



US00D842974S

(12) **United States Design Patent** (10) **Patent No.:** **US D842,974 S**
Szolony et al. (45) **Date of Patent:** **** Mar. 12, 2019**

(54) **HEAT EXCHANGER**(71) Applicant: **TOMTON S.R.O.**, Velke Albrechtice (CZ)(72) Inventors: **Tomás Szolony**, Zilina (CZ); **Ondrej Sikula**, Brno (CZ)(73) Assignee: **TOMTON s.r.o.**, Velké Albrechtice (CZ)(**) Term: **15 Years**(21) Appl. No.: **35/503,365**(22) Filed: **Jun. 7, 2017**(80) **Hague Agreement Data**Int. Filing Date: **Jun. 7, 2017**Int. Reg. No.: **DM/096680**Int. Reg. Date: **Jun. 7, 2017**Int. Reg. Pub. Date: **Jul. 14, 2017**(30) **Foreign Application Priority Data**

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Feb. 27, 2017 (EM) 003771153-0002
(Continued)(51) **LOC (11) Cl.** **23-04**(52) **U.S. Cl.**USPC **D23/323**(58) **Field of Classification Search**USPC D23/314, 317, 330, 332, 333, 335–351,
D23/354–356, 370, 376, 378, 381, 382,
D23/386, 411, 412, 323, 388, 389
(Continued)(56) **References Cited**

U.S. PATENT DOCUMENTS

D28,514 S * 4/1898 Easterly D23/386
D74,086 S * 12/1927 Waters D23/323
(Continued)

OTHER PUBLICATIONS

[Online] <http://www.tomton.cz/en/product/radiator-tomton-r4/>. Retrieved Oct. 13, 2018.**Primary Examiner* — Melanie Pellegrini*(74) Attorney, Agent, or Firm* — Grady K. Bergen; Griggs Bergen LLP(57) **CLAIM**

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

DESCRIPTION

1.1 is a bottom, front, and right side perspective view of a heat exchanger;

1.2 is a top, front, and right side perspective view of the heat exchanger of FIG. 1.1;

1.3 is a top, rear, and left side perspective view of the heat exchanger of FIG. 1.1 with a portion removed for completeness of the disclosure;

1.4 is an enlarged and partial rear and left side perspective view of the heat exchanger of FIG. 1.1 with a portion removed for completeness of the disclosure;

1.5 is a top plan view of the heat exchanger of FIGS. 1.1; and

1.6 is a left side elevational view of the heat exchanger of FIG. 1.1 with a portion removed for completeness of the disclosure;

2.1 is a bottom, front, and right side perspective view of alternate embodiment of a heat exchanger;

2.2 is a top, front, and right side perspective view of the heat exchanger of FIG. 2.1;

2.3 is a top, rear and left side perspective view of the heat exchanger of FIG. 2.1 with a portion removed for completeness of the disclosure;

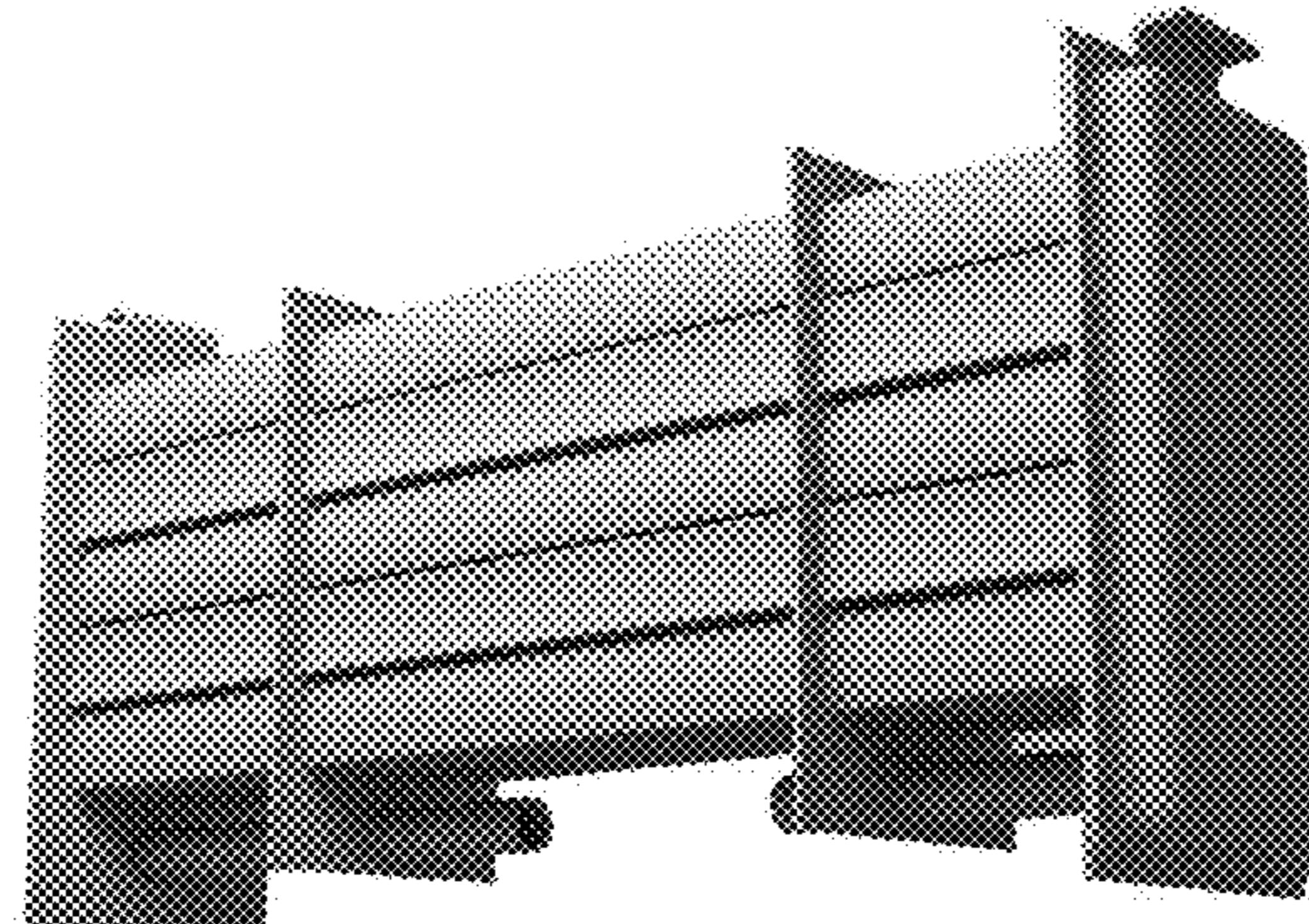
2.4 is an enlarged and partial rear and left side perspective view of the heat exchanger of FIG. 2.1;

2.5 is a top plan view of the heat exchanger of FIGS. 2.1; and

2.6 is a left side elevational view of the heat exchanger of FIG. 2.1 with a portion removed for completeness of the disclosure;

3.1 is a bottom, front, and right side perspective view of another alternate embodiment of a heat exchanger;

(Continued)



3.2 is a top, front, and right side perspective view of the heat exchanger of FIG. 3.1;

3.3 is a top, rear and left side perspective view of the heat exchanger of FIG. 3.1 with a portion removed for completeness of the disclosure;

3.4 is an enlarged and partial rear and left side perspective view of the heat exchanger of FIG. 3.1;

3.5 is a top plan view of the heat exchanger of FIG. 3.1; and

3.6 is a left side elevational view of the heat exchanger of FIG. 3.1.

(58) Field of Classification Search

CPC . F24D 13/00; F24H 7/00; F24H 7/002; F24H 7/0208; F24H 7/0216; F24H 9/02; F28F 1/325; F28D 1/0477

See application file for complete search history.

