



US00D895792S

(12) **United States Design Patent** (10) **Patent No.:** **US D895,792 S**  
**Ho** (45) **Date of Patent:** **\*\* Sep. 8, 2020**

(54) **DETACHABLE PLUNGER SYRINGE**

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(72) Inventor: **Stephen S Ho**, Houston, TX (US)

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

(21) Appl. No.: **29/727,232**

(22) Filed: **Mar. 9, 2020**

(51) **LOC (12) Cl.** ..... **24-02**

(52) **U.S. Cl.**  
USPC ..... **D24/112**

(58) **Field of Classification Search**  
USPC ..... D24/112-115, 108, 133, 130, 127;  
606/181, 185; 604/264, 272, 187, 181,  
604/184, 227

(Continued)

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(74) *Attorney, Agent, or Firm* — Whittaker Law Firm;  
Malcolm E. Whittaker

(57) **CLAIM**

The ornamental design for a detachable plunger syringe, as shown and described.

**DESCRIPTION**

FIG. 1 illustrates a perspective view of a detachable plunger syringe.

FIG. 2 illustrates a partially exploded perspective view of the detachable plunger syringe.

FIG. 3 illustrates an exploded perspective view of the detachable plunger syringe.

FIG. 4 illustrates a front view of the detachable plunger syringe.

FIG. 5 illustrates a right side view of the detachable plunger syringe. The left side view is a mirror image.

FIG. 6 illustrates a rear view of the detachable plunger syringe.

FIG. 7 illustrates a top view of the detachable plunger syringe.

FIG. 8 illustrates a bottom view of the detachable plunger syringe.

FIG. 9 illustrates a front view of a reservoir barrel of the detachable plunger syringe. The rear view is a mirror image.

FIG. 10 illustrates a right side view of the reservoir barrel of the detachable plunger syringe. The left side view is a mirror image of the right side view of the reservoir barrel of the detachable plunger syringe.

FIG. 11 illustrates a bottom view of the reservoir barrel of the detachable plunger syringe.

FIG. 12 illustrates a top view of the reservoir barrel of the detachable plunger syringe.

FIG. 13 illustrates a front view of a plunger of the detachable plunger syringe. The rear view is a mirror image.

FIG. 14 illustrates a right side view of the plunger of the detachable plunger syringe. The left side view is a mirror image.

FIG. 15 illustrates a top view of the plunger of the detachable plunger syringe.

FIG. 16 illustrates a bottom view of the plunger of the detachable plunger syringe.

FIG. 17 illustrates a front view of a nut of the detachable plunger syringe. The rear view, the left view, and the right view are mirror images.

FIG. 18 illustrates a top view of the nut of the detachable plunger syringe.

FIG. 19 illustrates a bottom view of the nut of the detachable plunger syringe.

FIG. 20 illustrates a front view of a fitting of the detachable plunger syringe. FIG. 20 also illustrates three clips used to temporarily immobilize the fitting during cell collection.

FIG. 21 illustrates a right view of the fitting of the detachable plunger syringe.

FIG. 22 illustrates a rear view of the fitting of the detachable plunger syringe.

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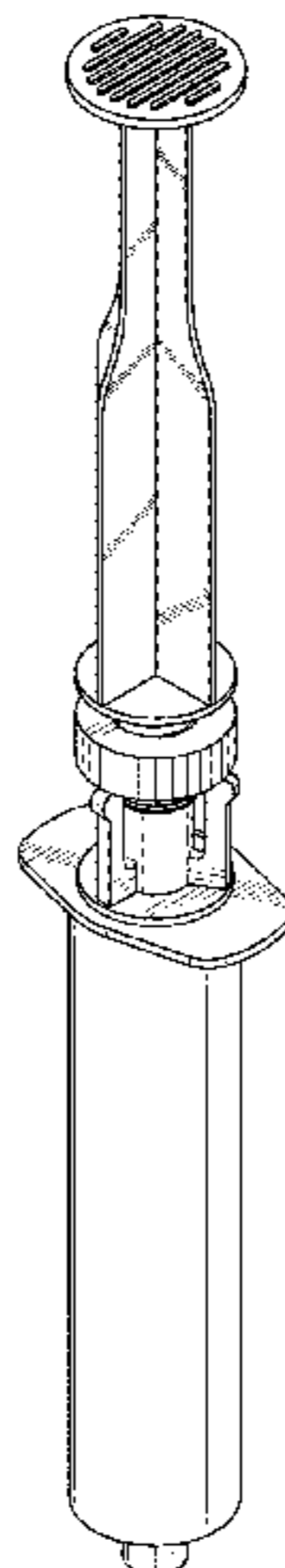


FIG. 23 illustrates a top view of the fitting of the detachable plunger syringe.

FIG. 24 illustrates a bottom view of the fitting of the detachable plunger syringe. FIG. 24 also illustrates the three clips used to temporarily immobilize the fitting during cell collection.

FIG. 25 illustrates a front view of a seal of the detachable plunger syringe. The rear view, the left side view, and the right side views are each a mirror image of the front view of the detachable plunger syringe.

FIG. 26 illustrates a bottom view of the seal of the detachable plunger syringe; and,

FIG. 27 illustrates a top view of the seal of the detachable plunger syringe.

The broken line showing of parts of the drawings is included for the purpose of illustrating use and environment and forms no part of the claimed design.

**1 Claim, 7 Drawing Sheets**

(58) **Field of Classification Search**

CPC ..... A61M 5/178; A61M 3/00; A61M 5/20;  
A61M 5/31; A61M 5/3146; A61M  
5/3129; A61M 5/3148; A61M 5/315  
See application file for complete search history.

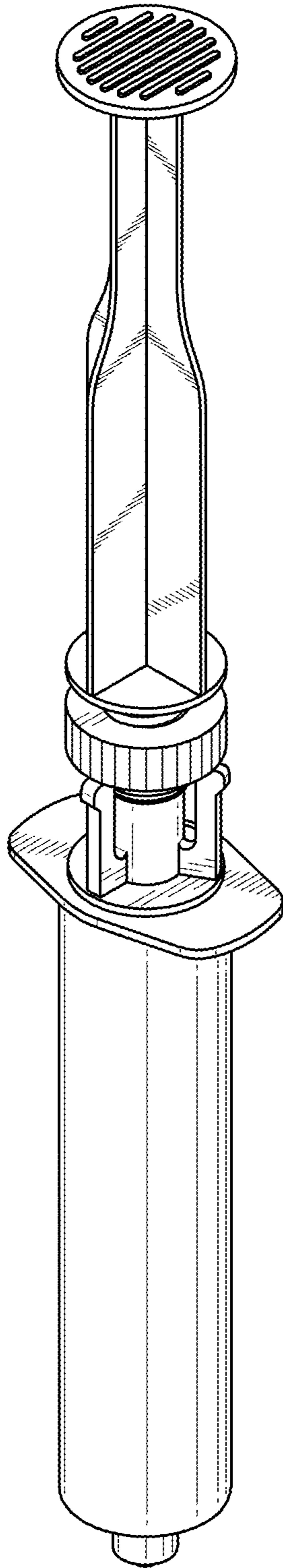
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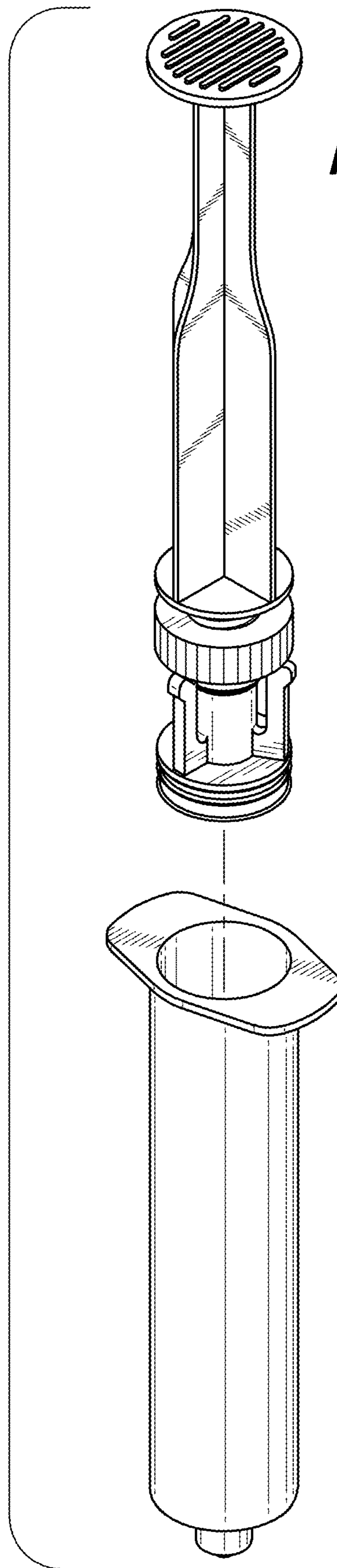
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D880,692	S	*	4/2020	Momose	.....	D24/130
D889,639	S	*	7/2020	Johnson	.....	D24/114

