



US00D725156S

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

(10) **Patent No.:** **US D725,156 S**  
(45) **Date of Patent:** **\*\* Mar. 24, 2015**

(54) **BORING MACHINE**  
(71) Applicant: **Sandvik Mining and Construction Oy,**  
Tampere (FI)  
(72) Inventors: **Jaakko Saari,** Tampere (FI); **Kari**  
**Juujarvi,** Tampere (FI); **Kari**  
**Lappalainen,** Tampere (FI)  
(73) Assignee: **Sandvik Mining and Construction Oy,**  
Tampere (FI)  
(\*\*) Term: **14 Years**  
(21) Appl. No.: **29/504,906**  
(22) Filed: **Oct. 10, 2014**  
(30) **Foreign Application Priority Data**

Apr. 11, 2014 (EM) ..... 2445379-0001

(51) **LOC (10) Cl.** ..... **15-03**  
(52) **U.S. Cl.**

USPC ..... **D15/21**

(58) **Field of Classification Search**  
USPC ..... D15/21-26, 28, 33, 30, 132; 173/189,  
173/9.5, 9.52; 180/9.1-9.44, 9.54, 9.62, 41,  
180/6.48, 9.6; 73/152.54, 152.46  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

3,322,206 A \* 5/1967 Gernhardt ..... 173/28  
D226,262 S \* 2/1973 Trueblood ..... D15/21  
D234,794 S \* 4/1975 Kennicutt et al. .... D15/21  
D244,190 S \* 5/1977 Swartz et al. .... D15/21  
4,181,182 A \* 1/1980 Gustafsson ..... 173/189  
4,303,130 A \* 12/1981 Bonca ..... 173/189  
D267,719 S \* 1/1983 Case ..... D15/21

4,371,041 A \* 2/1983 Becker et al. .... 173/28  
D272,071 S \* 1/1984 Baconet et al. .... D15/30  
4,449,592 A \* 5/1984 Mayer ..... 175/52  
D287,499 S \* 12/1986 Takamatsu et al. .... D15/30  
5,222,564 A \* 6/1993 Bonca ..... 173/189  
5,263,545 A \* 11/1993 Tudora et al. .... 175/52  
5,806,616 A \* 9/1998 Enlund et al. .... 180/9.52  
5,810,101 A \* 9/1998 Caraway et al. .... 175/78  
5,844,133 A \* 12/1998 Goto et al. .... 73/152.54  
5,941,324 A \* 8/1999 Bennett ..... 175/85  
D413,907 S \* 9/1999 Suzaki et al. .... D15/132  
6,257,349 B1 \* 7/2001 Bardwell ..... 173/28  
6,298,927 B1 \* 10/2001 Back ..... 175/52  
D453,023 S \* 1/2002 Kaneko et al. .... D15/21  
D477,332 S \* 7/2003 Bennett ..... D15/21  
D490,444 S \* 5/2004 Kuwae ..... D15/33  
D506,483 S \* 6/2005 Saari ..... D15/132  
D552,131 S \* 10/2007 Matsubara et al. .... D15/33  
7,537,424 B2 \* 5/2009 Innes et al. .... 414/22.62  
8,061,435 B2 \* 11/2011 Gunnarson ..... 173/1  
8,631,898 B2 \* 1/2014 Luoma ..... 181/200

\* cited by examiner

*Primary Examiner* — Mark Goodwin

(74) *Attorney, Agent, or Firm* — Jacobson Holman, PLLC.

