



US00D412513S

**United States Patent** [19]  
**Ooyabu**

[11] **Patent Number: Des. 412,513**

[45] **Date of Patent: \*\* Aug. 3, 1999**

[54] **UPPER ELECTRODE FOR  
MANUFACTURING SEMICONDUCTORS**

[75] Inventor: **Jun Ooyabu**, Yamanashi-Ken, Japan

[73] Assignee: **Tokyo Electron Limited**, Tokyo-To,  
Japan

[\*\*] Term: **14 Years**

[21] Appl. No.: **29/074,109**

[22] Filed: **Jul. 28, 1997**

[30] **Foreign Application Priority Data**

Jan. 29, 1997 [JP] Japan ..... 9-2208

[51] **LOC (6) Cl.** ..... **15-01**

[52] **U.S. Cl.** ..... **D15/144**

[58] **Field of Search** ..... D13/152; D15/122,  
D15/144, 144.1; 414/935-941

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

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*Primary Examiner*—Brian N. Vinson  
*Attorney, Agent, or Firm*—Ladas & Parry

[57] **CLAIM**

I claim the ornamental design for an upper electrode for manufacturing semiconductors, as shown and described.

**DESCRIPTION**

FIG. 1 is a front elevational view of an upper electrode for manufacturing semiconductors showing my new design;

FIG. 2 is a rear elevational view thereof;

FIG. 3 is a top plan view thereof;

FIG. 4 is a bottom plan view thereof;

FIG. 5 is a right side elevational view thereof;

FIG. 6 is a left side elevational view thereof;

FIG. 7 is a front elevational view thereof, showing the electrode in an opened state;

FIG. 8 is a rear elevational view thereof, showing the electrode in an opened state;

FIG. 9 is a top plan view thereof, showing the electrode in an opened state;

FIG. 10 is a bottom plan view thereof, showing the electrode in an opened state;

FIG. 11 is a right side elevational view thereof, showing the electrode in an opened state;

FIG. 12 is a left side elevational view thereof, showing the electrode in an opened state; and,

FIG. 13 is a reduced front elevational view thereof, showing the electrode in an opened state, with the broken-line disclosure being for illustrative purposes only and forming no part of the claimed design.

