



US00D955944S

(12) **United States Design Patent** (10) **Patent No.:** **US D955,944 S**  
**Topp** (45) **Date of Patent:** **\*\* Jun. 28, 2022**

(54) **BRAKING UNIT COLUMN**

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(\*\*) Term: **15 Years**

(21) Appl. No.: **29/723,022**

(22) Filed: **Feb. 4, 2020**

**Related U.S. Application Data**

(62) Division of application No. 29/622,361, filed on Oct. 17, 2017, now Pat. No. Des. 878,259.

(30) **Foreign Application Priority Data**

Apr. 20, 2017 (DE) ..... 402017100534.4

(51) **LOC (13) Cl.** ..... **12-16**

(52) **U.S. Cl.**  
USPC ..... **D12/180**

(58) **Field of Classification Search**

USPC ..... D12/180, 177; D15/7, 143  
CPC ..... F01L 1/181  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D135,731 S 5/1943 Benzel  
D295,753 S \* 5/1988 LaBair ..... D15/7  
5,013,198 A \* 5/1991 Schultz ..... F04B 23/06  
417/403

D392,234 S 3/1998 Wallace  
D418,098 S 12/1999 Wallace  
D428,617 S \* 7/2000 Hariwara ..... D15/7  
6,089,111 A \* 7/2000 Machijima ..... G01D 11/30  
92/5 L

D480,405 S \* 10/2003 Kleffmann ..... D15/143

D494,902 S 8/2004 Wen

D546,252 S 7/2007 Belisle

D586,272 S 2/2009 Schulz

D600,180 S 9/2009 Schulz et al.

(Continued)

**FOREIGN PATENT DOCUMENTS**

CN 204591831 \* 8/2015

**OTHER PUBLICATIONS**

Vevor Hydraulic Power Unit Auto Car Lift posted to amazon.com.  
Available date: Jul. 29, 2016 [site visited Jul. 28, 2021] Available:  
<<https://www.amazon.com/VEVOR-Hydraulic-Power-Pumps-Single/dp/B01JA3QPCO>> (Year: 2016).\*

(Continued)

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(57) **CLAIM**

The ornamental design for a braking unit column, as shown and described.

**DESCRIPTION**

FIG. 1 is a top right perspective view of a braking unit column showing our new design;

FIG. 2 is a bottom right perspective view thereof;

FIG. 3 is a front elevational view of thereof;

FIG. 4 is a rear elevational view thereof;

FIG. 5 is a left elevational view thereof;

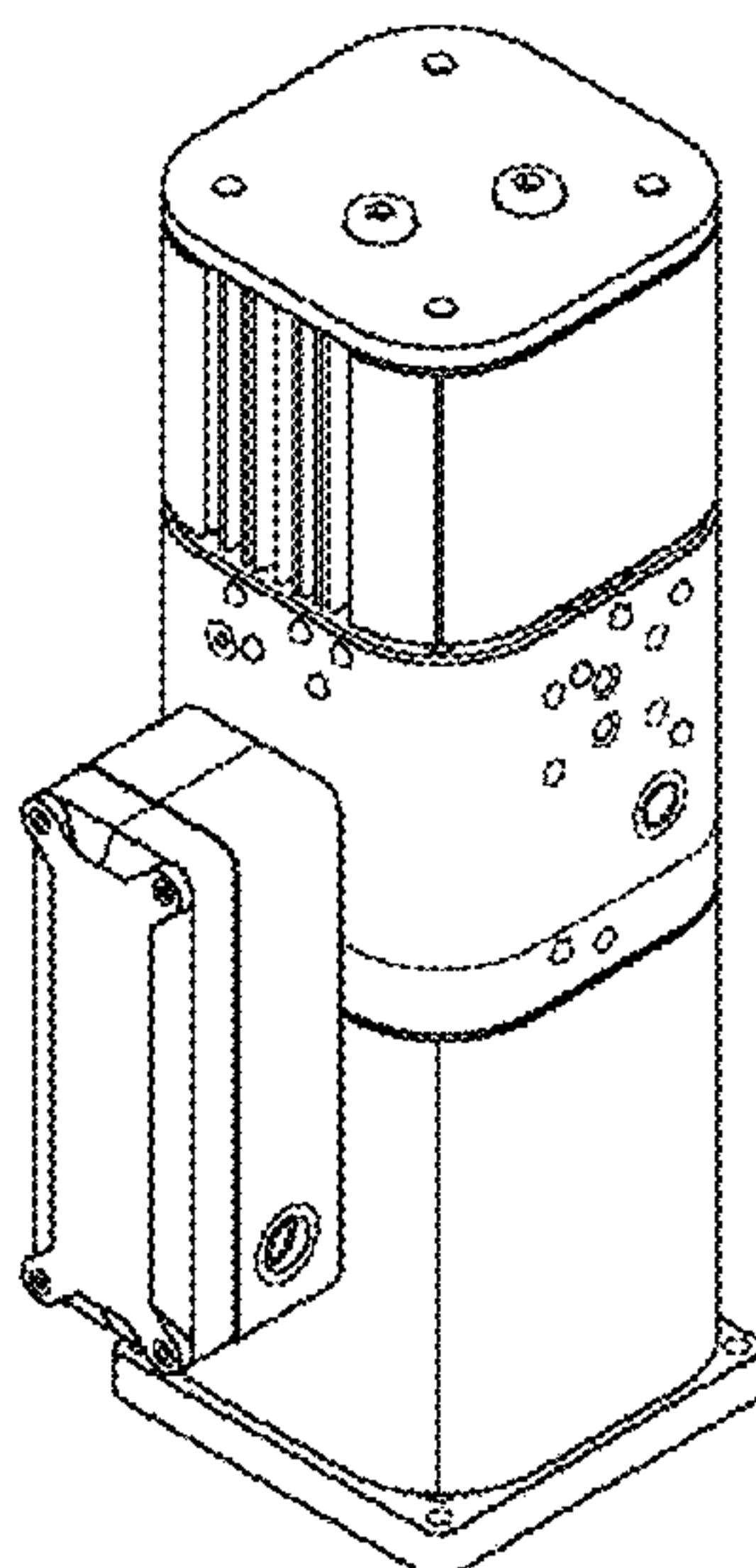
FIG. 6 is a right elevational view thereof;

