



US00D863705S

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

(10) **Patent No.:** **US D863,705 S**

(45) **Date of Patent:** **** Oct. 15, 2019**

(54) **CLEANING DEVICE FOR SOLDERING TIPS**

(71) Applicant: **Guangzhou Yihua Electronic Equipment Co., Ltd.**, Guangzhou, Guangdong (CN)

(72) Inventor: **Mingkang Gou**, Guangdong (CN)

(73) Assignee: **GUANGZHOU YIHUA ELECTRONIC EQUIPMENT CO., LTD.**, Guangzhou, Guangdong (CN)

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

(21) Appl. No.: **29/606,252**

(22) Filed: **Jun. 2, 2017**

(30) **Foreign Application Priority Data**

Dec. 8, 2016 (EP) 003507268-0018

(51) **LOC (12) Cl.** **07-05**

(52) **U.S. Cl.**
USPC **D32/35**

(58) **Field of Classification Search**
USPC D32/1, 35; D8/14, 30, 71, 90; D9/504,
D9/526, 529; D19/77, 84, 85;
D28/73-76

CPC A46B 5/0012; A47L 11/12; B08B 1/04
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D195,116 S * 4/1963 Race 15/220.4
D272,309 S * 1/1984 Walser D15/124

D286,126 S * 10/1986 Driscoll D6/666
D405,320 S * 2/1999 Tisdale D7/609
6,604,255 B2 * 8/2003 Hayashi B08B 1/04
15/102
D480,522 S * 10/2003 Sasaki D32/35
D512,530 S * 12/2005 Hartwein D28/44
D545,014 S * 6/2007 Santiago D32/35
D569,403 S * 5/2008 Uetani D15/144
D594,046 S * 6/2009 Kita D15/144
D596,654 S * 7/2009 Kita D15/144
D621,861 S * 8/2010 Kita D15/144
D678,373 S * 3/2013 Kita D15/144.2
2006/0048318 A1 * 3/2006 Goh A47L 11/12
15/97.1
2008/0229530 A1 * 9/2008 Kordick A46B 5/0012
15/50.3

