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(12) **United States Design Patent** (10) **Patent No.:** **US D849,216 S**  
**Huan et al.** (45) **Date of Patent:** **\*\* May 21, 2019**

(54) **HEAT EXCHANGER**

7/06; F28D 7/10; F28D 2001/0266; B21D 53/02; F28B 1/06

See application file for complete search history.

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(72) Inventors: **Jin Huan**, Zhejiang (CN); **Jin Junfeng**, Zhejiang (CN); **Lu Xiangxun**, Zhejiang (CN)

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

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(Continued)

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**Related U.S. Application Data**

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**Foreign Application Priority Data**

Jul. 5, 2016 (CN) ..... 2016 3 0303271

(51) **LOC (11) Cl.** ..... **23-03**

(52) **U.S. Cl.**  
USPC ..... **D23/323**

(58) **Field of Classification Search**  
USPC ..... D23/323, 322, 324, 325, 326, 327, 330,  
D23/386, 352, 354, 449; D7/407;  
D13/179

CPC ..... F28F 1/06; F28F 1/16; F28F 1/21; F28F 9/02; F28D 1/047; F28D 13/12; F28D

(57) **CLAIM**

The ornamental design for a heat exchanger, substantially as shown and described.

**DESCRIPTION**

FIG. 1 is a front, left side and top perspective view of a heat exchanger comprising a new, original and ornamental design;

FIG. 2 is a front view thereof;

FIG. 3 is a rear view thereof;

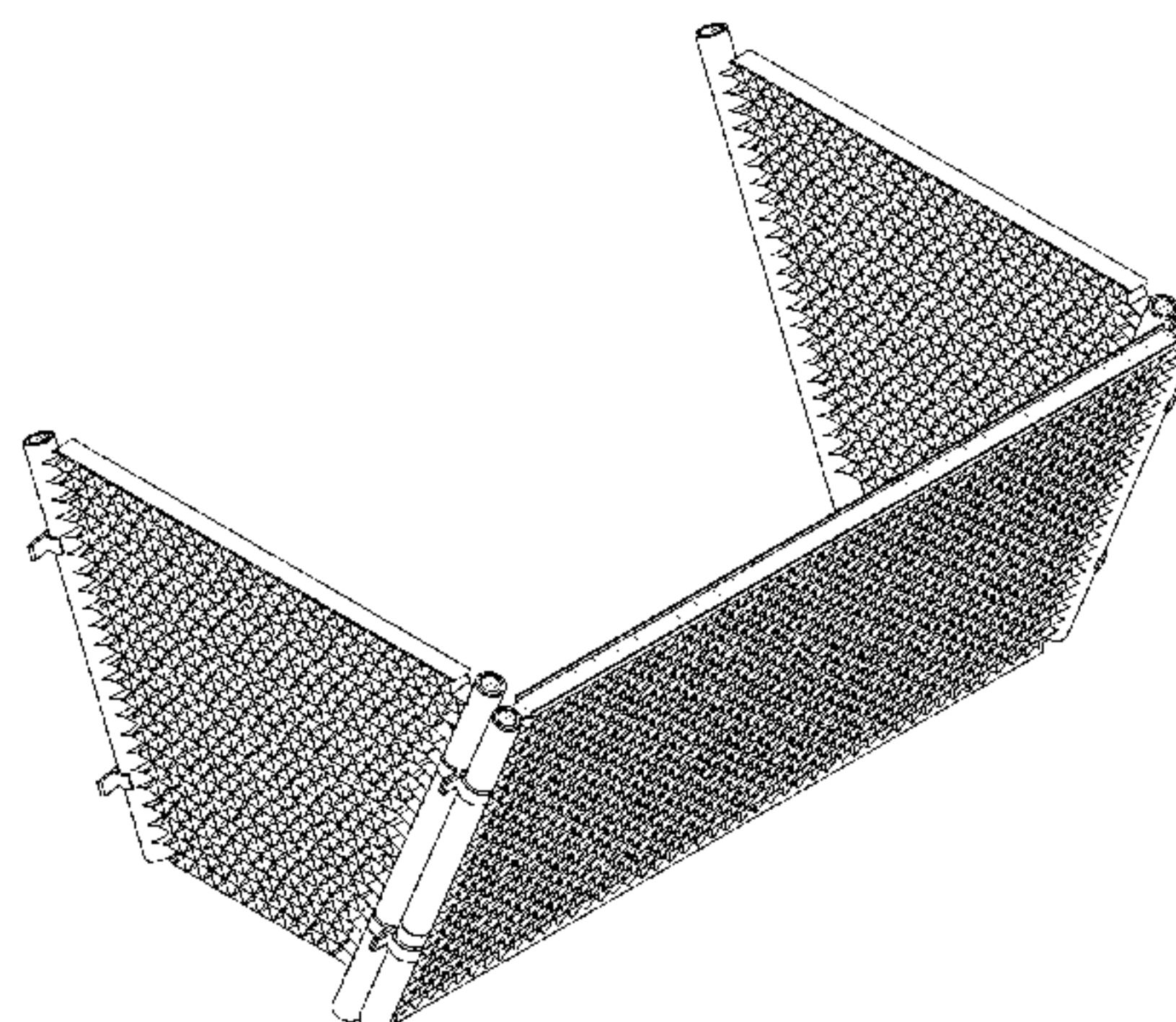
FIG. 4 is a left side view thereof;

