



US00D752112S

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

(10) **Patent No.:** **US D752,112 S**
(45) **Date of Patent:** **** Mar. 22, 2016**

(54) **EXCAVATOR**

(71) Applicant: **Hitachi Construction Machinery Co., Ltd.**, Tokyo (JP)

(72) Inventors: **Shigehisa Hagura**, Tokyo (JP); **Tomoyuki Miyata**, Tokyo (JP); **Kazuhiko Hiraoka**, Tokyo (JP); **Hiroshi Tabeta**, Tsuchiura (JP); **Keiji Ahiko**, Tsuchiura (JP); **Junya Kawamoto**, Tsuchiura (JP); **Tomoyuki Tanaka**, Tsuchiura (JP)

(73) Assignee: **Hitachi Construction Machinery Co., Ltd.**, Tokyo (JP)

(**) Term: **14 Years**

(21) Appl. No.: **29/508,528**

(22) Filed: **Nov. 7, 2014**

(30) **Foreign Application Priority Data**

May 8, 2014 (JP) 2014-009907

(51) **LOC (10) Cl.** **15-04**

(52) **U.S. Cl.**
USPC **D15/24; D15/25**

(58) **Field of Classification Search**
USPC D15/10, 22-26, 28, 30
CPC E02F 3/32; E02F 9/163; E02F 3/76; E02F 3/40
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,728,251	A *	3/1988	Takashima et al.	.....	414/694
D406,152	S *	2/1999	Miyaoka et al.	.....	D15/25
D409,629	S *	5/1999	Miyaoka et al.	.....	D15/25
D474,481	S *	5/2003	Hara	.....	D15/25
D518,071	S *	3/2006	Gwak et al.	.....	D15/25
D538,304	S *	3/2007	Uemura	.....	D15/25

D538,827	S *	3/2007	Uemura	.....	D15/25
D561,785	S *	2/2008	Imashige et al.	.....	D15/24
D576,180	S *	9/2008	Kuwae et al.	.....	D15/25
D590,847	S *	4/2009	Yonekura et al.	.....	D15/25
D609,252	S *	2/2010	Shimada et al.	.....	D15/25
D633,926	S *	3/2011	Shimada et al.	.....	D15/25
D677,703	S *	3/2013	Hiraoka et al.	.....	D15/25
D681,066	S *	4/2013	Saito et al.	.....	D15/24
D681,689	S *	5/2013	Saito et al.	.....	D15/24
D682,887	S *	5/2013	Iwata	.....	D15/25
D682,891	S *	5/2013	Kinoshita	.....	D15/25
D684,598	S *	6/2013	Hagura et al.	.....	D15/24
D684,599	S *	6/2013	Saito et al.	.....	D15/24
D684,600	S *	6/2013	Saito et al.	.....	D15/24
D685,394	S *	7/2013	Nagata et al.	.....	D15/24
D687,865	S *	8/2013	Hatanaka et al.	.....	D15/24
D692,924	S *	11/2013	Hatanaka et al.	.....	D15/24
D695,791	S *	12/2013	Hagura et al.	.....	D15/25
D707,261	S *	6/2014	Caboret et al.	.....	D15/24
D711,927	S *	8/2014	Yoshita et al.	.....	D15/24
D716,844	S *	11/2014	Hayami et al.	.....	D15/25
D716,845	S *	11/2014	Hayami et al.	.....	D15/25
D725,680	S *	3/2015	Mishio et al.	.....	D15/24
2003/0079925	A1 *	5/2003	Shinohara et al.	.....	180/89.13
2004/0084934	A1 *	5/2004	Yokoo et al.	.....	296/190.01
2005/0210717	A1 *	9/2005	Ueda et al.	.....	37/443
2006/0000123	A1 *	1/2006	Chikaishi et al.	.....	37/379

