



US00D643914S

(12) **United States Design Patent**
Endo et al.(10) **Patent No.:** US D643,914 S
(45) **Date of Patent:** ** Aug. 23, 2011(54) **COLLECTING DEVICE FOR SUBSTANCES
FLOATING IN AIR**(75) Inventors: **Yoshiya Endo**, Amagasaki (JP); **Yuichi Inatomi**, Amagasaki (JP); **Mitsuo Ishizuka**, Amagasaki (JP)(73) Assignee: **Hitachi Plant Technologies, Ltd.**,
Toshima-Ku (JP)(**) Term: **14 Years**(21) Appl. No.: **29/347,851**(22) Filed: **Jun. 24, 2010**(30) **Foreign Application Priority Data**

Apr. 5, 2010 (JP) 2010-008539

(51) **LOC (9) Cl.** **23-04**(52) **U.S. Cl.** **D23/364**(58) **Field of Classification Search** D23/364,
D23/355, 356, 359, 360, 366, 369, 332, 333,
D23/335, 342, 351, 365; 422/120, 122; 55/356,
55/473, 504, 429; 96/97; D14/188, 170,
D14/172; 261/DIG. 17, DIG. 65, DIG. 88,
261/DIG. 31; D18/34.6; 62/285; D34/24;
D32/21

See application file for complete search history.

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L.L.P.(57) **CLAIM**

The ornamental design for a collecting device for substances floating in air, as shown and described.

DESCRIPTION

FIG. 1 is a front view of the present invention;

FIG. 2 is a rear view of the present invention;

FIG. 3 is a left side view of the present invention;

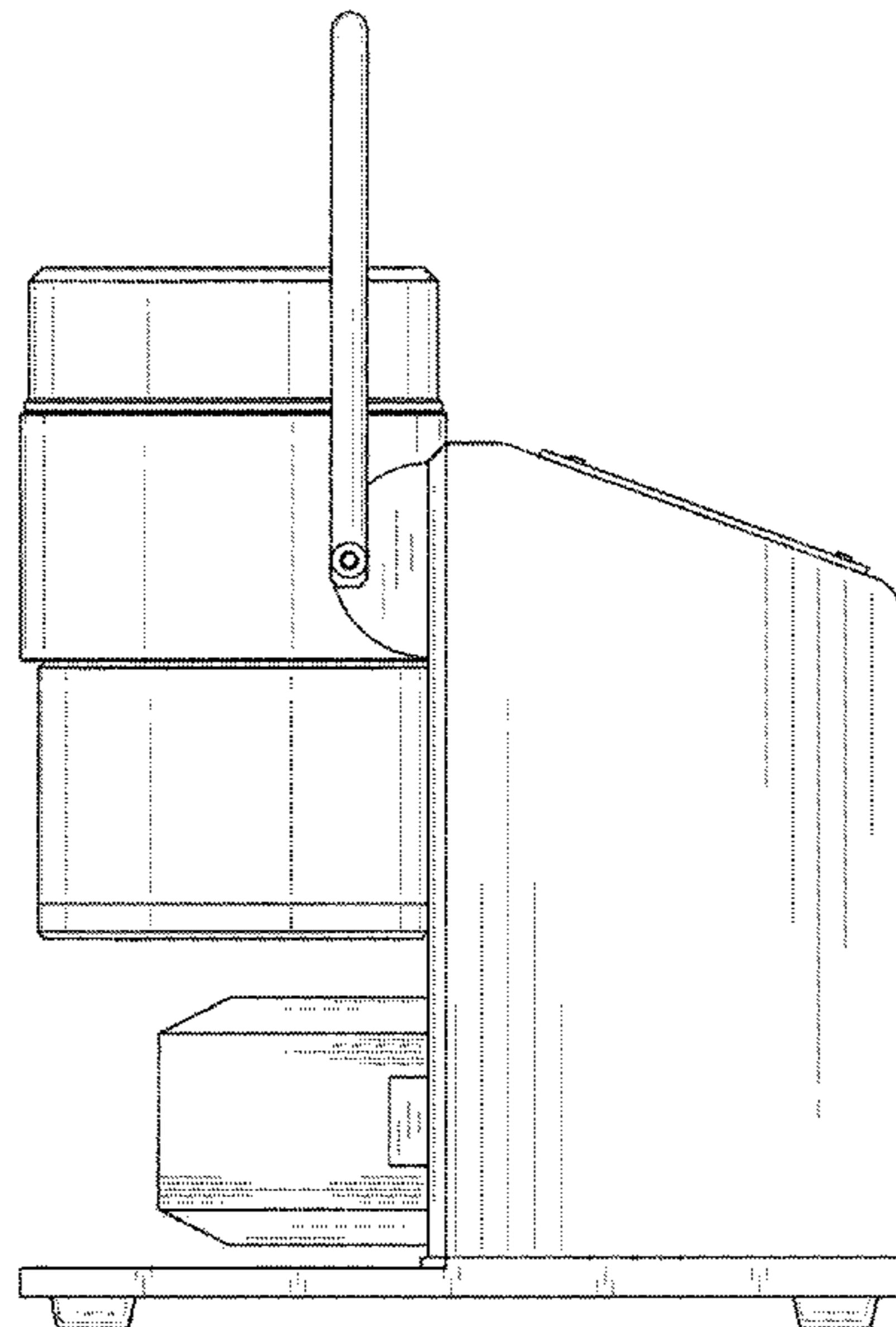
FIG. 4 is a right side view of the present invention;