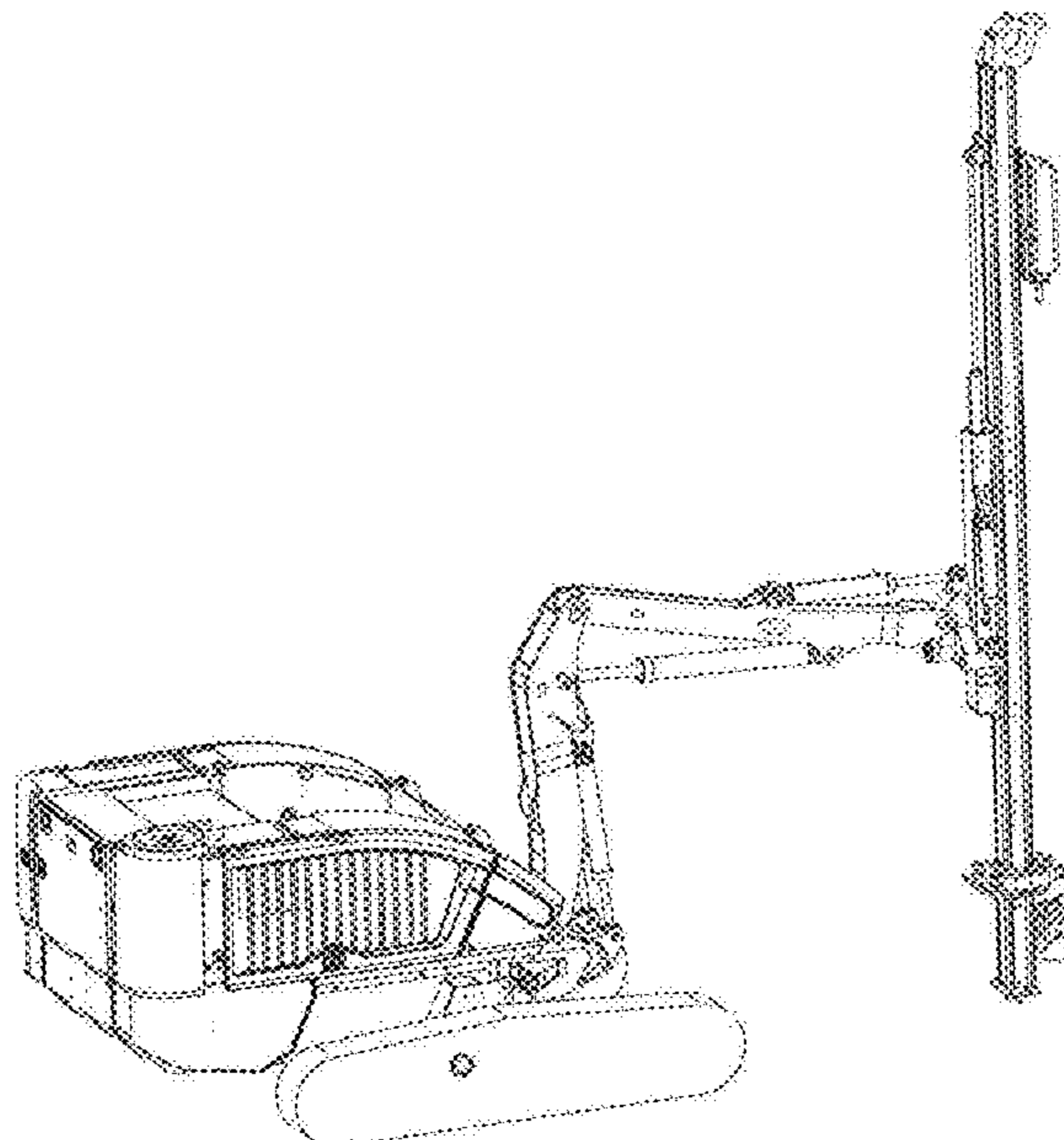
(57) **CLAIM**

We claim the ornamental design for the boring machine, as shown and described.

**DESCRIPTION**

FIG. 1 is a left side perspective view of the boring machine embodying our design;  
FIG. 2 is a right side perspective view of FIG. 1;  
FIG. 3 is a front elevational view of FIG. 1;  
FIG. 4 is a rear elevational view of FIG. 1;  
FIG. 5 is a left side elevational view of FIG. 1;  
FIG. 6 is a right side elevational view of FIG. 1; and,  
FIG. 7 is a top plan view of FIG. 1.

