



US00D863705S

(12) **United States Design Patent** (10) **Patent No.:** **US D863,705 S**  
**Gou** (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

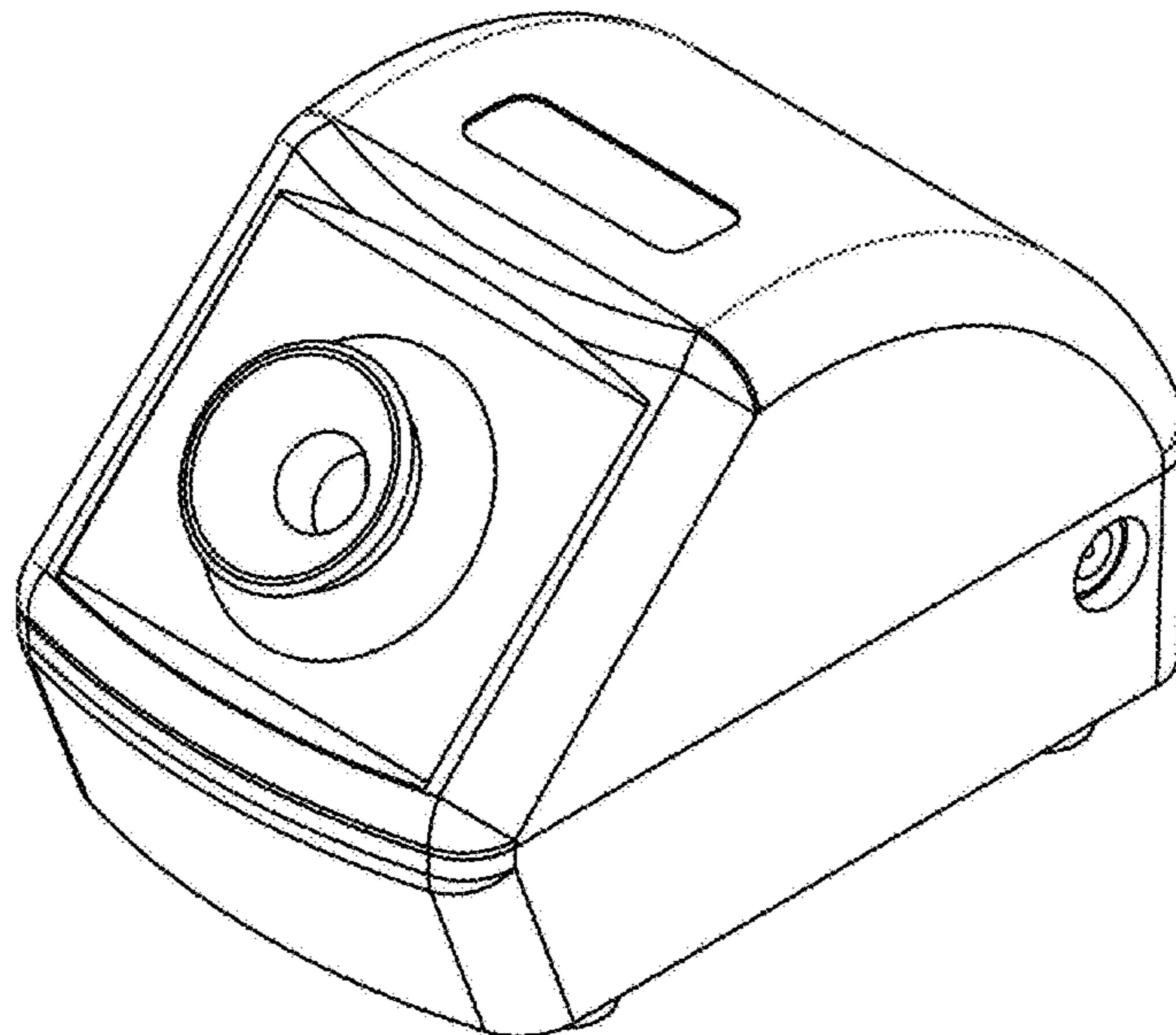
(57) **CLAIM**

