



US00D686929S

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

(10) **Patent No.:** **US D686,929 S**
(45) **Date of Patent:** **** Jul. 30, 2013**

(54) **APPARATUS WITH INTEGRATED SENSOR FOR THE DETERMINATION OF FLUID PROPERTIES**

(75) Inventors: **Michael D. Rainer**, Burton, OH (US);
Peter J. Gillespie, Chagrin Falls, OH (US)

(73) Assignee: **The Mercury Iron and Steel Co.**,
Cleveland, OH (US)

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

(21) Appl. No.: **29/402,424**

(22) Filed: **Sep. 23, 2011**

(51) **LOC (9) Cl.** **10-04**

(52) **U.S. Cl.**
USPC **D10/96; D10/81**

(58) **Field of Classification Search**
USPC D10/46, 81, 96; 73/204.11, 861; 356/128
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D510,880 S 10/2005 Shapiro
D577,301 S * 9/2008 Johnson et al. D10/81
2011/0107845 A1* 5/2011 Gabriel et al. 73/861.11

OTHER PUBLICATIONS

U.S. Appl. No. 29/414,234, filed Feb. 27, 2012, titled "Apparatus With Integrated Sensor", Michael D. Rainer et al., in its entirety.

(Continued)

Primary Examiner — Antoine D Davis

(74) *Attorney, Agent, or Firm* — Ulmer & Berne LLP

(57) **CLAIM**

The ornamental design for an apparatus with integrated sensor for the determination of fluid properties, as shown and described.

DESCRIPTION

FIG. 1 is an isometric view of a first embodiment of the apparatus with integrated sensor for the determination of fluid properties;

FIG. 2 is a top plan view of the apparatus with integrated sensor for the determination of fluid properties of FIG. 1;

FIG. 3 is a front elevation view of the apparatus with integrated sensor for the determination of fluid properties of FIG. 1;

FIG. 4 is a rear elevation view of the apparatus with integrated sensor for the determination of fluid properties of FIG. 1;

FIG. 5 is a left side elevation view of the apparatus with integrated sensor for the determination of fluid properties of FIG. 1;

FIG. 6 is a right side elevation view of the apparatus with integrated sensor for the determination of fluid properties of FIG. 1;

FIG. 7 is an isometric view of a second embodiment of the apparatus with integrated sensor for the determination of fluid properties;

FIG. 8 is a top plan view of the apparatus with integrated sensor for the determination of fluid properties of FIG. 7;

FIG. 9 is a front elevation view of the apparatus with integrated sensor for the determination of fluid properties of FIG. 7;

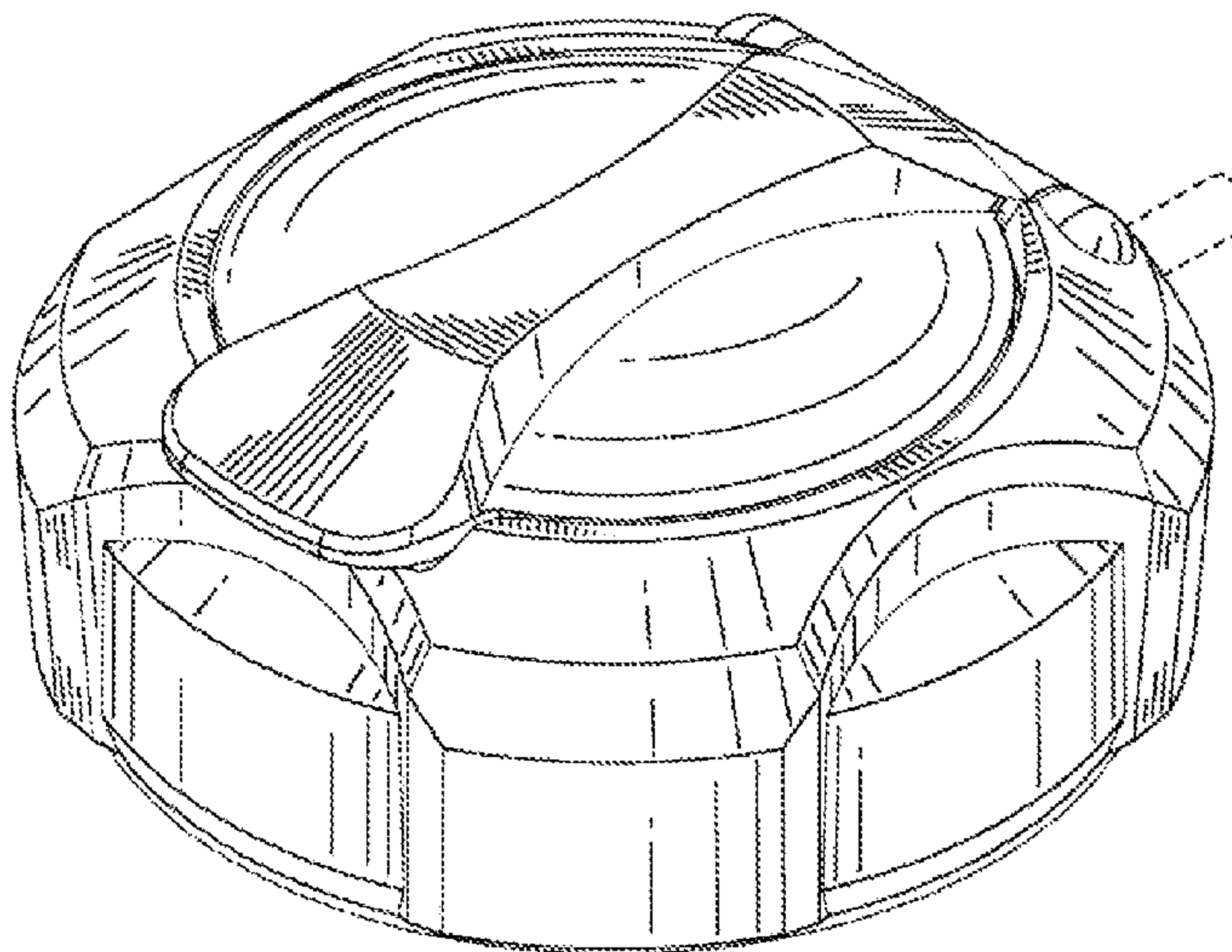
FIG. 10 is a rear elevation view of the apparatus with integrated sensor for the determination of fluid properties of FIG. 7;

FIG. 11 is a left side elevation view of the apparatus with integrated sensor for the determination of fluid properties of FIG. 7; and,

FIG. 12 is a right side elevation view of the apparatus with integrated sensor for the determination of fluid properties of FIG. 7.