**1 Claim, 7 Drawing Sheets**



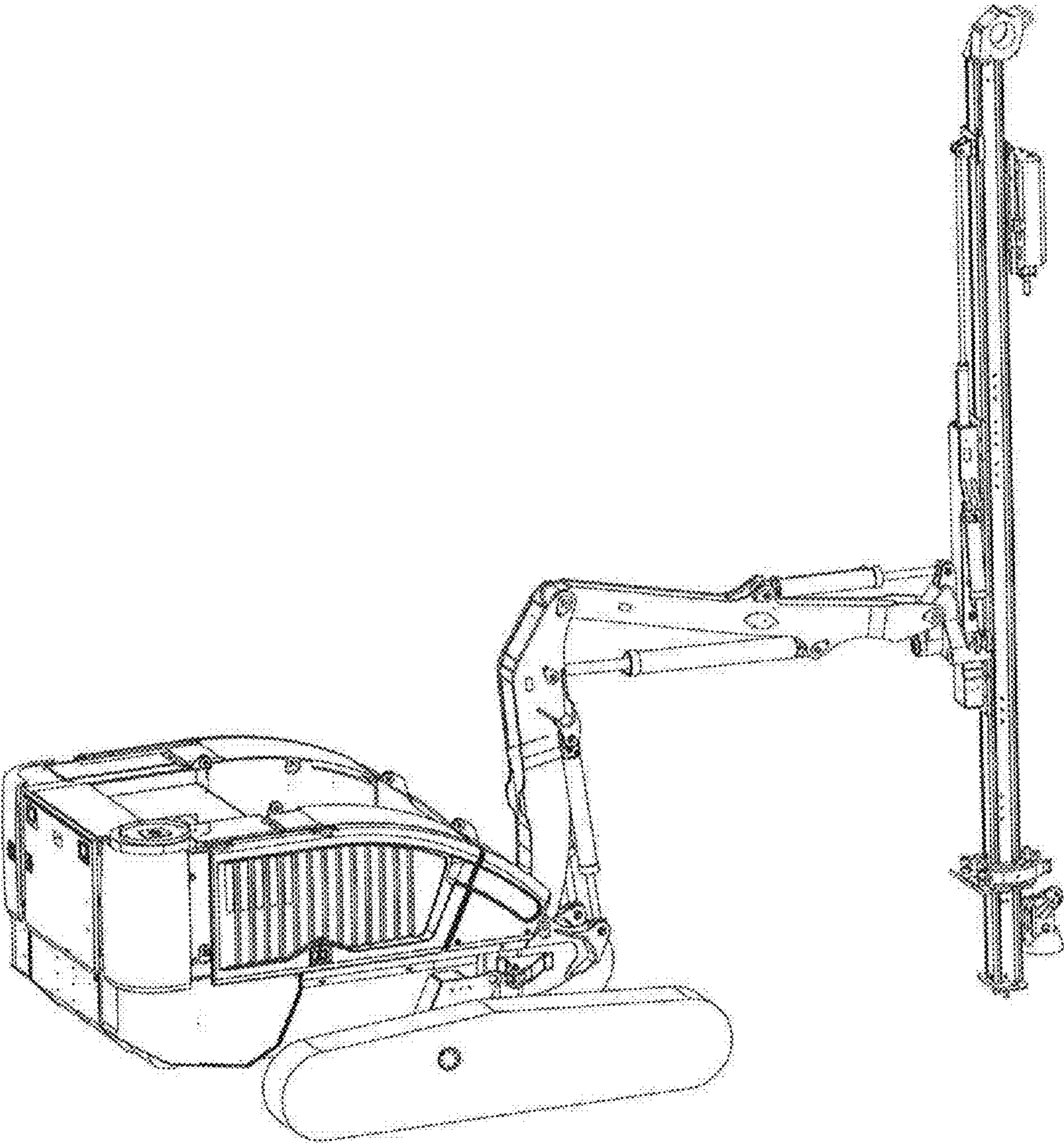


