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(12) **United States Design Patent**  
**Hu**

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(54) **SHUTTLE CAR FOR AUTOMATIC STORAGE SYSTEM**

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(52) **U.S. Cl.**  
USPC ..... **D15/199**

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D21/621, 622; D32/21; D34/28, 34  
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G05D 2201/0216; Y02T 10/705; Y02T  
10/7005

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D298,378 S \* 11/1988 Eckstedt ..... D12/1  
4,941,407 A \* 7/1990 Pigott ..... B62D 65/18  
104/289

5,154,249 A \* 10/1992 Yardley ..... B60D 1/06  
180/168  
6,019,563 A \* 2/2000 Murata ..... B23Q 7/1436  
414/222.01  
9,807,930 B1 \* 11/2017 Lydon ..... A01D 34/008  
10,202,061 B2 \* 2/2019 Scherle ..... B66F 9/063  
2009/0074545 A1 \* 3/2009 Lert, Jr. .... B65G 1/0492  
414/276  
2010/0230196 A1 \* 9/2010 Nishimura ..... B60L 8/003  
180/165  
2010/0316468 A1 \* 12/2010 Lert ..... B65G 47/57  
414/273  
2010/0316469 A1 \* 12/2010 Lert ..... B65G 1/10  
414/273  
2012/0185082 A1 \* 7/2012 Toebes ..... B65G 1/0492  
700/218  
2012/0185122 A1 \* 7/2012 Sullivan ..... G05D 1/0272  
701/23  
2012/0189416 A1 \* 7/2012 Toebes ..... B65G 1/0492  
414/509

(Continued)

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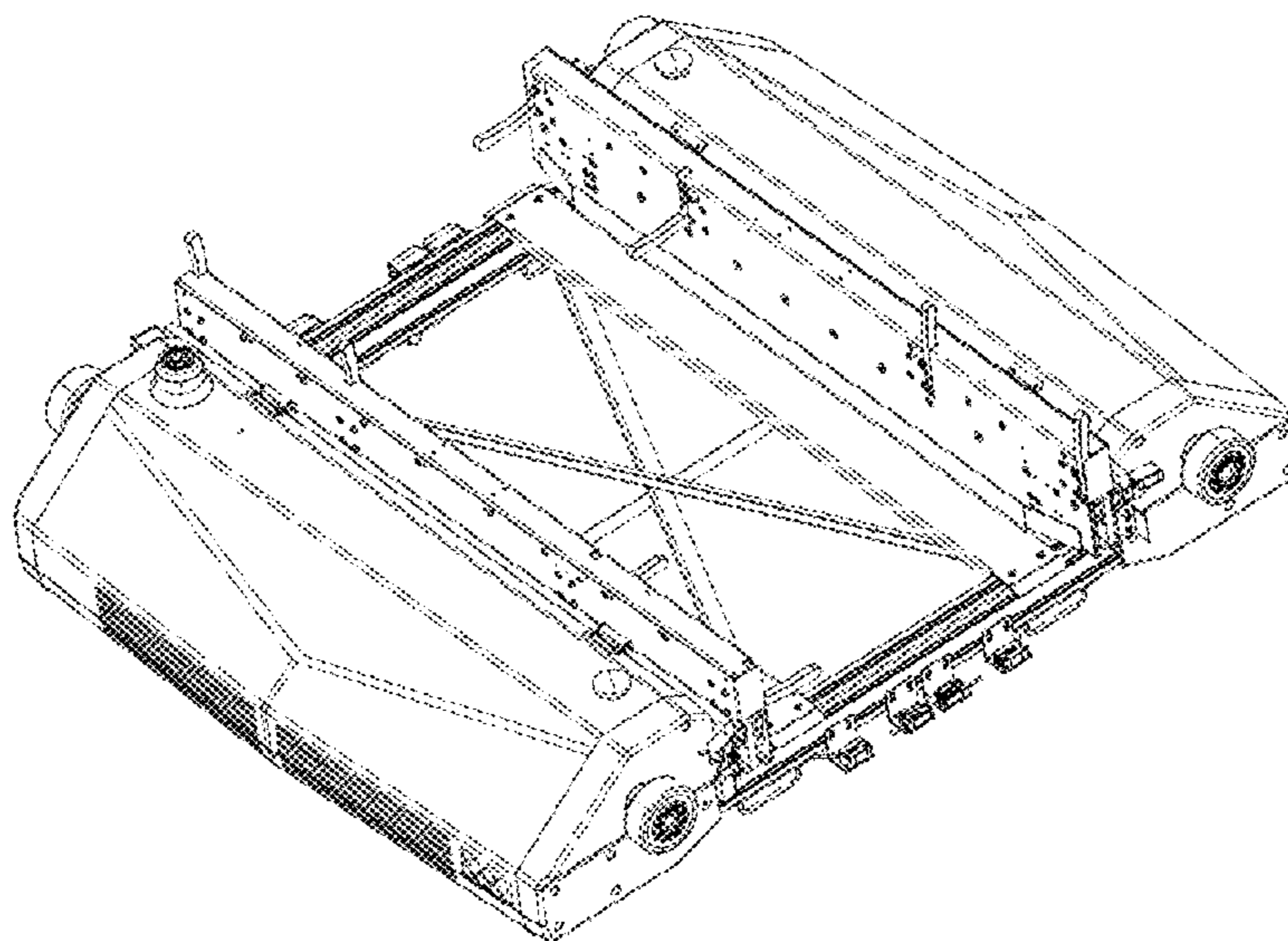
(57) **CLAIM**

