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(12) **United States Design Patent** (10) **Patent No.:** **US D561,348 S**  
**Zinger et al.** (45) **Date of Patent:** **\*\* Feb. 5, 2008**

(54) **VIAL ADAPTER**

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(73) Assignee: **Medimop Medical Projects Ltd.**, Ra'anana (IL)

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

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(30) **Foreign Application Priority Data**

Aug. 17, 2006 (IL) ..... 42919

(51) **LOC (8) Cl.** ..... **24-01**

(52) **U.S. Cl.** ..... **D24/231**

(58) **Field of Classification Search** ..... D24/108,  
D24/129, 130, 231; 604/88, 283, 411-414,  
604/537, 539

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 3,484,849 A 12/1969 Huebner et al.
- 3,757,981 A 9/1973 Harris Sr. et al.
- 3,826,261 A 7/1974 Killinger
- 3,885,607 A 5/1975 Peltier
- 3,977,555 A 8/1976 Larson
- 3,993,063 A 11/1976 Larrabee
- 4,020,839 A 5/1977 Klapp
- 4,253,501 A 3/1981 Ogle
- D267,199 S \* 12/1982 Koenig ..... D24/129
- 4,434,823 A 3/1984 Hudspith
- 4,475,915 A 10/1984 Sloane
- 4,588,396 A 5/1986 Stroebel et al.
- 4,607,671 A 8/1986 Aalto et al.
- 4,614,437 A 9/1986 Buehler
- 4,638,975 A 1/1987 Iuchi et al.
- 4,639,019 A 1/1987 Mittleman
- 4,697,622 A 10/1987 Swift et al.
- 4,743,229 A 5/1988 Chu

- 4,759,756 A 7/1988 Forman et al.
- 4,787,898 A 11/1988 Reines
- 4,865,592 A 9/1989 Rycroft
- 4,997,430 A 3/1991 Van der Heiden et al.
- 5,104,387 A 4/1992 Pokorney et al.

(Continued)

**FOREIGN PATENT DOCUMENTS**

DE 4112476 A1 1/1993

(Continued)

**OTHER PUBLICATIONS**

Grifols Vial Adapter Product Literature, 2 pages, Jan. 2002.

(Continued)

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(57) **CLAIM**

The ornamental design for a vial adapter, as shown and described.

**DESCRIPTION**

FIG. 1 is a top perspective view of a vial adapter in accordance with my new design;

FIG. 2 is a bottom perspective view thereof;

FIG. 3 is a front elevation view thereof;

FIG. 4 is a rear elevation view thereof;

FIG. 5 is a left-side elevation view thereof;

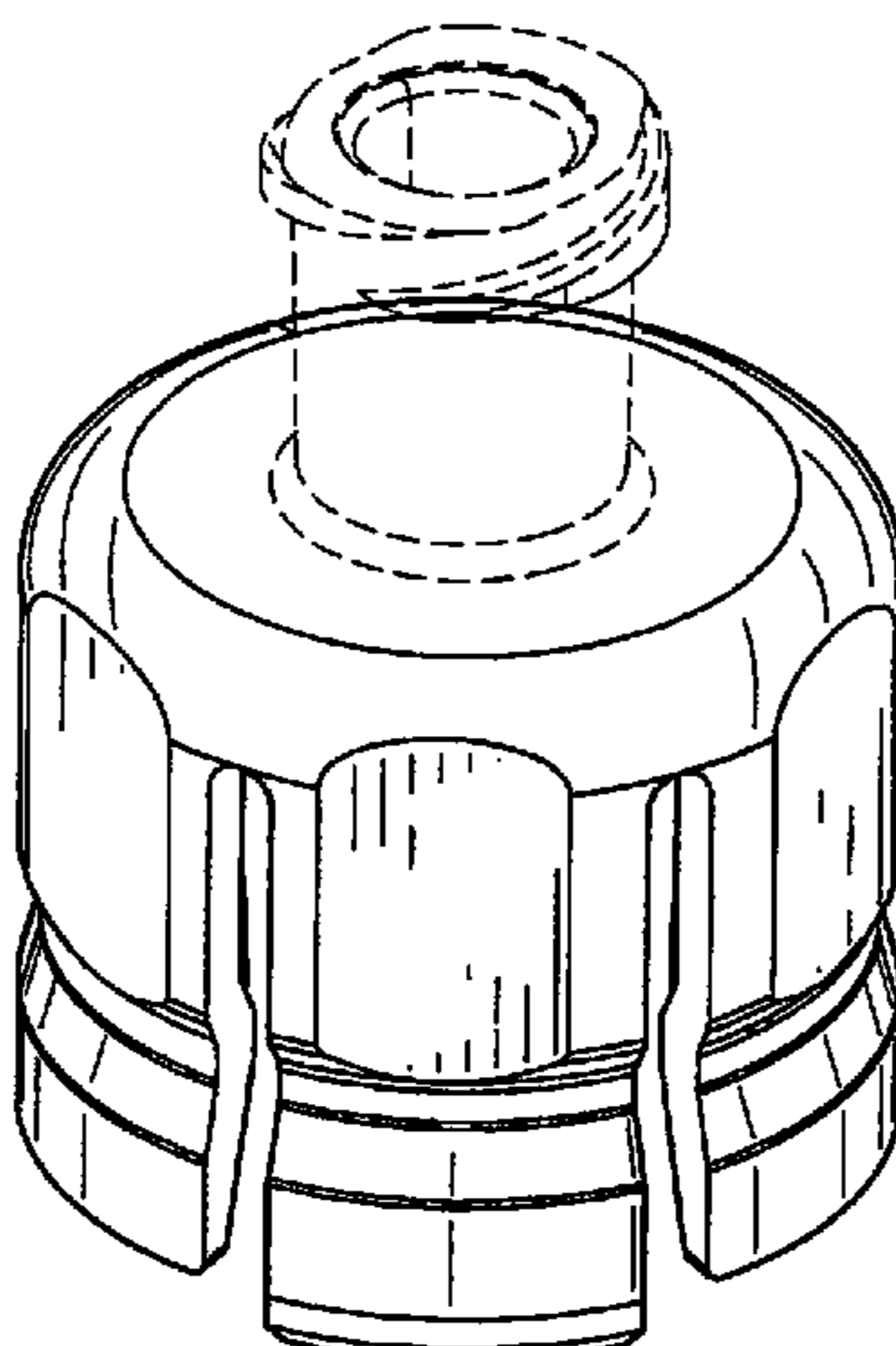
FIG. 6 is a right-side elevation view thereof;

