



US00D410523S

# United States Patent [19] Ota

[11] **Patent Number: Des. 410,523**

[45] **Date of Patent: \*\* Jun. 1, 1999**

[54] **SOLENOID OPERATED VALVE**

[75] Inventor: **Masuo Ota**, Tanashi, Japan

[73] Assignee: **Koganei Corporation**, Tokyo, Japan

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

[21] Appl. No.: **29/086,687**

[22] Filed: **Apr. 17, 1998**

[51] **LOC (6) Cl. .... 23-01**

[52] **U.S. Cl. .... D23/233**

[58] **Field of Search .... D23/233-5, 244-6;  
D13/166; 137/596.16, 884**

[56] **References Cited**

**U.S. PATENT DOCUMENTS**

D. 246,907	1/1978	Fialkowski et al. ....	D23/233
D. 246,908	1/1978	Fetty .....	D23/233
D. 390,636	2/1998	Hayashi et al. ....	D23/233
5,699,830	12/1997	Hayashi et al. ....	137/884
5,706,858	1/1998	Miyazoe et al. ....	137/884
5,810,115	9/1998	Mismas .....	137/884

**OTHER PUBLICATIONS**

Koganei Catalog No. F007 1996.  
Koganei Catalog No. F103 1996.

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*Attorney, Agent, or Firm*—McCormick, Paulding & Huber