The ornamental design for a shuttle car for automatic storage system, as shown and described.

**DESCRIPTION**

FIG. 1 is a top, front, right side perspective view of a shuttle car for automatic storage system according to my design; FIG. 2 is a top, front, left side perspective view thereof; FIG. 3 is a front elevational view thereof; FIG. 4 is a rear elevational view thereof; FIG. 5 is a left side elevational view thereof; FIG. 6 is a right side elevational view thereof; and, FIG. 7 is a top plan view thereof.

**1 Claim, 7 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

2012/0195720 A1\* 8/2012 Sullivan ..... B65G 1/04  
414/277  
2012/0195724 A1\* 8/2012 Toebes ..... B65G 13/00  
414/509  
2012/0197431 A1\* 8/2012 Toebes ..... B65G 1/0492  
700/217  
2013/0129453 A1\* 5/2013 Salichs ..... B65G 1/0492  
414/277  
2013/0245810 A1\* 9/2013 Sullivan ..... B65G 1/1373  
700/214  
2014/0308098 A1\* 10/2014 Lert ..... B65G 1/0492  
414/281  
2015/0203296 A1\* 7/2015 Buzan ..... B65G 1/0492  
700/218  
2015/0243949 A1\* 8/2015 Fukui ..... H01M 2/1083  
429/93  
2016/0167880 A1\* 6/2016 Pankratov ..... B65G 1/1378  
211/26.1  
2016/0207710 A1\* 7/2016 Conrad ..... B65G 1/0485  
2016/0214808 A1\* 7/2016 Cyrulik ..... B65G 67/02  
2017/0144502 A1\* 5/2017 Bae ..... B62D 61/12  
2017/0182924 A1\* 6/2017 Lendo ..... B60L 53/16  
2018/0072212 A1\* 3/2018 Alfaro ..... B60P 1/52  
2018/0099811 A1\* 4/2018 Shen ..... G05D 3/00

