



US00D924174S

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

(10) **Patent No.:** **US D924,174 S**
(45) **Date of Patent:** **** Jul. 6, 2021**

- (54) **SURGE ABSORBER**
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Ching-Ho Chou, Taoyuan (TW); **Do Chen**, Taoyuan (TW)
- (73) Assignee: **DELTA ELECTRONICS, INC.**,
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- D245,906 S * 9/1977 Taylor D13/184
- 4,404,615 A * 9/1983 Dep H05K 9/0067
206/707
- D286,765 S * 11/1986 Prouty D13/159
- 5,206,779 A * 4/1993 Sato H01R 13/6666
361/111
- D339,790 S * 9/1993 Leman D13/108
- D358,370 S * 5/1995 Guppy D13/152
- D397,085 S * 8/1998 Blase D13/118
- D533,139 S * 12/2006 Roesch D13/152
- D563,896 S * 3/2008 Greenslate D10/104.1

(Continued)

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

(21) Appl. No.: **29/619,183**

(22) Filed: **Sep. 27, 2017**

(30) **Foreign Application Priority Data**

- Sep. 26, 2017 (EM) EM004372431-0001
- Sep. 26, 2017 (EM) EM004372431-0002
- Sep. 26, 2017 (EM) EM004372431-0003
- Sep. 26, 2017 (EM) EM004372431-0004

(51) **LOC (13) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/158**; D13/160

(58) **Field of Classification Search**
USPC D13/107, 110, 112, 118, 123, 133, 156,
D13/158-162, 173, 174, 184, 199
CPC H01H 61/00; H01H 71/16; H01H 85/143;
H01R 13/207; H02G 3/12; H02H 1/00;
H02H 1/20; H02H 3/22; H02H 7/04;
H02H 9/00; H02H 9/04
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 1,811,687 A * 6/1931 Goldberg H02G 3/123
174/57
- 3,576,936 A * 5/1971 Fischer A63H 33/042
434/224
- D245,905 S * 9/1977 Taylor D13/184

OTHER PUBLICATIONS

1P 3PD 3PY Transient/Surge Absorbers, dated Nov. 2011, [online], [site visited Feb. 18, 2020]. Available from Internet, URL: <http://time-mark.com/Documents/Datasheets/Time-Mark-1P-3PD-3PY-Transient-Surge-Absorber.pdf> (Year: 2011).*

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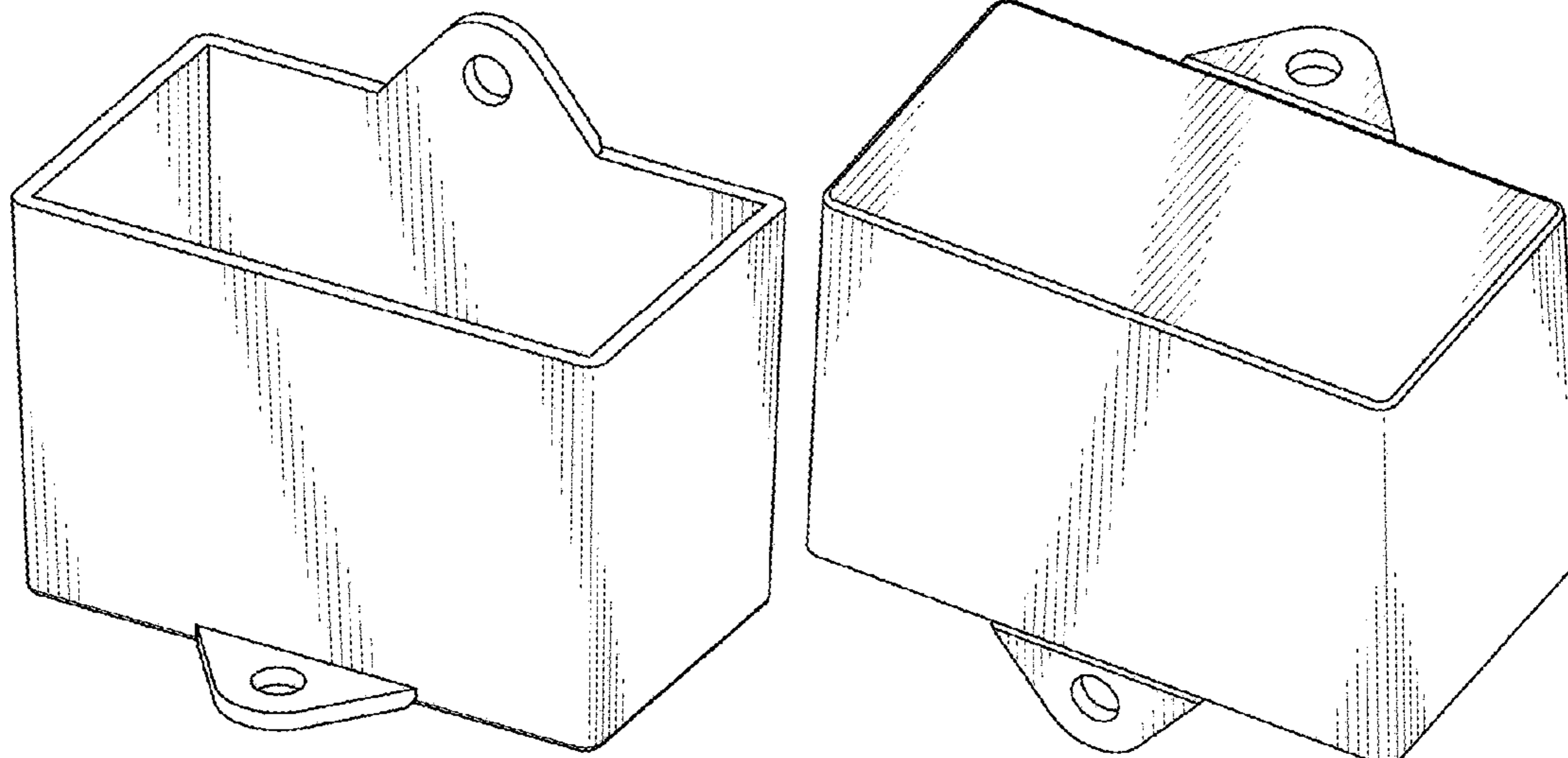
(57) **CLAIM**

