

US00D884657S

(12) **United States Design Patent** (10) **Patent No.:** **US D884,657 S**  
**Personeni et al.** (45) **Date of Patent:** **\*\* May 19, 2020**

(54) **CIRCUIT BREAKER**  
 (71) Applicant: **ABB S.p.A.**, Milan (IT)  
 (72) Inventors: **Davide Personeni**, Treviolo (IT); **Luca Lanzoni**, Mozzo (IT); **Michele Ferrari**, Bergamo (IT); **Mauro Ghislotti**, Mapello (IT)

D547,730 S \* 7/2007 Azzola ..... D13/160  
 D641,710 S \* 7/2011 Azzola ..... D13/160  
 D687,387 S \* 8/2013 Besana ..... D13/160  
 D707,636 S \* 6/2014 Besana ..... D13/160  
 9,805,889 B2 \* 10/2017 He ..... H01H 71/08  
 D804,430 S \* 12/2017 Besana ..... D13/160  
 D853,337 S \* 7/2019 Besana ..... D13/160  
 D858,460 S \* 9/2019 Azzola ..... D13/160  
 10,483,065 B2 \* 11/2019 Oh ..... H01H 33/596

(Continued)

(73) Assignee: **ABB S.p.A.**, Milan (IT)  
 (\*\*) Term: **15 Years**  
 (21) Appl. No.: **29/666,970**  
 (22) Filed: **Oct. 17, 2018**  
 (30) **Foreign Application Priority Data**

Apr. 18, 2018 (EM) ..... 005239464  
 (51) **LOC (12) Cl.** ..... **13-03**  
 (52) **U.S. Cl.**  
 USPC ..... **D13/160**  
 (58) **Field of Classification Search**  
 USPC ..... D13/110, 112, 118, 123, 133, 154,  
 D13/158–162.1, 169–171, 173, 175, 178,  
 D13/184, 199  
 CPC .. H01H 9/00; H01H 9/02; H01H 9/20; H01H  
 9/26; H01H 33/06; H01H 33/66; H01H  
 33/662; H01H 33/666; H01H 35/36;  
 H01H 71/10; H02B 11/133; H05K 7/14  
 See application file for complete search history.

(56) **References Cited**  
 U.S. PATENT DOCUMENTS  
 4,890,184 A \* 12/1989 Russell ..... H02H 3/10  
 361/87  
 5,150,091 A \* 9/1992 Hart ..... H01H 9/0264  
 200/293  
 D535,626 S \* 1/2007 Azzola ..... D13/160  
 D547,729 S \* 7/2007 Azzola ..... D13/160