* cited by examiner

Primary Examiner — Michelle E. Wilson

(74) *Attorney, Agent, or Firm* — Lucas & Mercanti, LLP

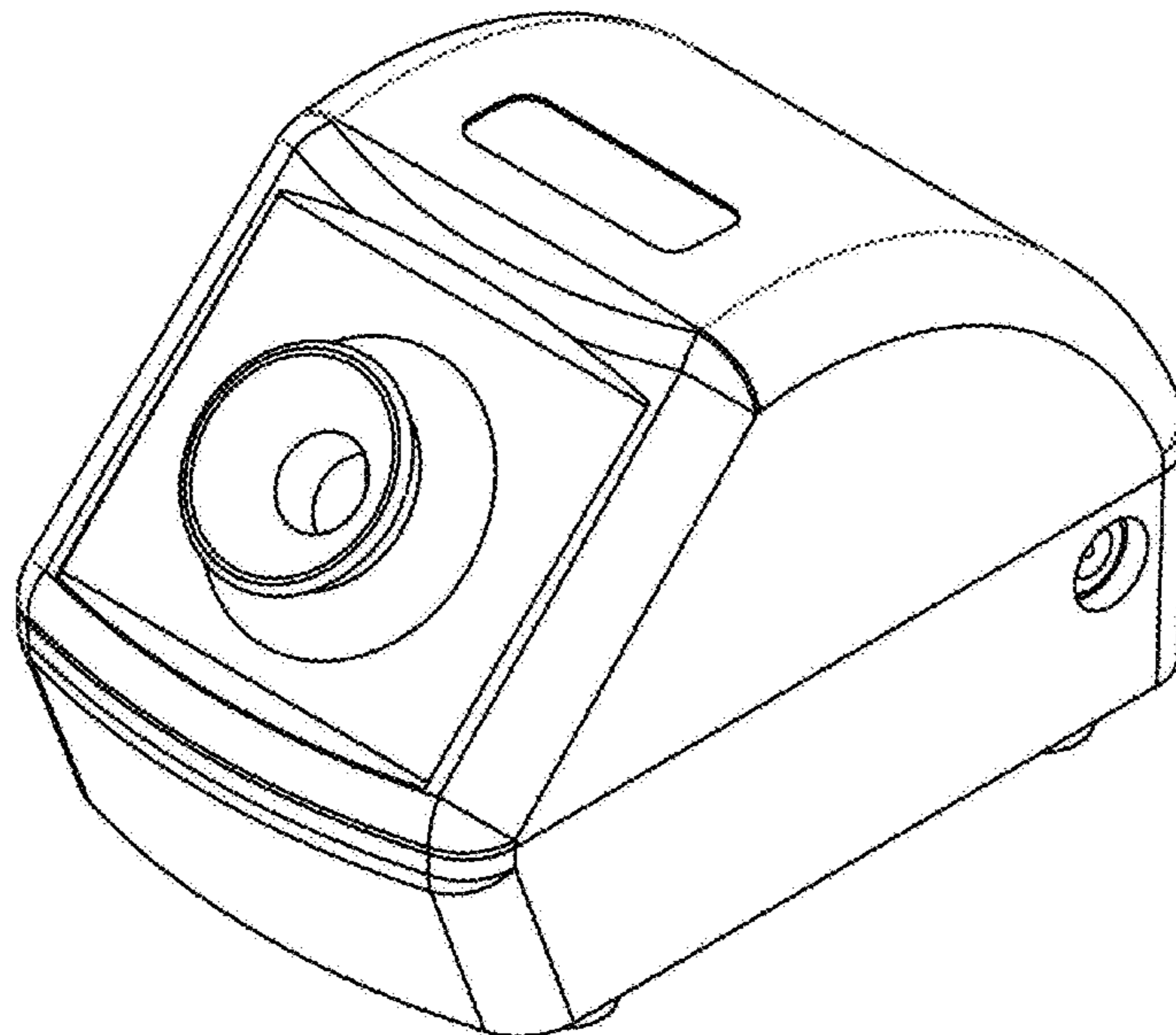
(57) **CLAIM**

The ornamental design for a cleaning device for soldering tips, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the cleaning device for soldering tips.
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top view thereof; and,
FIG. 7 is a bottom view thereof.

