



US00D824236S

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

(10) **Patent No.:** **US D824,236 S**
(45) **Date of Patent:** **** Jul. 31, 2018**

- (54) **KNOB AND COLLAR ASSEMBLY**
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- (**) Term: **15 Years**
- (21) Appl. No.: **29/587,367**
- (22) Filed: **Dec. 13, 2016**
- (51) **LOC (11) Cl.** **08-06**
- (52) **U.S. Cl.**
USPC **D8/311**
- (58) **Field of Classification Search**
USPC D8/107, 300, 301, 307, 310, 311, 312;
D10/102; D23/250, 421; D7/393, 394,
D7/396, 543, 545, 547, 548
(Continued)

- (56) **References Cited**
U.S. PATENT DOCUMENTS
D400,778 S * 11/1998 Holbrook, Jr. D8/311
D498,657 S * 11/2004 Milrud D8/311
(Continued)

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(57) **CLAIM**
The ornamental design for a knob and collar assembly, as shown and described.

DESCRIPTION

The file of this patent contains at least one drawing/photo-graph executed in color. Copies of this patent with color

drawing(s)/photograph(s) will be provided by the Office upon request and payment of the necessary fee.

FIG. 1 is a front-perspective view of a knob and collar assembly according to a first embodiment;
 FIG. 2 is a front elevation view thereof;
 FIG. 3 is a back elevation view thereof;
 FIG. 4 is a right side elevation view thereof;
 FIG. 5 is a left side elevation view thereof;
 FIG. 6 is a top plan view thereof;
 FIG. 7 is a bottom plan view thereof;
 FIG. 8 is a front-perspective view of a knob and collar assembly according to a second embodiment;
 FIG. 9 is a front elevation view thereof;
 FIG. 10 is a back elevation view thereof;
 FIG. 11 is a right side elevation view thereof;
 FIG. 12 is a left side elevation view thereof;
 FIG. 13 is a top plan view thereof;
 FIG. 14 is a bottom plan view thereof;
 FIG. 15 is a front-perspective view of a knob and collar assembly according to a third embodiment;
 FIG. 16 is a front elevation view thereof;
 FIG. 17 is a back elevation view thereof;
 FIG. 18 is a right side elevation view thereof;
 FIG. 19 is a left side elevation view thereof;
 FIG. 20 is a top plan view thereof; and,
 FIG. 21 is a bottom plan view thereof.

The broken lines shown represent unclaimed subject matter and form no part of the claimed design.

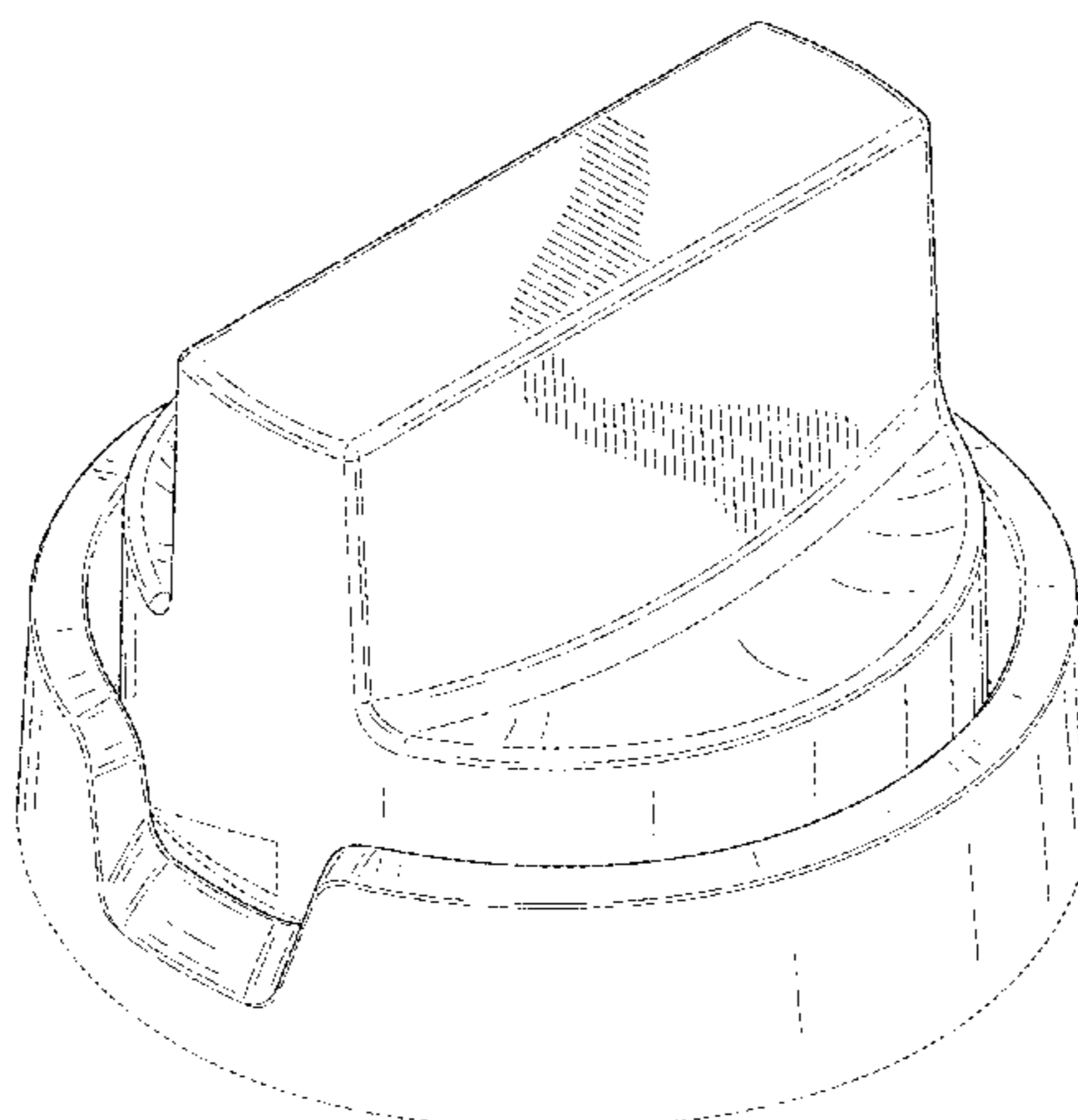
Diagonal shading is used to represent features that are reflective in appearance.

Stipple fill is used to represent features that are non-reflective in appearance.

The colors used in FIGS. 15-21 represent colors that are applied to the respective features, including the variations thereof caused by the effect of light and shadow on the metallic surface of the knob and collar. The depicted metallic light grey color is defined under the H-S-V color scheme as:

H: 61/360
S: 9%
V: 94%, and

(Continued)



the depicted metallic brass-toned color is defined under the H-S-V color scheme as:

H: 56/360
S: 75%
V: 80%.

**1 Claim, 21 Drawing Sheets
(6 of 21 Drawing Sheet(s) Filed in Color)**

(58) **Field of Classification Search**

CPC ... Y10T 292/57; Y10T 292/82; Y10T 16/469;
Y10T 16/44; Y10T 16/476; Y10T
74/2084; Y10T 292/85; Y10T 74/2087;
Y10T 16/4713; Y10T 16/506; Y10T
74/20876; Y10T 74/20612; Y10T
70/5765; Y10T 16/459; Y10T 74/2066;
Y10T 16/487; Y10T 74/20822

See application file for complete search history.

(56)

References Cited

U.S. PATENT DOCUMENTS

D521,314 S *	5/2006	Ball	D7/393
7,171,727 B2 *	2/2007	Wylie	F24C 7/082 16/441
D637,886 S *	5/2011	Bengtson	D8/311
D642,042 S *	7/2011	Kim	D8/311
D715,126 S *	10/2014	Kim	D7/393
D762,593 S *	8/2016	Oneufer	D13/174
9,484,163 B2 *	11/2016	Oneufer	H01H 9/223
D773,917 S *	12/2016	Shoemaker	D8/311
D775,493 S *	1/2017	Funnell, II	D7/406
D779,303 S *	2/2017	Shoemaker	D8/311
D792,189 S *	7/2017	Incukur	D8/311
D793,199 S *	8/2017	Nilssen	D8/311
2004/0107545 A1 *	6/2004	Worrell	G05G 1/10 16/441
2009/0139367 A1 *	6/2009	Rosa	G05D 23/1902 74/553
2015/0370283 A1 *	12/2015	Lawson	G05G 1/082 74/553

