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

(10) **Patent No.:** **US D480,876 S**

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(54) **TOOTHBRUSH HEAD WITH STEPPED BRISTLE ARRAY**

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(73) **Assignee:** **Ergonomic Dental Technologies, Inc.**, San Francisco, CA (US)

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

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Related U.S. Application Data

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(51) **LOC (7) Cl.** **04-02**

(52) **U.S. Cl.** **D4/104**

(58) **Field of Search** D4/104-112, 130, D4/132-134, 136; 15/159.1, 160, 167.1, 167.2, 186, 187, DIG. 5, DIG. 6; 132/308, 309; 601/139, 141

(56) **References Cited**

U.S. PATENT DOCUMENTS

D44,997 S	12/1913	Carroll	
D47,669 S	8/1915	Hunt	
1,251,250 A	12/1917	Libby	15/110
D56,858 S	1/1921	Cahill	
1,494,448 A	5/1924	Sookne	
D73,245 S	8/1927	Straehly	
D77,115 S	12/1928	Mowry	
1,948,233 A	2/1934	Janik	15/110 X
1,968,303 A	7/1934	McMath	15/167.1
D96,749 S	7/1935	Hellonen	
2,051,687 A	8/1936	Dressler	15/167.1
D107,228 S	11/1937	Goodman	
2,111,880 A	3/1938	Waters	15/176.6
D139,264 S	10/1944	Littig	15/167.1
D140,438 S	2/1945	Cohen	15/167.1
D160,604 S	1/1950	Hutson	

2,685,703 A	8/1954	Dellenbach	15/167.1
2,697,239 A	12/1954	Funk	15/167.1
D175,894 S	10/1955	Krueger	D4/104
2,864,111 A	12/1958	Rotceig	15/168
2,934,776 A	5/1960	Clemens	15/167.1

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

DE	297 12 284	9/1997	
DE	198 16 098	10/1999	
EP	285-121	10/1988	15/167.1
GB	723	2/1880	15/167.1
GB	7787	6/1886	15/167.1
GB	17732	9/1895	15/167.1
JP	53-30970	3/1978	
JP	60-60937	4/1985	
JP	9-19323	1/1997	

OTHER PUBLICATIONS

Weldon Owen Pry Ltd., "Great Inventions", Time Life Books, 1995, Richard Wood—Consulting Editor, p.9, "Toothbrush".