**FOREIGN PATENT DOCUMENTS**

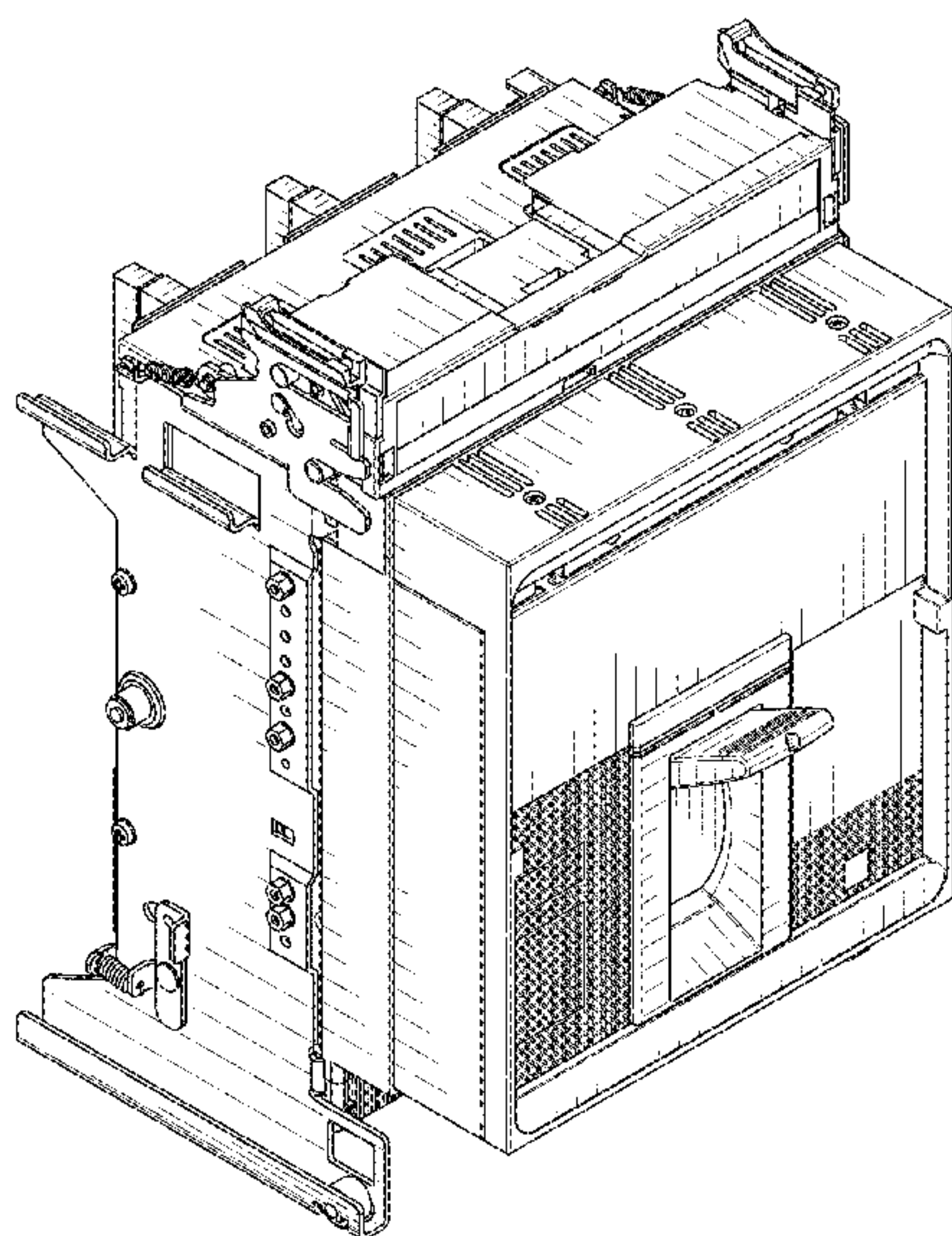
WO WO-2010079105 A1 \* 7/2010 ..... H01H 71/525  
*Primary Examiner* — Angela J Lee  
*Assistant Examiner* — Shawn T Gingrich  
 (74) *Attorney, Agent, or Firm* — Taft Stettinius &  
 Hollister LLP; J. Bruce Schelkopf

(57) **CLAIM**  
 The ornamental design for a circuit breaker, as shown and described.

**DESCRIPTION**

FIG. 1 is a front side perspective view of an embodiment of a circuit breaker.  
 FIG. 2 is a front side view of the circuit breaker shown in FIG. 1.  
 FIG. 3 is a back side view of the circuit breaker shown in FIG. 1.  
 FIG. 4 is a left side view of the circuit breaker shown in FIG. 1.  
 FIG. 5 is a right side view of the circuit breaker shown in FIG. 1.  
 FIG. 6 is a top side view of the circuit breaker shown in FIG. 1; and,  
 FIG. 7 is a bottom side view of the circuit breaker shown in FIG. 1.  
 The broken lines in the drawings illustrate portions of the circuit breaker that form no part of the claimed design.

**1 Claim, 7 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

2006/0071750 A1\* 4/2006 Marks ..... H01H 71/0207  
336/172  
2009/0190289 A1\* 7/2009 Bellotto ..... H01H 71/7409  
361/620  
2009/0239399 A1\* 9/2009 Azzola ..... H01H 71/08  
439/119  
2011/0186408 A1\* 8/2011 Manzoli ..... H01H 71/04  
200/237  
2013/0334174 A1\* 12/2013 Wehr ..... H01H 71/0257  
218/157  
2014/0151201 A1\* 6/2014 Sisley ..... H01H 9/0264  
200/293  
2015/0109091 A1\* 4/2015 Oh ..... H01H 37/52  
337/351  
2016/0268704 A1\* 9/2016 Jurek ..... H01H 71/10  
2017/0200574 A1\* 7/2017 Bresciani ..... H01H 21/30  
2017/0229261 A1\* 8/2017 Rota Martir ..... H01H 21/22  
2018/0190462 A1\* 7/2018 Oh ..... H01H 71/02  
2018/0233314 A1\* 8/2018 Oh ..... H01H 9/32  
2019/0131099 A1\* 5/2019 Fleitmann ..... H01H 71/10

