



US00D486146S

(12)

United States Design Patent
Dearnley

(10) Patent No.:

US D486,146 S

(45) Date of Patent:

**** Feb. 3, 2004**

(54) **LOW VISUAL IMPACT MONOPOLE TOWER FOR WIRELESS COMMUNICATIONS**

(75) Inventor: **Russell W. Dearnley**, Naperville, IL (US)

(73) Assignee: **Andrew Corporation**, Orland Park, IL (US)

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

(21) Appl. No.: **29/172,732**

(22) Filed: **Dec. 17, 2002**

(51) **LOC (7) Cl.** **14-03**

(52) **U.S. Cl.** **D14/230**

(58) **Field of Search** D14/230–238, D14/137, 138; 343/874, 875, 857, 890

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,234,234	A	*	3/1941	Cork et al.		343/874
3,490,025	A	*	1/1970	Pickles		343/857
3,605,105	A		9/1971	Penzias		343/839

(List continued on next page.)

OTHER PUBLICATIONS

Inventor: Behr, *Antenna Tower*, Patent Application Publication No. U.S. 2001/0045911, Publication Date: Nov. 29, 2001.

Andrew Corporation, *New Product Announcement, Cluster Mount Eases Zoning Approval*, Bulletin 10286A (04/99).

Inventors: Jimenez Sanchez et al., *Arrangement of Camouflage Applicable Over Support Towers of Telecommunications Antennas or Similar Structure*, Patent Application Publication No. U.S. 2001/0013212, Publication Date: Aug. 16, 2002.

Inventor: Gillen, *Antenna Tower and Support Apparatus*, Patent Application Publication No. U.S. 2002/0015001, Publication Date: Feb. 7, 2002.

Inventors: Chiang et al., *Adaptive Antenna for Use in Wireless Communication Systems*, Patent Application Publication No. U.S. 2002/0036595, Publication Date: Mar. 28, 2002.

Inventors: Ianello et al., *Antenna Mount*, Patent Application Publication No. U.S. 2002/0053996, Publication Date: May, 9, 2002.

Inventor: Cash, *Method and Apparatus for Increasing the Capacity and Stability of a Single-Pole Tower*, Patent Application Publication No. U.S. 2002/0056250, Publication Date: May 16, 2002.

Inventor: Hook, *Group Antenna With Narrower Side Lobes in the Horizontal Plane*, Patent Application Publication No. US 2002/0057223, Publication Date: May 16, 2002.

Inventor: Wastberg, *Dual-Beam Antenna Aperture*, Patent Application Publication No. U.S. 2002/0080073, Publication Date: Jun. 27, 2002.

Inventor: Skalina et al., *Common Aperture UHF/VHF Antenna*, Patent Application Publication No. U.S. 2002/0084949, Publication Date: Jul. 4, 2002.

Primary Examiner—Louis S. Zarfes

Assistant Examiner—Deanne Levy

(74) *Attorney, Agent, or Firm*—Wood, Herron & Evans, L.L.P.

(57) **CLAIM**

The ornamental design for a low visual impact monopole tower for wireless communications, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of the invention; FIG. 2 is a front elevational view of FIG. 1; FIG. 3 is a right side elevational view of FIG. 1, the left side elevational view being a mirror image of the right side elevational view; FIG. 4 is a rear elevational view of FIG. 1; FIG. 5 is a top plan view of FIG. 1; and, FIG. 6 is a bottom view of FIG. 1.

The elements shown in dash-dot lines form no part of the claimed invention, and are instead included to show environmental aspects of the claimed invention.

