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

(10) **Patent No.:** **US D927,558 S**
(45) **Date of Patent:** **** Aug. 10, 2021**

(54) **BORING MACHINE WITH CASING DRIVER**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **YAMAMOTO FOUNDATION**
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JP 10339088 * 12/1998
JP 2001040974 A * 2/2001

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OTHER PUBLICATIONS

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CAT MD5150C Track Drill (Year: 2016).*

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

Primary Examiner — Richard E Chilcot

(21) Appl. No.: **35/508,829**

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(22) Filed: **Aug. 23, 2019**

(57) **CLAIM**

The ornamental design for a boring machine with casing driver, as shown and described.

(80) **Hague Agreement Data**

DESCRIPTION

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Int. Reg. Date: **Aug. 23, 2019**
Int. Reg. Pub. Date: **Mar. 20, 2020**

Fig. 1.1 is a front view of a boring machine with casing driver of my new design;
Fig. 1.2 is a rear view thereof;
Fig. 1.3 is a left view thereof;
Fig. 1.4 is a right view thereof;
Fig. 1.5 is a top view thereof, a bottom view is omitted because the article is a heavy object;
Fig. 1.6 is a reference view showing a state of use thereof;
Fig. 1.7 is a reference view showing the front thereof with the 1.9-1.9 line, 1.10-1.10 line and 1.11-1.11 line;
Fig. 1.8 is a cross-sectional reference view taken along the 1.8-1.8 line in Fig. 1.12;
Fig. 1.9 is an enlarged cross-sectional reference view taken along the 1.9-1.9 line in Fig. 1.7;
Fig. 1.10 is an enlarged cross-sectional reference view taken along the 1.10-1.10 line in Fig. 1.7;
Fig. 1.11 is a cross-sectional reference view taken along the 1.11-1.11 line in Fig. 1.7; and
Fig. 1.12 is a partial top reference view thereof with the 1.8-1.8 line.
The broken lines in the figures are for the purpose of illustrating portions of the article that form no part of the claimed design.

(30) **Foreign Application Priority Data**

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(51) **LOC (13) Cl.** **15-03**

(52) **U.S. Cl.**
USPC **D15/21**

(58) **Field of Classification Search**
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73/152.51, 152.54, 152.59, 11, 24, 48,
73/25-28, 189, 9.5, 9.52

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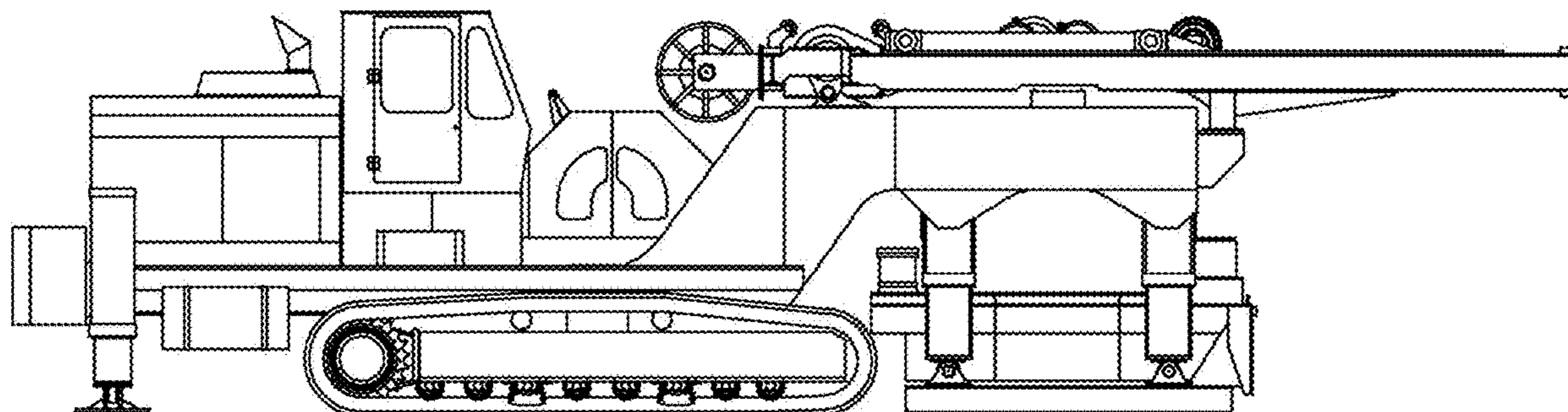
(56) **References Cited**

U.S. PATENT DOCUMENTS

D253,535 S * 11/1979 Schmidt D15/21
D264,590 S * 5/1982 Thomas D15/21

(Continued)

1 Claim, 12 Drawing Sheets



- (52) **U.S. Cl.**
 CPC *E21B 44/00* (2013.01)
- (58) **Field of Classification Search**
 CPC E21B 7/023; E21B 7/024; E21B 7/022;
 E21B 7/02; E21B 7/027; E21B 3/02;
 E21B 44/00; B60G 17/005; B60G
 2300/09; B60G 2300/32; B60G 2300/40;
 B62D 55/116; B62D 55/104
 See application file for complete search history.