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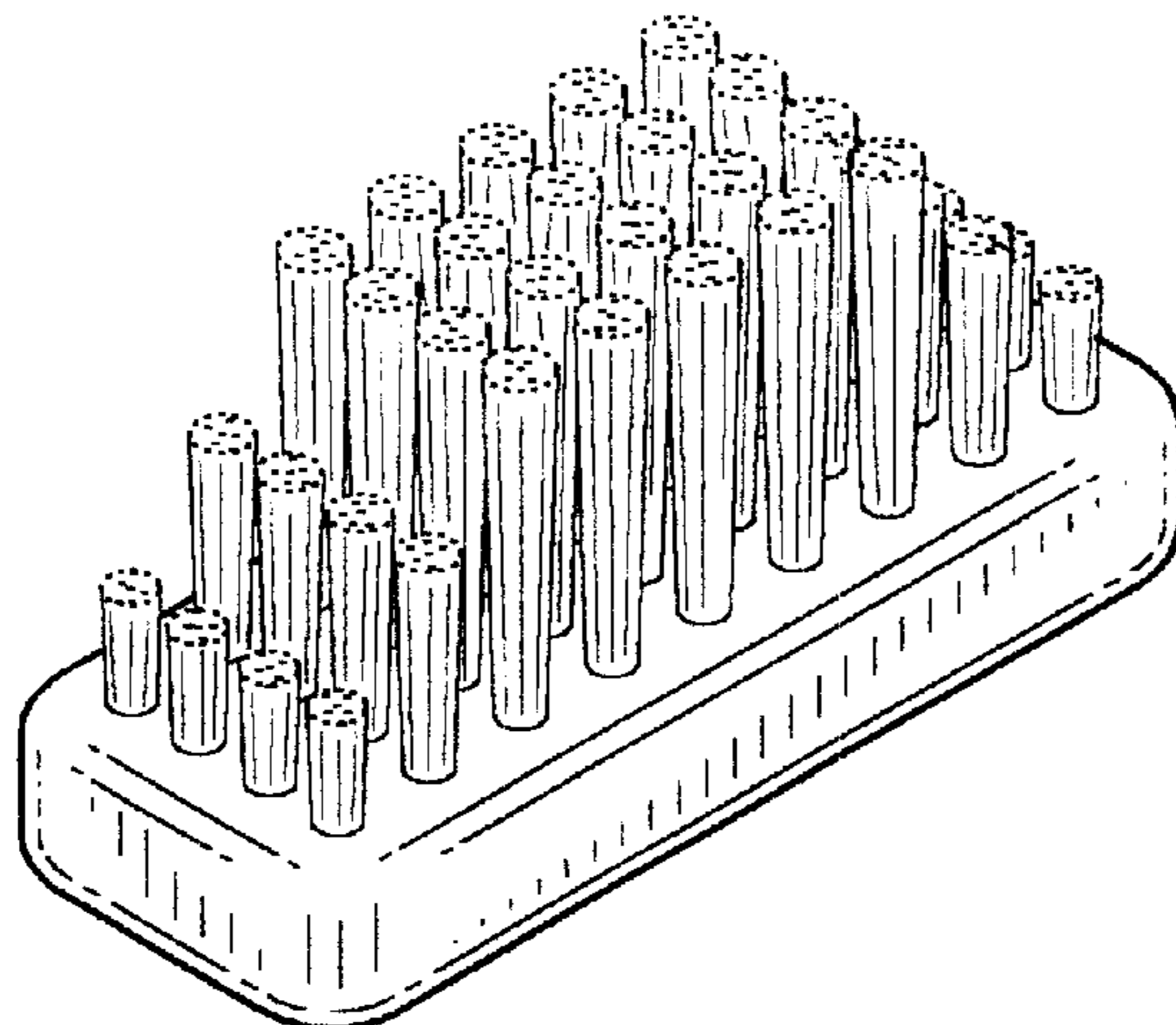
(57) **CLAIM**

The ornamental design for toothbrush head with stepped bristle array, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of my ornamental design for a toothbrush head;
FIG. 2 is a front view thereof;
FIG. 3 is a bottom plan view thereof;
FIG. 4 is a top plan view thereof; and,
FIG. 5 is a side view thereof, the opposite side being a mirror image of that shown.
The broken line showing of environmental structure in FIGS. 1 and 4 is for illustrative purposes only and forms no part of the claimed design.

