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

(10) **Patent No.:** **US D689,188 S**

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- (54) **SYRINGE PLUNGER ROD**
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Exton, PA (US)
- (**) Term: **14 Years**
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- (51) **LOC (9) Cl.** **24-02**
- (52) **U.S. Cl.**
USPC **D24/130**
- (58) **Field of Classification Search**
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606/181, 185; 604/264, 272, 115, 232, 187,
604/158, 164.08, 192, 263, 163, 181, 184,
604/198, 227; 600/101, 139, 143; 128/200.24,
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See application file for complete search history.

- D262,739 S 1/1982 Nitshke
- 4,367,738 A 1/1983 Legendre et al.
- 4,367,749 A 1/1983 Dudley et al.
- 4,391,273 A 7/1983 Chiquiar-Arias
- 4,392,497 A 7/1983 Ghaussy
- 4,441,951 A 4/1984 Christinger
- 4,513,754 A 4/1985 Lee
- 4,581,024 A 4/1986 Swenson

(Continued)

FOREIGN PATENT DOCUMENTS

- CH 657990 A5 10/1986
- EP 0350792 1/1990

(Continued)

OTHER PUBLICATIONS

Office Action issued Nov. 15, 2012 in U.S. Appl. No. 12/680,609.

(Continued)

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(57) **CLAIM**

The ornamental design for a syringe plunger rod, as shown and described.

DESCRIPTION

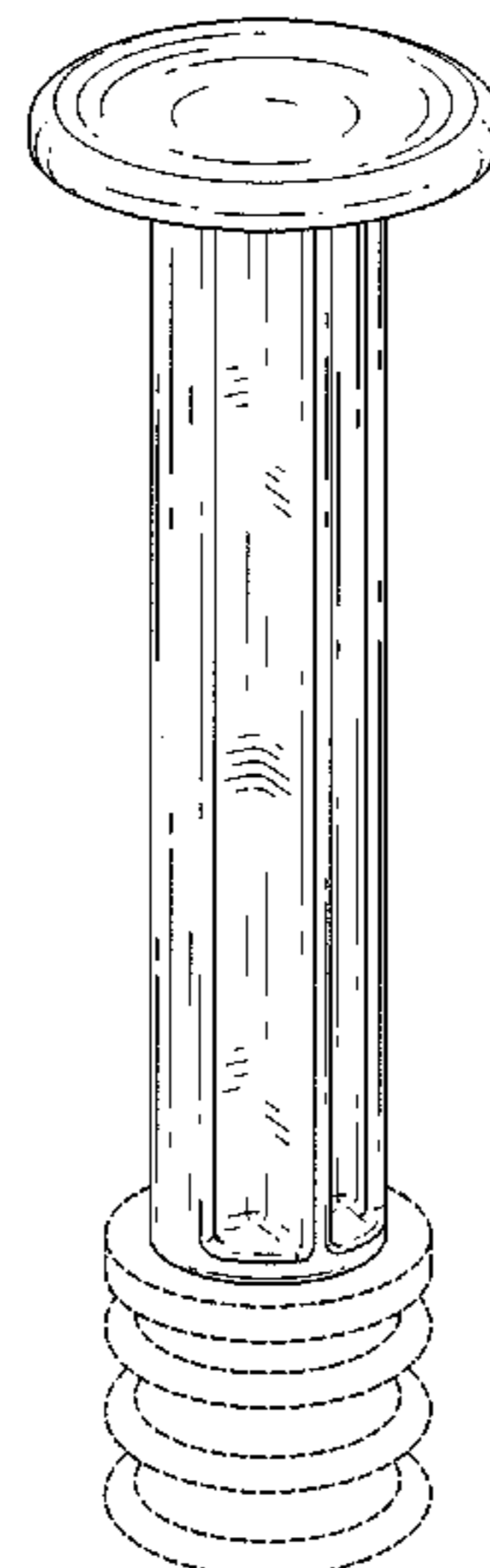
FIG. 1 is a top perspective view of a syringe plunger rod in accordance with my new design; FIG. 2 is a top plan view thereof; FIG. 3 is a bottom plan view thereof; FIG. 4 is a right side elevational view thereof, a left side elevational view thereof being identical; and, FIG. 5 is a front elevational view thereof, a rear elevational view thereof being identical. The broken lines in the figures illustrate environmental structure only and form no part of the claimed design.