\* cited by examiner

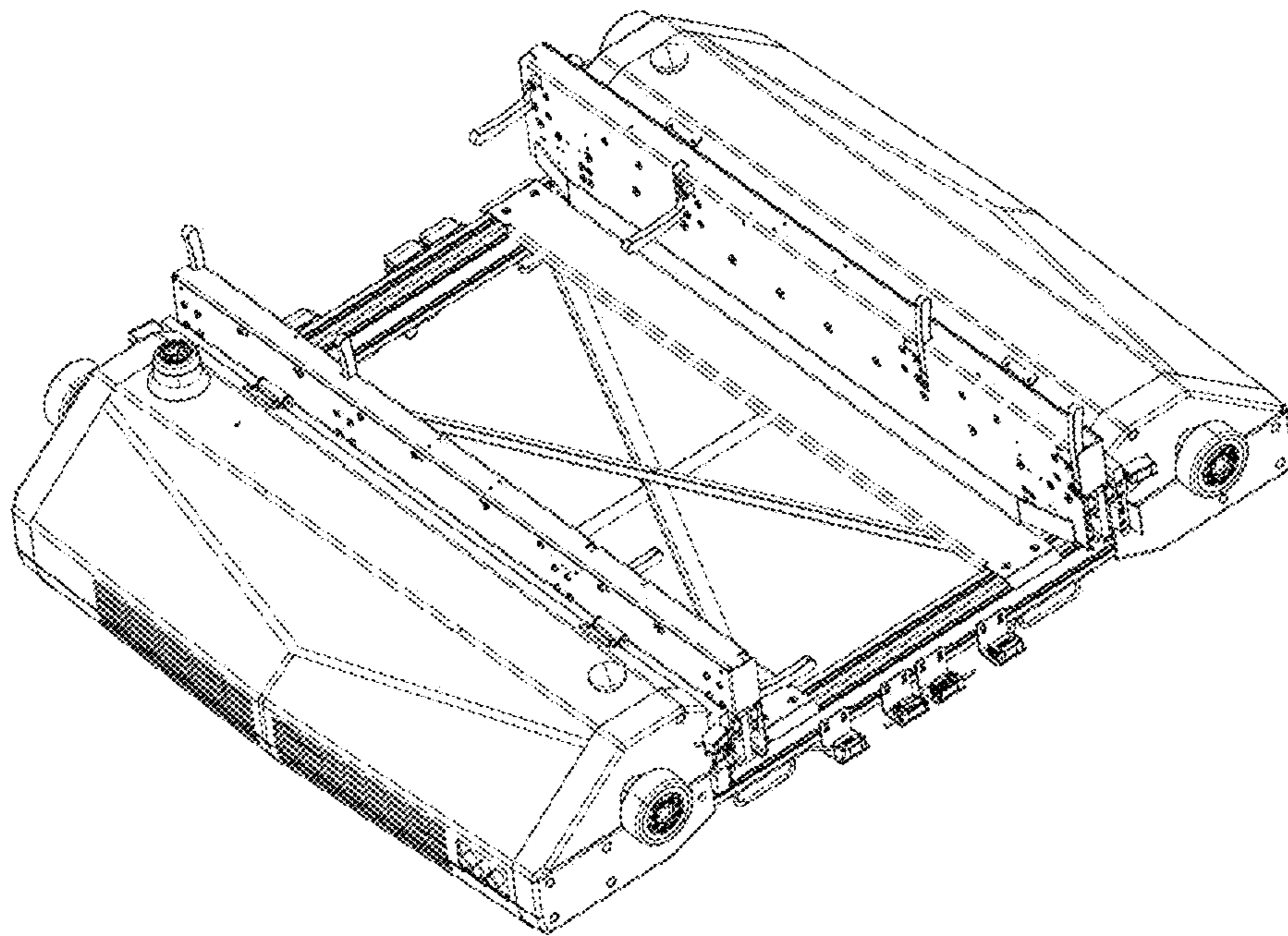


Fig. 1