* cited by examiner

Primary Examiner — Mitchell Siegel

(74) *Attorney, Agent, or Firm* — Crowell & Moring LLP

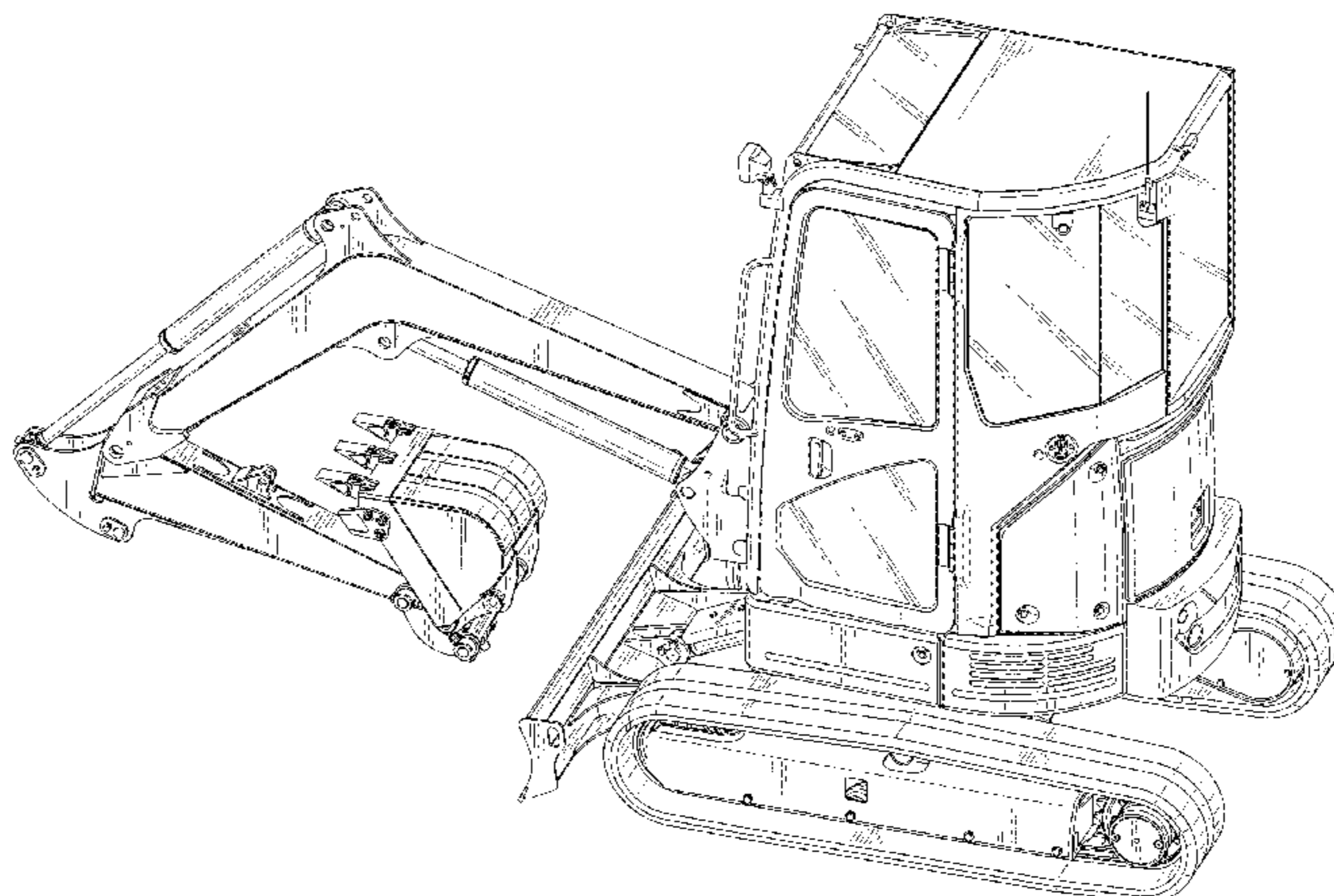
(57) **CLAIM**

We claim the ornamental design for an excavator, as shown.

DESCRIPTION

FIG. 1 is a front, top and right side perspective view of an excavator showing our/my new design;
FIG. 2 is a front elevational view thereof;
FIG. 3 is a rear elevational view thereof;
FIG. 4 is a left side elevational view thereof;
FIG. 5 is a right side elevational view thereof;
FIG. 6 is a top plan view thereof; and,
FIG. 7 is a bottom plan view thereof.

