



US00D956004S

(12) **United States Design Patent** (10) **Patent No.:** **US D956,004 S**
Lin et al. (45) **Date of Patent:** **** Jun. 28, 2022**

(54) **LIQUID-COOLING HEAT DISSIPATION MODULE**

(71) Applicant: **Auras Technology Co., Ltd.**, New Taipei (TW)

(72) Inventors: **Jen-Hao Lin**, New Taipei (TW);
Tian-Li Ye, New Taipei (TW);
Chien-Yu Chen, New Taipei (TW);
Chien-An Chen, New Taipei (TW)

(73) Assignee: **AURAS TECHNOLOGY CO., LTD.**, New Taipei (TW)

(**) Term: **15 Years**

(21) Appl. No.: **29/752,538**

(22) Filed: **Sep. 28, 2020**

(30) **Foreign Application Priority Data**

Mar. 27, 2020 (TW) 109301725

(51) **LOC (13) Cl.** **13-03**

(52) **U.S. Cl.**
USPC **D13/179**

(58) **Field of Classification Search**
USPC D13/179, 182.184; D23/231; D14/230
CPC . H01Q 1/428; H01Q 1/02; H01Q 1/38; H01L 23/367; H01L 23/3672; H05K 7/20254; H05K 7/20263; H05K 7/20409; F28F 3/022; F28F 3/04; F28F 21/065; G02B 1/111; F28D 15/0275
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D825,501 S * 8/2018 Yamaguchi D13/182
10,834,850 B2 * 11/2020 Deng F28D 1/05383
2013/0299139 A1 * 11/2013 Mounioloux G06F 1/20165/120
2017/0181320 A1 * 6/2017 Aoki H05K 7/20263

2017/0338024 A1 * 11/2017 Guentert H05K 7/20263
2019/0075681 A1 * 3/2019 Xiao F28D 1/05375
2019/0090384 A1 * 3/2019 Xiao H01L 23/3672
2021/0112683 A1 * 4/2021 Mohajer G02B 6/4261
2021/0176893 A1 * 6/2021 Shieh G06F 1/20
2021/0195793 A1 * 6/2021 Chen H05K 7/20263
2021/0305129 A1 * 9/2021 Chen H01L 23/473
2021/0307198 A1 * 9/2021 Chen H05K 7/20263
2022/0007539 A1 * 1/2022 Horie H05K 5/0247

OTHER PUBLICATIONS

Techpowerup, "Calyos Showcases Its NSG S0 Phase Change Cooling Chassis at Computex 2017", Published Jun. 2, 2017. (<https://www.techpowerup.com/233994/calyos-showcases-its-nsg-s0-phase-change-cooling-chassis-at-computex-2017>) (Year: 2017).*

* cited by examiner

Primary Examiner — April Rivas

(74) *Attorney, Agent, or Firm* — Muncy, Geissler, Olds & Lowe, P.C.

(57) **CLAIM**

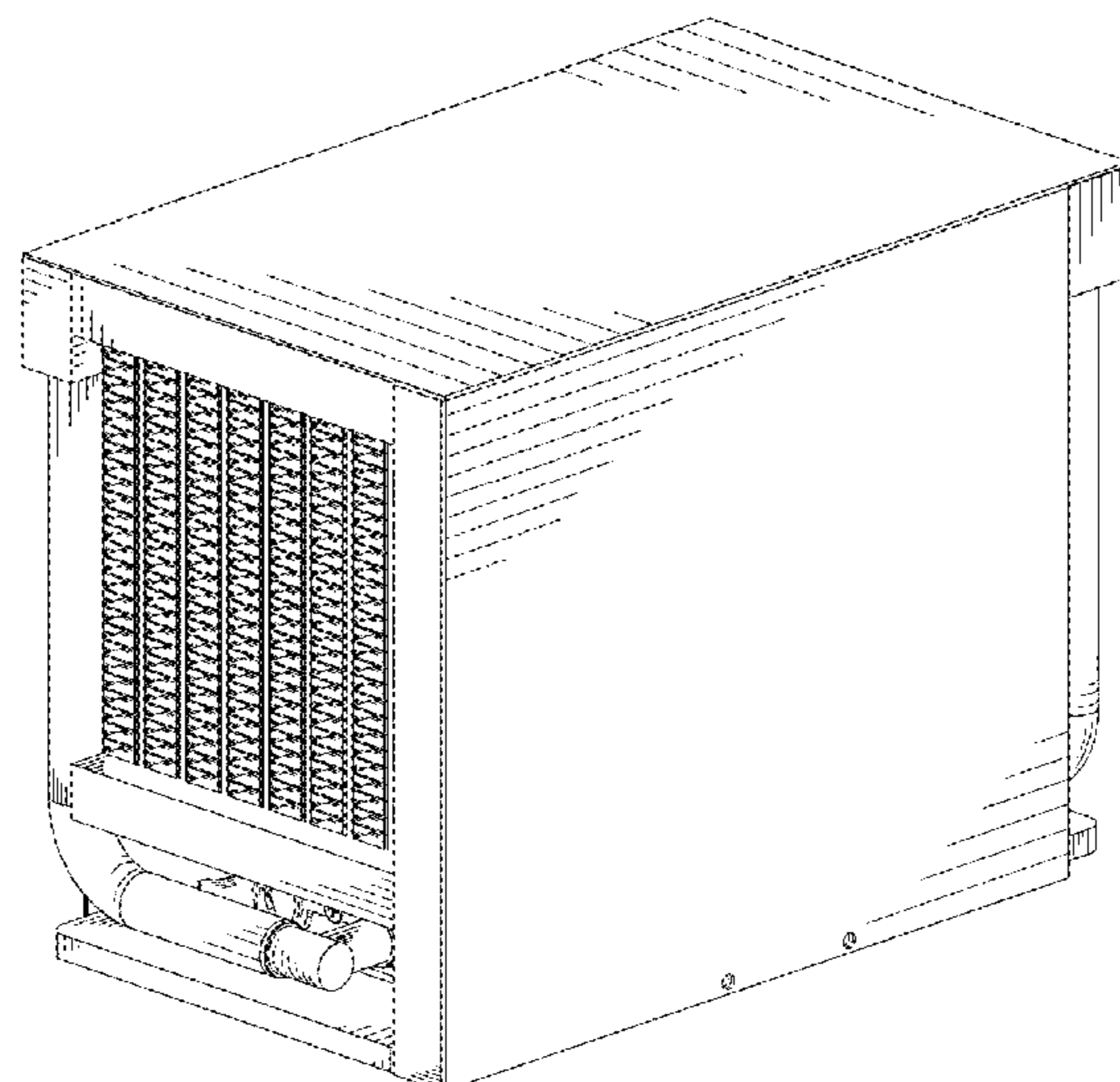
The ornamental design for a liquid-cooling heat dissipation module, as shown and described.

