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(12) **United States Design Patent** (10) **Patent No.:** **US D827,795 S**
Junfeng (45) **Date of Patent:** **** Sep. 4, 2018**

(54) **HEAT EXCHANGER**

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

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(30) **Foreign Application Priority Data**

Jul. 5, 2016 (CN) 2016 3 0303259

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

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

(58) **Field of Classification Search**

USPC D23/323, 322, 324, 386, 325, 327, 354,
D23/330; D7/407; D13/179
CPC F28F 1/06; F28F 1/16; F28F 1/21; F28F
9/02; F28D 1/047; F28D 13/12; F28D
7/06; F28D 7/10; F28D 2001/0266; B21D
53/02; F28B 1/06
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,787,973 A * 8/1998 Kado F28F 9/182
165/153
5,910,167 A * 6/1999 Reinke F25B 39/028
165/174

D787,033 S * 5/2017 Huan D23/323
2006/0196647 A1 * 9/2006 Mathur F28D 1/0435
165/140
2008/0173434 A1 * 7/2008 Matter F28D 1/0417
165/150
2009/0314475 A1 * 12/2009 Jeon F28D 1/0391
165/109.1
2011/0247791 A1 * 10/2011 Jiang F28D 1/047
165/173
2012/0227944 A1 * 9/2012 Moisidis F28D 1/047
165/172
2013/0292103 A1 * 11/2013 Eindhoven F28B 1/06
165/173
2014/0366571 A1 * 12/2014 Gao F25B 39/02
62/498
2014/0374077 A1 * 12/2014 Lee F28F 1/12
165/173

* cited by examiner

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(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 rear, right side and top perspective view thereof;

FIG. 3 is a front view thereof;

FIG. 4 is a rear view thereof;

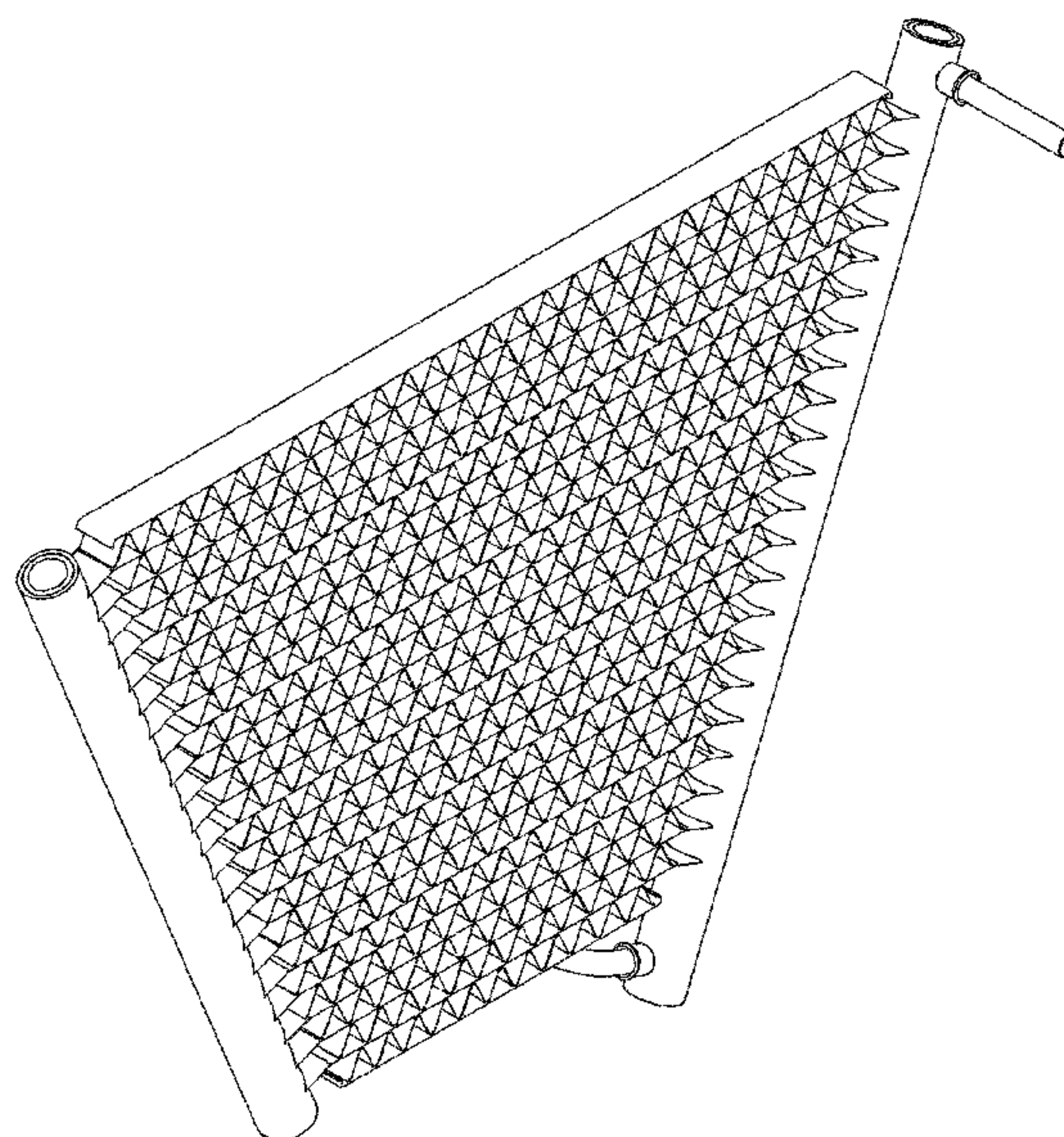
FIG. 5 is a left side view thereof;