* cited by examiner

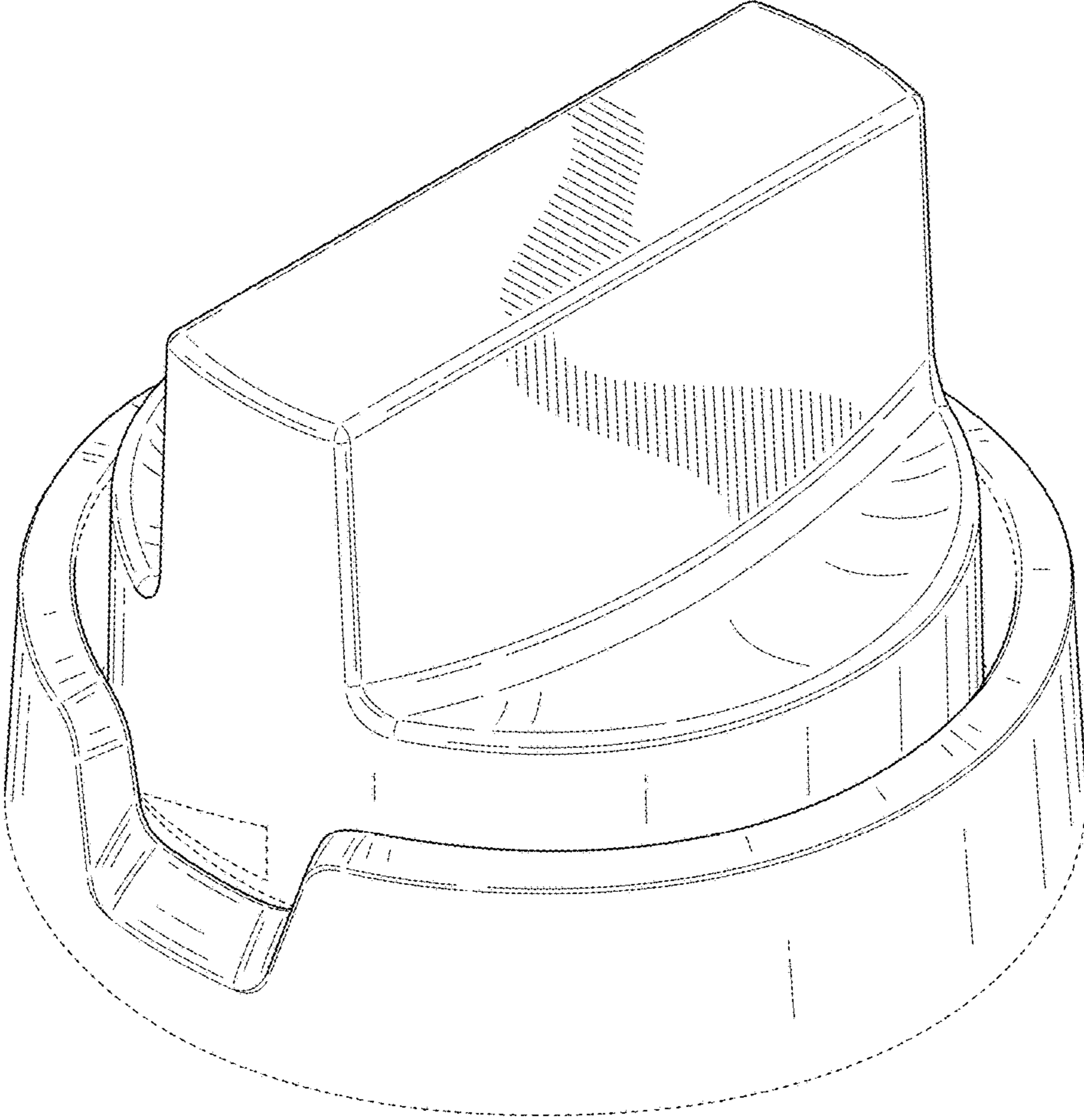


FIG. 1

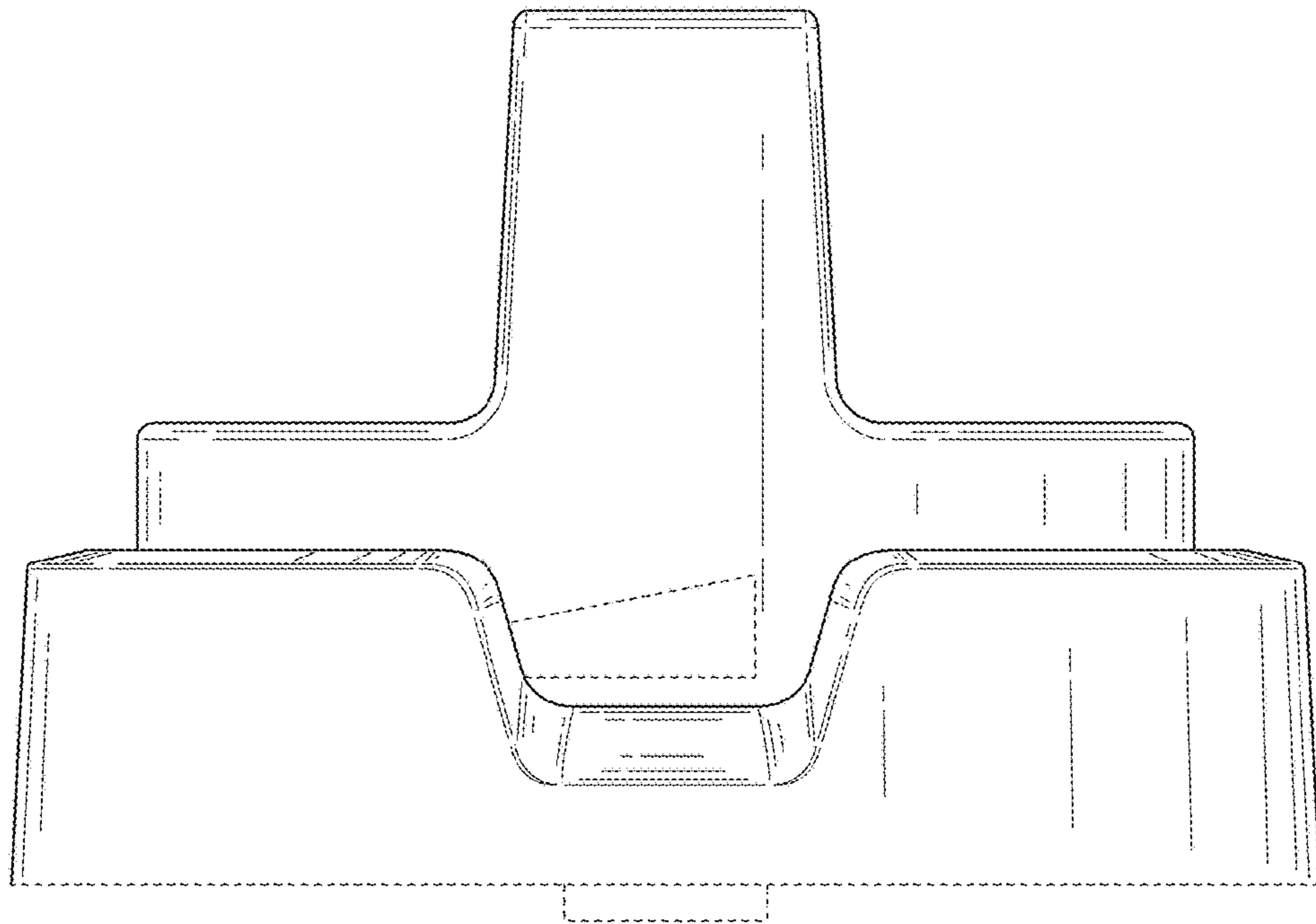


FIG. 2

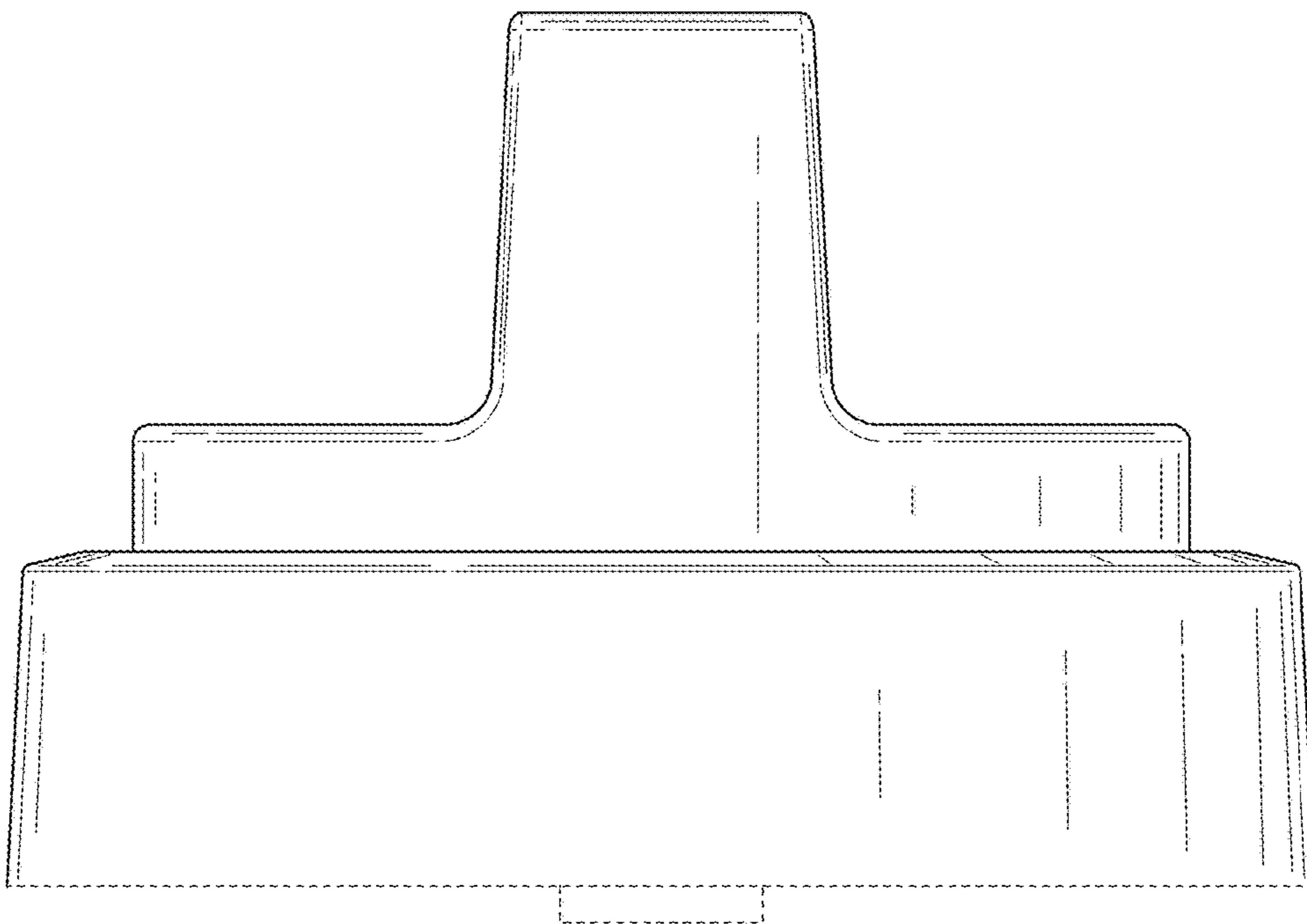