FIG. 5 is a right side view thereof;

FIG. 6 is a top view thereof; and,

FIG. 7 is a bottom view thereof.

(Continued)



The broken lines show portions of the heat exchanger, that form no part of the claimed design.

**1 Claim, 7 Drawing Sheets**

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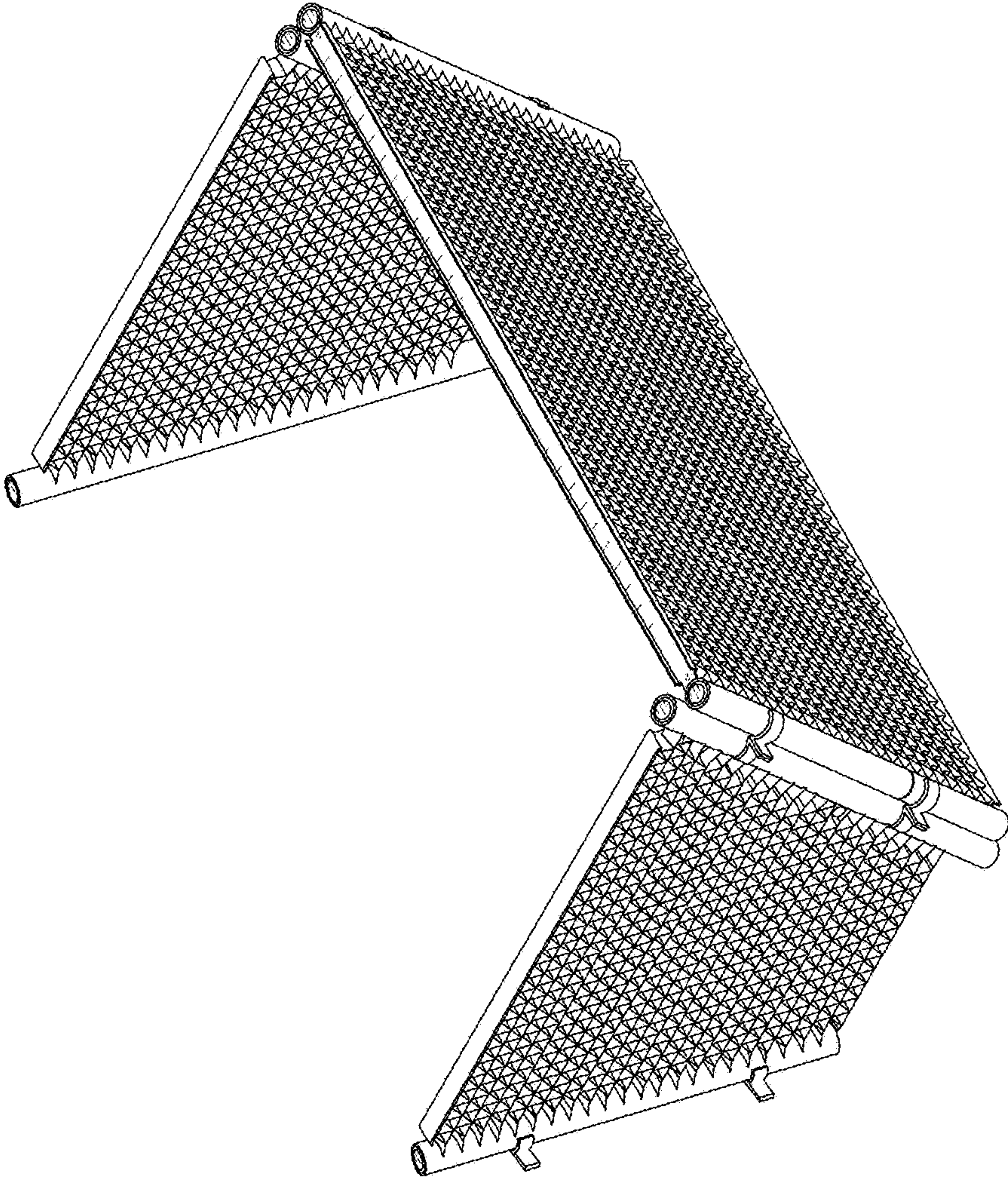


