

US00D870540S

(12) **United States Design Patent** (10) **Patent No.:** **US D870,540 S**
Aoki et al. (45) **Date of Patent:** **** Dec. 24, 2019**

(54) **SLIDER BLOCK FOR MOVING AN ARTICLE ALONG A RAIL**

(71) Applicant: **THK CO., LTD.**, Tokyo (JP)

(72) Inventors: **Shinji Aoki**, Tokyo (JP); **Takeshi Shimamura**, Tokyo (JP)

(73) Assignee: **THK CO., LTD.**, Tokyo (JP)

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

(21) Appl. No.: **29/616,637**

(22) Filed: **Sep. 7, 2017**

(30) **Foreign Application Priority Data**

Mar. 15, 2017 (JP) 2017-005215

(51) **LOC (12) Cl.** **08-05**

(52) **U.S. Cl.**
USPC **D8/377**

(58) **Field of Classification Search**

USPC D8/321, 359, 374, 375, 376, 377, 400, D8/61, 64, 70, 363, 381, 354, 349, 403, D8/57, 69, 310; D3/276; D6/587; D7/318, 393, 600, 622, 705, 624.1, 502, D7/553.1, 553.2, 553.4, 553.5, 553.6, D7/554.2, 554.3; D9/531; D14/238, 373, D14/448, 451, 452; D25/38.1, 41.1, 43, D25/48.2, 48.3

CPC Y10T 16/10; Y10T 16/104; Y10T 16/124; Y10T 16/1263; Y10T 16/127; Y10T 16/131; Y10T 16/14; Y10T 16/35; Y10T 16/3543; Y10T 16/37; Y10T 16/376; Y10T 16/379; Y10T 16/387; Y10T 24/44573; Y10T 29/53543; Y10T 137/6903; Y10T 16/372; Y10T 16/375; Y10T 16/378; Y10T 16/3797; Y10T 16/18; Y10T 16/1853; Y10T 16/1857; Y10T 16/186; Y10T 16/209; Y10T 16/1937; A47H 1/02; A47F 7/14; A47F 7/16; A47F 7/143; A47F 5/08; A47F

5/0807; A47F 5/0815; A47F 5/0838; A47F 5/0846; A47F 5/0853; A47F 5/105; B60B 7/20; B60B 19/06; B60B 37/10; B60B 2200/43; B60B 33/02; B60B 11/00;
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

D153,039 S * 3/1949 Sanford D8/354
D259,330 S * 5/1981 Stine D8/373
(Continued)

OTHER PUBLICATIONS

Rullblock BL-MAX, posted unknown, [retrieved Sep. 24, 2019]. Retrieved from Internet, <URL: <https://www.eiemaskin.se/produkter/linjaerprodukter/rullblock-bl-max/>>.*

(Continued)