FIG. 6 is a right side view thereof;

FIG. 7 is a top view thereof; and,

FIG. 8 is a bottom view thereof.

1 Claim, 8 Drawing Sheets



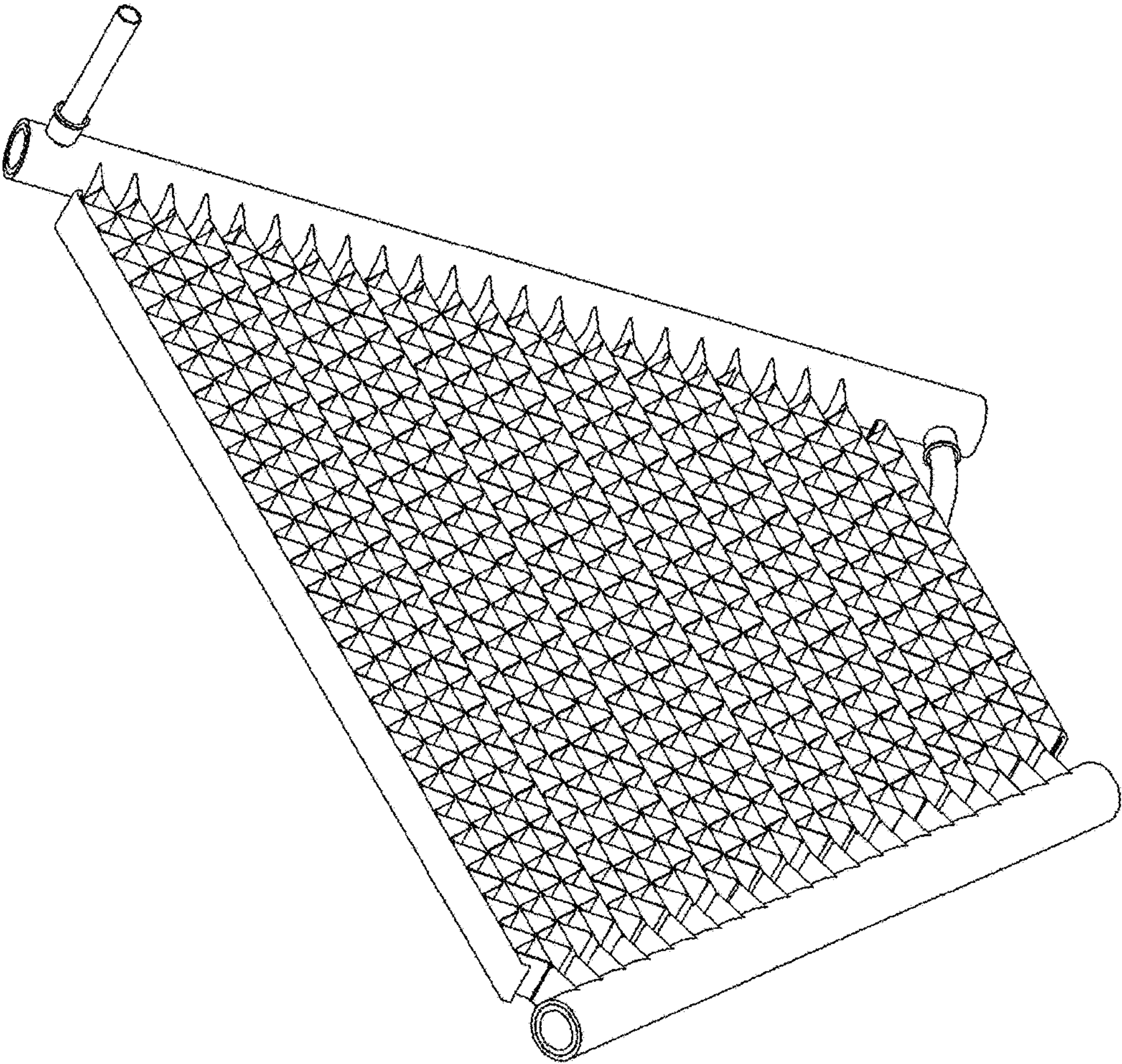