FIG. 1

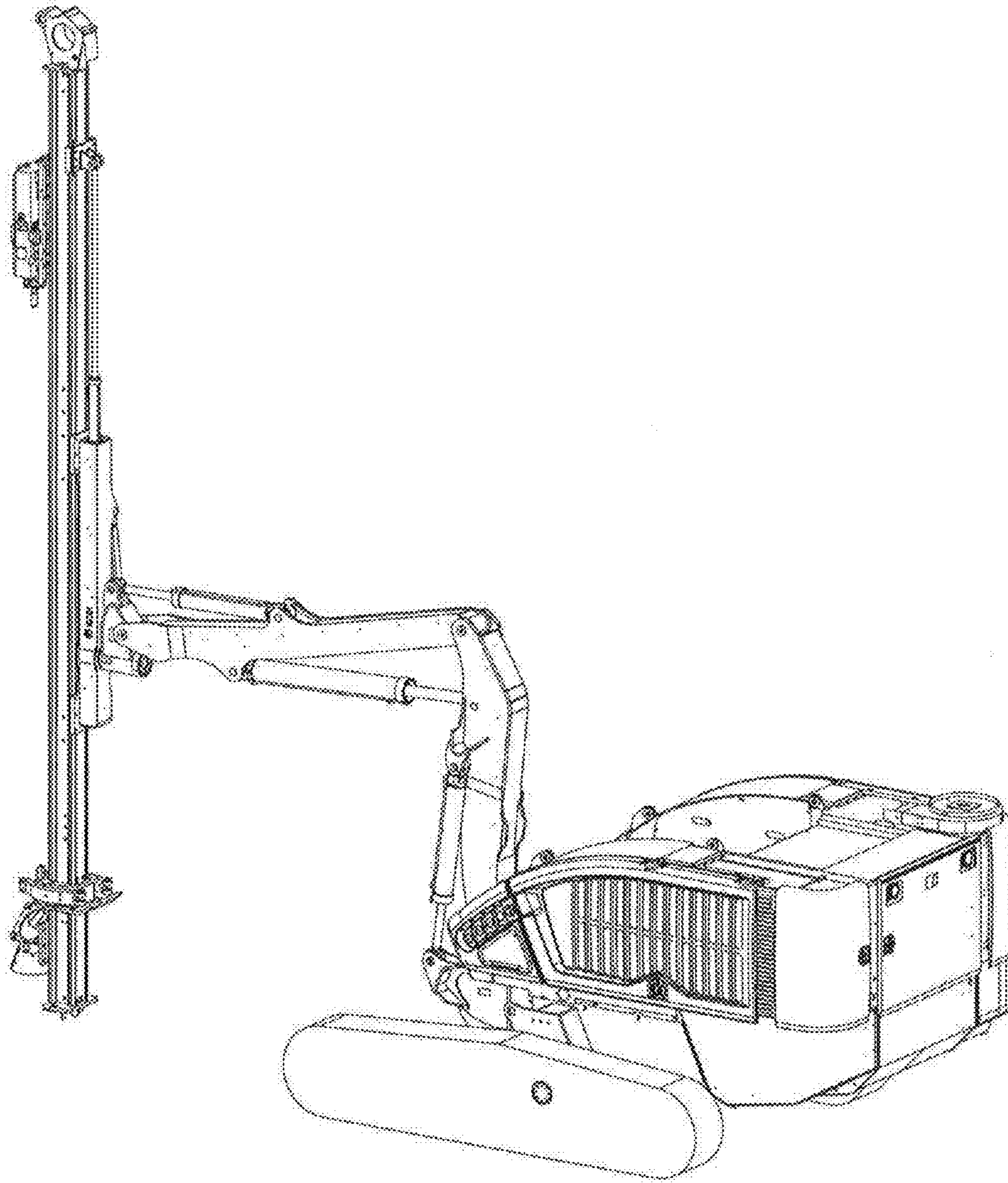


