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

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(45) **Date of Patent:** **\*\* Mar. 19, 2024**

(54) **EXPIRATORY RESISTOR**

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

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(30) **Foreign Application Priority Data**

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(51) **LOC (14) Cl.** ..... **29-02**

(52) **U.S. Cl.**  
USPC ..... **D24/110; D24/129**

(58) **Field of Classification Search**  
USPC ..... D24/107, 108, 110, 110.5, 110.6, 127,  
D24/129, 164; D21/662

(Continued)

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(57) **CLAIM**

The ornamental design for an expiratory resistor, as shown and described.

**DESCRIPTION**

FIG. 1 is a top perspective view of an expiratory resistor according to a first embodiment.

FIG. 2 is a front elevation view of the expiratory resistor shown in FIG. 1.

FIG. 3 is a side elevation view of the expiratory resistor shown in FIG. 1.

FIG. 4 is a top end view of the expiratory resistor shown in FIG. 1.

FIG. 5 is a bottom end view of the expiratory resistor shown in FIG. 1.

FIG. 6 is a bottom perspective view of the expiratory resistor shown in FIG. 1.

FIG. 7 is a top perspective view of an expiratory resistor according to a second embodiment.

FIG. 8 is a front elevation view of the expiratory resistor shown in FIG. 7.

FIG. 9 is a side elevation view of the expiratory resistor shown in FIG. 7.

FIG. 10 is a top end view of the expiratory resistor shown in FIG. 7.

FIG. 11 is a bottom end view of the expiratory resistor shown in FIG. 7.

FIG. 12 is a bottom perspective view of the expiratory resistor shown in FIG. 7.

FIG. 13 is a top perspective view of an expiratory resistor according to a third embodiment.

FIG. 14 is a front elevation view of the expiratory resistor shown in FIG. 13.

FIG. 15 is a side elevation view of the expiratory resistor shown in FIG. 13.

FIG. 16 is a top end view of the expiratory resistor shown in FIG. 13.

FIG. 17 is a bottom end view of the expiratory resistor shown in FIG. 13.

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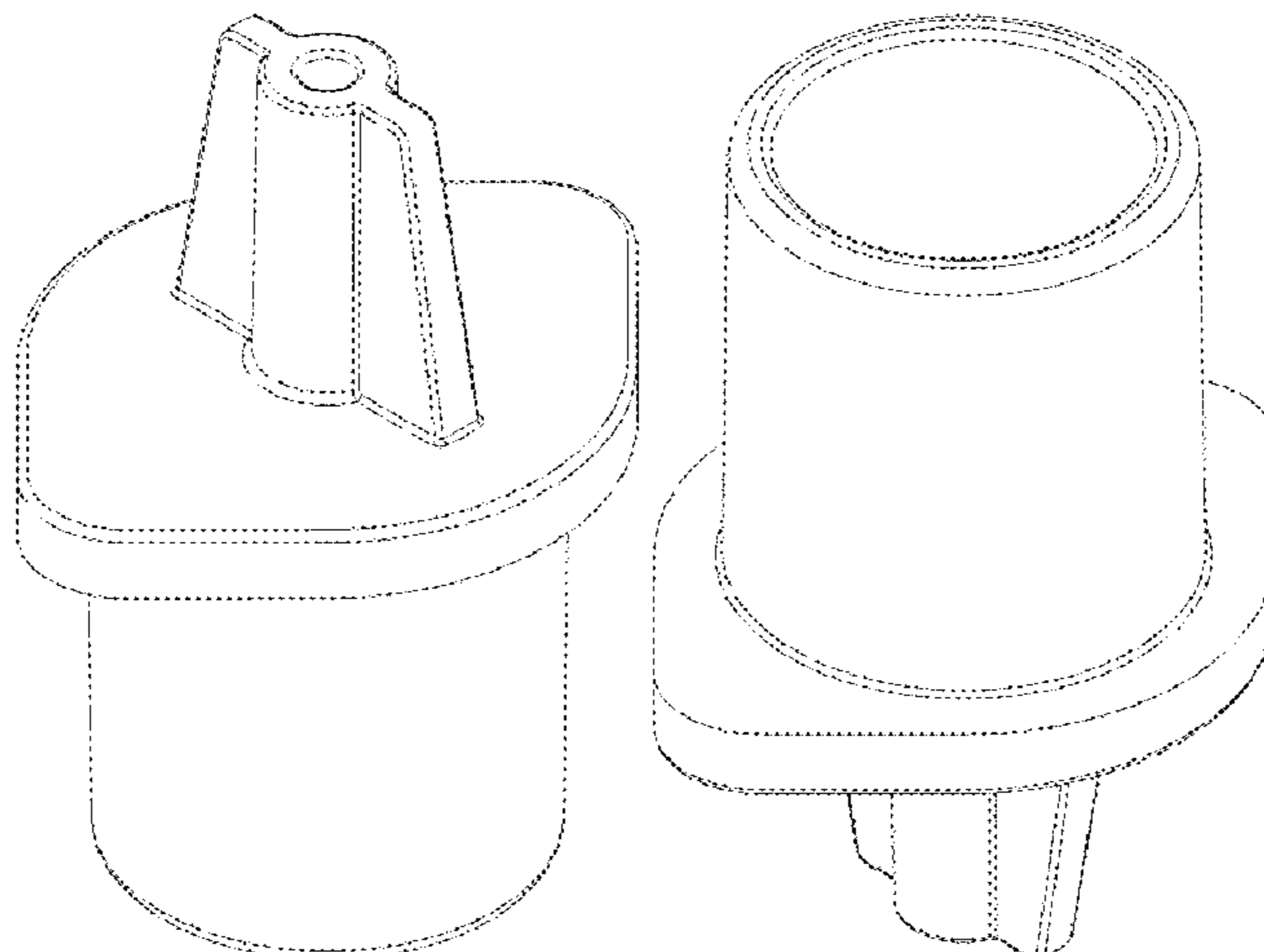


FIG. 18 is a bottom perspective view of the expiratory resistor shown in FIG. 13.

FIG. 19 is a top perspective view of an expiratory resistor according to a fourth embodiment.

FIG. 20 is a front elevation view of the expiratory resistor shown in FIG. 19.

FIG. 21 is a side elevation view of the expiratory resistor shown in FIG. 19.

FIG. 22 is a top end view of the expiratory resistor shown in FIG. 19.

FIG. 23 is a bottom end view of the expiratory resistor shown in FIG. 19; and,

FIG. 24 is a bottom perspective view of the expiratory resistor shown in FIG. 19.

As is evident from FIGS. 4 and 5, the expiratory resistor of the first embodiment has reflective symmetry between front and rear sides, and left and right sides; therefore FIGS. 2 and 3 represent the views of front and rear sides, and left and right sides, respectively. As is evident from FIGS. 10 and 11, the expiratory resistor of the second embodiment has reflective symmetry between front and rear sides, and left and right sides; therefore FIGS. 8 and 9 represent the views of front and rear sides, and left and right sides, respectively. As is evident from FIGS. 16 and 17, the expiratory resistor of the third embodiment has reflective symmetry between front and rear sides, and left and right sides; therefore FIGS. 14 and 15 represent the views of front and rear sides, and left and right sides, respectively. As is evident from FIGS. 22 and 23, the expiratory resistor of the fourth embodiment has reflective symmetry between front and rear sides, and left and right sides; therefore FIGS. 20 and 21 represent the views of front and rear sides, and left and right sides, respectively.

**1 Claim, 24 Drawing Sheets**

(58) **Field of Classification Search**

CPC ..... A61M 16/0006; A61M 16/208; A61M 16/0866; A61M 16/20; A61M 16/00; A61M 15/0098; A63B 23/18

See application file for complete search history.