**1 Claim, 7 Drawing Sheets**

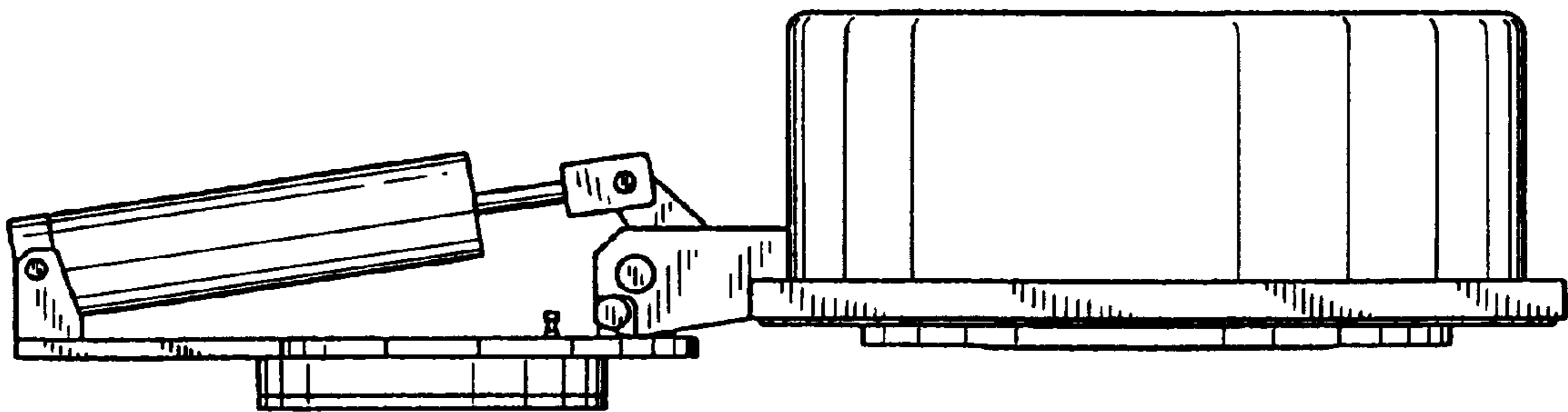


FIG. 1

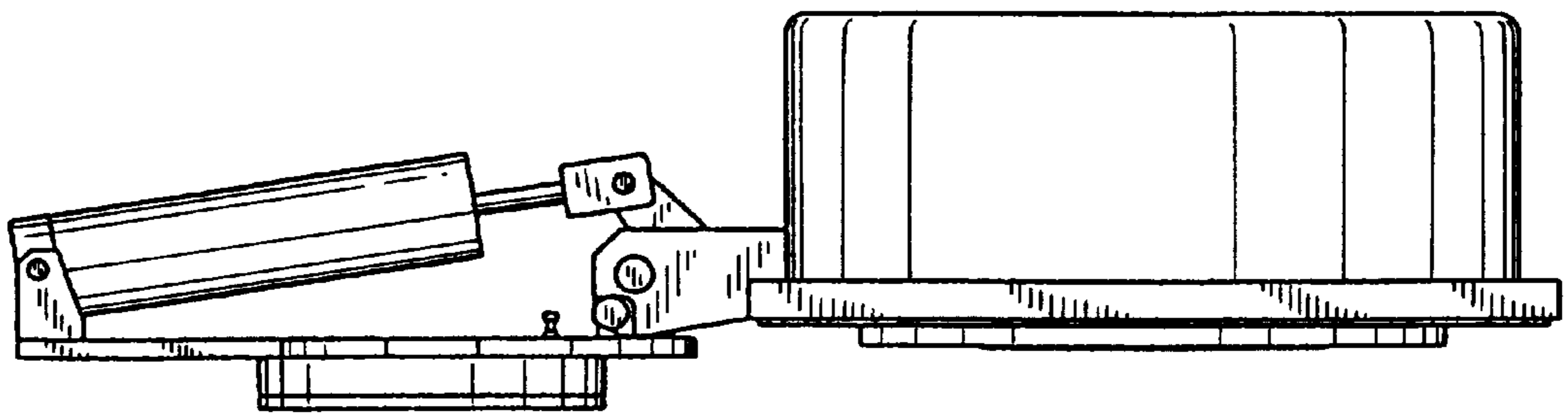


