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

(10) **Patent No.:** **US D712,073 S**

(45) **Date of Patent:** **\*\* Aug. 26, 2014**

(54) **LED LIGHTING LAMP**

(75) Inventor: **Tsuneyuki Hirabayashi**, Higashiomi (JP)

(73) Assignee: **Kyocera Corporation**, Kyoto (JP)

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

(21) Appl. No.: **29/425,628**

(22) Filed: **Jun. 25, 2012**

(30) **Foreign Application Priority Data**

|               |      |       |             |
|---------------|------|-------|-------------|
| Dec. 27, 2011 | (JP) | ..... | 2011-030392 |
| Dec. 27, 2011 | (JP) | ..... | 2011-030393 |
| Dec. 27, 2011 | (JP) | ..... | 2011-030394 |

(51) **LOC (10) Cl.** ..... **26-04**

(52) **U.S. Cl.**  
USPC ..... **D26/2**

(58) **Field of Classification Search**  
USPC ..... D26/1-4; 313/313, 315, 316, 317, 318,  
313/493; 315/52, 53, 56, 57, 58  
See application file for complete search history.

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| D582,578 S * | 12/2008 | Tsai et al.  | ..... | D26/2 |
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*Primary Examiner* — Marcus Jackson

(74) *Attorney, Agent, or Firm* — DLA Piper LLP (US)

(57) **CLAIM**

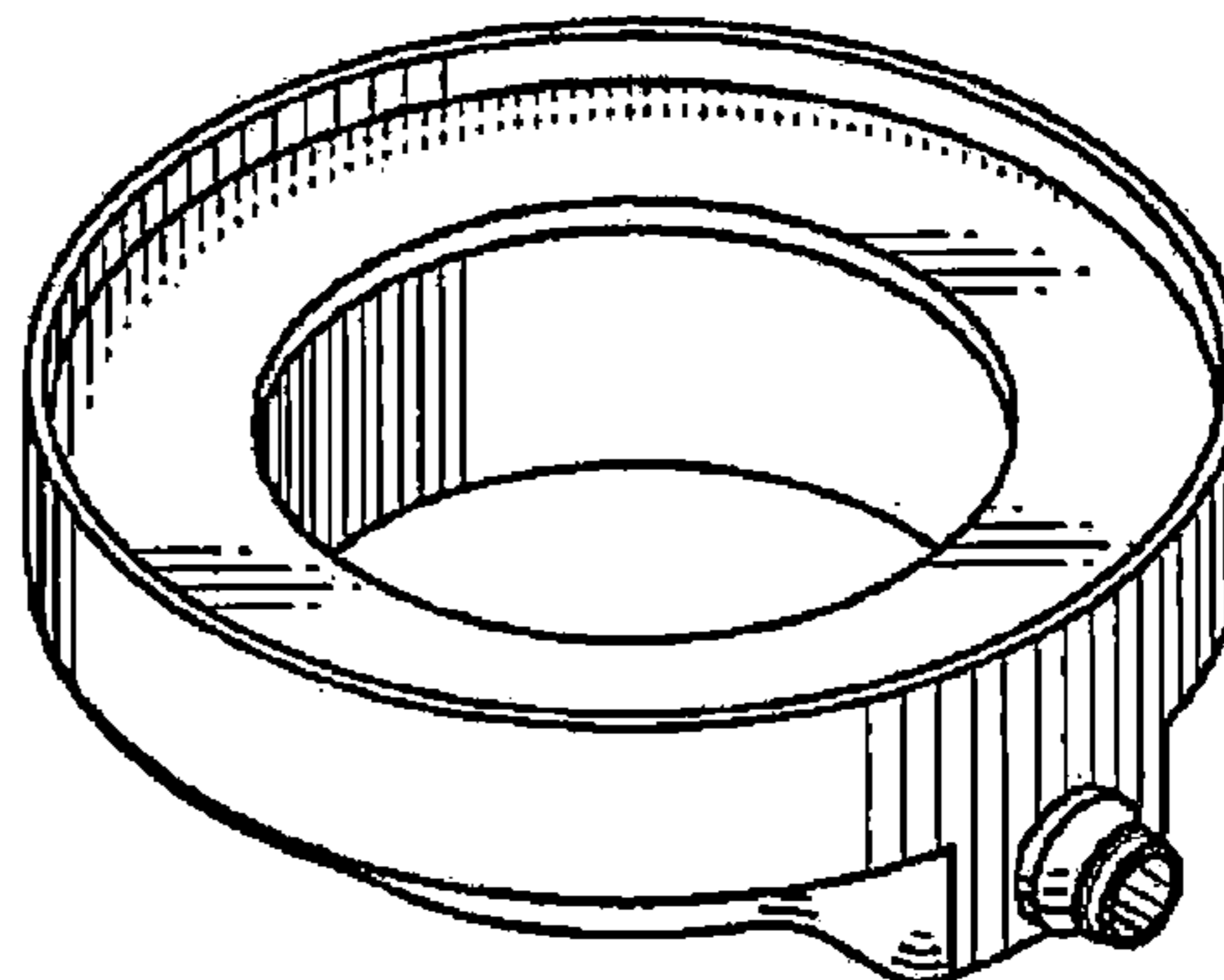
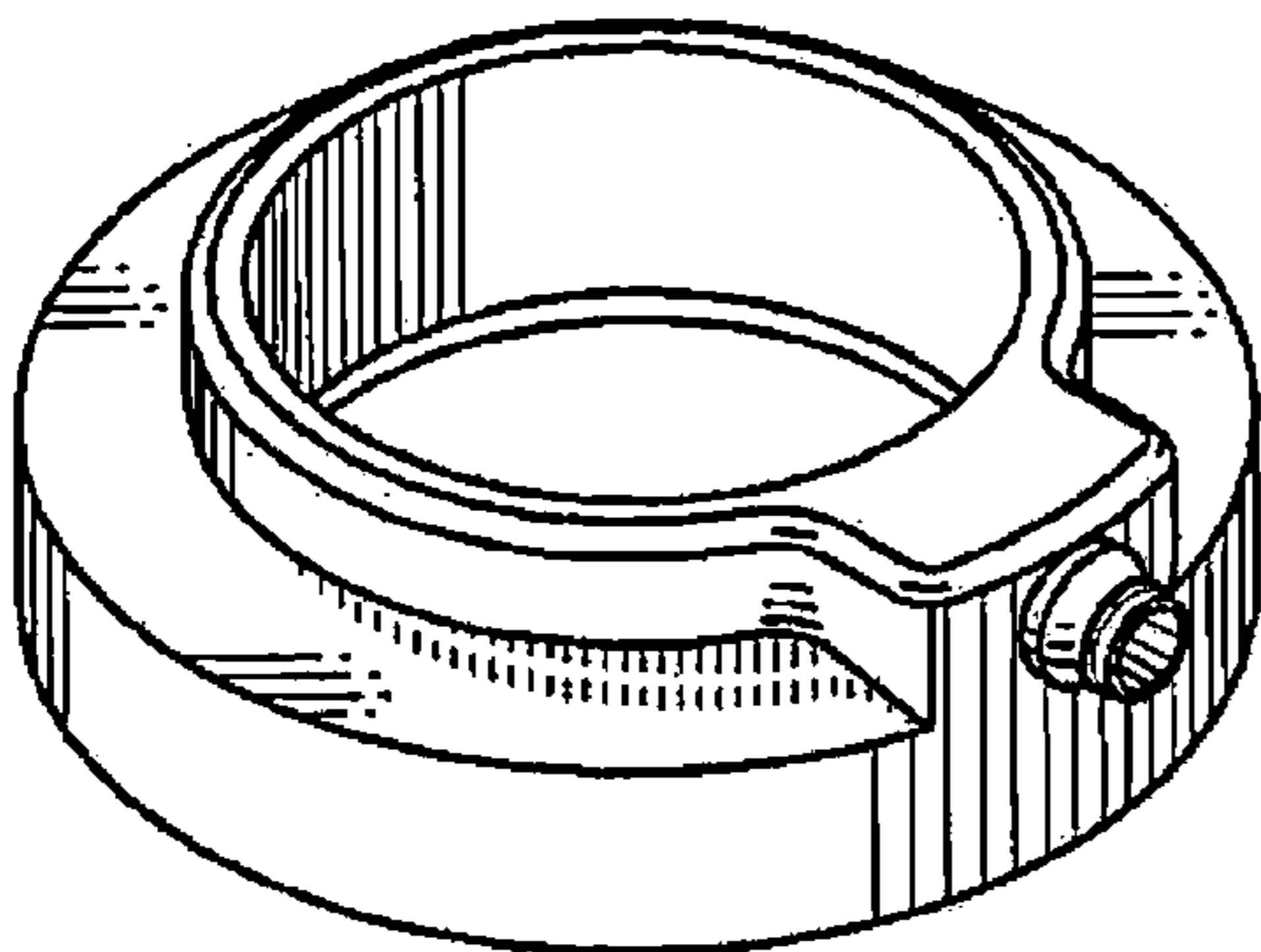
The ornamental designs for the LED lighting lamp, as shown and described.

**DESCRIPTION**

FIG. 1 is a front view of a first embodiment of an LED lighting lamp;

FIG. 2 is a rear view thereof;  
 FIG. 3 is a left side view thereof;  
 FIG. 4 is a right side view thereof;  
 FIG. 5 is a top plan view thereof;  
 FIG. 6 is a bottom plan view thereof;  
 FIG. 7 is a sectional view taken along line 7-7 in FIG. 1, wherein inner portions are shown in the claimed design;  
 FIG. 8 is a sectional view taken along line 7-7 in FIG. 1 thereof;  
 FIG. 9 is a perspective view showing a rear side thereof;  
 FIG. 10 is a perspective view showing a front side thereof;  
 FIG. 11 is a front view of a second embodiment of an LED lighting lamp;  
 FIG. 12 is a rear view thereof;  
 FIG. 13 is a left side view thereof;  
 FIG. 14 is a right side view thereof;  
 FIG. 15 is a top plan view thereof;  
 FIG. 16 is a bottom plan view thereof;  
 FIG. 17 is a sectional view taken along line 17-17 in FIG. 11, wherein inner portions are shown in the claimed design;  
 FIG. 18 is a sectional view taken along line 17-17 in FIG. 11 thereof;  
 FIG. 19 is a perspective view showing a rear side thereof;  
 FIG. 20 is a perspective view showing a front side thereof;  
 FIG. 21 is a front view of a third embodiment of an LED lighting lamp;  
 FIG. 22 is a rear view thereof;  
 FIG. 23 is a left side view thereof;  
 FIG. 24 is a right side view thereof;  
 FIG. 25 is a top plan view thereof;  
 FIG. 26 is a bottom plan view thereof;  
 FIG. 27 is a sectional view taken along line 27-27 in FIG. 21, wherein inner portions are shown in the claimed design;  
 FIG. 28 is a sectional view taken along line 27-27 in FIG. 21 thereof;  
 FIG. 29 is a perspective view showing a rear side thereof;  
 FIG. 30 is a perspective view showing a front side thereof;  
 and,  
 FIG. 31 is another front view of the third embodiment of the LED lighting lamp.

The LED lighting lamp comprises: a housing; a reflecting body which is disposed in the housing and provided with a plurality of holes, wherein internal surfaces of the holes serves as reflecting surfaces; a plurality of light-emitting



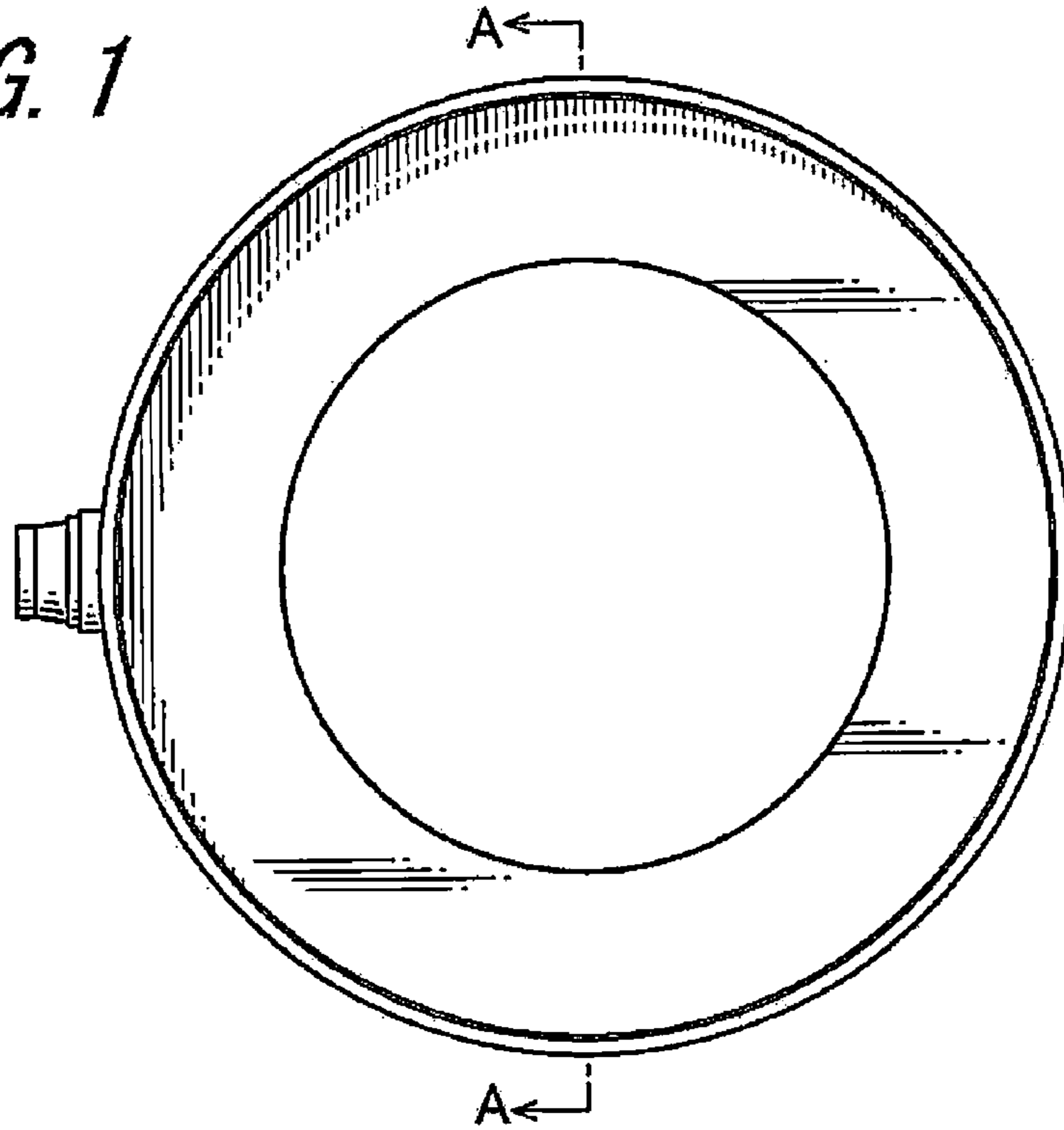
diodes which are disposed in the housing, wherein, when viewed from above, each of the light-emitting diodes is located at a position which is outwardly displaced from a center of the each of the holes; and a covering body which covers the reflecting body.