1 Claim, 2 Drawing Sheets

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 2,998,050 A 8/1961 Hamilton et al.
- 3,093,134 A 6/1963 Roehr
- 3,118,448 A 1/1964 Gottschalk
- 3,135,993 A 6/1964 Ryan
- 3,330,004 A 7/1967 Cloyd
- 3,359,619 A 12/1967 Walkden
- 3,470,604 A 10/1969 Zenick
- 3,648,684 A 3/1972 Barnwell et al.
- 3,756,235 A 9/1973 Burke et al.
- 3,782,383 A 1/1974 Thompson et al.
- 3,865,236 A 2/1975 Rycroft
- D238,617 S 1/1976 Evanston
- 3,943,225 A 3/1976 Koehn
- 4,003,262 A 1/1977 Gerarde et al.
- 4,070,756 A 1/1978 Shields
- 4,263,922 A 4/1981 White



(56)

References Cited

U.S. PATENT DOCUMENTS

4,585,444 A 4/1986 Harris
 4,589,871 A 5/1986 Imbert
 4,617,012 A 10/1986 Vaillancourt
 4,655,764 A 4/1987 Sato
 4,675,007 A 6/1987 Terry
 4,742,910 A 5/1988 Staebler
 4,795,445 A 1/1989 Jensen
 4,838,877 A 6/1989 Massau
 4,840,185 A 6/1989 Hernandez
 4,886,072 A 12/1989 Percarpio et al.
 4,915,225 A 4/1990 Tabor, Jr. et al.
 4,922,602 A 5/1990 Mehl
 4,936,833 A 6/1990 Sams
 4,972,843 A 11/1990 Broden
 4,976,925 A 12/1990 Porcher et al.
 5,026,355 A 6/1991 Sweeney et al.
 D321,759 S 11/1991 Buswell et al.
 5,087,249 A 2/1992 Deal
 5,125,058 A 6/1992 Tenerz et al.
 5,183,469 A 2/1993 Capaccio
 5,312,351 A 5/1994 Gerrone
 5,364,369 A 11/1994 Reynolds et al.
 5,489,272 A 2/1996 Wirtz
 5,510,065 A 4/1996 McFarlane
 5,529,189 A 6/1996 Feldschuh
 D377,687 S 1/1997 Udovch
 5,607,399 A 3/1997 Grimard et al.
 5,616,136 A 4/1997 Shillington et al.
 D383,205 S * 9/1997 Pagay et al. D24/112
 5,667,495 A 9/1997 Bitdinger et al.
 D387,425 S 12/1997 Niedoispial et al.
 5,693,028 A 12/1997 Shillington
 5,700,247 A 12/1997 Grimard et al.
 5,803,918 A 9/1998 Vetter et al.
 D403,761 S 1/1999 Adams
 5,980,495 A 11/1999 Heinz et al.
 D417,730 S 12/1999 Brassil et al.
 5,997,511 A 12/1999 Curie et al.
 D419,671 S 1/2000 Jansen
 6,223,408 B1 5/2001 Vetter et al.
 6,331,174 B1 12/2001 Reinhard et al.
 6,361,525 B2 3/2002 Capes et al.
 D462,441 S * 9/2002 Garner D24/133
 6,494,892 B1 12/2002 Ireland et al.
 6,537,259 B1 3/2003 Niermann
 6,558,353 B2 5/2003 Zohmann
 D476,417 S 6/2003 Swenson et al.
 6,589,261 B1 7/2003 Abulhaj et al.
 6,616,639 B2 9/2003 Gagnieux et al.
 6,629,962 B2 10/2003 Correa et al.
 6,709,428 B2 3/2004 Sagstetter
 6,723,111 B2 4/2004 Abulhaj et al.
 D490,517 S 5/2004 Harmon
 D492,404 S 6/2004 Prais et al.
 RE38,964 E 1/2006 Shillington
 7,024,749 B2 4/2006 Sagstetter
 D558,340 S 12/2007 Hochman et al.
 7,418,880 B1 9/2008 Smith
 D578,210 S * 10/2008 Muta et al. D24/114
 7,455,661 B2 11/2008 Barrelle et al.
 D588,693 S 3/2009 Strong et al.
 7,544,189 B2 6/2009 Griffiths
 7,582,073 B2 9/2009 Barrelle et al.
 D609,333 S 2/2010 Holmes
 D617,453 S 6/2010 Shaw
 D618,347 S * 6/2010 Bradshaw D24/112
 7,874,827 B2 1/2011 Togashi et al.
 D635,249 S 3/2011 Becker