1 Claim, 1 Drawing Sheet



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U.S. PATENT DOCUMENTS

D189,414 S	12/1960	Kisky	D4/110	5,114,214 A	5/1992	Barman	15/DIG. 5
3,103,679 A	9/1963	Clemens	15/167.1	D337,201 S	7/1993	Haddad	D4/107
3,258,805 A	7/1966	Rossnan	15/110	D342,160 S	12/1993	Curtis et al.	D4/104
D231,872 S	* 6/1974	Spaulding	D4/104	D344,414 S	2/1994	Rahman	D4/104
4,010,509 A	3/1977	Huish	15/167.1	5,315,730 A	5/1994	Kim et al.	15/167.1
4,109,339 A	8/1978	Dietrich	15/167.1	5,341,537 A	8/1994	Curtis et al.	15/167.1
4,115,894 A	9/1978	Peterson	15/167.1	D351,732 S	10/1994	Dair et al.	D4/104
D251,038 S	2/1979	Hill et al.	D4/104	5,369,835 A	12/1994	Clarke	15/167.1
D252,597 S	8/1979	Holzworth et al.	D4/25	5,371,915 A	12/1994	Key	15/167.1
4,185,349 A	1/1980	Papas	15/106	5,383,244 A	1/1995	Ahrens et al.	15/167.1
D259,977 S	7/1981	Porper	D4/110	5,392,483 A	2/1995	Heinzelman et al.	15/167.1
4,306,327 A	12/1981	Zeski	15/167.1	D360,076 S	* 7/1995	Schneider	D4/104
D265,527 S	7/1982	Macaluso	D4/110	5,481,775 A	1/1996	Gentile et al.	15/167.1
4,429,434 A	2/1984	Sung-shan	15/167.1 X	D368,804 S	4/1996	Yost et al.	D4/104
4,463,470 A	8/1984	Willis	15/167.1	D370,347 S	6/1996	Heinzelman et al.	D4/104
D282,603 S	2/1986	Piero	D4/108	5,522,109 A	6/1996	Chan	15/167.1
D287,790 S	* 1/1987	Ray	D4/104	5,570,487 A	11/1996	Schneider	15/167.1
D289,231 S	4/1987	Fleisher	D4/110	5,613,262 A	3/1997	Choy-Maldonado	15/160
4,654,921 A	* 4/1987	Dinner	D4/104	5,622,502 A	4/1997	Wilkes et al.	15/167.1
D289,704 S	5/1987	Marthaler et al.	D4/104	5,628,082 A	5/1997	Moskovich	15/110
4,667,360 A	5/1987	Marthaler et al.	15/167 R	D391,764 S	3/1998	Falleiros et al.	D4/104
4,672,706 A	6/1987	Hill	15/167 R	5,787,540 A	8/1998	Hirschmann	15/167.1
D292,948 S	12/1987	Parina	D4/104	5,792,159 A	8/1998	Amin	606/161
4,763,375 A	8/1988	Vieten	15/167.1	5,836,033 A	11/1998	Berge	15/110
4,800,608 A	1/1989	Key	15/167.1	5,850,659 A	12/1998	Butler et al.	15/167.1
D300,990 S	5/1989	Jagger	D4/104	5,884,354 A	3/1999	Anderson	15/167.1
D301,399 S	6/1989	Kreyer, Jr.	D4/104	D414,938 S	10/1999	Von Stein	D4/104
D305,385 S	1/1990	Schneider	D4/104	D428,256 S	7/2000	Harada	D4/104
D311,454 S	10/1990	Rethman	D4/106	D428,260 S	7/2000	Harada	D4/110
5,046,212 A	9/1991	O'Conke	15/105	D430,401 S	9/2000	Harada	D4/104
D321,092 S	10/1991	Woll et al.	D4/106	D431,908 S	10/2000	Harada	D4/104
5,054,154 A	10/1991	Schiffer et al.	15/167.1				