(56) **References Cited**

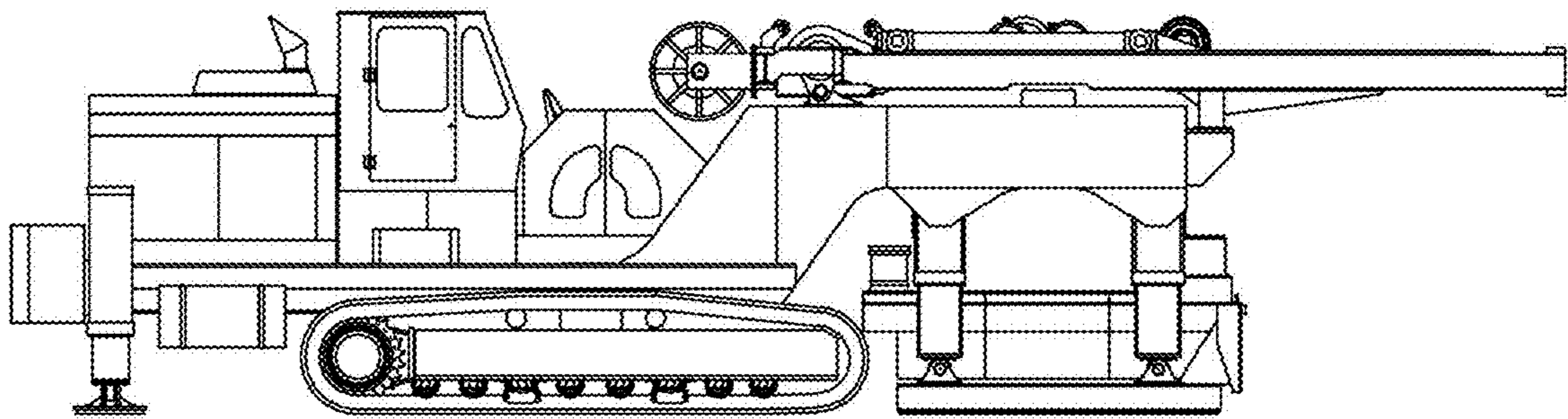
U.S. PATENT DOCUMENTS

D267,719 S * 1/1983 Case D15/21
 4,371,041 A * 2/1983 Becker E21B 19/02
 173/28
 4,449,592 A * 5/1984 Mayer E21B 19/20
 173/164
 4,625,815 A * 12/1986 Spies E21B 19/08
 175/73
 5,806,616 A * 9/1998 Enlund B60G 17/005
 180/9.52
 5,844,133 A * 12/1998 Goto E21B 44/00
 73/152.54
 5,941,324 A * 8/1999 Bennett E21B 19/14
 175/85
 D413,907 S * 9/1999 Suzaki D15/132
 D453,023 S * 1/2002 Kaneko D15/21