The phantom lines and areas shown in the figures are for illustrative purposes only and form no part of the claimed design.

1 Claim, 7 Drawing Sheets



OTHER PUBLICATIONS

Pending U.S. Appl. No. 13/107,675; Titled: Methods and Apparatuses for Measuring Properties of a Substance in a Process Stream;

Filed: May 13, 2011; Inventors: Michael D. Rainer et al., in its entirety.

* cited by examiner

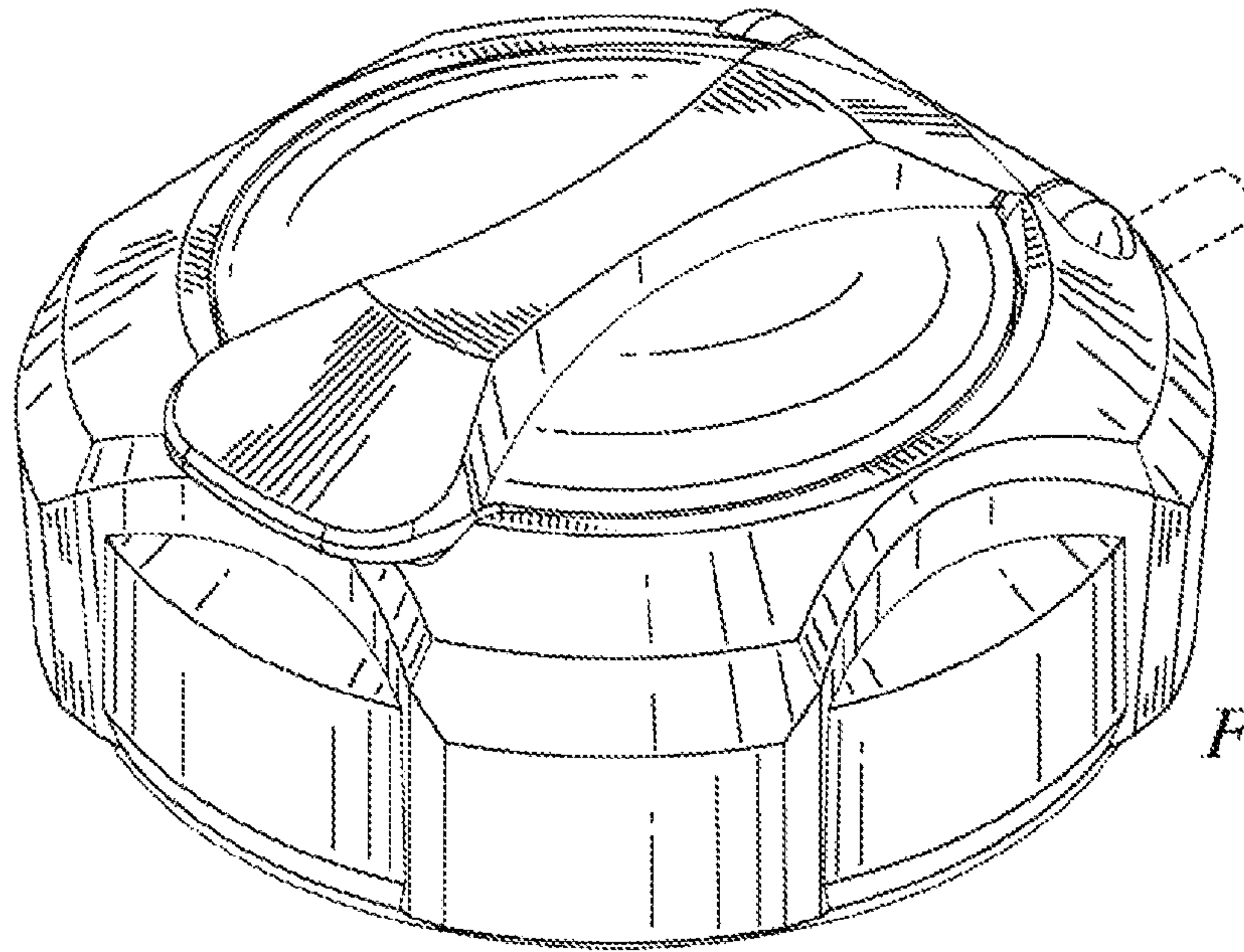