FIG. 1



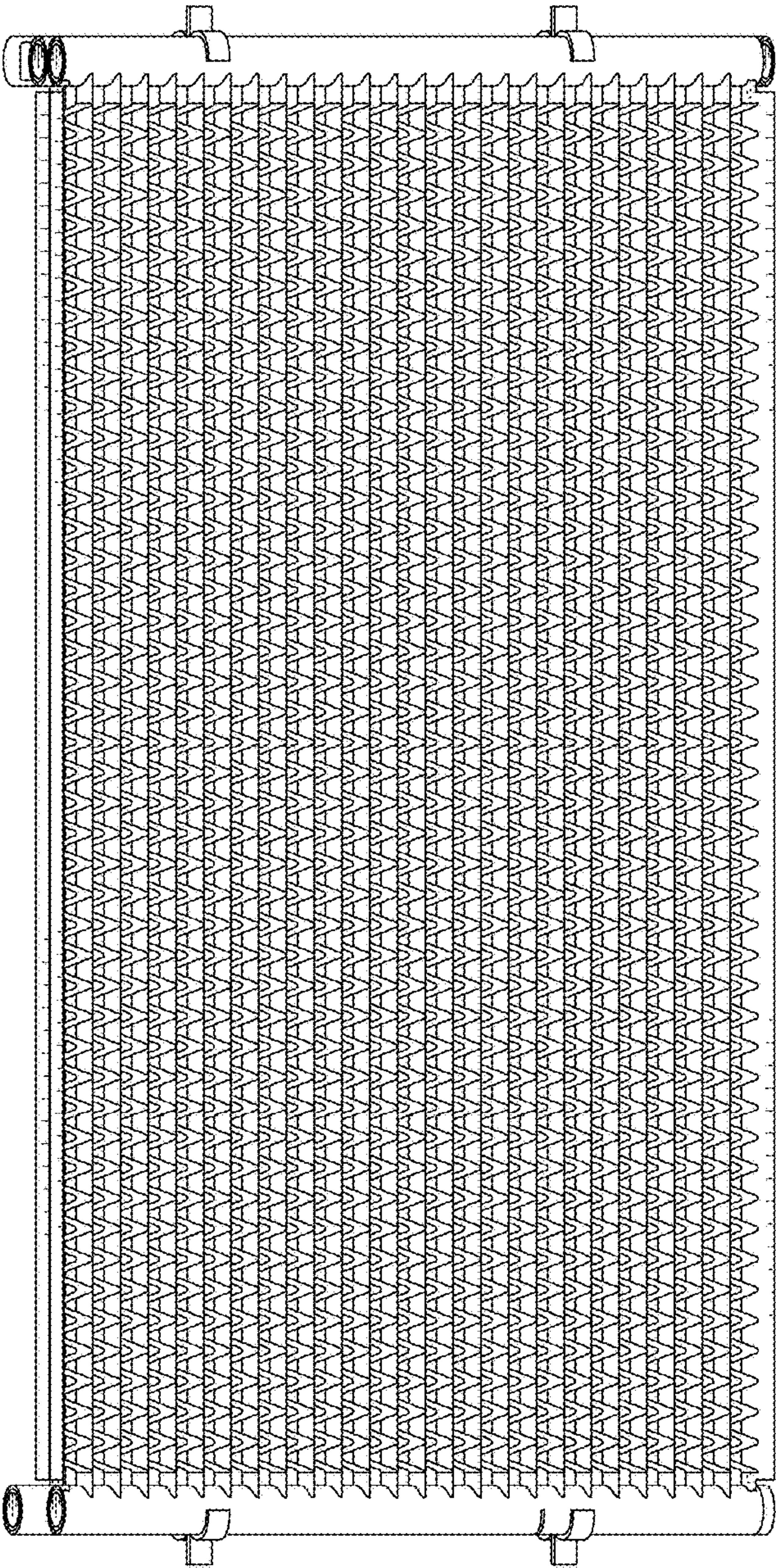