FIG. 7 is a bottom plan view thereof; and,

FIG. 8 is a top plan view thereof.

The broken lines in the figures are for illustrative purposes only and form no part of the claimed design.

**1 Claim, 4 Drawing Sheets**



# US D561,348 S

Page 2

## U.S. PATENT DOCUMENTS

5,113,904 A 5/1992 Aslanian  
5,203,771 A 4/1993 Melker et al.  
5,211,638 A 5/1993 Dudar et al.  
5,247,972 A 9/1993 Tetreault  
5,270,219 A 12/1993 DeCastro et al.  
5,288,290 A 2/1994 Brody  
5,334,163 A 8/1994 Sinnett  
5,342,346 A 8/1994 Honda et al.  
5,344,417 A \* 9/1994 Wadsworth, Jr. .... 604/414  
5,350,372 A 9/1994 Ikeda et al.  
5,374,264 A 12/1994 Wadsworth, Jr.  
5,385,547 A 1/1995 Wong et al.  
5,478,337 A 12/1995 Okamoto et al.  
5,526,853 A 6/1996 McPhee et al.  
5,566,729 A 10/1996 Grabenkort et al.  
5,573,281 A 11/1996 Keller  
5,636,660 A 6/1997 Pfeleiderer et al.  
5,641,010 A 6/1997 Maier  
5,653,686 A 8/1997 Coulter et al.  
5,743,312 A 4/1998 Pfeifer et al.  
6,063,068 A 5/2000 Fowles et al.  
D427,308 S 6/2000 Zinger  
6,080,132 A 6/2000 Cole et al.  
6,156,025 A 12/2000 Niedoşpial et al.  
6,159,192 A 12/2000 Fowles et al.  
6,238,372 B1 5/2001 Zinger et al.  
D445,501 S 7/2001 Niedoşpial, Jr.  
6,343,629 B1 2/2002 Wessman et al.  
6,379,340 B1 4/2002 Zinger et al.  
D472,316 S \* 3/2003 Douglas et al. .... D24/130  
D472,630 S \* 4/2003 Douglas et al. .... D24/108  
6,558,365 B2 5/2003 Zinger et al.  
6,699,229 B2 3/2004 Zinger et al.  
D495,416 S 8/2004 Dimeo et al.  
6,852,103 B2 2/2005 Fuller et al.

6,875,205 B2 4/2005 Leinsing  
2002/0087144 A1 7/2002 Zinger et al.  
2002/0127150 A1 9/2002 Sasso  
2003/0153895 A1 8/2003 Leinsing  
2003/0199847 A1 10/2003 Akerlund et al.  
2004/0044327 A1 3/2004 Hasegawa  
2005/0148994 A1 7/2005 Leinsing  
2006/0079834 A1 4/2006 Tecnnican et al.  
2007/0060904 A1\* 3/2007 Vedrine et al. .... 604/411

## FOREIGN PATENT DOCUMENTS

DE 19504413 A1 8/1996  
EP 0192661 B1 9/1986  
EP 0258913 A2 3/1988  
EP 0195018 B1 6/1991  
EP 0814866 B1 1/1998  
EP 0898951 A2 3/1999  
EP 1329210 A1 7/2003  
EP 1454609 A1 9/2004  
EP 1454650 A1 9/2004  
WO 0191693 A2 12/2001  
WO 2005105014 A1 11/2005  
WO 9629113 A1 2/2007

## OTHER PUBLICATIONS

Novel Transfer, Mixing and Drug Delivery Systems, MOP Medimop Medical Projects Ltd. Catalog, 4 pages, Rev. 4, 2004.  
Smart Site® Alaris Medical Systems Product Brochure, 4 pages, Issue 1, Oct. 1999.  
Smart Site® Needle Systems, Alaris Medical Systems Webpage, 4 pages, Feb. 2006.  
Photographs of Alaris Medical Systems SmartSite® device, 5 pages, 2002.  
Non-Vented Vial Access Pin with ULTRASITE® Valve, B. Braun Medical, Inc. website and product description, 3 pages, Feb. 2006.

