



US00D793977S

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

(10) **Patent No.:** **US D793,977 S**
(45) **Date of Patent:** **** Aug. 8, 2017**

(54) **DC ELECTRIC POWER NOISE CUTOFF
DEVICE FOR ELECTRIC ANTICORROSION
APPARATUS**

(71) Applicant: **OMNI LPS. CO., LTD.**, Seoul (KR)

(72) Inventors: **Young-Ki Chung**, Seoul (KR); **Kang
Soo Lee**, Gyeonggi-do (KR); **Sung
Hwa Kim**, Gyeonggi-do (KR)

(73) Assignee: **OMNI LPS. CO., LTD.**, Seoul (KR)

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

(21) Appl. No.: **29/536,933**

(22) Filed: **Aug. 20, 2015**

(30) **Foreign Application Priority Data**

Feb. 23, 2015 (KR) 30-2015-0009131

(51) **LOC (10) Cl.** **13-99**

(52) **U.S. Cl.**
USPC **D13/199**; D13/184

(58) **Field of Classification Search**
USPC D13/123, 124, 125, 158, 173, 184, 199;
174/50; 361/516
CPC H01H 9/02; H01H 9/443; H01H 33/53;
H01H 33/596; H01H 83/00; H01H 83/08;
H01F 27/02; H01F 27/33; H05K 7/1432;
H05K 5/00; H05K 5/03; H05K 5/04;
H05K 5/06

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,622,532 A * 11/1986 Kluessendorf H01F 27/02
335/292
D308,854 S * 6/1990 Fuhrmann D13/184
D317,909 S * 7/1991 Fujioka D13/199

D325,568 S * 4/1992 Murata D13/173
D390,834 S * 2/1998 Dizon D13/184
D402,275 S * 12/1998 Korhonen D13/184
D425,493 S * 5/2000 Cutright D13/184
6,533,064 B1 * 3/2003 Kim F04B 39/0066
181/250
D570,284 S * 6/2008 Yoshida D13/125
D606,033 S * 12/2009 Sonntag D13/184
8,492,651 B2 * 7/2013 Schindler H05K 5/061
174/50

(Continued)

Primary Examiner — Selina Sikder

(74) *Attorney, Agent, or Firm* — Hamre, Schumann,
Mueller & Larson, P.C.

