



US00D970570S

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

(10) **Patent No.:** **US D970,570 S**

(45) **Date of Patent:** **\*\* Nov. 22, 2022**

(54) **VACUUM PUMP**

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

(21) Appl. No.: **29/832,487**

(22) Filed: **Mar. 28, 2022**

(30) **Foreign Application Priority Data**

Dec. 3, 2021 (CN) ..... 202130801517.1

(51) **LOC (13) Cl.** ..... **15-10**

(52) **U.S. Cl.**  
USPC ..... **D15/146**

(58) **Field of Classification Search**  
USPC ..... D15/122, 126, 134, 146; D7/336, 337, D7/352, 356, 362, 602; D9/435, 439, D9/500, 503, 504, 516  
CPC ..... B65B 31/00; B65B 31/02; B65B 31/024; B65B 31/048; B65B 51/10; B65B 51/14; B65B 51/146; B65B 41/12; B65B 31/04; B29C 66/8491; B29C 65/30; B41F 16/00; B41F 16/0026; B41F 16/0093; B41F 1/38; B30B 15/047; B30B 15/061; B30B 15/064; B30B 15/34; B67B 6/00; B67C 3/222

See application file for complete search history.

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*Assistant Examiner* — Mark T. Philipps

(57) **CLAIM**

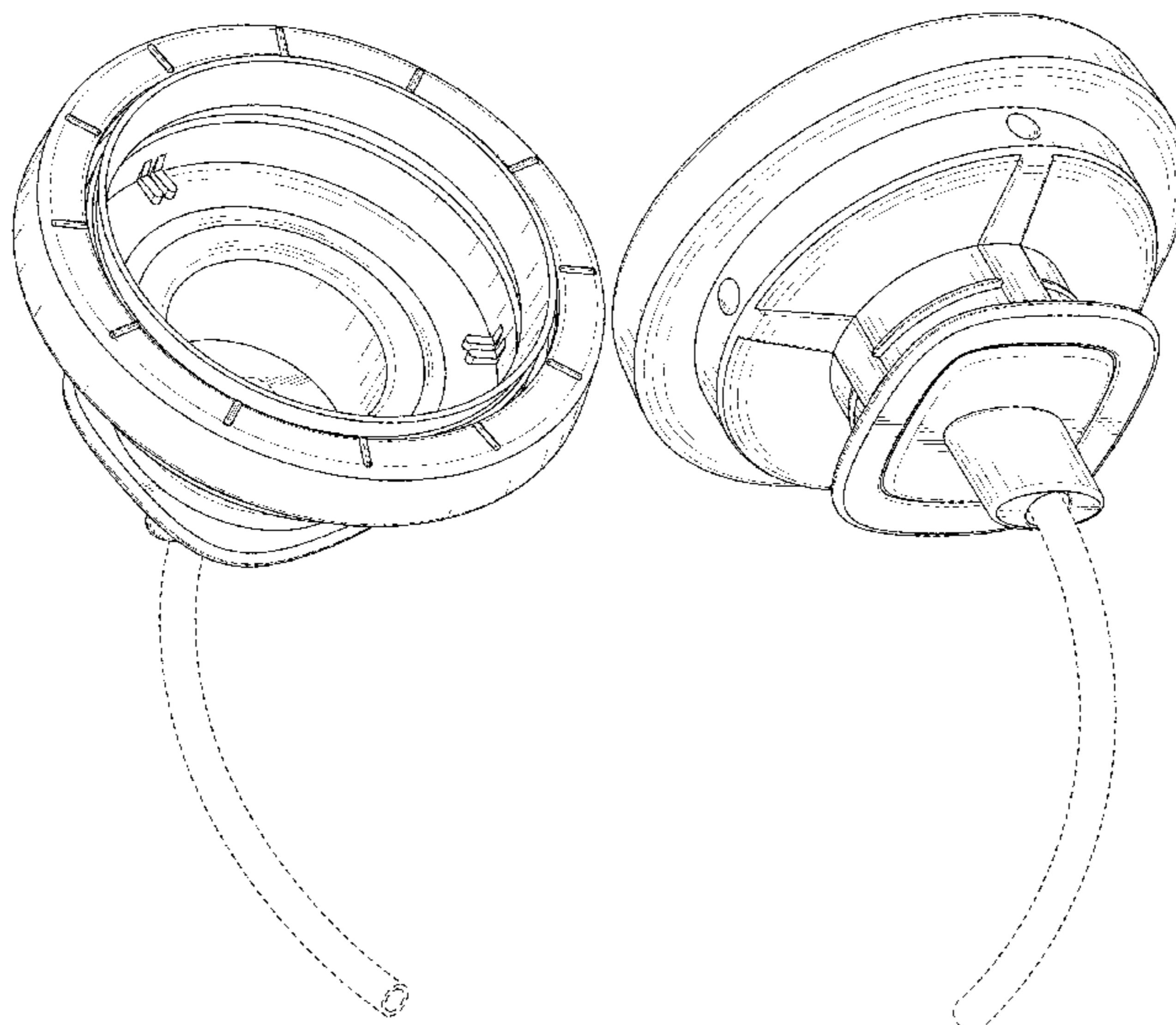
The ornamental design for a vacuum pump, as shown and described.