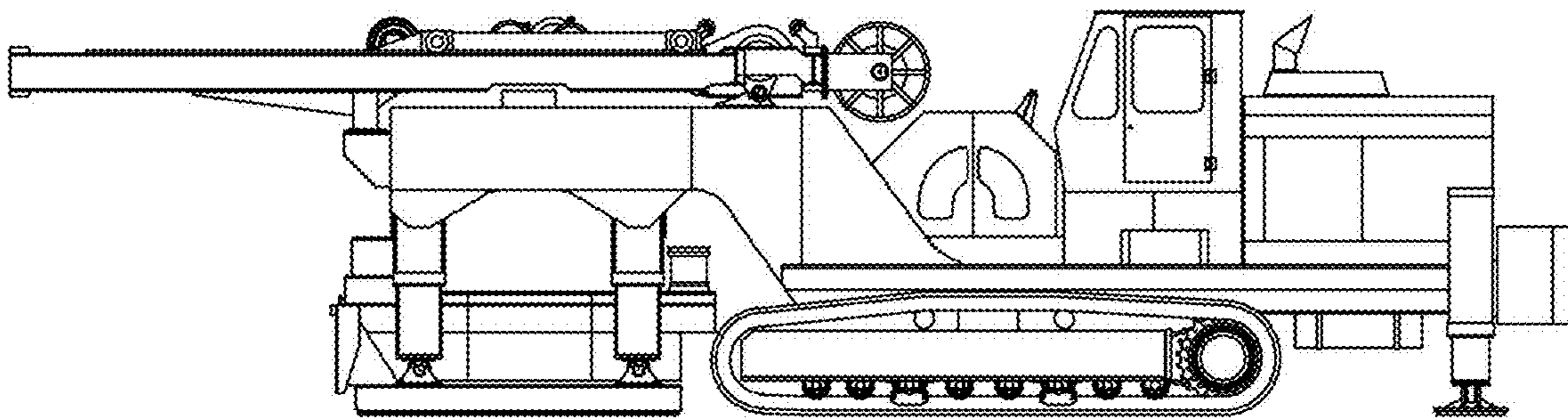
D477,332 S * 7/2003 Bennett D15/21
 D506,483 S * 6/2005 Saari D15/132
 D725,156 S * 3/2015 Saari D15/21
 9,091,125 B2 * 7/2015 Konduc E21B 15/04
 9,121,234 B2 * 9/2015 Flusche E21B 19/165
 9,458,680 B2 * 10/2016 Kannegaard E21B 19/002
 D780,812 S * 3/2017 Niemczyk D15/21
 D851,132 S * 6/2019 Cosgrove D15/21
 D851,688 S * 6/2019 Cosgrove D15/21
 10,329,788 B2 * 6/2019 Jonah E04H 12/345
 10,612,323 B2 * 4/2020 Childers E21B 19/155
 10,822,924 B2 * 11/2020 Konduc E04B 1/34336
 10,899,401 B2 * 1/2021 Smith B60P 1/00
 2008/0142235 A1 * 6/2008 Jacobsson B60K 11/04
 173/27
 2009/0236146 A1 * 9/2009 Pierz E21B 7/20
 175/62
 2009/0283324 A1 * 11/2009 Konduc A61P 25/06
 175/57
 2011/0072737 A1 * 3/2011 Wasterval E21B 7/023
 52/115
 2016/0052441 A1 * 2/2016 Korach B60P 1/02
 414/495
 2016/0376808 A1 * 12/2016 Magnuson E21B 19/14
 52/123.1
 2017/0175461 A1 * 6/2017 Maurer E21B 7/02
 2018/0112467 A1 * 4/2018 Chiaramonte E21B 7/022
 2020/0024907 A1 * 1/2020 Gupta E21B 19/14
 2020/0115974 A1 * 4/2020 Hudson B23B 51/0054