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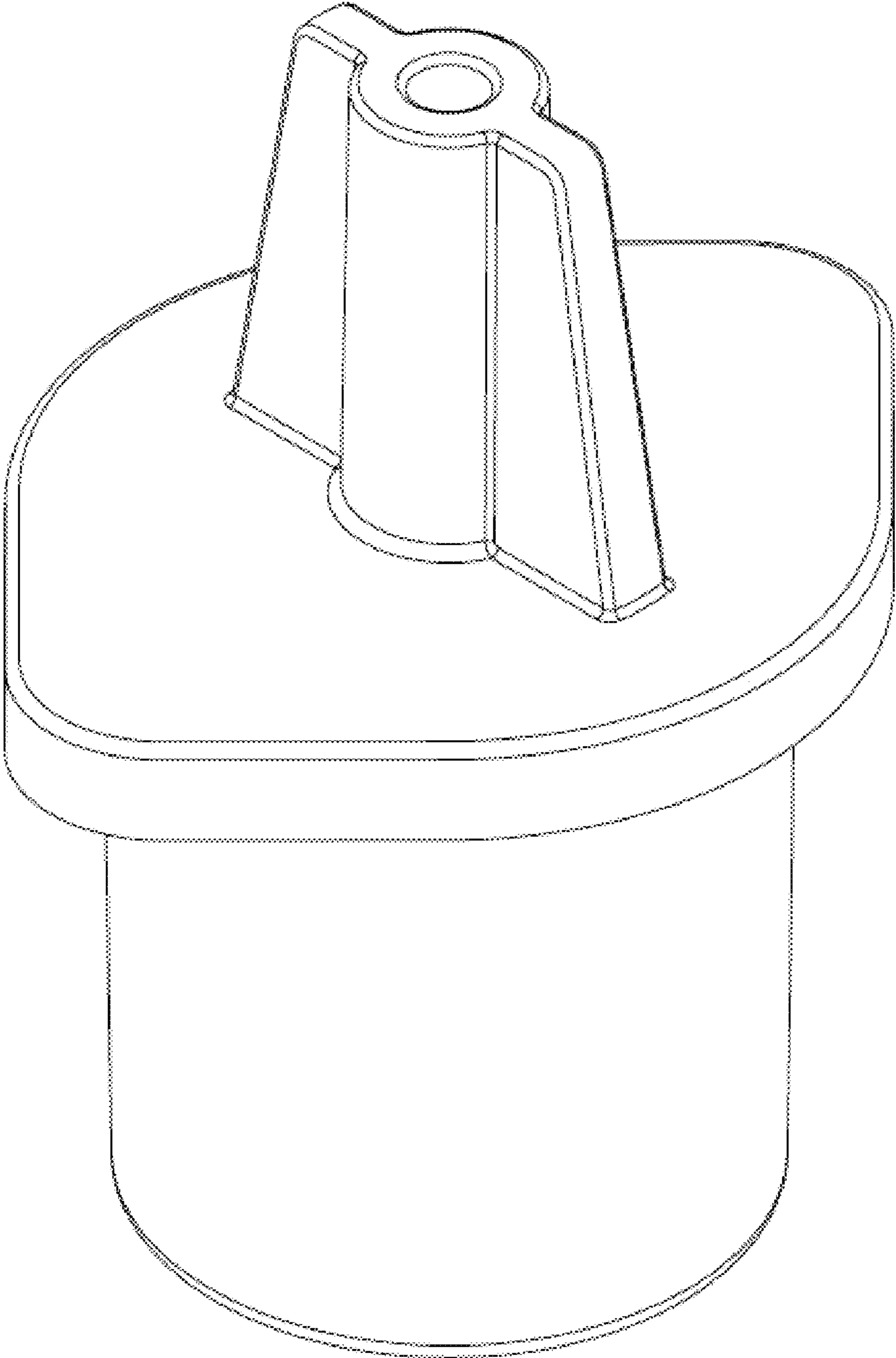
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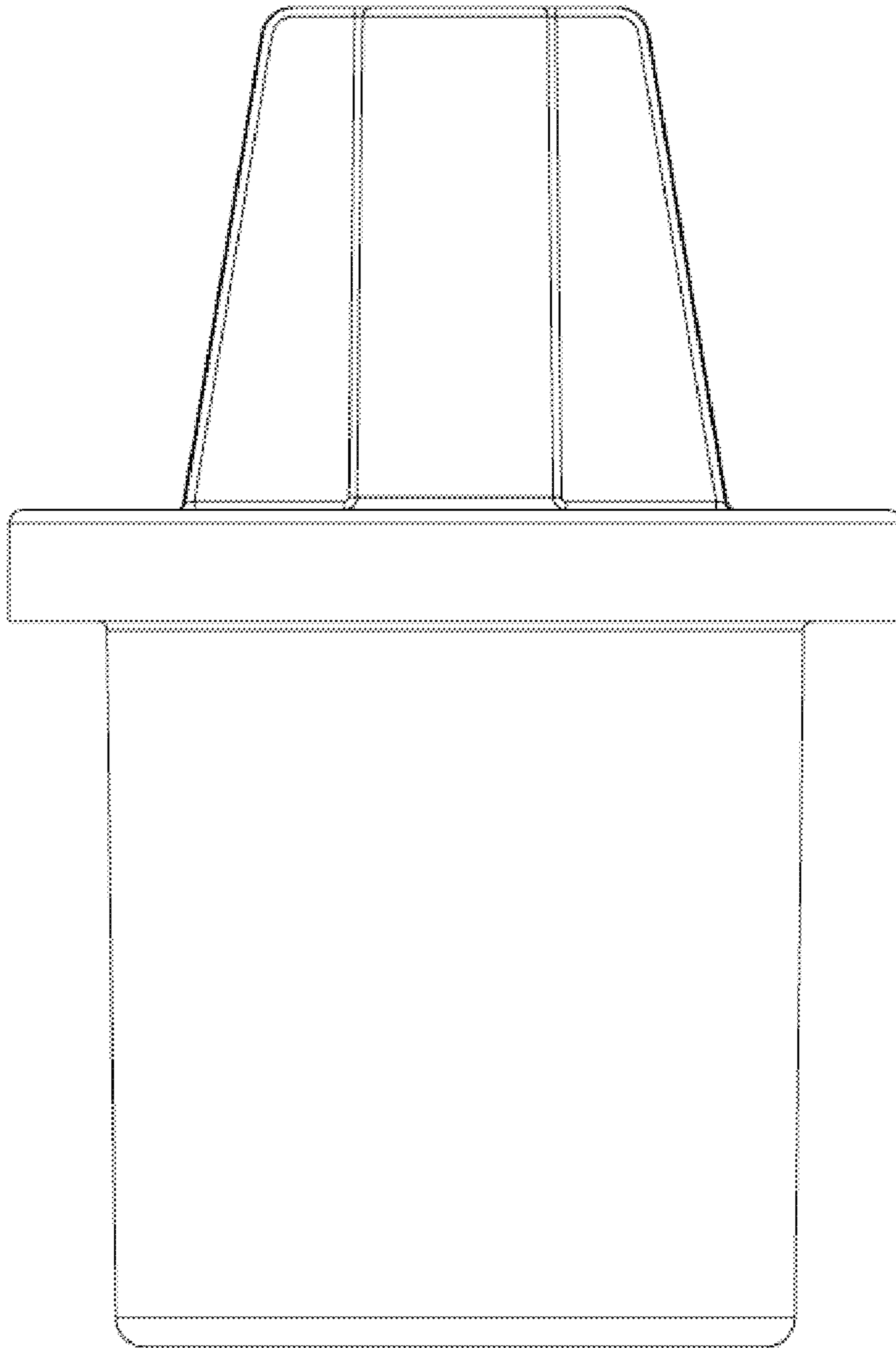
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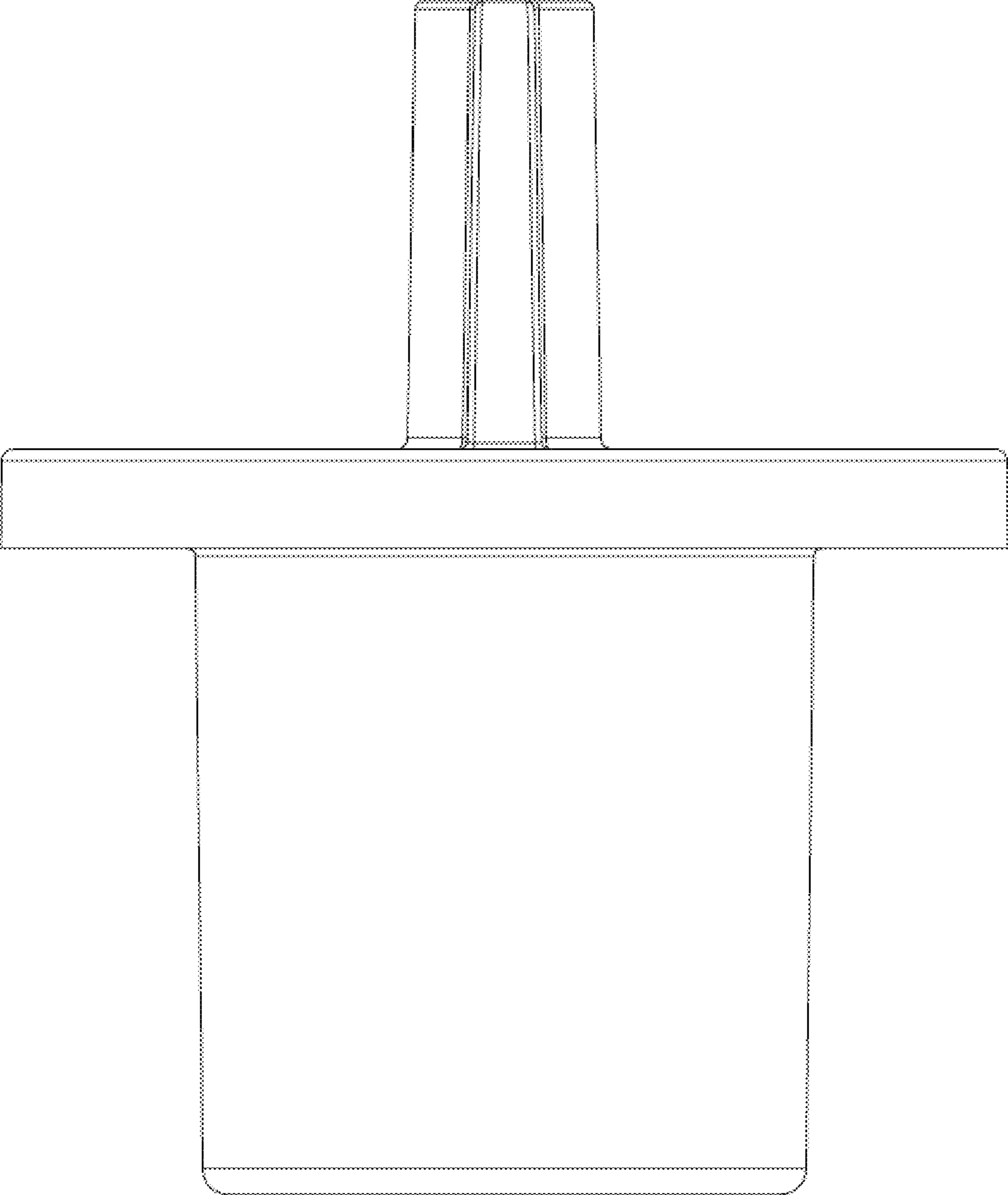
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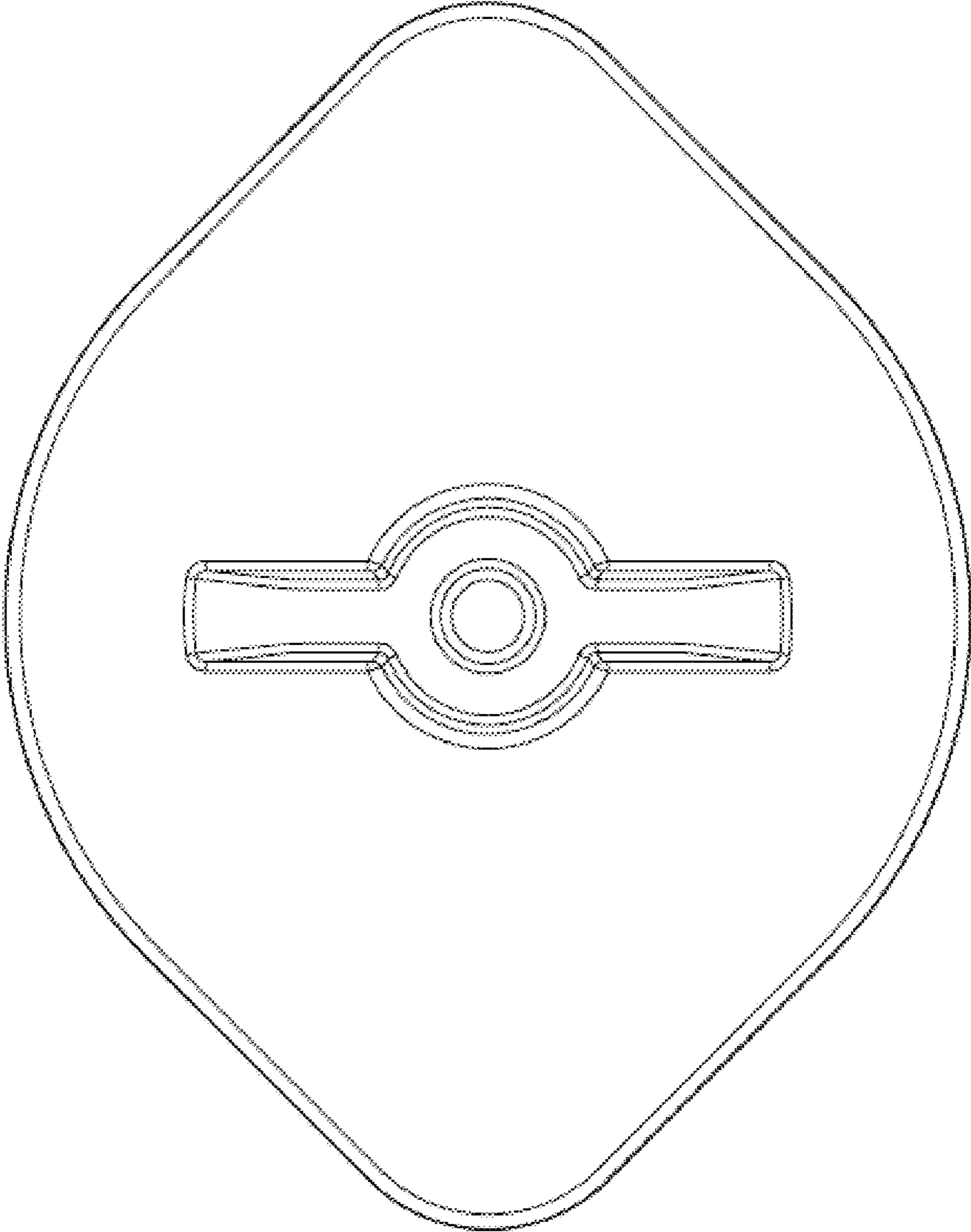
**FIG. 1**