**DESCRIPTION**

FIG. 1 is a front, left and bottom perspective view of a vacuum pump showing my new design;  
FIG. 2 is a right, rear and top perspective view thereof;  
FIG. 3 is a perspective view of the exploded view of FIG. 2;  
FIG. 4 is a front view thereof;  
FIG. 5 is a rear view thereof;  
FIG. 6 is a left side view thereof;  
FIG. 7 is a right side view thereof;  
FIG. 8 is a top plan view thereof; and,  
FIG. 9 is a bottom plan view thereof.

The broken lines in the figures illustrate portions of the vacuum pump that form no part of the claimed design.

**1 Claim, 9 Drawing Sheets**



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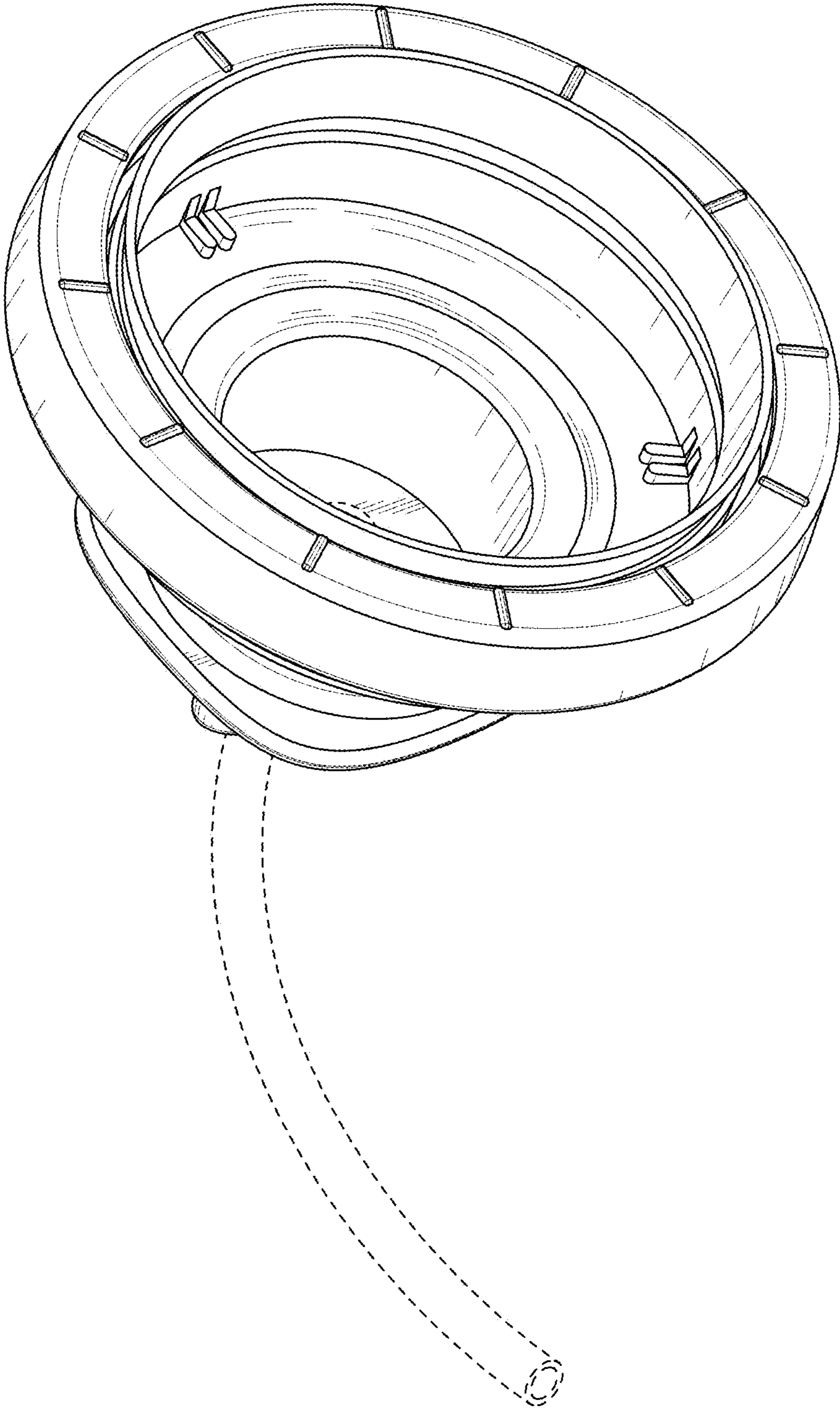


