



US00D941885S

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

(10) **Patent No.:** **US D941,885 S**
(45) **Date of Patent:** **** Jan. 25, 2022**

(54) **EXCAVATOR**

(71) Applicant: **Guangxi LiuGong Machinery Co., Ltd.**, Liuzhou Guangxi (CN)

(72) Inventors: **Gary Major**, Nantwich (GB); **Richard Killgren**, Nantwich (GB); **James Holmes**, Coventry (GB)

(73) Assignee: **Guangxi LiuGong Machinery Co., Ltd.**, Guangxi (CN)

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

(21) Appl. No.: **29/709,786**

(22) Filed: **Oct. 17, 2019**

(51) **LOC (13) Cl.** **12-09**

(52) **U.S. Cl.**
USPC **D15/22; D15/25**

(58) **Field of Classification Search**
USPC D15/10, 22–26, 28, 30
CPC E02F 3/32; E02F 3/76; E02F 3/40; E02F 3/325; E02F 3/352; E02F 3/384; E02F 3/425; E02F 3/437; E02F 3/627; E02F 3/964; E02F 9/163; E02F 9/0858; E02F 9/0875; E02F 9/2045; E02F 9/006; E02F 9/0808; E02F 9/0833; E02F 9/2004; E02F 9/207; E02F 9/2091; E02F 9/2246; E02F 9/2292; E02F 9/0086; E02F 9/18; F01N 13/001; F01N 2590/08

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D406,152 S *	2/1999	Miyaoka	.....	D15/25
D437,602 S *	2/2001	Hiraoka	.....	D15/25
D460,975 S *	7/2002	Yanagida	.....	D15/25
D534,552 S *	1/2007	Yanagida	.....	D15/25
D658,211 S *	4/2012	Hiraoka	.....	D15/25
D663,324 S *	7/2012	Fuchita	.....	D15/25

D663,751 S *	7/2012	Yogita	.....	D15/25
D677,703 S *	3/2013	Hiraoka	.....	D15/25
D678,354 S *	3/2013	Hiraoka	.....	D15/25
D682,322 S *	5/2013	Suzuki	.....	D15/25
D684,598 S *	6/2013	Hagura	.....	D15/24
D692,924 S *	11/2013	Hatanaka	.....	D15/24
D695,791 S *	12/2013	Hagura	.....	D15/25
D711,927 S *	8/2014	Yoshita	.....	D15/24
D716,845 S *	11/2014	Hayami	.....	D15/25
D798,340 S *	9/2017	Hagura	.....	D15/22
D842,344 S *	3/2019	Okuyama	.....	D15/23
D851,135 S *	6/2019	Jilbert	.....	D15/25
D854,054 S *	7/2019	Hirasawa	.....	D15/22
D855,082 S *	7/2019	Okuyama	.....	D15/25
D870,159 S *	12/2019	Jilbert	.....	D15/22
D895,687 S *	9/2020	Phadatare	.....	D15/22

(Continued)

Primary Examiner — Mark A Goodwin

(74) *Attorney, Agent, or Firm* — Young Basile Hanlon & MacFarlane, P.C.

(57) **CLAIM**

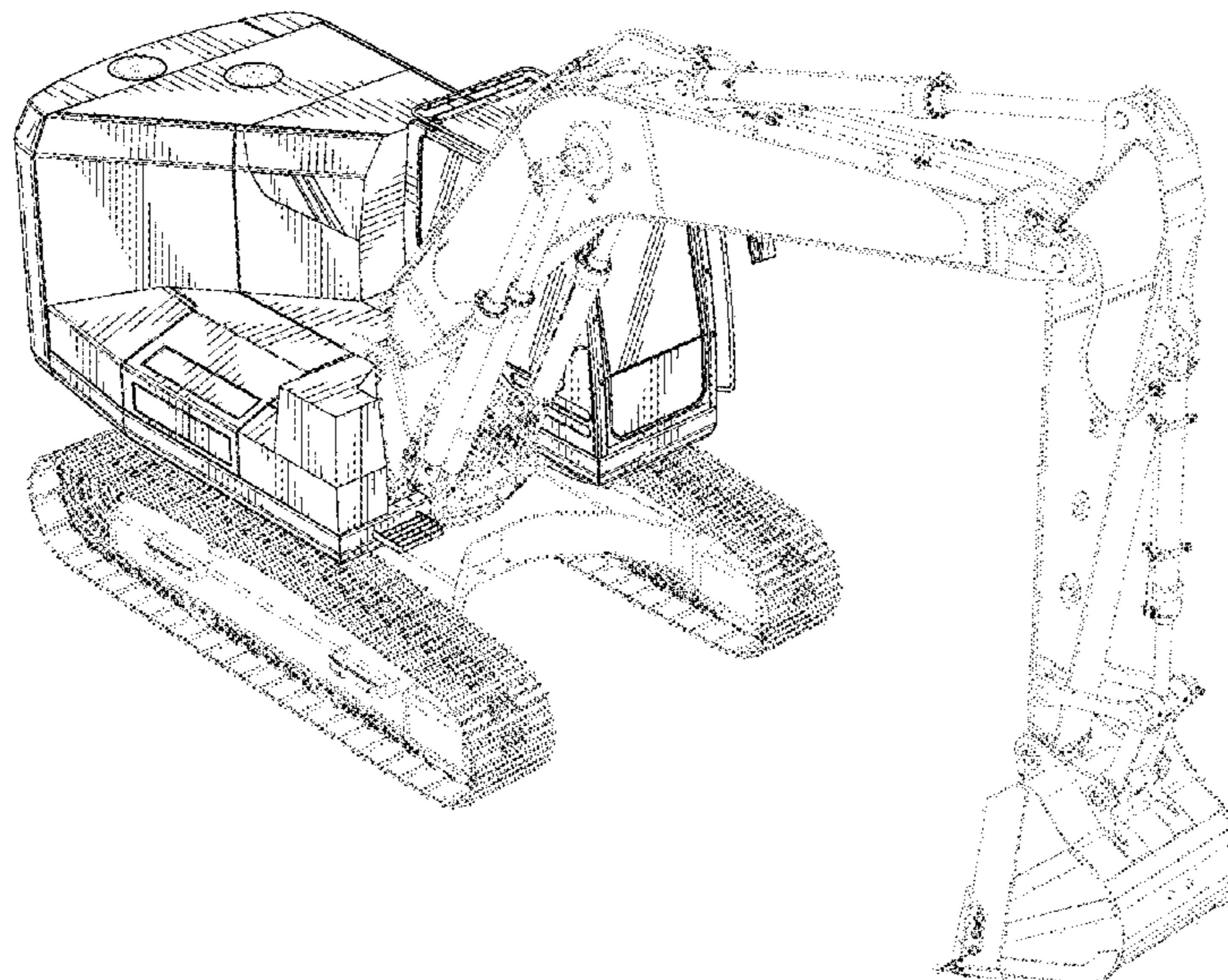
The ornamental design for an excavator, as shown and described.