[57] **CLAIM**

The ornamental design for a solenoid operated valve, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a solenoid operated valve showing my new design;  
FIG. 2 is a front elevational view thereof;  
FIG. 3 is a rear elevational view thereof;  
FIG. 4 is a right side elevational view thereof;  
FIG. 5 is a left side elevational view thereof;  
FIG. 6 is a top plan view thereof;  
FIG. 7 is a bottom plan view thereof;  
FIG. 8 is a perspective view of a solenoid operated valve showing a second embodiment of my new design;  
FIG. 9 is a front elevational view thereof;  
FIG. 10 is a rear elevational view thereof;  
FIG. 11 is a right side elevational view thereof;  
FIG. 12 is a left side elevational view thereof;  
FIG. 13 is a top plan view thereof; and,  
FIG. 14 is a bottom plan view thereof.

**1 Claim, 12 Drawing Sheets**

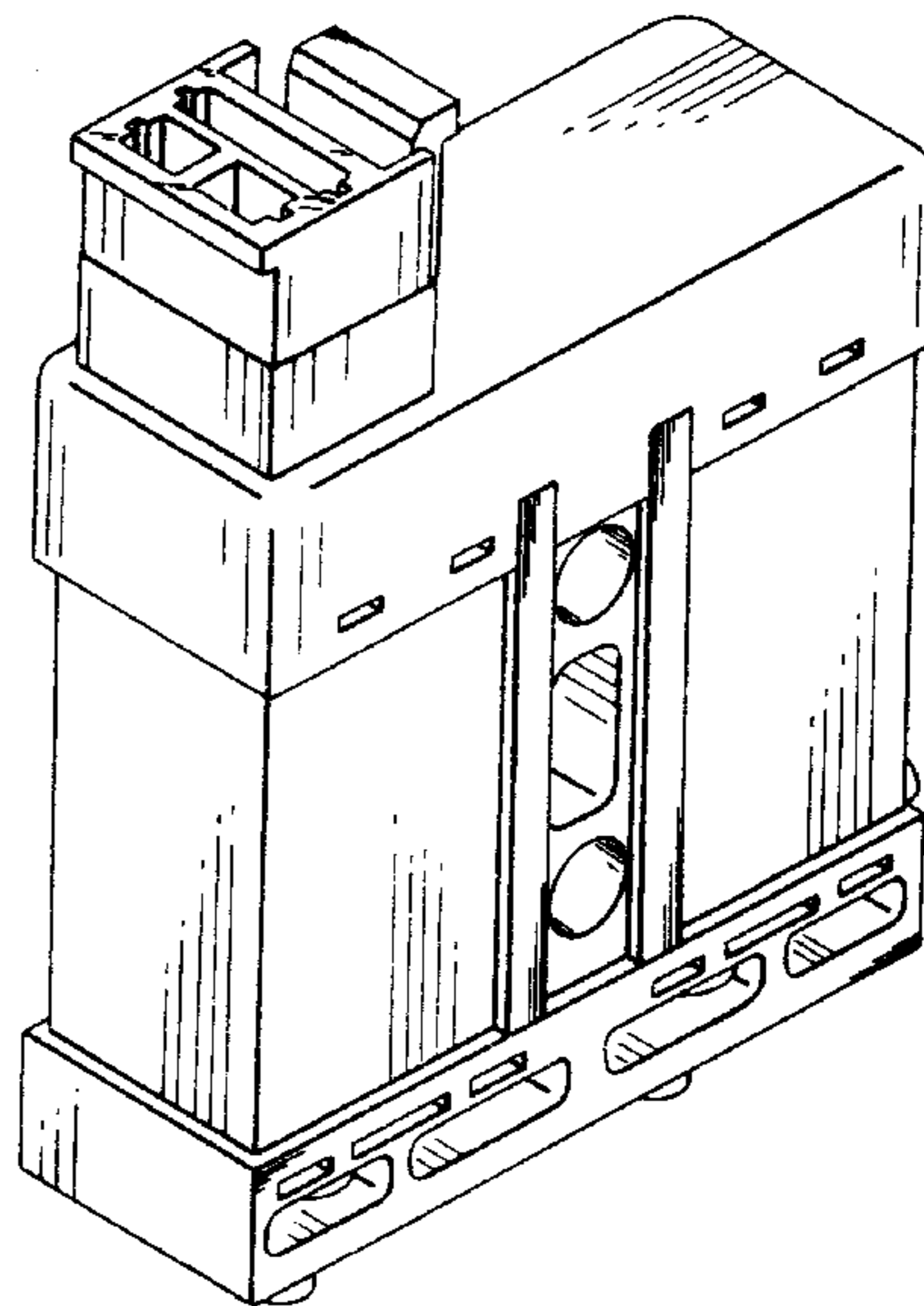
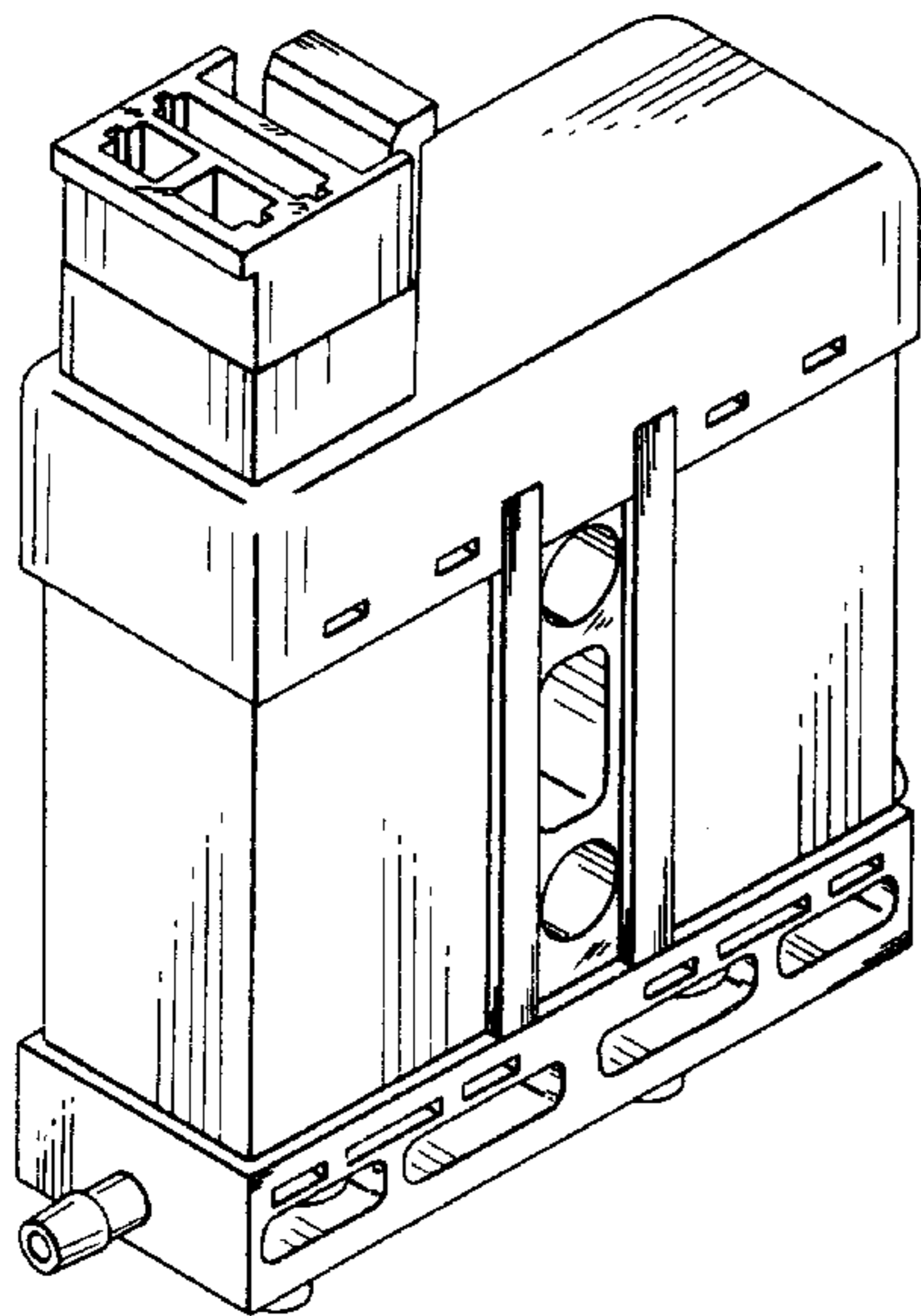