1 Claim, 3 Drawing Sheets



US D486,146 S

U.S. PATENT DOCUMENTS			
3,605,108 A	9/1971	Crawford	343/882
3,829,864 A	8/1974	Truskanov et al.	343/833
4,301,457 A	11/1981	Bogner	343/770
4,574,290 A	3/1986	Siwiak	343/827
4,590,479 A	5/1986	Ben-Dov	343/771
5,038,151 A	8/1991	Kaminski	343/727
D329,433 S	* 9/1992	Wilson	D14/234
D331,927 S	* 12/1992	Birri	D14/155
D333,661 S	* 3/1993	Elliott et al.	D14/236
5,291,211 A	3/1994	Tropper	343/890
5,467,955 A	11/1995	Beyersmith	248/219.3
5,570,546 A	11/1996	Butterworth et al.	52/111
5,581,958 A	12/1996	Cote	52/40
5,611,176 A	3/1997	Juengert et al.	52/40
D383,138 S	* 9/1997	Harada	D14/234
5,757,324 A	5/1998	Helms et al.	343/700
5,787,649 A	8/1998	Popowych et al.	52/40
5,818,385 A	10/1998	Bartholomew	342/372
5,861,858 A	1/1999	Niekamp	343/800
5,872,547 A	2/1999	Martek	343/815
5,880,701 A	3/1999	Bhame et al.	343/890
D409,997 S	* 5/1999	Heuel	D14/137
5,926,145 A	7/1999	Honma	343/720
5,940,048 A	8/1999	Martek	343/893
5,963,178 A	10/1999	Jones	343/890
5,969,689 A	10/1999	Martek et al.	343/758
5,995,063 A	11/1999	Somoza et al.	343/890
5,999,145 A	12/1999	Niekamp	343/890
6,028,566 A	2/2000	Pennell et al.	343/878
6,057,804 A	5/2000	Kaegebein	343/792
6,088,002 A	7/2000	Johnson et al.	343/878
6,088,003 A	7/2000	Bassirat	343/890
6,094,166 A	7/2000	Martek et al.	343/374
6,122,866 A	9/2000	Thomas et al.	52/40
6,127,988 A	10/2000	McNichol	343/844
6,133,890 A	10/2000	Damiani	343/890
6,173,537 B1	1/2001	Davidsson et al.	52/40
6,188,373 B1	2/2001	Martek	343/893
6,198,458 B1	3/2001	Heinz et al.	343/853
6,201,510 B1	3/2001	Lopez et al.	343/799
6,222,503 B1	4/2001	Gietema et al.	343/890
6,268,828 B1	7/2001	Martek	342/373
6,286,266 B1	9/2001	Popowych et al.	52/40
6,286,281 B1	9/2001	Johnson	52/592.1
6,323,823 B1	11/2001	Wong et al.	343/844
6,335,709 B1	1/2002	Cummings	343/890
6,343,440 B1	2/2002	Ayers	52/40
6,346,924 B1	2/2002	Heinz et al.	343/853
6,351,250 B1	2/2002	Gillen	343/890
6,369,774 B1	4/2002	Lucidarme	343/890
6,407,711 B1	6/2002	Bonebright et al.	343/705