1 Claim, 7 Drawing Sheets



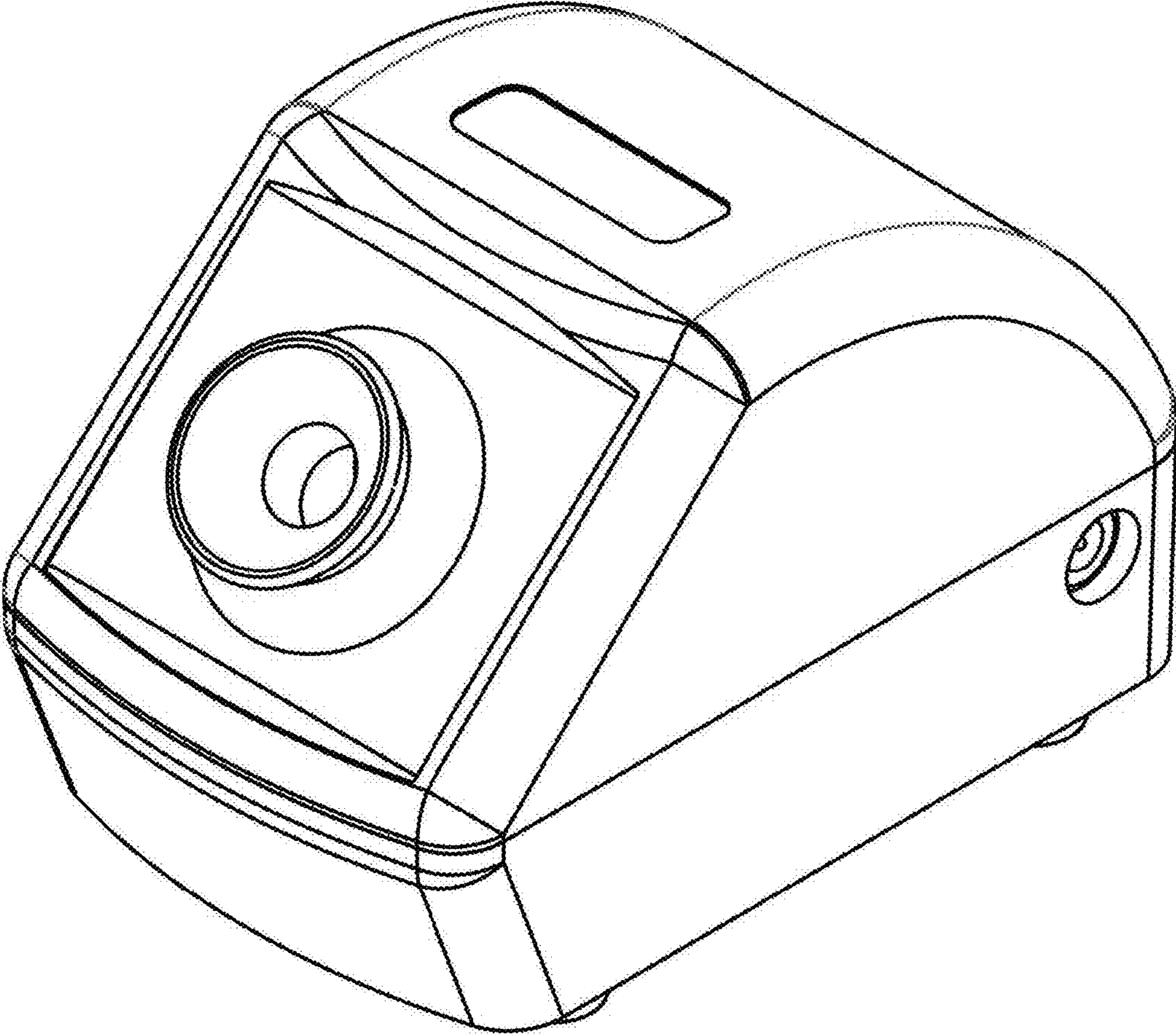


