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

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(45) **Date of Patent:** **\*\* May 22, 2012**

(54) **ROTARY ACTUATOR**

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(JP)

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

(21) Appl. No.: **29/414,317**

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(30) **Foreign Application Priority Data**

Nov. 22, 2011 (JP) ..... 2011-026968

(51) **LOC (9) Cl.** ..... **15-09**

(52) **U.S. Cl.** ..... **D15/143**

(58) **Field of Classification Search** ..... D13/147,  
D13/148, 158; D15/5, 143, 148, 199; D23/233;  
74/89.15, 411.5, 490.09; 297/14, 325, 327;  
310/20, 80; 319/80; 414/560-569

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D446,229 S *	8/2001	Kaneko	.....	D15/143
D479,542 S *	9/2003	Lannoch	.....	D15/148
D479,725 S *	9/2003	Lannoch	.....	D15/148
D494,659 S *	8/2004	Marinoni et al.	.....	D15/143
D578,147 S *	10/2008	Fukano et al.	.....	D15/143

D597,111 S *	7/2009	Takeuchi et al.	.....	D15/143
D597,112 S *	7/2009	Takeuchi et al.	.....	D15/143
D598,938 S *	8/2009	Mijno	.....	D15/148
D619,631 S *	7/2010	Otsuka	.....	D15/149
D628,219 S *	11/2010	Fukano et al.	.....	D15/143
D629,872 S *	12/2010	Marinoni et al.	.....	D23/249
D639,321 S *	6/2011	Torii et al.	.....	D15/143
2003/0041598 A1 *	3/2003	Takeuchi et al.	.....	60/591

\* cited by examiner

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(57) **CLAIM**

The ornamental design for a rotary actuator, as shown and described.

**DESCRIPTION**

FIG. 1 shows a front view of a rotary actuator showing our new design;  
 FIG. 2 shows a rear view thereof;  
 FIG. 3 shows a right side view thereof;  
 FIG. 4 shows a left side view thereof;  
 FIG. 5 shows a top view thereof;  
 FIG. 6 shows a bottom view thereof;  
 FIG. 7 shows a top, front and left side perspective view thereof;  
 FIG. 8 shows a bottom, front and right side perspective view thereof; and,  
 FIG. 9 shows a cross-sectional view thereof, taken along line 9-9 in FIG. 5.