1 Claim, 6 Drawing Sheets



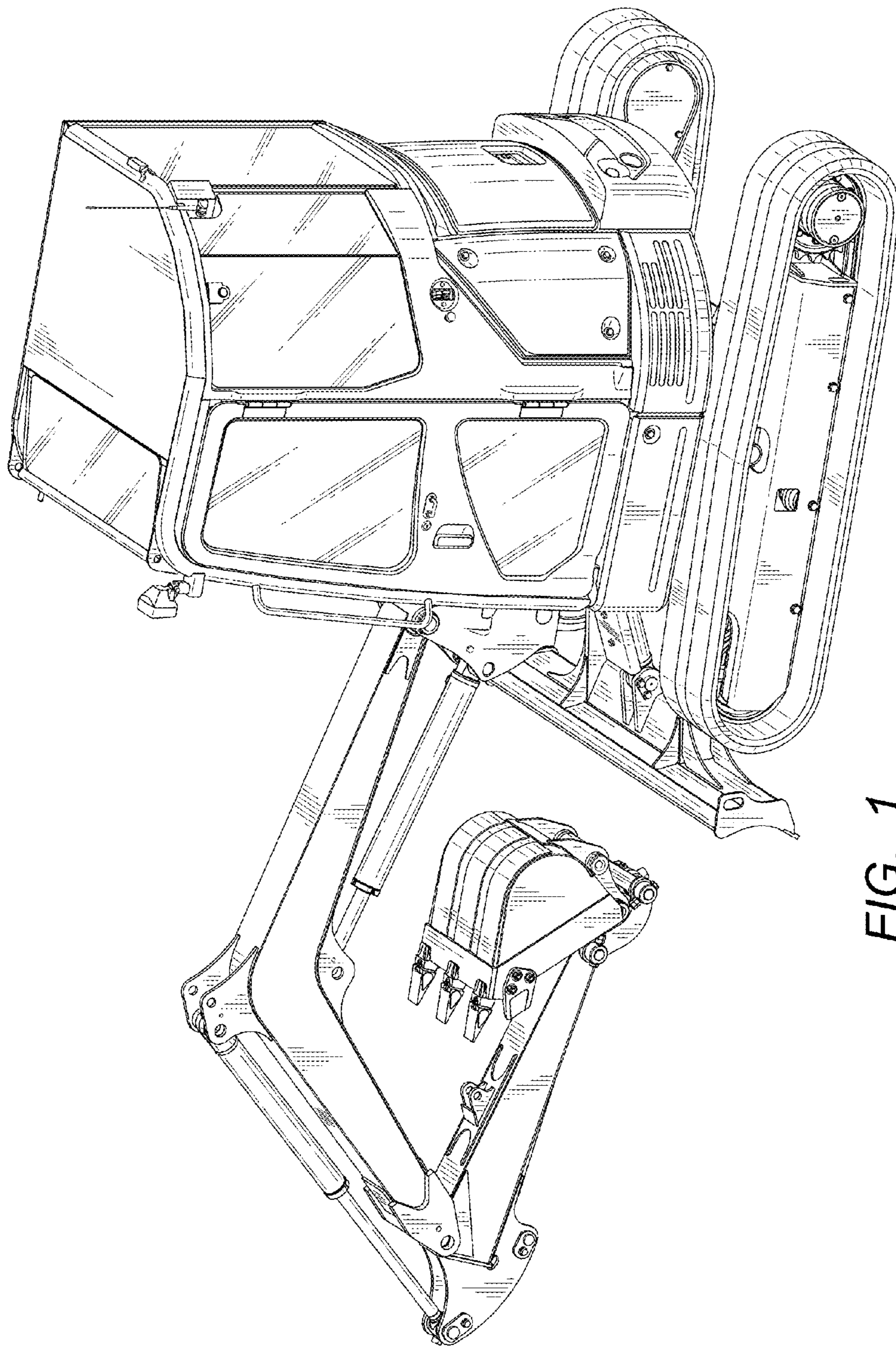