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**



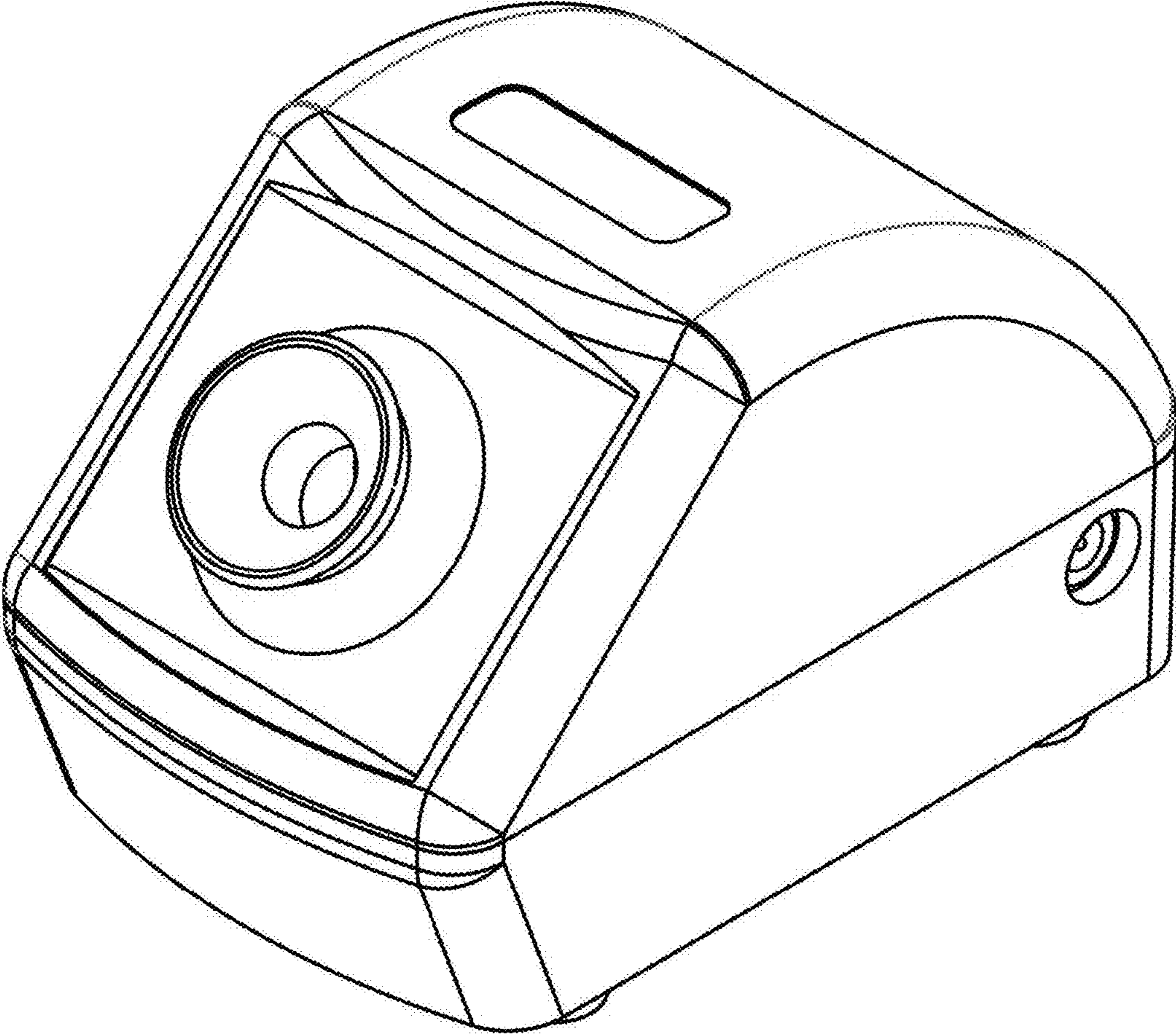