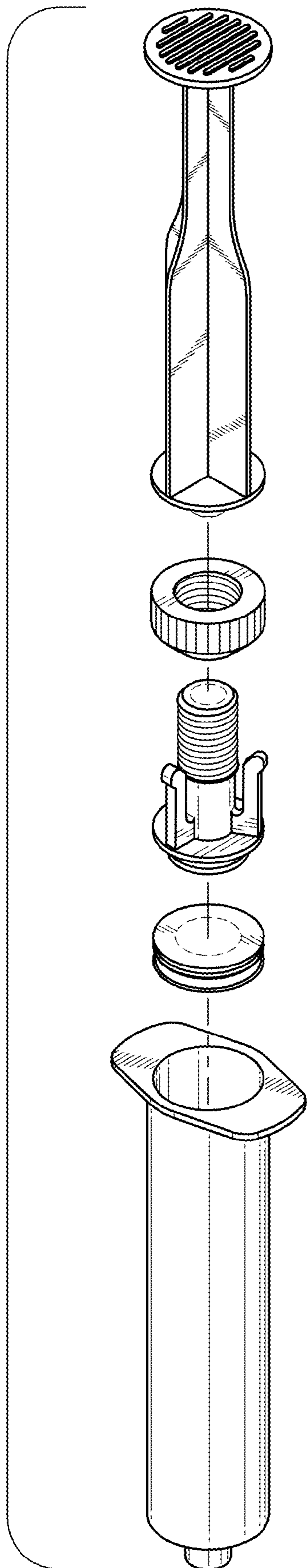
\* cited by examiner

**FIG. 1**

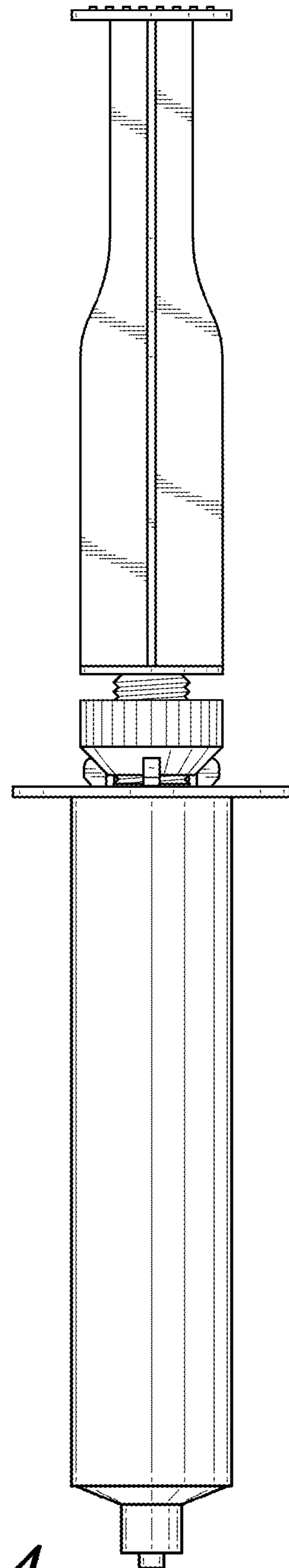


**FIG. 2**

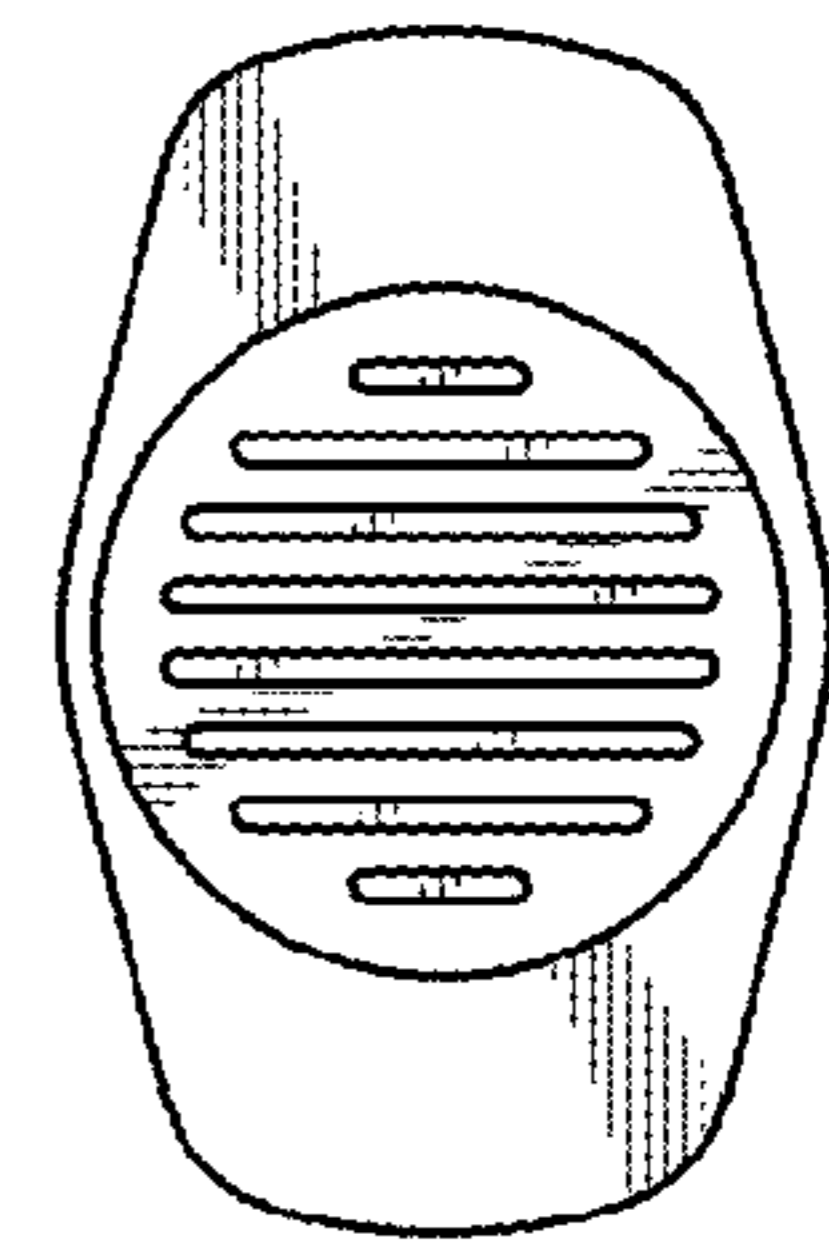
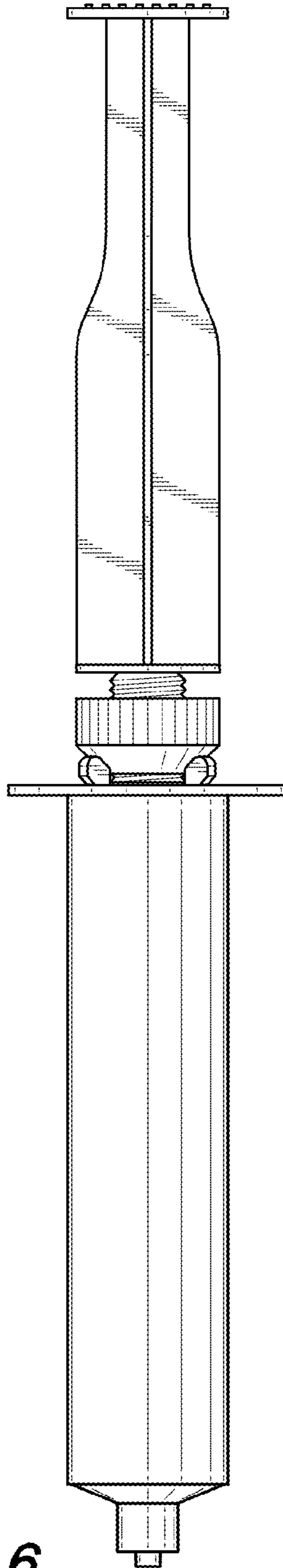
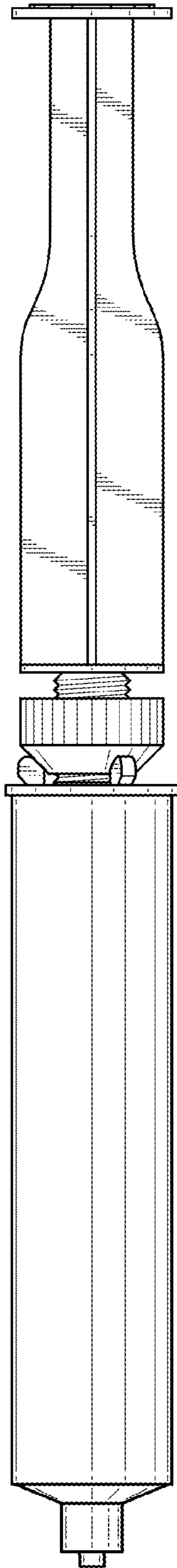




