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

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(54) **BATTERY BUSHING**

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(**) Term: **14 Years**

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(52) **U.S. Cl.**
USPC **D13/119**

(58) **Field of Classification Search**
USPC D13/119, 118, 102-106, 110, 184, 156,
D13/154, 121, 133; 429/96-100, 163;
206/703-705, 471, 485.1, 493
CPC H01M 2/02; H01M 2/1061; H01M 10/06;
Y02E 60/126
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 3,826,115 A * 7/1974 Davis B60R 16/04
180/68.5
- 4,936,409 A * 6/1990 Nix H01M 2/1083
180/68.5
- D311,373 S * 10/1990 Morisse D13/119
- D321,856 S * 11/1991 Whitley, II 180/68.5

- 5,422,202 A 6/1995 Spiegelberg et al.
- 5,425,170 A 6/1995 Spiegelberg et al.
- 5,589,294 A 12/1996 Spiegelberg et al.
- 5,632,173 A 5/1997 Spiegelberg et al.
- 5,791,183 A 8/1998 Spiegelberg et al.
- 6,102,356 A * 8/2000 Huntley B60R 16/04
248/500
- 6,644,084 B1 11/2003 Spiegelberg et al.
- 7,021,101 B2 4/2006 Spiegelberg et al.
- 7,052,332 B2 5/2006 Heller et al.
- 7,163,763 B2 1/2007 Spiegelberg et al.

(Continued)

FOREIGN PATENT DOCUMENTS

- DE 3942175 A1 6/1991
- EP 601268 B1 12/1996

(Continued)