**1 Claim, 6 Drawing Sheets**

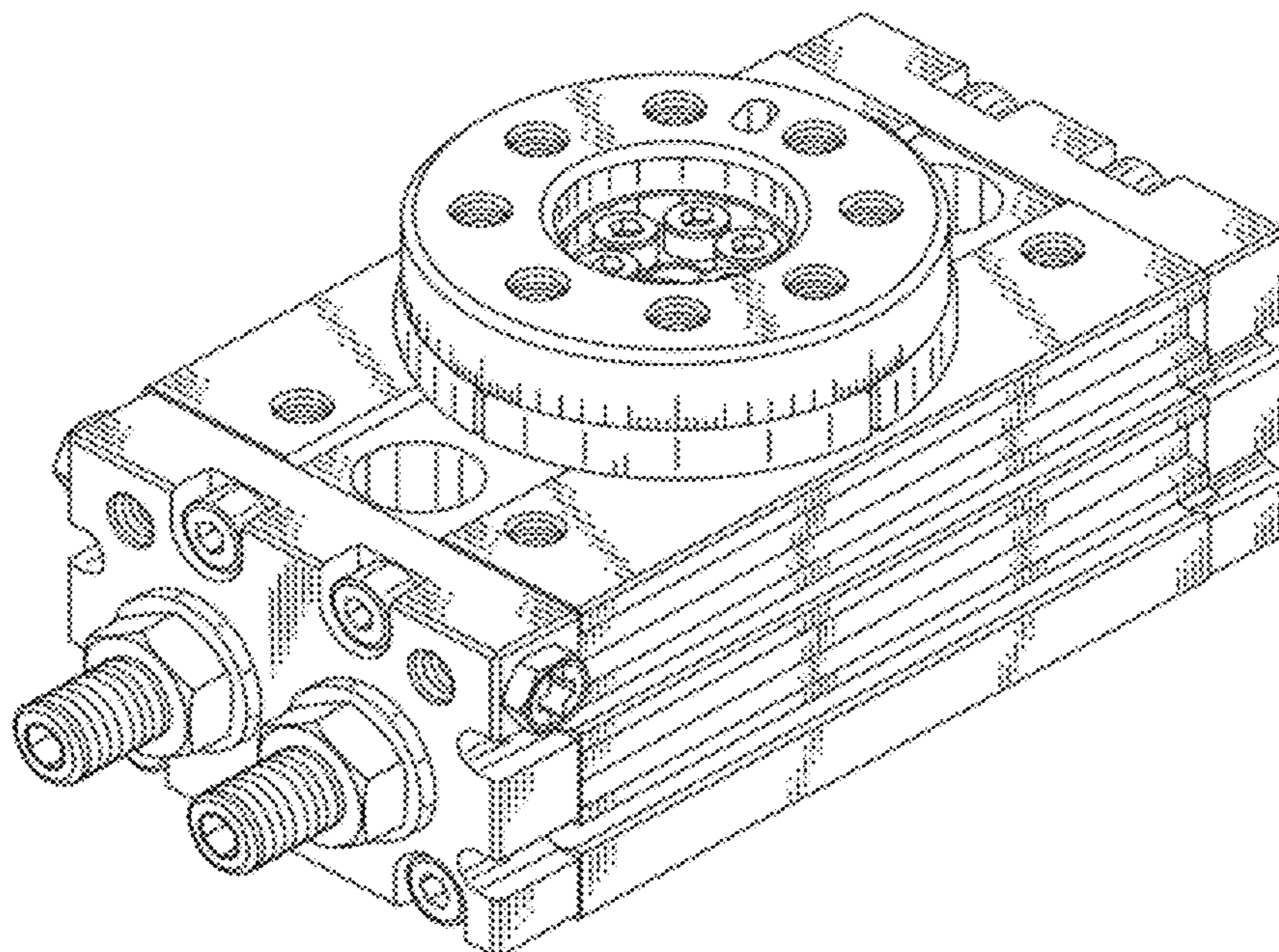


