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(12) **United States Design Patent** (10) **Patent No.:** **US D872,228 S**  
**Matsuda et al.** (45) **Date of Patent:** **\*\* Jan. 7, 2020**

(54) **EXPANSION VALVE**

(56) **References Cited**

(71) Applicant: **FUJIKOKI CORPORATION**, Tokyo (JP)

U.S. PATENT DOCUMENTS

(72) Inventors: **Ryo Matsuda**, Tokyo (JP); **Hiroshi Yokota**, Tokyo (JP); **Junya Hayakawa**, Tokyo (JP)

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(73) Assignee: **FUJIKOKI CORPORATION**, Tokyo (JP)

\* cited by examiner

(\*\*) Term: **15 Years**

*Primary Examiner* — Gino Colan

(21) Appl. No.: **29/624,285**

(74) *Attorney, Agent, or Firm* — Manabu Kanesaka

(22) Filed: **Oct. 31, 2017**

(57) **CLAIM**

(30) **Foreign Application Priority Data**

The ornamental design for expansion valve, as shown and described.

Sep. 26, 2017 (JP) ..... 2017-021011

(51) **LOC (12) Cl.** ..... **23-01**

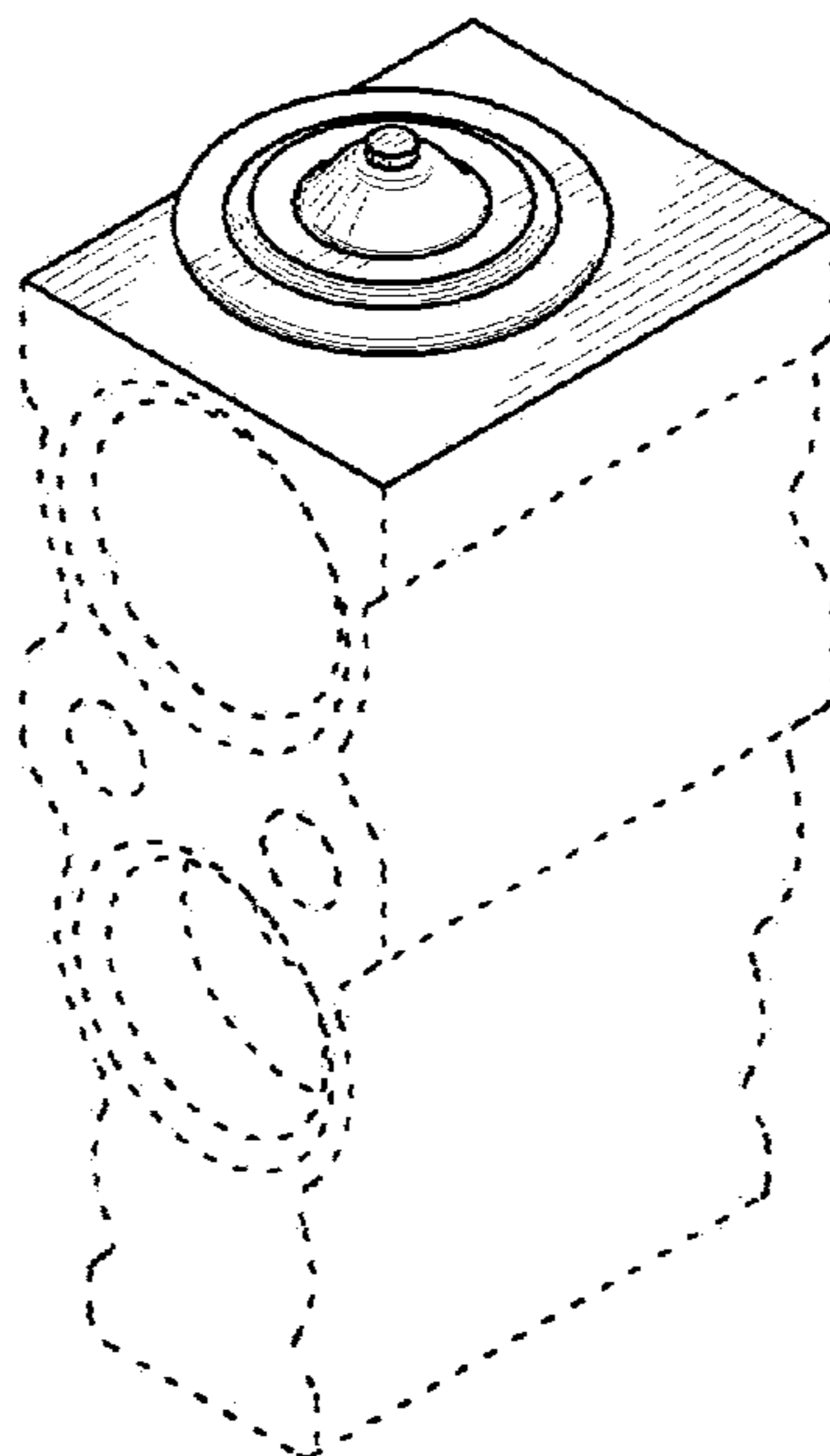
**DESCRIPTION**

(52) **U.S. Cl.**  
USPC ..... **D23/233**

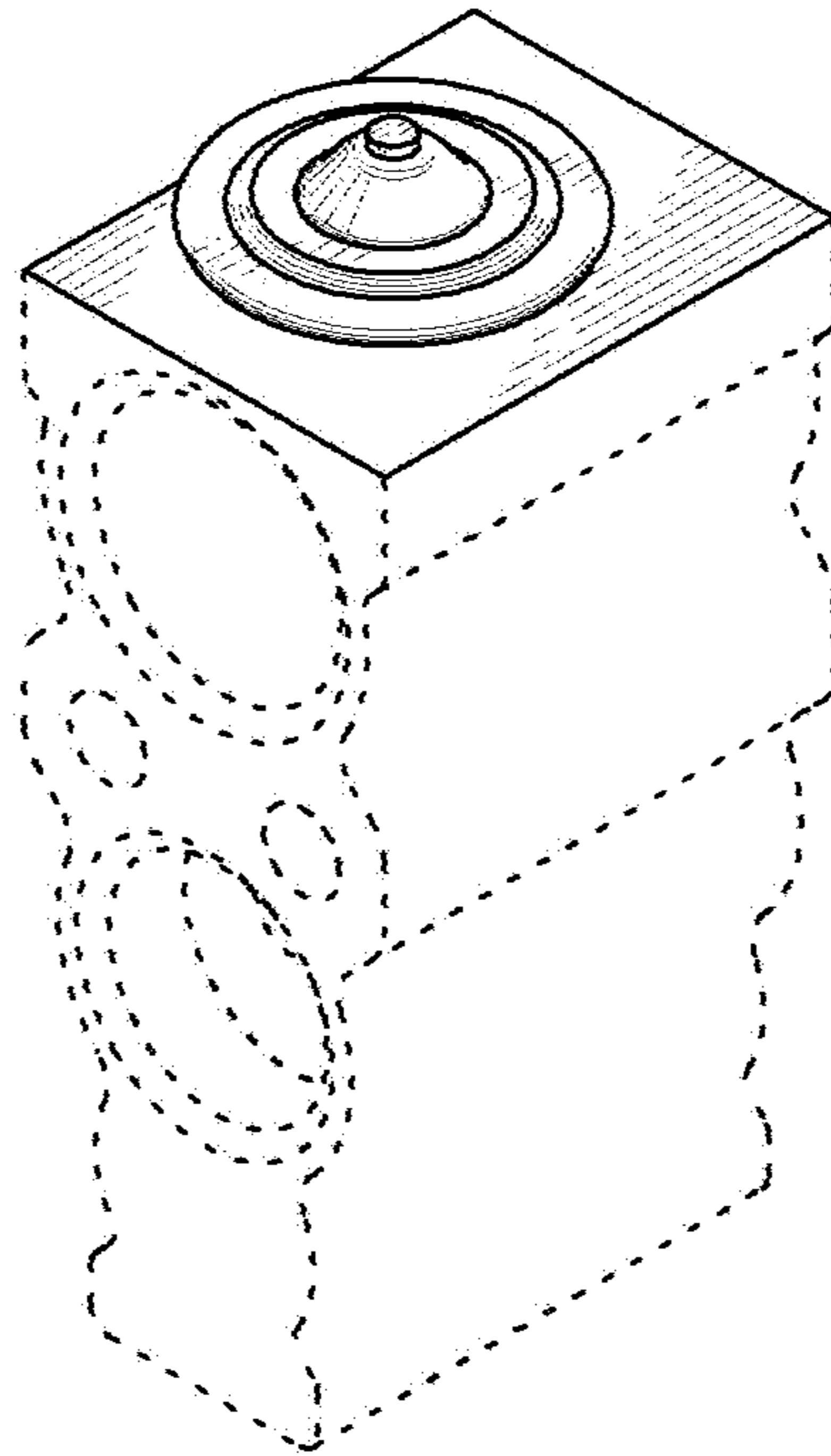
(58) **Field of Classification Search**  
USPC ..... D23/233–237, 244–249; 62/527, 225, 62/126, 324.1, 202, 211, 115; 137/15.04, 137/549, 597, 625.29, 625.4, 625.47, 468; 251/62, 63, 63.5, 129.1, 129.16–129.18, 251/149.1, 214, 309–310  
CPC ..... F16K 27/0236; F16K 7/17; F16K 31/402; F16K 7/12; F16K 7/16; F16K 41/103; F16K 99/0015; F16K 7/00  
See application file for complete search history.