FIG. 3

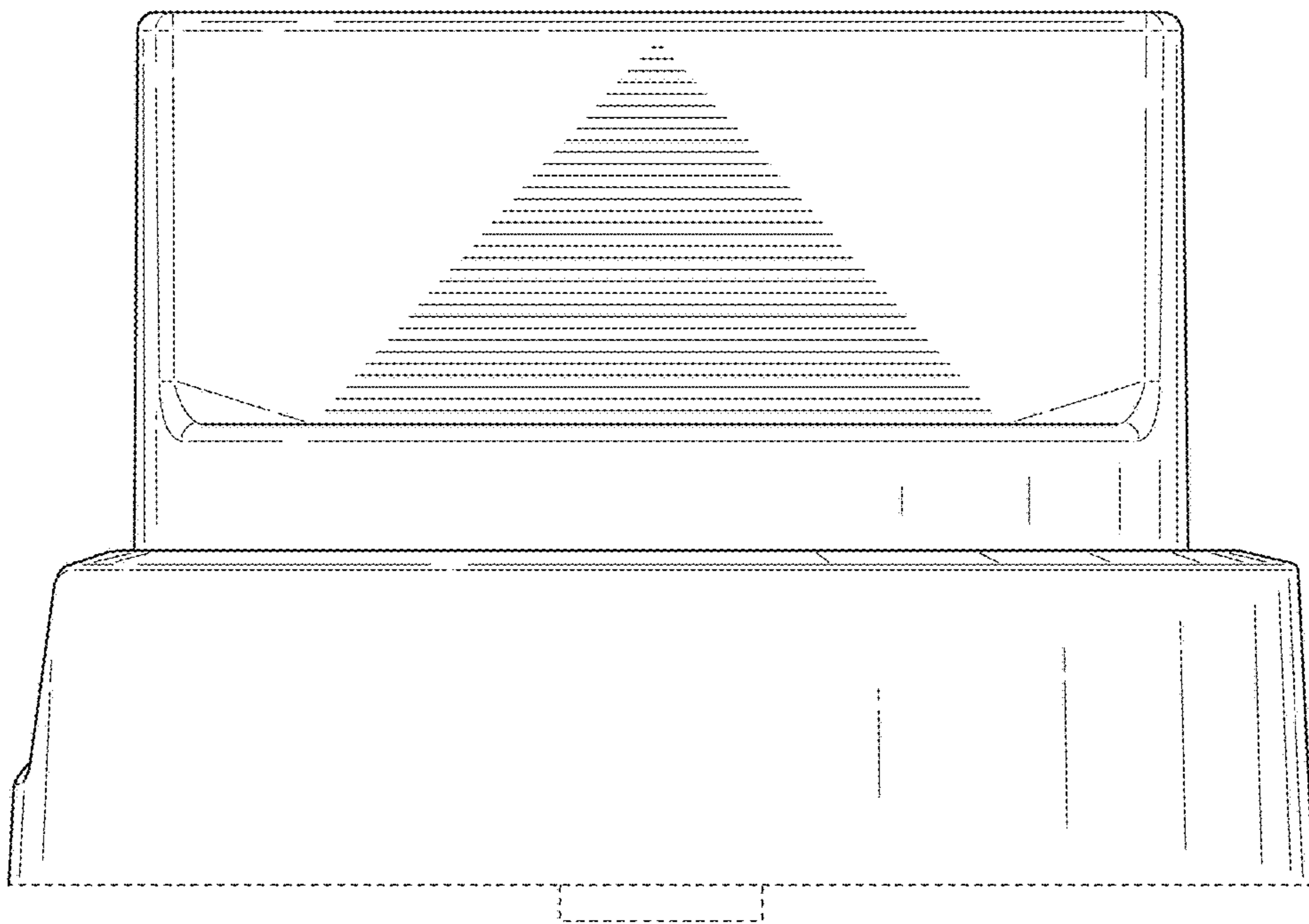


FIG. 4

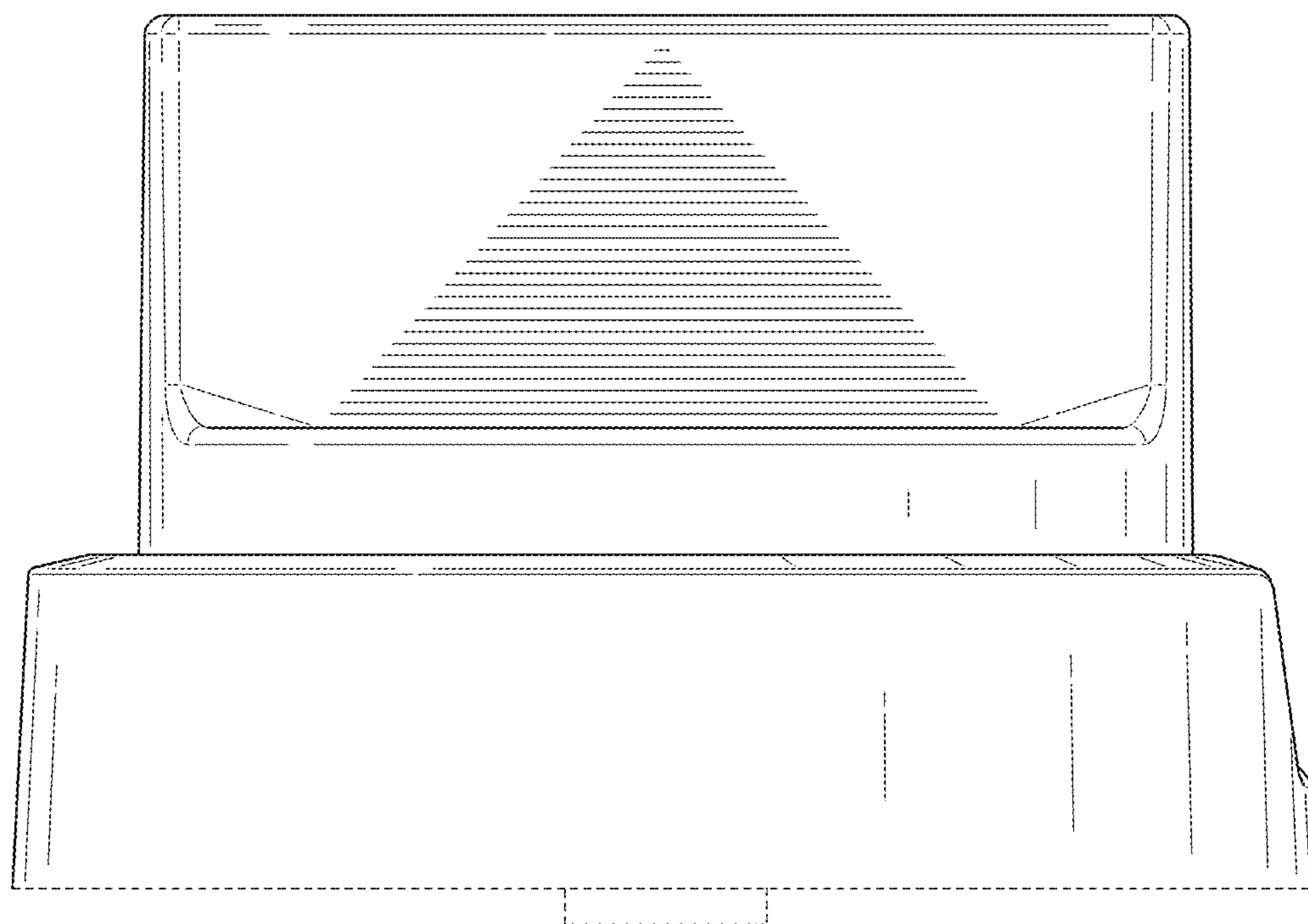


FIG. 5



FIG. 6