* cited by examiner

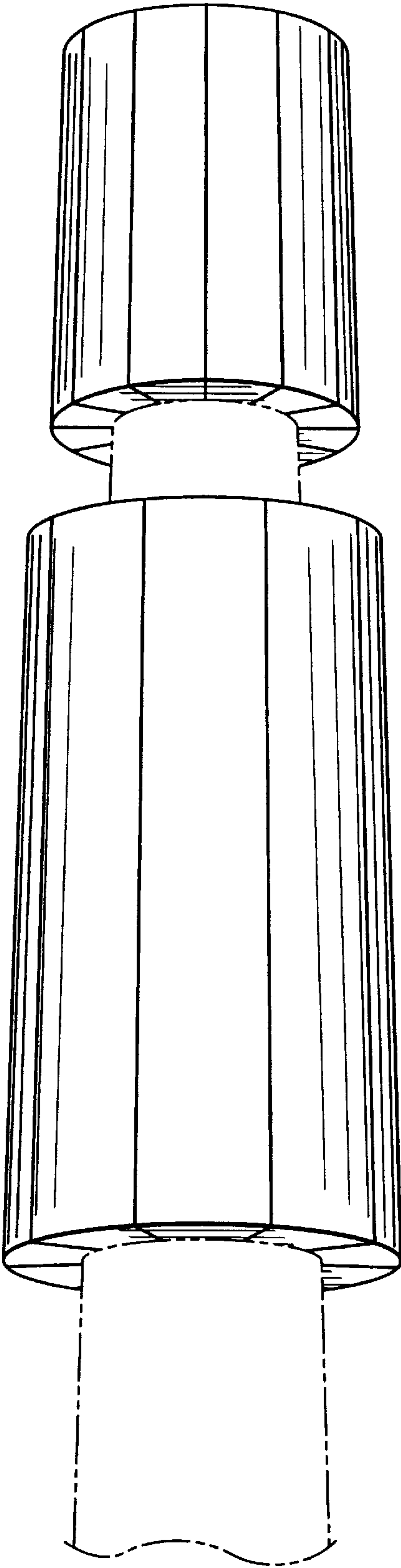


FIG. 1

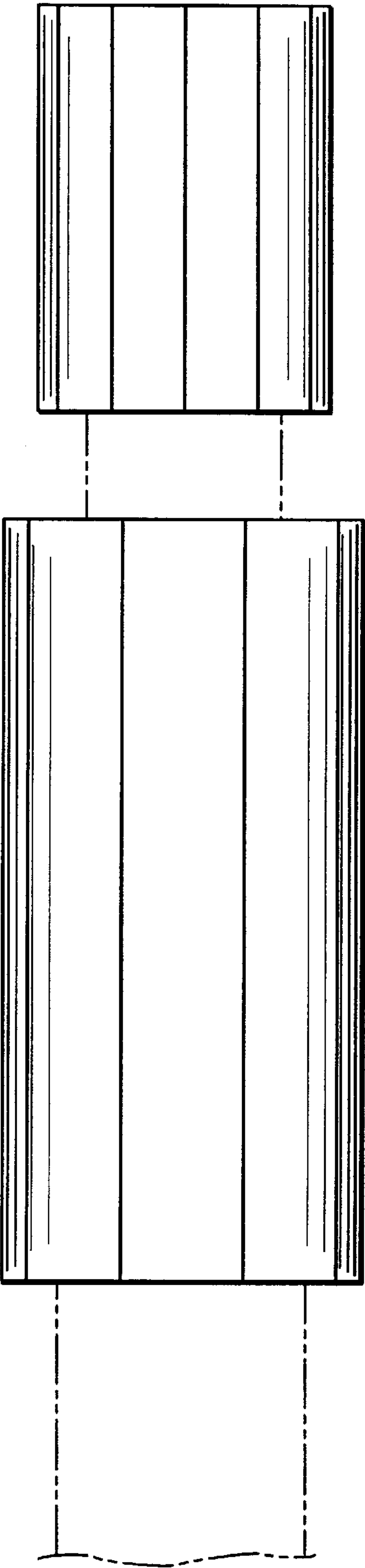


