



US00D576645S

(12) **United States Design Patent**
Sugata et al.

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(45) **Date of Patent:** **** Sep. 9, 2008**

(54) **COLUMN FOR MACHINING CENTER**

(57) **CLAIM**

(75) Inventors: **Shinsuke Sugata**, Fukuyama (JP);
Yoshinori Seo, Fukuyama (JP)

The ornamental design for a column for machining center, as shown and described.

(73) Assignee: **Horkos Corp**, Fukuyama (JP)

DESCRIPTION

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

FIG. 1 is a front elevation of a column for machining center in place in a machining center and showing the design;

(21) Appl. No.: **29/290,284**

FIG. 2 is a top plan view of the column for machining center of FIG. 1 in place in a machining center;

(22) Filed: **Nov. 15, 2007**

FIG. 3 is a left side elevation of the column for machining center of FIG. 1 in place in a machining center;

(30) **Foreign Application Priority Data**

FIG. 4 is a right side elevation of the column for machining center of FIG. 1 in place in a machining center;

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FIG. 5 is a rear elevation of the column for machining center of FIG. 1 in place in a machining center;

(51) **LOC (8) Cl.** **15-09**

(52) **U.S. Cl.** **D15/122**

(58) **Field of Classification Search** D15/122,
D15/124, 127, 128, 130, 131; 29/26 A, 26 R,
29/30, 33 A-33 T, 34 R, 39, 50, 563-566,
29/564.1-564.8; 483/17-57

FIG. 6 is a perspective view taken from the front, top and right side of the column for machining center of FIG. 1 in place in a machining center;

See application file for complete search history.

FIG. 7 is a front elevation of the column for machining center of FIG. 1 showing the design;

(56) **References Cited**

FIG. 8 is a top plan view of the column for machining center of FIG. 7;

U.S. PATENT DOCUMENTS

FIG. 9 is a left side elevation of the column for machining center of FIG. 7;

- 4,516,311 A * 5/1985 Takakuwa et al. 483/39
- 4,642,861 A * 2/1987 Riley et al. 29/38 A
- 5,134,762 A * 8/1992 Scott 29/26 A
- 5,323,572 A * 6/1994 Guenin 451/21
- 6,203,478 B1 * 3/2001 Gorrochategui 483/31
- 6,519,823 B1 * 2/2003 Sugata et al. 29/26 A
- 7,266,871 B2 * 9/2007 Takeuchi et al. 29/27 C
- D553,653 S * 10/2007 Kai D15/122
- 2002/0078541 A1 * 6/2002 Ohmori et al. 29/26 A
- 2003/0126728 A1 * 7/2003 Watanabe 29/48.5 R
- 2007/0251071 A1 * 11/2007 Ota 29/27 C

FIG. 10 is a right side elevation of the column for machining center of FIG. 7;

FIG. 11 is a rear elevation of the column for machining center of FIG. 7;

FIG. 12 is a bottom plan view of the column for machining center of FIG. 7;

FIG. 13 is a sectional view taken along the line 13—13 in FIG. 7; and,

FIG. 14 is a perspective view taken from the rear, top and right side of the column for machining center of FIG. 7.

* cited by examiner

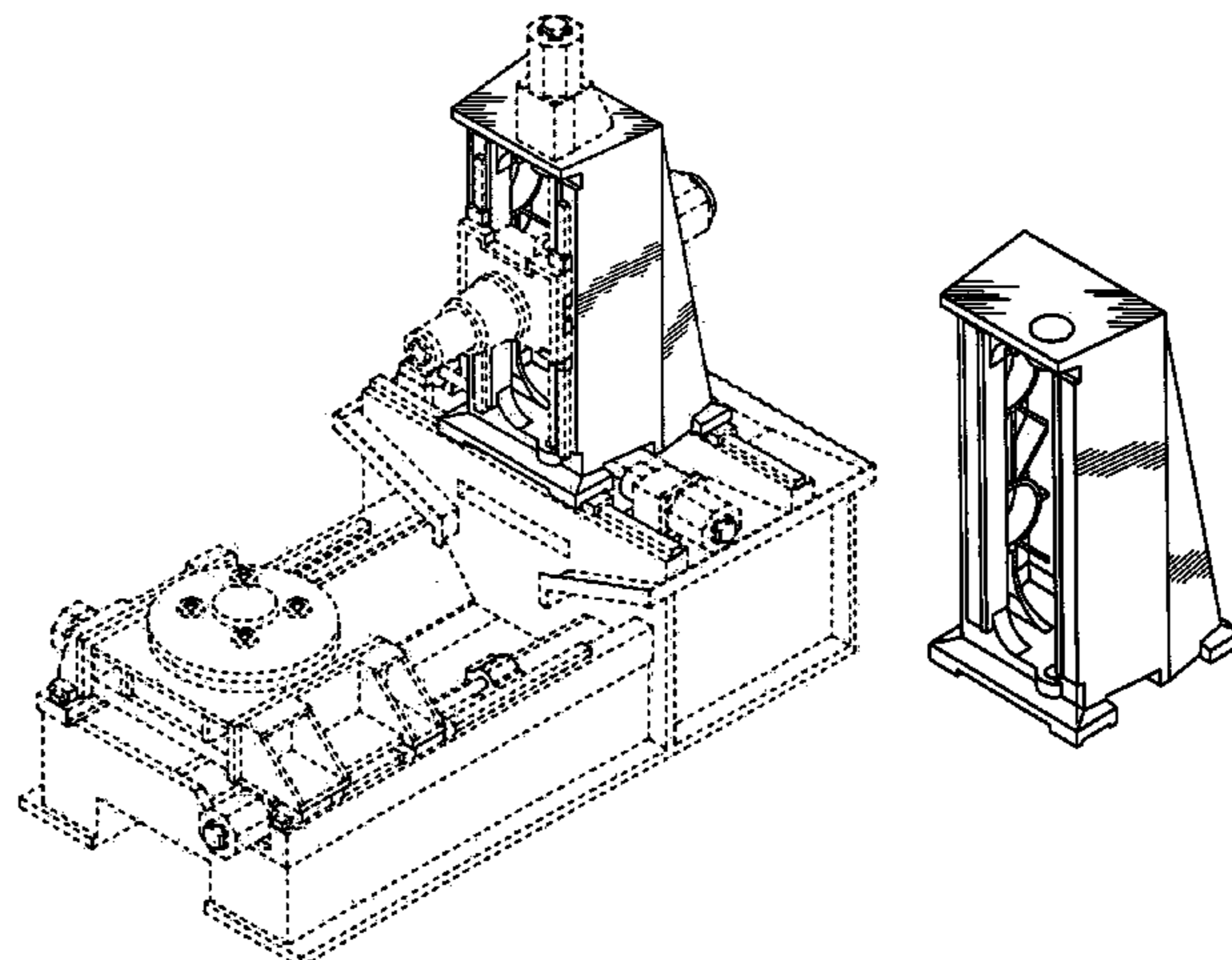
The broken line showing of the machining center in FIGS. 1-6 is included for the purpose of illustrating the environment of the column for machining center and forms no part of the claimed design.

