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(12) **United States Design Patent**
Juco

(10) **Patent No.:** **US D962,881 S**
(45) **Date of Patent:** **** Sep. 6, 2022**

- (54) **SEMICONDUCTOR WAFER PROCESSING APPARATUS**
- (71) Applicant: **Lam Research Corporation**, Fremont, CA (US)
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- (73) Assignee: **Lam Research Corporation**, Fremont, CA (US)
- (**) Term: **15 Years**
- (21) Appl. No.: **29/690,192**
- (22) Filed: **May 6, 2019**
- (51) **LOC (13) Cl.** **13-03**
- (52) **U.S. Cl.**
USPC **D13/182**
- (58) **Field of Classification Search**
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D16/230-234; D26/27; D10/81;
D13/182
CPC B23K 26/00; B23K 26/0006; B23K 26/0096; B23K 26/08; B23K 26/36; B23K 26/32; B23K 26/40; B65C 2009/0043; B65C 2009/1846; H01L 21/00; H01L 21/67; H01S 5/00; H01S 5/02; H01S 5/04; H01S 5/10
See application file for complete search history.

- D900,892 S * 11/2020 Zhang D15/122
- D923,591 S * 6/2021 Aoki D13/182
- D923,669 S * 6/2021 Tavares Andre E21B 7/024
D15/122
- D928,722 S * 8/2021 Kok D13/156
- D928,854 S * 8/2021 Zhang D15/122

(Continued)

OTHER PUBLICATIONS

Semiconductor Wafer Apparatus. (Design—© Questel) orbit.com. [Online PDF compilation of references] 59 pgs. Print Dates Range Jul. 16, 2019-Jun. 2, 2000 [Retrieved Sep. 13, 2021].*
(Continued)

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(57) **CLAIM**

The ornamental design for a semiconductor wafer processing apparatus, as shown and described.

