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

(10) **Patent No.:** **US D614,823 S**
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(54) **BALL AND SOCKET CLEANING DEVICE CONNECTOR**

5,551,115 A 9/1996 Neville
D532,170 S * 11/2006 Davis-Wilson et al. D32/50
D547,069 S * 7/2007 Braithwaite et al. D4/137

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

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(Continued)

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Related U.S. Application Data

(63) Continuation of application No. 11/871,531, filed on Oct. 12, 2007, now abandoned.

(51) **LOC (9) Cl.** **14-01**

(52) **U.S. Cl.** **D32/50**

(58) **Field of Classification Search** D32/35,
D32/40, 45, 50, 51, 30; 15/143.1, 147.1,
15/147.2, 209.1, 210.1, 228, 231, 233, 1.7;
401/137–140, 15, 188 R, 268, 270, 278–279;
D4/137, 115, 119; 239/532

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

320,436 A	6/1885	Hock	
366,790 A	7/1887	Orther	
2,764,774 A	10/1956	Belsky, et al	
2,854,683 A	10/1958	Warden	
2,884,655 A	5/1959	Maddox	
3,016,556 A	1/1962	Greenleaf	
3,319,281 A	5/1967	Montgomery	
3,737,938 A	6/1971	Saltzstein	
3,604,044 A	9/1971	Johnson	
3,695,646 A *	10/1972	Mommsen	285/261
4,475,262 A	10/1984	Downer	
D282,112 S *	1/1986	Maust et al.	D32/50
4,676,022 A	6/1987	Wraight	
4,796,325 A	1/1989	Bortman	
D315,642 S *	3/1991	Furgale	D4/135
5,361,442 A	11/1994	Payne et al.	
5,435,040 A	7/1995	McClure	

(57) **CLAIM**

The ornamental design for a ball and socket cleaning device connector, as shown and described.

DESCRIPTION

FIG. 1 is a detailed illustration of a top view of the ball and socket cleaning device connector.

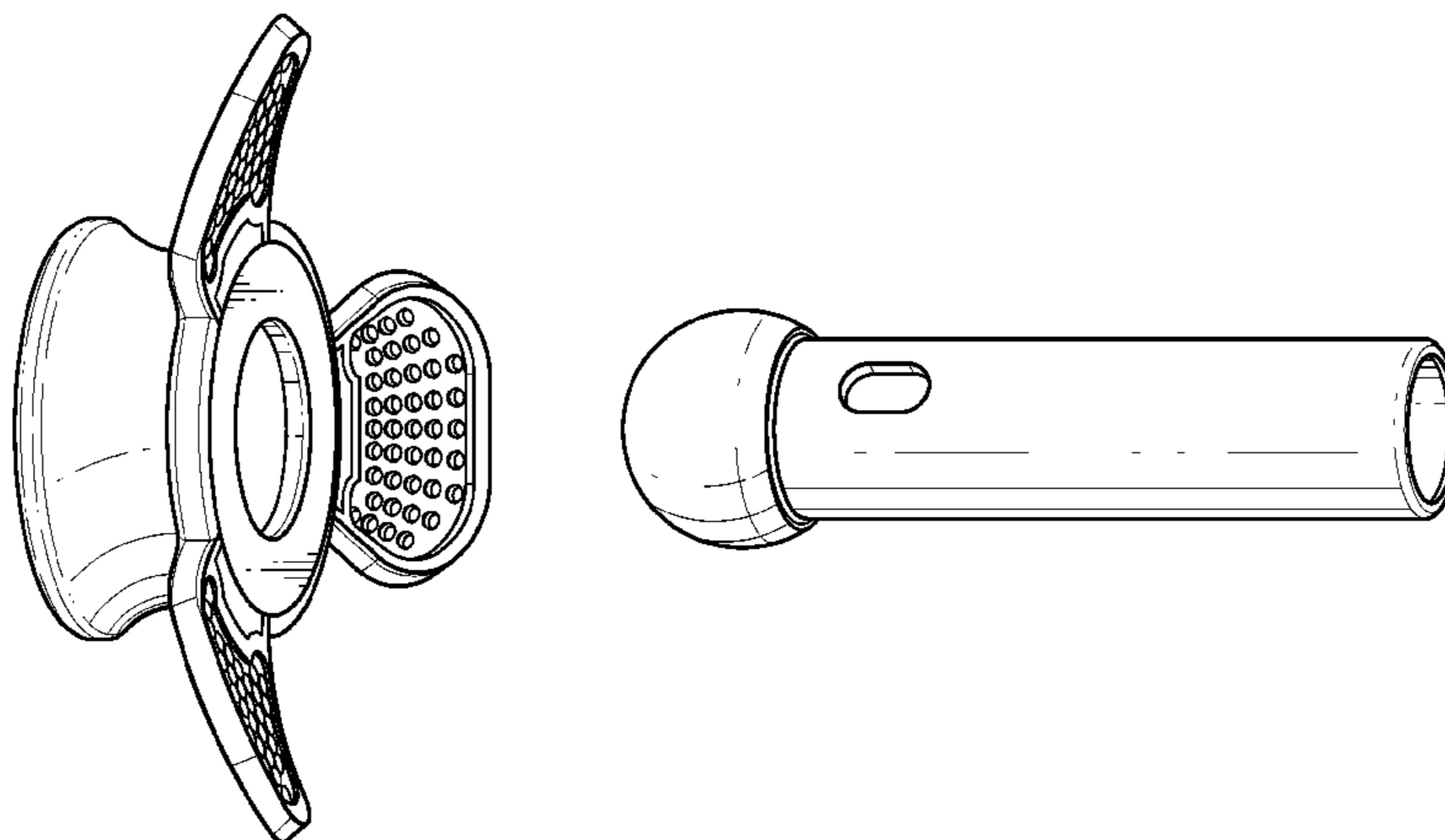
FIG. 2 is a detailed illustration of a side view of the ball and socket cleaning device connector; and,

