



US00D746454S

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

(10) **Patent No.:** **US D746,454 S**

(45) **Date of Patent:** **** Dec. 29, 2015**

(54) **SURGICAL INSTRUMENT SHAFT WITH HOLE PATTERN**

(71) Applicant: **INTUITIVE SURGICAL OPERATIONS, INC.**, Sunnyvale, CA (US)

(72) Inventor: **S. Christopher Anderson**, San Francisco, CA (US)

(73) Assignee: **INTUITIVE SURGICAL OPERATIONS, INC.**, Sunnyvale, CA (US)

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

(21) Appl. No.: **29/464,367**

(22) Filed: **Aug. 15, 2013**

(51) **LOC (10) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/144**

(58) **Field of Classification Search**
USPC D19/199, 200, 203, 204; D24/133, 138, D24/144, 147, 146; D8/98, 198; 606/1, 606/166-167

CPC A61B 1/00002; A61B 1/018; A61B 1/005; A61B 1/0125; A61B 1/008; A61B 1/24; A61B 1/00154; A61B 17/00; A61B 1/04

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,635,641	A	*	1/1972	Turner	.....	425/461
D242,828	S	*	12/1976	Lahay	.....	D24/112
D305,295	S	*	1/1990	Momany	.....	D8/70
D421,303	S	*	2/2000	Cote et al.	.....	D24/133
D438,903	S	*	3/2001	Rosenbaum	.....	D19/55
D442,282	S	*	5/2001	Taylor et al.	.....	D24/143

D496,730	S	*	9/2004	Morawski et al.	.....	D24/147
D504,513	S	*	4/2005	Morawski et al.	.....	D24/147
6,969,373	B2	*	11/2005	Schwartz et al.	.....	604/170.03
D618,725	S	*	6/2010	Cetera	.....	D19/55
D682,938	S	*	5/2013	Larson et al.	.....	D19/55
2005/0043682	A1		2/2005	Kucklick et al.		
2012/0010628	A1		1/2012	Cooper et al.		
2013/0123805	A1		5/2013	Park et al.		

OTHER PUBLICATIONS

Design U.S. Appl. No. 29/464,362, filed Aug. 15, 2013.
Design U.S. Appl. No. 29/464,364, filed Aug. 15, 2013.
Design U.S. Appl. No. 29/464,366, filed Aug. 15, 2013.
Design U.S. Appl. No. 29/464,369, filed Aug. 15, 2013.
Design U.S. Appl. No. 29/464,370, filed Aug. 15, 2013.
U.S. Appl. No. 61/866,311, filed Aug. 15, 2013.