FIG. 7 is a top plan view thereof; and,

FIG. 8 is a bottom plan view thereof.

The evenly spaced broken lines in the drawings depict portions of the braking unit column that form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**



(56)

References Cited

OTHER PUBLICATIONS

U.S. PATENT DOCUMENTS

D642,203 S \* 7/2011 Yoshimura ..... D15/9  
D659,614 S \* 5/2012 Kluck ..... D12/180  
D661,631 S 6/2012 Böhm et al.  
9,109,696 B2 8/2015 Heurich et al.  
9,115,654 B2 8/2015 Schnell  
D828,249 S 9/2018 Gustafson et al.  
D836,505 S 12/2018 Gustafson et al.  
D839,803 S \* 2/2019 Kanbargi ..... D12/177  
D878,259 S 3/2020 Topp  
D921,701 S \* 6/2021 Lörner ..... D15/7  
D924,937 S \* 7/2021 Lörner ..... D15/7  
2008/0010984 A1 \* 1/2008 Arbel ..... F15B 7/005  
60/476  
2008/0062038 A1 3/2008 Ouchi et al.  
2011/0126703 A1 \* 6/2011 Terasaki ..... F15B 15/2892  
92/5 R  
2018/0170334 A1 6/2018 Loeffler et al.  
2018/0257620 A1 9/2018 Crossman  
2019/0085920 A1 3/2019 Liu et al.

Mophorn Hydraulic Pump posted to amazon.com. Available date: Jun. 18, 2018 [site visited Jul. 28, 2021] Available: <<https://www.amazon.com/Mophorn-2-2KW-Hydraulic-Power-Universal/dp/B07DV9Z39V>> (Year: 2018).\*

Pintsch Bubenzer—3D Brakes in Motion posted to amazon.com. Available date: Sep. 24, 2013 [site visited Jul. 28, 2021] Available: <<https://www.youtube.com/watch?v=zQYEDzfOtNM>> (Year: 2013).\*

Construction, Working and Maintenance of Electro Hydraulic Thruster Drum Brakes by K.P. Shah. Available date: Mar. 2019 [site visited Jul. 28, 2021] Available: <<https://practicalmaintenance.net/wp-content/uploads/Construction-Working-and-Maintenance-of-Electro-Hydraulic-Thruster-Drum-Brakes.pdf>> (Year: 2019).\*

Mophorn Hydraulic Pump 3 Quart Hydraulic Power Unit posted to amazon.com. Available date: May 4, 2019 [site visited Feb. 3, 2022] Available: <<https://www.amazon.com/Mophorn-Quart-Hydraulic-Hydraulic-Trailer-Reservoir/dp/B07RKMLGBD>> (Year: 2019).\*