FIG. 1

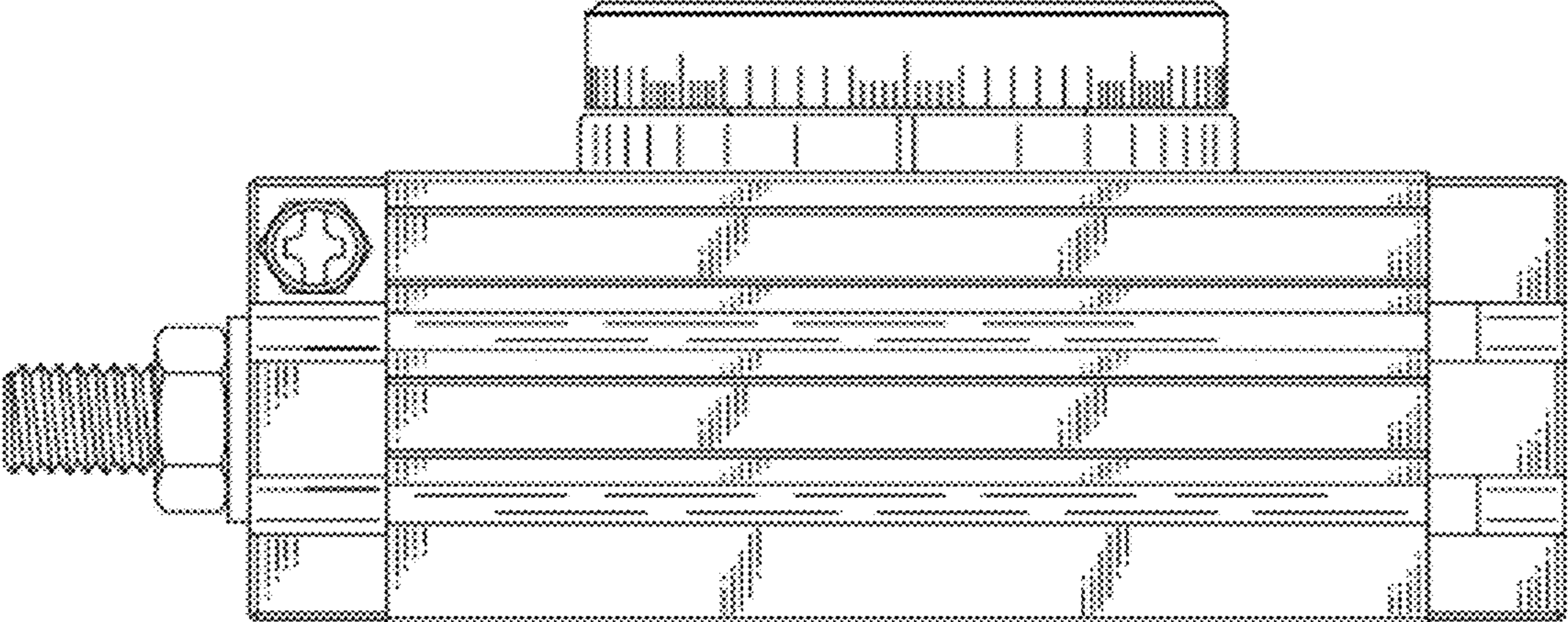


FIG. 2