DESCRIPTION

FIG. 1 is an upper, front, left perspective view of a first embodiment of an excavator of our new design; FIG. 2 is an upper, front, right perspective view thereof; FIG. 3 is an upper, rear, right perspective view thereof; FIG. 4 is an upper, rear, left perspective view thereof; FIG. 5 is a left view thereof; FIG. 6 is a right view thereof; FIG. 7 is a front view thereof; FIG. 8 is a rear view thereof; FIG. 9 is a top view thereof; and, FIG. 10 is a bottom view thereof.

The broken lines in the drawings represent unclaimed portions of the excavator and form no part of the claimed design.

1 Claim, 10 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D896,852 S	*	9/2020	Major	D15/30
D901,553 S	*	11/2020	Major	D15/30
D905,762 S	*	12/2020	Phadatare	D15/22
D915,470 S	*	4/2021	Ninomiya	D15/25
D923,666 S	*	6/2021	Ishii	D15/22

* cited by examiner

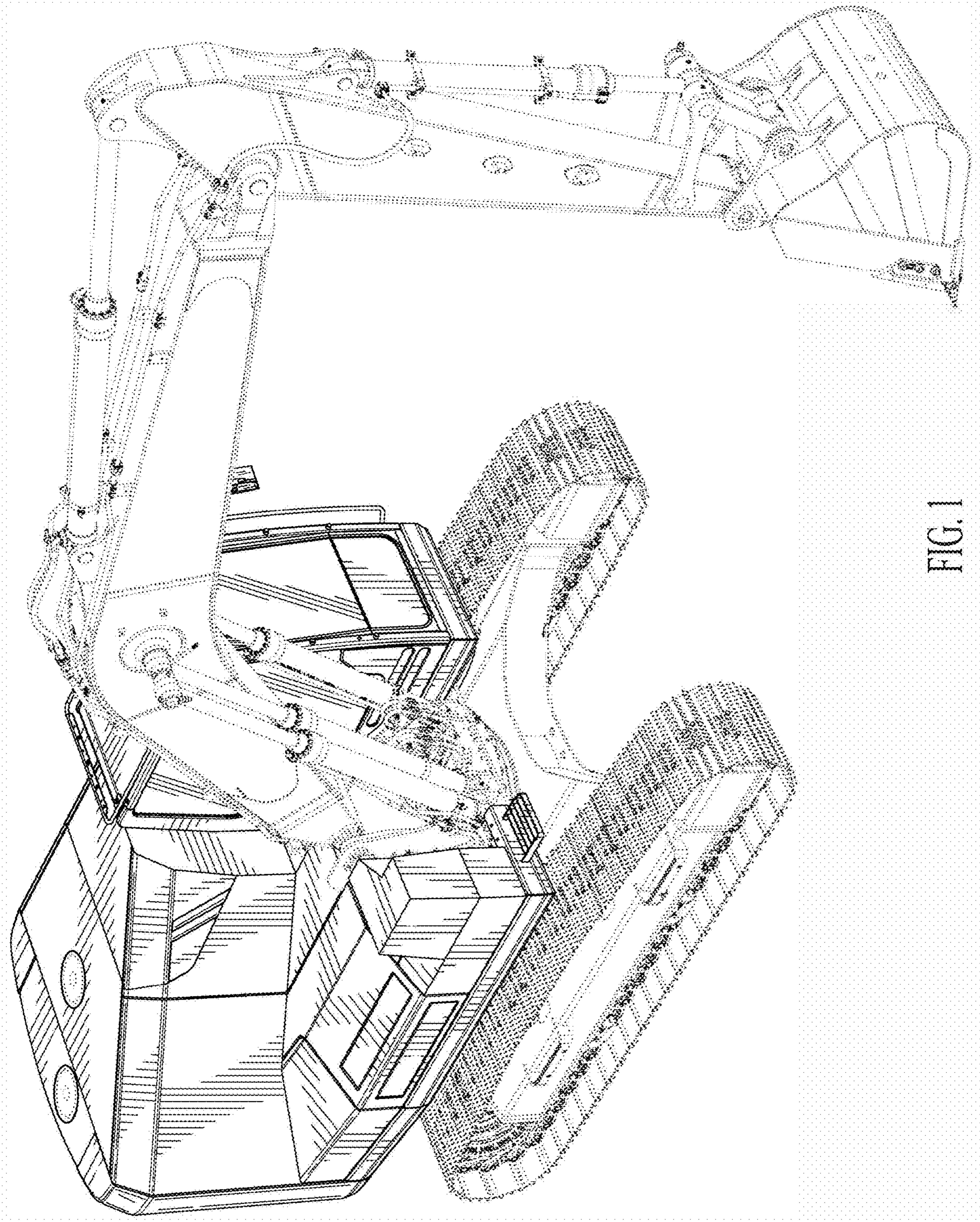


FIG. 1

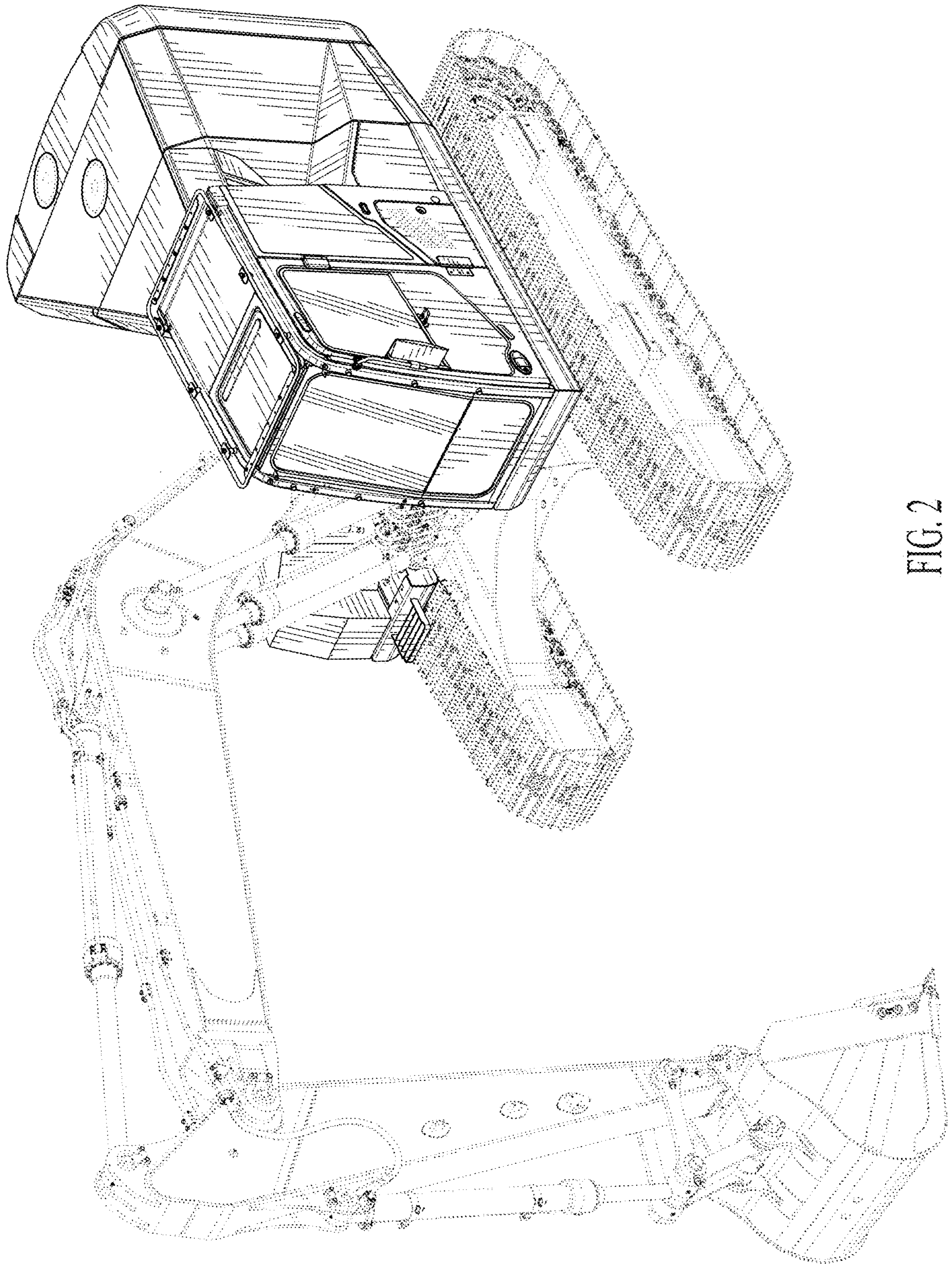


FIG. 2

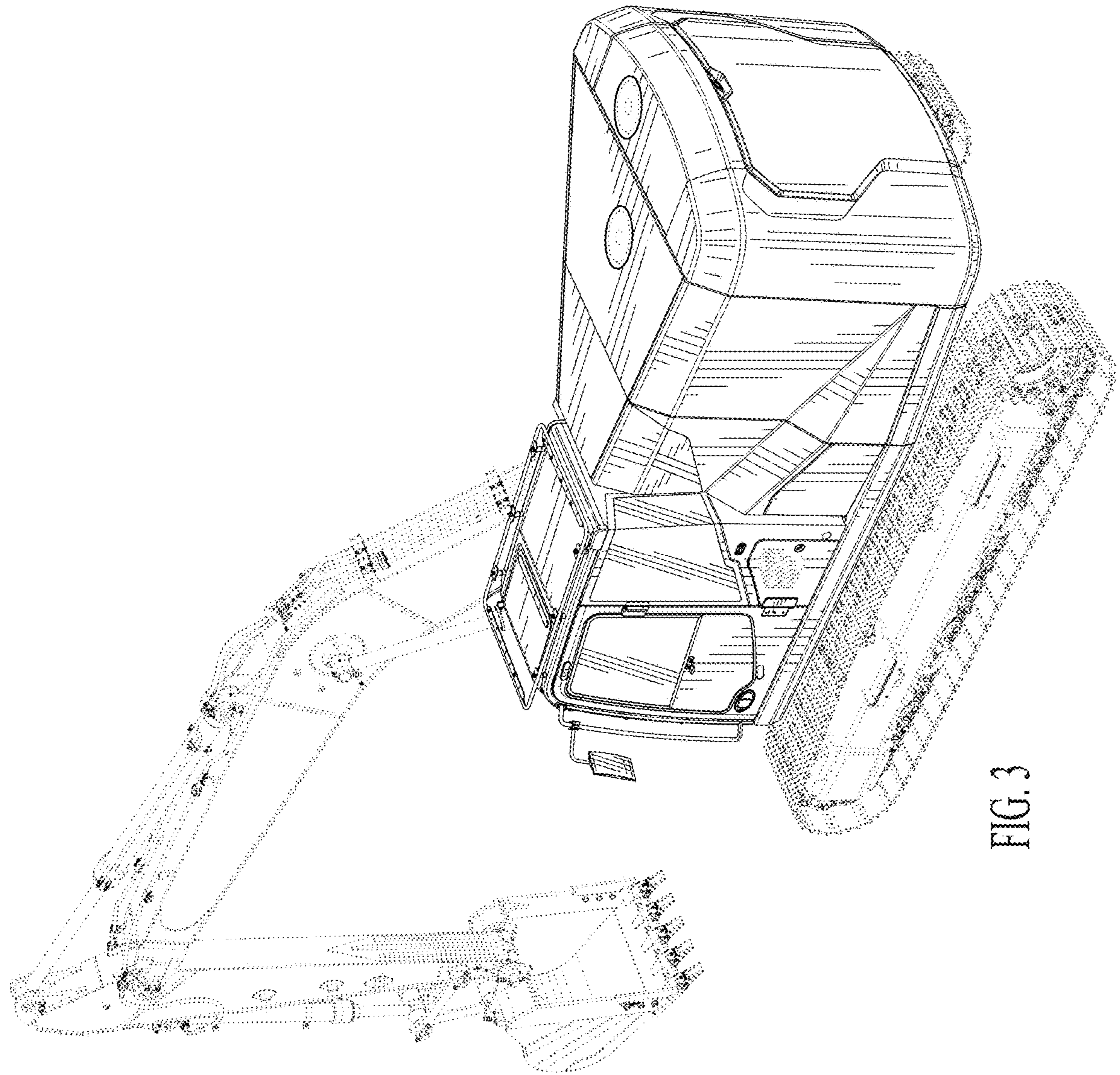
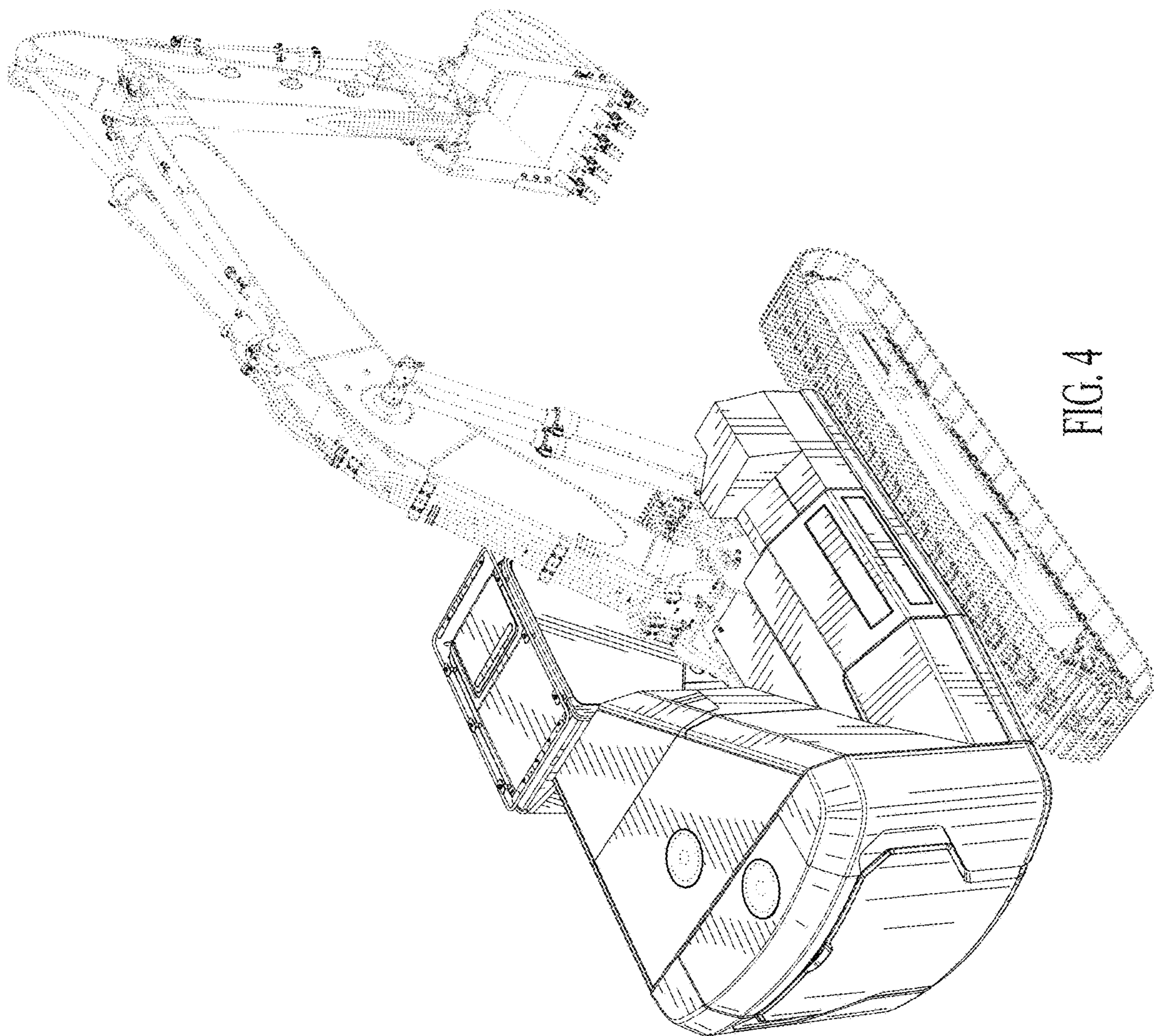