FIG. 1

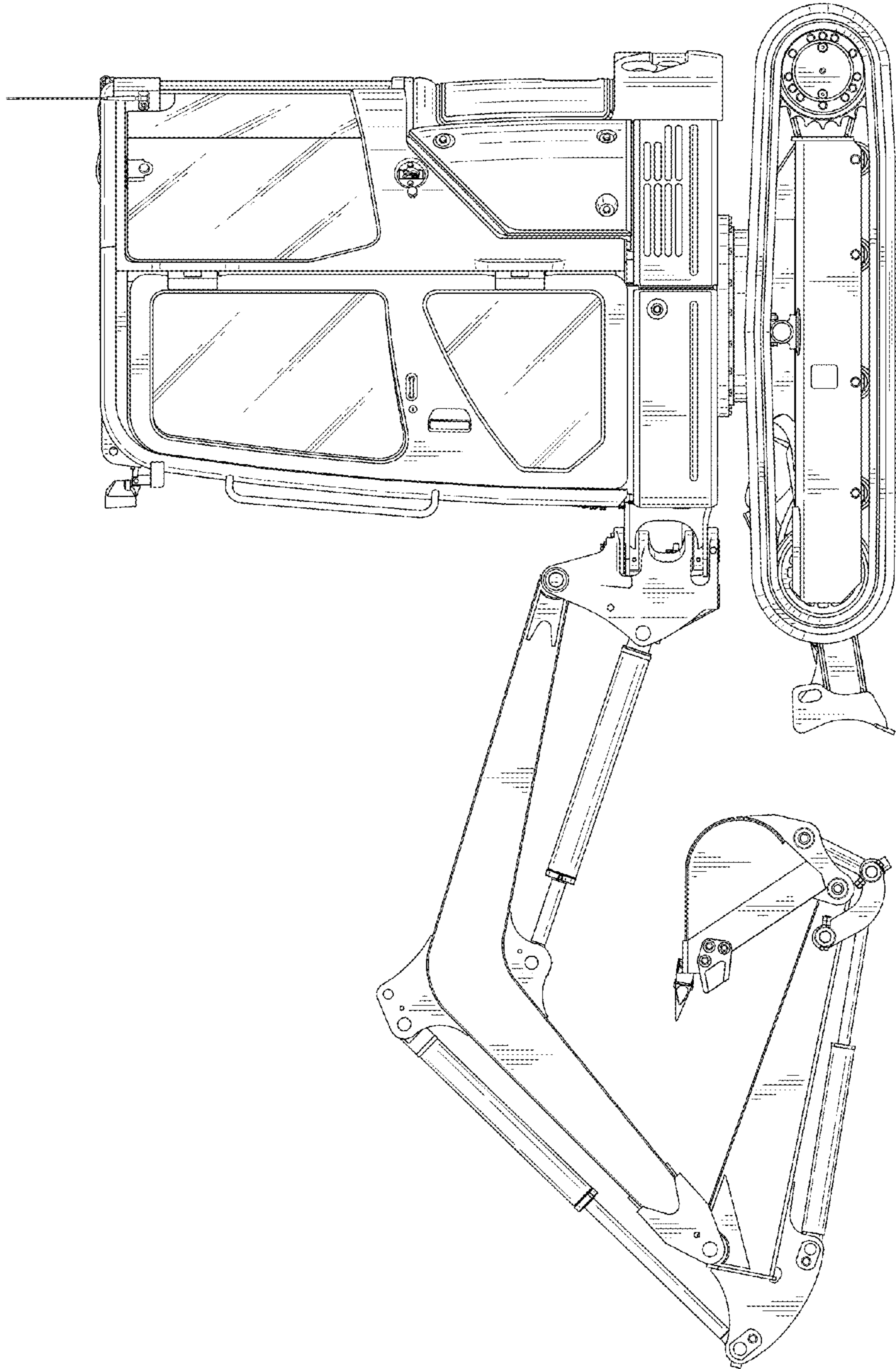


FIG. 2

