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

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(45) **Date of Patent:** **** Jan. 8, 2013**

(54) **MEMBRANE CARTRIDGE FOR SUBMERGED MEMBRANE SEPARATION**

FOREIGN PATENT DOCUMENTS

JP 1070340 5/2000

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

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(30) **Foreign Application Priority Data**

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(51) **LOC (9) Cl.** **23-01**

(52) **U.S. Cl.** **D23/210**

(58) **Field of Classification Search** D23/200,
D23/207, 209, 210, 233–237, 244–249, 259–269,
D23/310; 210/226–228, 231, 323.1, 335,
210/348

See application file for complete search history.

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(57) **CLAIM**

The ornamental design for a membrane cartridge for submerged membrane separation, as shown and described.

DESCRIPTION

FIG. 1 is a front view of a membrane cartridge for submerged membrane separation showing our new design;

FIG. 2 is a rear view thereof;

FIG. 3 is a top plan view thereof;

FIG. 4 is a bottom view thereof;

FIG. 5 is a right side view thereof;

FIG. 6 is a left side view thereof;

FIG. 7 is a front perspective view thereof;

FIG. 8 is an enlarged view thereof, showing section 8-8 of FIG. 1;

FIG. 9 is an enlarged view thereof, showing section 9-9 of FIG. 1;

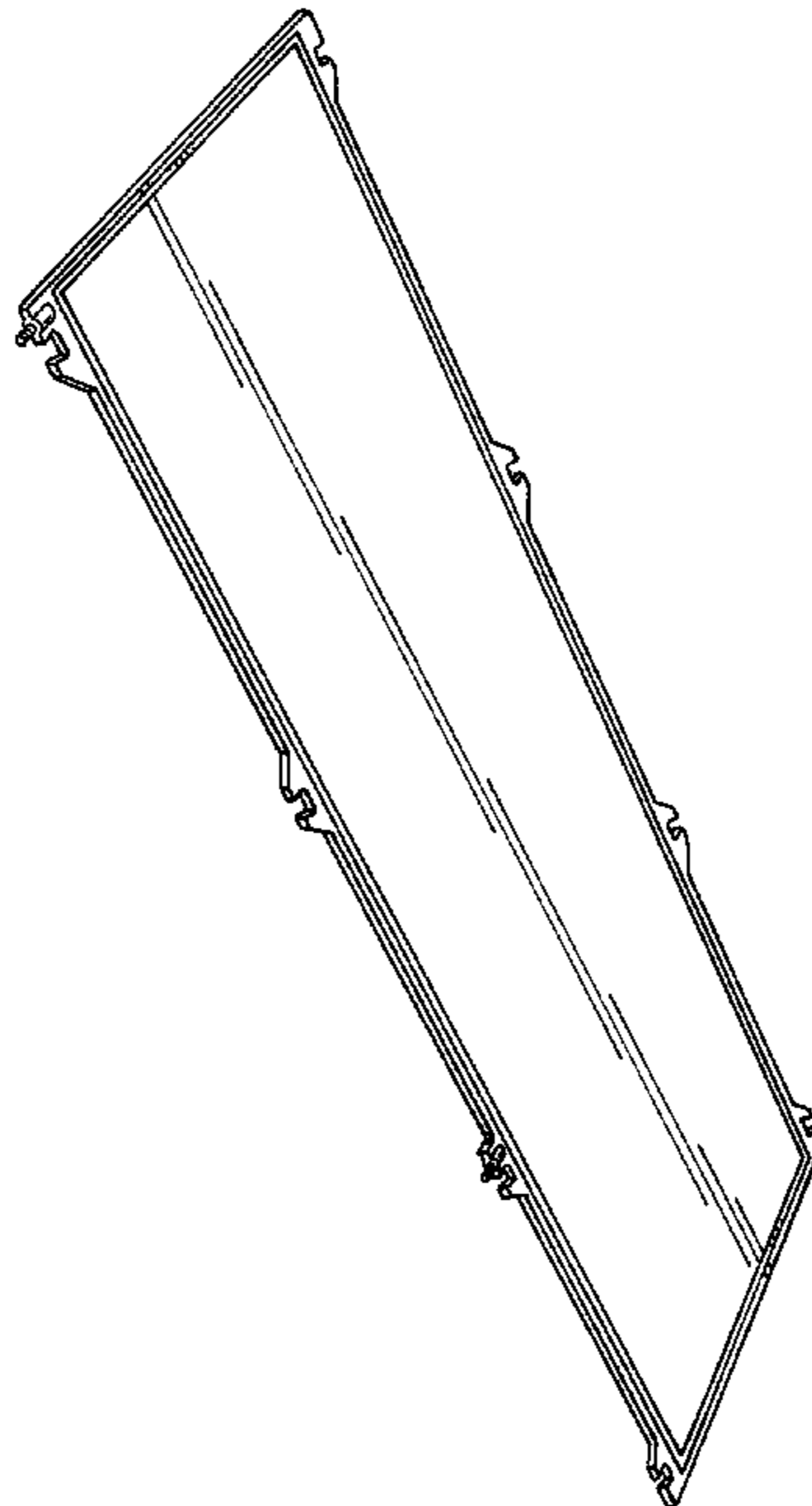
FIG. 10 is an enlarged view thereof, showing section 10-10 of FIG. 1;