D638,122 S 5/2011 Kosinski et al.
 D638,123 S * 5/2011 Kosinski et al. D24/130
 D638,538 S * 5/2011 Kosinski et al. D24/130
 8,002,754 B2 8/2011 Kawamura et al.
 8,021,511 B2 9/2011 Erskine
 D650,903 S 12/2011 Kosinski et al.
 8,105,294 B2 1/2012 Araki et al.
 D663,415 S * 7/2012 Tamura et al. D24/130
 D667,108 S * 9/2012 Mottahed D24/130
 D667,111 S * 9/2012 Robinson D24/133
 D667,950 S * 9/2012 Hyun et al. D24/130
 8,313,954 B2 11/2012 Leach et al.
 D673,268 S * 12/2012 Kommireddy D24/130
 D673,675 S * 1/2013 Wong D24/130
 D674,086 S * 1/2013 Khalaj D24/114
 2001/0049496 A1 12/2001 Kirchhofer et al.
 2002/0007147 A1 1/2002 Capes et al.
 2002/0026146 A1 2/2002 Jansen et al.
 2002/0133184 A1 9/2002 LoRusso
 2003/0069544 A1 4/2003 Lee
 2003/0088215 A1 5/2003 Ferguson et al.
 2003/0088234 A1 5/2003 Sagstetter
 2004/0002713 A1 1/2004 Olson et al.
 2004/0127857 A1 7/2004 Shemesh et al.
 2006/0079848 A1 4/2006 Pelkey et al.
 2006/0200085 A1 9/2006 Watts et al.
 2006/0200095 A1 9/2006 Steube
 2007/0167912 A1 7/2007 Causey et al.
 2007/0185460 A1 8/2007 Vedrine et al.
 2007/0239117 A1 10/2007 Chelak et al.
 2007/0265582 A1 11/2007 Kaplan et al.
 2007/0286881 A1 12/2007 Burkinshw
 2008/0183137 A1 7/2008 Barrelle et al.
 2008/0269688 A1 10/2008 Colucci et al.
 2009/0157044 A1 6/2009 Liyanagama et al.
 2010/0152678 A1 6/2010 Jakob
 2010/0270702 A1 10/2010 Zelvovich et al.
 2012/0010573 A1 1/2012 Lundquist
 2012/0022457 A1 1/2012 Silver
 2012/0078179 A1 3/2012 Finke