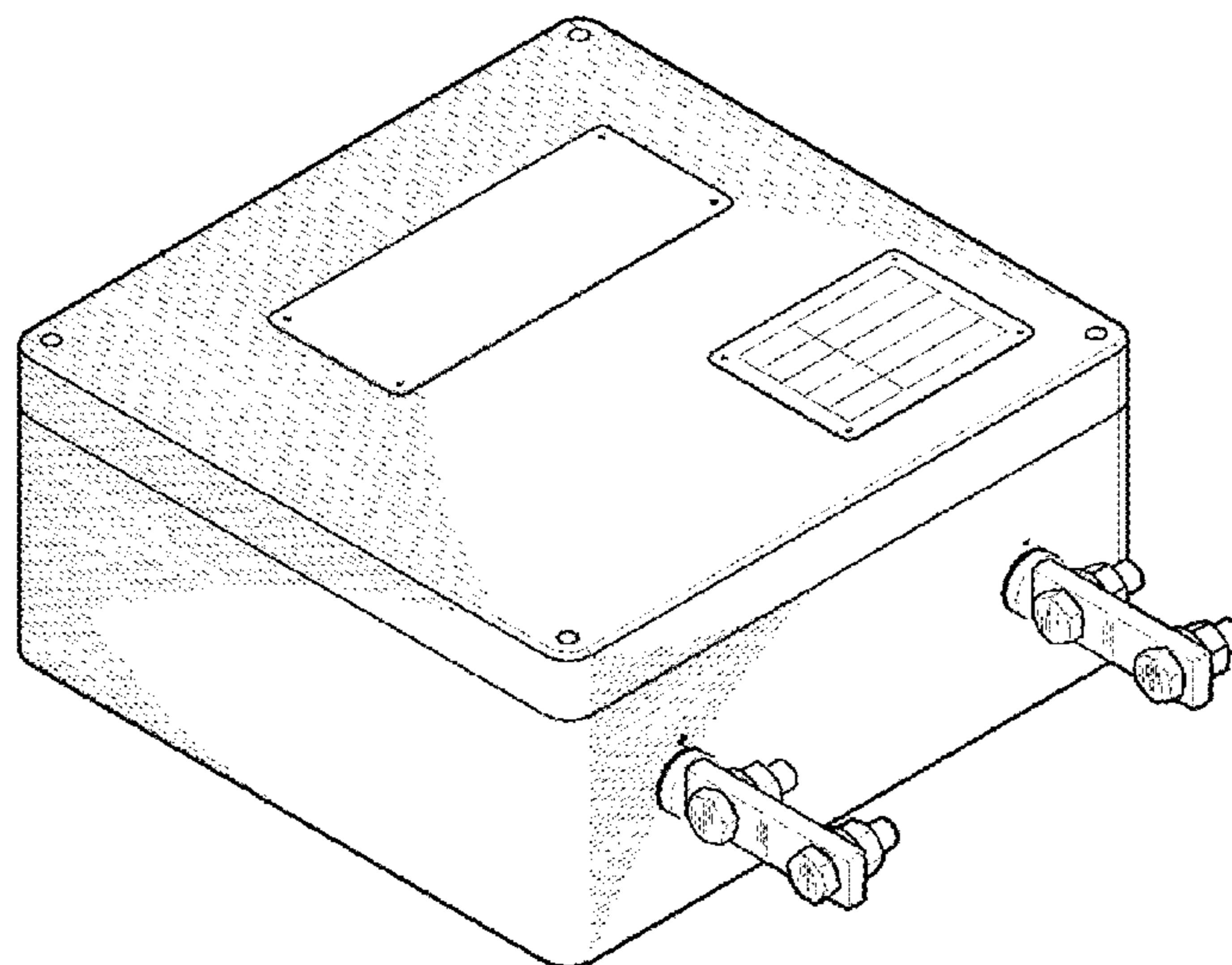
(57) **CLAIM**

The ornamental design for a DC electric power noise cutoff device for electric anticorrosion apparatus, as shown and described.

DESCRIPTION

FIG. 1 is a front perspective view of a DC electric power noise cutoff device for electric anticorrosion apparatus;
FIG. 2 is a front elevation view of the DC electric power noise cutoff device for electric anticorrosion apparatus of FIG. 1;
FIG. 3 is a rear elevation view of the DC electric power noise cutoff device for electric anticorrosion apparatus of FIG. 1;
FIG. 4 is a left-side view of the DC electric power noise cutoff device for electric anticorrosion apparatus of FIG. 1;
FIG. 5 is a right-side view of the DC electric power noise cutoff device for electric anticorrosion apparatus of FIG. 1;
FIG. 6 is a top plan view of the DC electric power noise cutoff device for electric anticorrosion apparatus of FIG. 1;
and,
FIG. 7 is a bottom plan view of the DC electric power noise cutoff device for electric anticorrosion apparatus of FIG. 1.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

8,575,497 B2 * 11/2013 Hultgreen F24C 7/082
174/50
D702,198 S * 4/2014 Gretz D13/152
D730,305 S * 5/2015 Brunn D13/184
D753,074 S * 4/2016 Kliegle D13/199
9,386,720 B2 * 7/2016 Yang H05K 7/1432
2007/0295692 A1 * 12/2007 Muench H01F 27/321
218/83
2014/0062636 A1 * 3/2014 Yang H01F 17/04
336/83
2014/0111938 A1 * 4/2014 Hung H05K 5/04
361/692
2014/0138146 A1 * 5/2014 Li H05K 5/0008
174/520
2015/0091419 A1 * 4/2015 Joist G06F 1/181
312/223.1
2015/0127060 A1 * 5/2015 Eidelman H01G 9/06
607/5
2016/0183400 A1 * 6/2016 Pan H01F 27/04
361/752
2017/0047154 A1 * 2/2017 Liu H01F 27/33