* cited by examiner

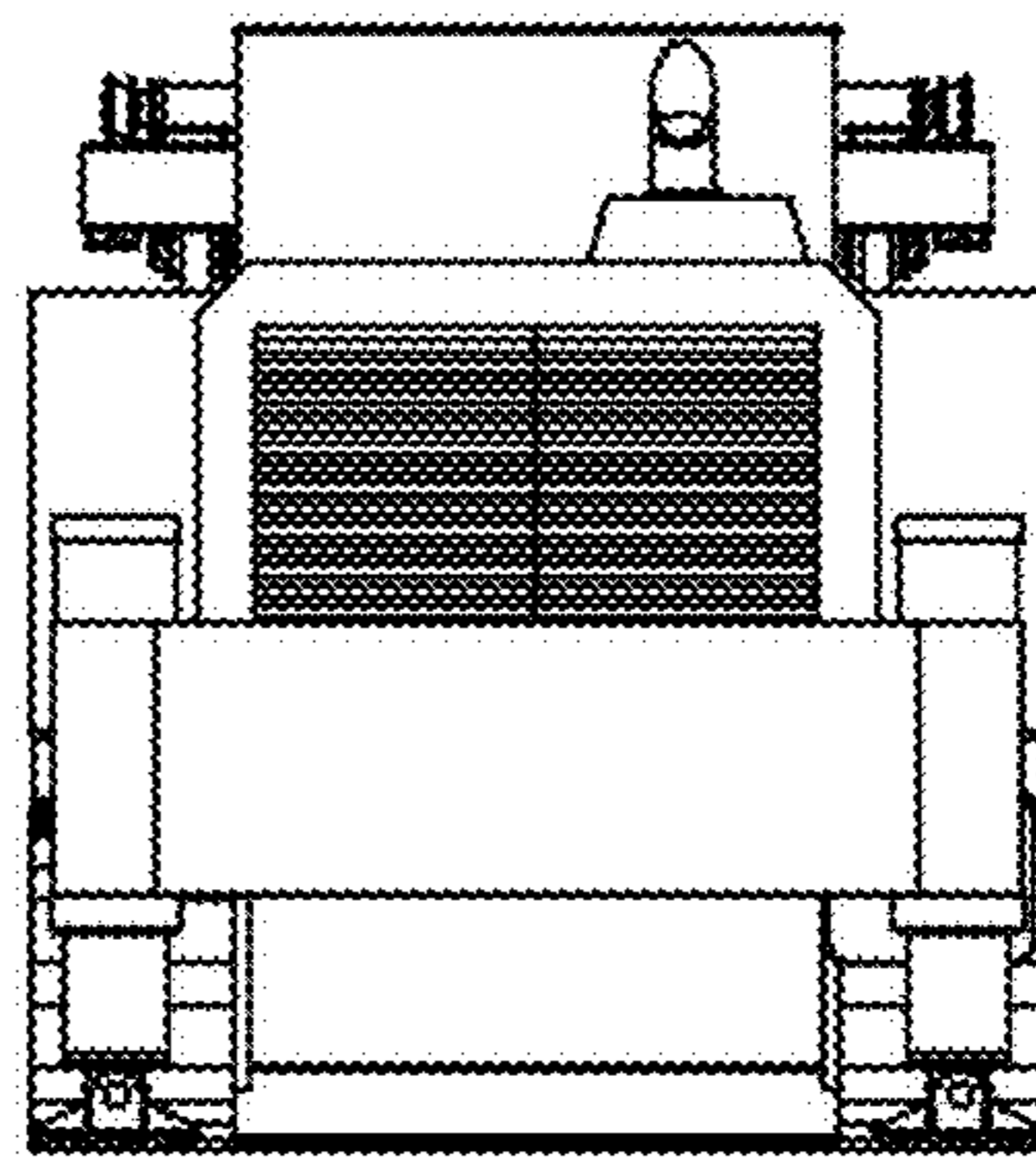
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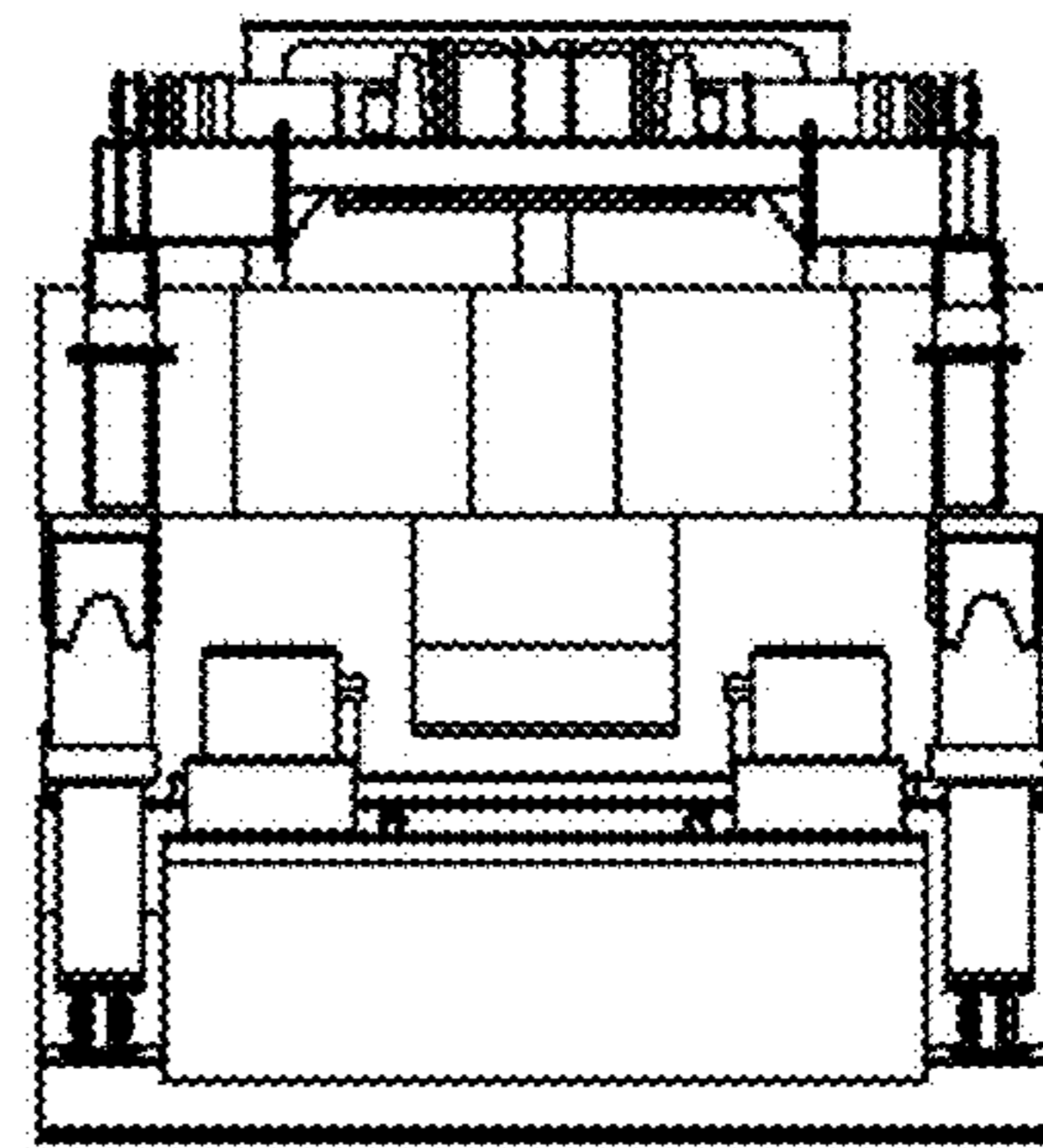