FIG. 1

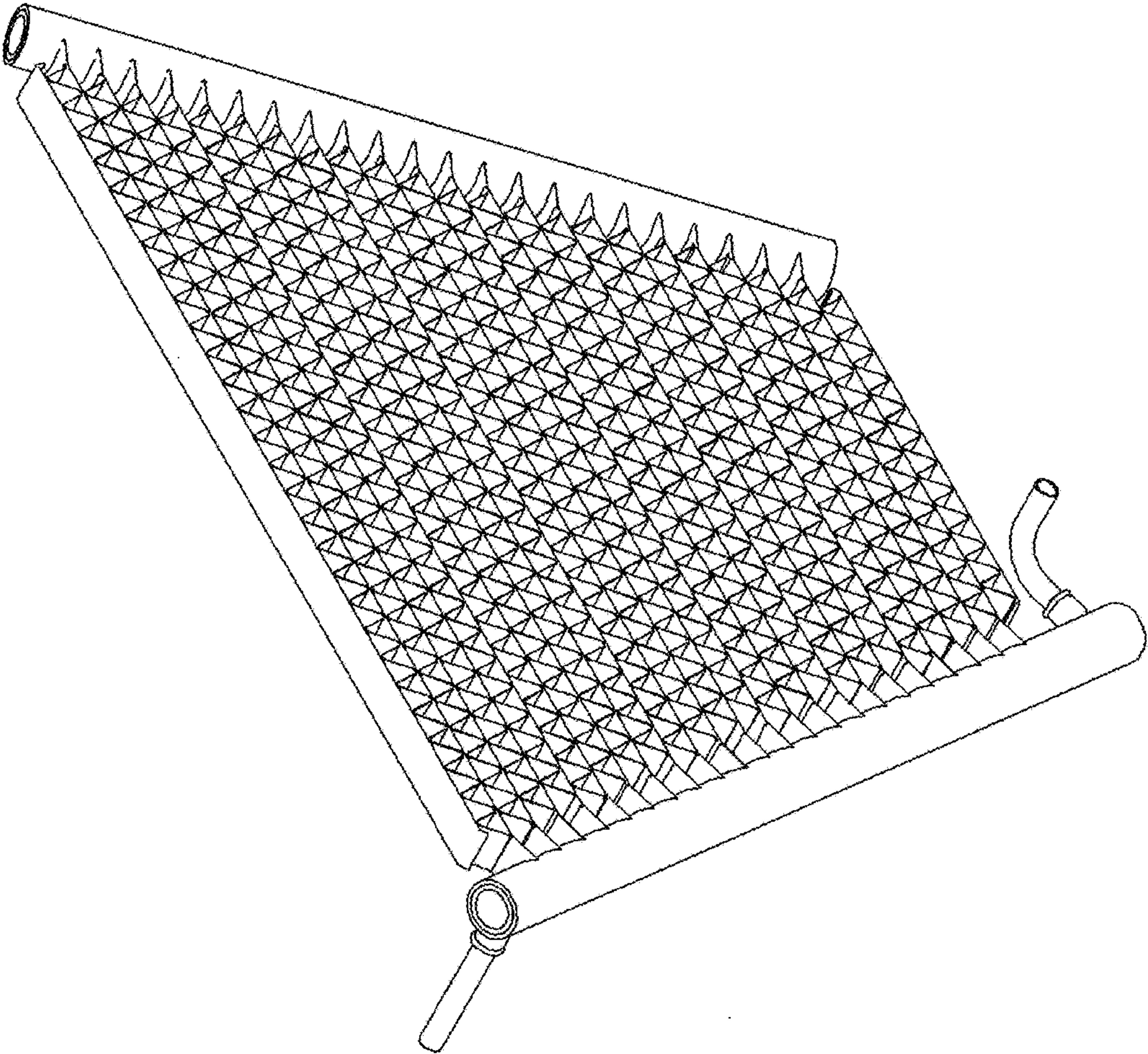


FIG. 2

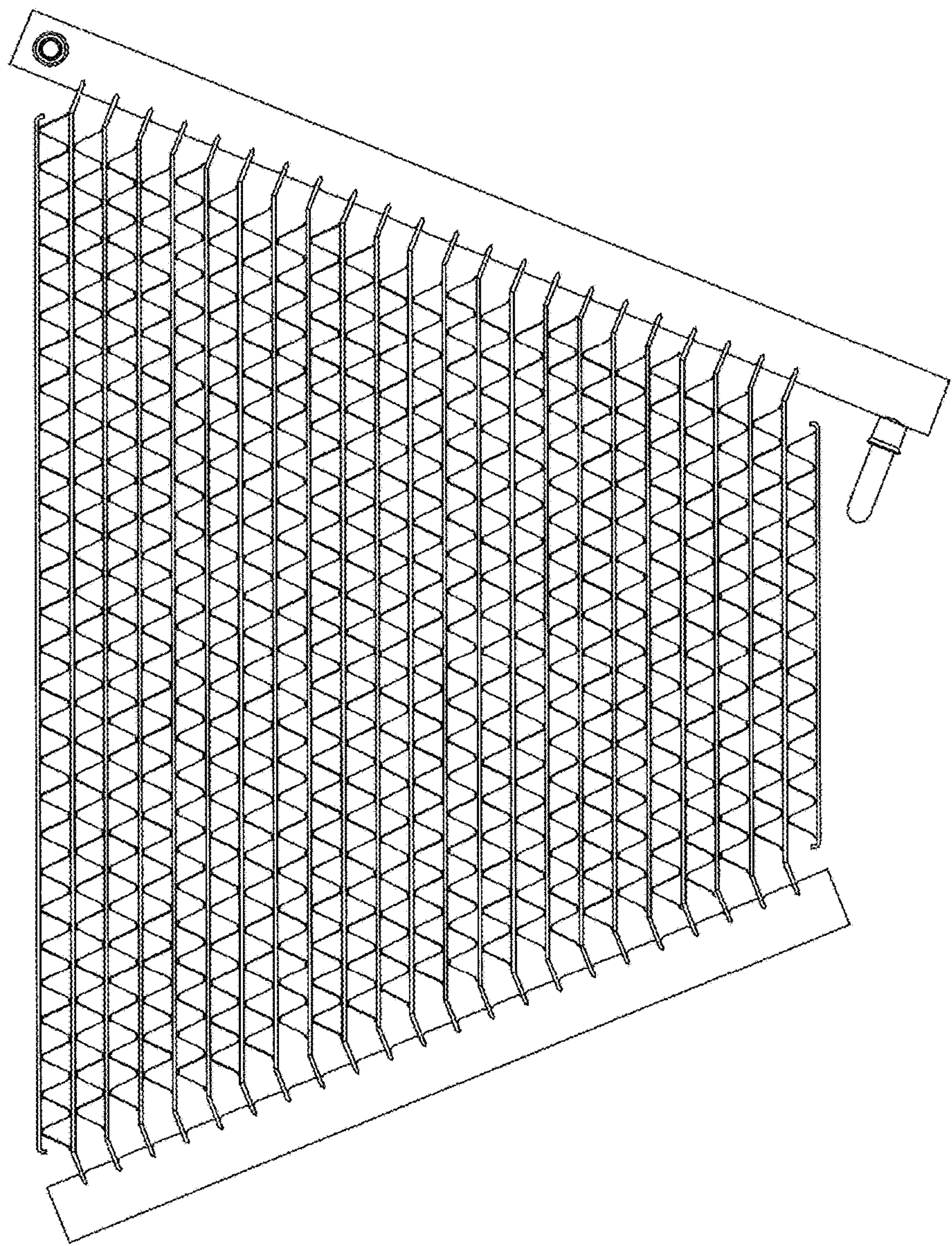