Fig. 1

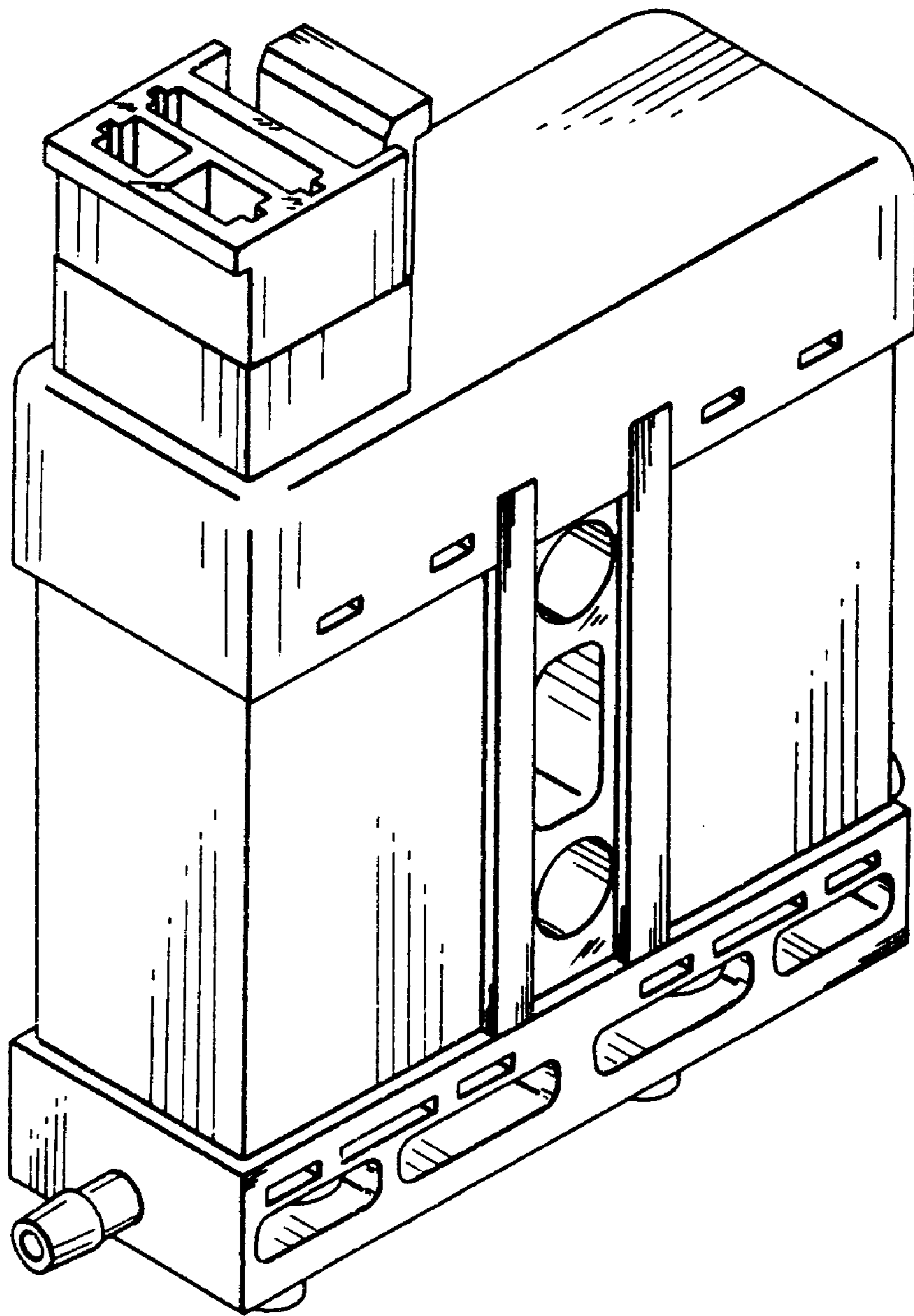


Fig. 2

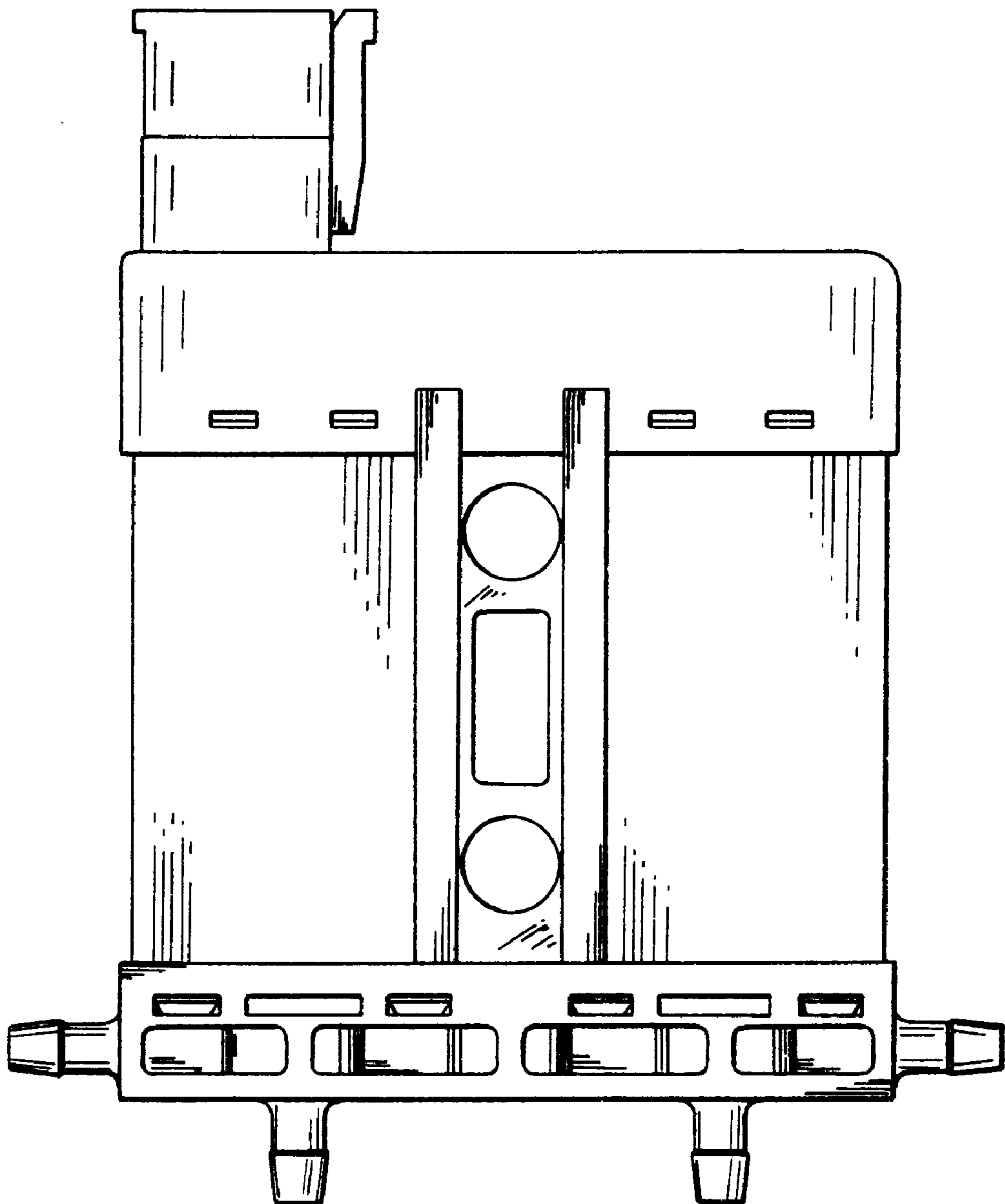


Fig. 3