FIG. 2



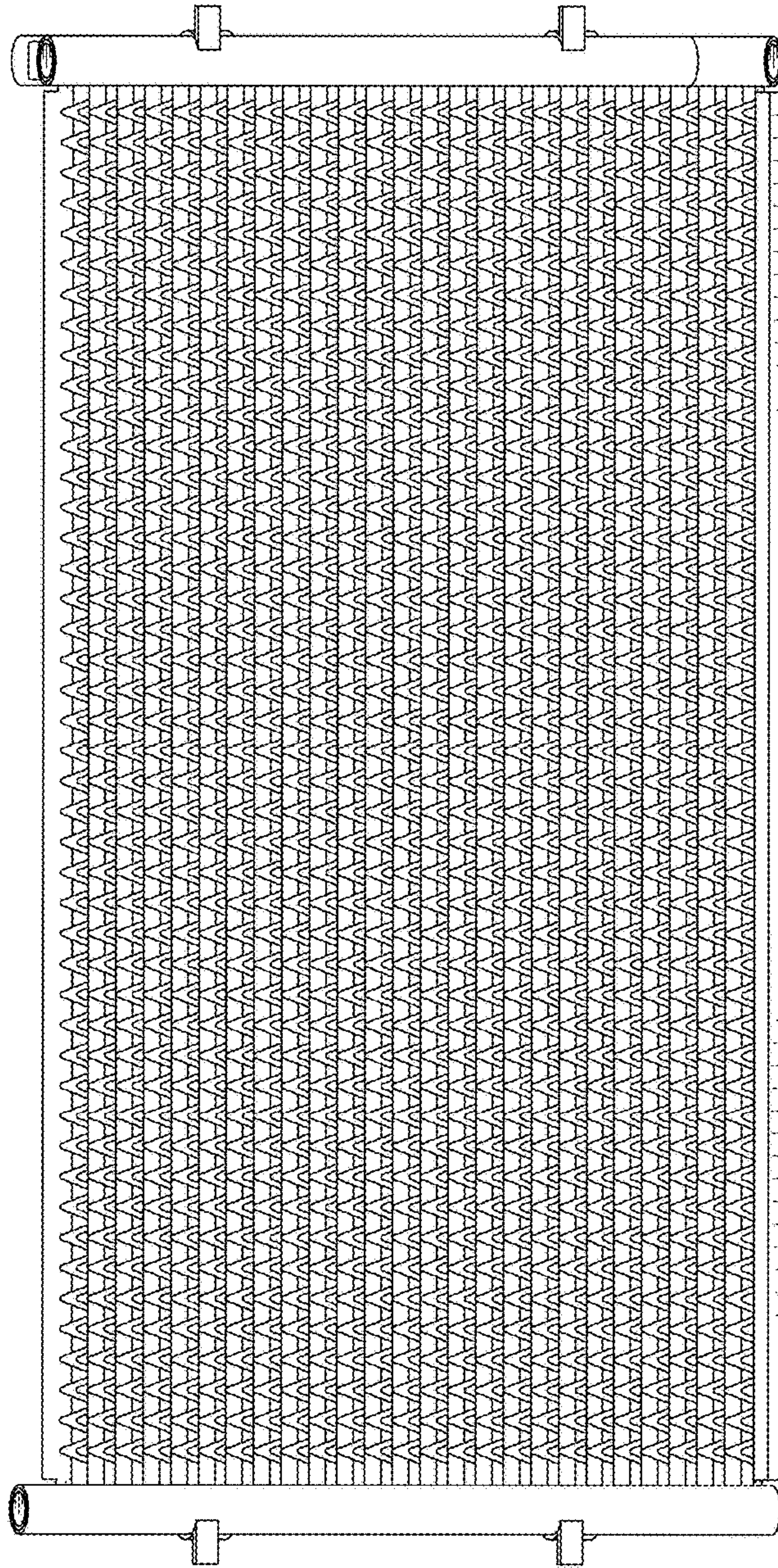