FIG. 1

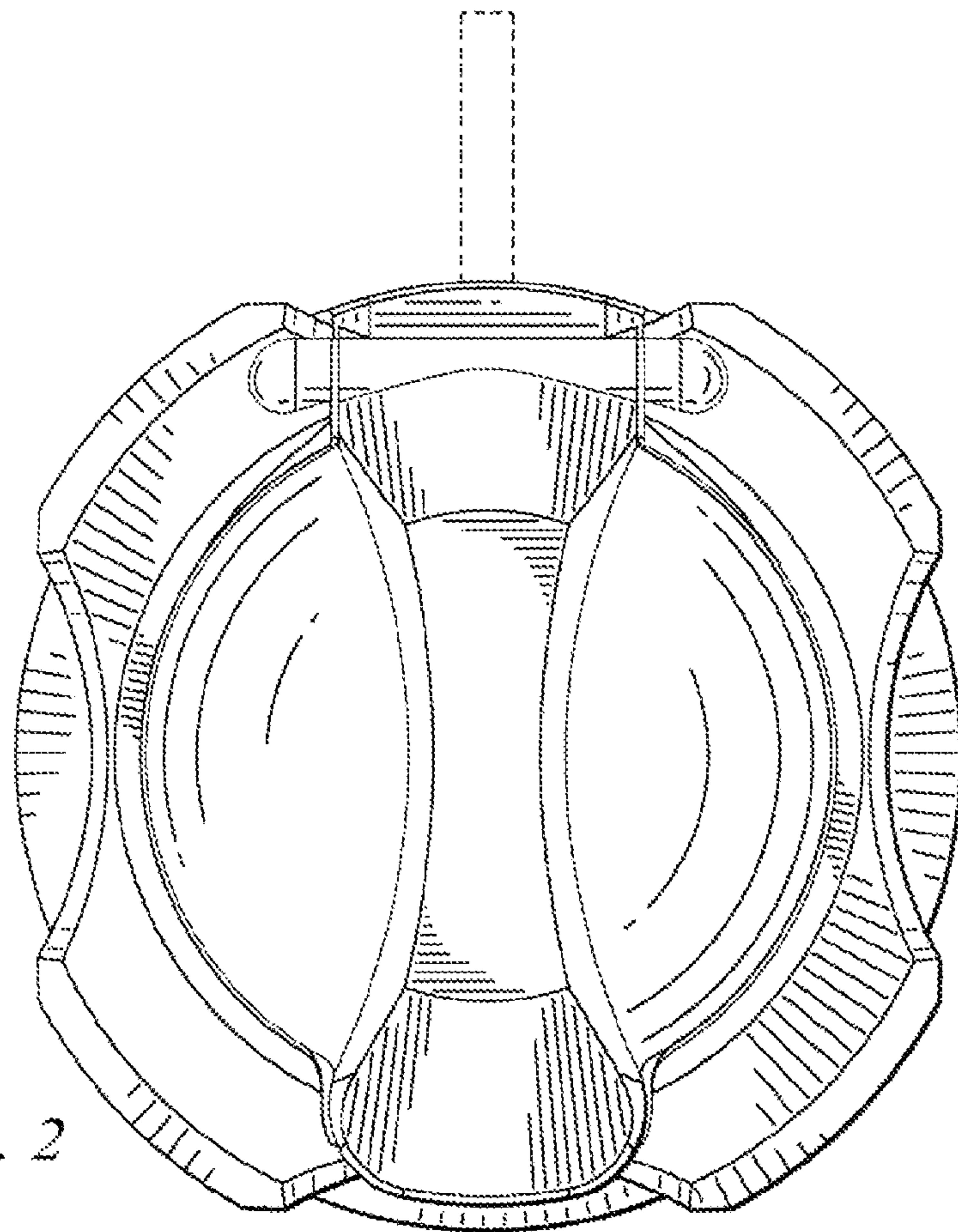


FIG. 2

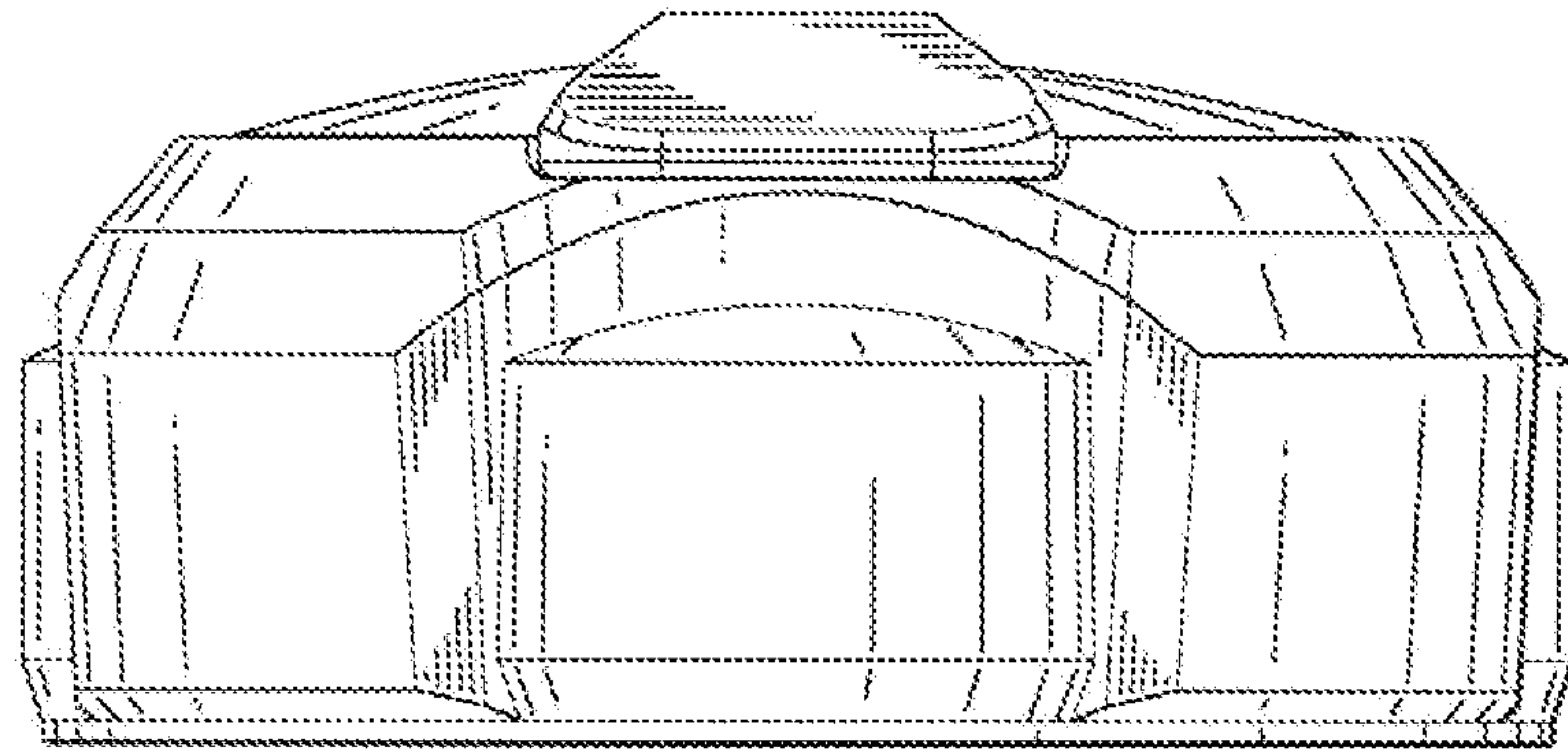


FIG. 3

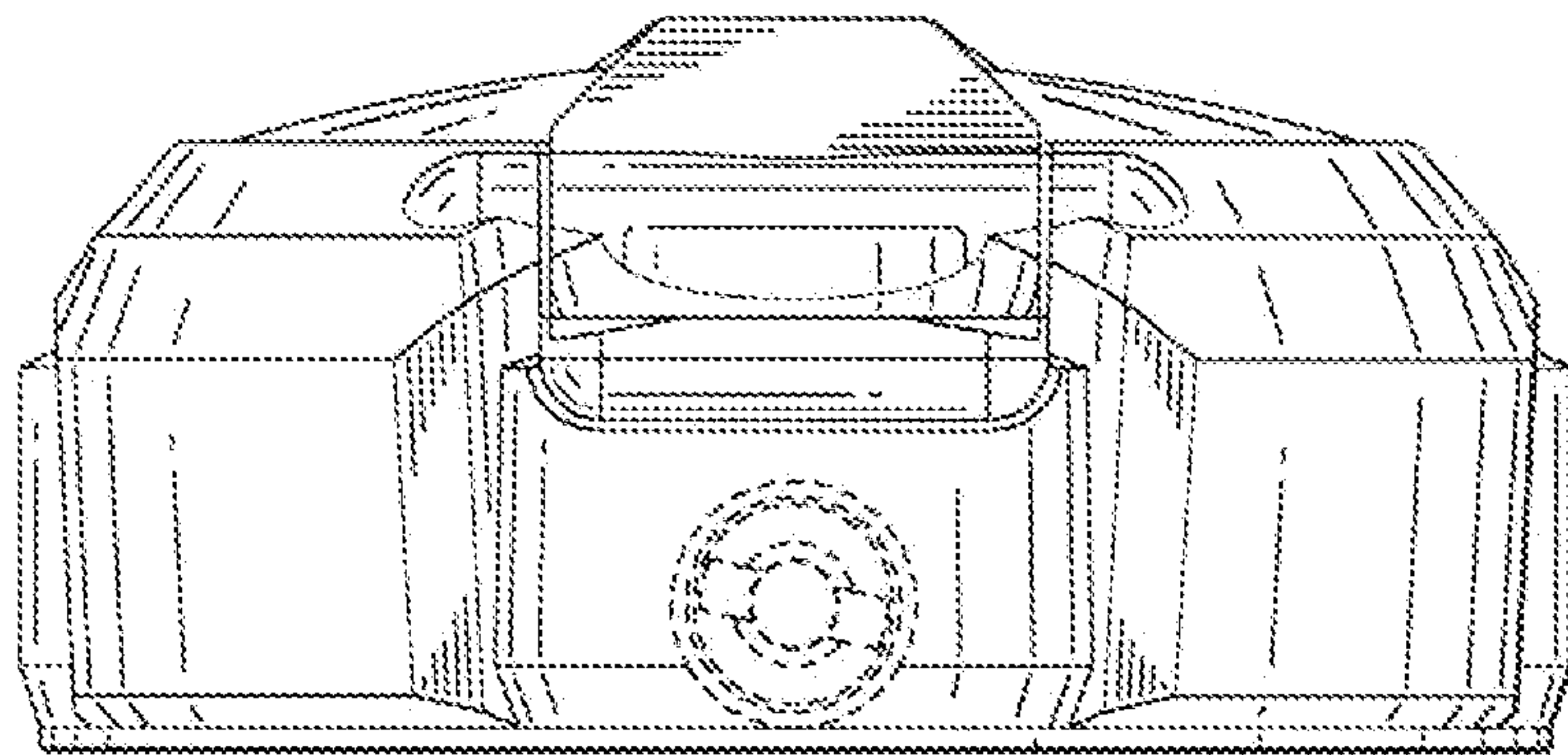