The front view in FIG. **21** is drawn in the condition that, although a reflecting body and light-emitting diodes are viewed through a transparent cover body, distortion of images of the reflecting body and the light-emitting diodes viewed through the transparent cover body due to refraction of light is ignored.

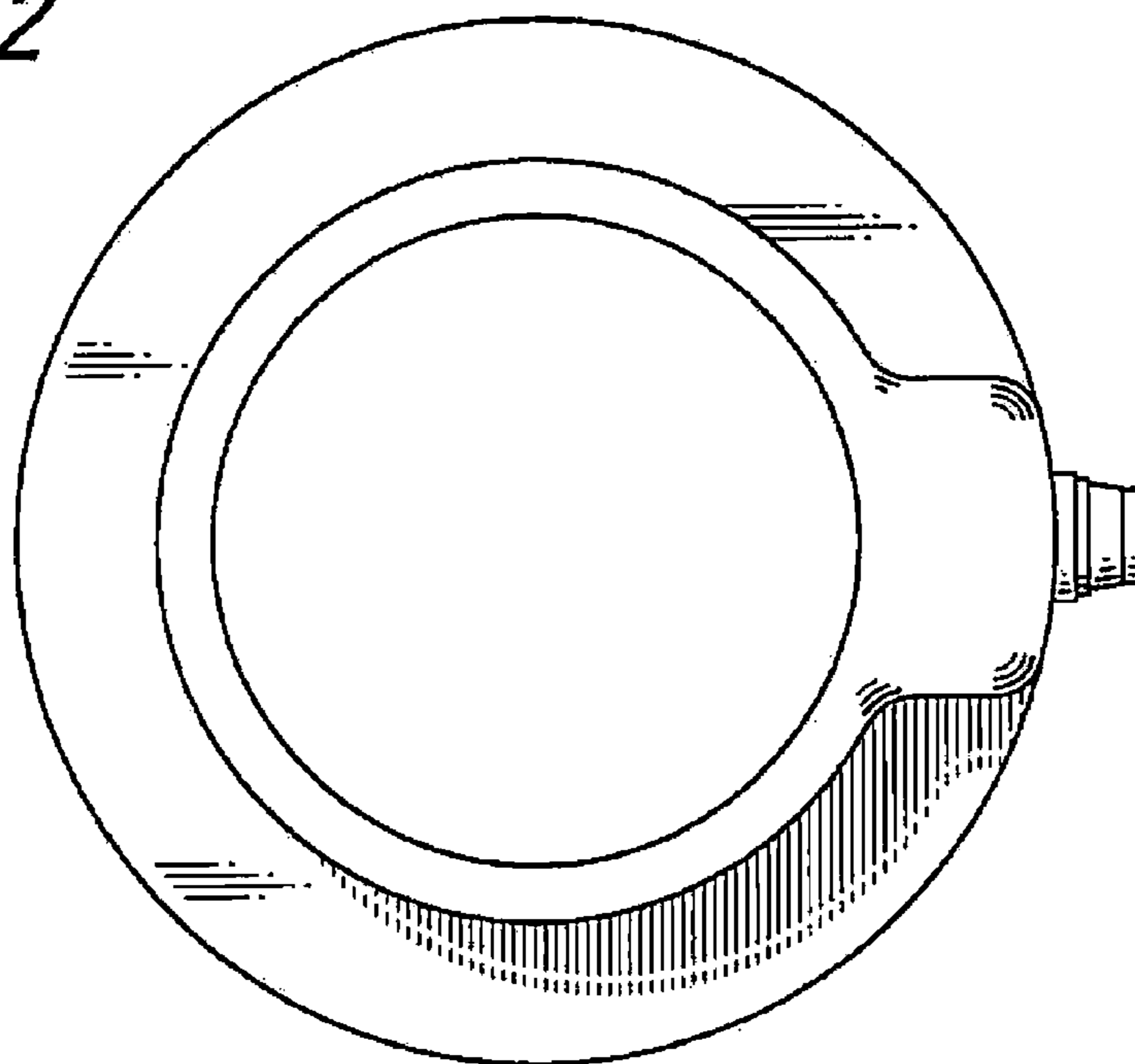
The front view in FIG. **31** is drawn in the condition that the reflecting body and the light-emitting diodes are viewed through the transparent cover body, and distortion of images of the reflecting body and the light-emitting diodes viewed through the transparent cover body due to refraction of light therethrough is considered.