Primary Examiner—Sandra Snapp

Assistant Examiner—Patricia Palasik

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1 Claim, 14 Drawing Sheets



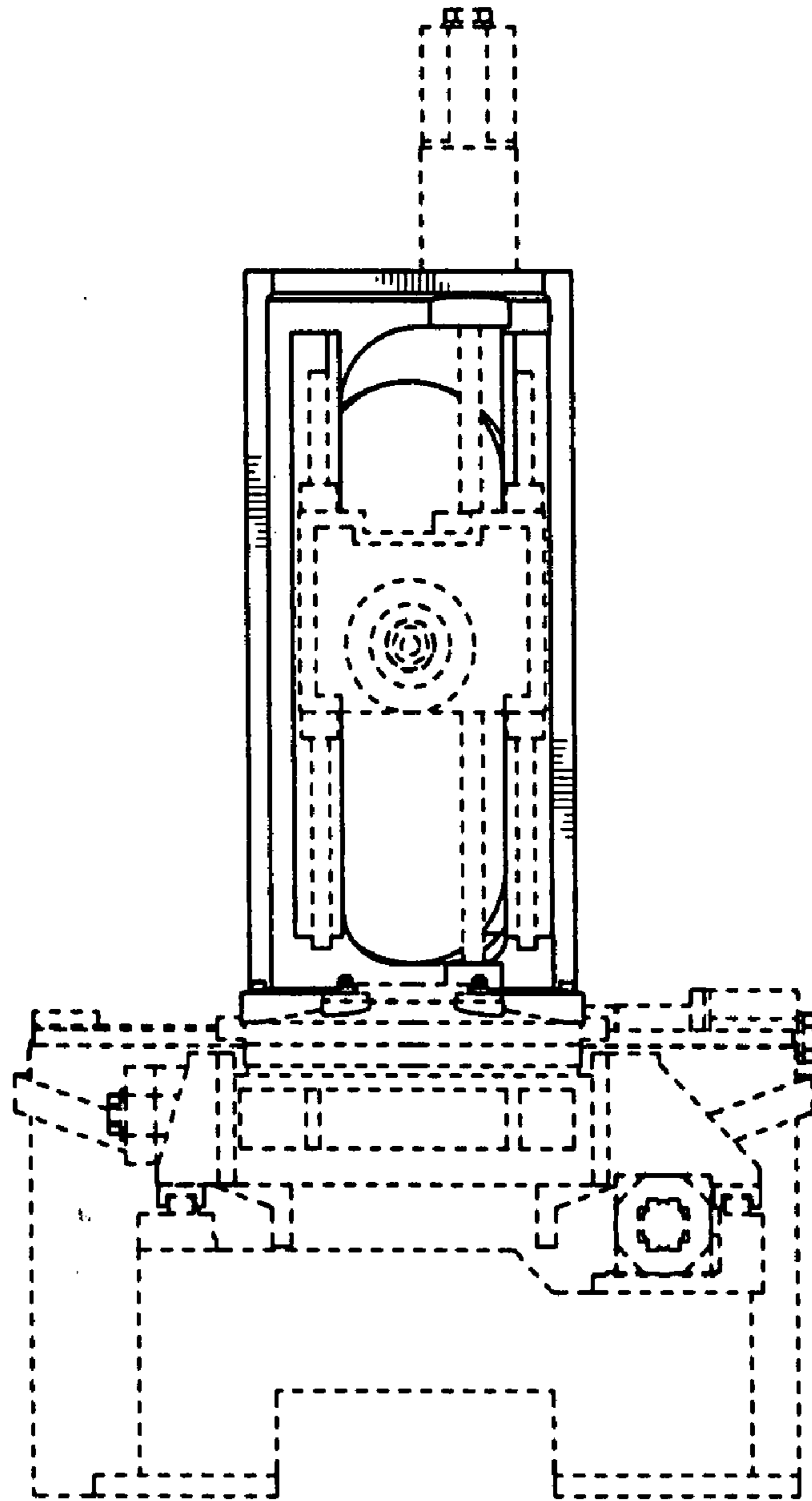


FIG. 1

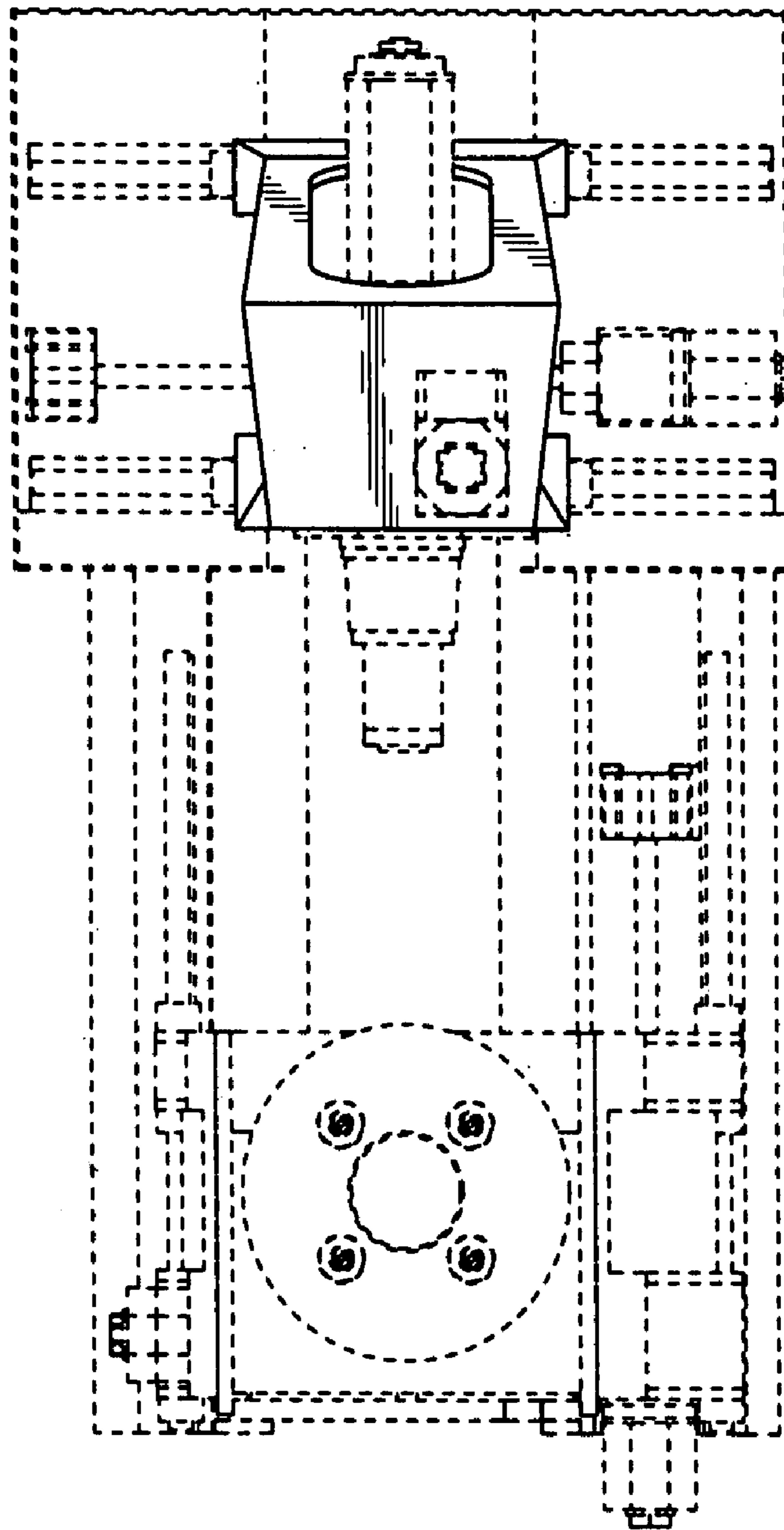