FIG. 5 is a plan view of the present invention; and,

FIG. 6 is a bottom view of the present invention.

The portions of the drawings shown in broken lines form no part of the claimed design.

The article is for use in collecting device for substances floating in the air including microorganisms such as bacteria and fungi, chemical material, fine particles etc. When collecting such objects, a cover for a collector storage part of the article is removed and a collector provided with a collecting plate is set on a base with a carrier such as gelatin placed on the plate. After that the cover is placed back and air is suctioned through an air suction hole formed on the cover by use of a suction fan. The suctioned air is sprayed to the support so that the objects contained in the air are adhered to the support surface to be collected. The air sprayed to the support is discharged outside through the suction fan, a filter and an air permeability casing which covers the filter.

1 Claim, 6 Drawing Sheets

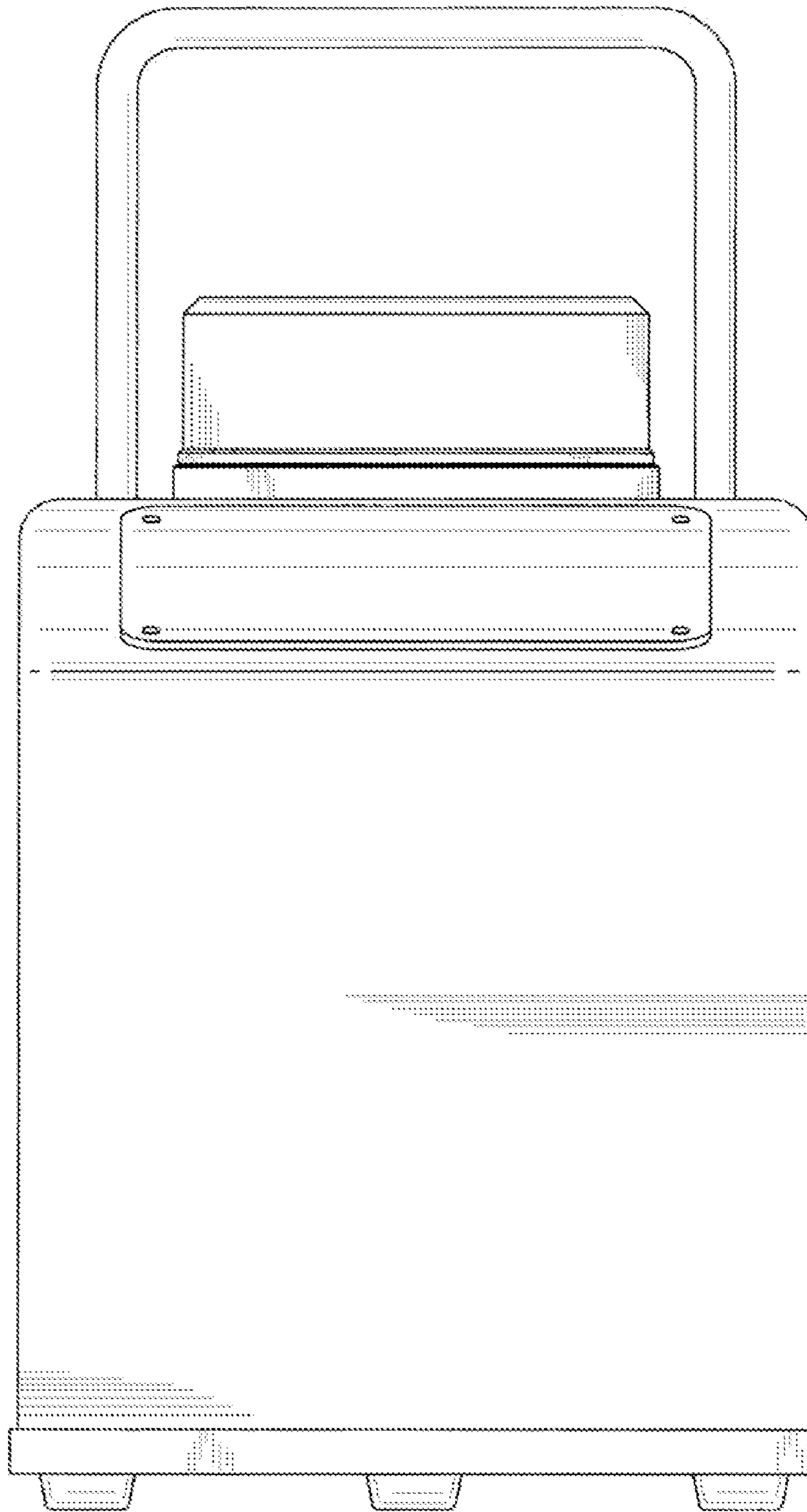
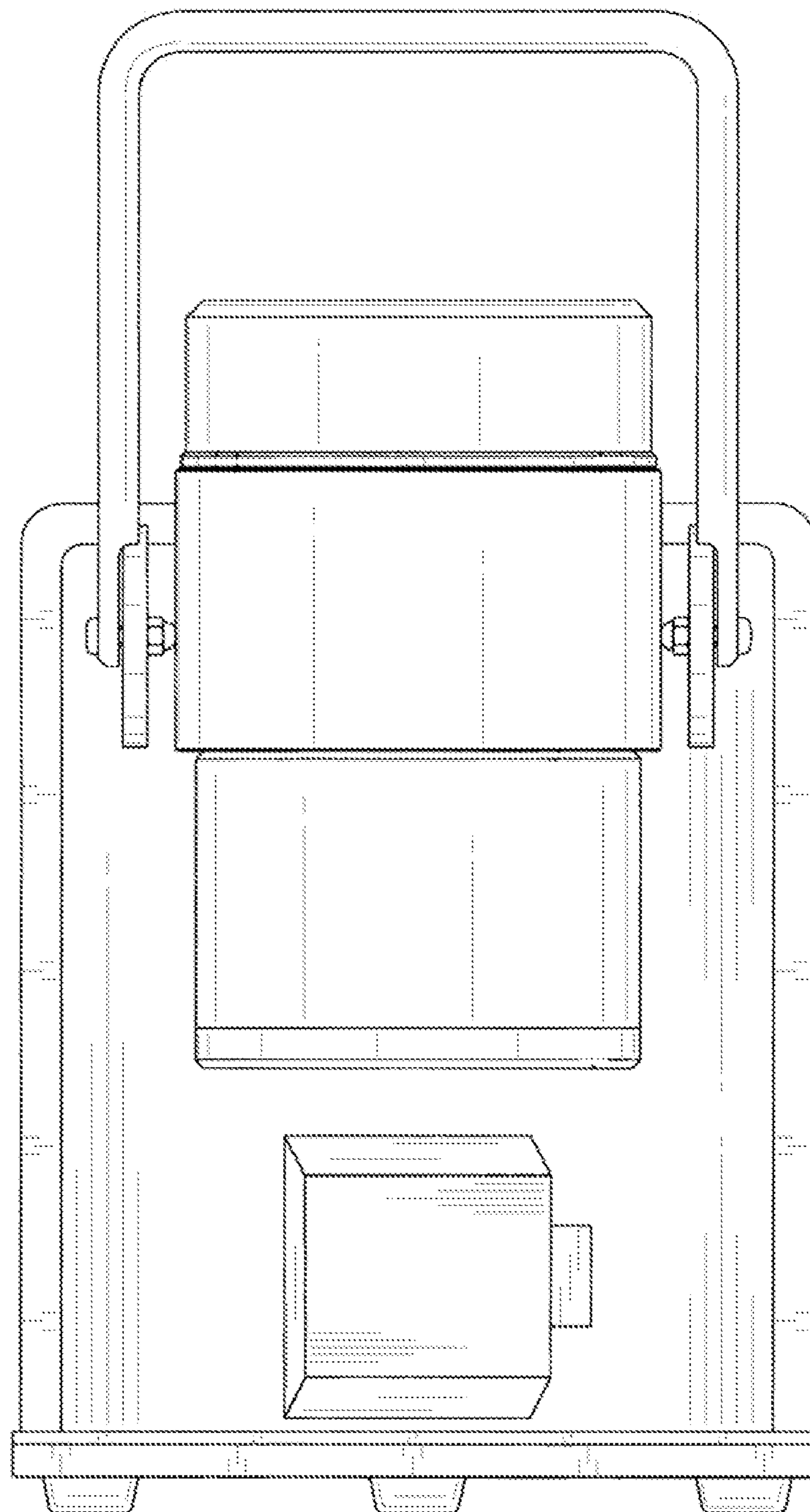
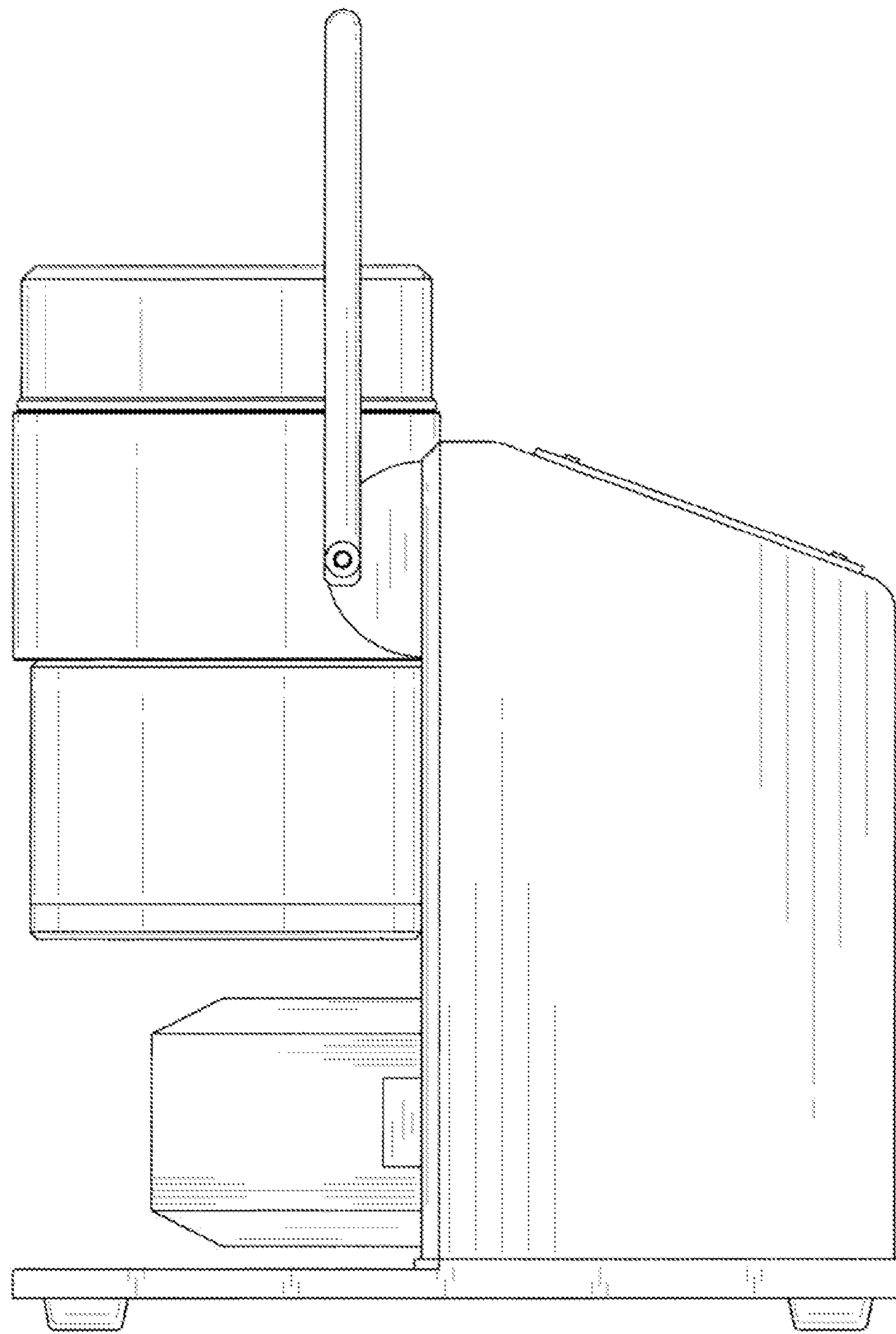