FIG. 4

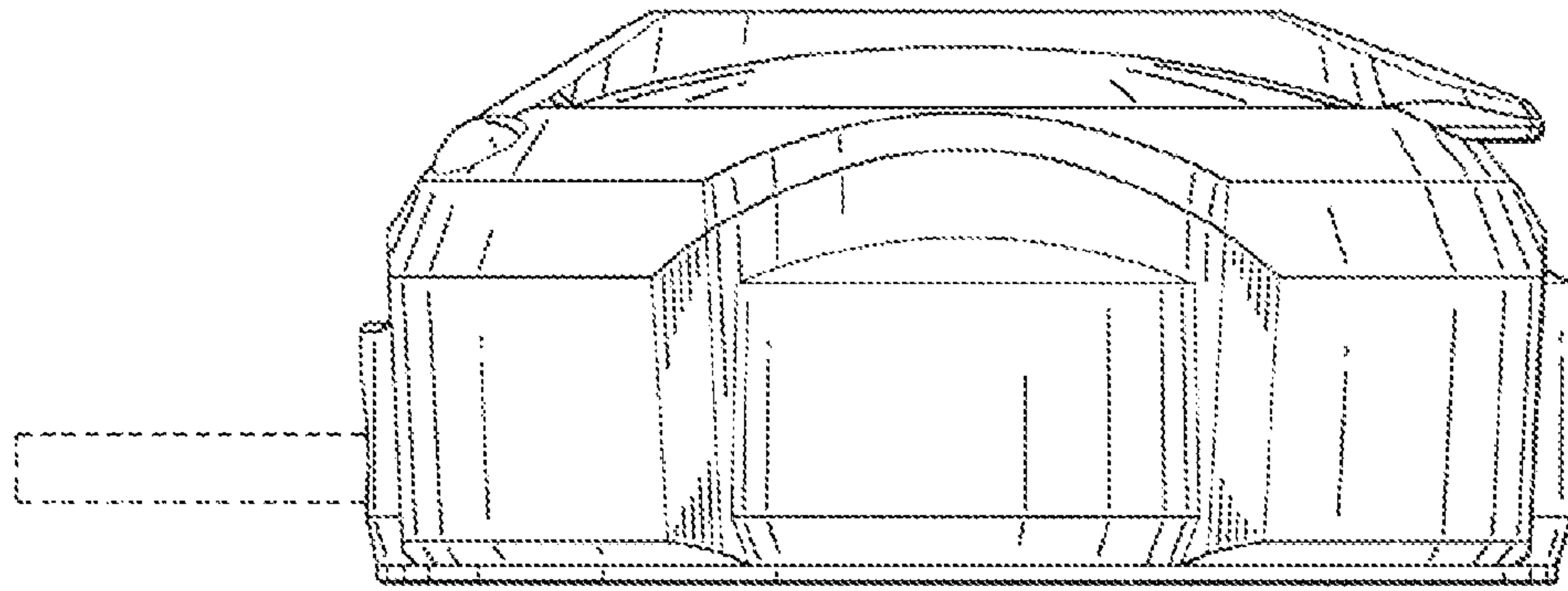


FIG. 5

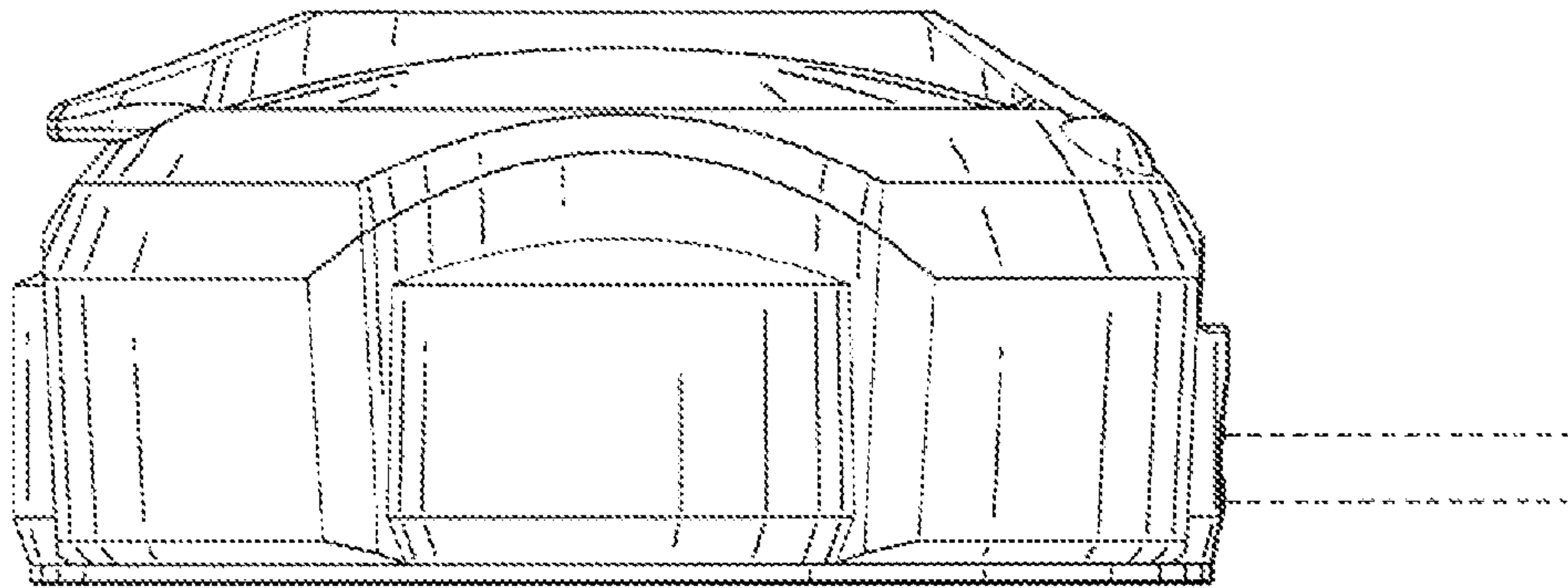


FIG. 6

