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

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- (54) **BATTERY SWAPPING VEHICLE**
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- (51) **LOC (12) Cl.** **15-99**
- (52) **U.S. Cl.**
USPC **D15/199**
- (58) **Field of Classification Search**
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B65G 51/03; B66F 11/00
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS

- 3,358,785 A * 12/1967 Mayer G01G 19/02
177/256
- D237,541 S * 11/1975 Doelling D34/35
- 4,556,126 A * 12/1985 Wait B60R 3/007
182/150
- 7,004,710 B1 * 2/2006 Quade B60L 53/80
414/395

- 2006/0214634 A1 * 9/2006 Baba B60L 53/11
320/114
- 2012/0228245 A1 * 9/2012 Bachir B60L 50/64
211/26.2
- 2014/0261098 A1 * 9/2014 Giemza B65G 69/24
108/44
- 2014/0360011 A1 * 12/2014 Mulato B60L 53/80
29/729
- 2015/0307068 A1 * 10/2015 Gaffoglio B60L 53/80
414/399
- 2016/0107619 A1 * 4/2016 Clarke B65G 51/03
29/402.08
- 2016/0276858 A1 * 9/2016 Davis B60L 58/26
- 2016/0325849 A1 * 11/2016 Miller B64C 39/024
- 2017/0158070 A1 * 6/2017 Salasoo H01M 2/1083
- 2018/0123099 A1 * 5/2018 Fees F16B 13/143
- 2018/0134260 A1 * 5/2018 Ahrens B60S 5/06
- 2018/0135328 A1 * 5/2018 Wu E04H 6/307
- 2018/0215556 A1 * 8/2018 Lee B65G 47/244
- 2018/0222338 A1 * 8/2018 Sponheimer B60L 50/64
- 2019/0002260 A1 * 1/2019 Conway B66F 11/00
- 2019/0092581 A1 * 3/2019 Sturges B25B 5/106

(Continued)

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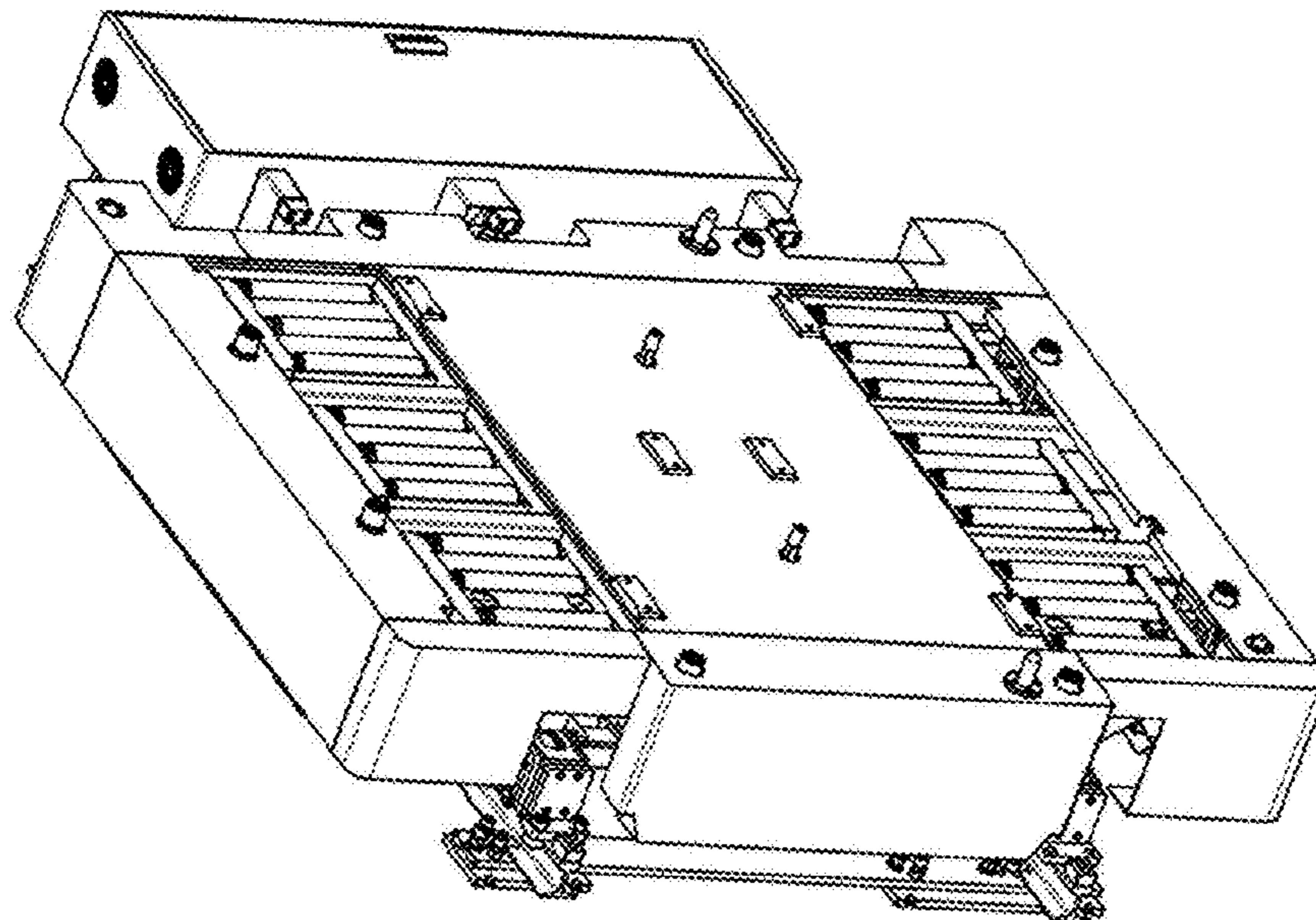
(57) **CLAIM**