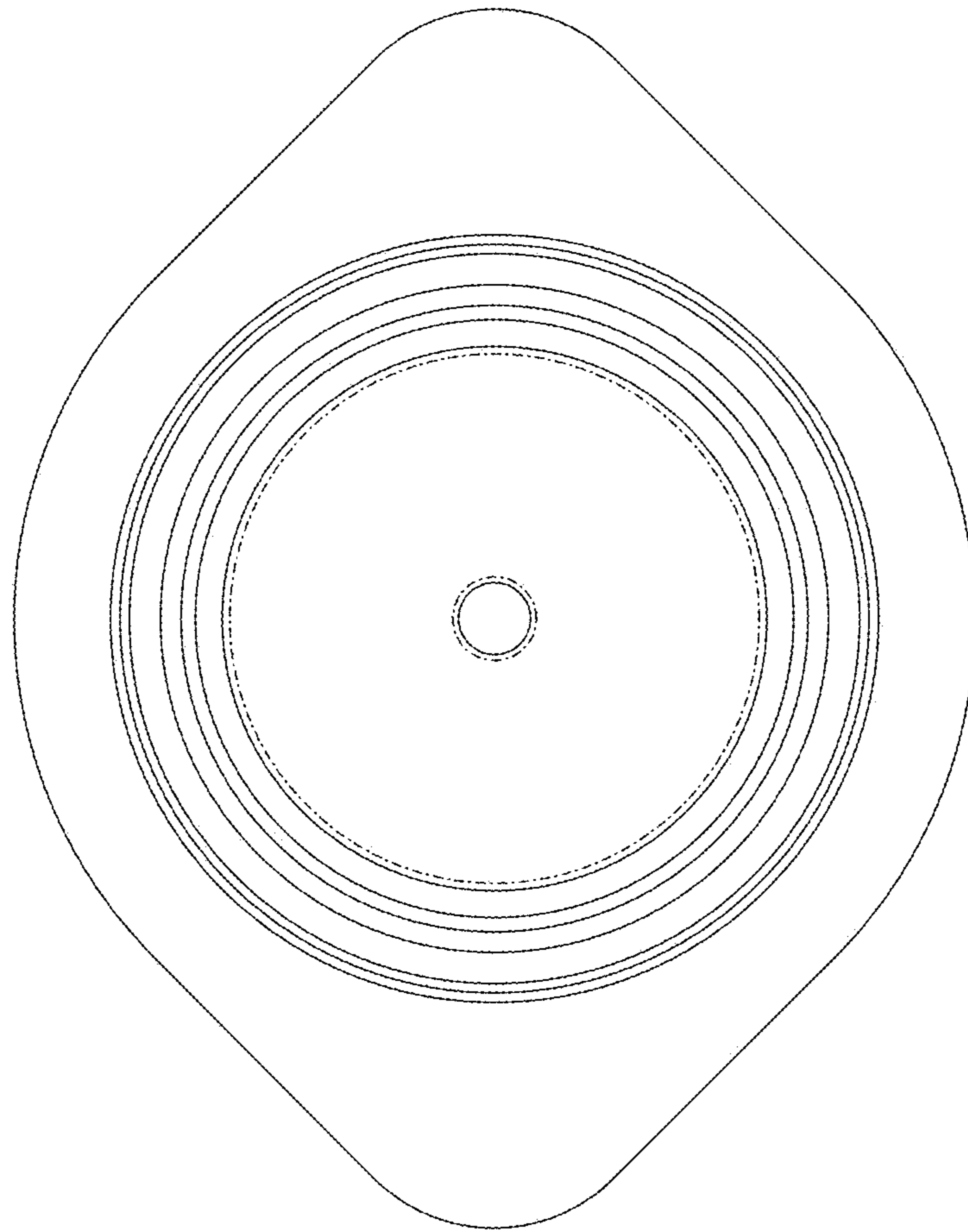
**FIG. 2**



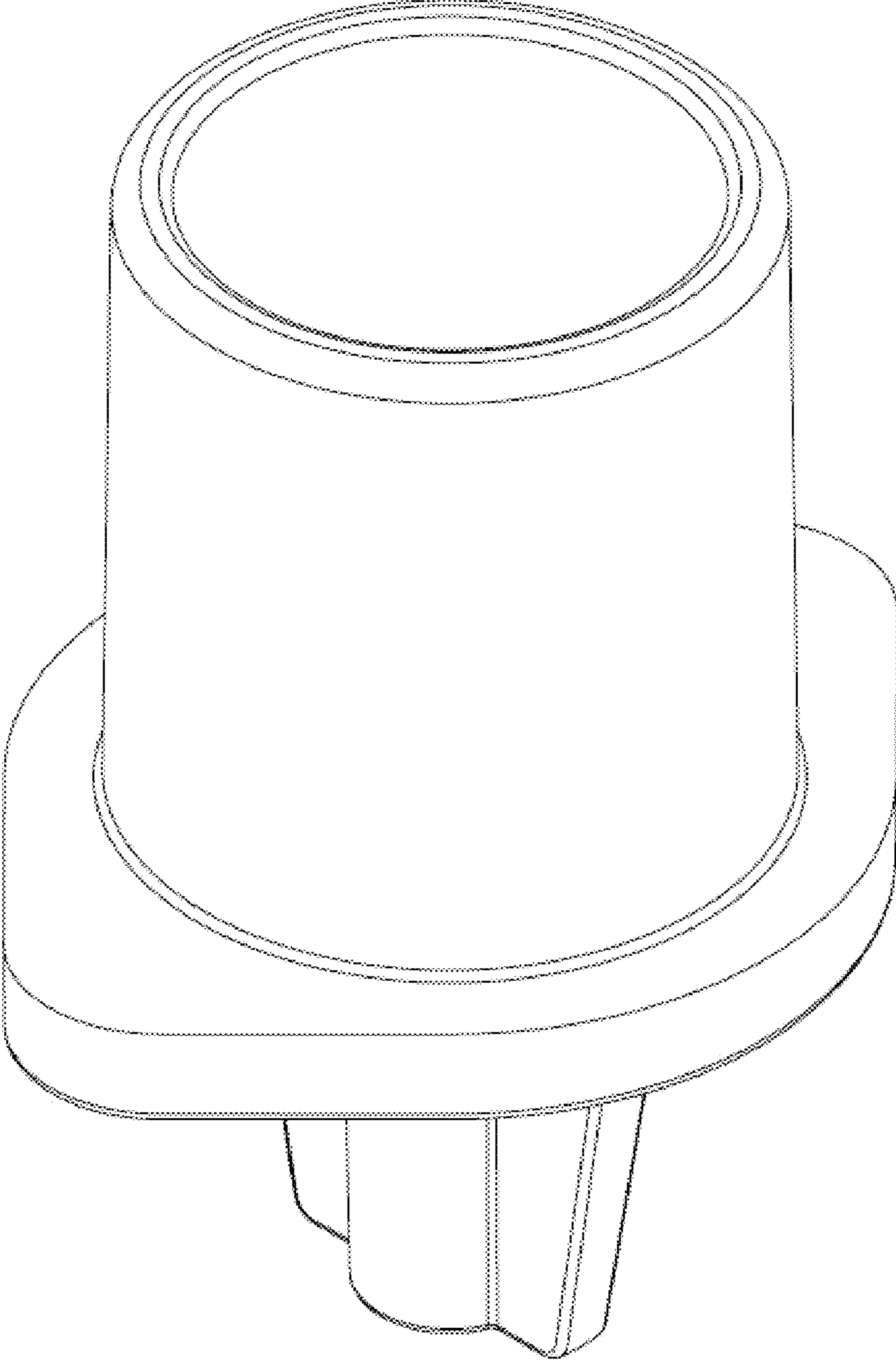
**FIG. 3**



**FIG. 4**

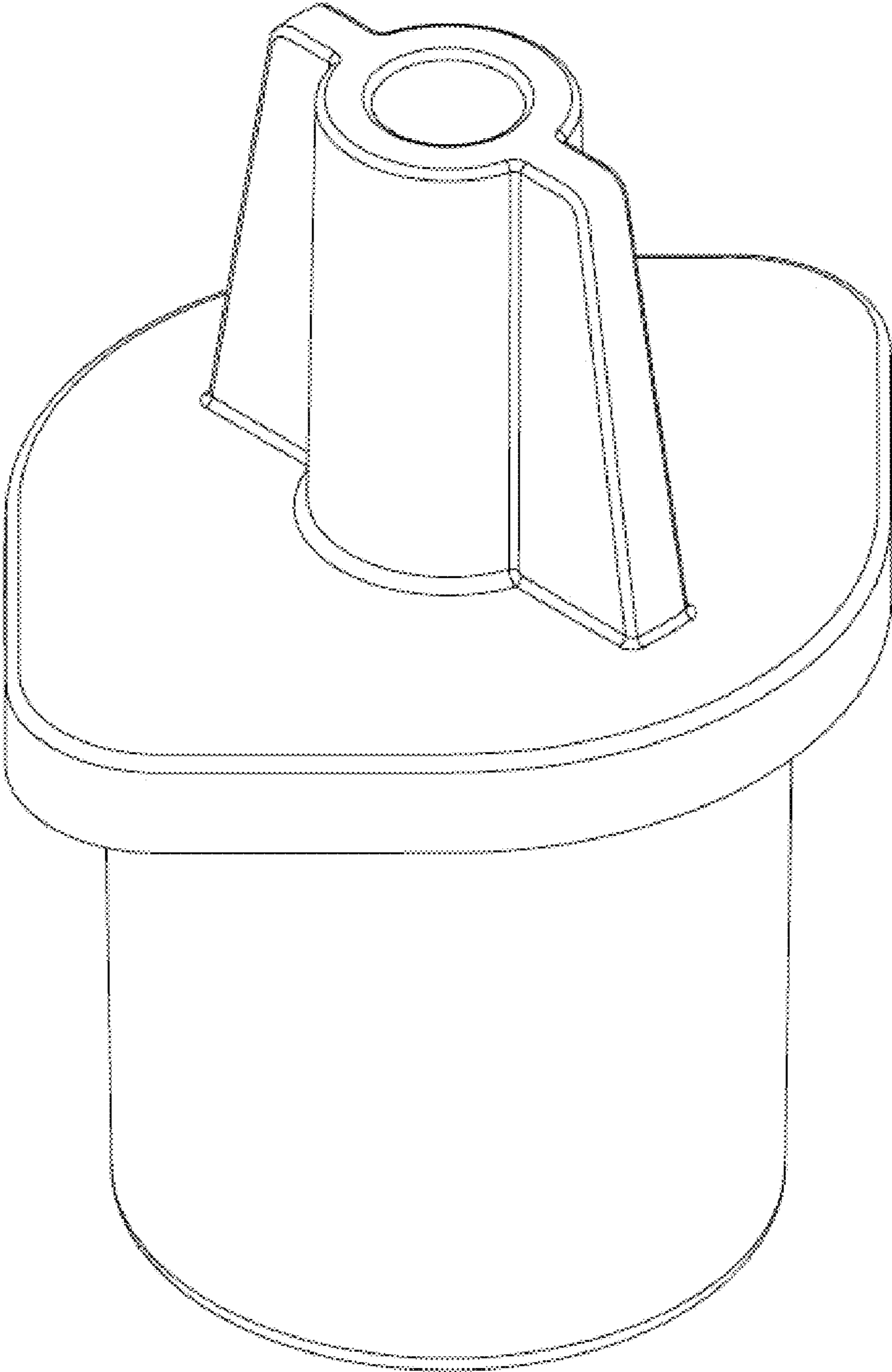


**FIG. 5**

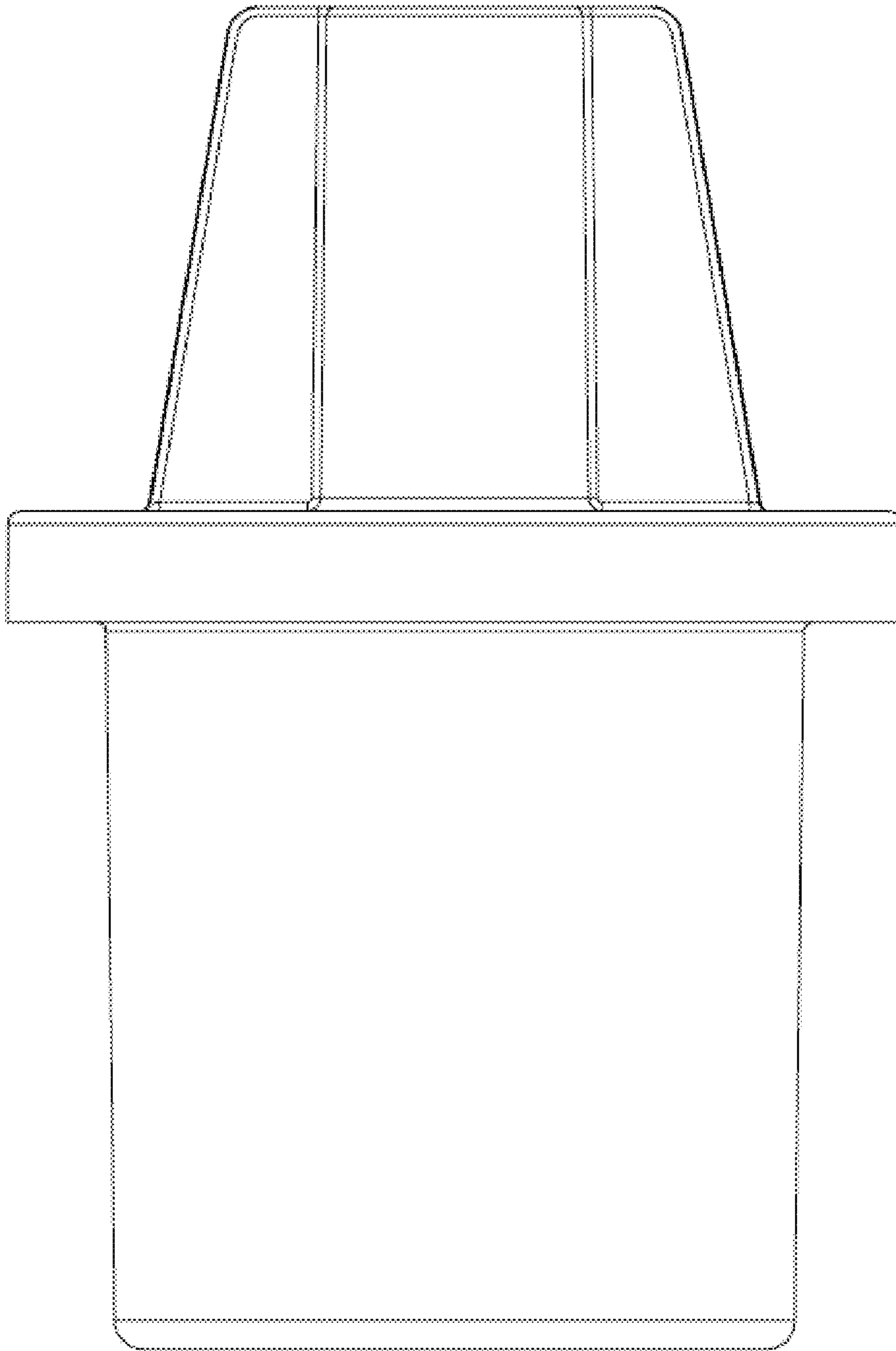


