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(12) **United States Design Patent** (10) **Patent No.:** **US D929,475 S**
Tavares Andre (45) **Date of Patent:** **** Aug. 31, 2021**

(54) **MACHINE TOOL FOR DRILLING DEEP HOLES**

(56) **References Cited**

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U.S. PATENT DOCUMENTS

D266,520 S * 10/1982 Engel D15/122
4,443,929 A * 4/1984 Bayer B23Q 3/15713
483/32
D277,679 S * 2/1985 Kitamura D15/122
4,651,404 A * 3/1987 Shorrock B23Q 11/005
29/563
4,704,773 A * 11/1987 Quinart B23B 3/06
29/27 C
D302,163 S * 7/1989 Itoh D15/122
5,175,408 A * 12/1992 Takashima B23H 7/36
219/69.14
5,273,124 A * 12/1993 Lloyd E21B 3/02
173/185
D379,998 S * 6/1997 Marinkovic D15/124
D388,103 S * 12/1997 Gotou D15/122
5,782,151 A * 7/1998 Shiramasa B23Q 5/40
409/134
5,871,426 A * 2/1999 Araki B23Q 3/1576
483/44
D428,025 S * 7/2000 Miyake D15/127
D438,548 S * 3/2001 Inada D15/127
D489,077 S * 4/2004 Bloch D15/122
D495,723 S * 9/2004 Kawamura D15/127
7,013,544 B2 * 3/2006 Yasuda B23Q 7/1431
29/27 C
7,226,403 B2 * 6/2007 Konvicka B23Q 1/012
198/346.1

Related U.S. Application Data

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(30) **Foreign Application Priority Data**

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(58) **Field of Classification Search**
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173/189, 9.5, 9.52; 73/152.4, 152.46
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See application file for complete search history.

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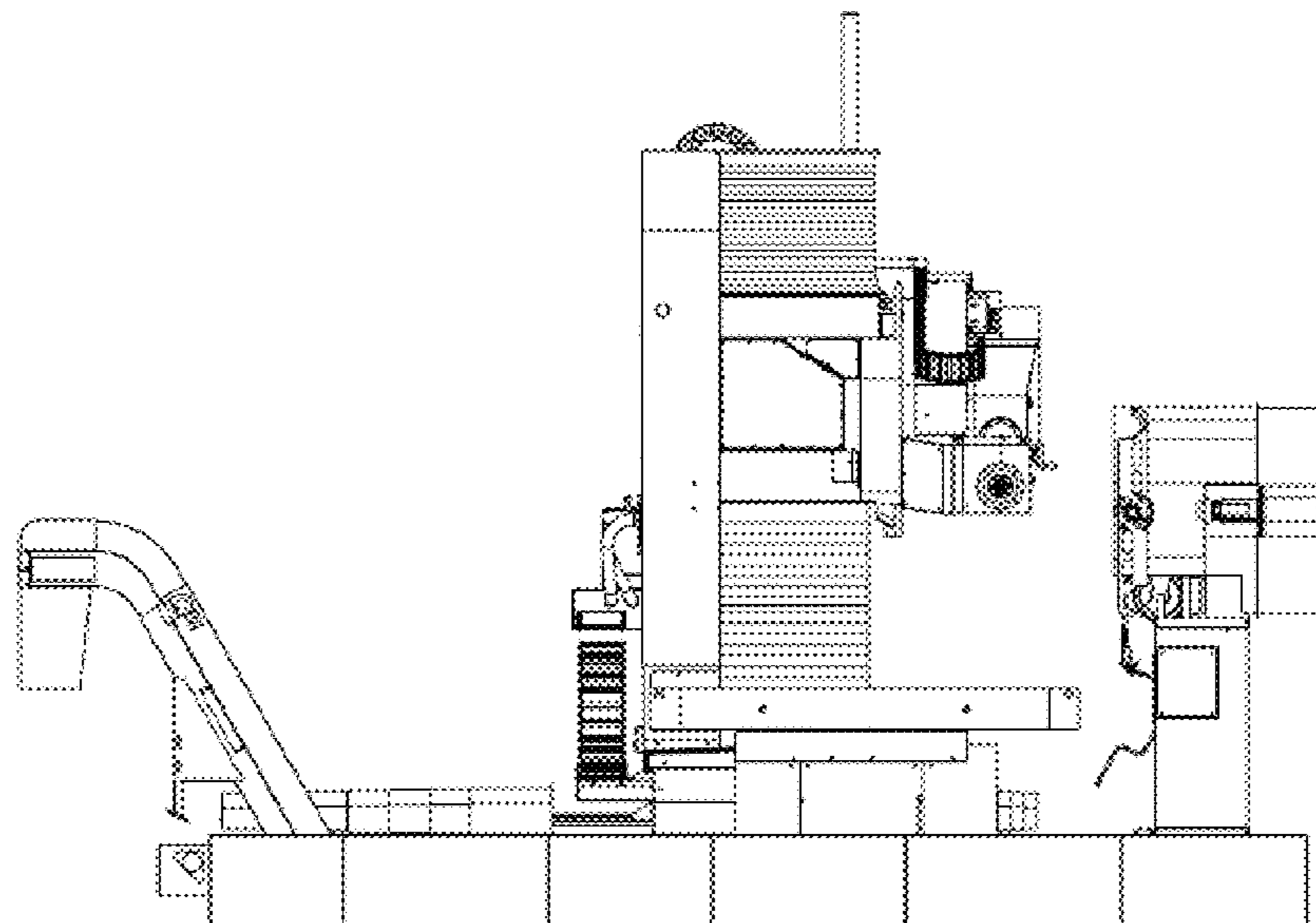
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(57) **CLAIM**
The ornamental design for machine tool for drilling deep holes, as shown and described.