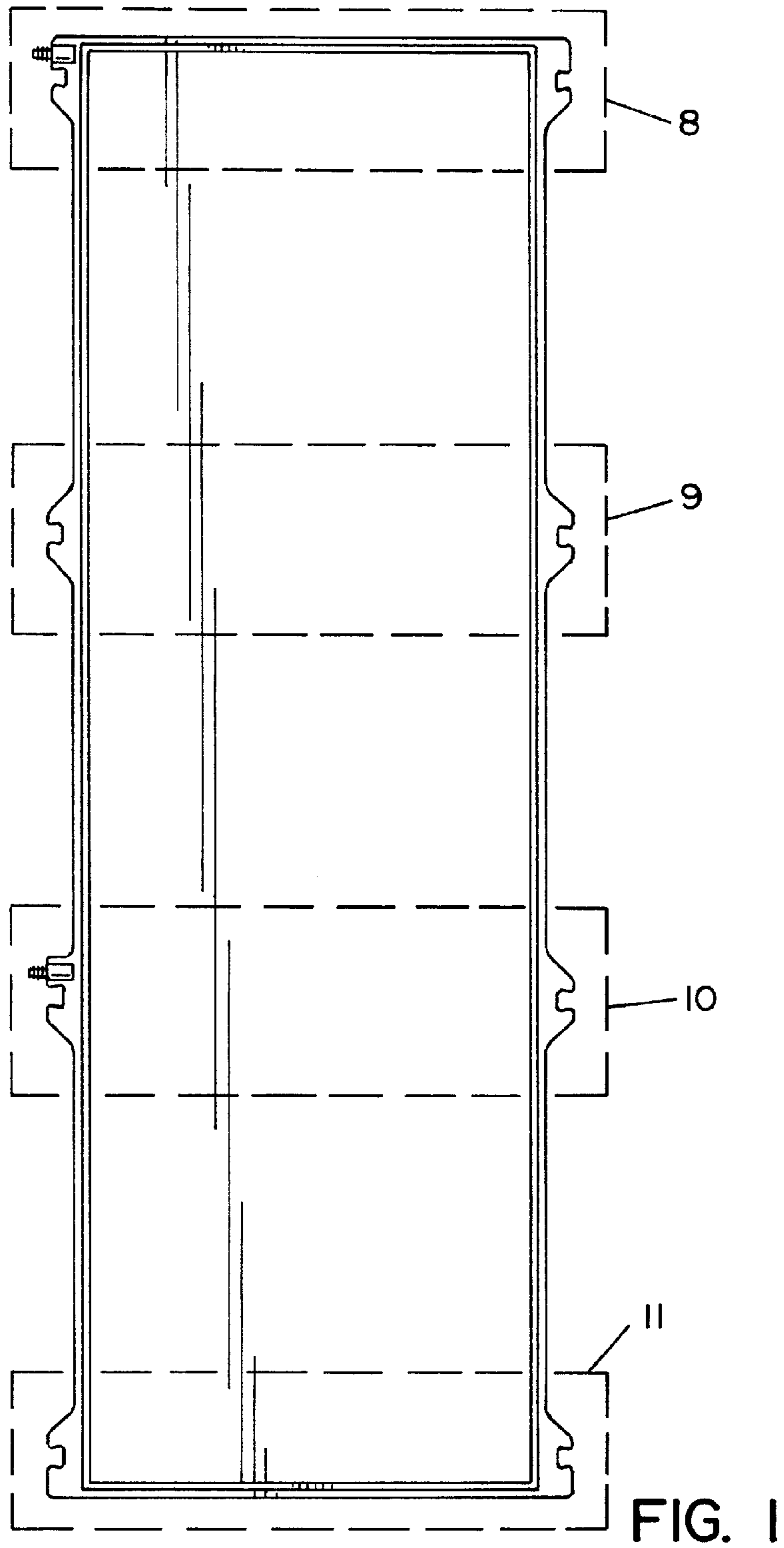
FIG. 11 is an enlarged view thereof, showing section 11-11 of FIG. 1;

FIG. 12 is an enlarged, partial, perspective view thereof, showing the upper nozzle; and,

FIG. 13 is an enlarged, partial, perspective view thereof, showing the lower nozzle.