FIG. 2

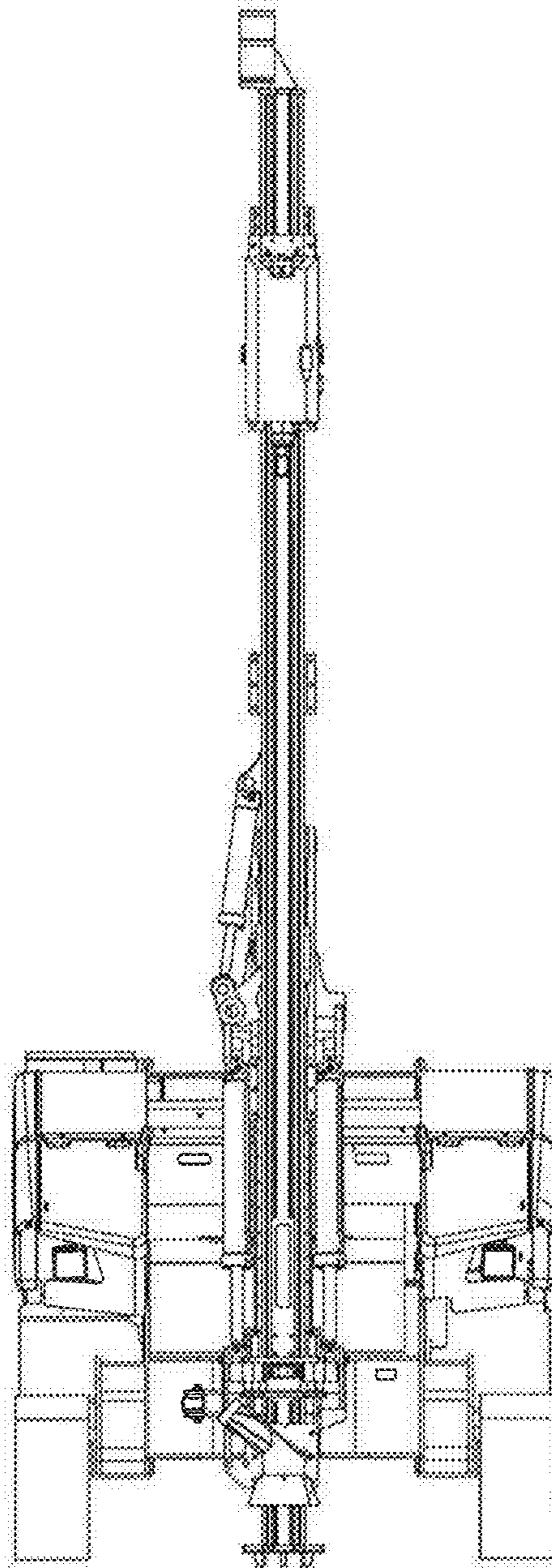


FIG. 3