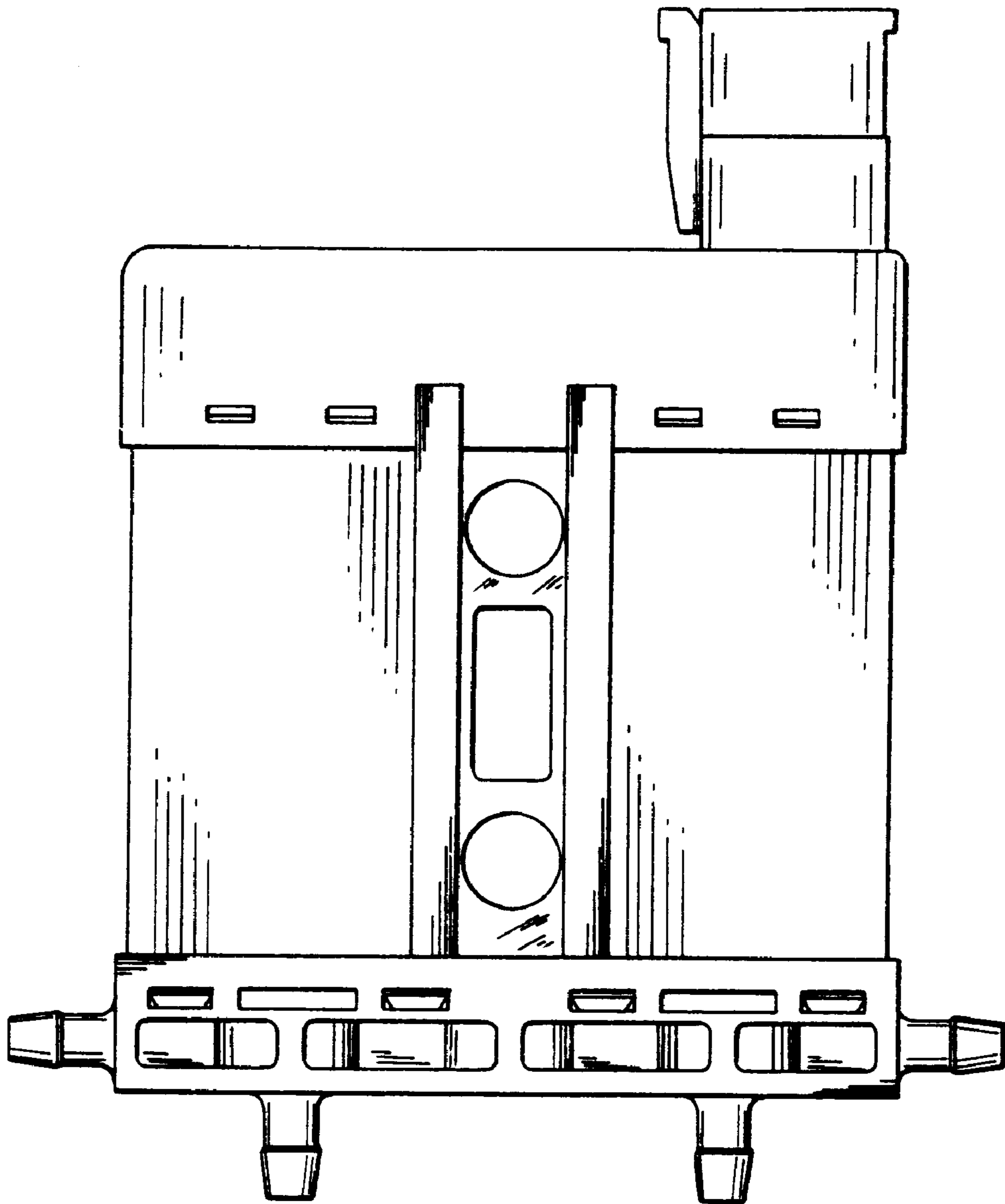


Fig. 4

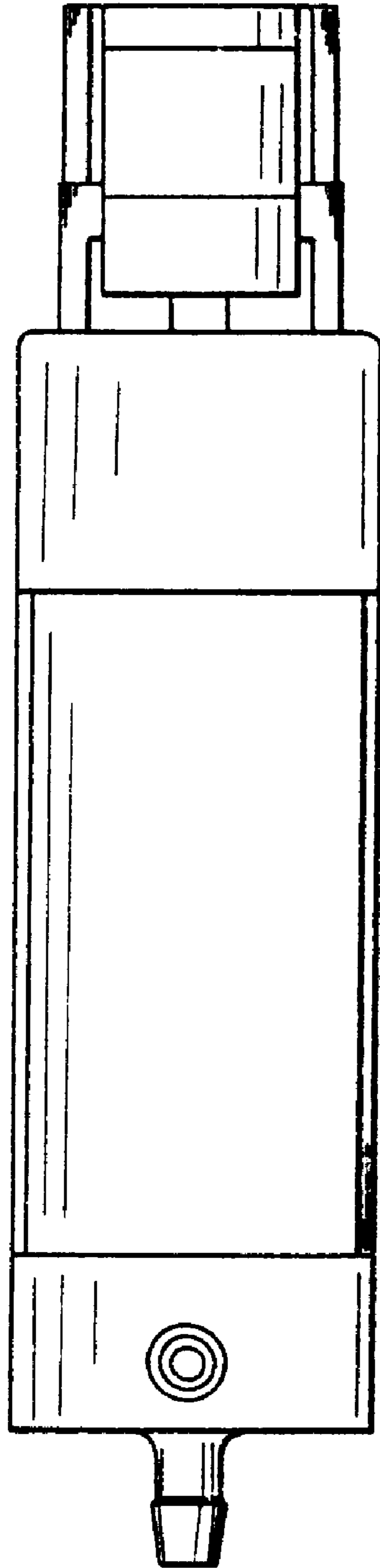


Fig. 5