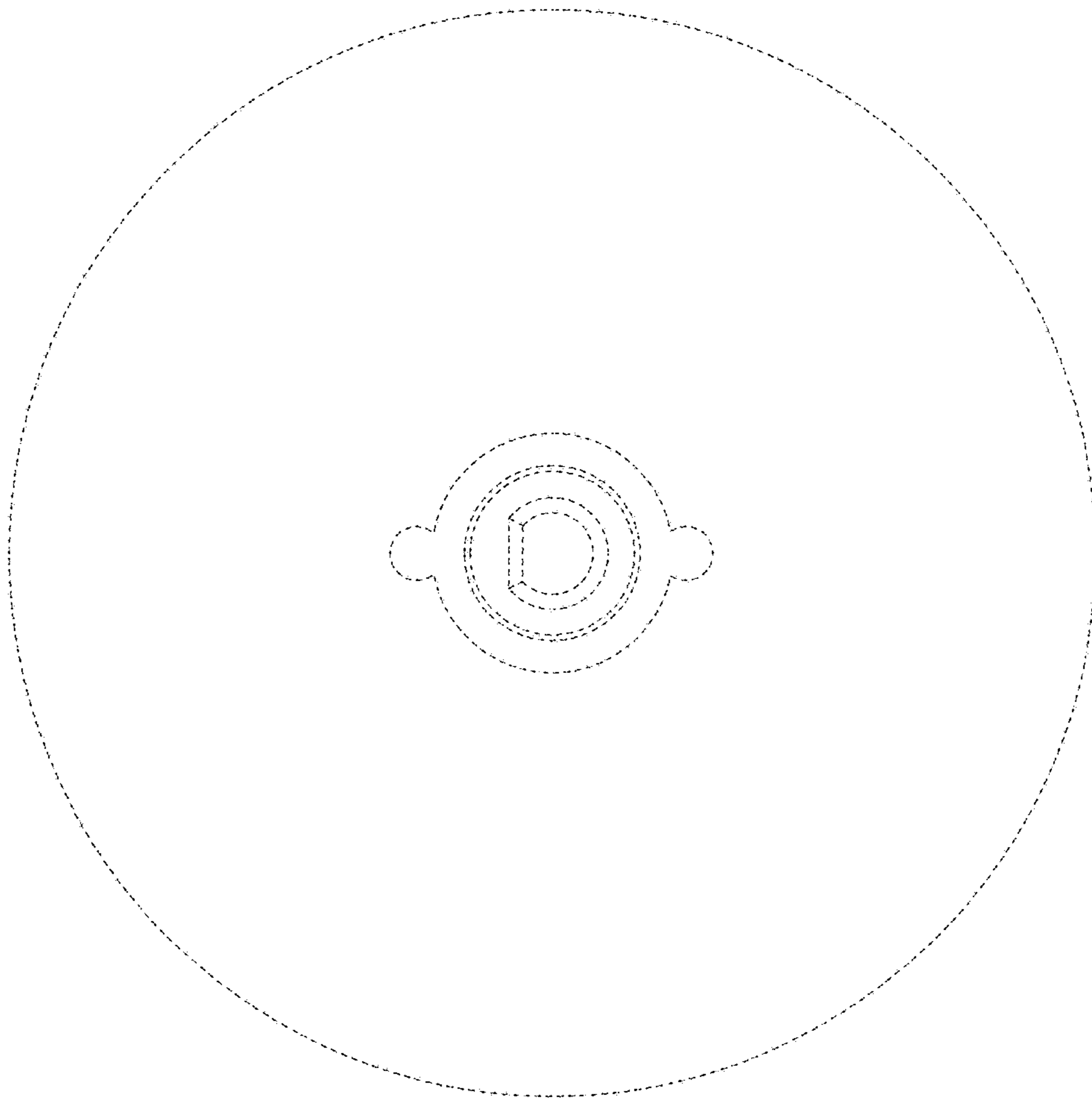


FIG. 7

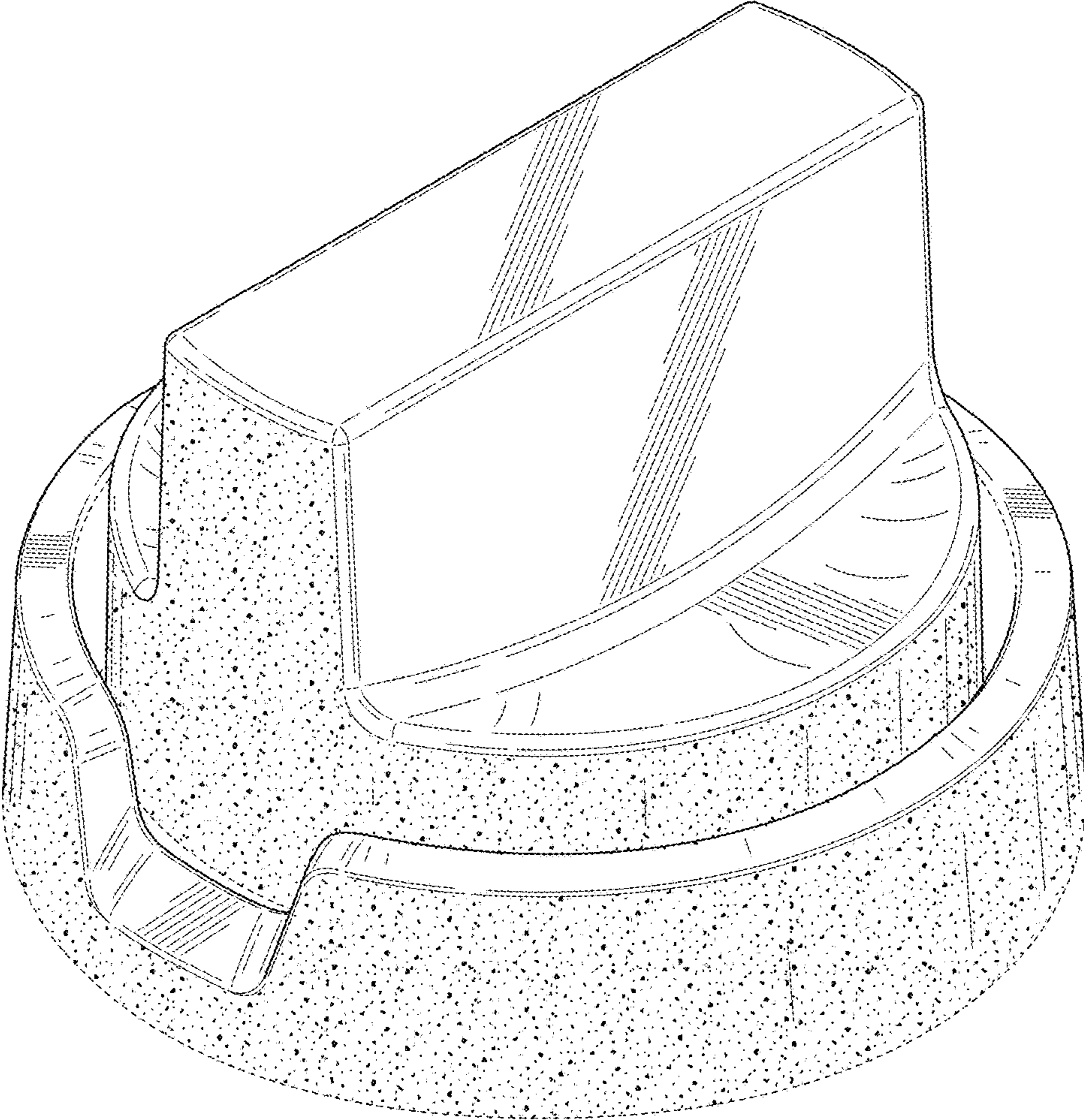


FIG. 8

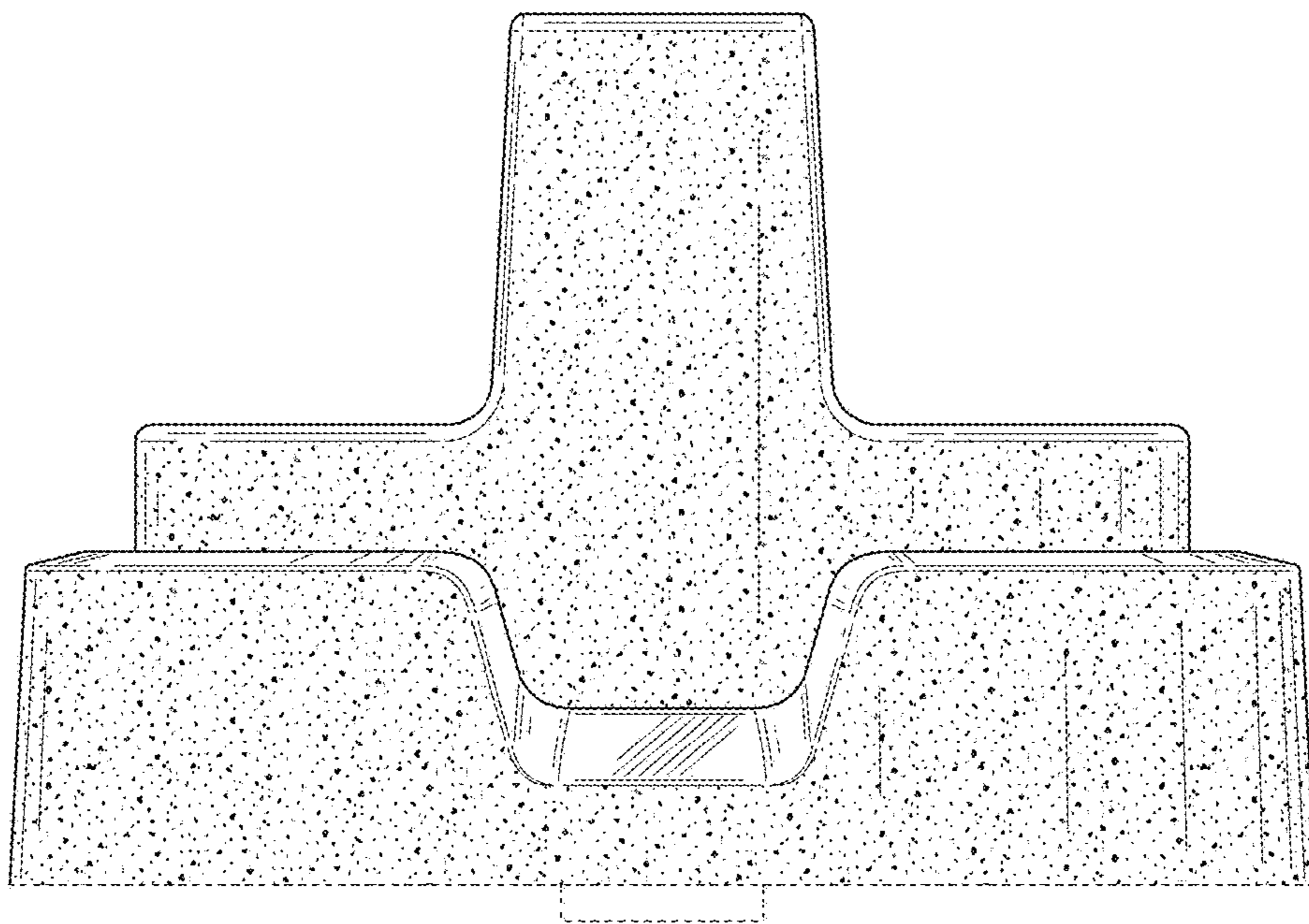


FIG. 9