FIG. 2

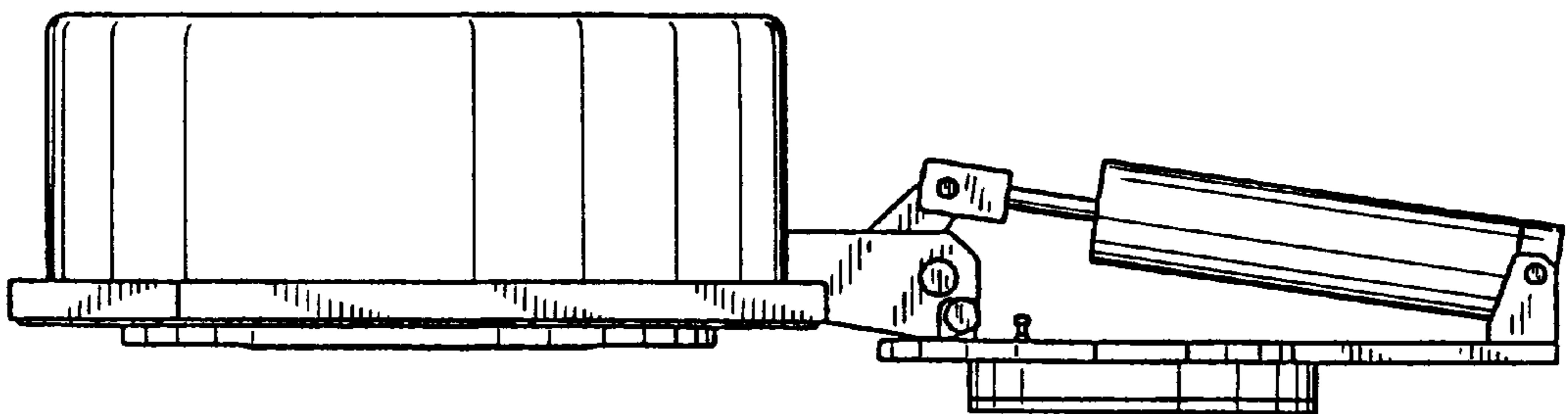


FIG. 3

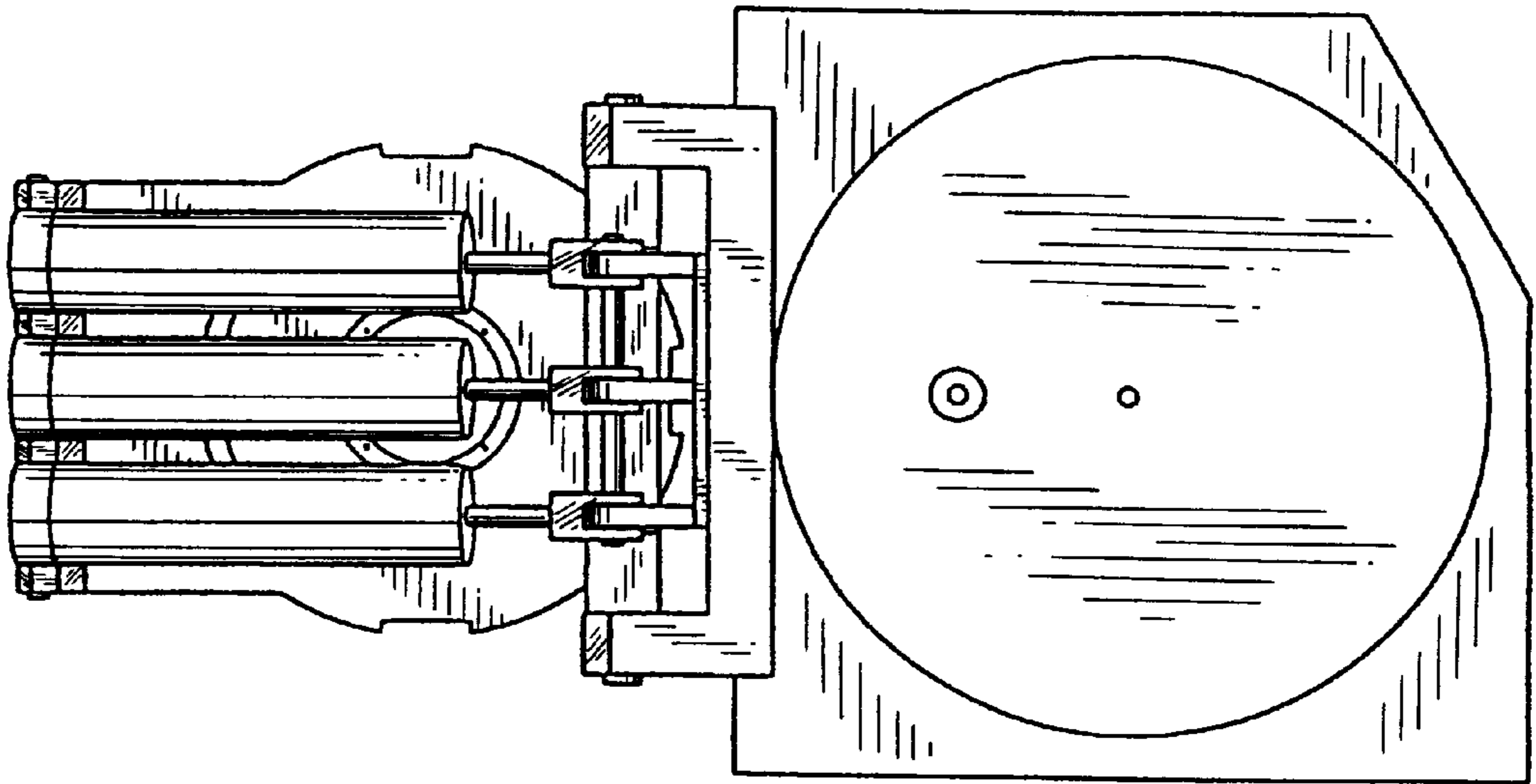