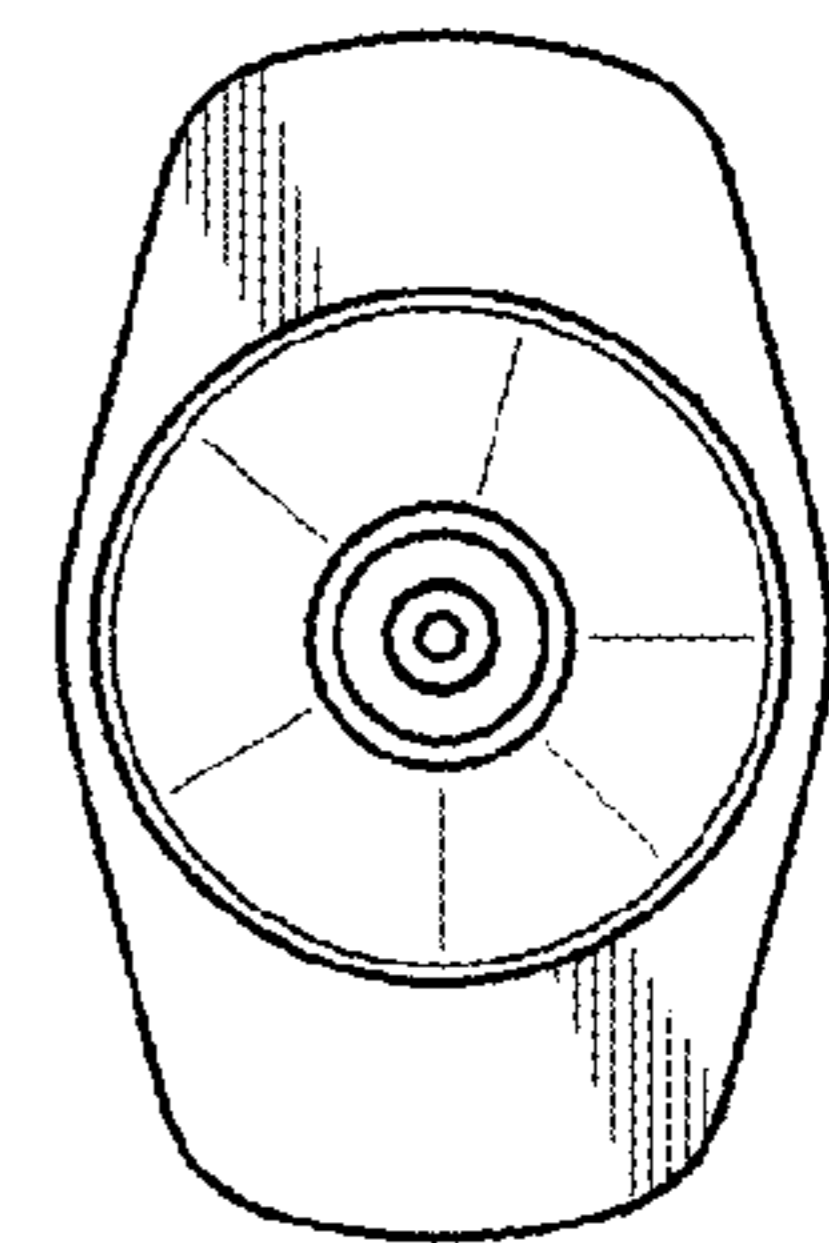
**FIG. 3**



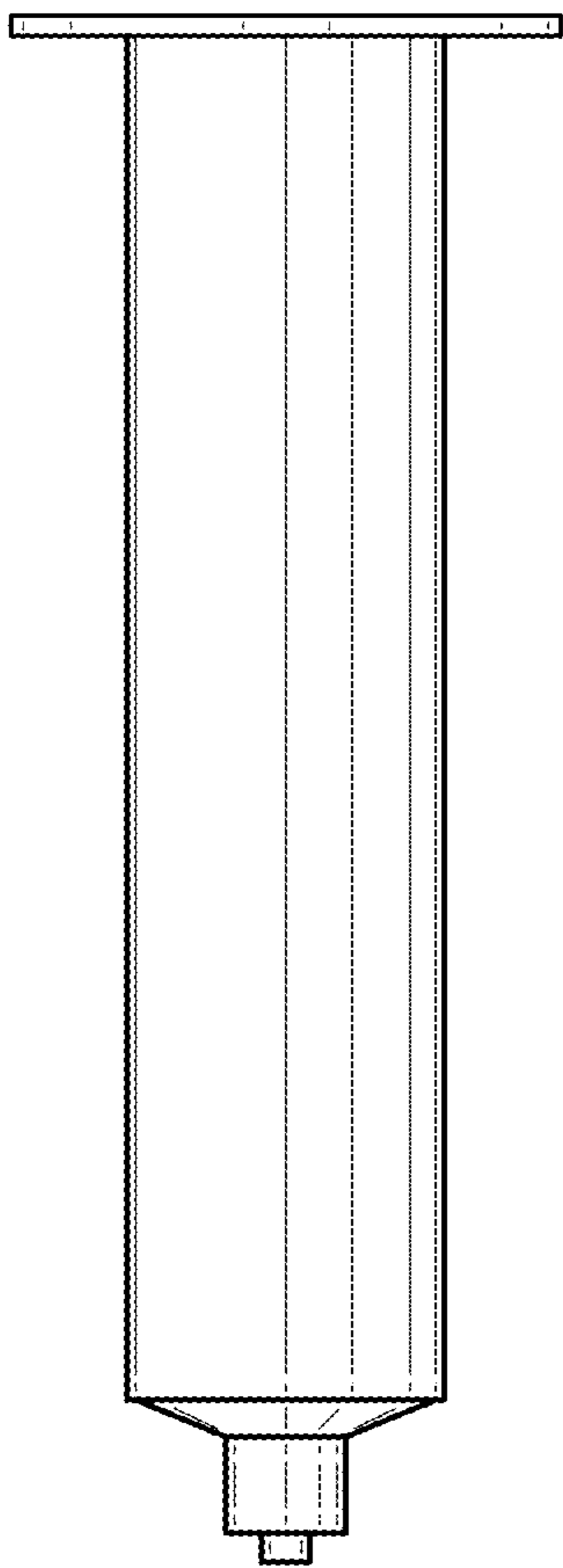
**FIG. 4**



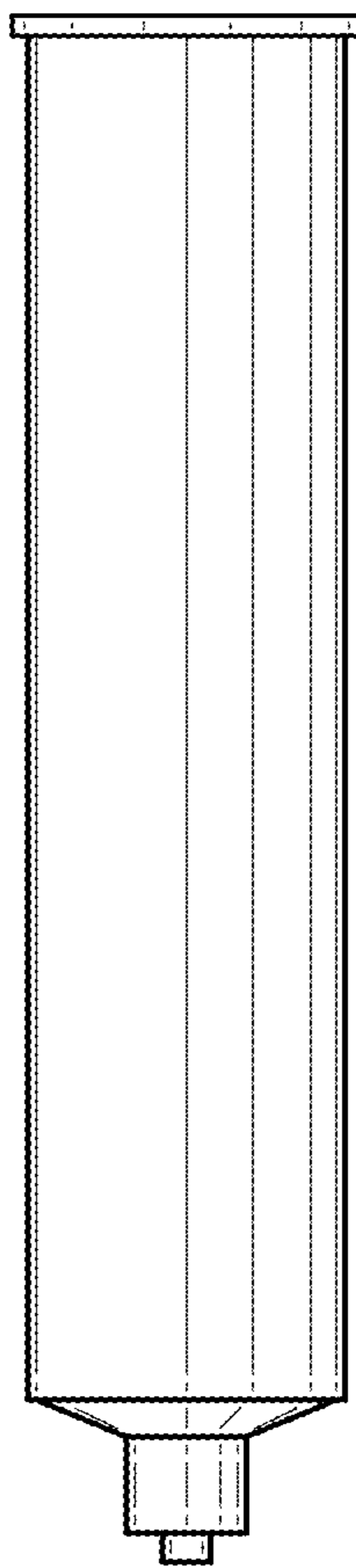
*FIG. 7*



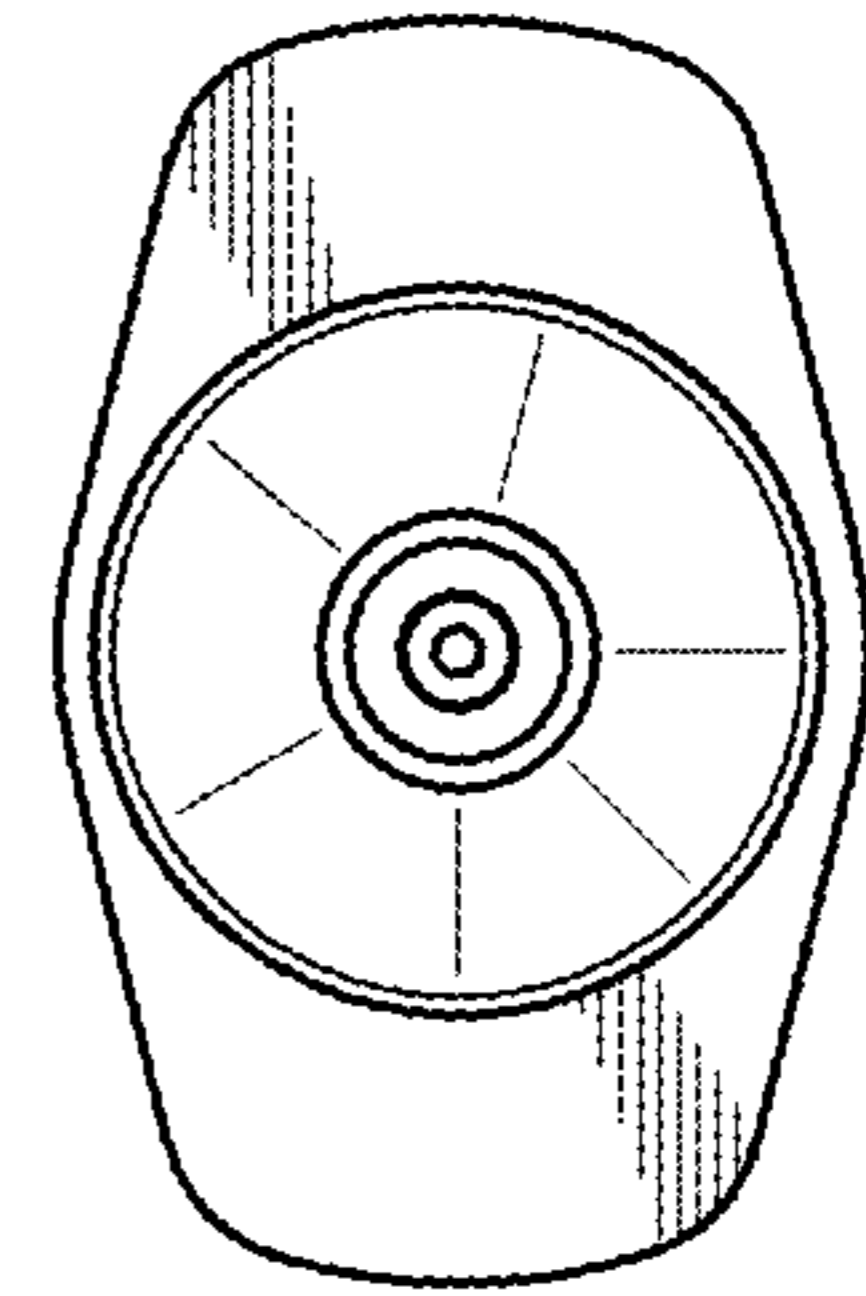
