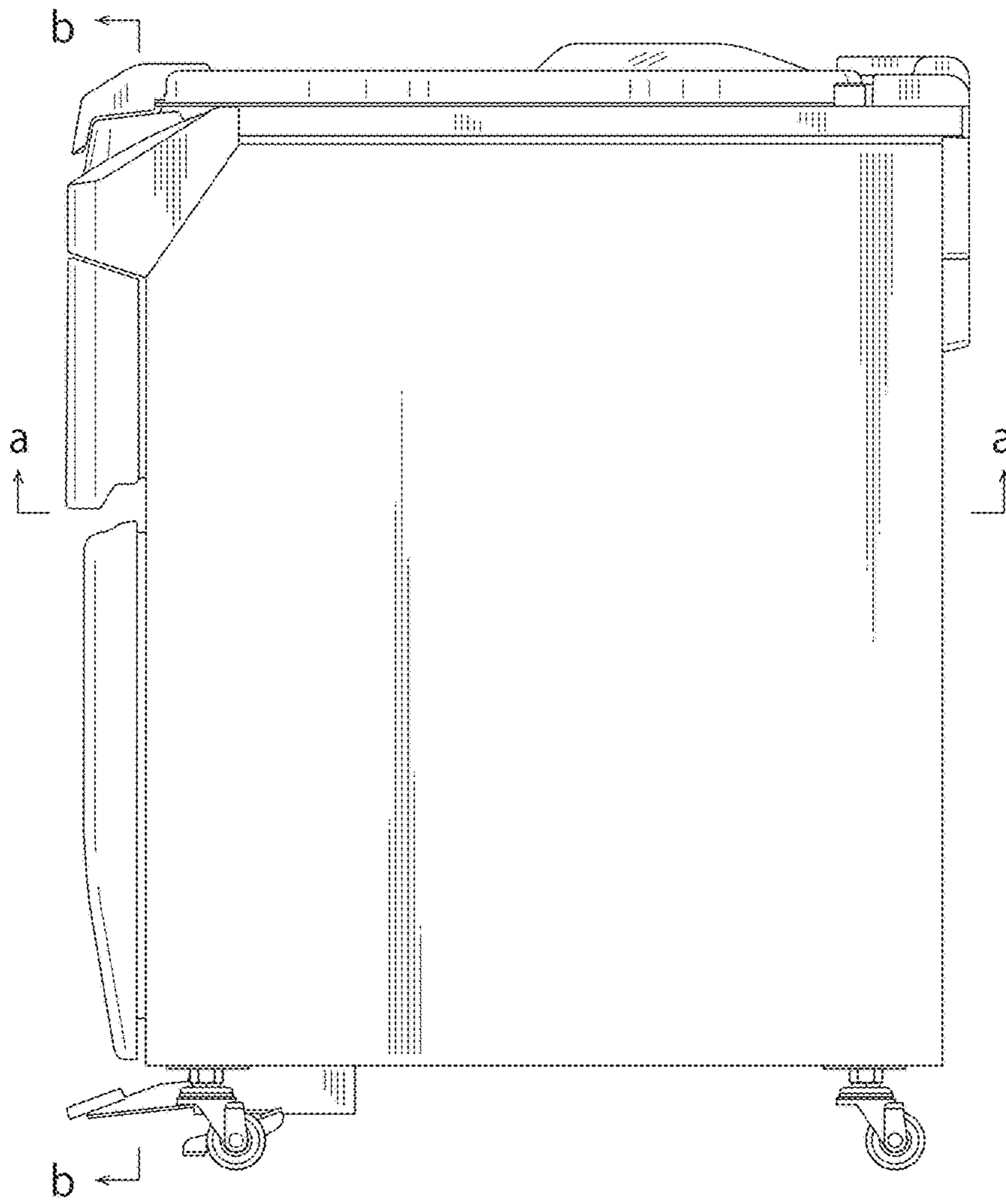


Fig. 7

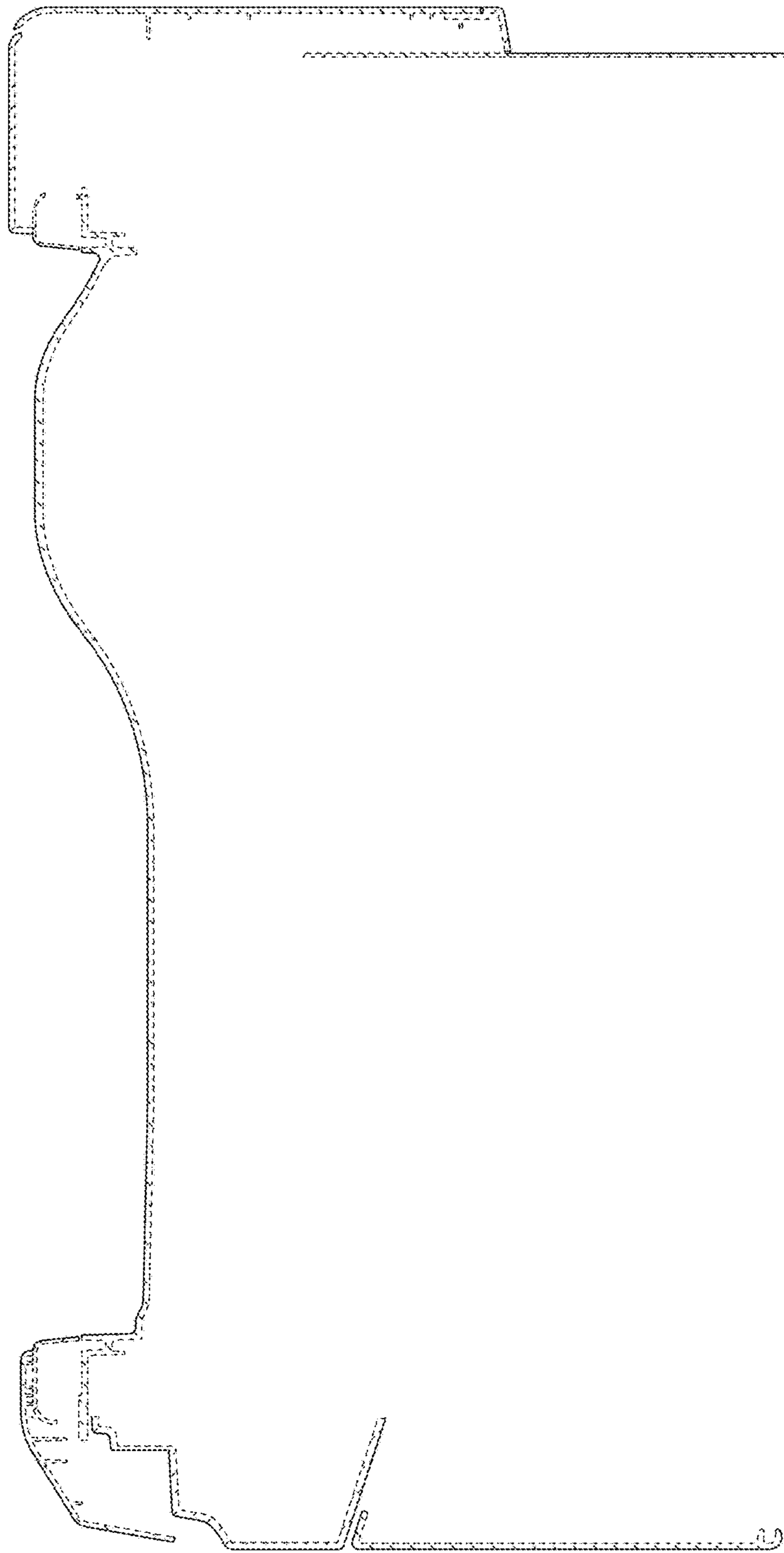


Fig. 8

