



US00D454886S

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

(10) **Patent No.:** **US D454,886 S**
(45) **Date of Patent:** **** Mar. 26, 2002**

(54) **DIAPHRAGM PUMP**

(75) Inventor: **Ikuo Ohya**, Takatsuki (JP)

(73) Assignee: **Techno Takatsuki Co., Lt.**, Osaka (JP)

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

(21) Appl. No.: **29/137,163**

(22) Filed: **Feb. 14, 2001**

(30) **Foreign Application Priority Data**

Dec. 12, 2000 (JP) 2000-035553

(51) **LOC (7) Cl.** **15-02**

(52) **U.S. Cl.** **D15/7**

(58) **Field of Search** D15/7-9.1; 417/410.1,
417/413.1, 423.3, 40, 88; 200/84 B

(56) **References Cited**

U.S. PATENT DOCUMENTS

D215,765 S * 10/1969 Levin D15/17
D426,553 S * 6/2000 Jack et al. D15/7
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Primary Examiner—Ralf Seifert

(74) *Attorney, Agent, or Firm*—Ware, Fressola, Van Der Sluys & Adolphson LLP

(57) **CLAIM**

The ornamental design for a diaphragm pump, as shown and described.

DESCRIPTION

The article to which our new design is applied, “diaphragm pump”, is used as air pump for supplying compressed air

into such as medical apparatus for home use; monitoring and sampling apparatus, for example.

FIG. 1 is a perspective view of my new design of diaphragm pump;

FIG. 2 is a front view thereof;

FIG. 3 is a rear view thereof;

FIG. 4 is a right side view thereof;

FIG. 5 is a plane view thereof;

FIG. 6 is a bottom view thereof; and,

FIG. 7 is a cross-sectional view taken along the line 7—7 of FIG. 2.

It being understood that the broken lines are for illustrative purposes only.

This article is characterized in that there are four striae in the shape of slender rectangle in the upper part of casing, each two of said striae being in parallel with each other, and formed from the center of the upper part towards right or left ends, as shown in the plane view, and also that there are the same four striae in the bottom of casing, as shown in the bottom view.

The parts of the article drawn in full lines are our new design for which we seek registration.