* cited by examiner

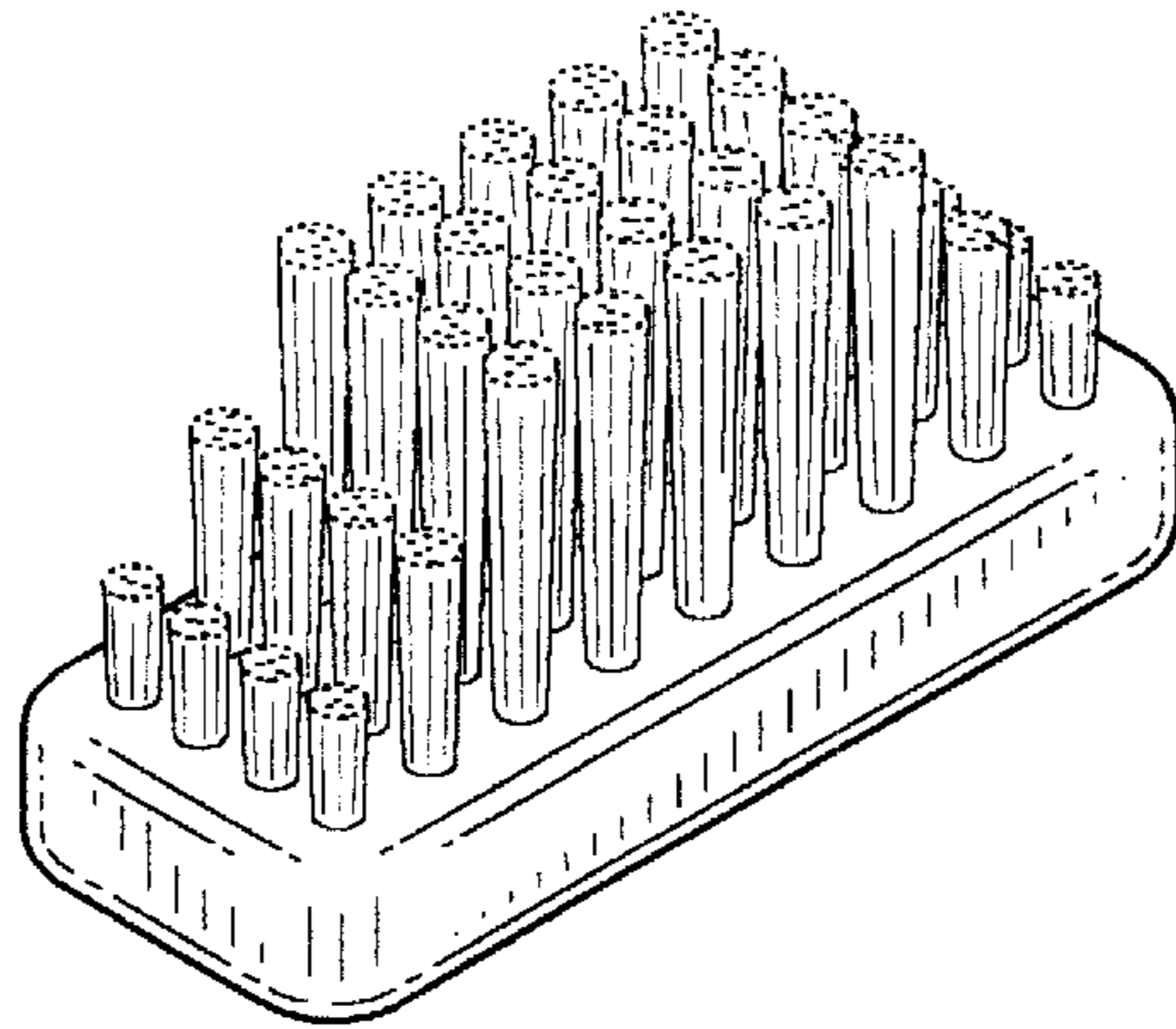


FIG. 1