FIG. 3

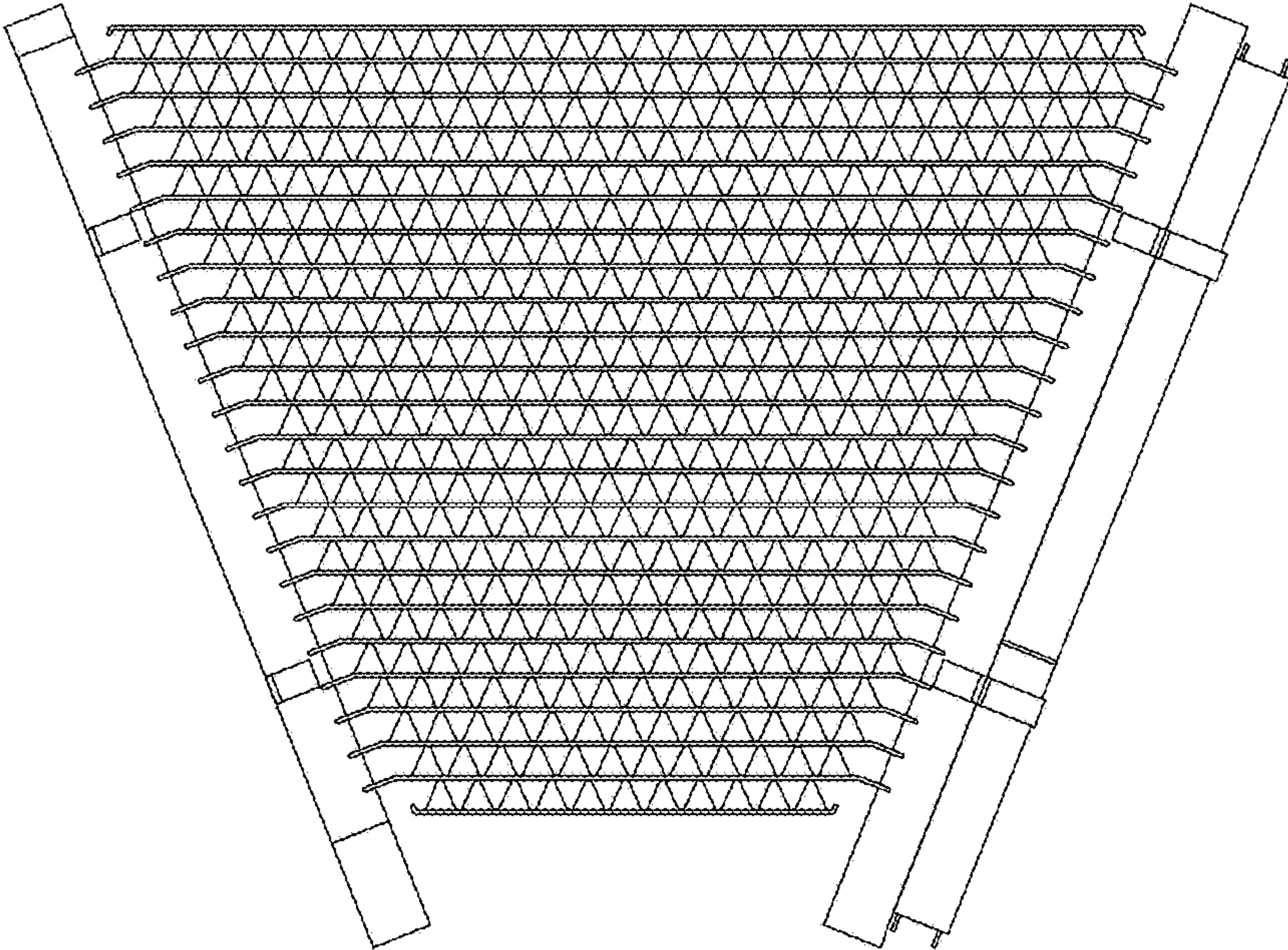