1 Claim, 4 Drawing Sheets

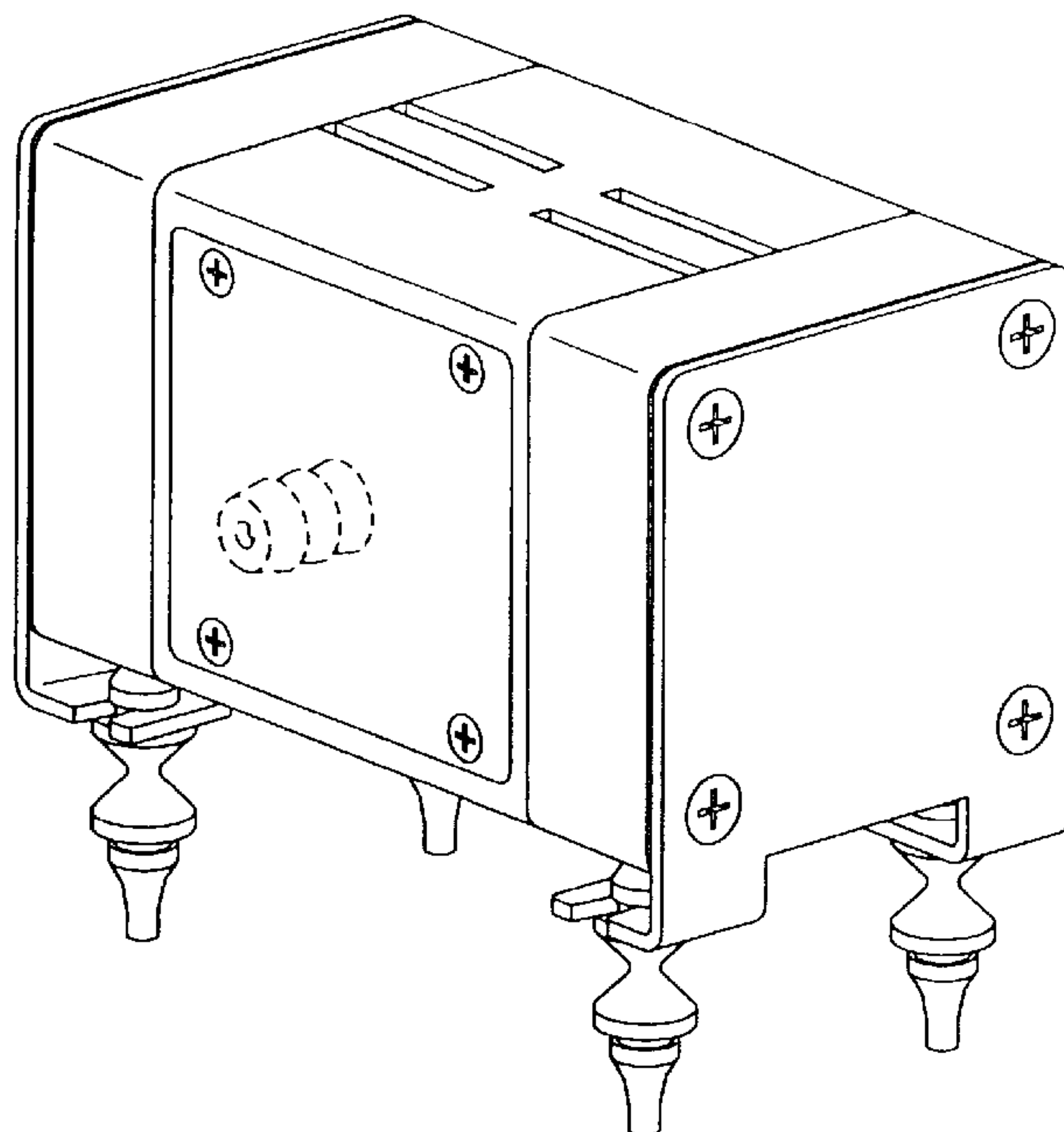


FIG. 1

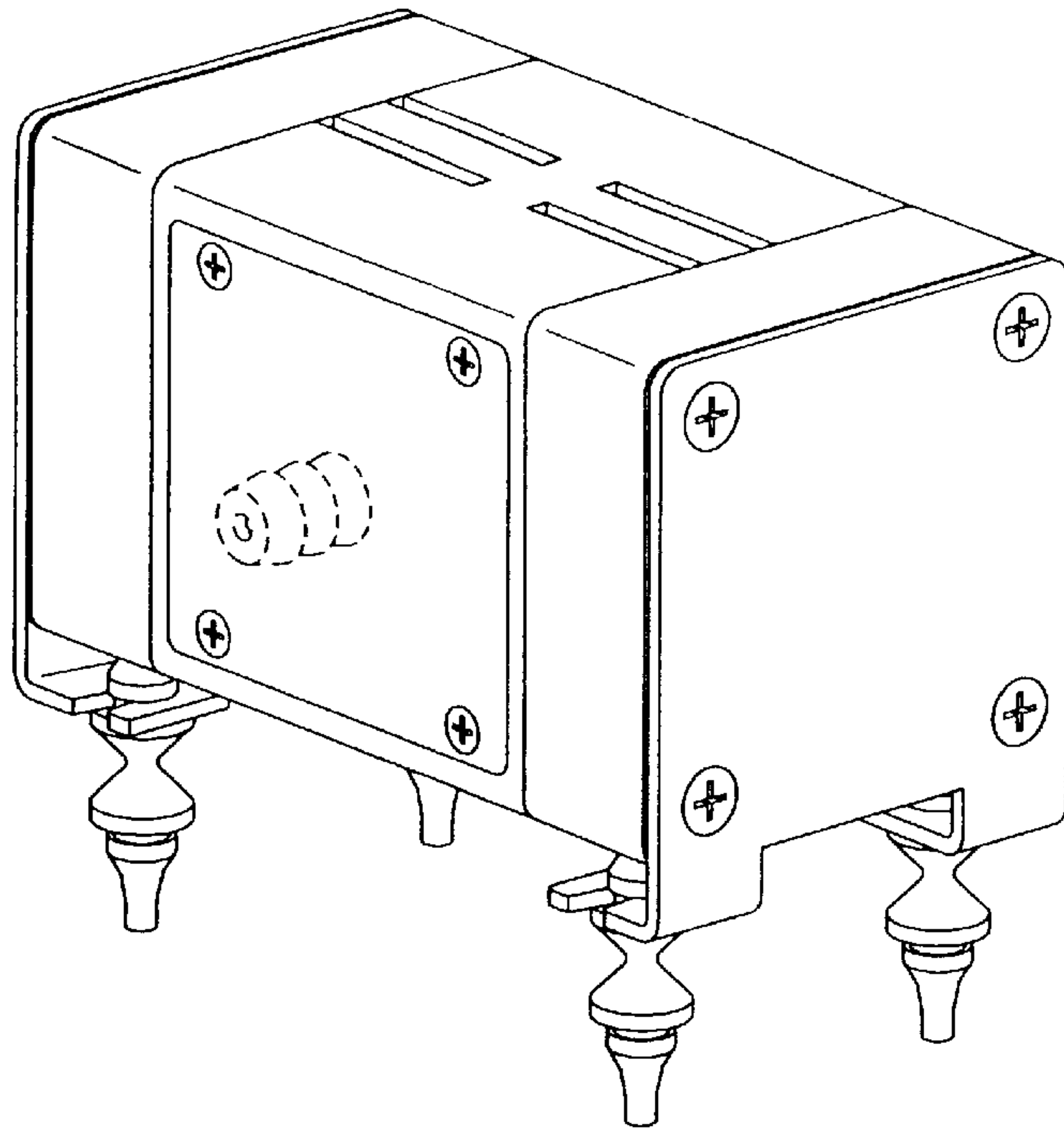


FIG. 2