\* cited by examiner

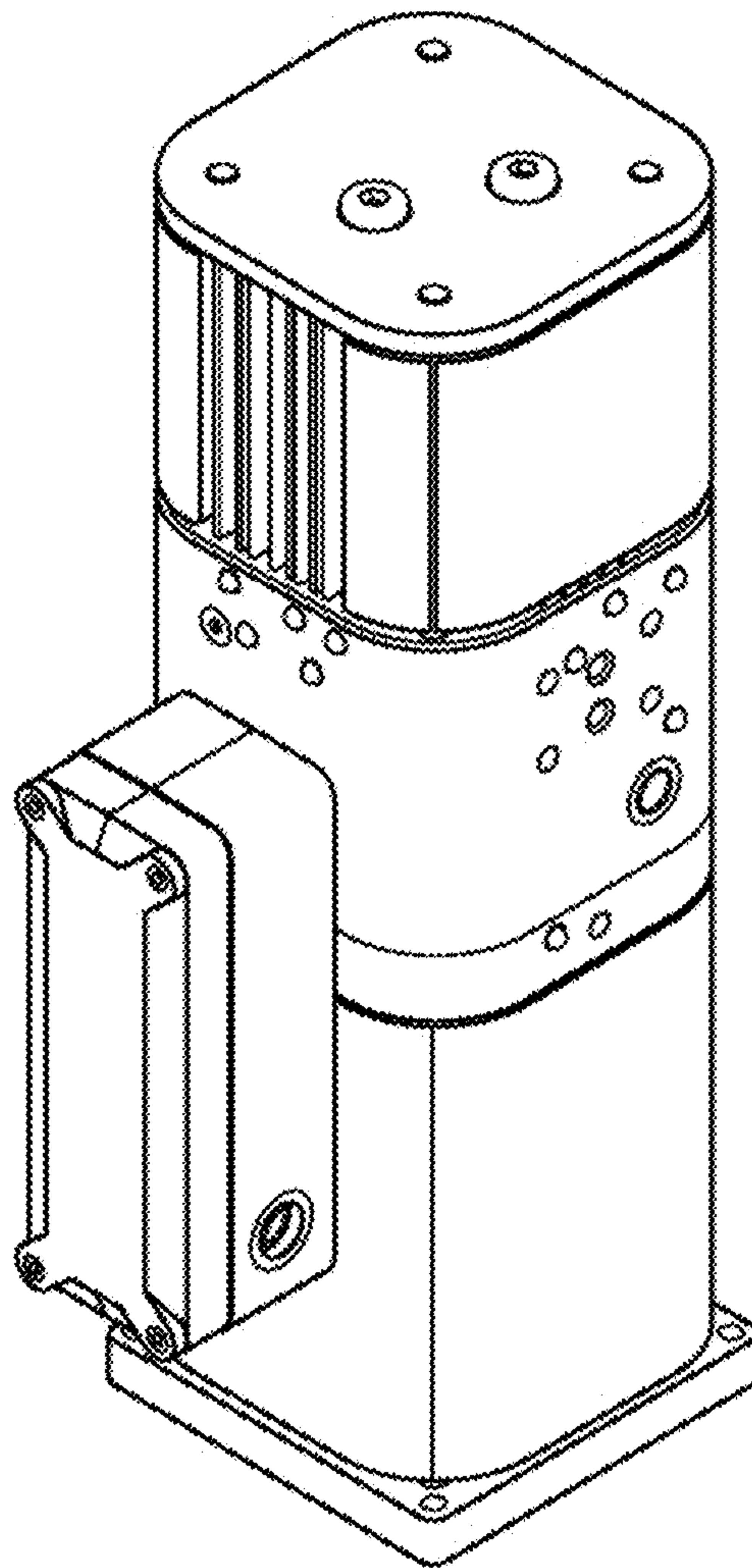


FIG. 1

