



US00D733192S

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

(10) **Patent No.:** **US D733,192 S**
(45) **Date of Patent:** **** Jun. 30, 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.: **29/504,908**

(22) Filed: **Oct. 10, 2014**

(30) **Foreign Application Priority Data**

Apr. 11, 2014 (EM) 2445379-0003

(51) **LOC (10) Cl.** **15-03**

(52) **U.S. Cl.**
USPC **D15/33; 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

The application file contains at least one drawing executed in color. Copies of this eventual patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

FIG. 1 is a front perspective view of the boring machine embodying our design;

FIG. 2 is a rear 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 left side elevational view of FIG. 1;

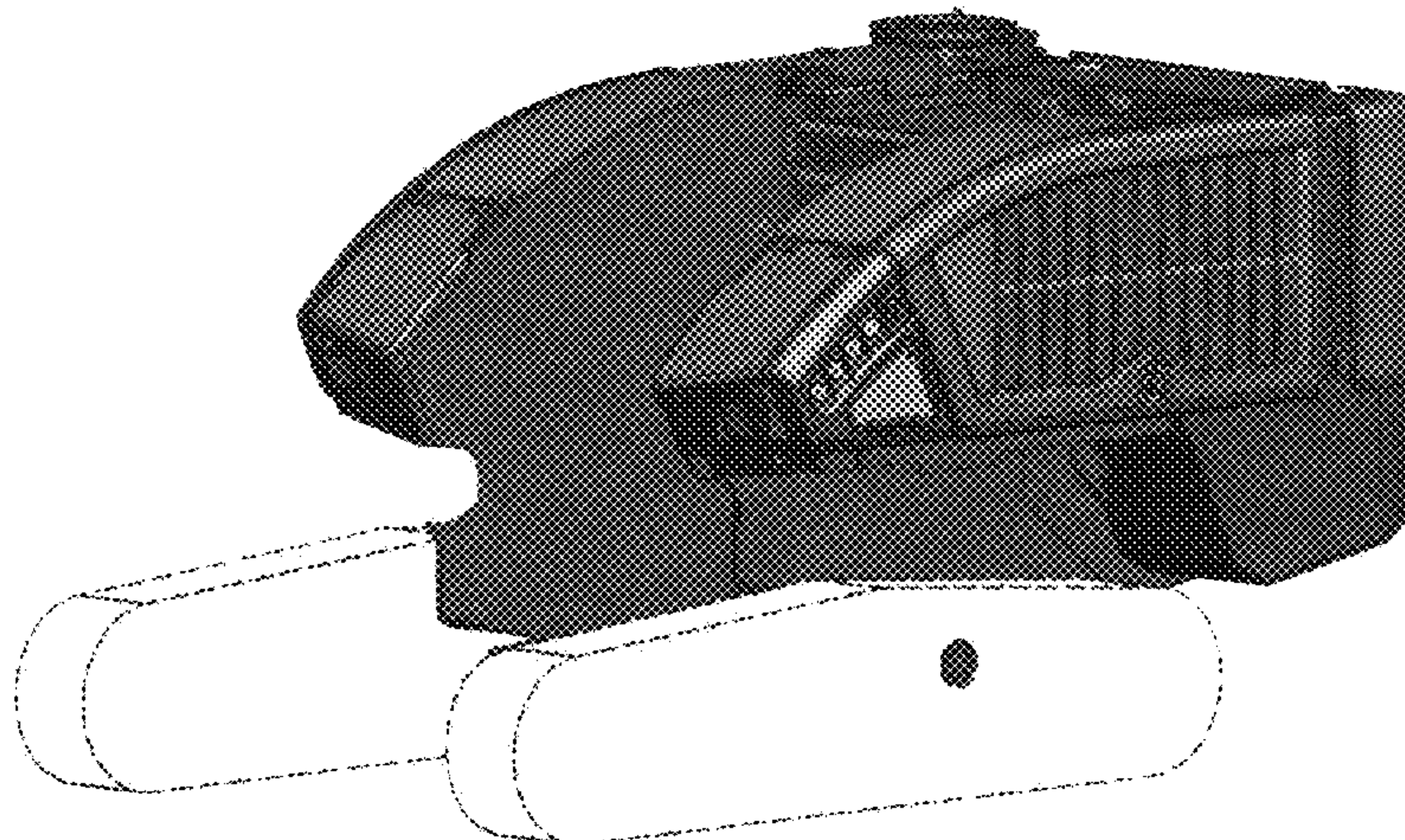
FIG. 6 is a right side elevational view of FIG. 1; and,

FIG. 7 is a top plan view of FIG. 1.