FOREIGN PATENT DOCUMENTS

FR 1004756 A 4/1952
 GB 614003 A 12/1948
 GB 1207229 A 9/1970
 JP 4303730 10/1992
 WO 2012043544 A1 4/2012

OTHER PUBLICATIONS

Office Action issued Nov. 26, 2012 in CN Application No. 200980101066.7.
 International Preliminary Report on Patentability Issued Jul. 20, 2010 in Int'l Application No. PCT/US2009/031112, Written Opinion.
 International Search Report Issued Oct. 22, 2009 in Int'l Appln. No. PCT/US2009/031112; Written Opinion.
 Office Action issued Sep. 21, 2009 in U.S. Appl. No. 29/334,048.
 Office Action issued Mar. 18, 2010 in U.S. Appl. No. 29/334,048.
 U.S. Appl. No. 29/402,109 by Lundquist, filed Sep. 21, 2011.
 Office Action issued May 3, 2012 in CN Application No. 200980101066.7.
 Office Action issued Jul. 31, 2012 in JP Application No. 2010-543235.
 Extended search report issued Jun. 12, 2012 in EP Application No. 12166374.4.
 Extended search report issued Sep. 7, 2011 in EP Application No. 09702776.7.
 Office Action issued Apr. 23, 2013 in U.S. Appl. No. 29/402,109.