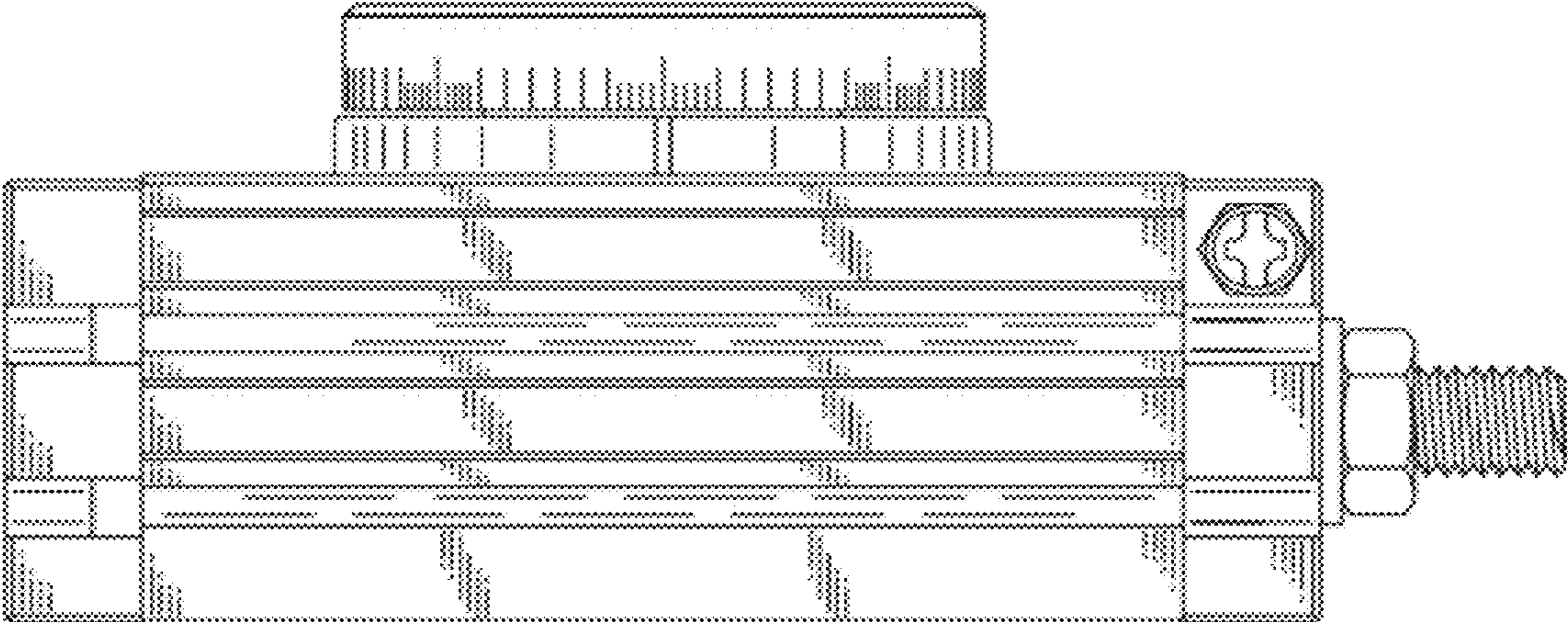


FIG. 3

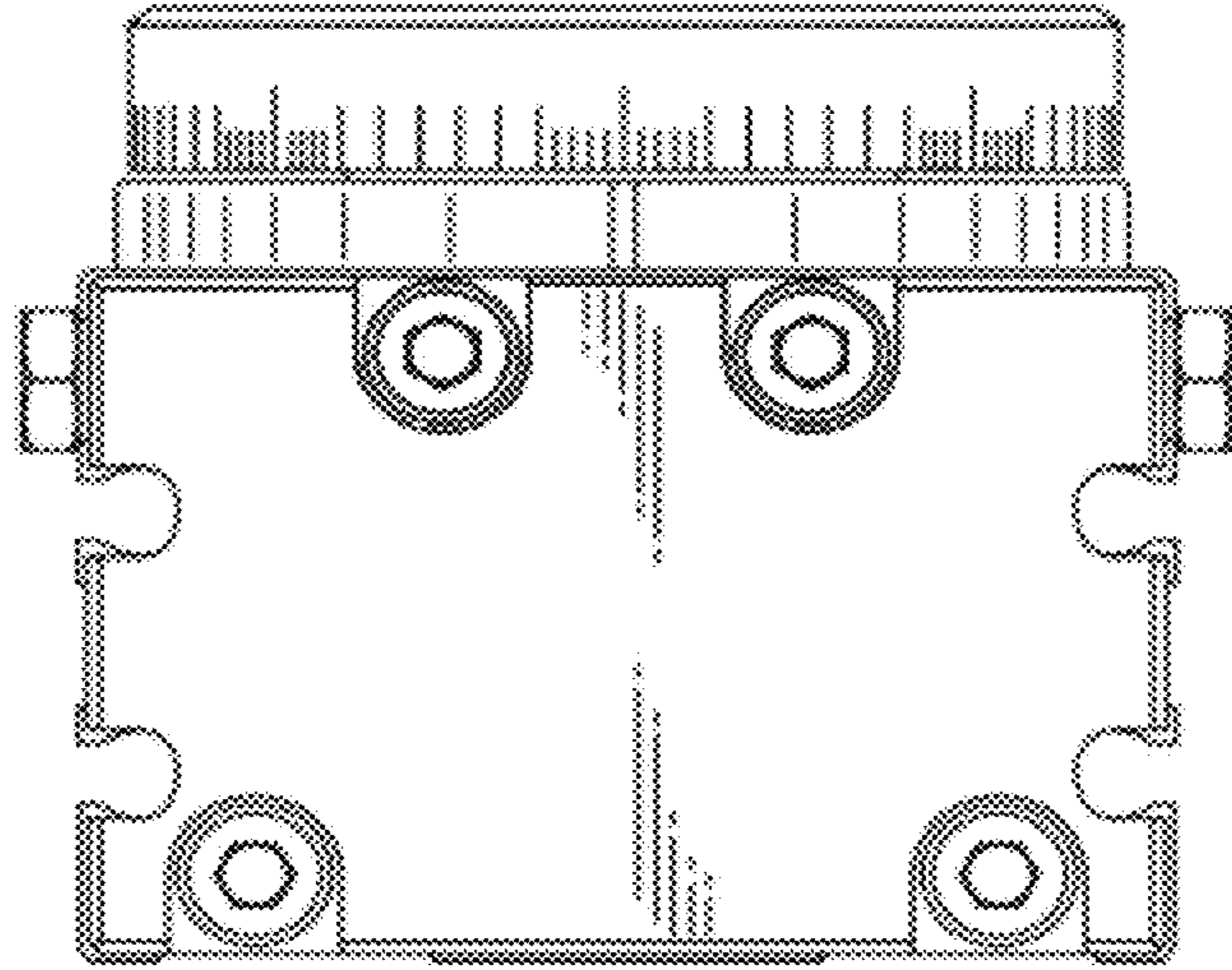