\* cited by examiner

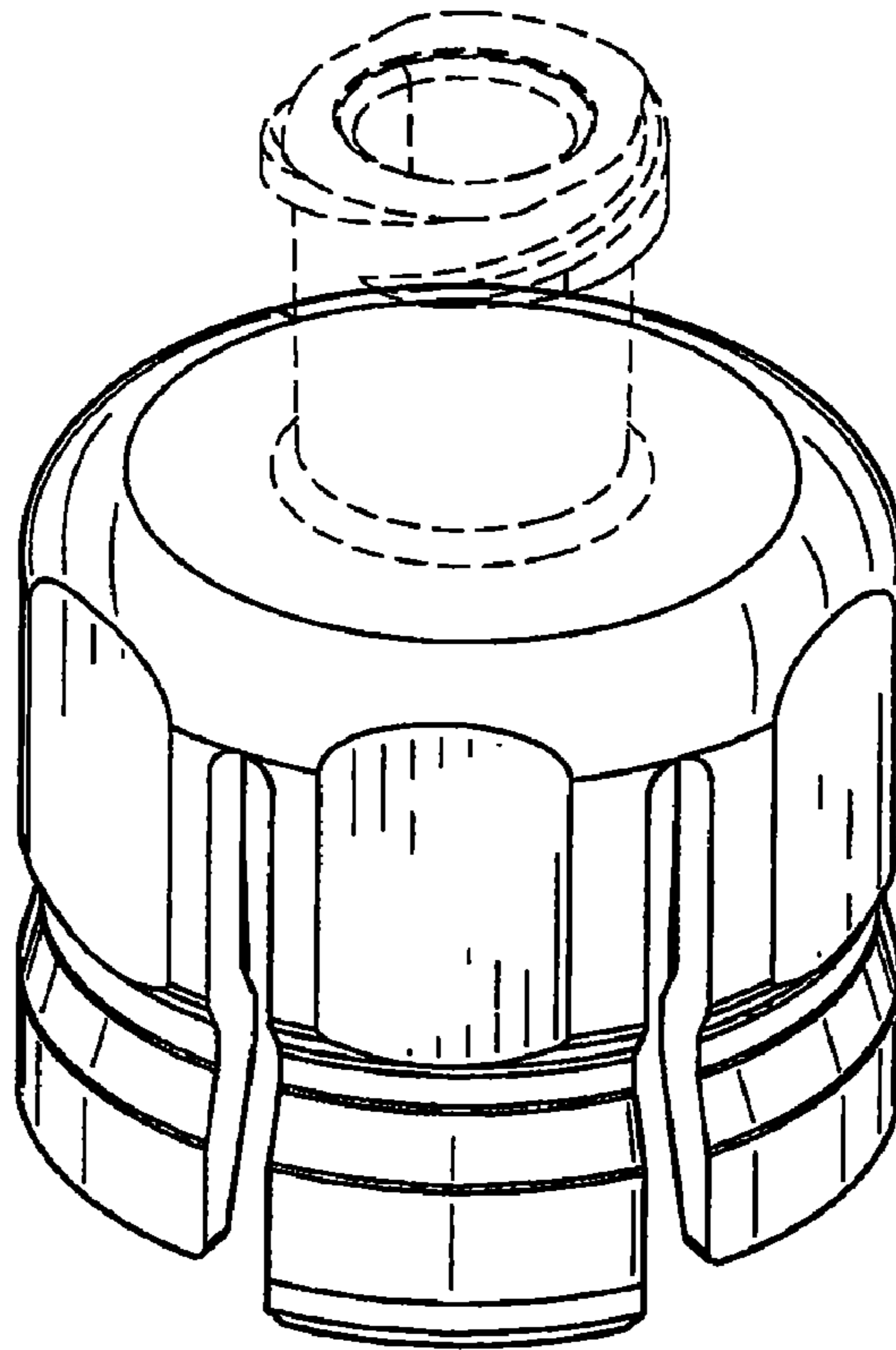


FIG.1