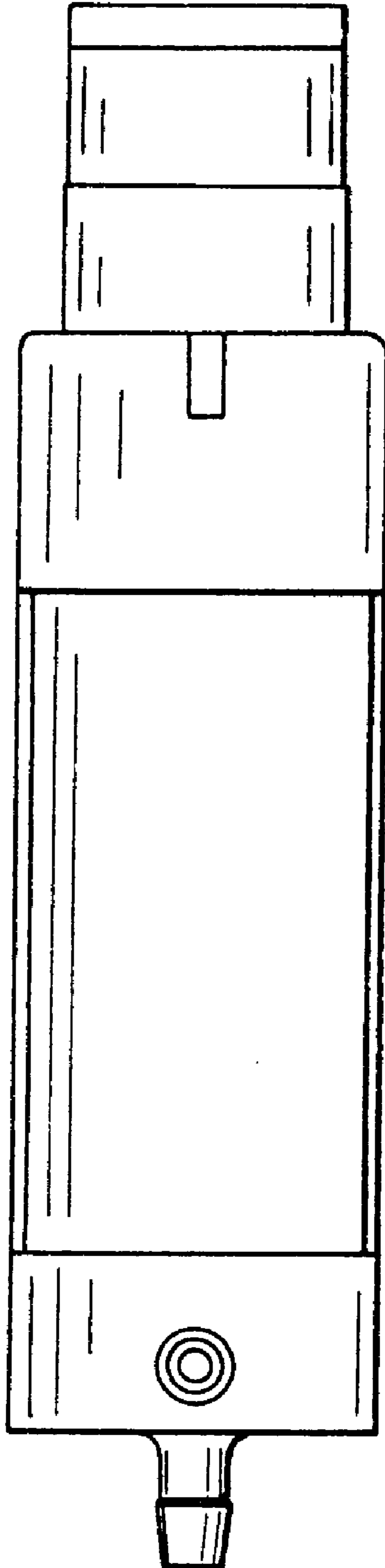


Fig. 6

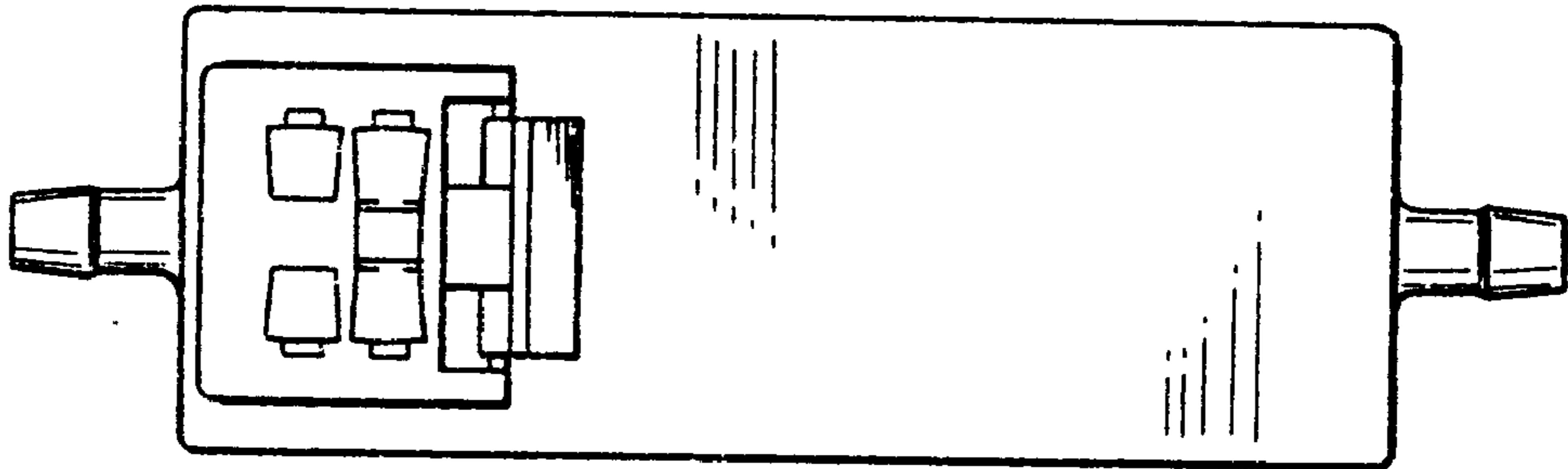


Fig. 7

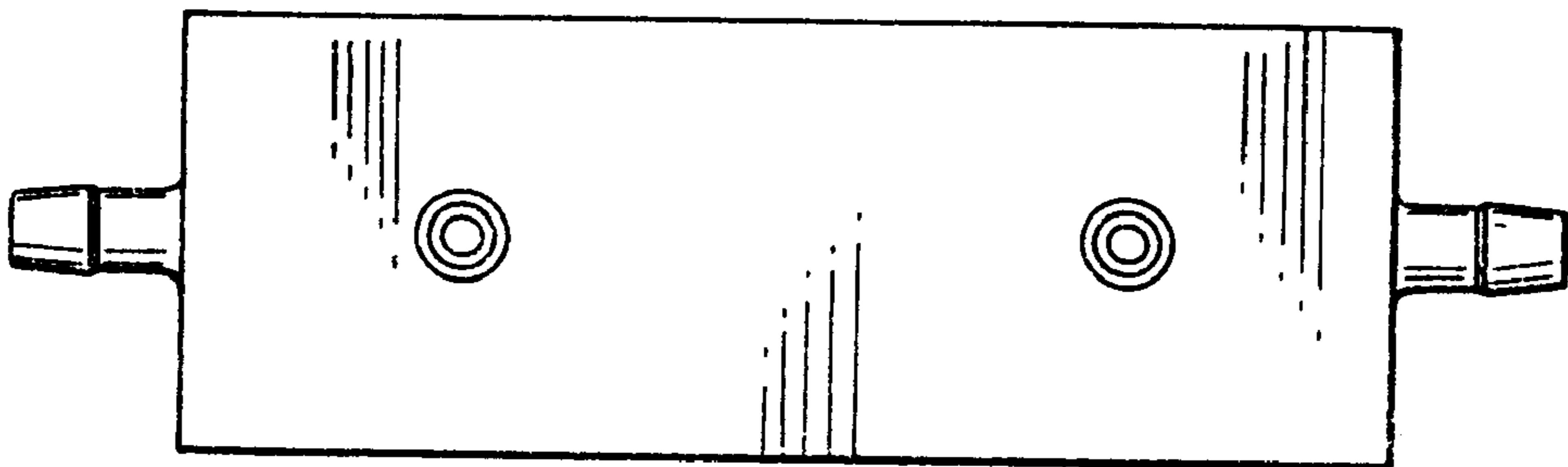