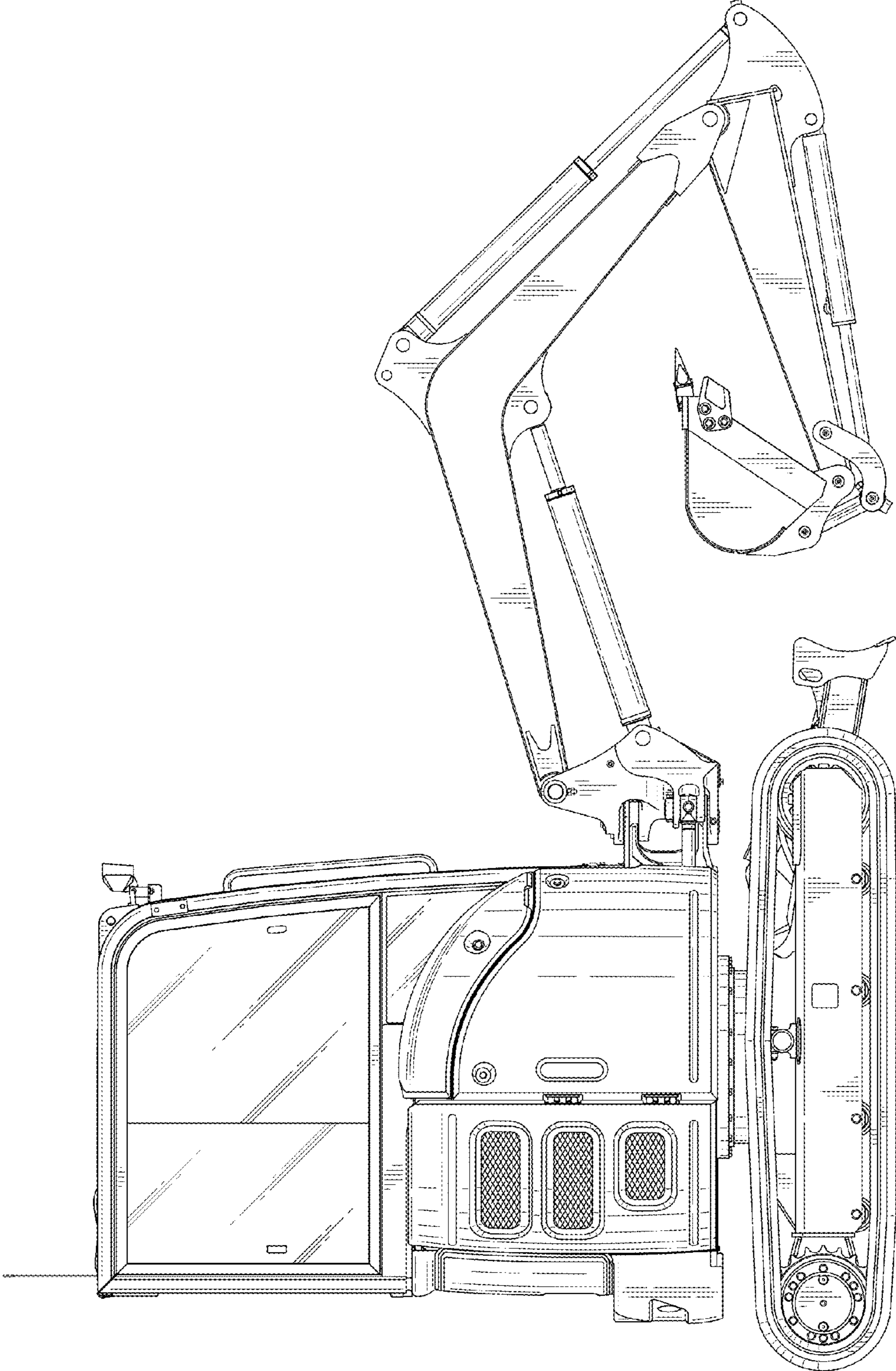


FIG. 3