The broken lines in the drawings illustrate portions of the boring machine that forms no part of the claimed design.

The drawings are submitted in color which is necessary because color is an integral part of the claimed design.

1 Claim, 7 Drawing Sheets
(7 of 7 Drawing Sheet(s) Filed in Color)



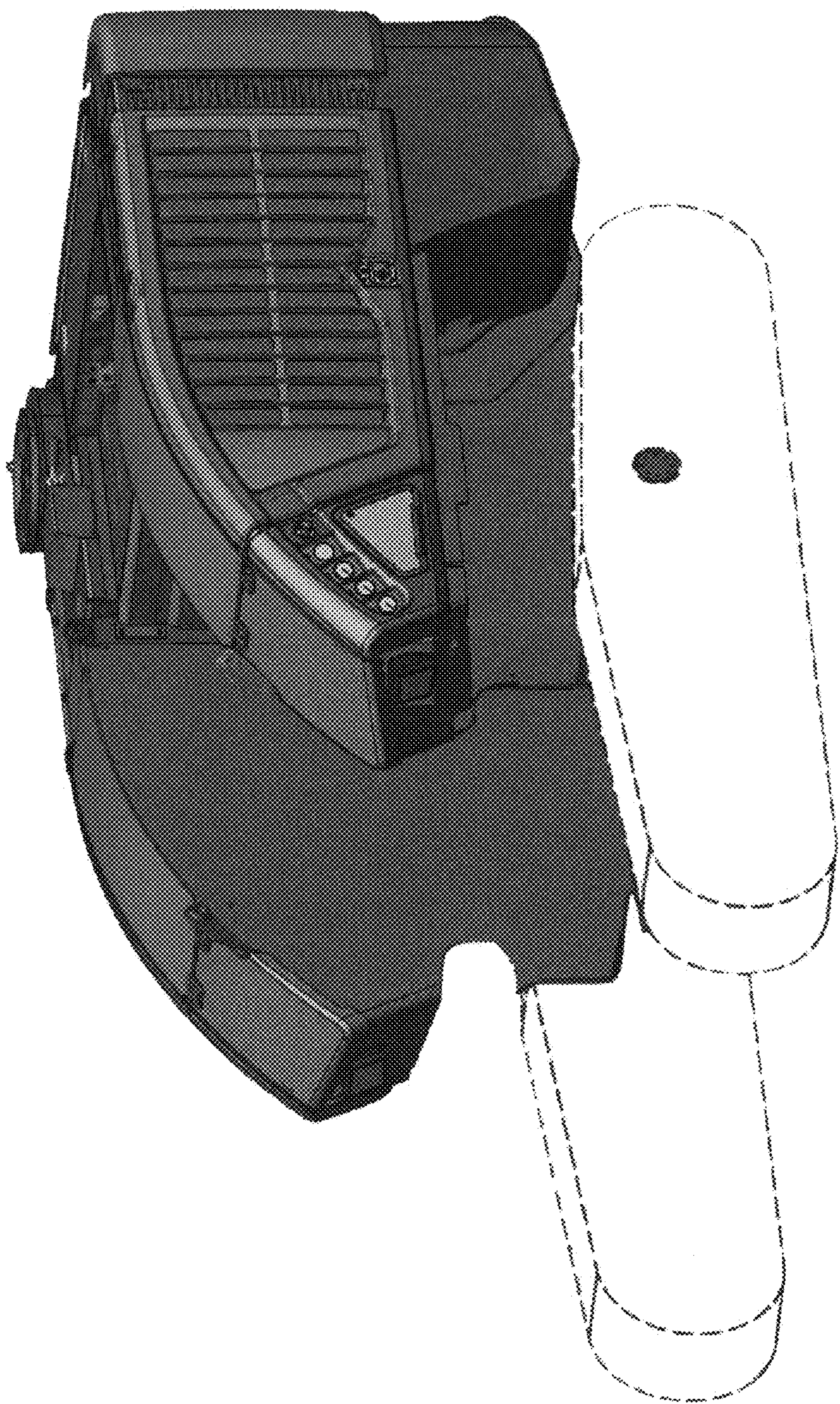


FIG. 1

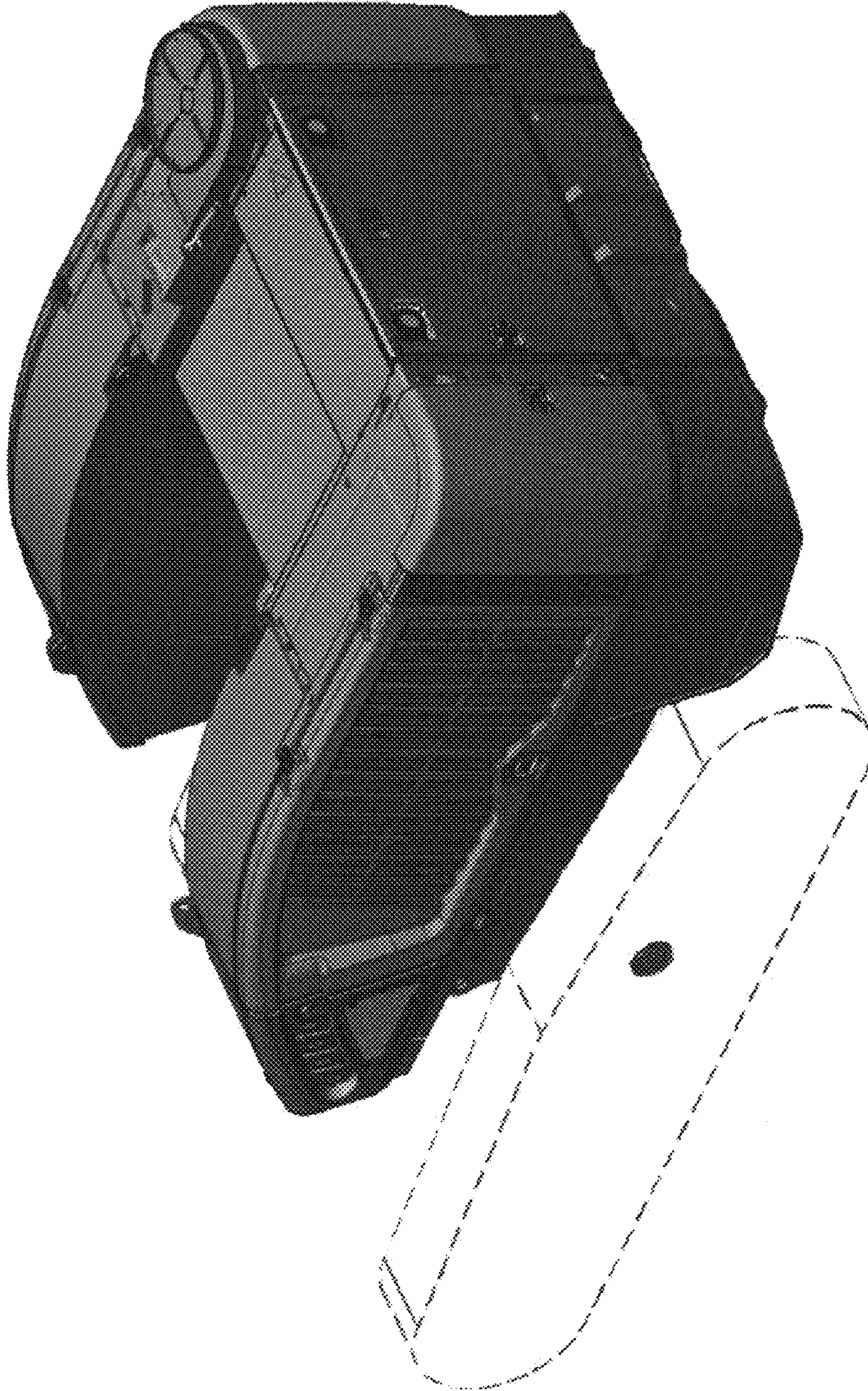