* cited by examiner

Primary Examiner — Wan Laymon
Assistant Examiner — Mark Booker

(57) **CLAIM**

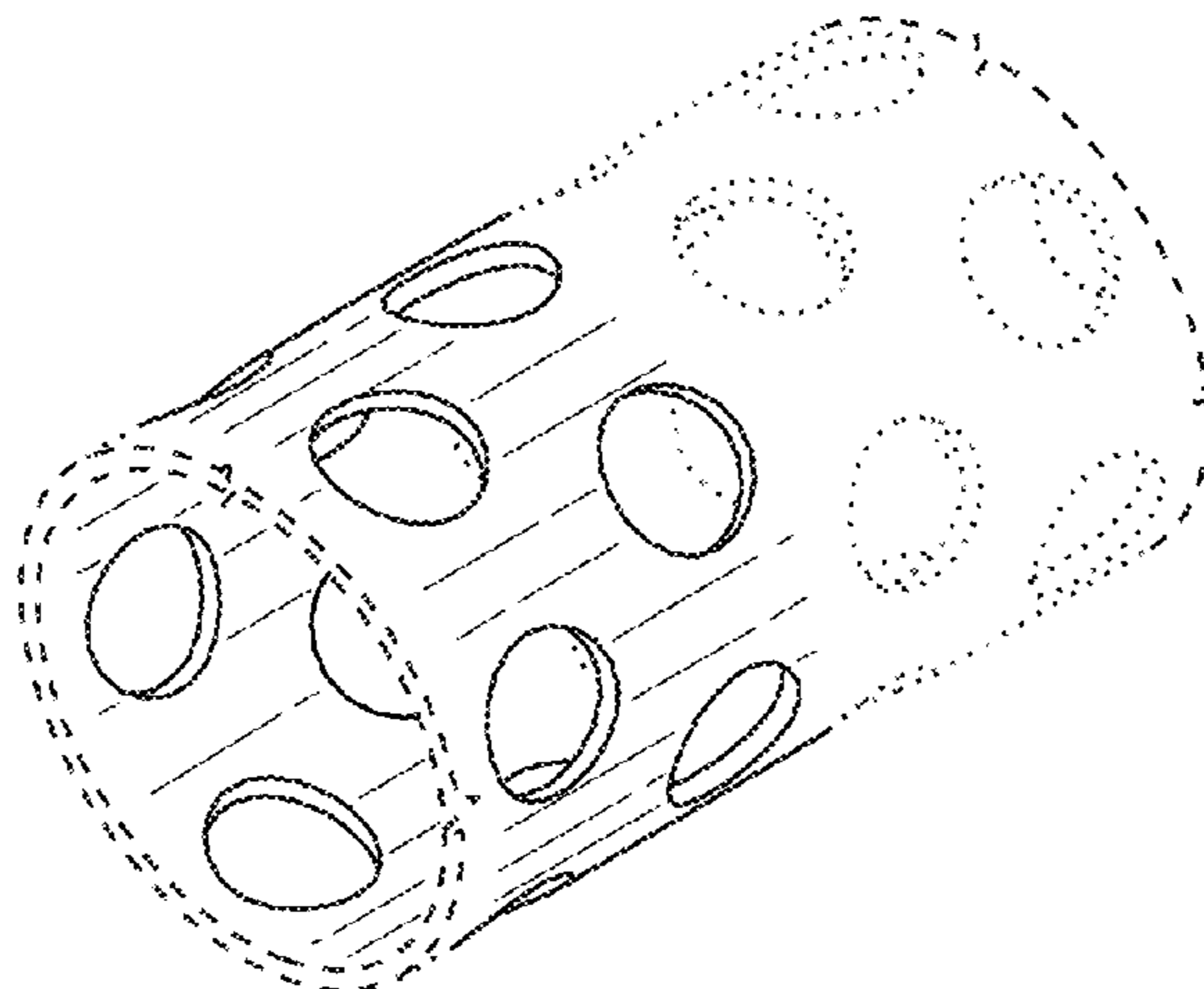
The ornamental design for a surgical instrument shaft with hole pattern, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a surgical instrument shaft with hole pattern showing my new design; FIG. 2 is a top plan view thereof; and, FIG. 3 is a first side view thereof.

The environmental structure depicted in broken lines of even length and in dotted lines forms no part of the claimed design. The surface shading lines also form no part of the claimed design but are intended to depict curvature of the shaft that includes the claimed hole pattern. Portions of the article beyond the broken away symbols form no part of the claimed design.