FIG. 4

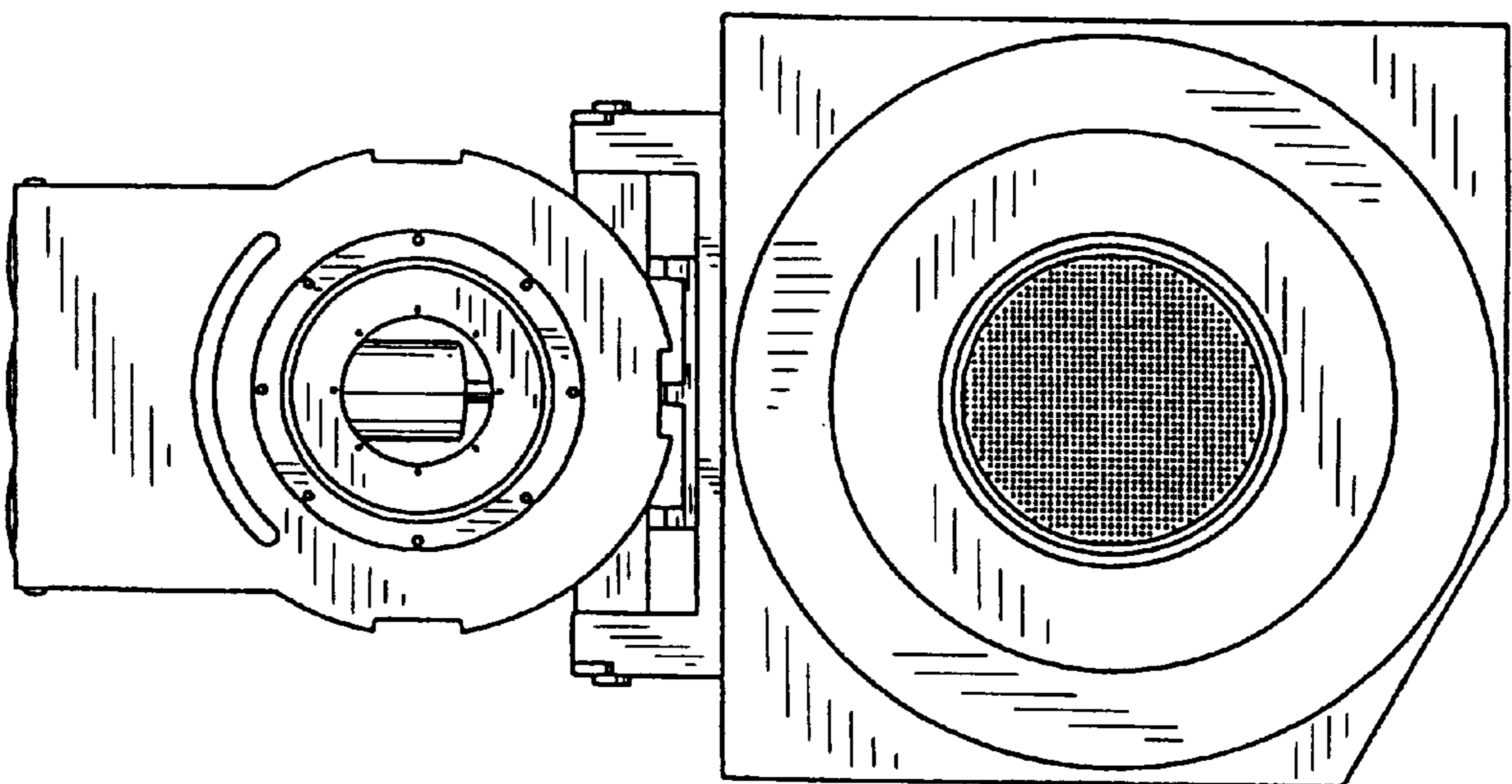


FIG. 5

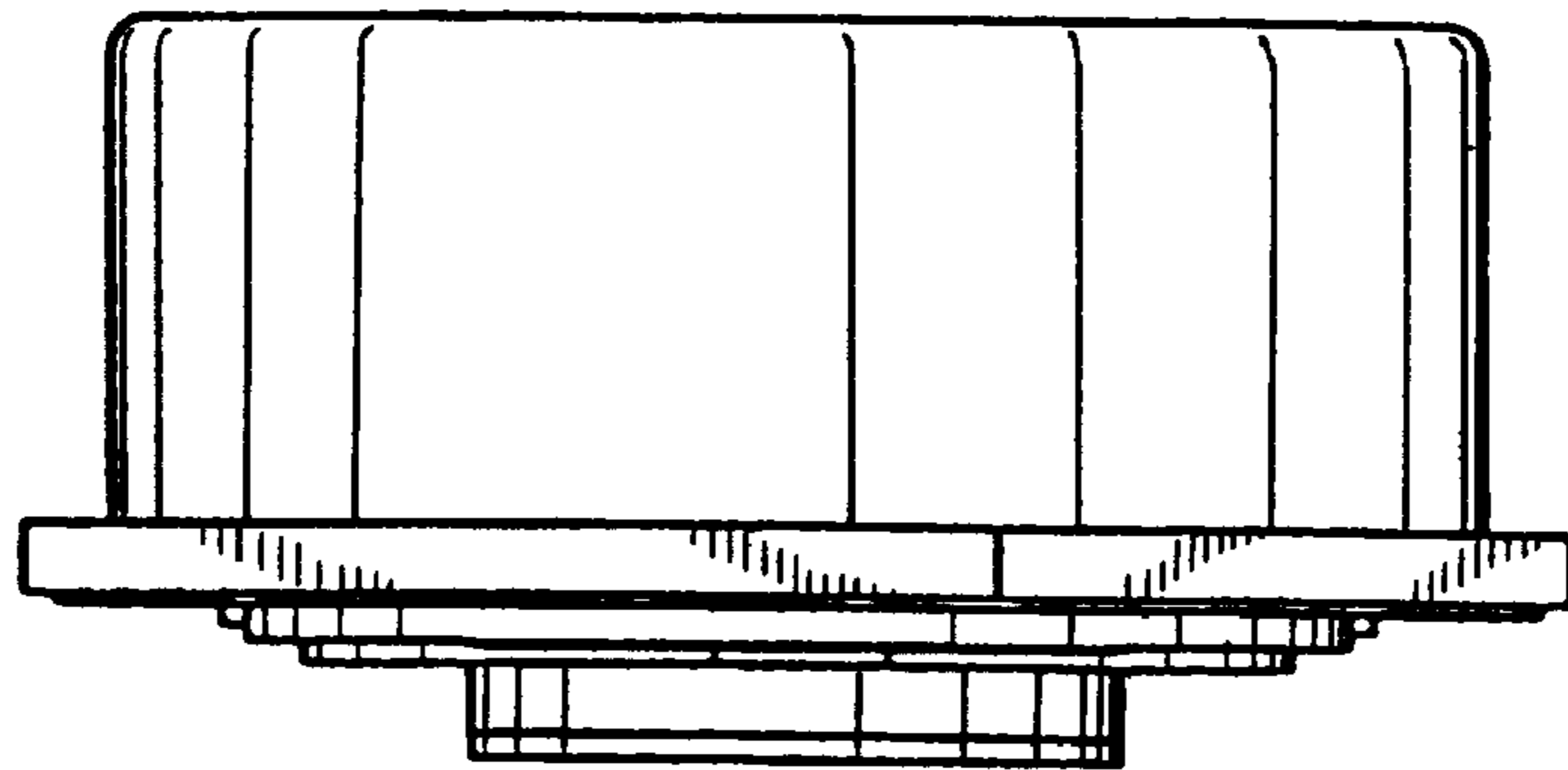


FIG. 6