FIG. 3



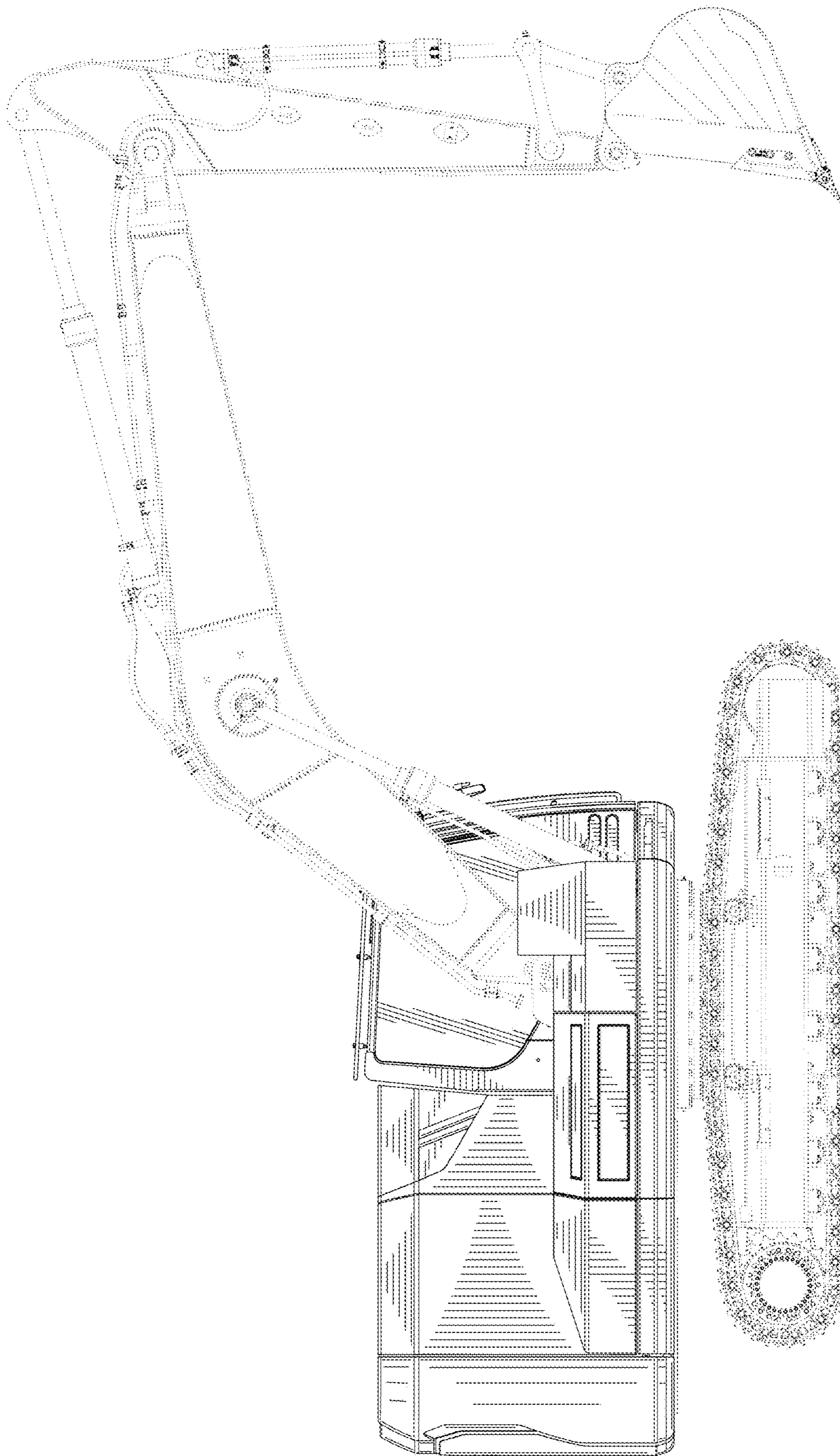


FIG. 5