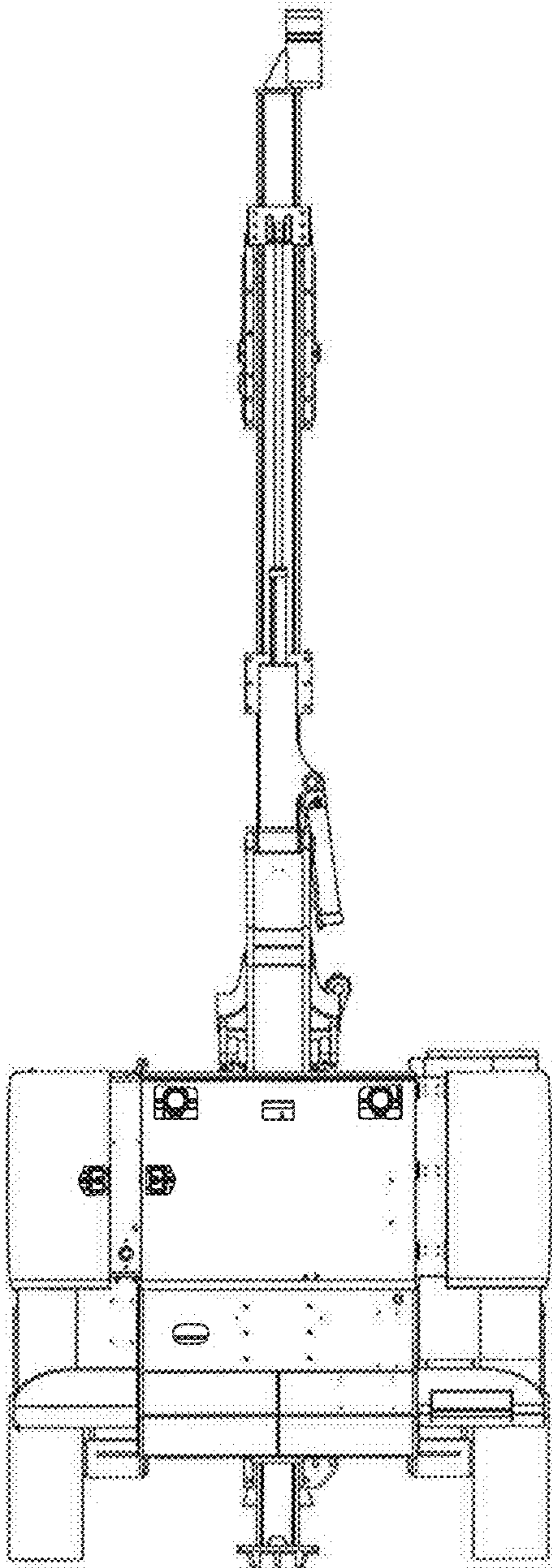


FIG. 4

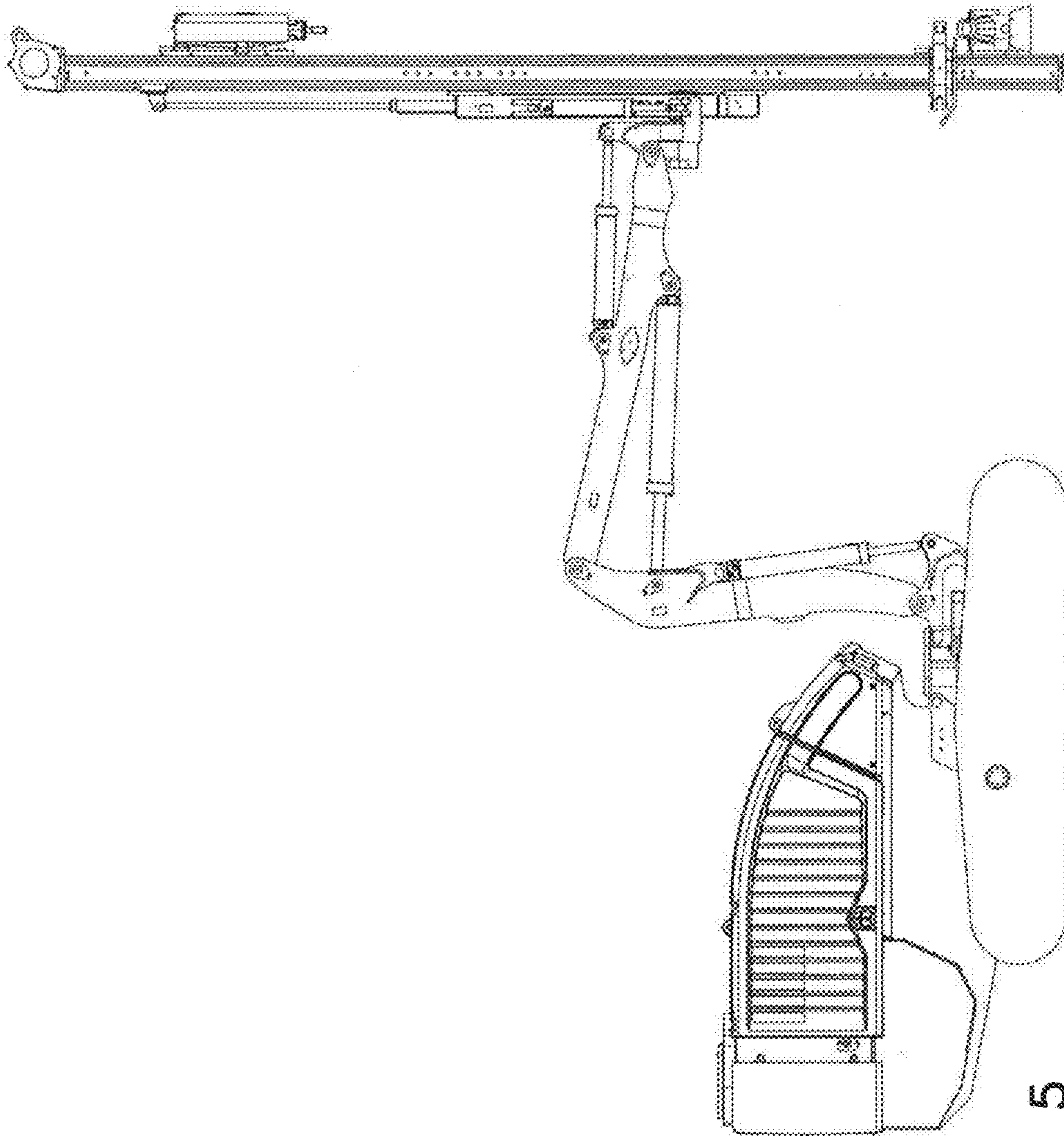