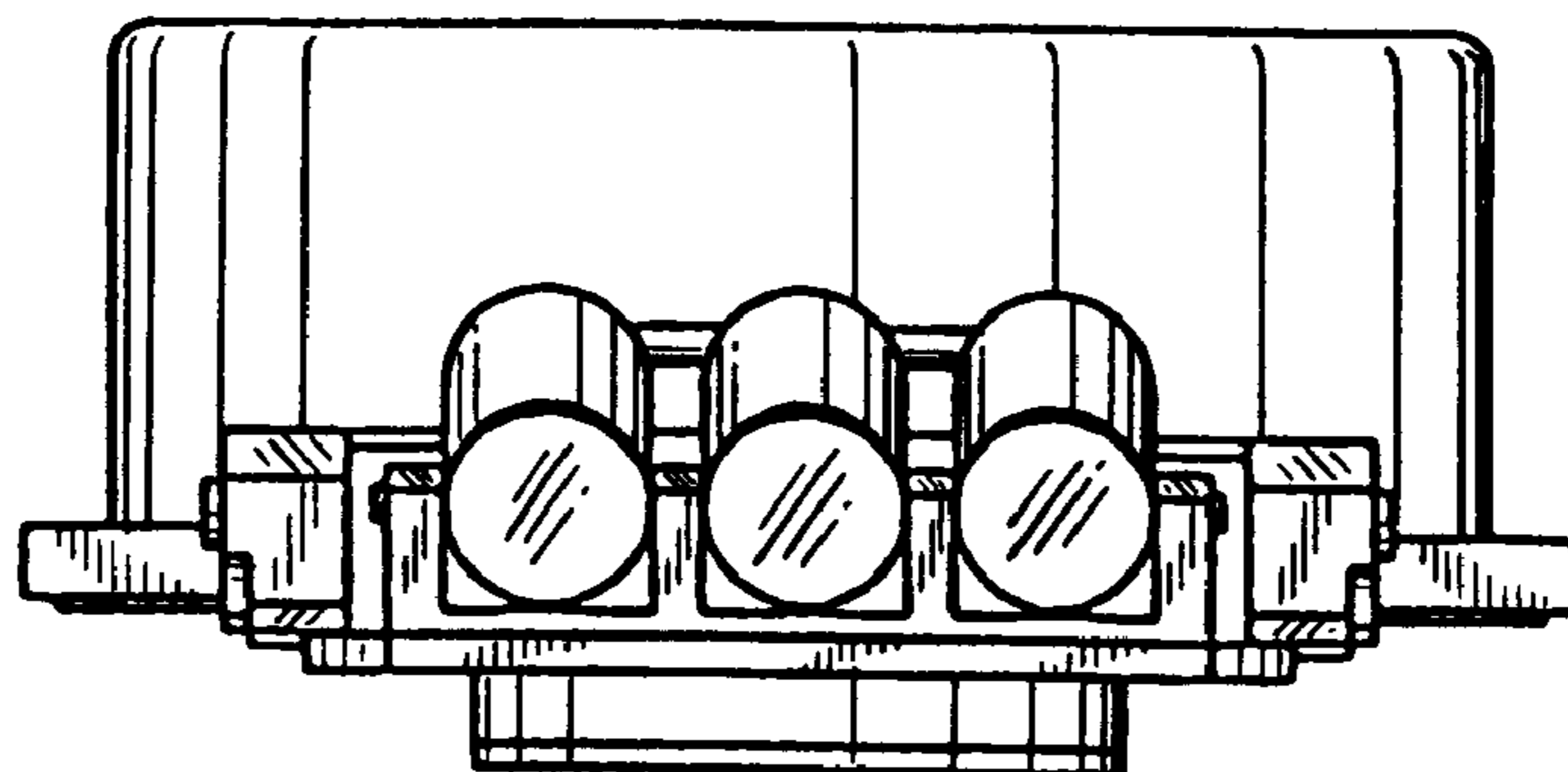


FIG. 7

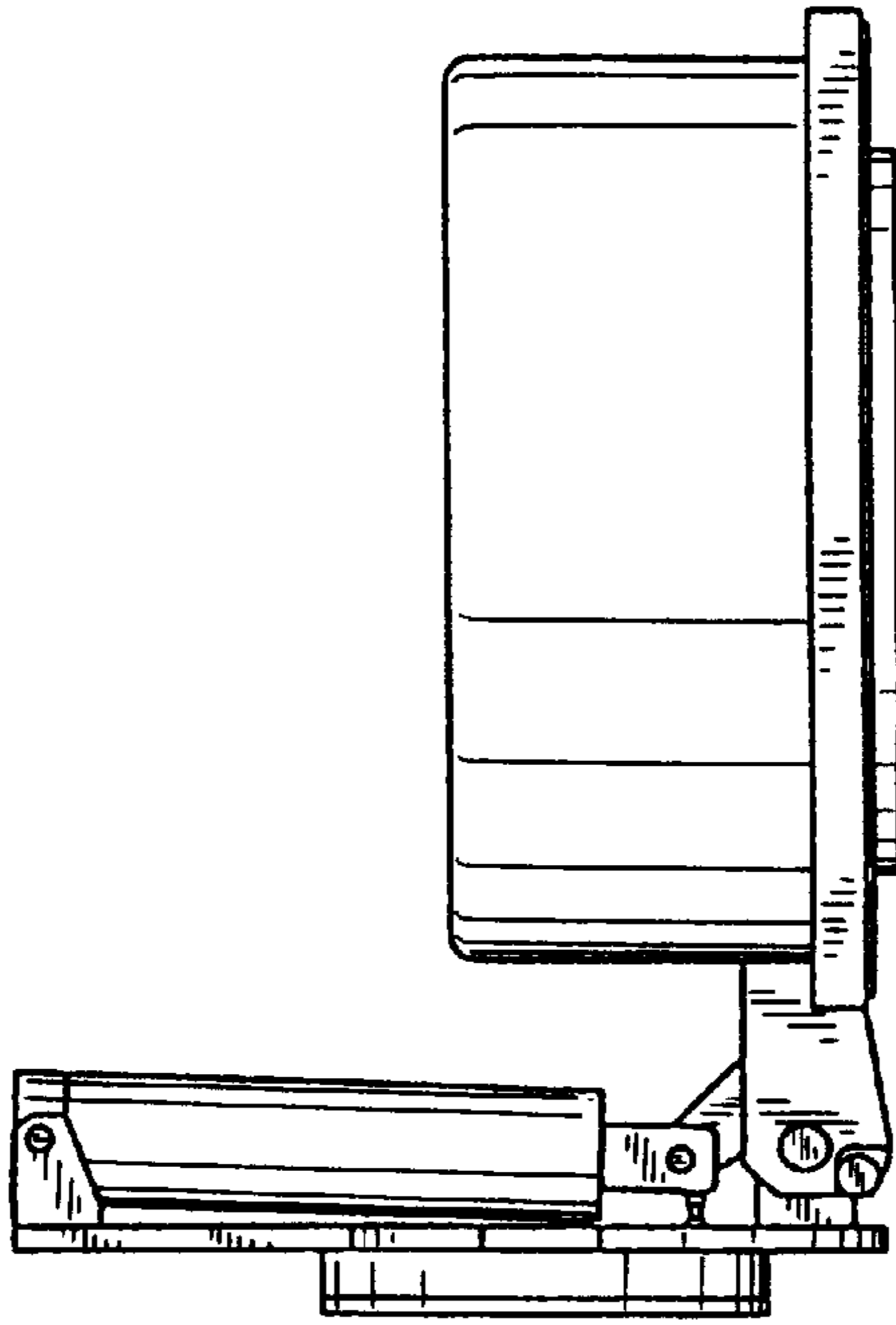


FIG. 8