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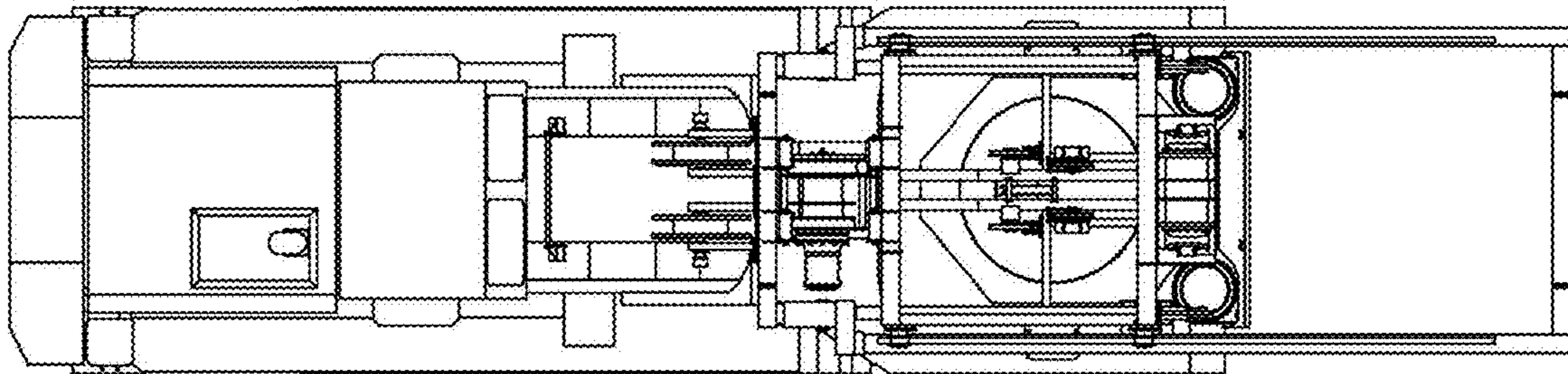
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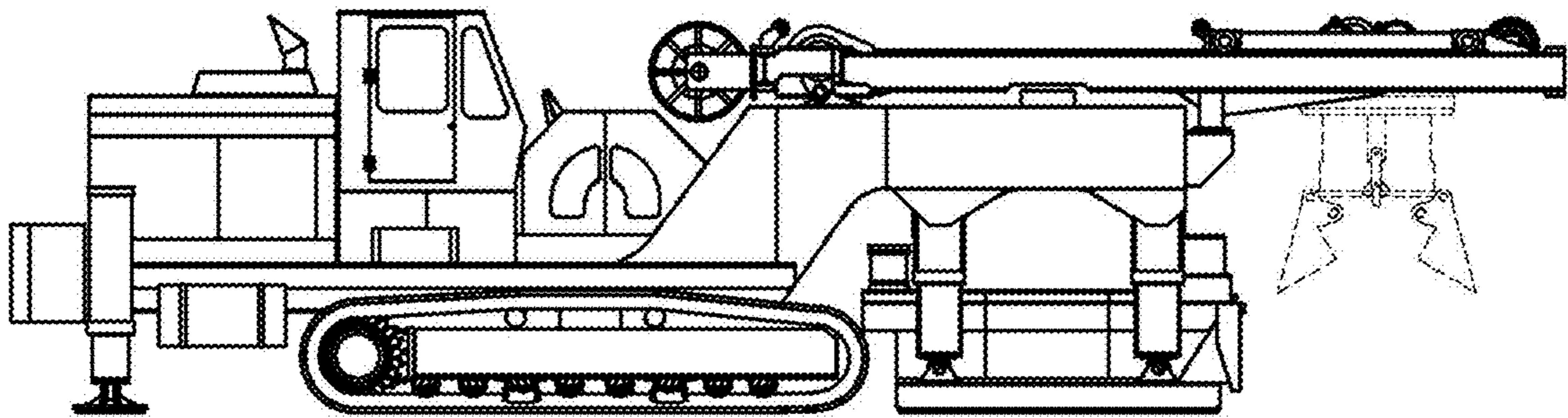