1 Claim, 8 Drawing Sheets





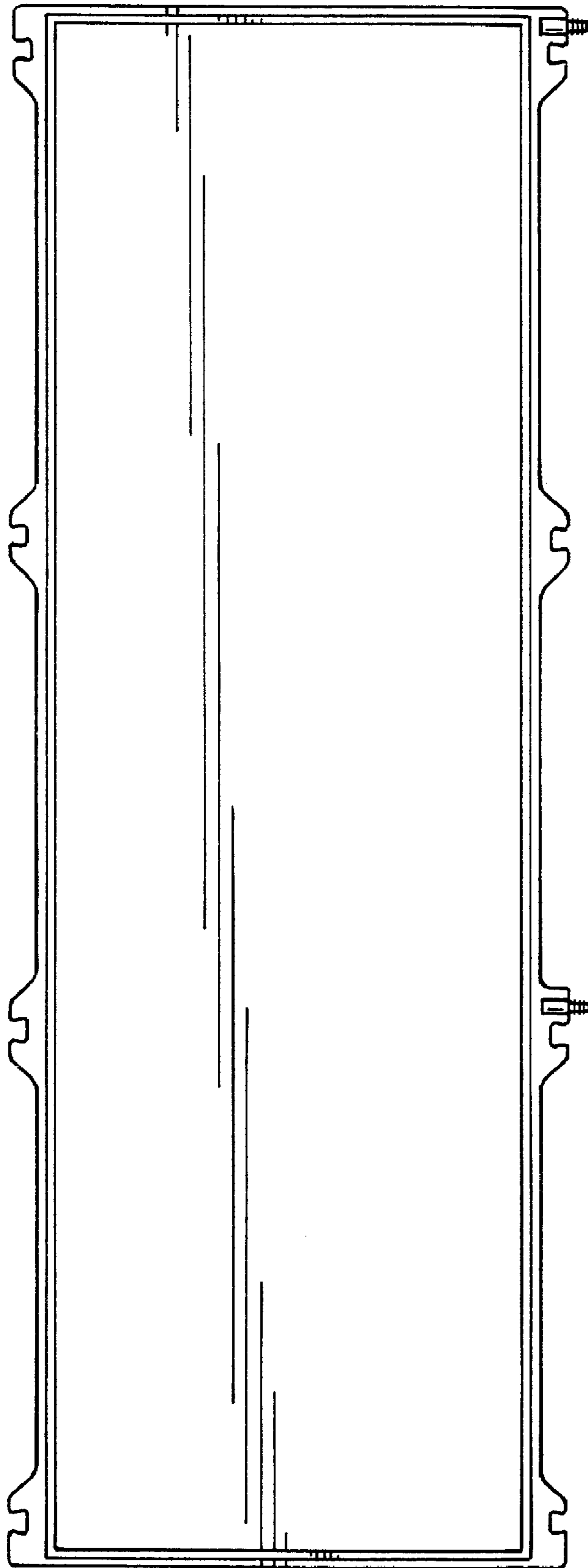


FIG. 2