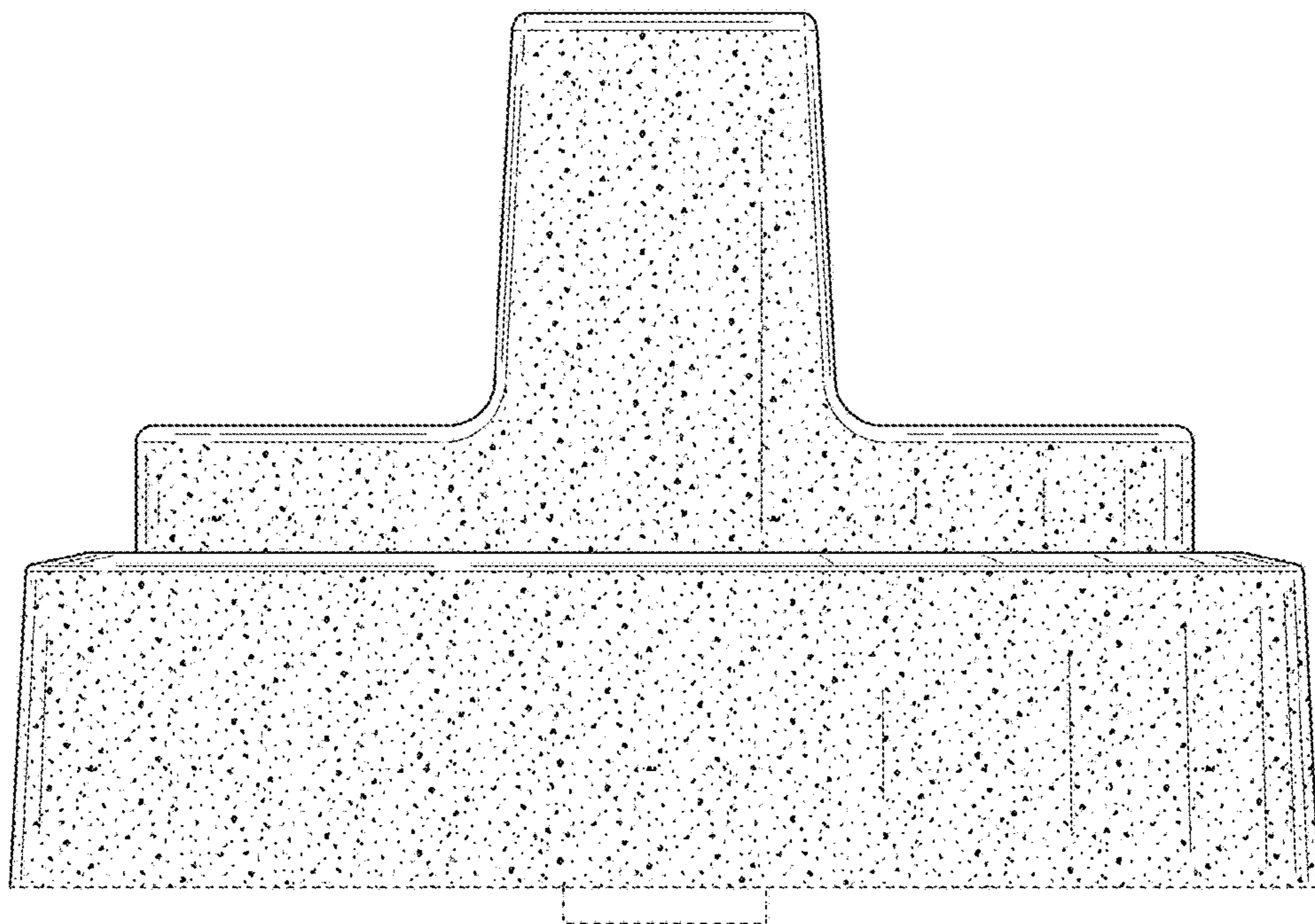


FIG. 10

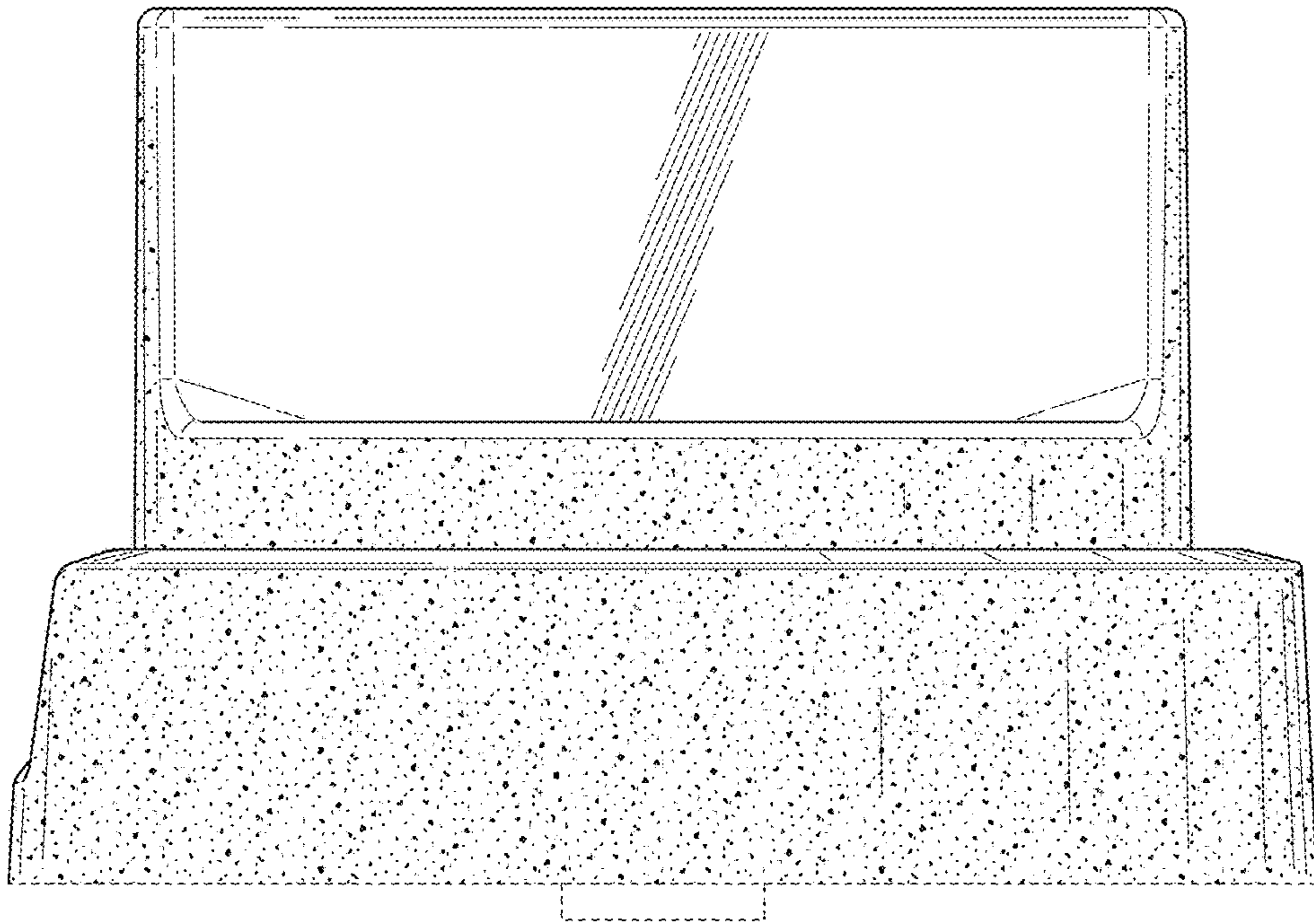


FIG. 11

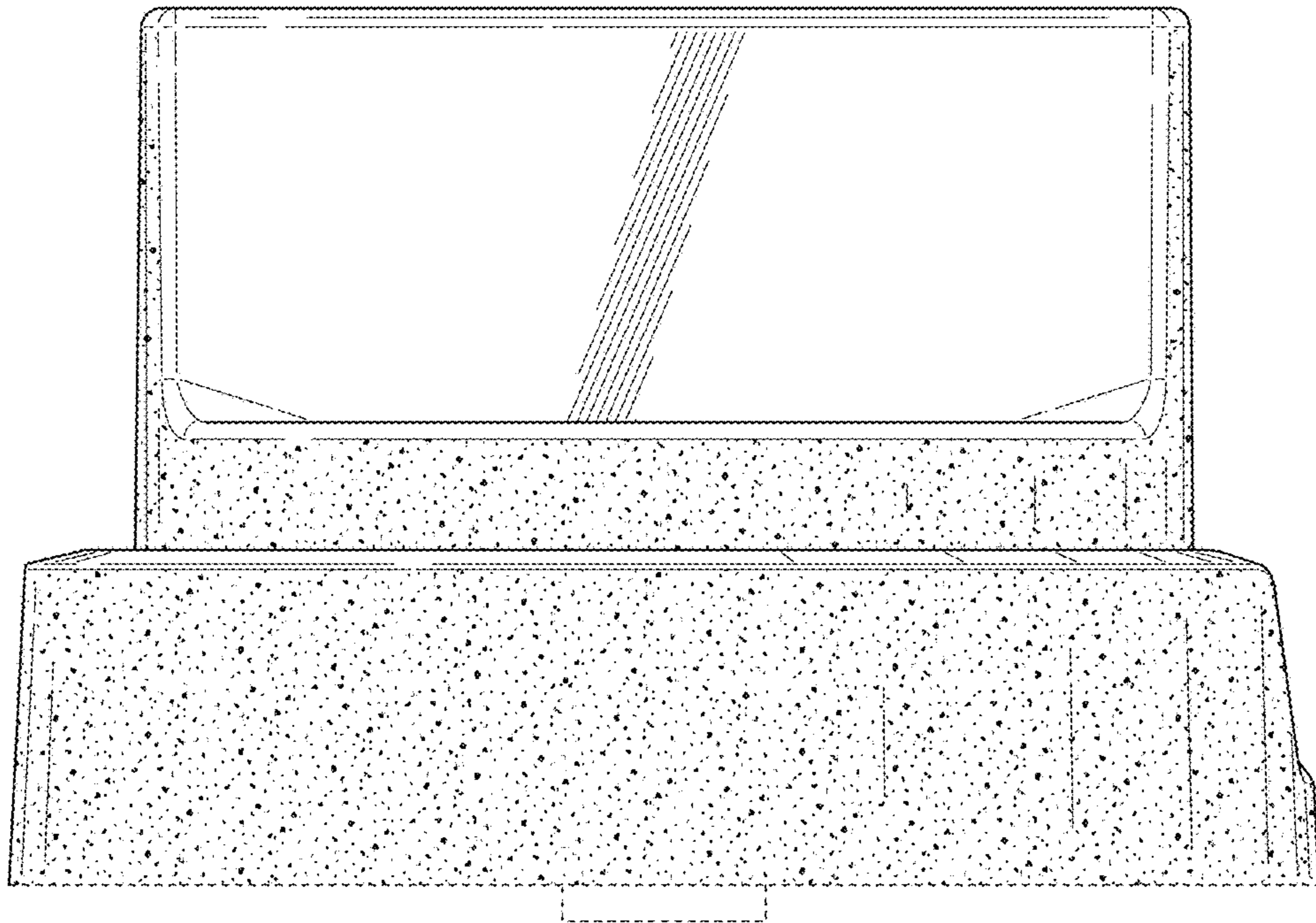


FIG. 12