\* cited by examiner



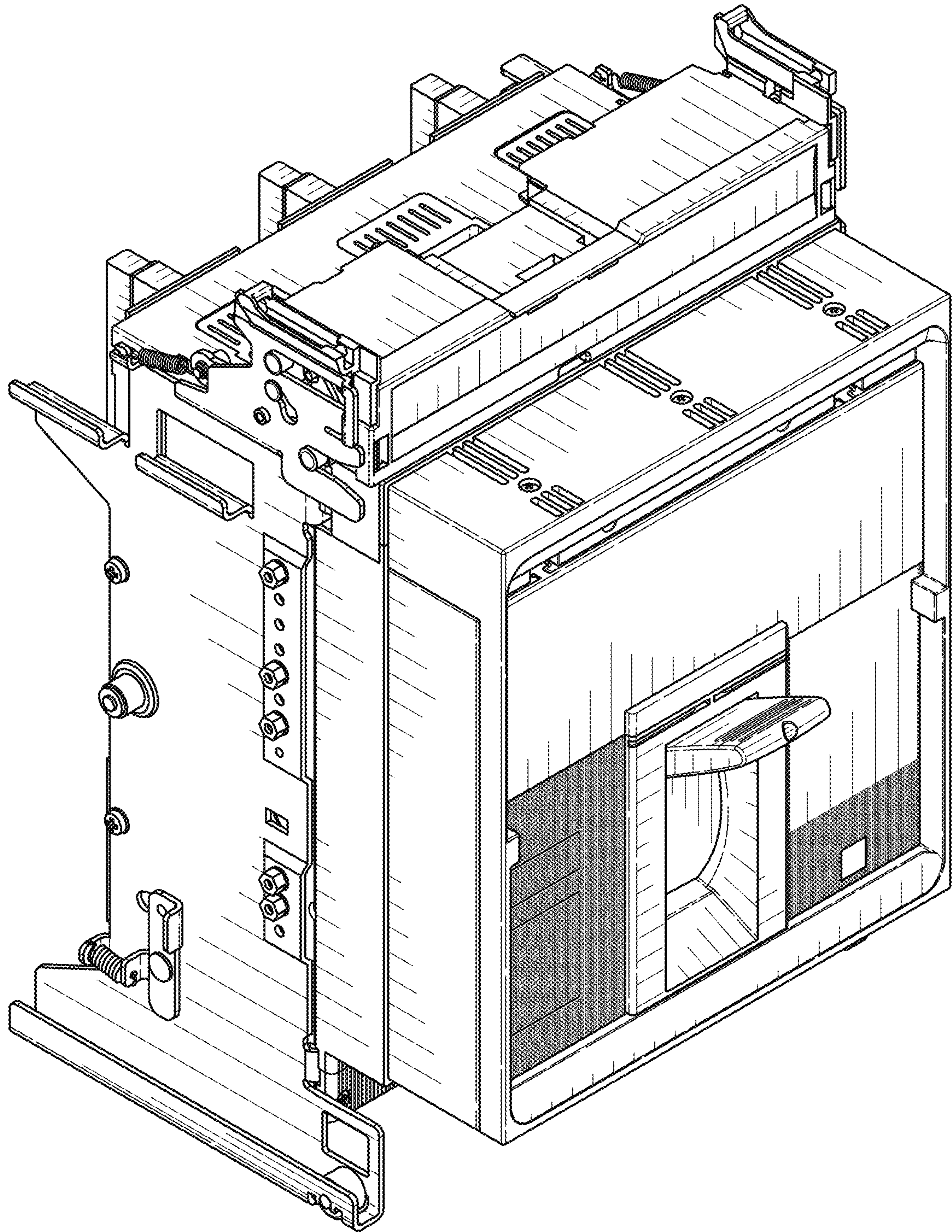