Fig. 8

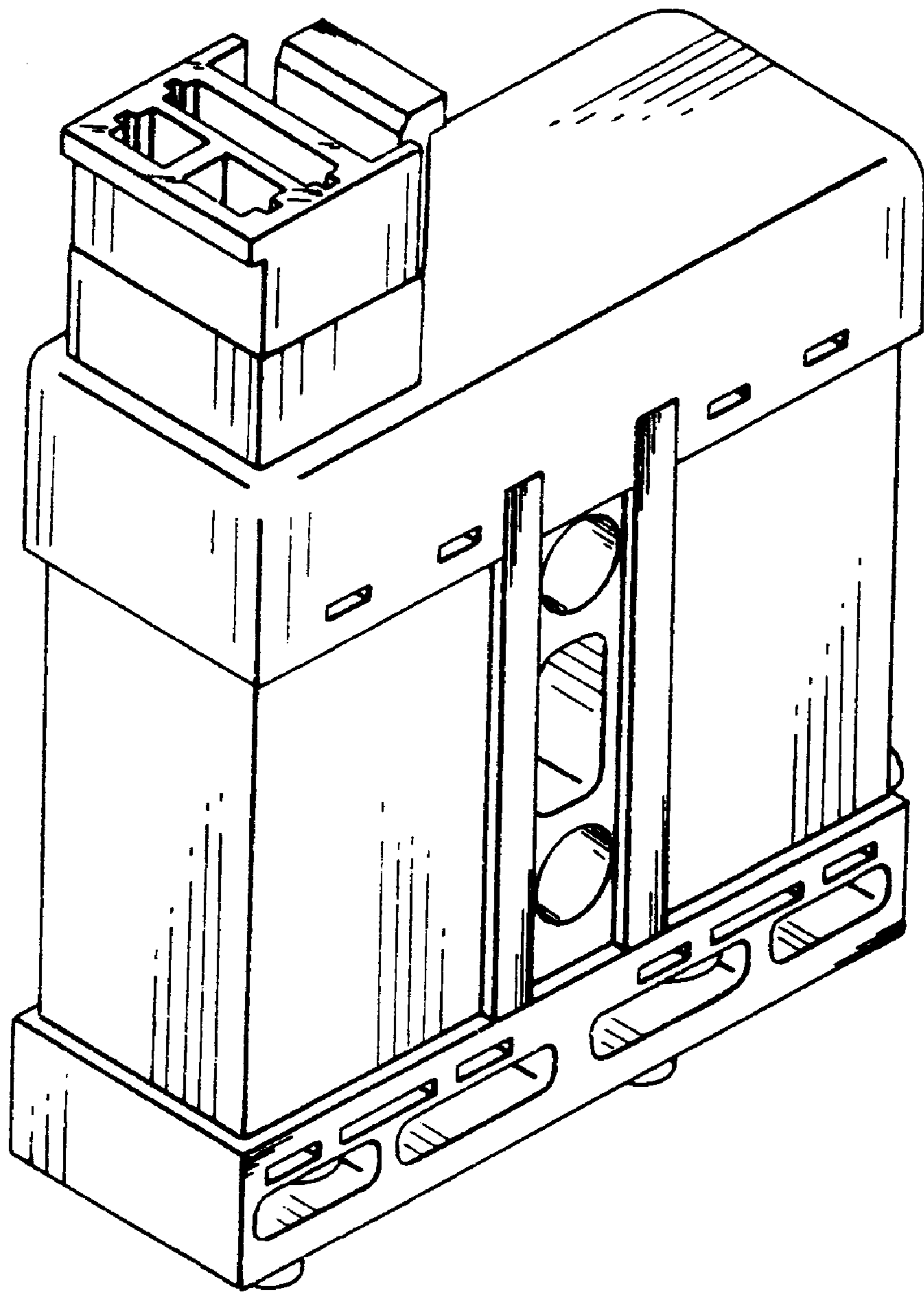




Fig. 9

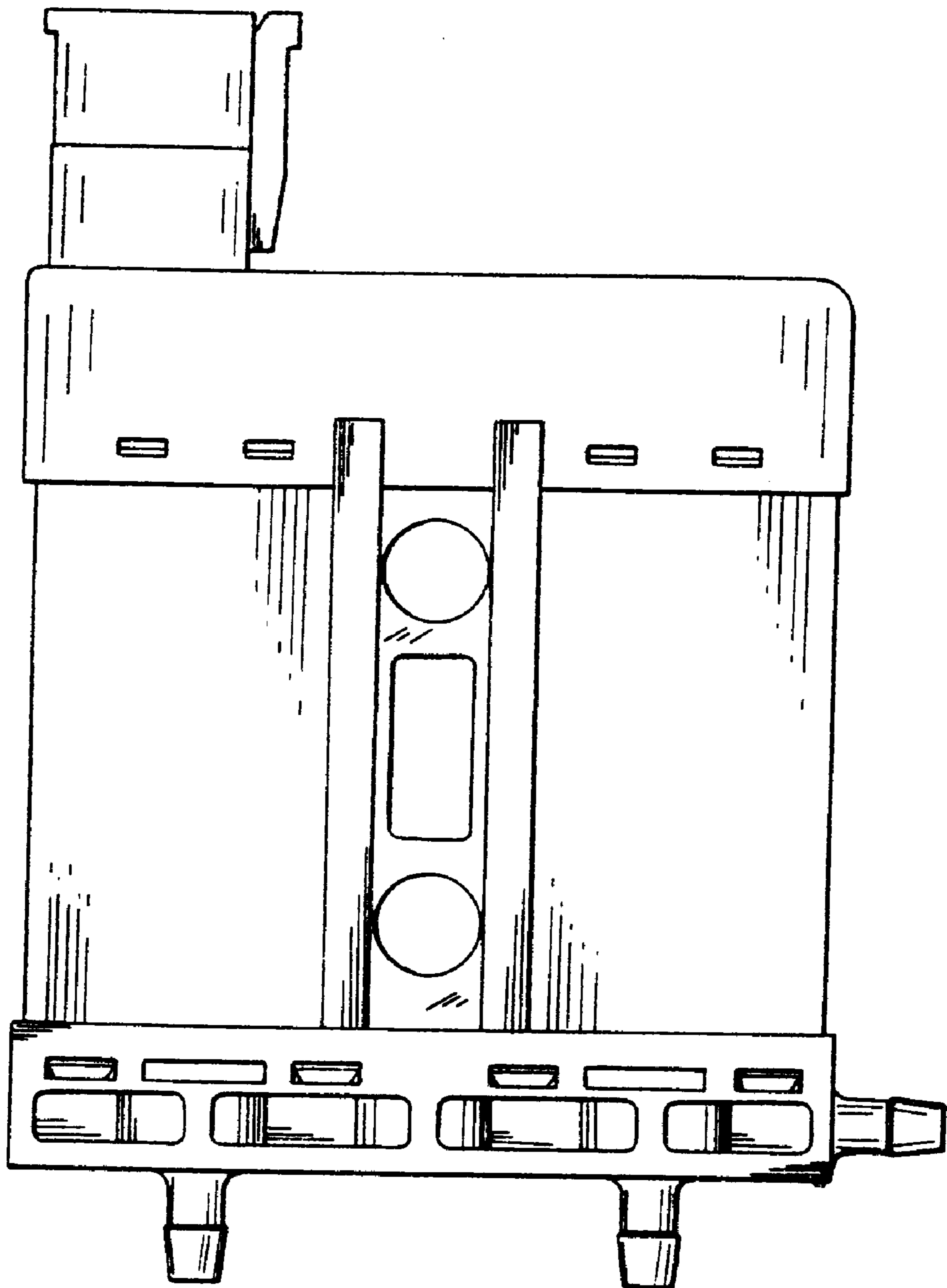