*FIG. 8*



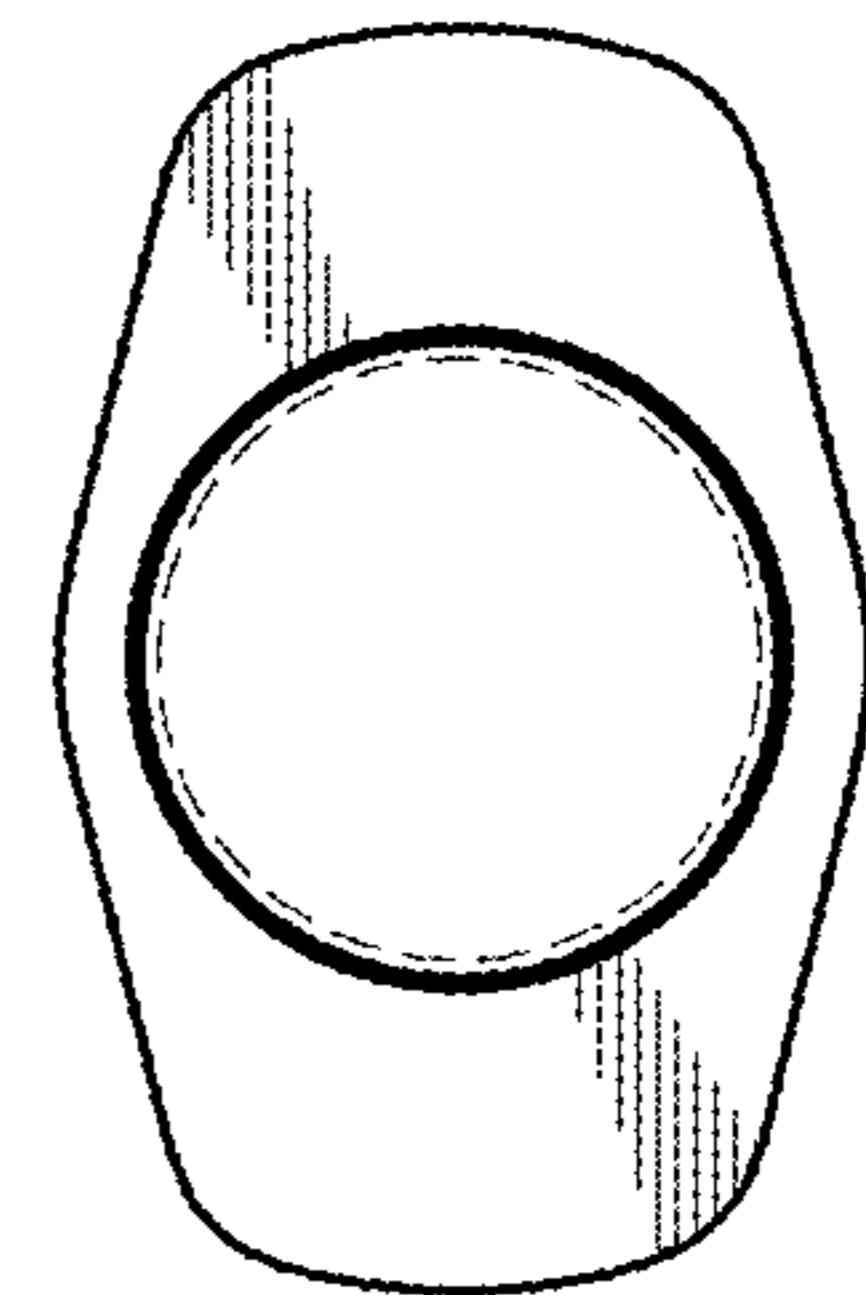
**FIG. 9**



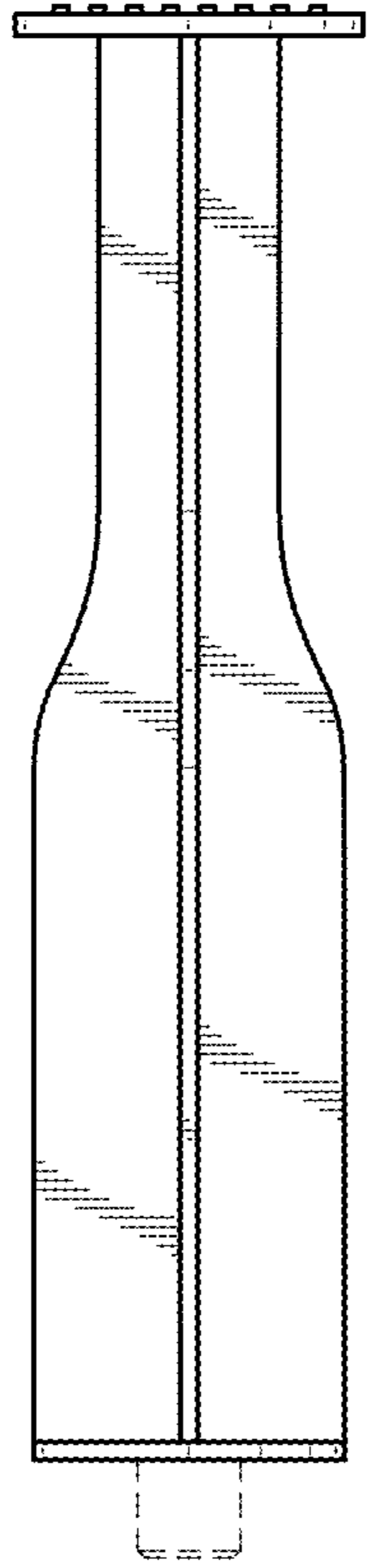
**FIG. 10**



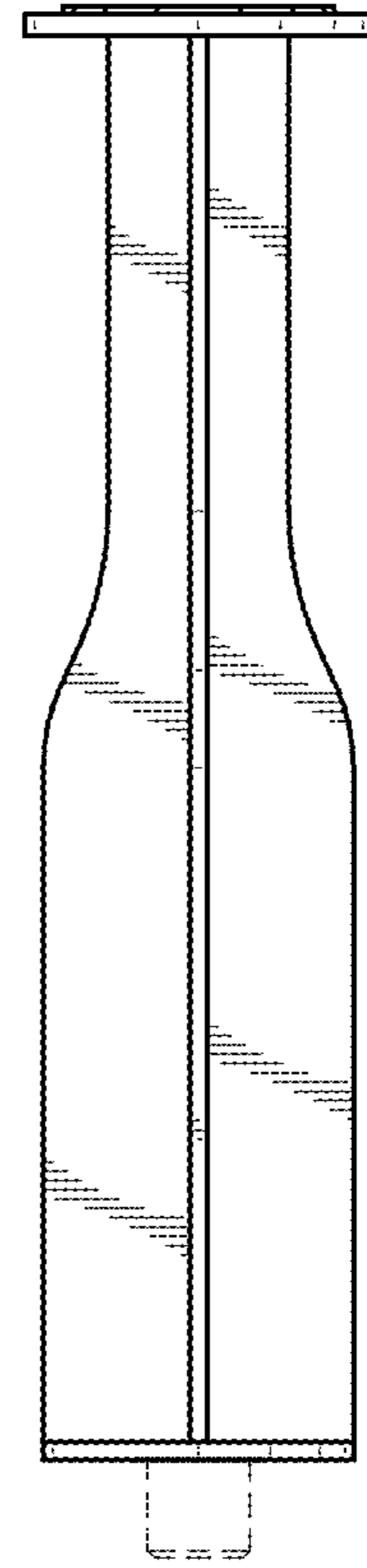