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References Cited

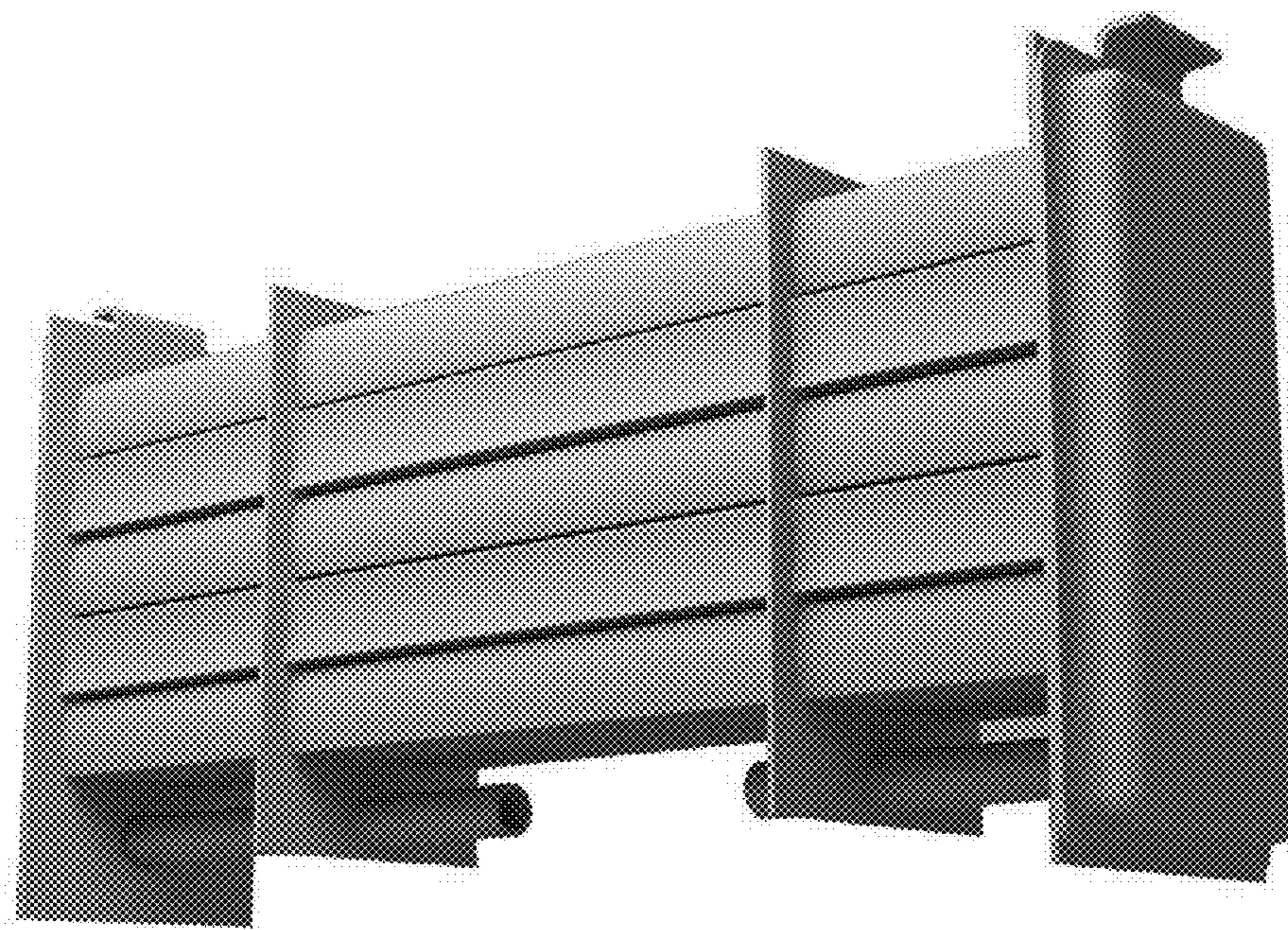
U.S. PATENT DOCUMENTS

D356,367	S	*	3/1995	Kolb	D23/386
D360,258	S	*	7/1995	Shellenberger	D23/329
D655,728	S	*	3/2012	Seno	D15/89
D719,649	S	*	12/2014	Ainley	D23/323
D785,151	S	*	4/2017	Oktayer	D23/354
2013/0299132	A1	*	11/2013	Guilford	F28F 1/00 165/67