FIG. 1

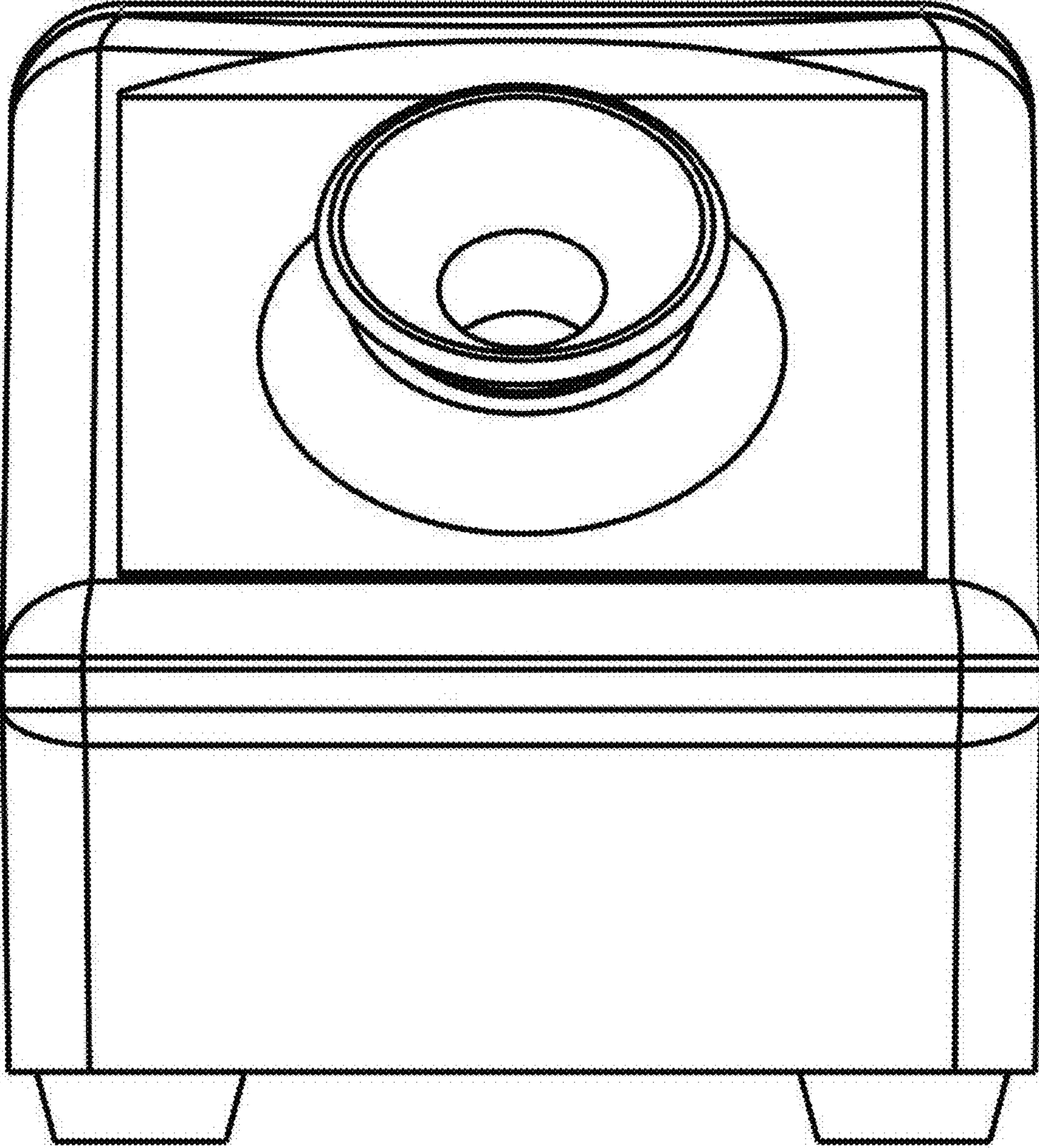


FIG. 2