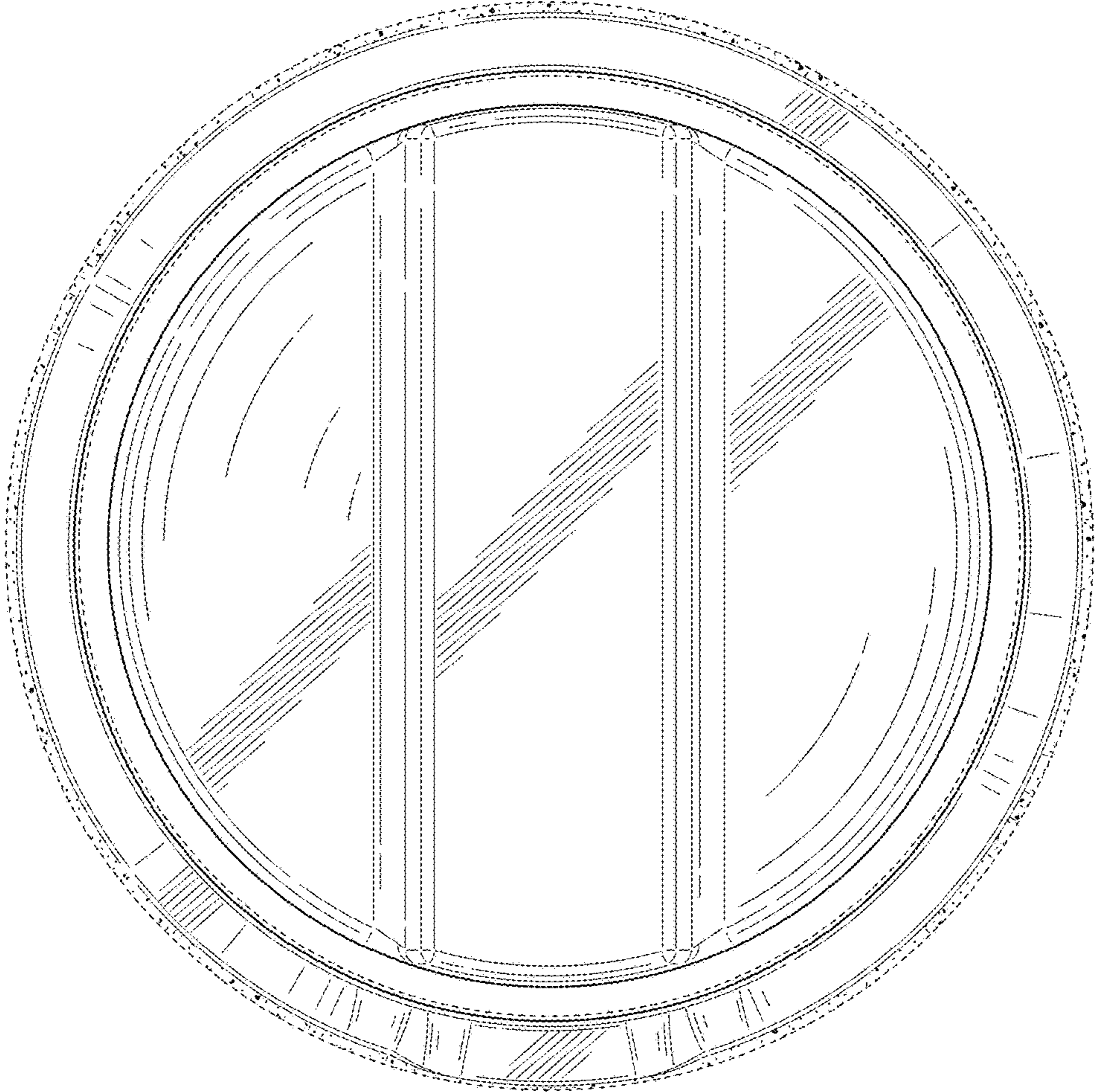


FIG. 13

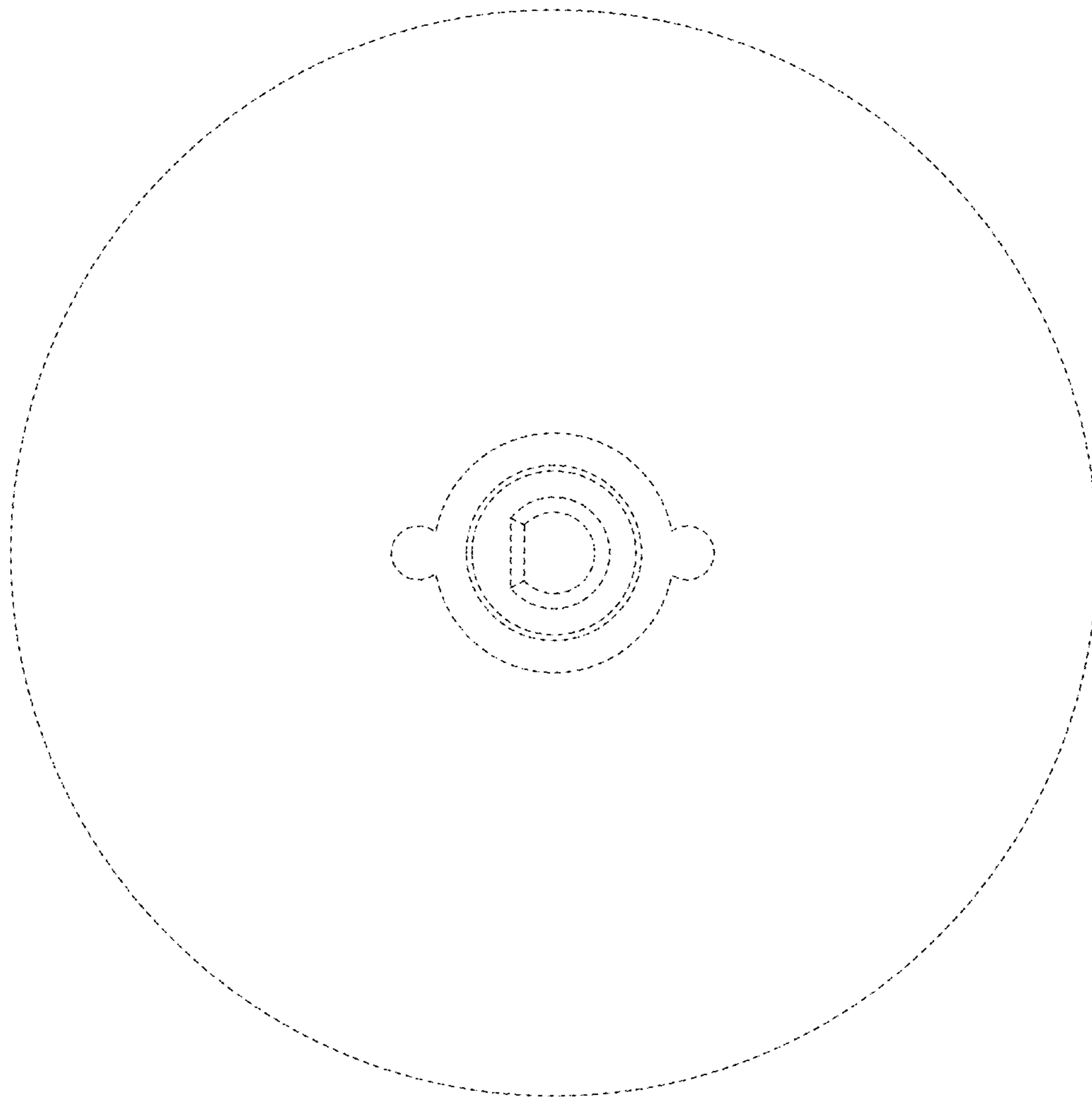


FIG. 14

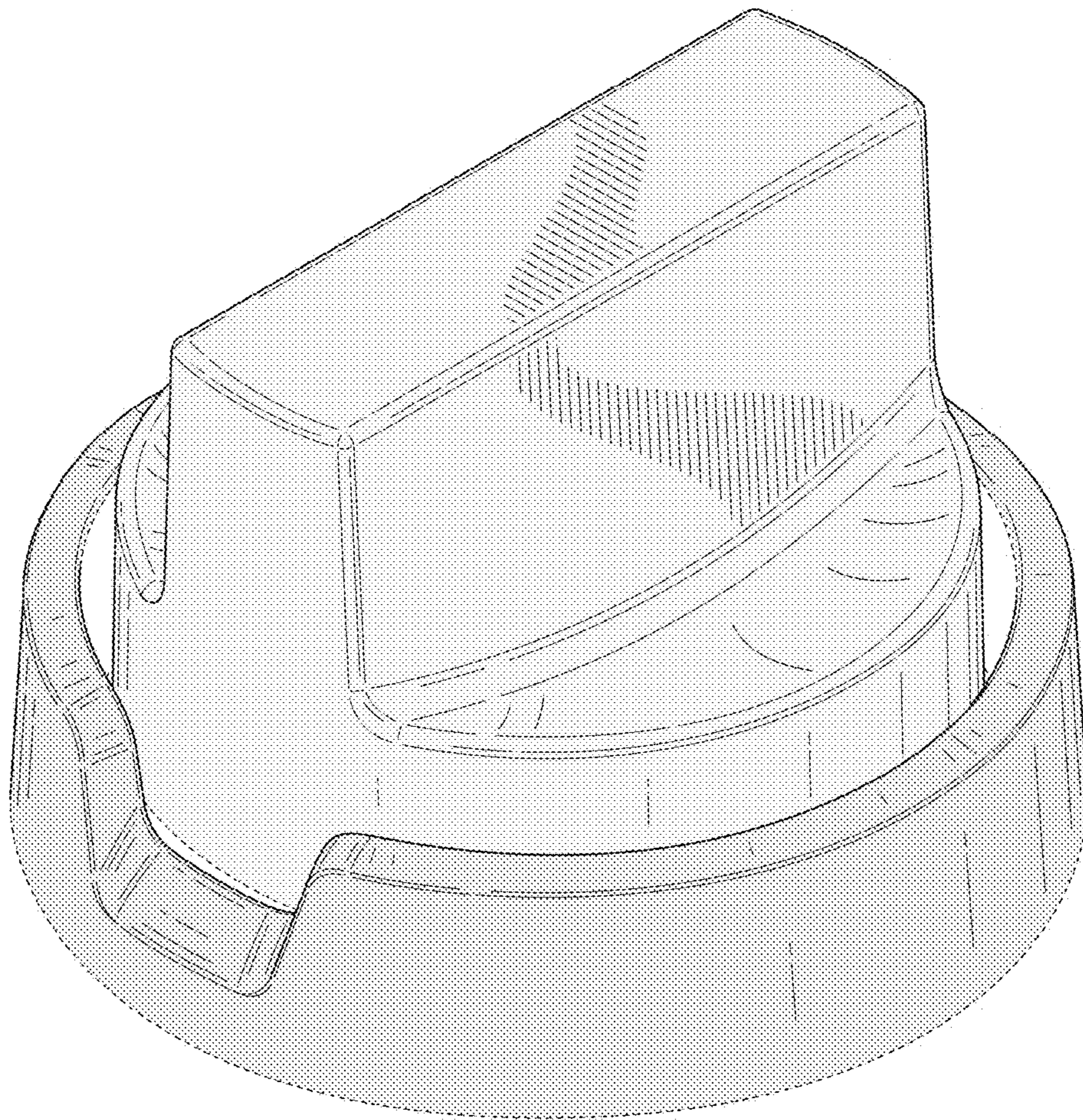


FIG. 15