* cited by examiner

FIG. 1

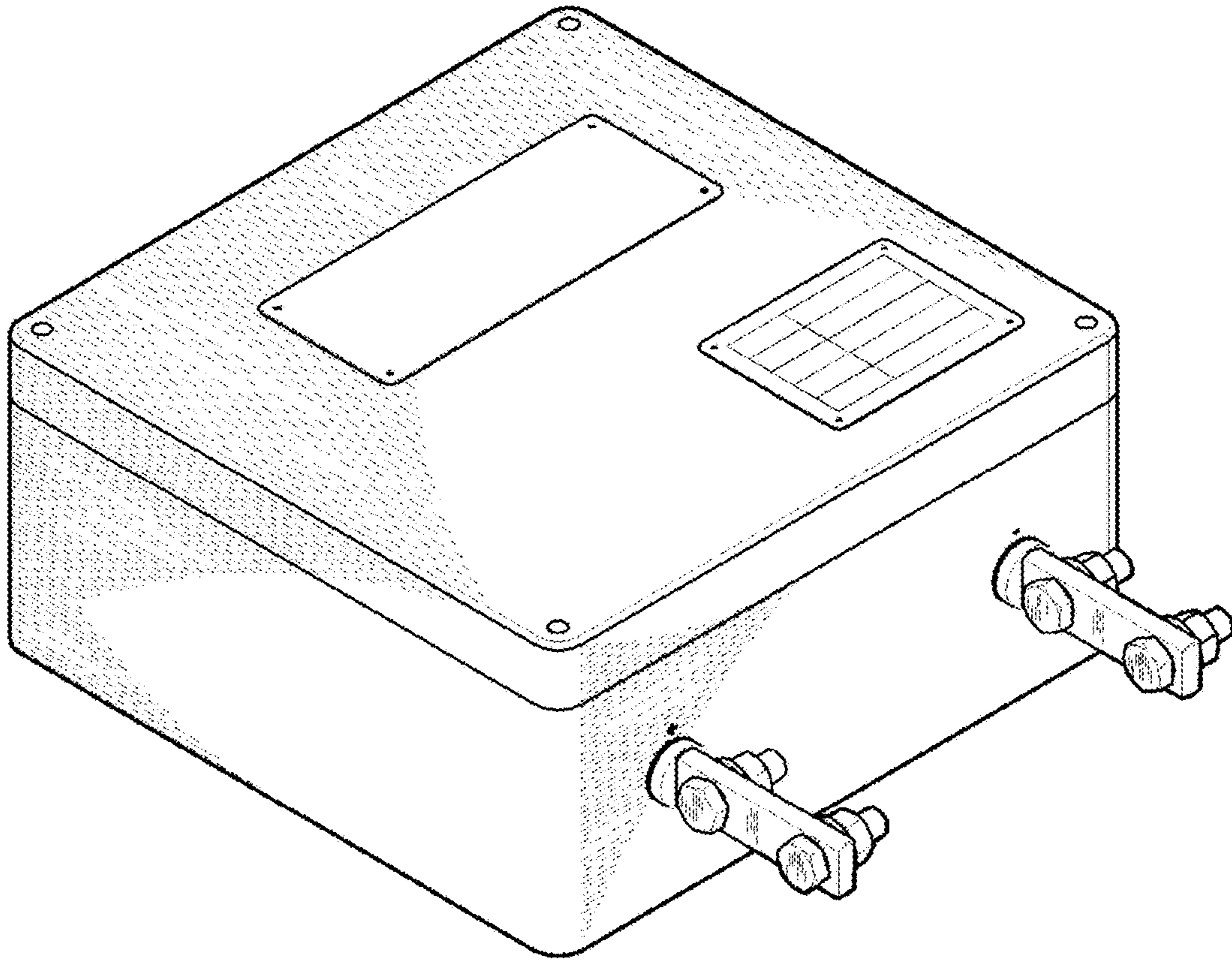