**FIG. 11**



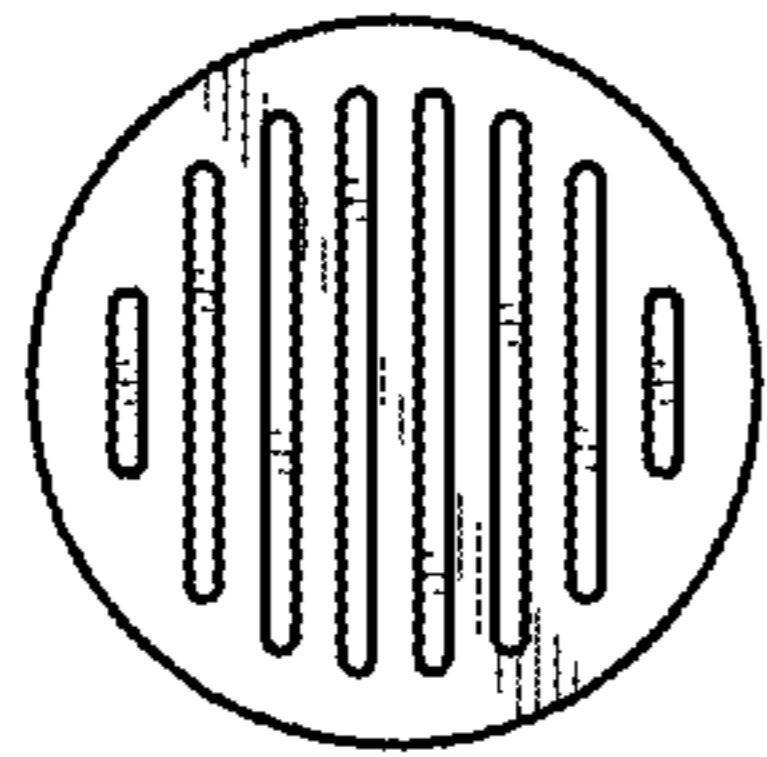
**FIG. 12**



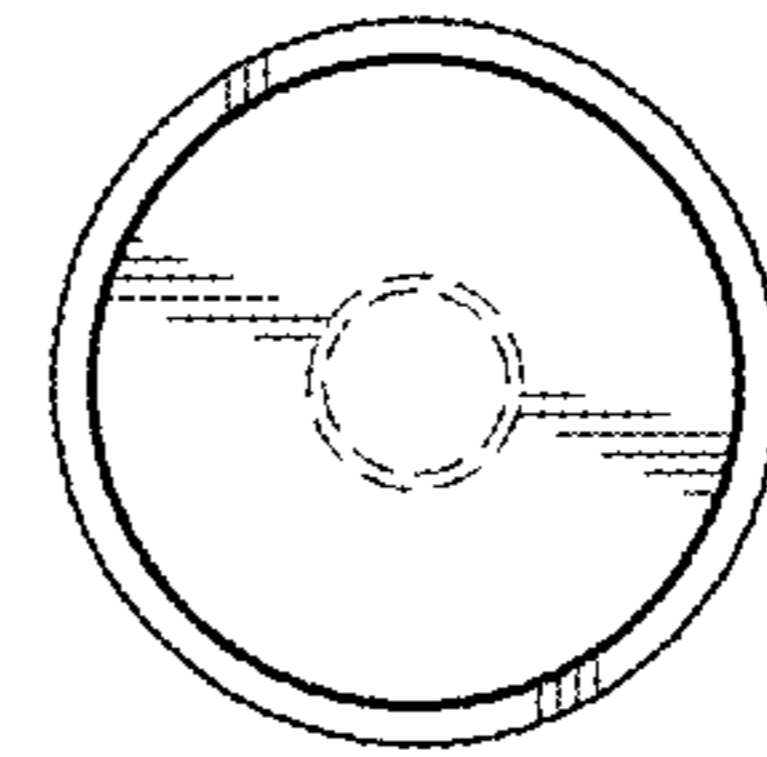
**FIG. 13**



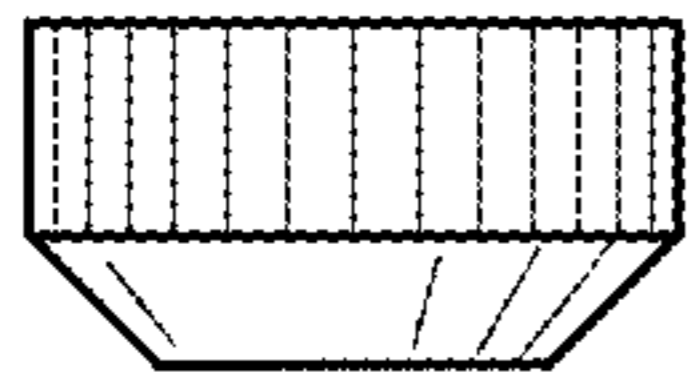
**FIG. 14**



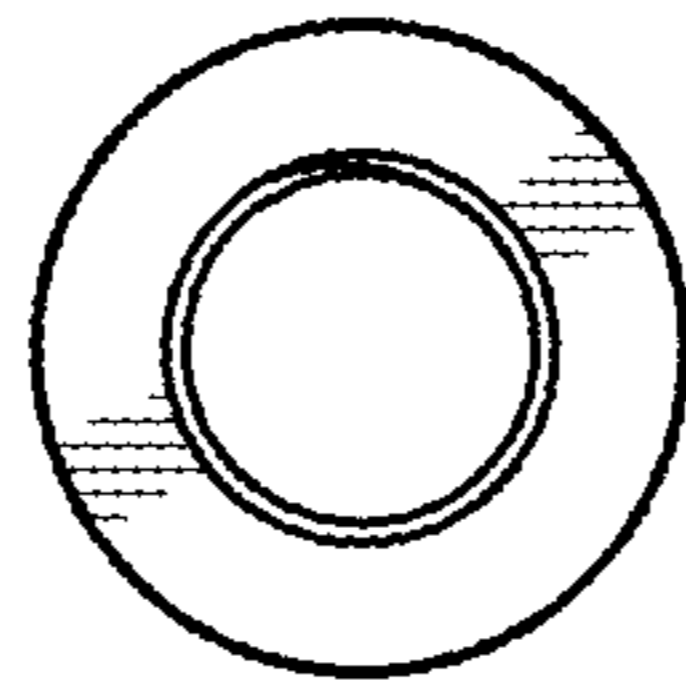