The ornamental design for surge absorber, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an embodiment of a surge absorber in accordance with our new design;
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 plan view thereof;
FIG. 7 is a bottom plan view thereof; and,
FIG. 8 is another perspective view thereof.
The unshaded surface form no part of the claimed design.
The broken lines in the drawings illustrate portions of the surge absorber that form no part of the claimed design.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D736,726 S * 8/2015 Andersen D13/152
D776,060 S * 1/2017 Haberkorn D13/152
D794,576 S * 8/2017 Hall D13/159
2004/0065466 A1* 4/2004 Compagnone, Jr. H02G 3/12
174/66
2010/0328016 A1* 12/2010 Wang H01C 7/126
337/158
2017/0318691 A1* 11/2017 Gates H02G 3/081

* cited by examiner

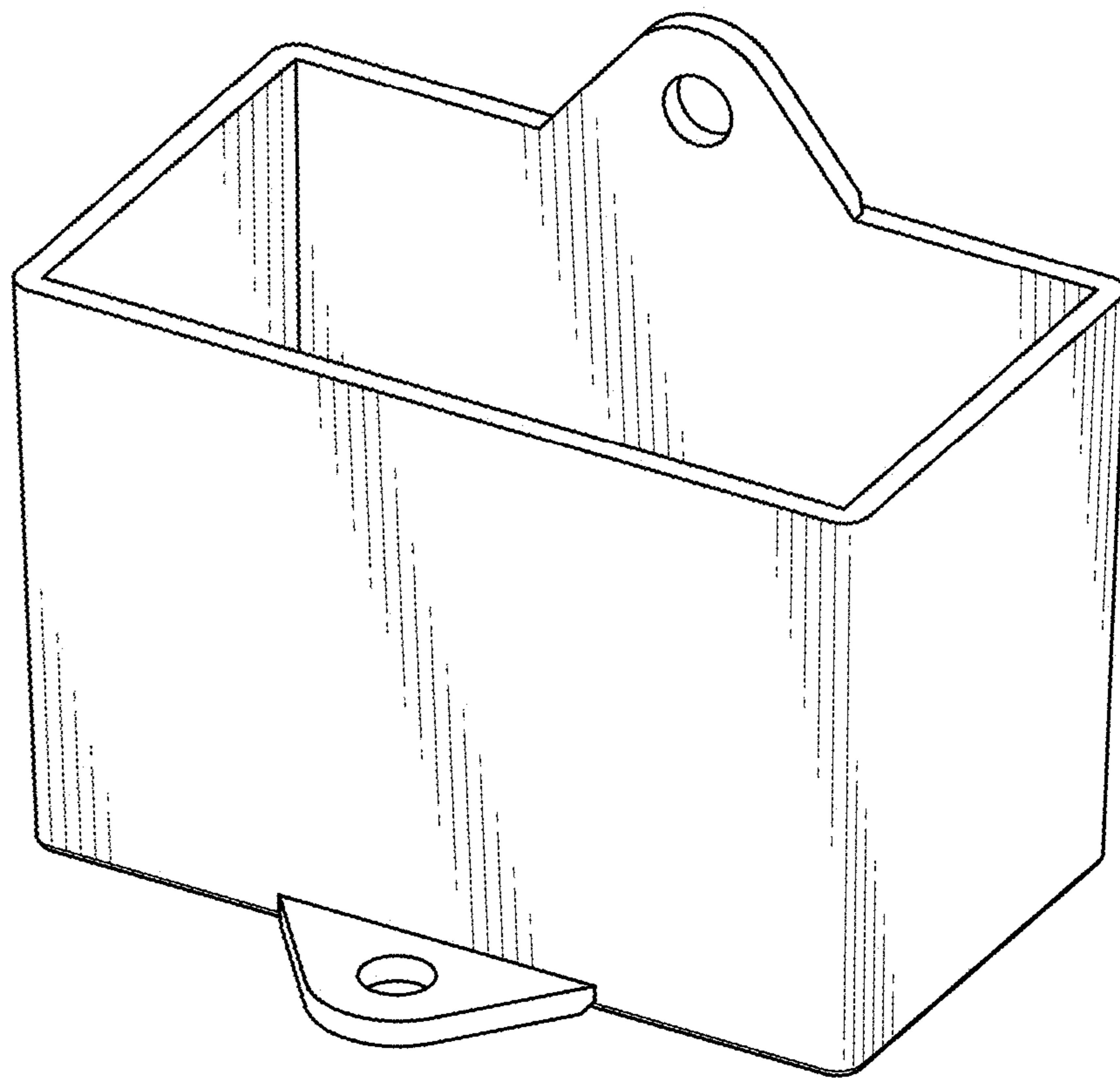


FIG. 1