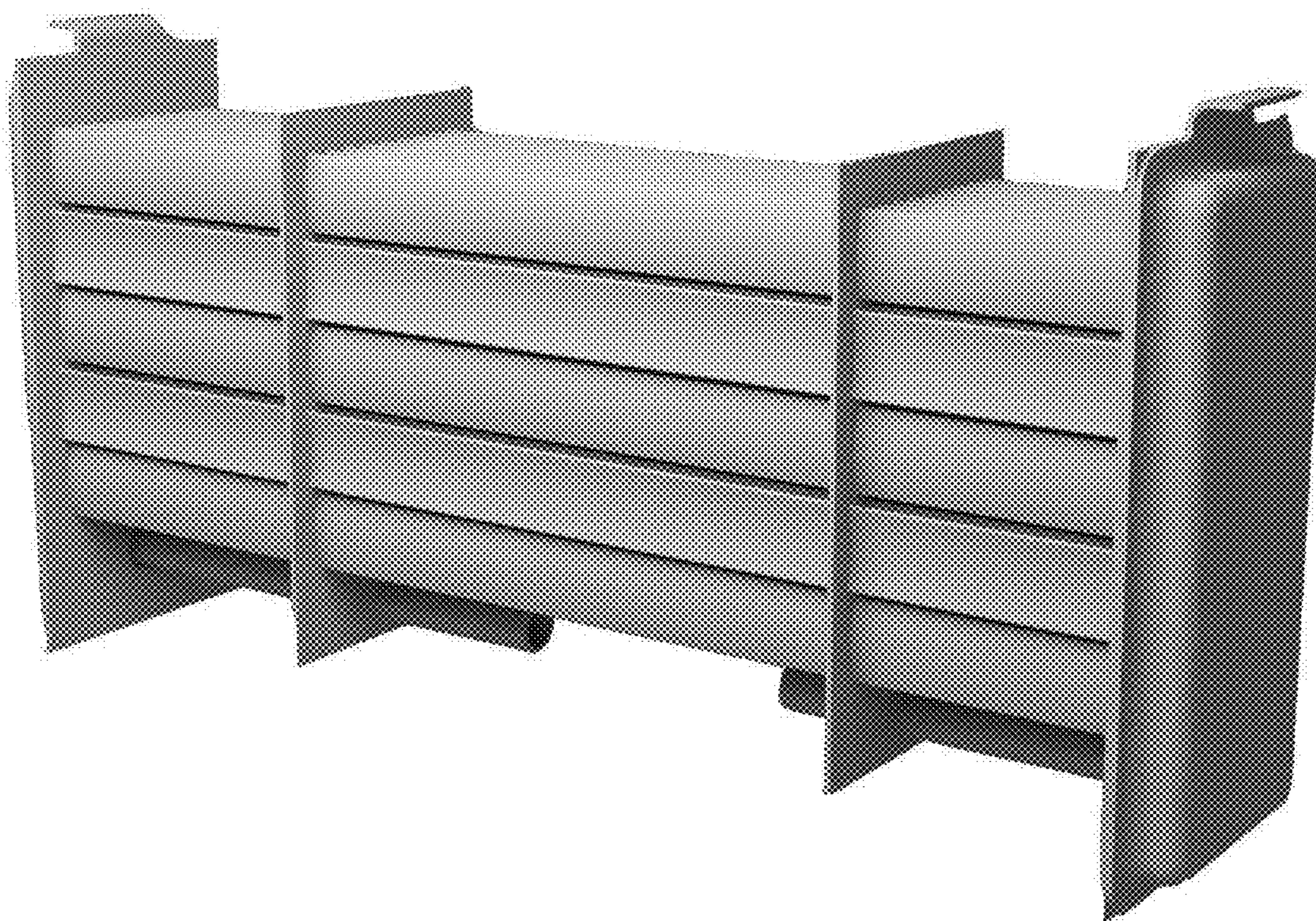
* cited by examiner

(30) Foreign Application Priority Data

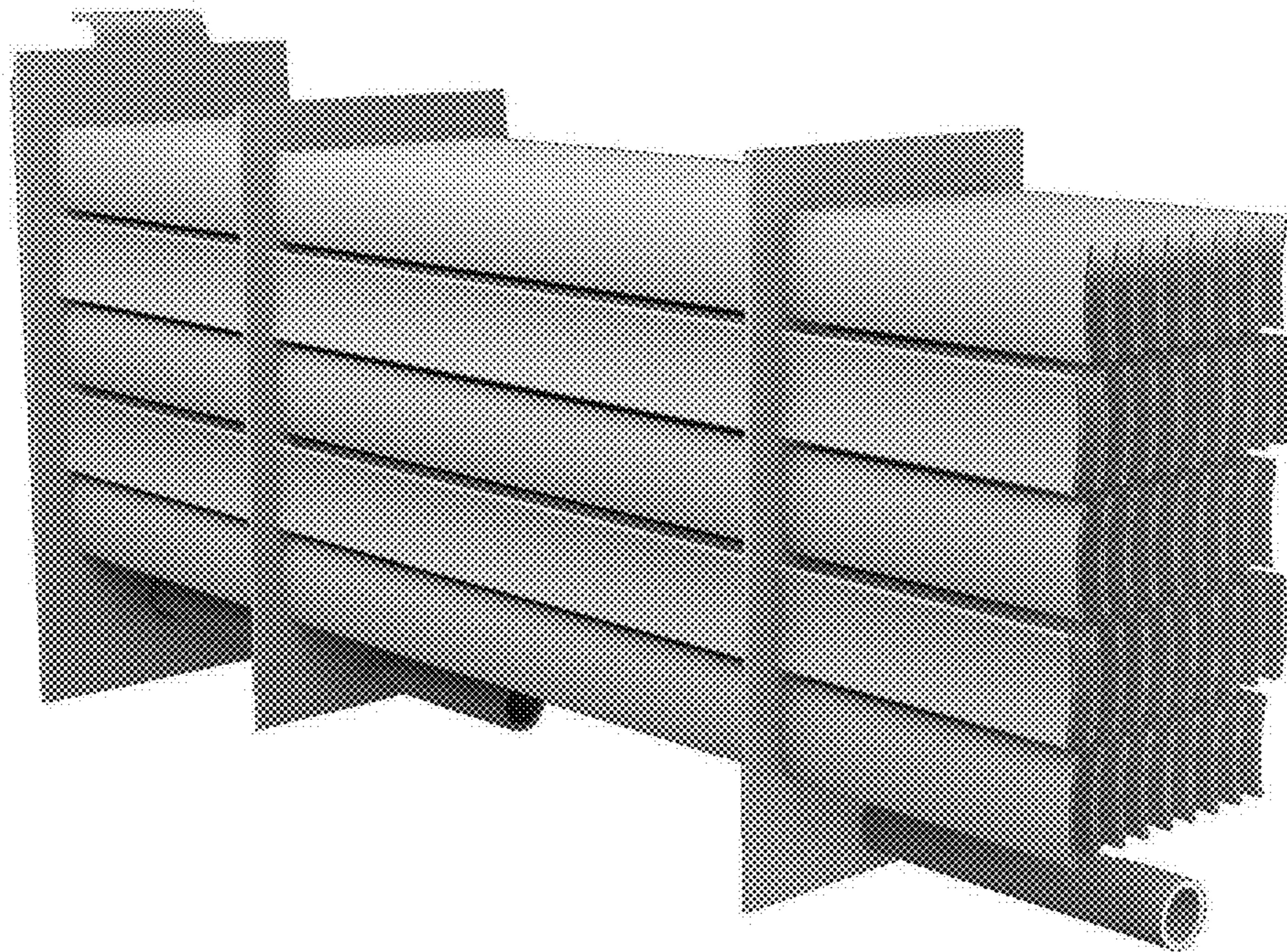
Feb. 27, 2017 (EM) 003771153-0003
Feb. 27, 2017 (EM) 003771153-0004