DESCRIPTION

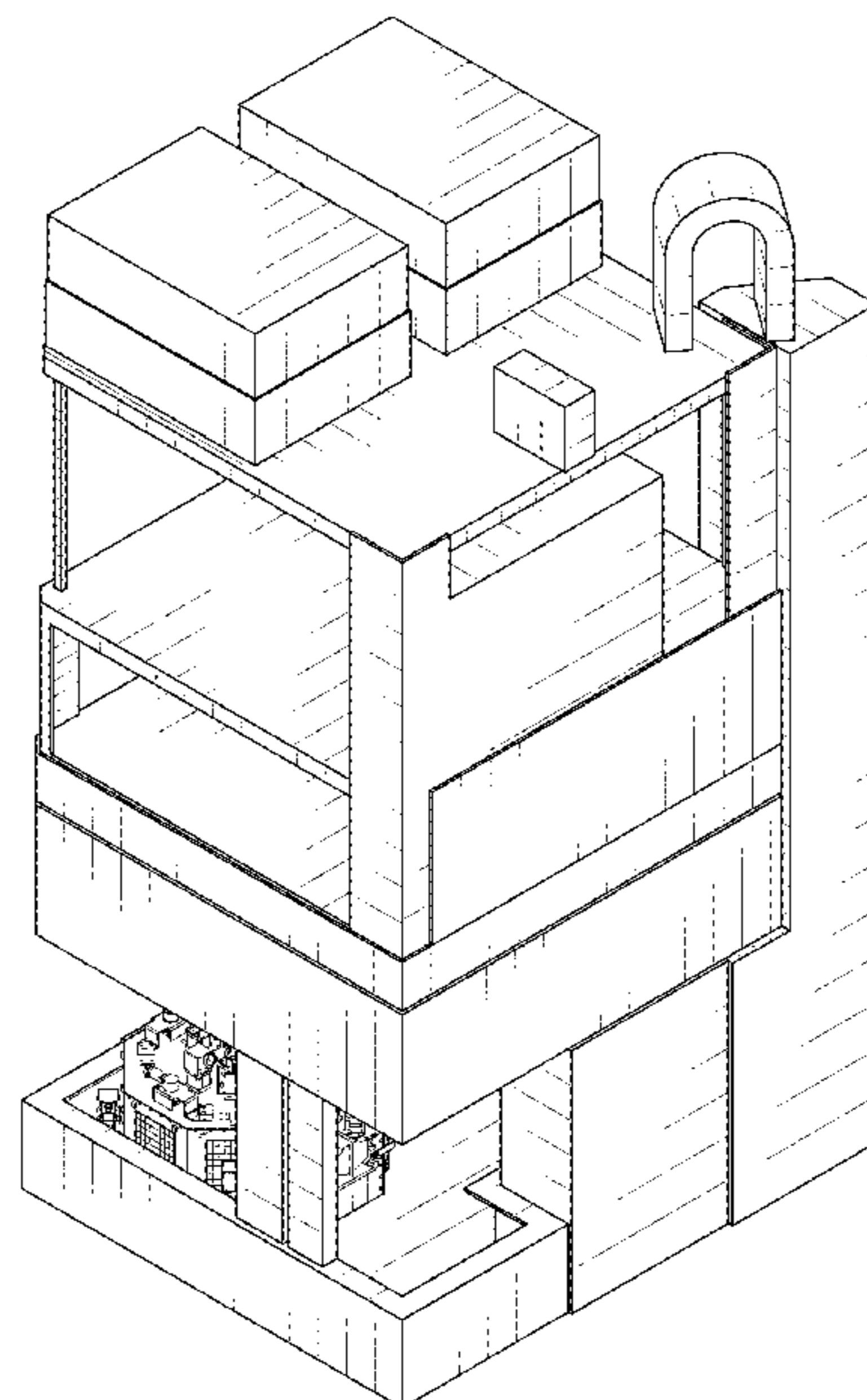
FIG. 1 is a perspective view depicting the overall shape of the semiconductor wafer processing apparatus, showing my new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom plan view thereof.
The broken line showings of portions of the semiconductor wafer processing apparatus and portions of the semiconductor wafer processing tool illustrate environmental structure, and the broken lines form no part of the claimed design.
The shape of the semiconductor wafer processing apparatus is the feature of the design creation content.

1 Claim, 7 Drawing Sheets

(56) **References Cited**

U.S. PATENT DOCUMENTS

- D571,739 S * 6/2008 Hosaka D13/182
- D730,849 S * 6/2015 Aromin D13/182
- D748,595 S * 2/2016 Bertalan D13/182
- D753,735 S * 4/2016 Shimano D15/122
- D761,746 S * 7/2016 Toyoshima D13/182
- D851,611 S * 6/2019 Kurz D13/182



(56)

References Cited

U.S. PATENT DOCUMENTS

D929,475 S * 8/2021 Tavares Andre E21B 7/024
D15/122
D930,054 S * 9/2021 Bangalore Srinivas D15/122

OTHER PUBLICATIONS

“Single Wafer vs Batch Wafer Processing.” Feb. 21, 2018. Mems star, <https://memsstar.com/single-wafer-vs-batch-wafer-processing/>.*

“Single Wafer vs. Batch Wafer Processing in MEMS manufacturing.” Aug. 2, 2016. CMM International, <http://www.cmmmagazine.com/mems/single-wafer-vs-batch-wafer-processing-in-mems-manufacturing/>.*

https://www.researchgate.net/publication/35950411_Nonlinear_control_of_a_planar_magnetic_levitation_system_microformLevis, Michel. “Nonlinear Control of a Planar Magnetic Levitation System.” 2003. University of Toronto.*

“Chinese Application Serial No. 201930607750.9, First Notice of Correction dated Feb. 27, 2020”, w/ English Machine Translation, 2 pgs.

“Chinese Application Serial No. 201930607750.9, Response filed Apr. 26, 2020 to First Correction Notice dated Feb. 27, 2020”, w/ English Machine Translation, 34 pgs.