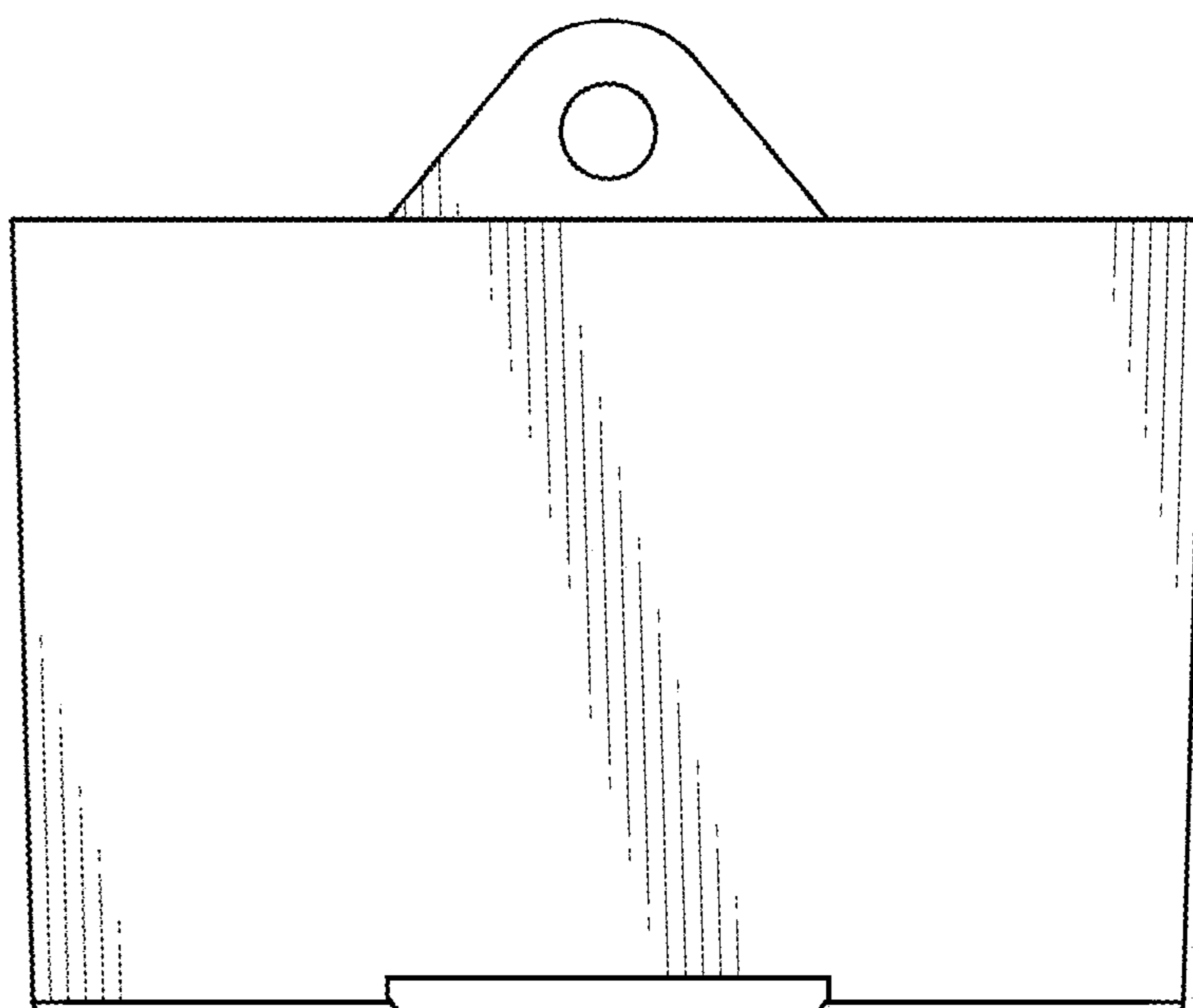


FIG. 2

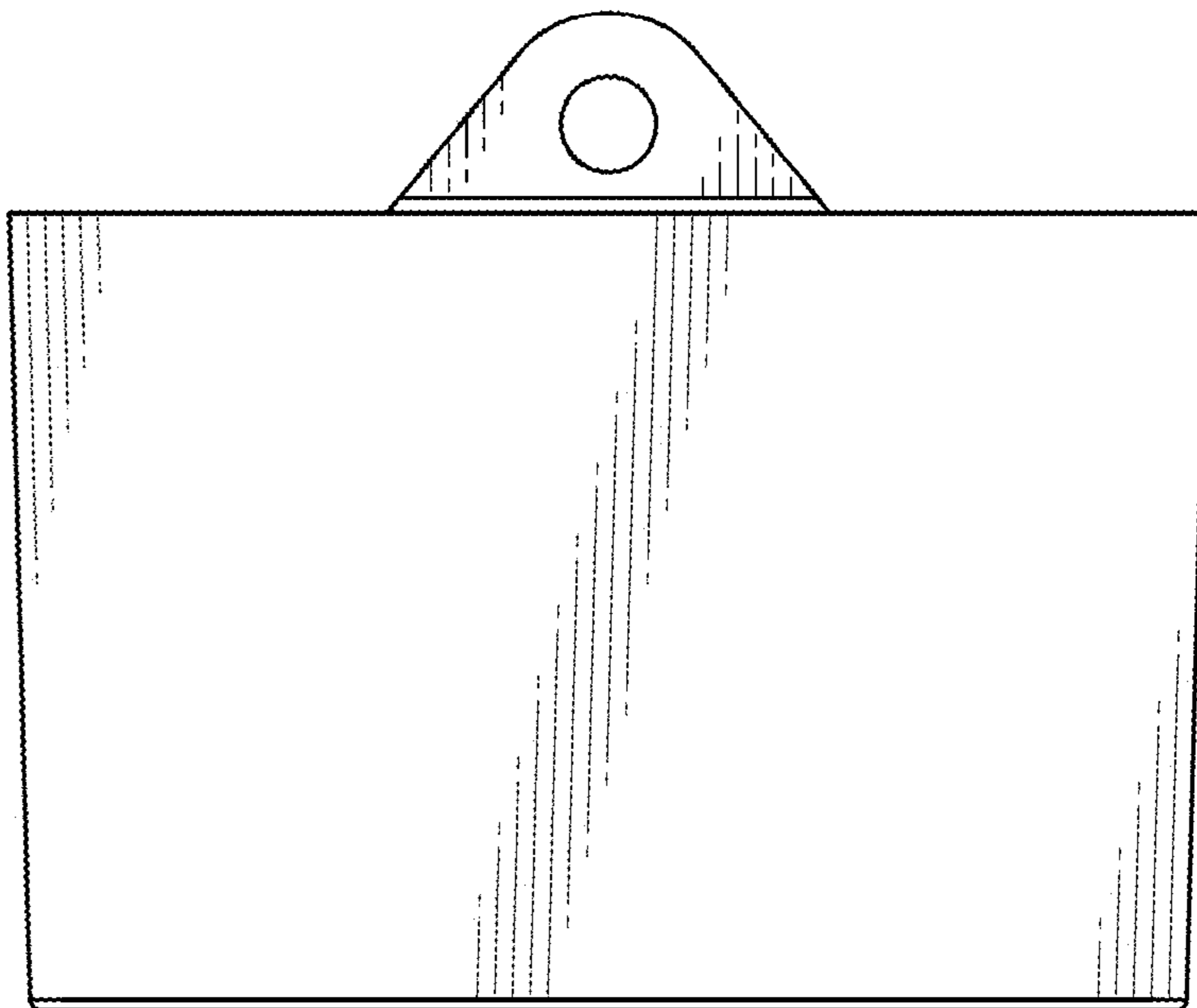


FIG. 3

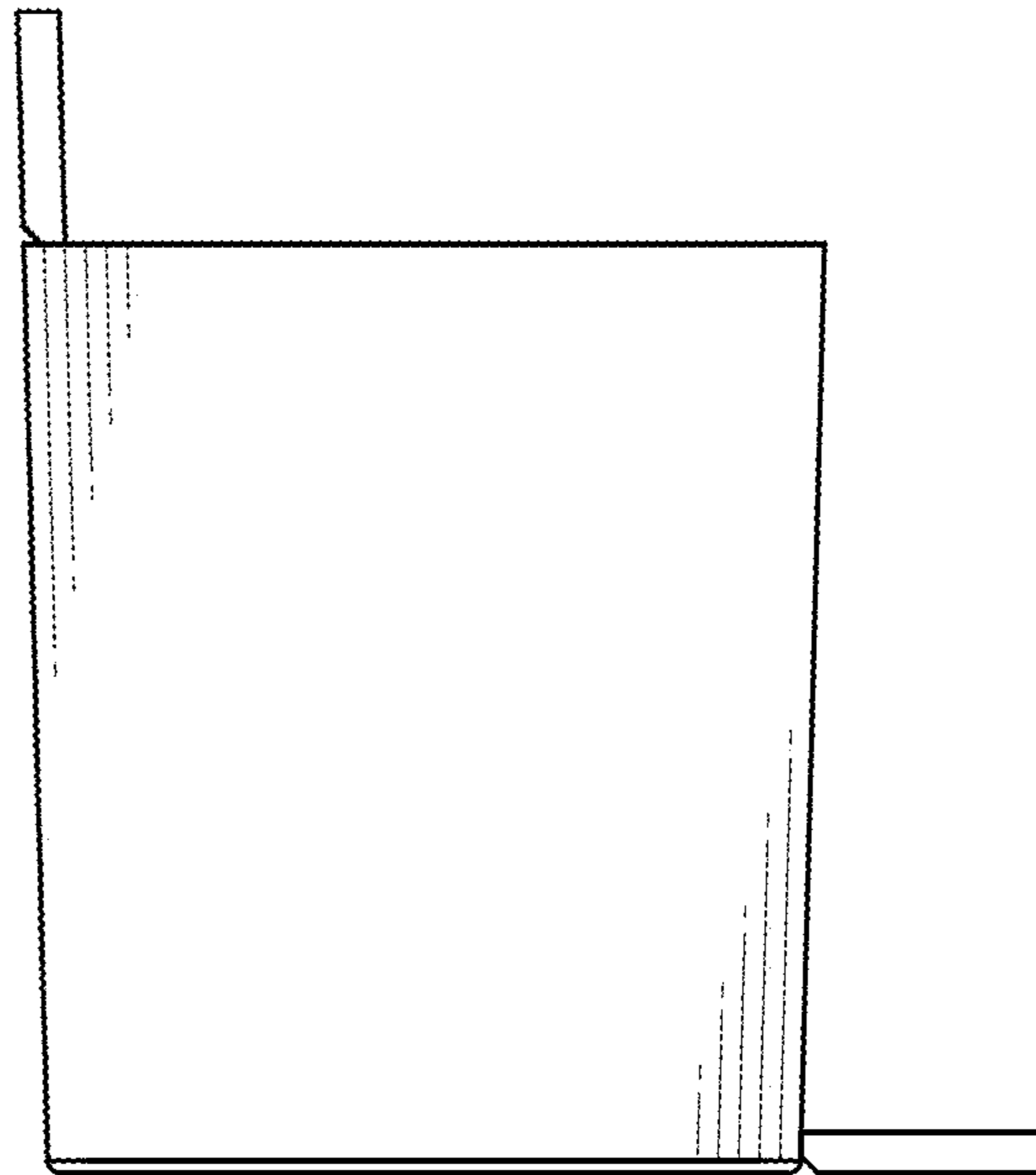


FIG. 4

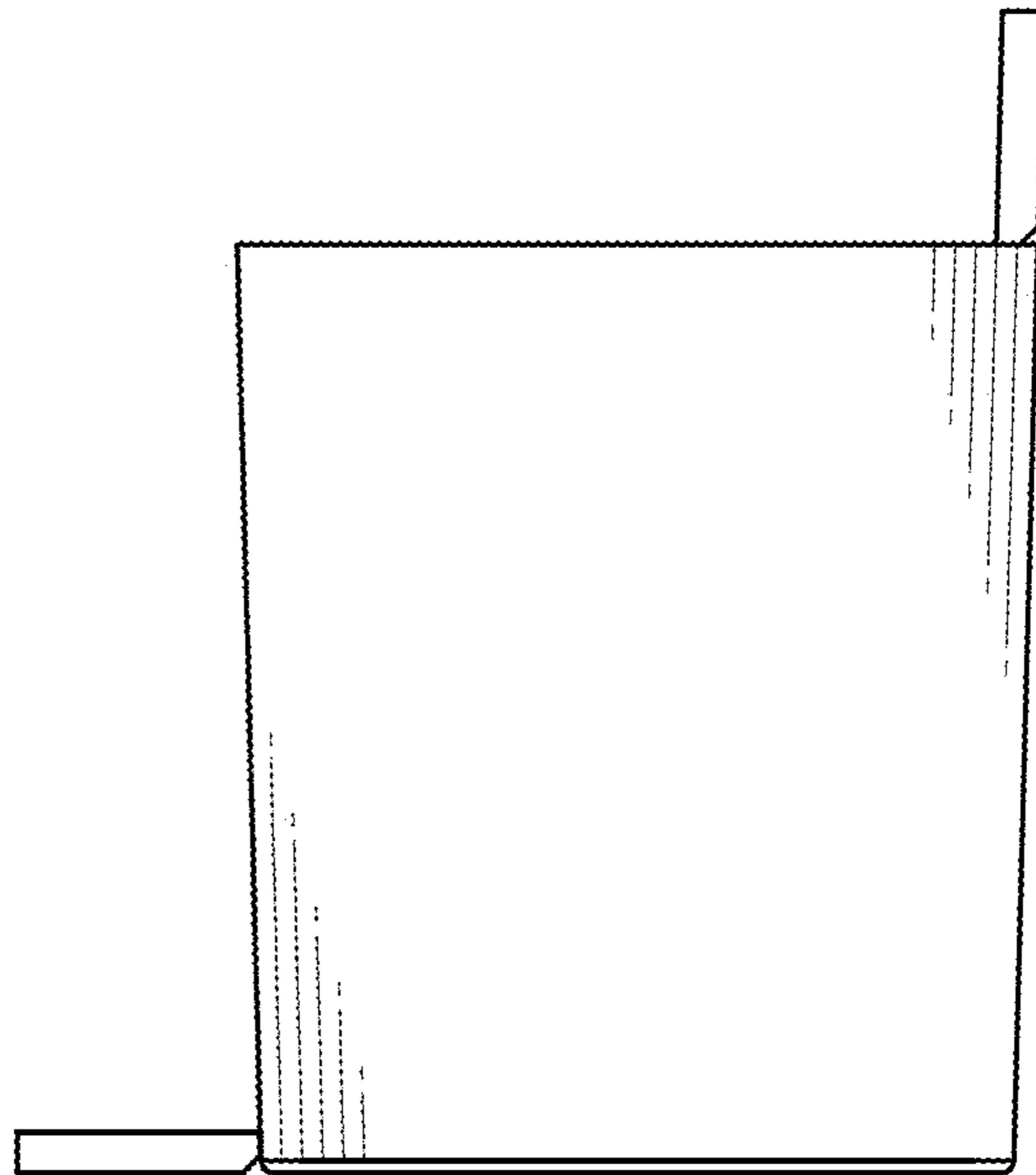