**FIG. 6**

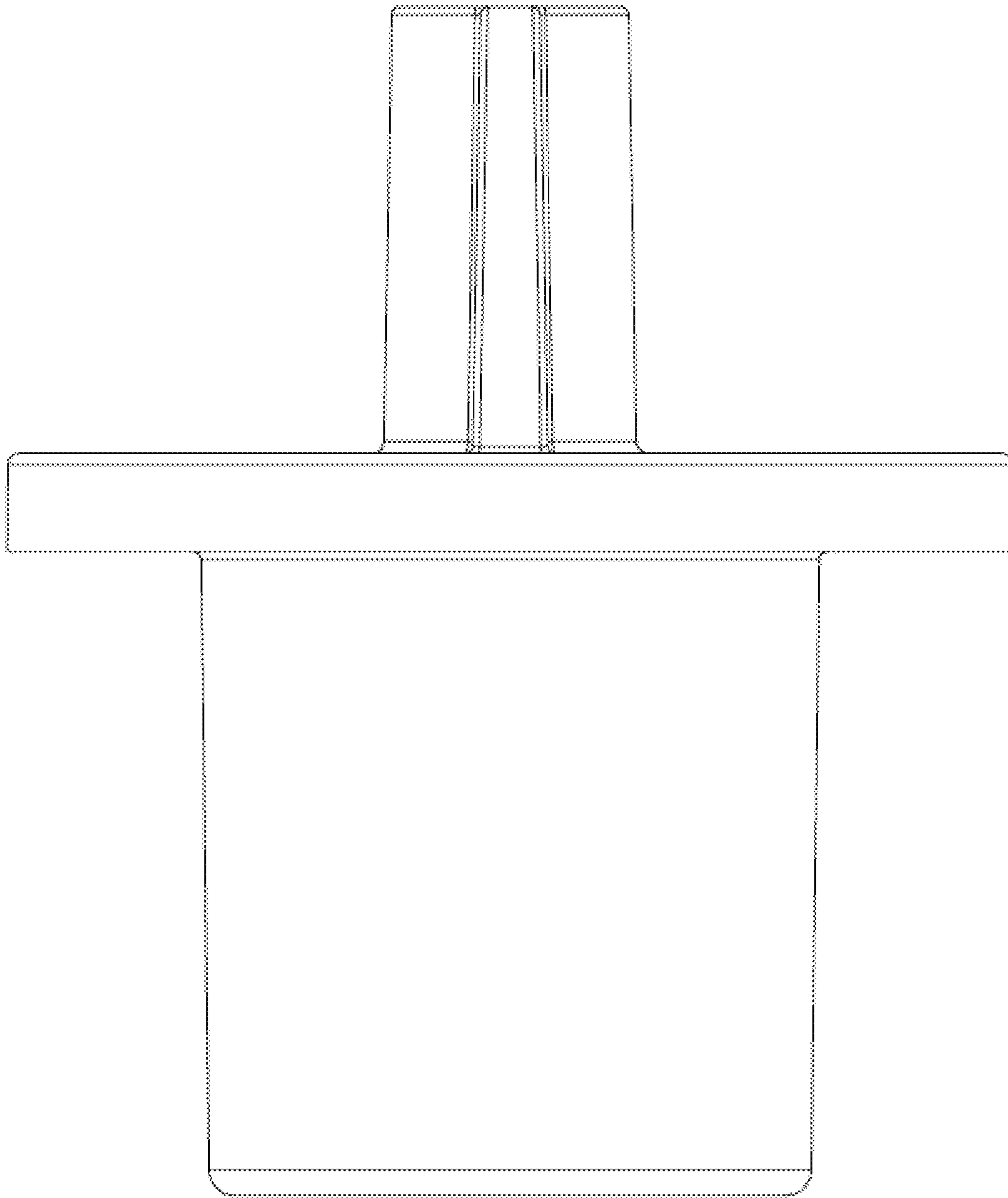




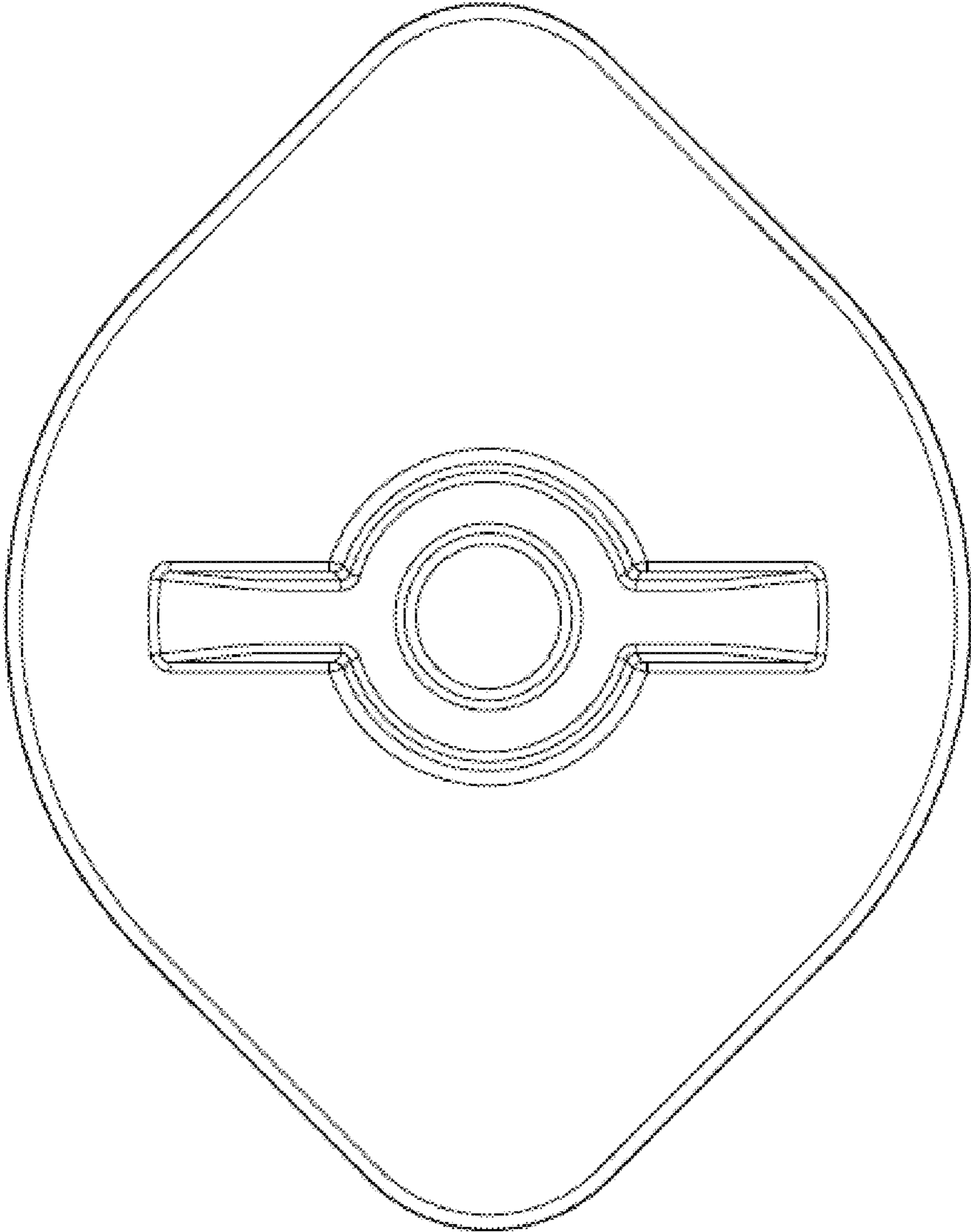
**FIG. 7**



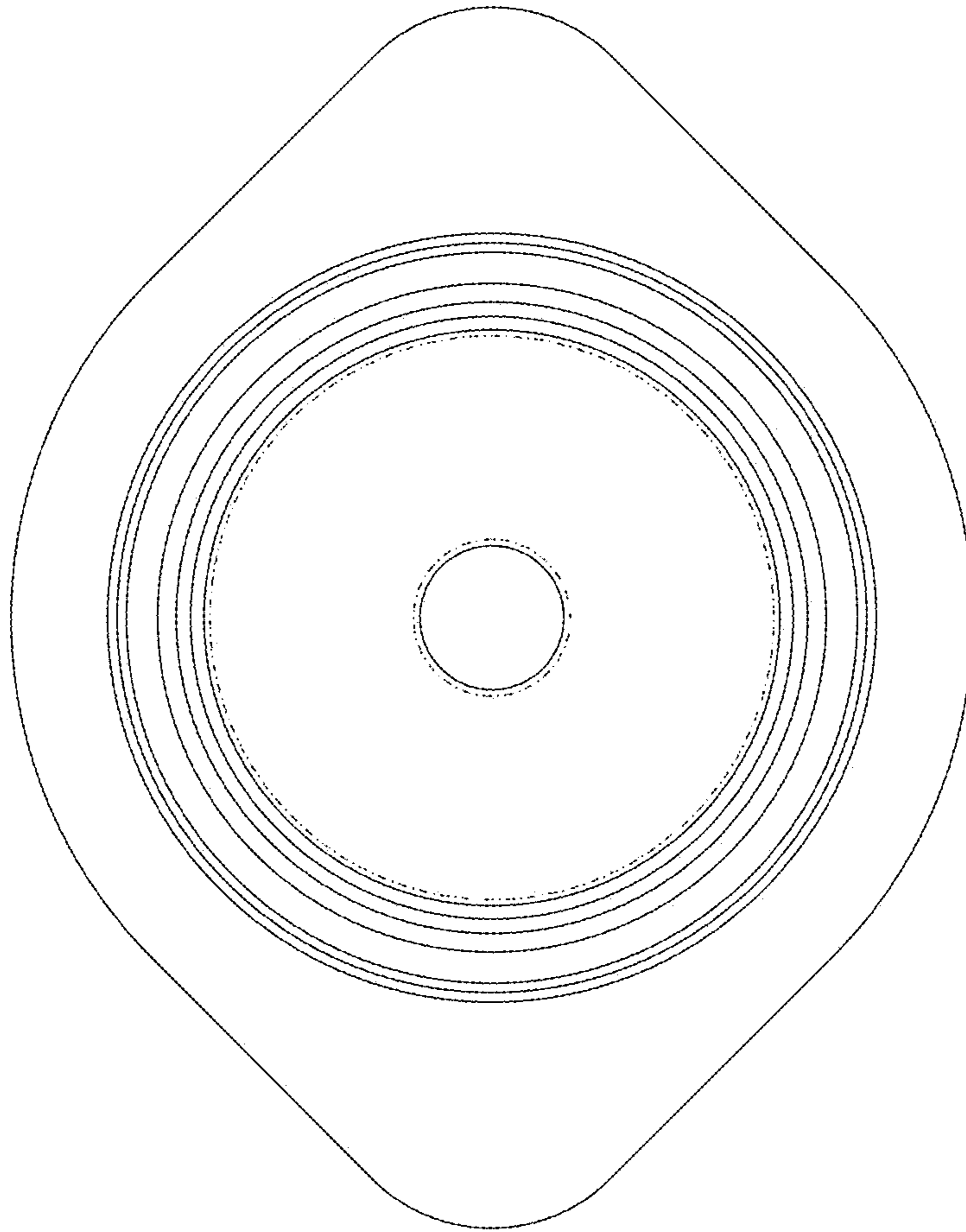