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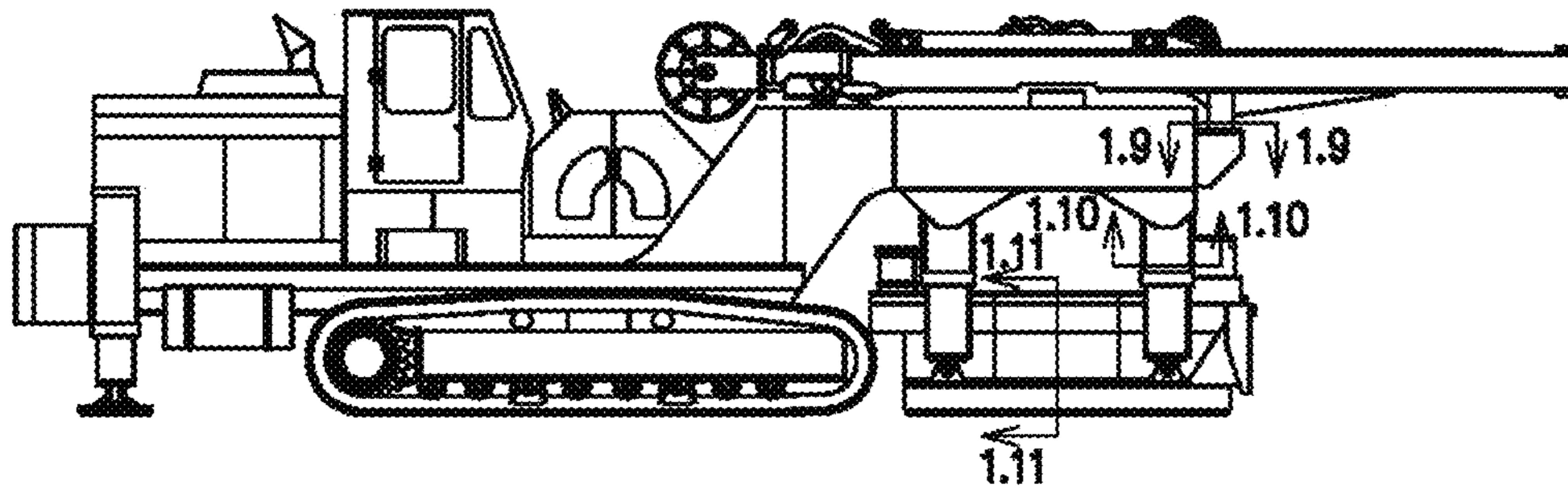
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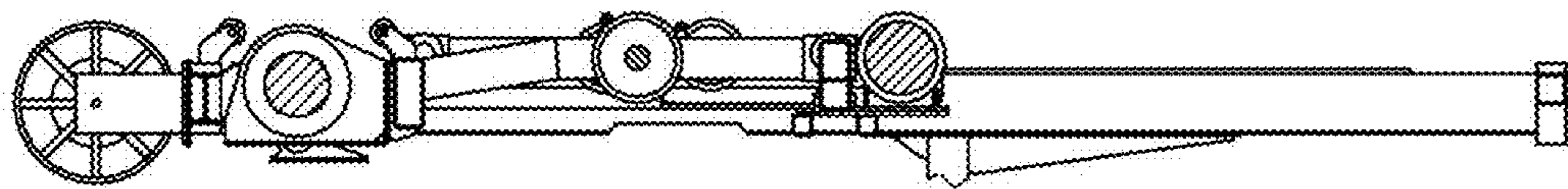