FIG. 2

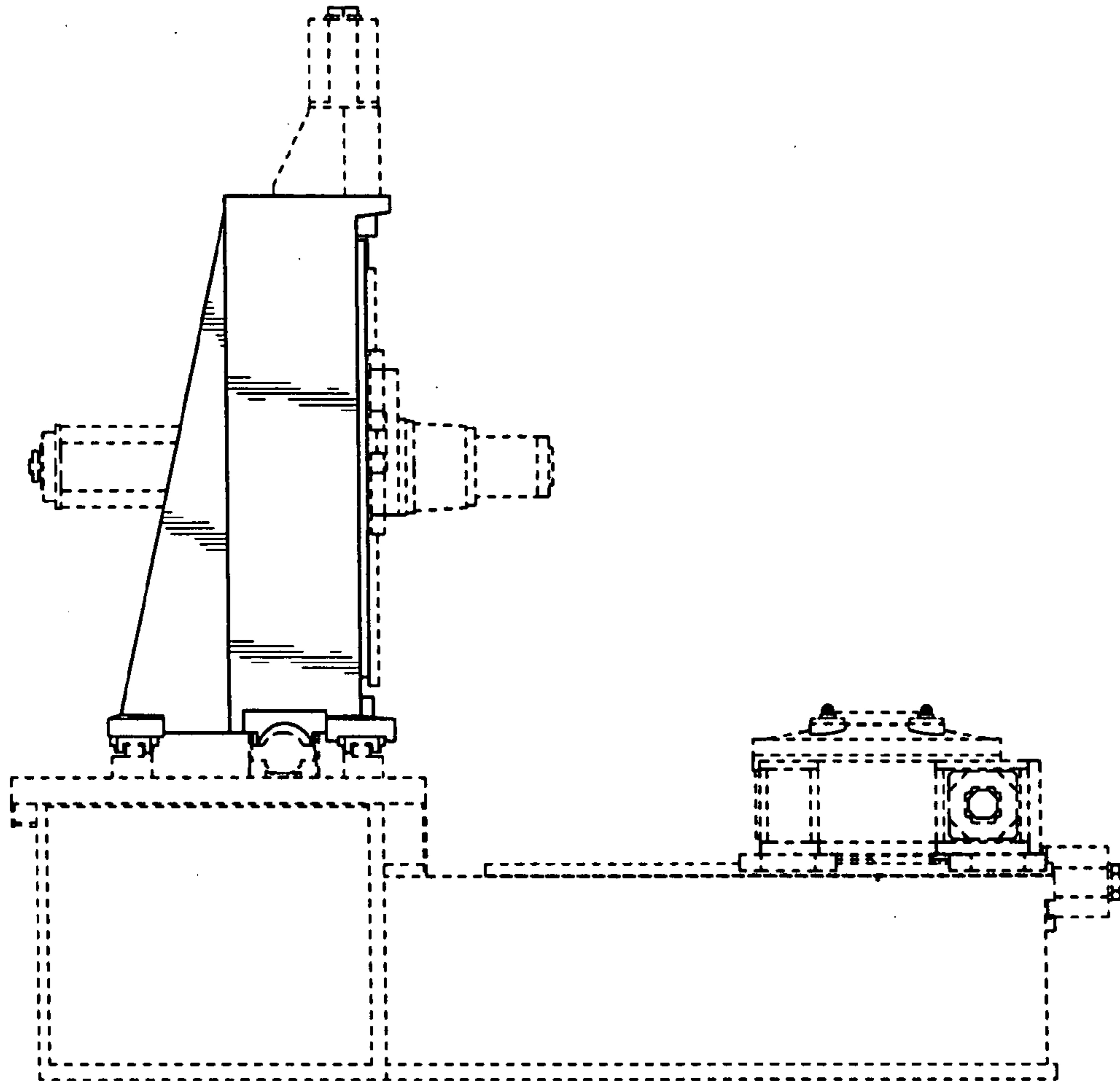


FIG. 3

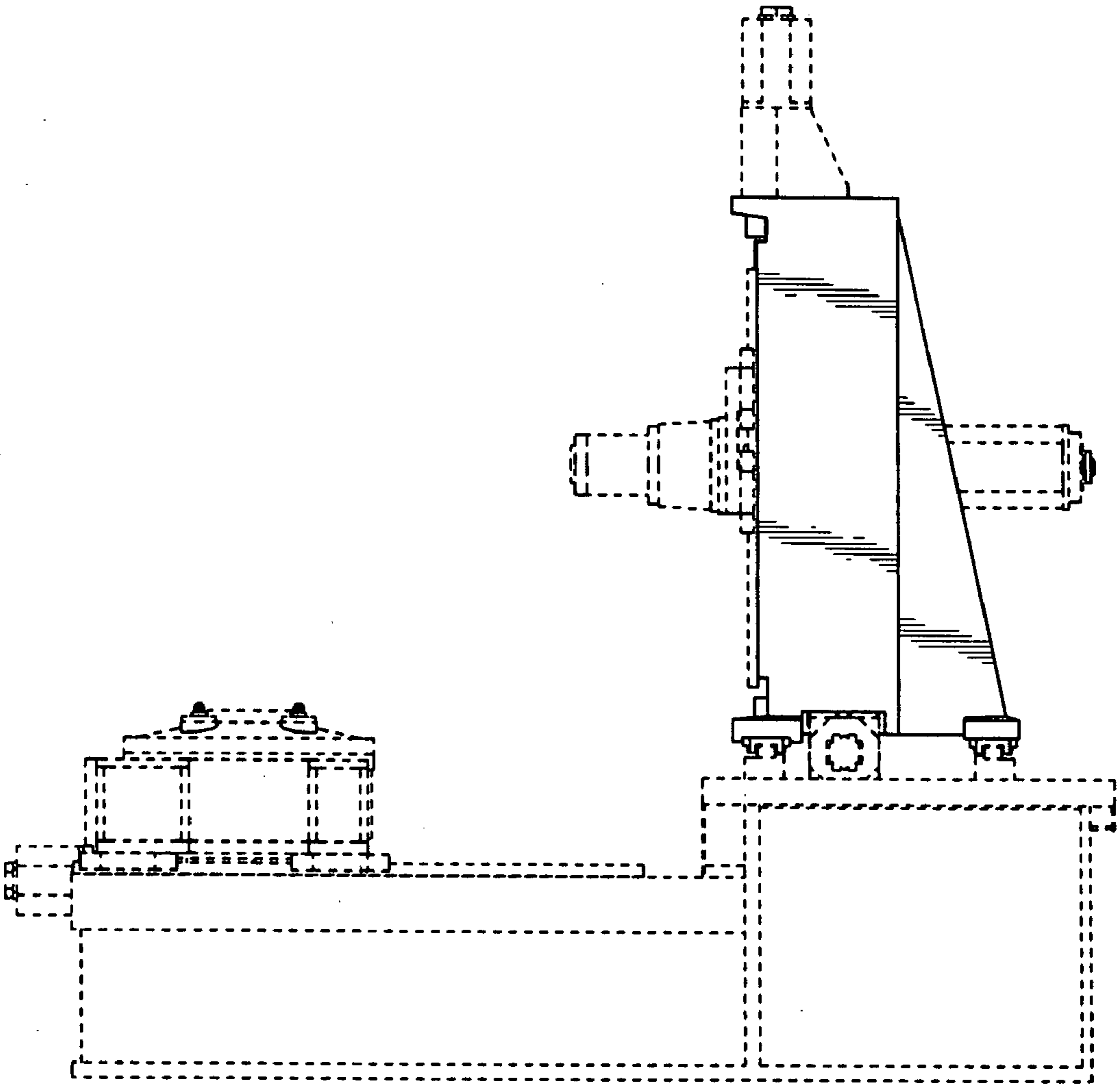


FIG. 4