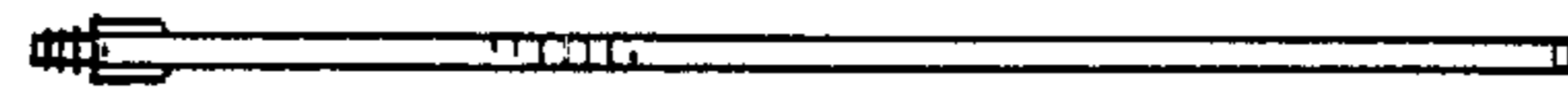


FIG. 3

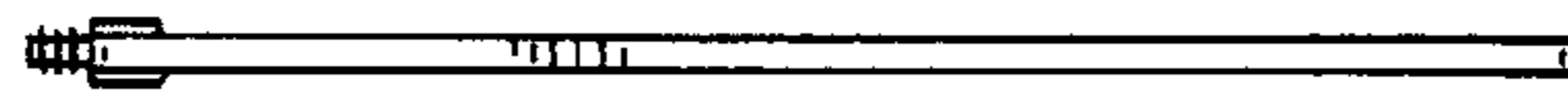


FIG. 4



FIG. 5



FIG. 6

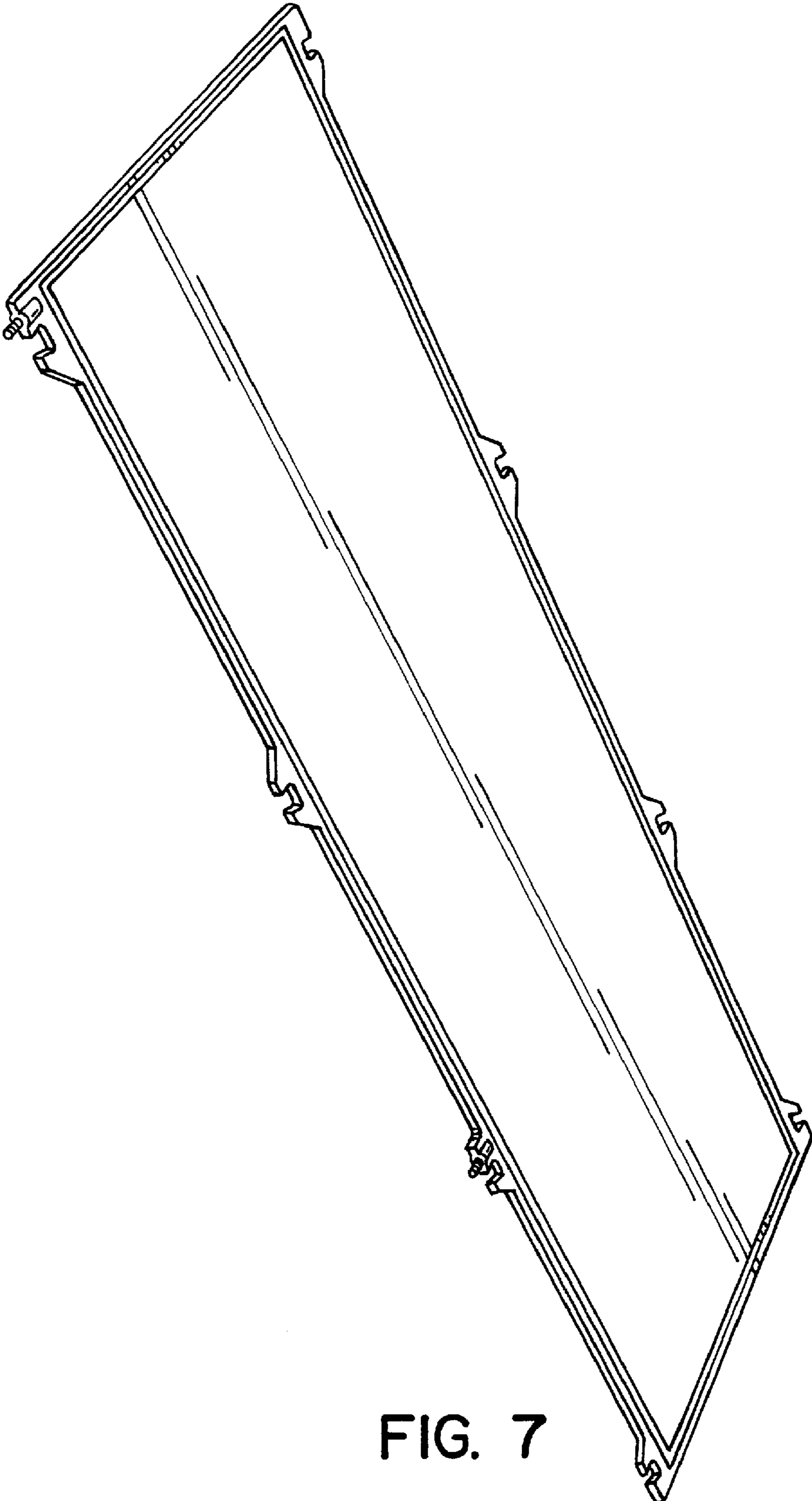


FIG. 7

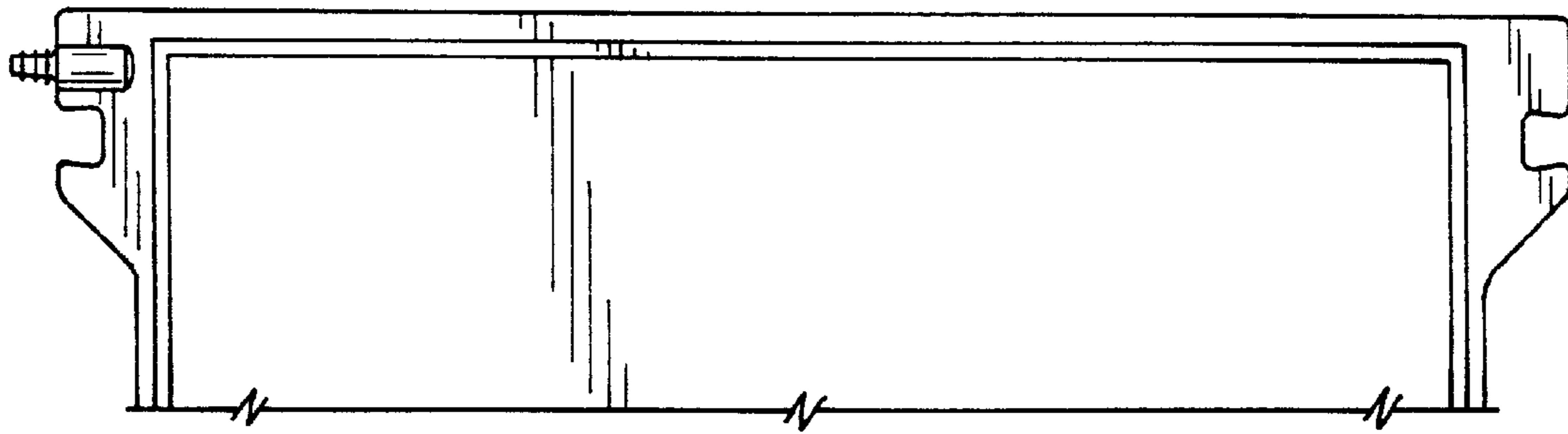