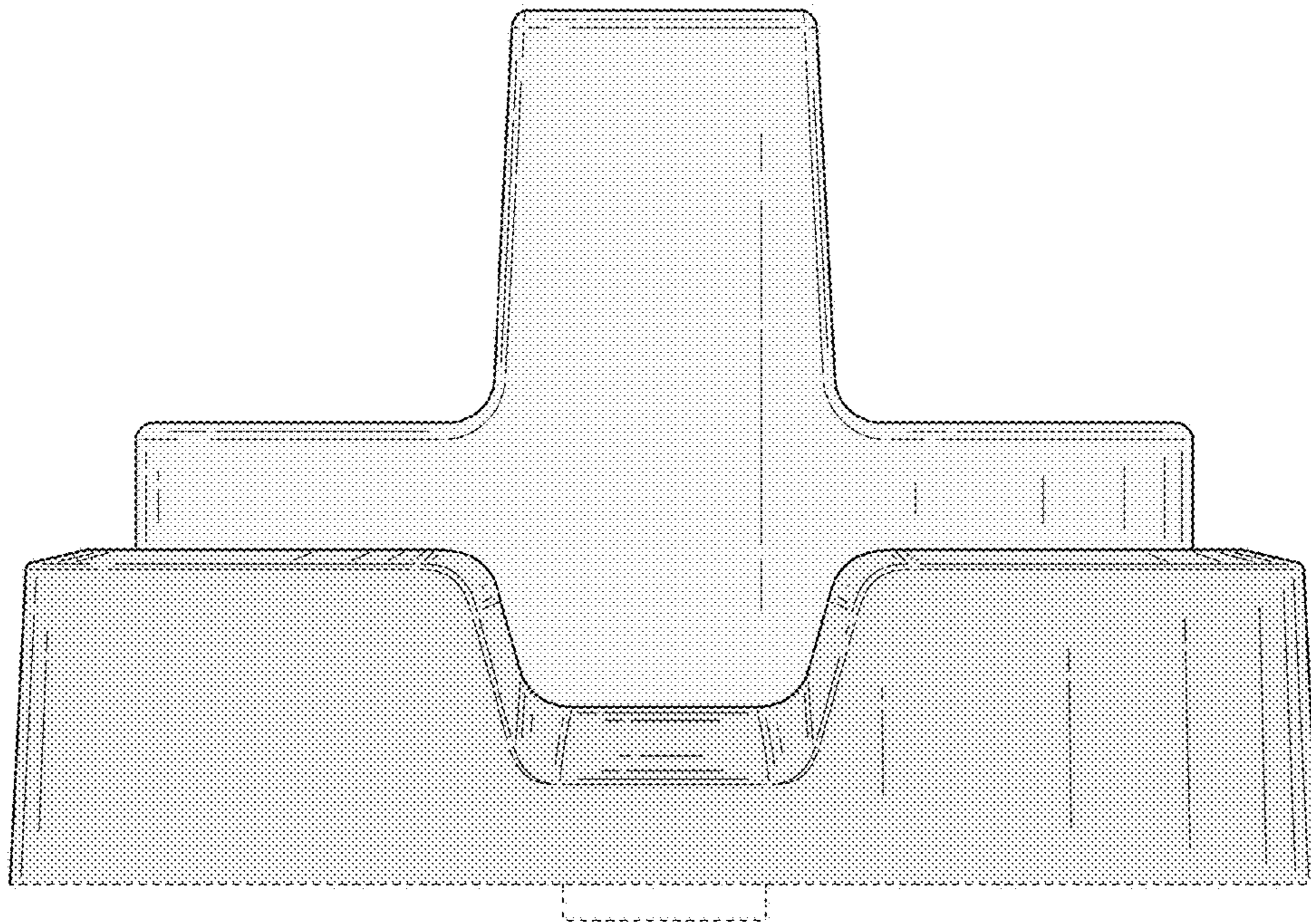


FIG. 16

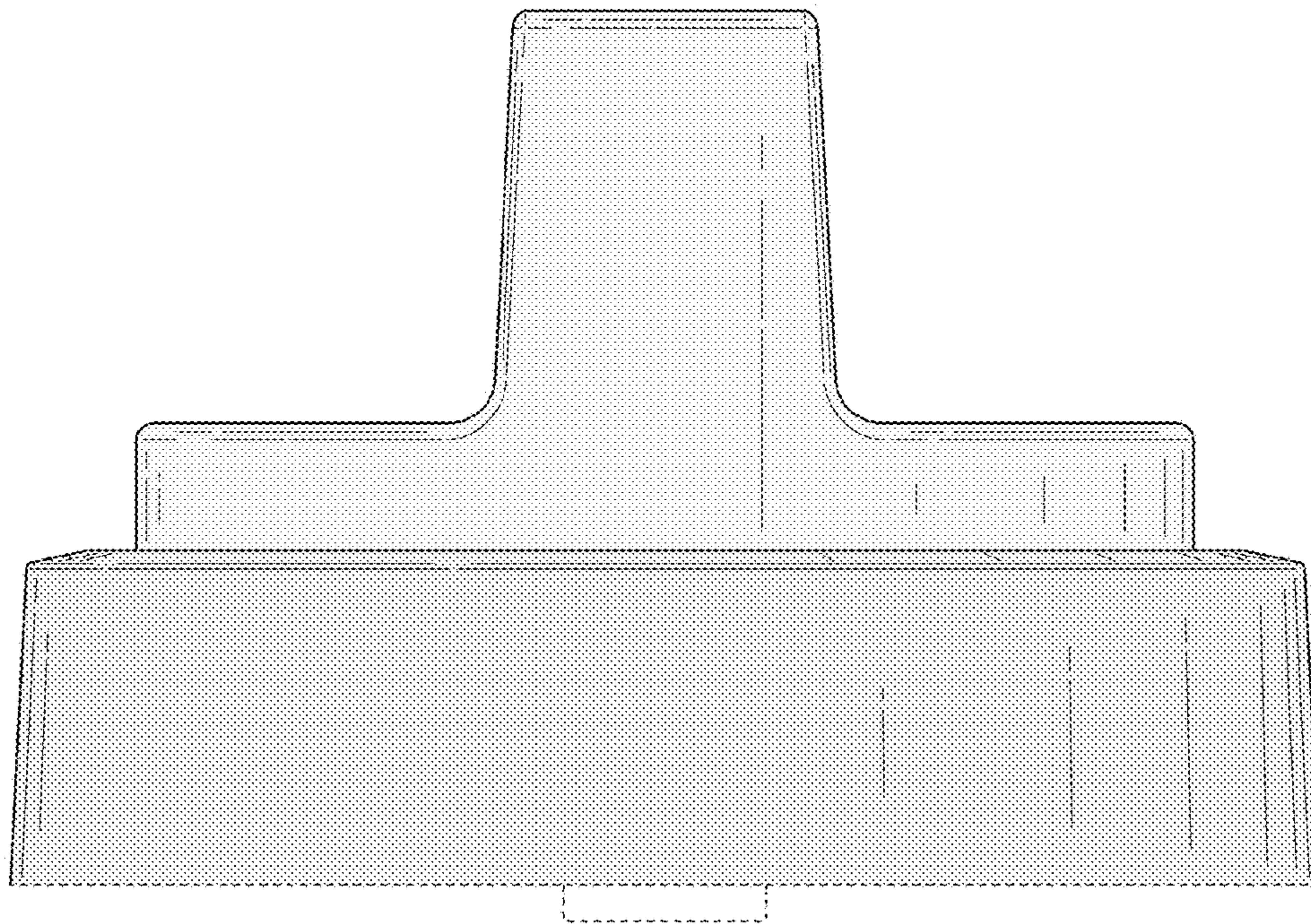


FIG. 17

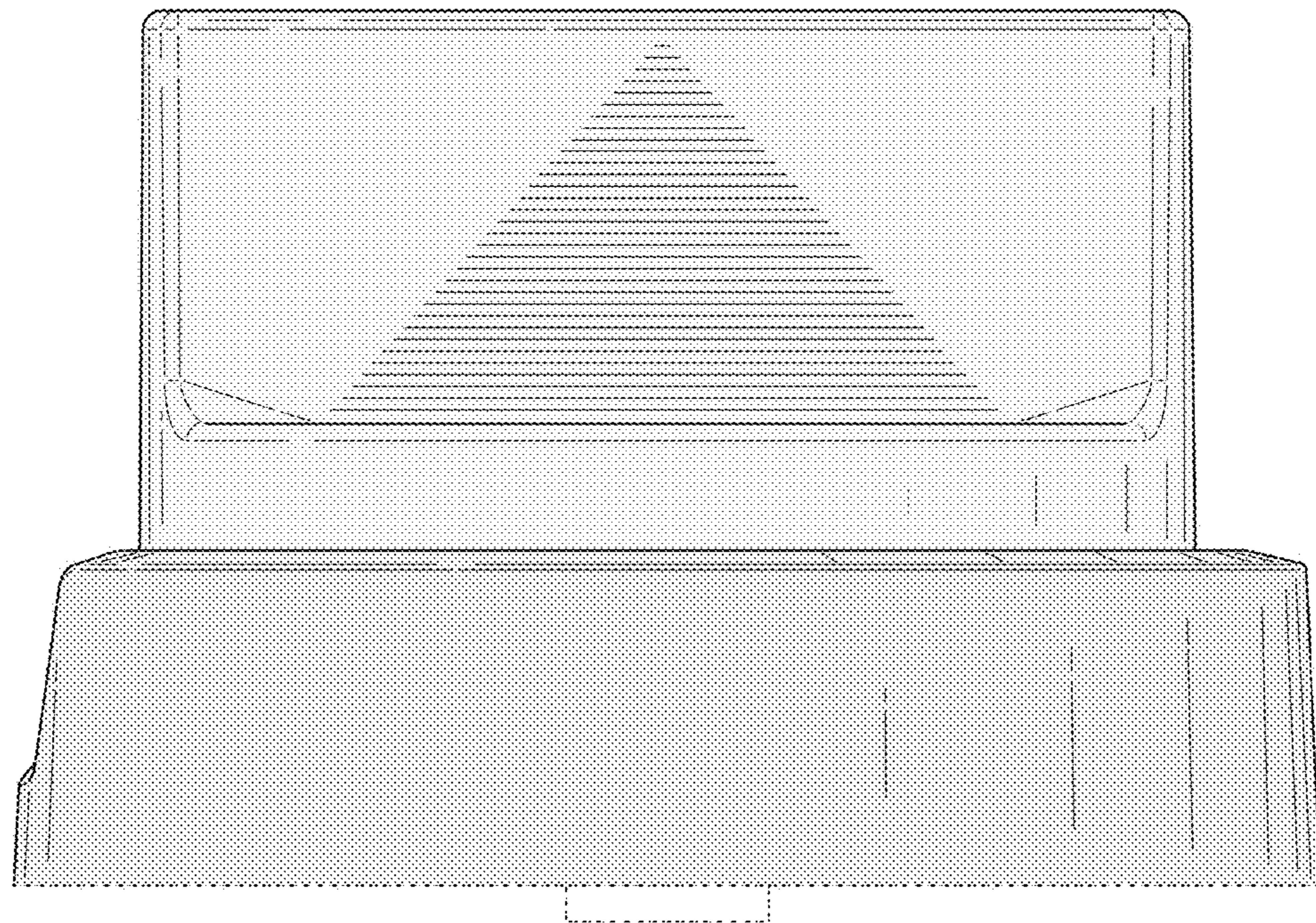


FIG. 18