Primary Examiner — Karen E Kearney

Assistant Examiner — Kristin E Reed

(74) *Attorney, Agent, or Firm* — Westerman, Hattori, Daniels & Adrian, LLP

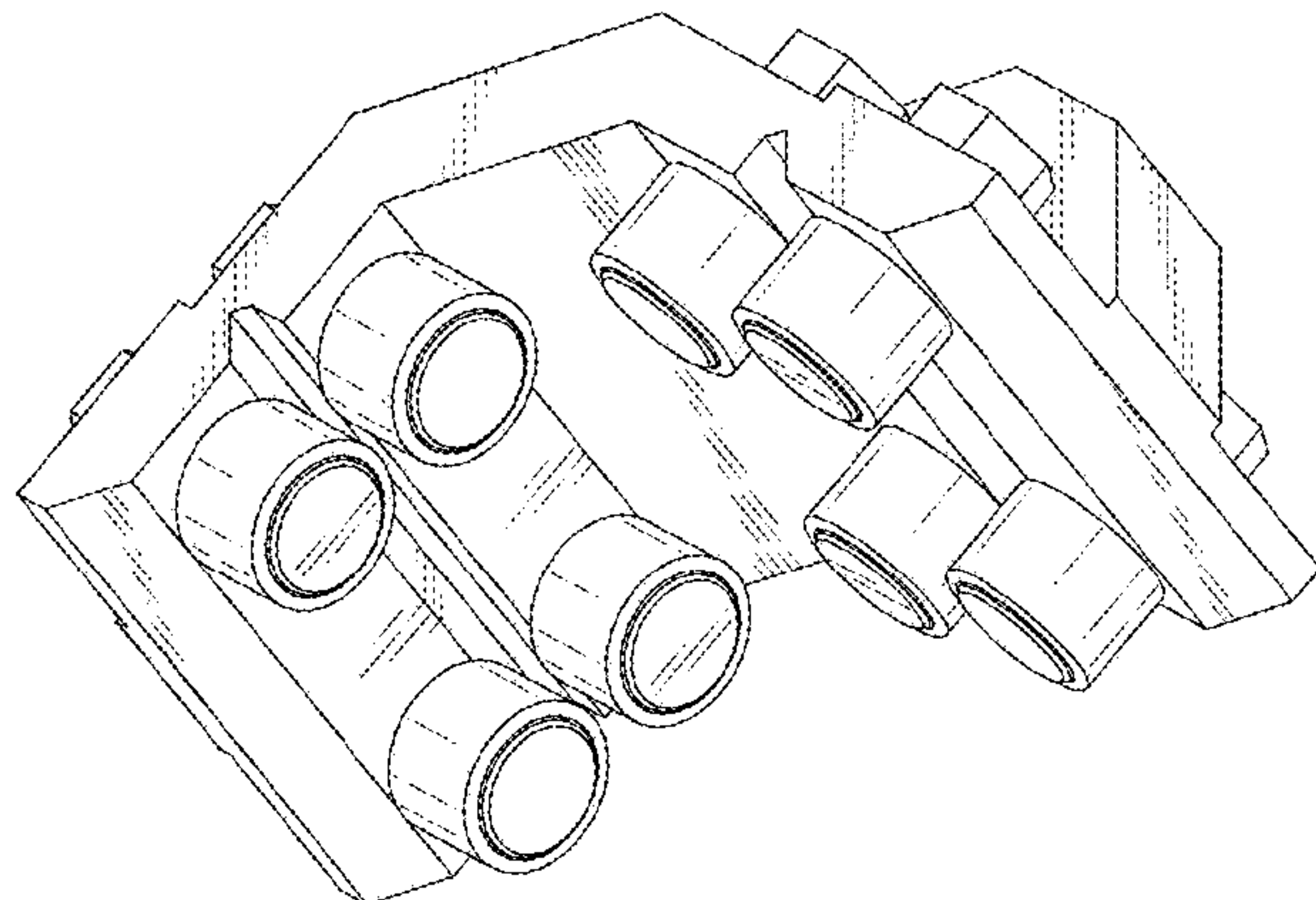
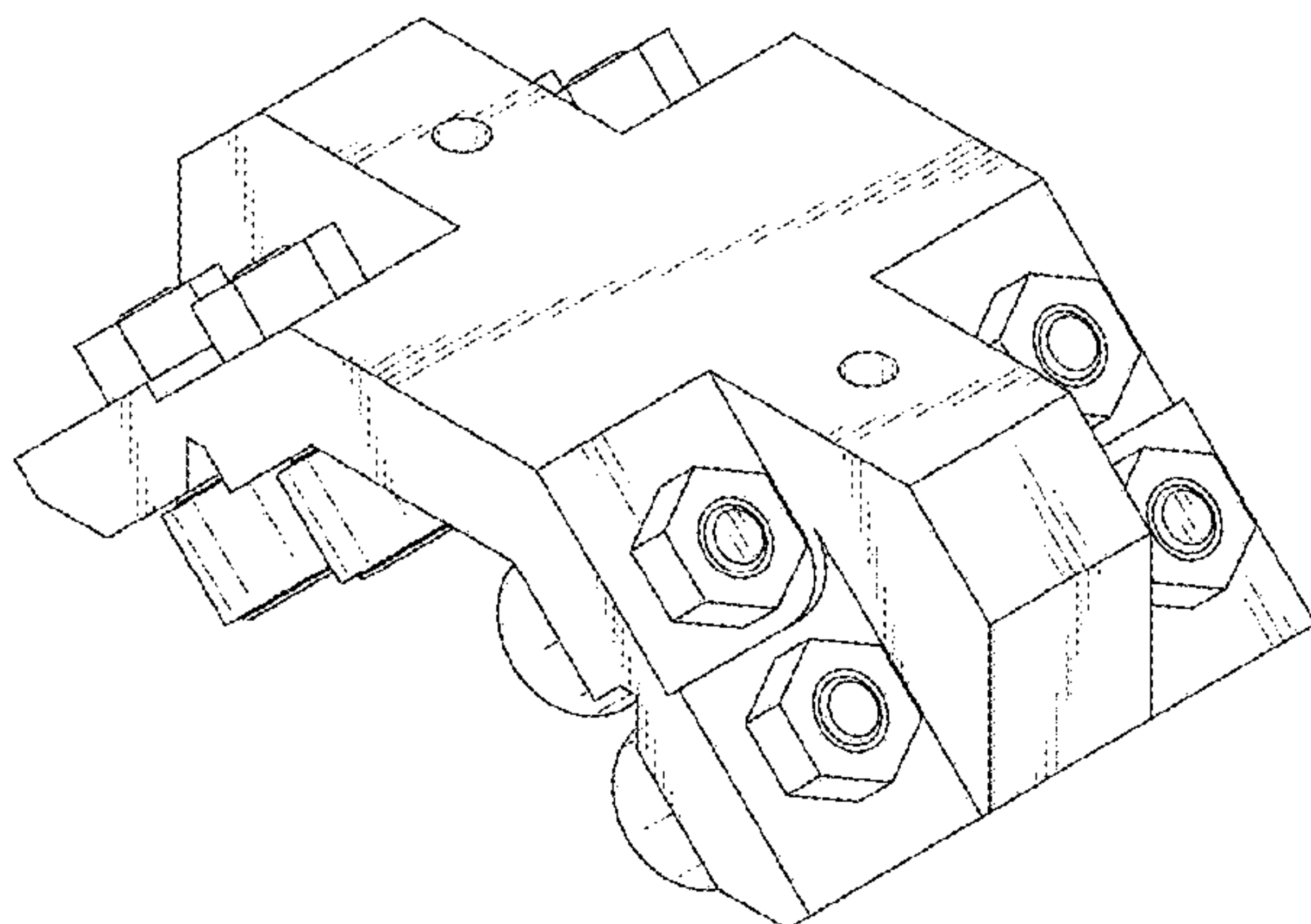
(57) **CLAIM**