* cited by examiner

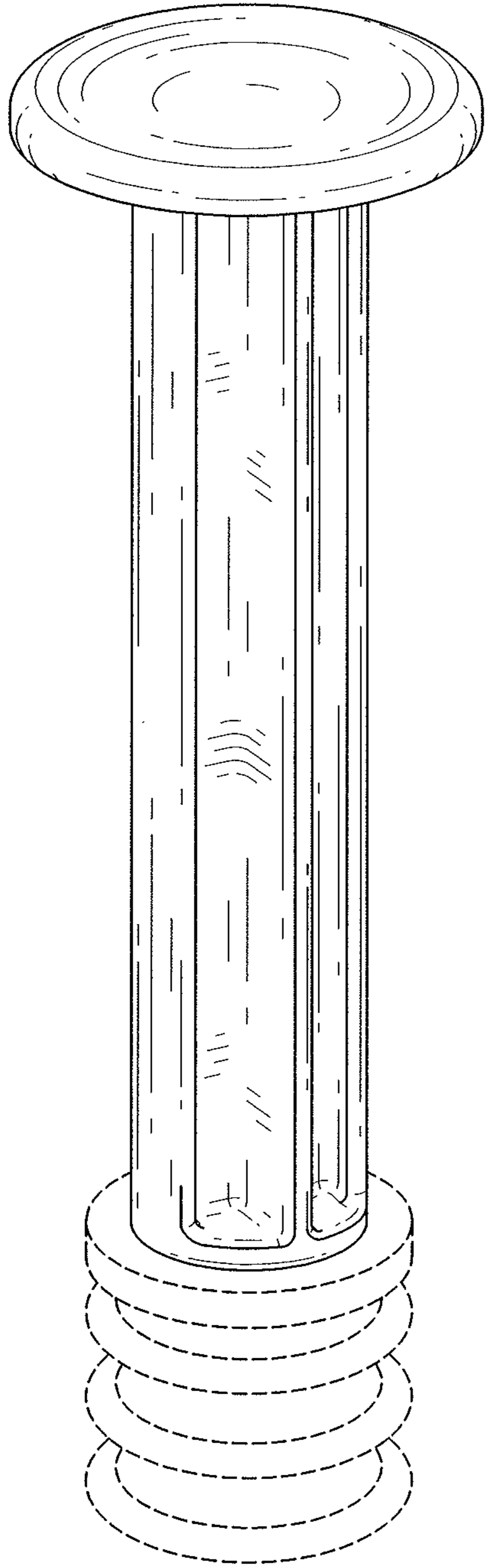


Fig. 1