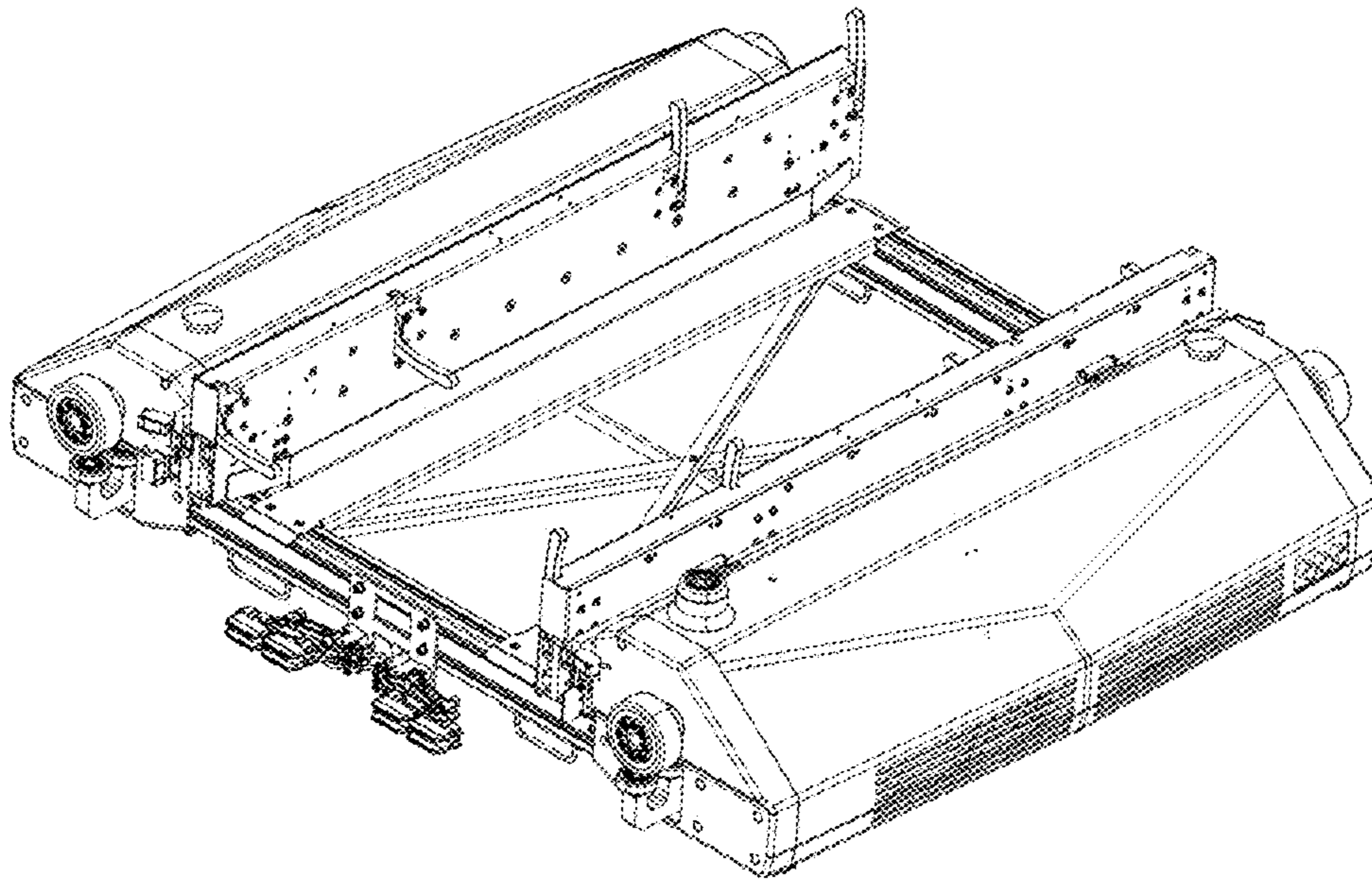


Fig. 2

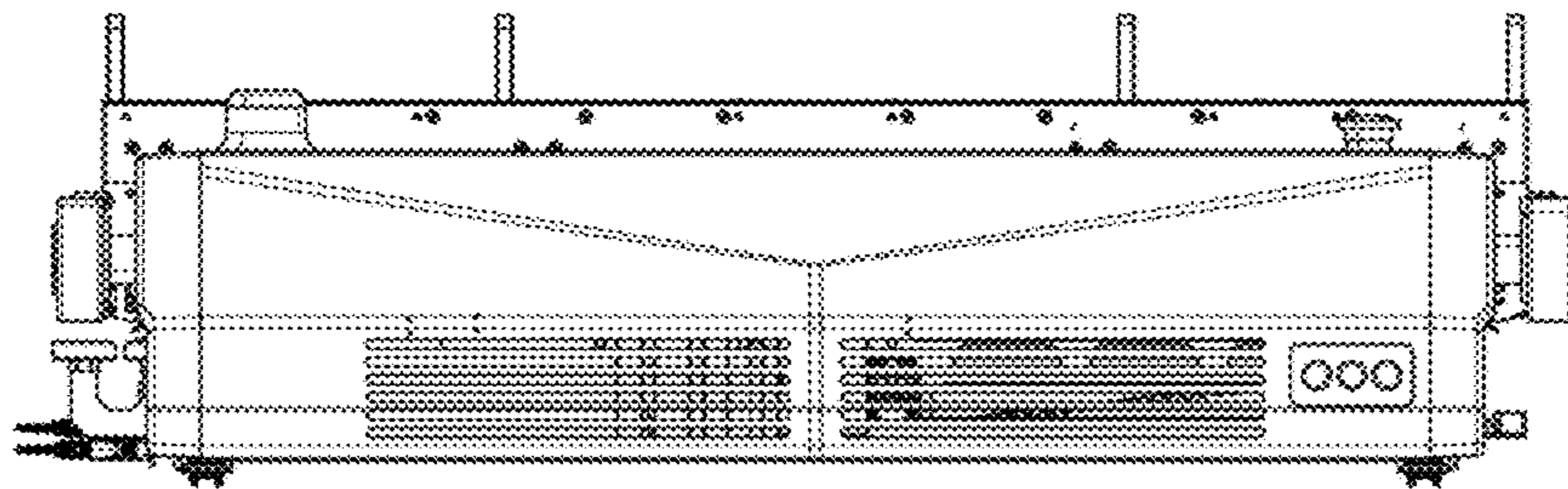