FIG. 4



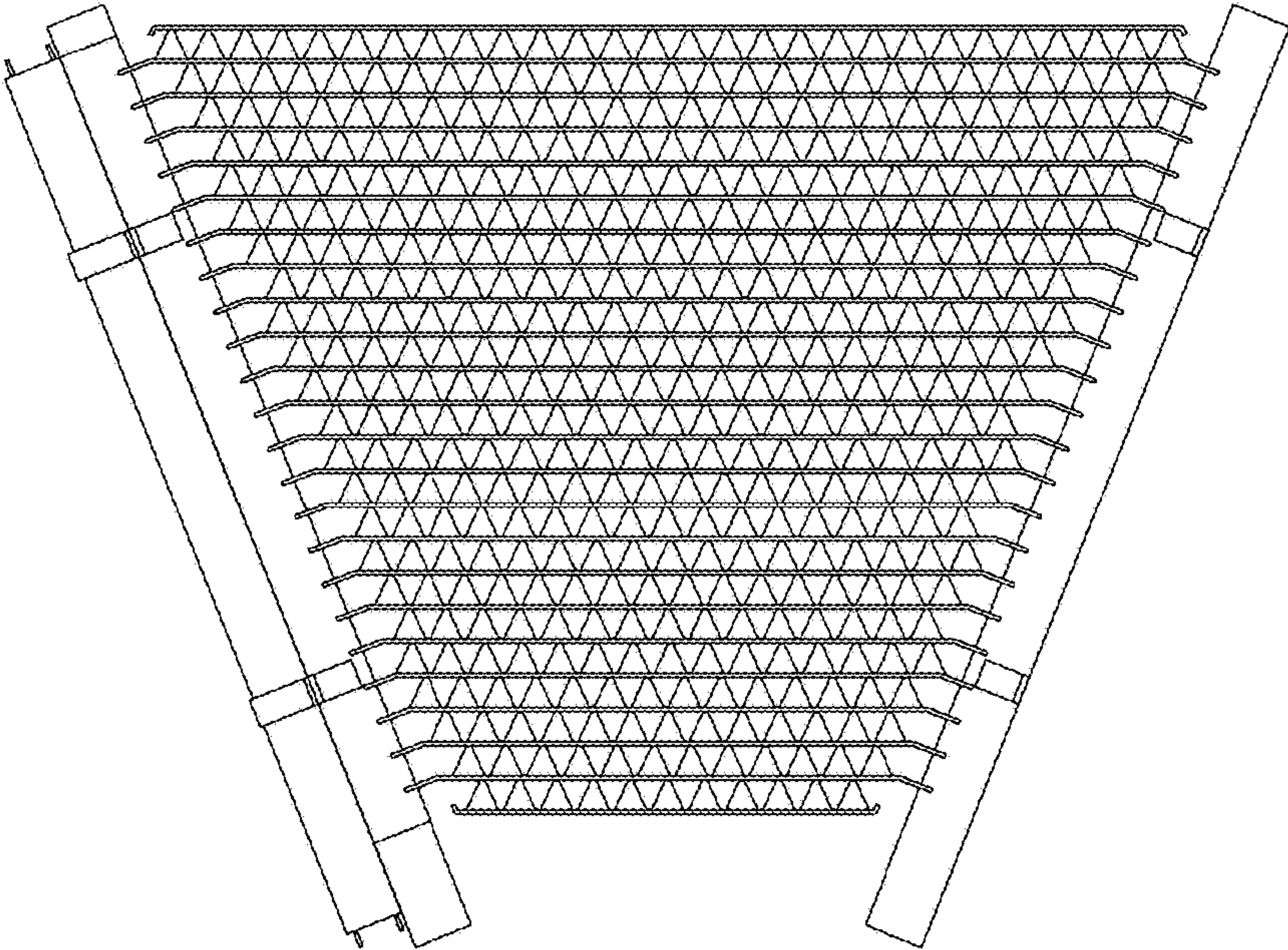