FIG. 8

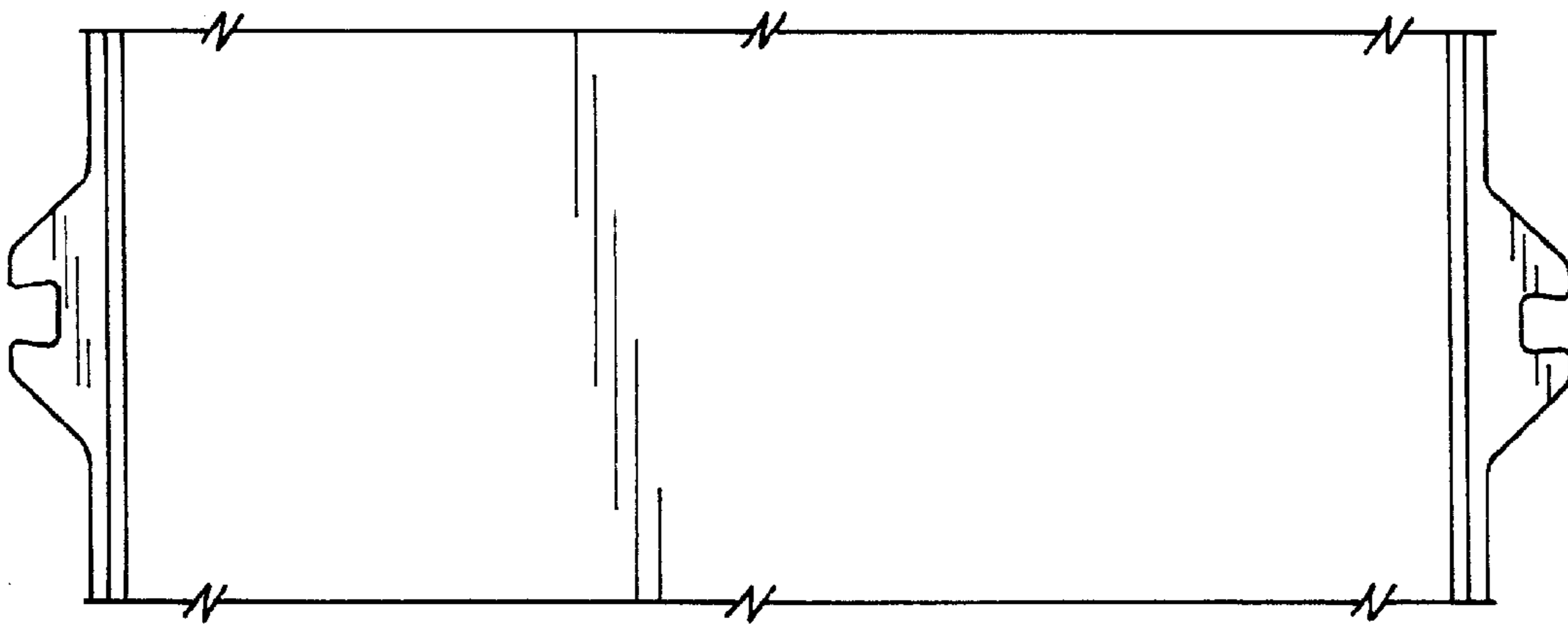


FIG. 9