FIG. 1

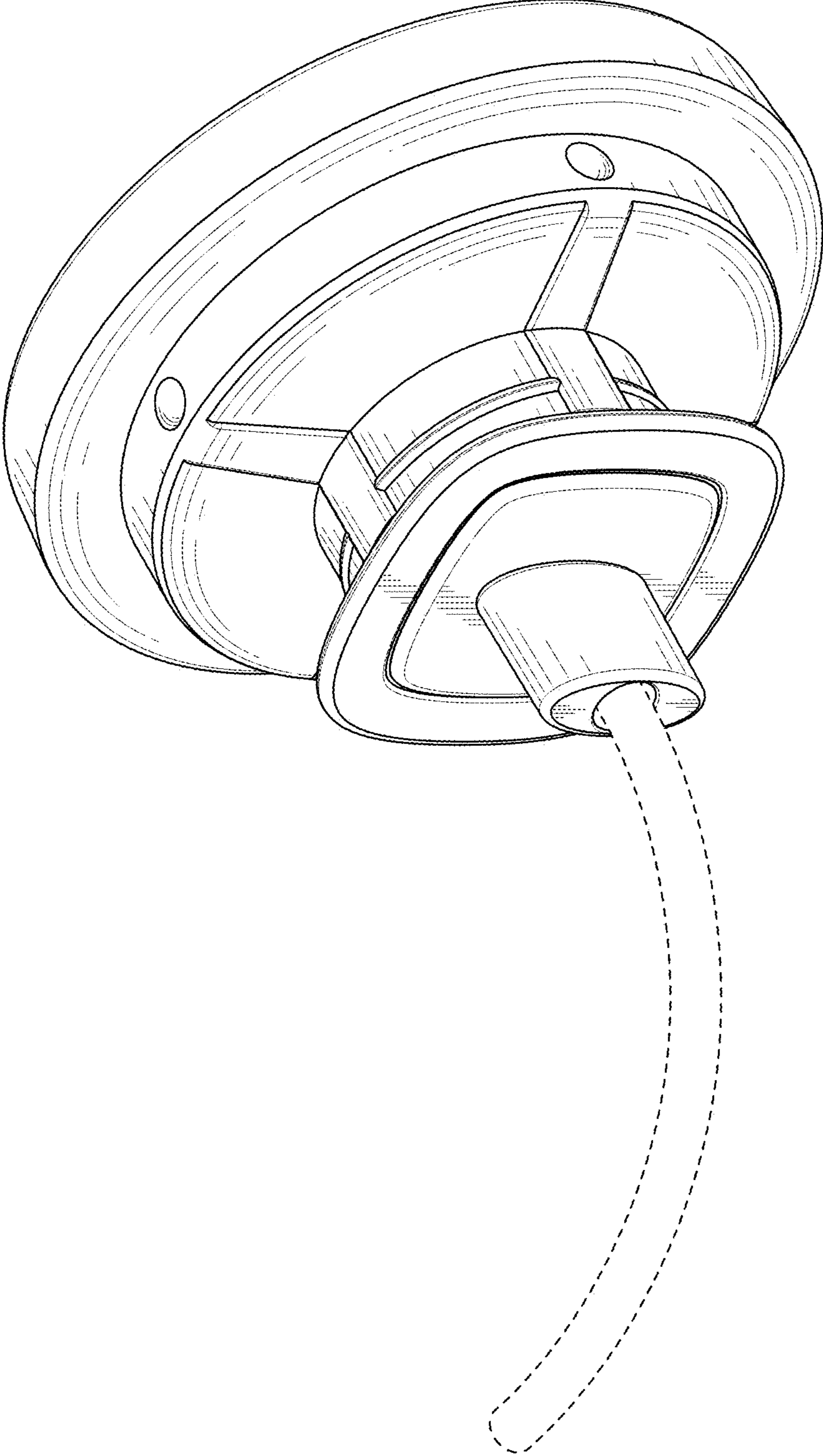


FIG. 2