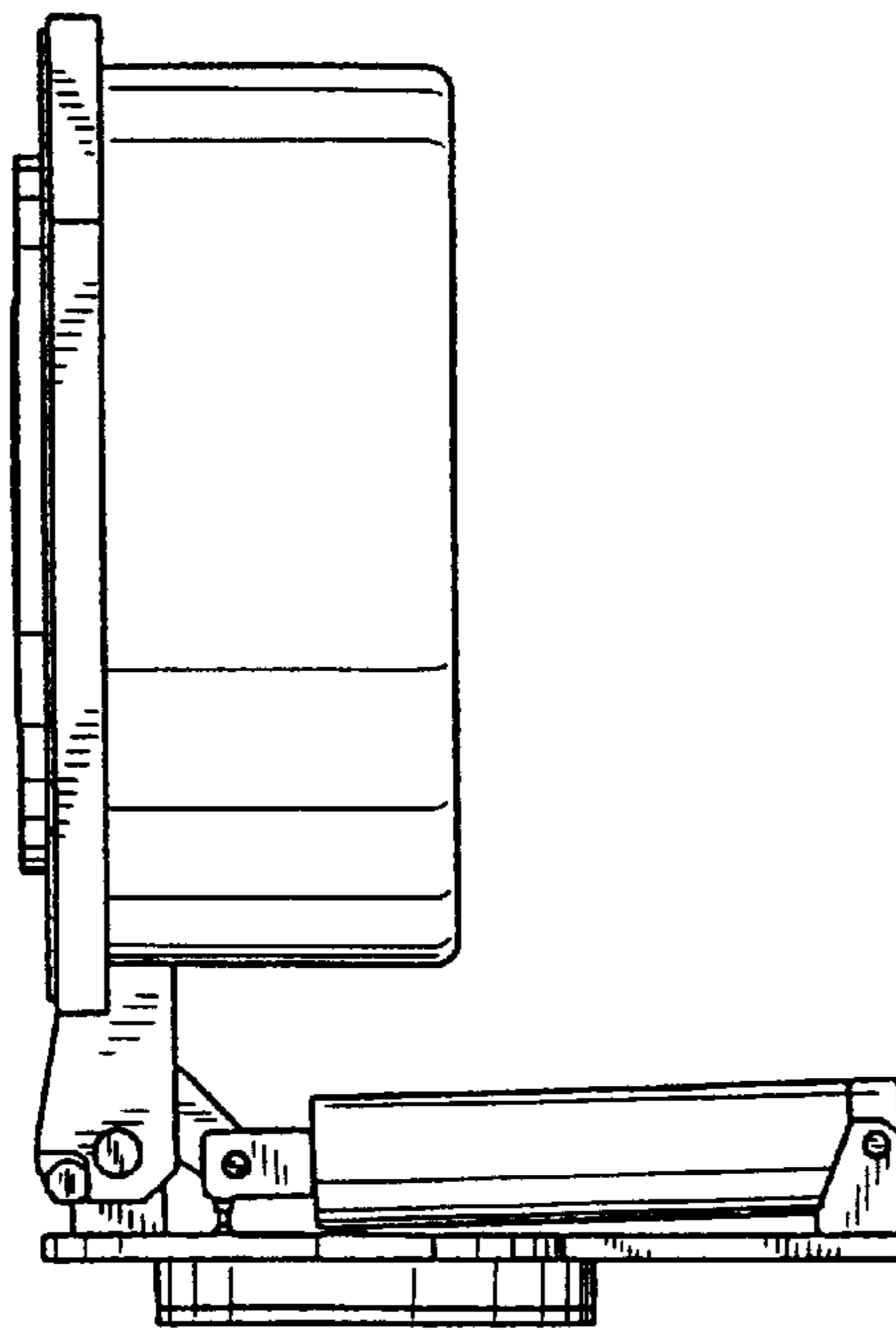


FIG. 9

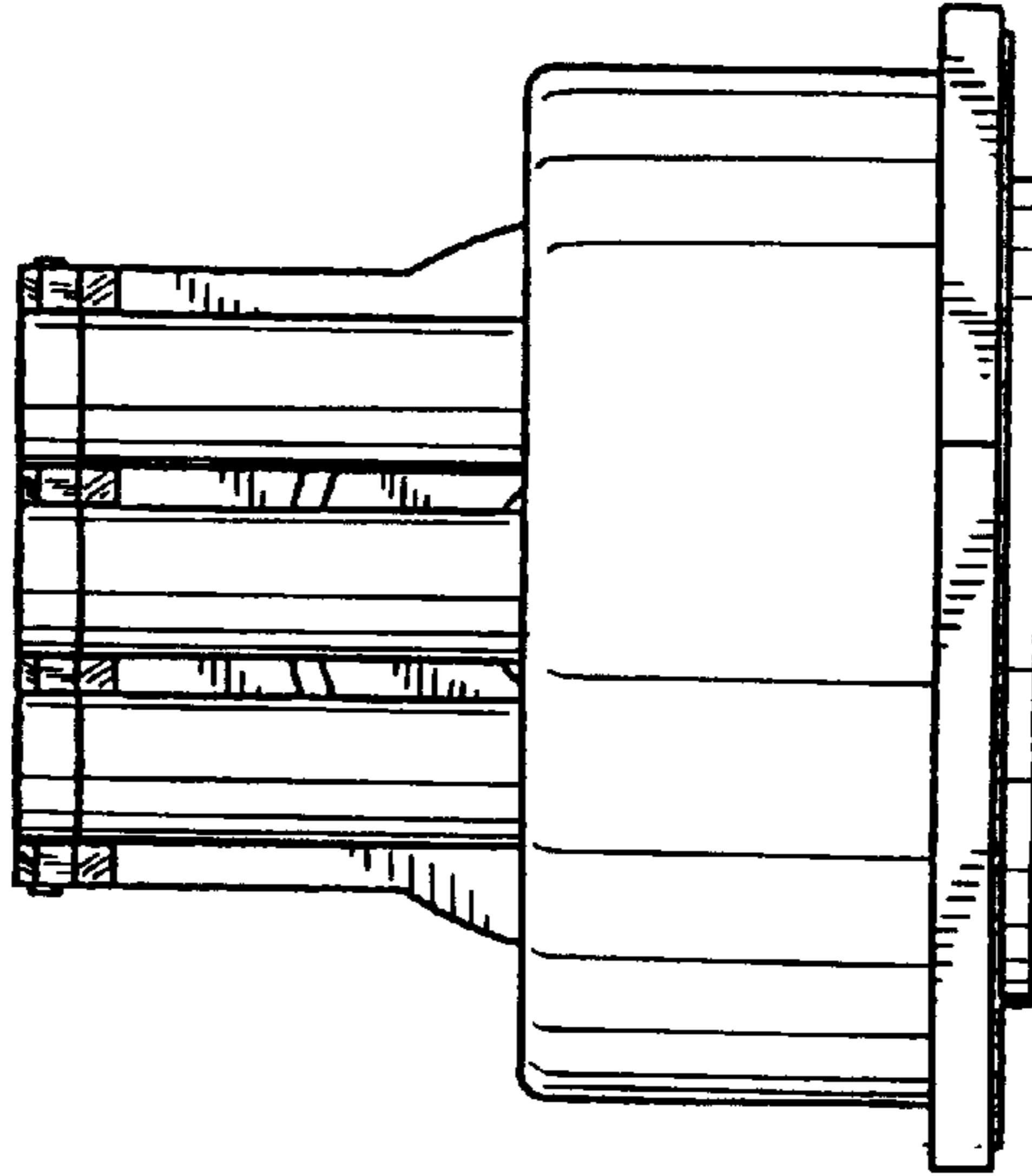


FIG. 10

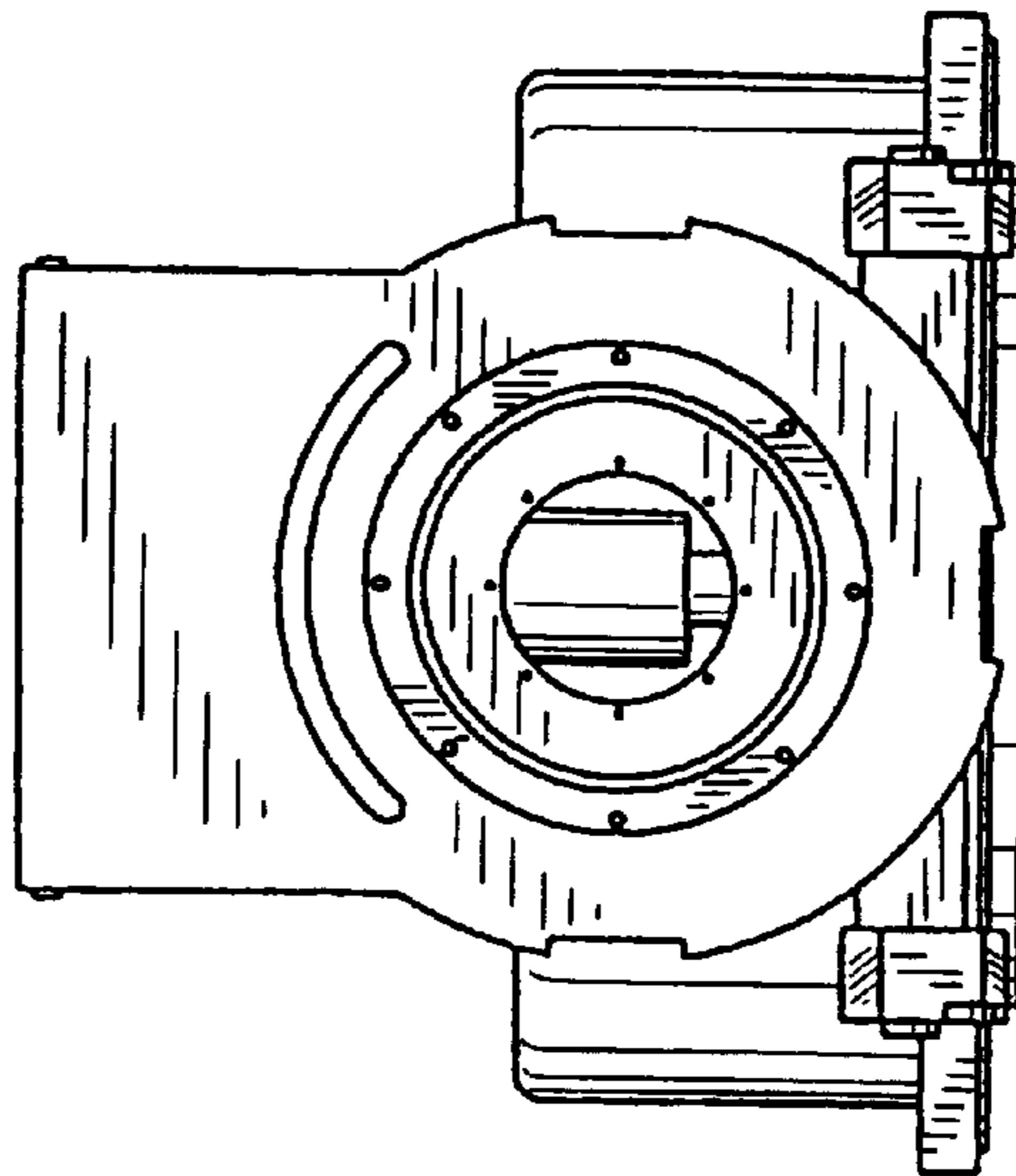