Fig. 3

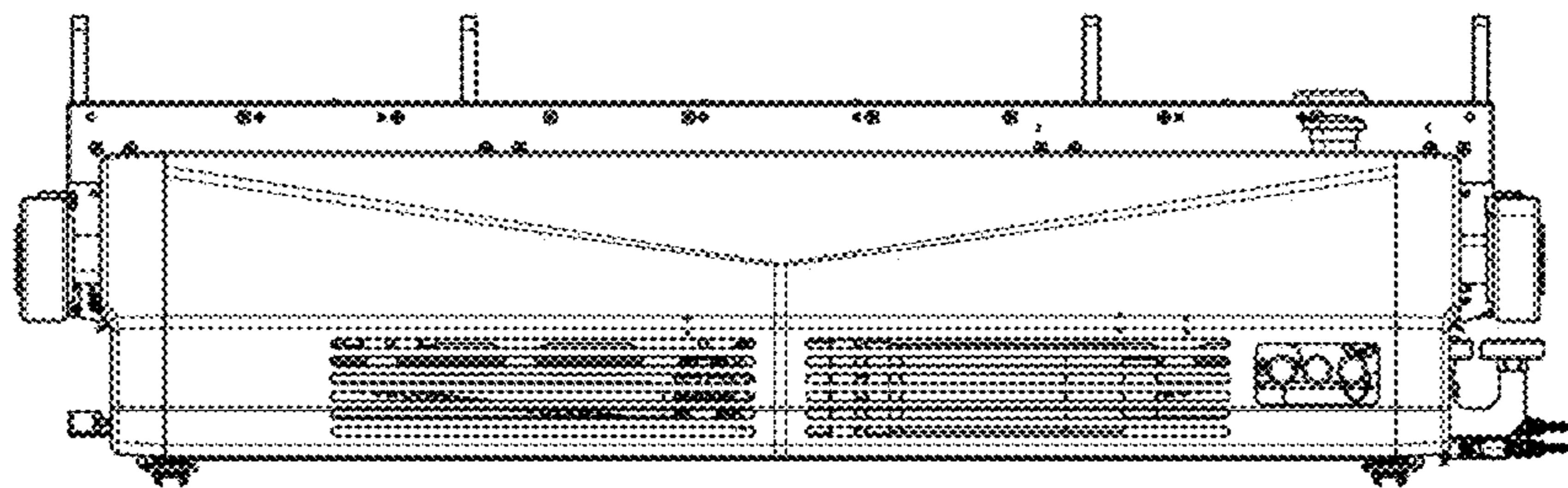


Fig. 4