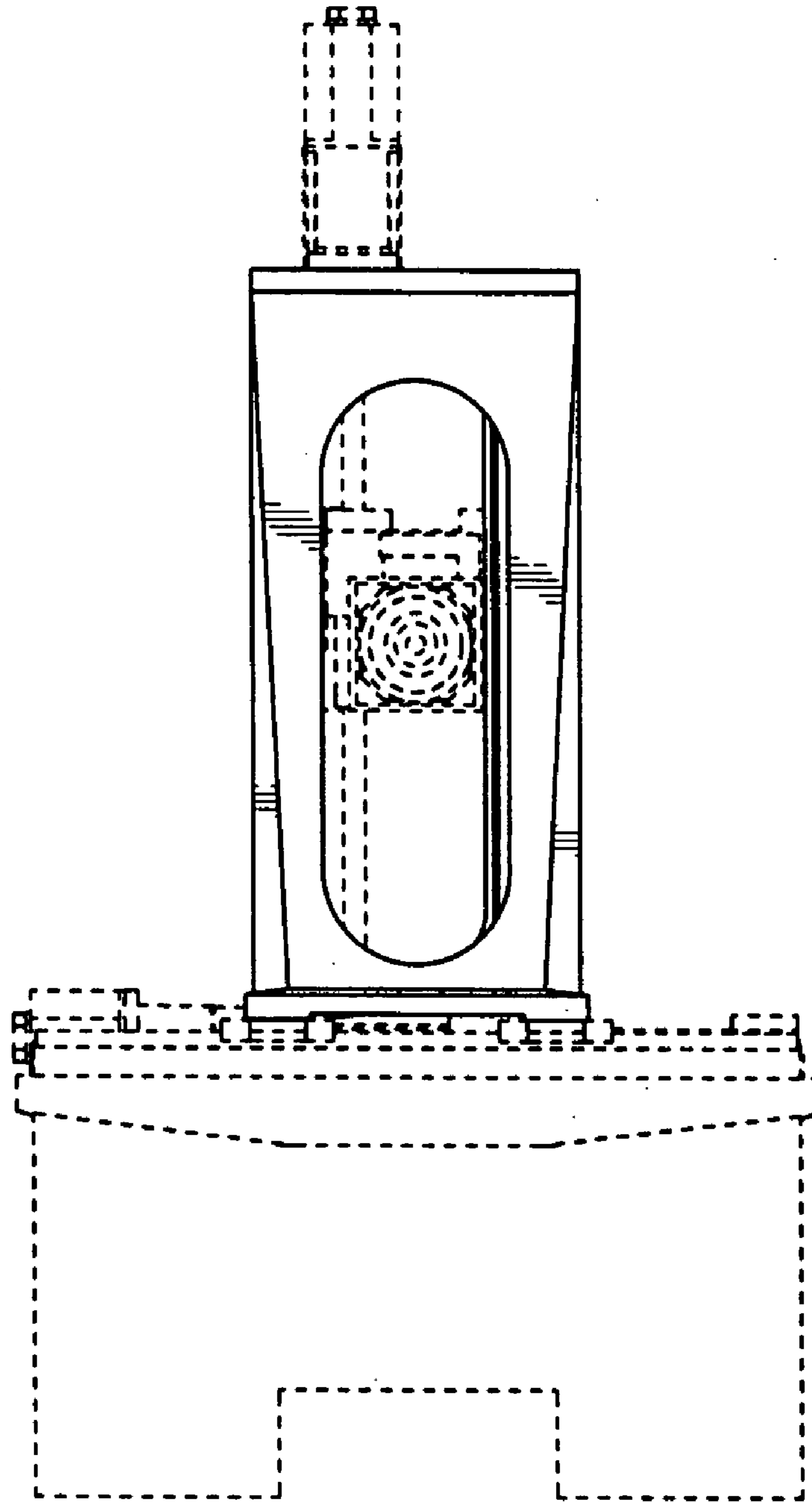


FIG. 5

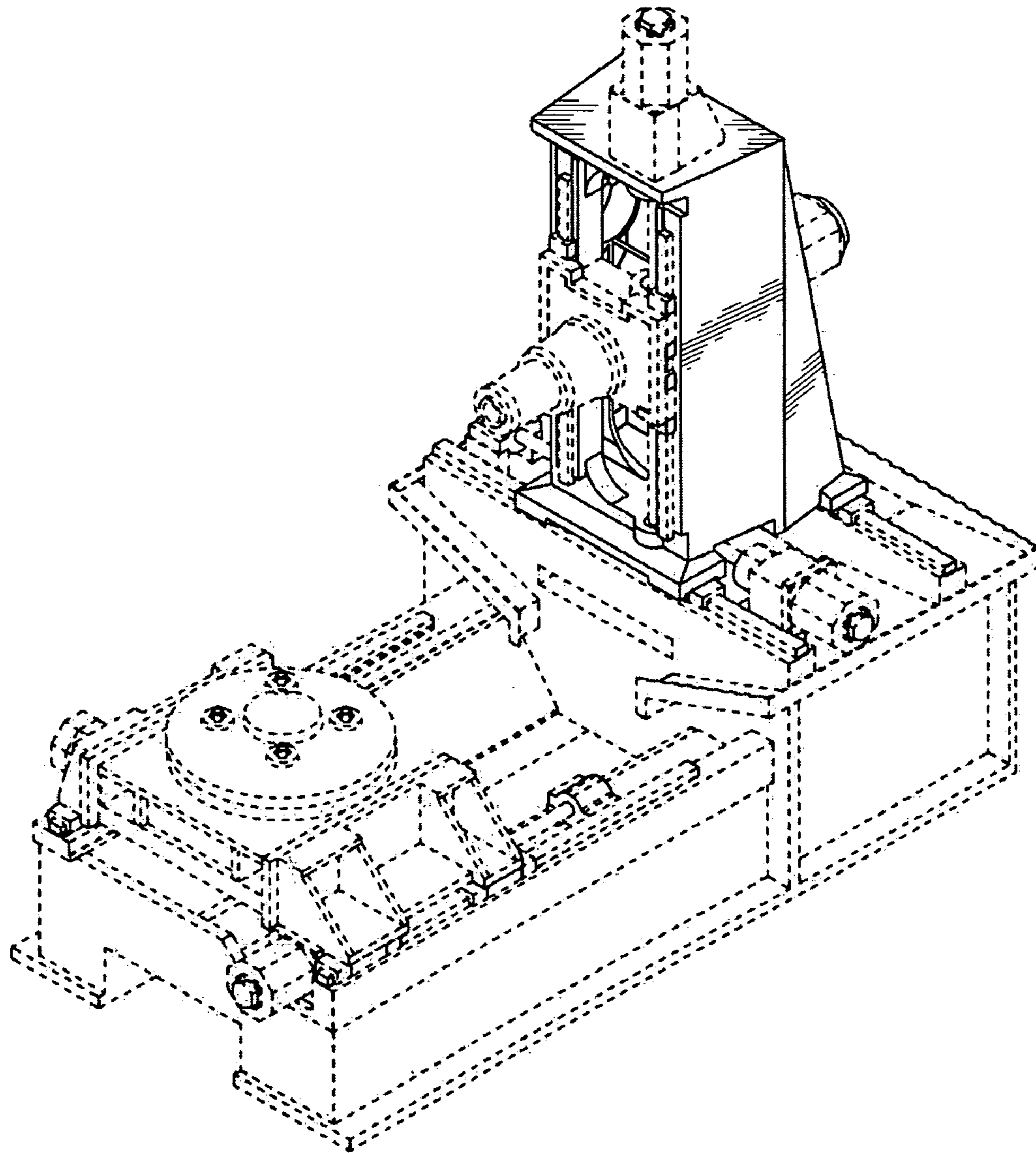


FIG. 6

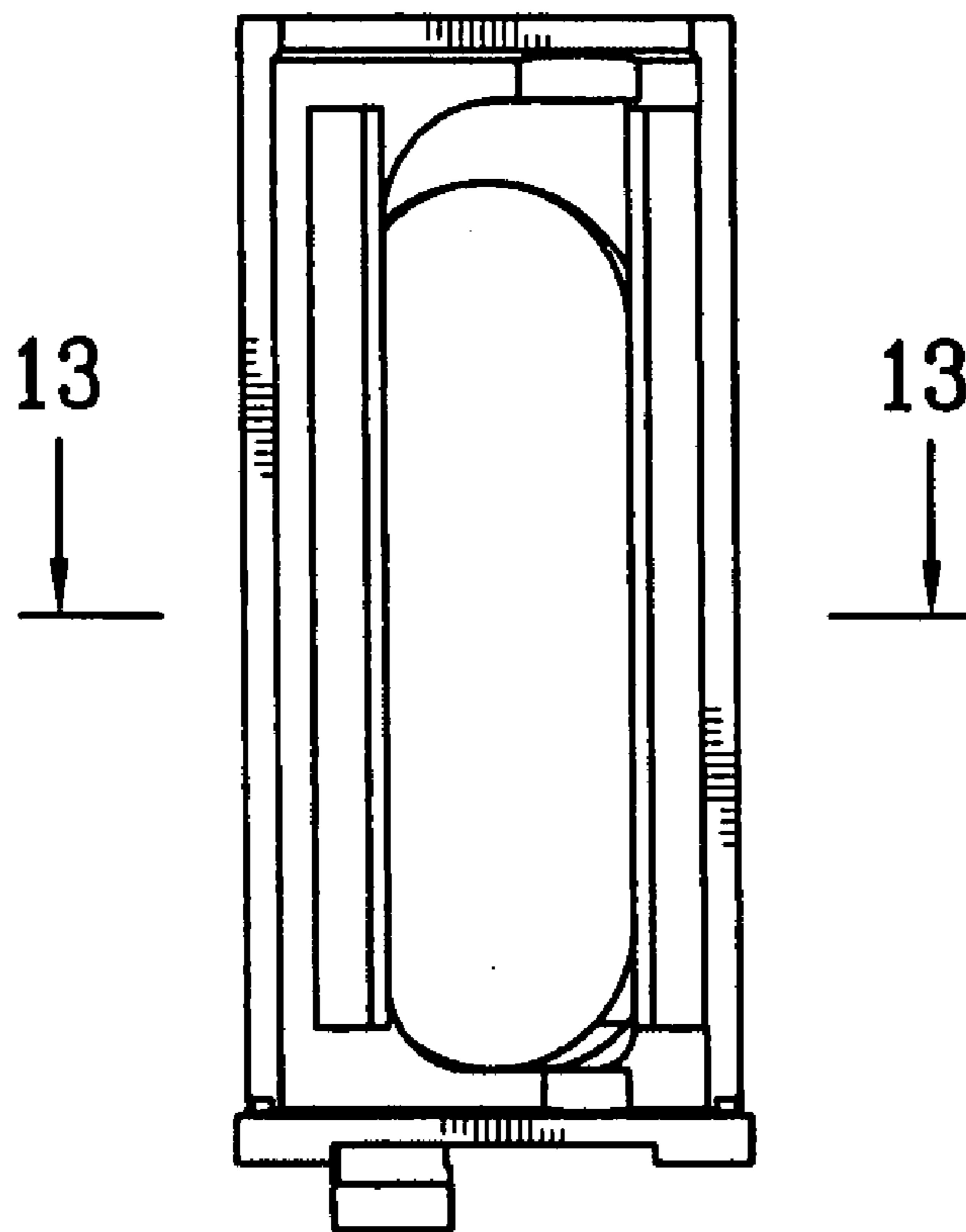