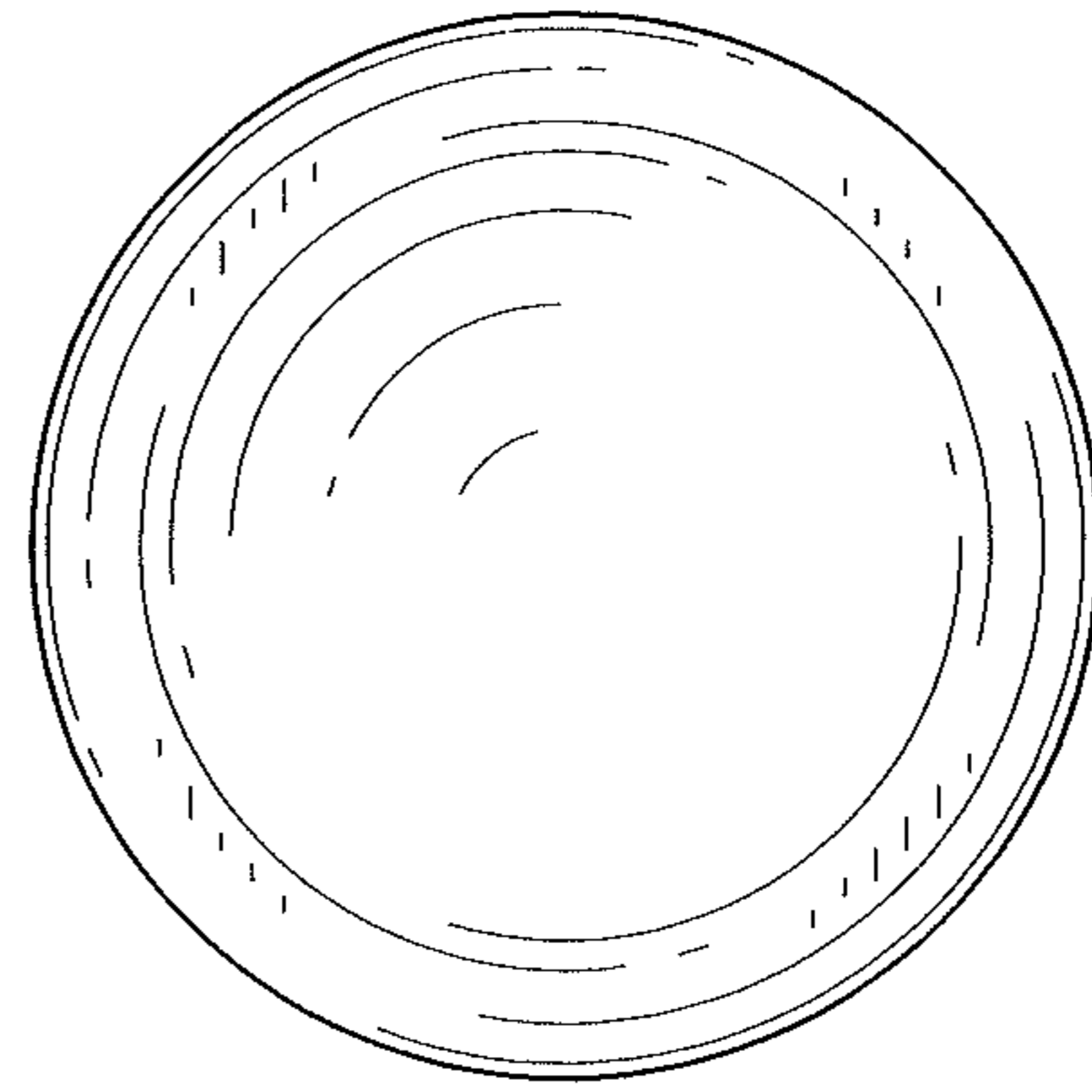


Fig. 2

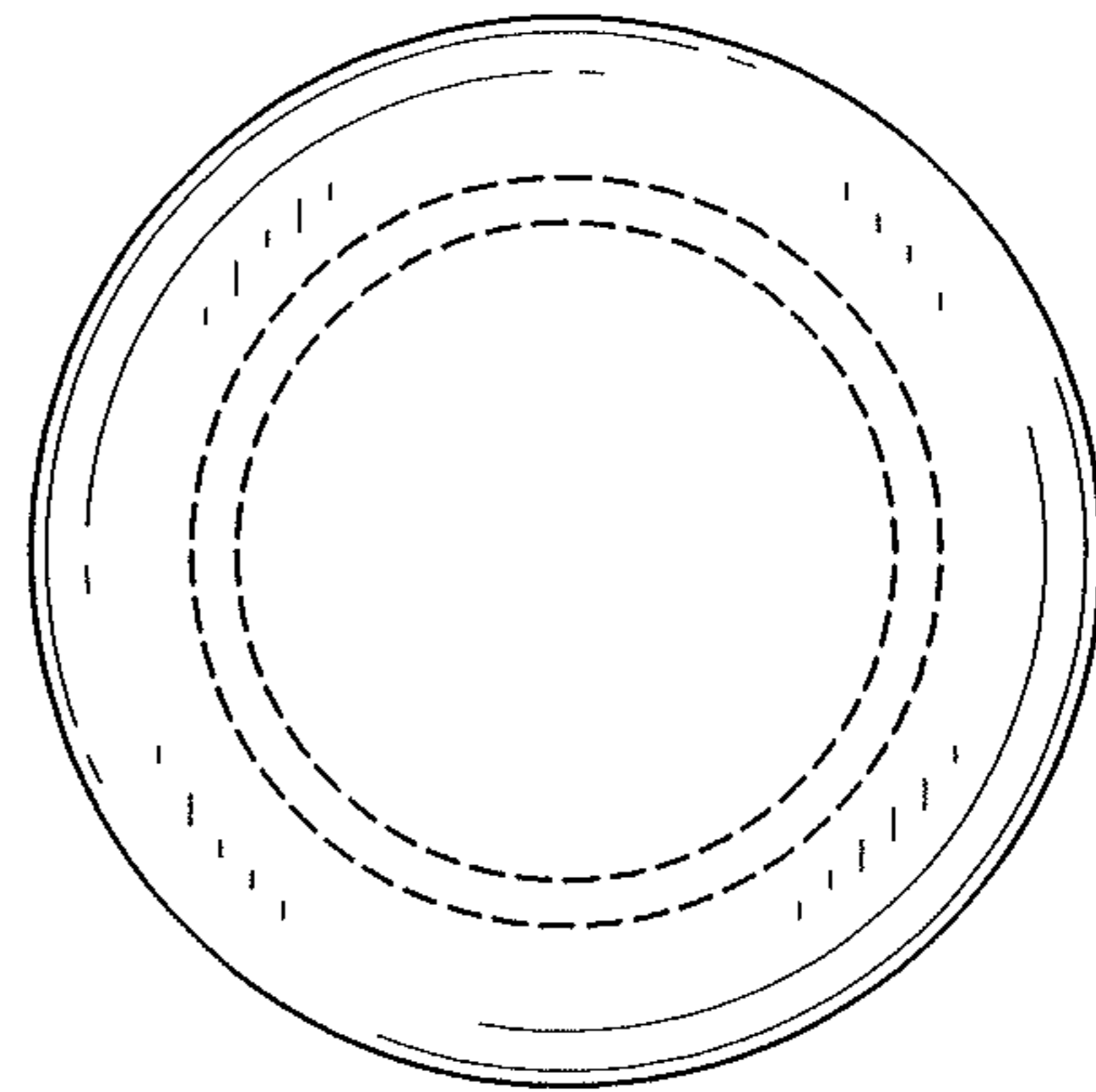


Fig. 3