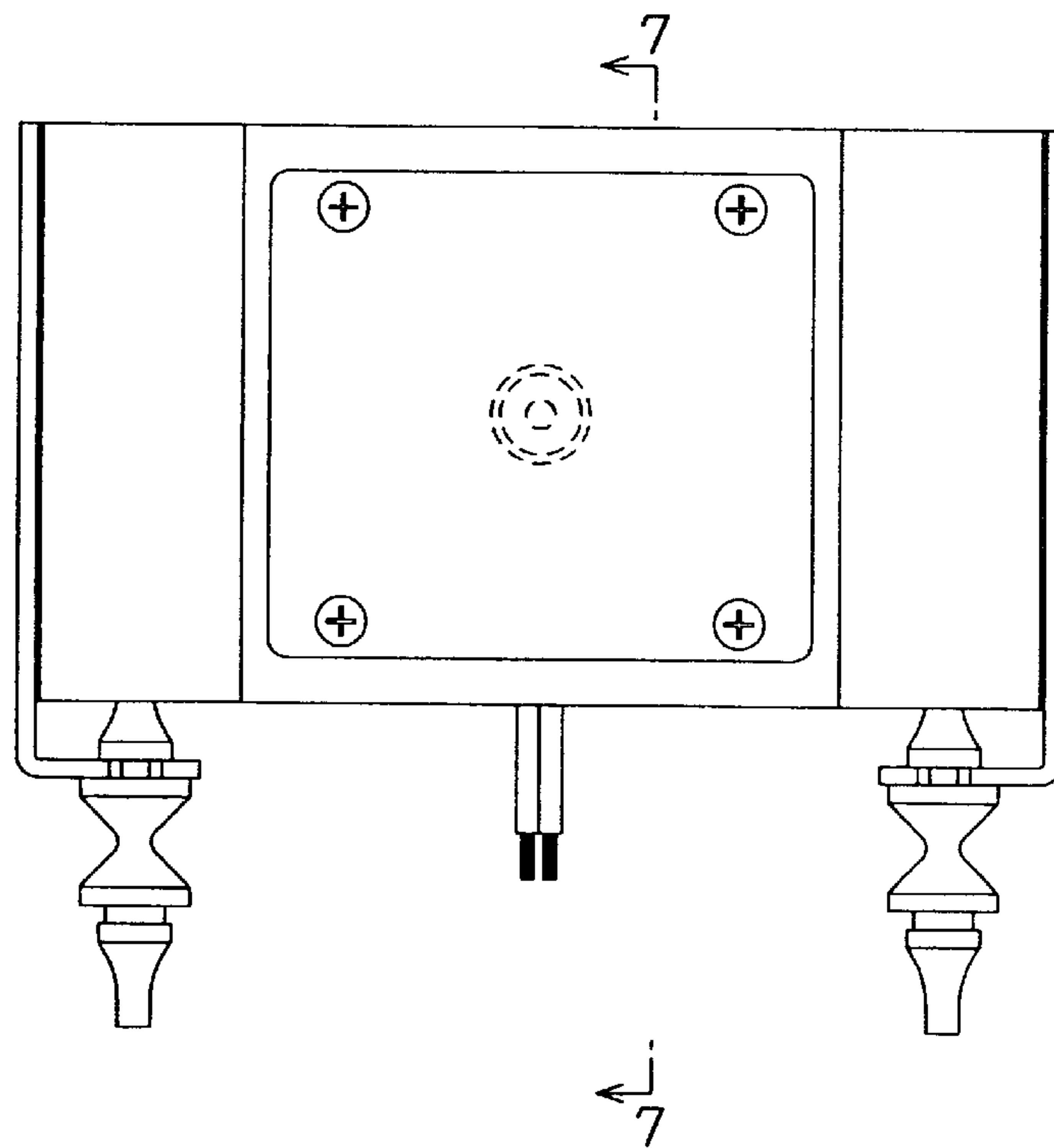


FIG. 3

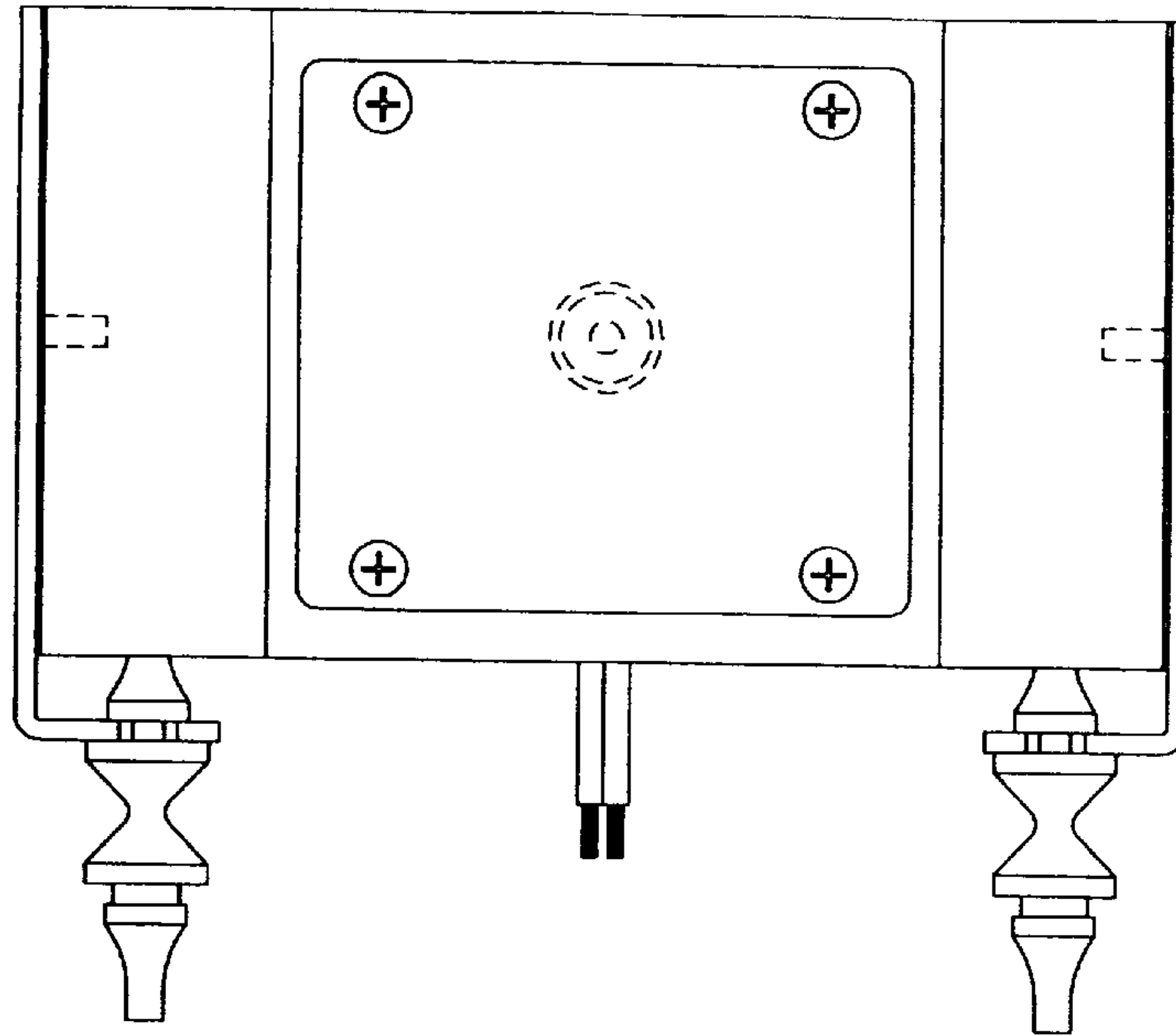


FIG. 4

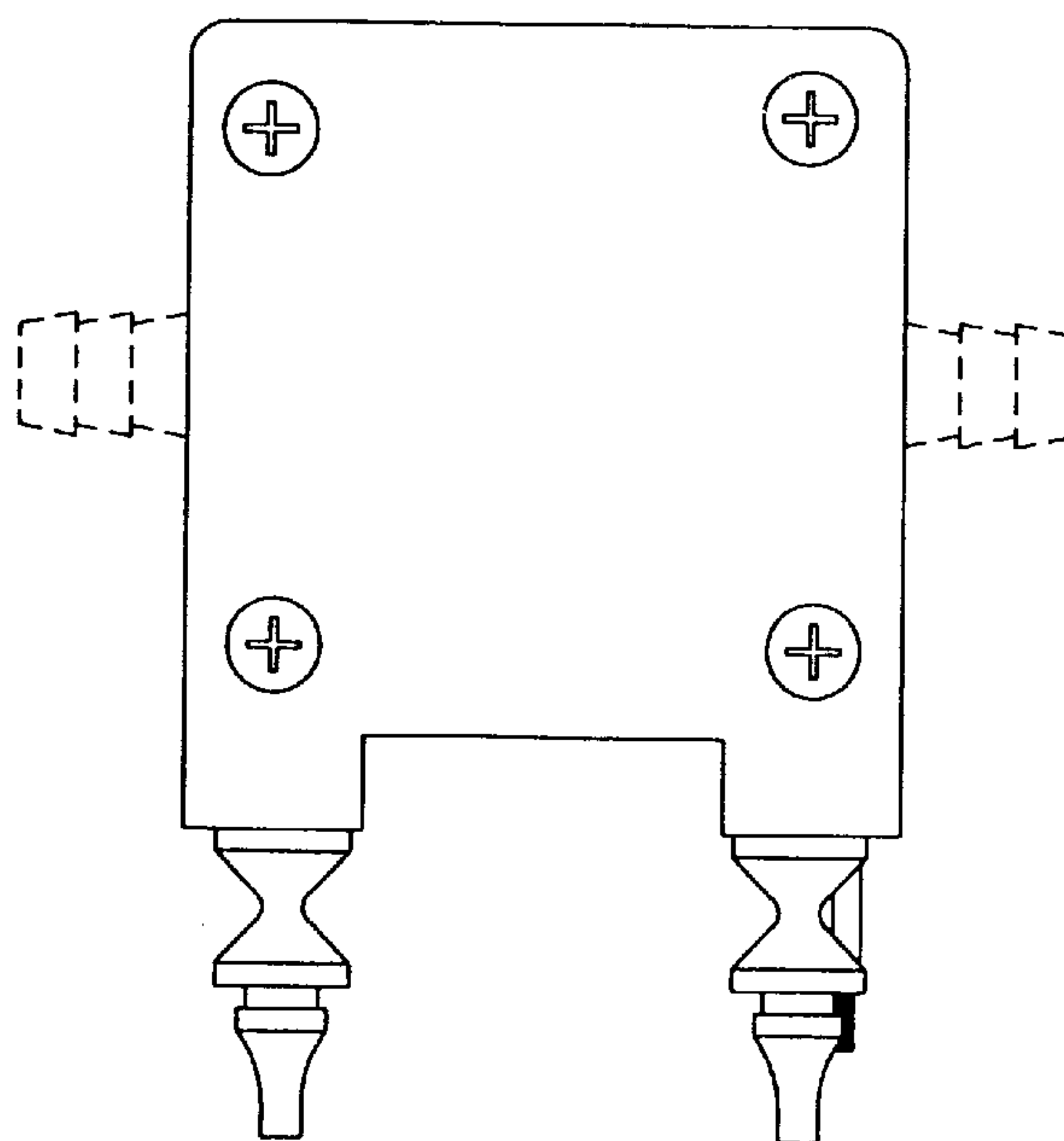