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(57) **CLAIM**

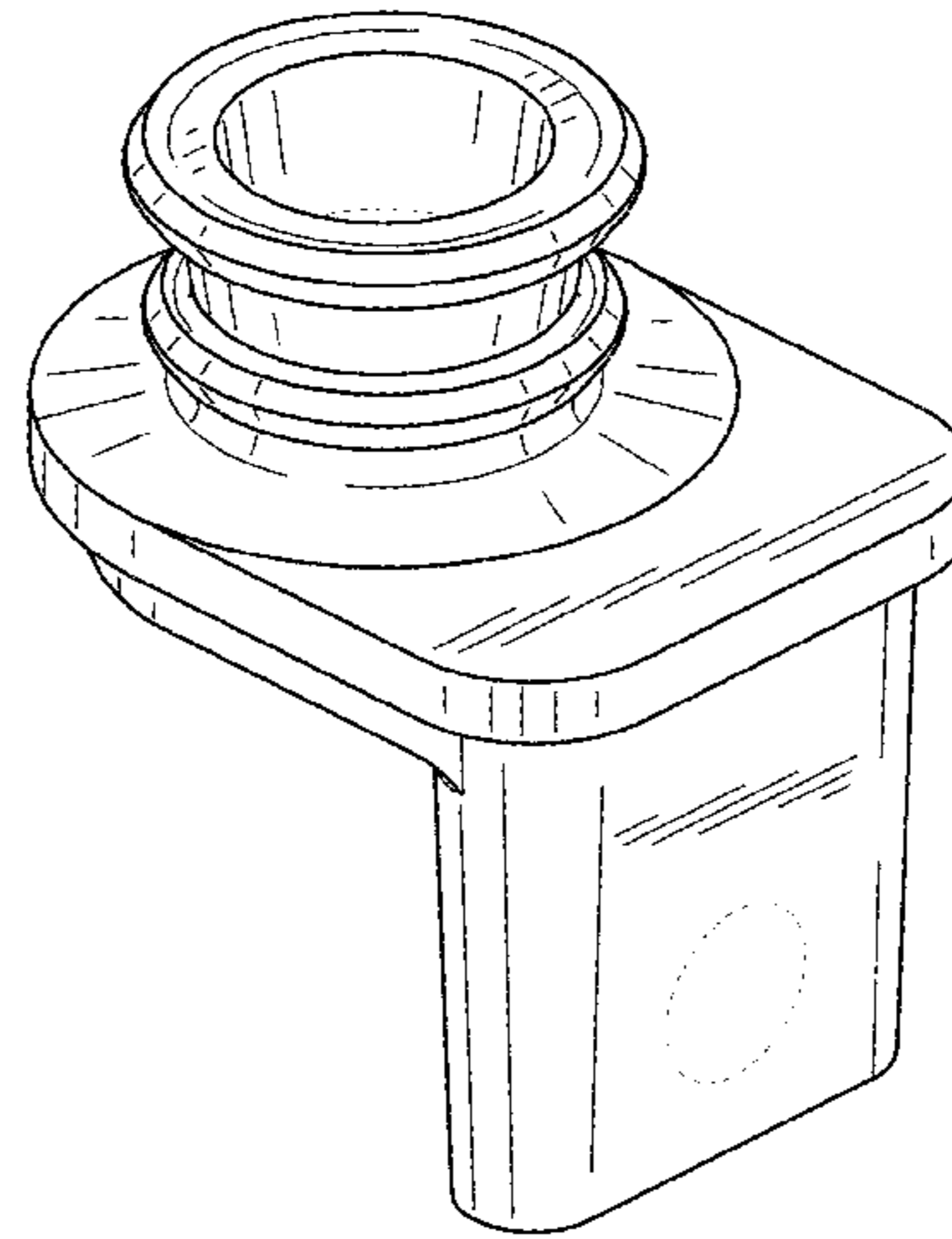
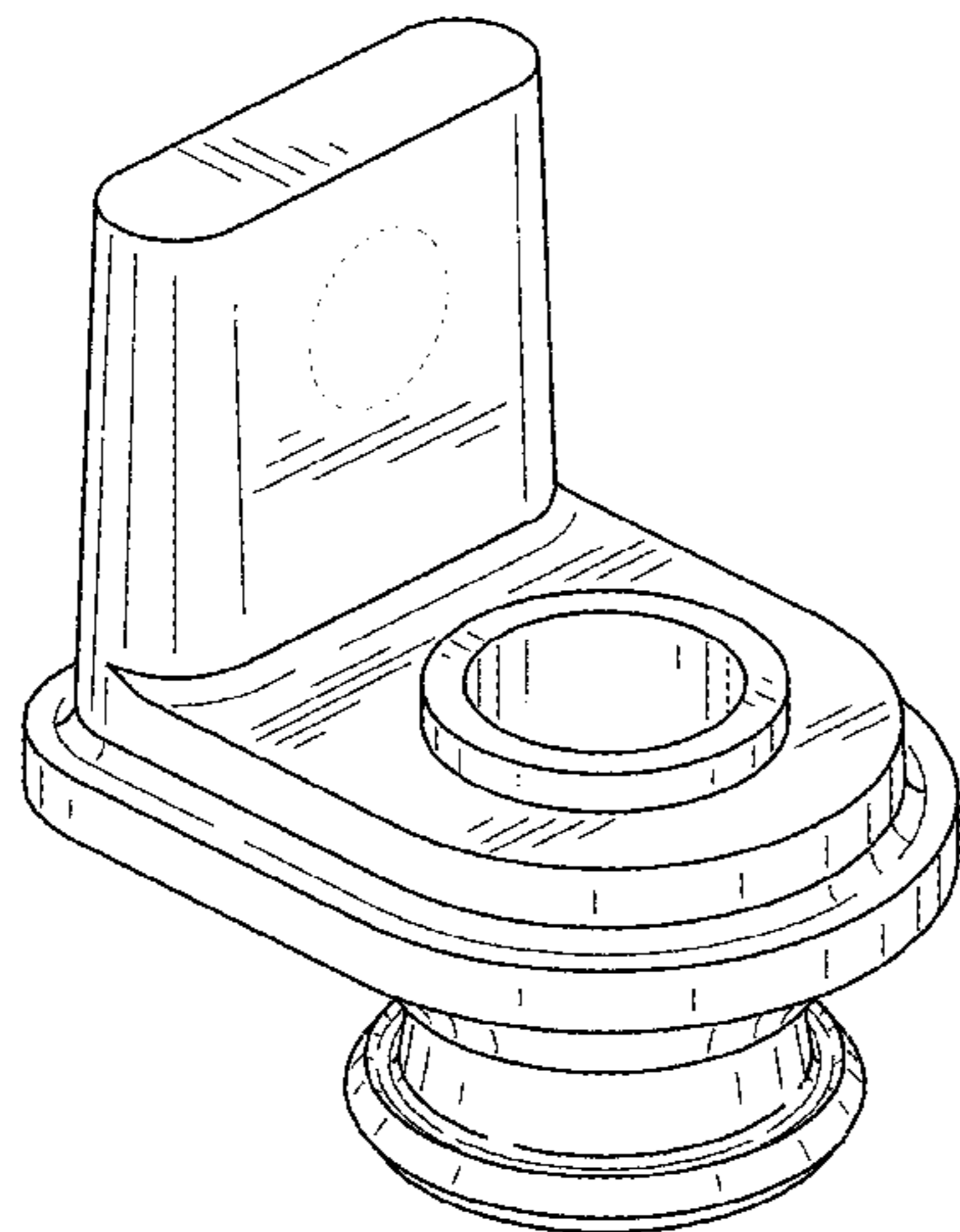
The ornamental design for a battery bushing, as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of the ornamental design of the battery bushing;
 FIG. 2 is a bottom perspective view thereof;
 FIG. 3 is a left side elevation view thereof, the right side elevation view being a mirror image;
 FIG. 4 is a front elevation view thereof;
 FIG. 5 is a rear elevation view thereof;
 FIG. 6 is a top view thereof;
 FIG. 7 is a bottom view thereof; and,
 FIG. 8 is a cross-sectional view taken along line 8-8 of FIG. 4.

The broken lines shown in the drawings are included for the purpose of illustrating environmental structure and form no part of the claimed design.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

7,338,539 B2 3/2008 Ratte et al.
 7,628,049 B2 12/2009 Spiegelberg et al.
 7,641,100 B2 1/2010 Spiegelberg et al.
 D611,413 S * 3/2010 Brockington D13/119
 7,905,384 B1 3/2011 Spiegelberg et al.
 7,946,033 B2 5/2011 Gibellini
 7,985,496 B2 7/2011 Evraets et al.
 8,033,153 B1 10/2011 Spiegelberg et al.
 D659,639 S * 5/2012 Saber D13/118
 8,168,323 B2 5/2012 Richter et al.
 8,701,743 B2 4/2014 Cain et al.
 D746,230 S * 12/2015 Hanses D13/119
 2004/0132353 A1 7/2004 Seeh et al.
 2005/0147882 A1 7/2005 Ratte et al.
 2007/0122686 A1 5/2007 Alexandrovichserov et al.
 2008/0038633 A1 2/2008 Ratte et al.
 2008/0241677 A1 10/2008 Garcia et al.