FIG. 3

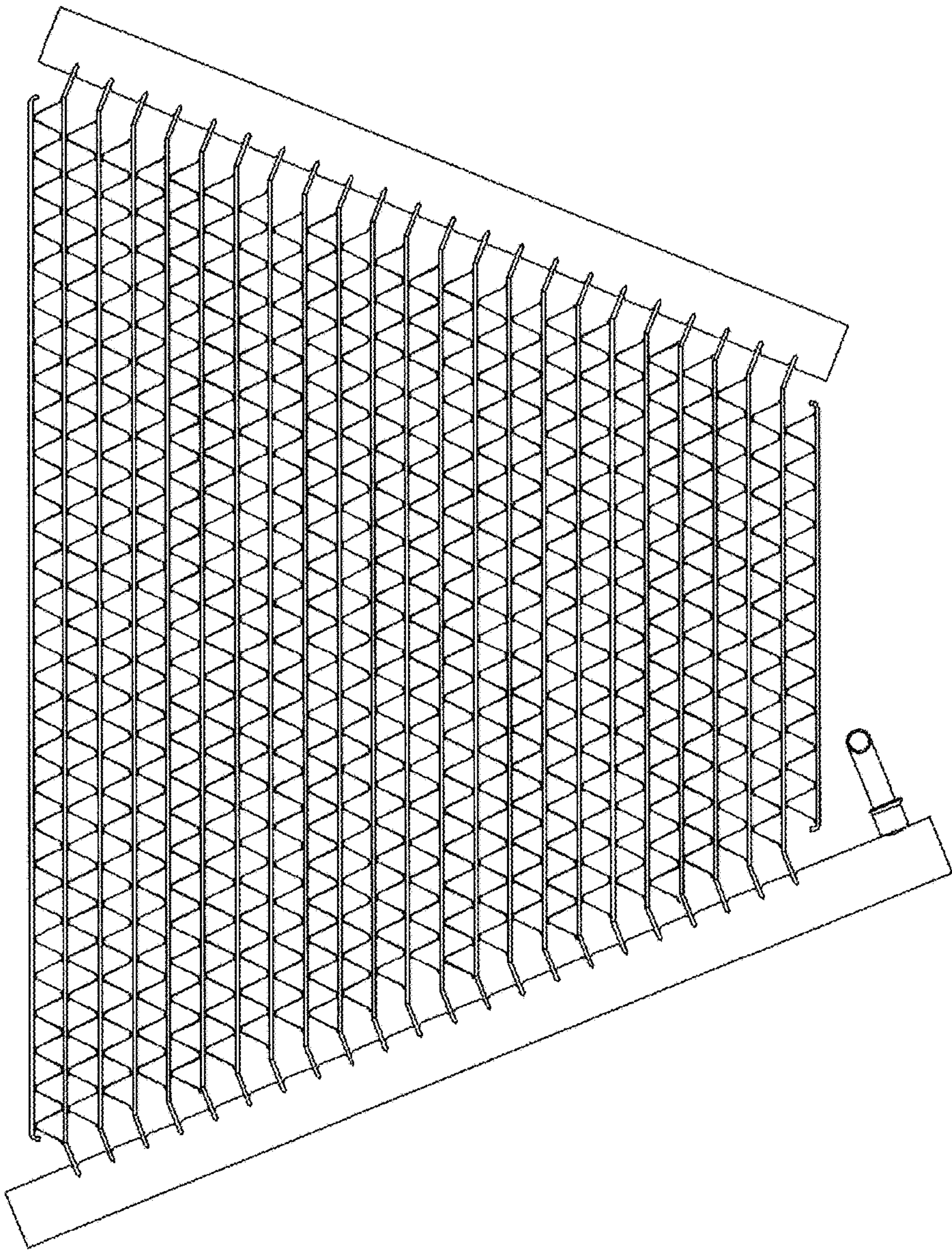


FIG. 4

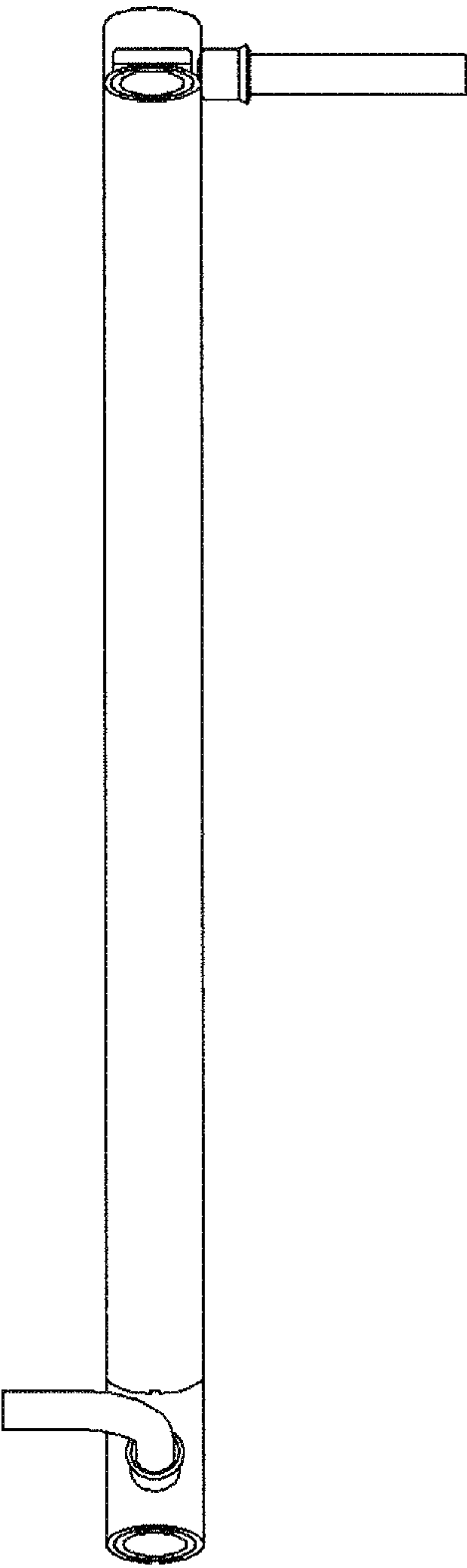