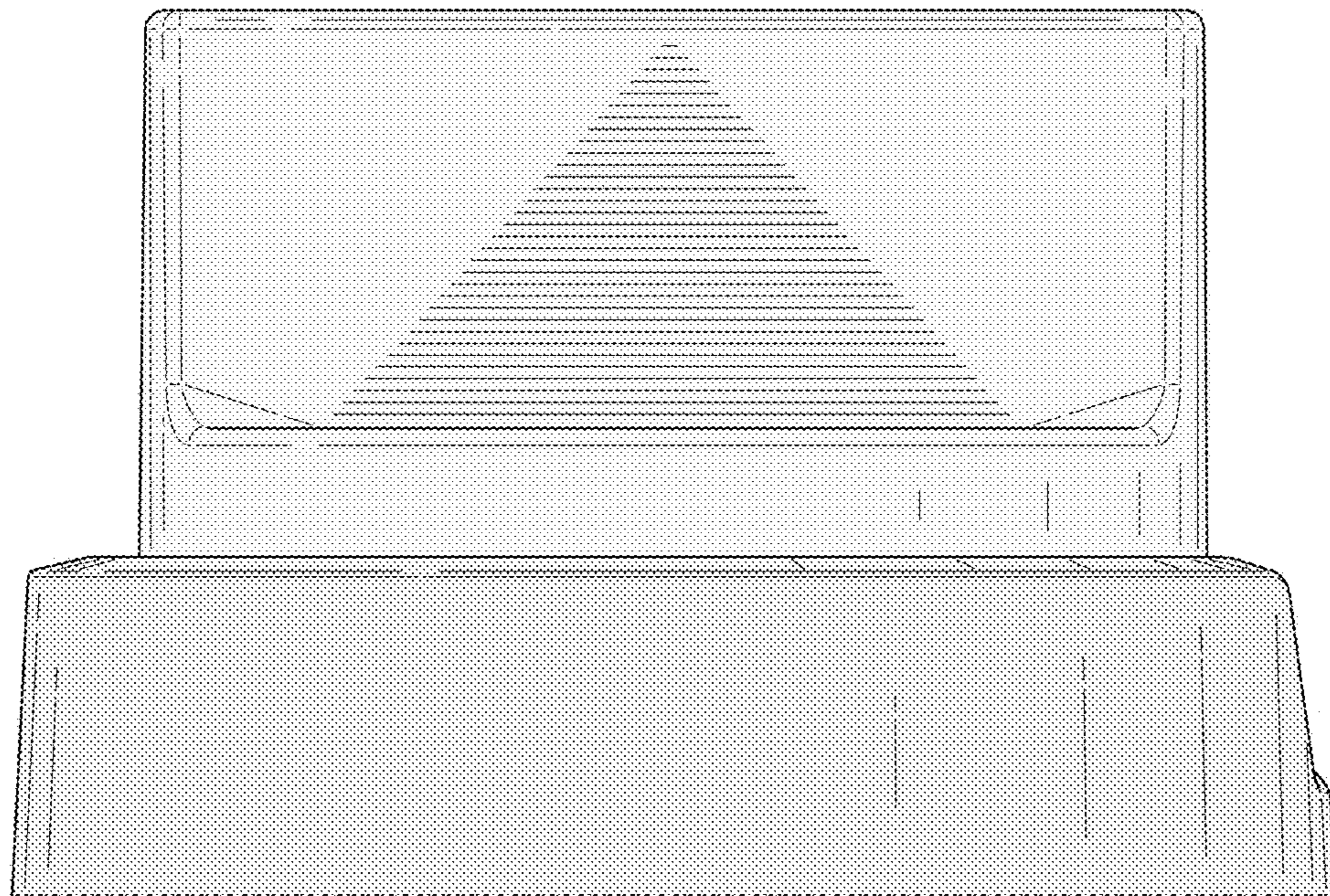


FIG. 19

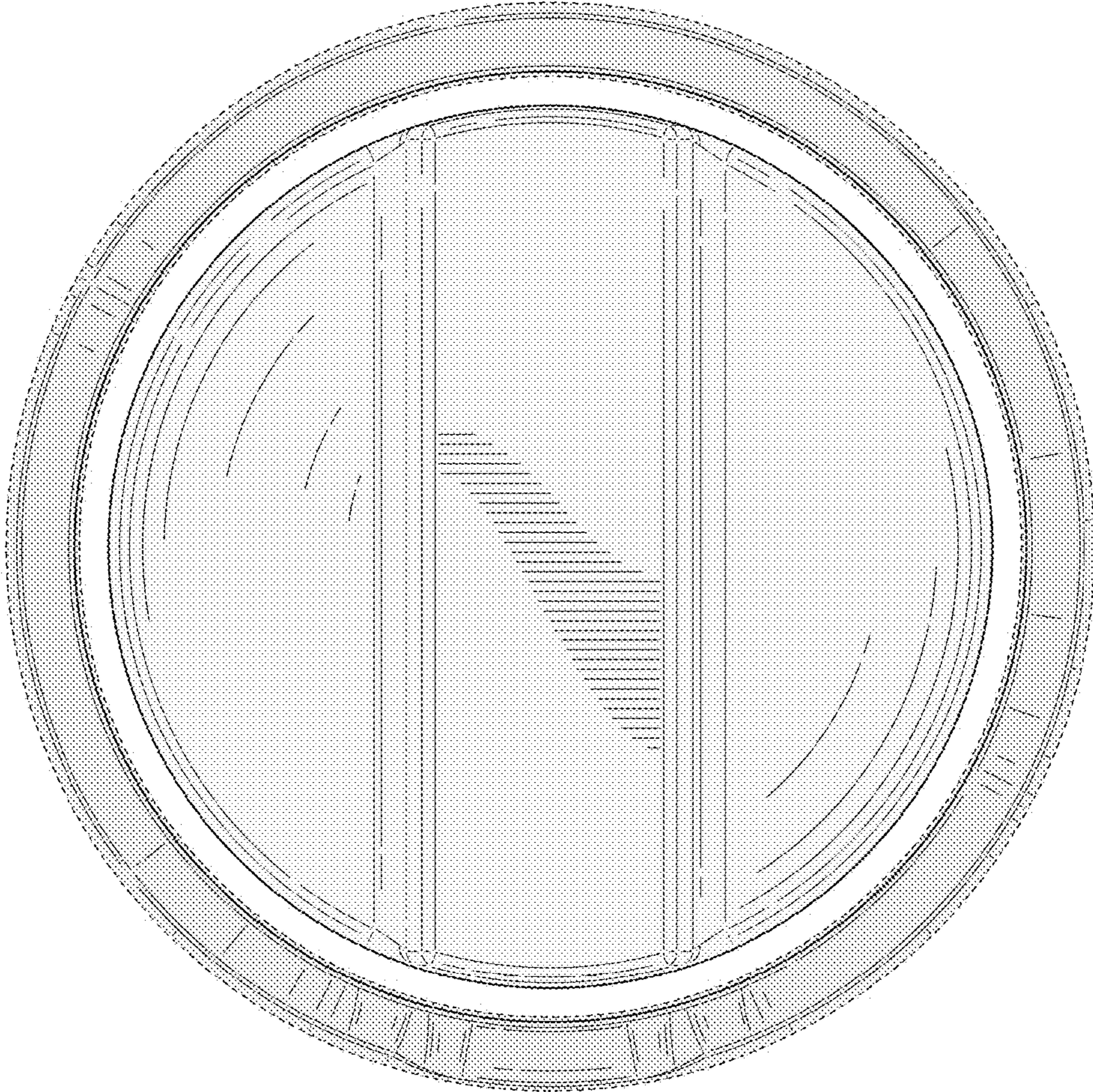


FIG. 20

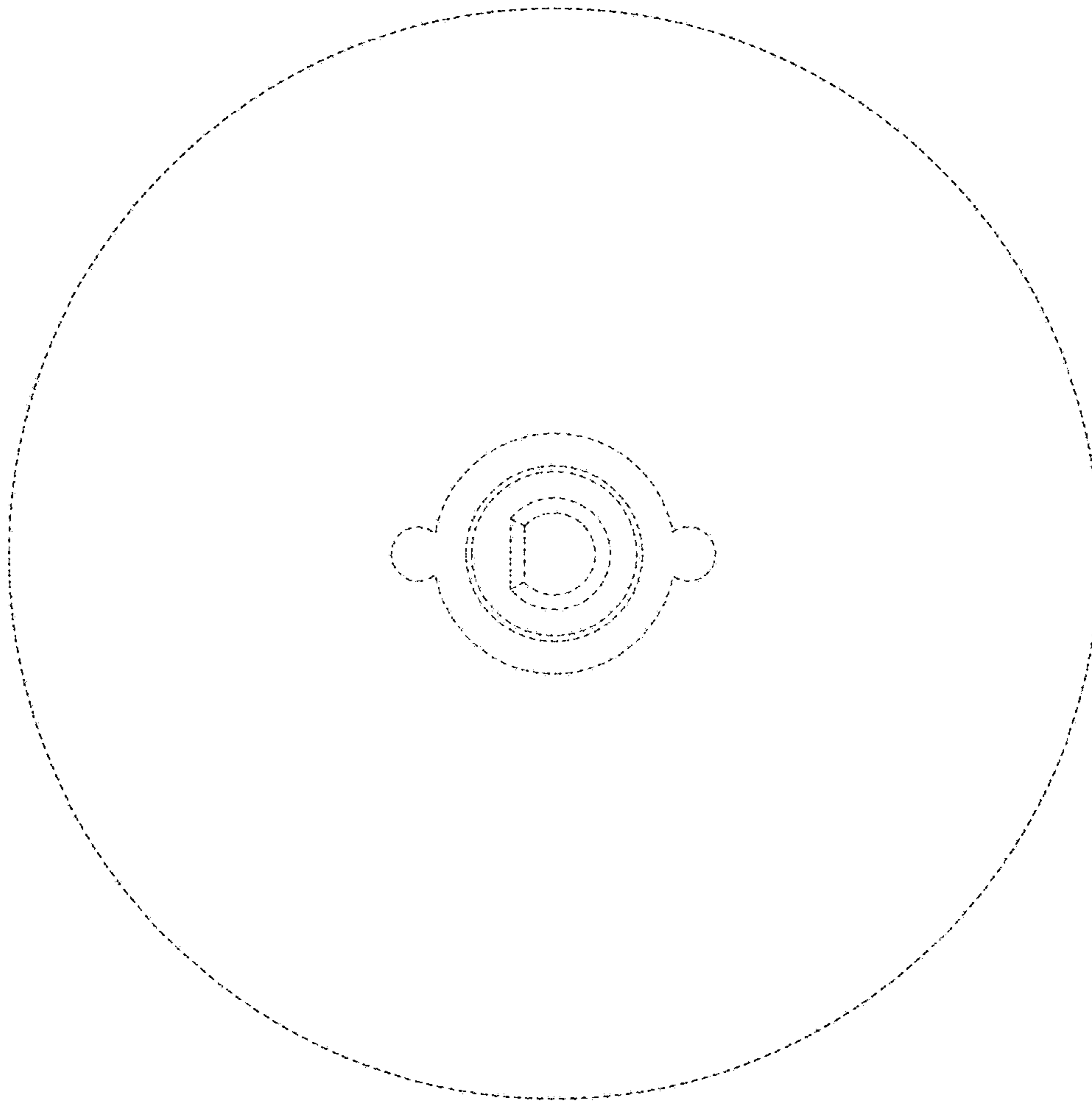


FIG. 21