FIG. 2

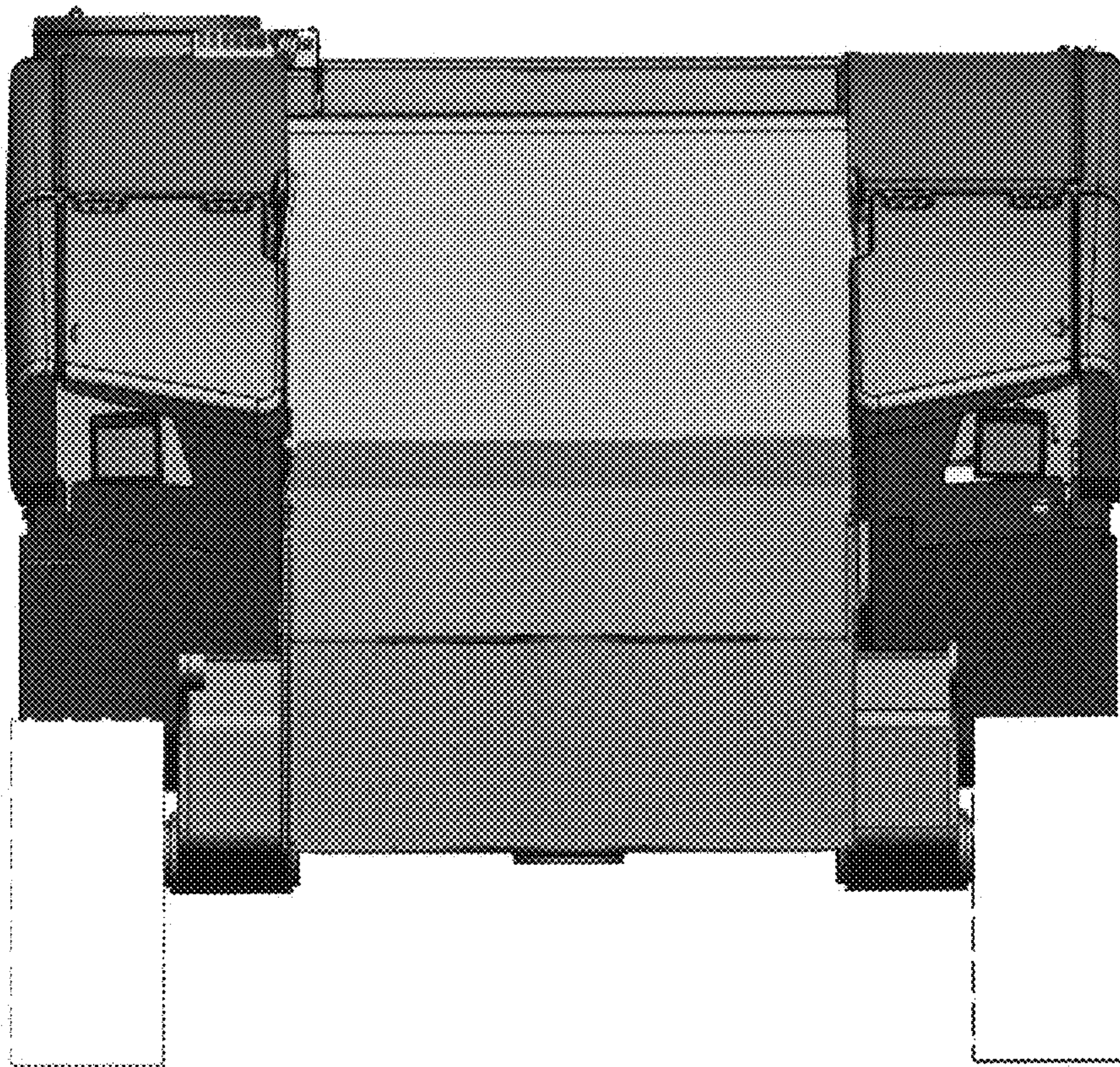


FIG. 3