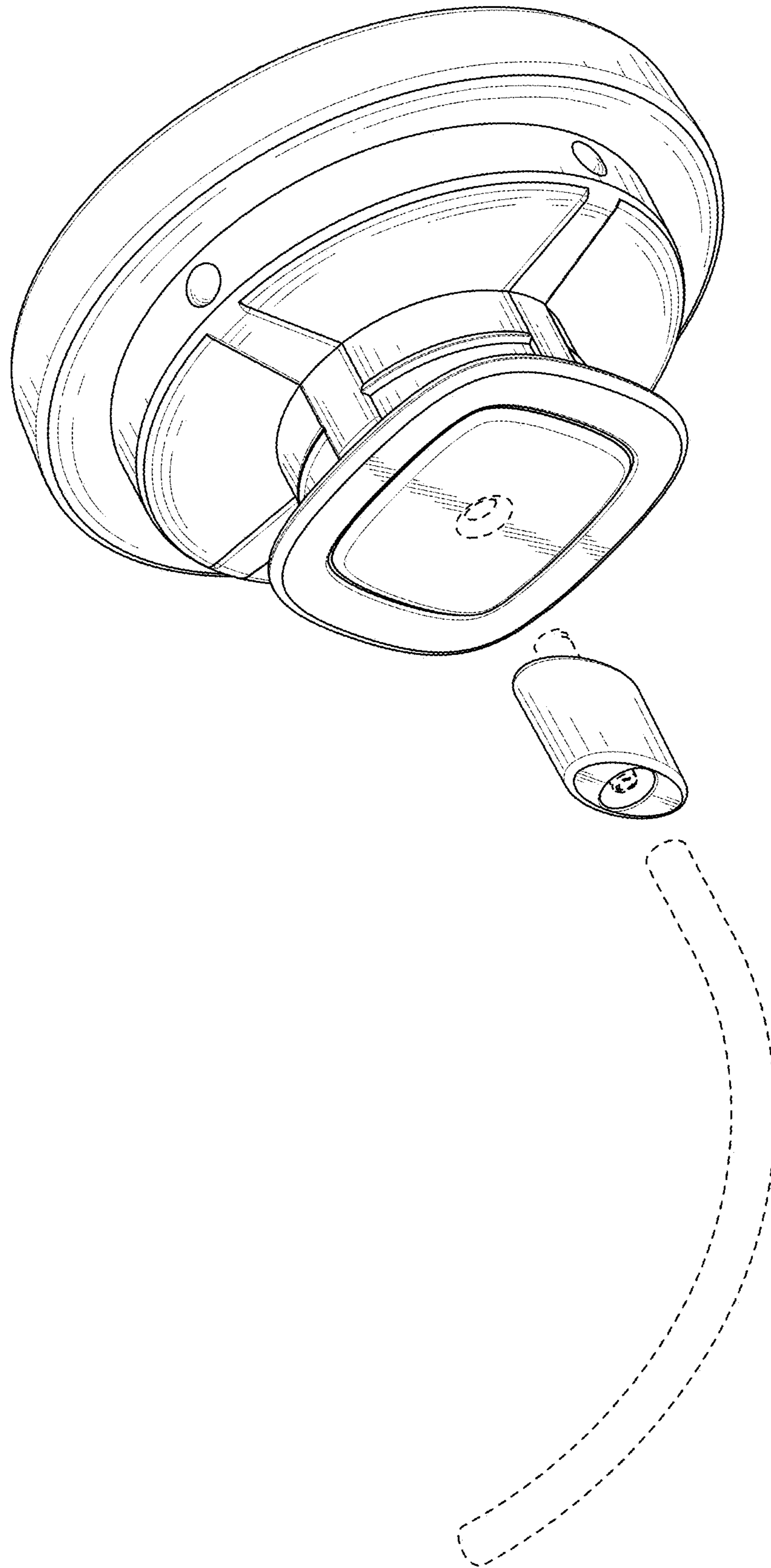


FIG. 3

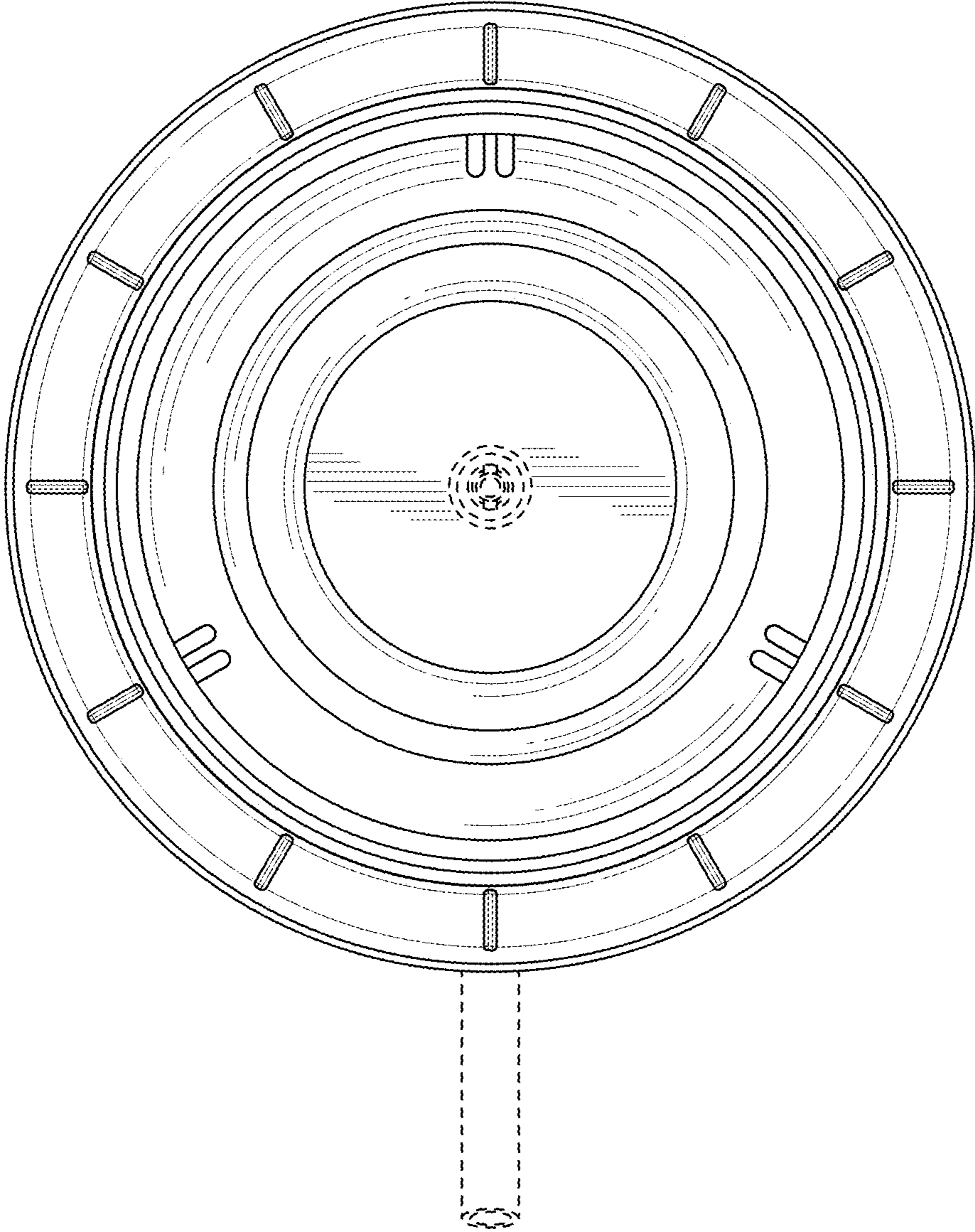