FIG. 4

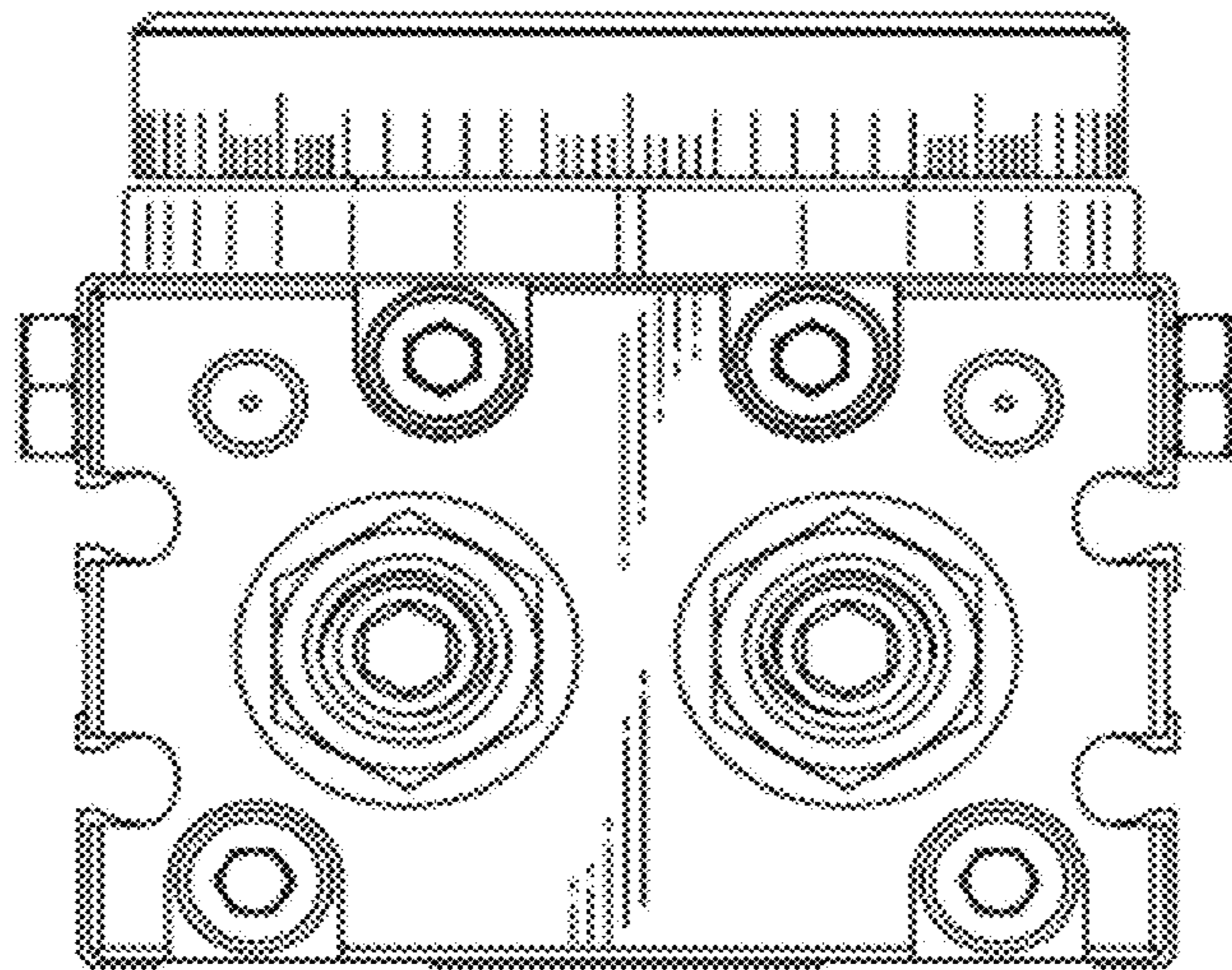