**1 Claim, 16 Drawing Sheets**

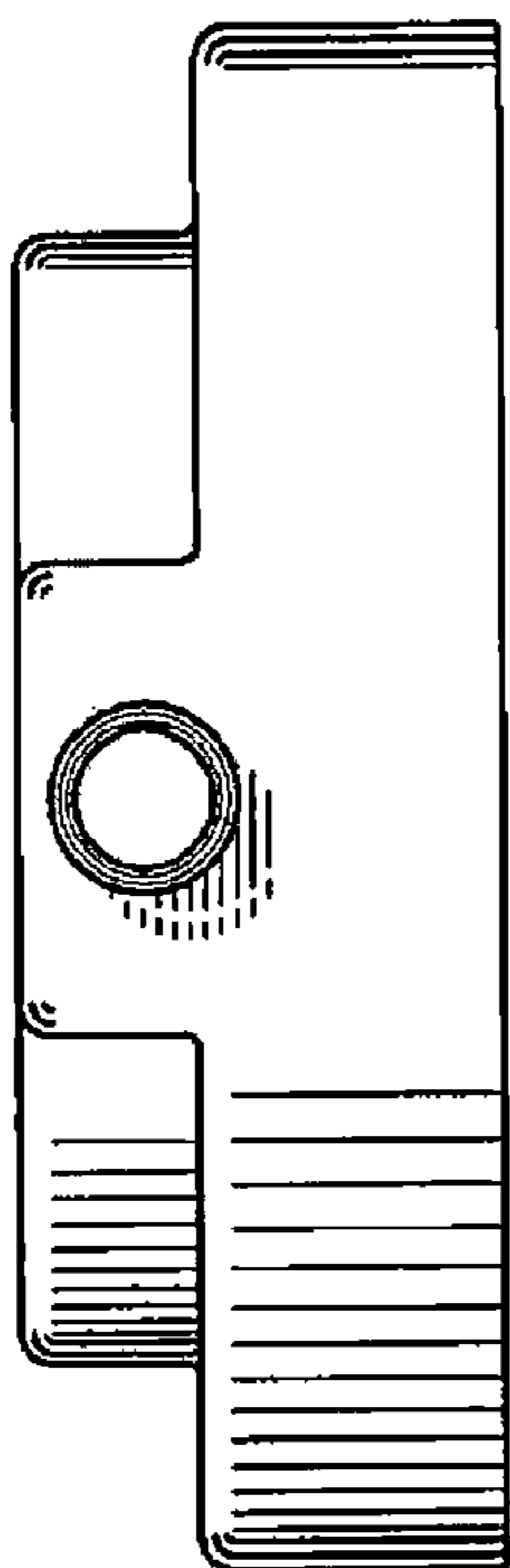
*FIG. 1*



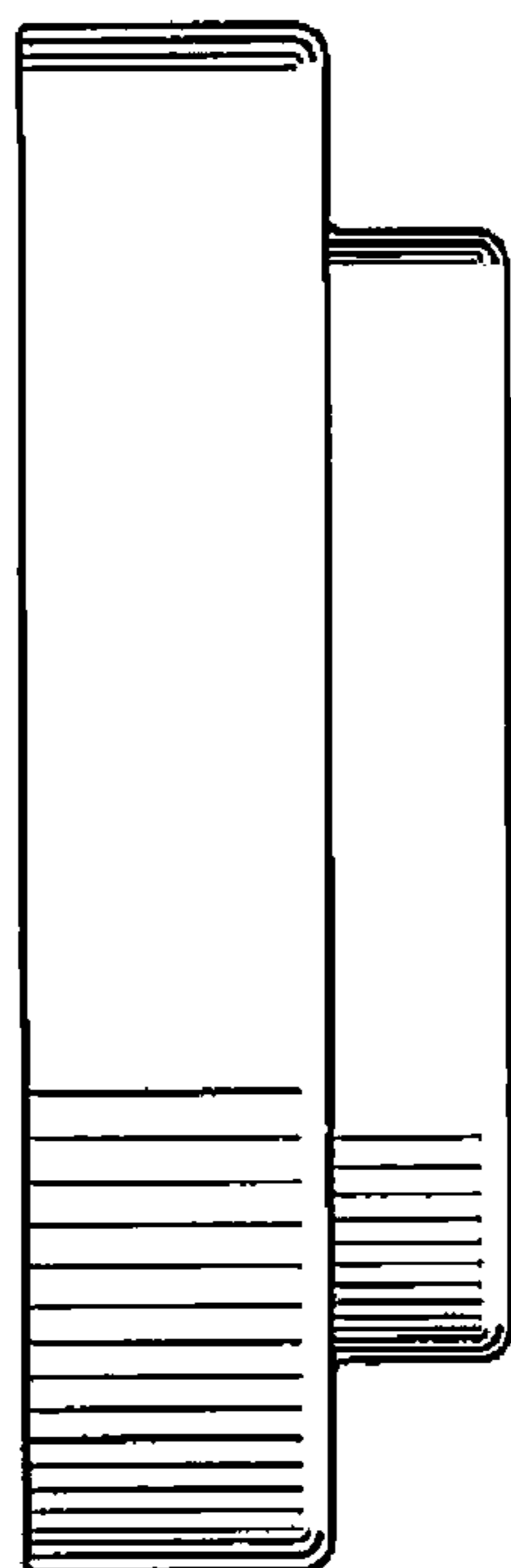
*FIG. 2*



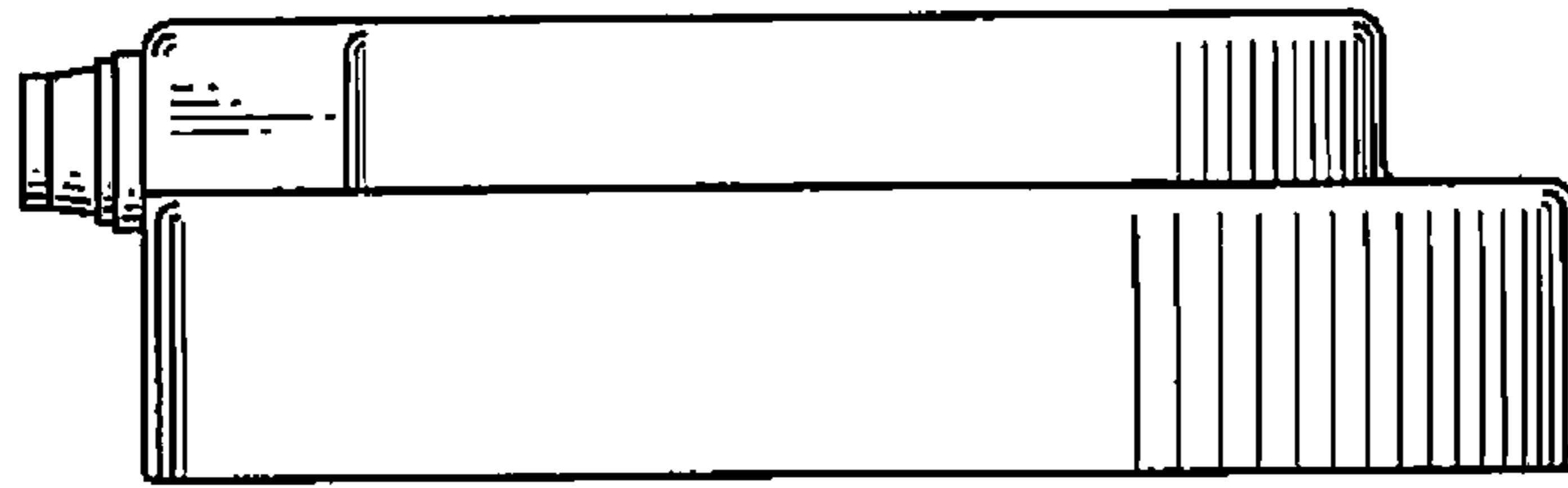
*FIG. 3*



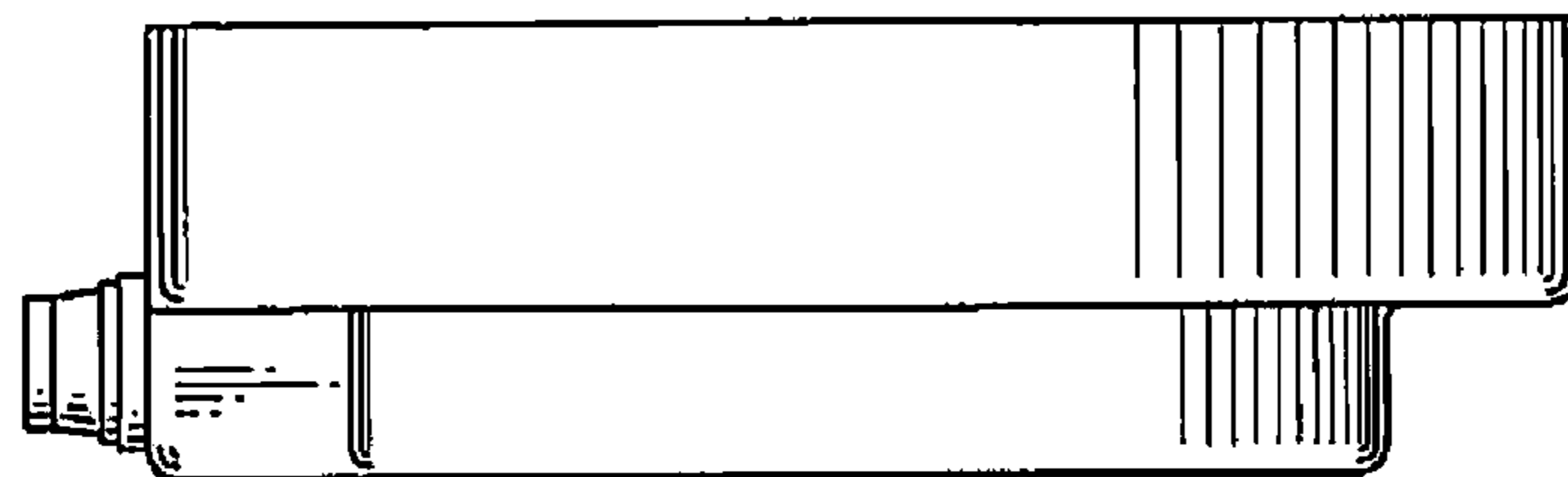
*FIG. 4*



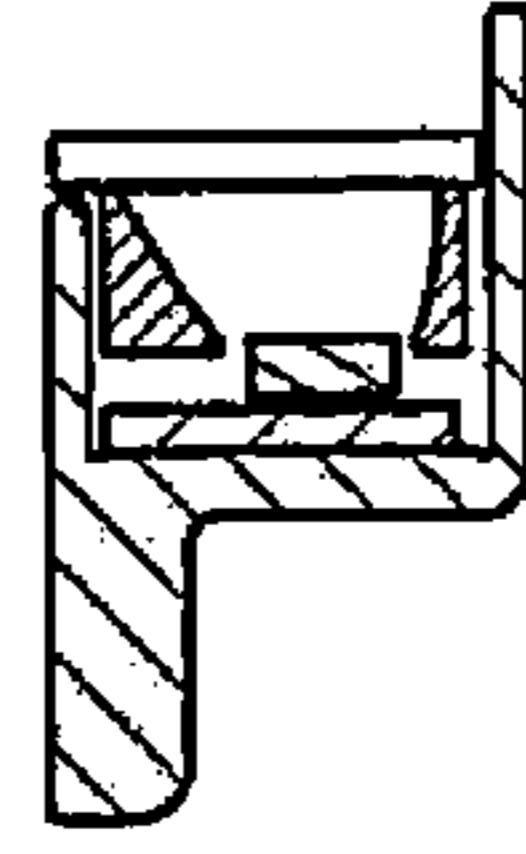
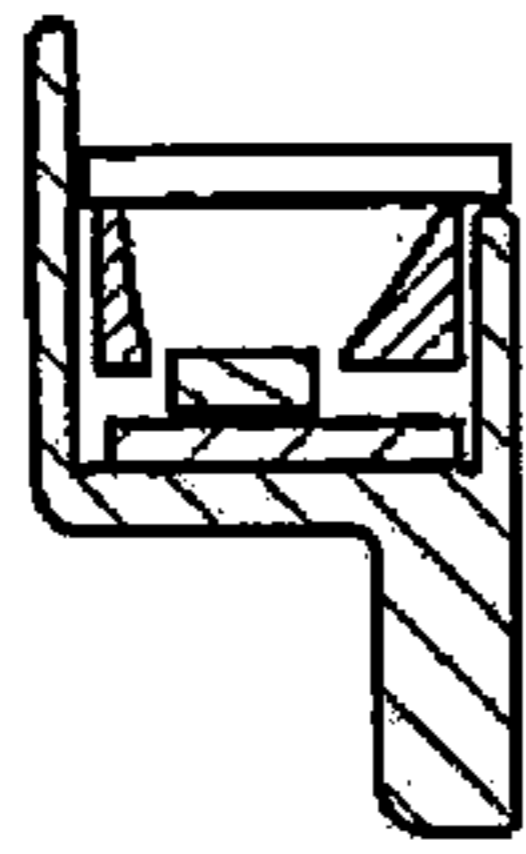
*FIG. 5*