FIG. 4

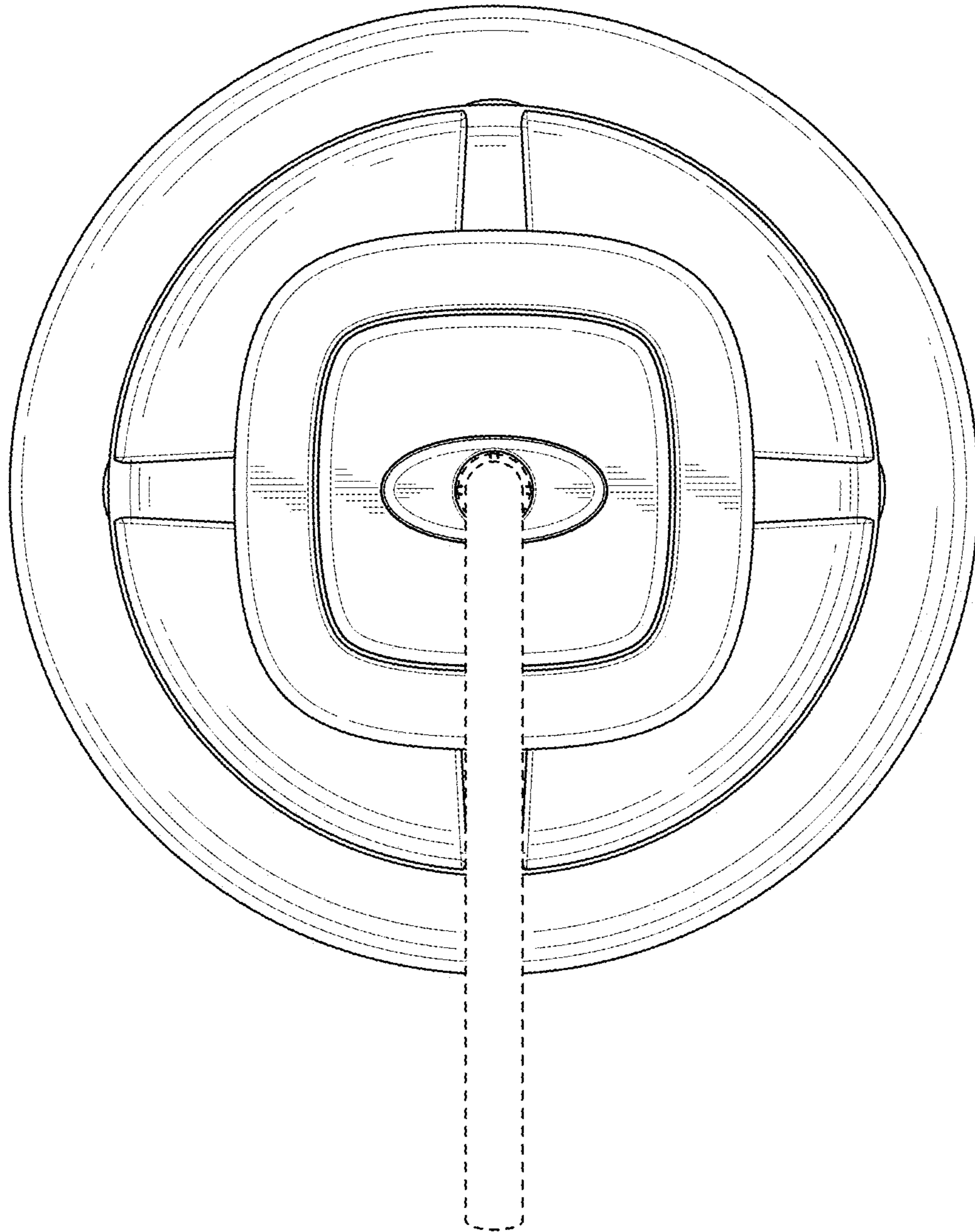