FIG. 5

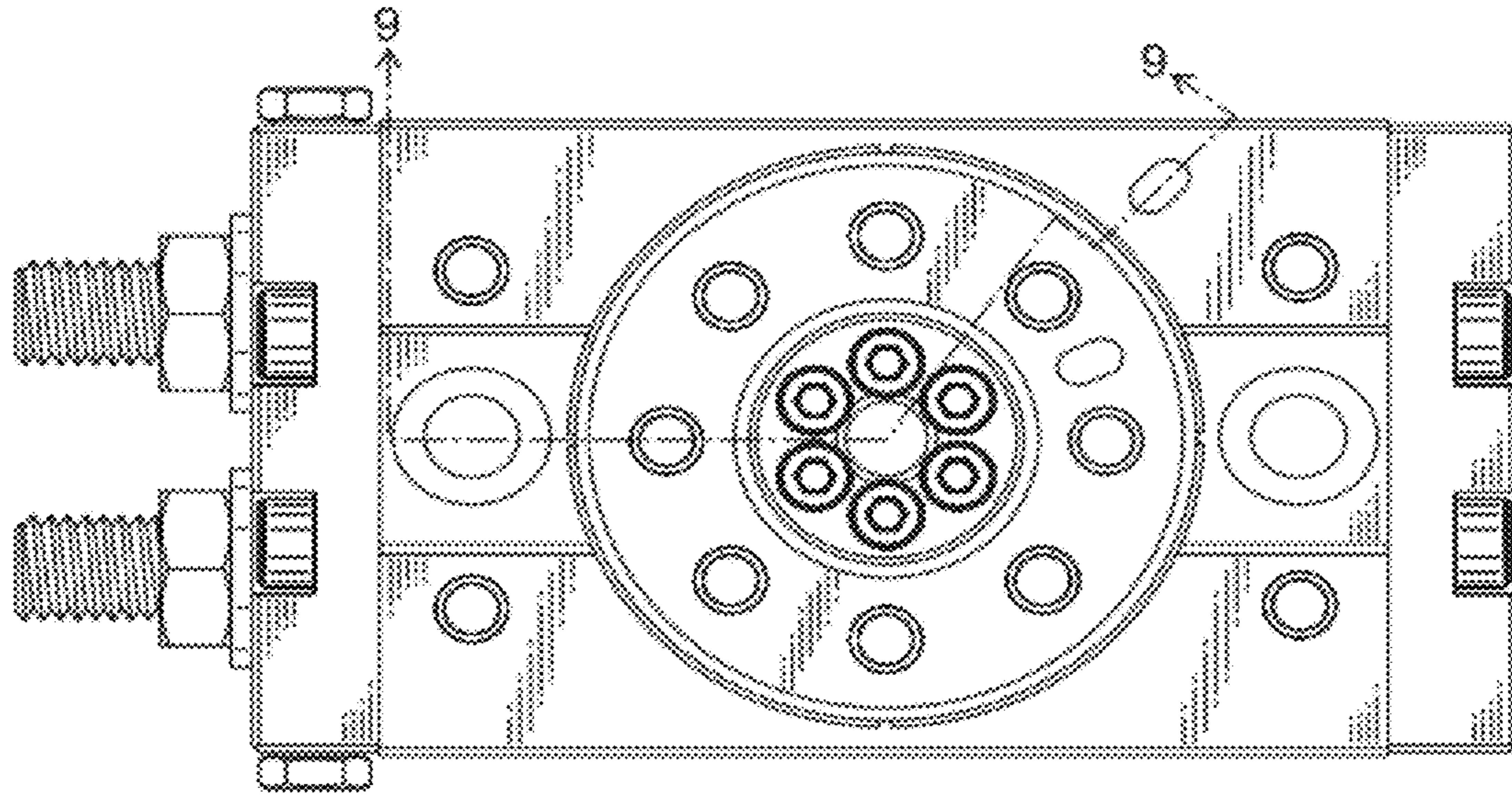


FIG. 6