FIG. 1

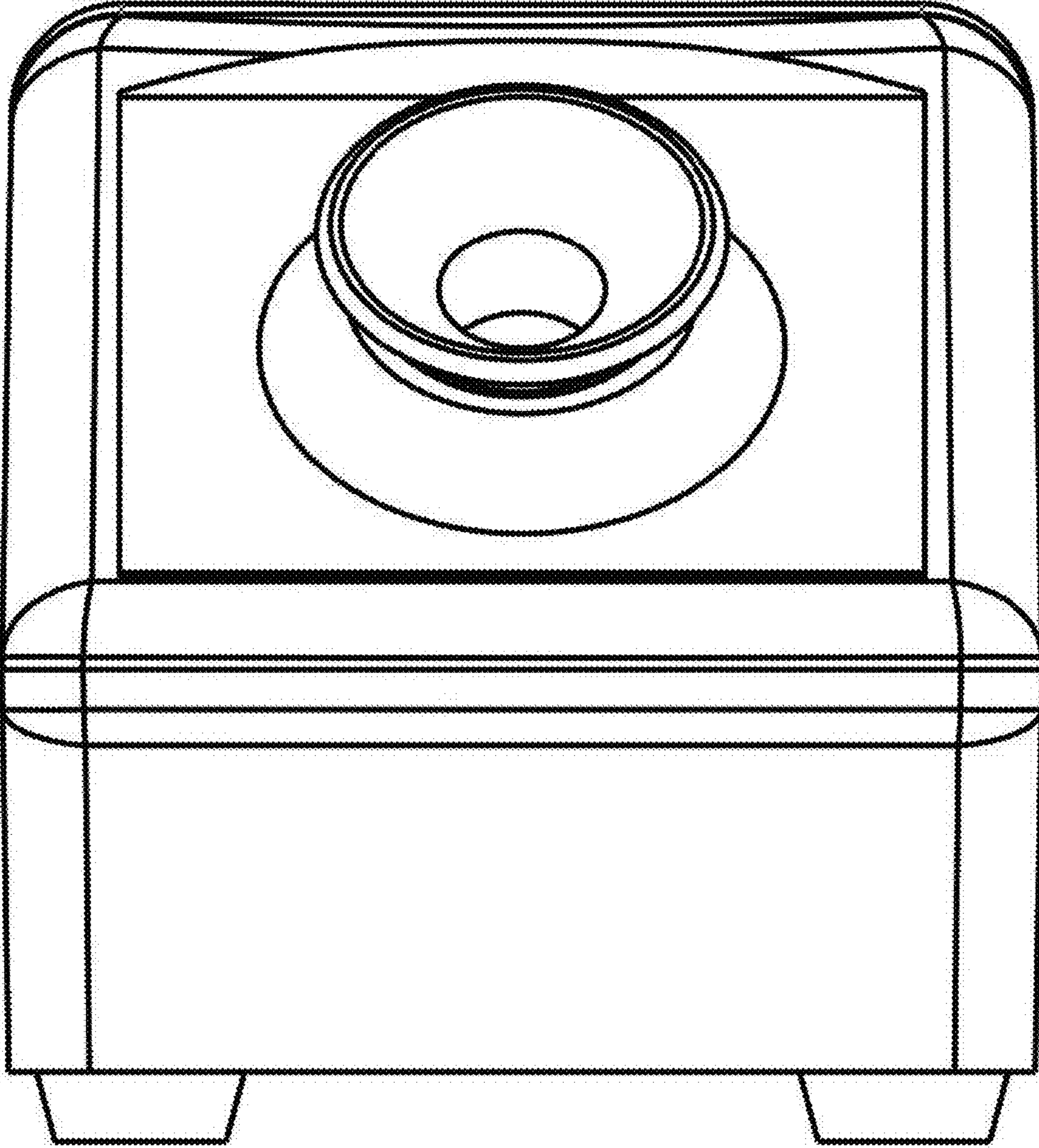


FIG. 2