The ornamental design for a slider block for moving an article along a rail, as shown and described.

DESCRIPTION

FIG. 1 is a top isometric view of a slider block for moving an article along a rail;
FIG. 2 is a bottom isometric view thereof;
FIG. 3 is a front elevational view thereof, the rear elevational view being identical;
FIG. 4 is a right side elevational view thereof, the left side elevational view being identical;
FIG. 5 is a top plan view thereof; and,
FIG. 6 is a bottom plan view thereof.

1 Claim, 6 Drawing Sheets



(58) **Field of Classification Search**

CPC .. B64F 1/32; B65G 1/04; B65G 17/20; H04N
1/00522; H04N 1/00533; H04N 1/00538;
G06F 1/1637; G06F 1/1607; G06F
1/1647; G06F 1/1692; G06F 3/1446;
G06F 3/147; G06F 3/1423; A47G 1/141;
A47G 29/00; F16M 11/26

See application file for complete search history.

(56)

References Cited

U.S. PATENT DOCUMENTS

D278,794 S * 5/1985 Vater D8/377
D394,603 S * 5/1998 Brandes D8/403
D441,273 S * 5/2001 O'Donnell D14/238
D587,559 S * 3/2009 Jones D8/349
D742,720 S * 11/2015 Perry D8/349
D784,482 S * 4/2017 Ding D22/110

D823,668 S * 7/2018 Macdonald D8/349
2013/0140142 A1* 6/2013 Bohrer B65G 17/20
198/678.1
2017/0174435 A1* 6/2017 Fenile B65G 19/025
2018/0215547 A1* 8/2018 Fenile B65G 17/20
2019/0232977 A1* 8/2019 Aoki B61B 13/04

OTHER PUBLICATIONS

JET Rail Roller Blocks, posted unknown, [retrieved Sep. 24, 2019].
Retrieved from Internet, <URL: http://www.lm76.com/jet_rail.htm>.*

Rounding Up the Latest Linear Guides, posted Jun. 29, 2015,
[retrieved Sep. 24, 2019]. Retrieved from Internet, <URL: <https://www.machinedesign.com/linear-motion/rounding-latest-linear-guides>>.*