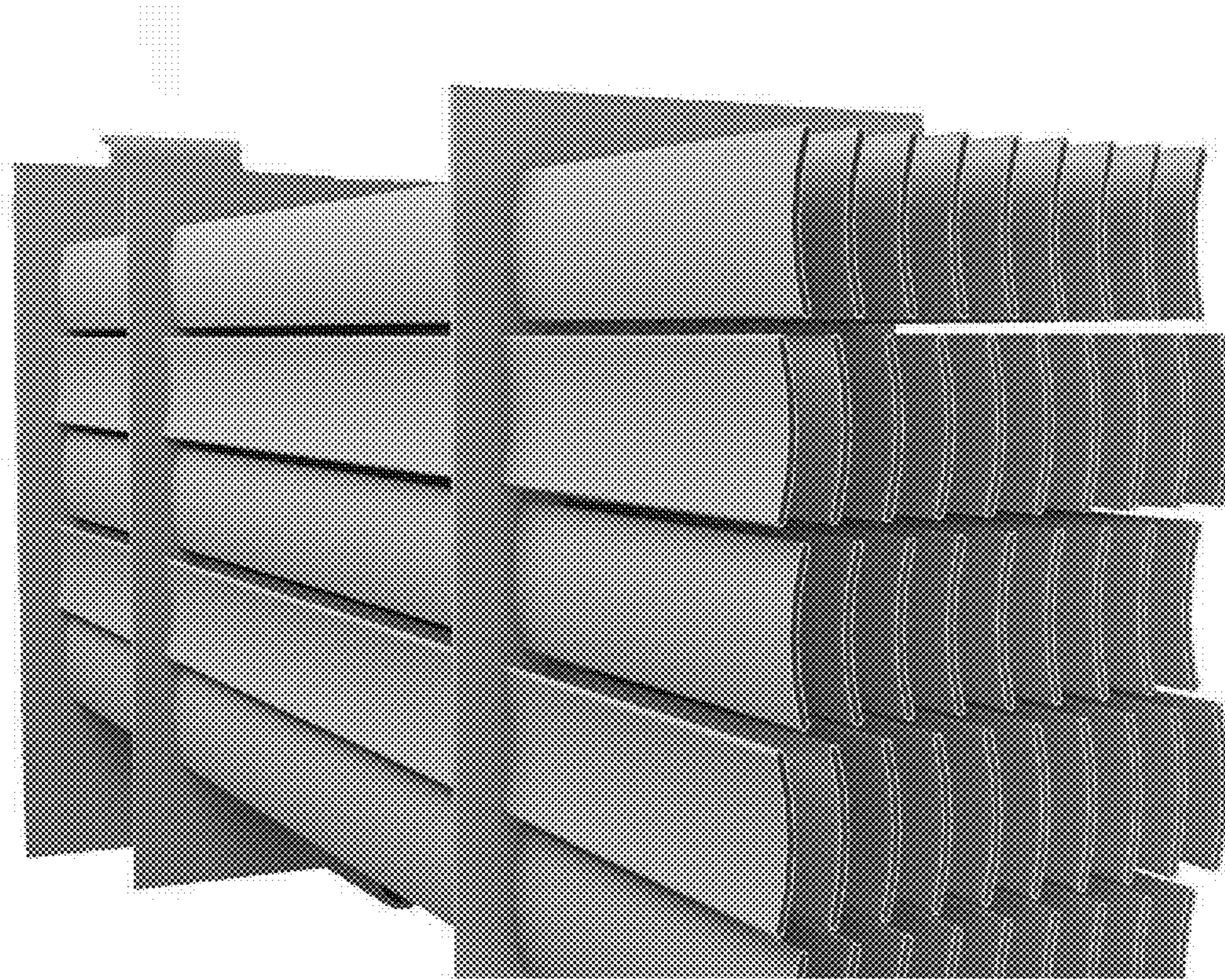
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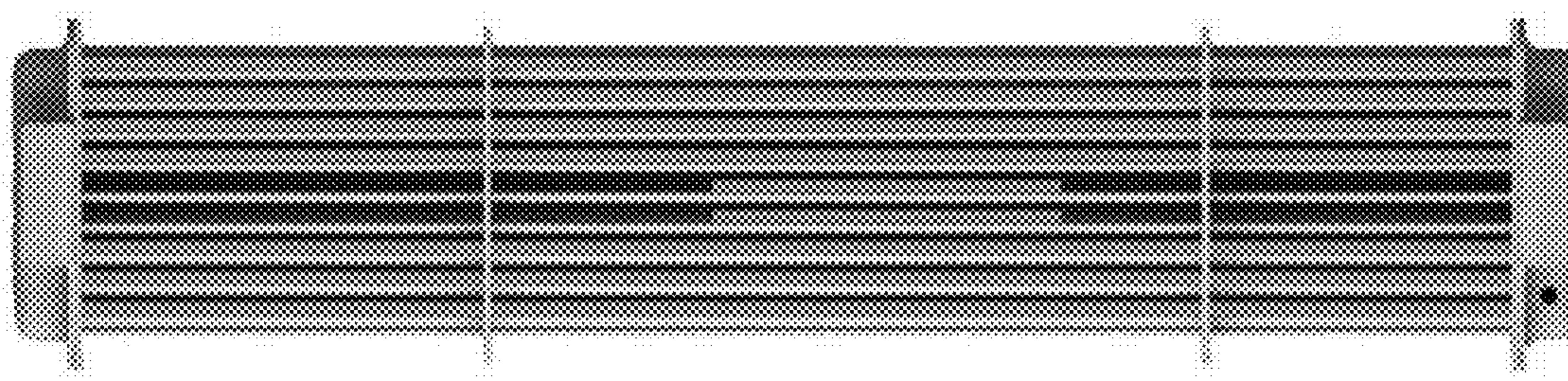
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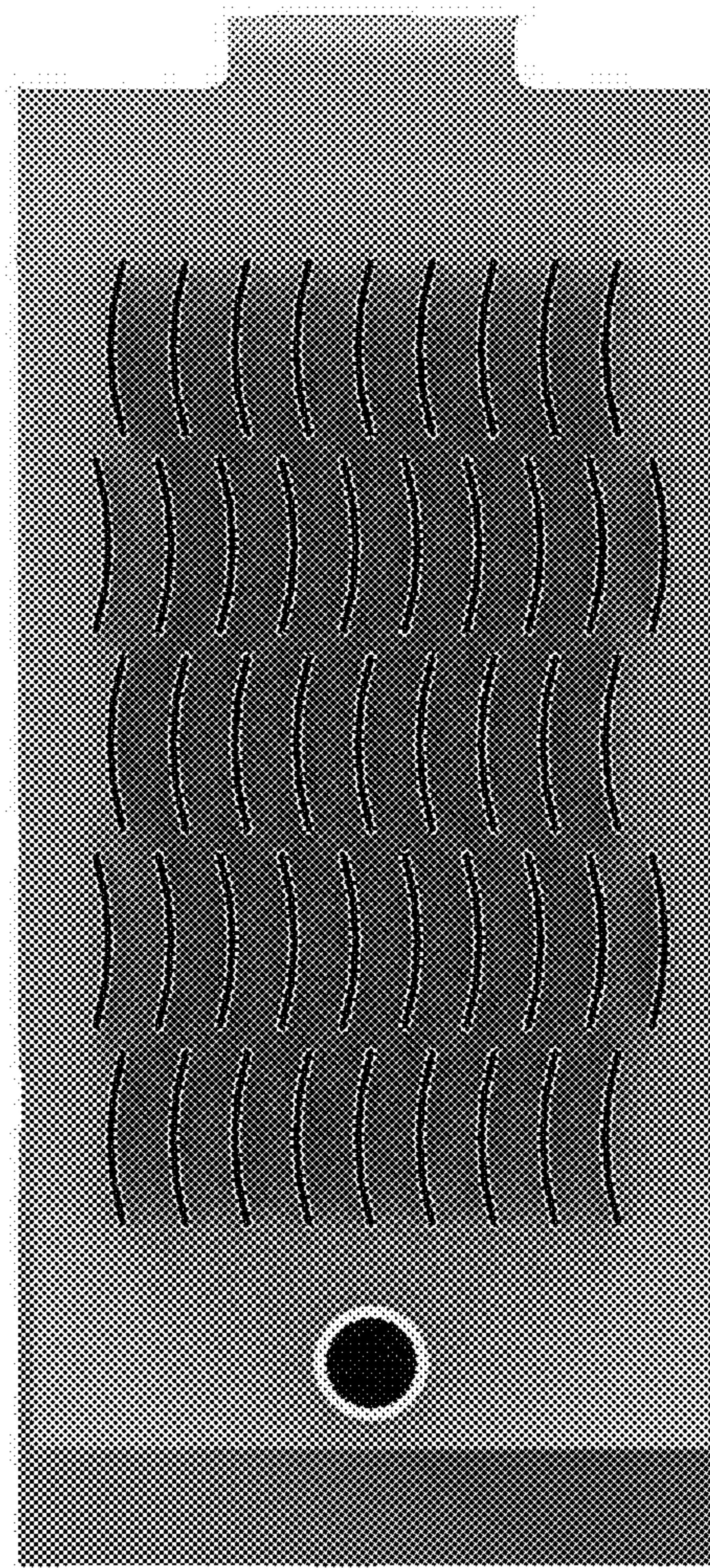
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