FIG. 5

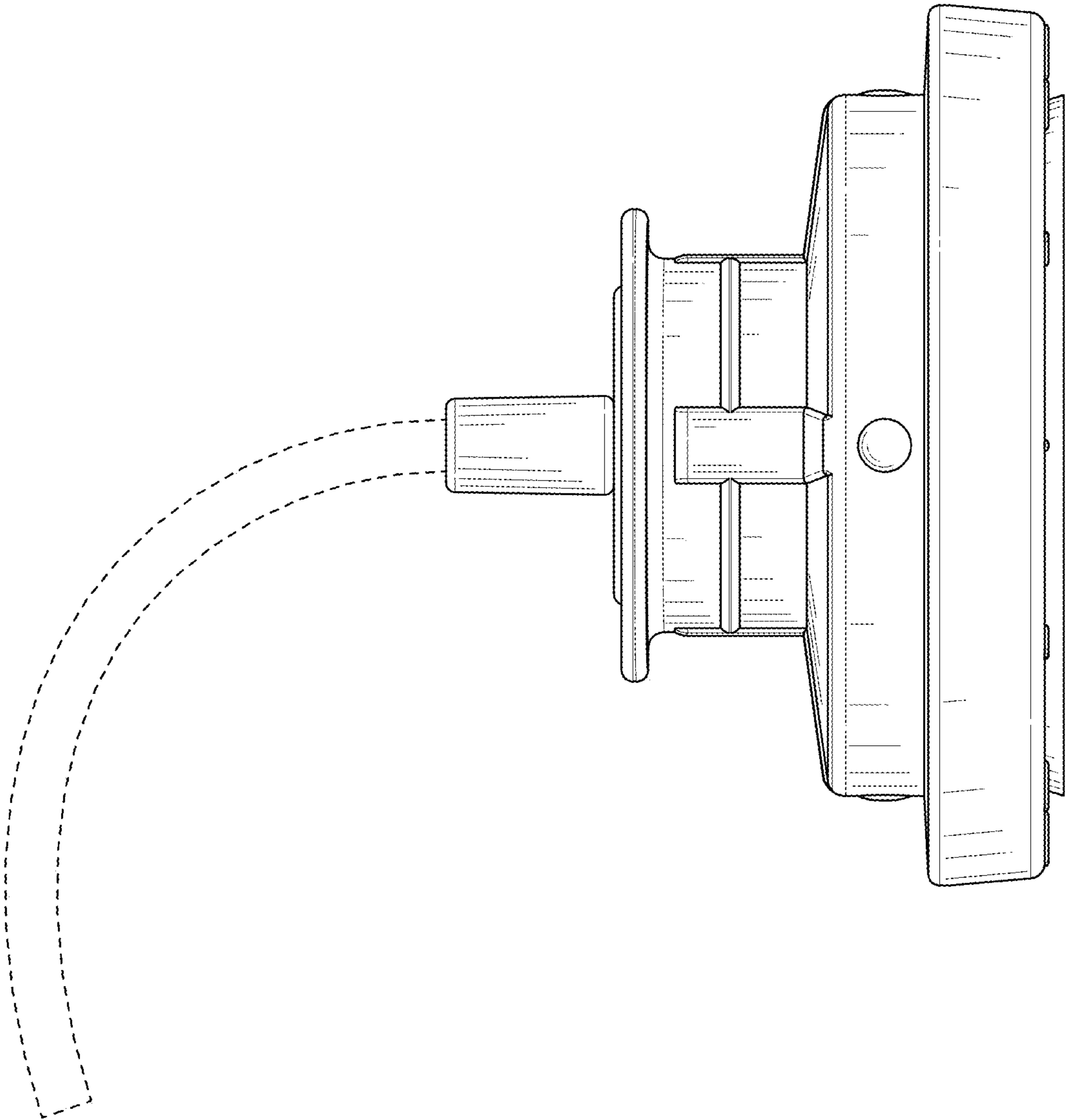


FIG. 6