FIG. 1 is a perspective view of an expansion valve showing our new design;  
FIG. 2 is a front view thereof;  
FIG. 3 is a rear view thereof;  
FIG. 4 is a right side view thereof, a left side view thereof being a mirror image of the right side view thereof;  
FIG. 5 is a top view thereof; and,  
FIG. 6 is a bottom view thereof.  
The broken lines depict portions of the expansion valve that form no part of claimed design.

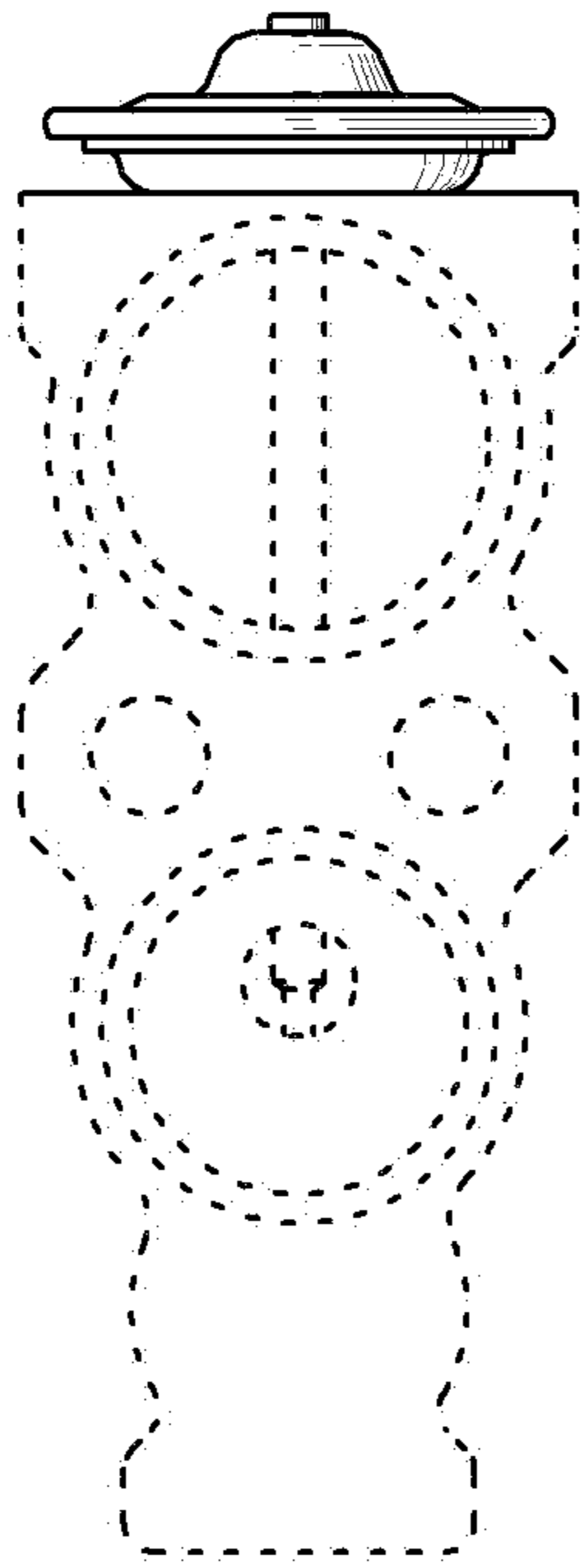
**1 Claim, 6 Drawing Sheets**



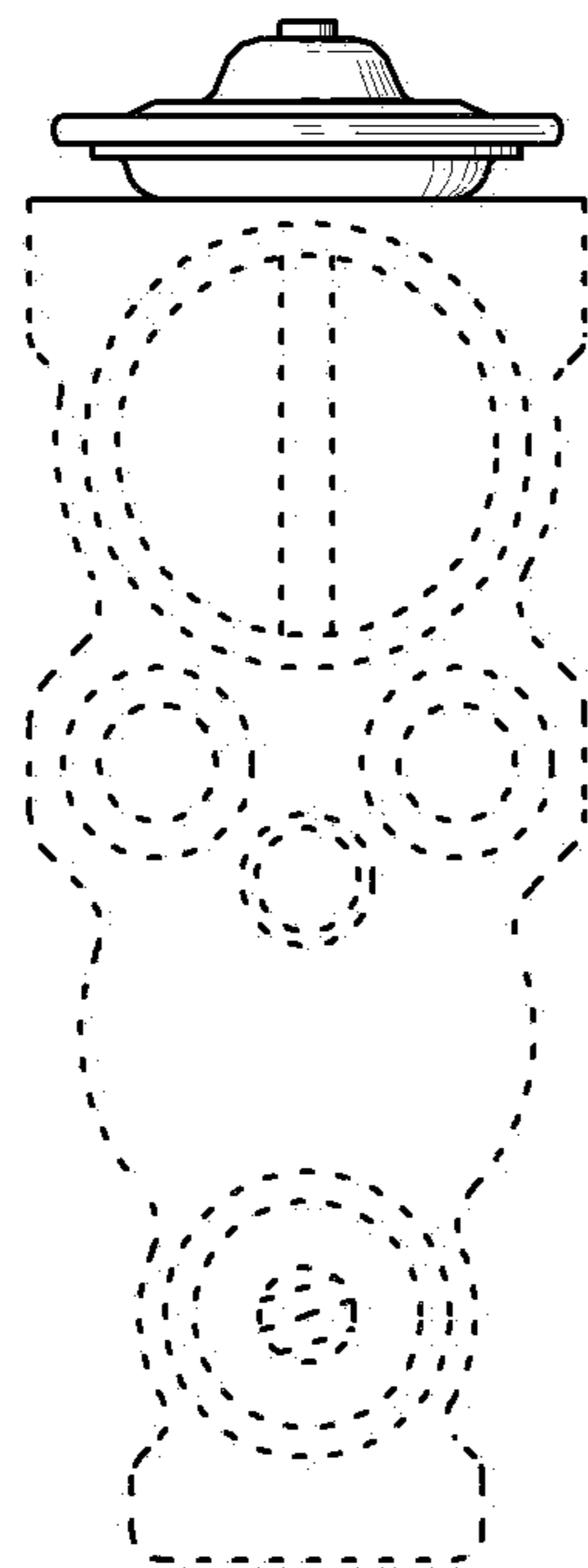