“Korean Application Serial No. 30-2019-0034114, Notice of Preliminary Rejection dated Mar. 17, 2020”, w/o English Translation, 5 pgs.

* cited by examiner

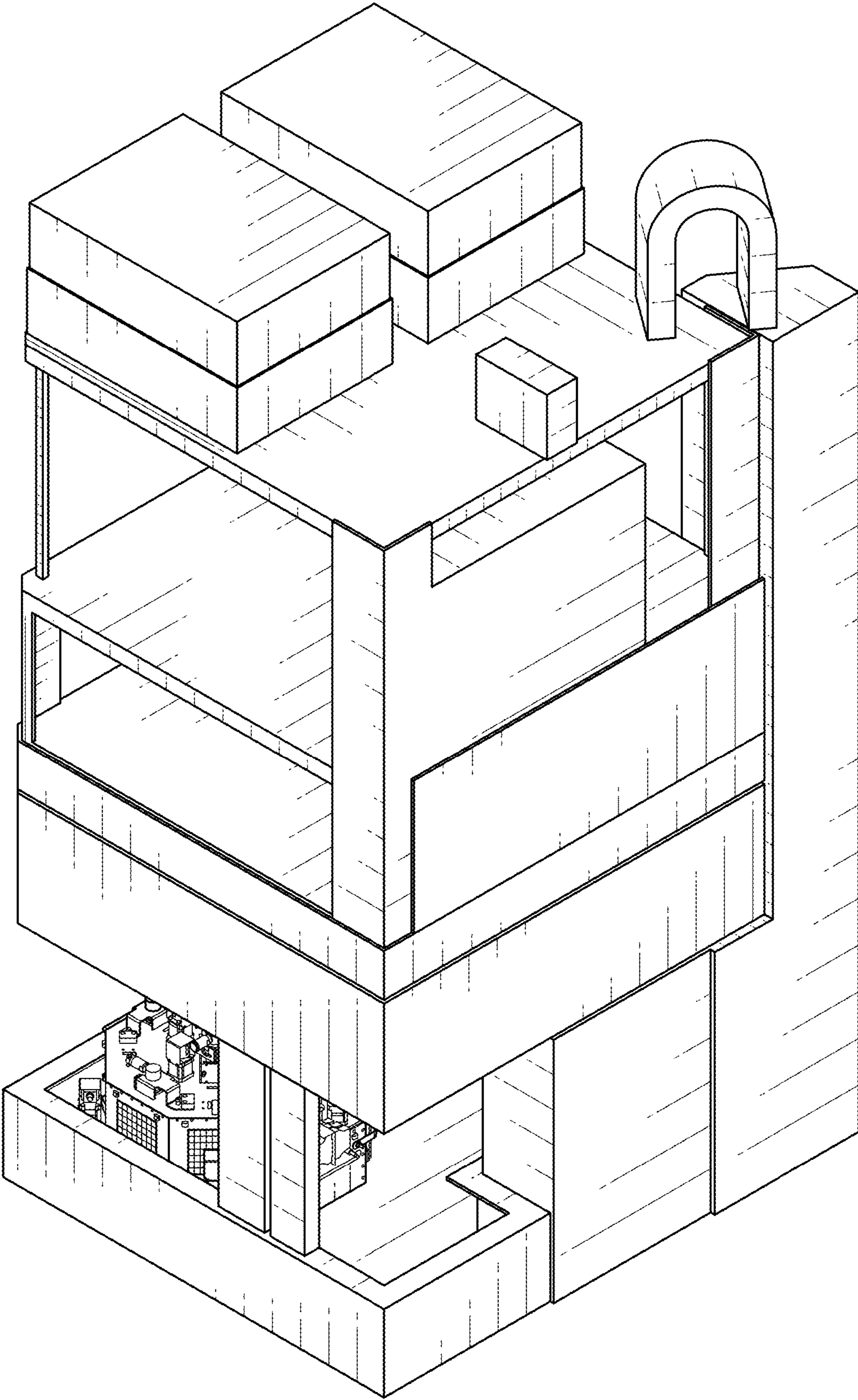


FIG. 1

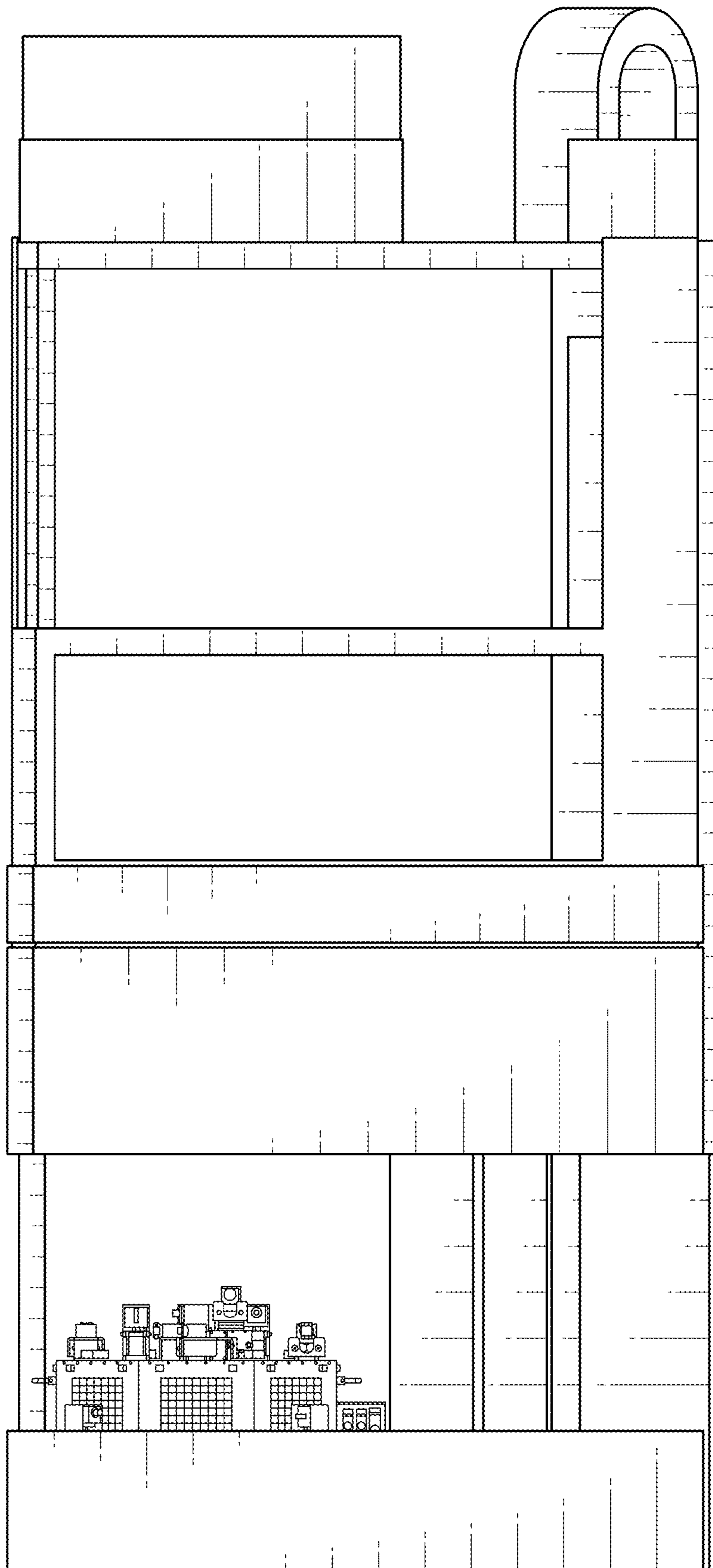


FIG. 2