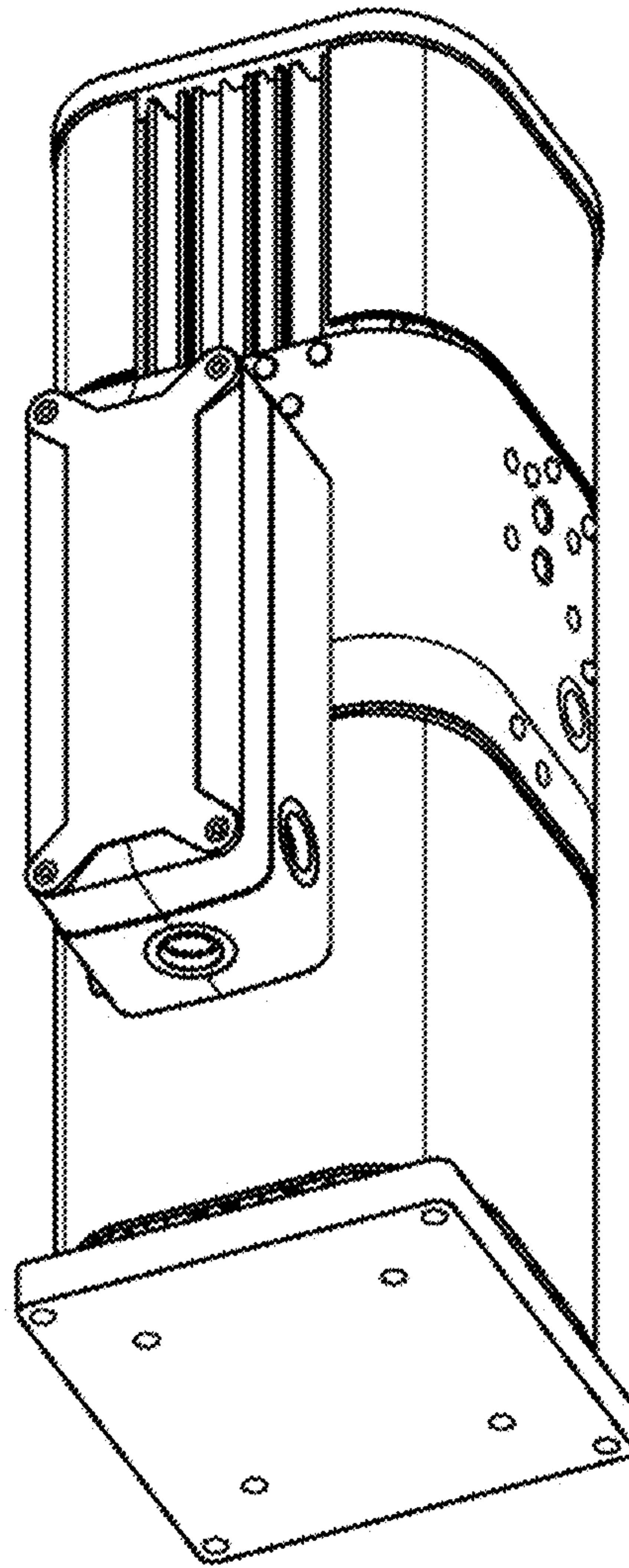


FIG. 2