**FIG. 8**



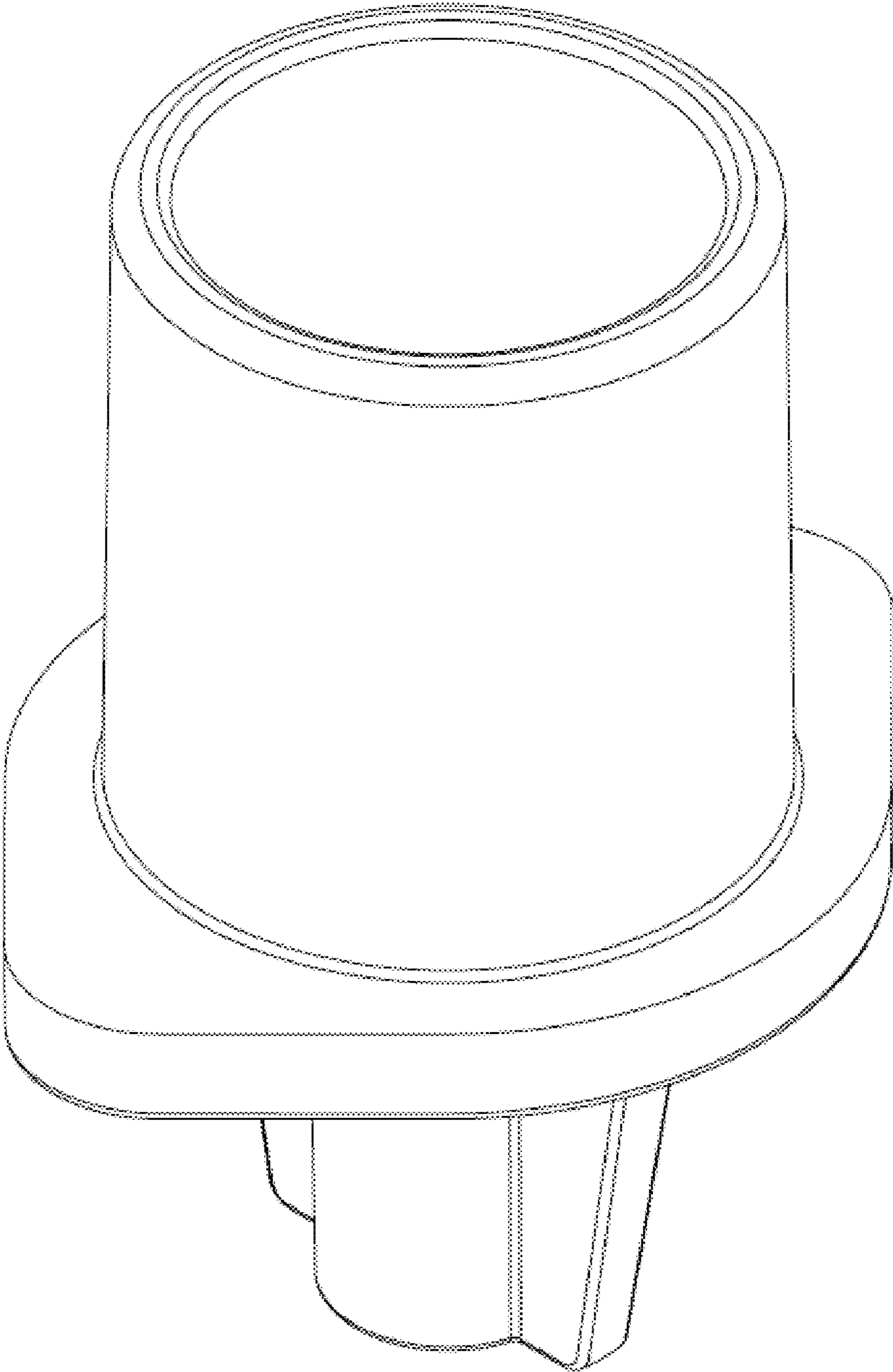
**FIG. 9**



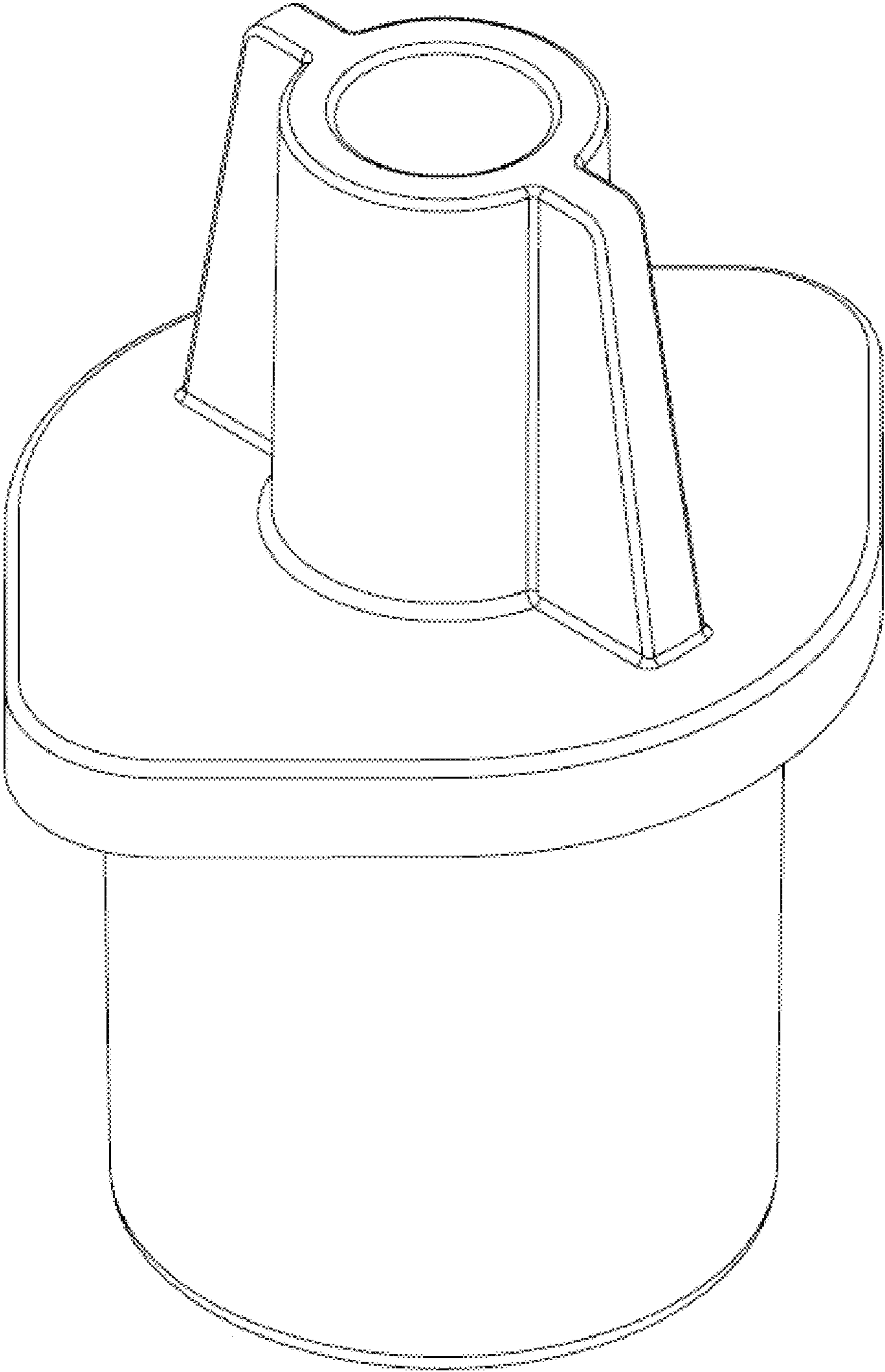
**FIG. 10**



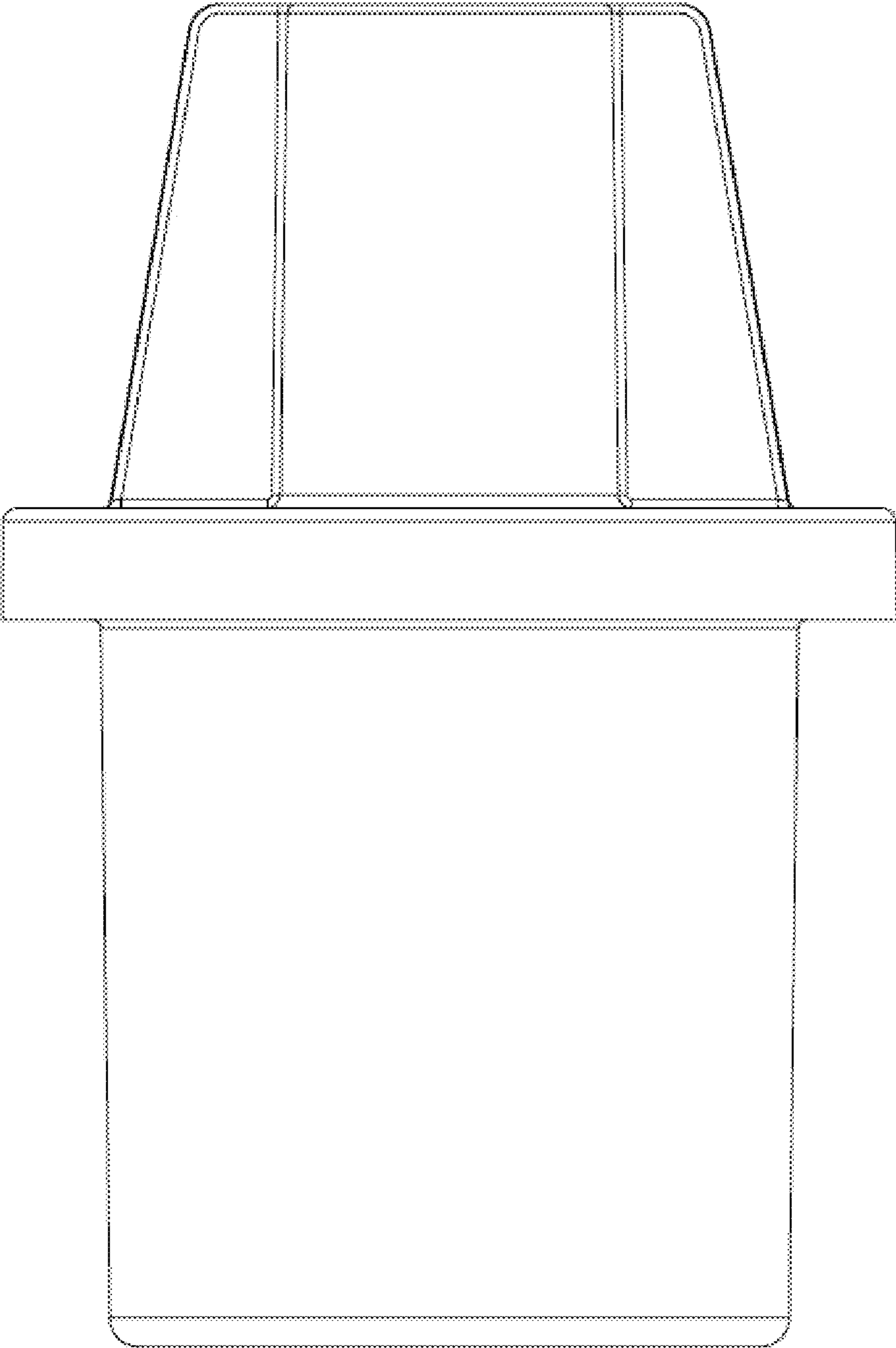
**FIG. 11**



**FIG. 12**