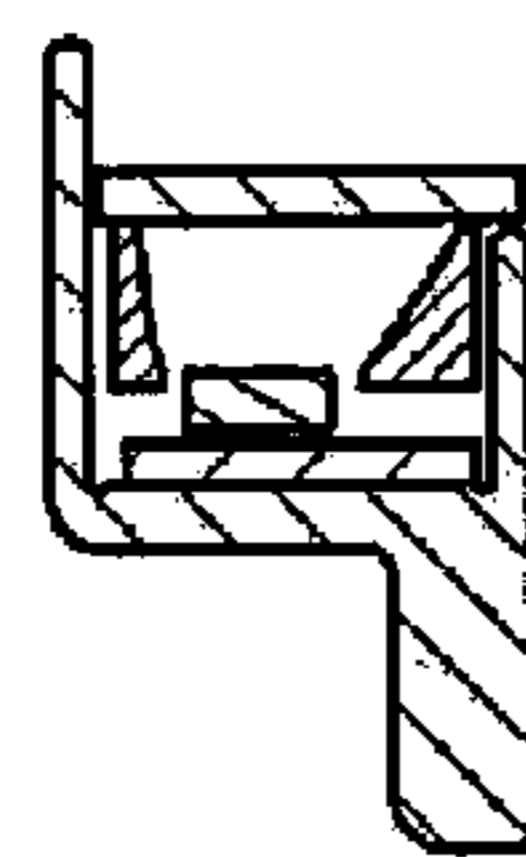
*FIG. 6*



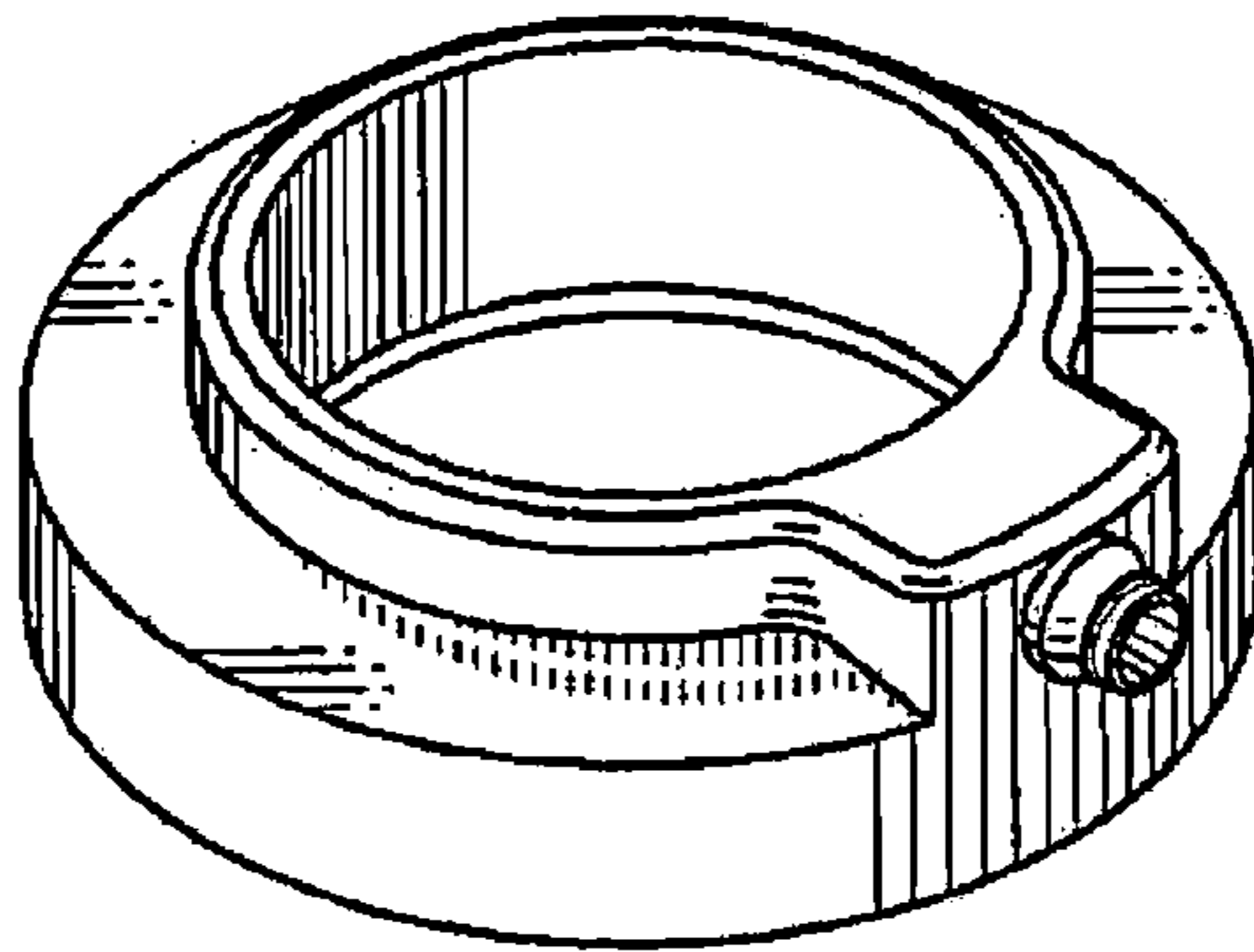
*FIG. 7*



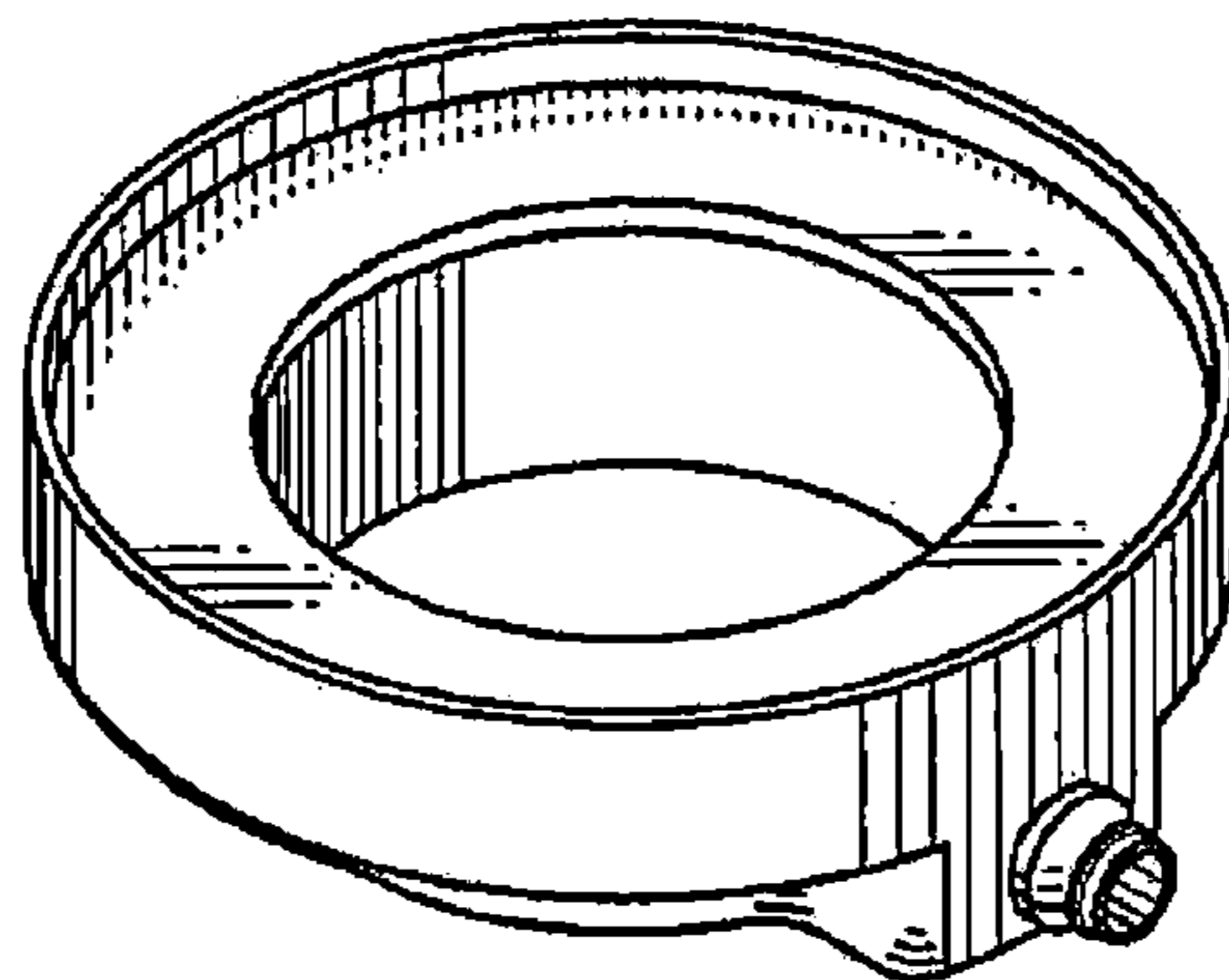
*FIG. 8*



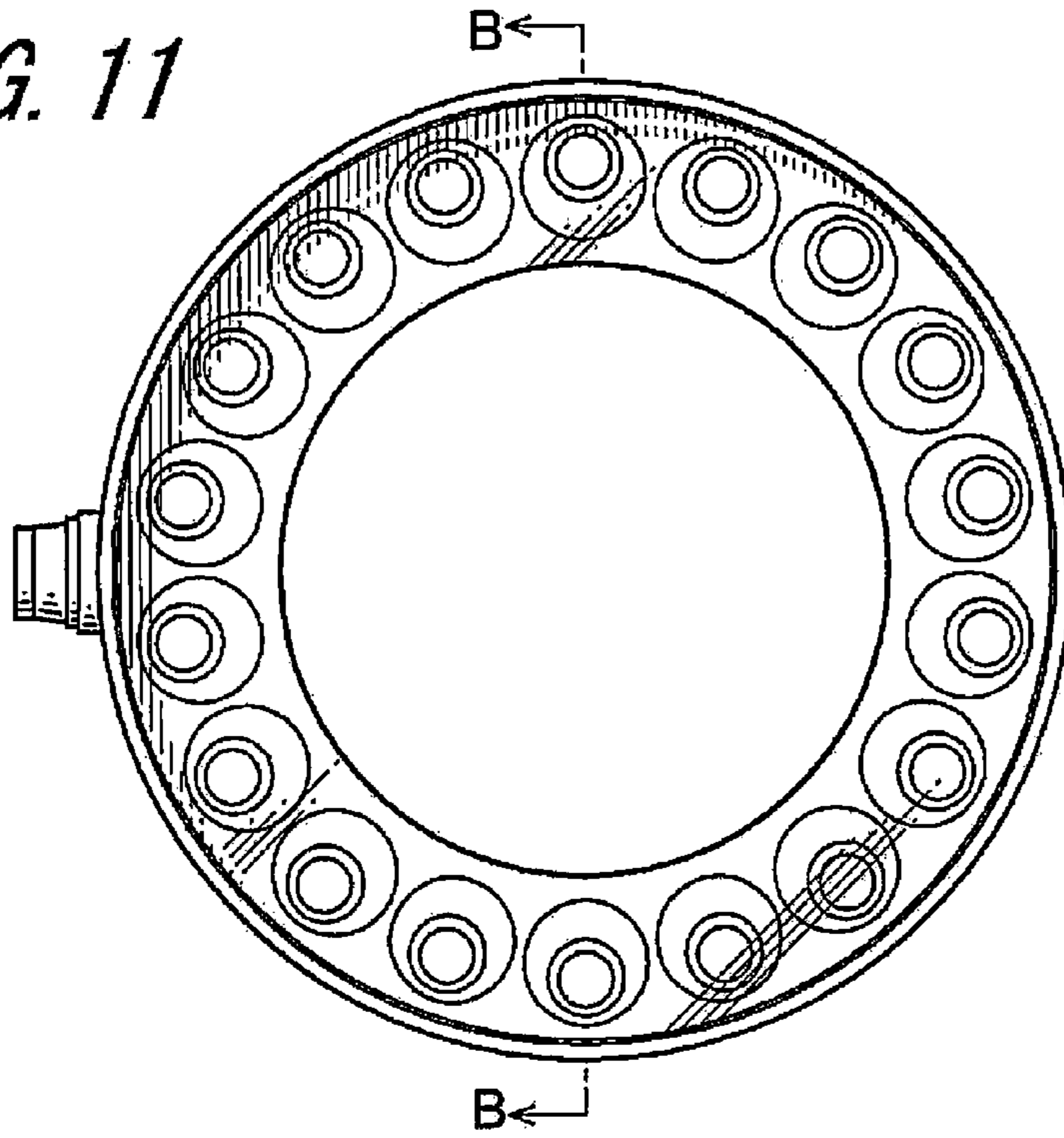
*FIG. 9*



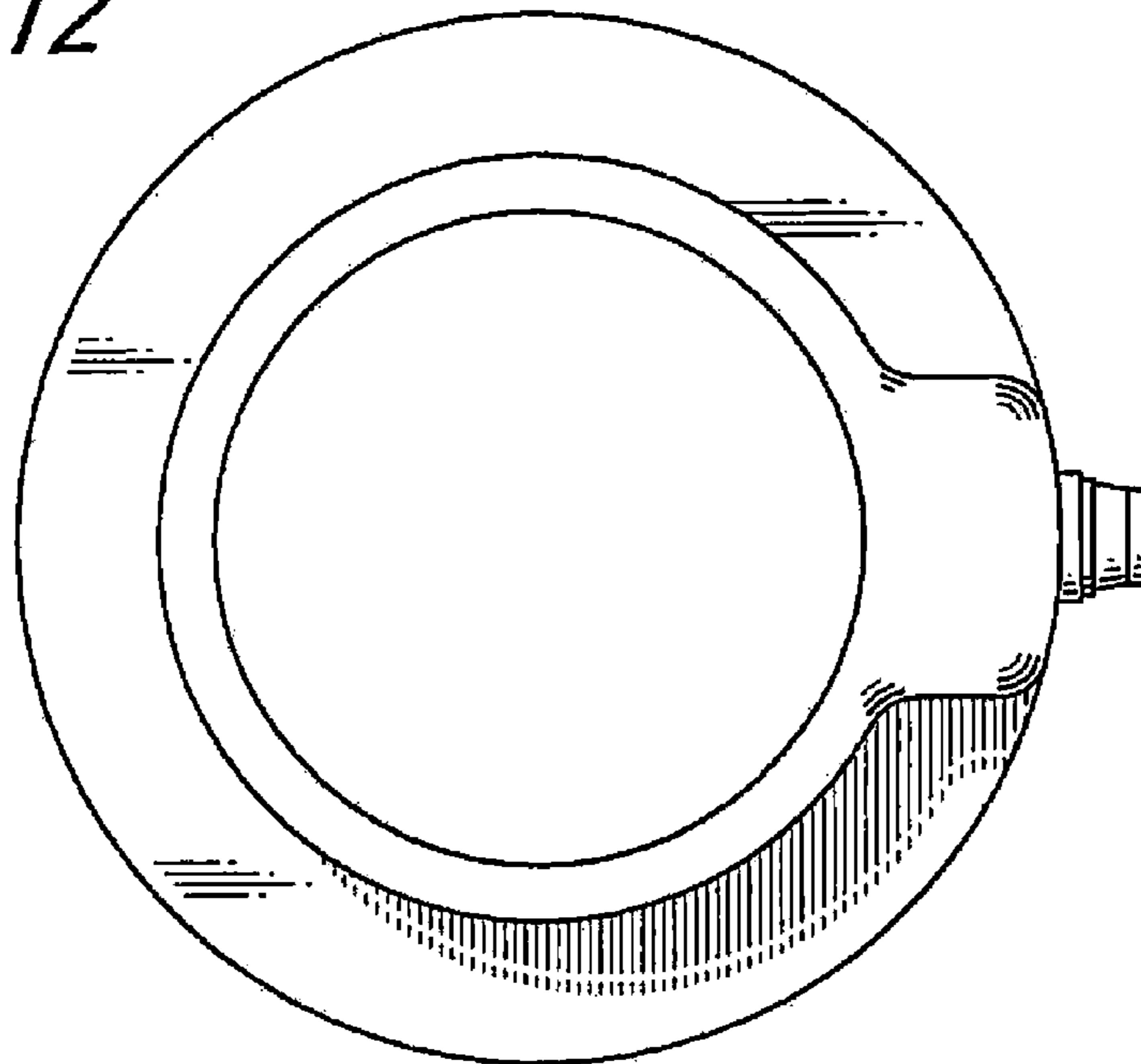
*FIG. 10*



*FIG. 11*

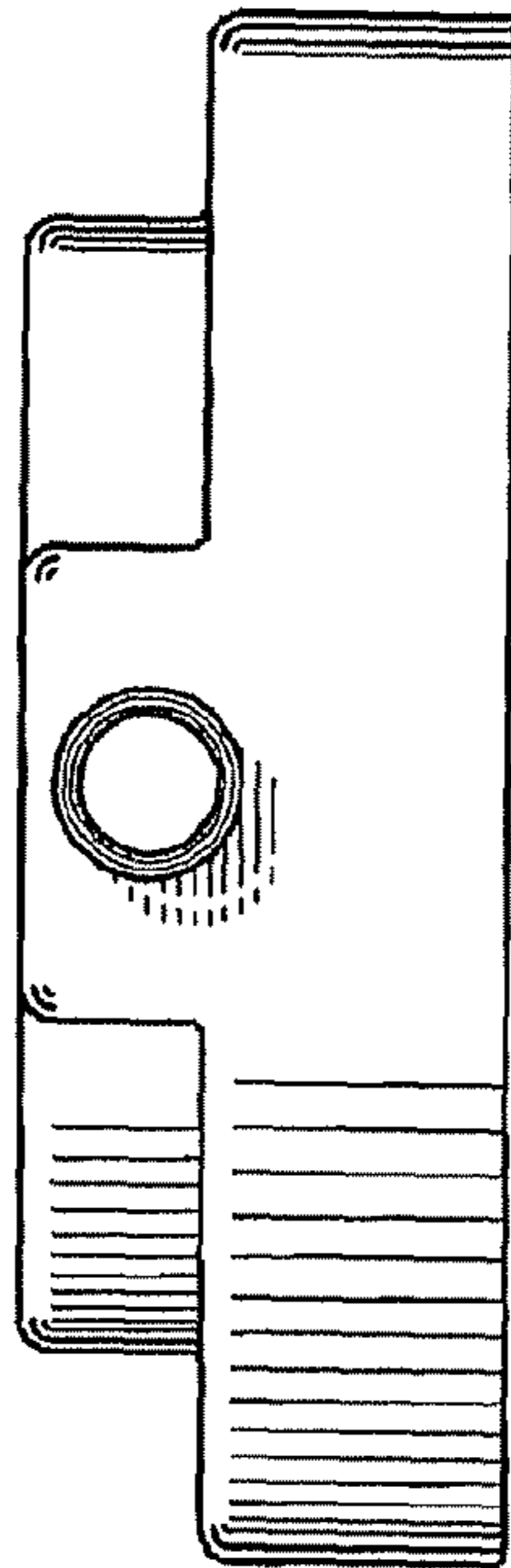


*FIG. 12*