FIG. 1



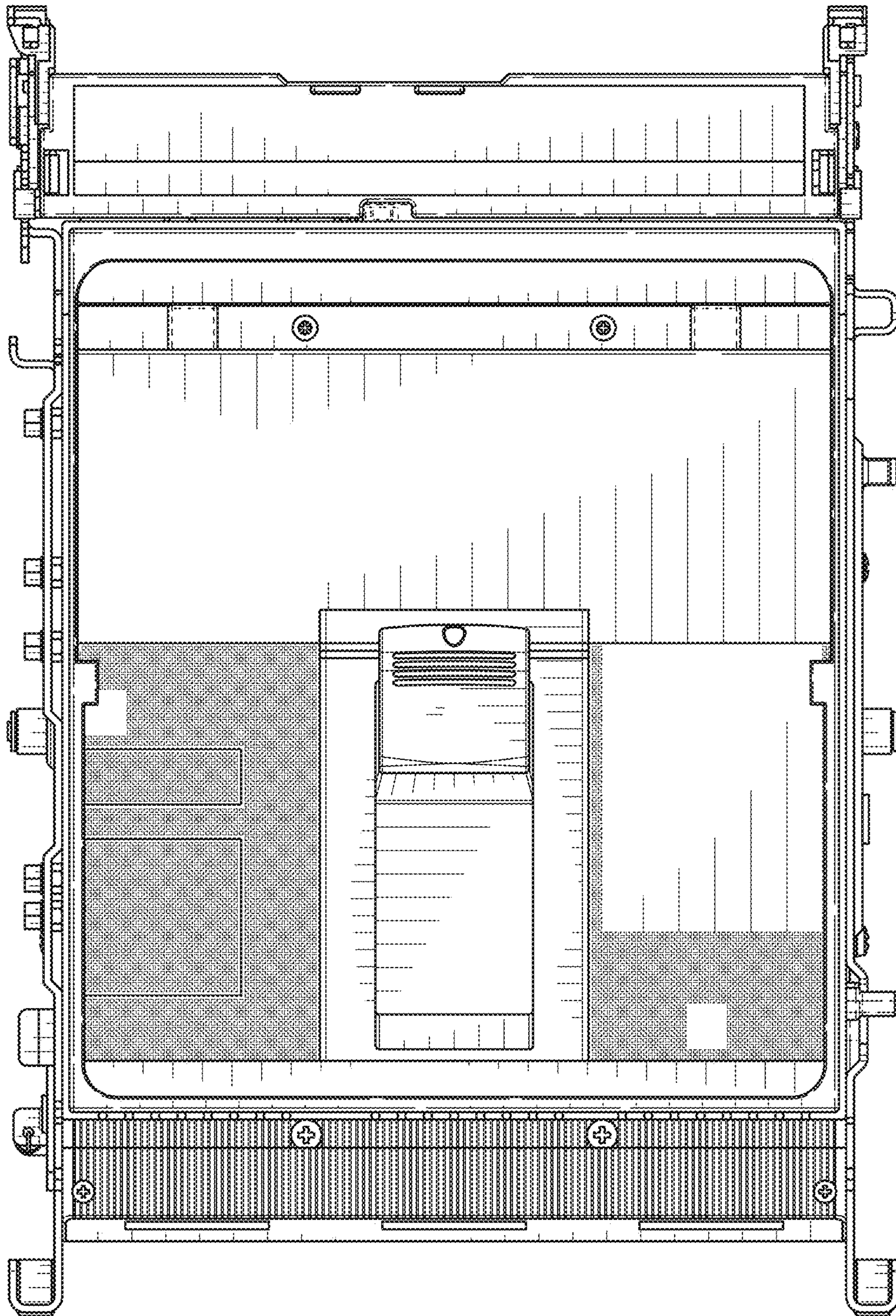


FIG. 2