FIG. 2

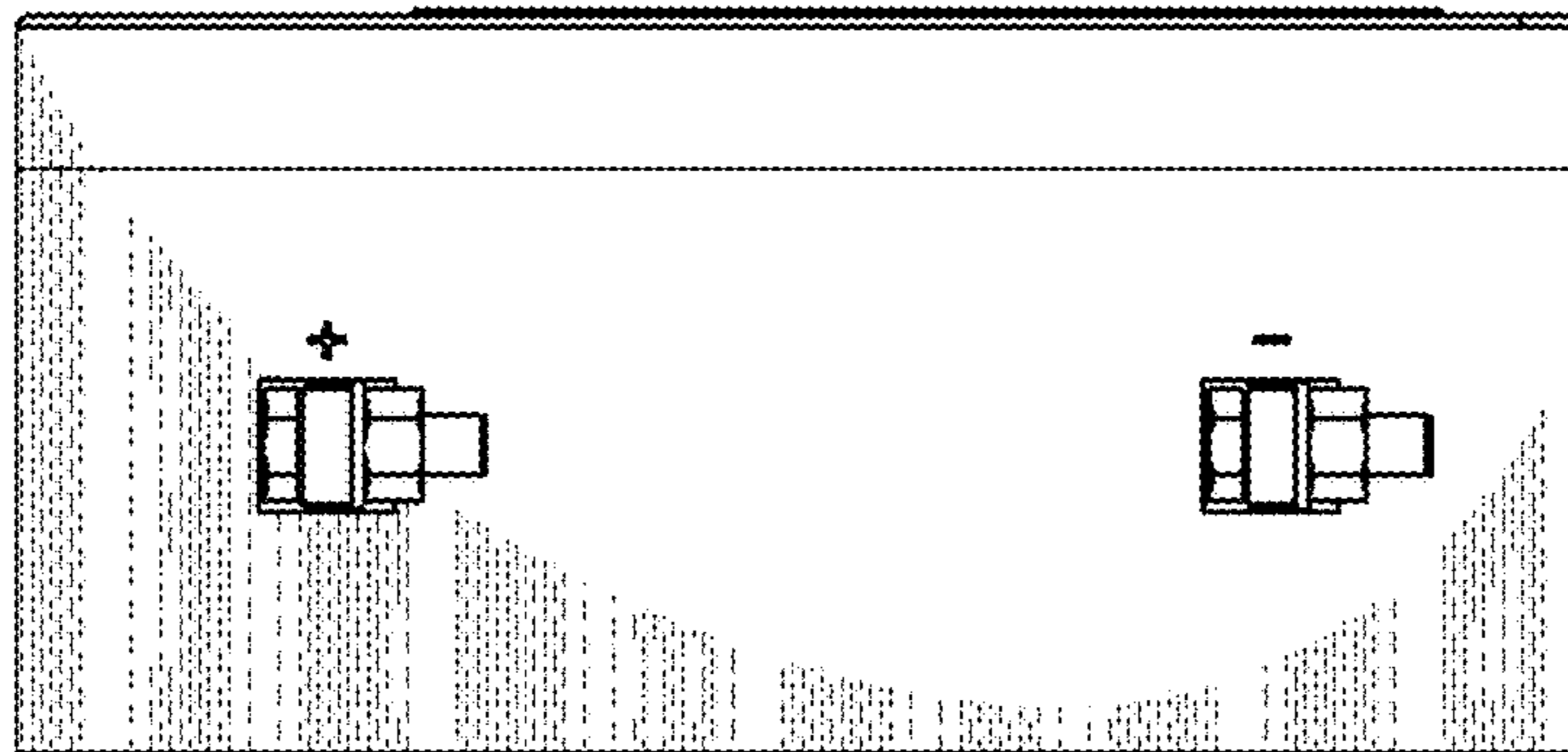


FIG. 3