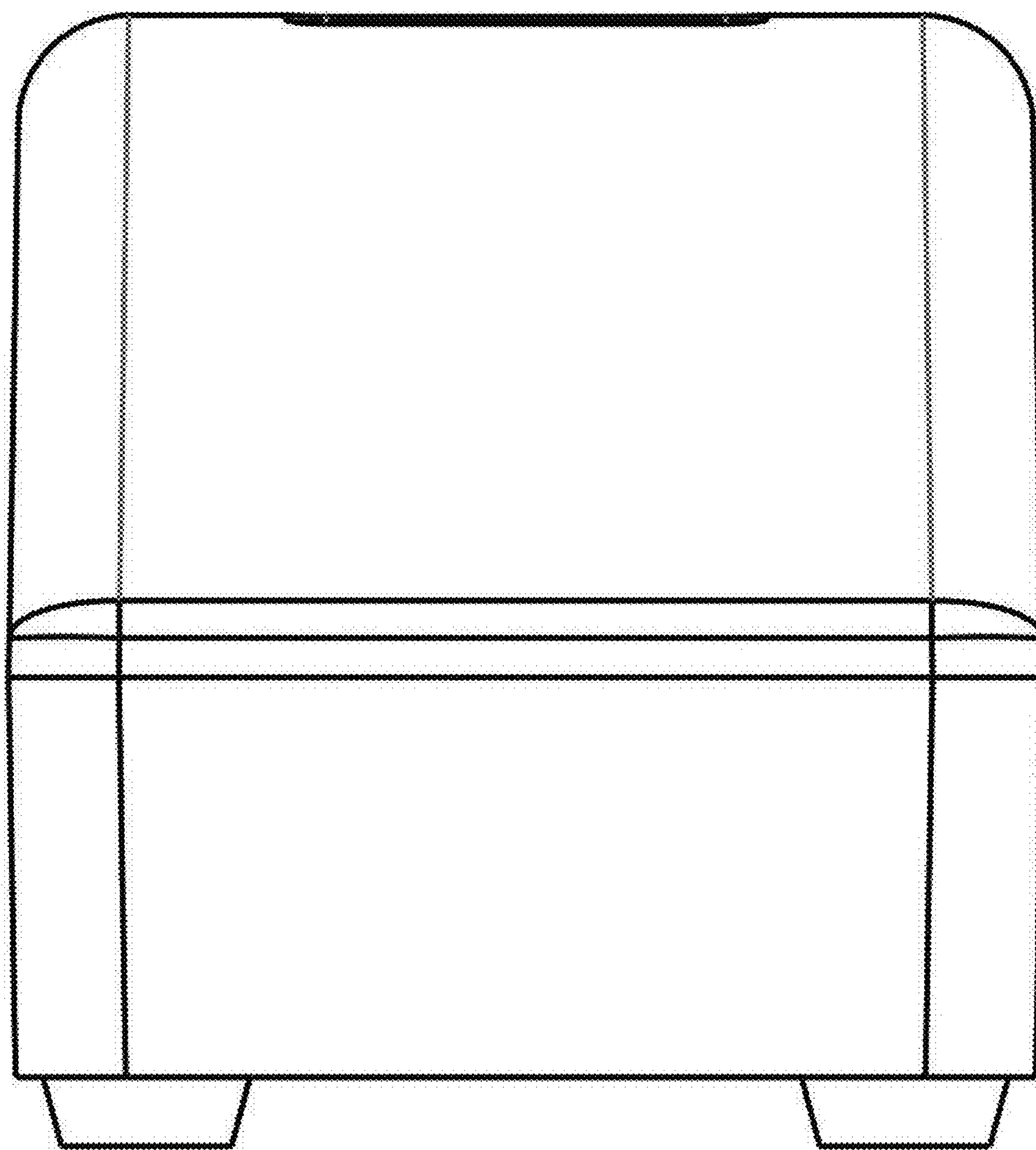


FIG. 3