The ornamental design for a battery swapping vehicle, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a battery swapping vehicle; FIG. 2 is a front view of the battery swapping vehicle; FIG. 3 is a rear view of the battery swapping vehicle; FIG. 4 is a left side view of the battery swapping vehicle; FIG. 5 is a right side view of the battery swapping vehicle; FIG. 6 is a top view of the battery swapping vehicle; and, FIG. 7 is a reference view showing use state of the battery swapping vehicle.

1 Claim, 4 Drawing Sheets



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References Cited

U.S. PATENT DOCUMENTS

2019/0168973 A1* 6/2019 Hines A47B 37/00
2019/0308820 A1* 10/2019 Andrae B65G 19/185
2020/0002967 A1* 1/2020 Mousavi E21B 19/155
2020/0017342 A1* 1/2020 Bengtsson B60S 5/06
2020/0259142 A1* 8/2020 Yin H01M 2/1083

* cited by examiner

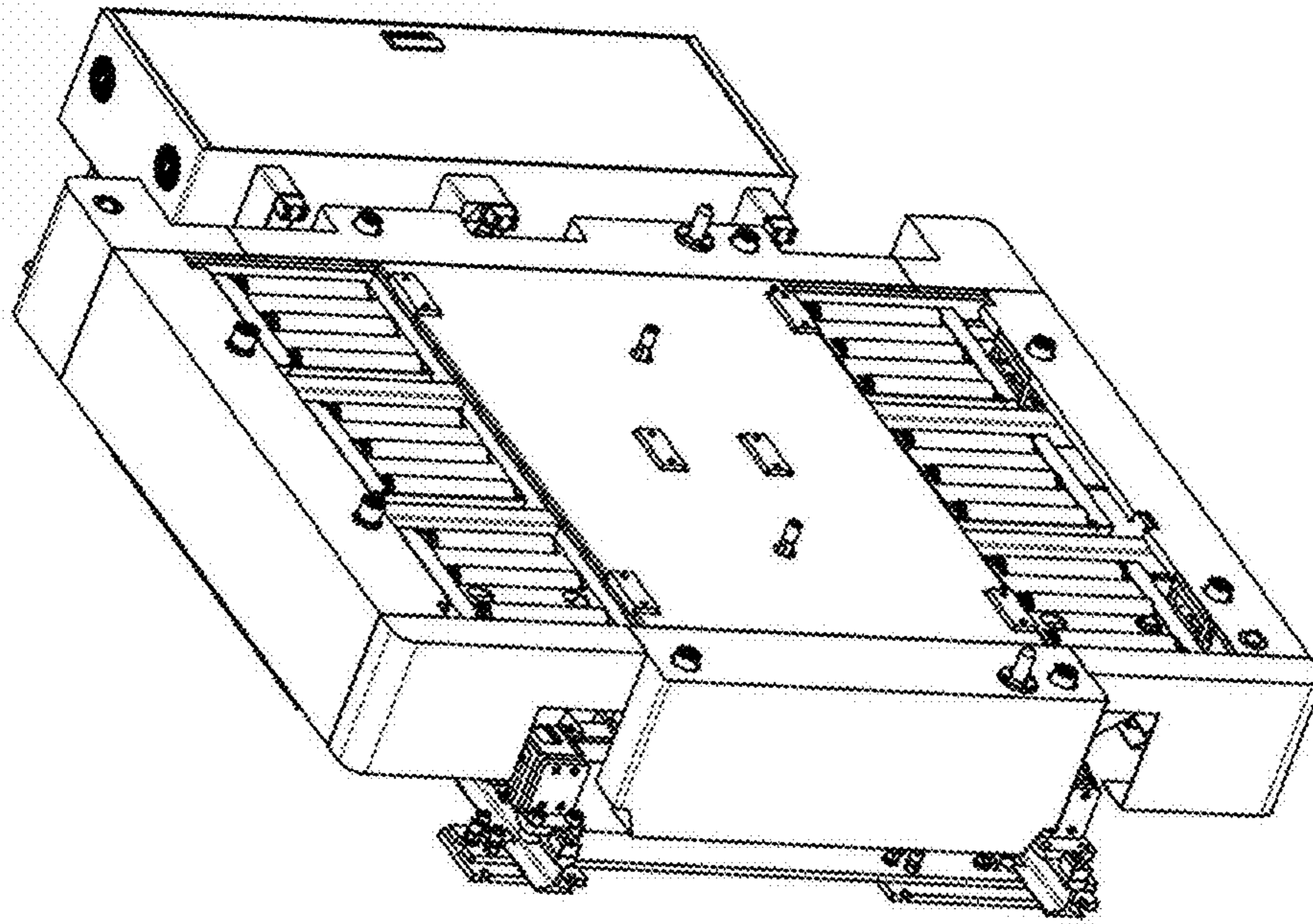


Fig.1

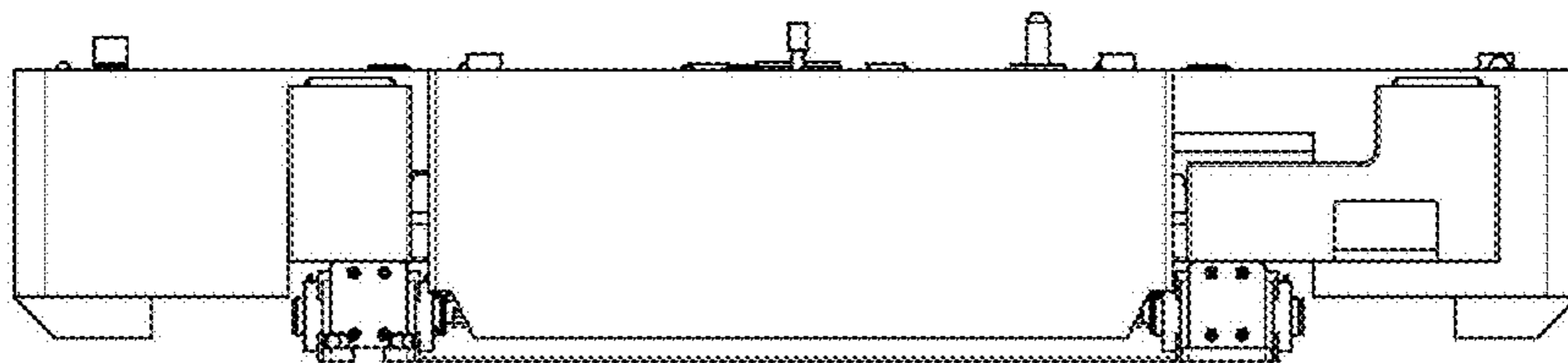


Fig.2