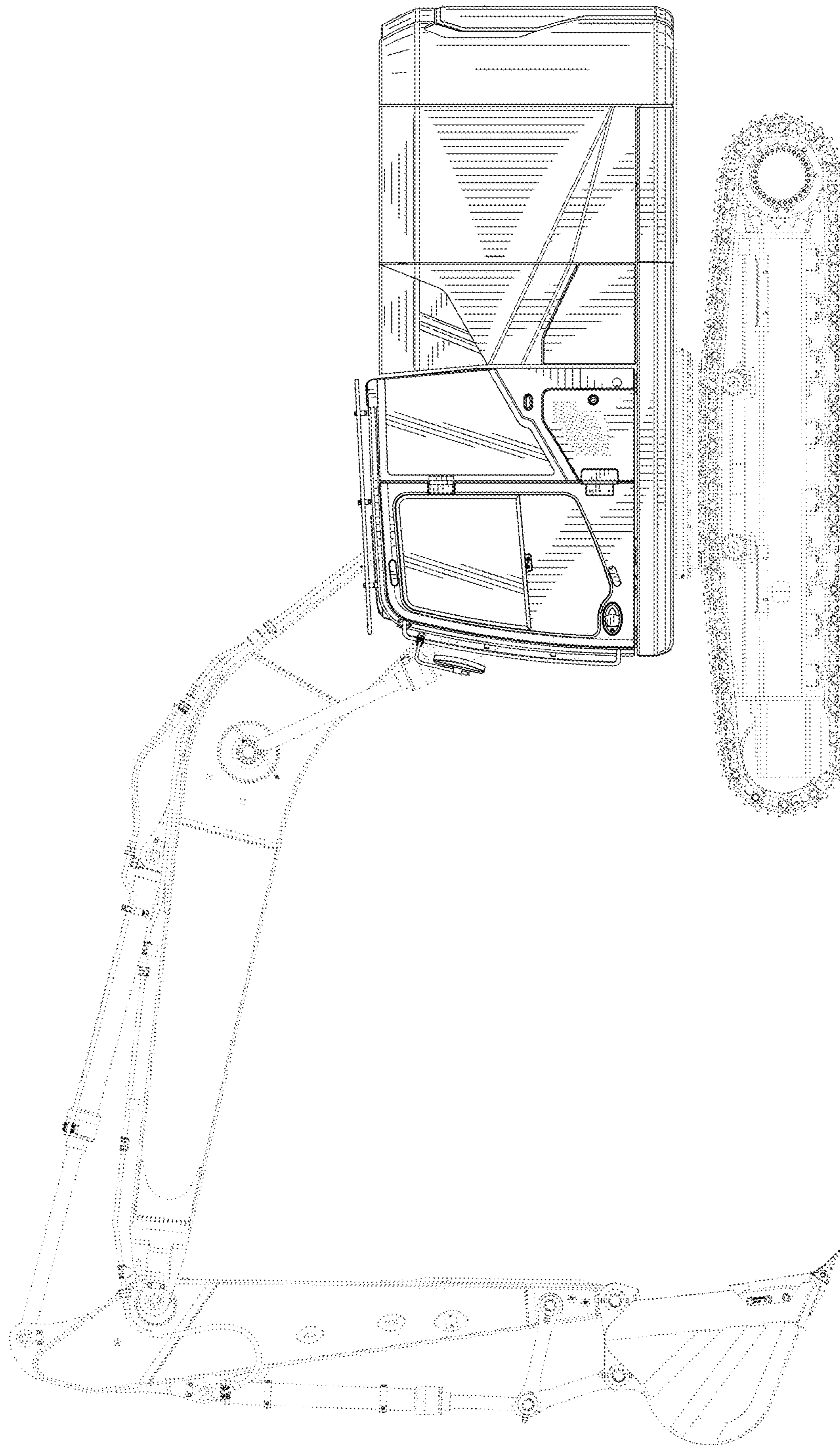


FIG. 6

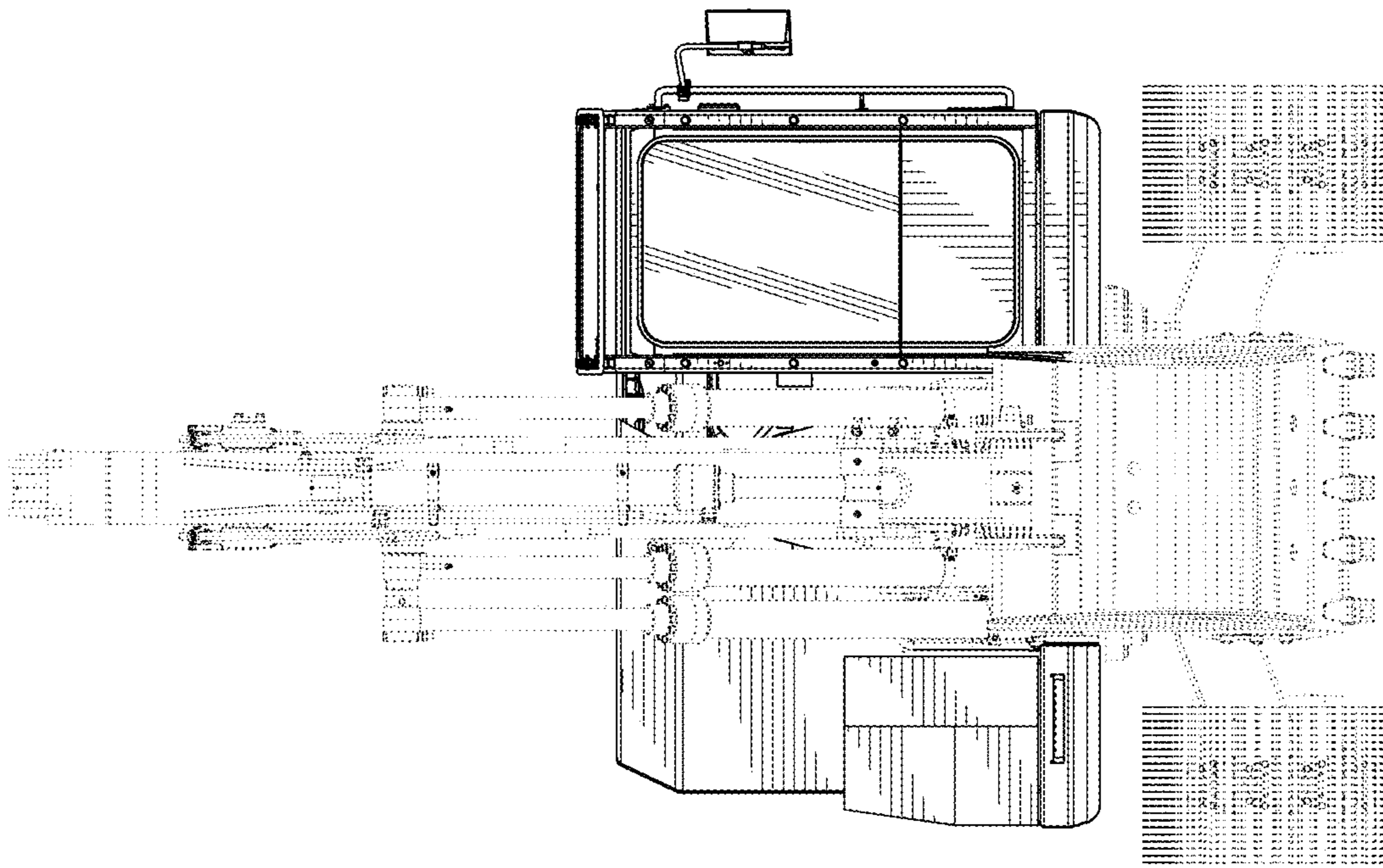