Fig. 10

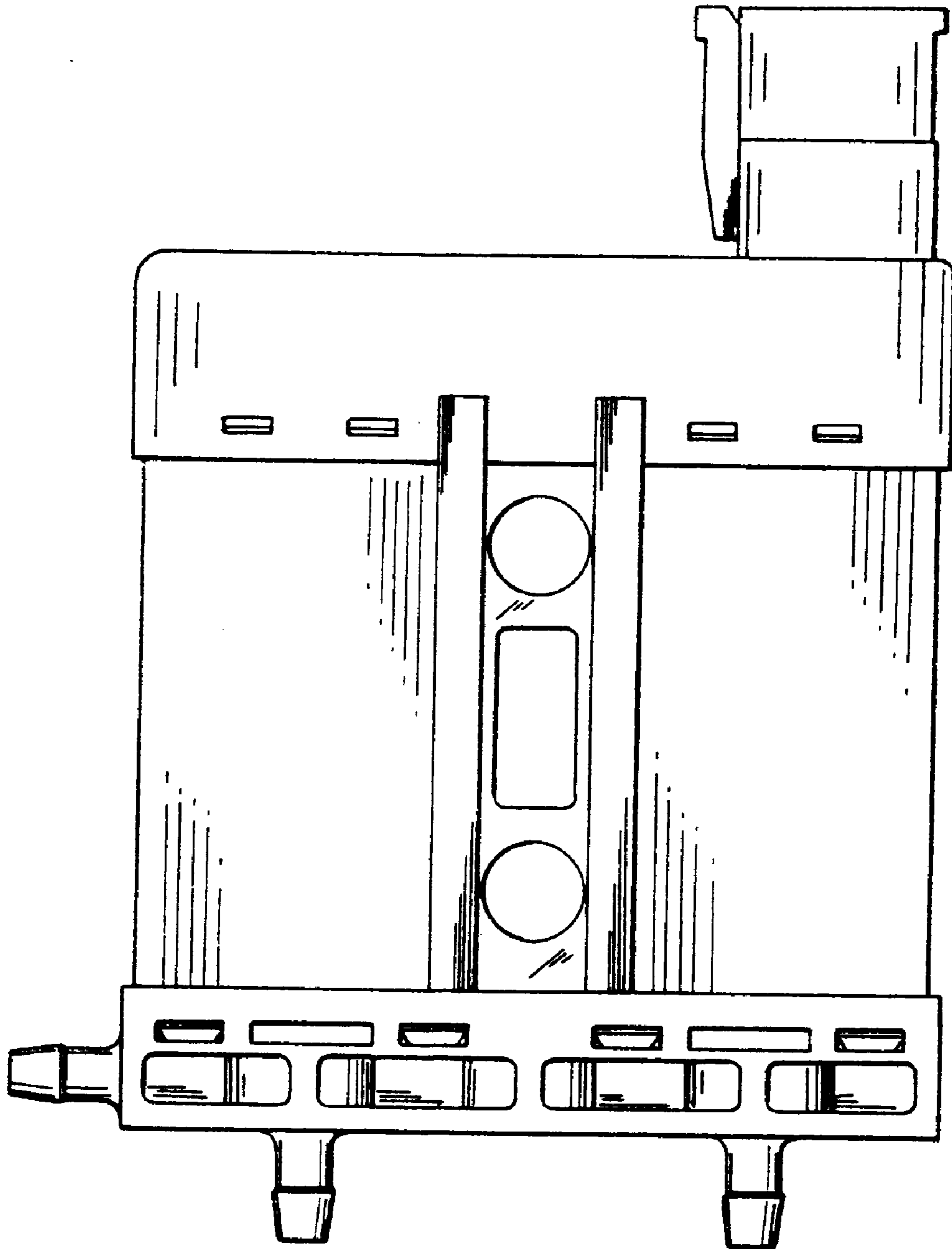


Fig. 11

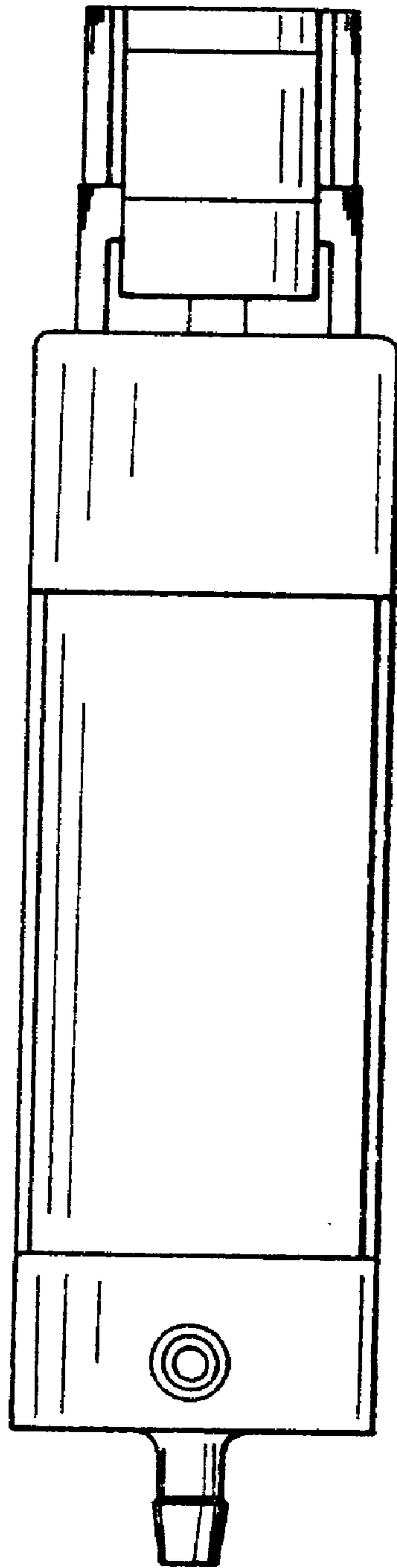