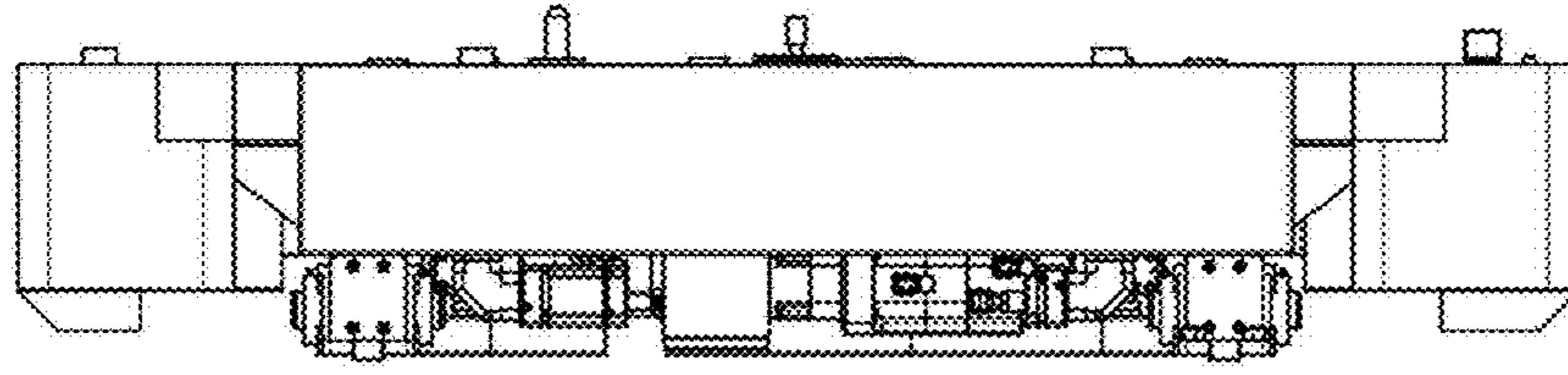


Fig.3

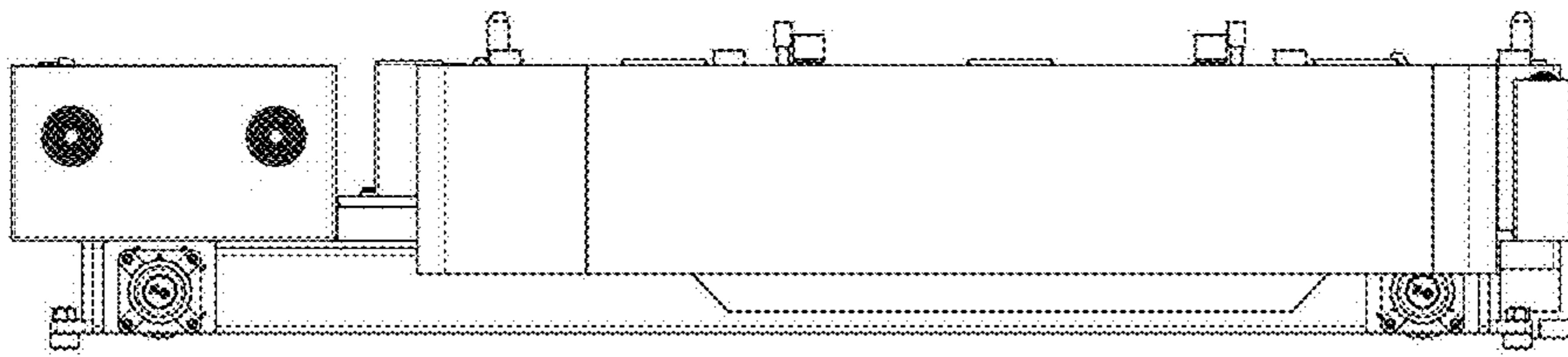


Fig.4

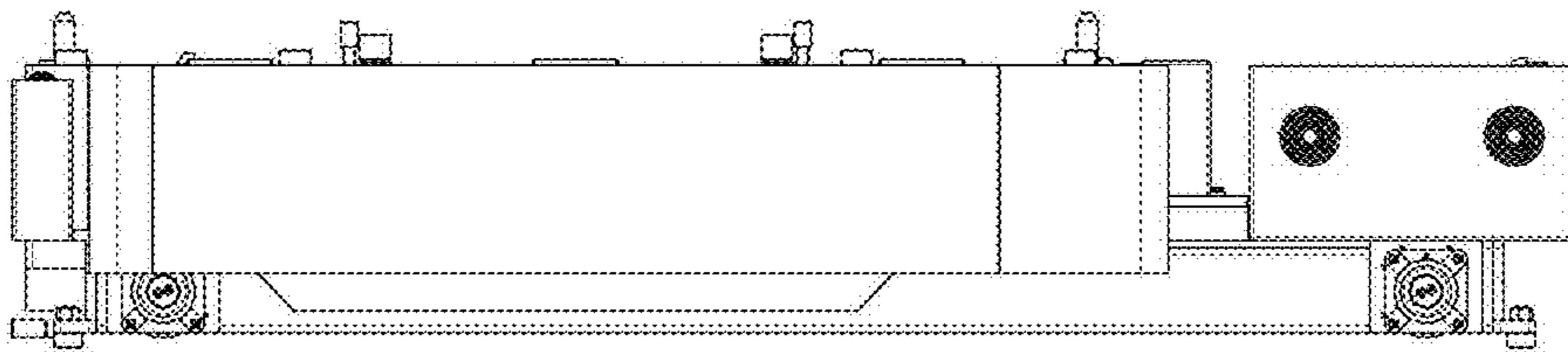


Fig.5

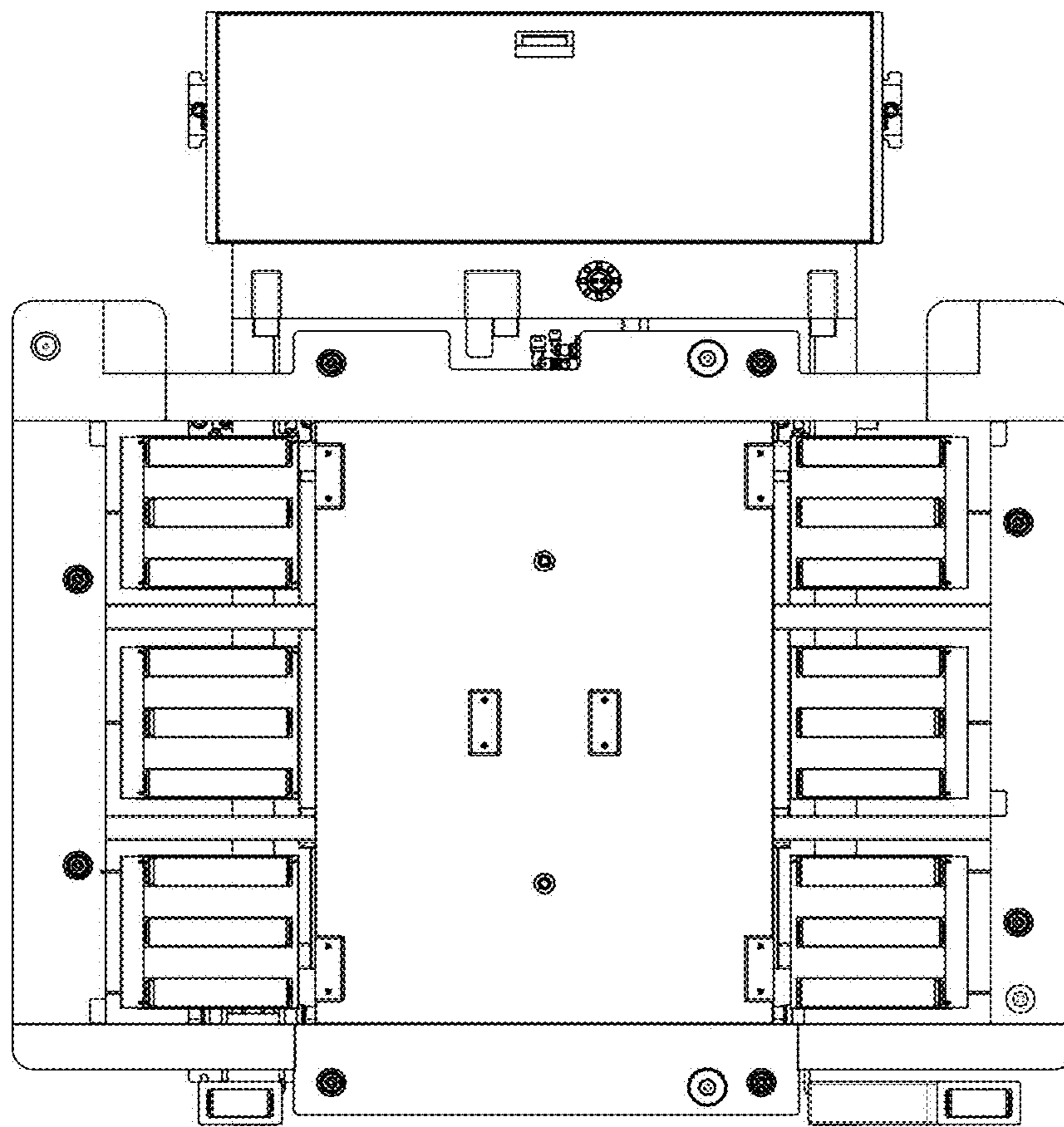


Fig.6

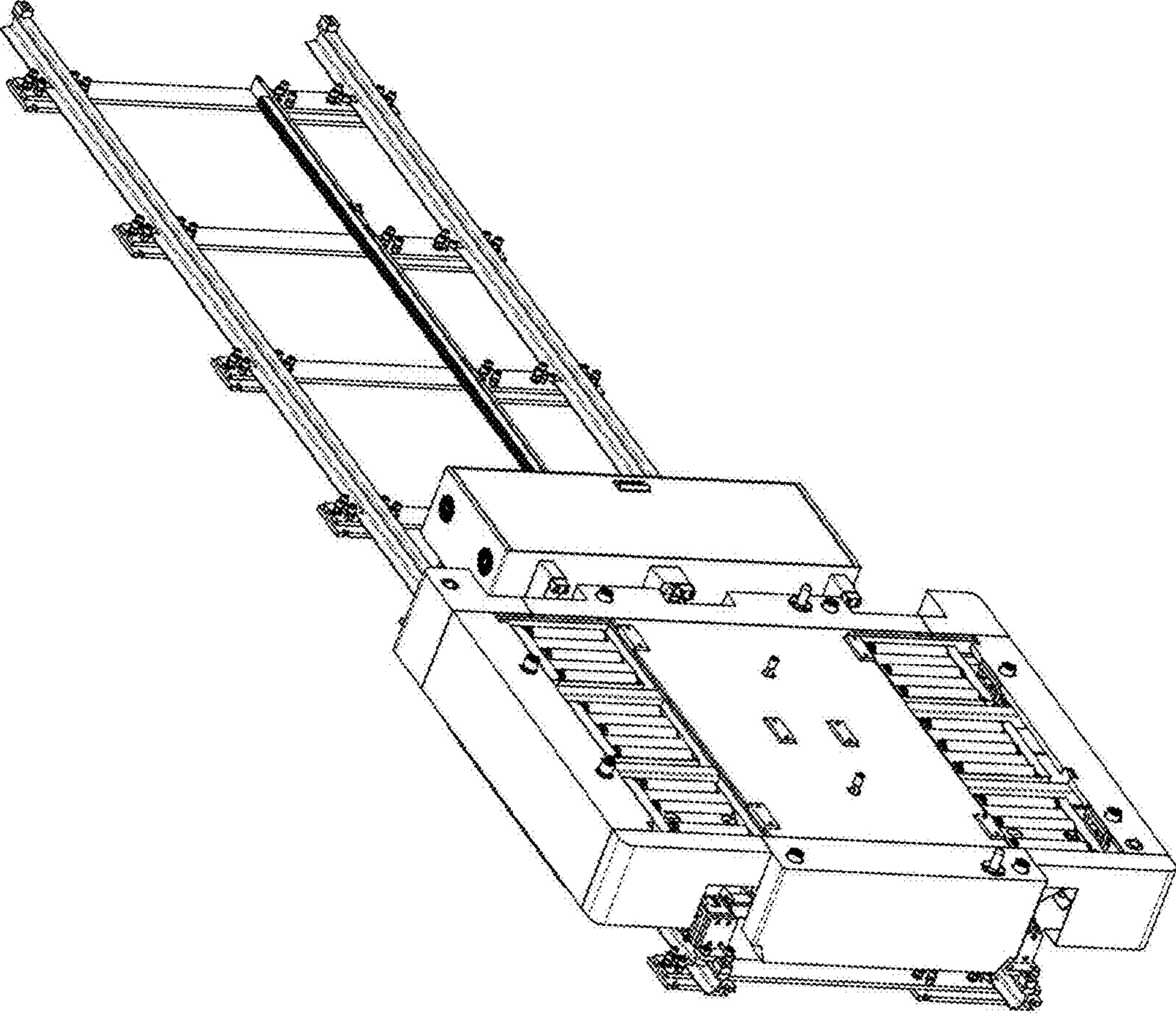


Fig.7