FIG. 7

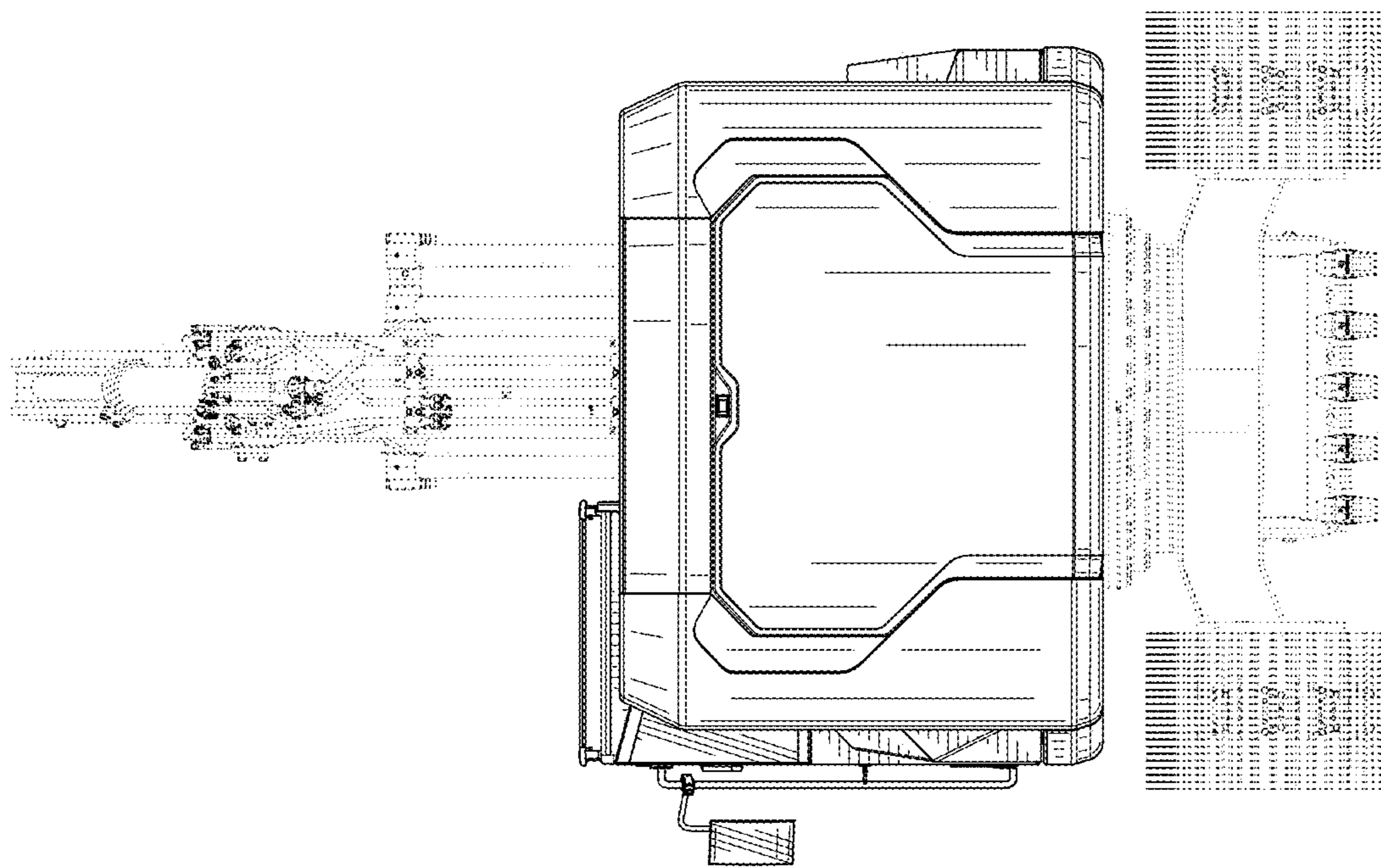


FIG. 8

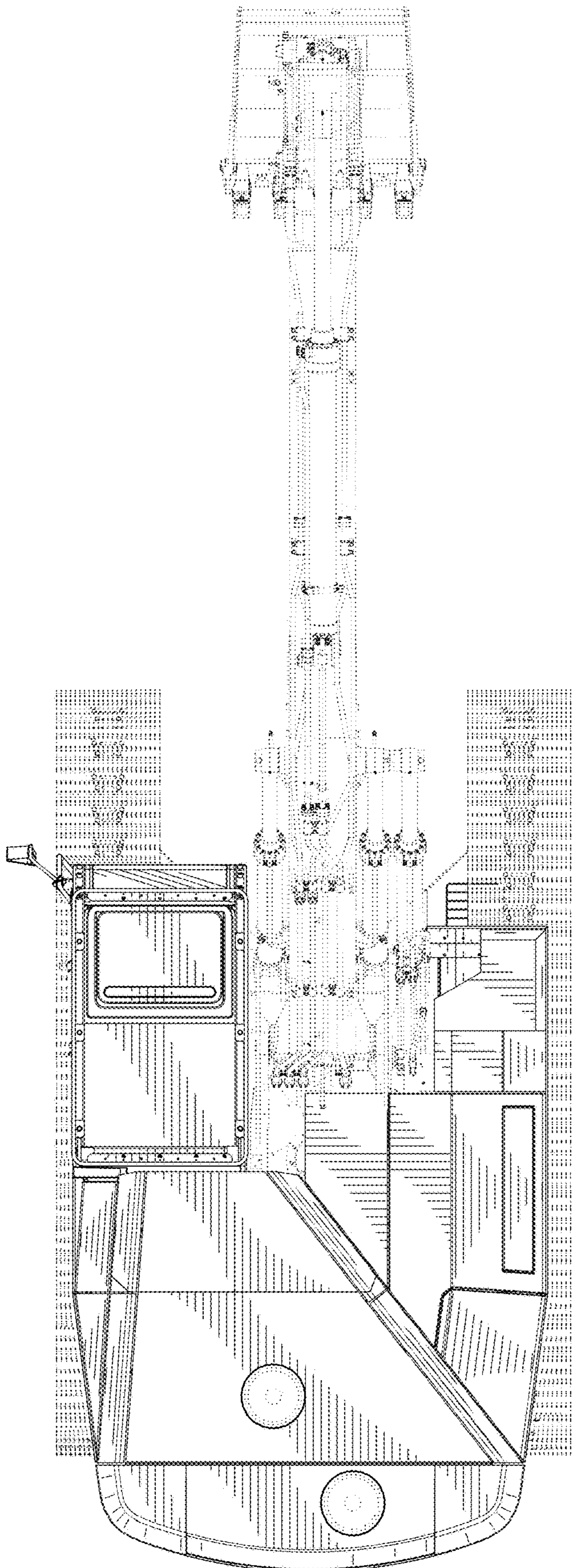