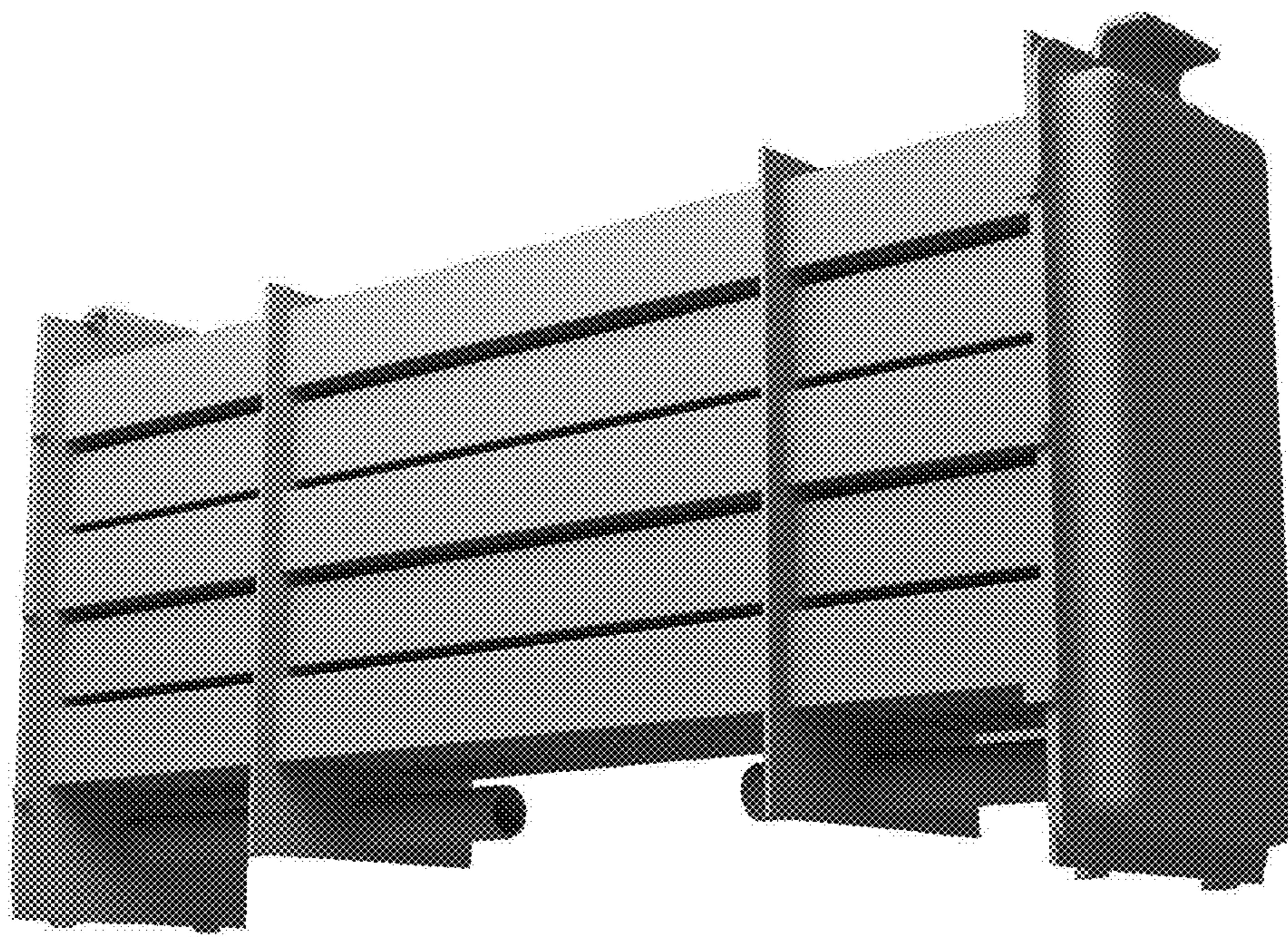
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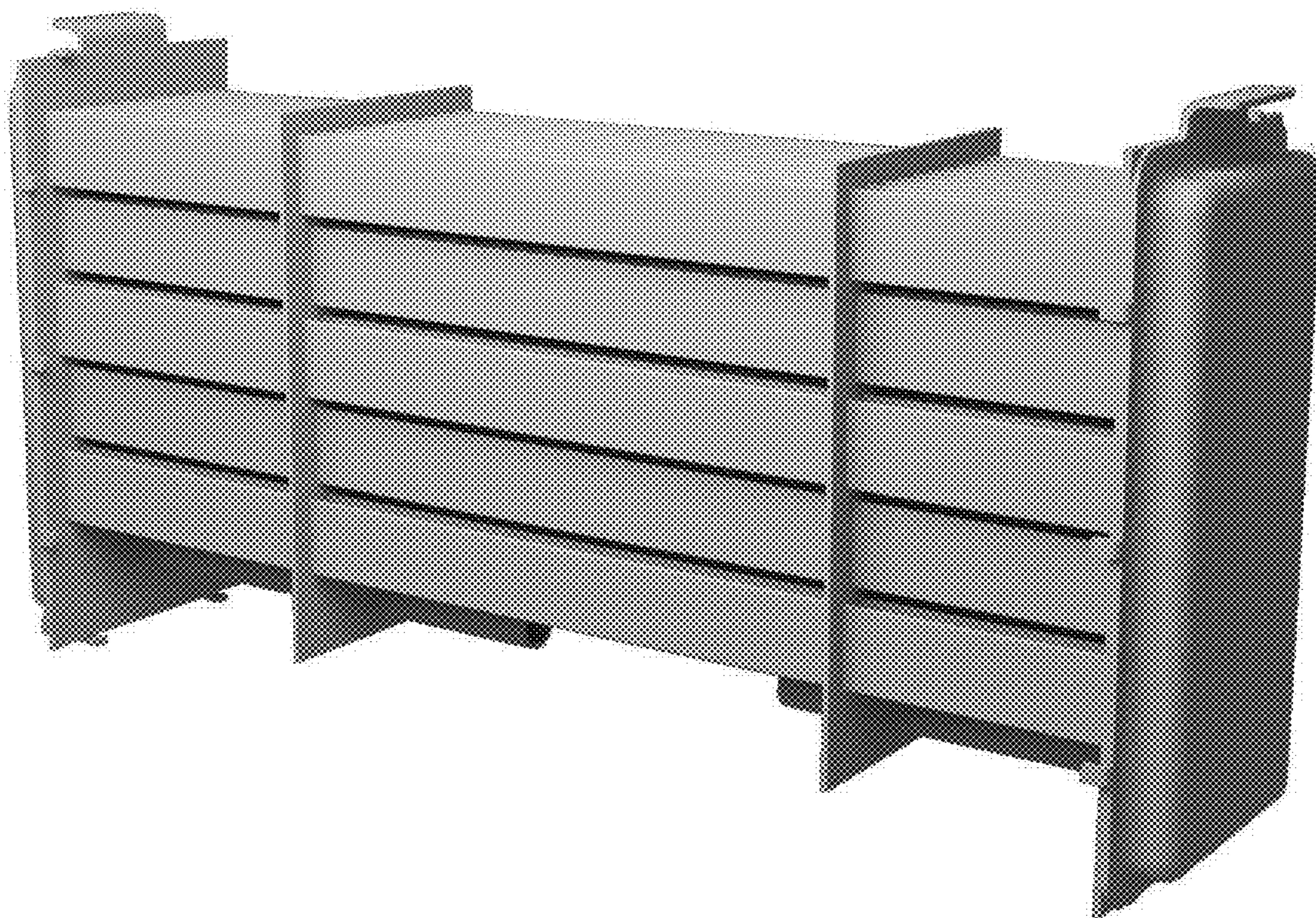
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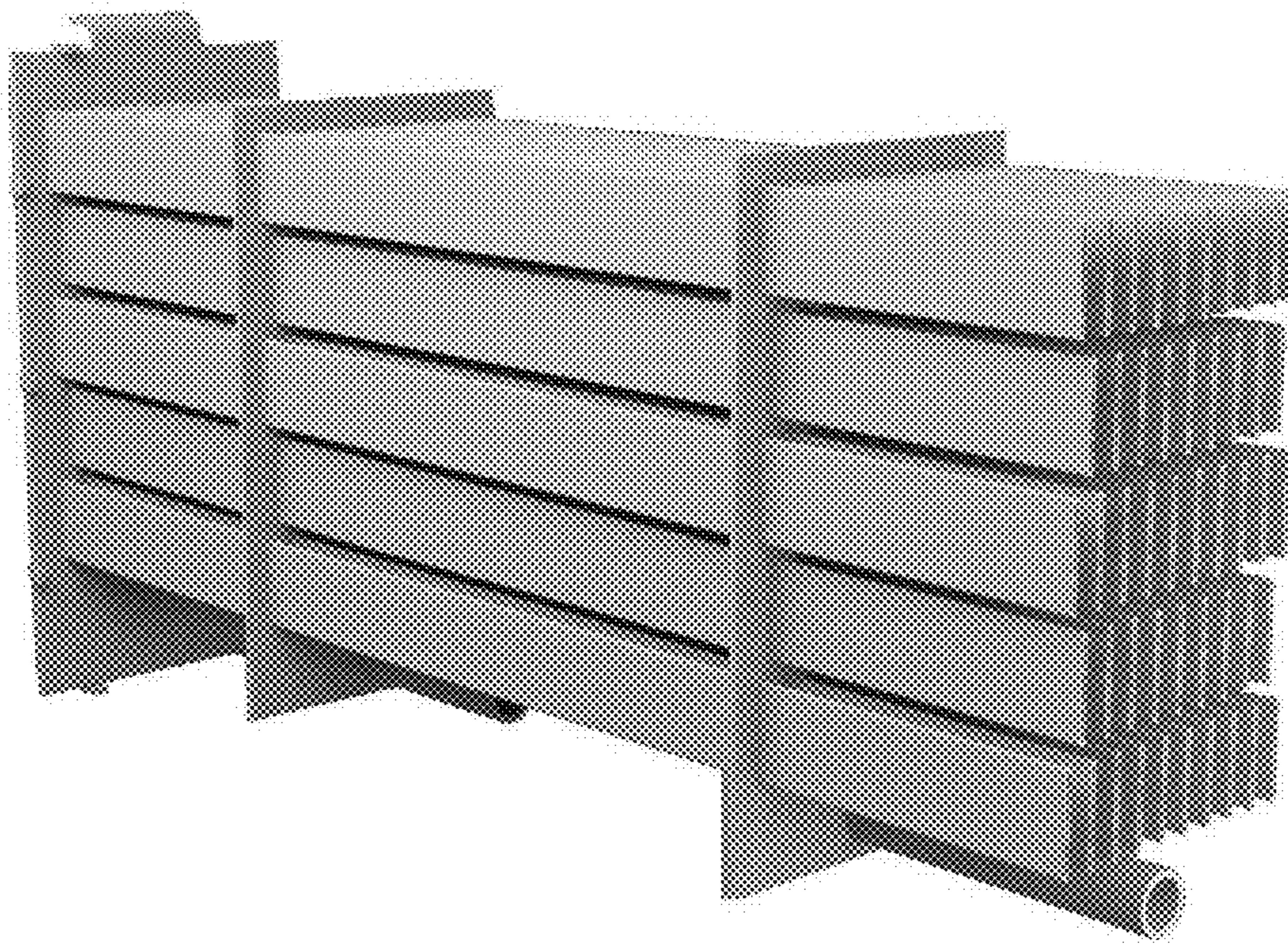