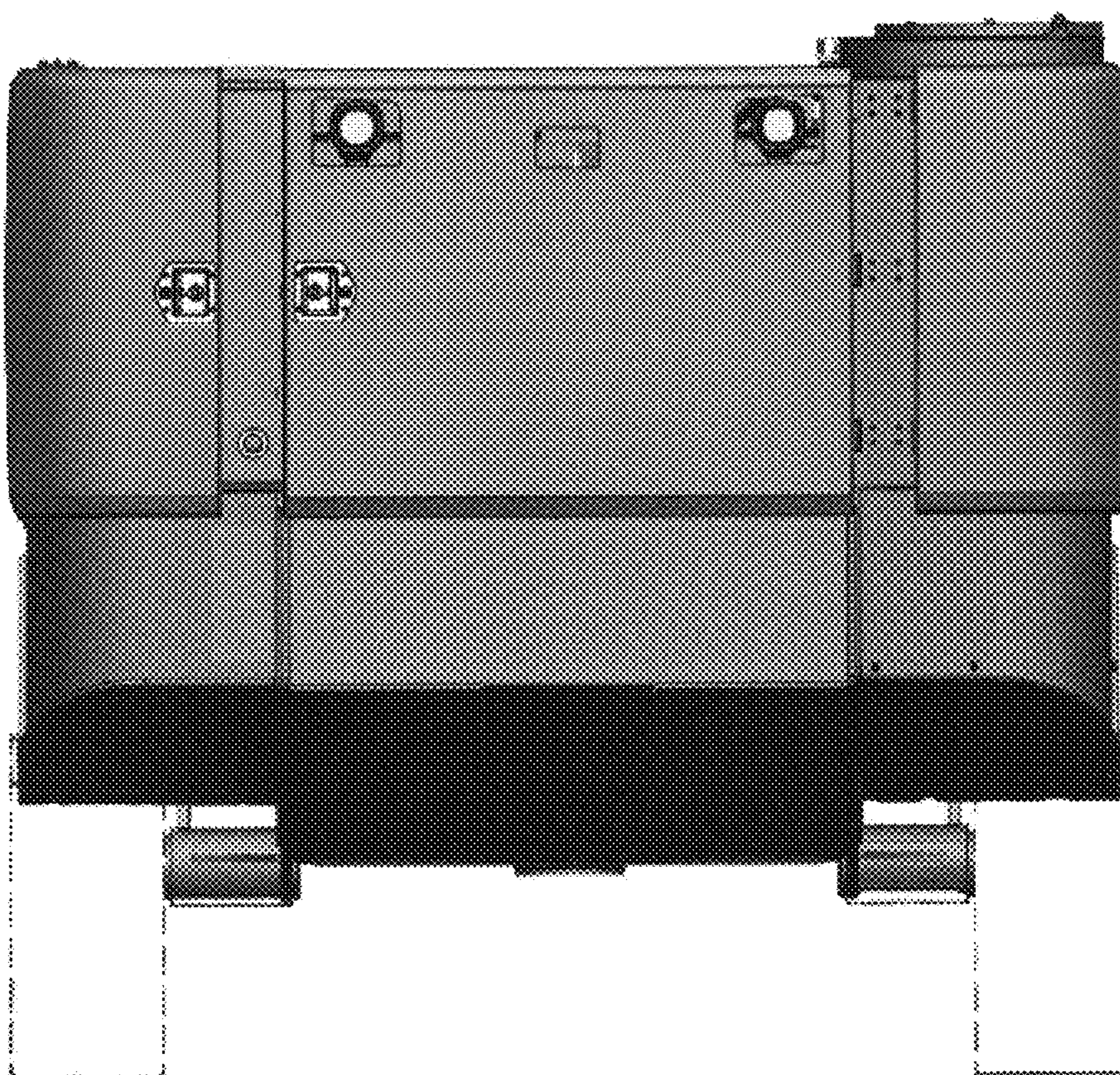


FIG. 4

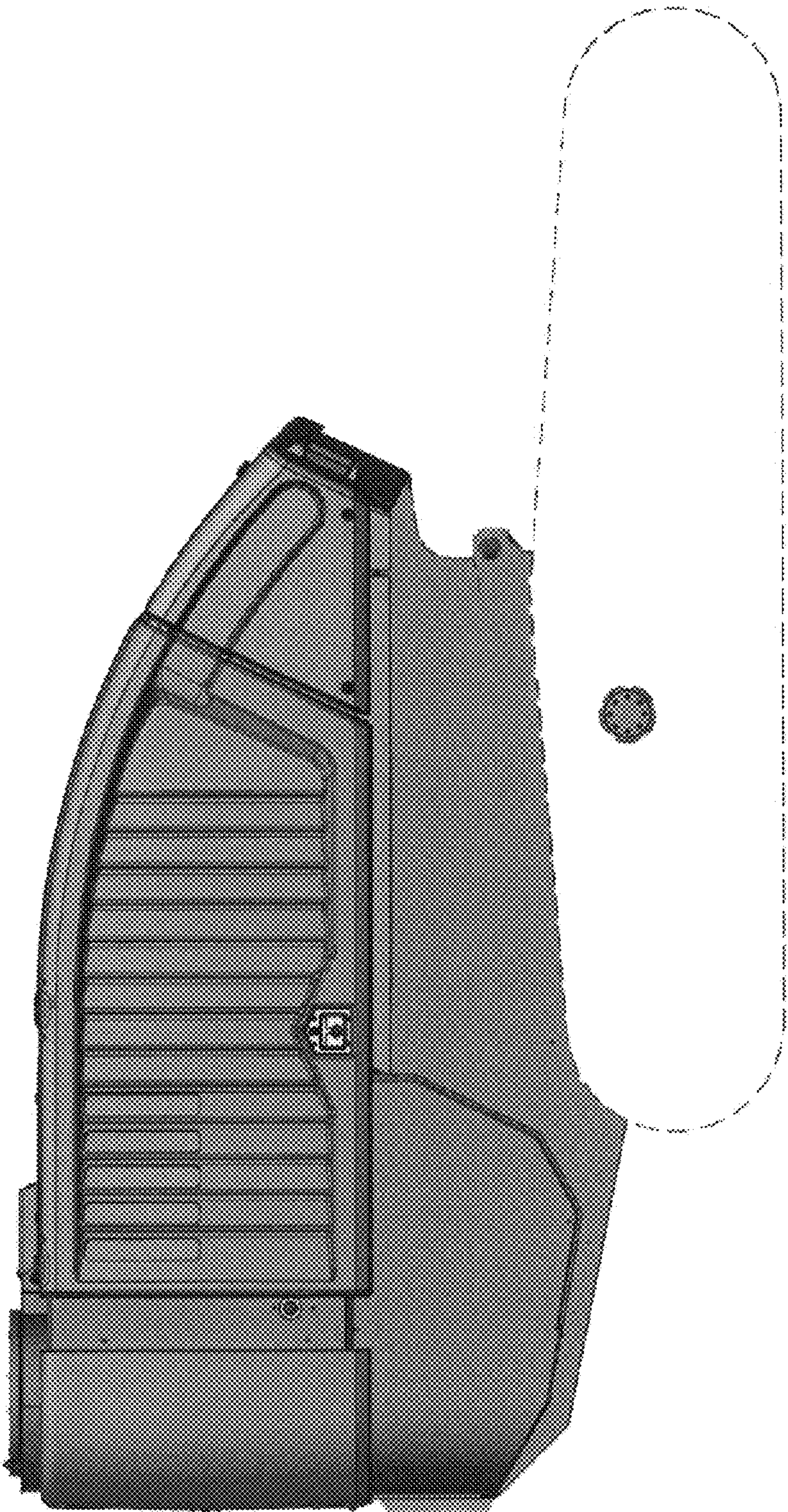


FIG. 5