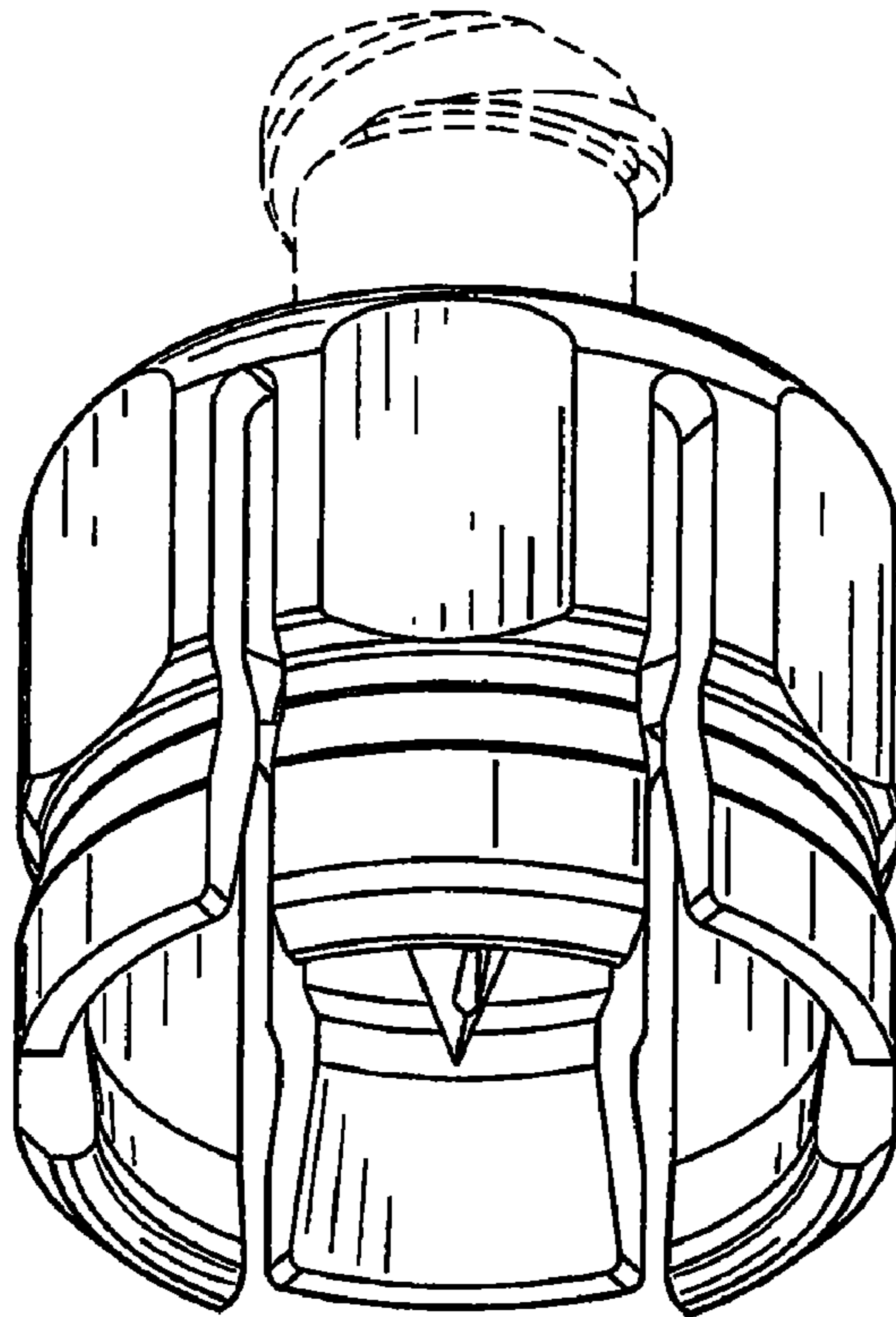


FIG.2