FIG. 7

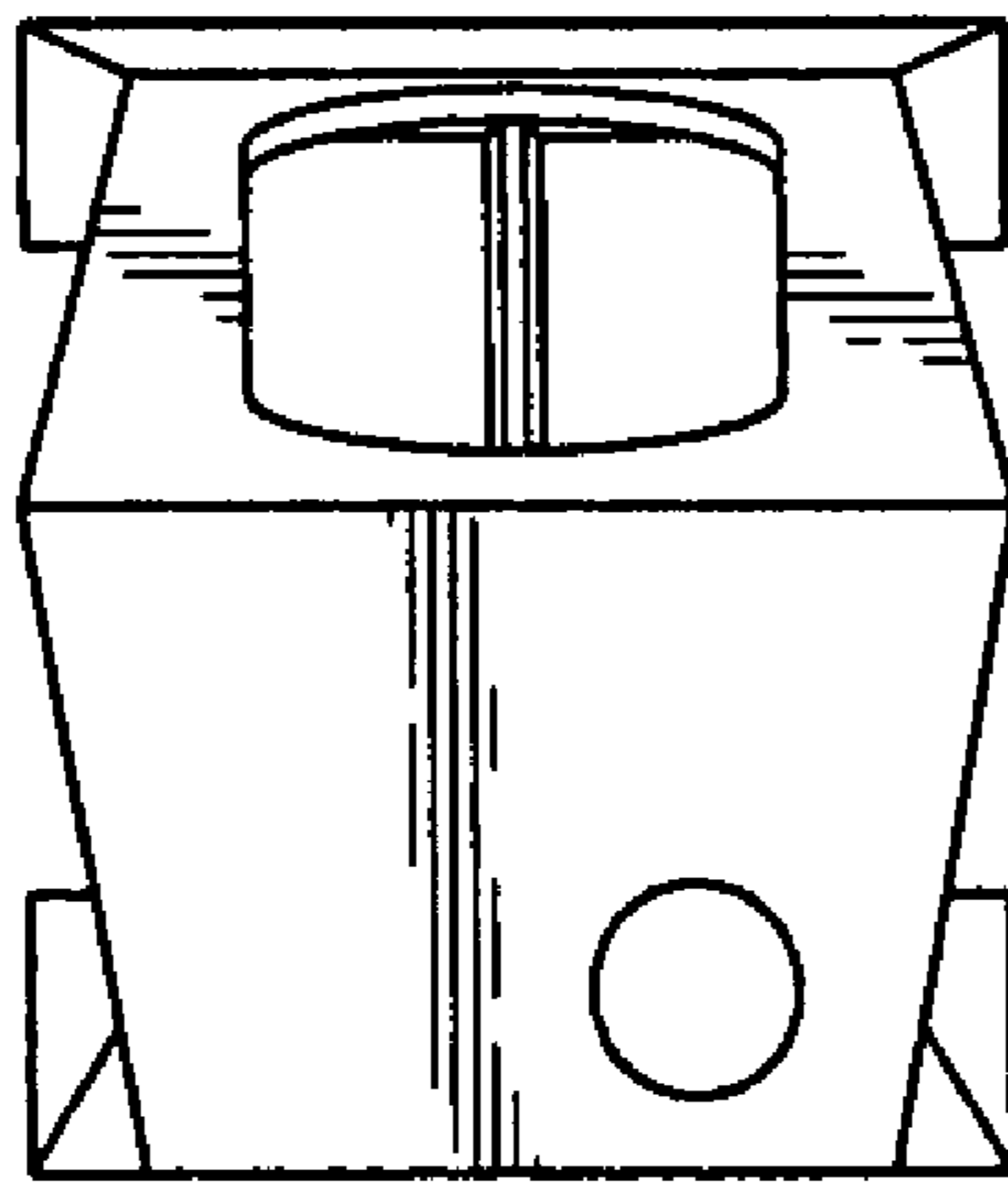


FIG. 8

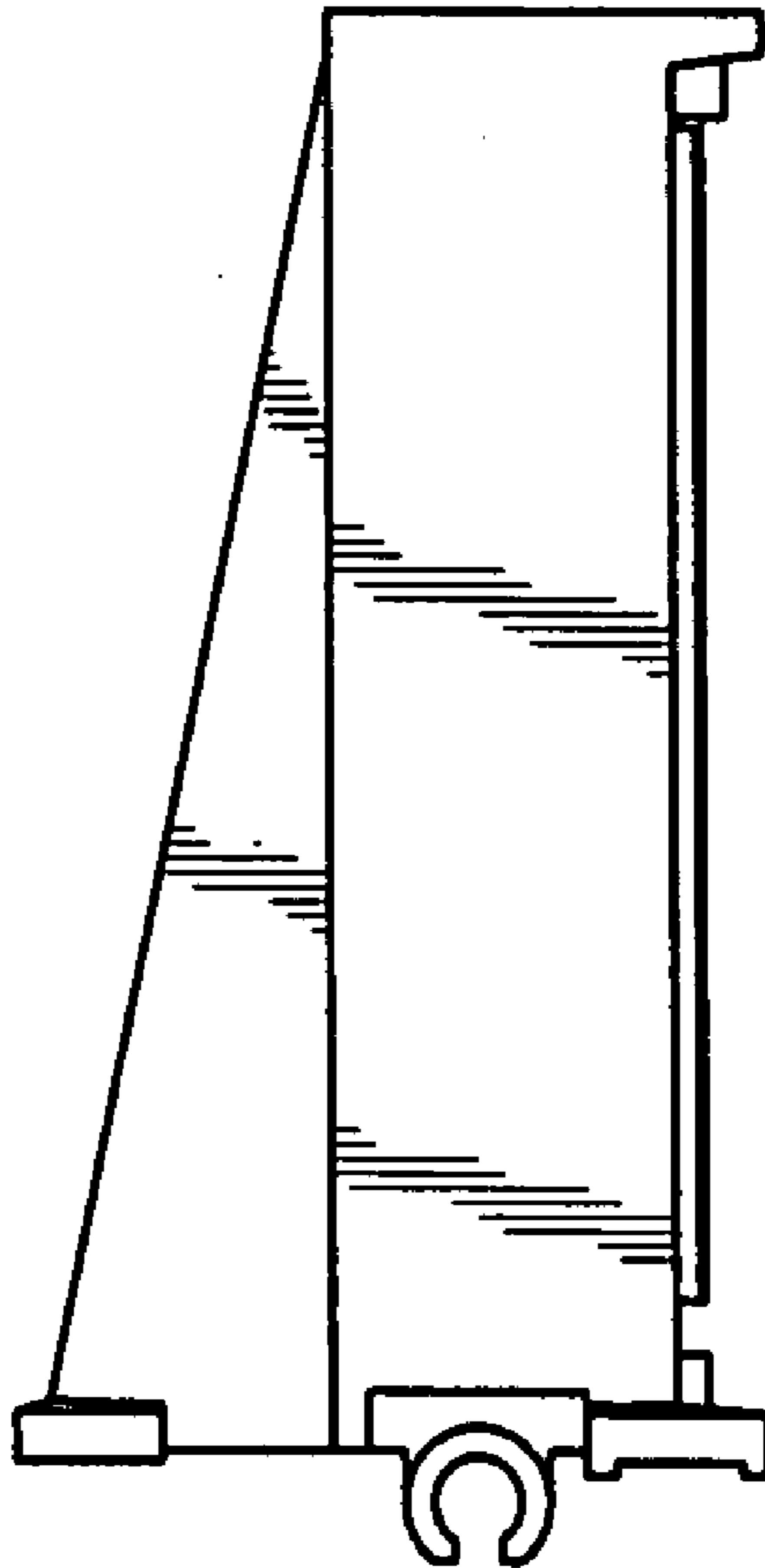


FIG. 9