FIG. 1

**FIG. 2**

**FIG. 3**

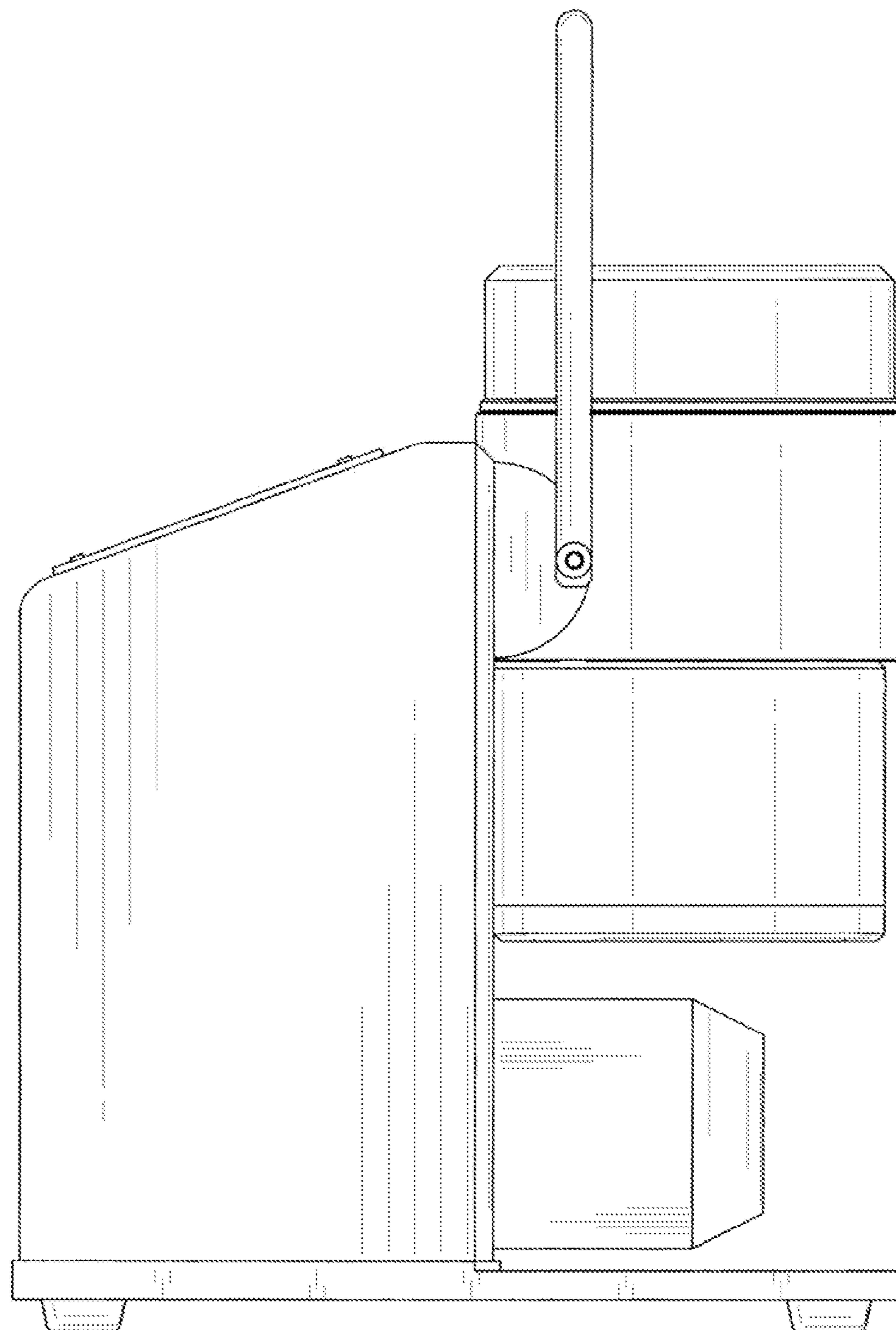