**FIG. 15**



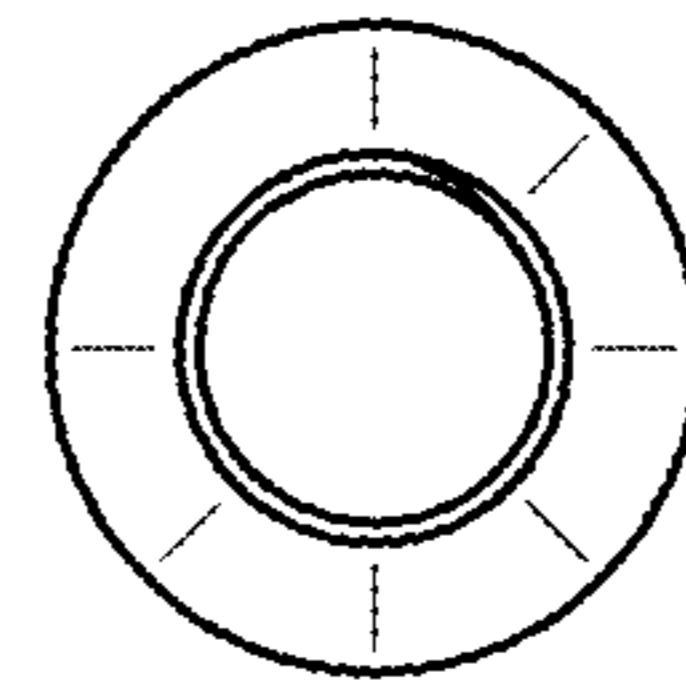
**FIG. 16**



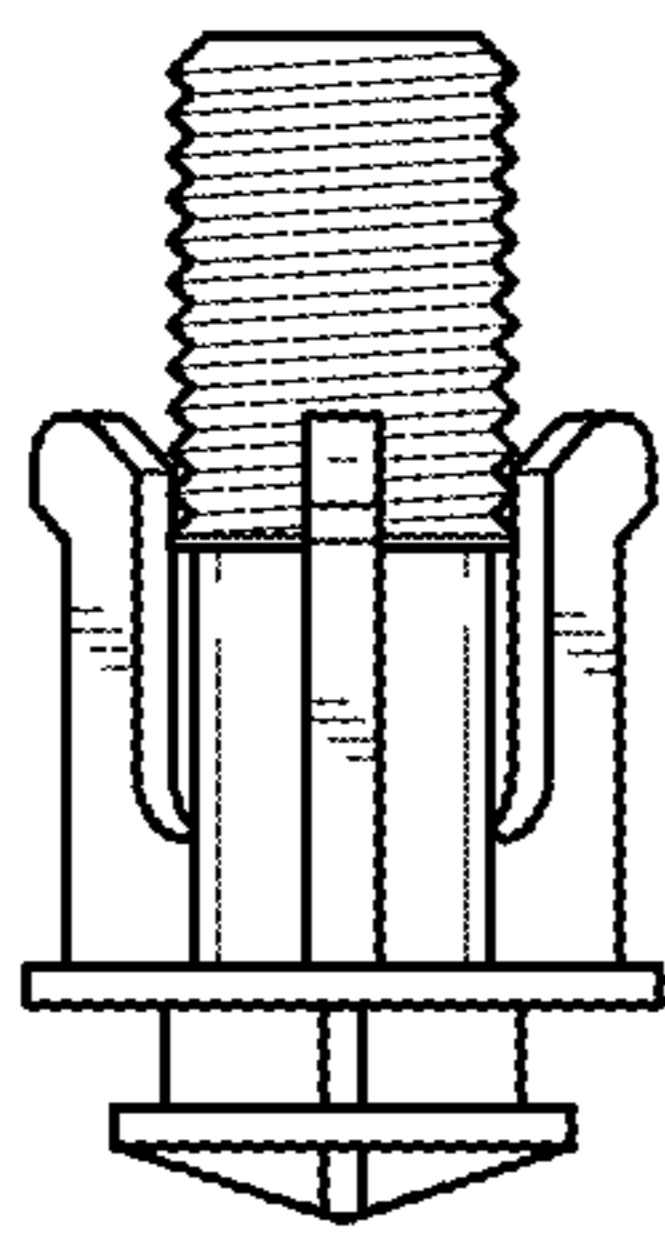
**FIG. 17**



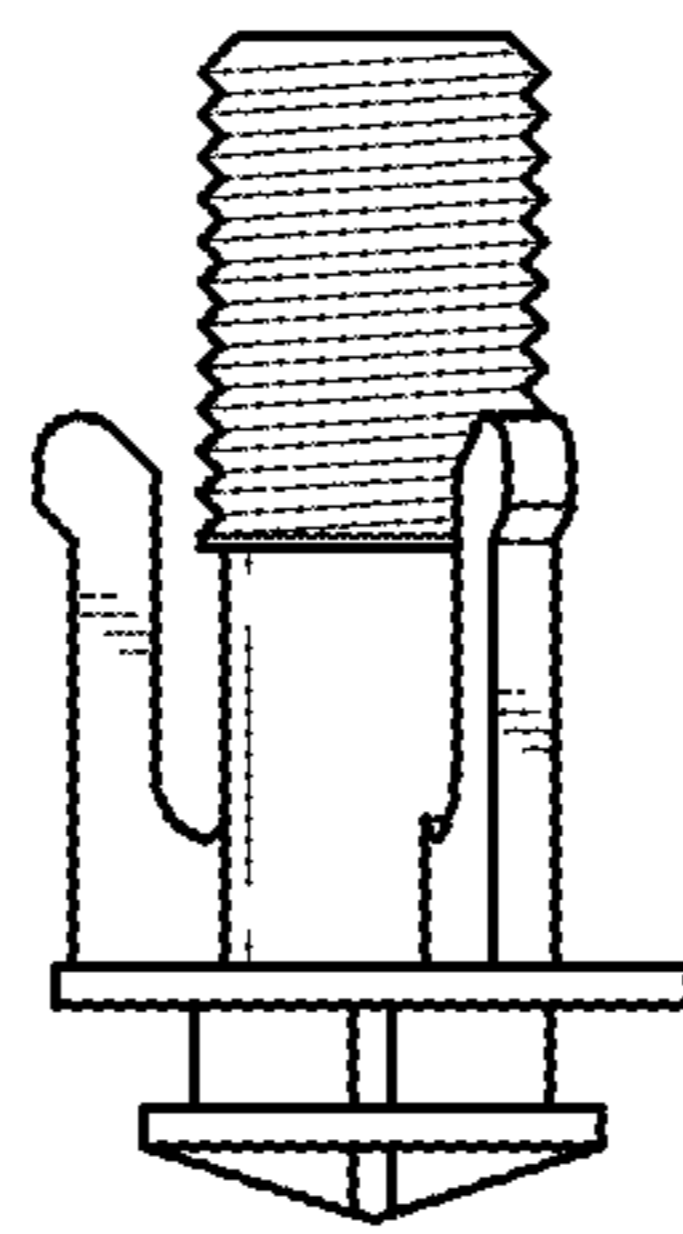