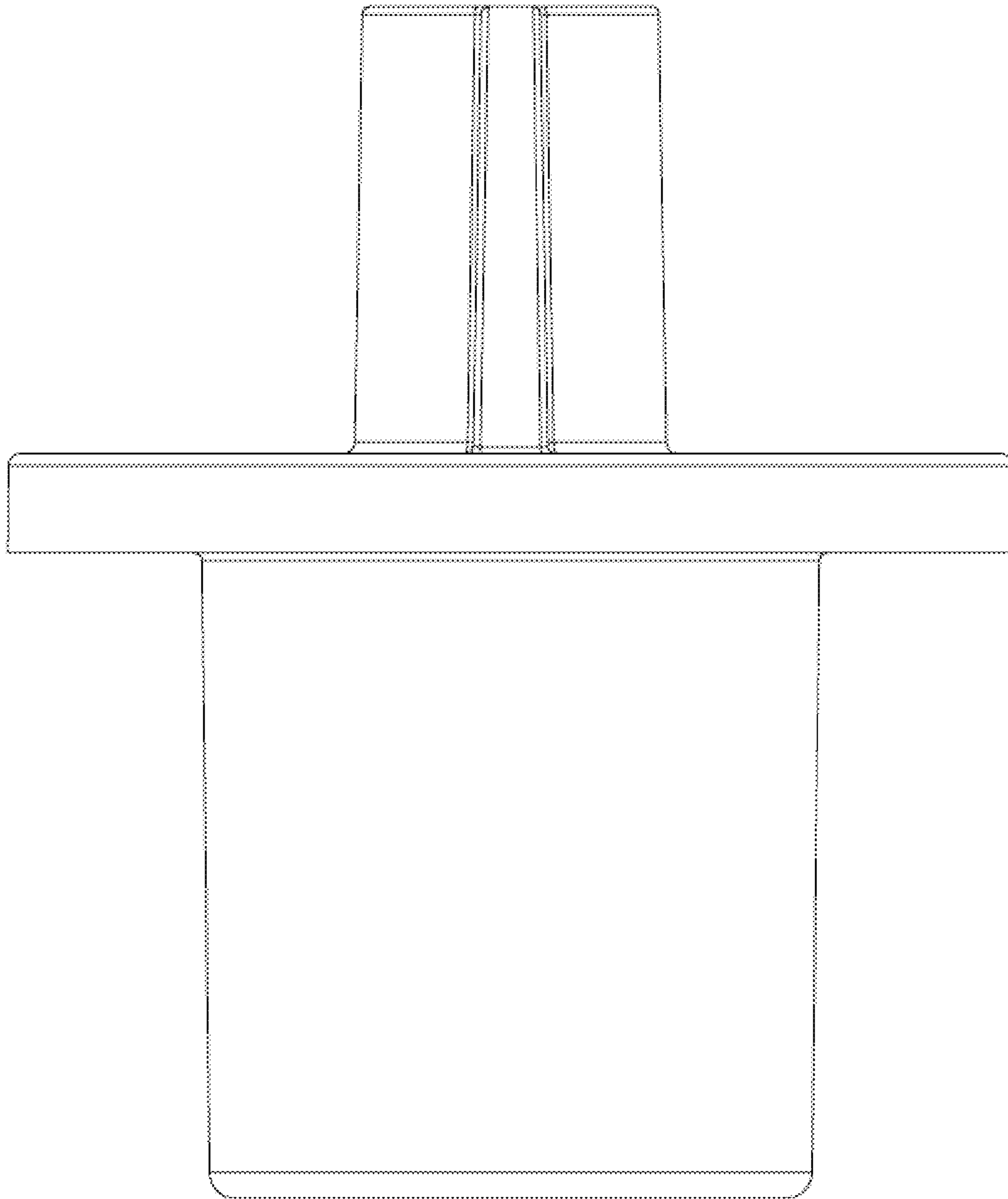


**FIG. 13**

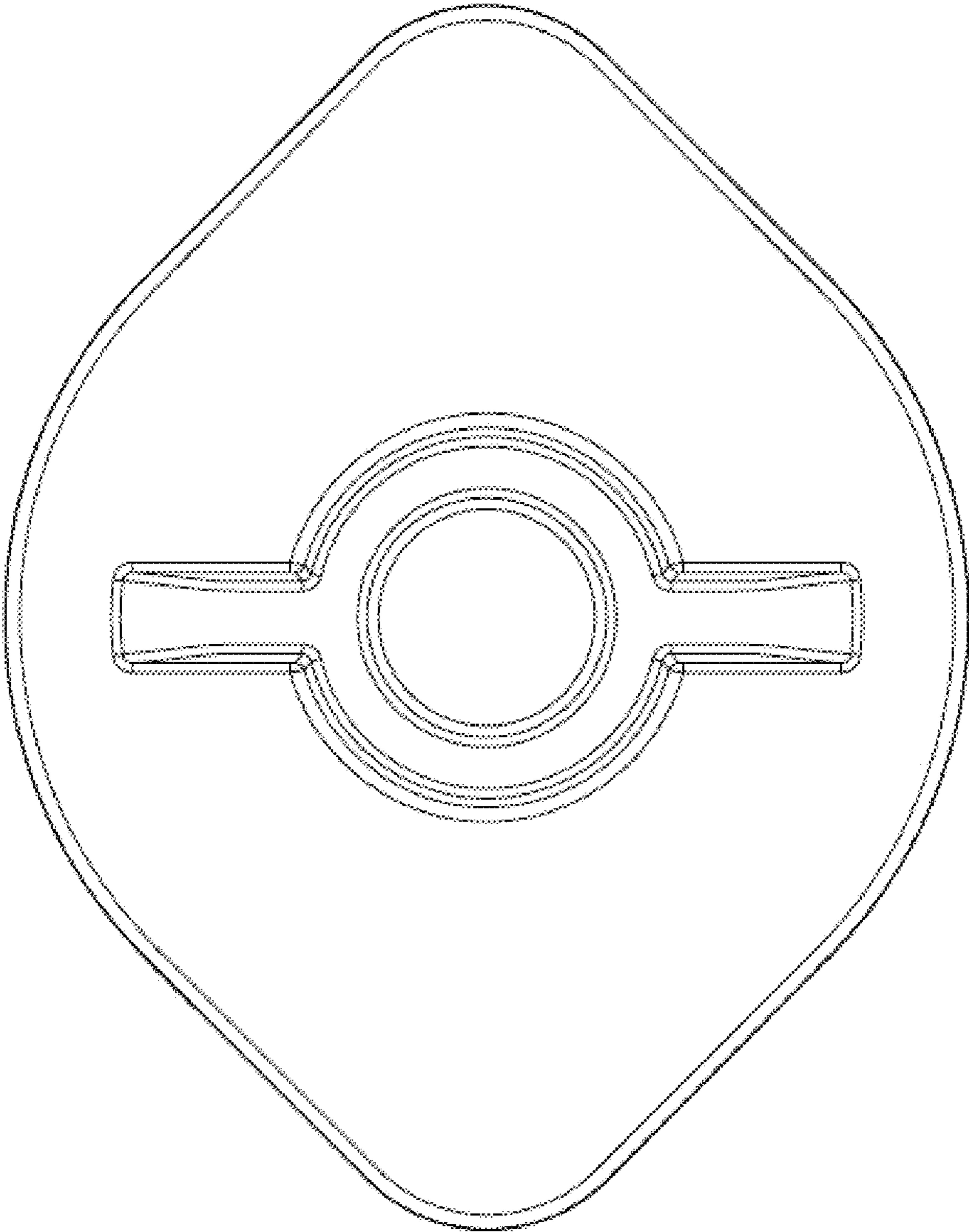


**FIG. 14**

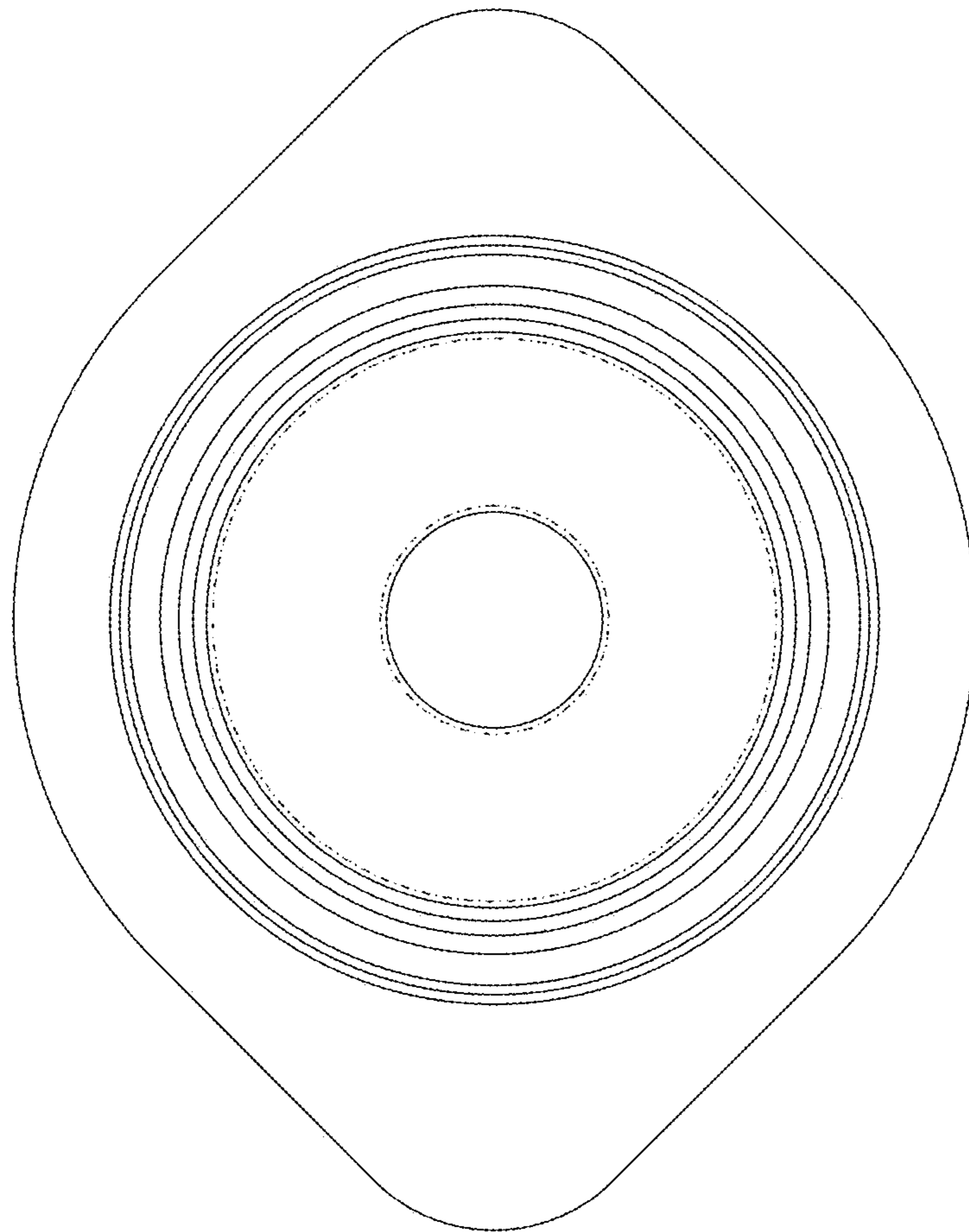




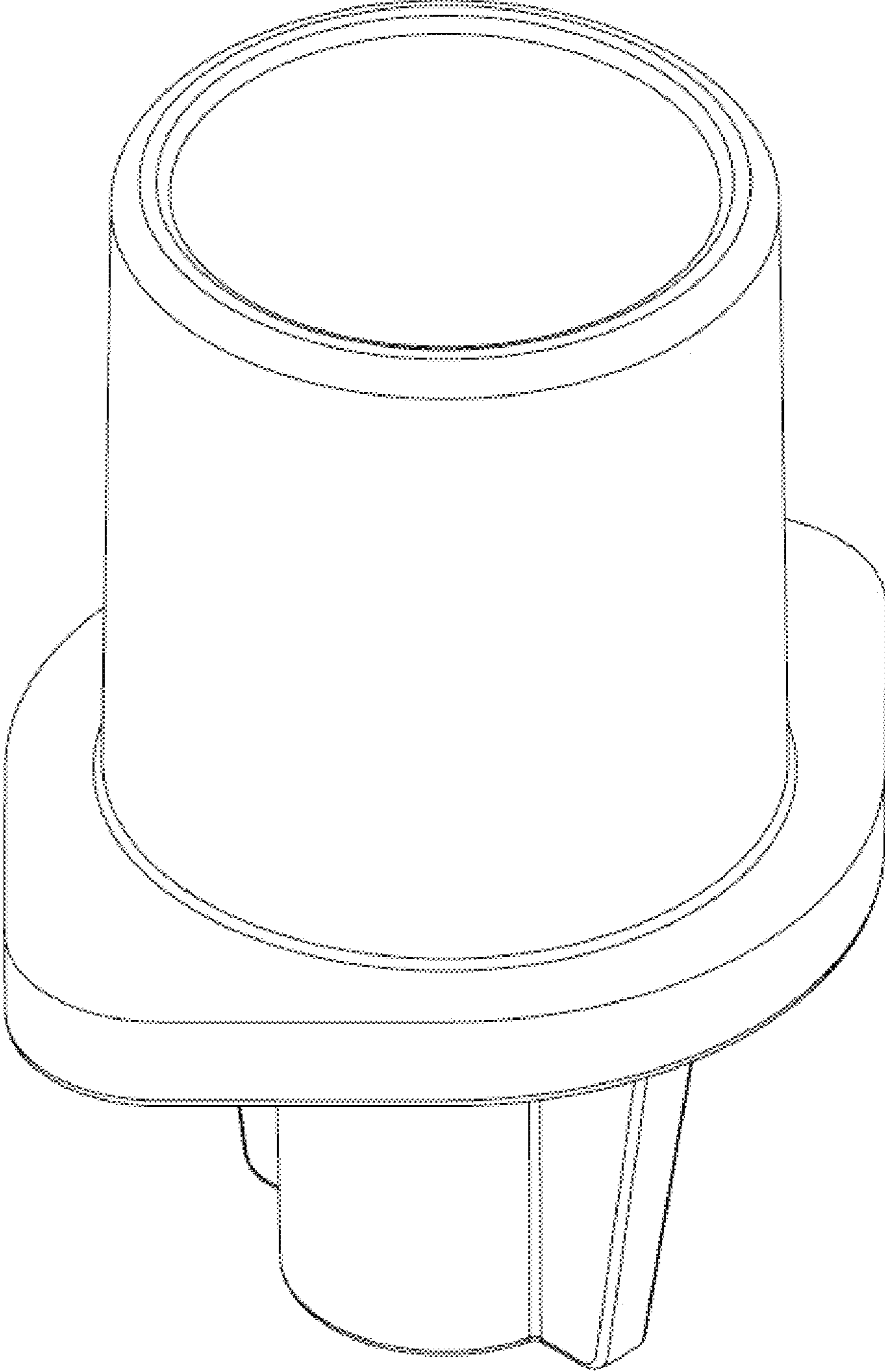