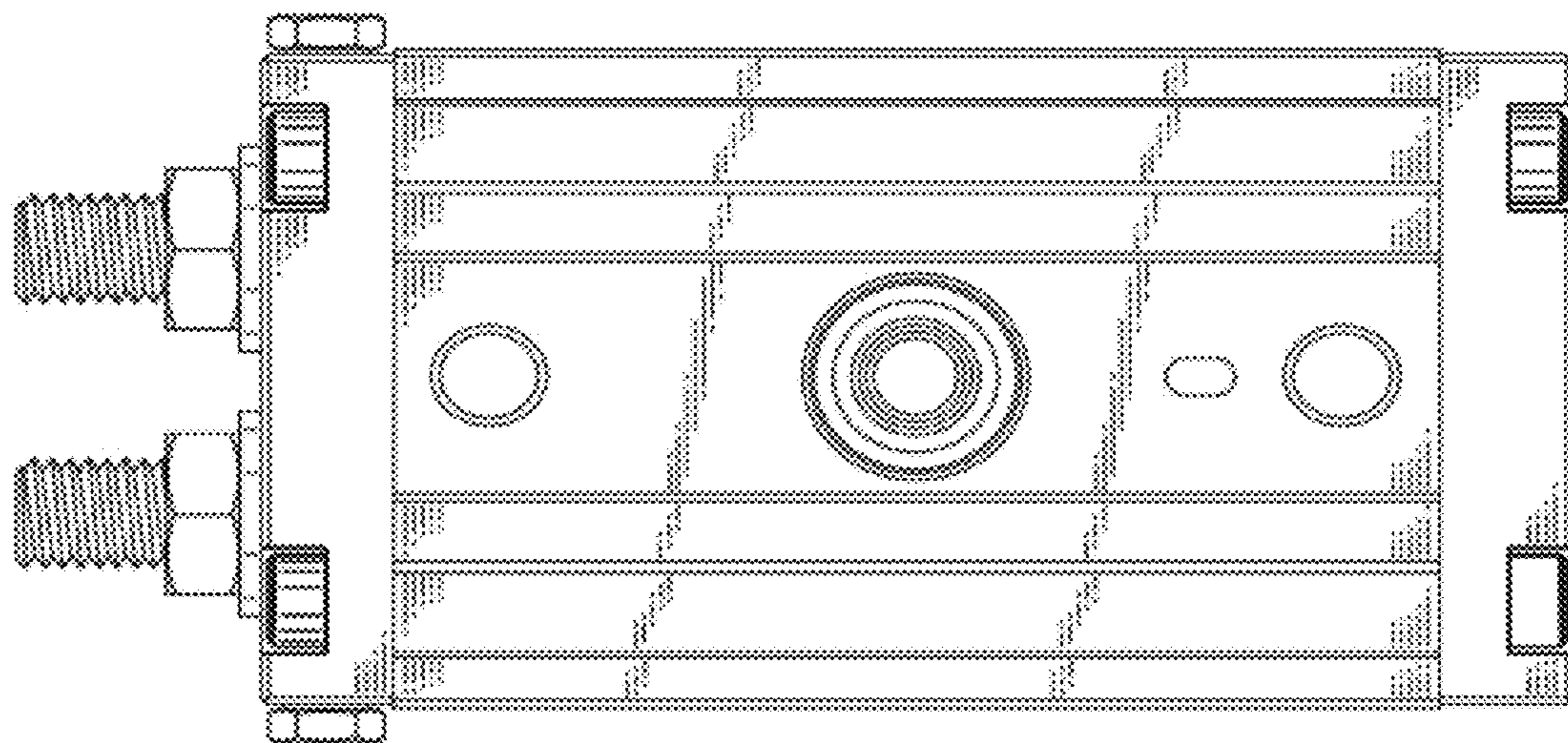


FIG. 7

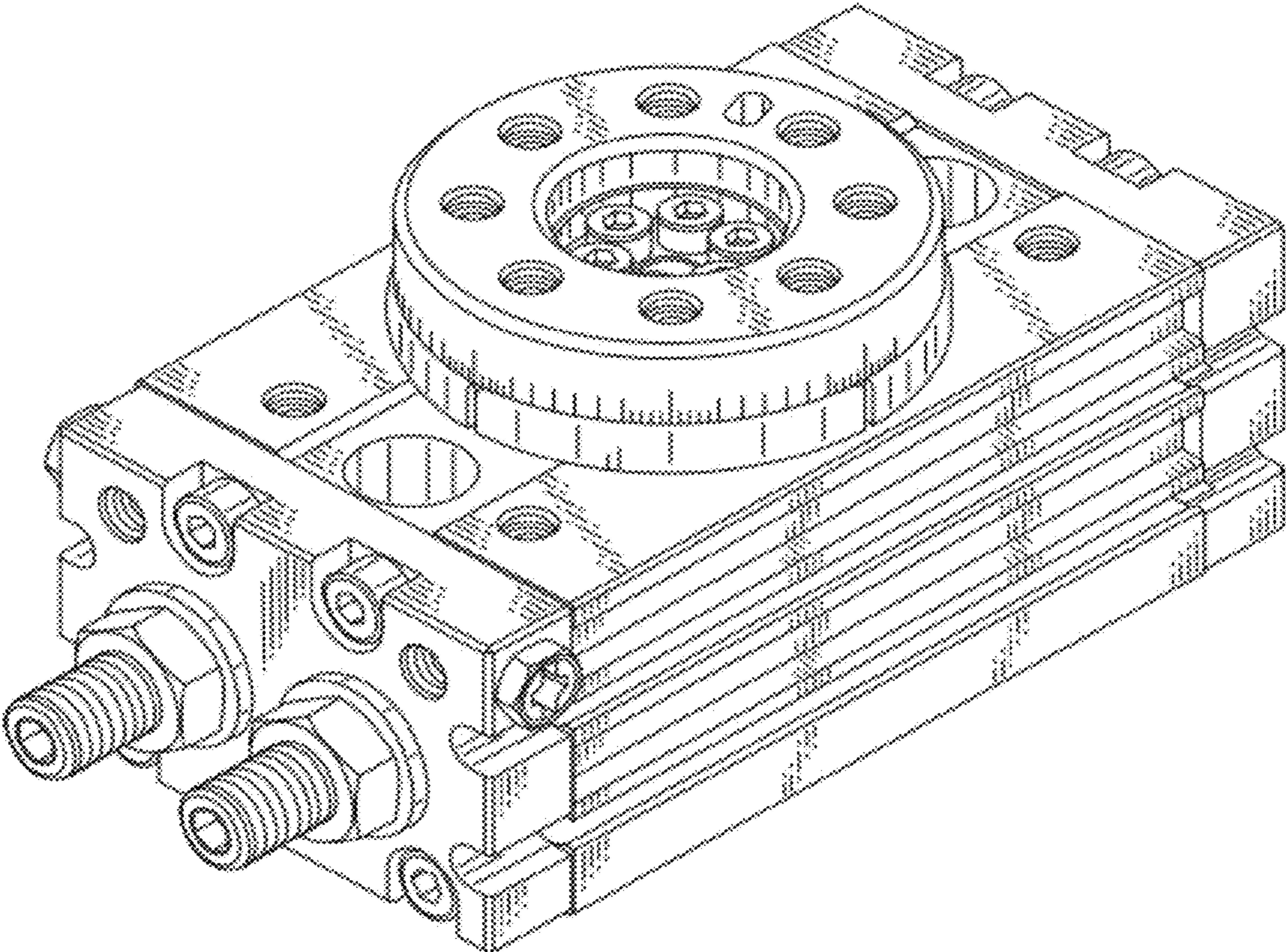