* cited by examiner

FIG. 1

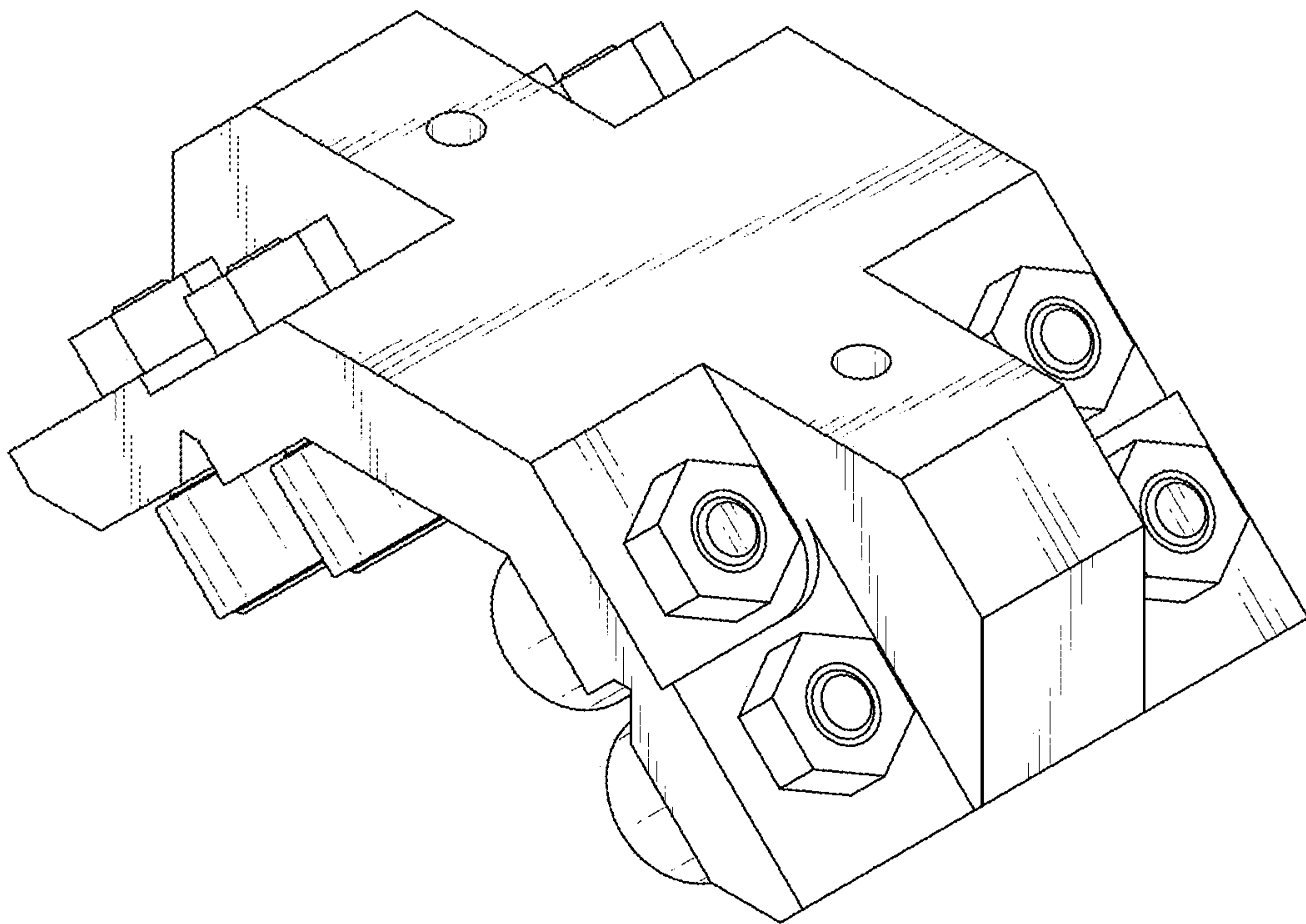