FIG. 5

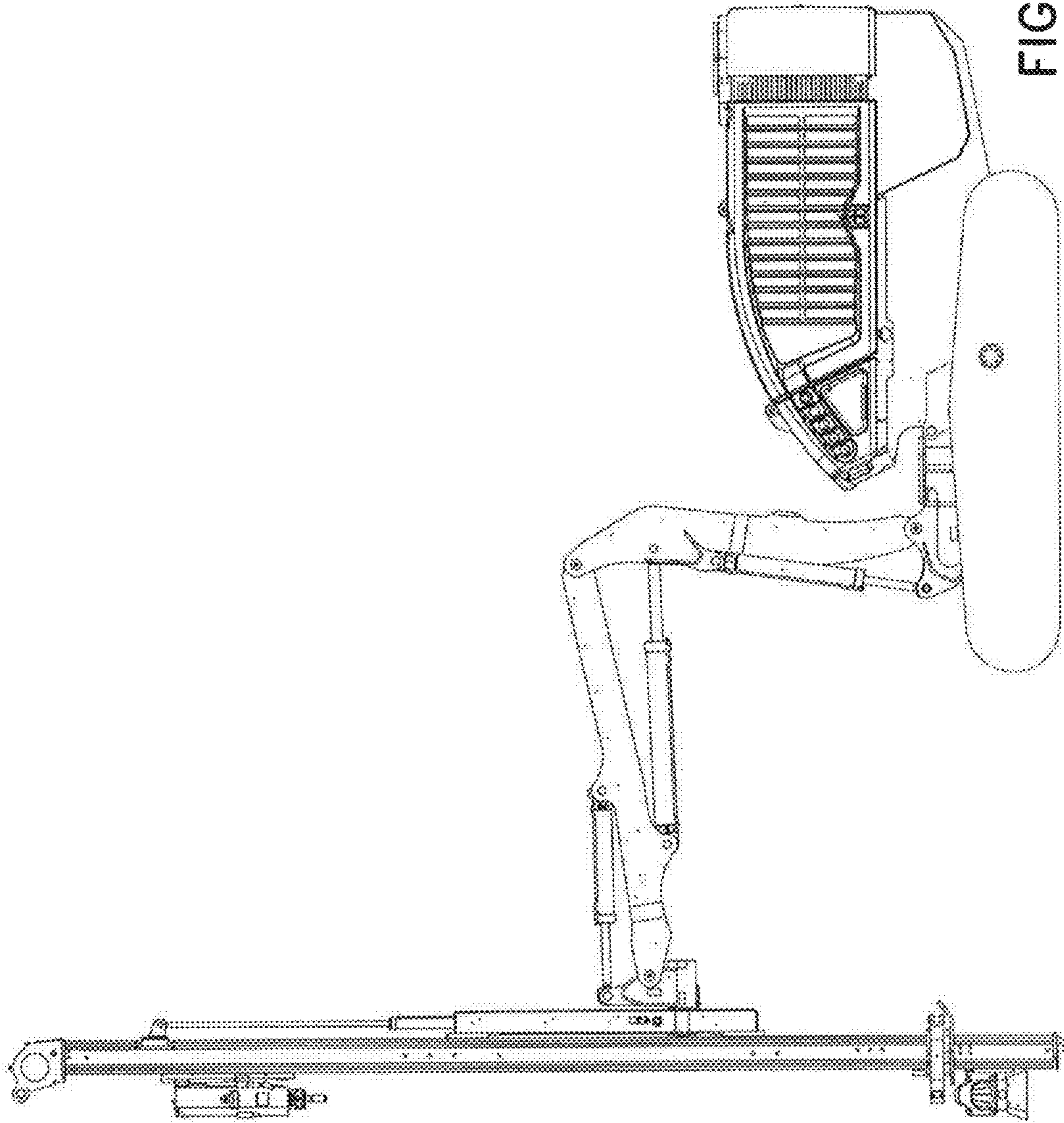