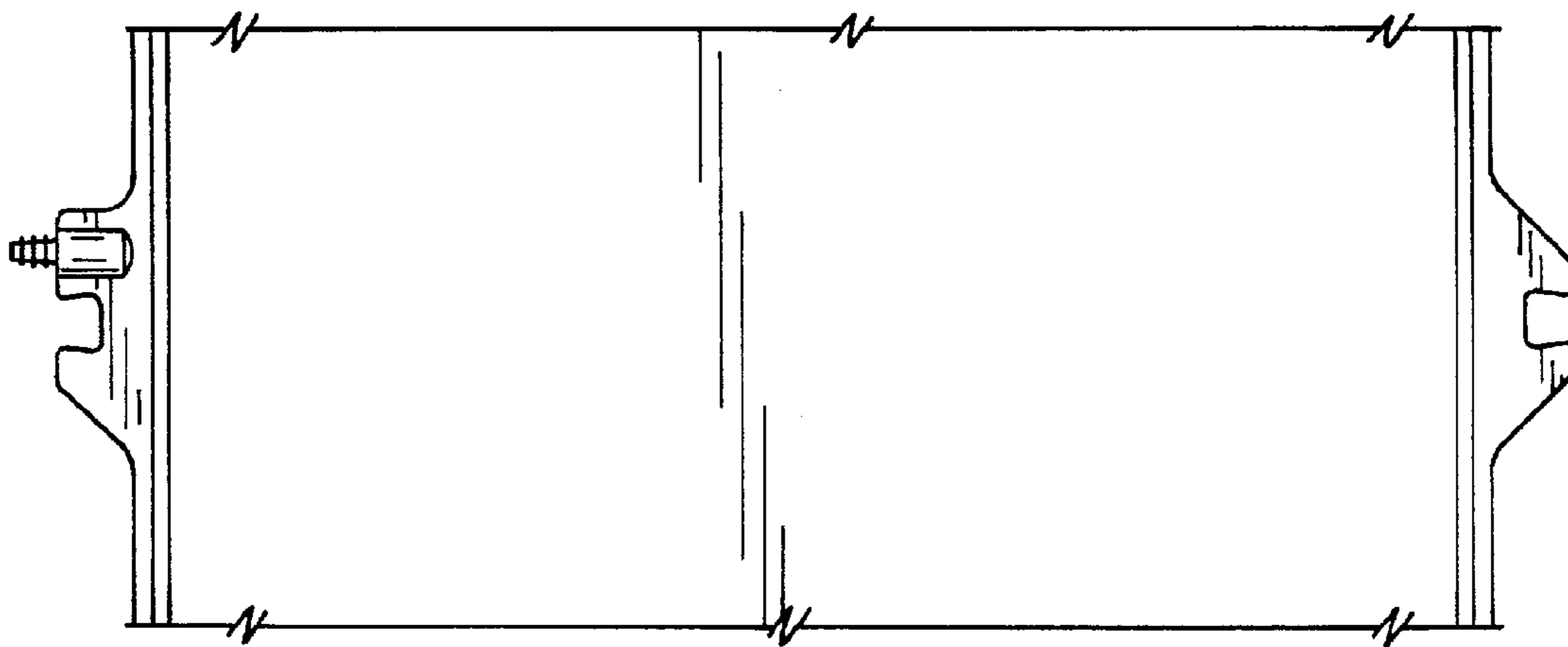


FIG. 10

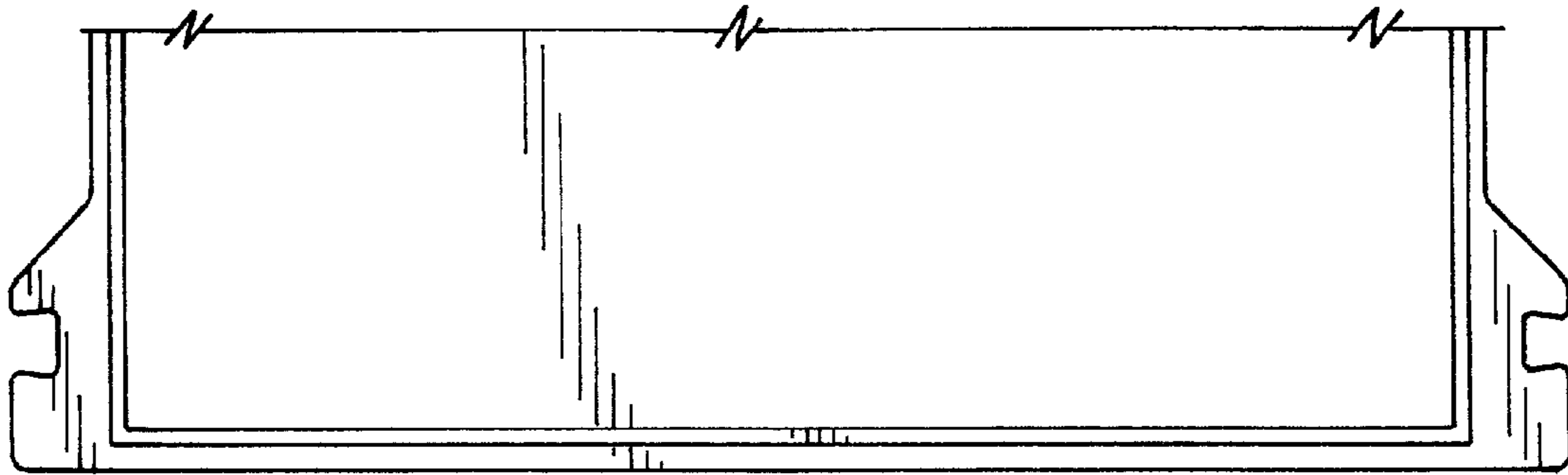


FIG. 11