FIG. 2

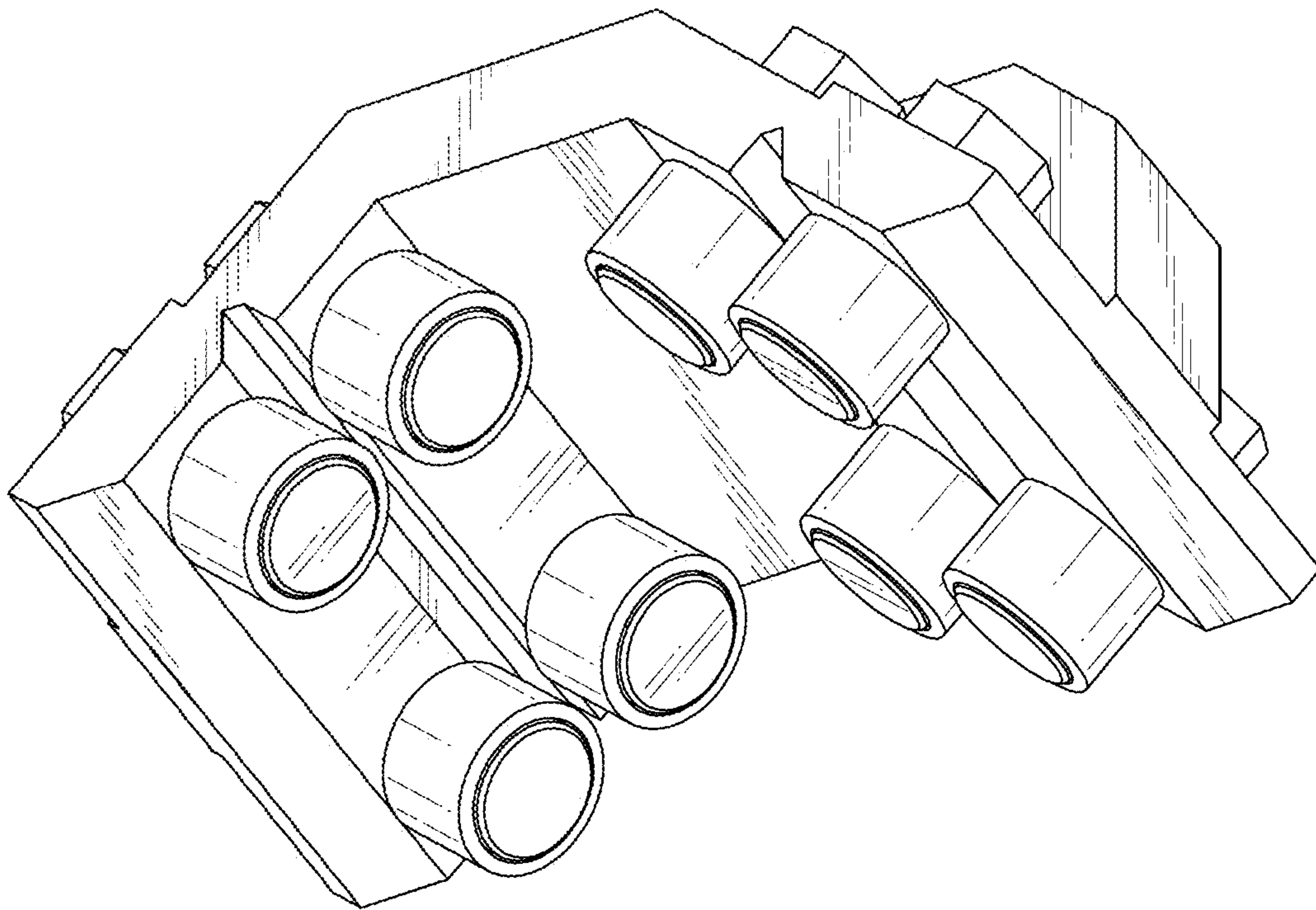


FIG. 3