FIG. 3 is a detailed illustration of a top and side perspective view of the ball and socket cleaning device connector and shows the cleaning device head ball disconnected from the cleaning device base socket.

The broken line showing of elements of the ball and socket cleaning device connector is for the purpose of illustrating unclaimed portions of the article and forms no part of the claimed design.

Any portion of the design not shown in the drawings forms no part of the claimed design and is hereby disclaimed. The ball and socket cleaning device connector is intended to connect a cleaning device base and cleaning device head, allow easy disconnection between the cleaning device base and cleaning device head, and allow a swivel with three-hundred and sixty degrees (360) of freedom.

1 Claim, 3 Drawing Sheets



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U.S. PATENT DOCUMENTS

D549,415 S *	8/2007	Trotter et al.	D32/50	D589,668 S *	3/2009	Byrne	D32/50
D574,566 S *	8/2008	Byrne	.....	D32/50	2004/0031506 A1 *	2/2004	Tsai	.....	134/105
D576,367 S *	9/2008	Anderson et al.	.....	D32/50	2008/0313858 A1 *	12/2008	Blom	.....	16/427
D582,619 S *	12/2008	Kong	.....	D32/50	2009/0050342 A1 *	2/2009	Ditzler	.....	172/748
D585,614 S *	1/2009	Senyuva	.....	D32/50	2009/0094791 A1 *	4/2009	Blom	.....	16/427
					2009/0097907 A1 *	4/2009	Blom	.....	403/122