**FIG. 15**



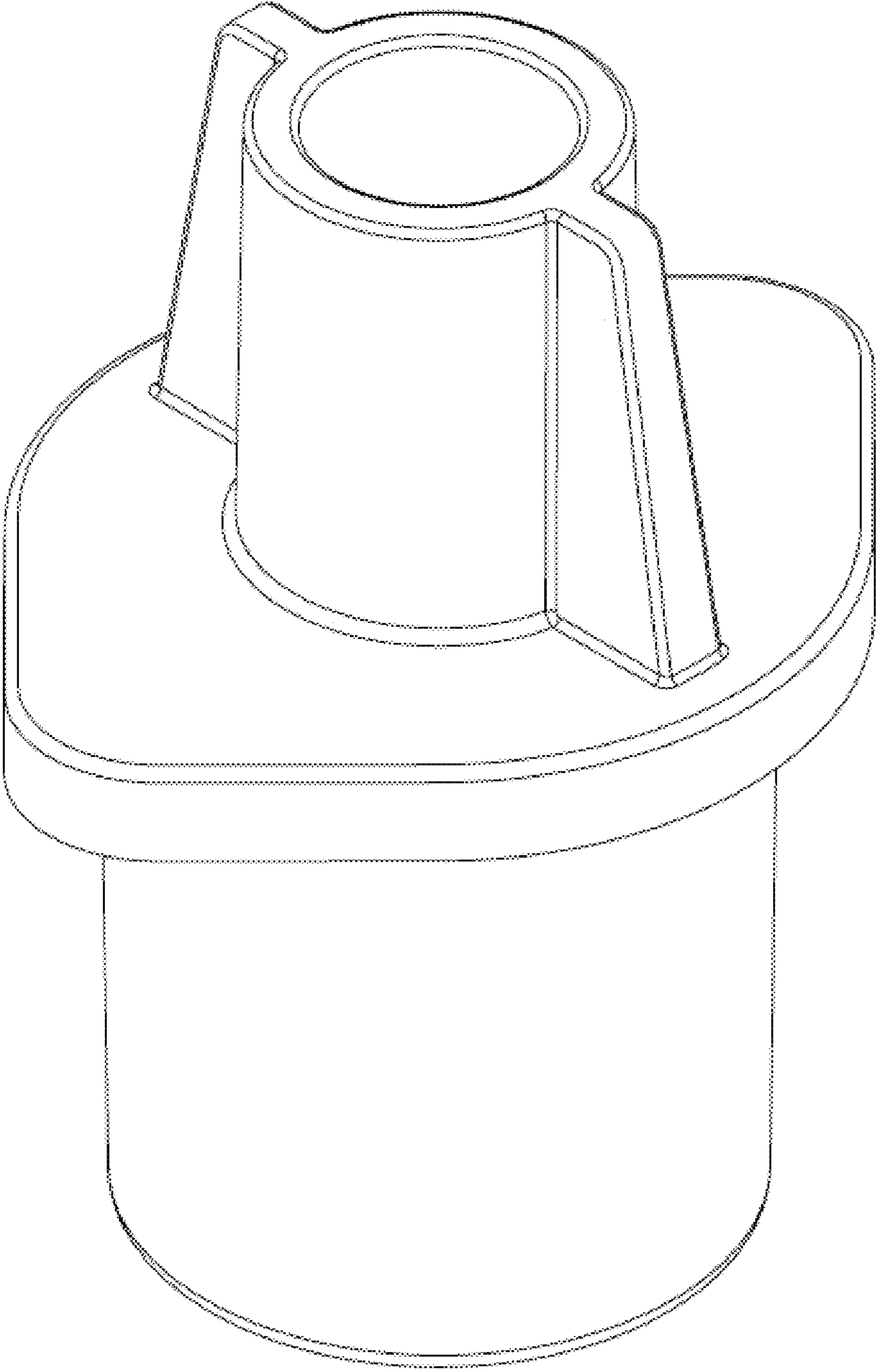
**FIG. 16**



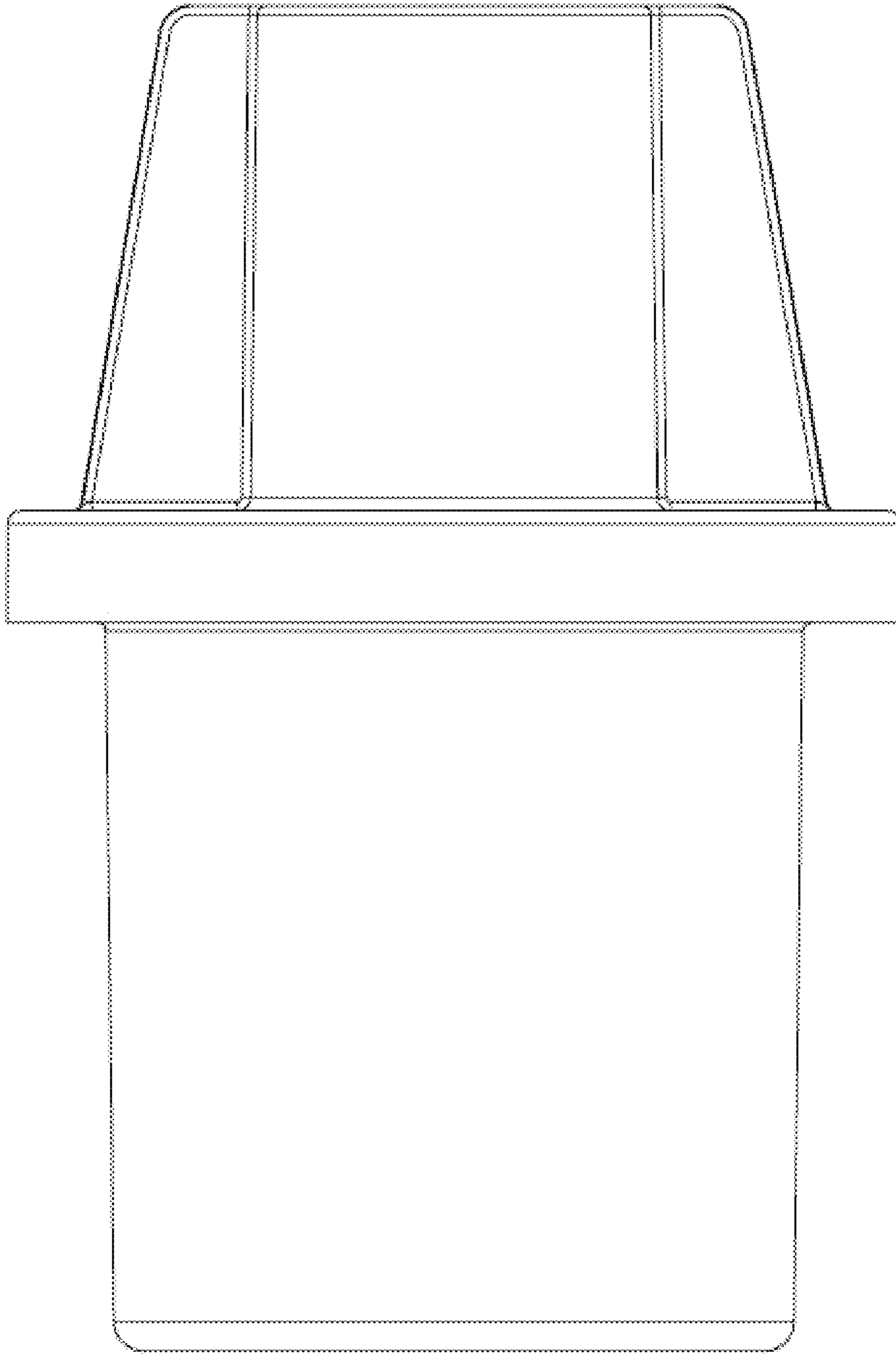
**FIG. 17**



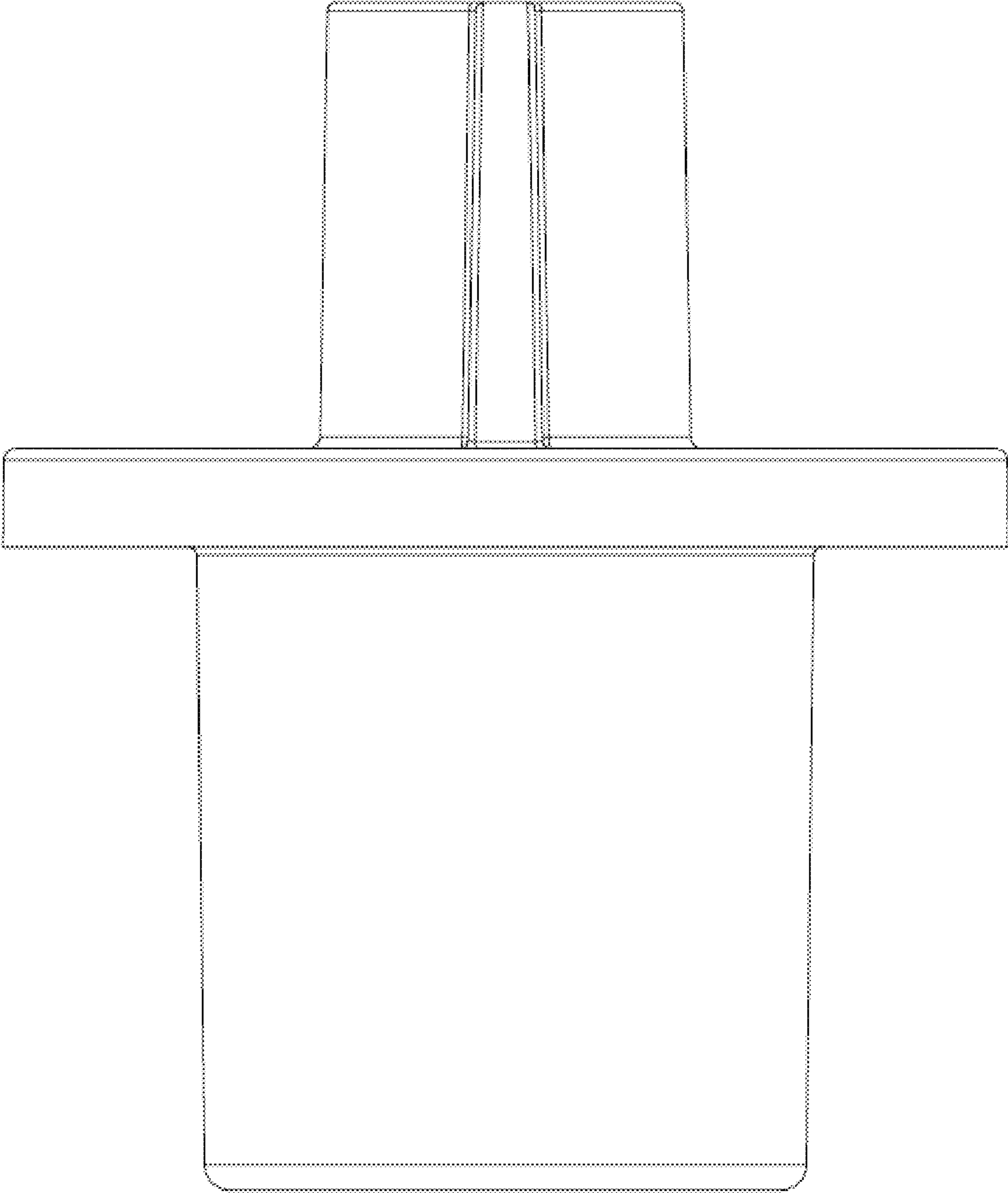
**FIG. 18**



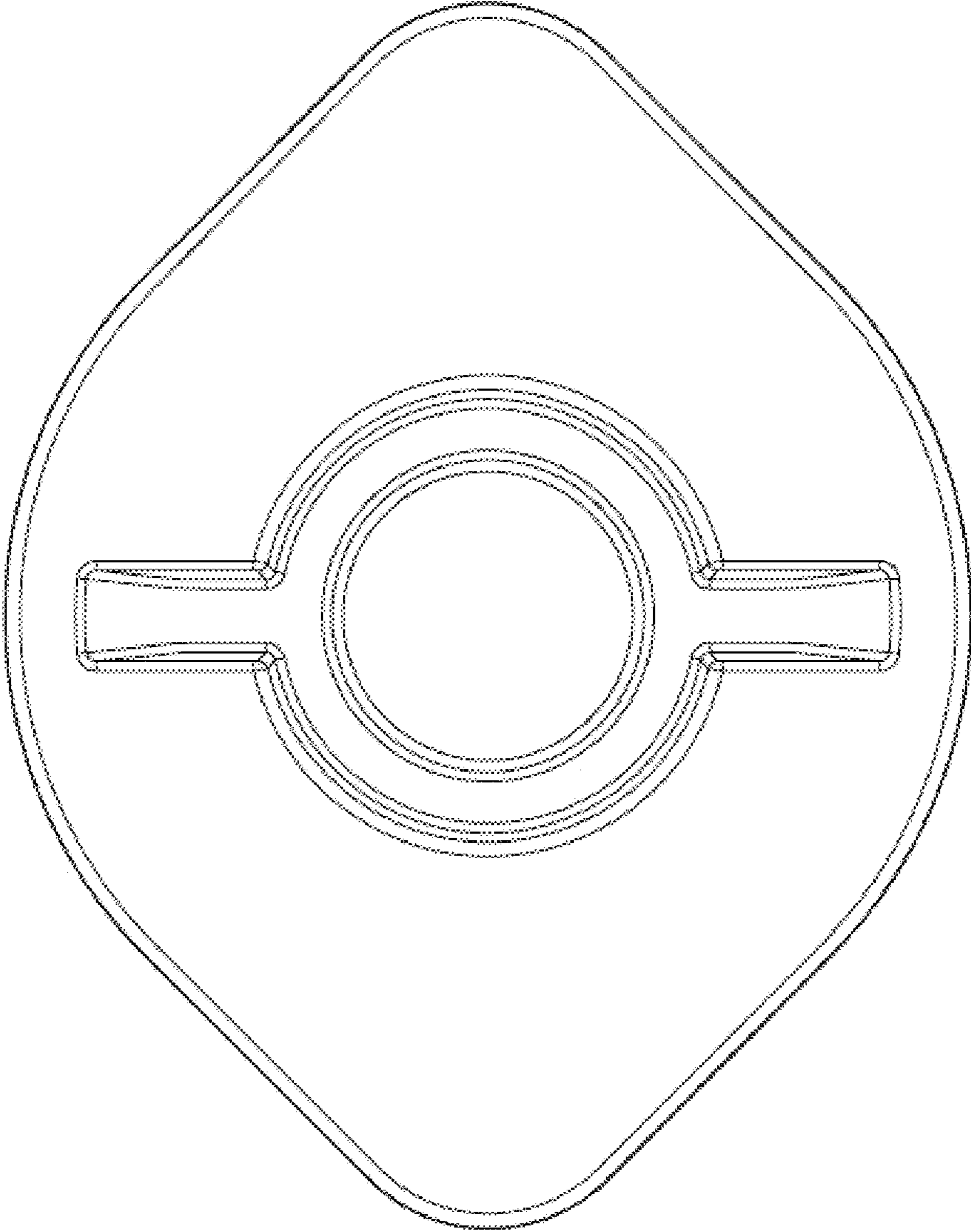