FIG. 9

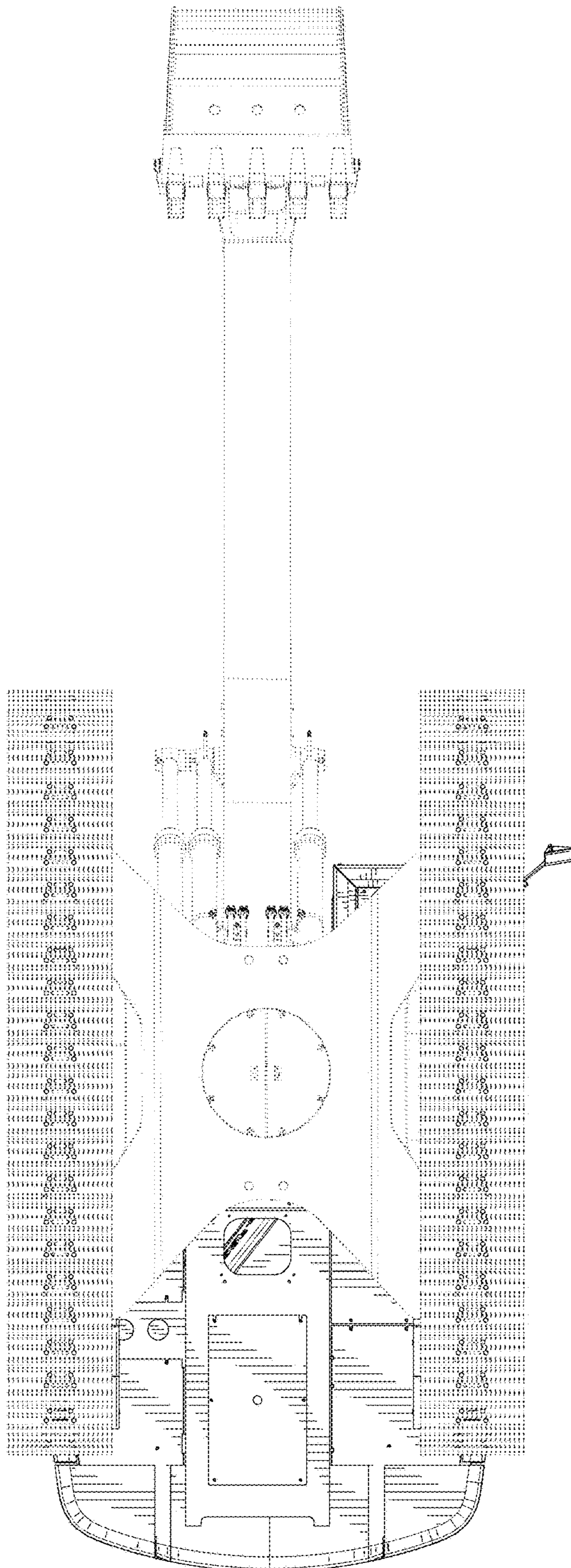


FIG. 10