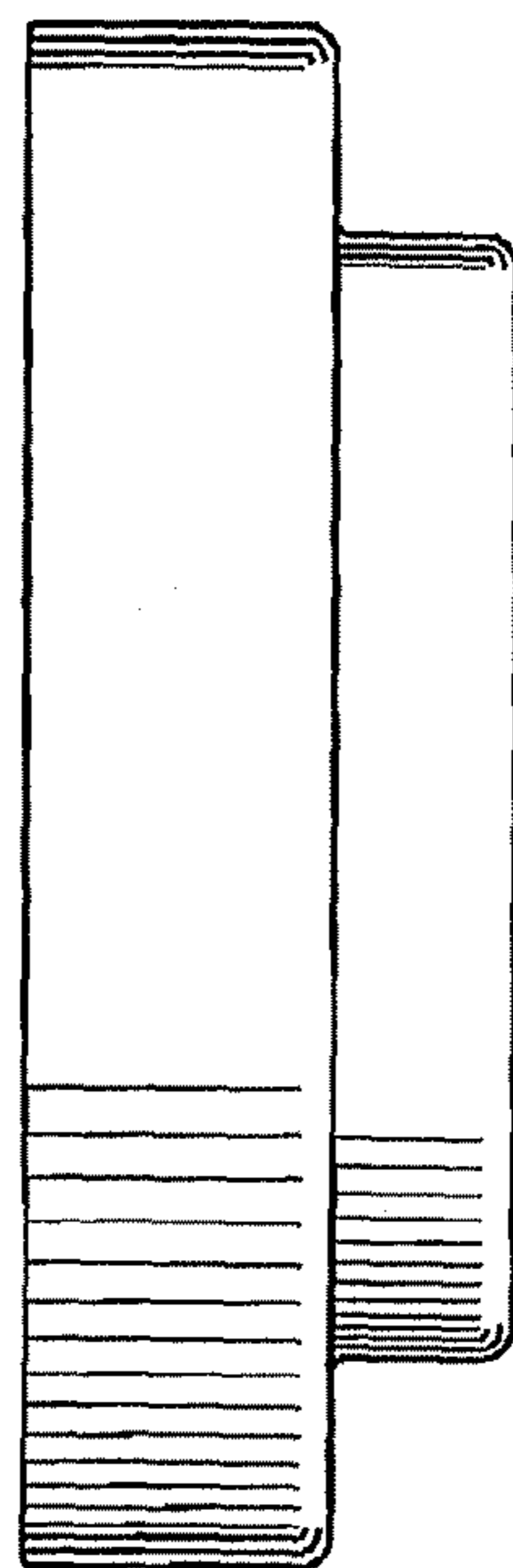




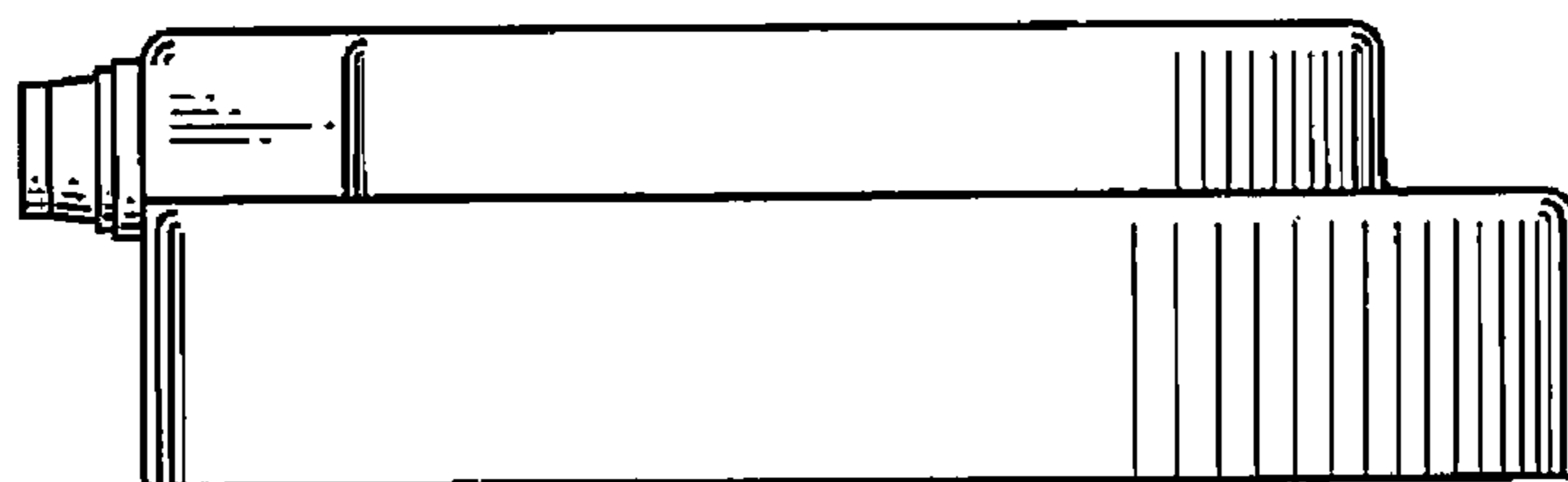
*FIG. 13*



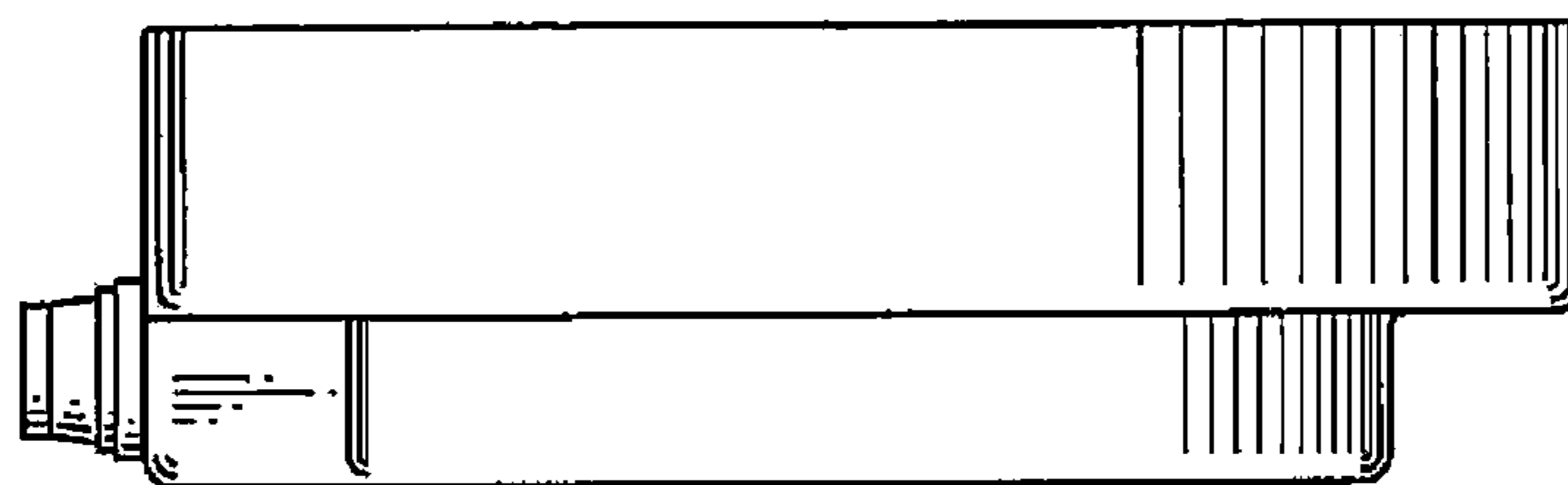
*FIG. 14*



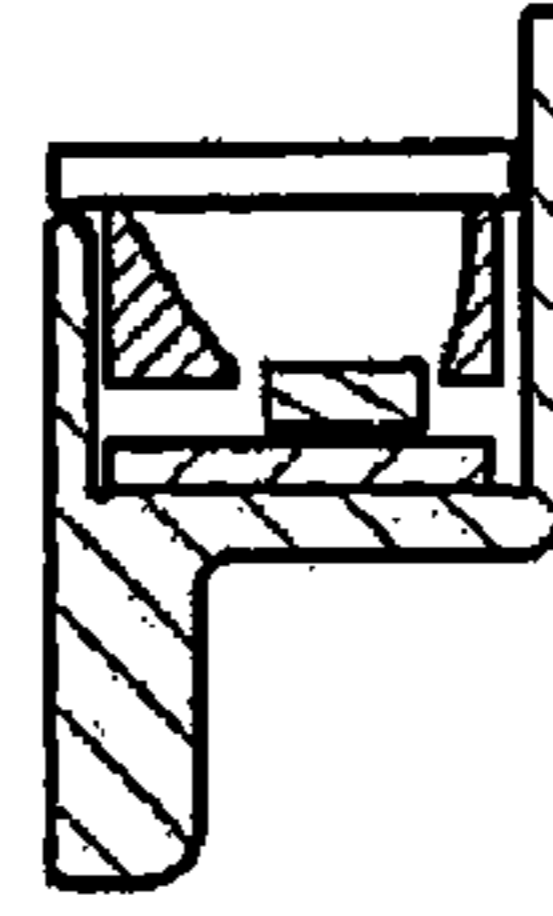
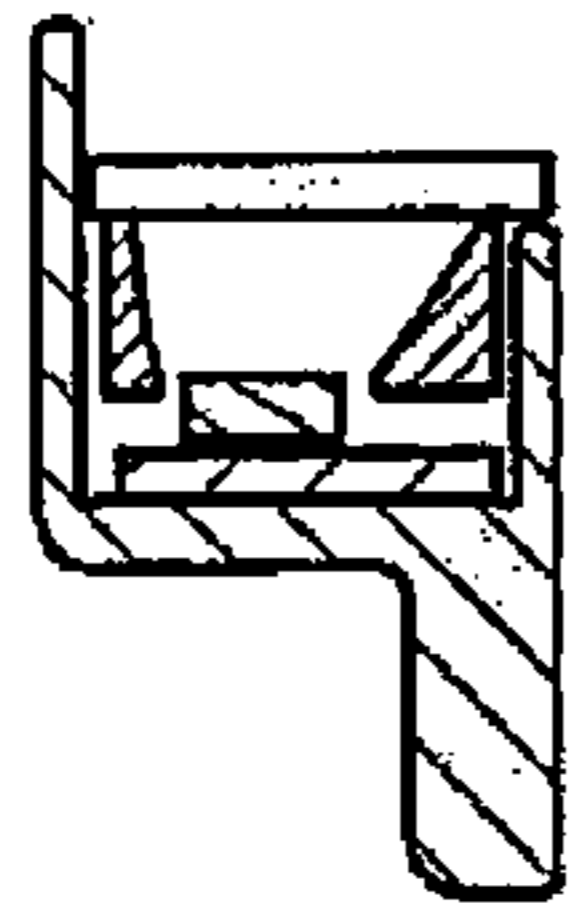
*FIG. 15*



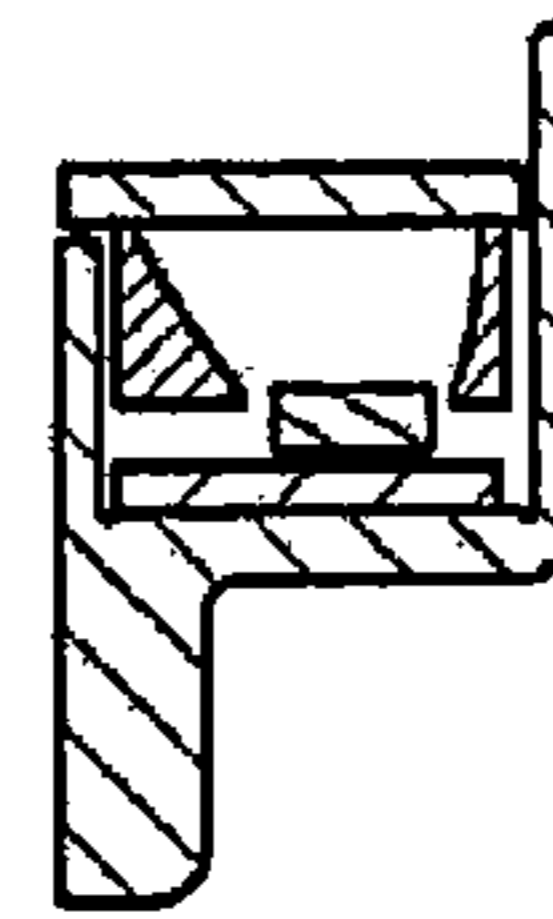
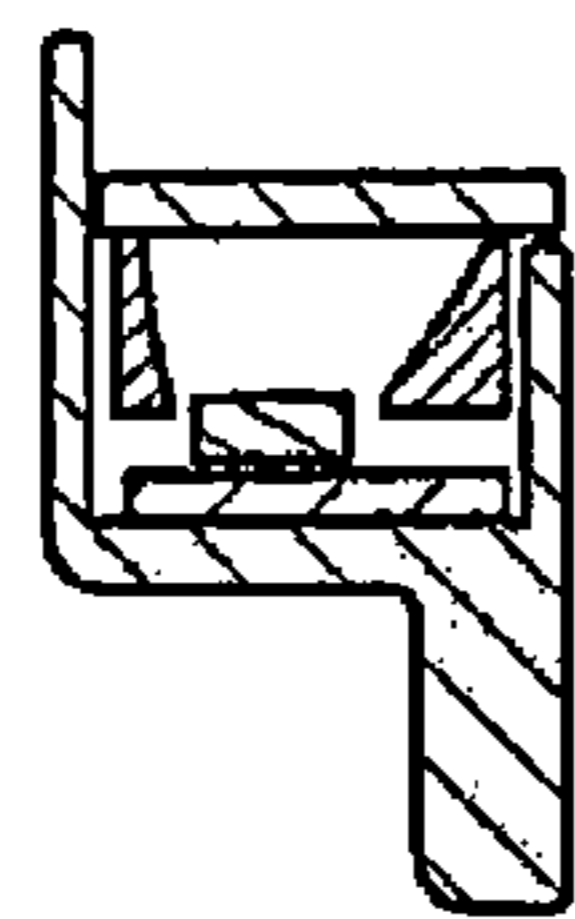
*FIG. 16*