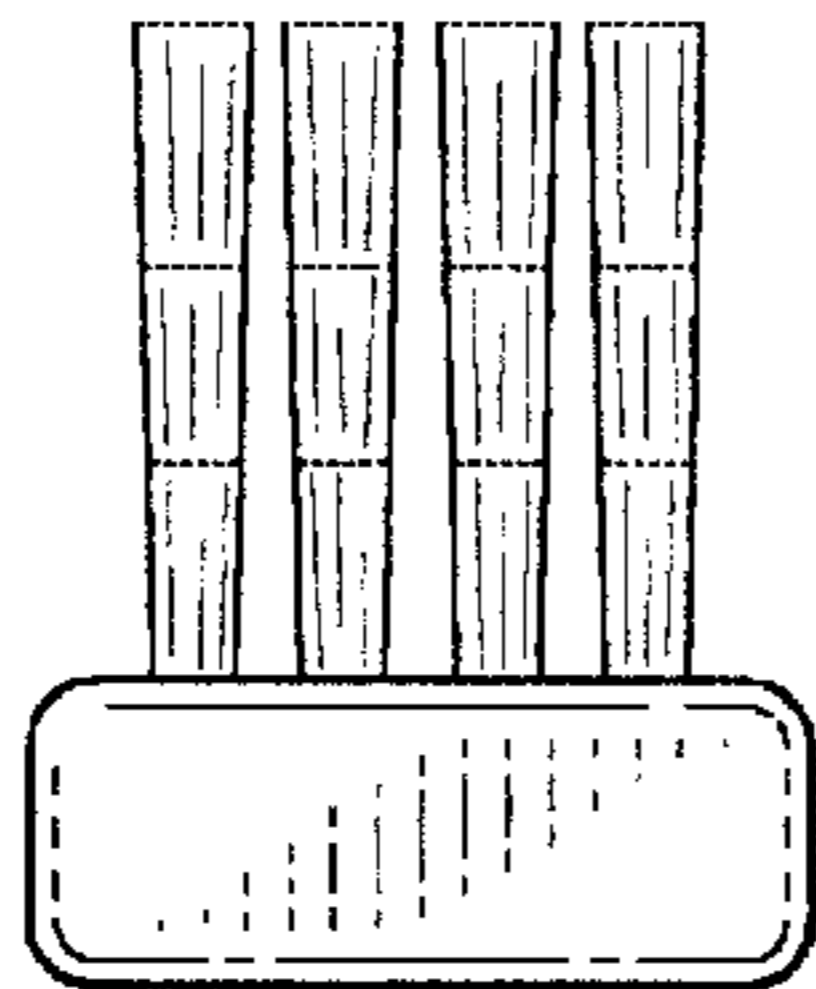


FIG. 2