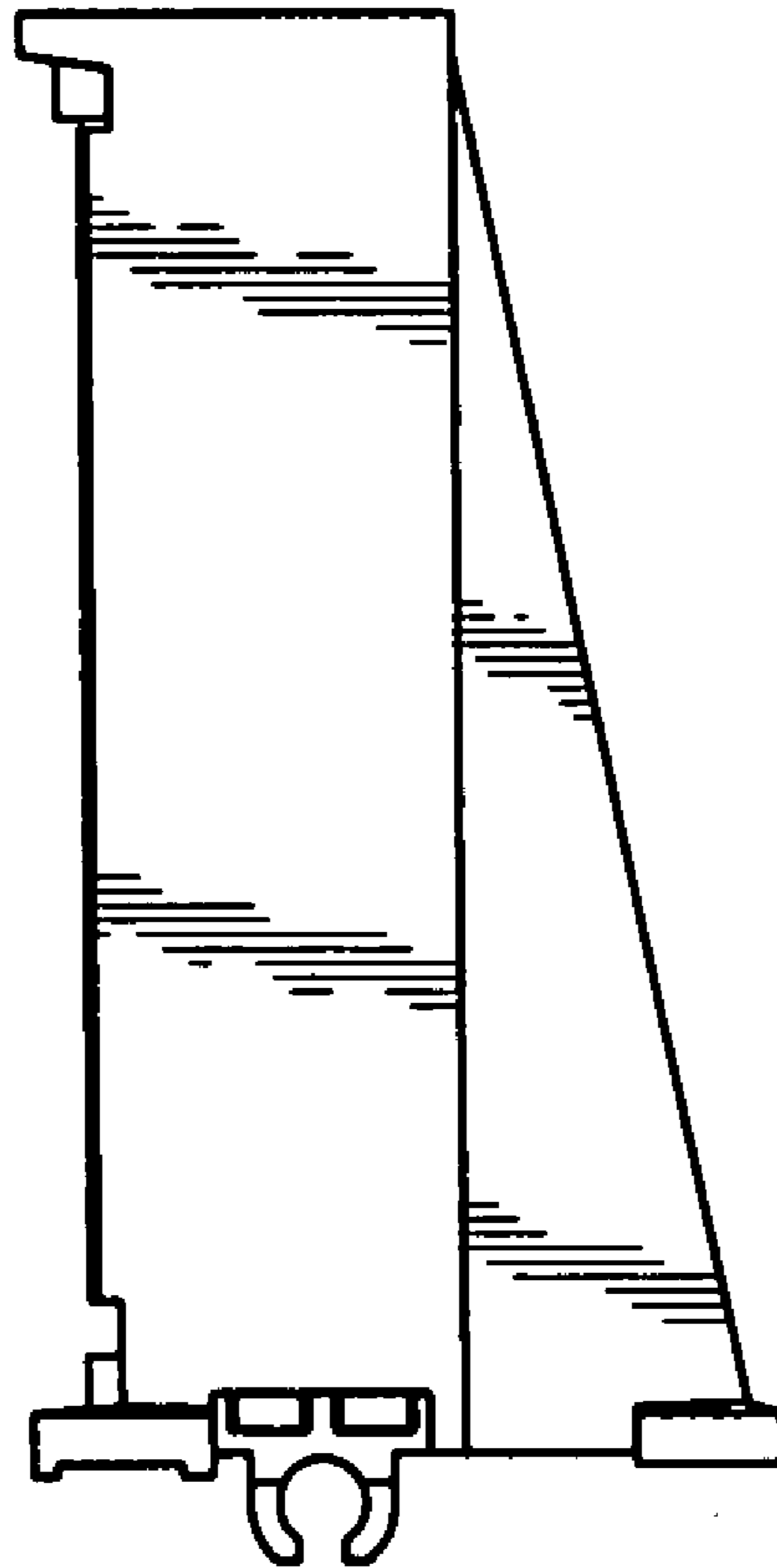


FIG. 10

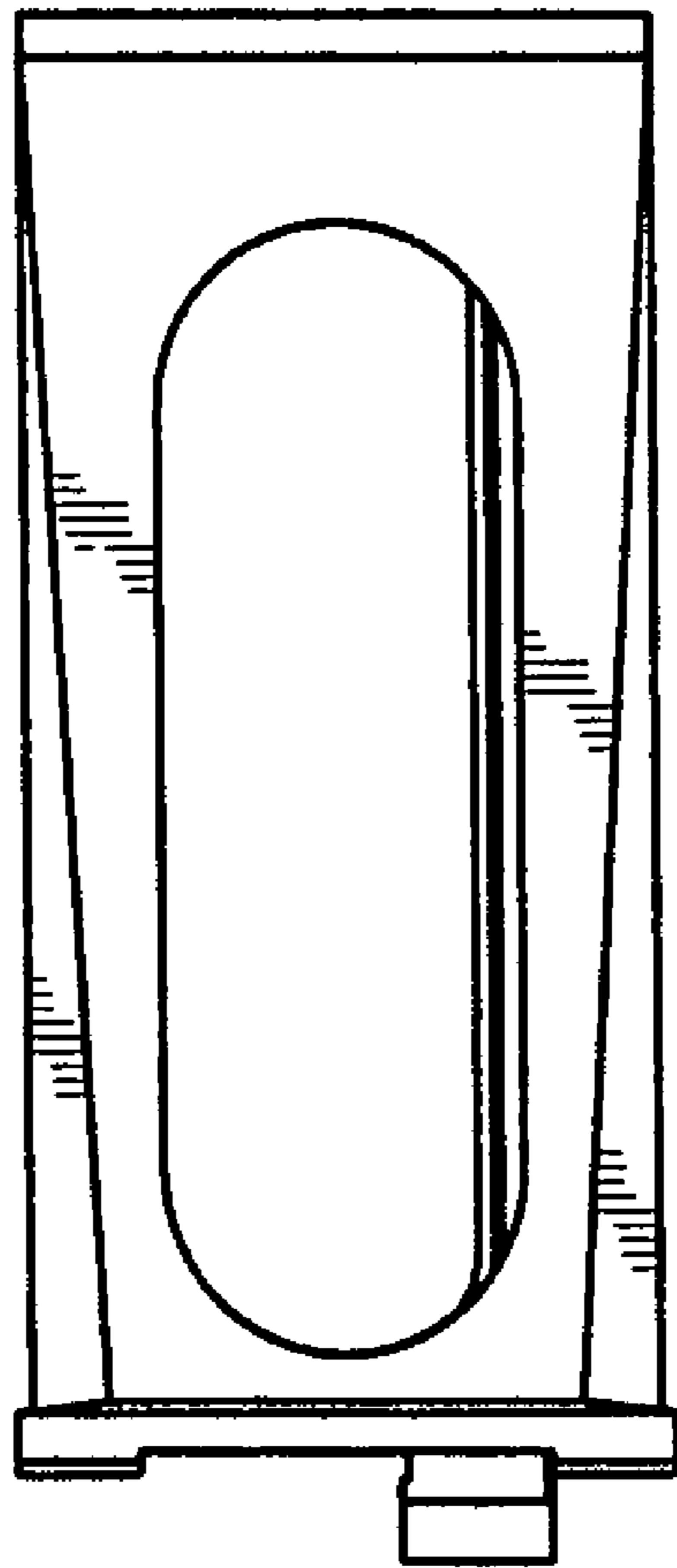


FIG. 11

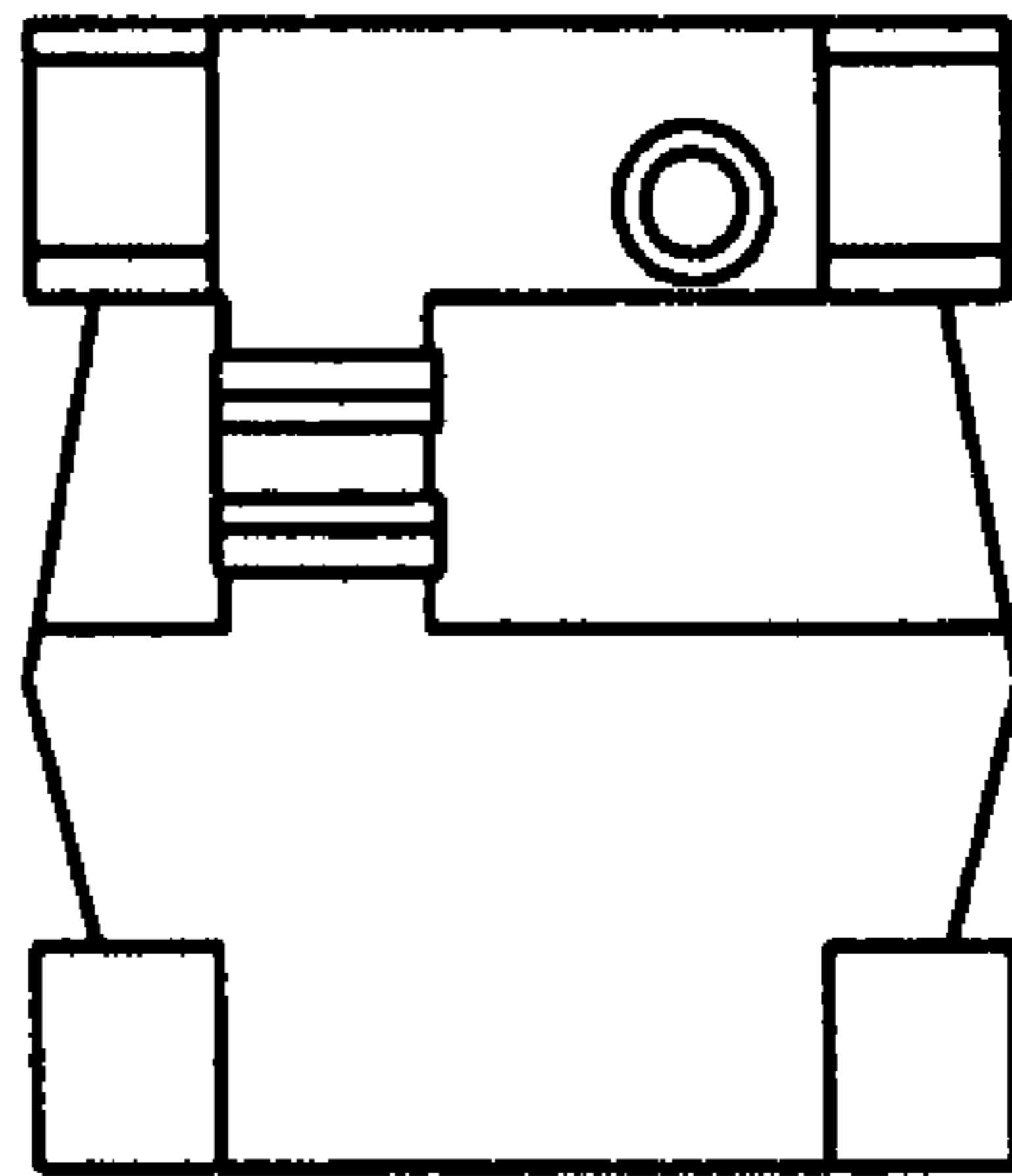


