



US00D456591S

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

(10) **Patent No.:** **US D456,591 S**

(45) **Date of Patent:** **** May 7, 2002**

(54) **HUMAN BODY PULSATING JACKET**

(76) **Inventor:** **Craig N. Hansen**, 14920 Minnetonka Industrial Rd., Minnetonka, MN (US) 55345

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

(21) **Appl. No.:** **29/122,889**

(22) **Filed:** **May 5, 2000**

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

(52) **U.S. Cl.** **D2/829**

(58) **Field of Search** D21/804, 805; 2/462, 463, 113, 114, 2.5; D29/101.4; D2/828, 829; D24/190, 170, 171; 602/19, 60; 601/149; 441/106, 111-119

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,223,570 A	12/1940	McMillin	
2,354,397 A	7/1944	Miller	
2,588,192 A	3/1952	Akerman et al.	
2,762,366 A	9/1956	Huxley, III. et al.	
2,780,222 A	2/1957	Polzin et al.	
2,869,537 A	1/1959	Chu	
2,899,955 A	8/1959	Huxley, III. et al.	
3,043,292 A	7/1962	Mendelson	
3,063,444 A	11/1962	Jobst	
3,078,842 A	2/1963	Gray	
3,179,106 A	4/1965	Meredith	
3,310,050 A	3/1967	Goldfarb	
3,545,017 A	* 12/1970	Cohn	441/112
3,577,977 A	5/1971	Ritzinger, Jr. et al.	
4,120,297 A	10/1978	Rabischong et al.	
4,135,503 A	1/1979	Romano	
4,178,922 A	12/1979	Curlee	
4,186,732 A	2/1980	Christoffel	
4,590,925 A	5/1986	Dillon	
4,621,621 A	11/1986	Marsalis	
4,676,232 A	6/1987	Olsson et al.	
4,682,588 A	7/1987	Curlee	
4,838,263 A	6/1989	Warwick et al.	
4,840,167 A	6/1989	Olsson et al.	
4,952,095 A	* 8/1990	Walters	441/106

4,977,889 A	12/1990	Budd	
5,007,412 A	* 4/1991	DeWall	D24/190
5,056,505 A	10/1991	Warwick et al.	
5,222,478 A	6/1993	Scarberry et al.	
5,235,967 A	8/1993	Arbisi et al.	
5,370,603 A	12/1994	Newman	
5,453,081 A	9/1995	Hansen	
5,569,170 A	10/1996	Hansen	
D379,396 S	* 5/1997	Rongo et al.	D21/805
5,769,800 A	6/1998	Gelfand et al.	
6,036,662 A	3/2000	Van Brunt et al.	
6,155,996 A	12/2000	Van Brunt et al.	
6,254,556 B1	* 7/2001	Hansen et al.	601/149

OTHER PUBLICATIONS

“Chronic bronchial asthma and emphysema,” *Geriatrics*, Jun. 1966.

“Enhanced Tracheal Mucus Clearance with High Frequency Chest Wall Compression,” *American Review of Respiratory Disease*, Sep. 1983.

“Peripheral mucociliary clearance with high-frequency chest wall compression,” *Journal of Applied Physiology*, Apr. 1985.

(List continued on next page.)

Primary Examiner—Louis S. Zarfaz

Assistant Examiner—Deanne Levy

(57) **CLAIM**

The ornamental design of a human body pulsating jacket, as shown and described.

DESCRIPTION

FIG. 1 is a front outside elevational view of a human body pulsating jacket of my new design;

FIG. 2 is a rear inside elevational view thereof;

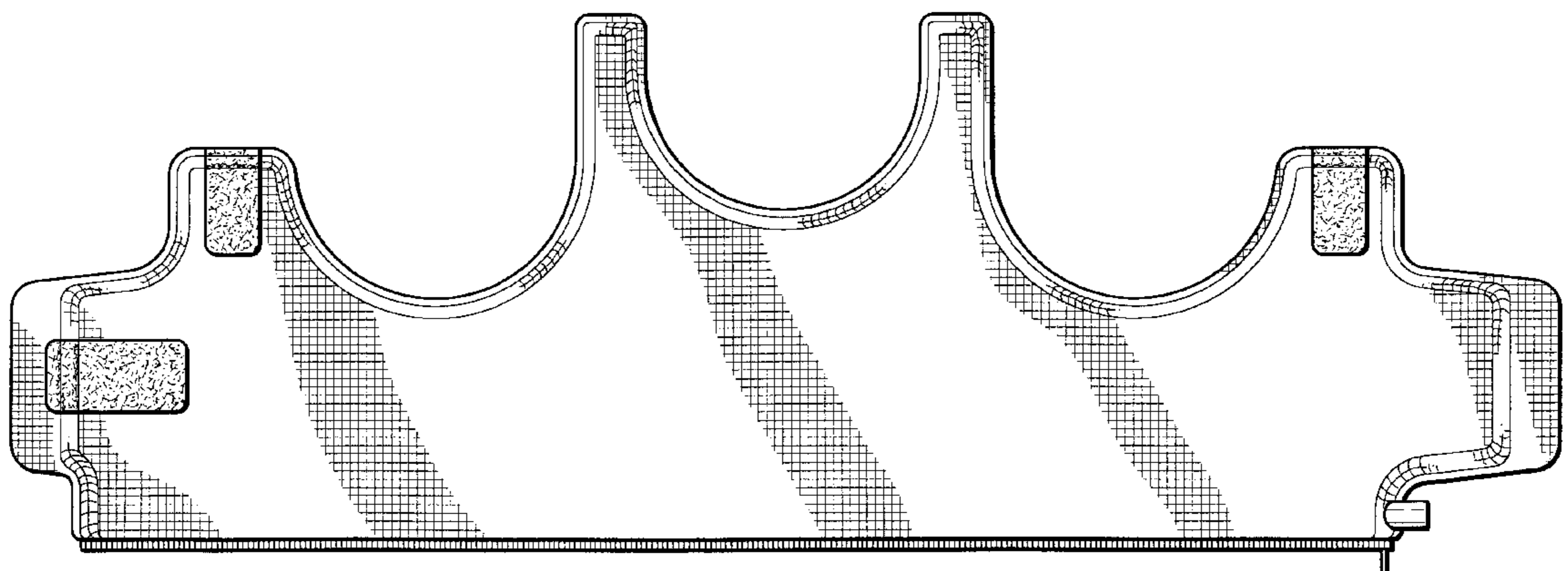
FIG. 3 is a top plan view thereof;