DESCRIPTION

FIG. 1 is a front view of a machine tool for drilling deep holes;
FIG. 2 is a front perspective view thereof; and,
FIG. 3 is a side view thereof.

1 Claim, 3 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D548,754 S *	8/2007	Itabashi	D15/122	D692,936 S *	11/2013	Thoma	D15/127
D548,755 S *	8/2007	Takeshima	D15/122	D692,937 S *	11/2013	Thoma	D15/127
D551,268 S *	9/2007	Iwamoto	D15/127	D693,380 S *	11/2013	Mueller	D15/122
D559,871 S *	1/2008	Kittaka	D15/122	D693,859 S *	11/2013	Kitamura	D15/122
D567,263 S *	4/2008	Sugihara	D15/122	D694,787 S *	12/2013	Mueller	D15/122
D578,144 S *	10/2008	Arisue	D15/122	D696,315 S *	12/2013	Schmid	D15/122
D637,631 S *	5/2011	Hiroshima	D15/122	D701,250 S *	3/2014	Thoma	D15/127
D649,174 S *	11/2011	Schindler	D15/127	D701,251 S *	3/2014	Thoma	D15/127
D649,567 S *	11/2011	Schindler	D15/127	D701,252 S *	3/2014	Thoma	D15/127
D667,032 S *	9/2012	Egami	D15/122	D701,253 S *	3/2014	Thoma	D15/127
D668,277 S *	10/2012	Miyake	D15/127	D707,289 S *	6/2014	Thoma	D18/34.8
D668,278 S *	10/2012	Miyake	D15/127	D716,857 S *	11/2014	Shimano	D15/122
D669,104 S *	10/2012	Michl	D15/122	D726,789 S *	4/2015	Schmid	D15/122
D671,969 S *	12/2012	Yang	D15/122	D734,787 S *	7/2015	Schonherr	D15/122
D676,881 S *	2/2013	Mueller	D15/122	D759,133 S *	6/2016	Kitamura	D15/122
D676,882 S *	2/2013	Mueller	D15/122	D759,736 S *	6/2016	Huang	D15/122
D680,563 S *	4/2013	Yang	D15/122	D759,738 S *	6/2016	Schonherr	D15/122
D690,330 S *	9/2013	Tsuchiyama	D15/122	D778,329 S *	2/2017	Grobe	D15/122
D690,331 S *	9/2013	Kitamura	D15/122	D780,812 S *	3/2017	Niemczyk	D15/21
D691,645 S *	10/2013	Klien	D15/122	D783,694 S *	4/2017	Yauchi	D15/122
				D797,822 S *	9/2017	Grobe	D15/122
				D808,447 S *	1/2018	Grobe	D15/122