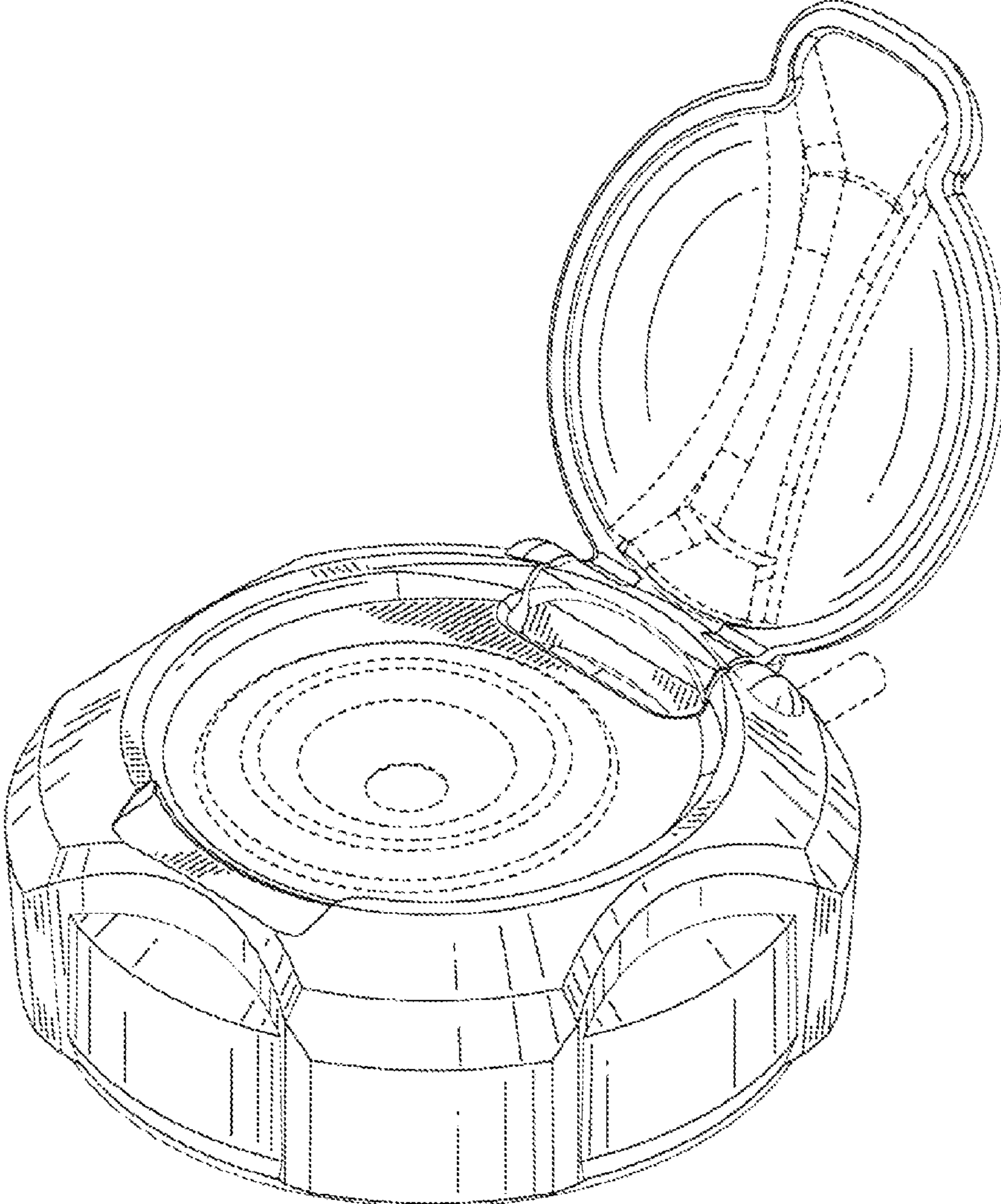


FIG. 7

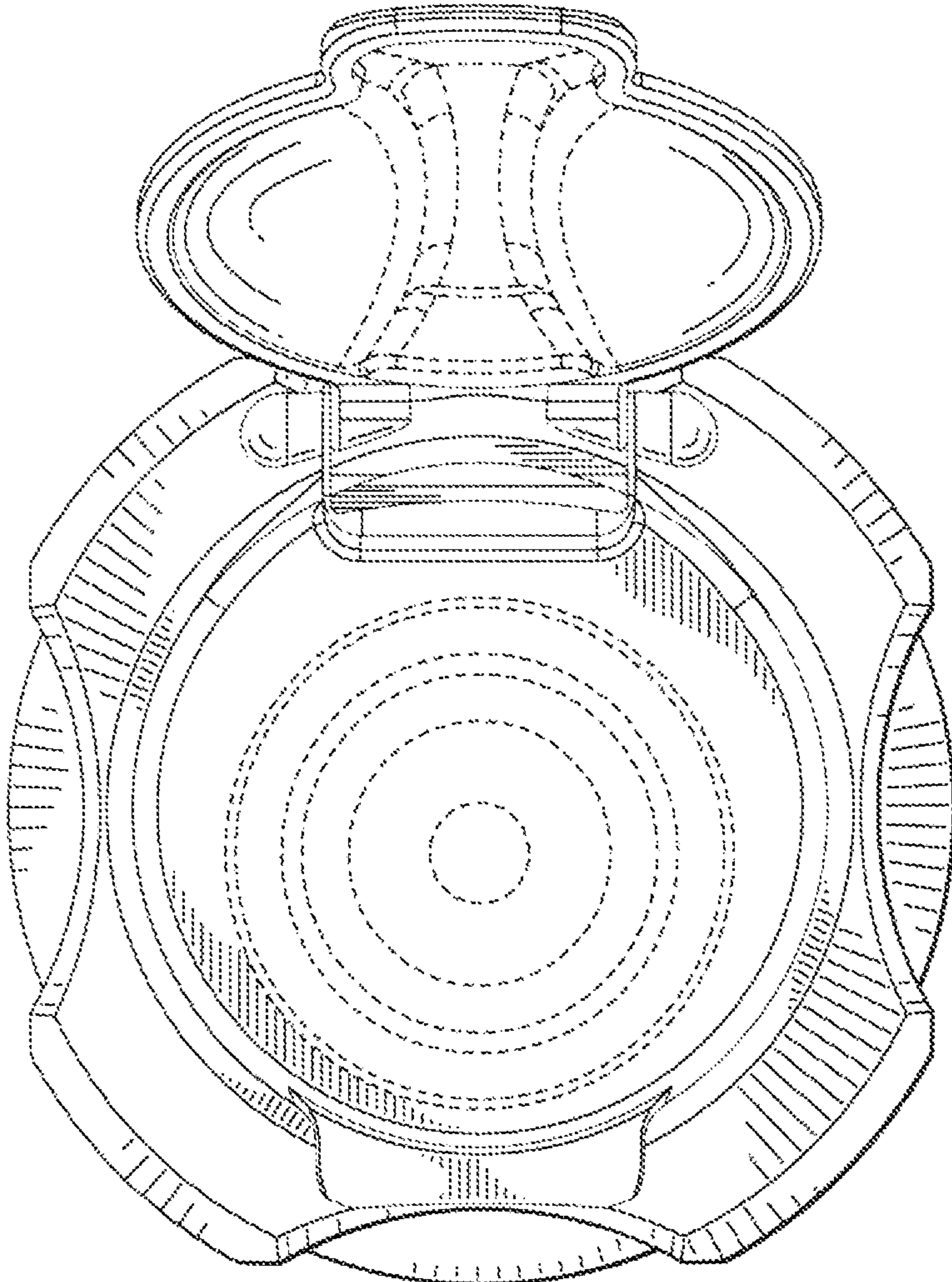


FIG. 8

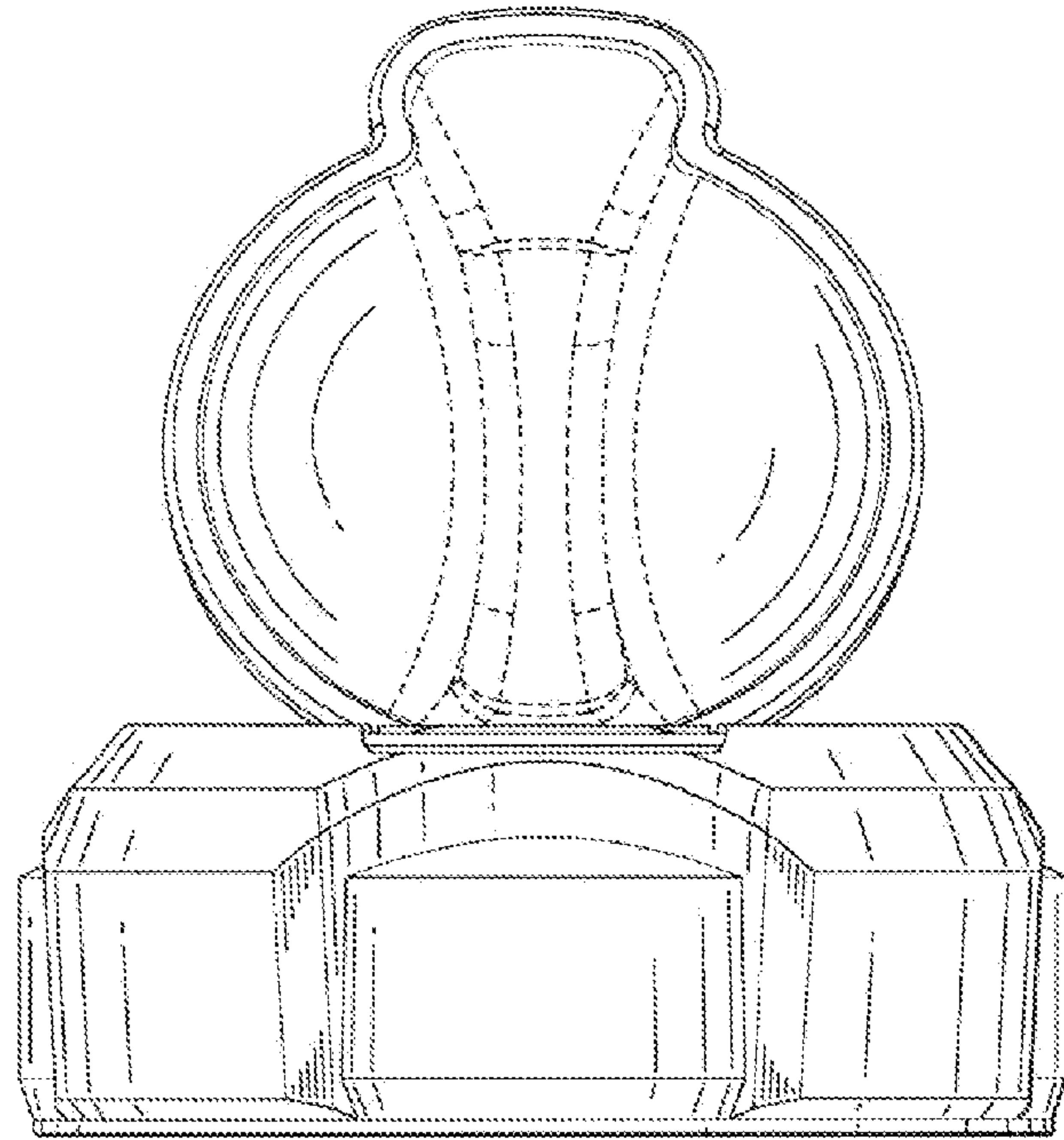


FIG. 9