FIG. 2

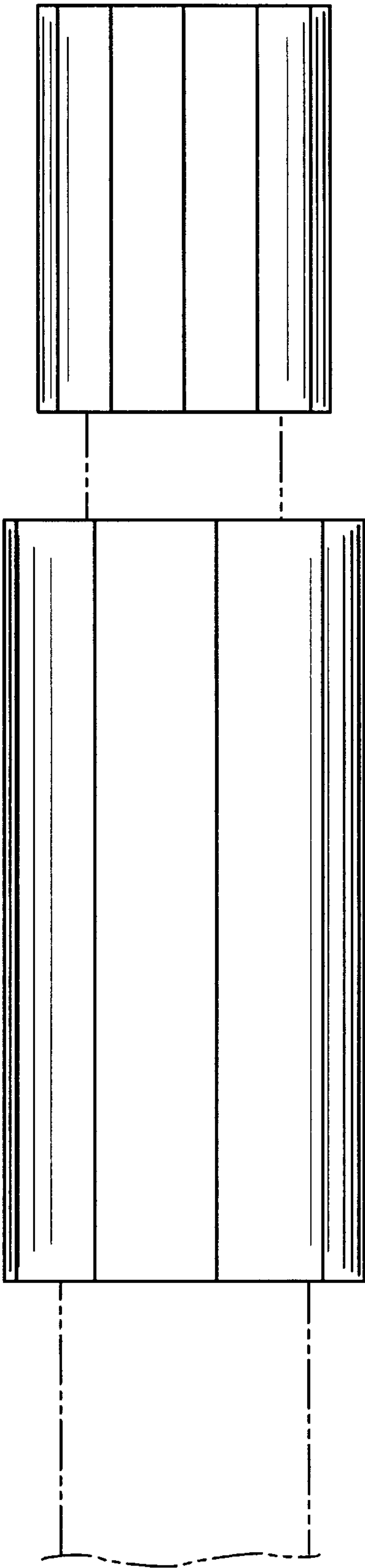


FIG. 3

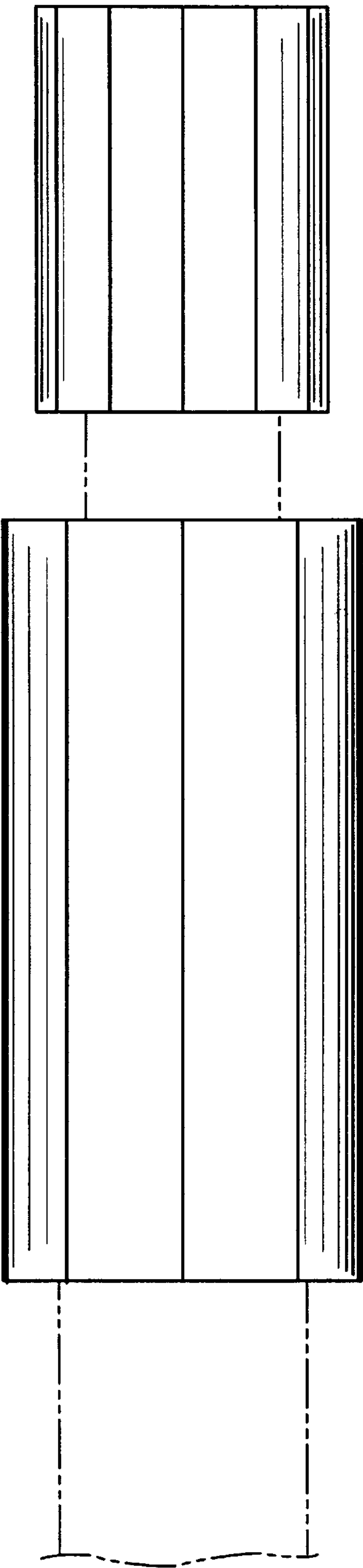