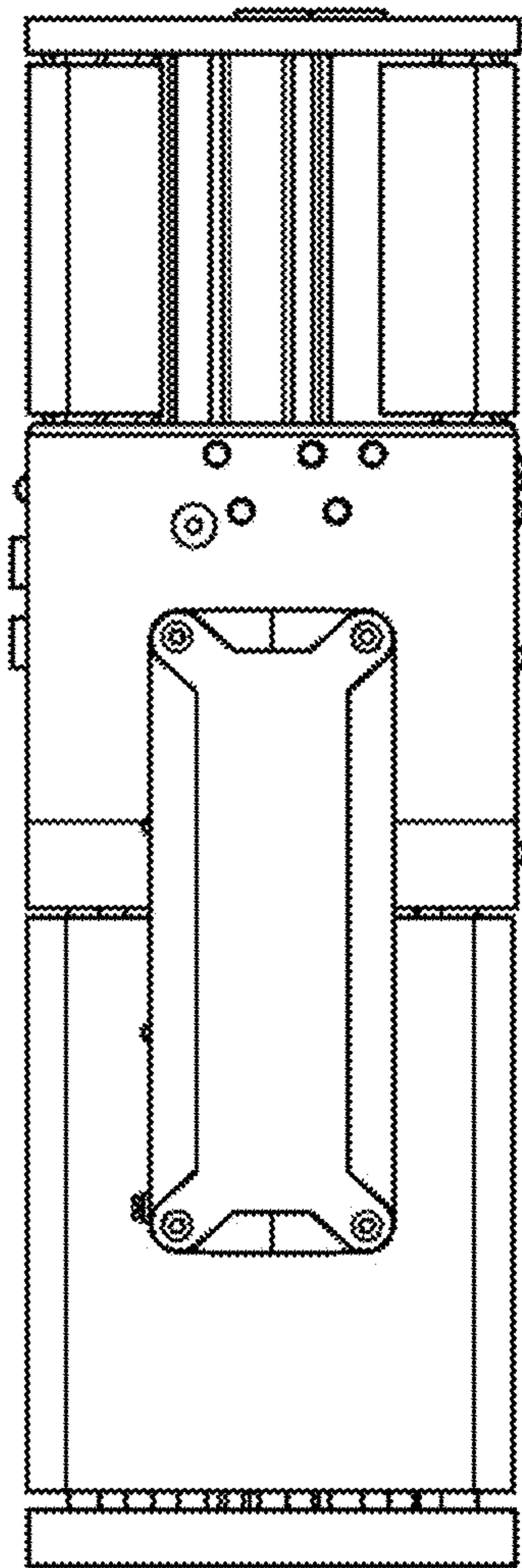


FIG. 3

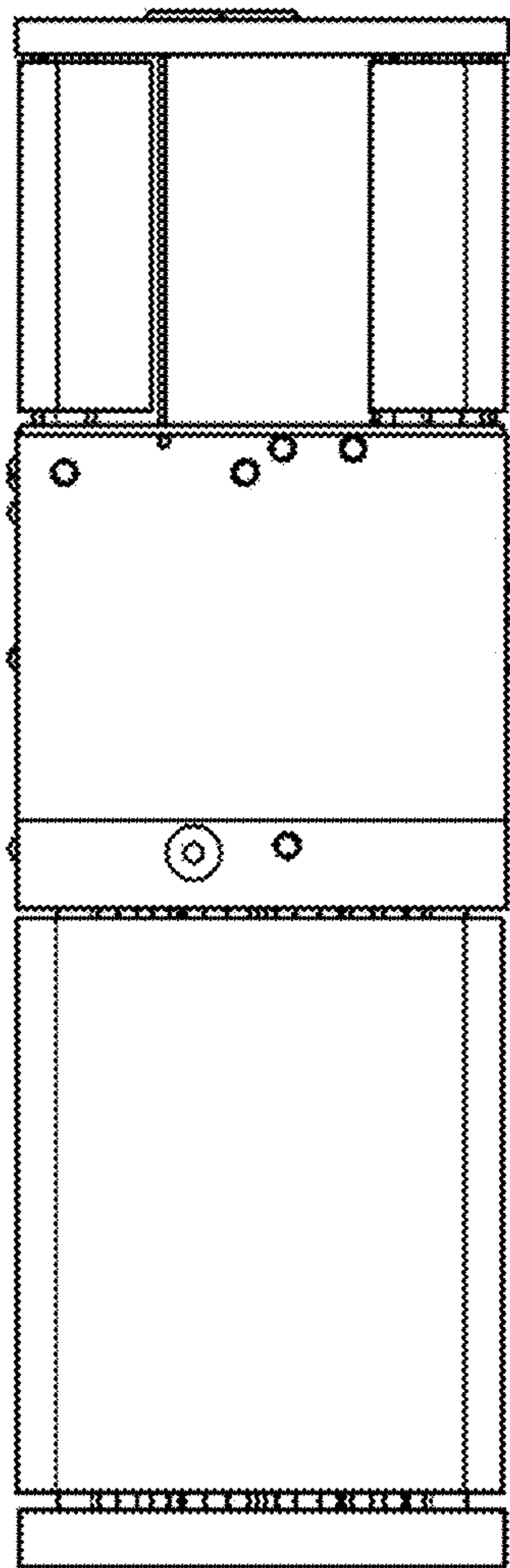