FIG. 4

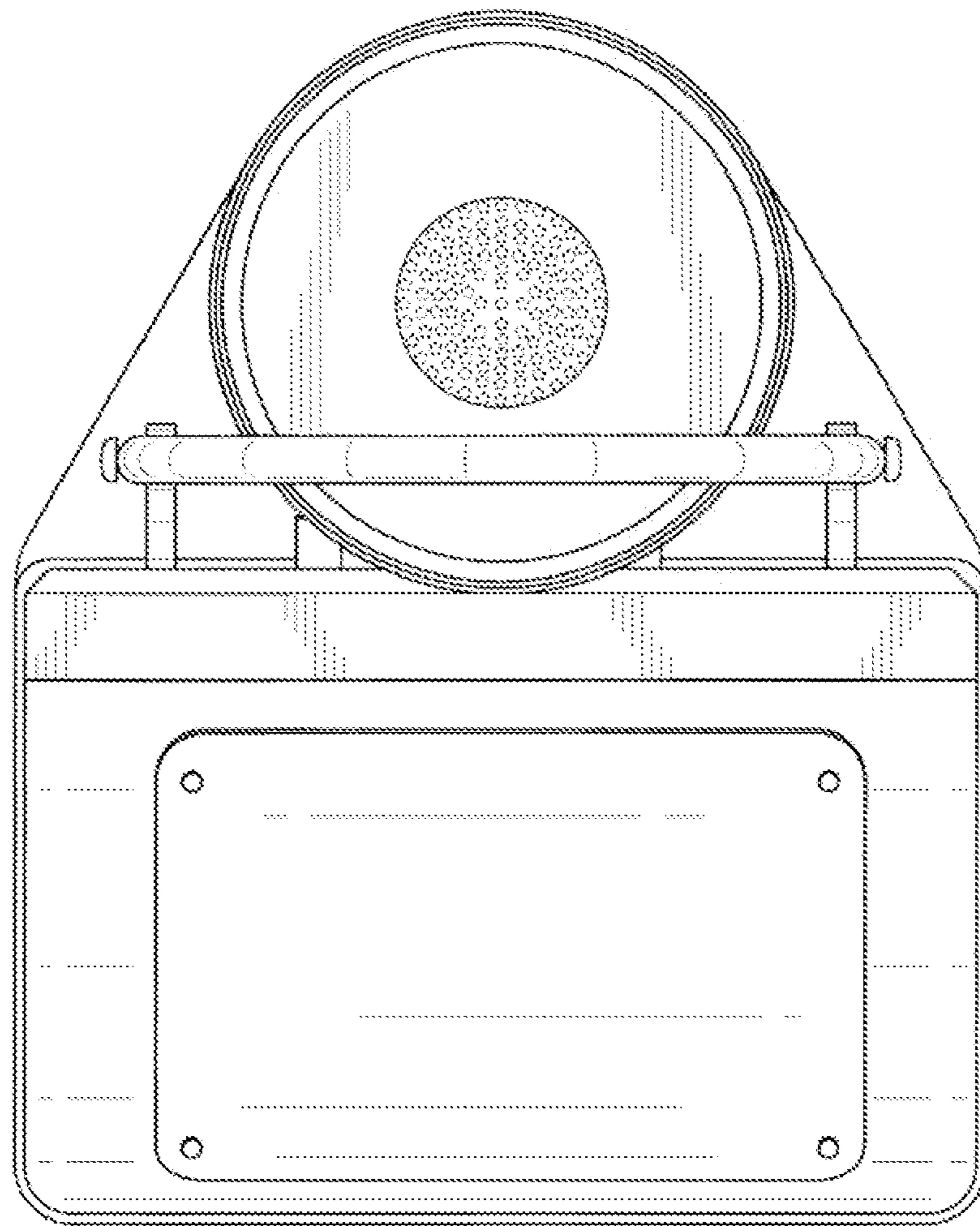