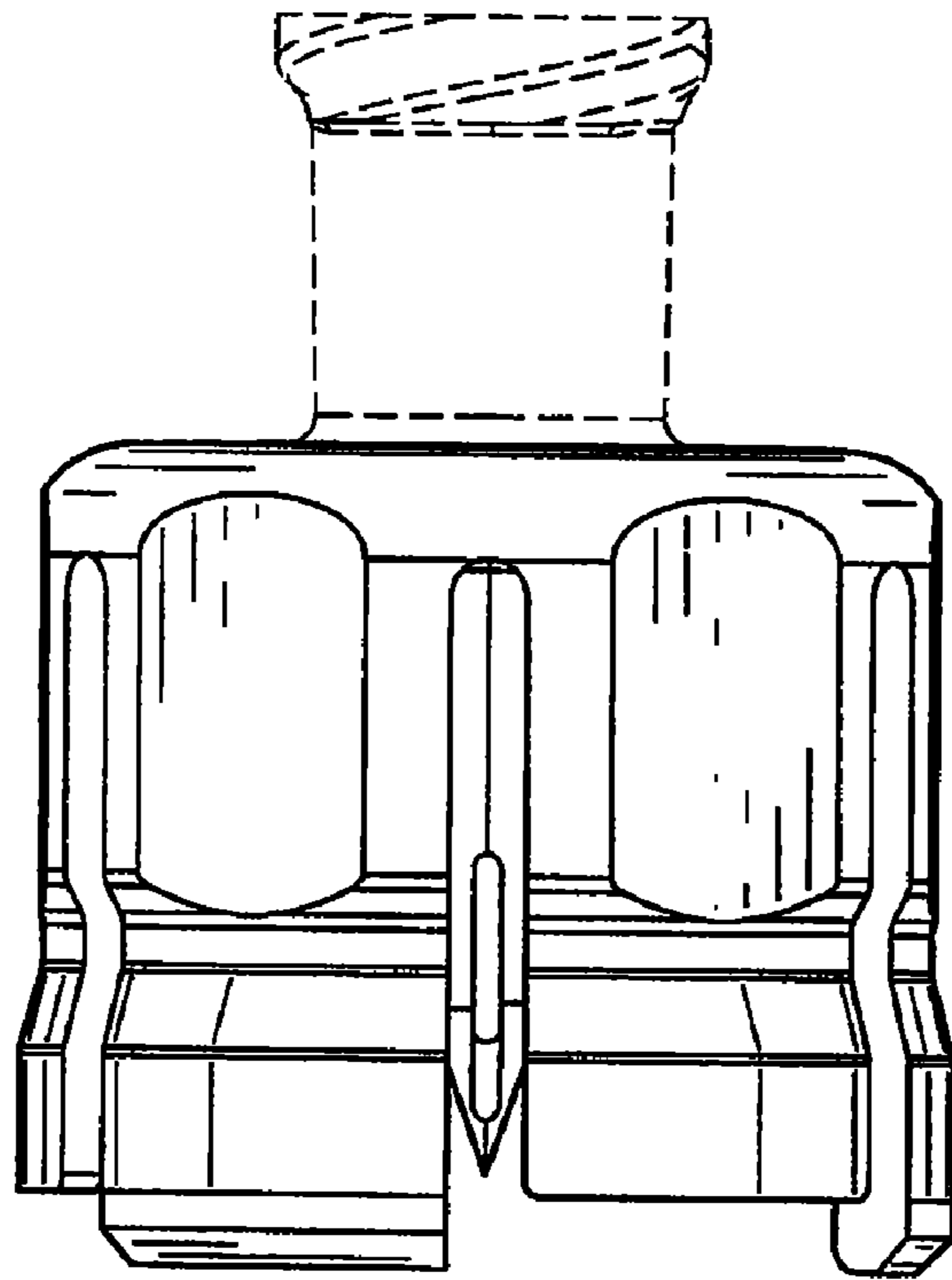


FIG. 3

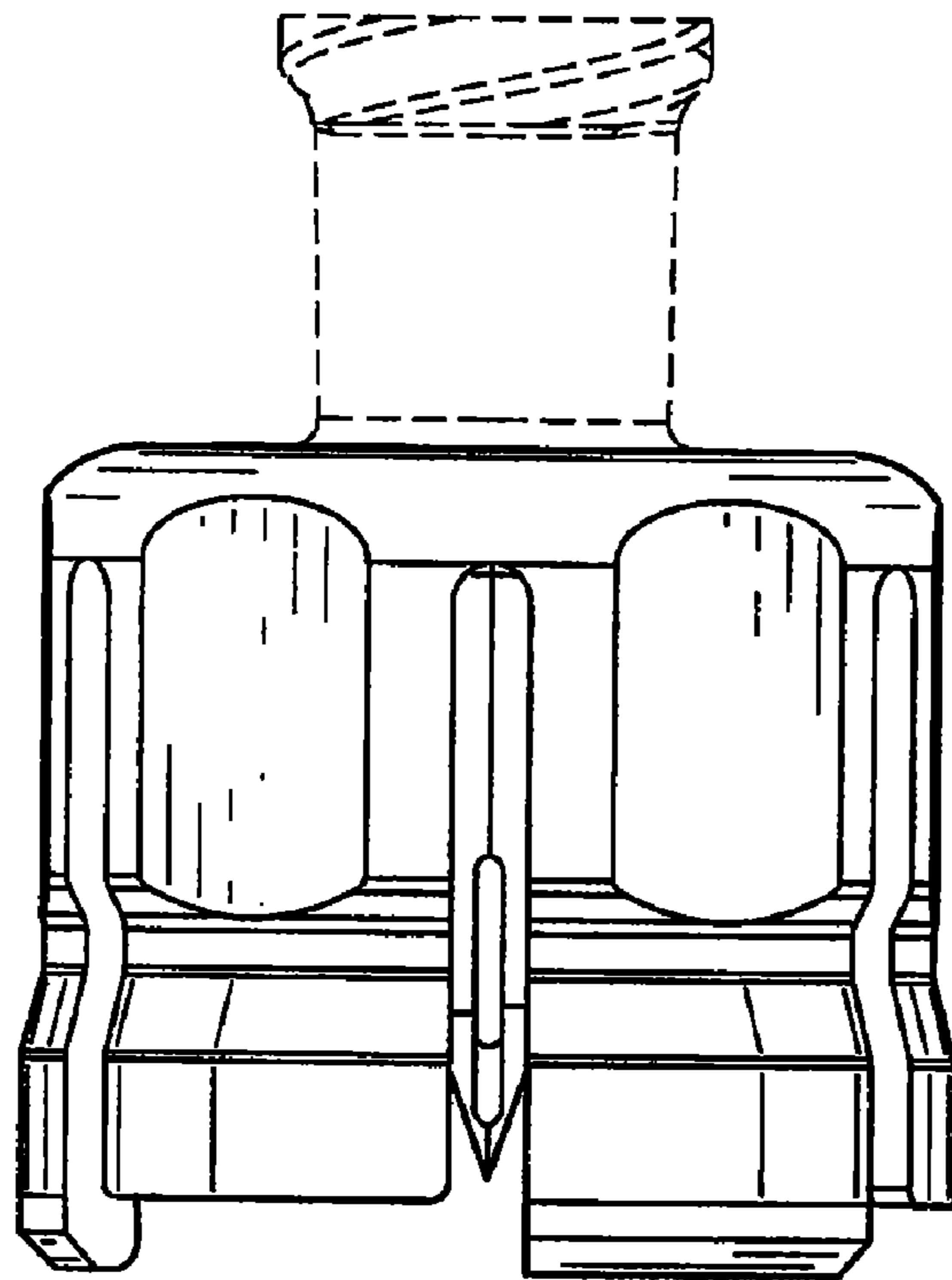


