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

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(54) **EYELID STRUCTURE OF ROBOT**

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(52) **U.S. Cl.**
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23/259, 262, 263
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2219/39335; G05B 2219/39427; G05B
2219/40304; G06C 7/60; G06N 3/00;
G06N 3/004; G06N 3/006; G06N 3/008;
G06N 5/00

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 5,413,454 A * 5/1995 Movsesian B25J 5/007
294/100
- 6,132,287 A * 10/2000 Kuralt A63H 17/004
446/431
- D545,721 S * 7/2007 Hacker D12/1
- D711,061 S * 8/2014 Chen D34/29
- 2001/0047895 A1* 12/2001 De Fazio B62D 57/024
180/22

- 2003/0048081 A1* 3/2003 Seemann B62D 55/00
318/68
- 2003/0051932 A1* 3/2003 Thompson B25J 5/007
180/167
- 2008/0077276 A1* 3/2008 Montero Sanjuan B21J 15/14
700/245
- 2008/0105481 A1* 5/2008 Hutcheson B25J 5/007
180/209
- 2010/0263948 A1* 10/2010 Couture B25J 5/005
180/8.2
- 2011/0036197 A1* 2/2011 Aoki B25J 5/007
74/490.01
- 2011/0050374 A1* 3/2011 Dvorak A63H 17/42
335/219
- 2011/0106313 A1* 5/2011 Lee B25J 5/007
700/259
- 2011/0132671 A1* 6/2011 Lee B25J 5/007
180/8.3

(Continued)

FOREIGN PATENT DOCUMENTS

- JP 1572275 3/2017
- JP 1579015 6/2017

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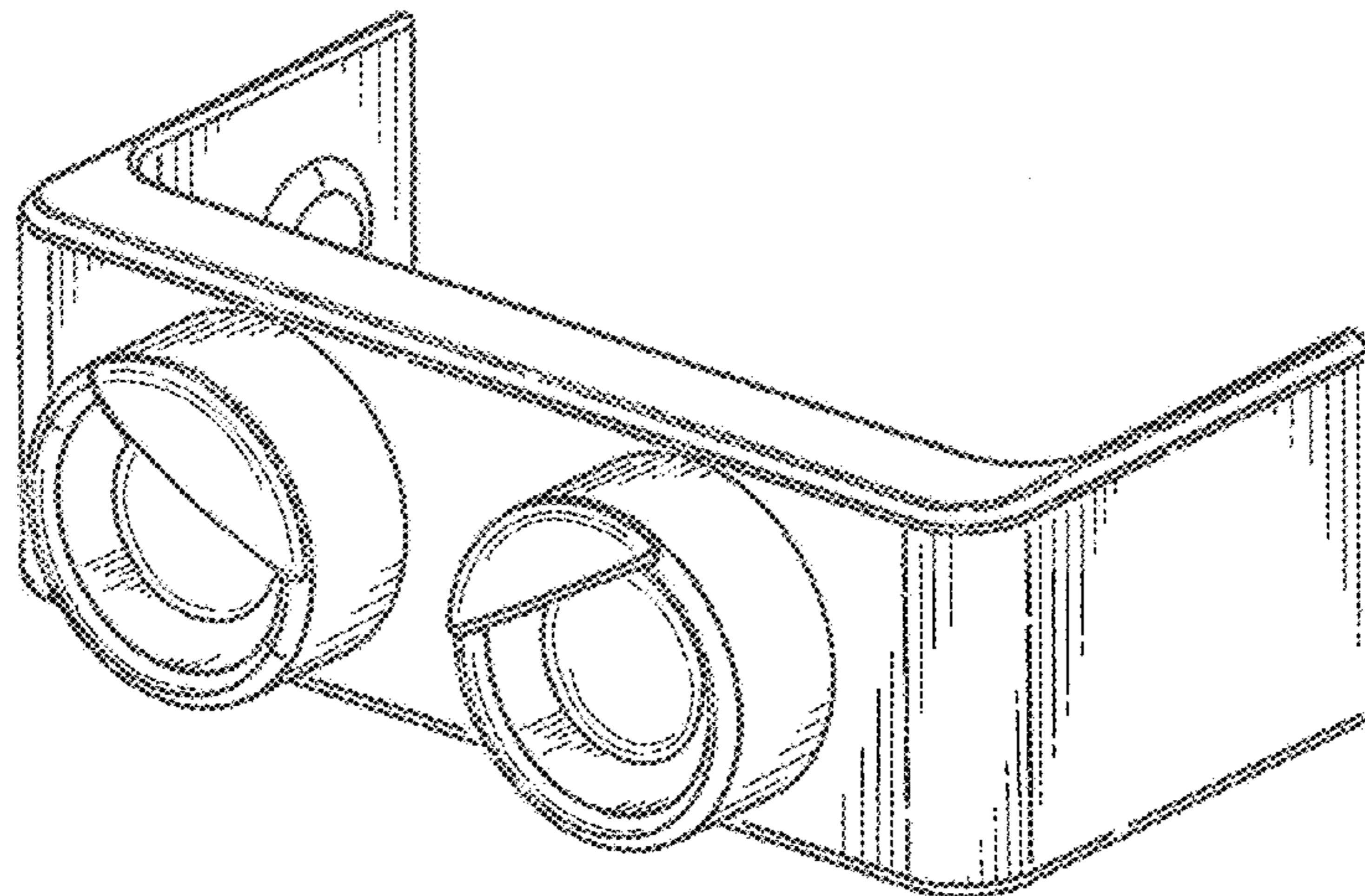
(57) **CLAIM**