2010/0116455 A1 5/2010 Ratte et al.
 2011/0045336 A1 2/2011 Ratte et al.
 2011/0293980 A1* 12/2011 Tartaglia H01M 2/1094
 429/100
 2013/0337307 A1* 12/2013 Butterfield H01M 2/10
 429/99
 2014/0356678 A1* 12/2014 Templeman H01M 2/1083
 429/100
 2015/0060170 A1* 3/2015 Templeman H01M 2/1083
 180/68.5
 2015/0188104 A1* 7/2015 Templeman H01M 2/1077
 429/100

FOREIGN PATENT DOCUMENTS

EP 1347522 A1 9/2003
 IT 1278026 B1 11/1997
 WO 2005067513 A2 7/2005
 WO 2011110317 A1 9/2011

* cited by examiner

FIG. 1

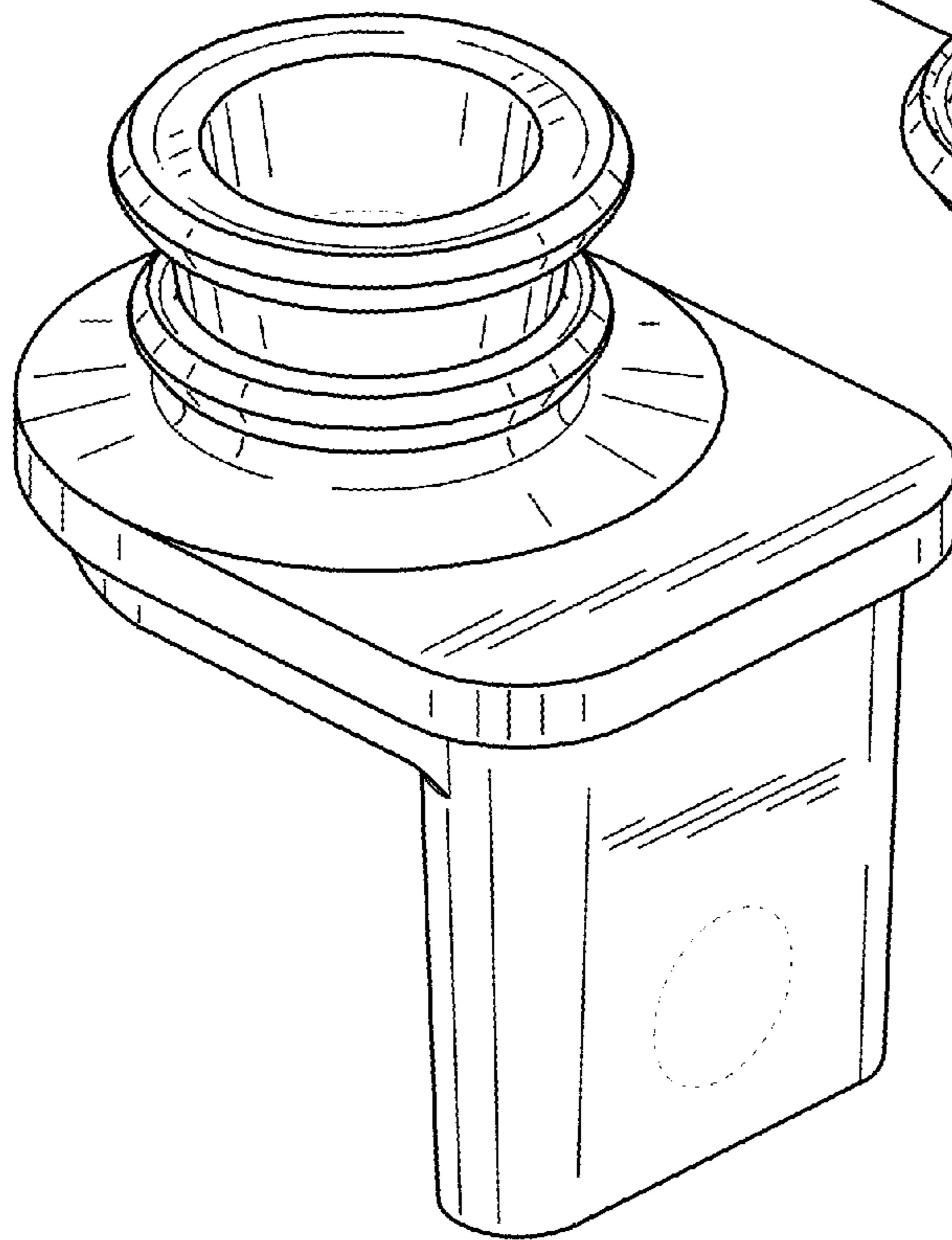
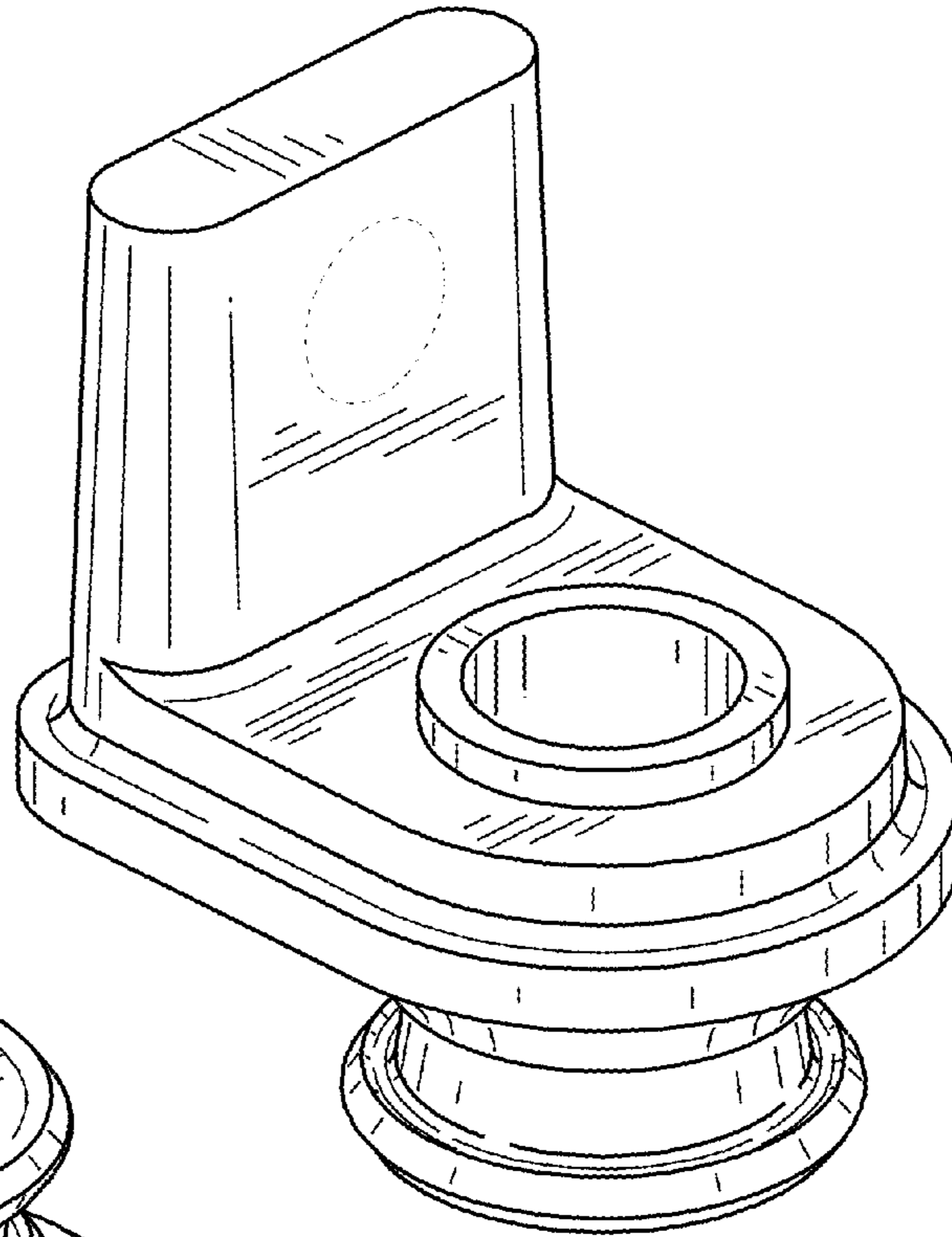