**Fig. 1**



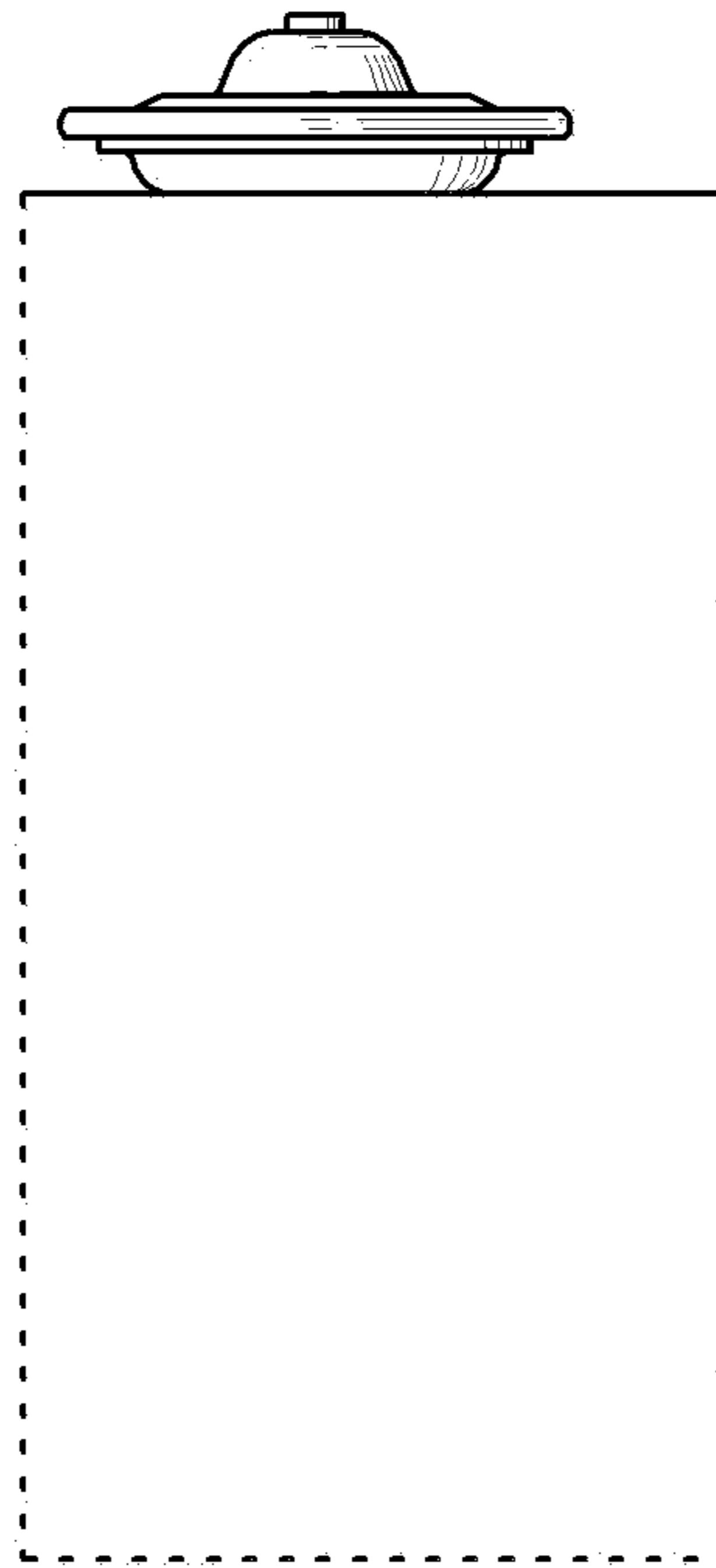
**Fig. 2**



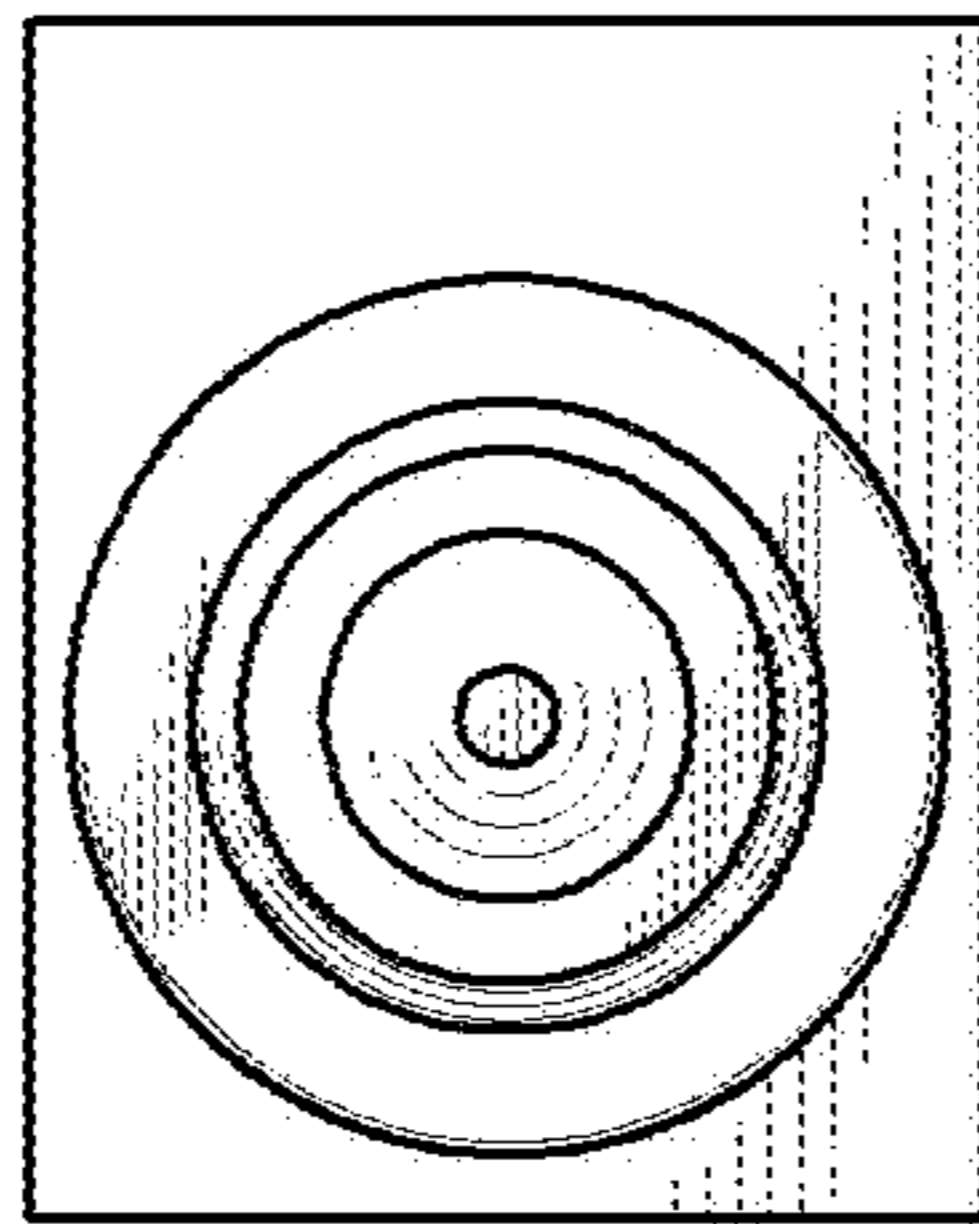
**Fig. 3**



**Fig. 4**



**Fig. 5**



**Fig. 6**