The ornamental design for an eyelid structure of a robot, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an eyelid structure of a robot showing my new design; FIG. 2 is a front plane view thereof; FIG. 3 is a back plane 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; and, FIG. 7 is a bottom plan view thereof.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2012/0013139 A1* 1/2012 Torres-Jara B25J 13/084
294/110.1
2012/0215355 A1* 8/2012 Bewley B25J 5/005
700/258
2012/0259460 A1* 10/2012 Rizzi B62D 57/028
700/245
2012/0283872 A1* 11/2012 Hu B25J 5/007
700/245
2013/0024067 A1* 1/2013 Troy B25J 5/007
701/36
2013/0104676 A1* 5/2013 Yang B25J 9/06
73/865.8
2013/0203020 A1* 8/2013 Buchstab G09B 19/165
434/33
2014/0137688 A1* 5/2014 Song B25J 17/00
74/490.05
2015/0003927 A1* 1/2015 Spishak B25J 5/007
408/1 R
2016/0144516 A1* 5/2016 Song B25J 19/02
414/21
2016/0229058 A1* 8/2016 Pinter G06Q 50/22
2016/0327383 A1* 11/2016 Becker G01B 11/005
2017/0088206 A1* 3/2017 Esteban Finck B21J 15/142

* cited by examiner

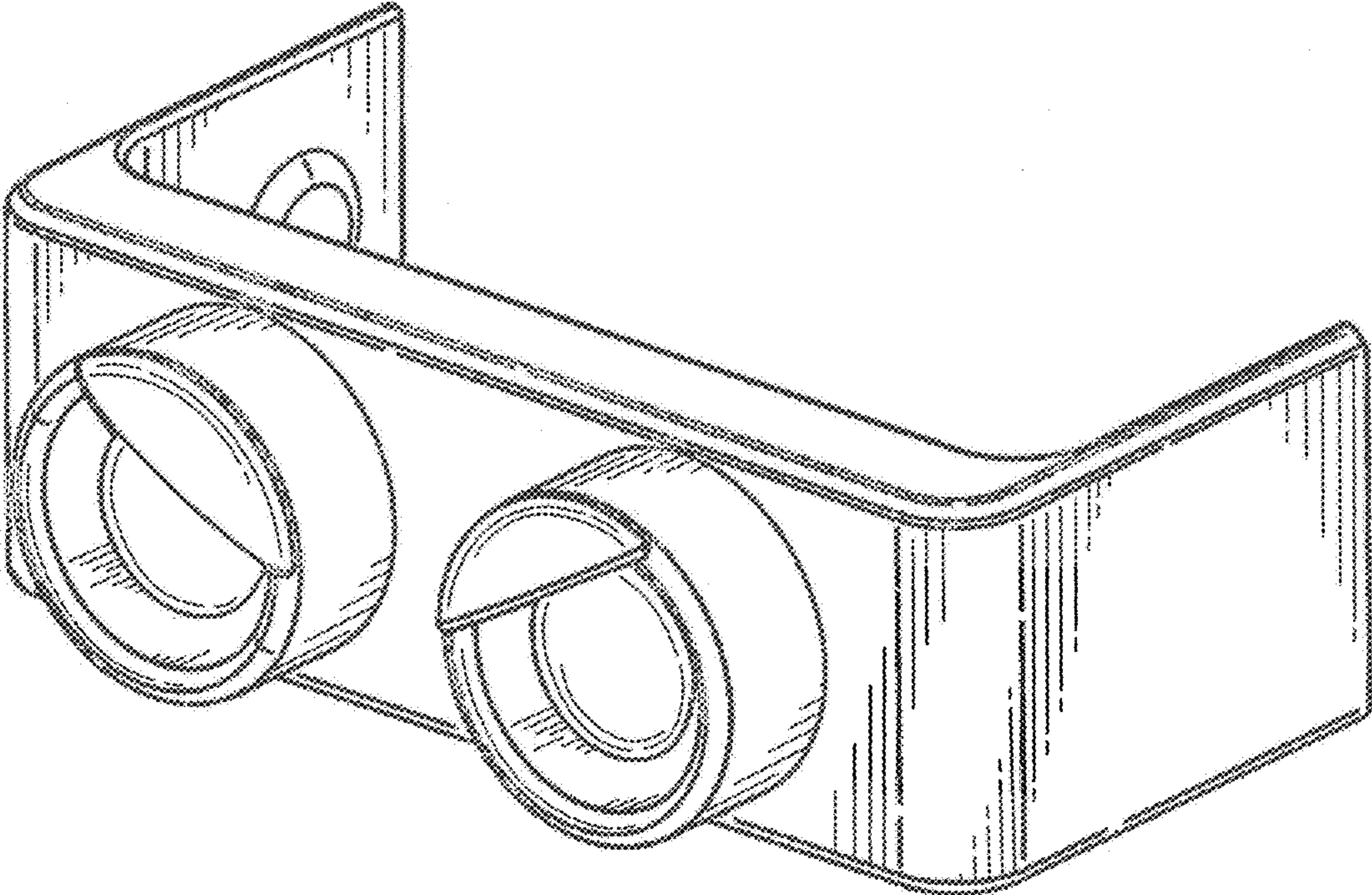


FIG. 1

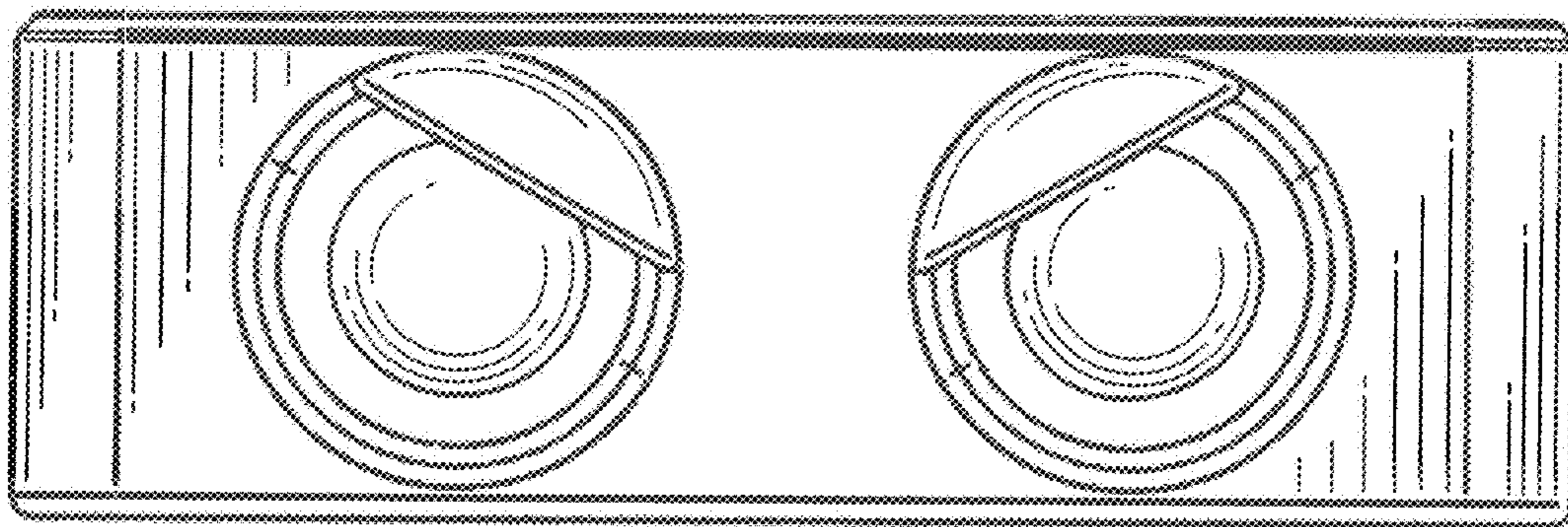


FIG. 2

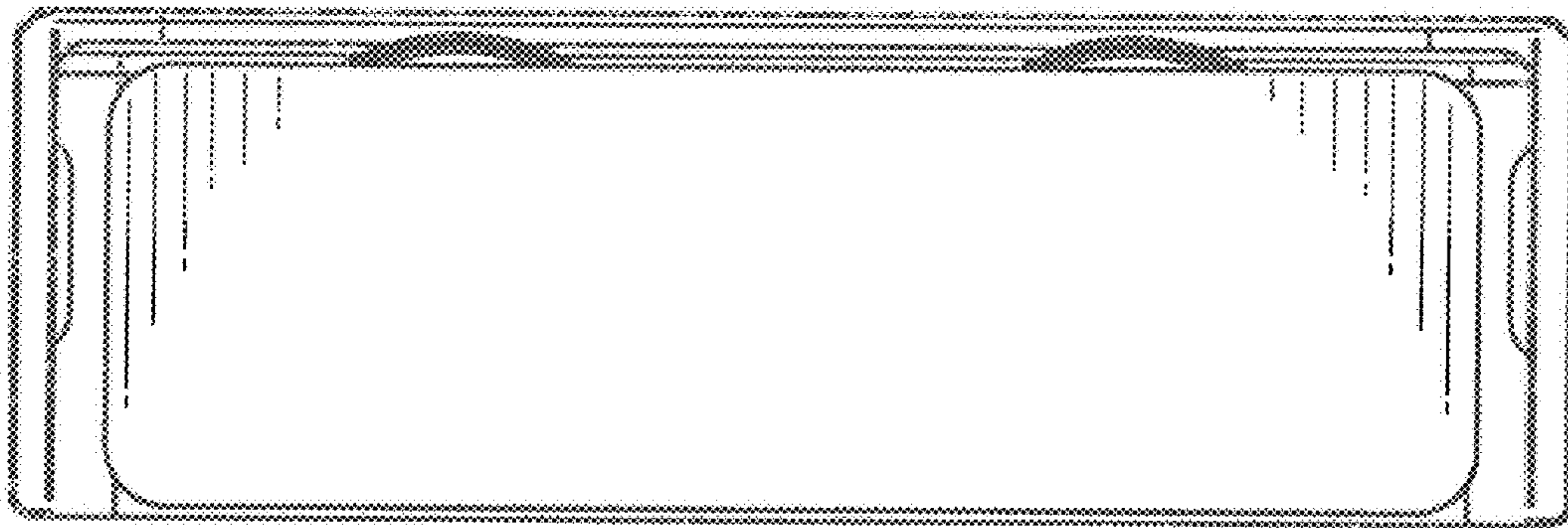


FIG. 3