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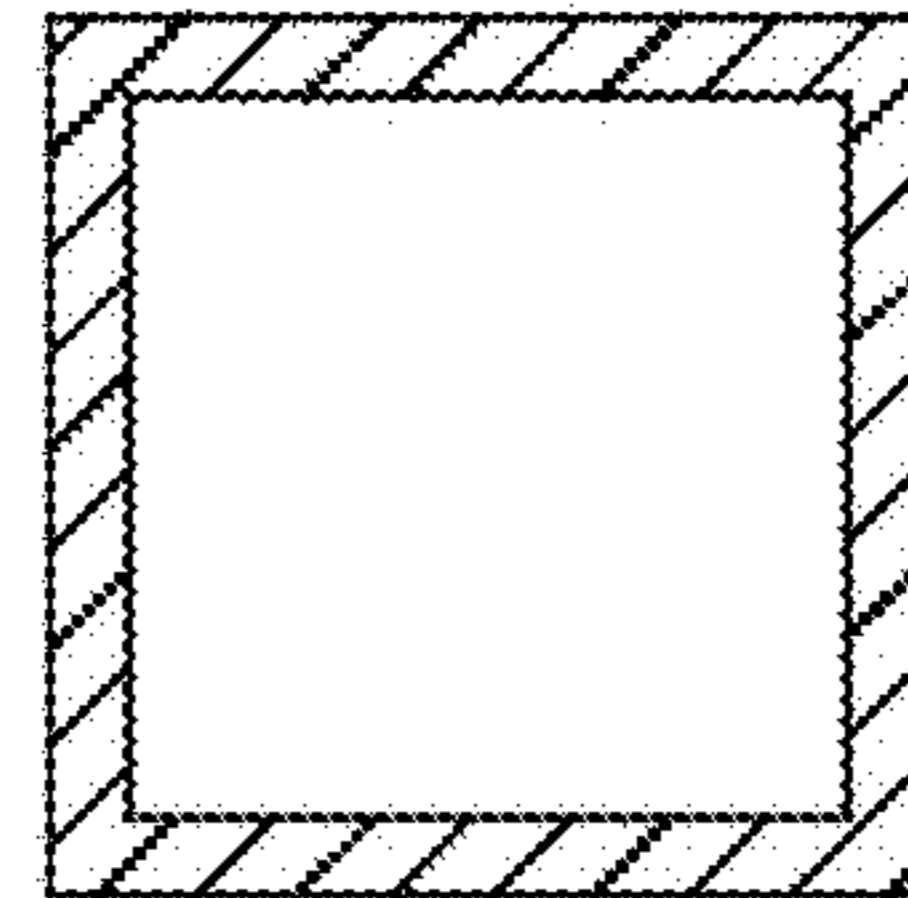
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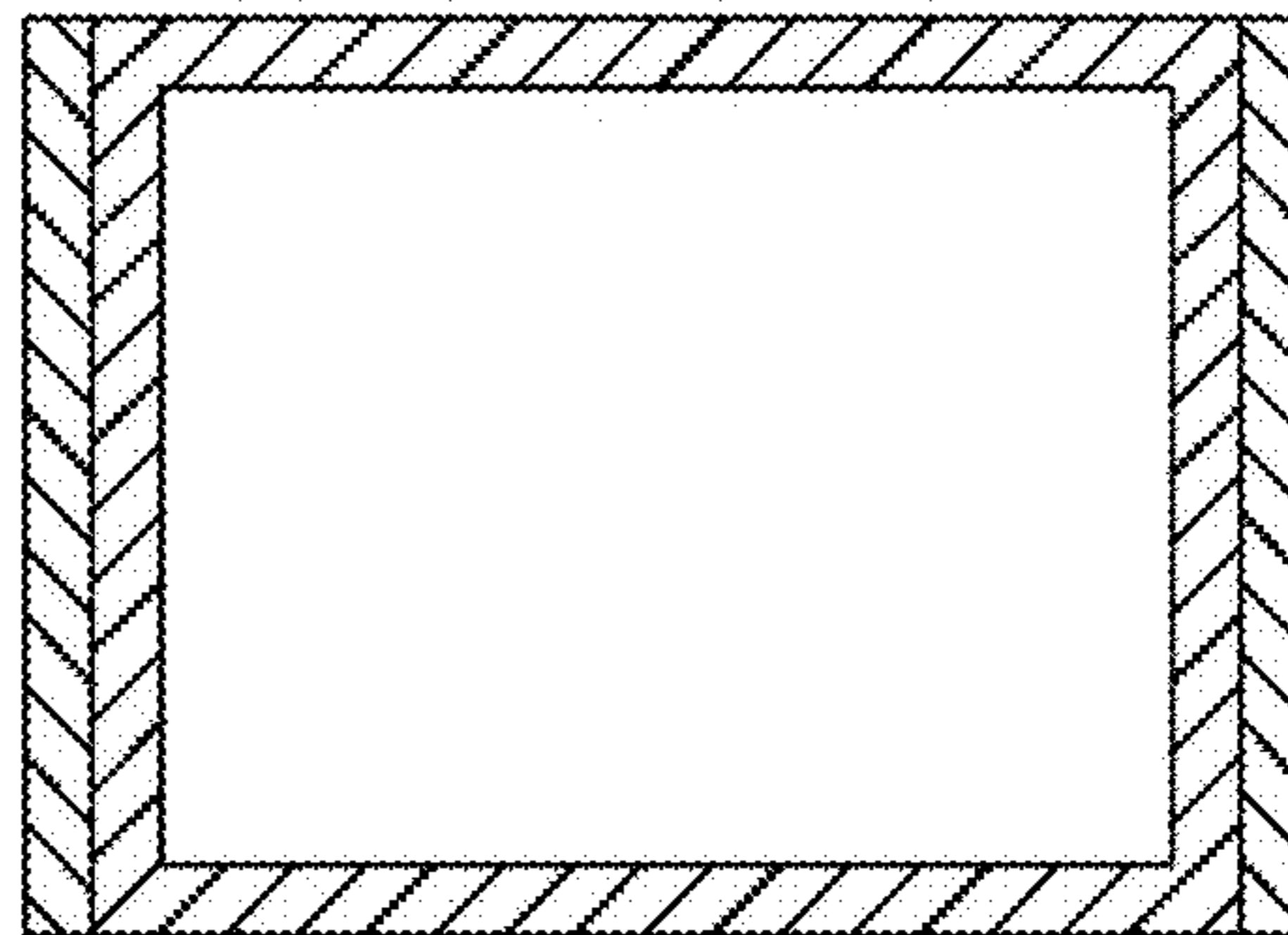