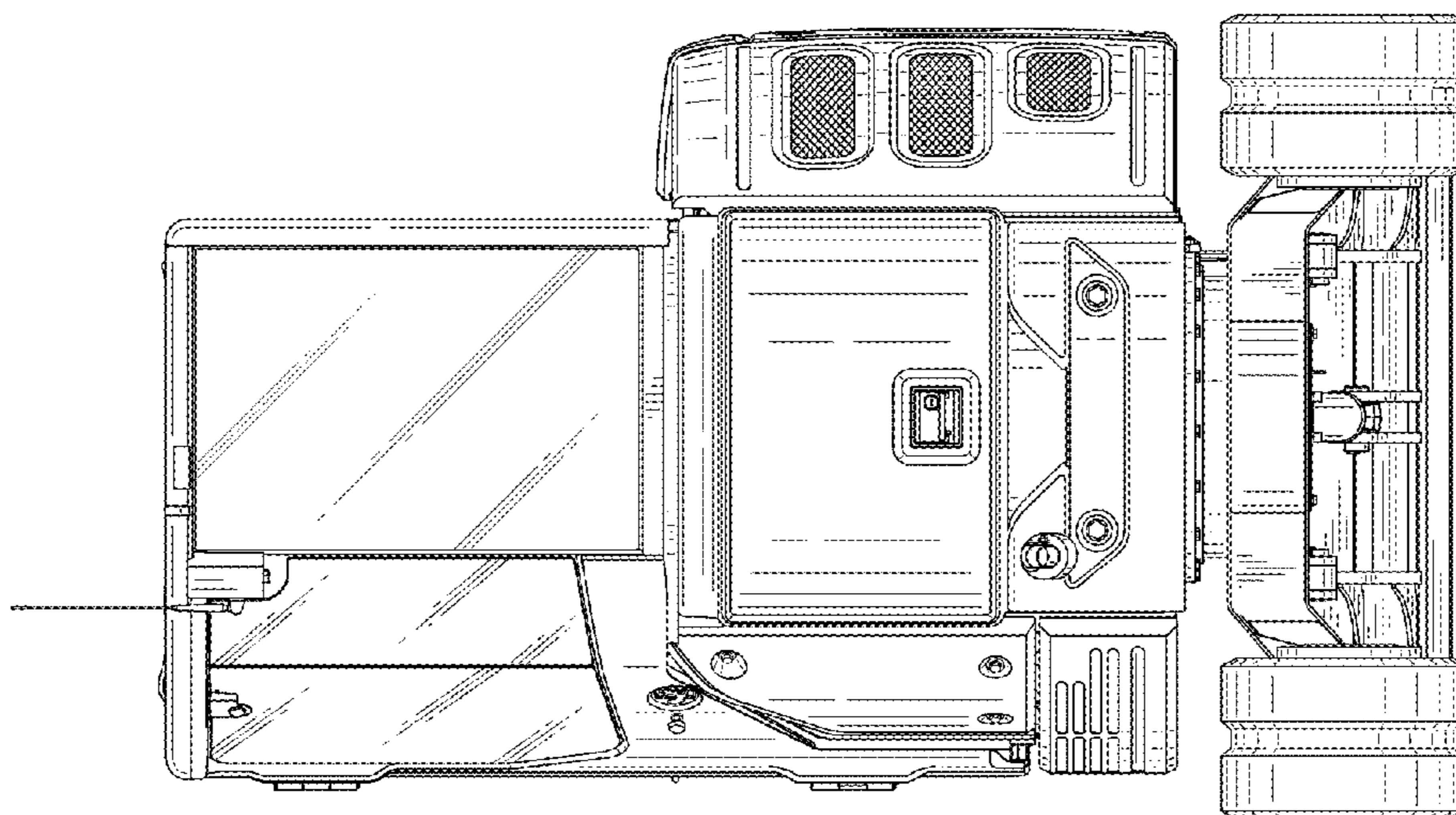


FIG. 5

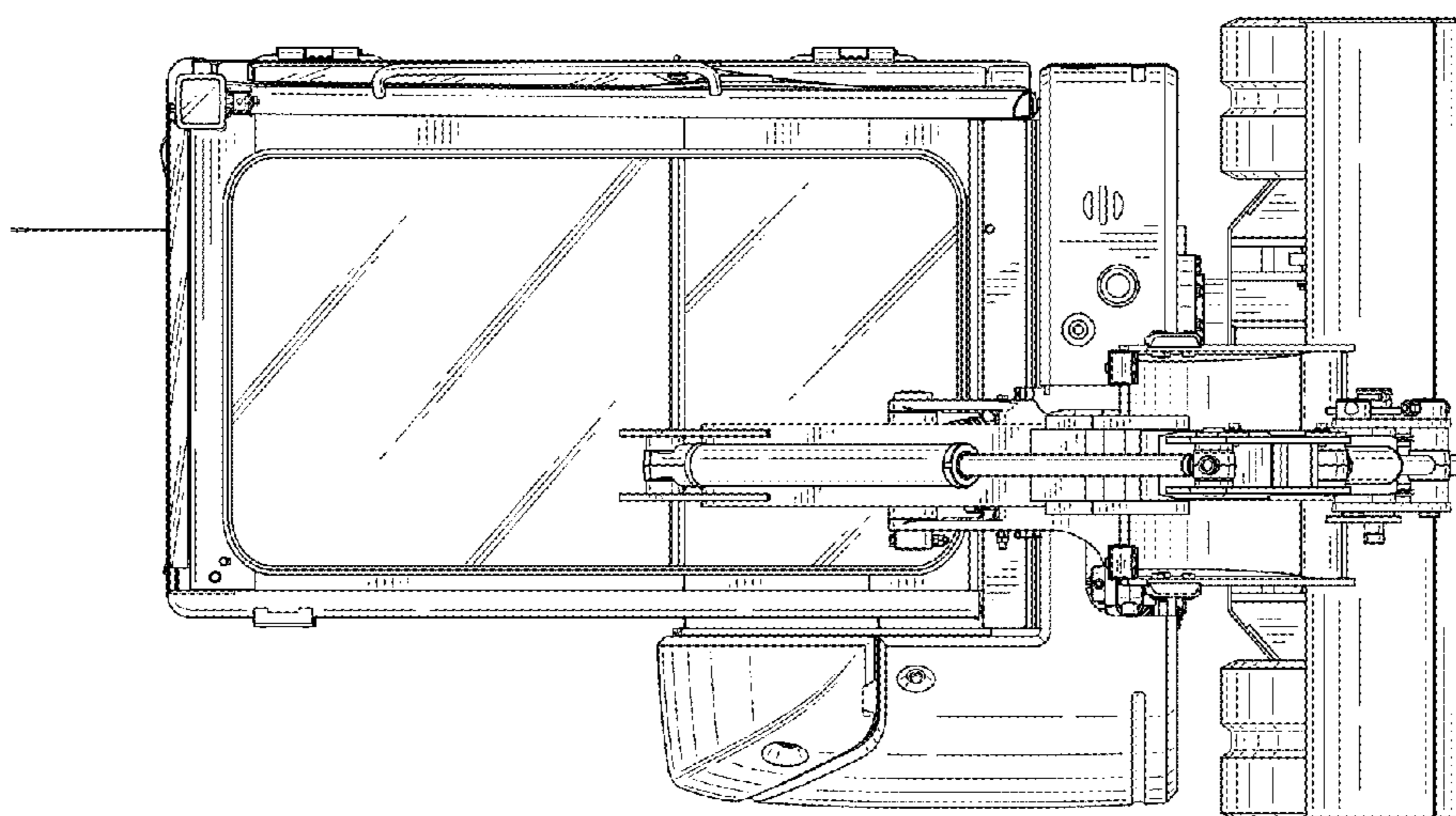