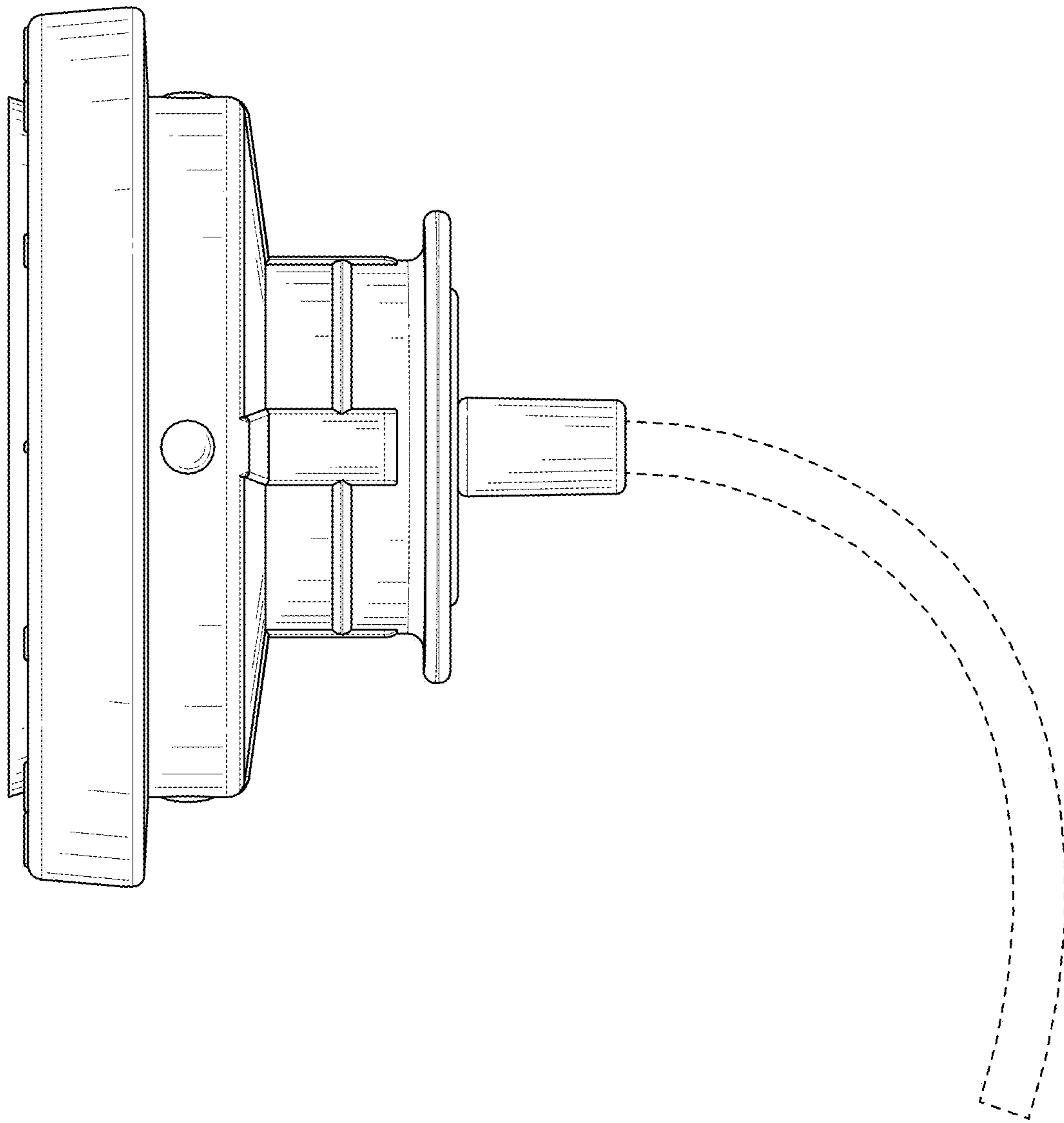


FIG. 7

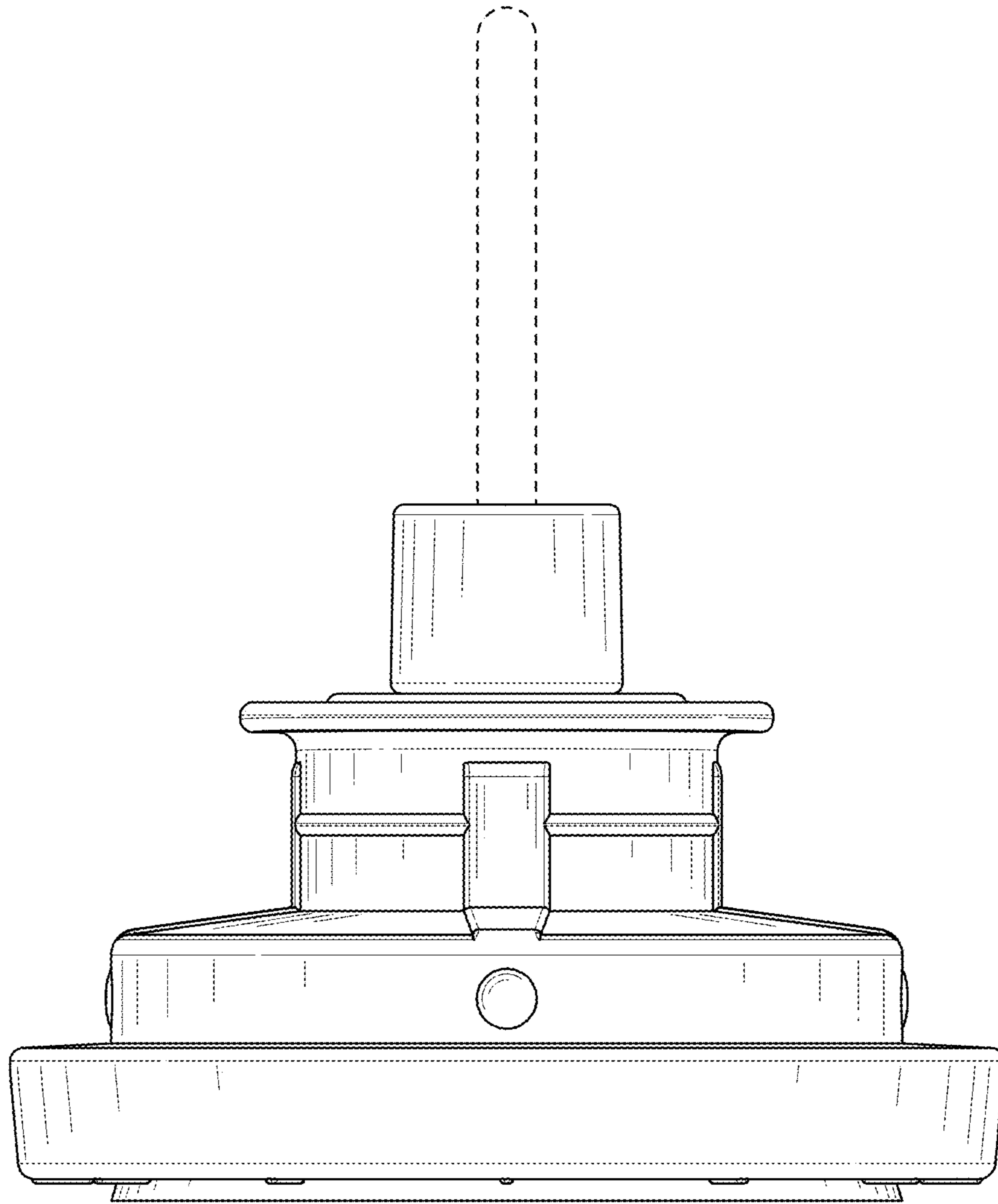