FIG. 5

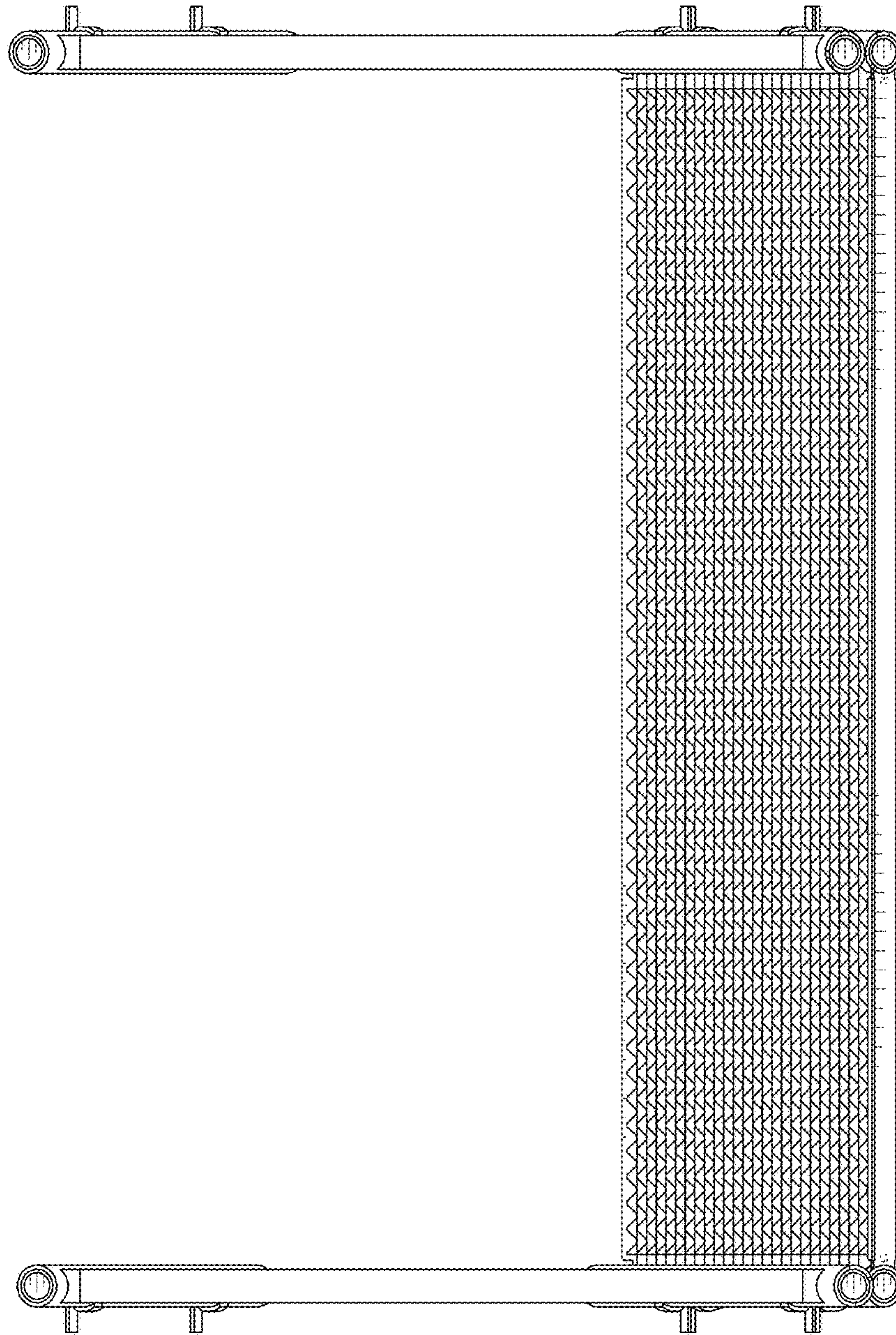


FIG. 6