FIG. 4 is a bottom plan view thereof;

FIG. 5 is an end elevational view of the left end of FIG. 1; and,

FIG. 6 is an end elevational view of the right end of FIG. 1.

1 Claim, 4 Drawing Sheets



OTHER PUBLICATIONS

“Artificial Ventilation,” 1986.

“Tracheal mucus clearance in high-frequency oscillation: effect of peak flow rate bias,” *The European Respiratory Journal*, Jan. 1990.

“High-frequency Chest Compression System to Aid in Clearance of Mucus from the Lung,” *Biomedical Instrumentation & Technology*, Jul. 1990.

“Preliminary Evaluation of High-Frequency Chest Compression for Secretion Clearance in Mechanically Ventilated Patients,” *Respiratory Care*, Oct. 1993.

* cited by examiner

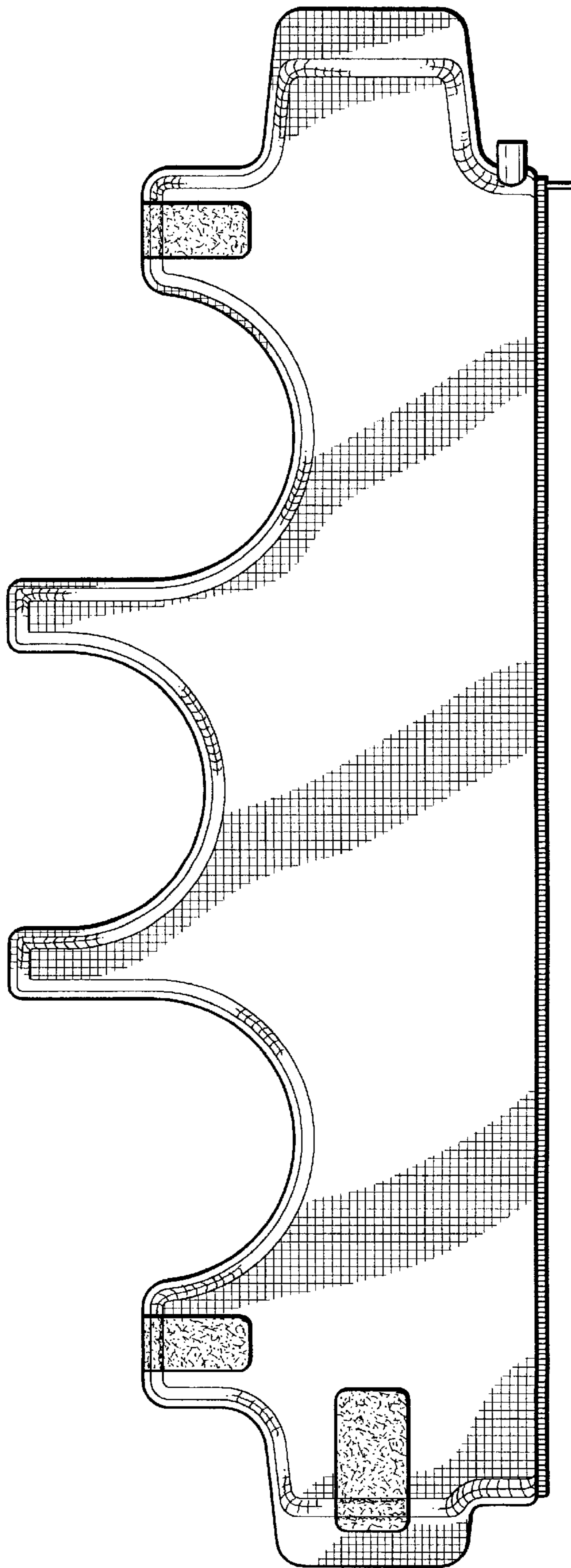


FIG. 1

FIG. 2

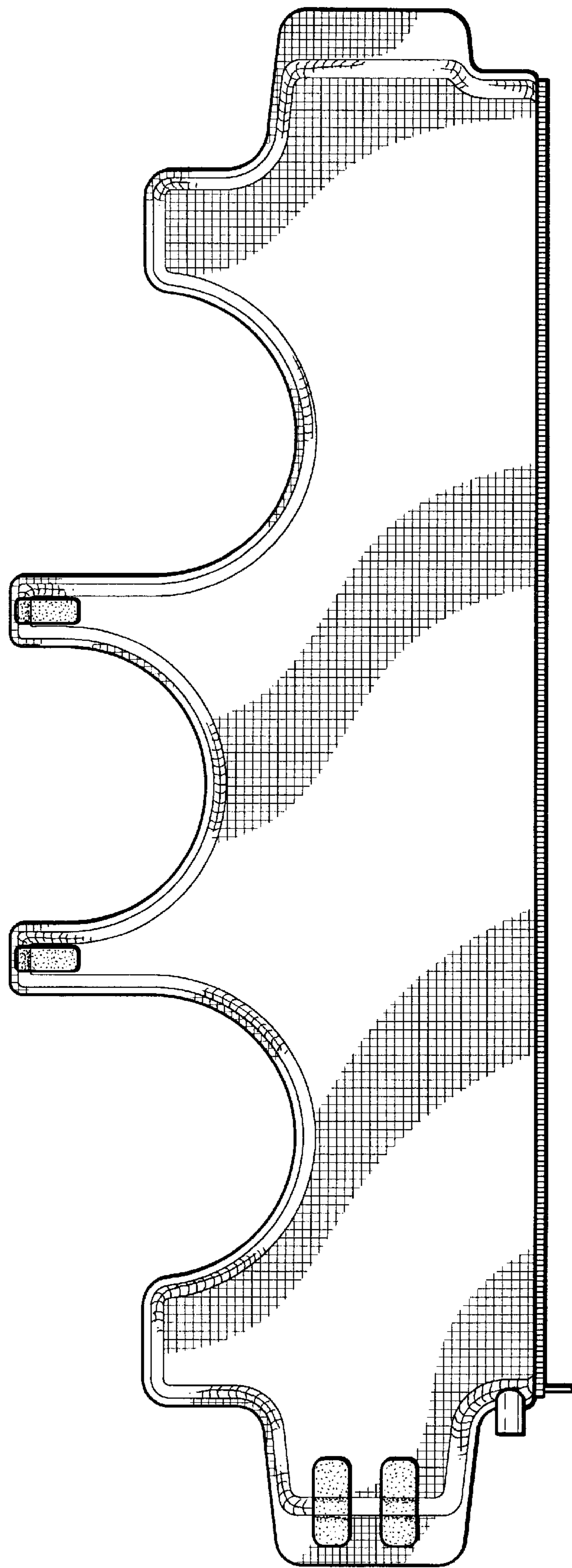


FIG. 3

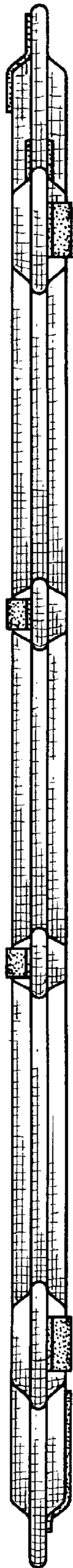


FIG. 4

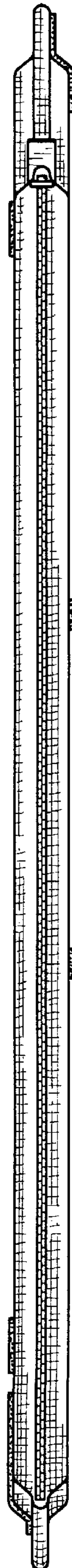


FIG. 6

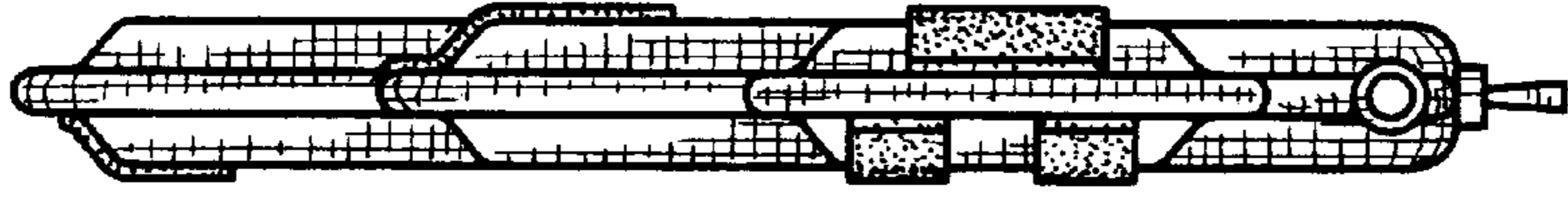


FIG. 5