* cited by examiner

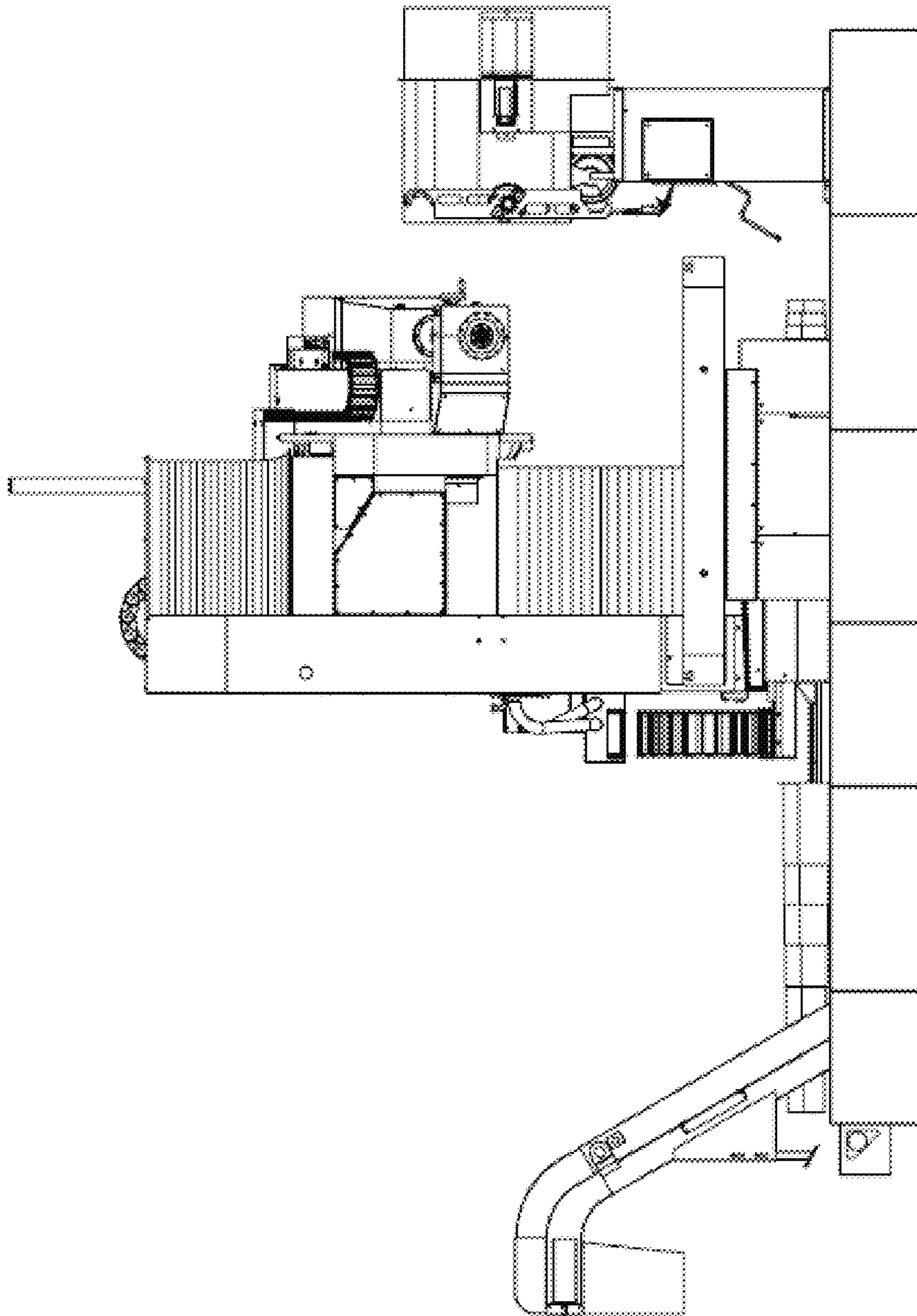