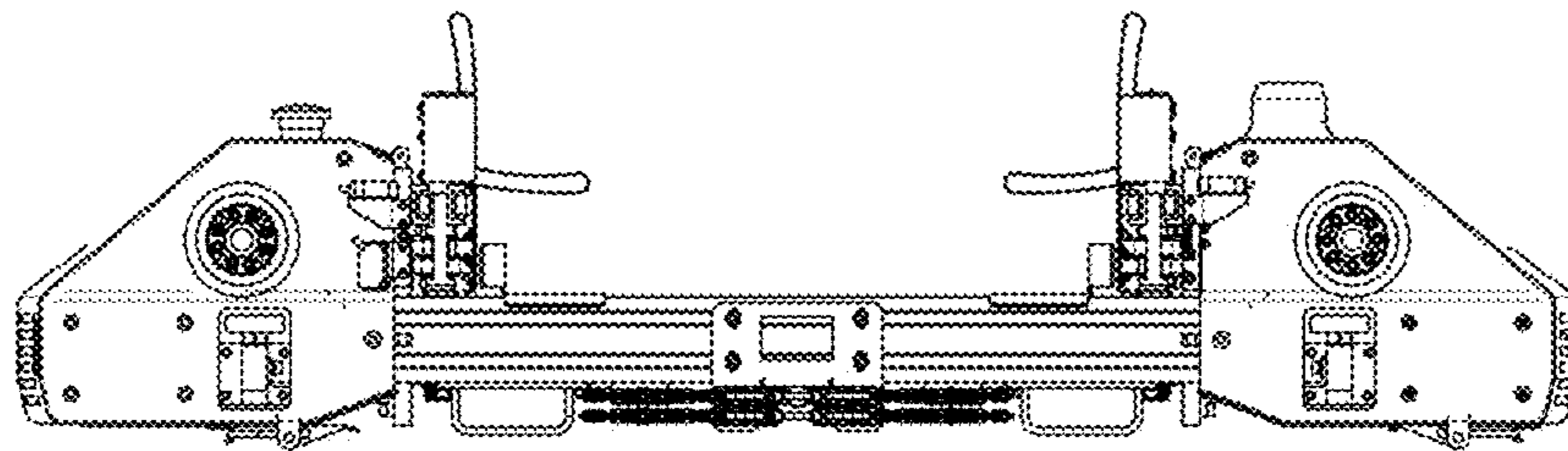


Fig. 5

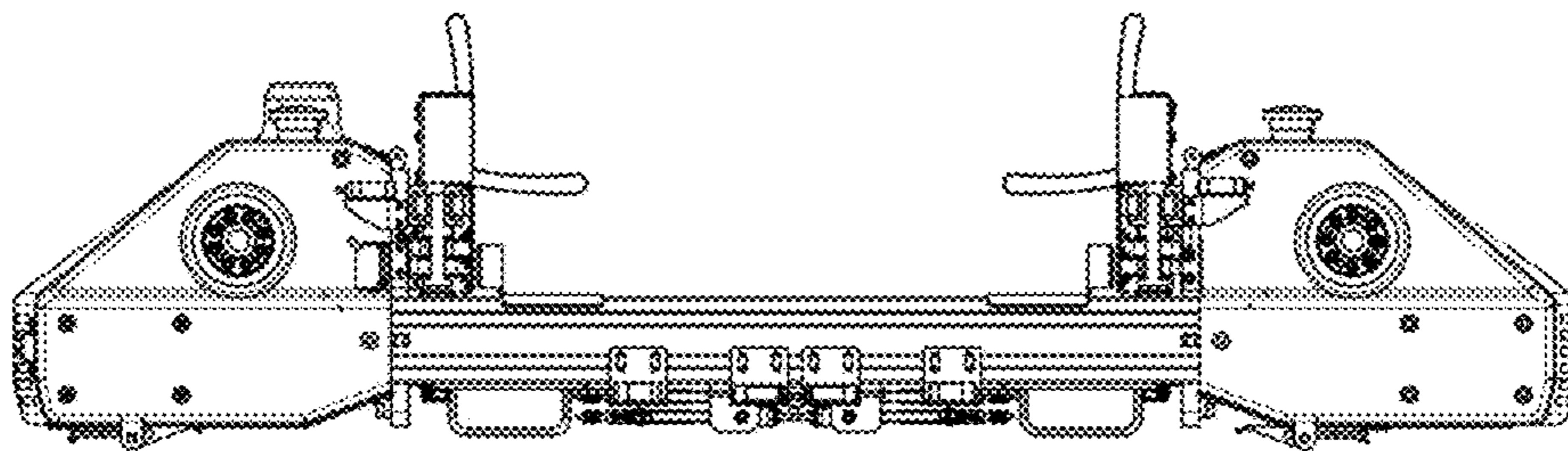