DESCRIPTION

FIG. 1 is a front, top, right perspective view of a liquid-cooling heat dissipation module showing our new design; FIG. 2 is a back, top, left perspective view thereof; FIG. 3 is a front, bottom, right perspective view thereof; FIG. 4 is a front elevational view thereof; FIG. 5 is a rear elevational view thereof; FIG. 6 is a left side elevational view thereof; FIG. 7 is a right side elevational view thereof; FIG. 8 is a top plan view thereof; and, FIG. 9 is a bottom plan view thereof.

The broken lines in the drawings illustrate portions of the liquid-cooling heat dissipation module which form no part of the claimed design.

1 Claim, 9 Drawing Sheets



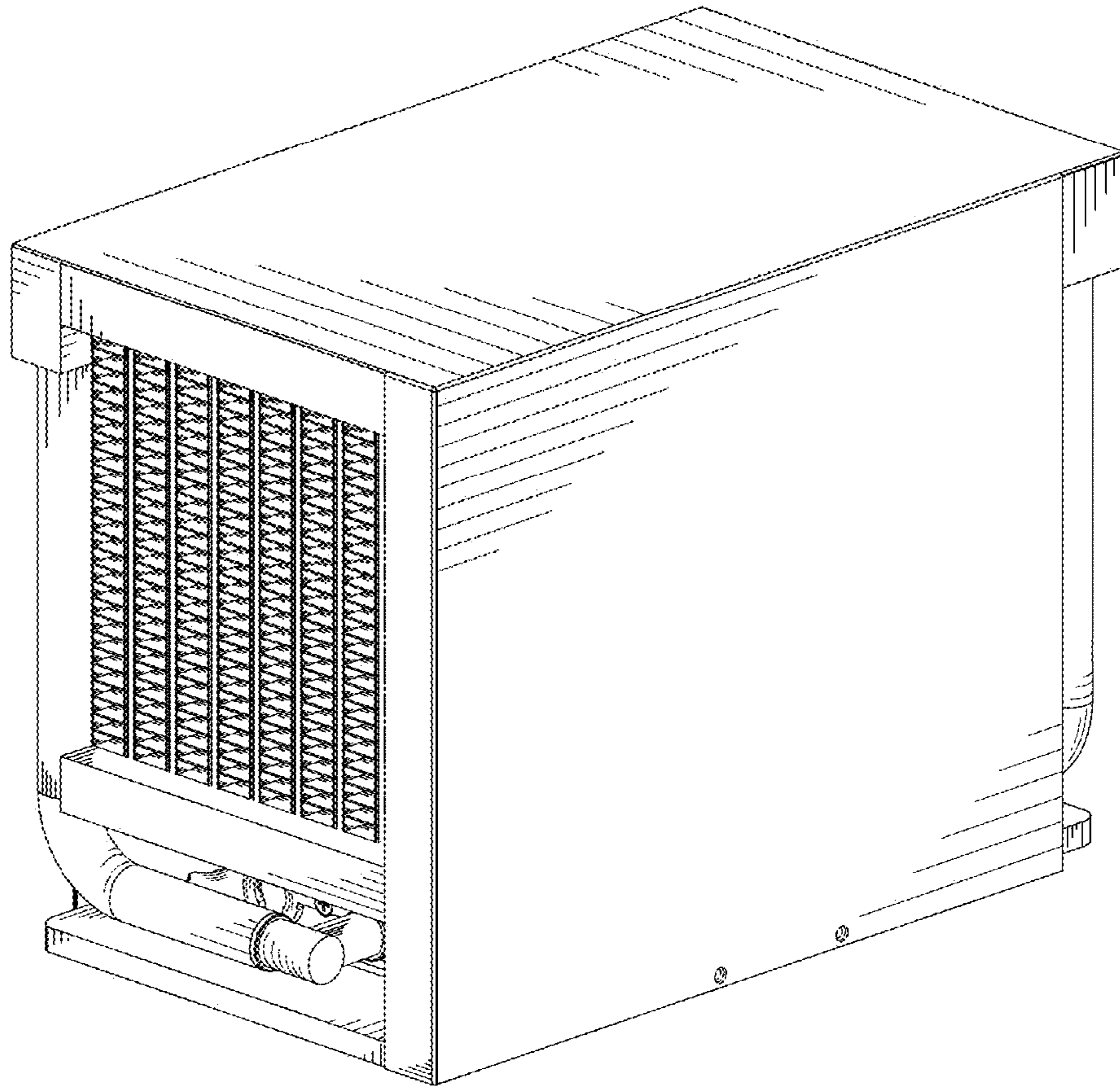


Fig. 1

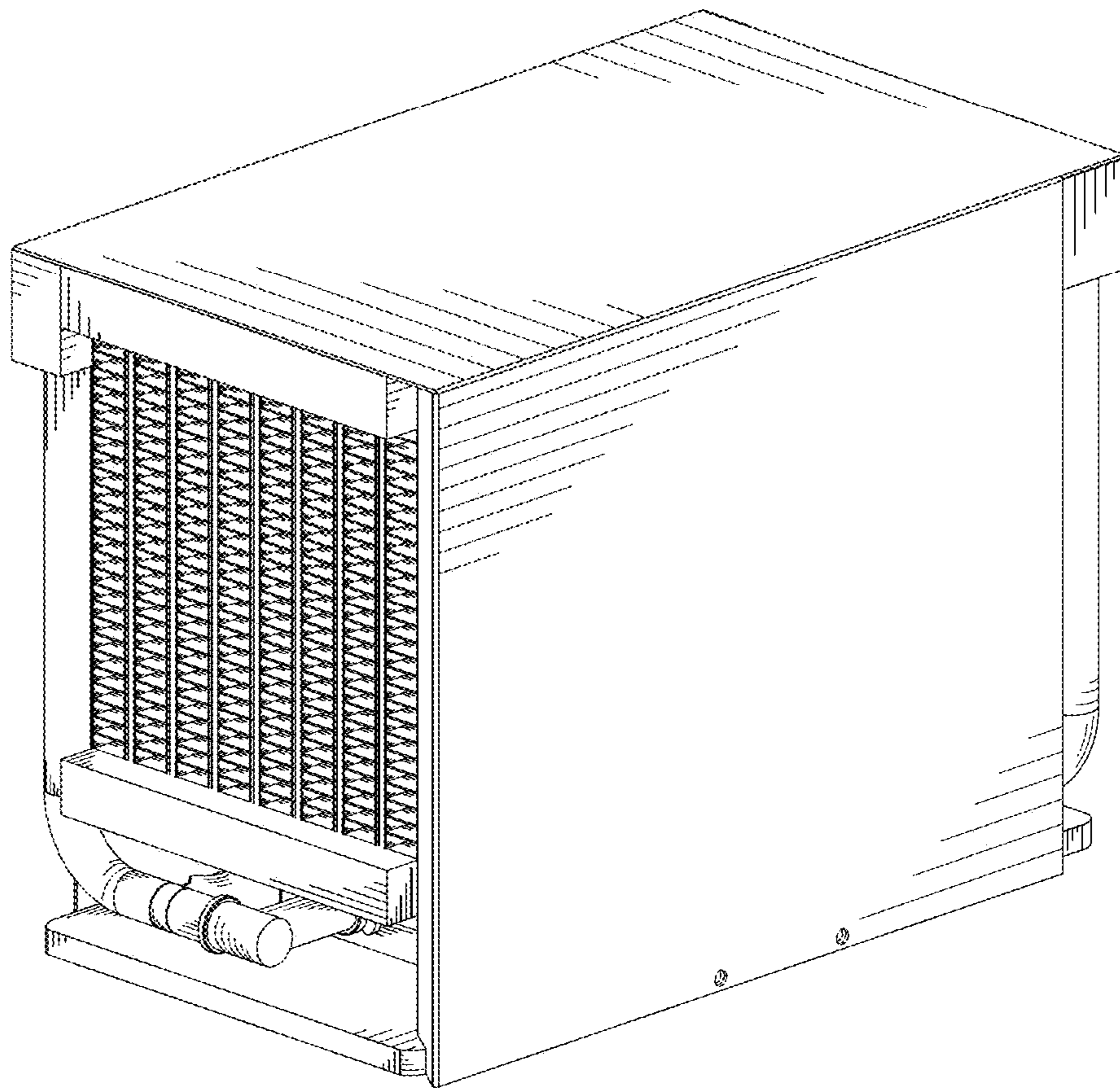


Fig. 2

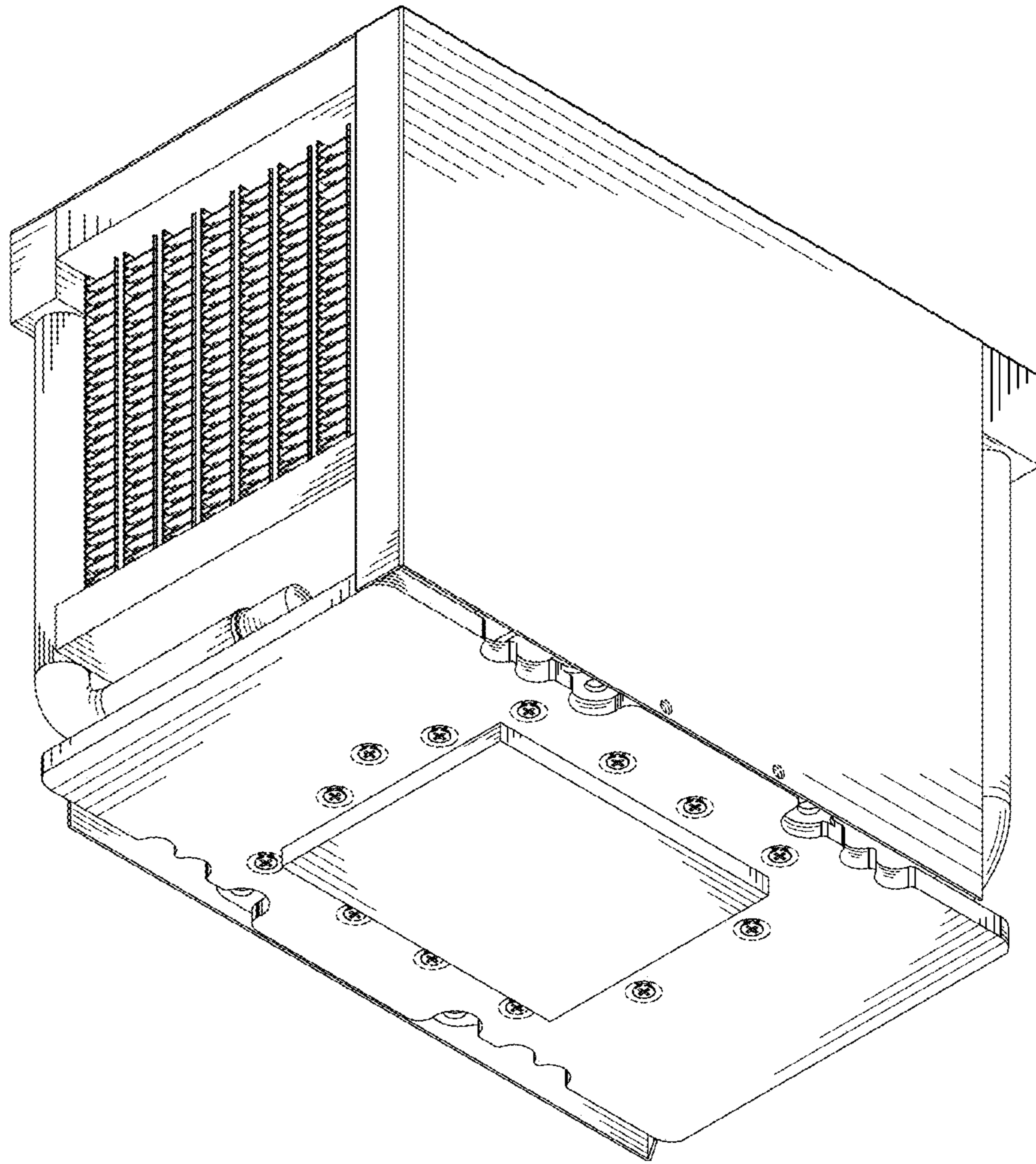