FIG. 6

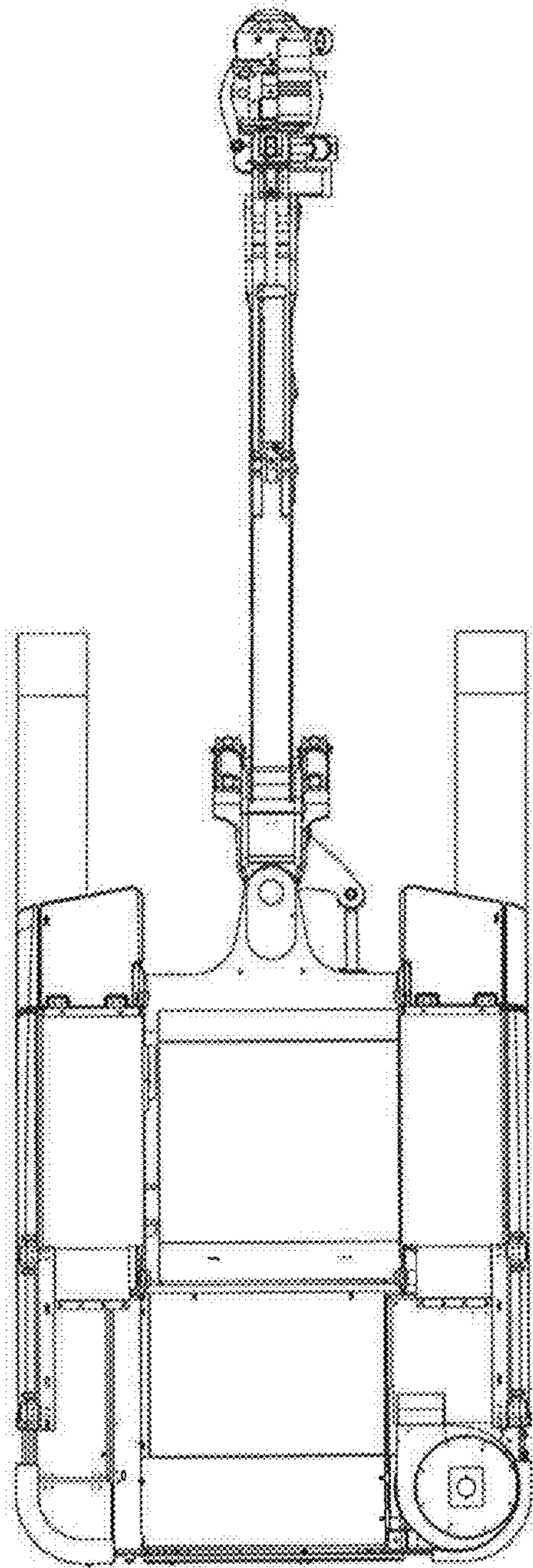


FIG. 7