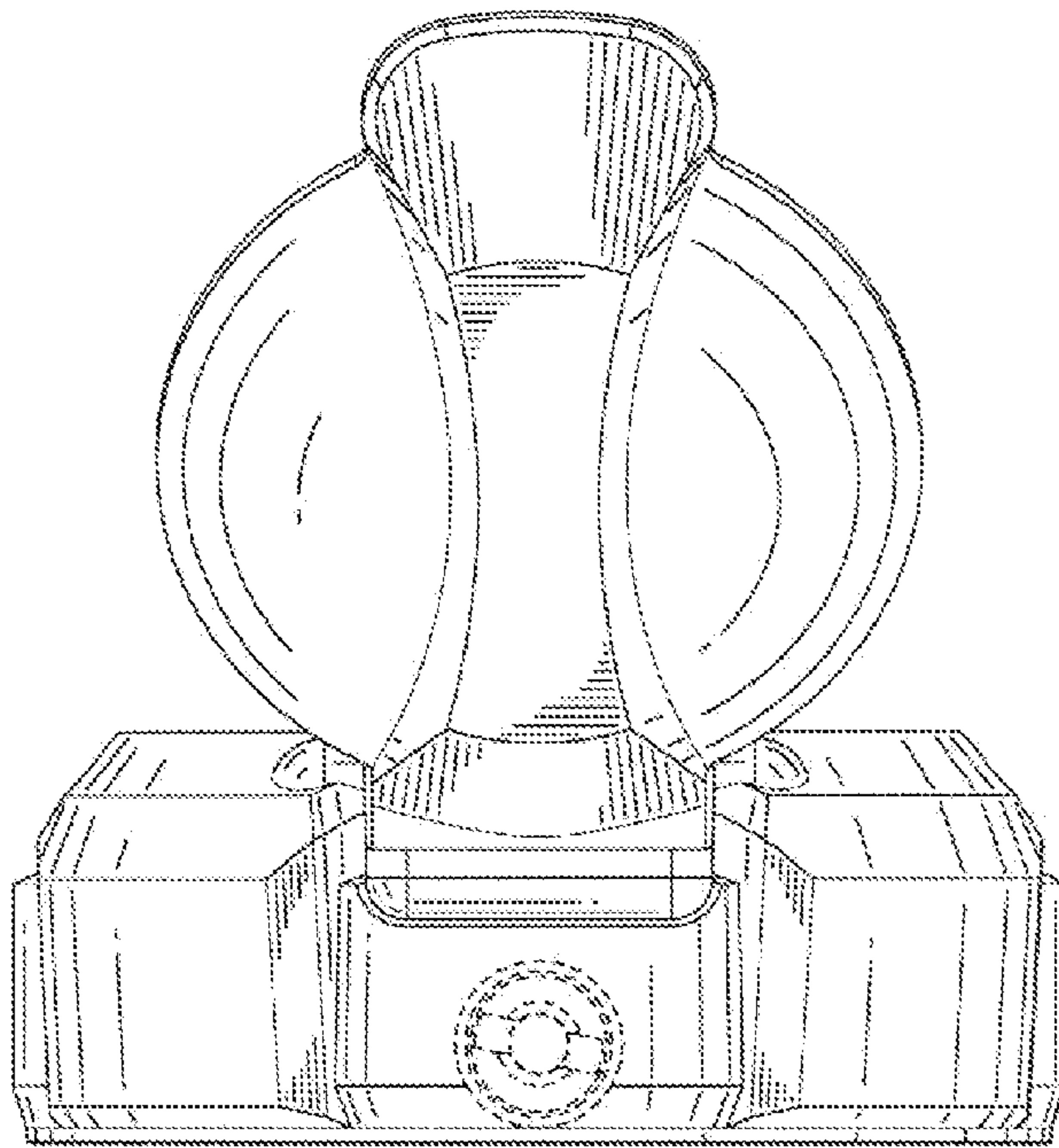


FIG. 10

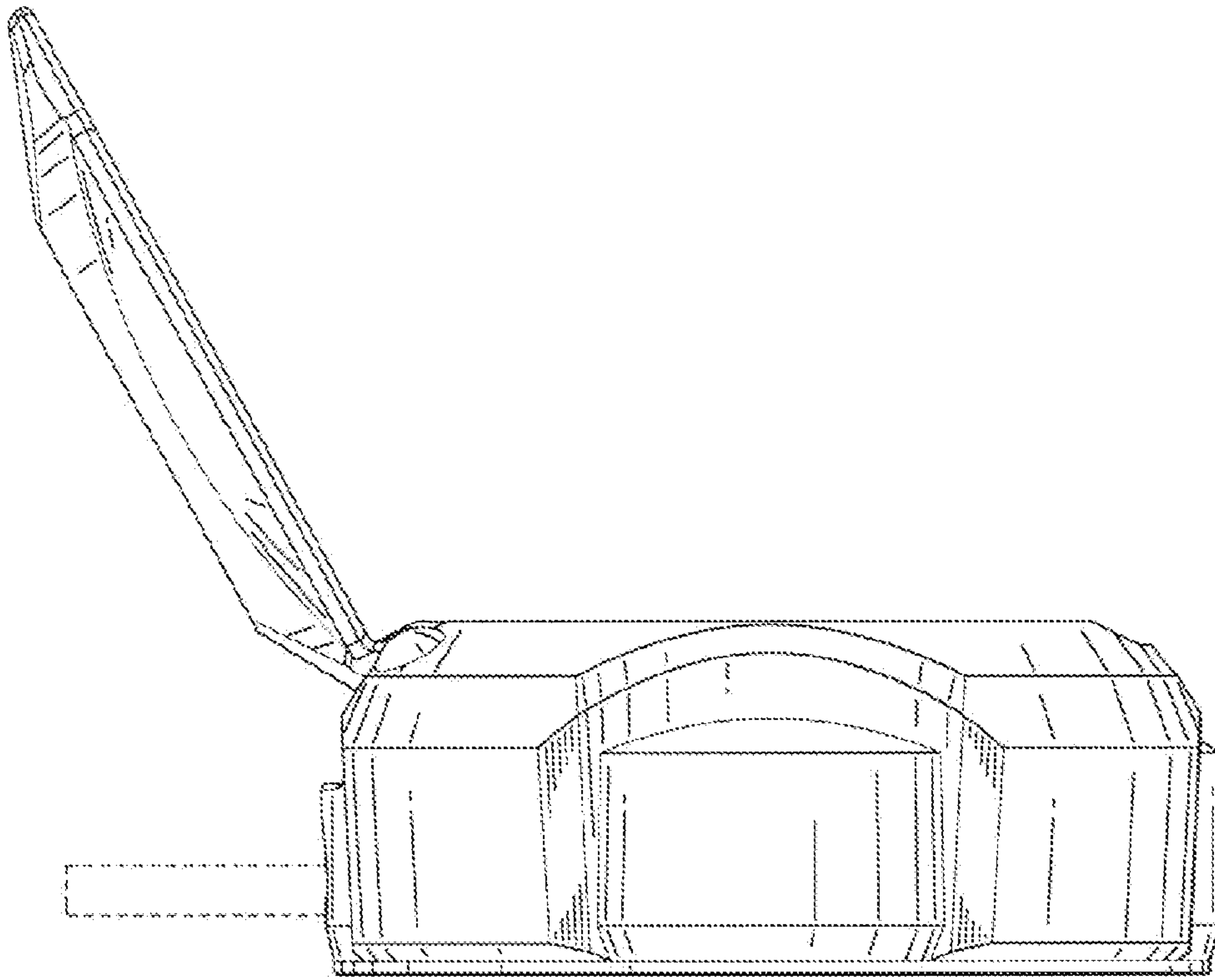


FIG. 11

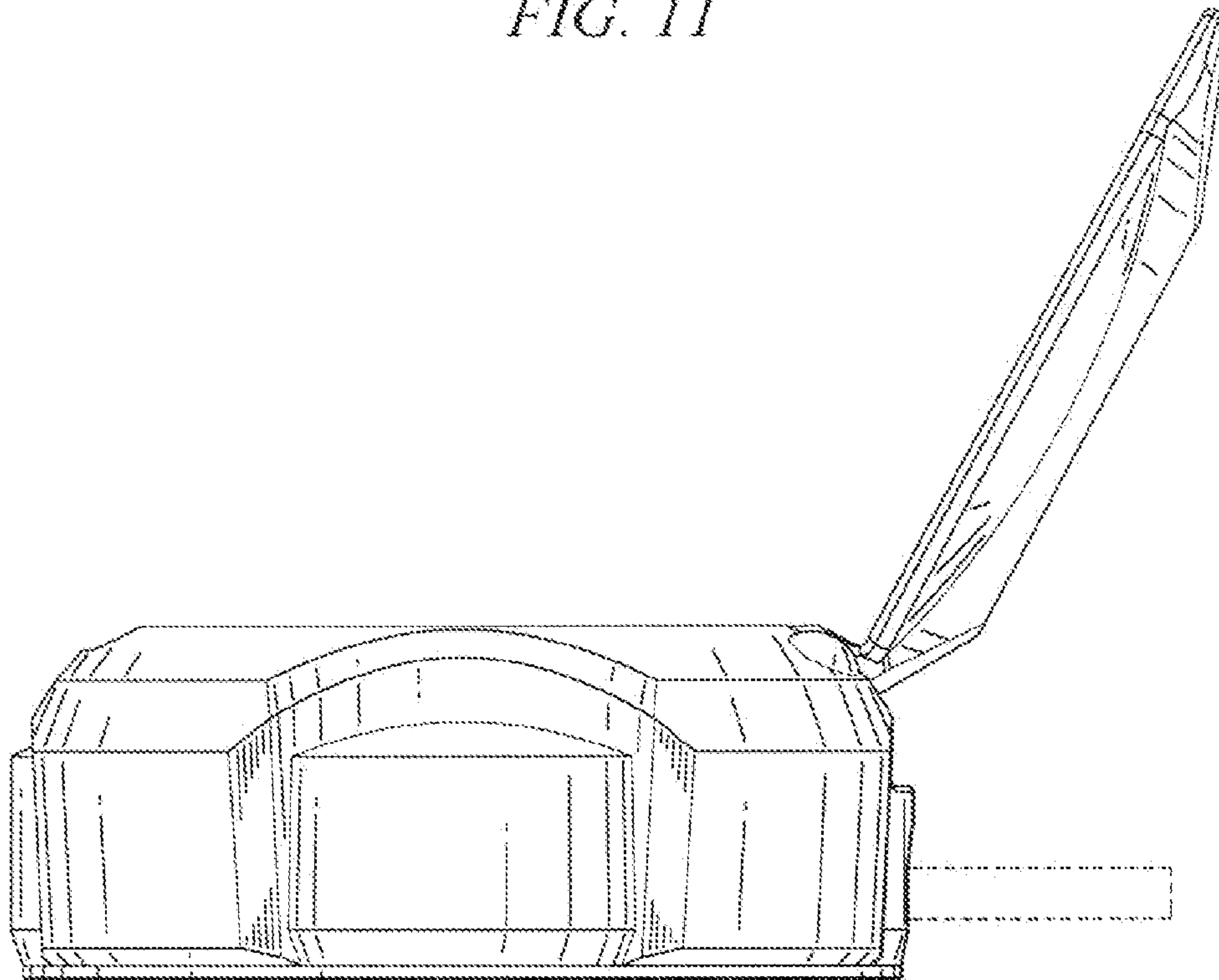


FIG. 12