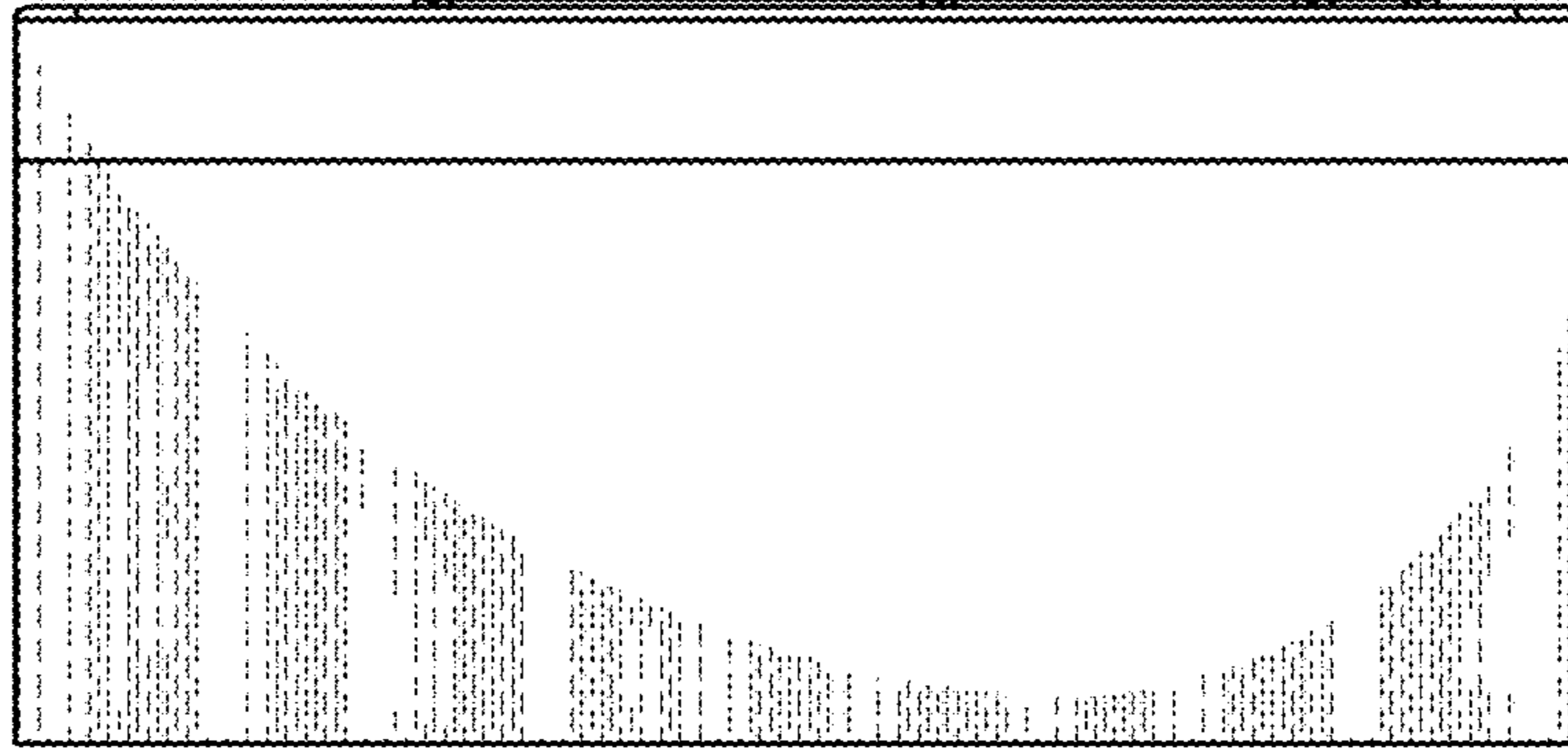


FIG. 4