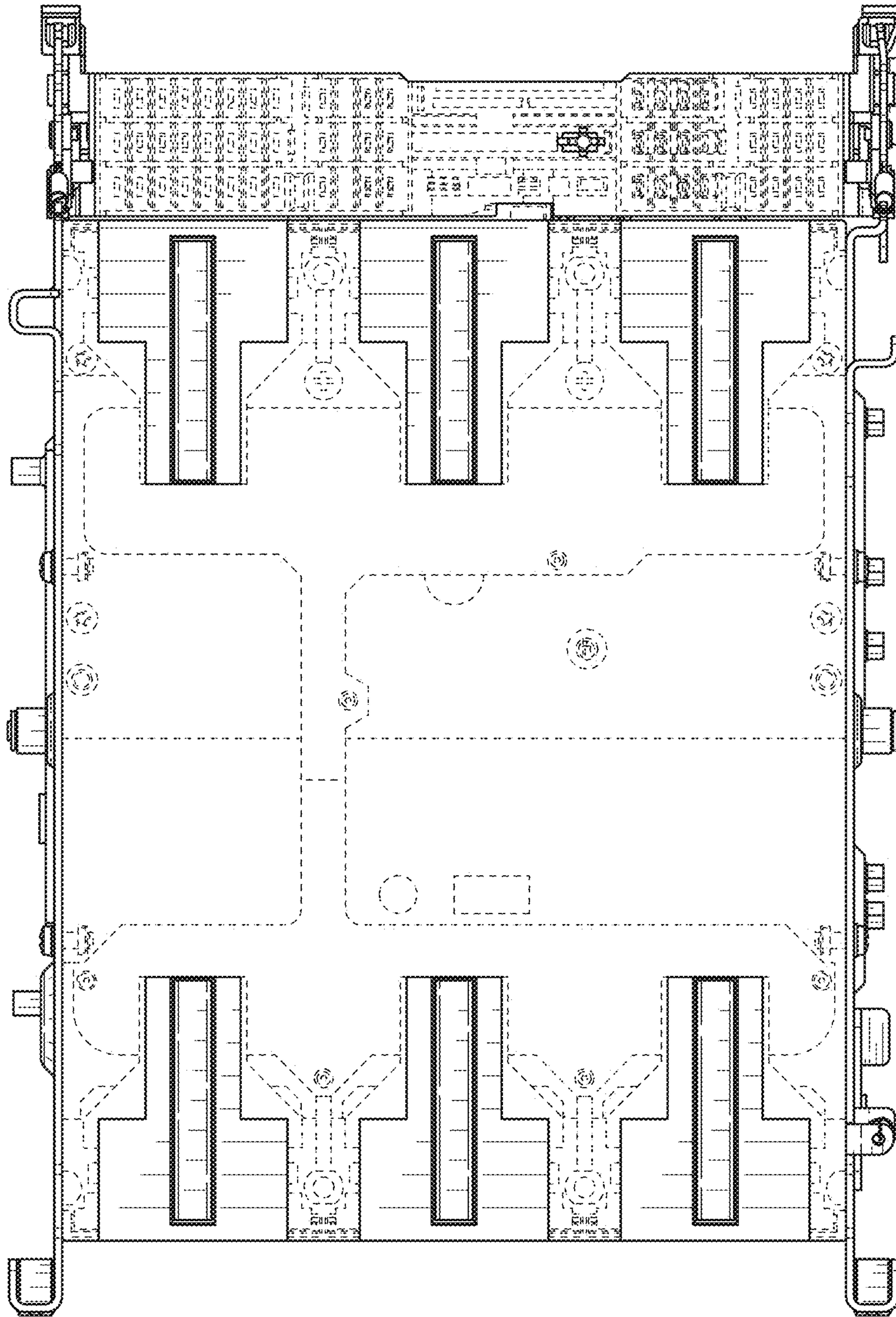


FIG. 3