**FIG. 19**



**FIG. 20**

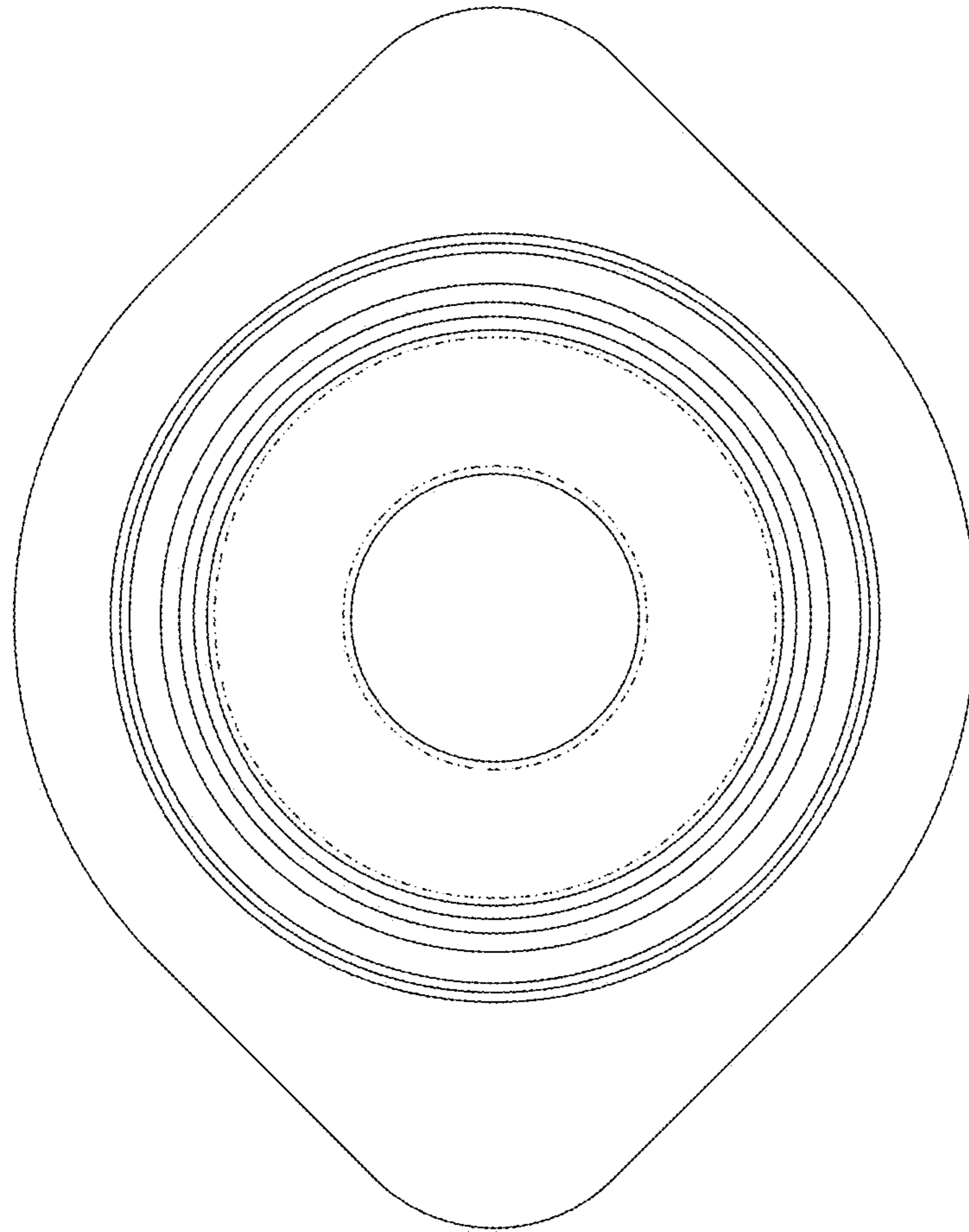


**FIG. 21**

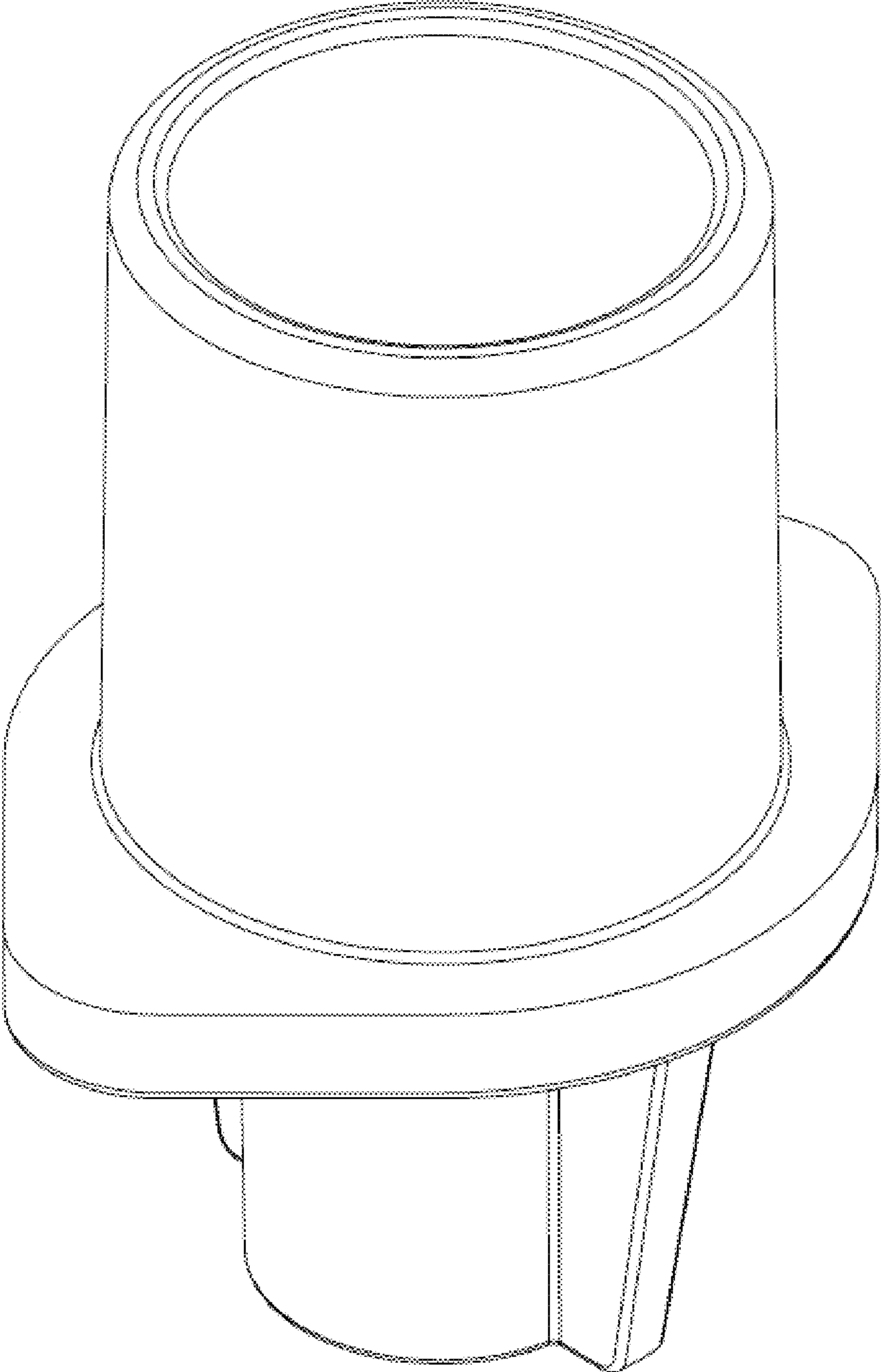


**FIG. 22**





*FIG. 23*



**FIG. 24**