FIG. 4

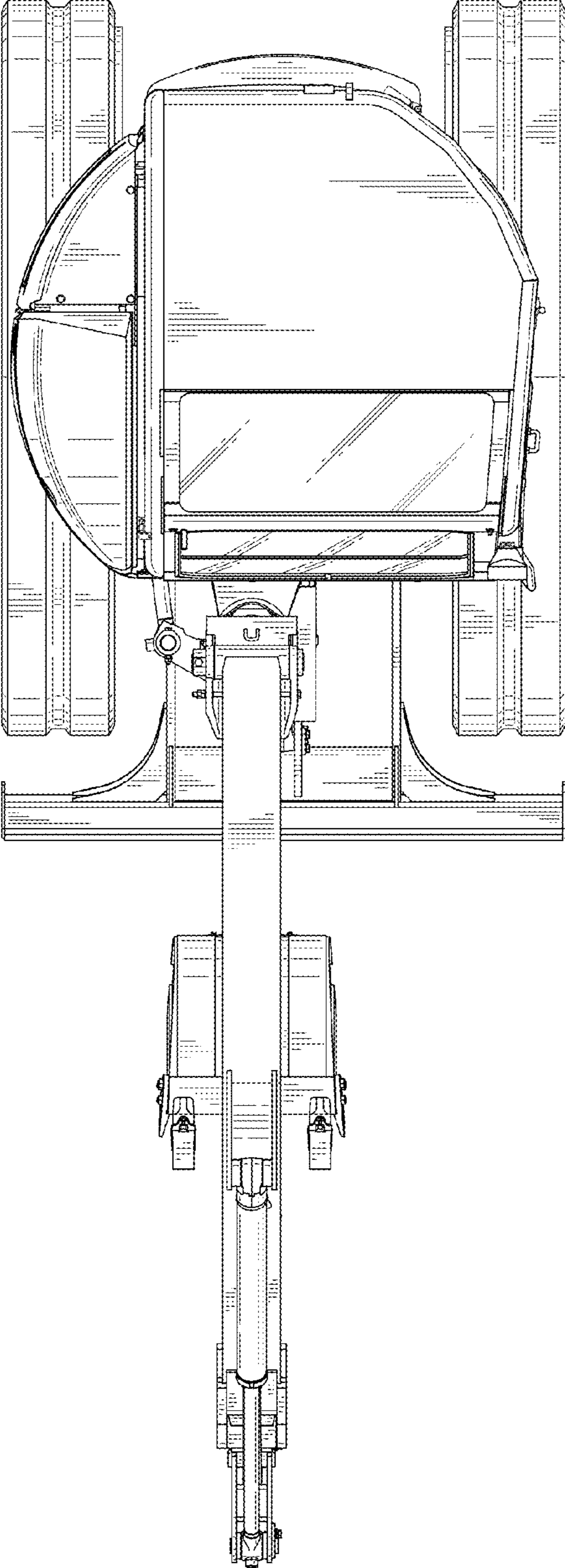