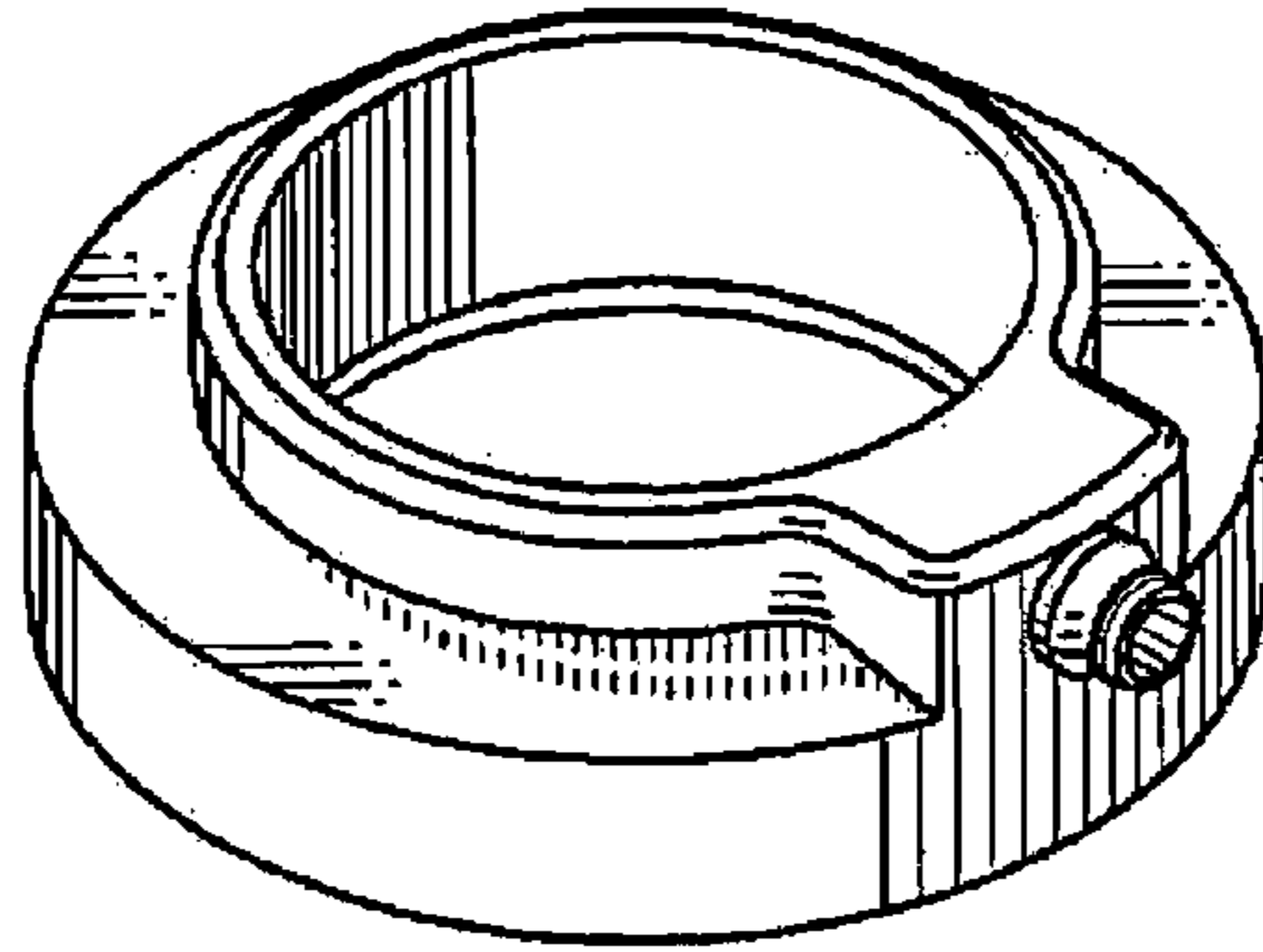
*FIG. 17*



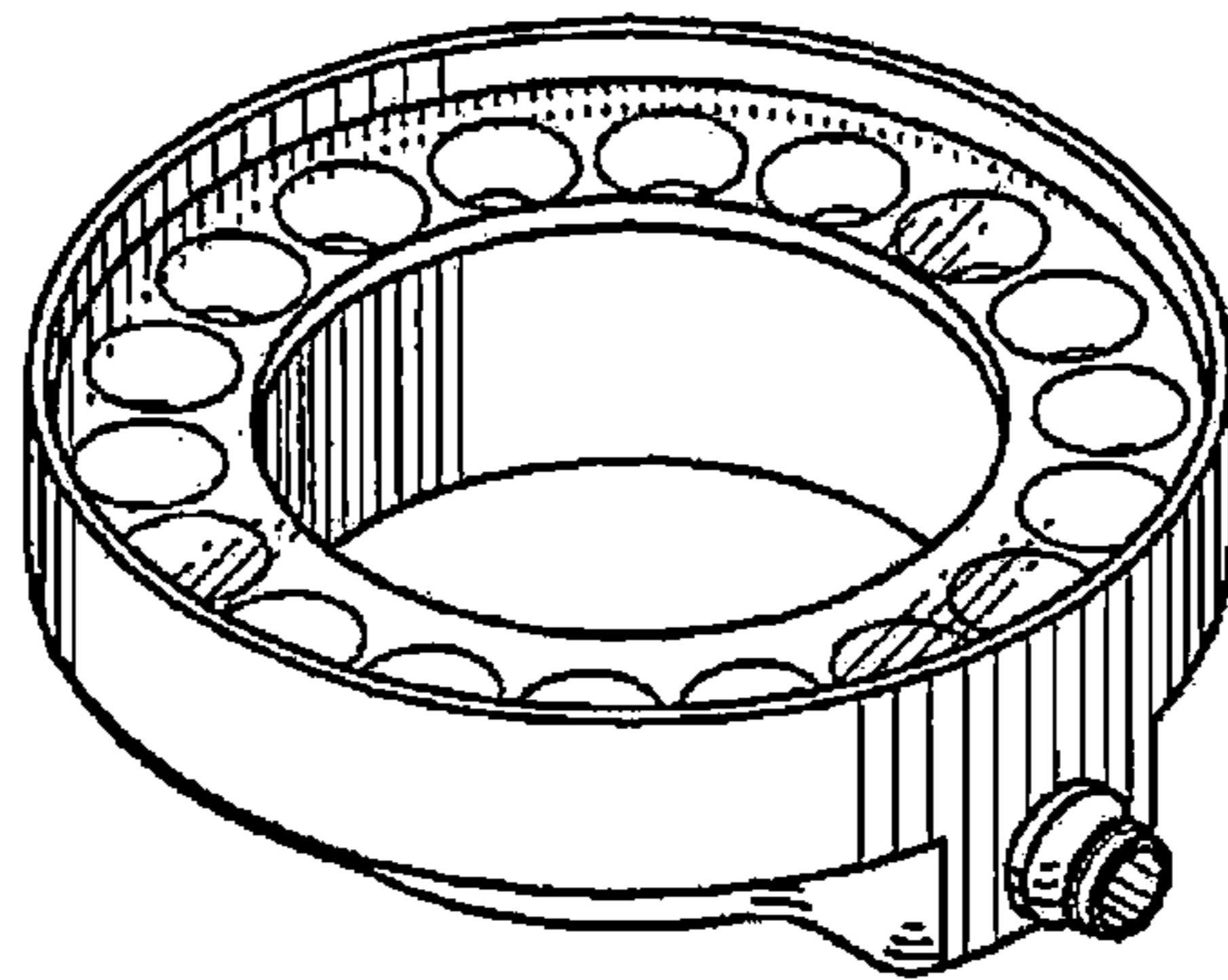
*FIG. 18*



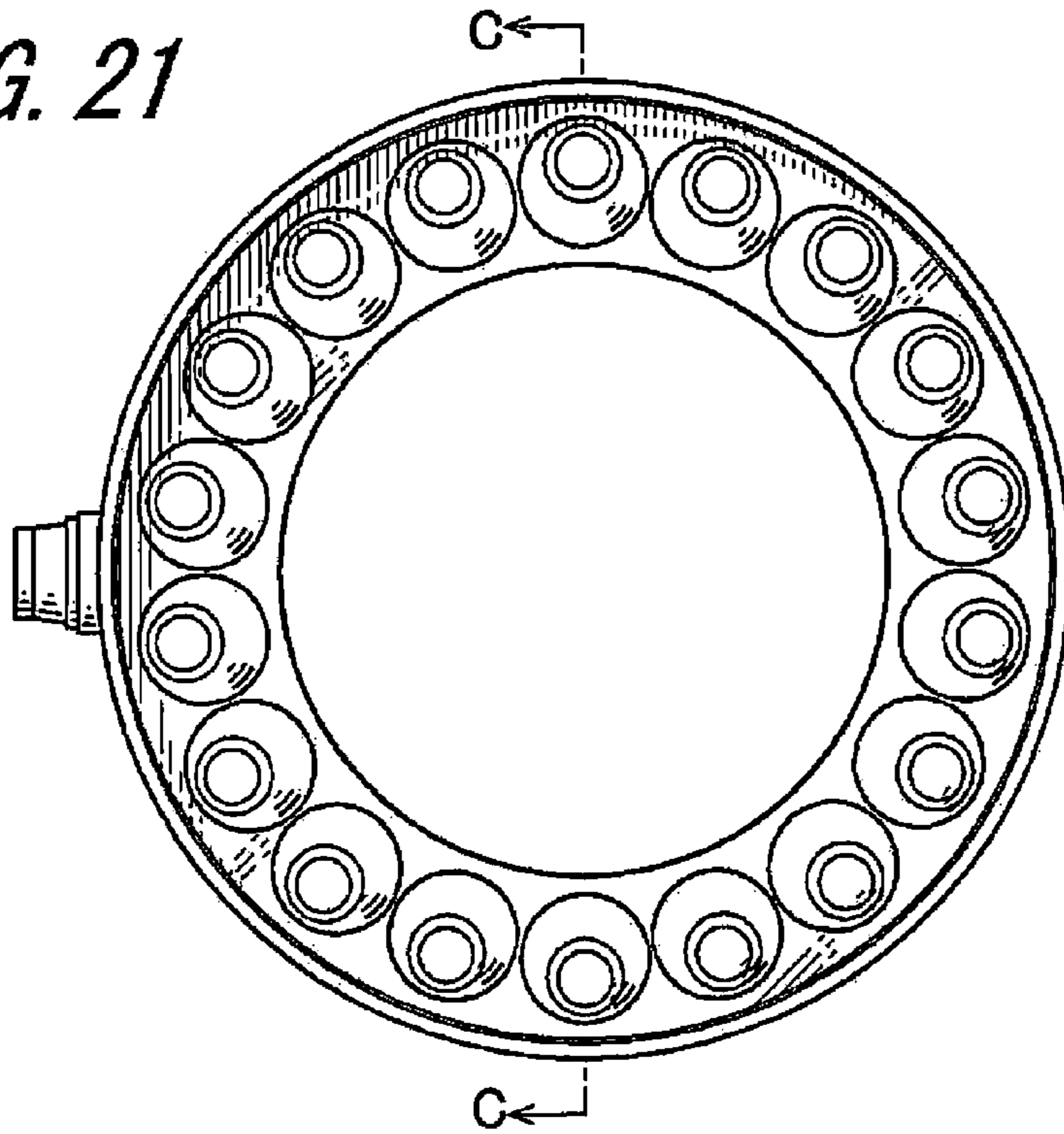
*FIG. 19*



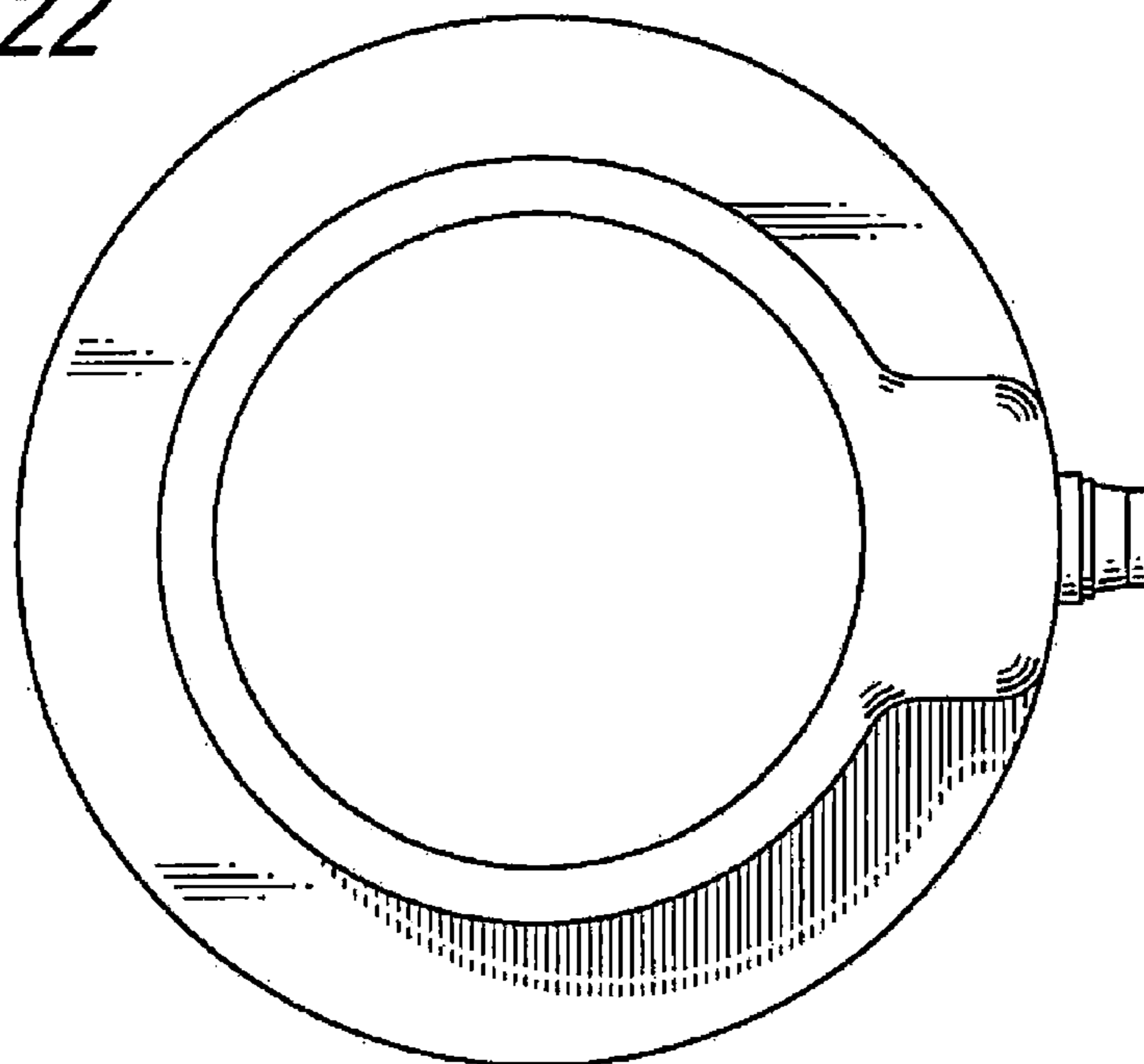
*FIG. 20*



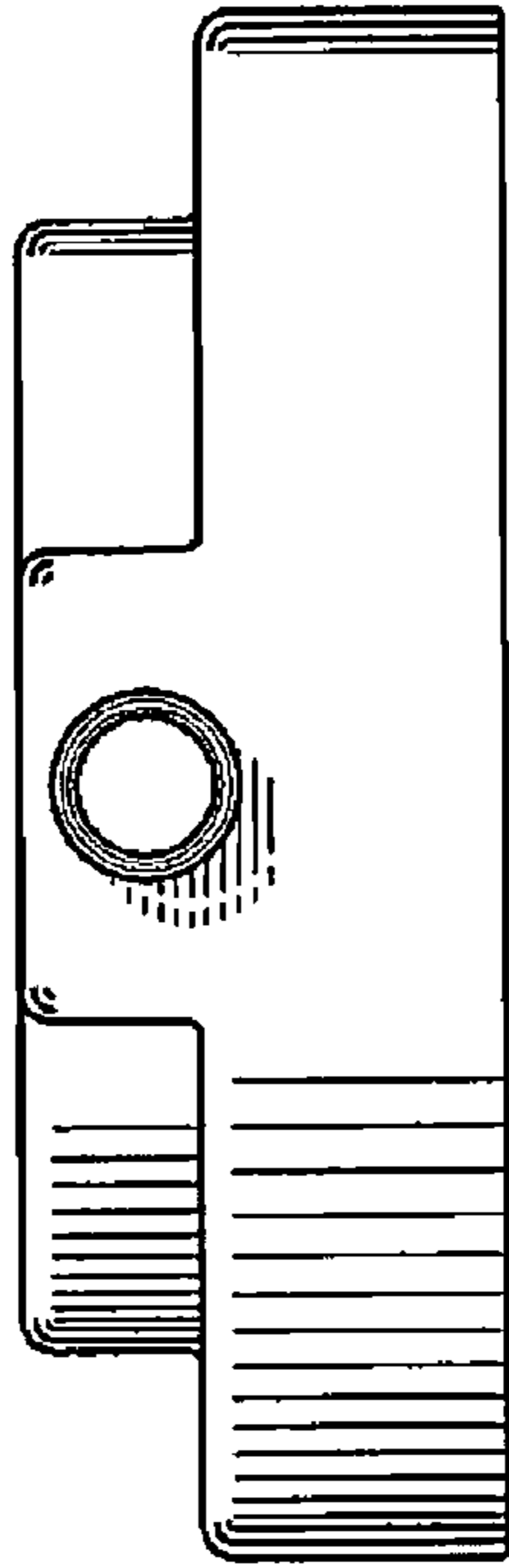