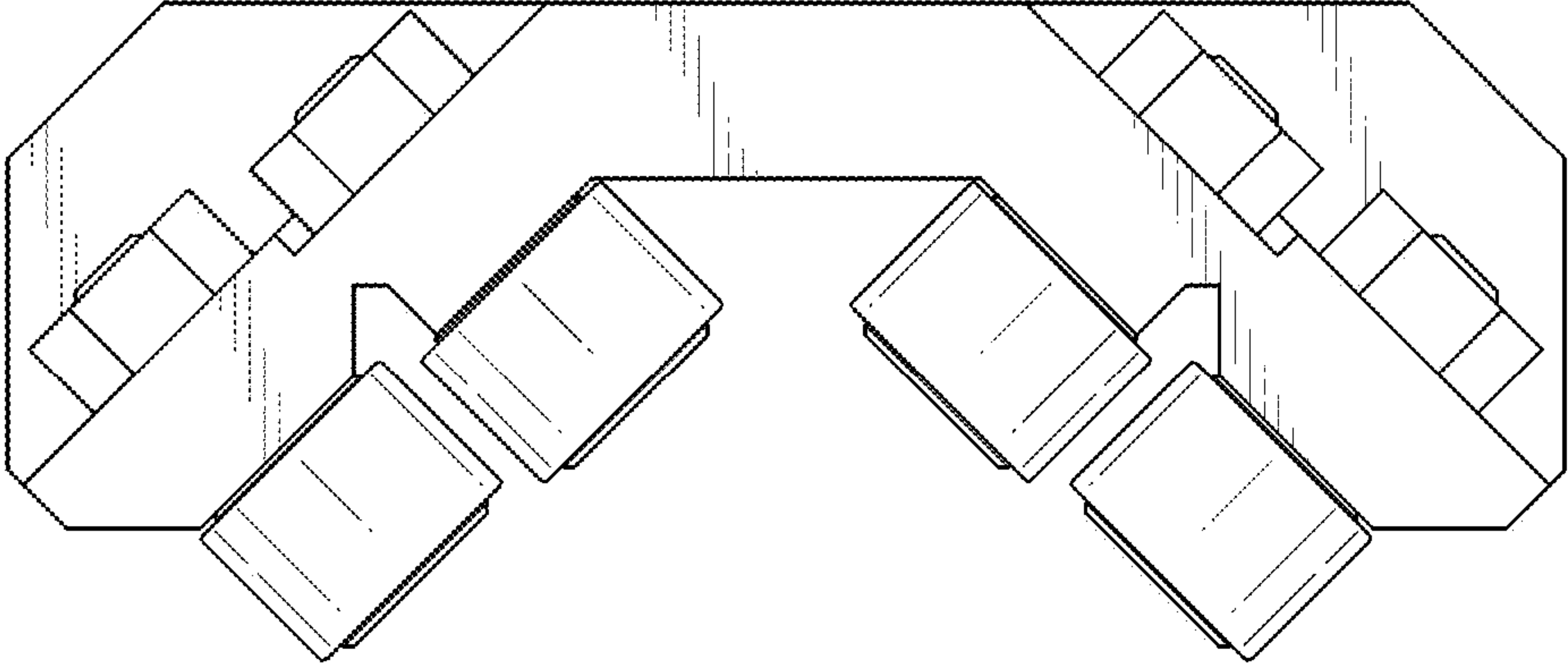


FIG. 4

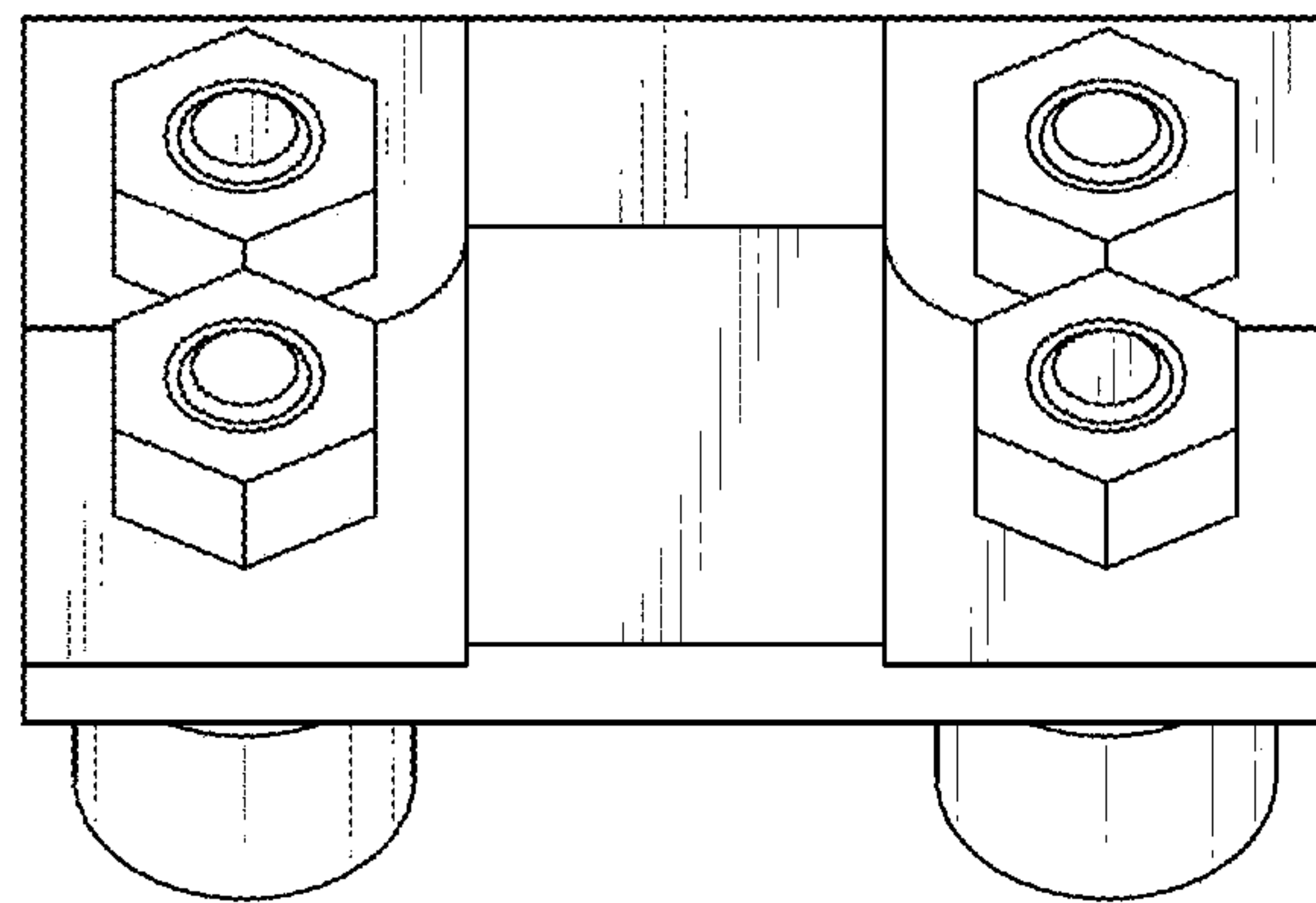