FIG. 5

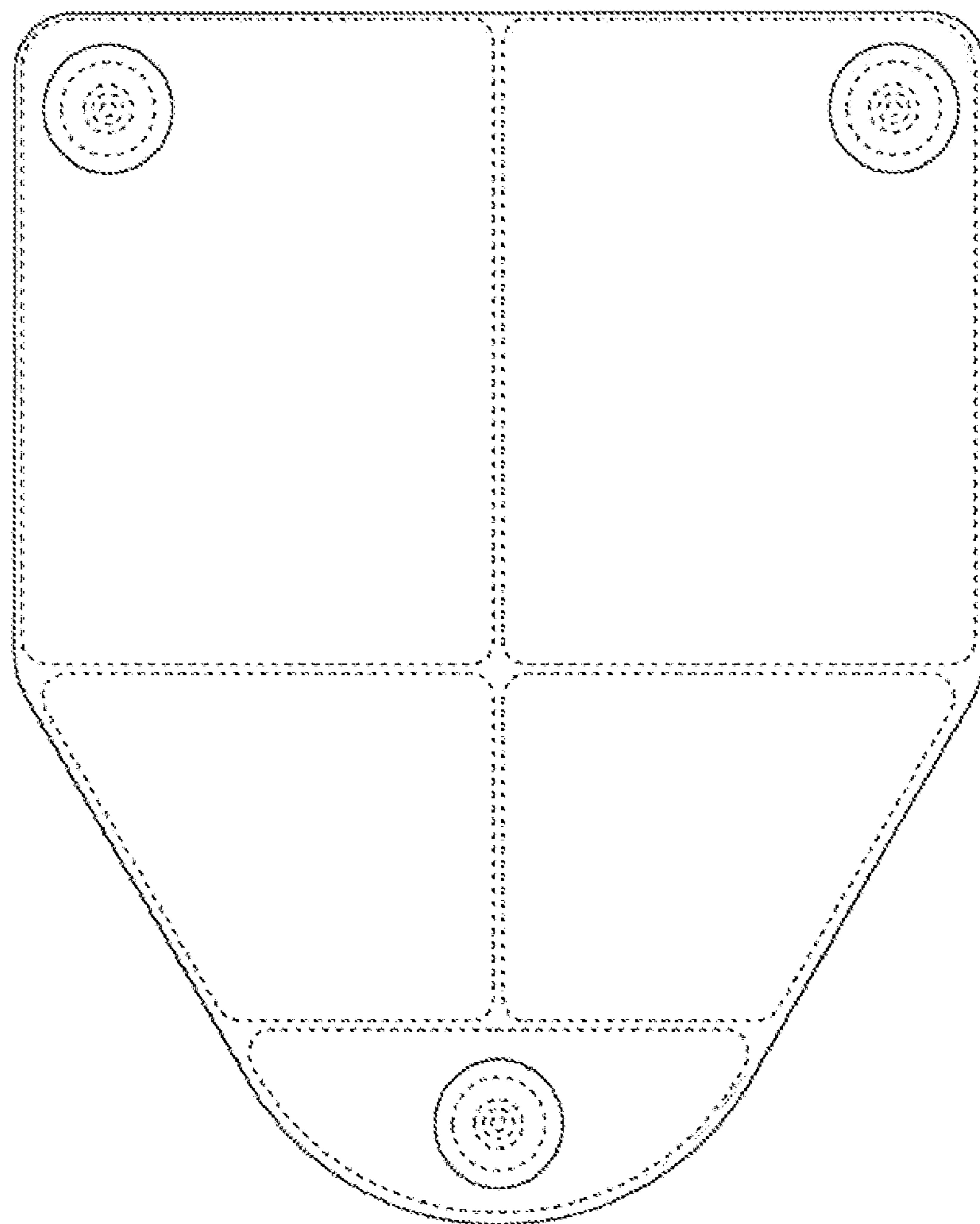


FIG. 6