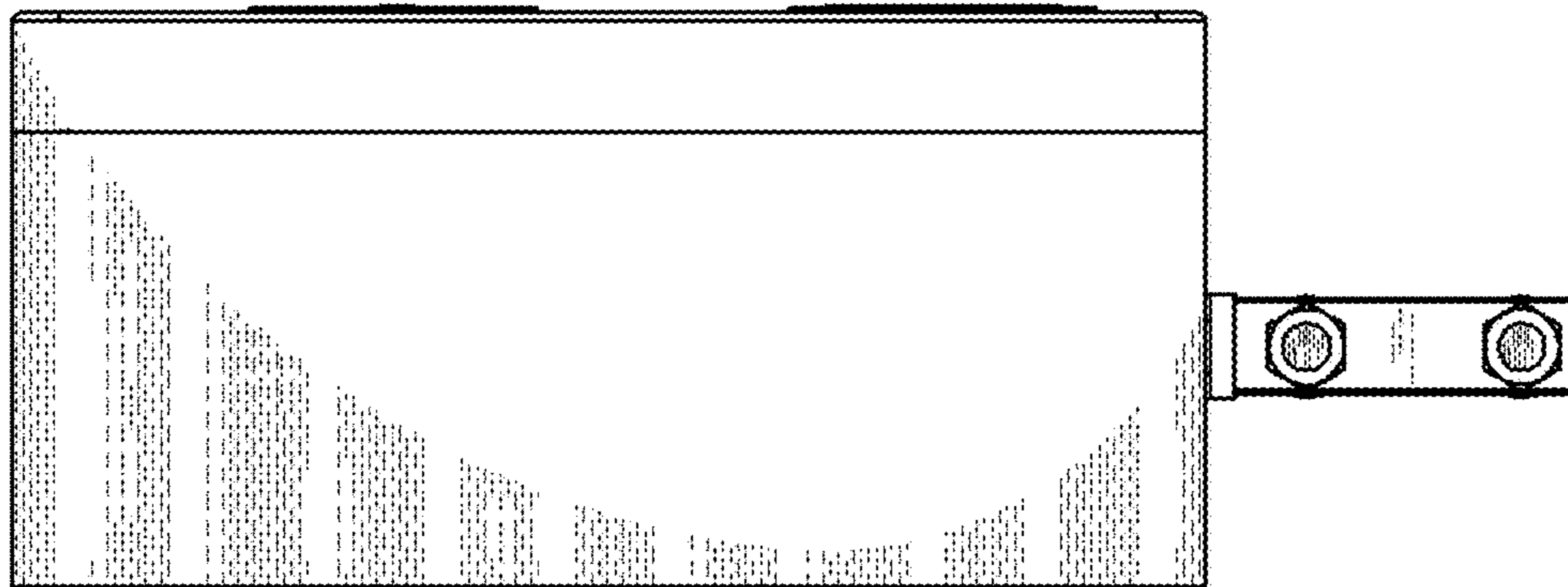


FIG. 5

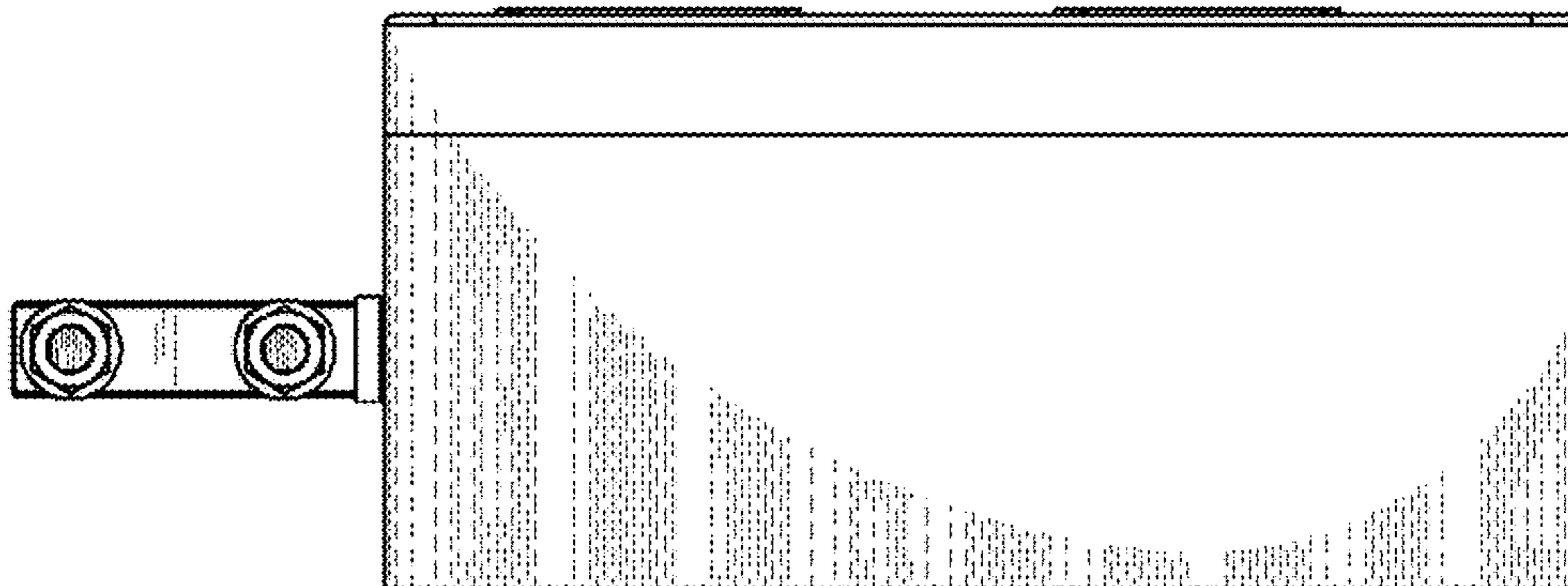