FIG. 5

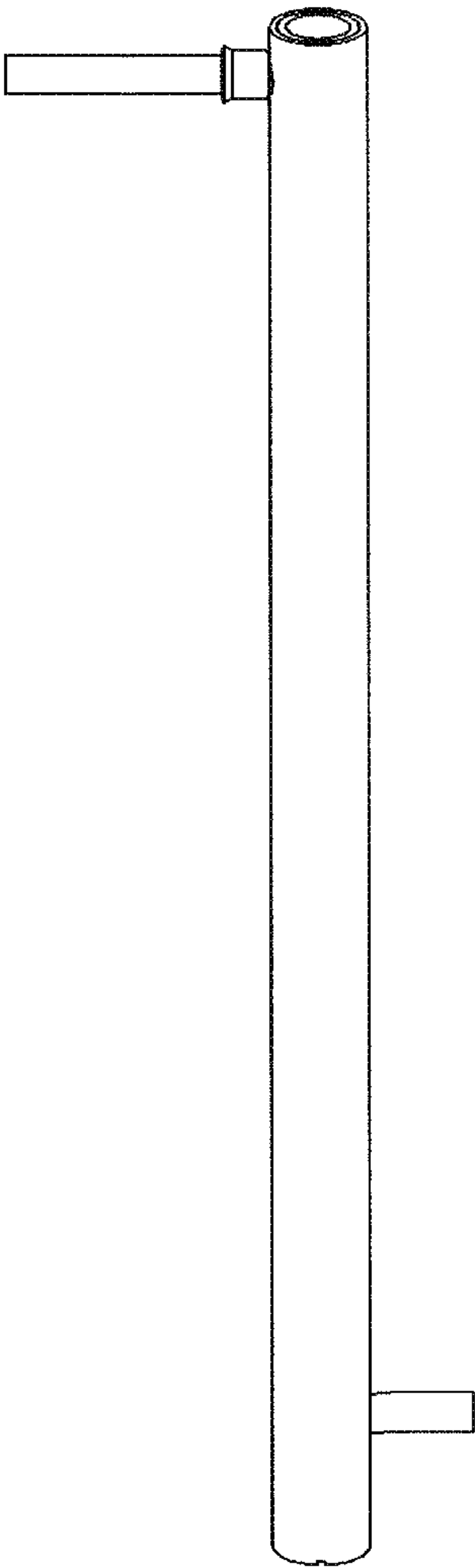


FIG. 6