FIG. 2

FIG. 3

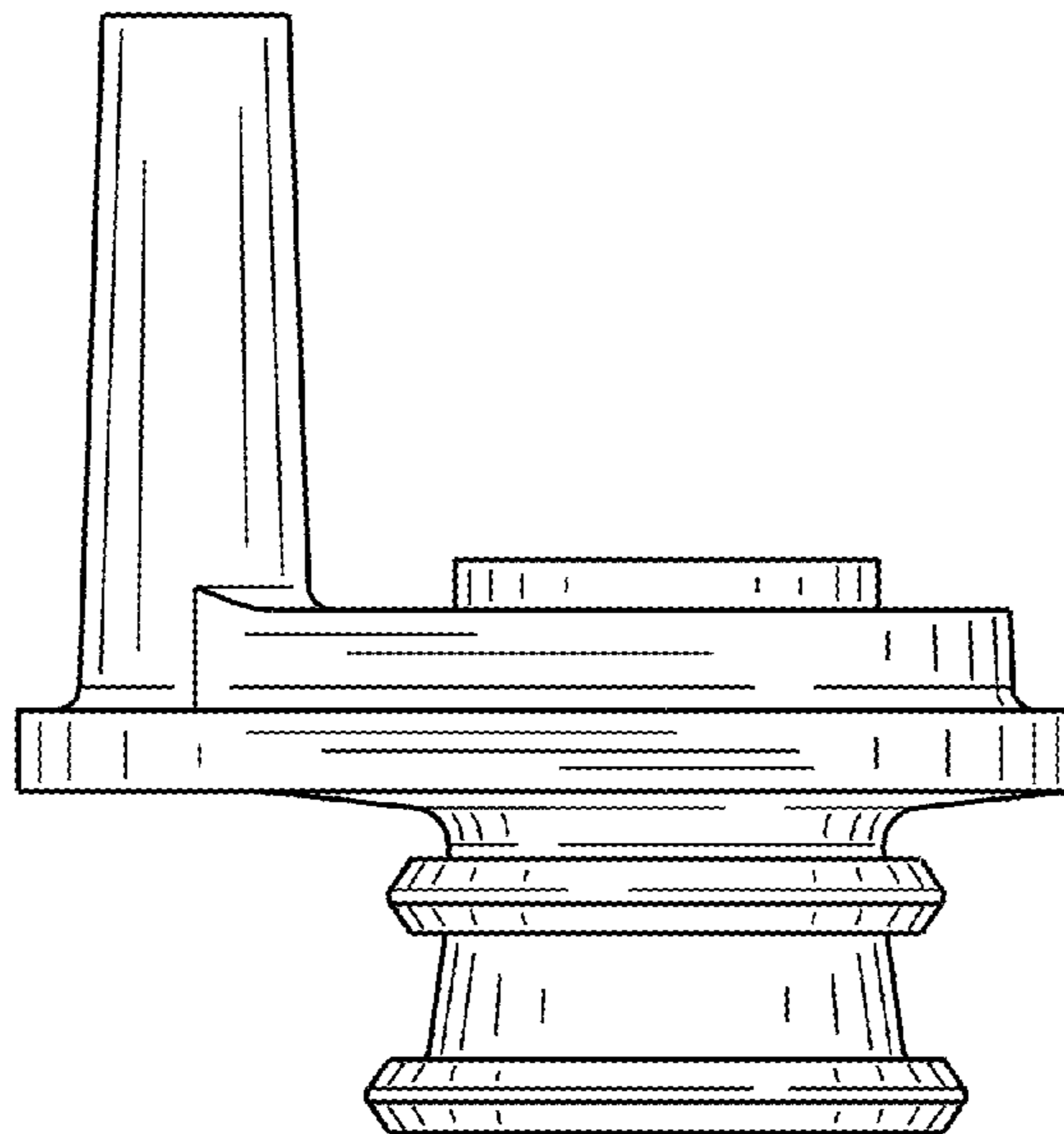
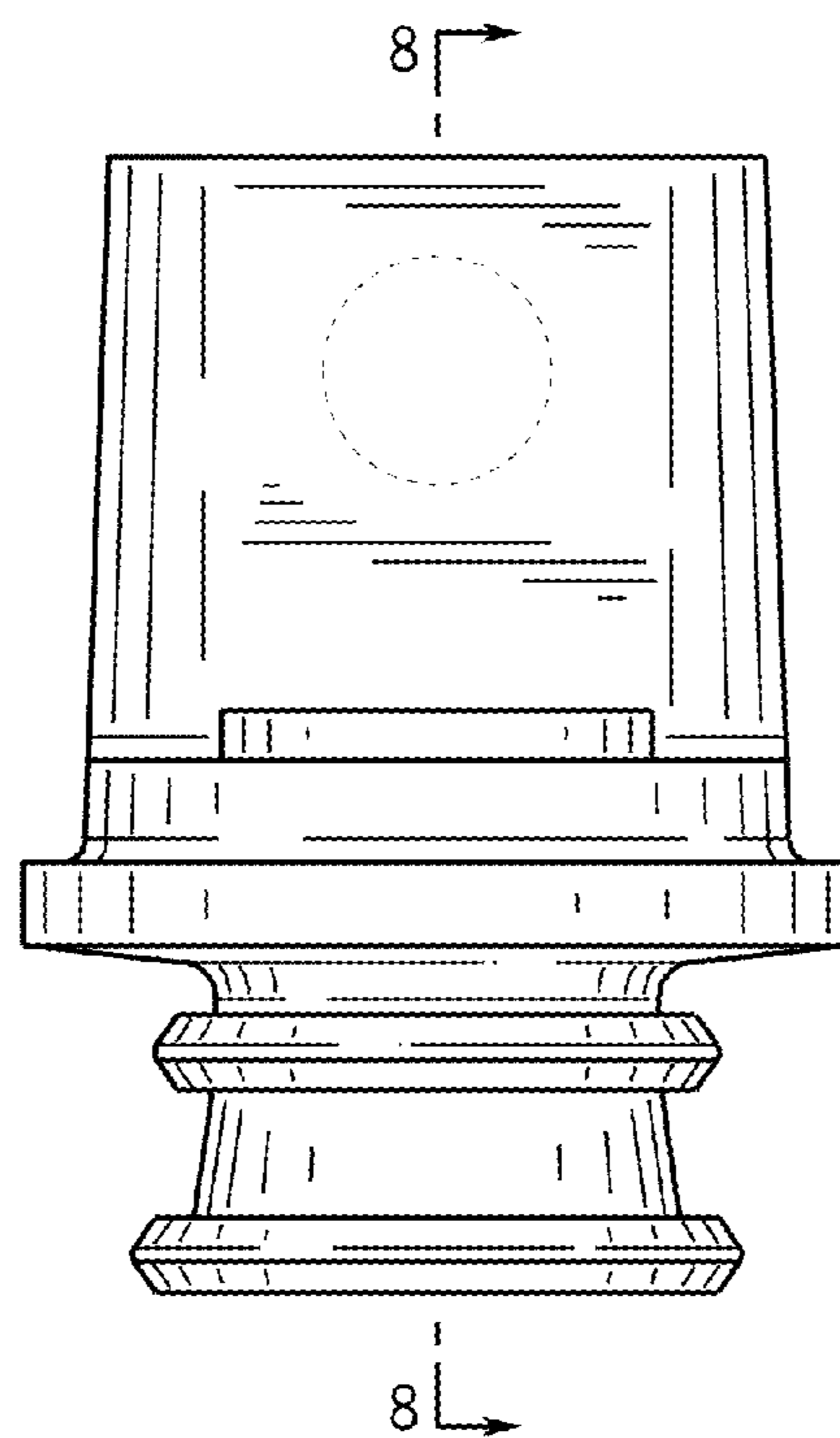