FIG. 5

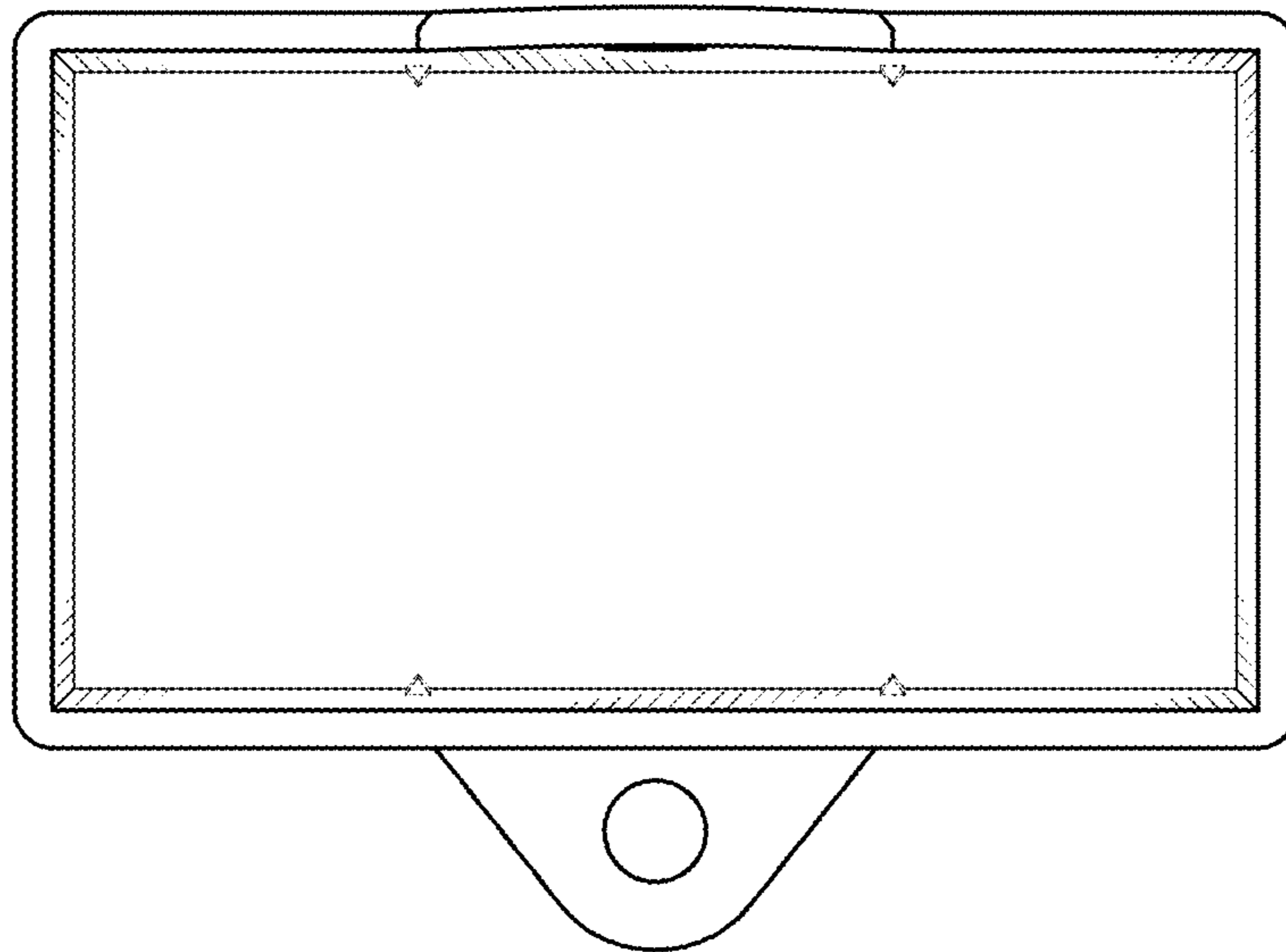


FIG. 6

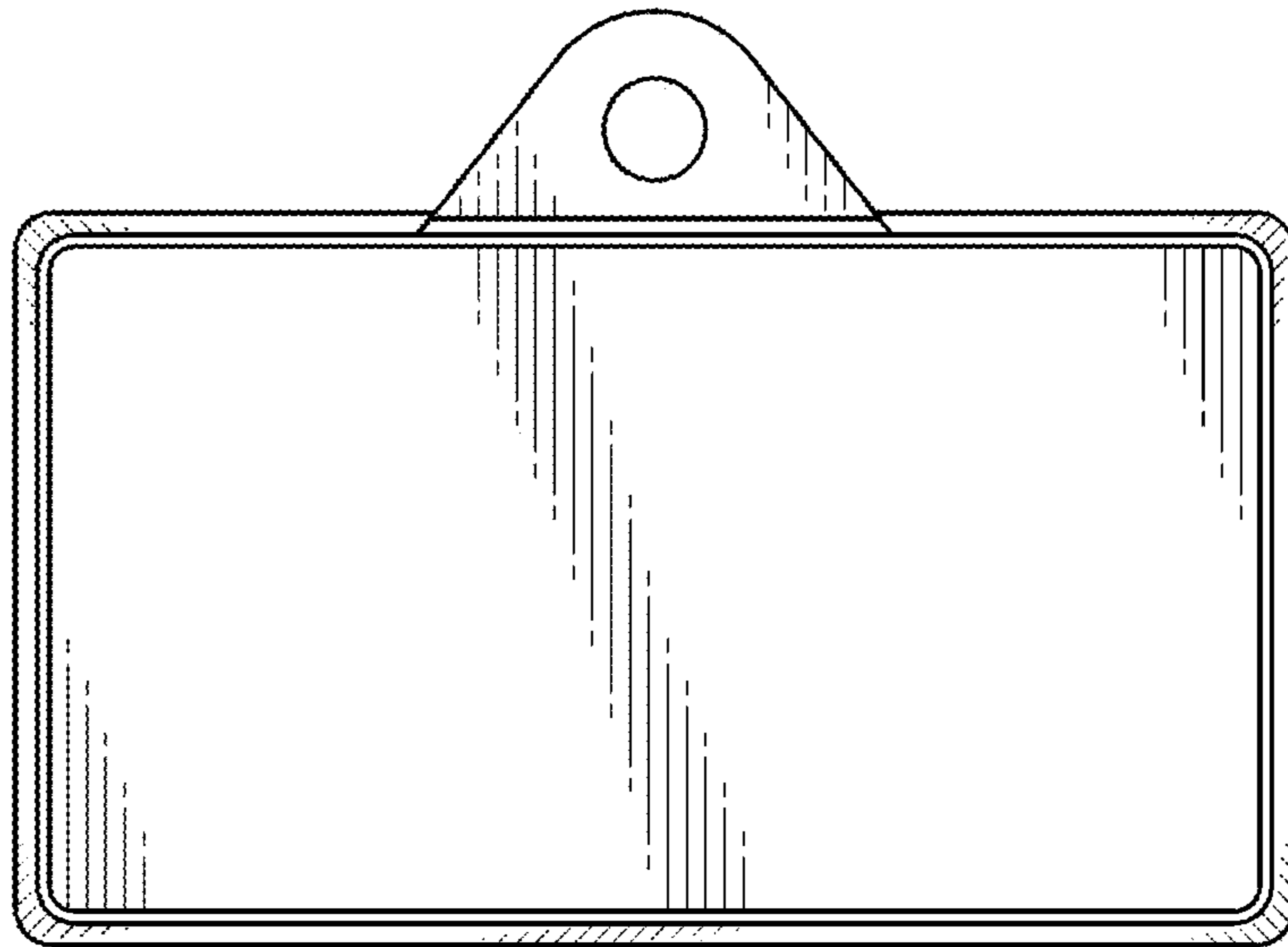


FIG. 7

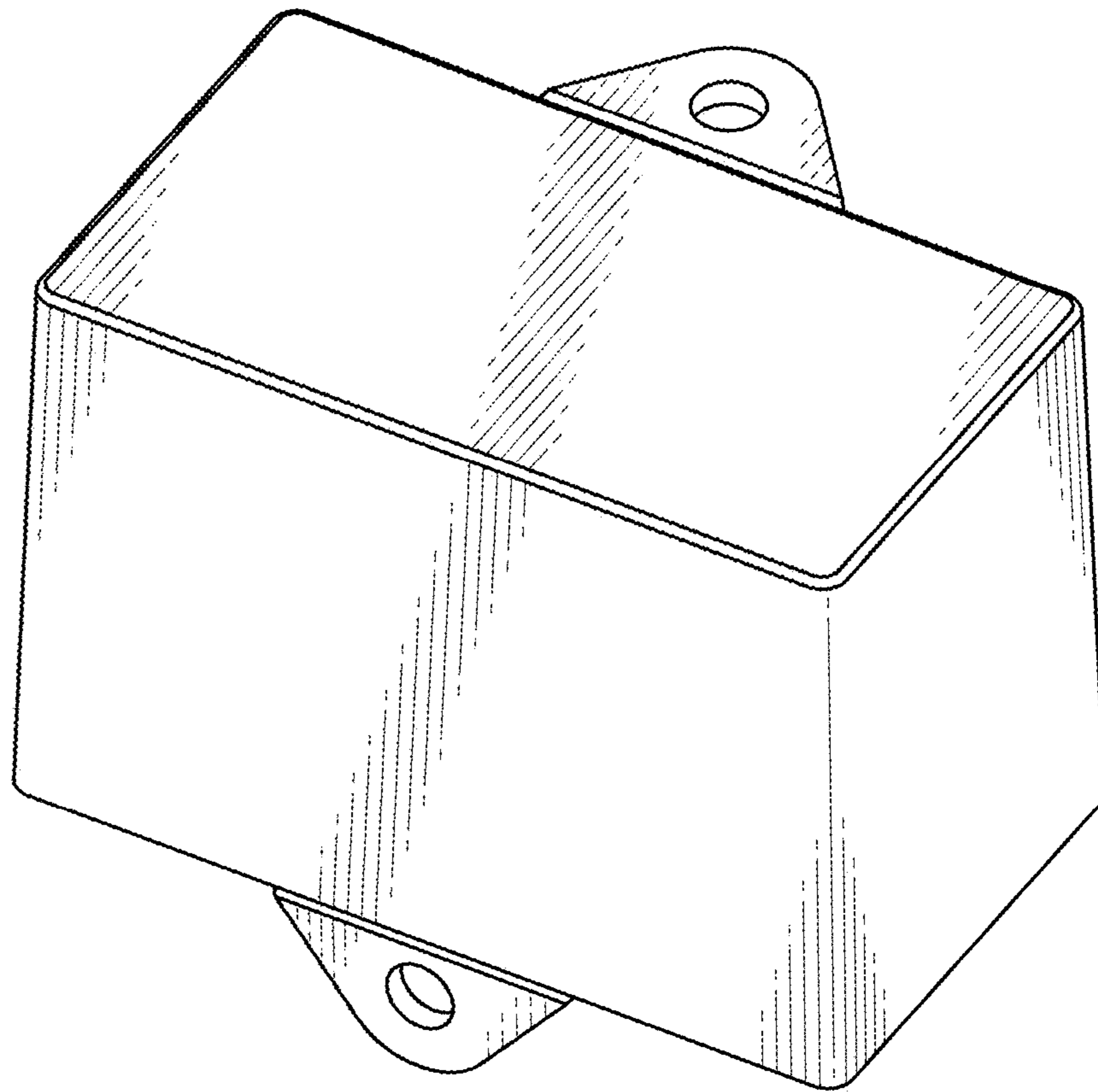


FIG. 8