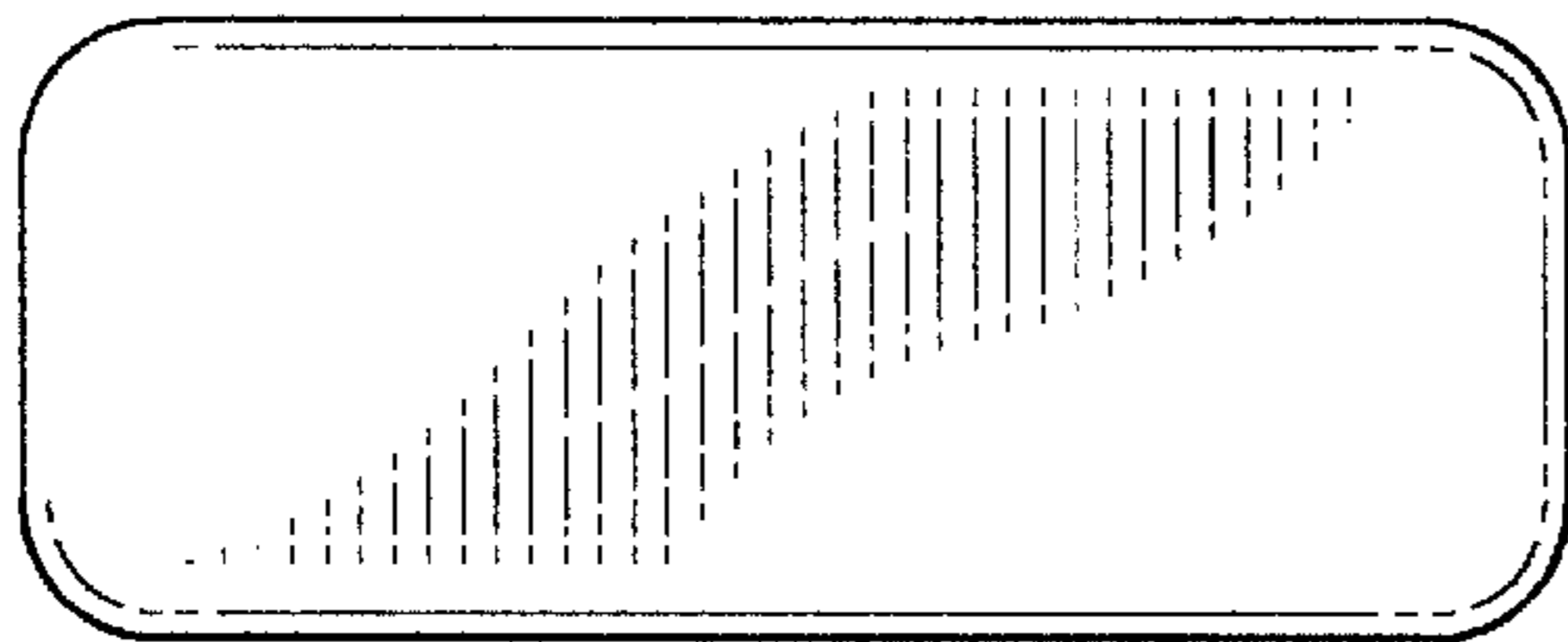


FIG. 3

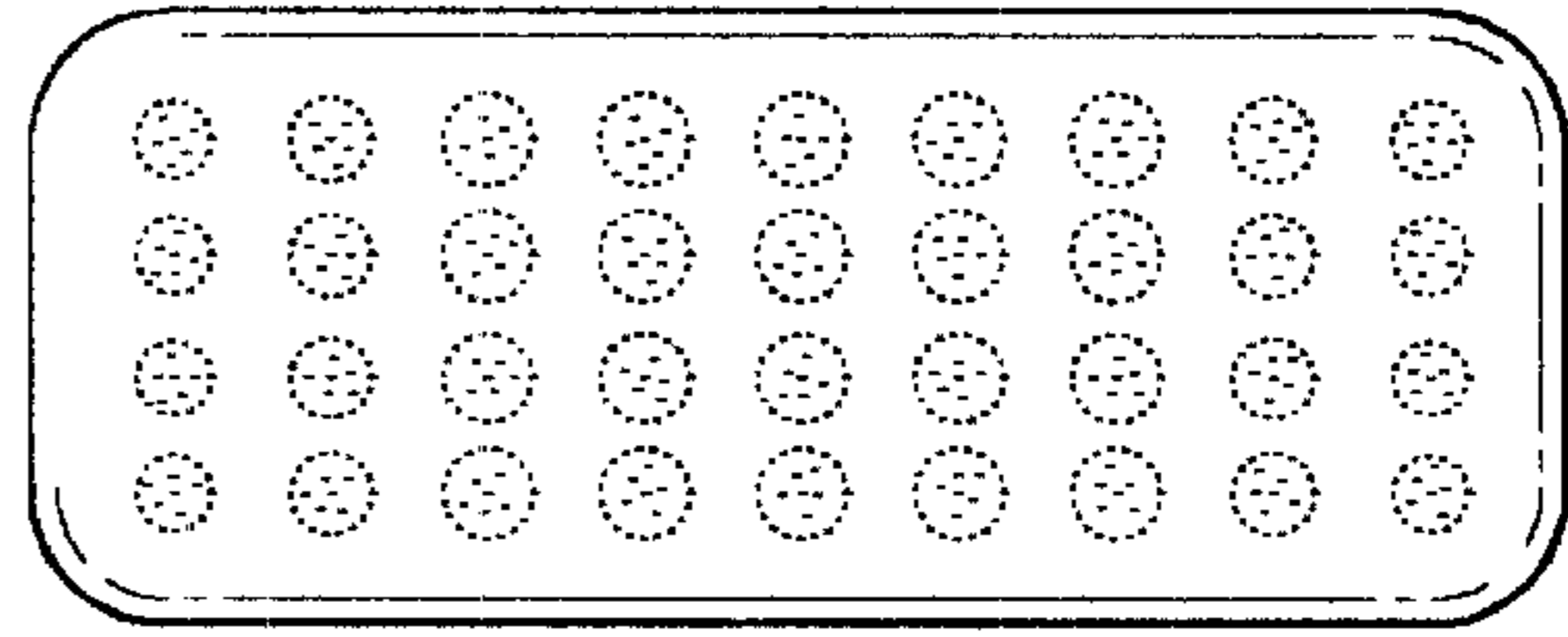