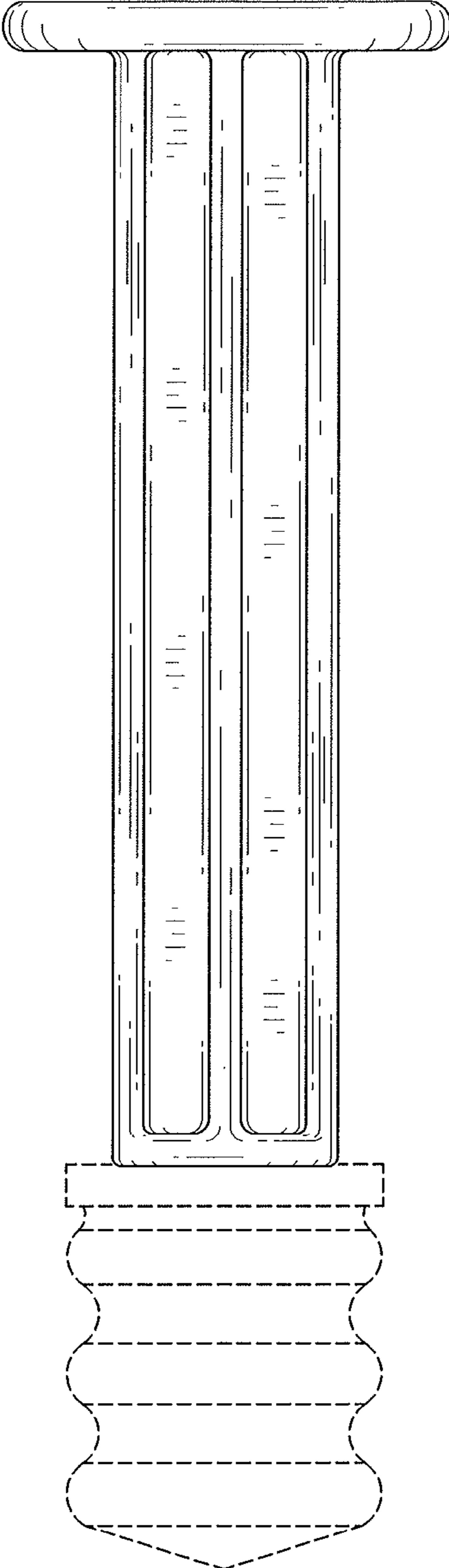


Fig. 4

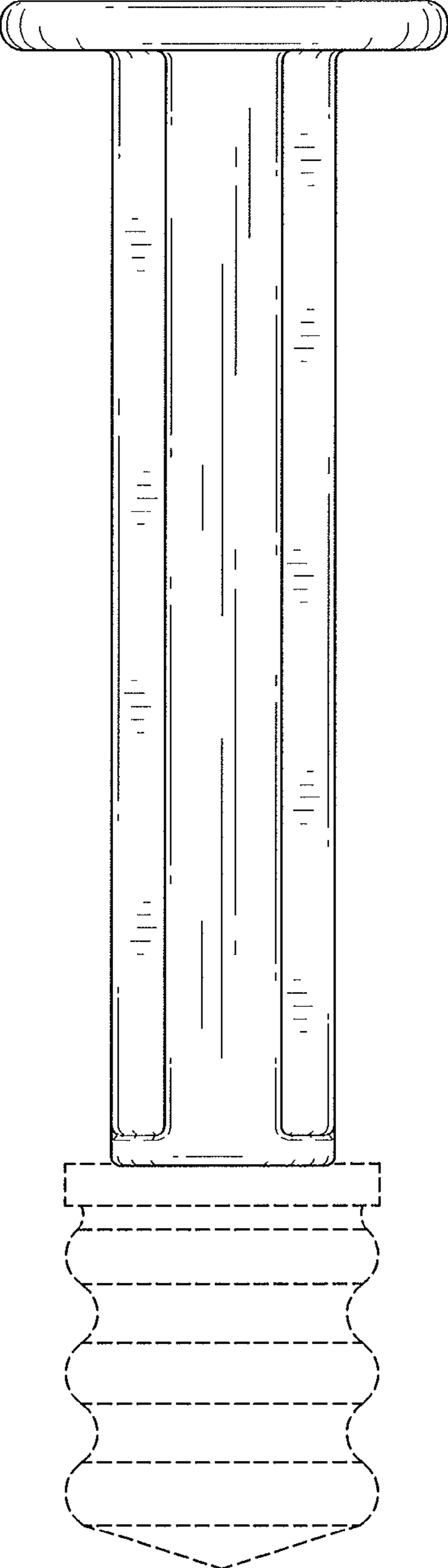


Fig. 5