FIG. 4

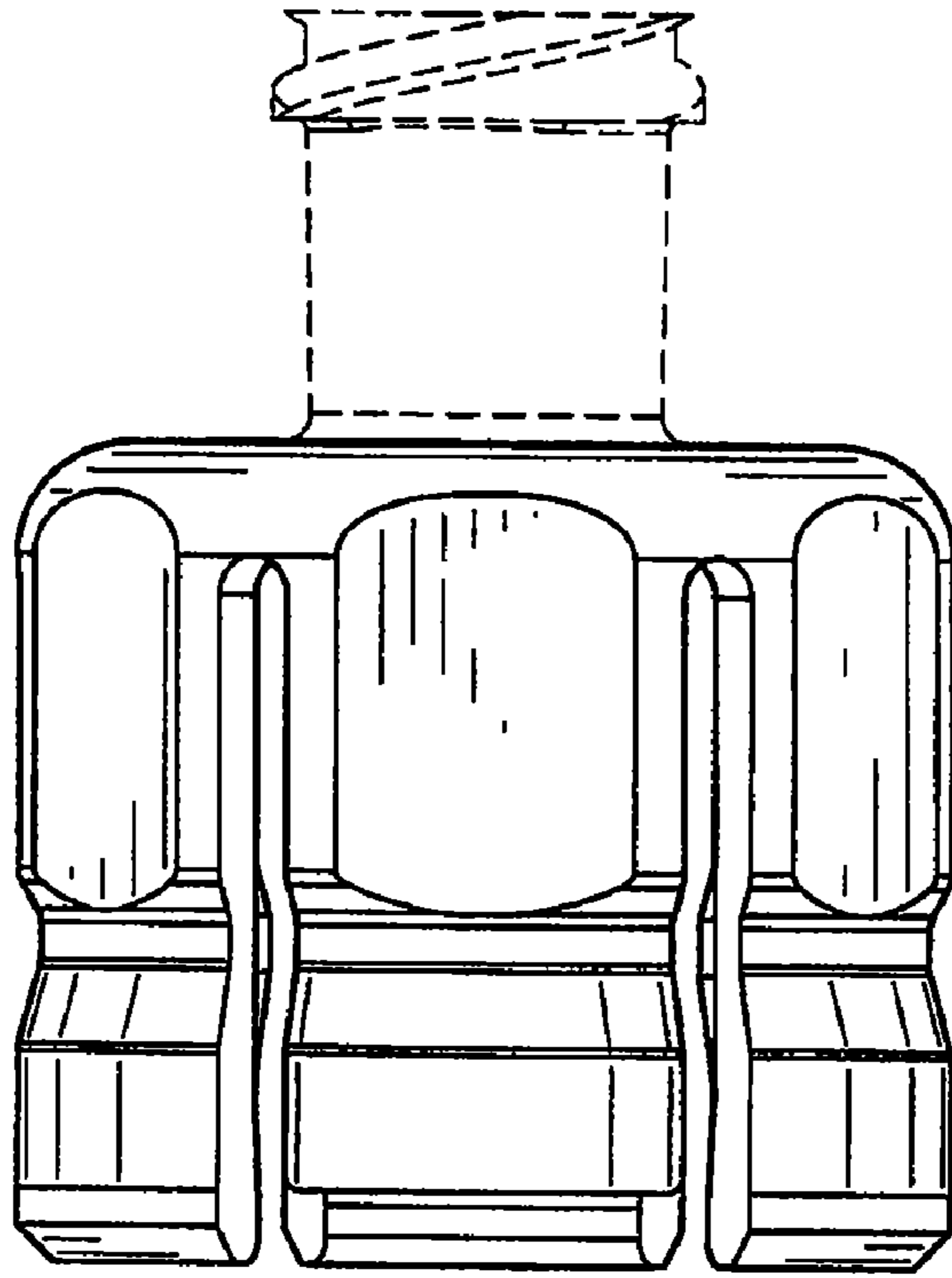


FIG. 5