FIG. 4



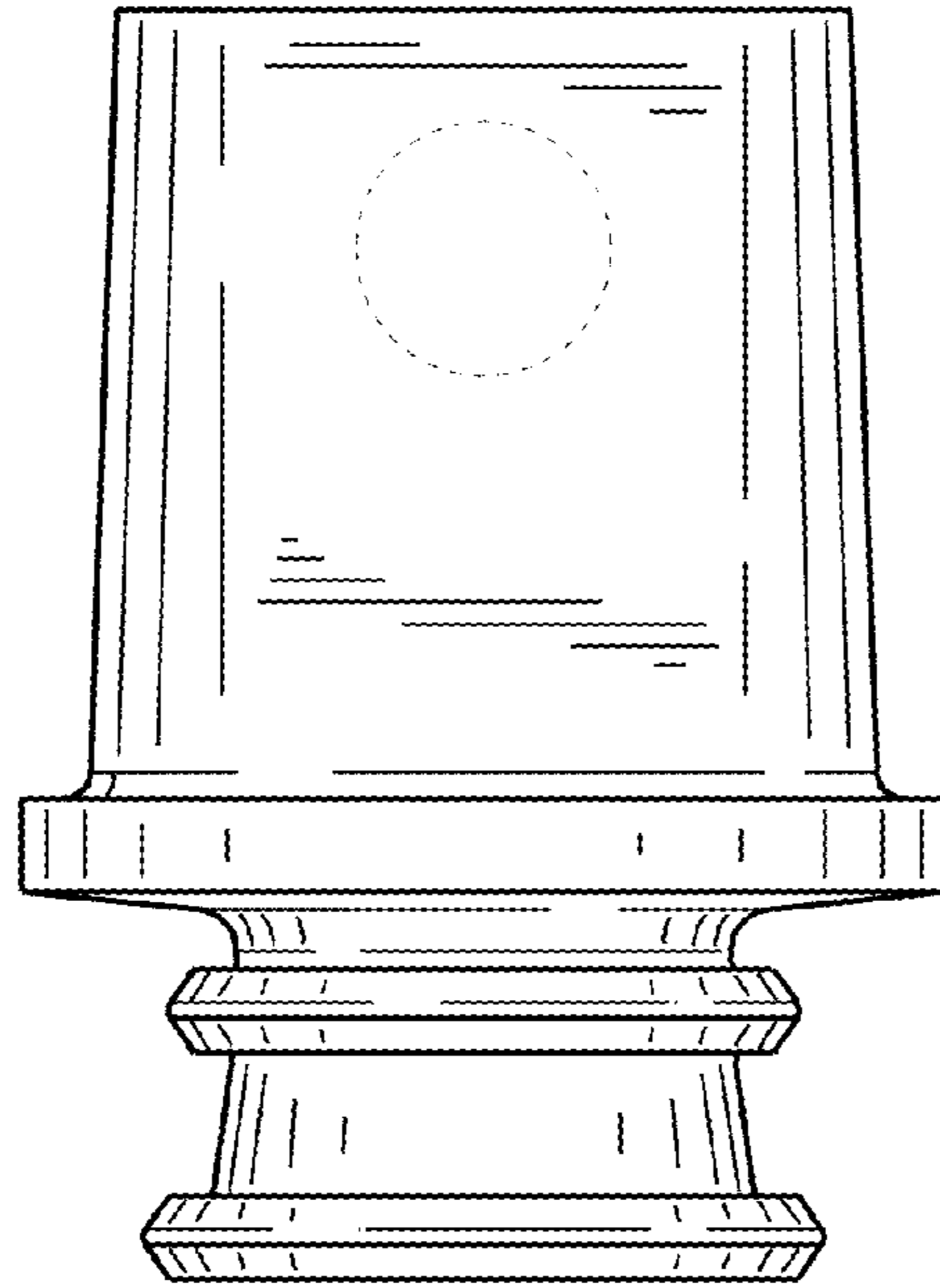


FIG. 5