Fig. 1

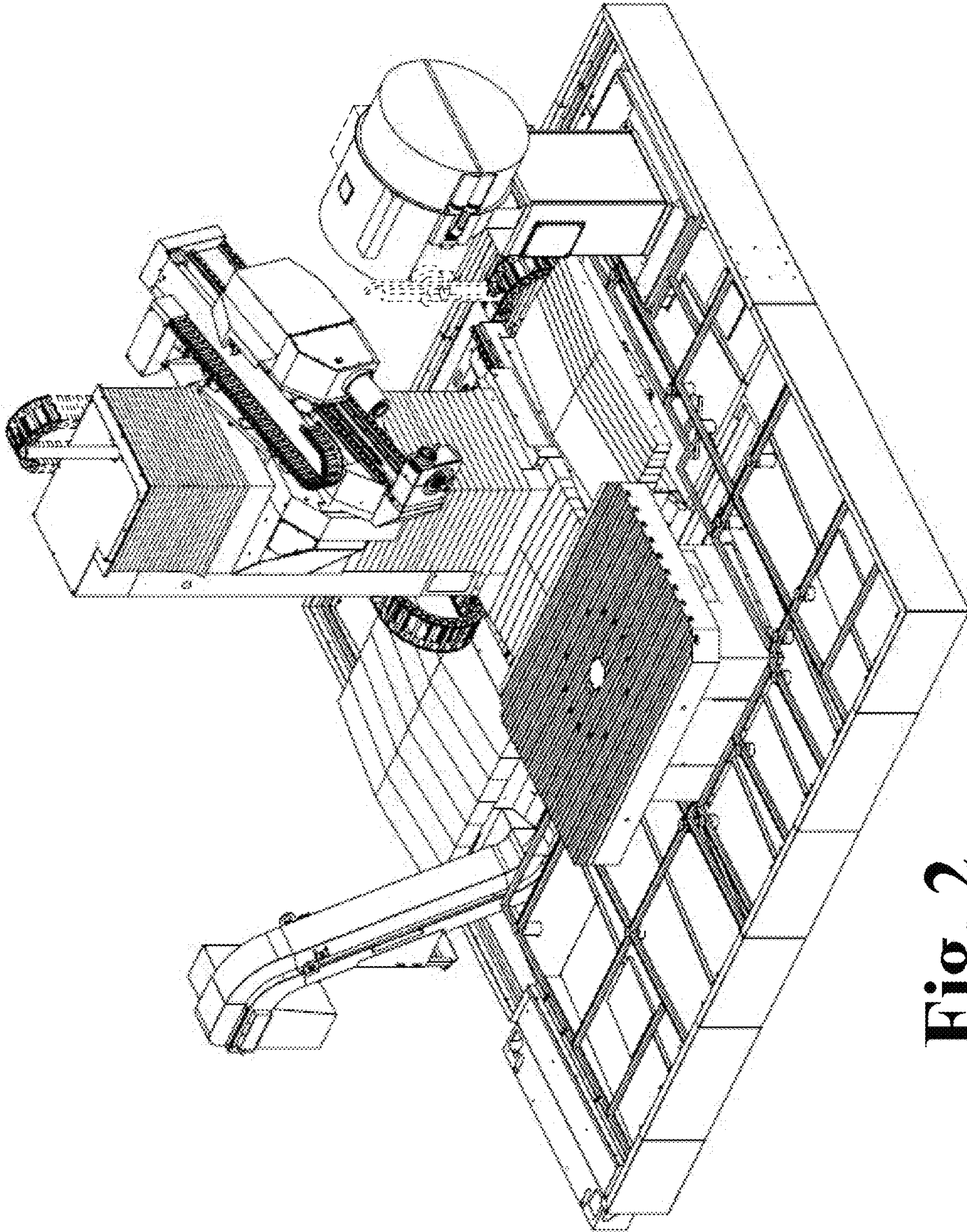