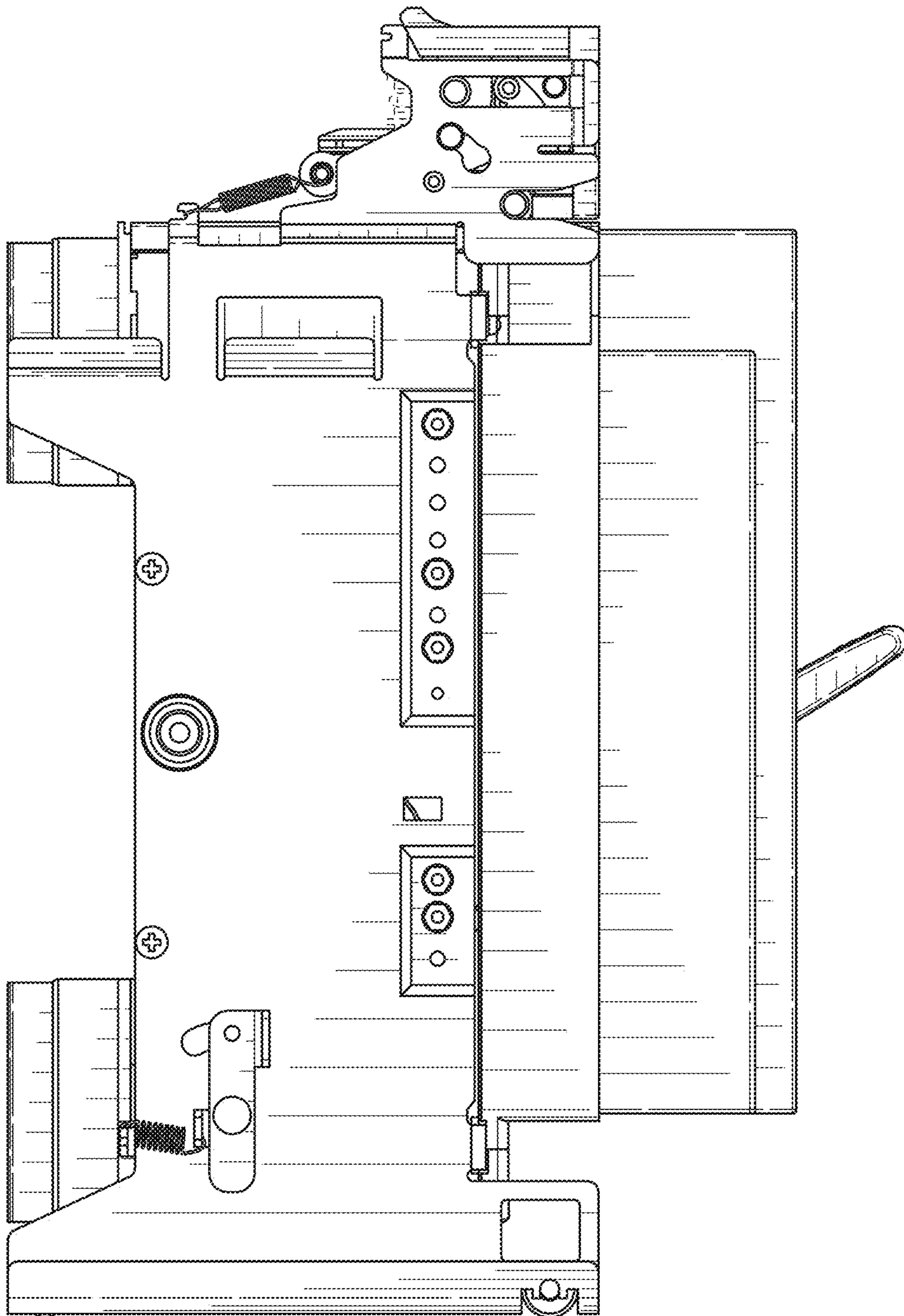


FIG. 4

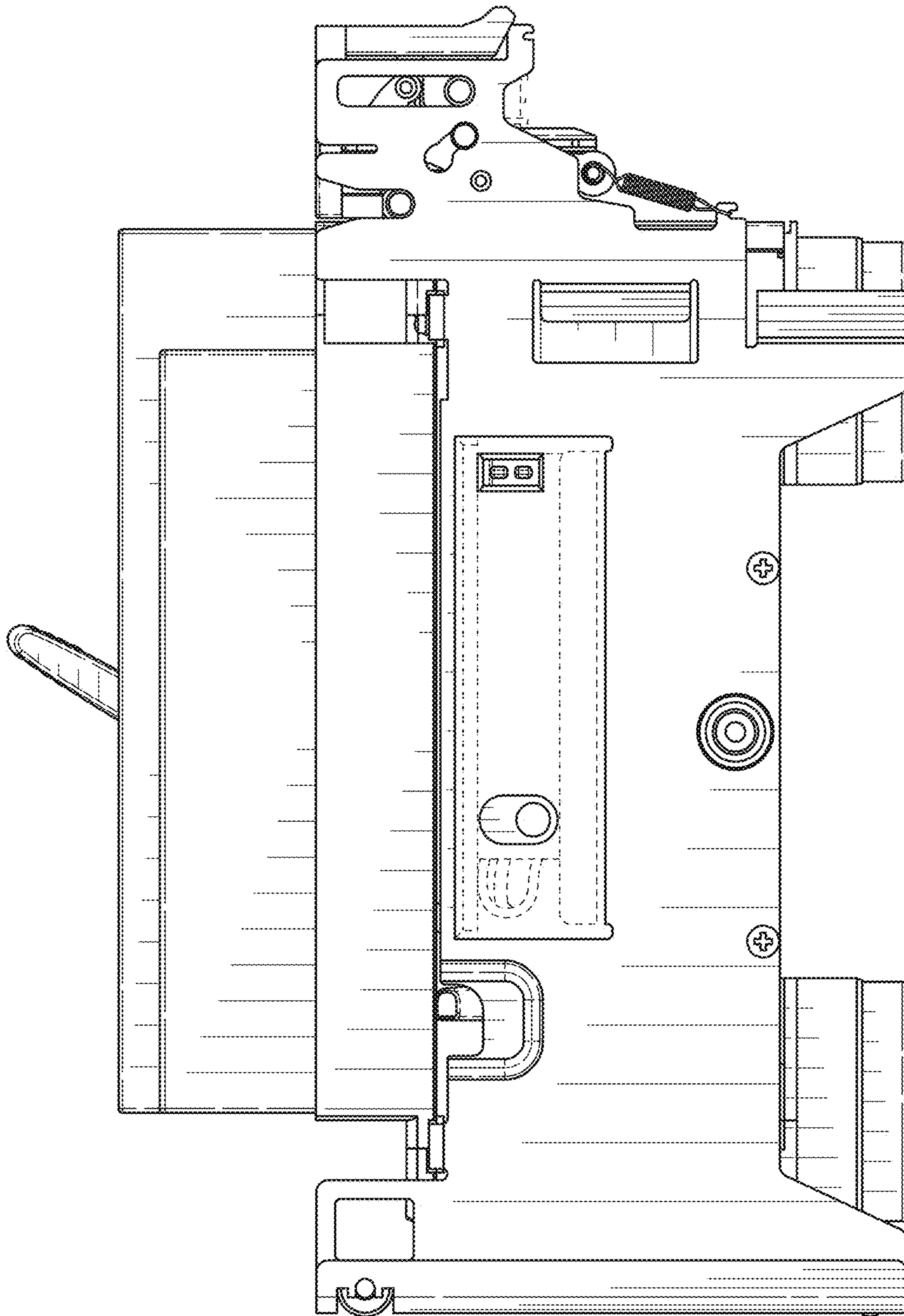