FIG. 12

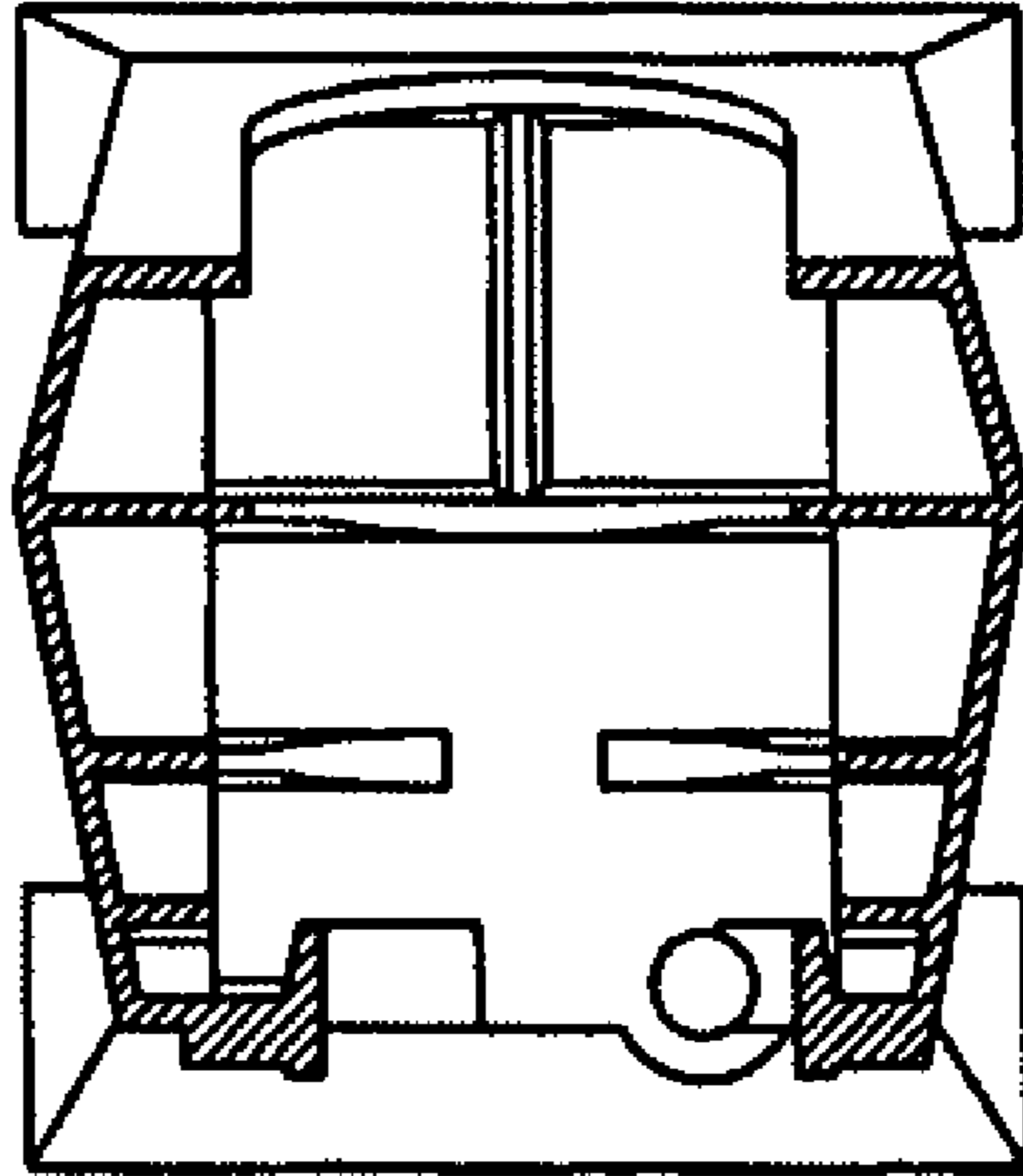


FIG. 13

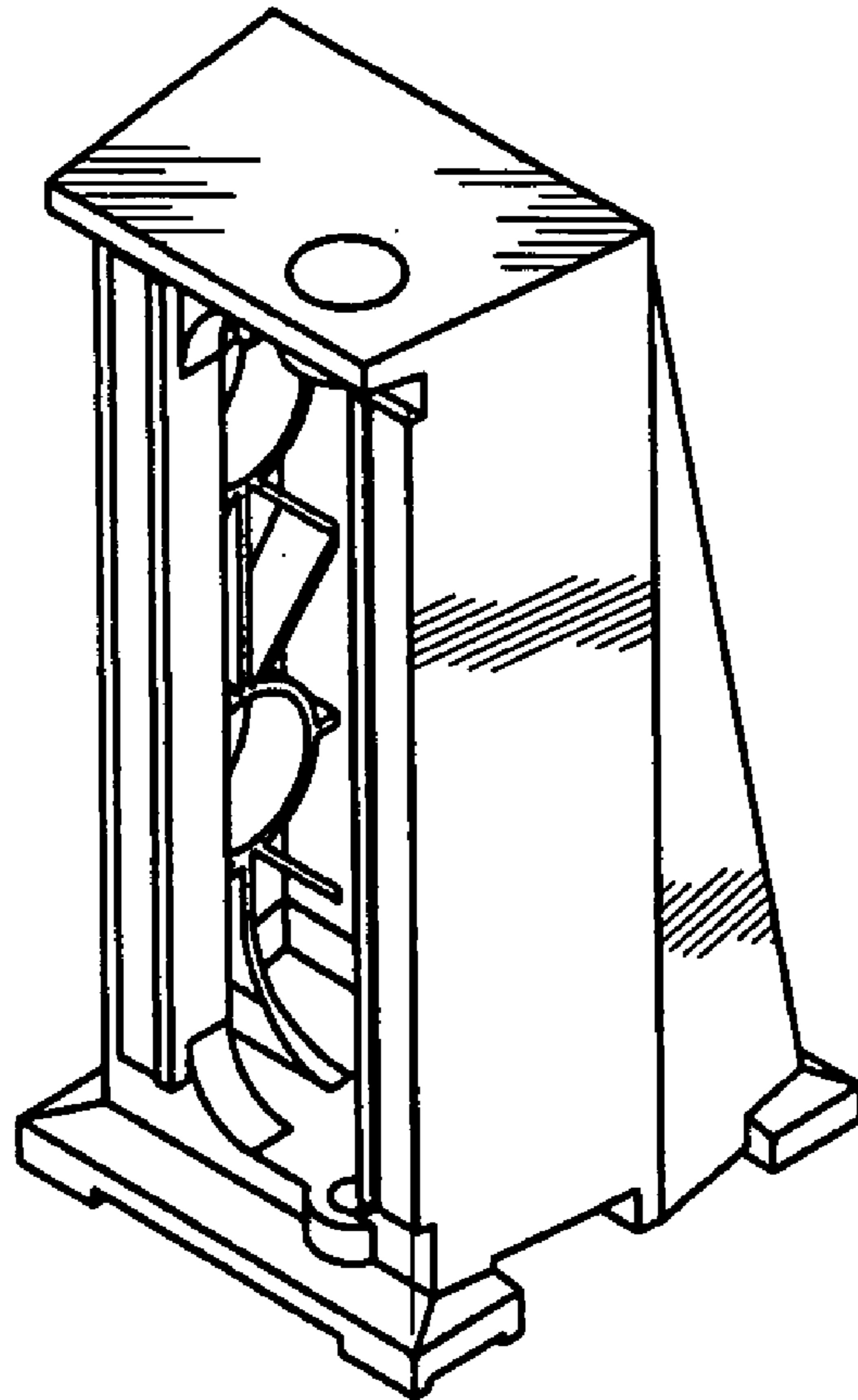


FIG. 14