* cited by examiner

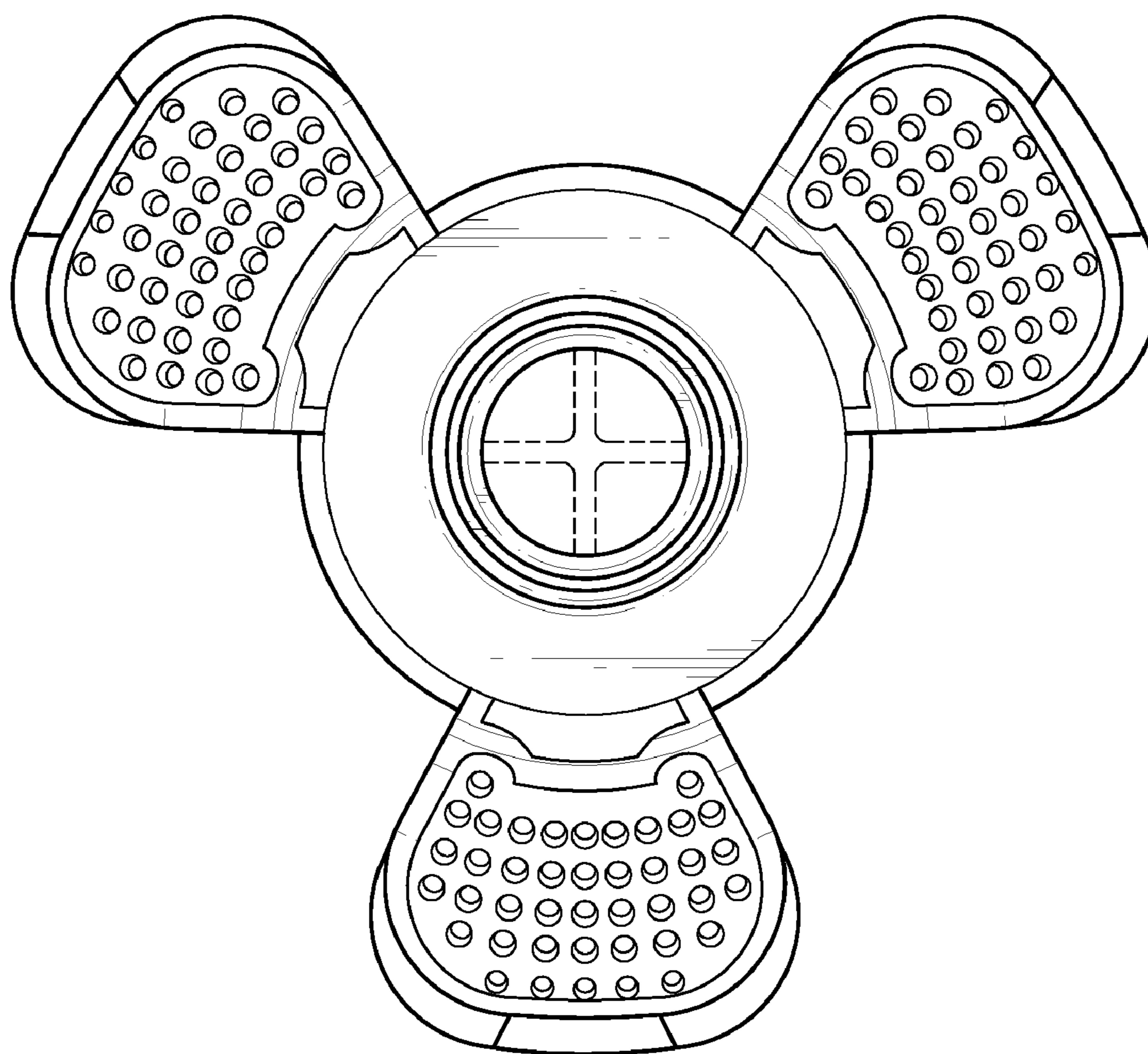


FIG. 1

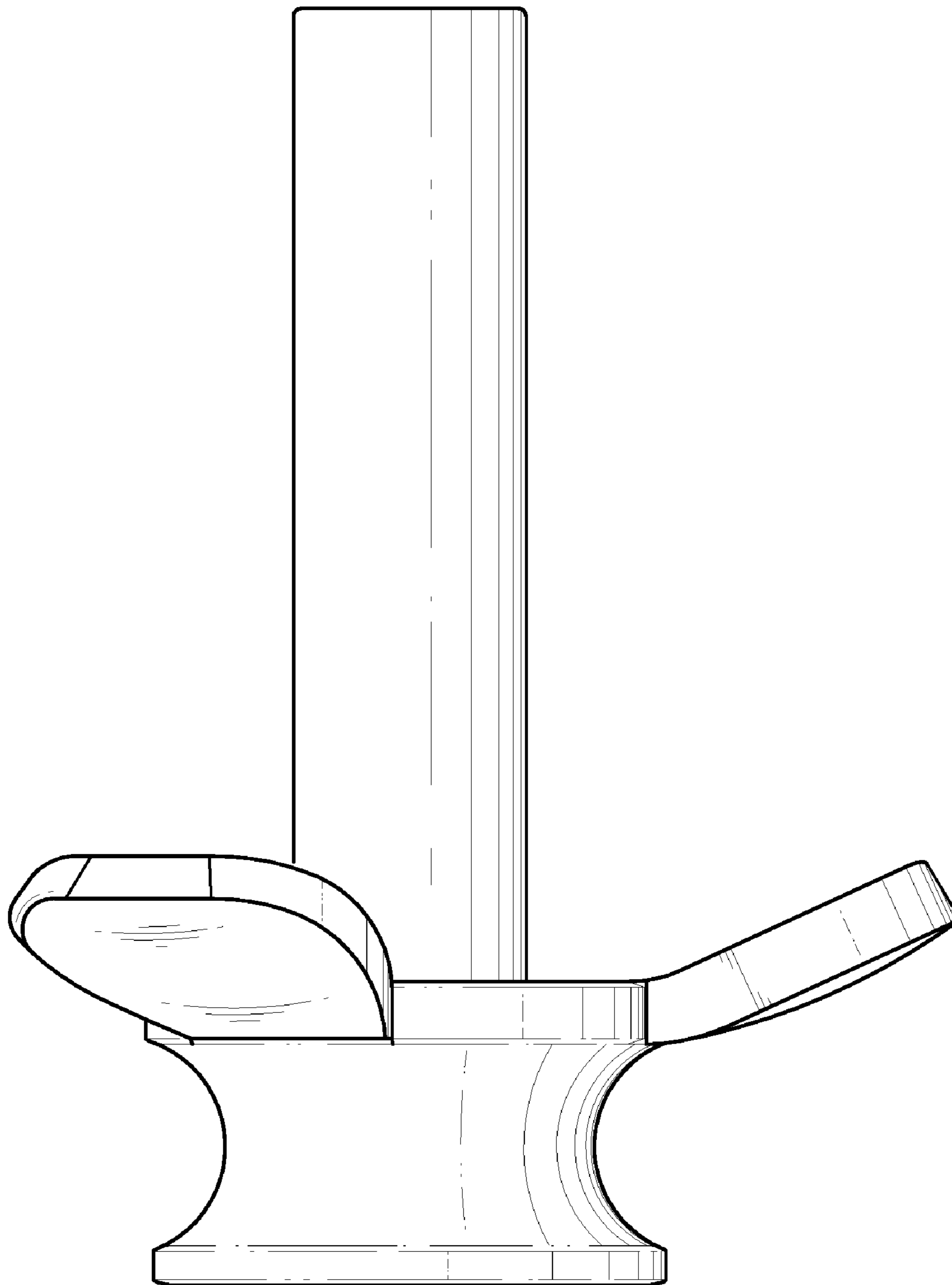


FIG. 2