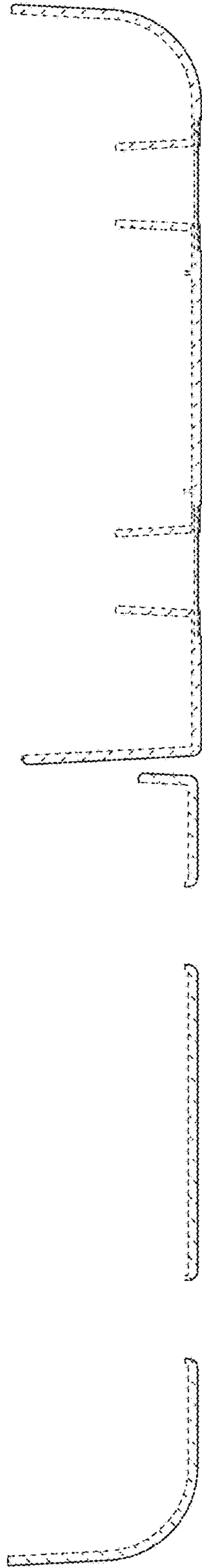


Fig. 9

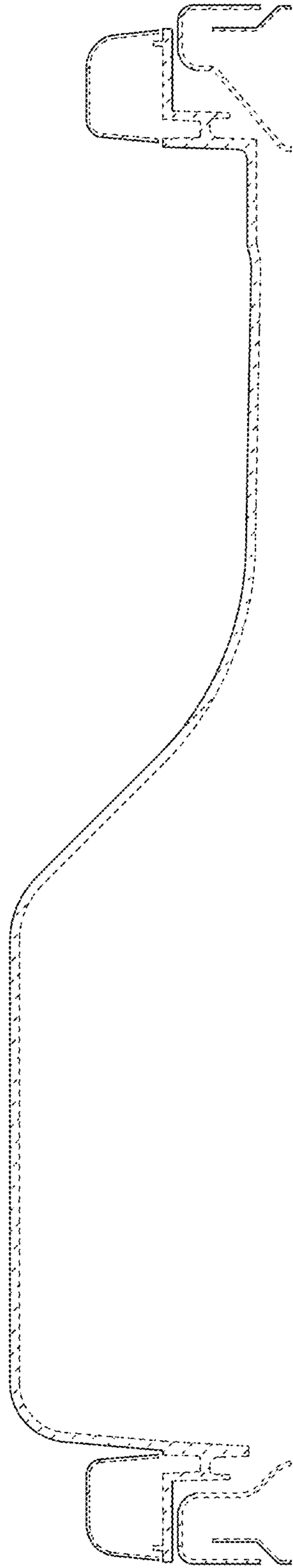


Fig. 10