FIG. 5

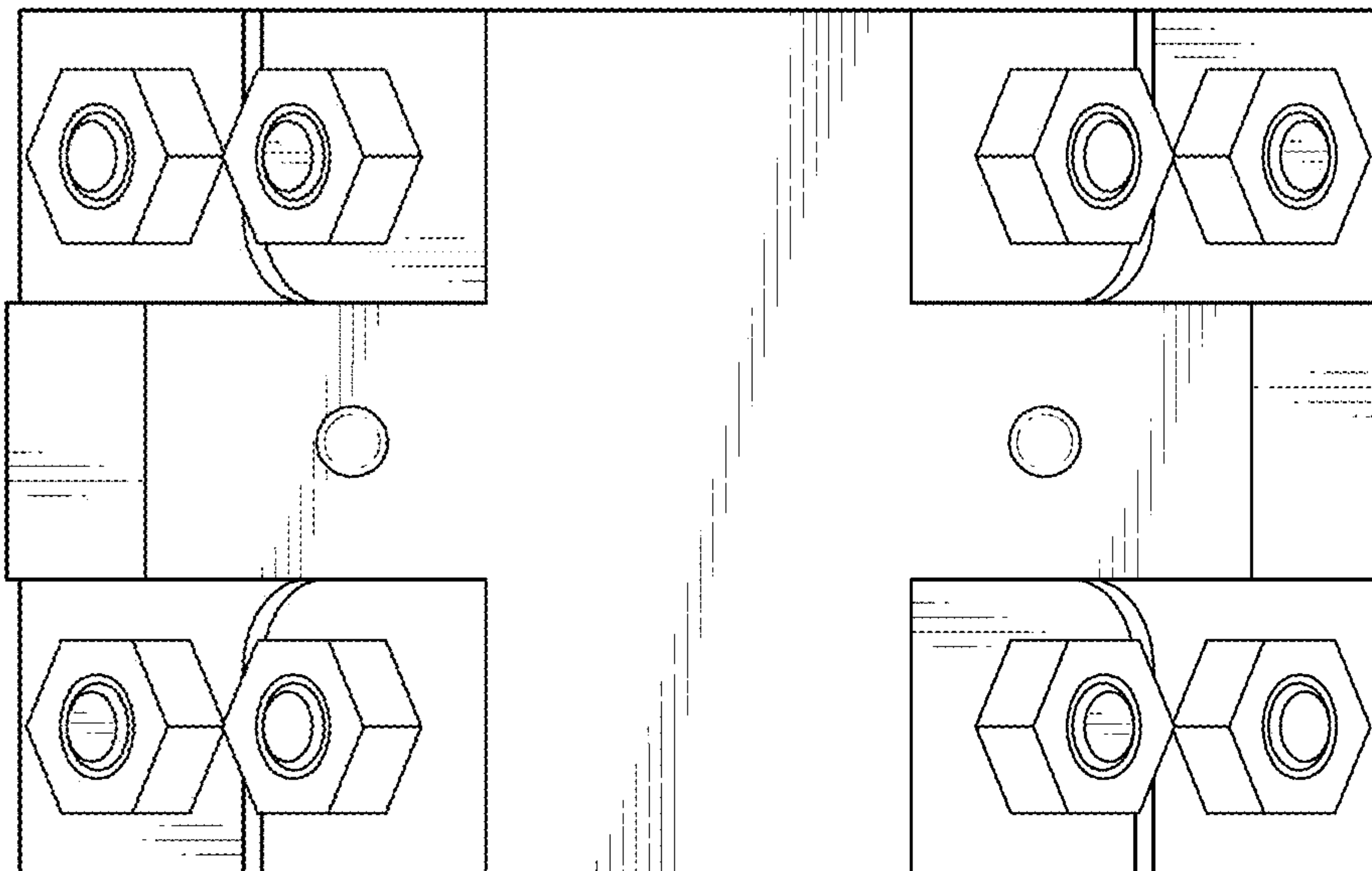


FIG. 6