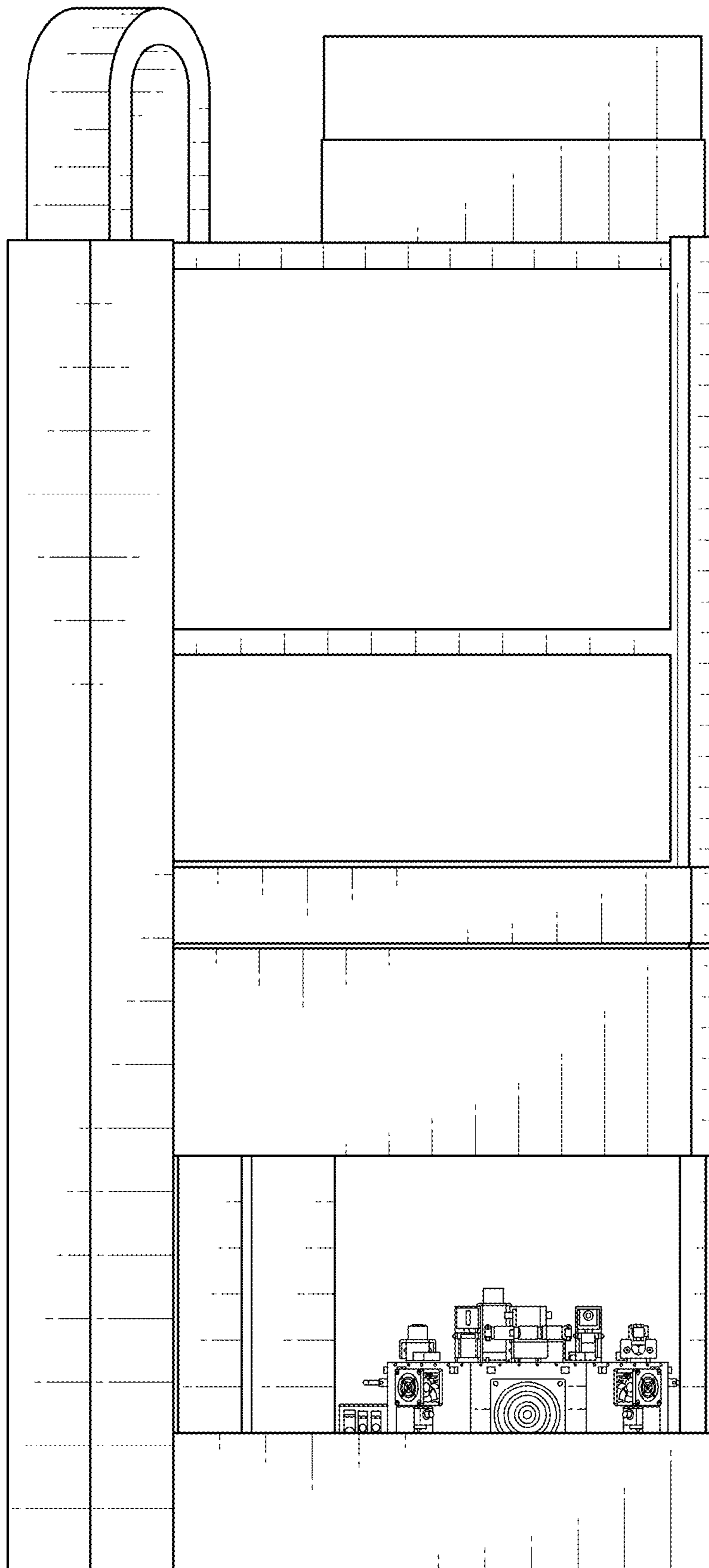


FIG. 3

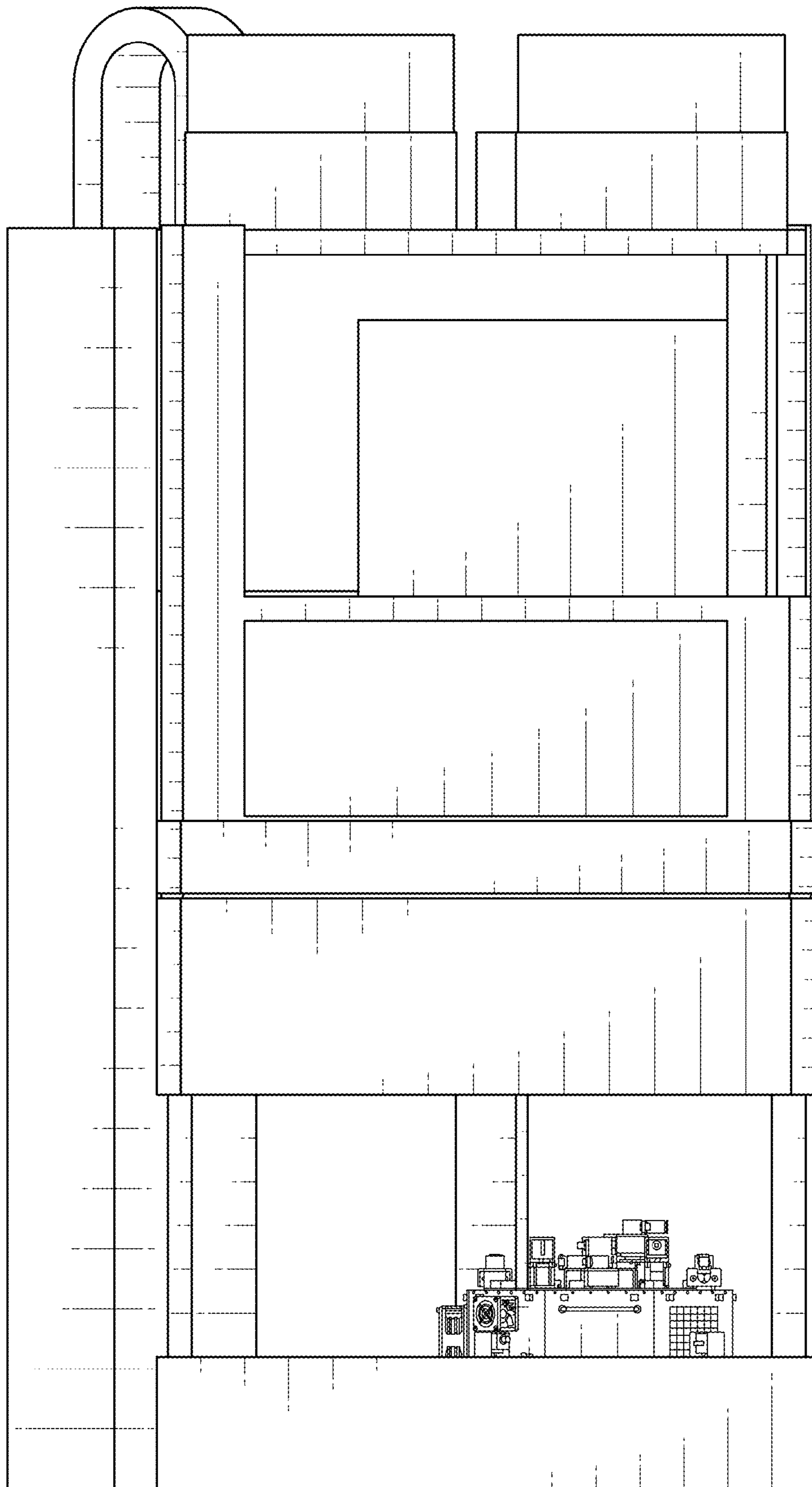