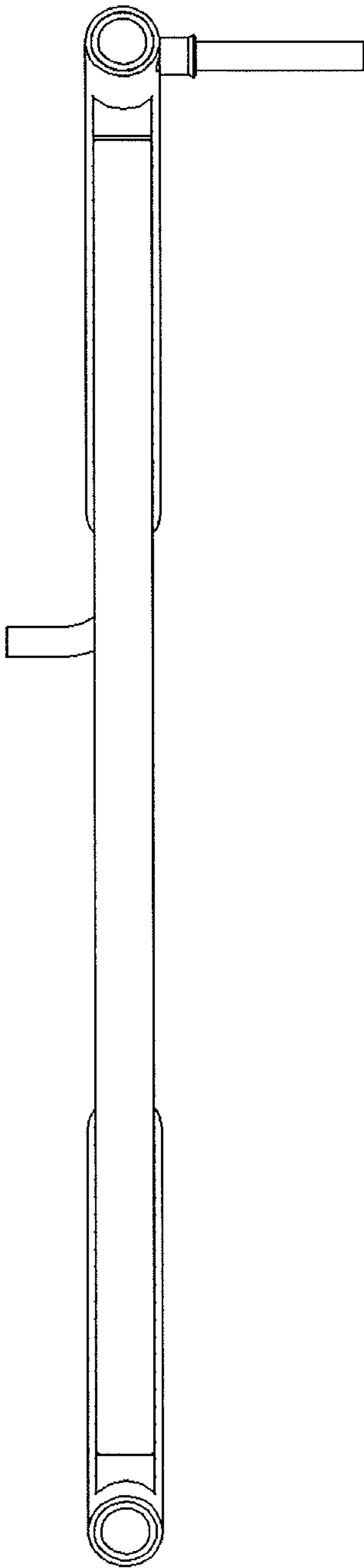


FIG. 7

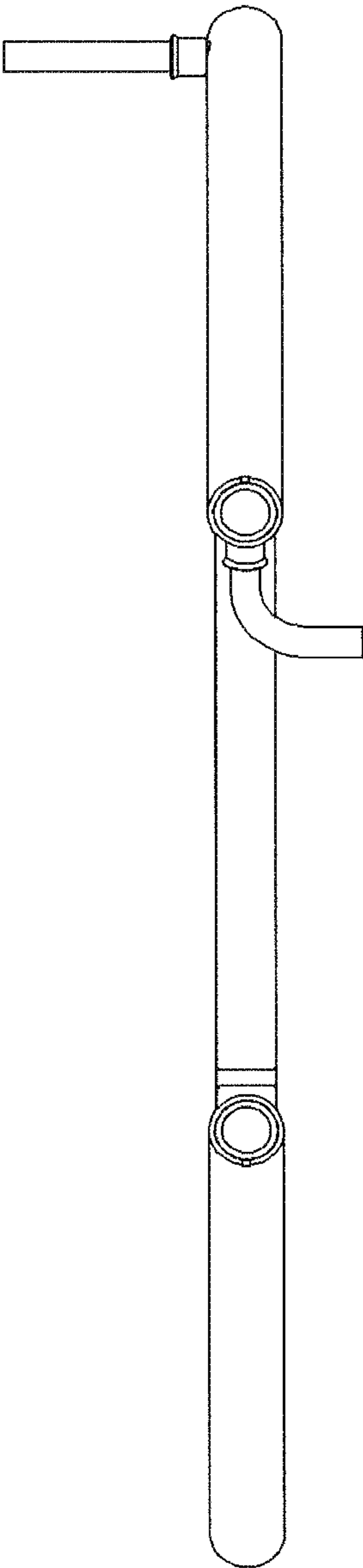


FIG. 8