*FIG. 21*



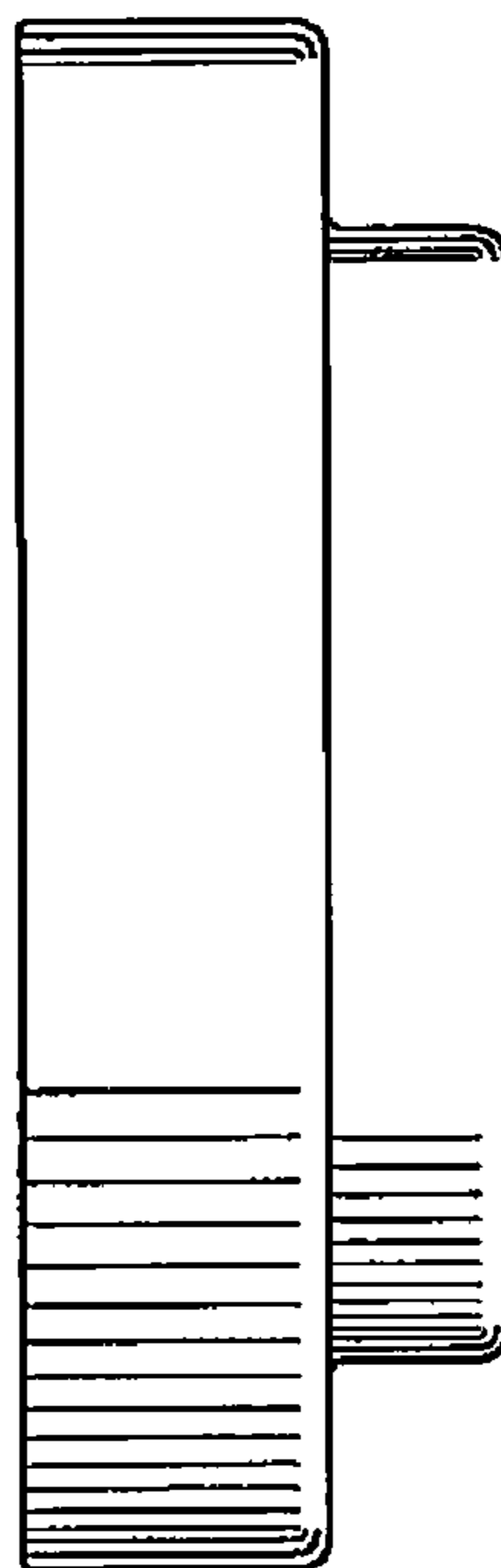
*FIG. 22*



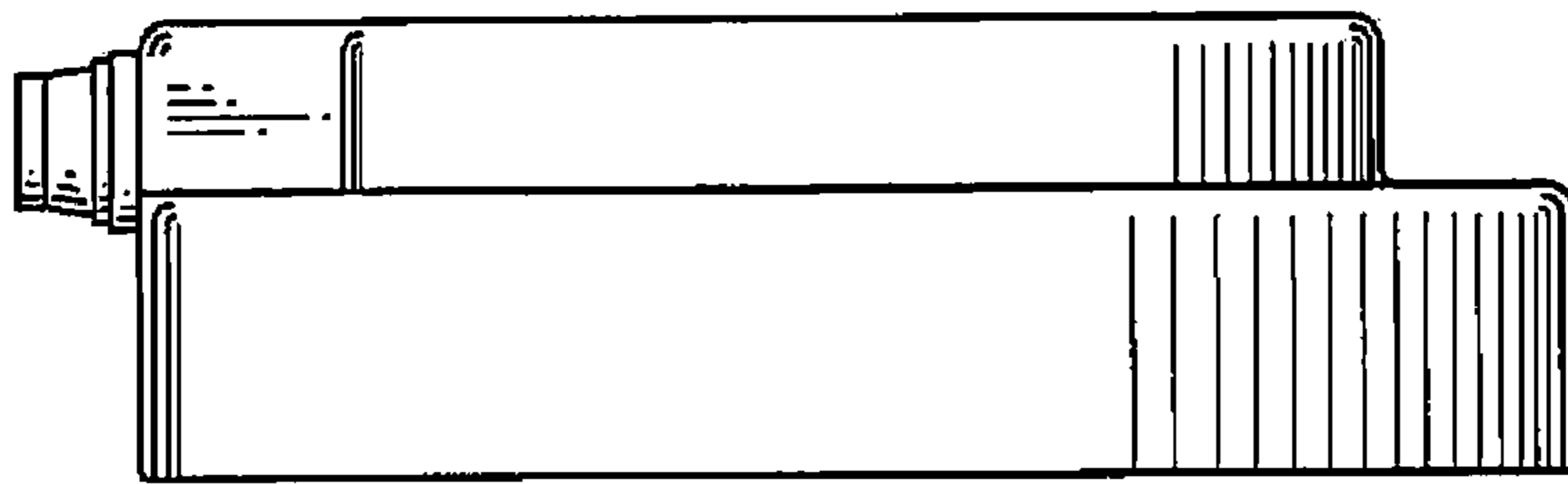
*FIG. 23*



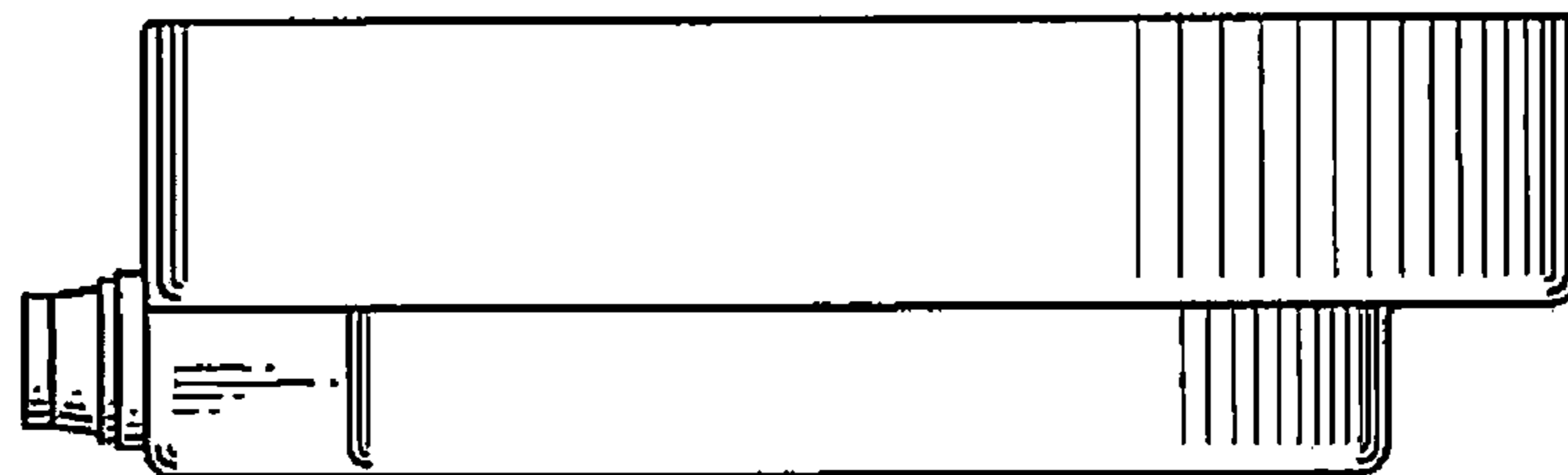
*FIG. 24*



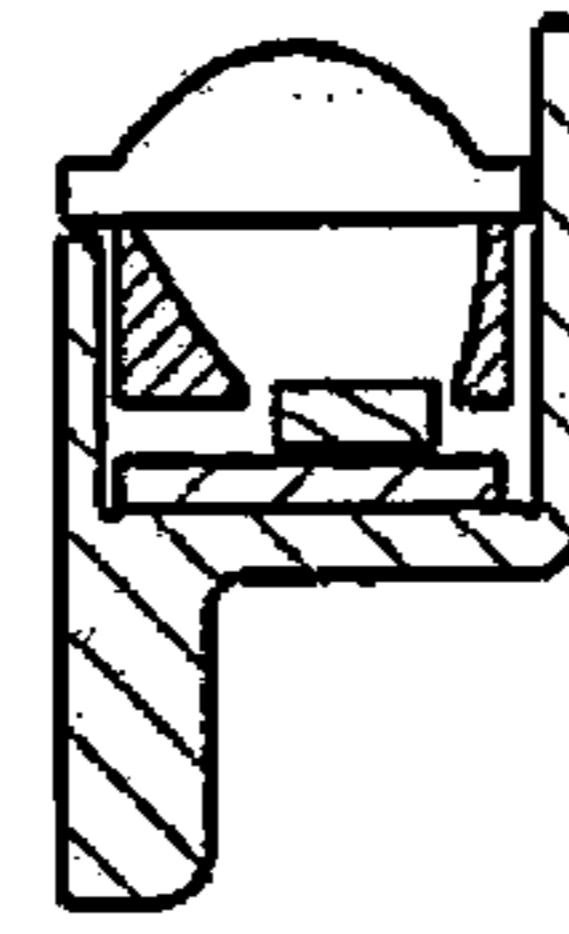
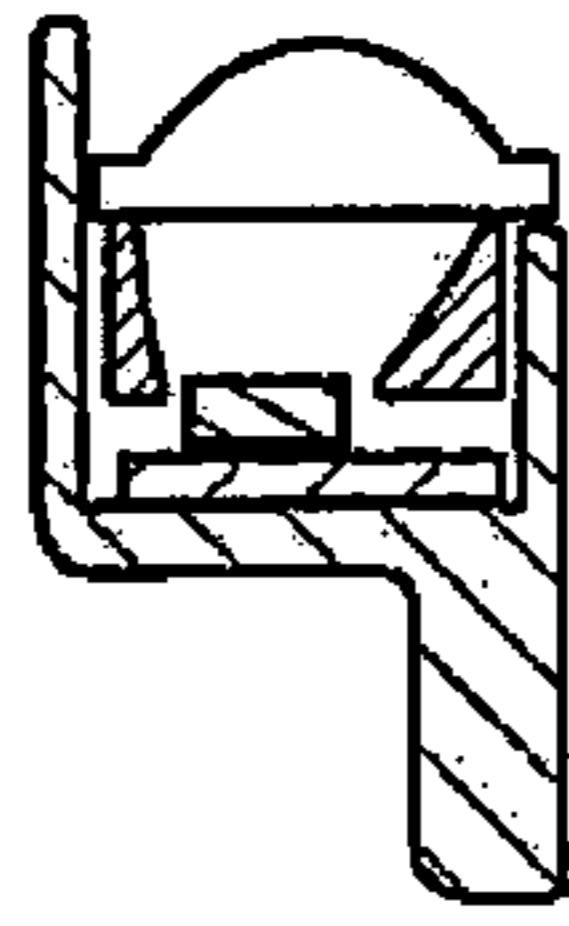