FIG. 6

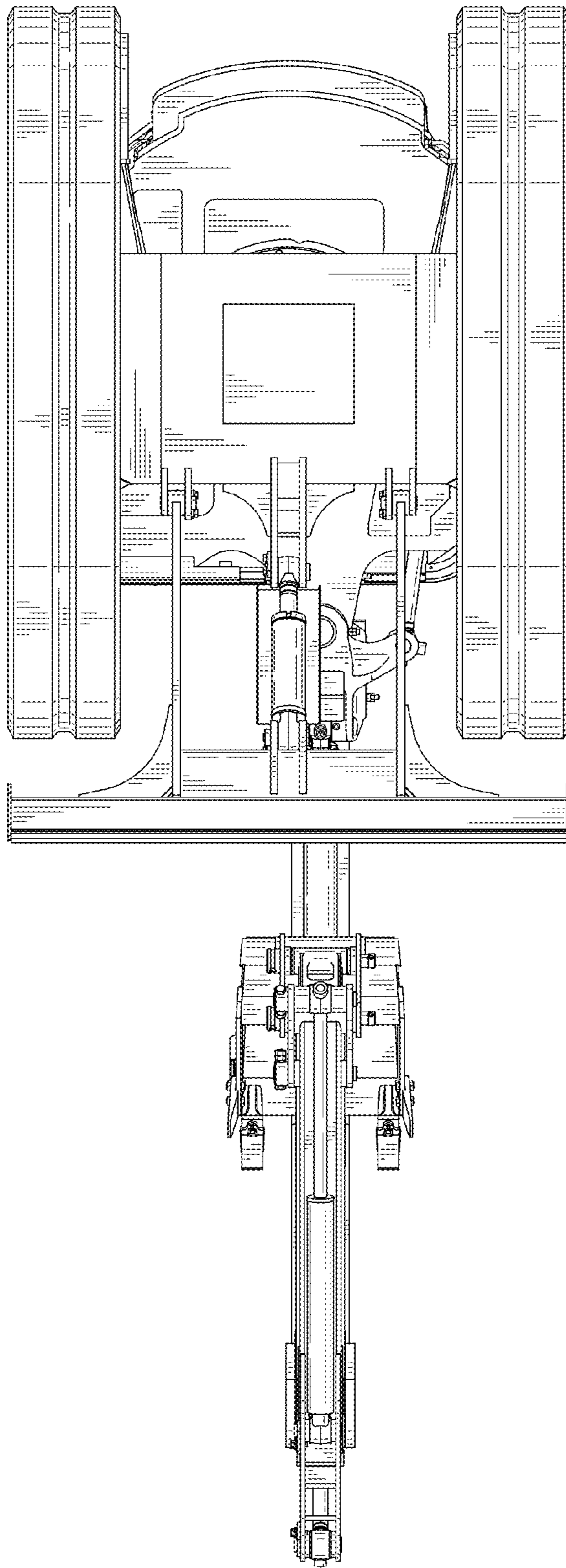


FIG. 7