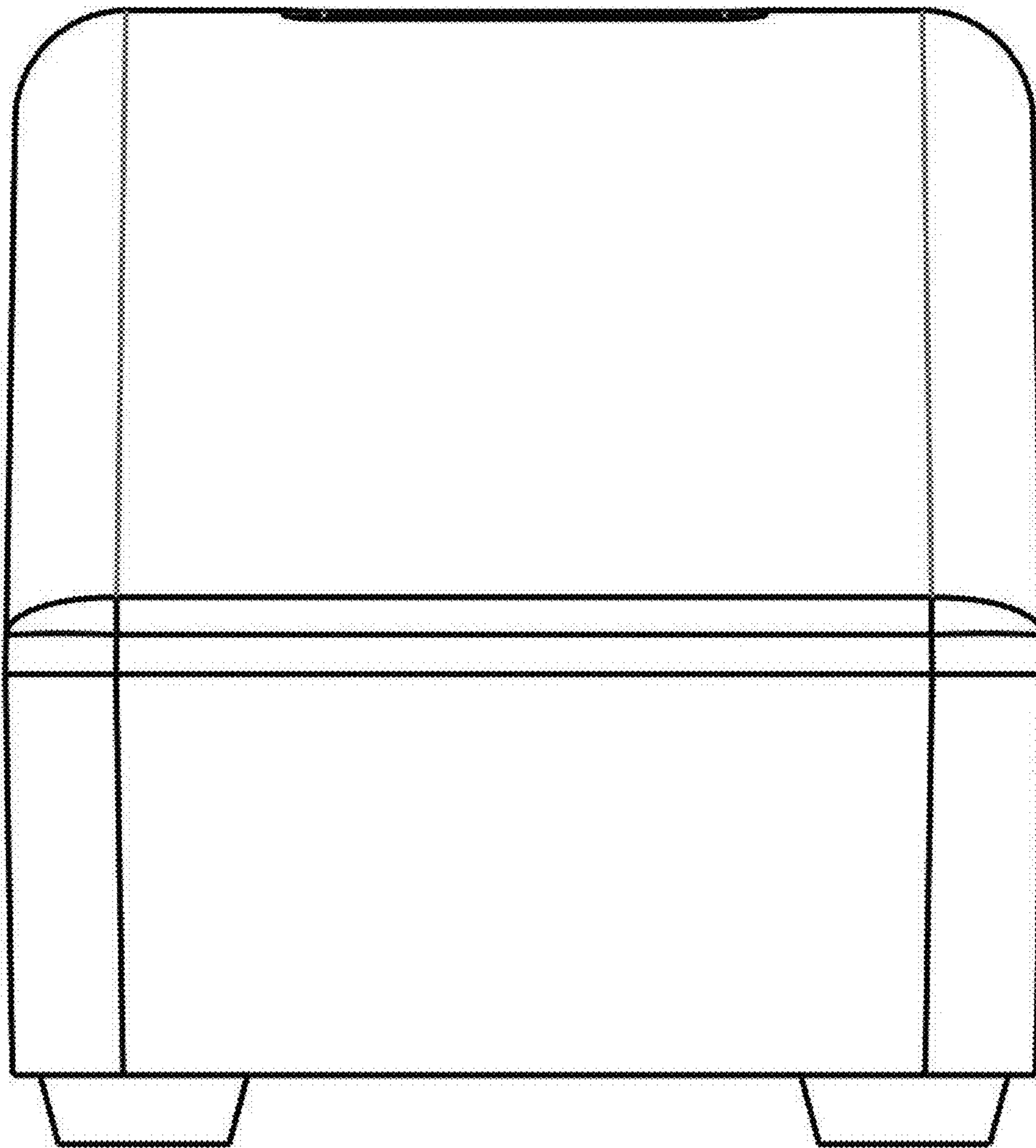


FIG. 3

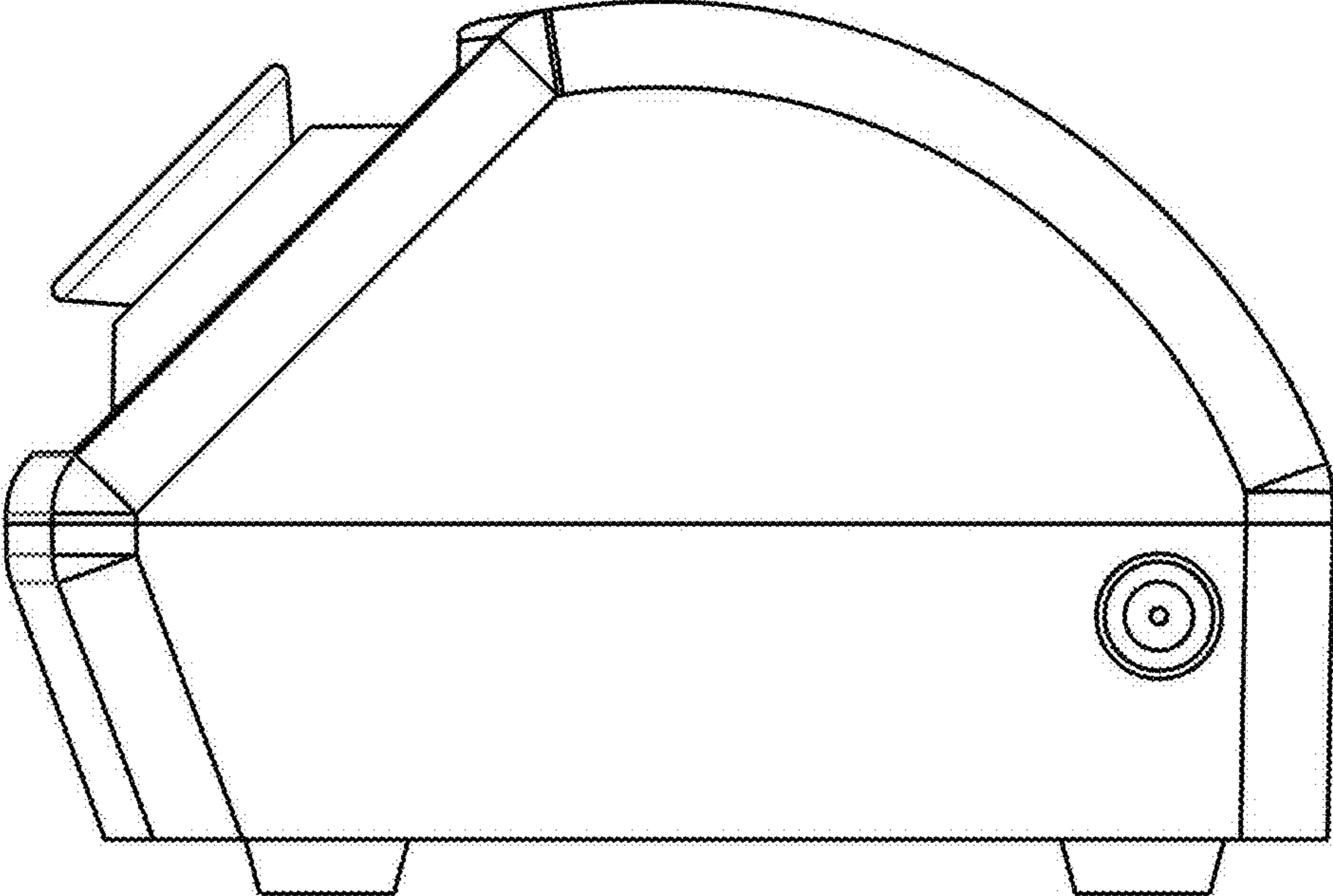