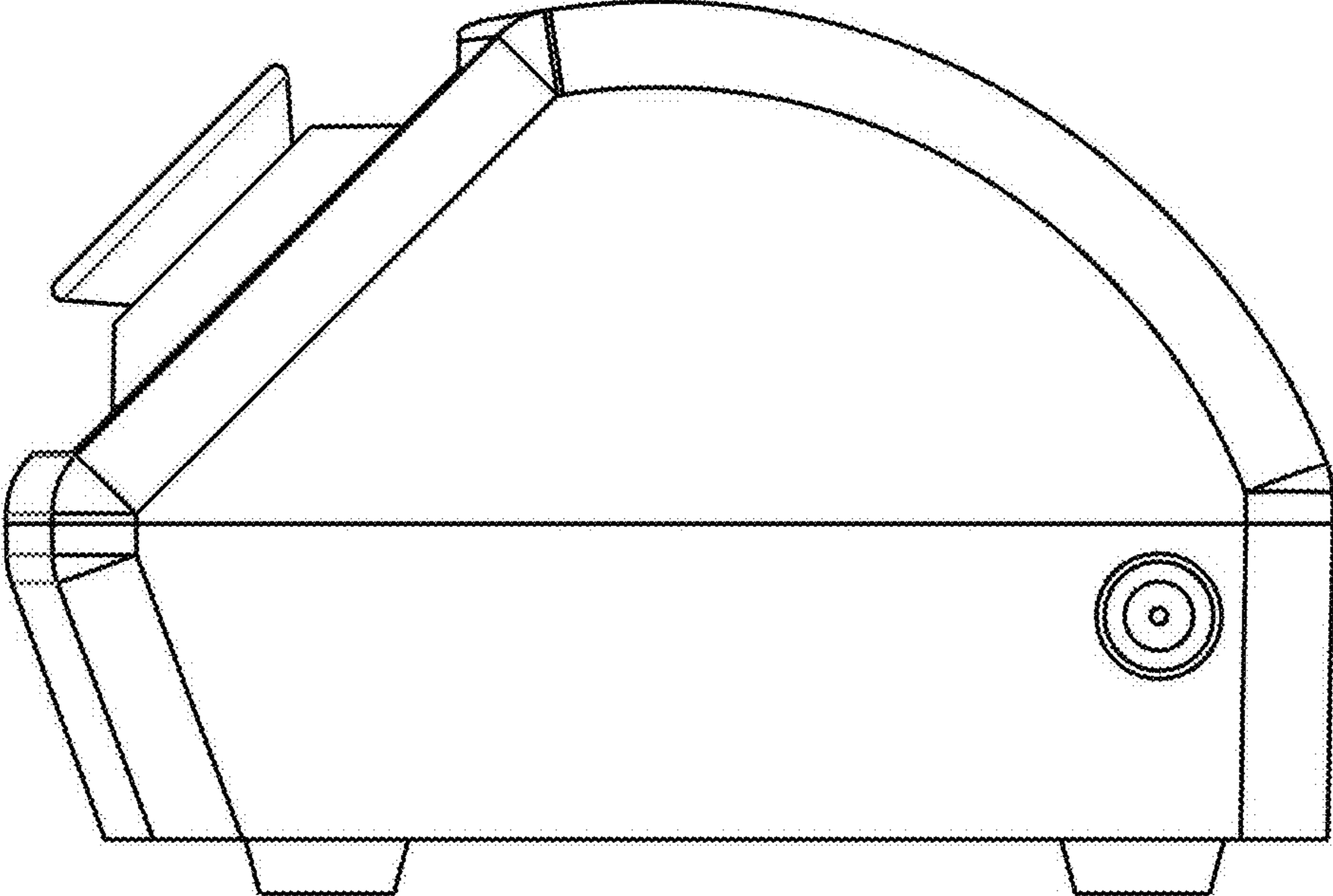


FIG. 4

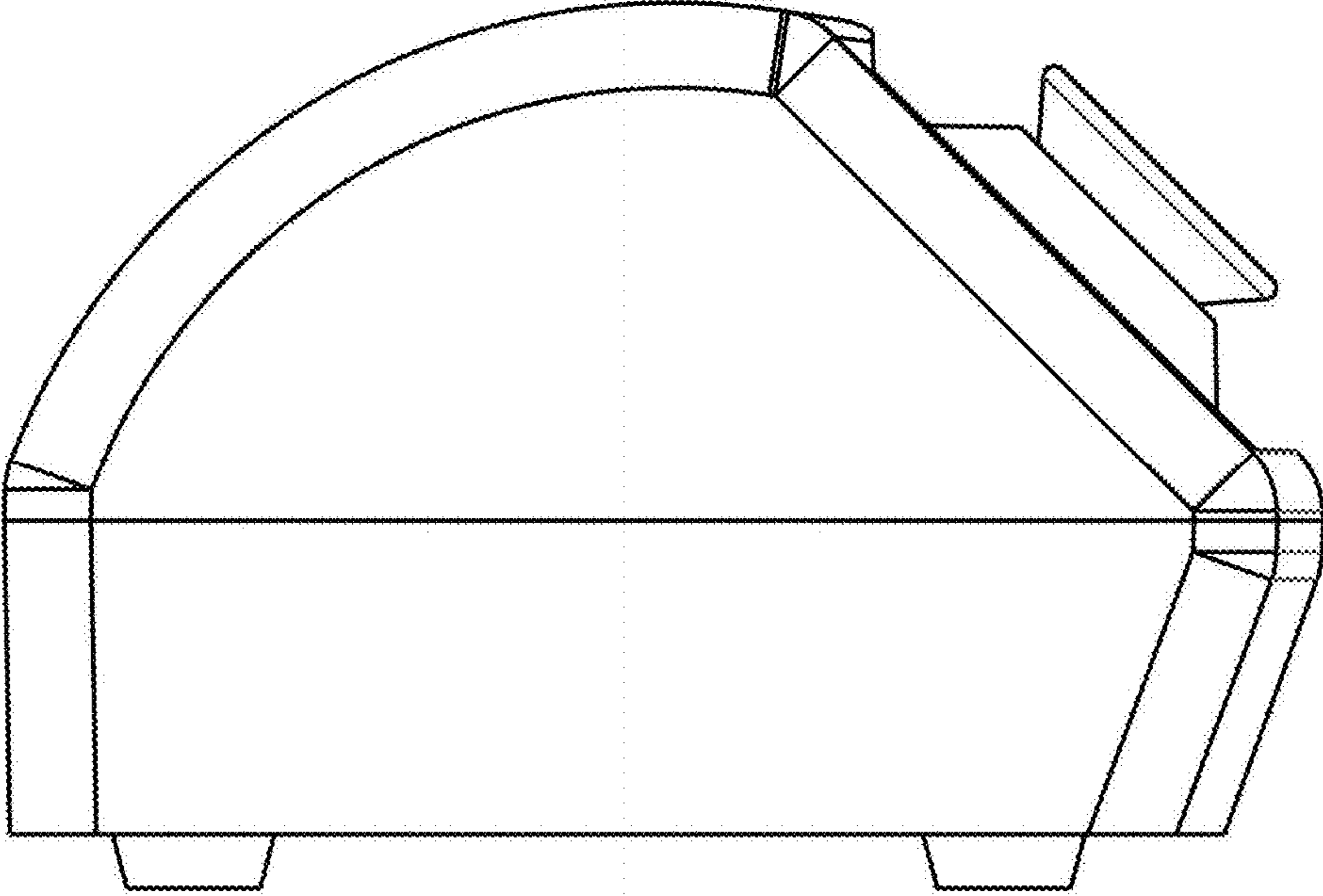