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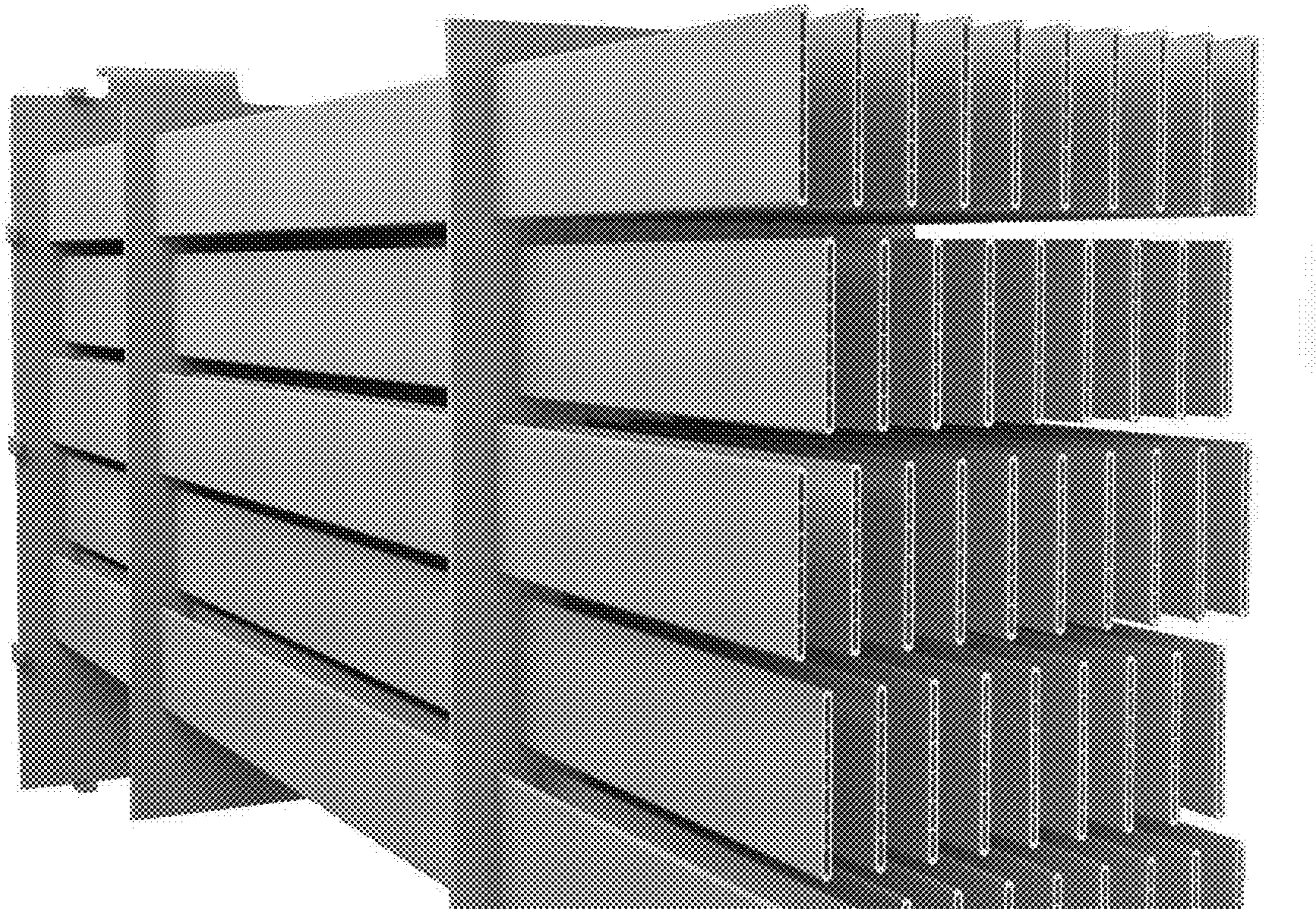
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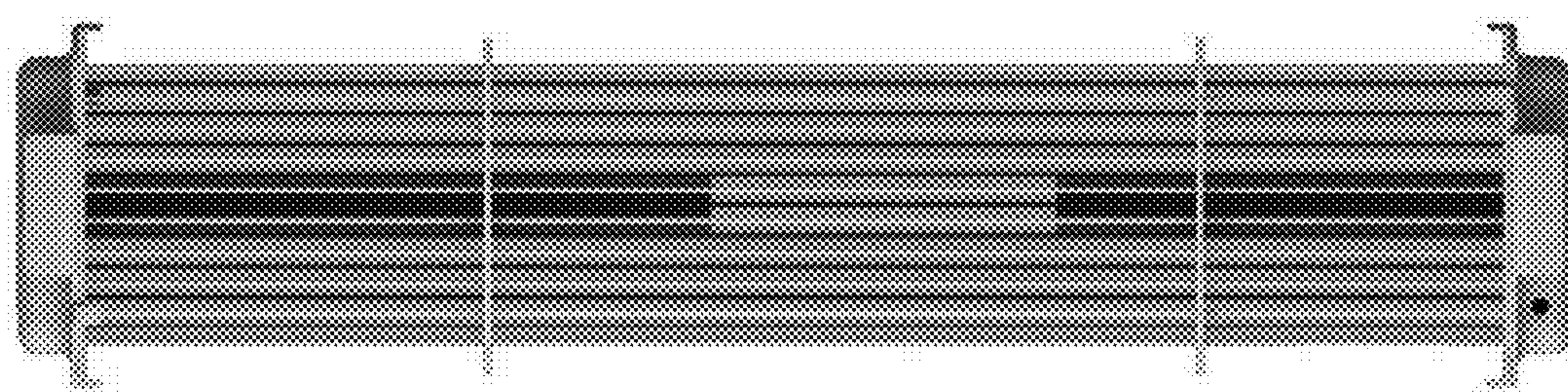
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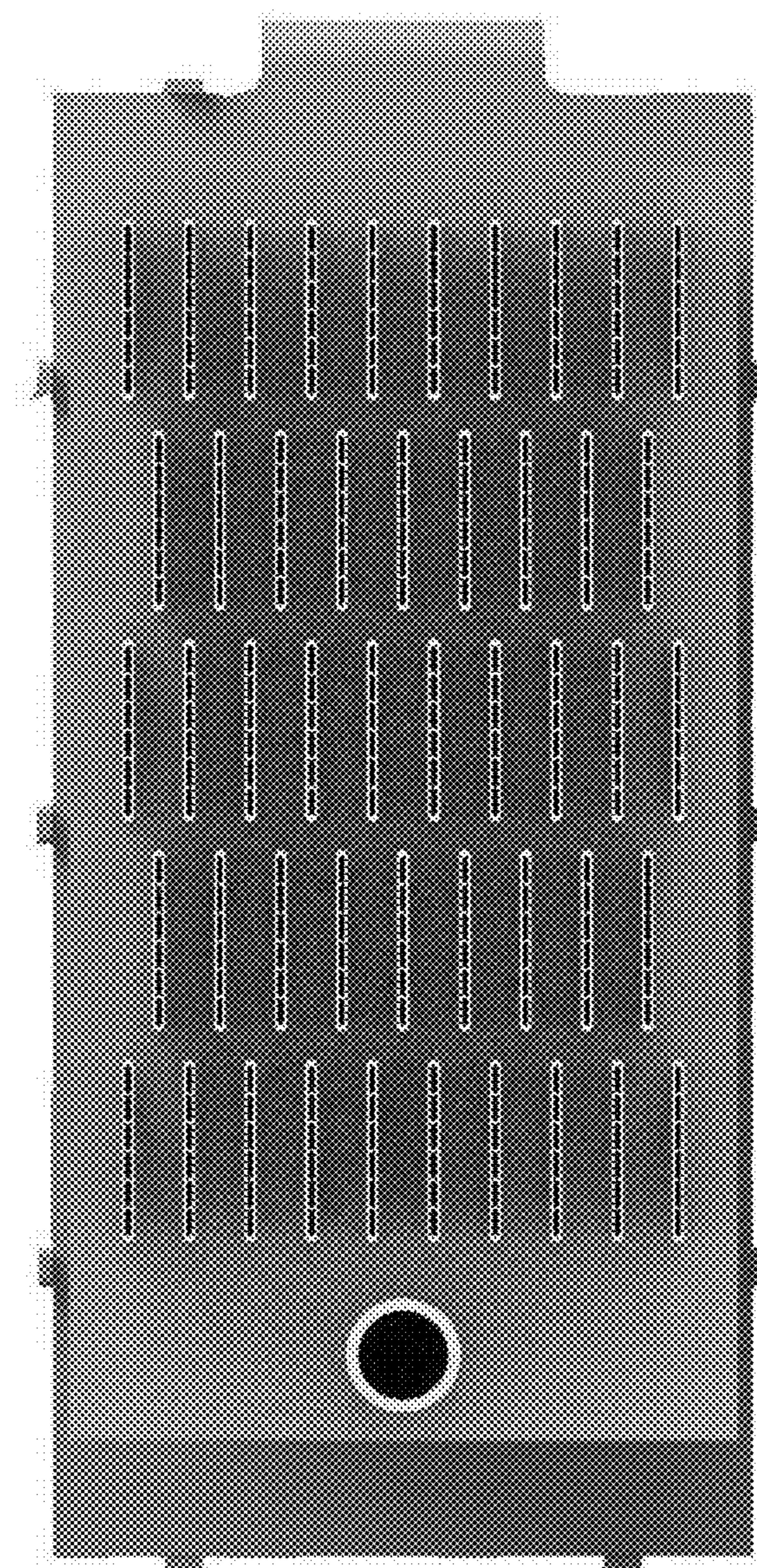