FIG. 5

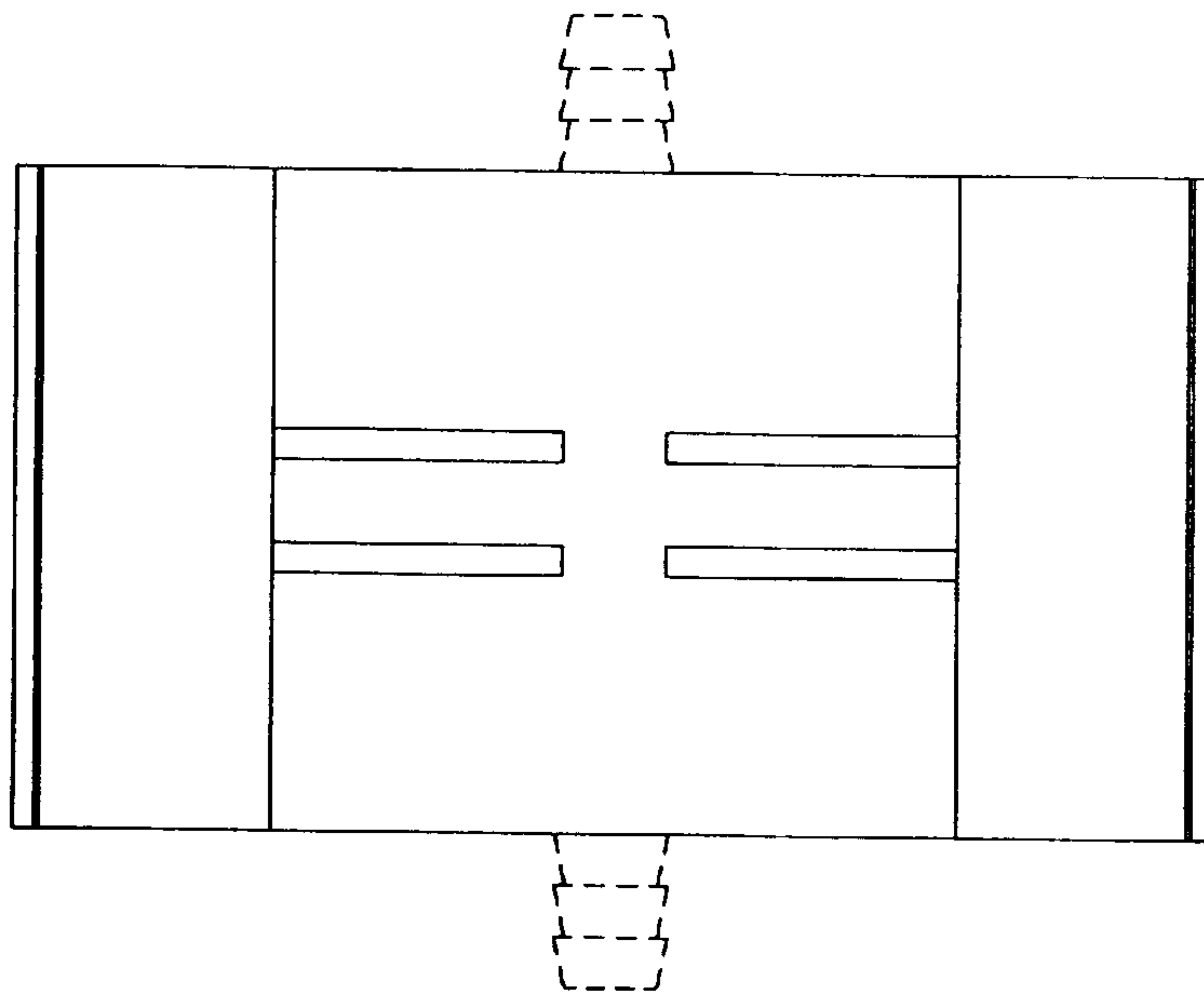


FIG. 6

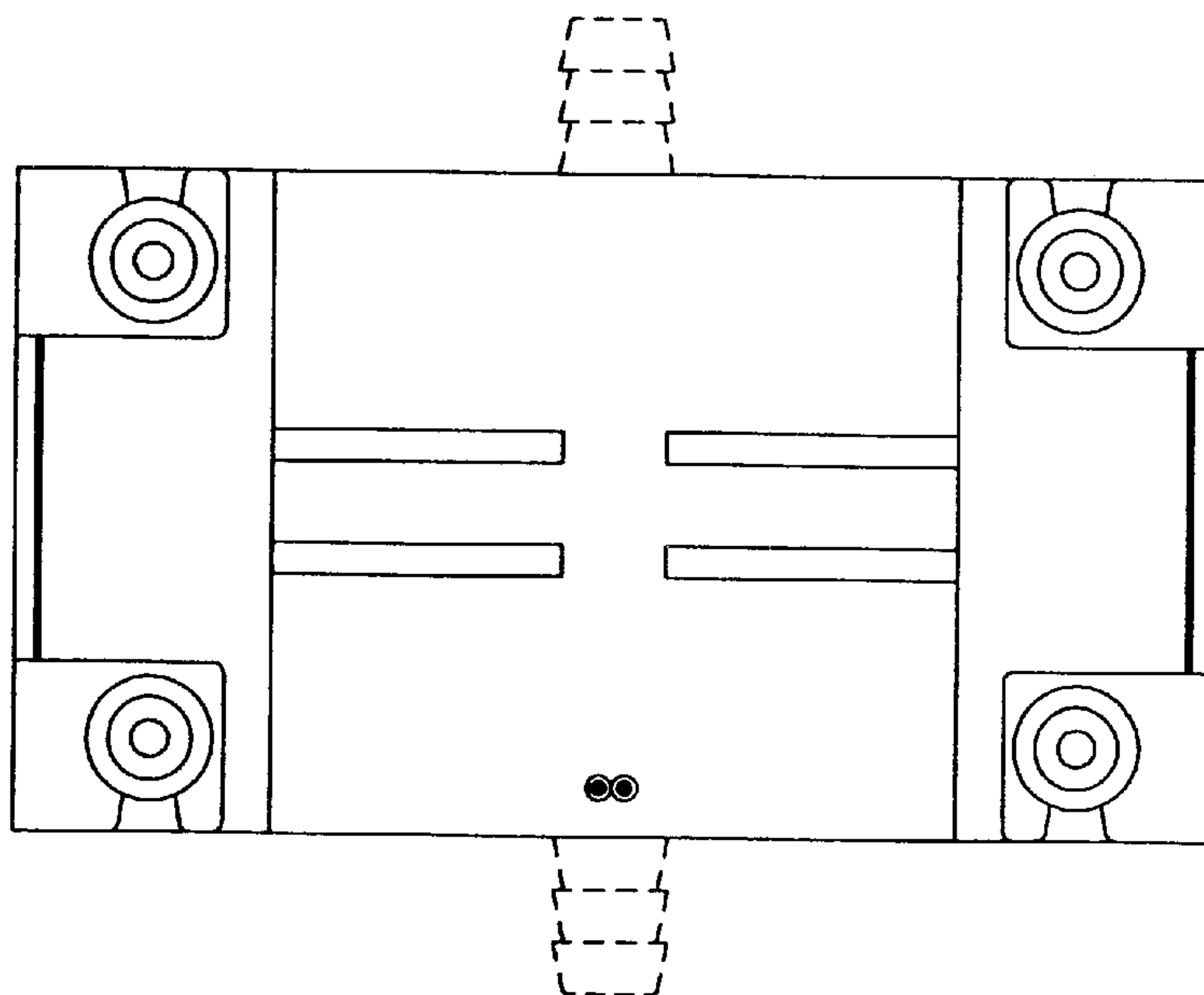
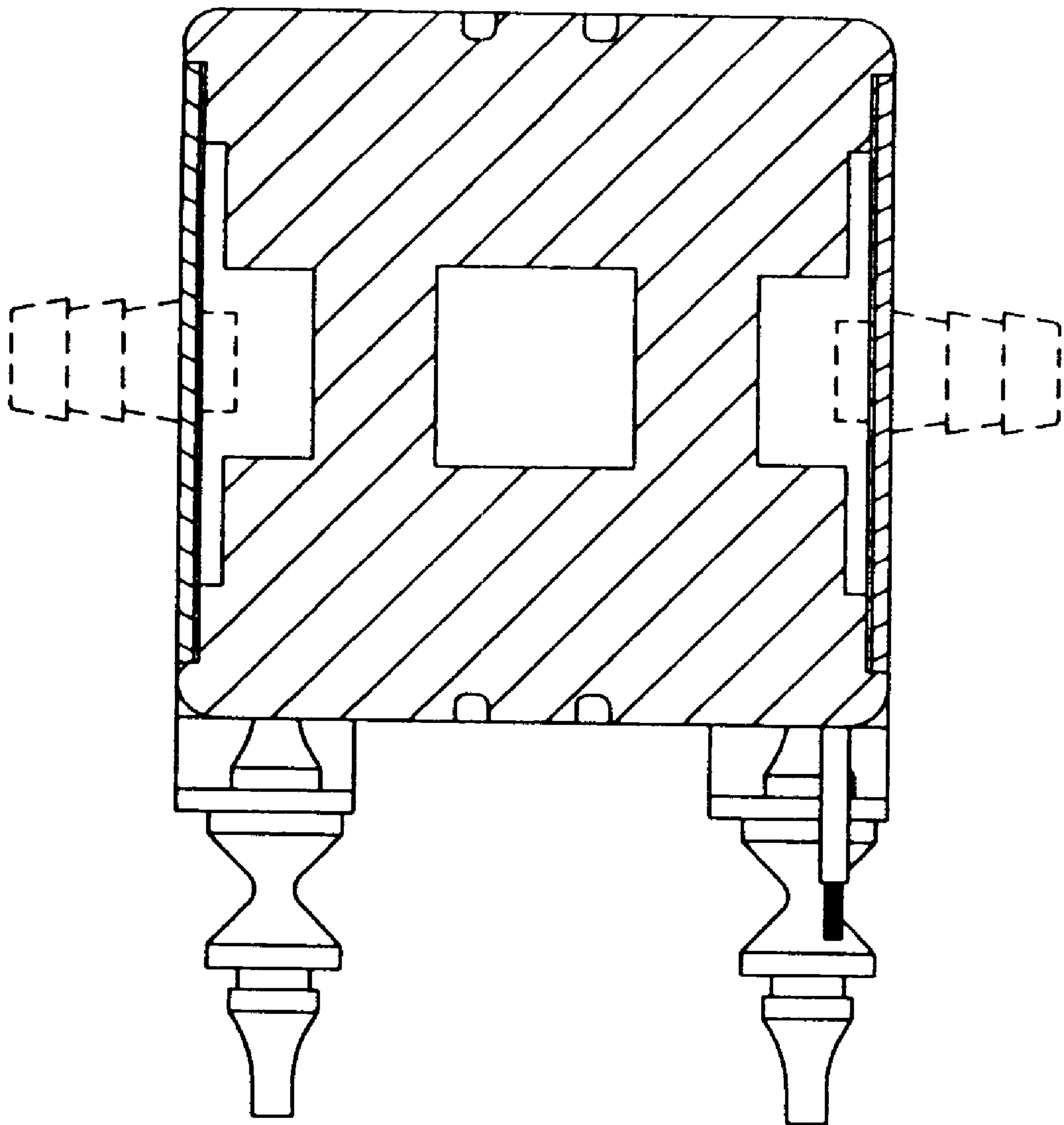


FIG. 7



UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : Des 454,886 S
DATED : March 26, 2002
INVENTOR(S) : Ikuo Ohya


Page 1 of 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 2,
Line 16, delete "strae" and substitute -- striae -- therefor.

Signed and Sealed this

Seventh Day of October, 2003

A handwritten signature in black ink, appearing to read "James E. Rogan", with a horizontal line drawn underneath it.

JAMES E. ROGAN
Director of the United States Patent and Trademark Office