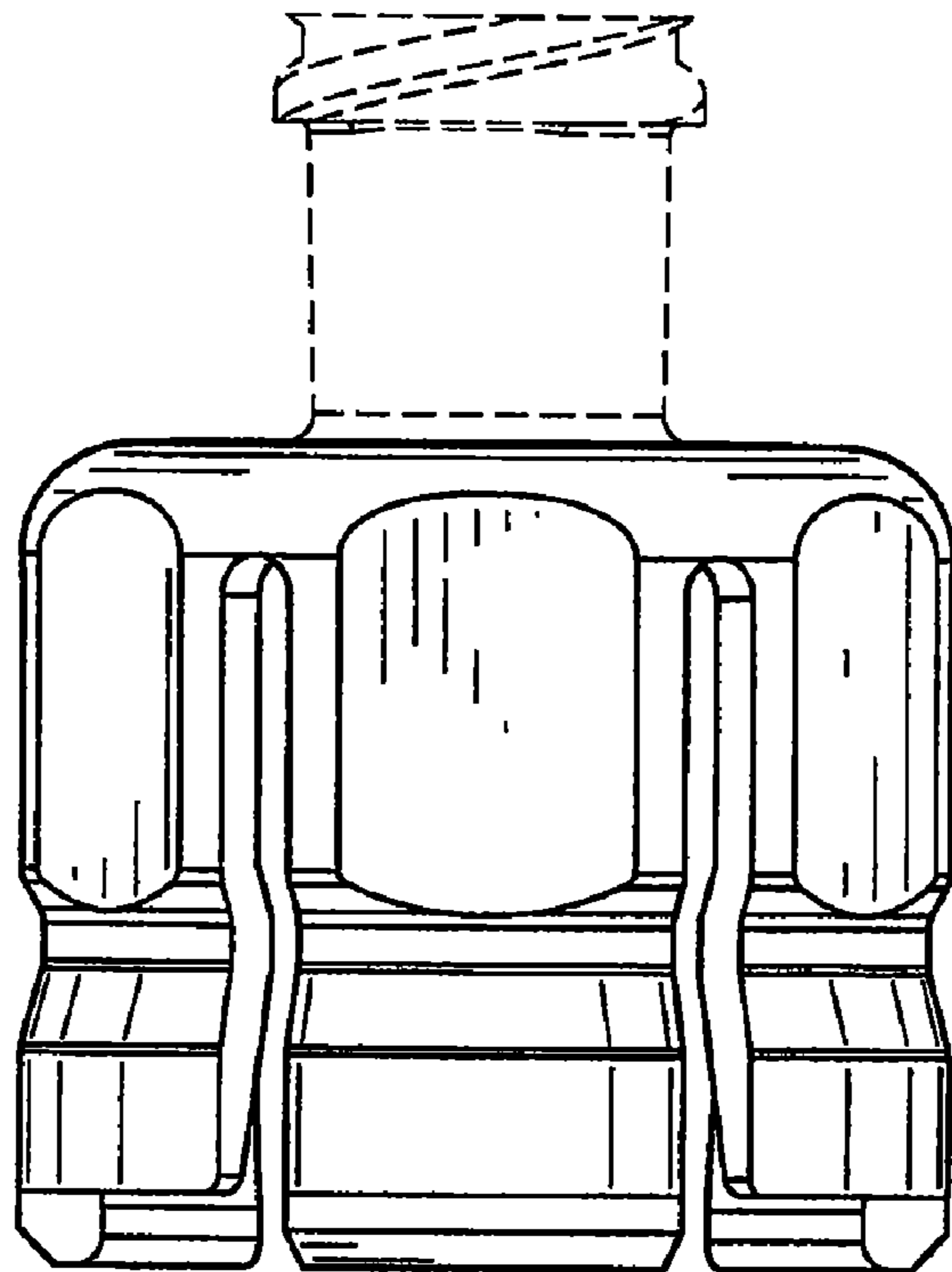


FIG. 6

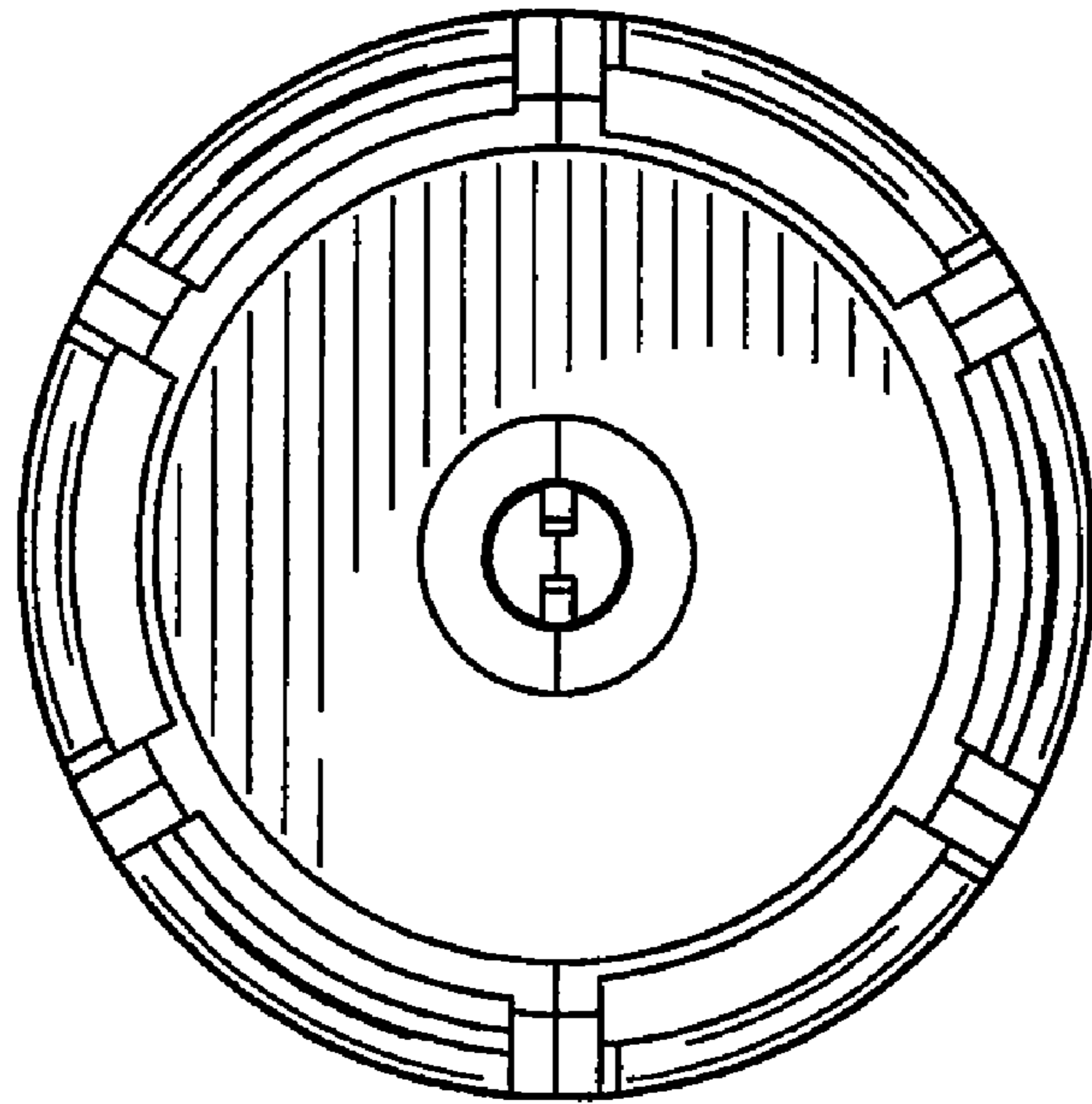