1 Claim, 1 Drawing Sheet



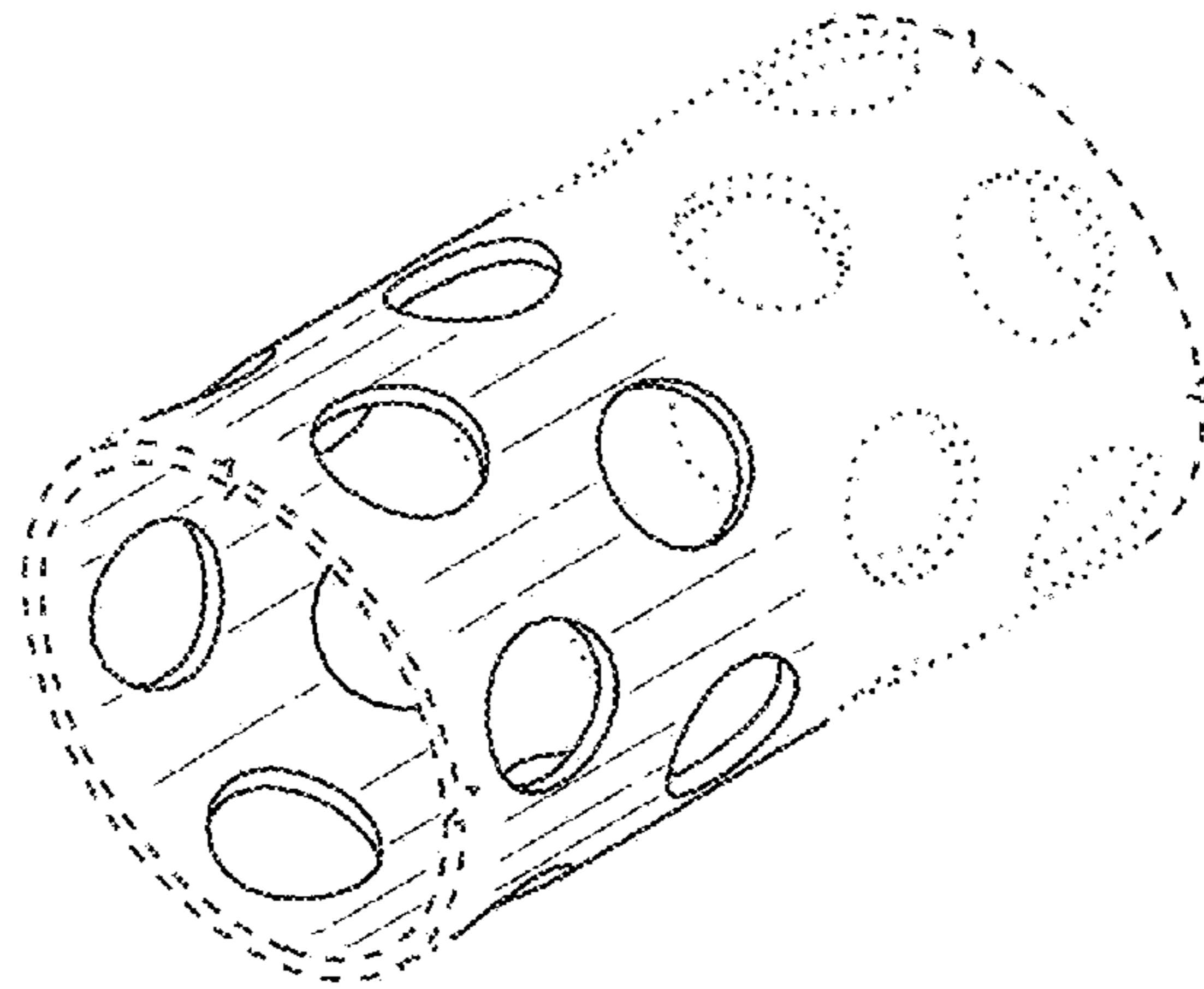


FIG. 1