FIG. 4

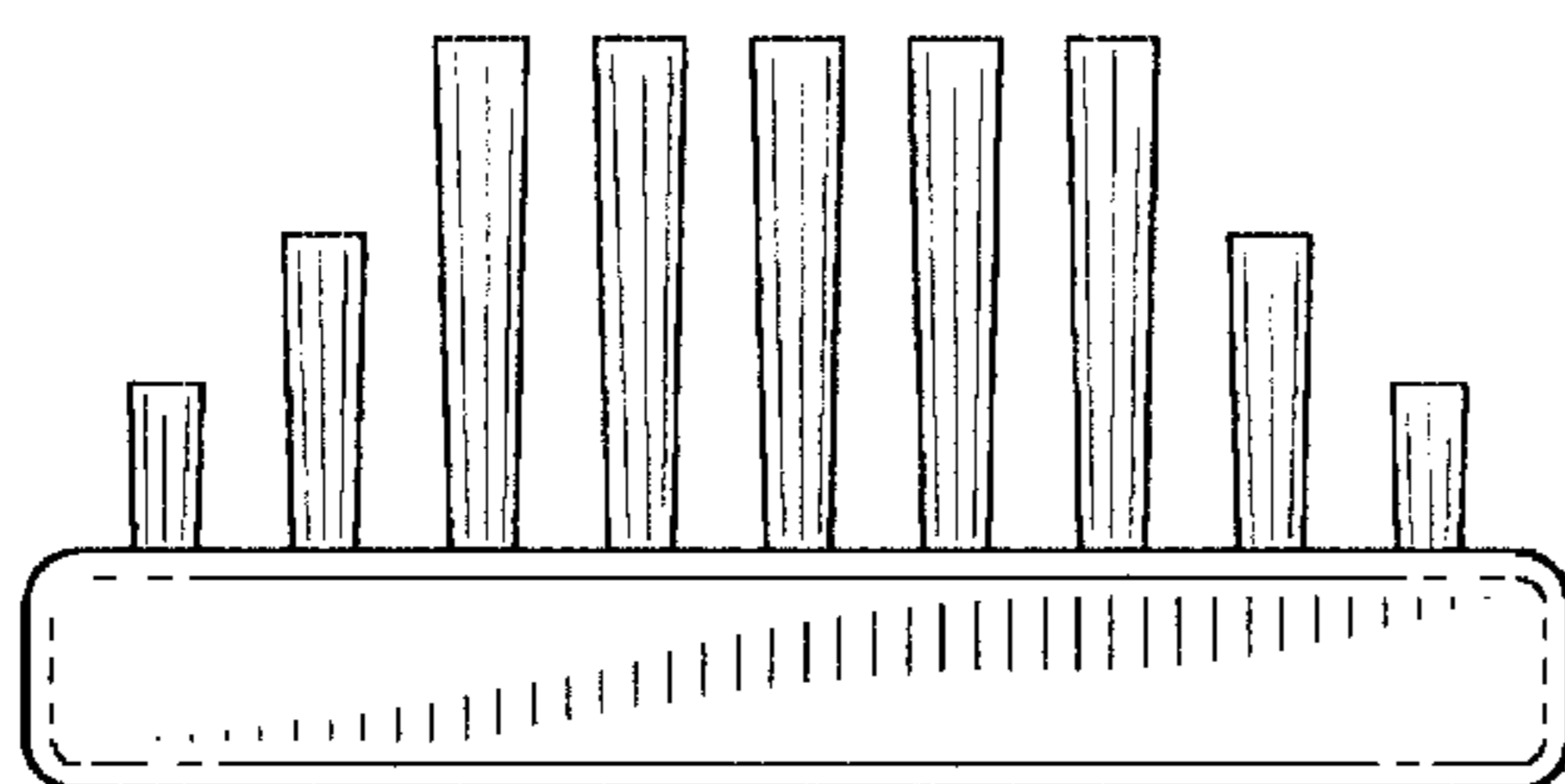


FIG. 5