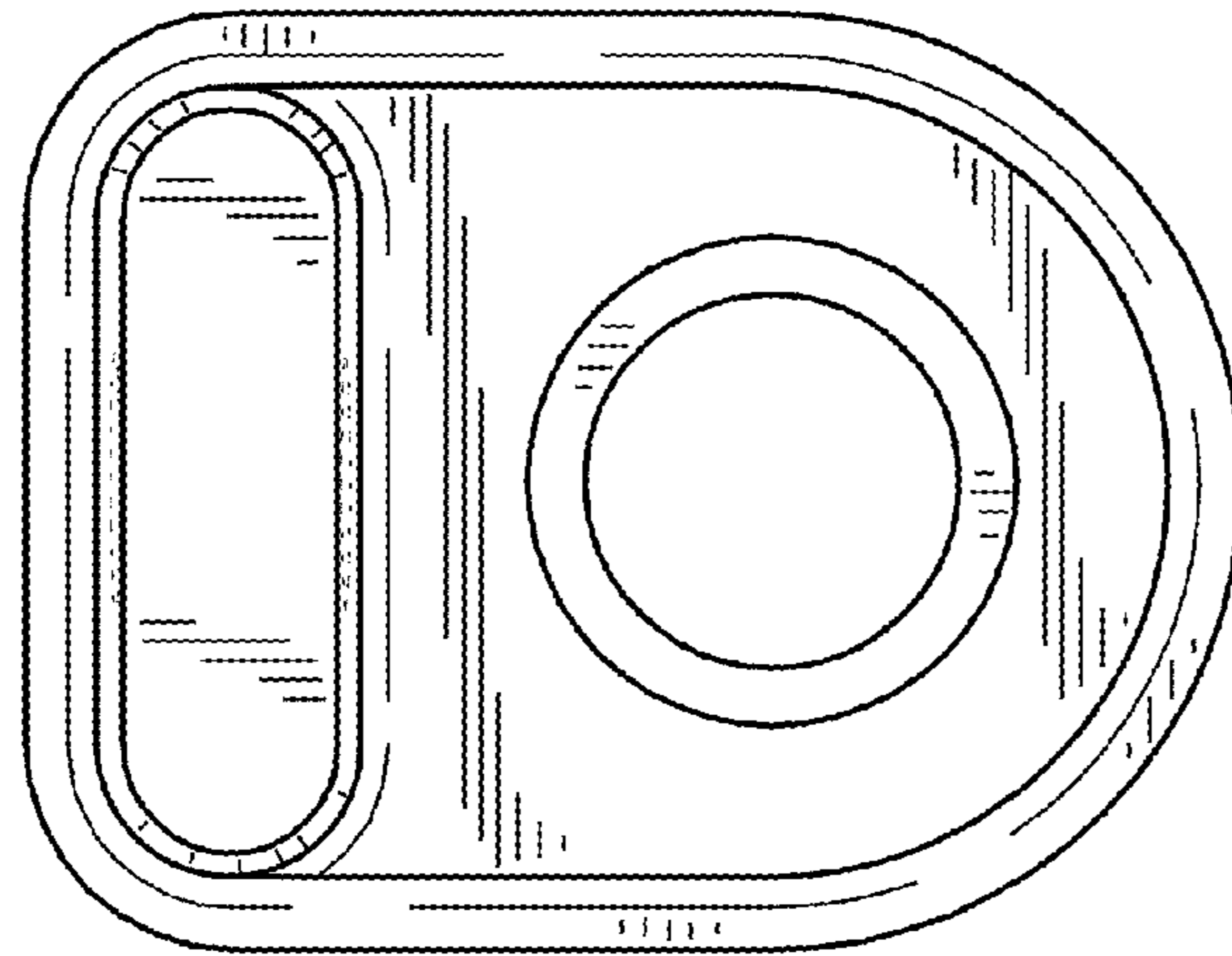


FIG. 6

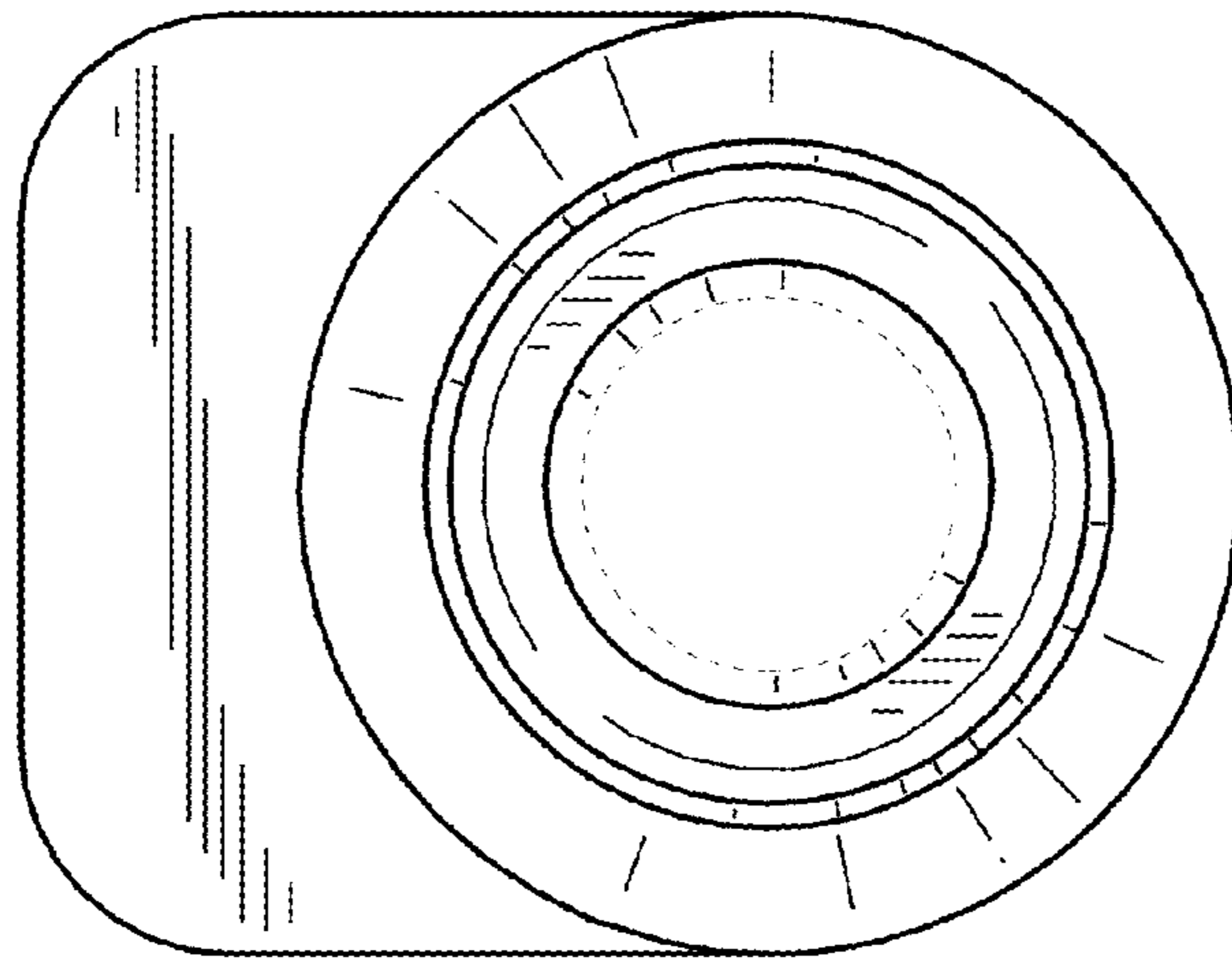