Fig. 3

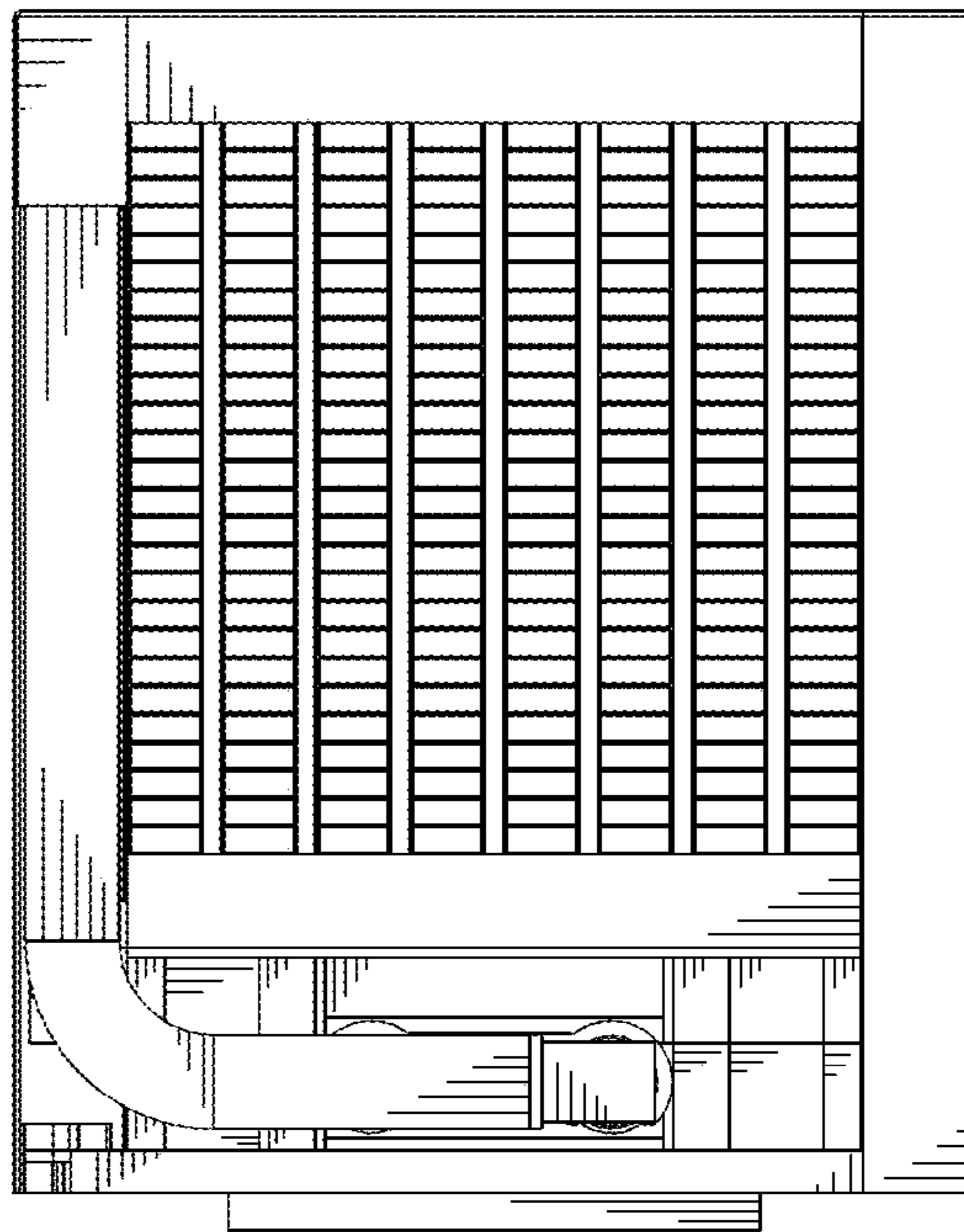


Fig. 4

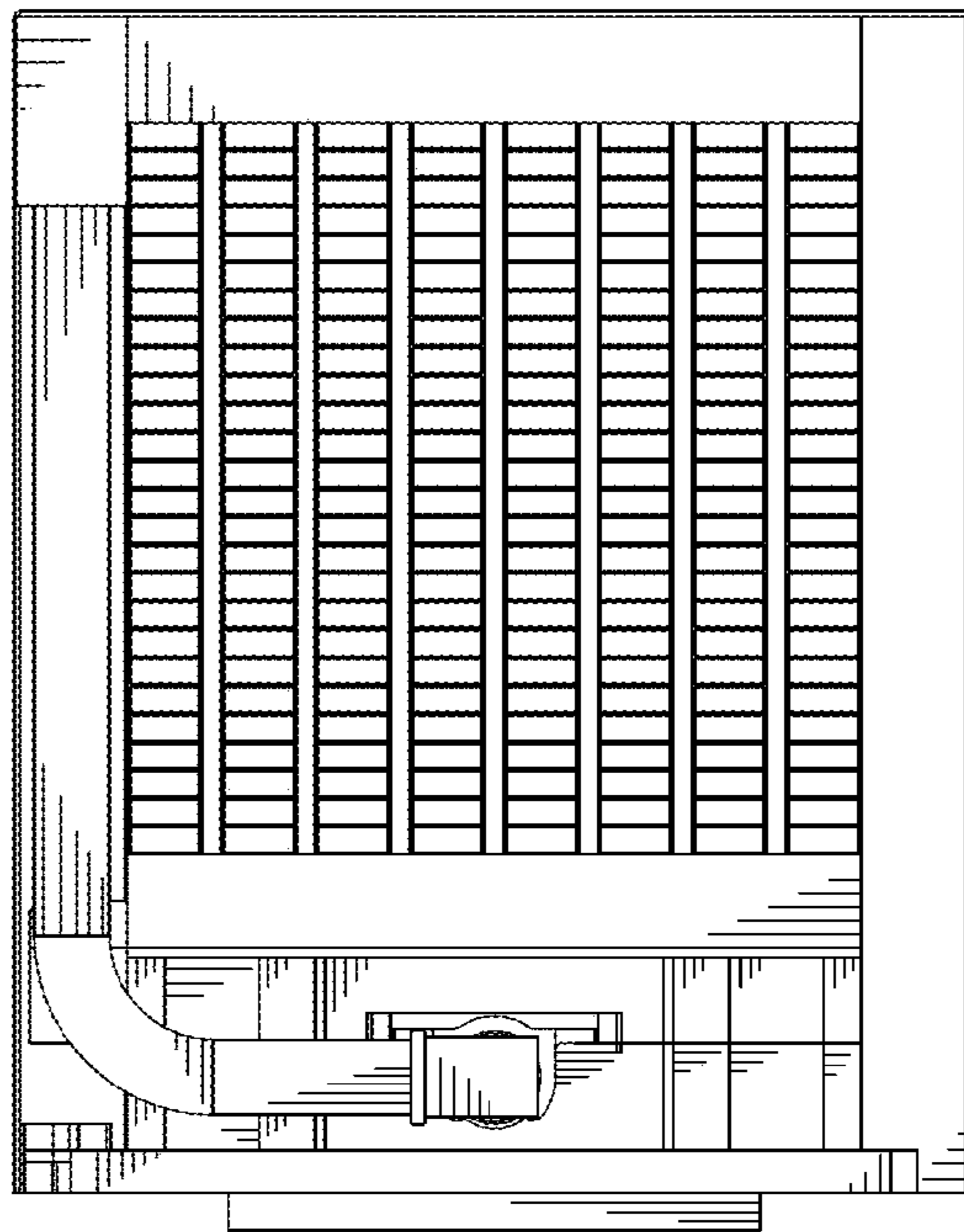


Fig. 5

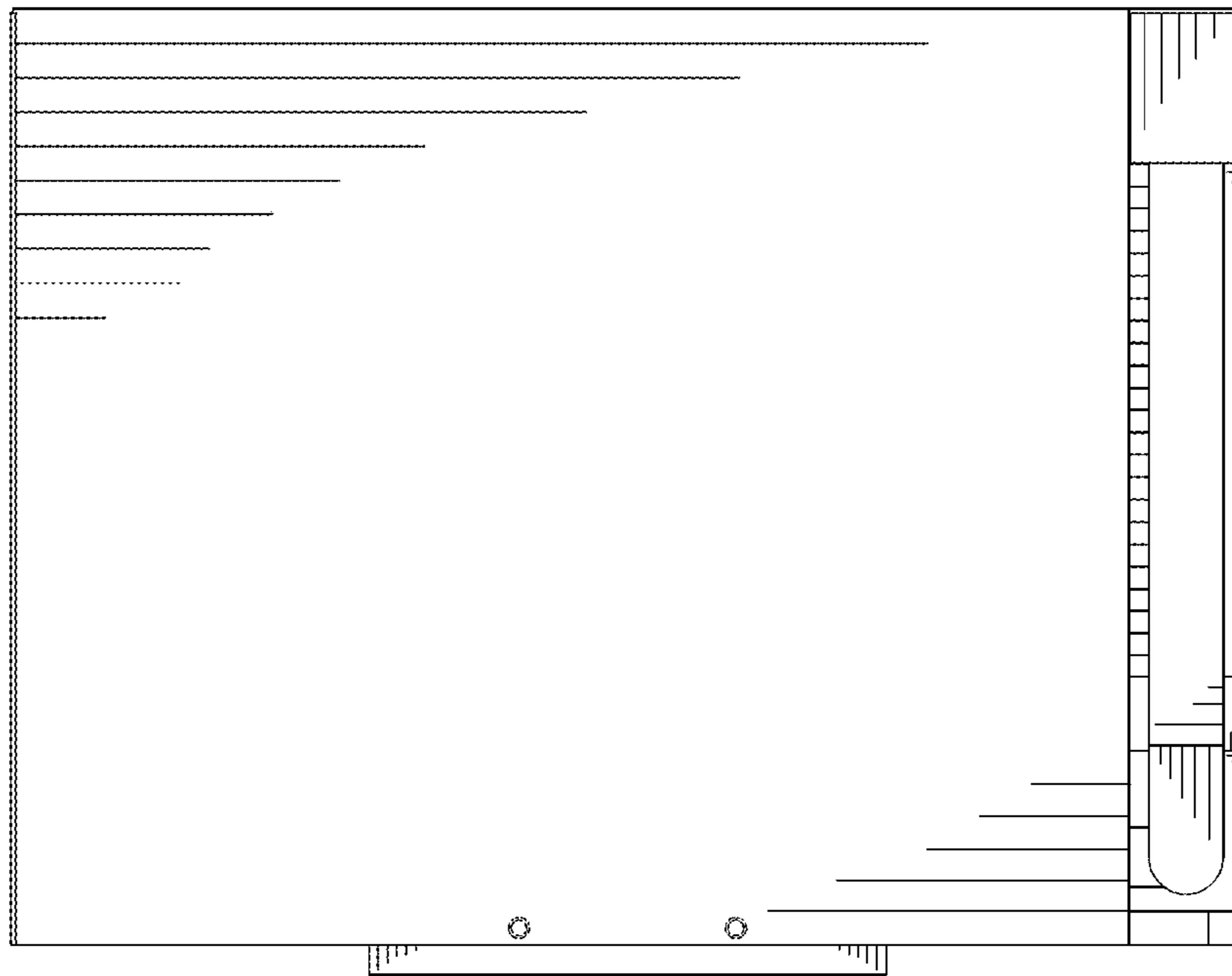