FIG. 11

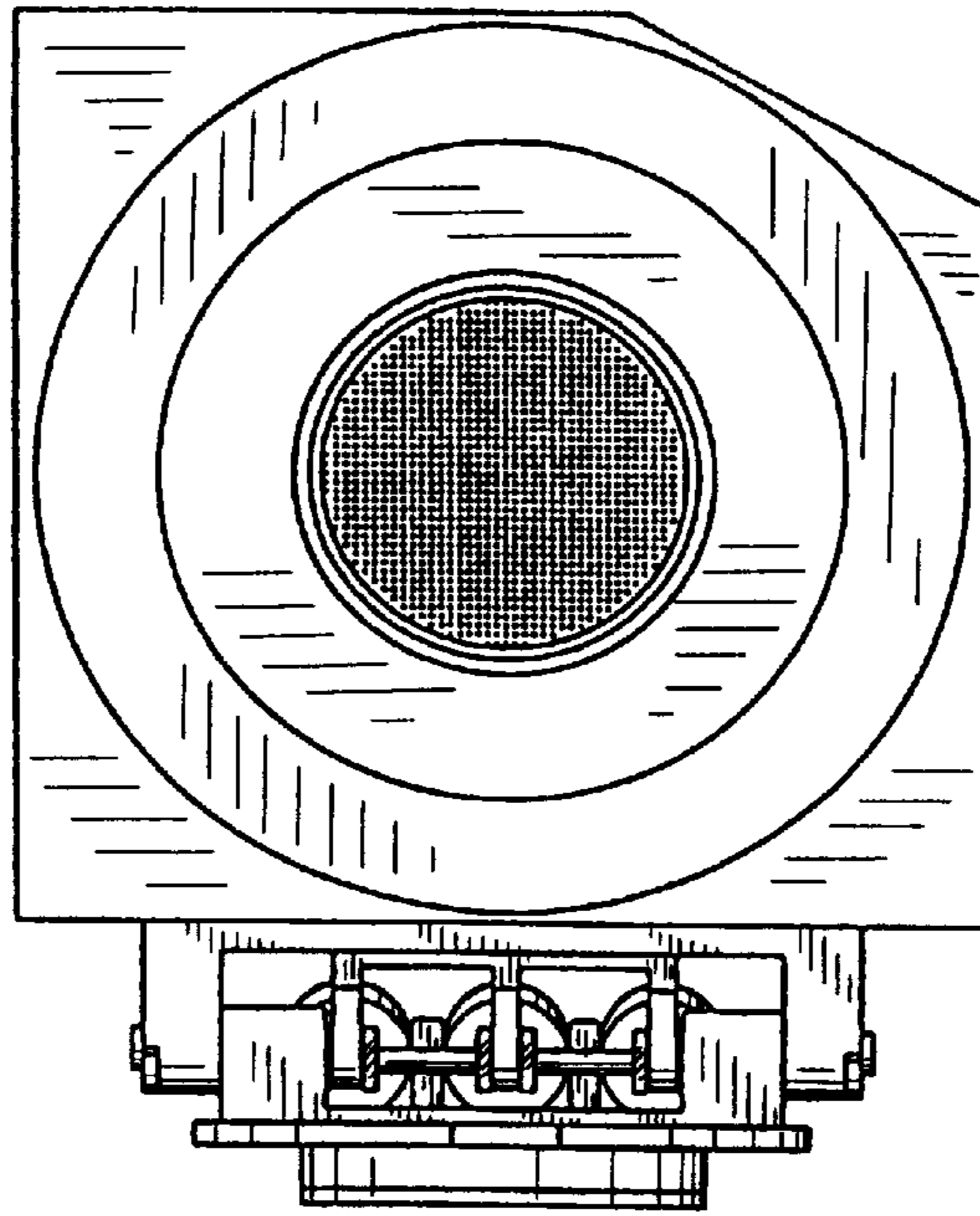
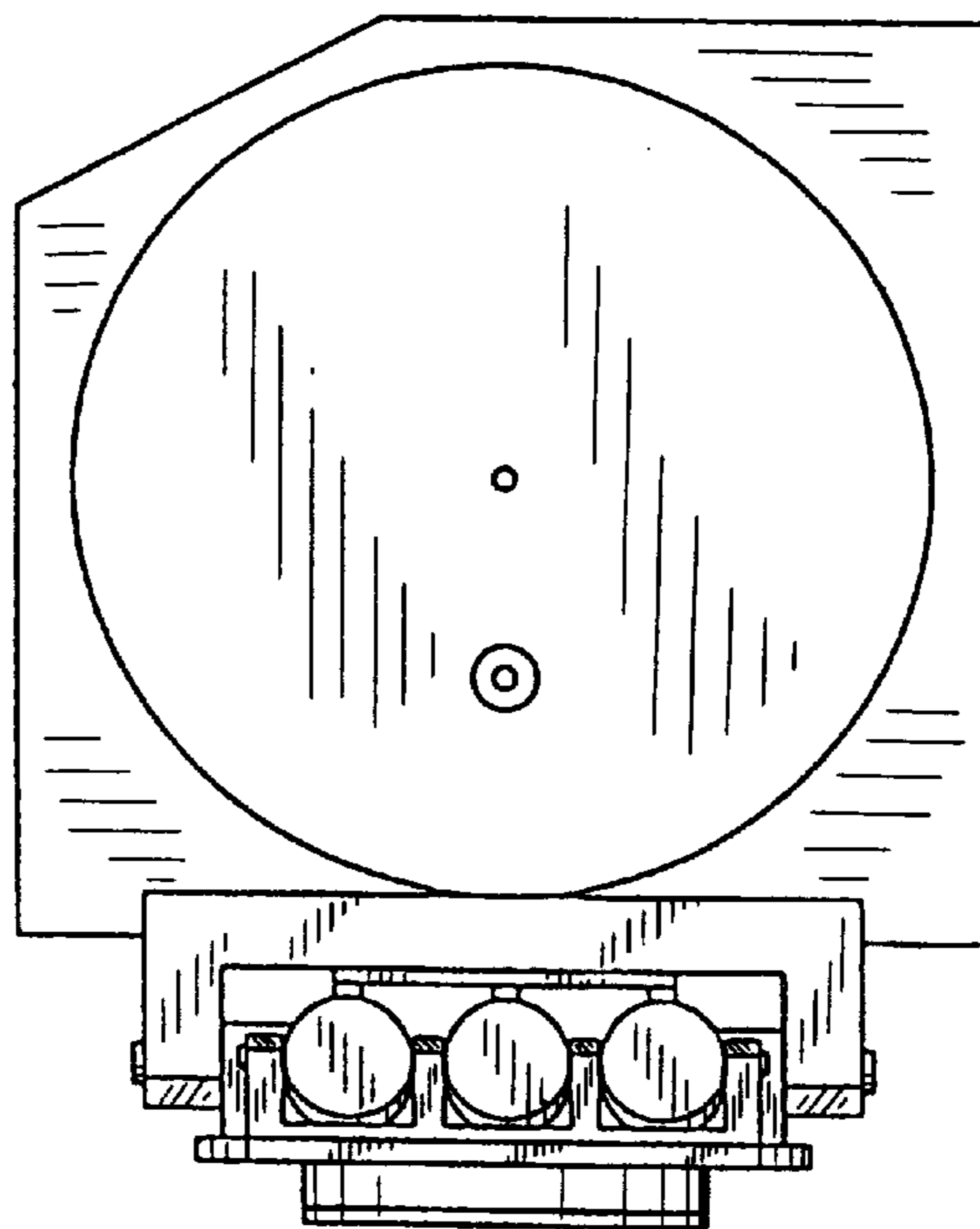