**FIG. 18**



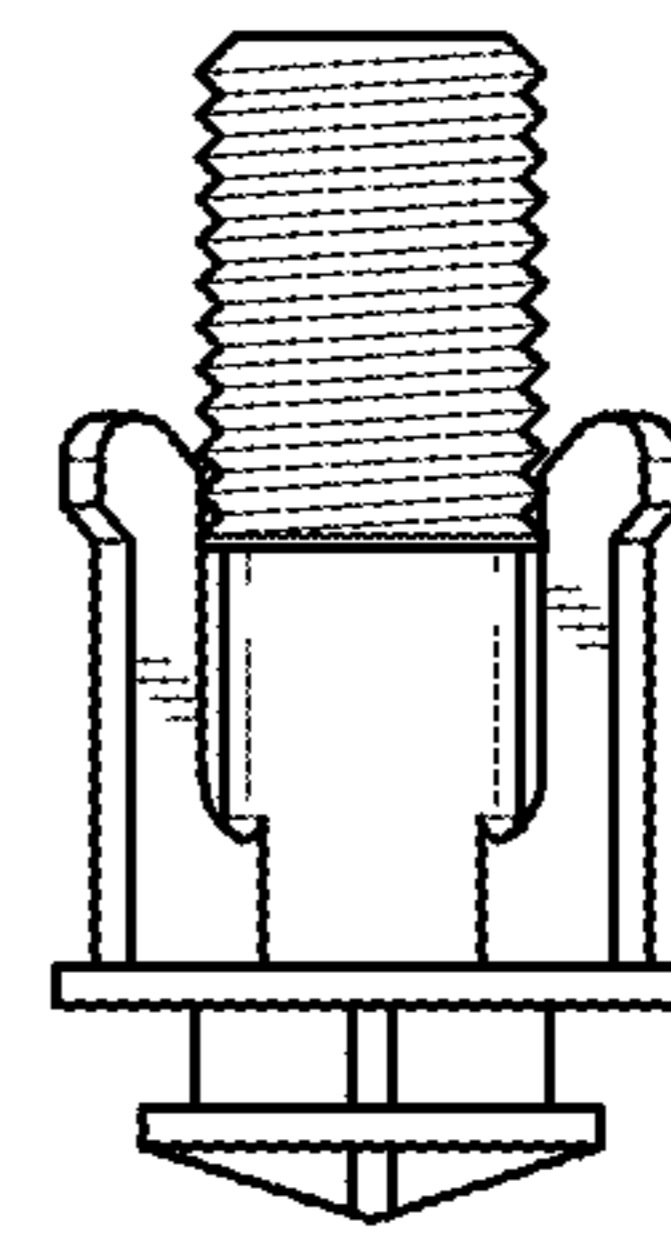
**FIG. 19**



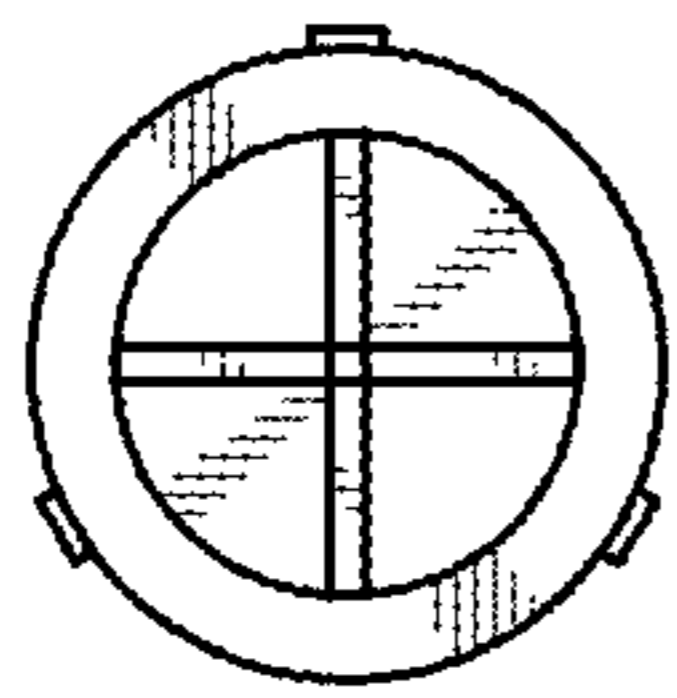
**FIG. 20**



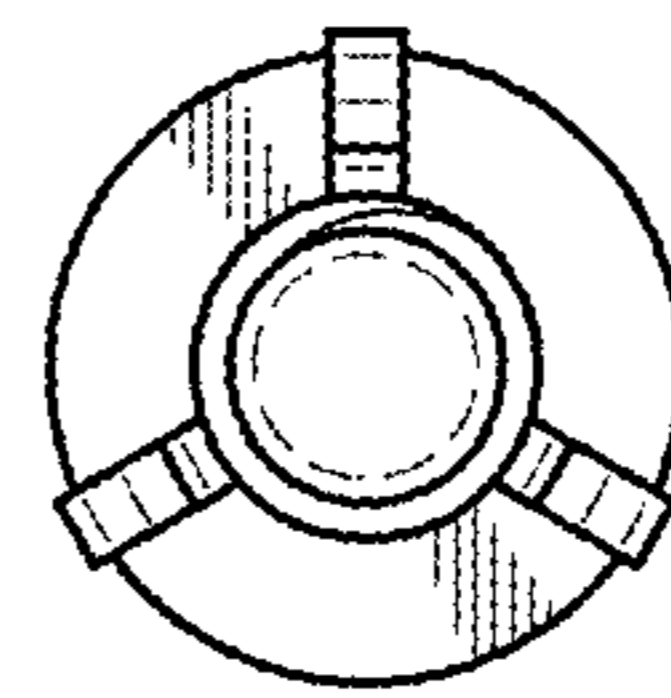
**FIG. 21**



**FIG. 22**