Fig. 6



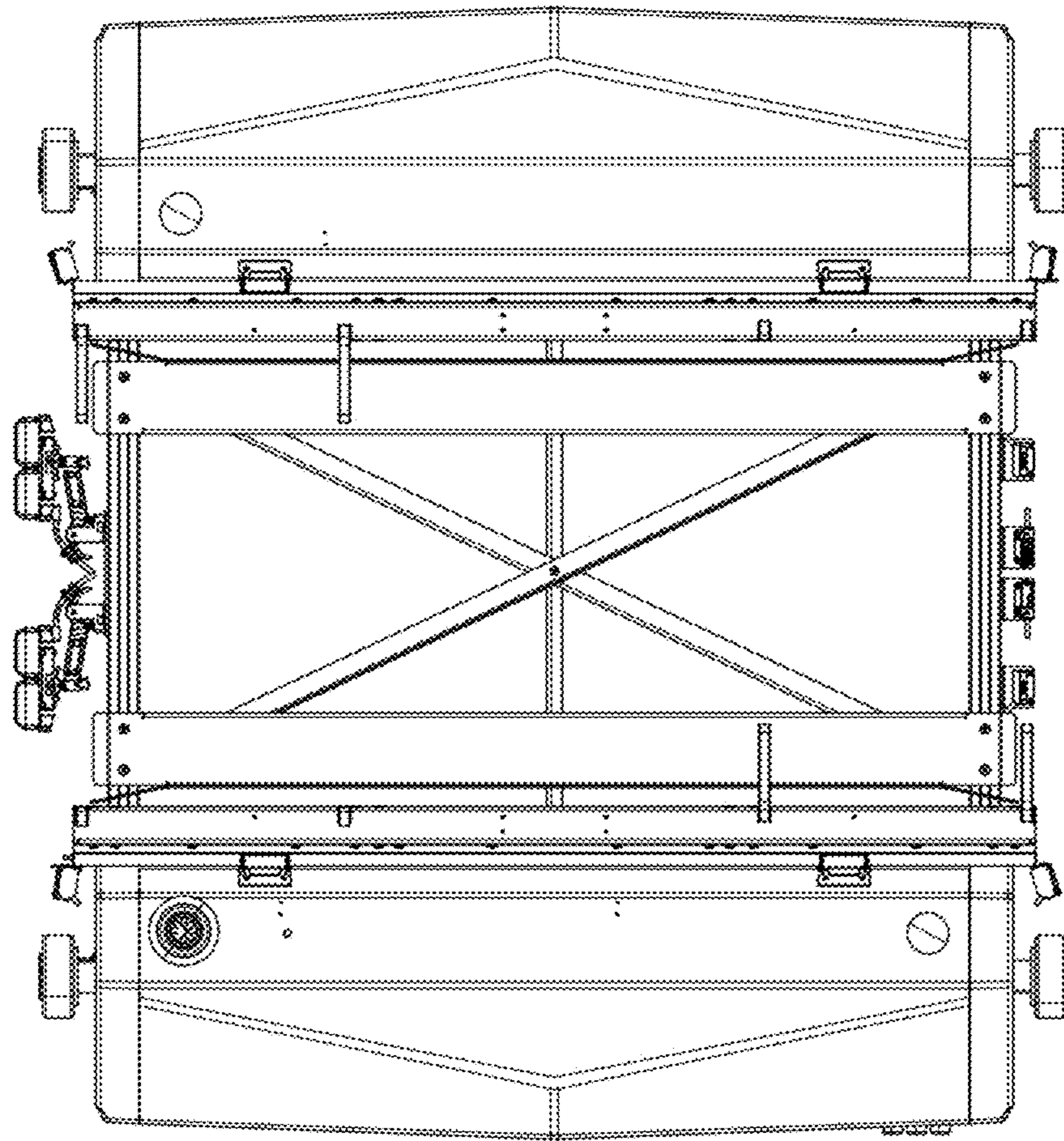


Fig. 7