FIG. 6

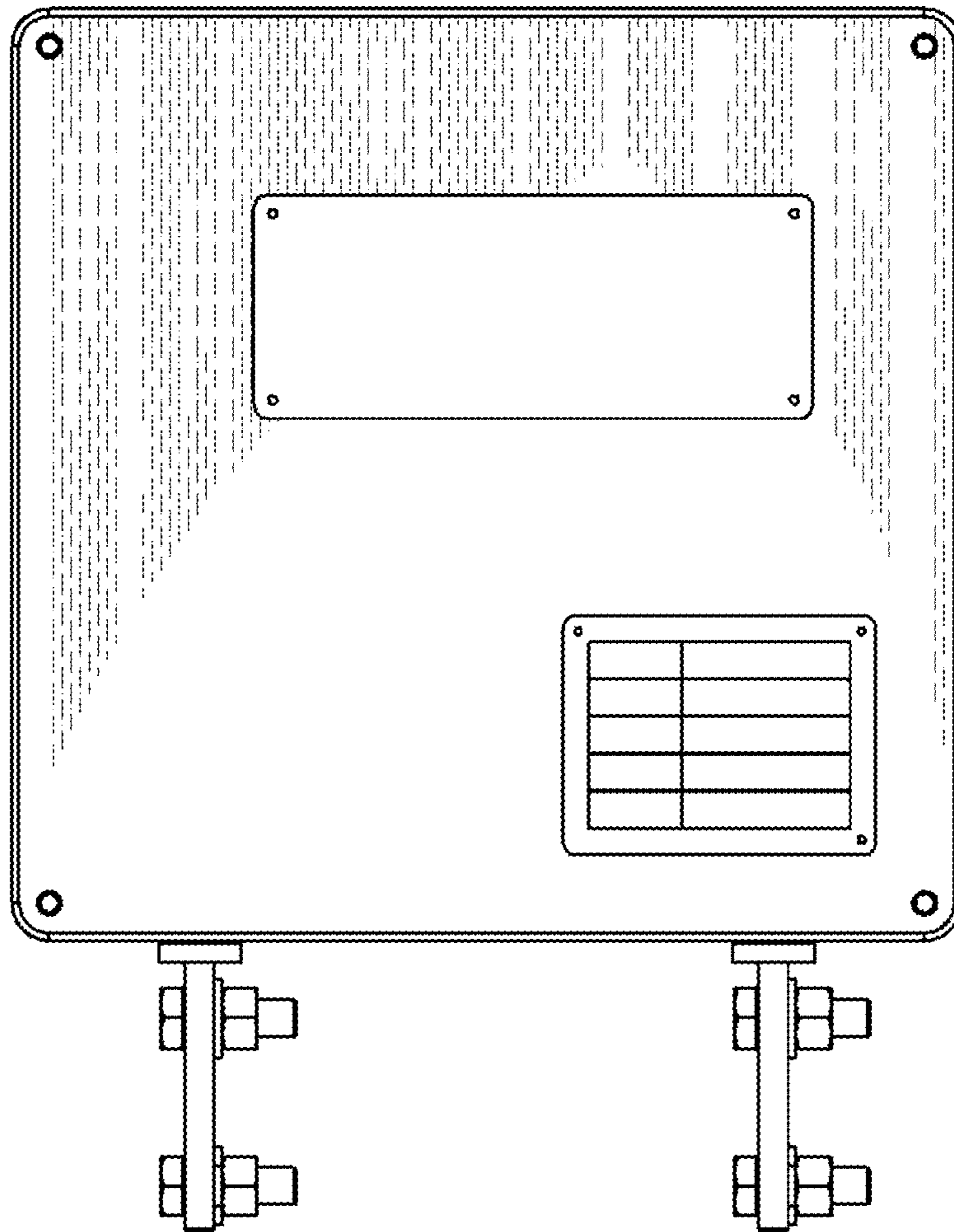


FIG. 7