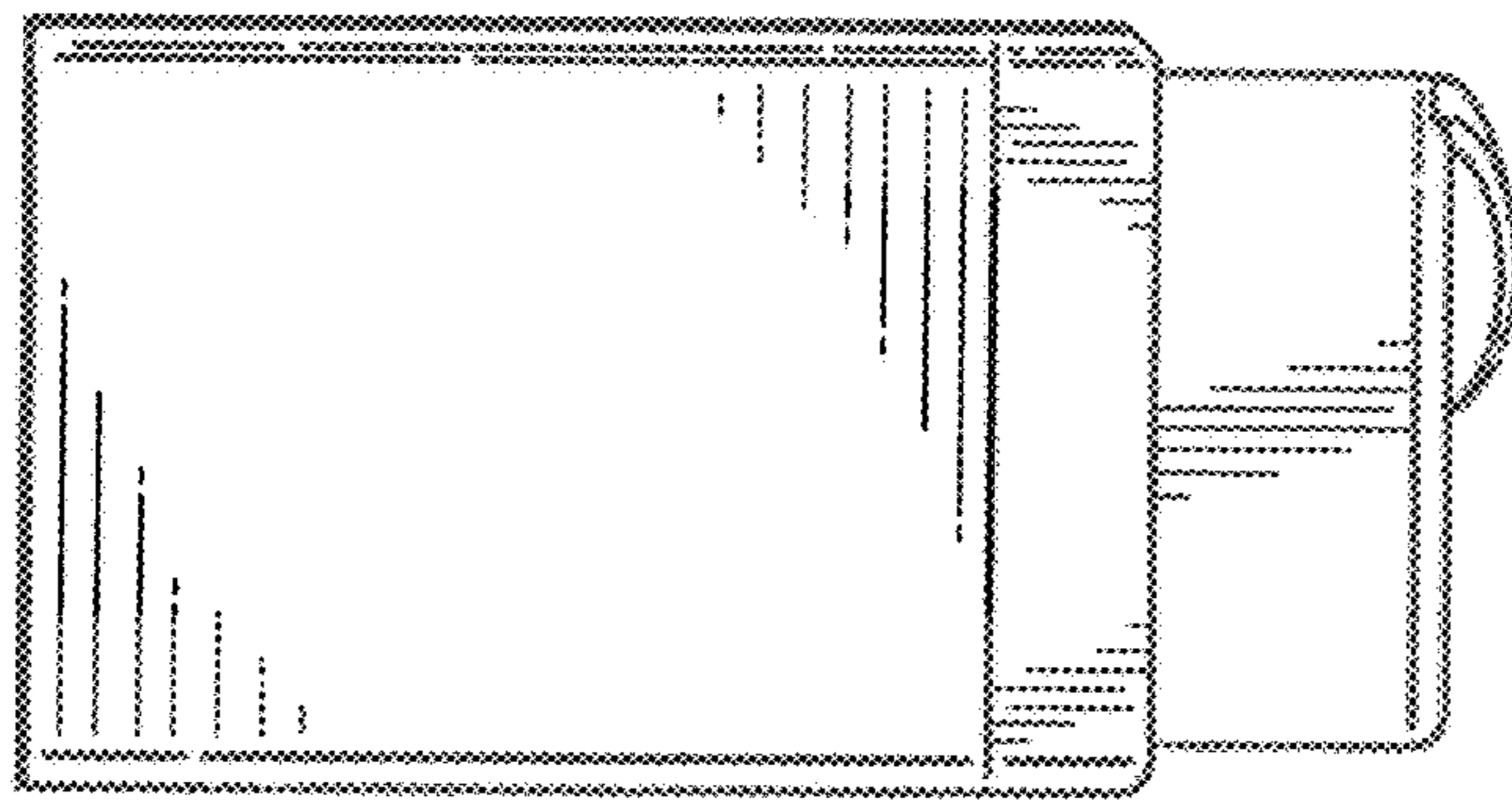


FIG. 4

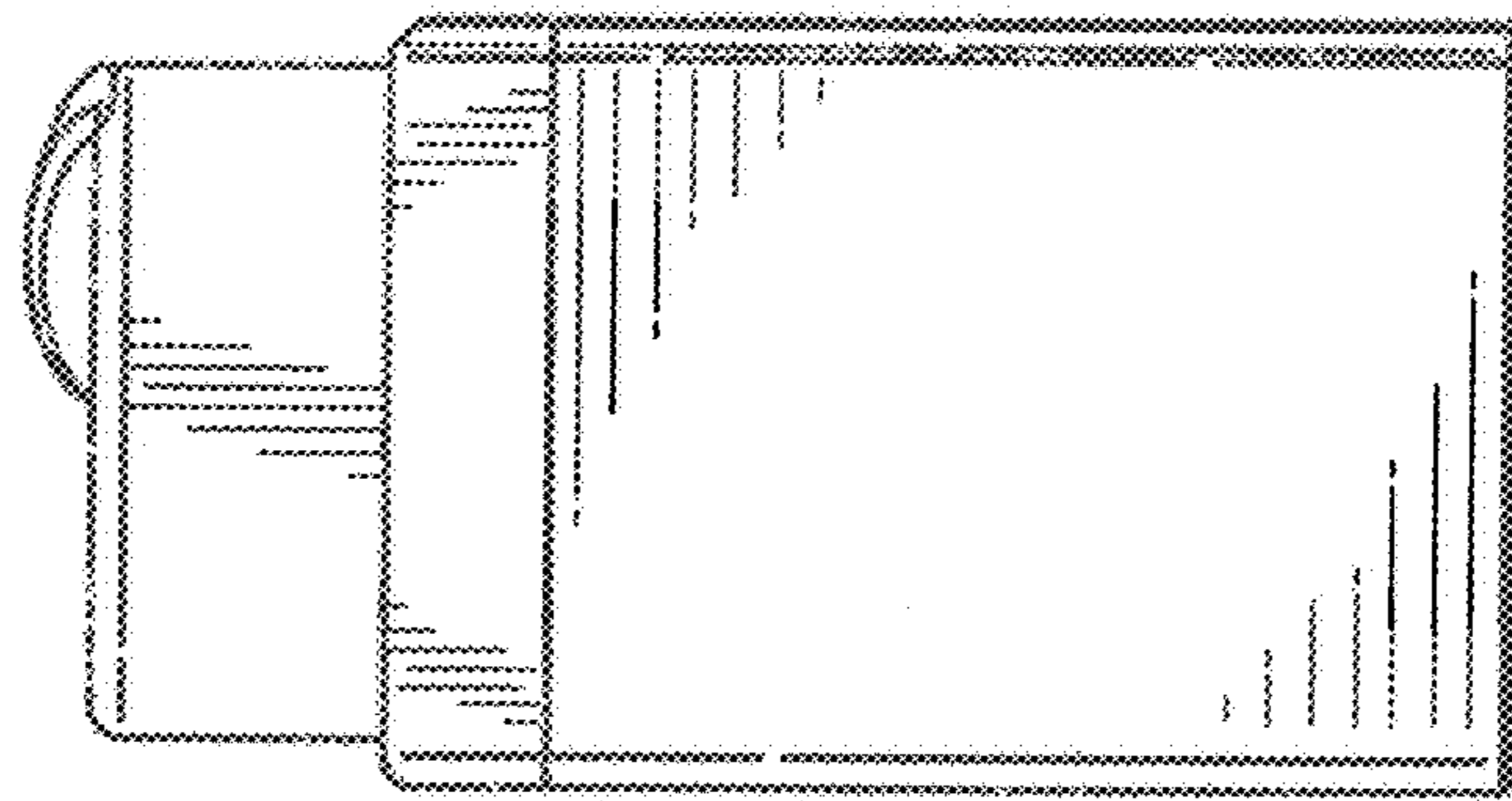


FIG. 5

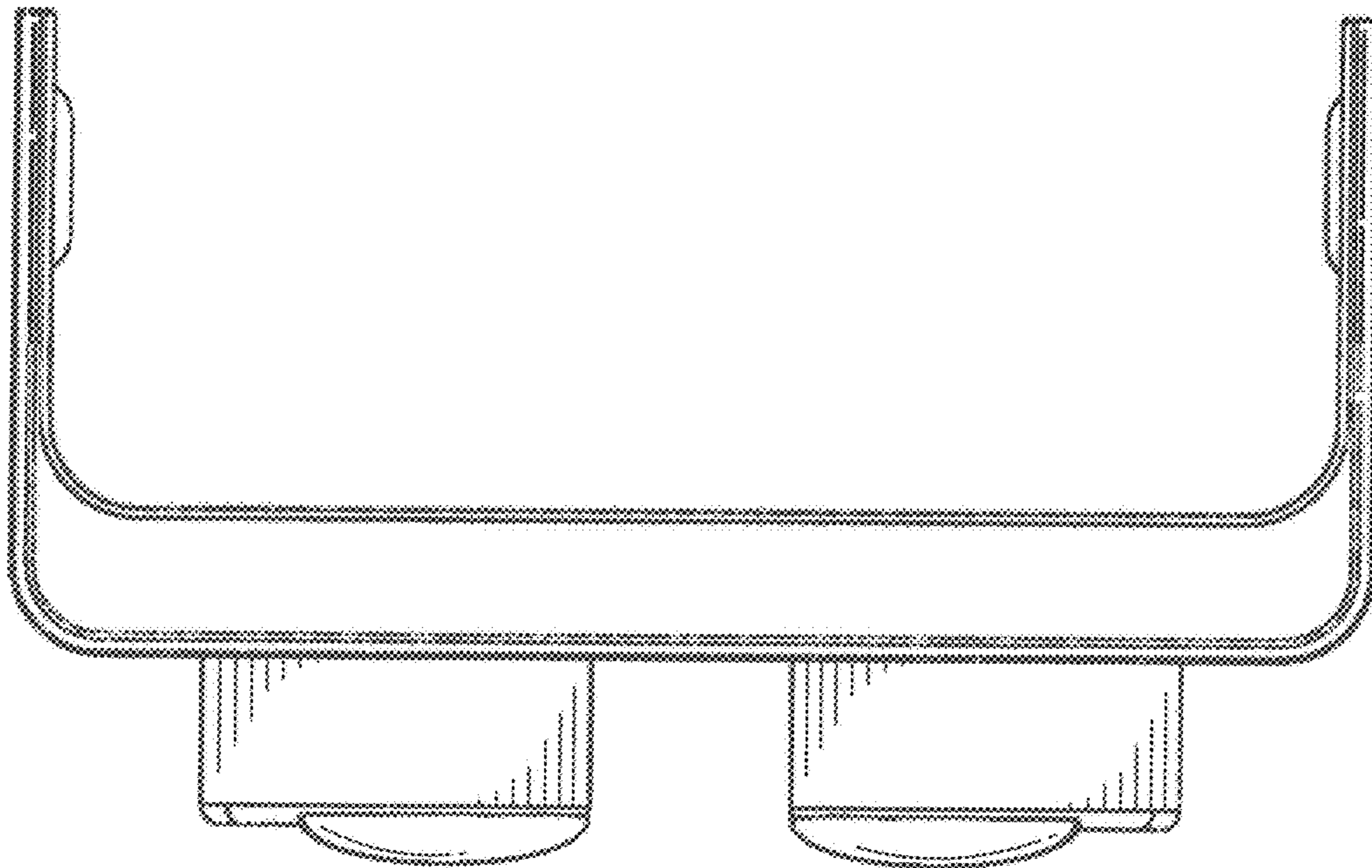


FIG. 6

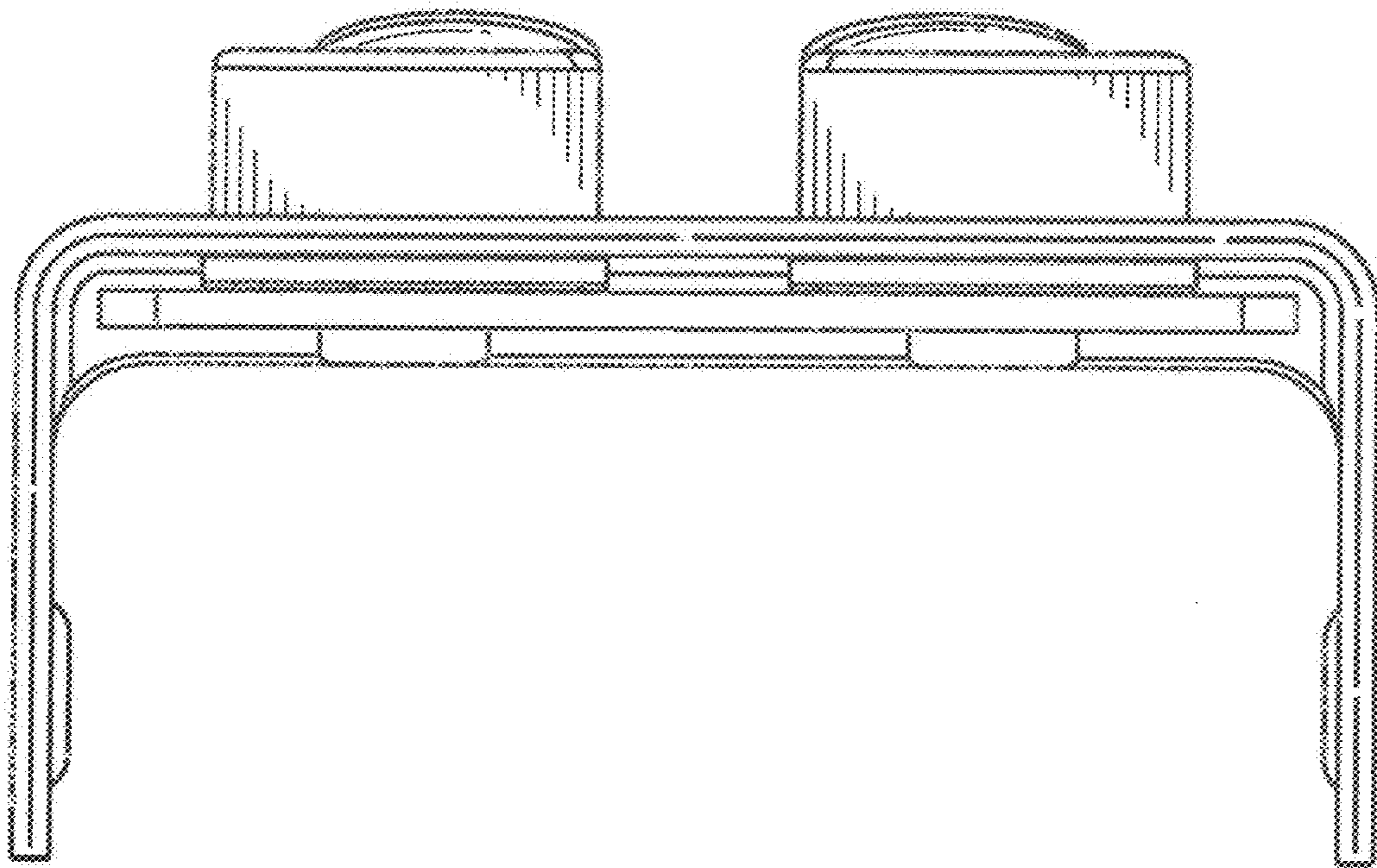


FIG. 7