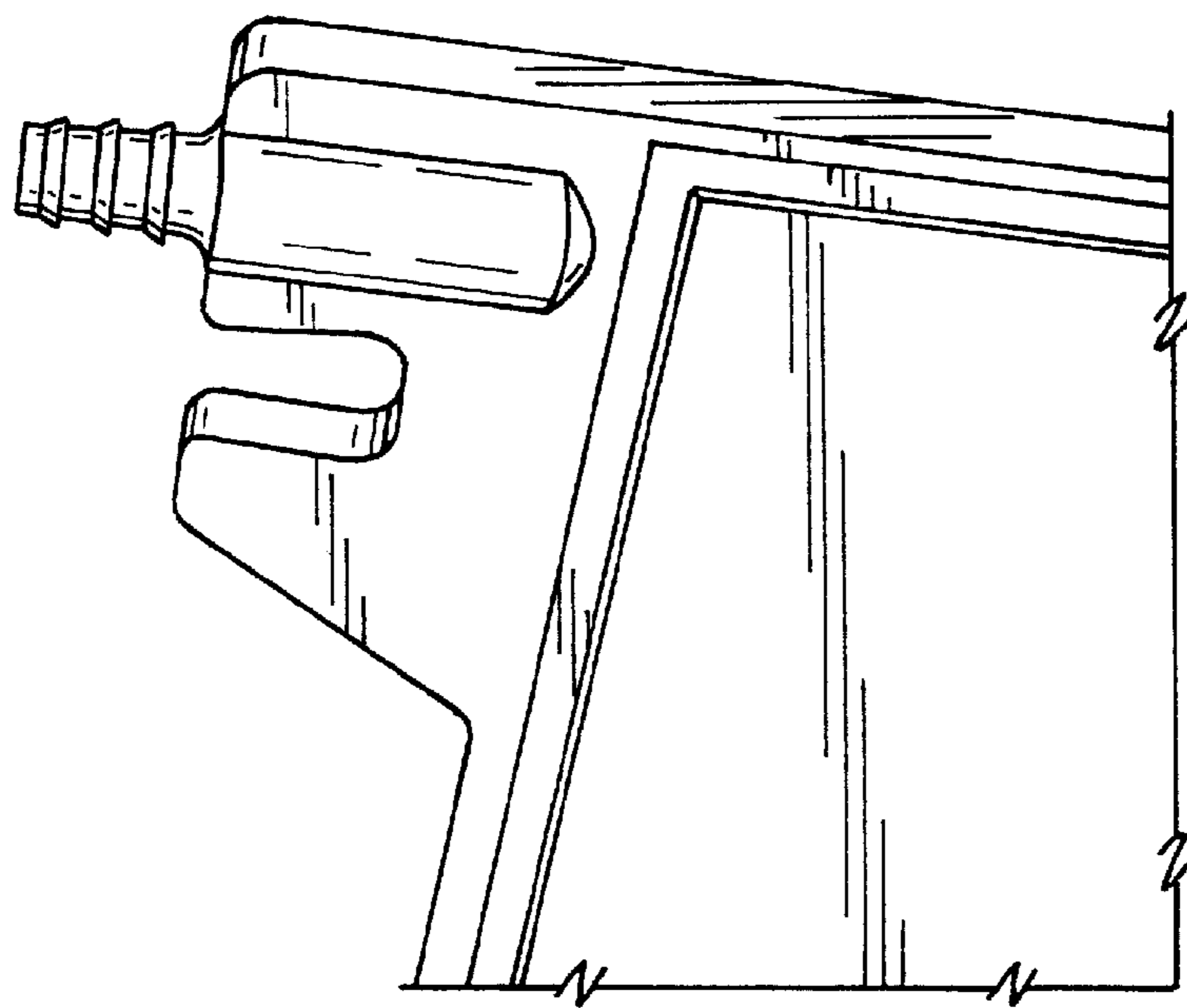


FIG. 12

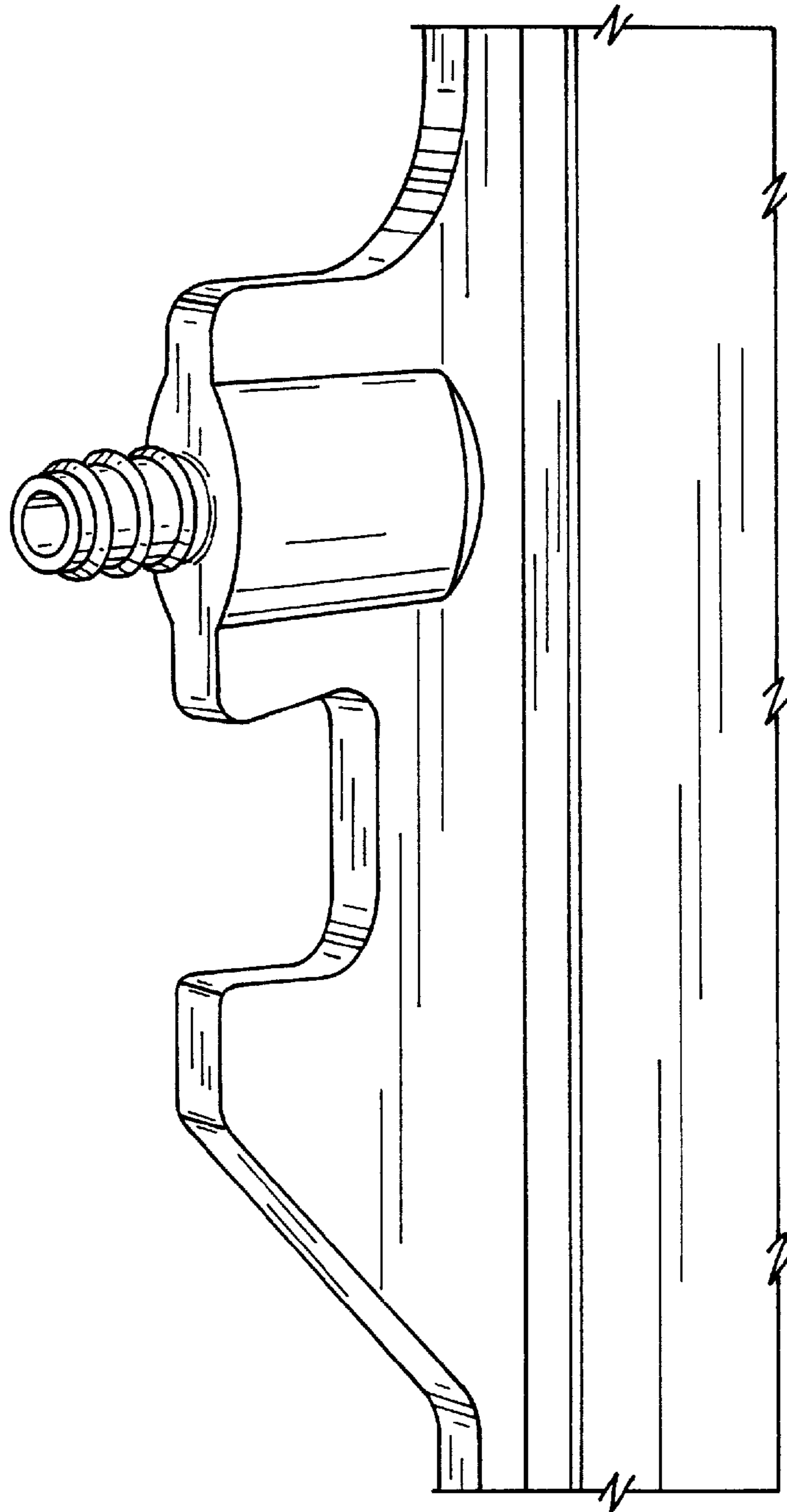


FIG. 13