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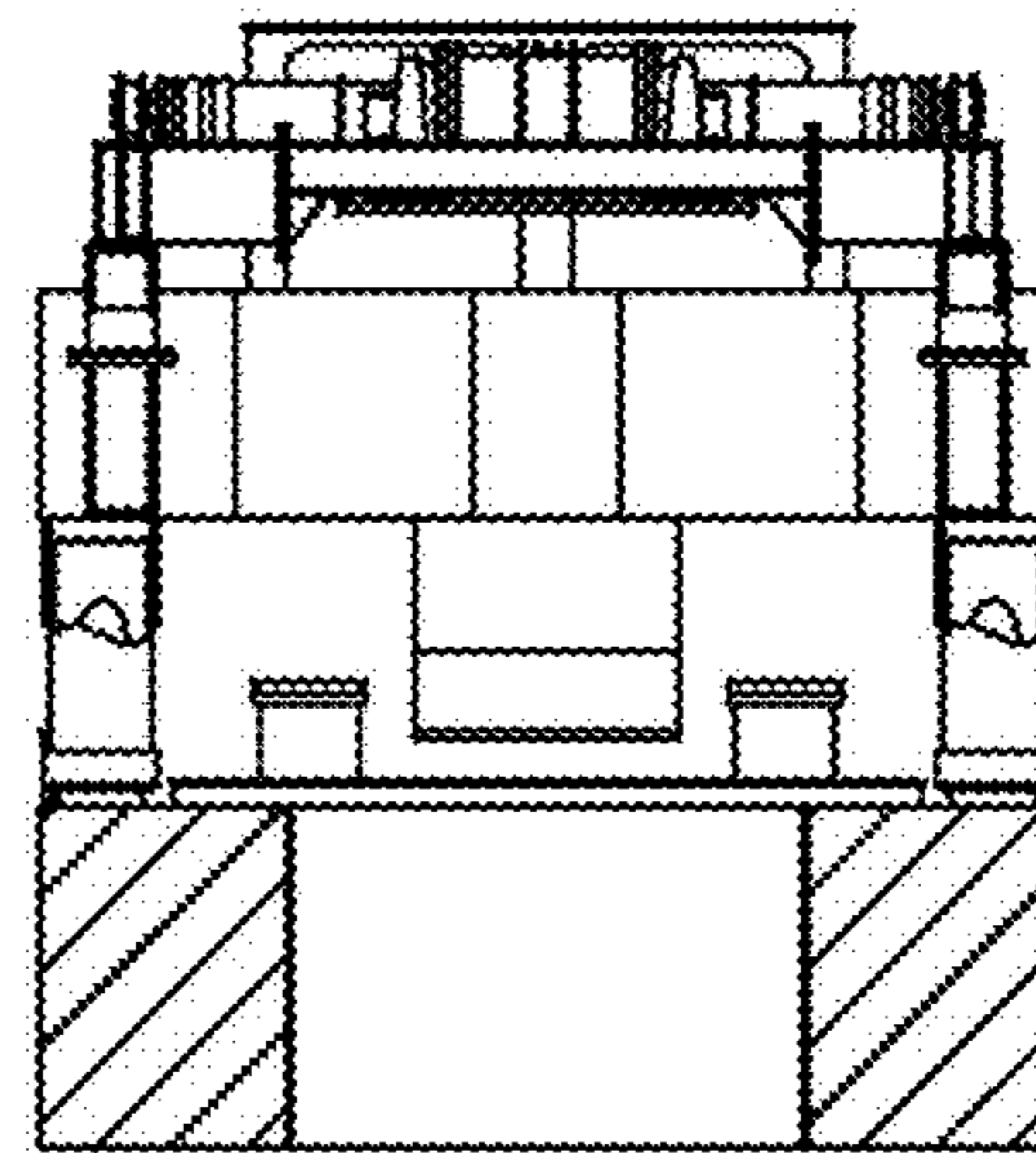
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1.10



1.11



1.12