Fig. 2

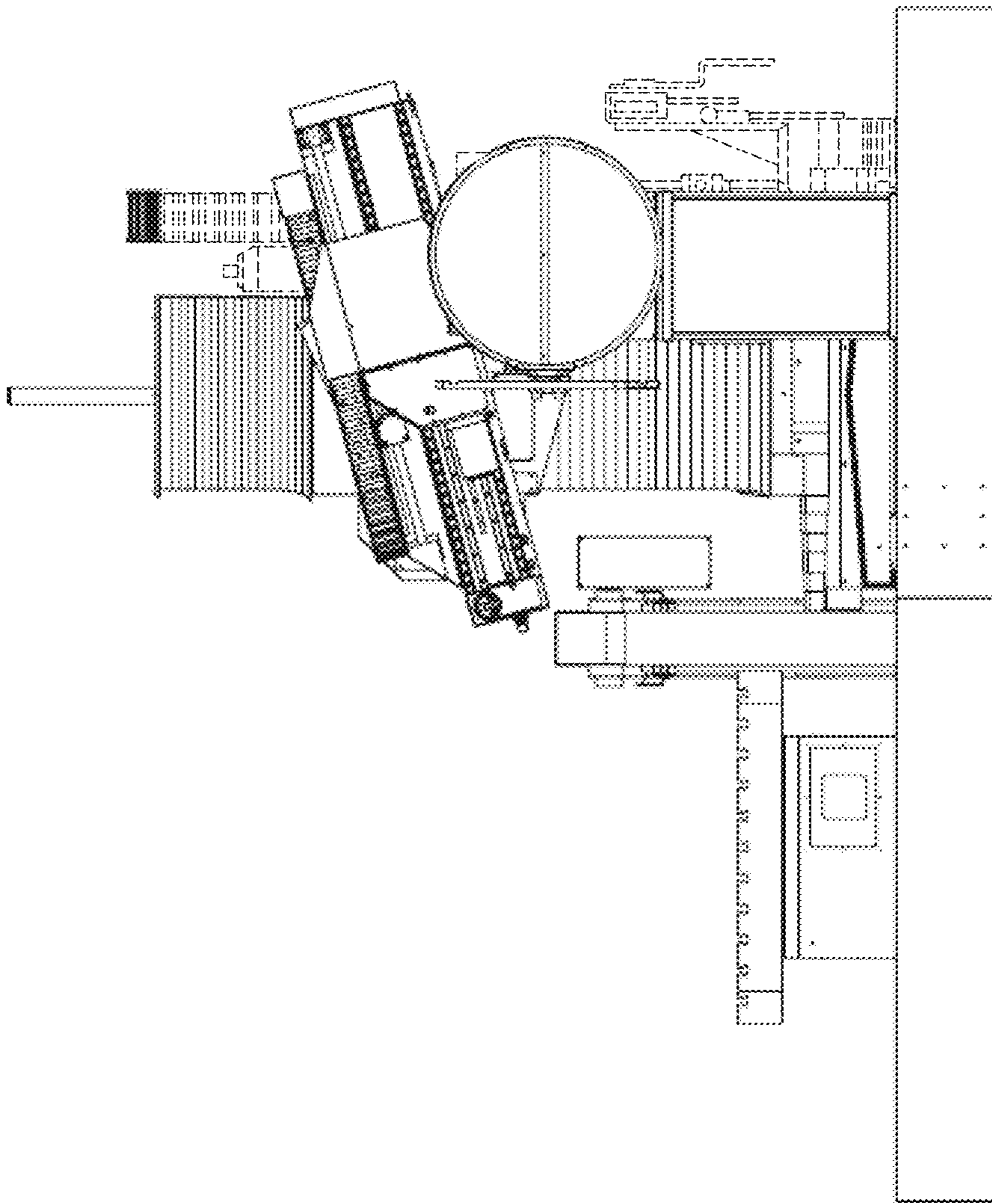


Fig. 3