FIG. 4



FIG. 5



FIG. 6

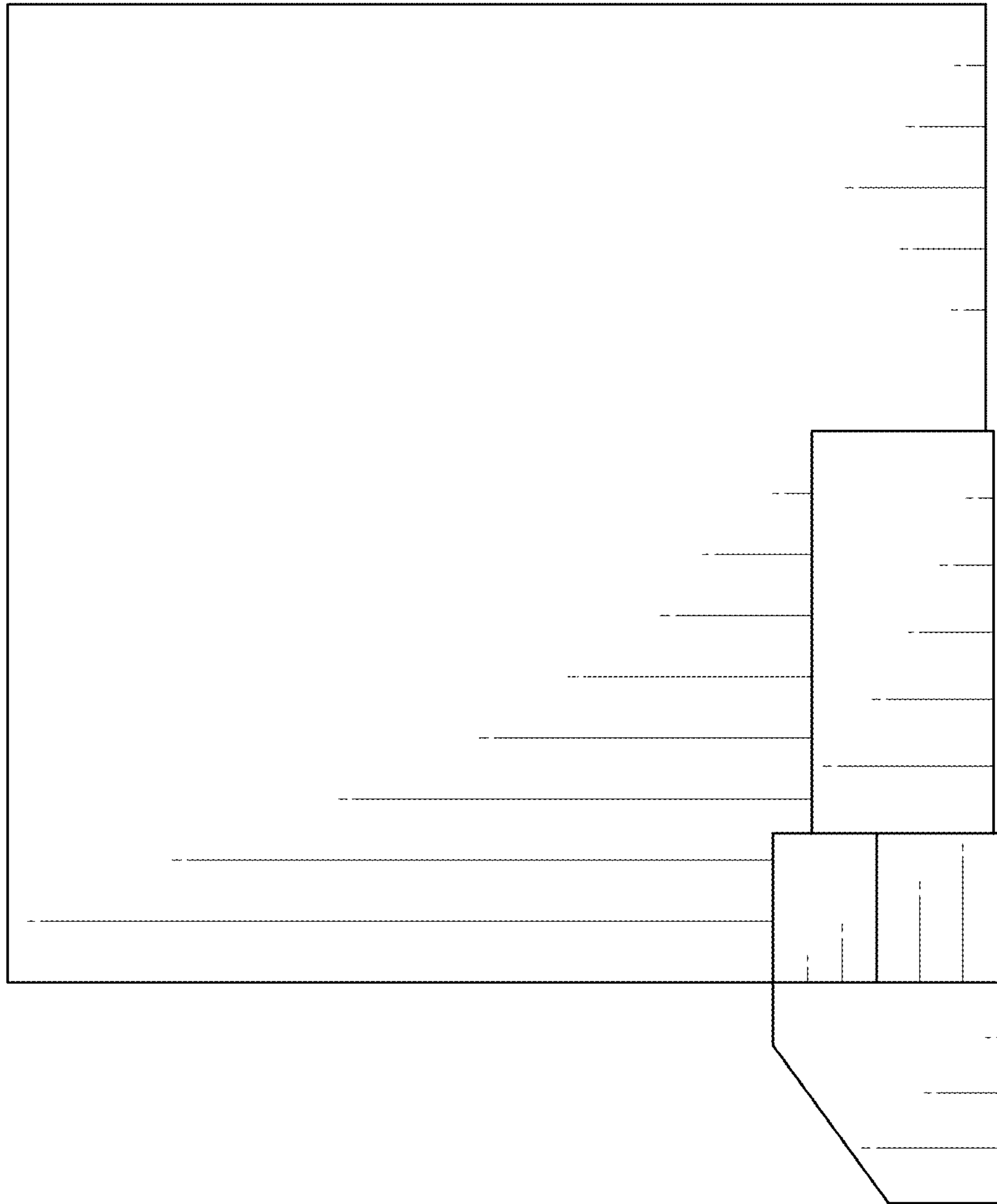


FIG. 7