FIG. 4

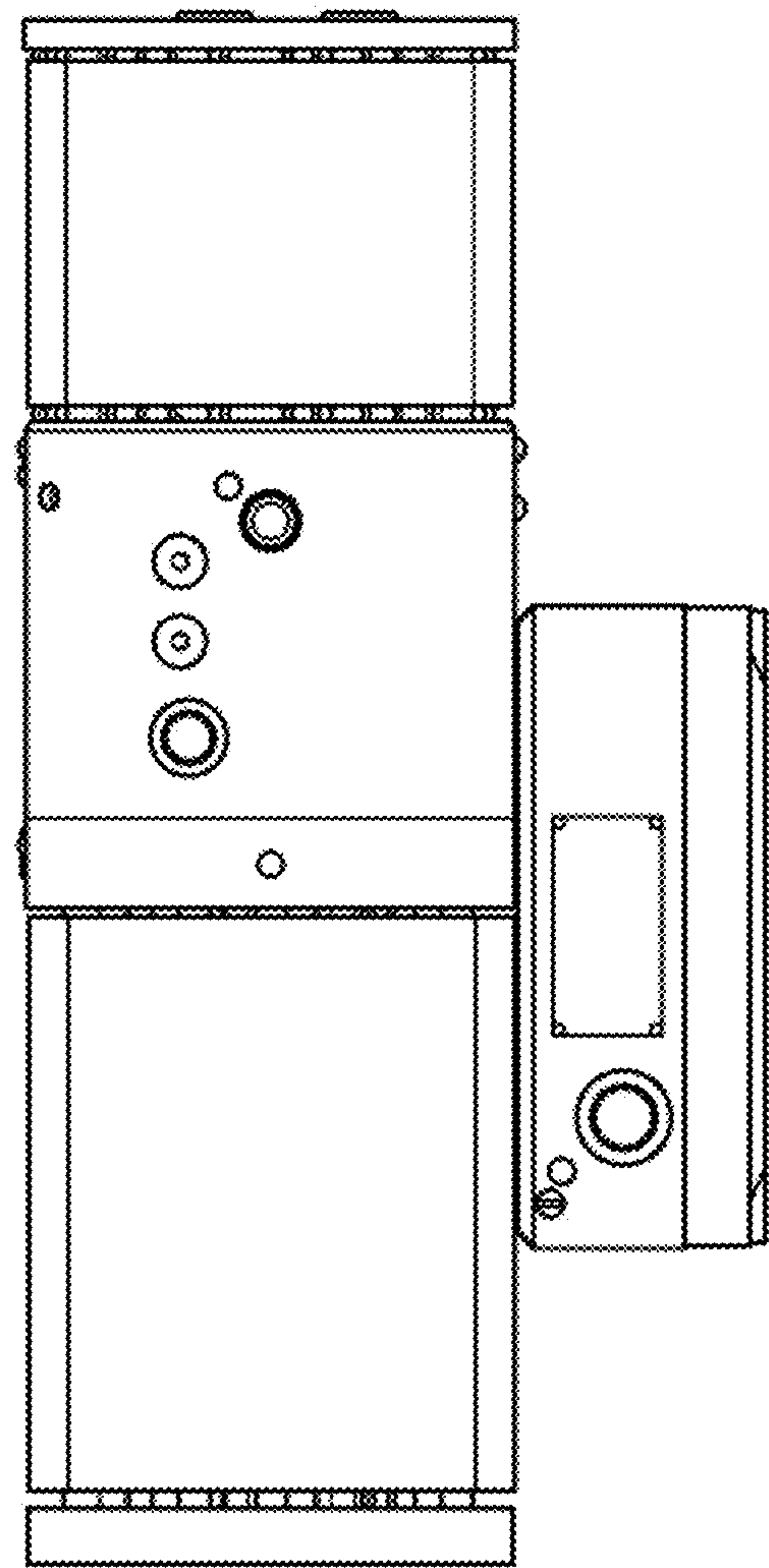


FIG. 5