FIG. 5

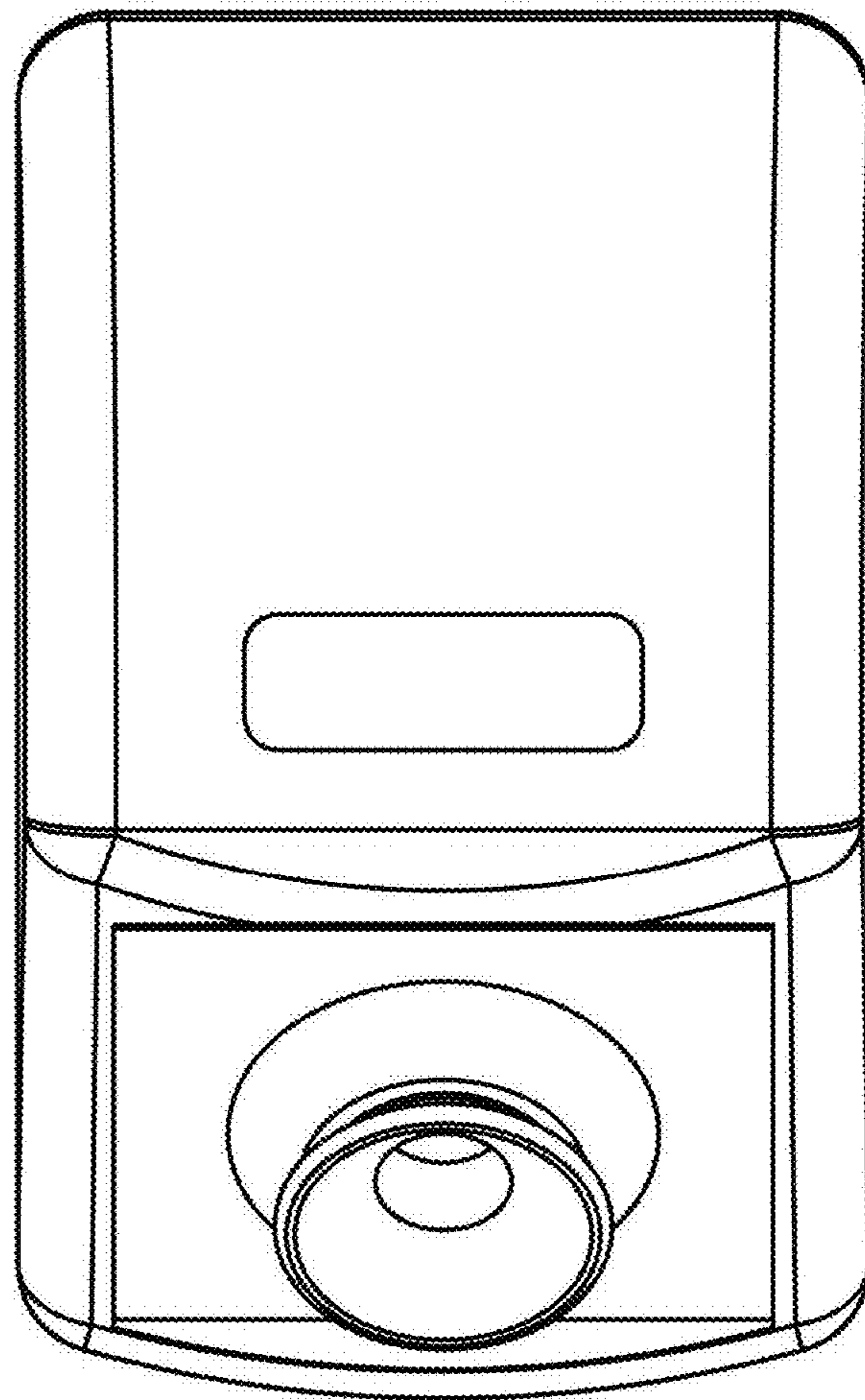