FIG. 4

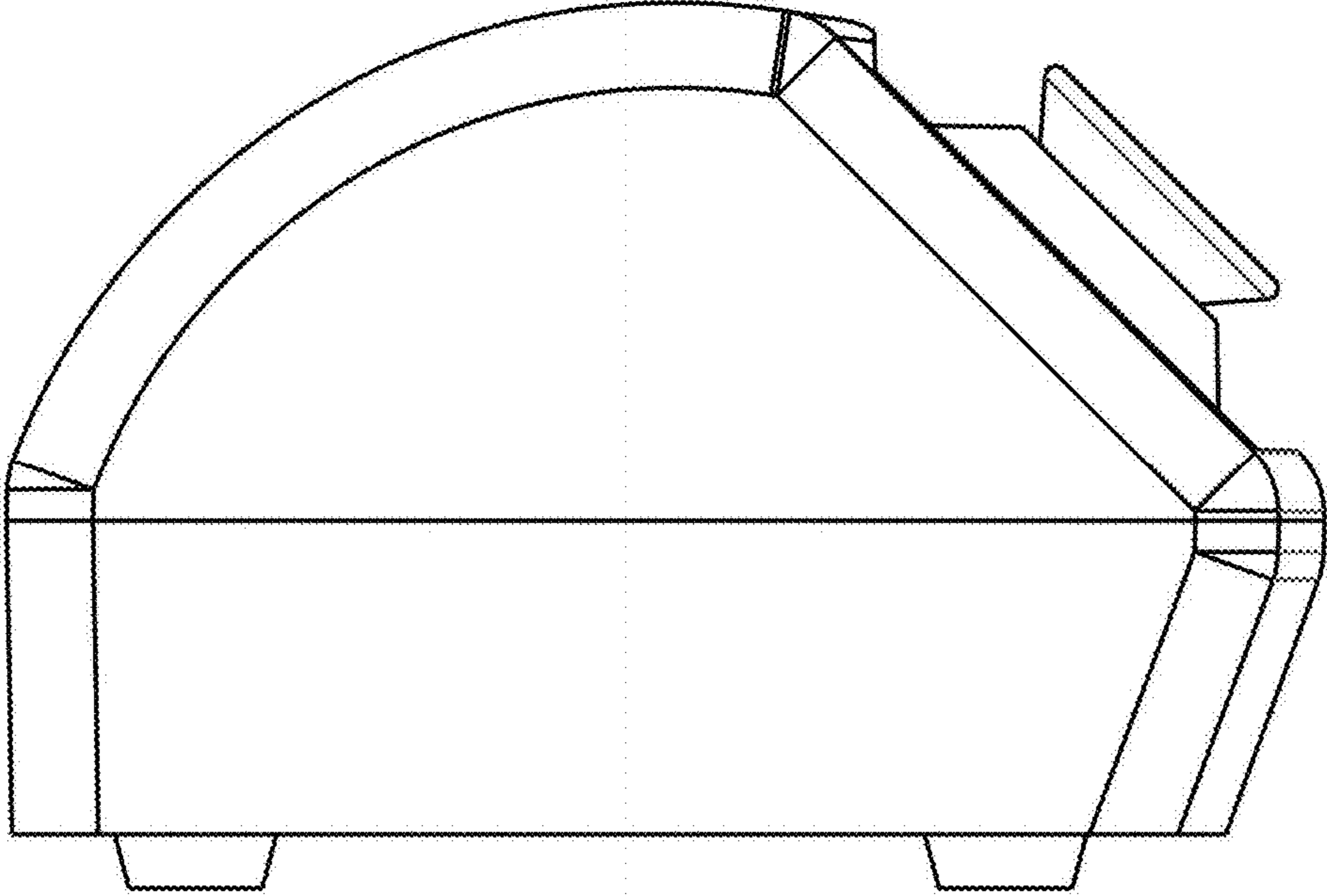


FIG. 5

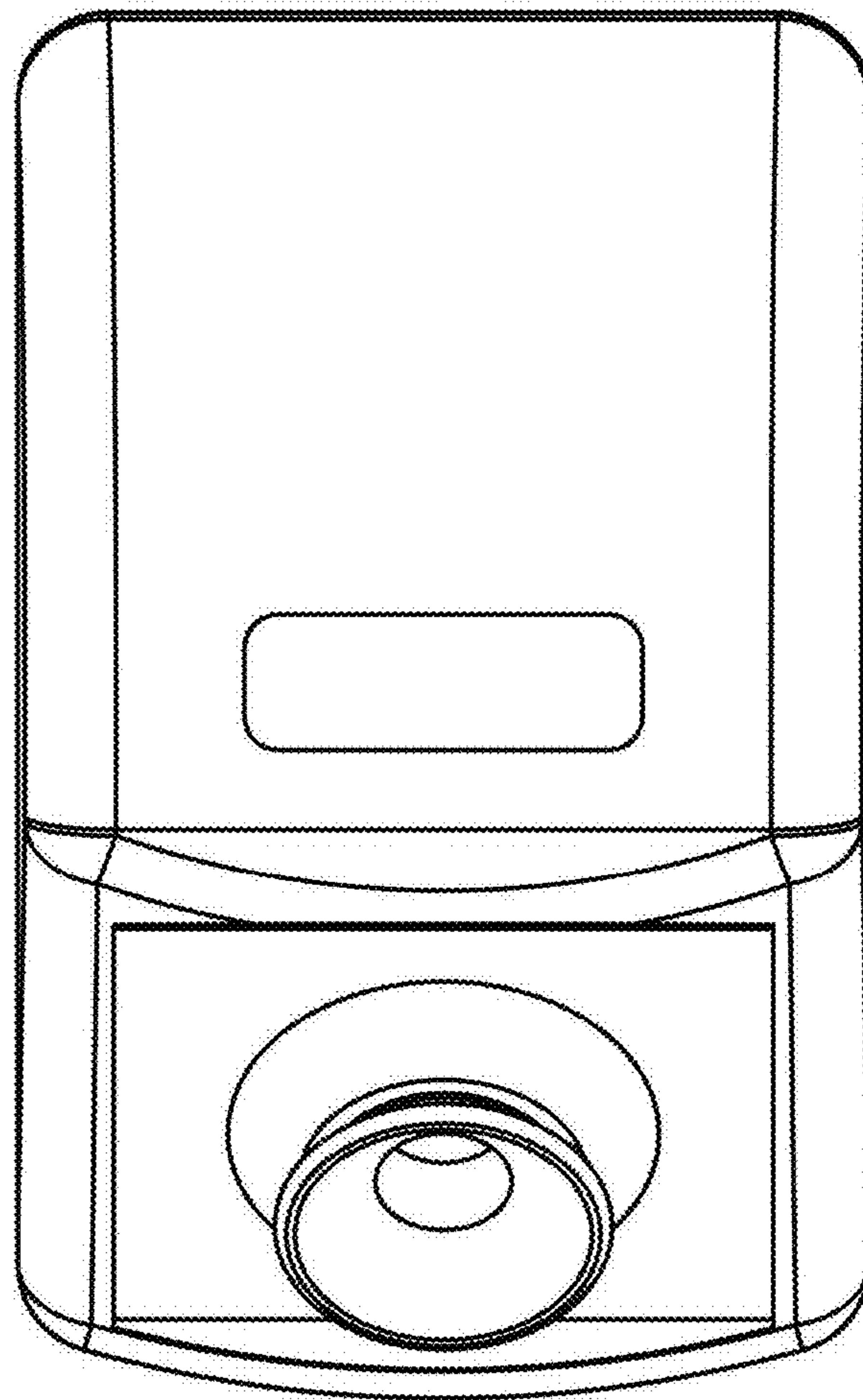