Fig. 12

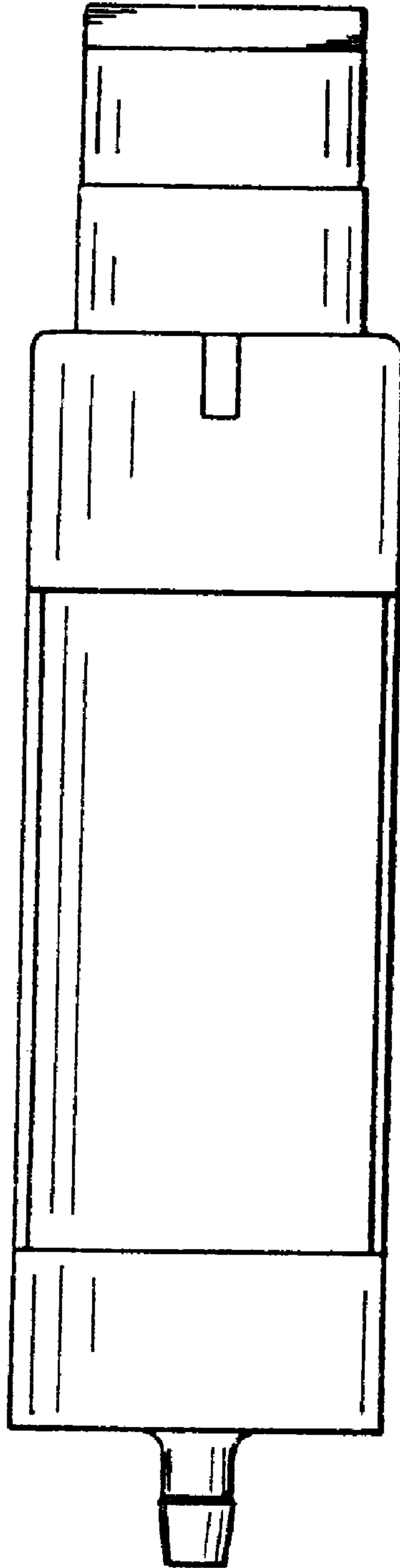


Fig. 13

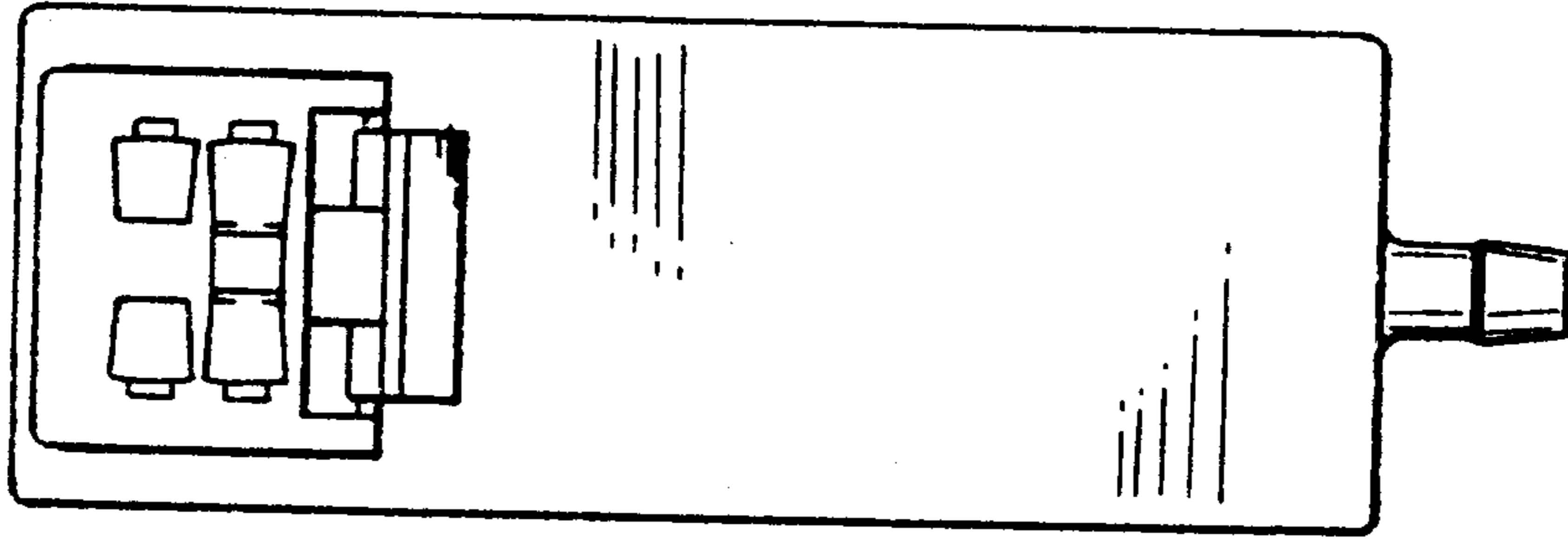


Fig. 14