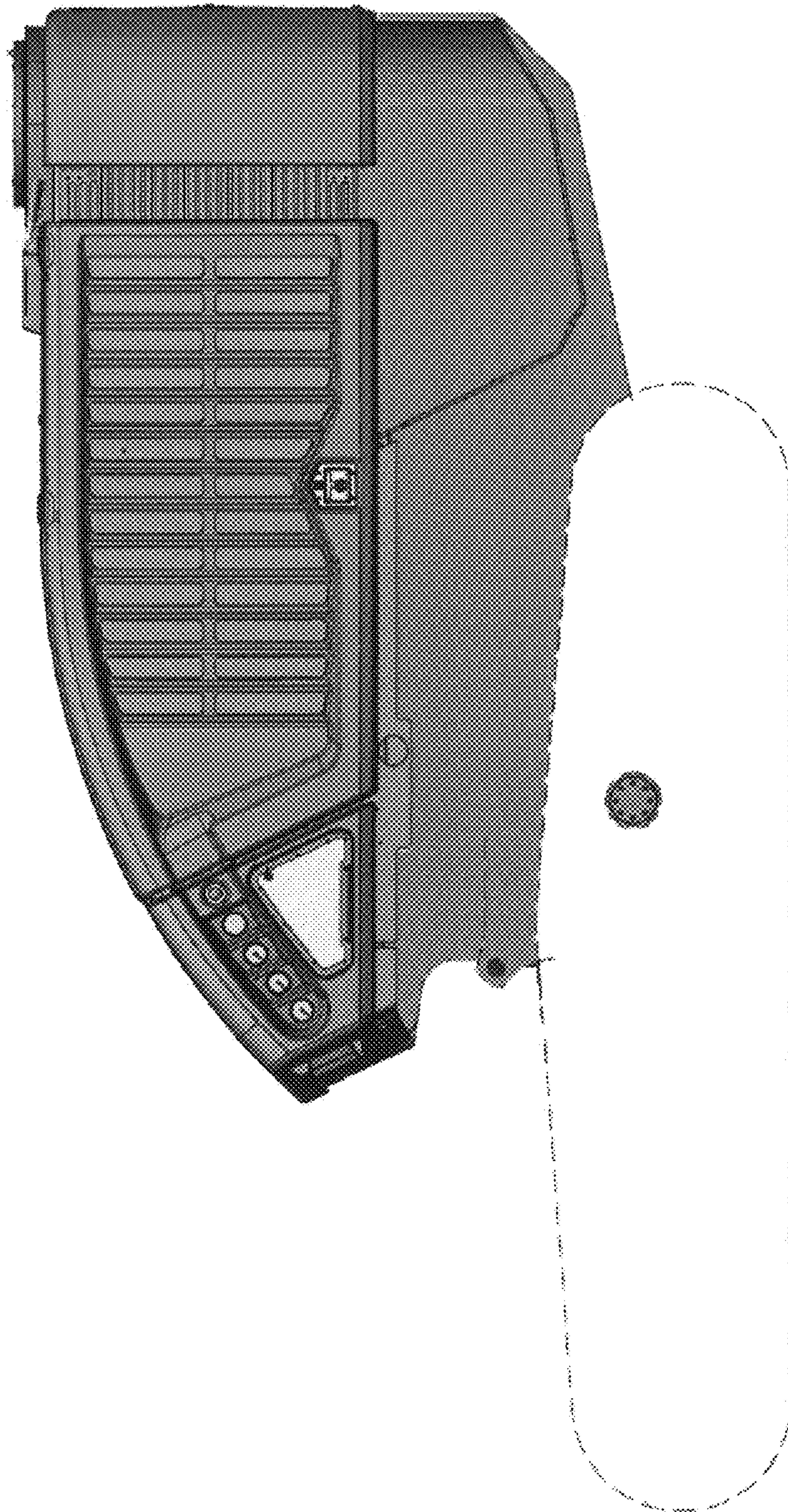


FIG. 6

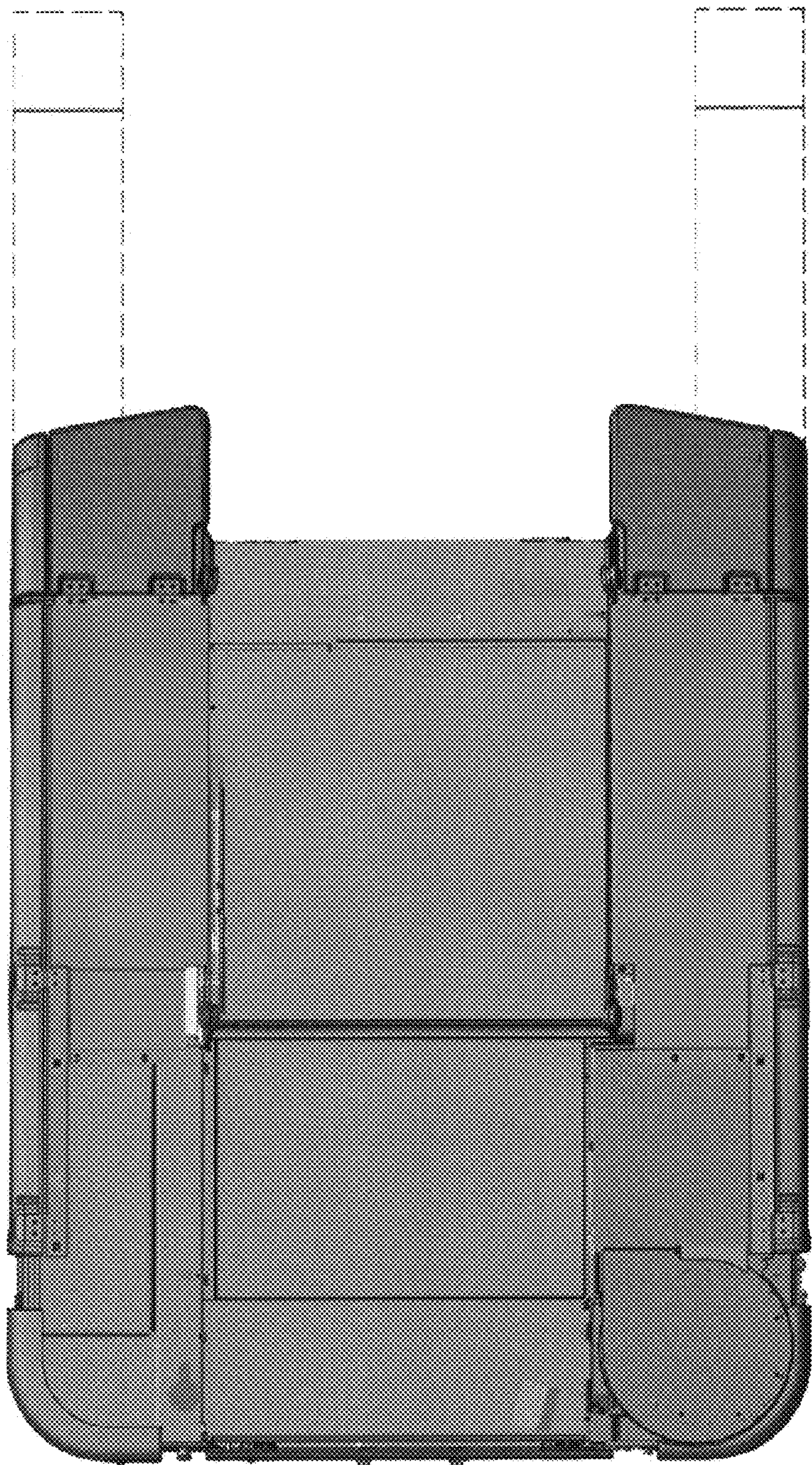


FIG. 7