Fig. 6

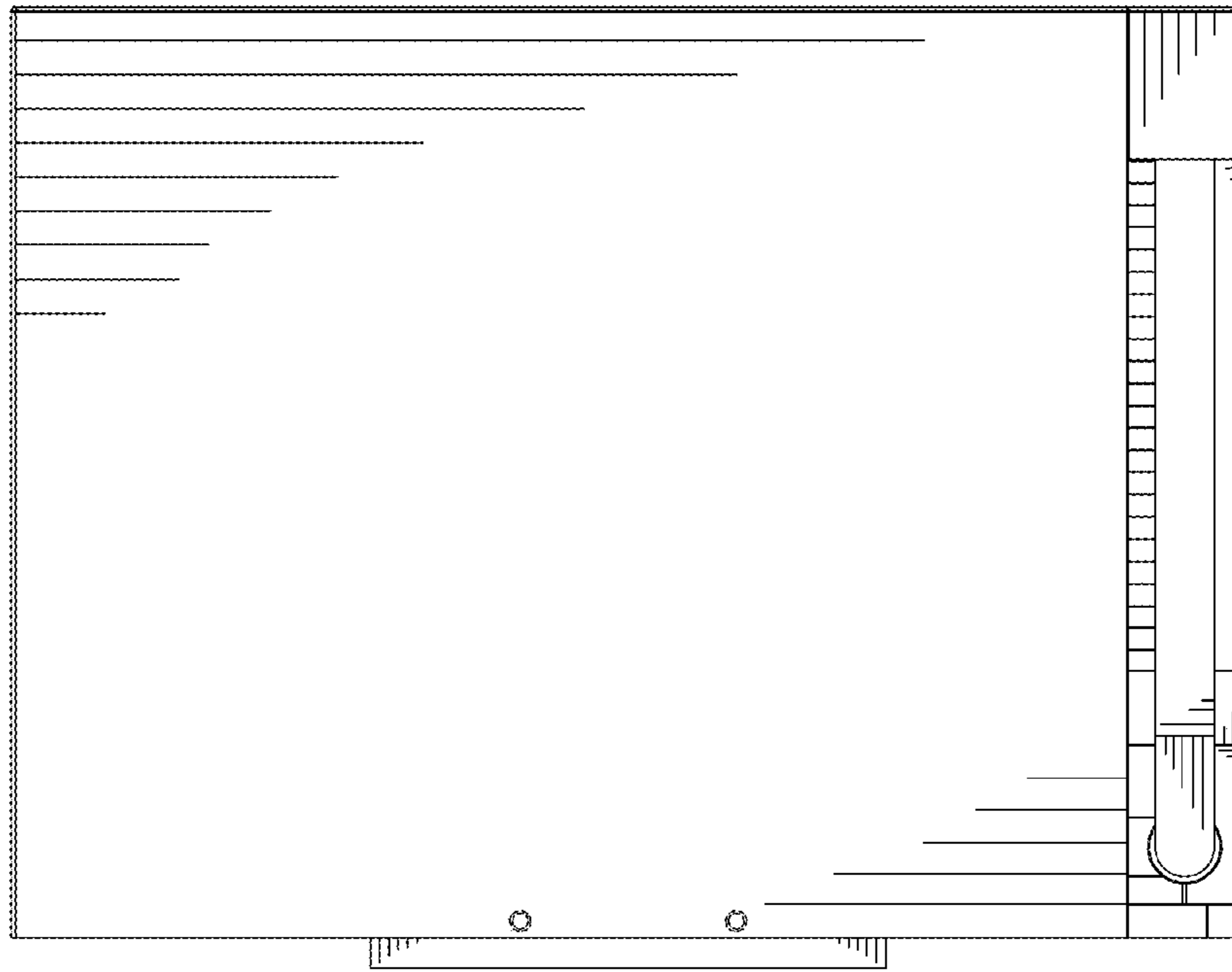


Fig. 7

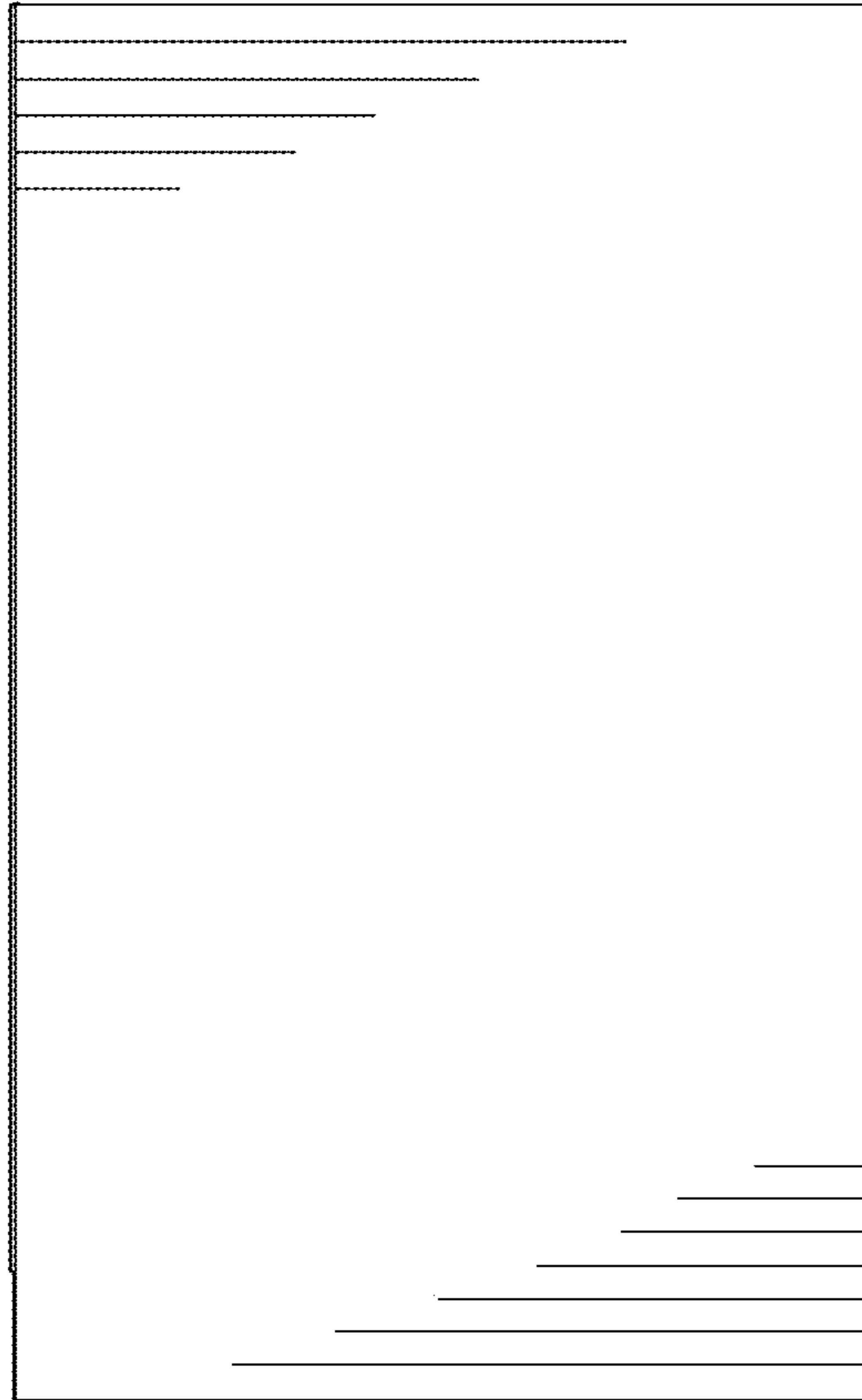


Fig. 8

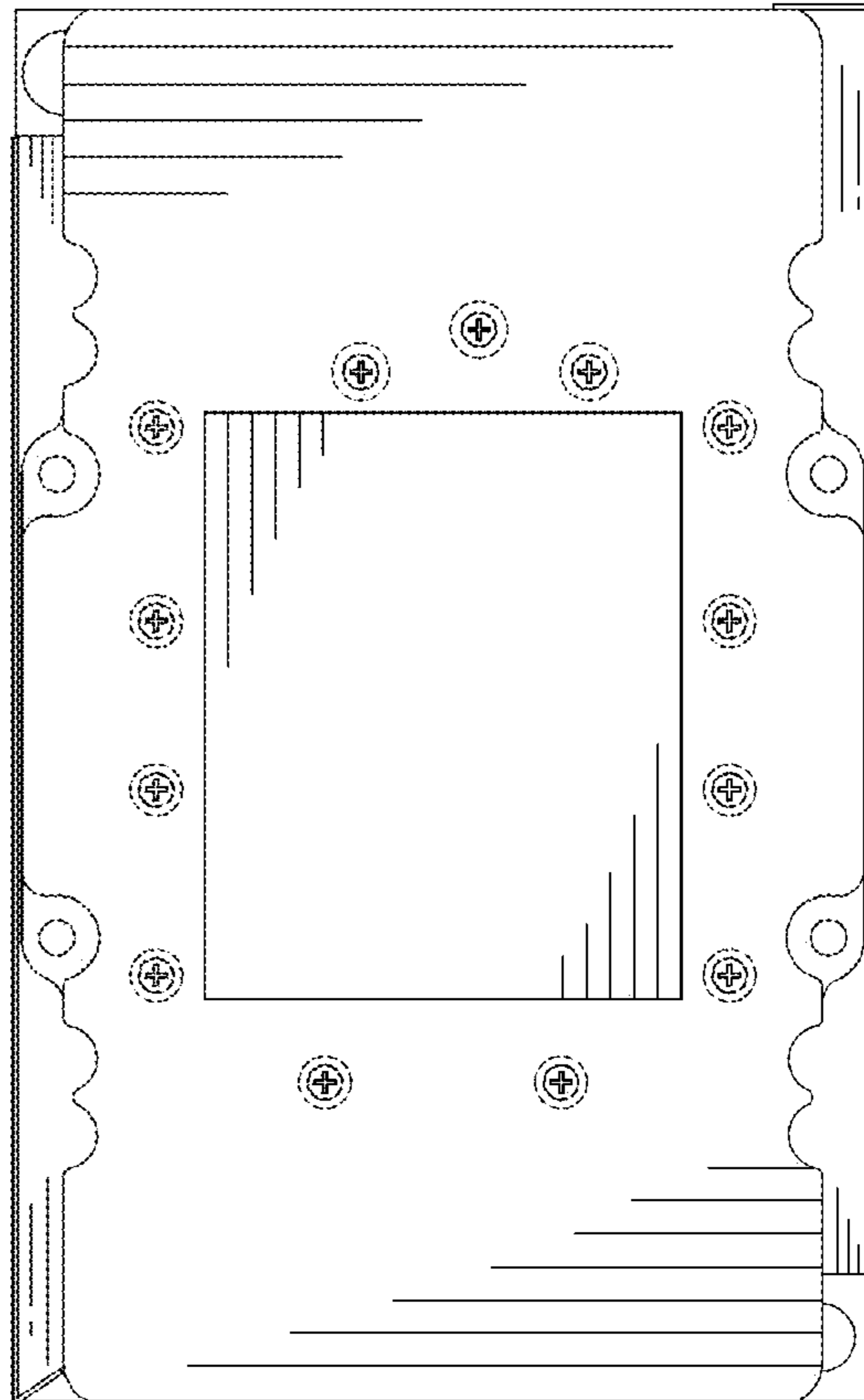


Fig. 9