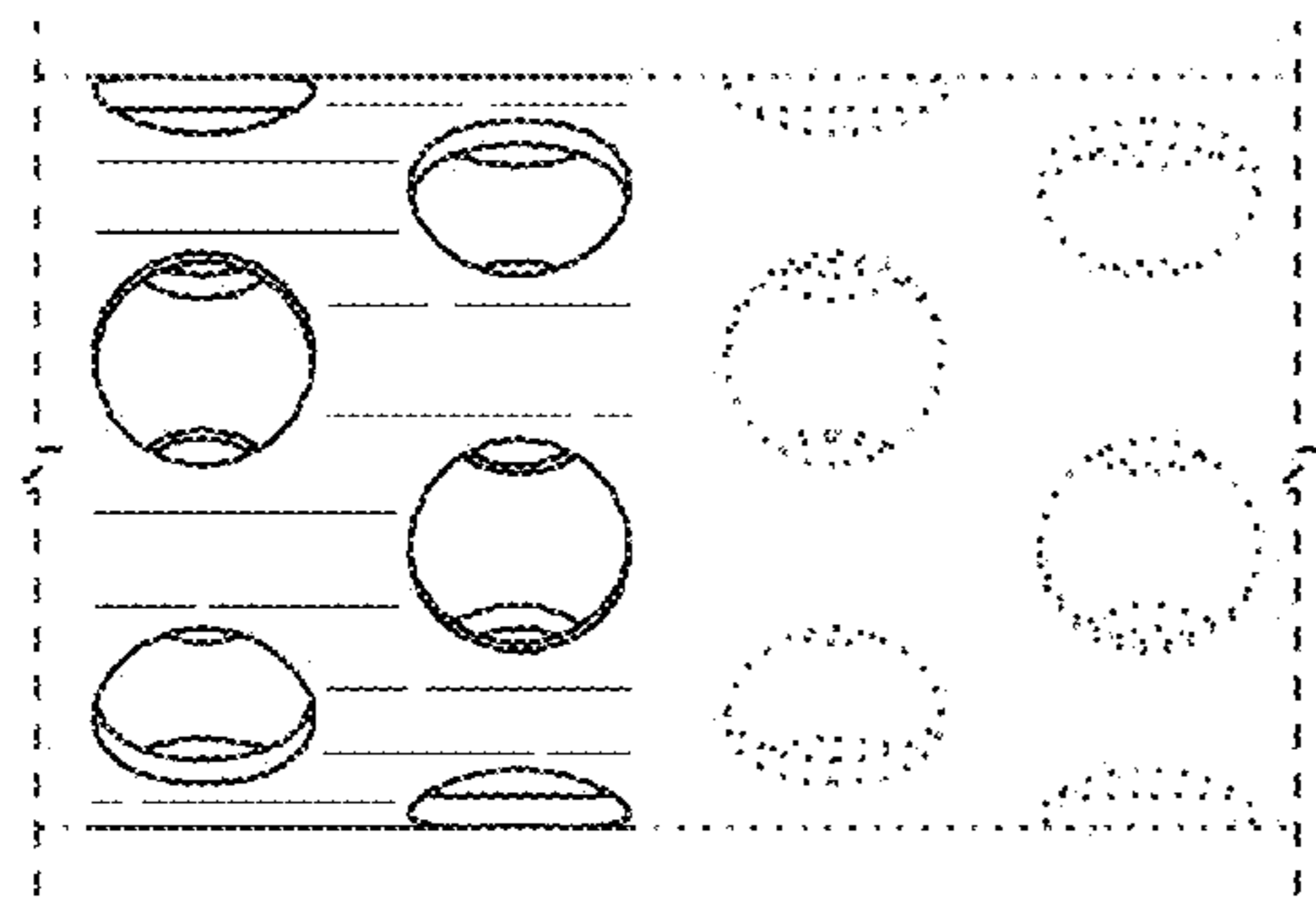


FIG. 2

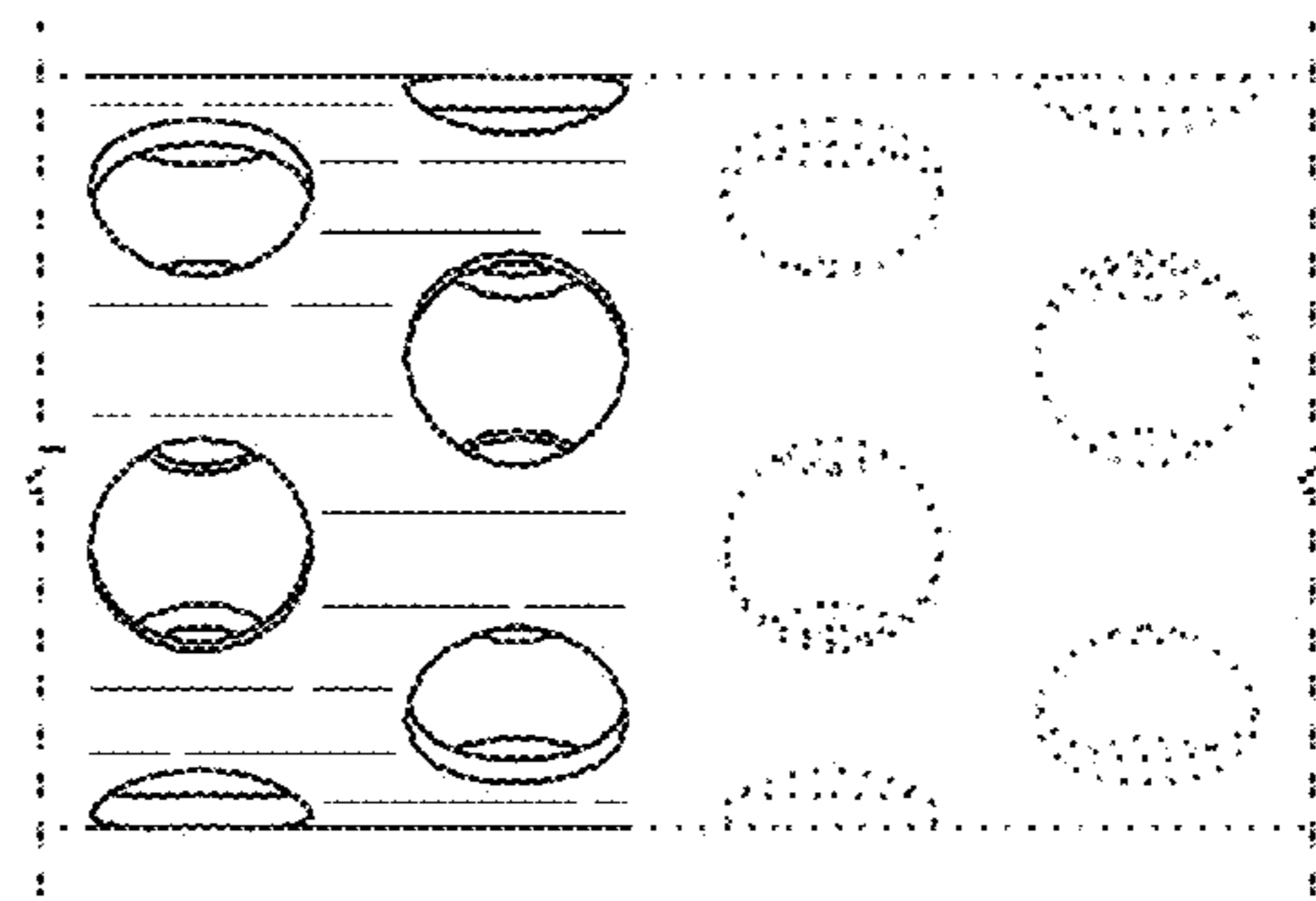


FIG. 3