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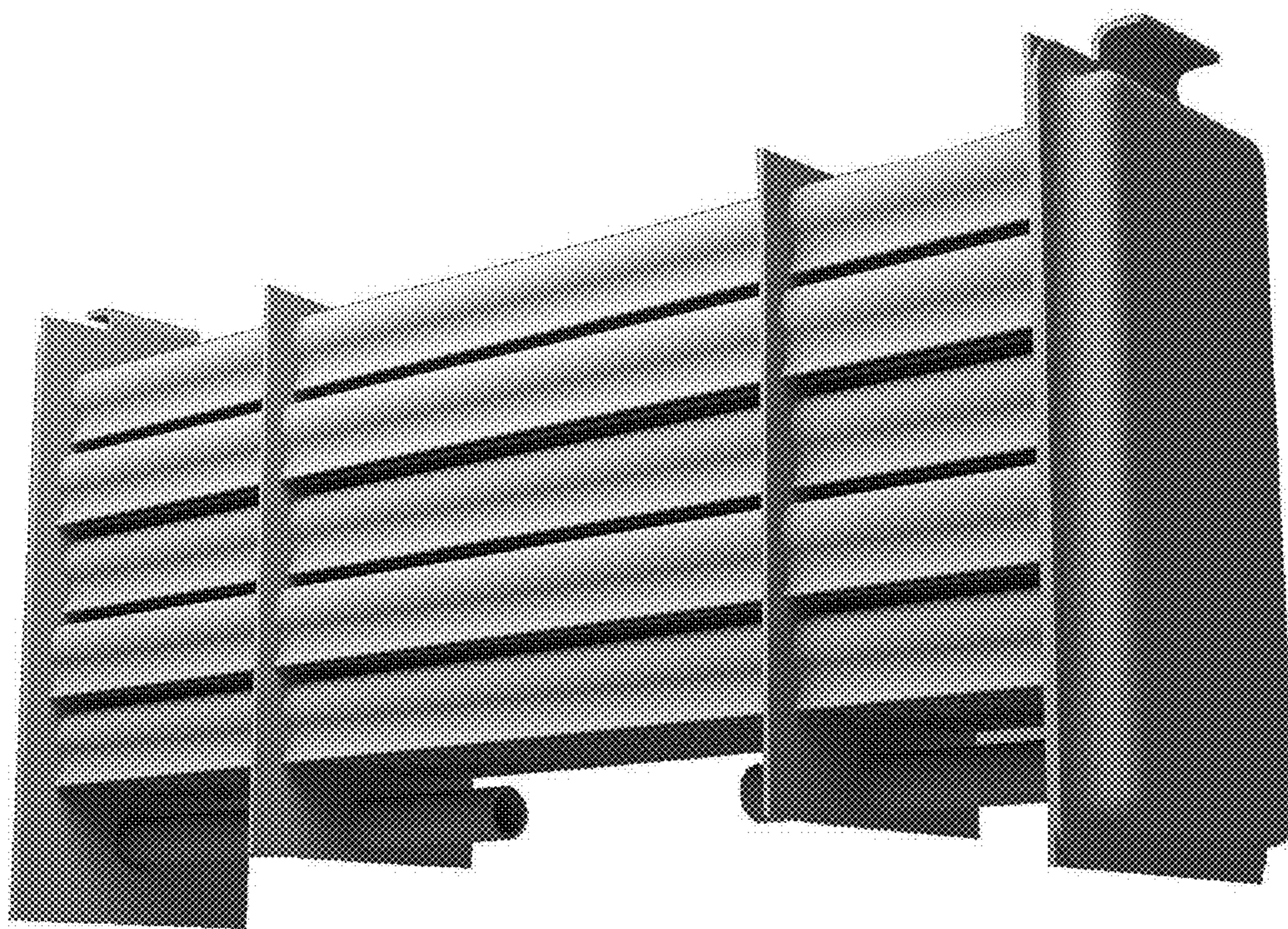
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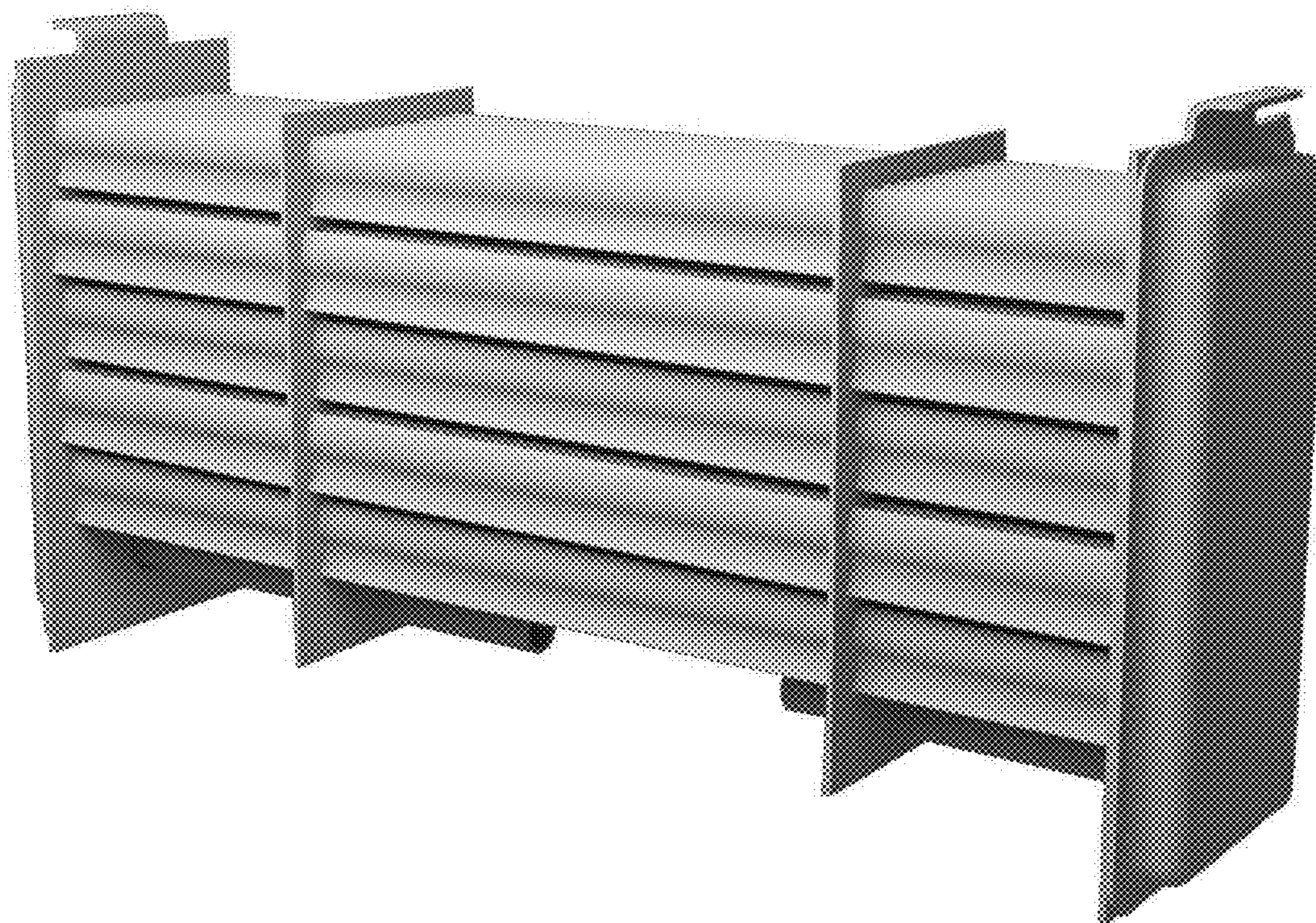
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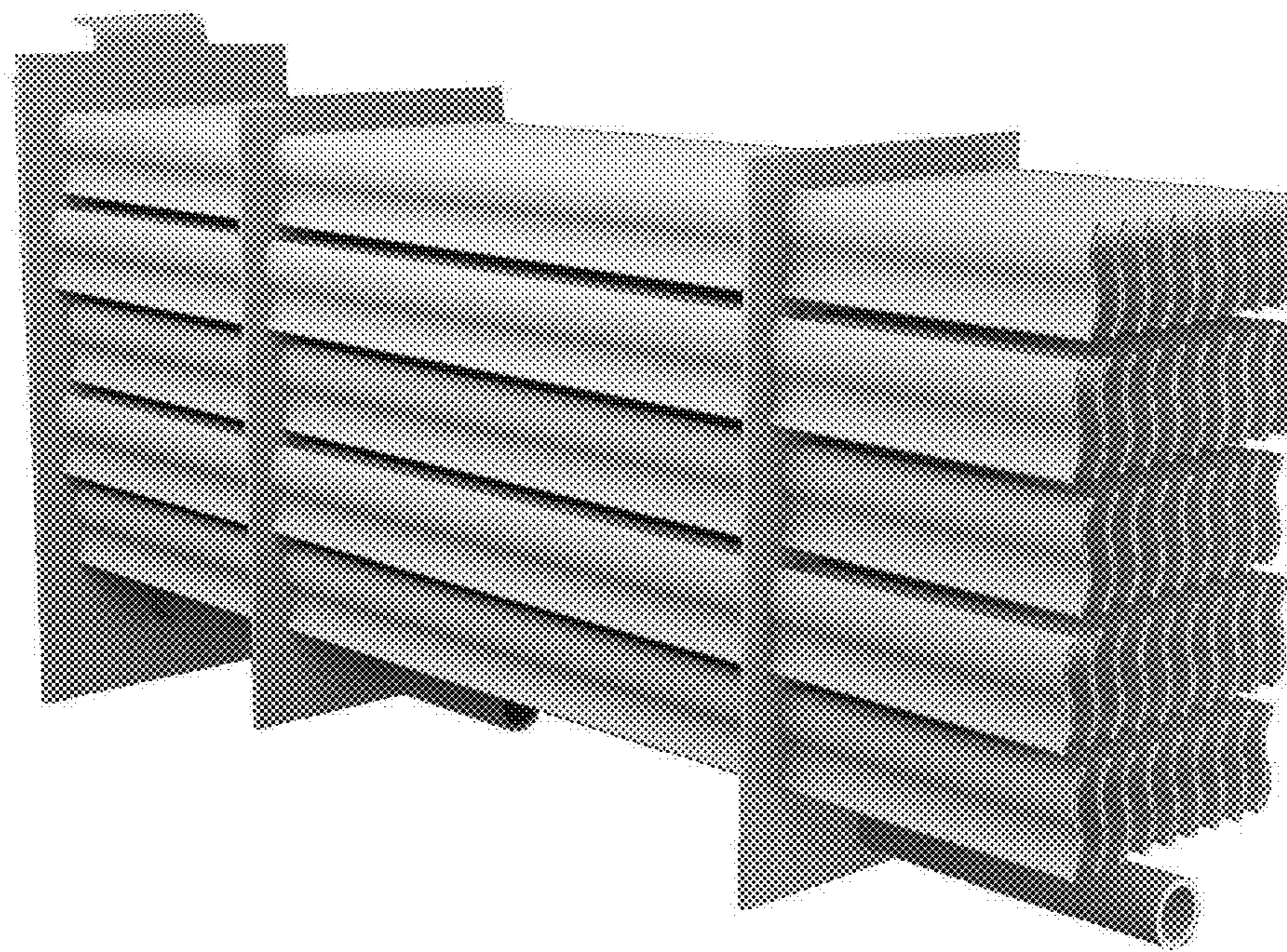