FIG. 4

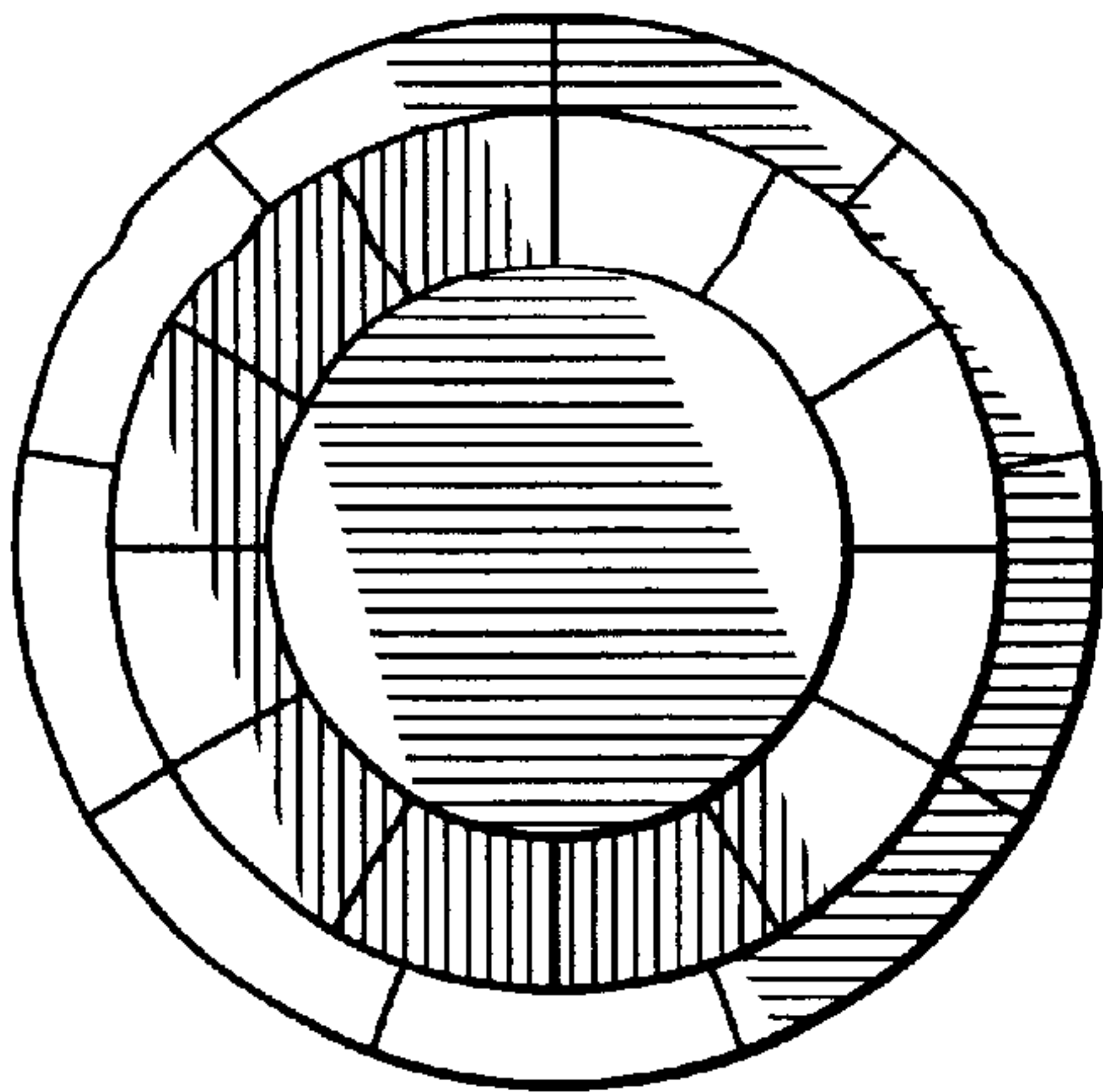


FIG. 5

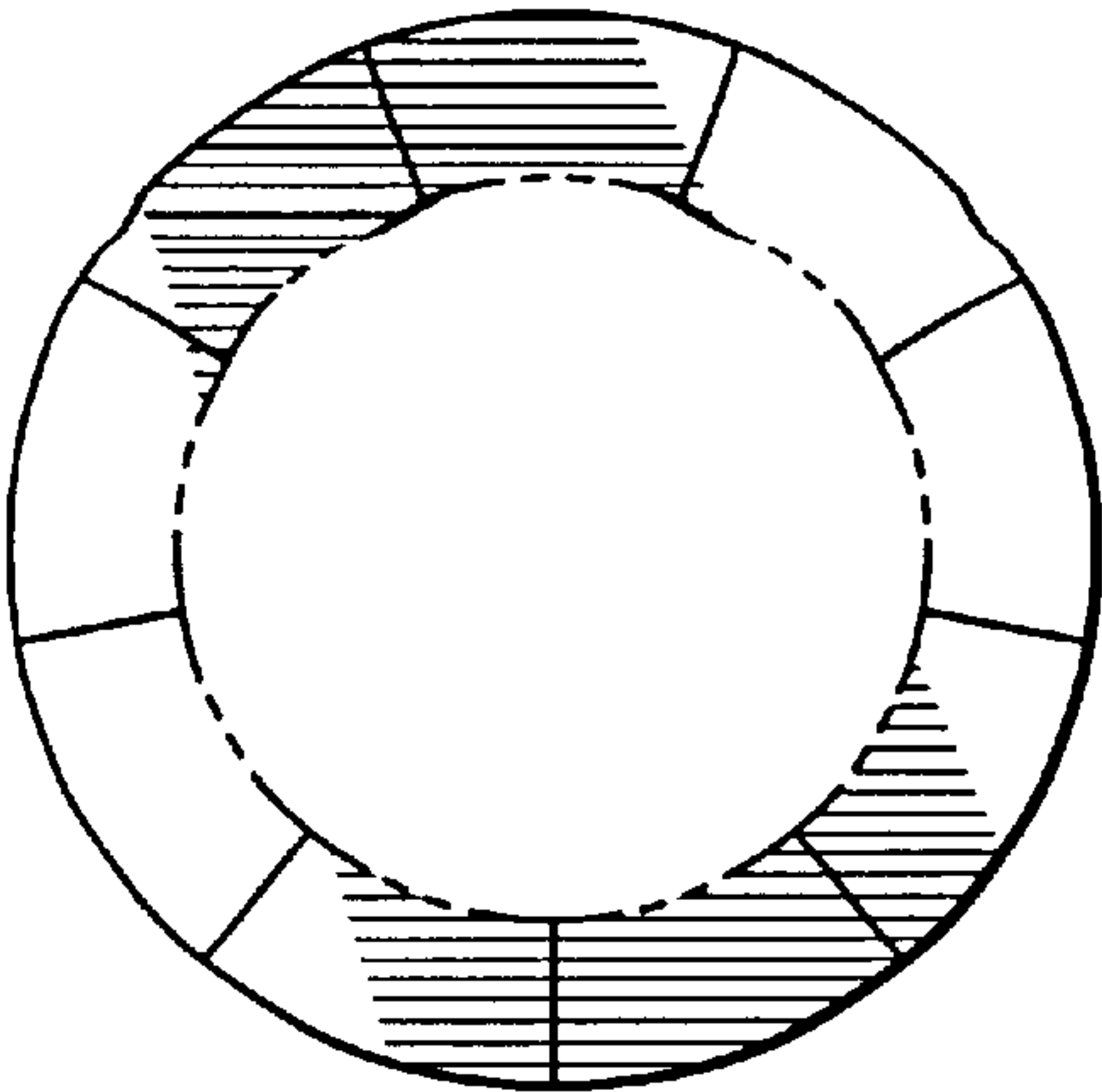


FIG. 6