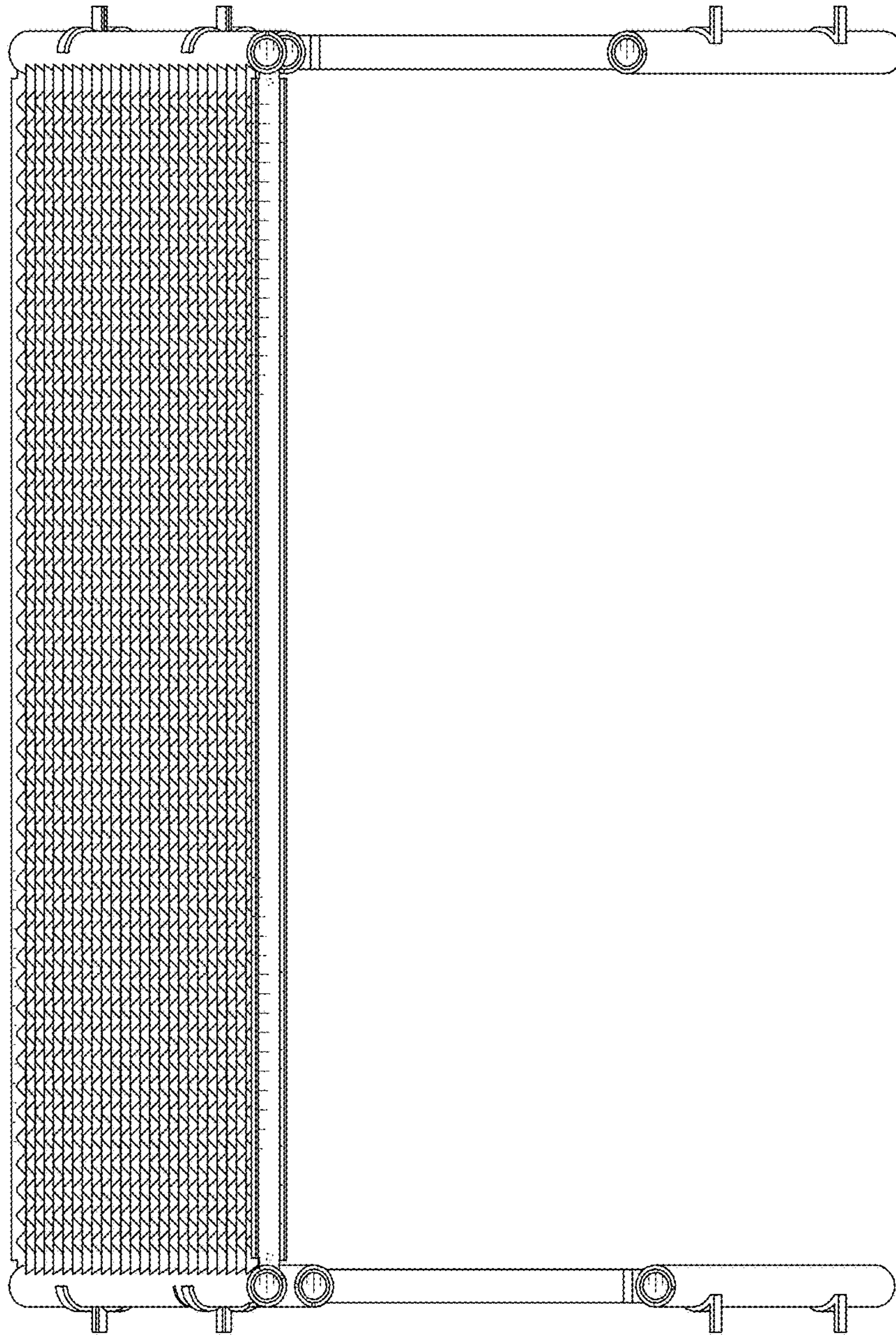


FIG. 7