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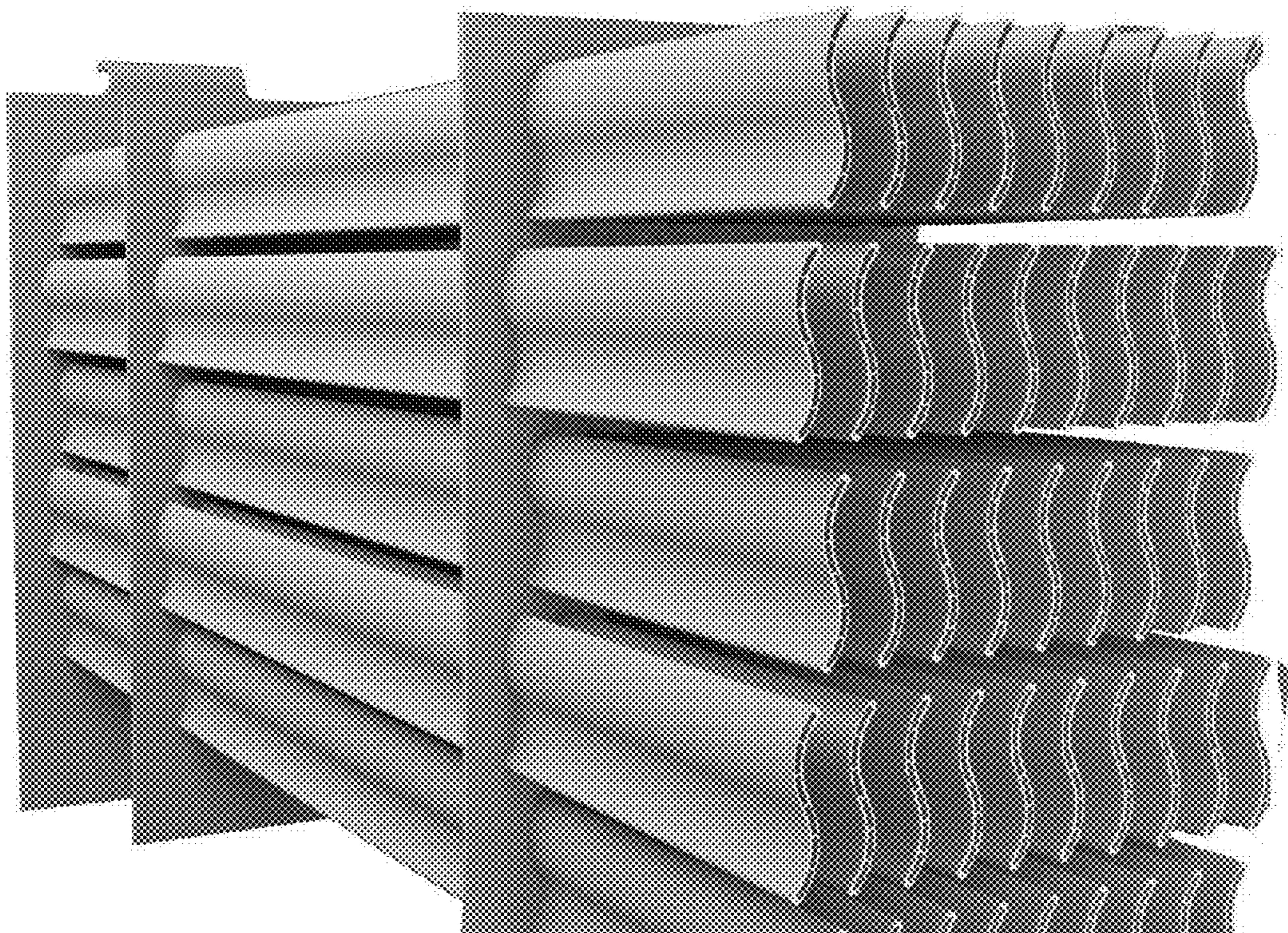
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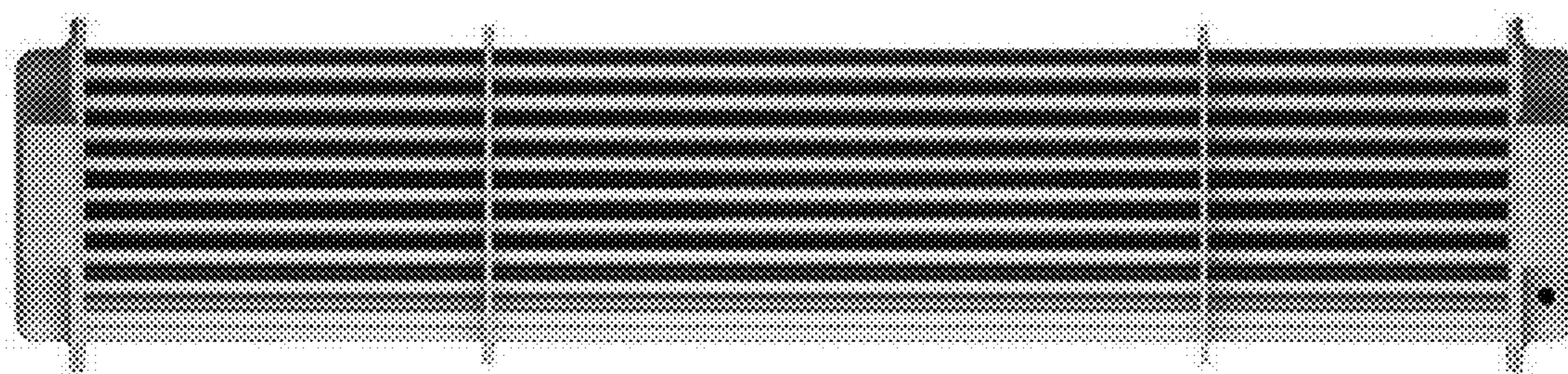
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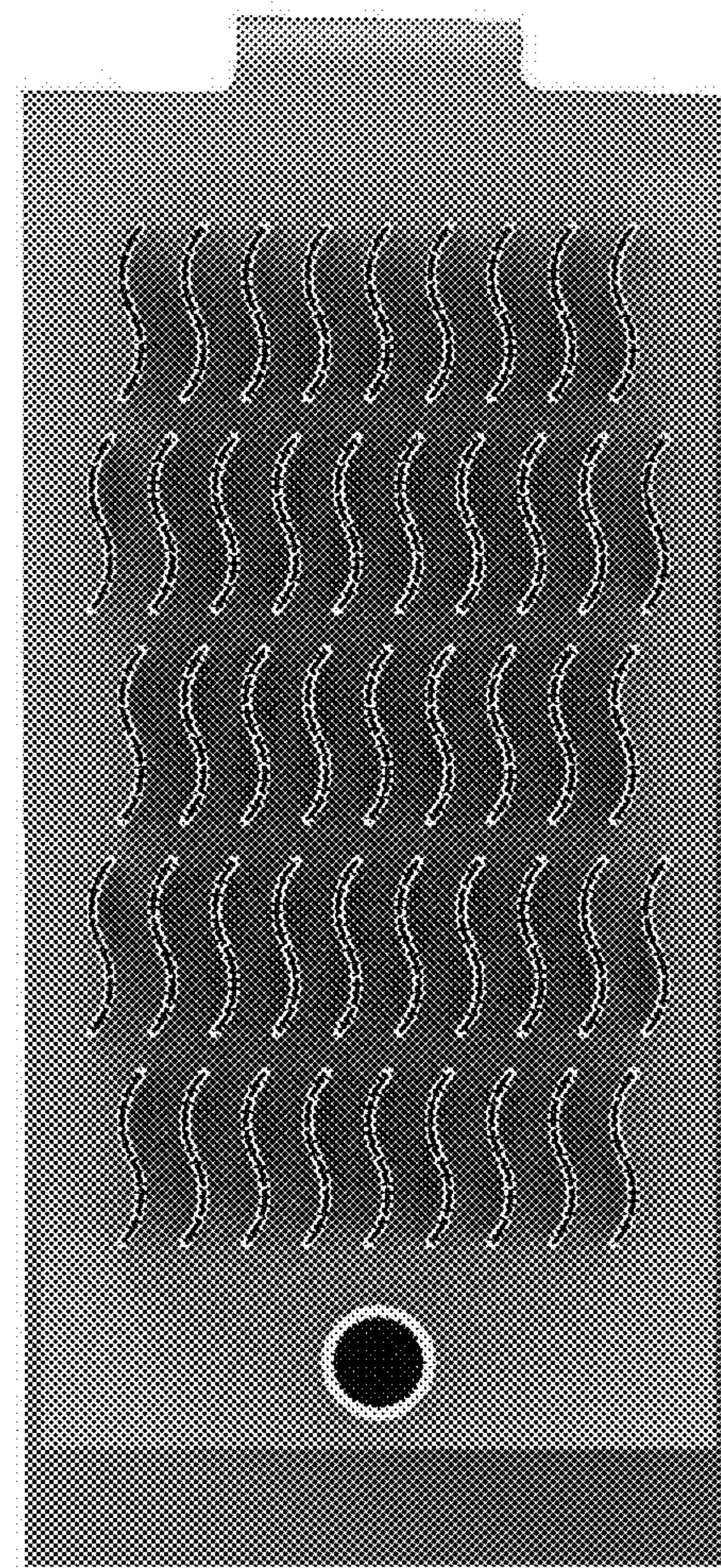
3.3



3.4



3.5



3.6