FIG. 5

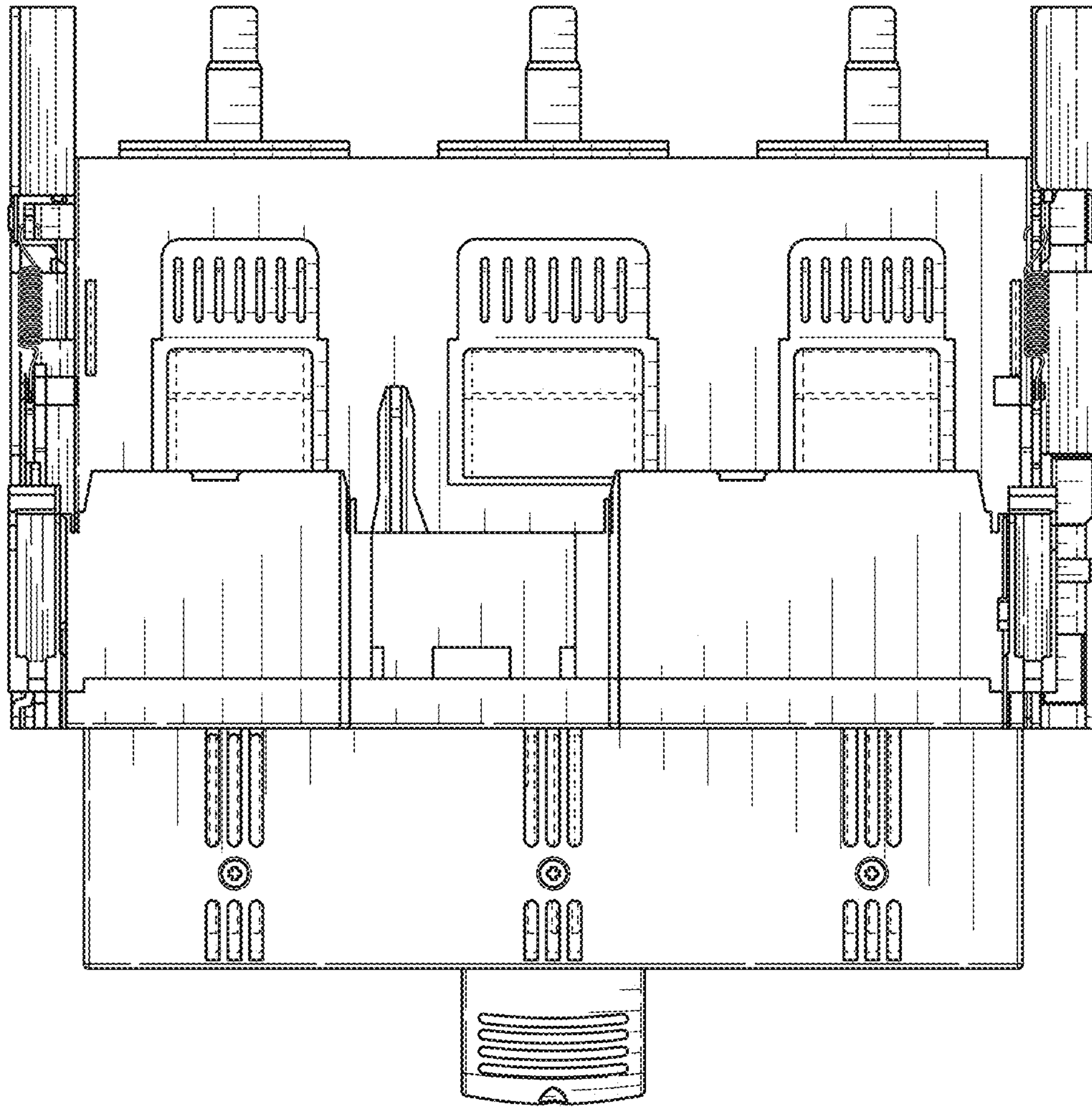