FIG. 6

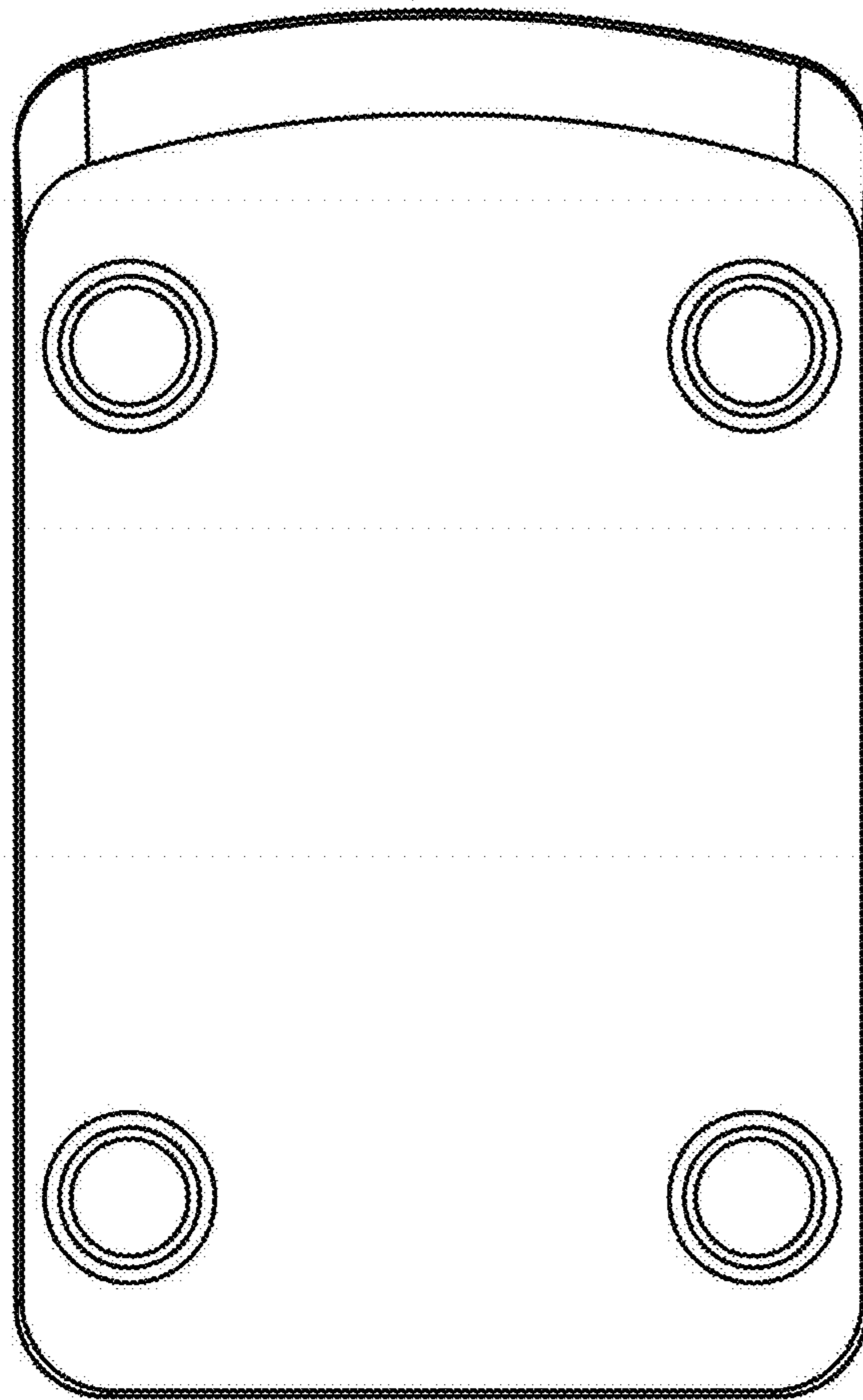


FIG. 7