*FIG. 25*



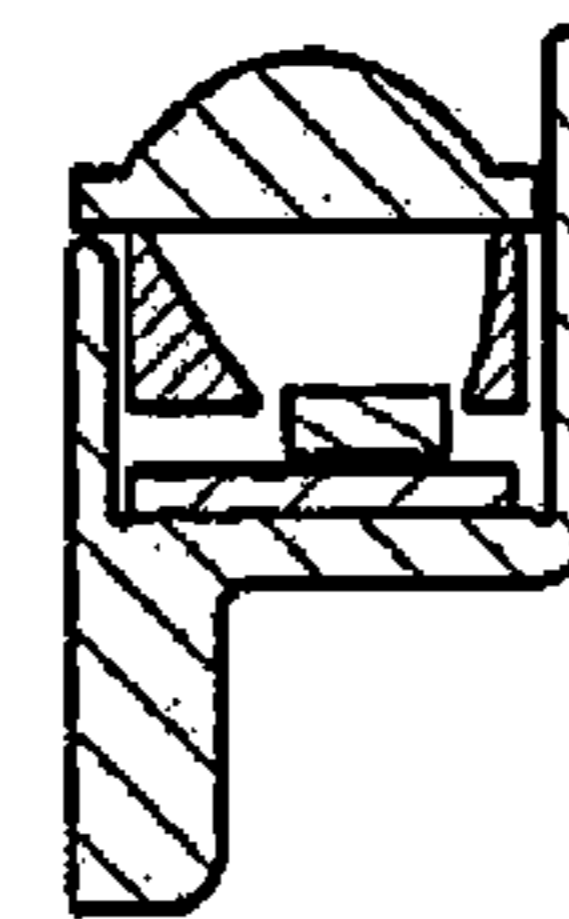
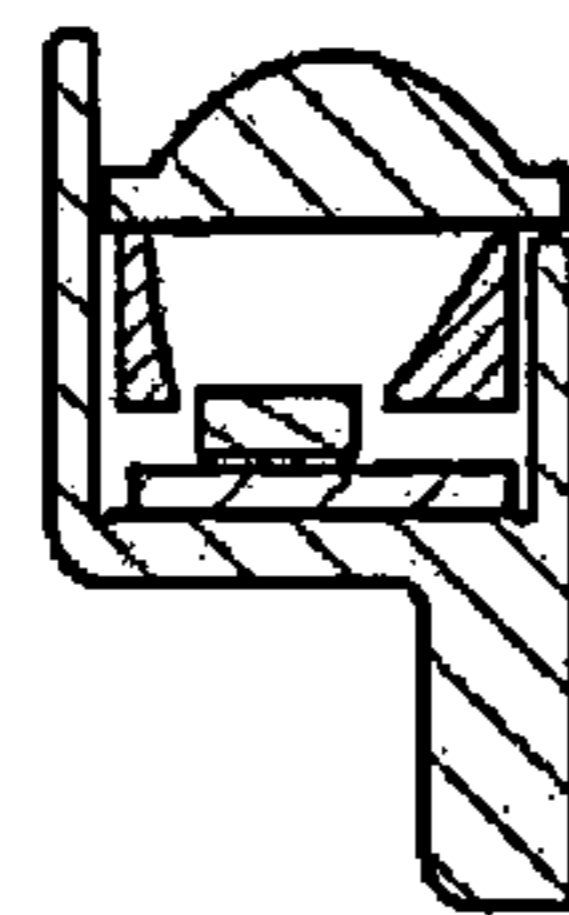
*FIG. 26*



*FIG. 27*

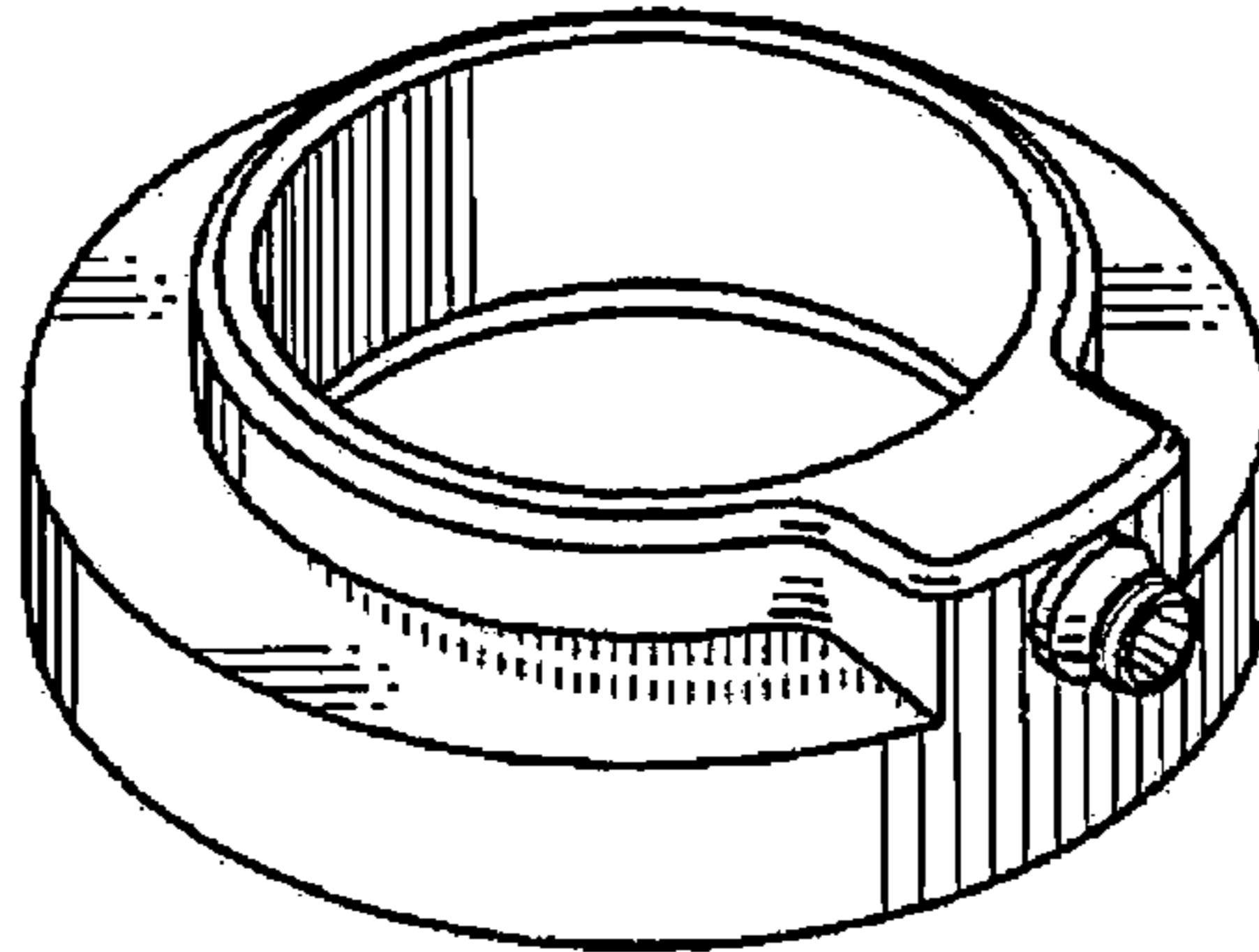


*FIG. 28*

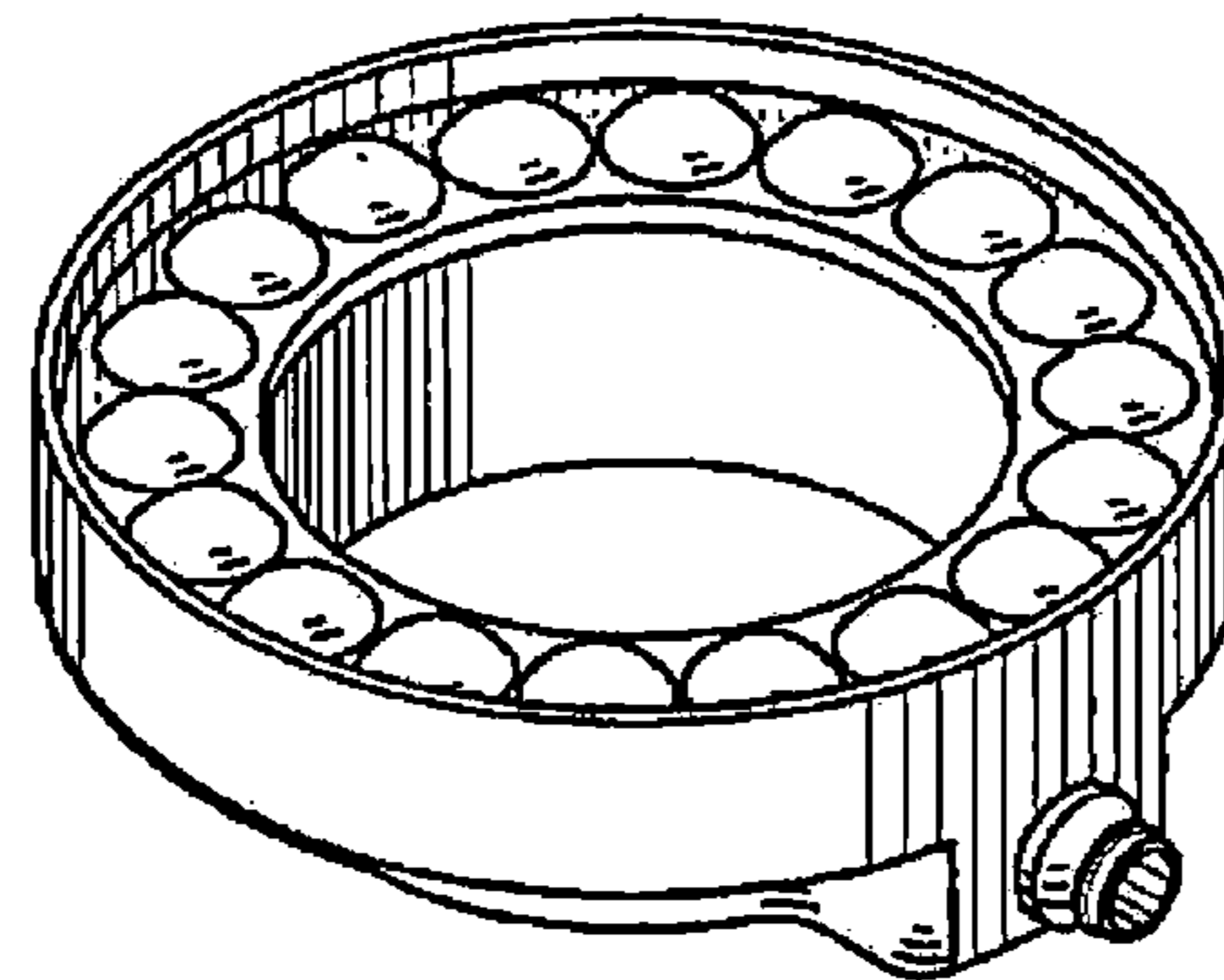




*FIG. 29*



*FIG. 30*



*FIG. 31*