FIG. 6



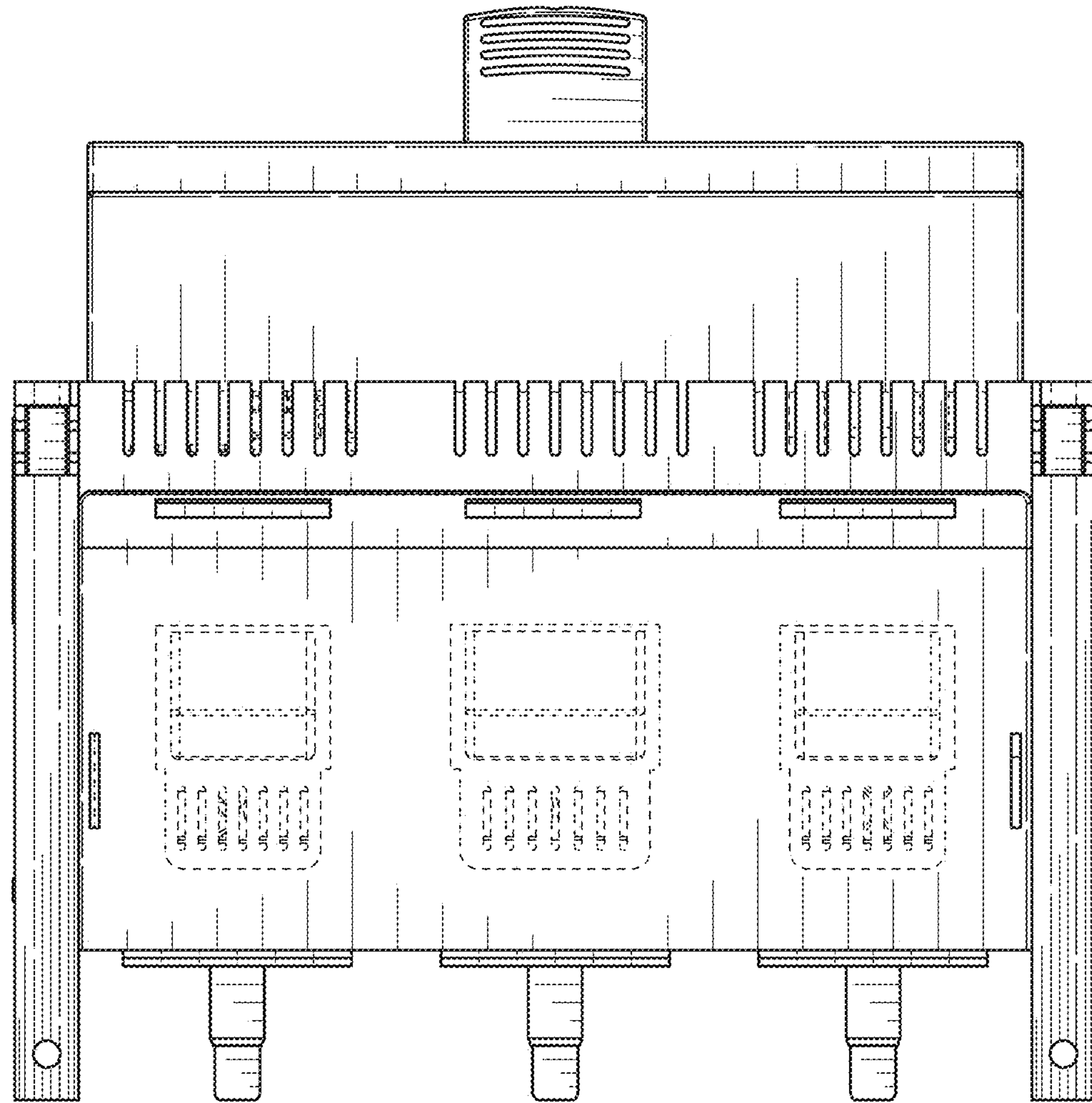


FIG. 7