FIG. 7

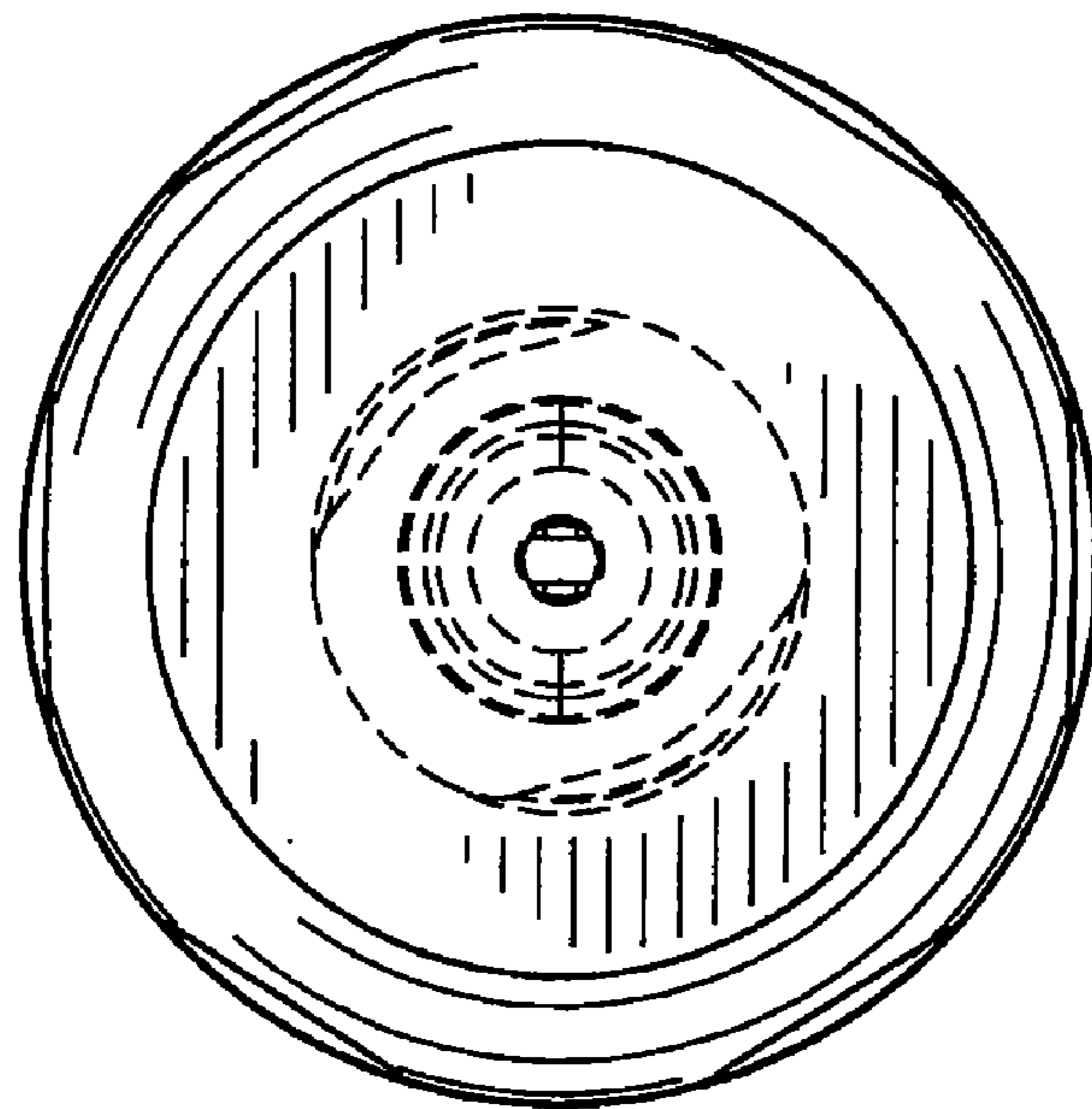


FIG. 8