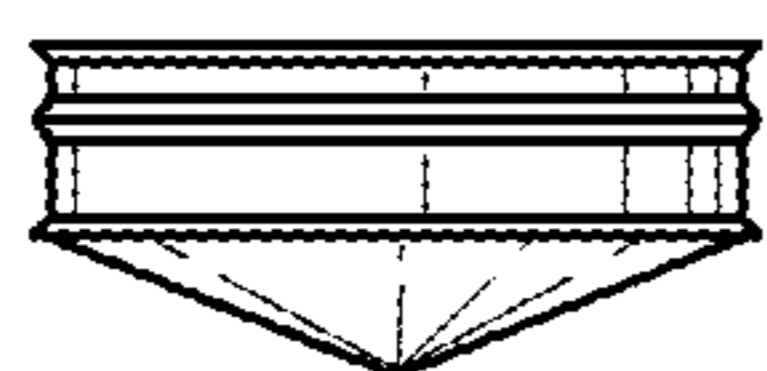


**FIG. 23**

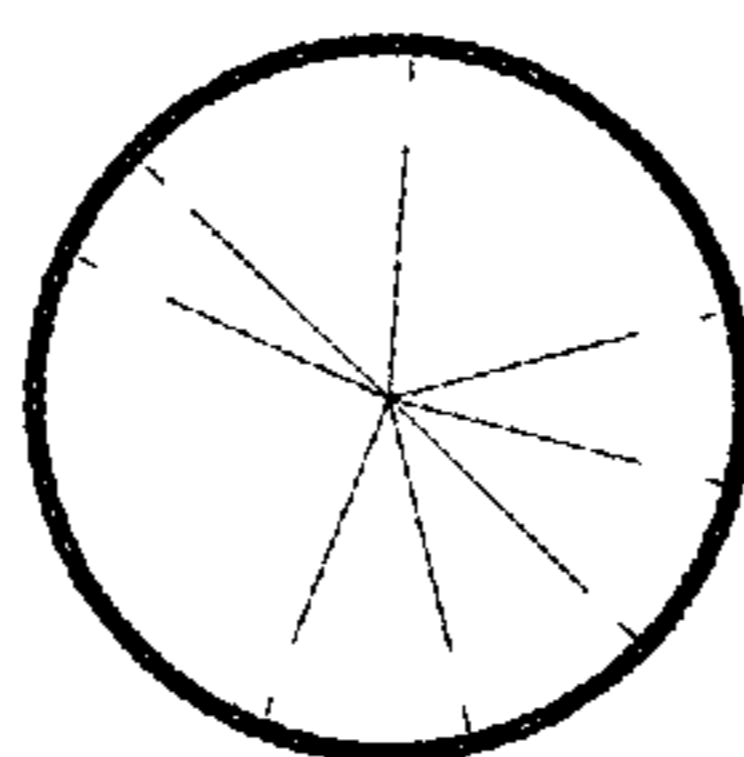


**FIG. 24**

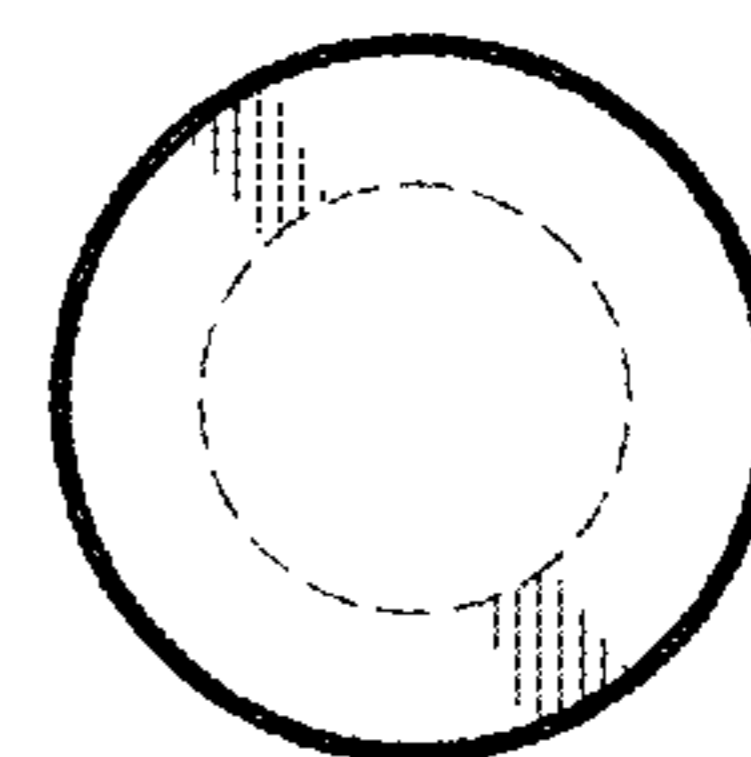




***FIG. 25***



***FIG. 26***



***FIG. 27***