FIG. 8

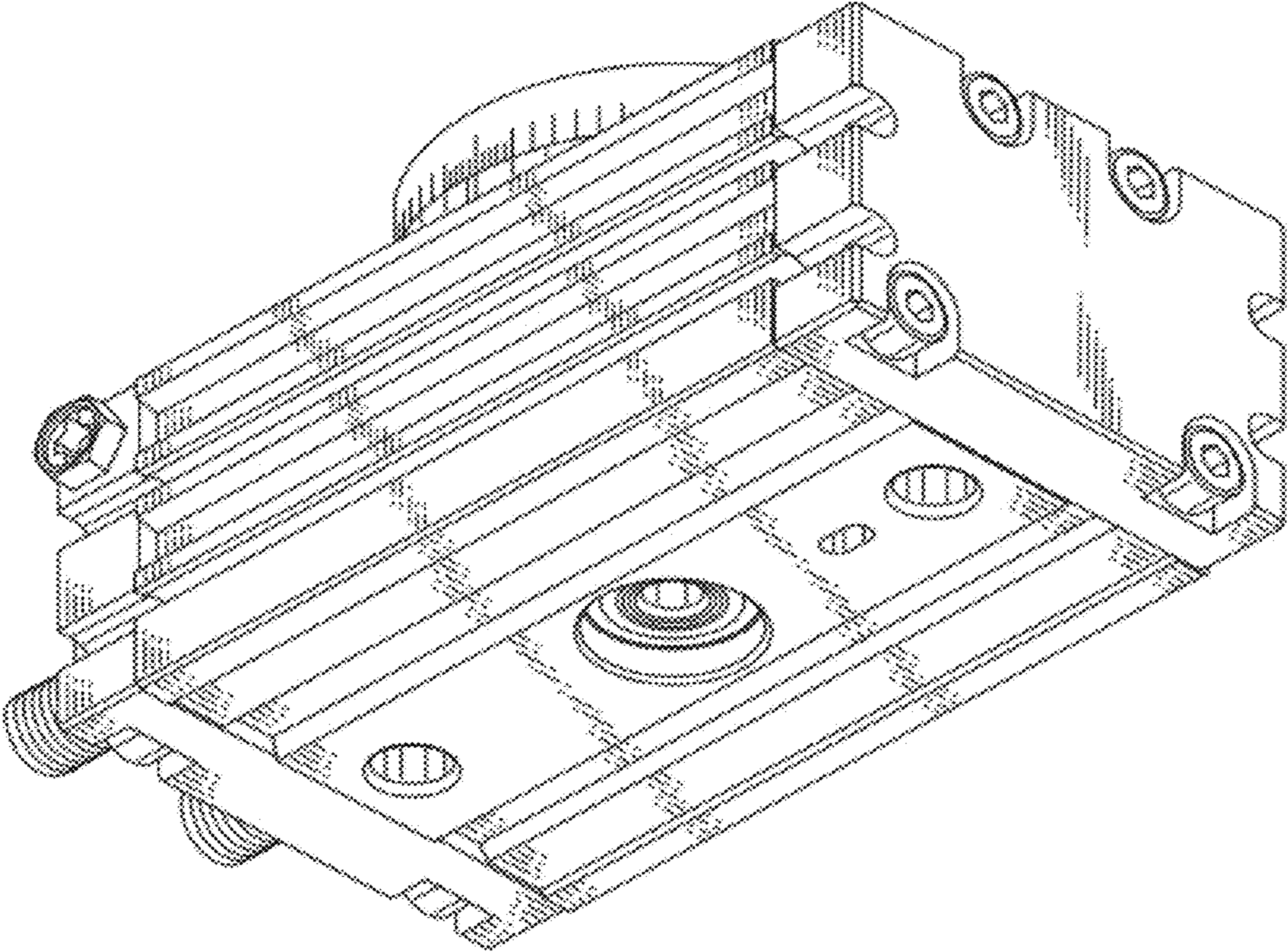


FIG. 9