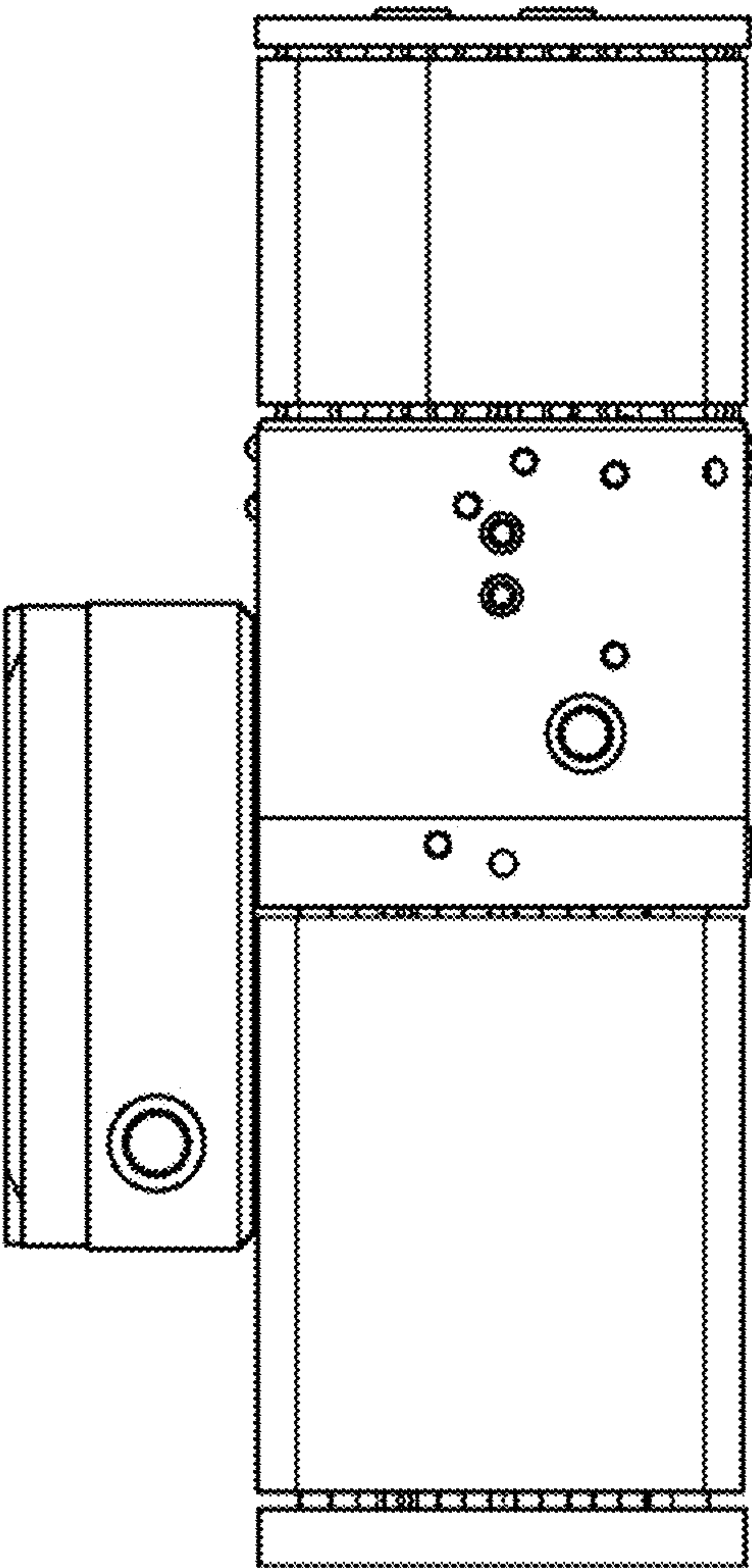


FIG. 6

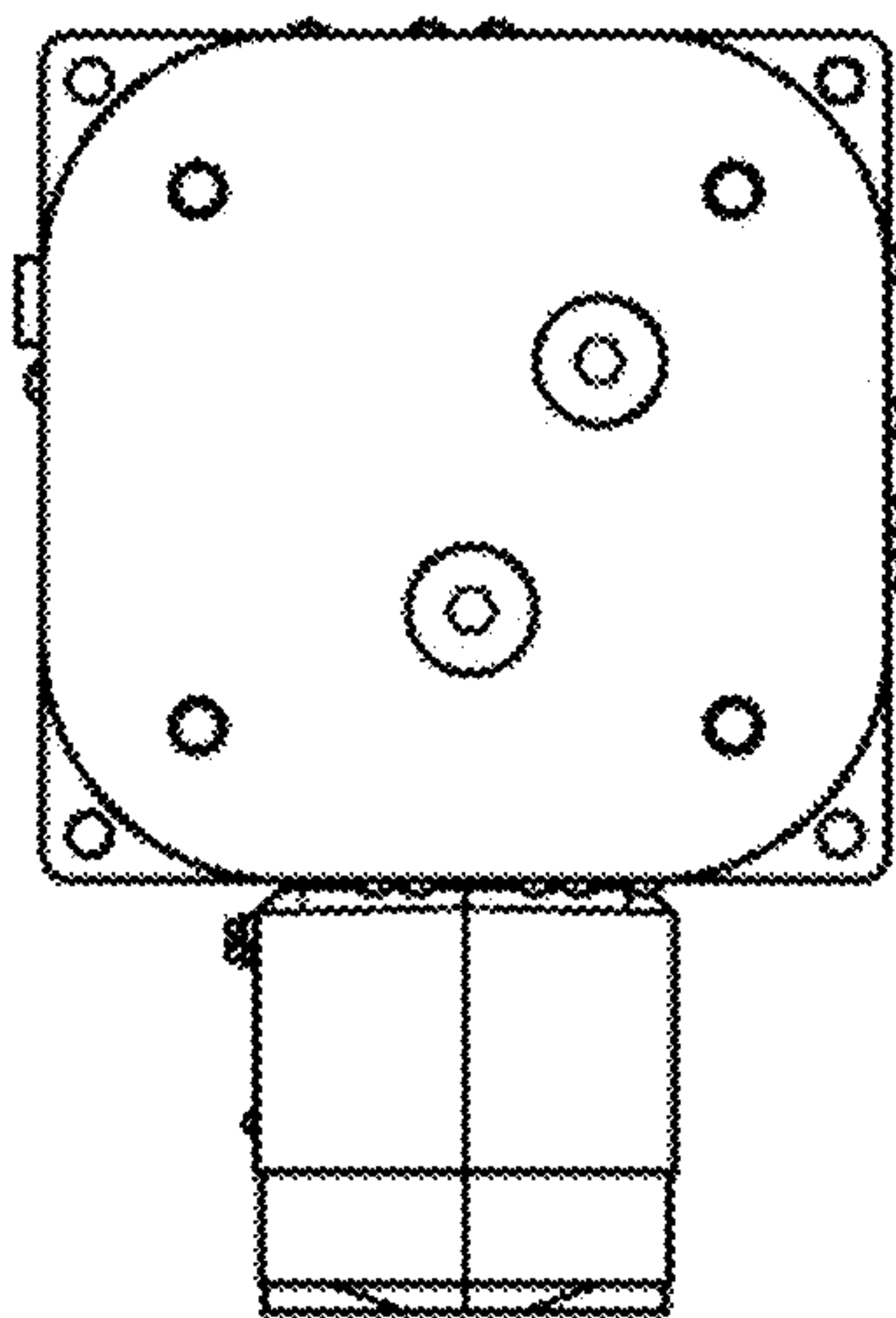