FIG. 7

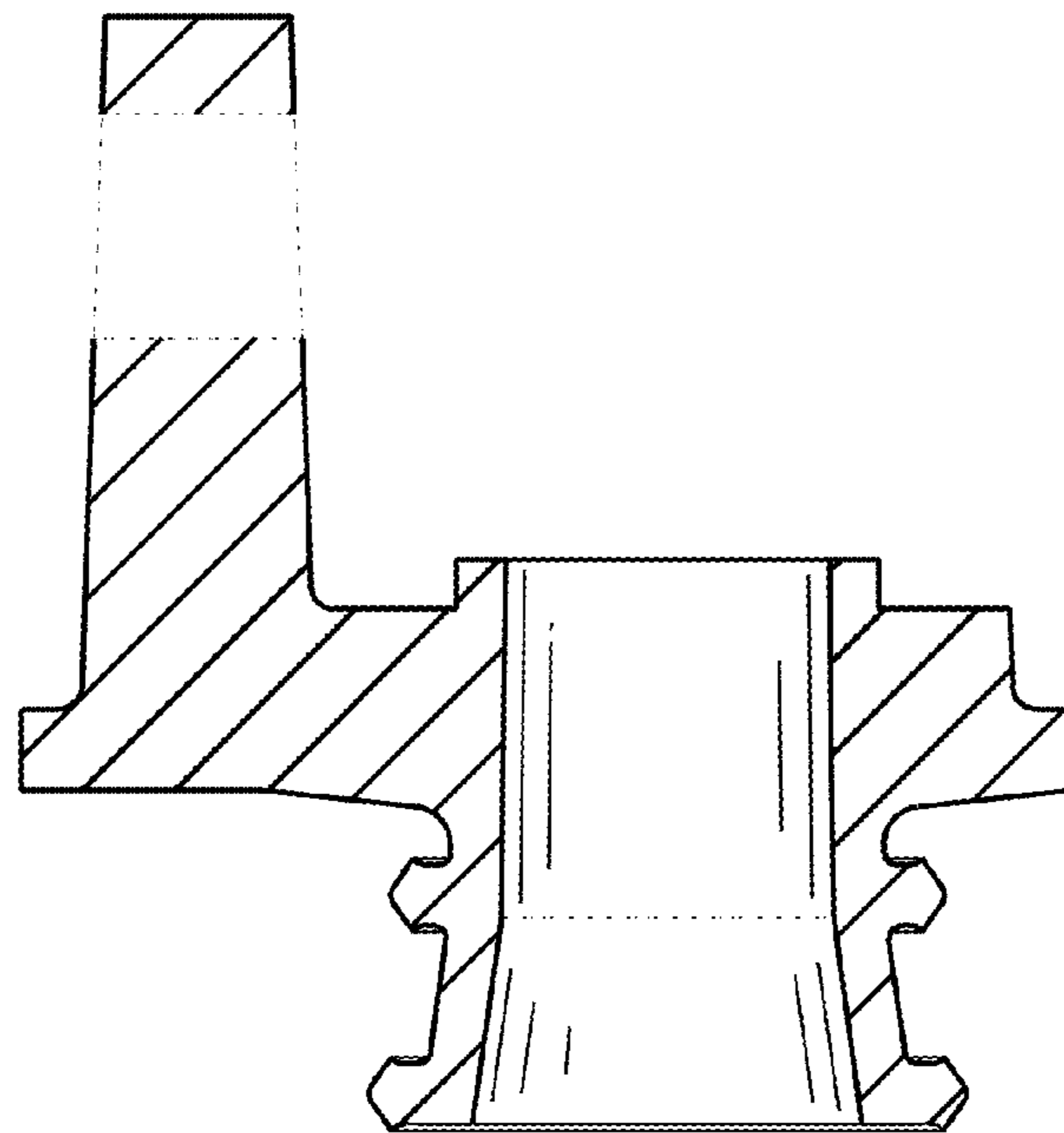


FIG. 8