FIG. 12



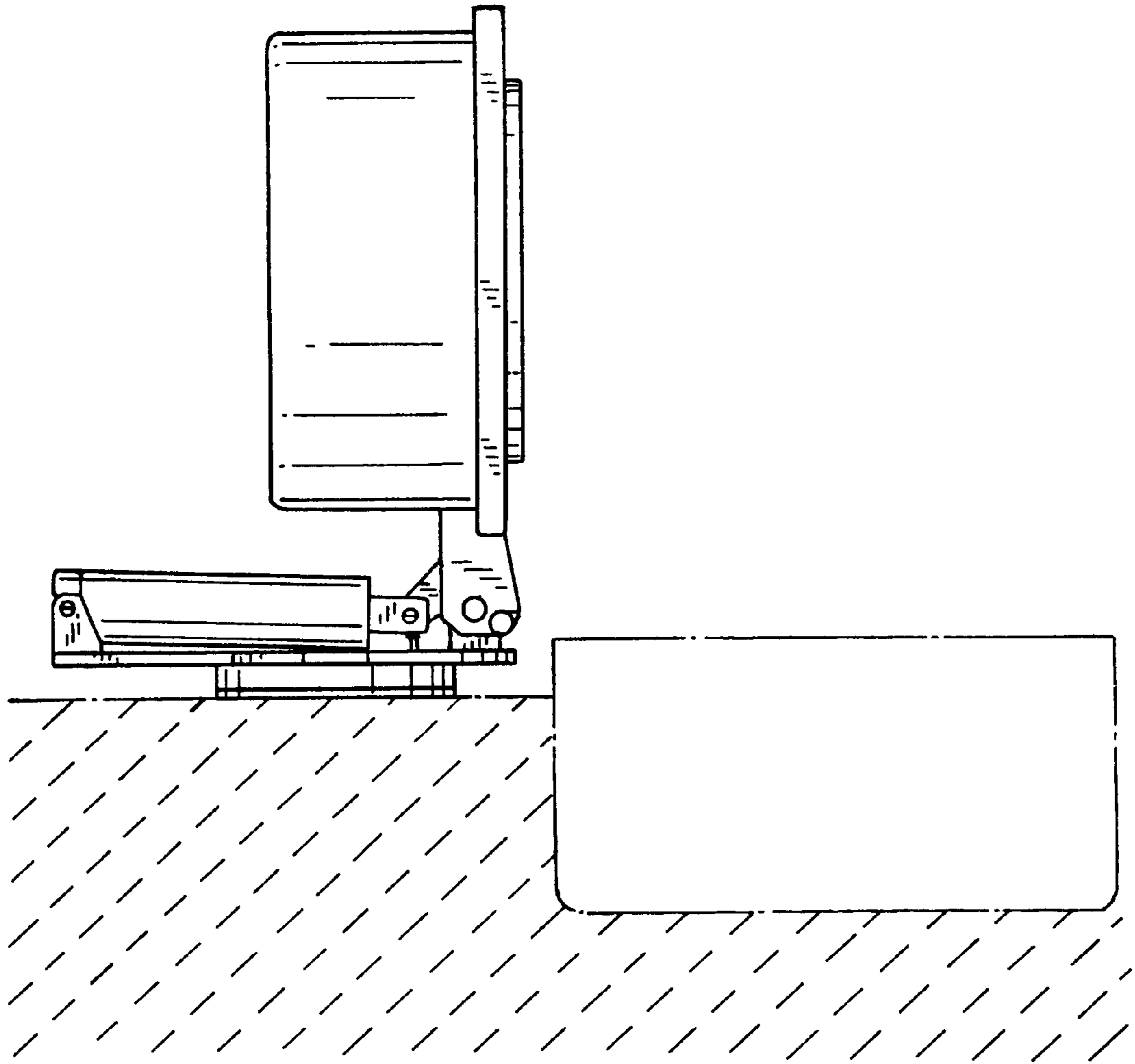


FIG. 13