FIG. 8

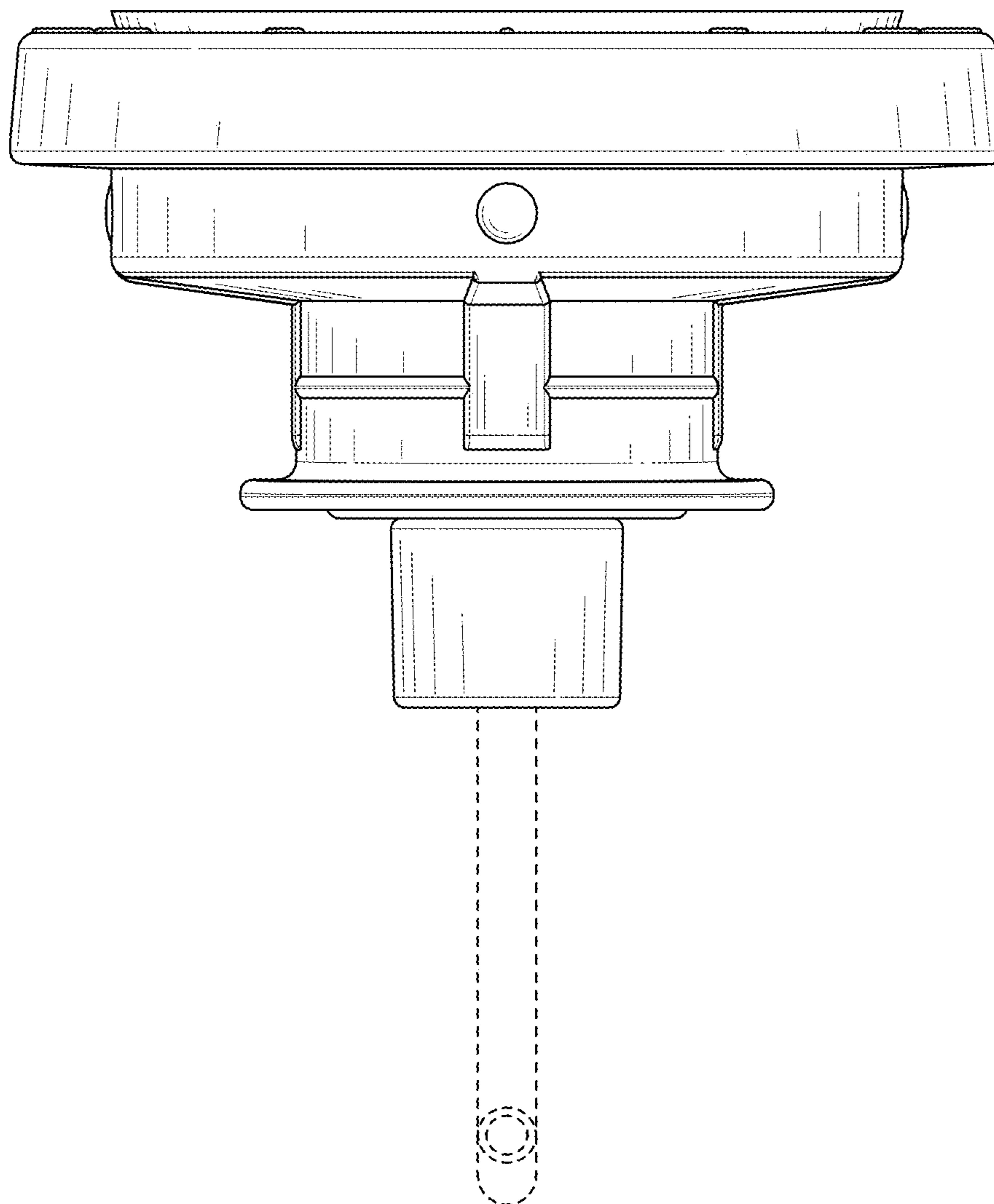


FIG. 9