FIG. 6

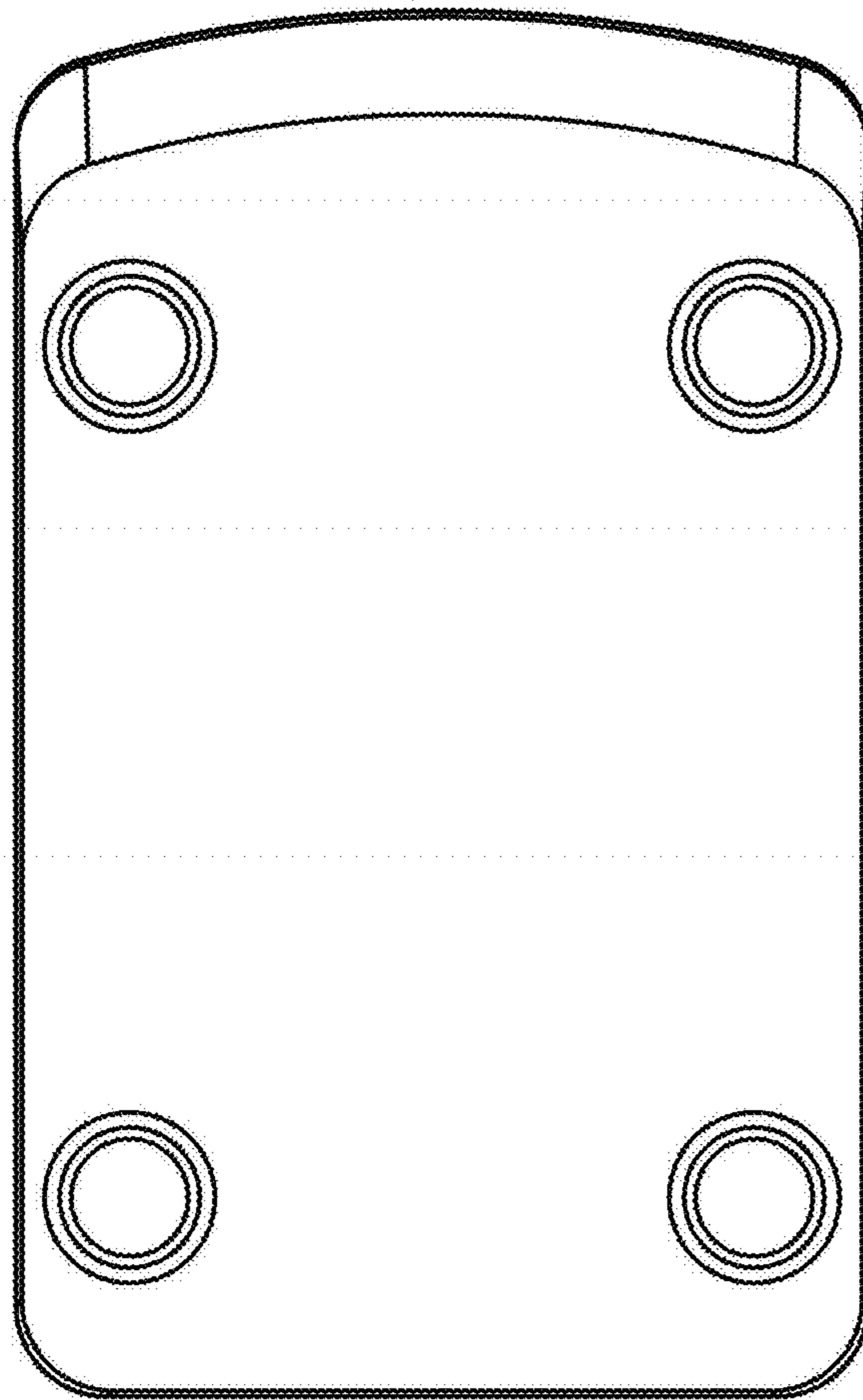


FIG. 7