FIG. 7

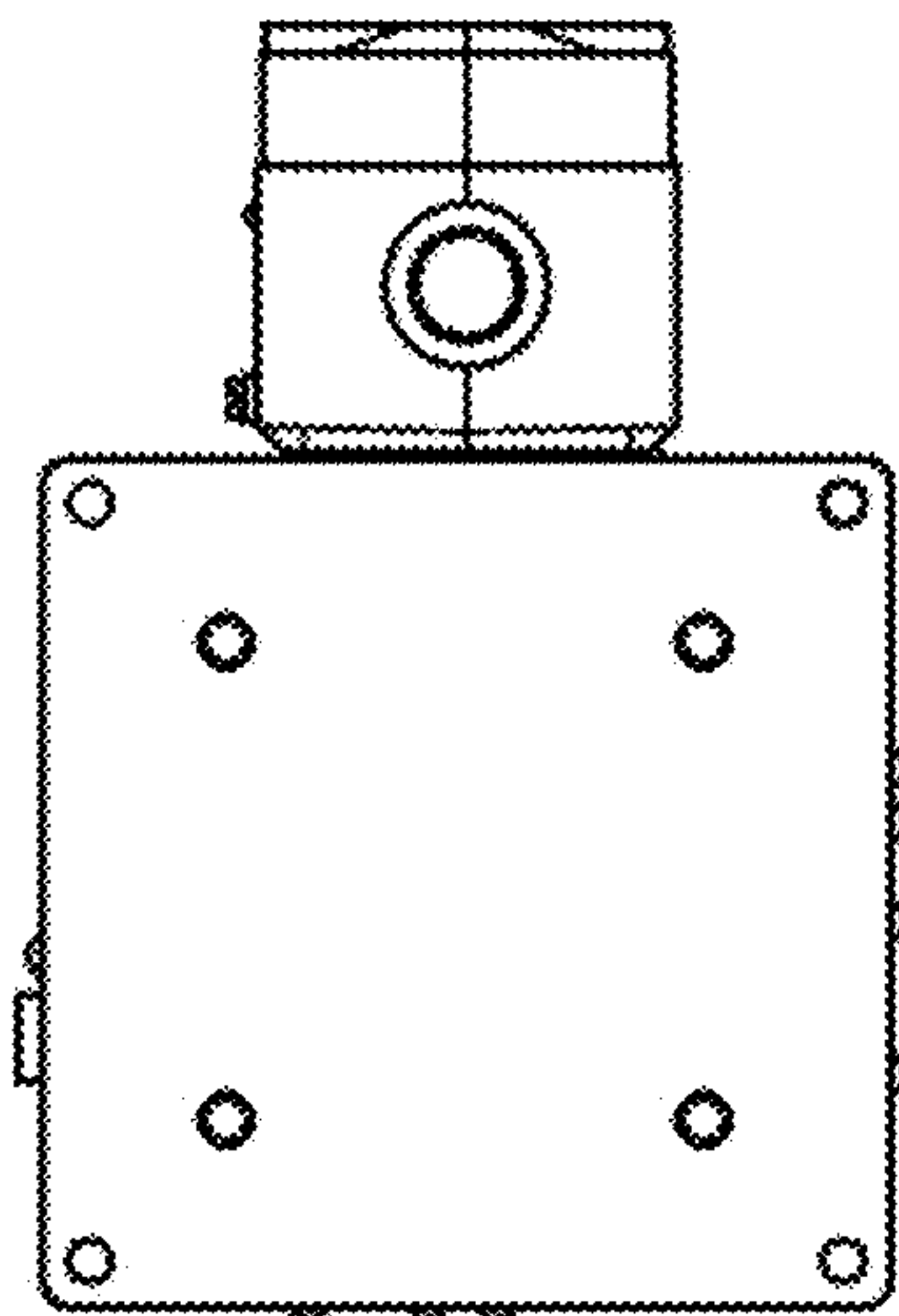


FIG. 8