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

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- (54) **CABLE TRANSFER APPARATUS**
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- (\*\*) Term: **15 Years**
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- (30) **Foreign Application Priority Data**

- 2,663,515 A \* 12/1953 Kinsinger ..... H02G 1/06  
242/557
- 2,991,977 A \* 7/1961 Petersen ..... B66D 1/7405  
242/155 BW
- 3,144,949 A \* 8/1964 Haugwitz ..... B65H 51/14  
414/431
- 3,326,010 A \* 6/1967 Gagne ..... H02G 1/06  
405/182
- 3,394,554 A \* 7/1968 Kinnan ..... E02F 5/08  
405/183
- 3,395,545 A \* 8/1968 Mendaloff, Jr. .... E02F 5/102  
405/178
- 3,456,449 A \* 7/1969 Heil ..... H02G 1/06  
405/156
- 3,523,425 A \* 8/1970 Pierce, Jr. .... H02G 1/06  
405/174
- 3,647,003 A \* 3/1972 Gagne ..... E02F 5/103  
172/40
- 3,744,260 A \* 7/1973 Lucero ..... E02F 3/961  
405/181
- 3,822,834 A \* 7/1974 Fjarlie ..... H02G 11/02  
242/388.5

(Continued)

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- (51) **LOC (13) Cl.** ..... **15-09**
- (52) **U.S. Cl.**  
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- (58) **Field of Classification Search**  
USPC ..... D15/28, 122, 138  
CPC ..... B60K 26/04; B65H 75/4452; F02D 9/02;  
F02D 2009/0255; G05G 7/14; H02G  
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See application file for complete search history.

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(57) **CLAIM**

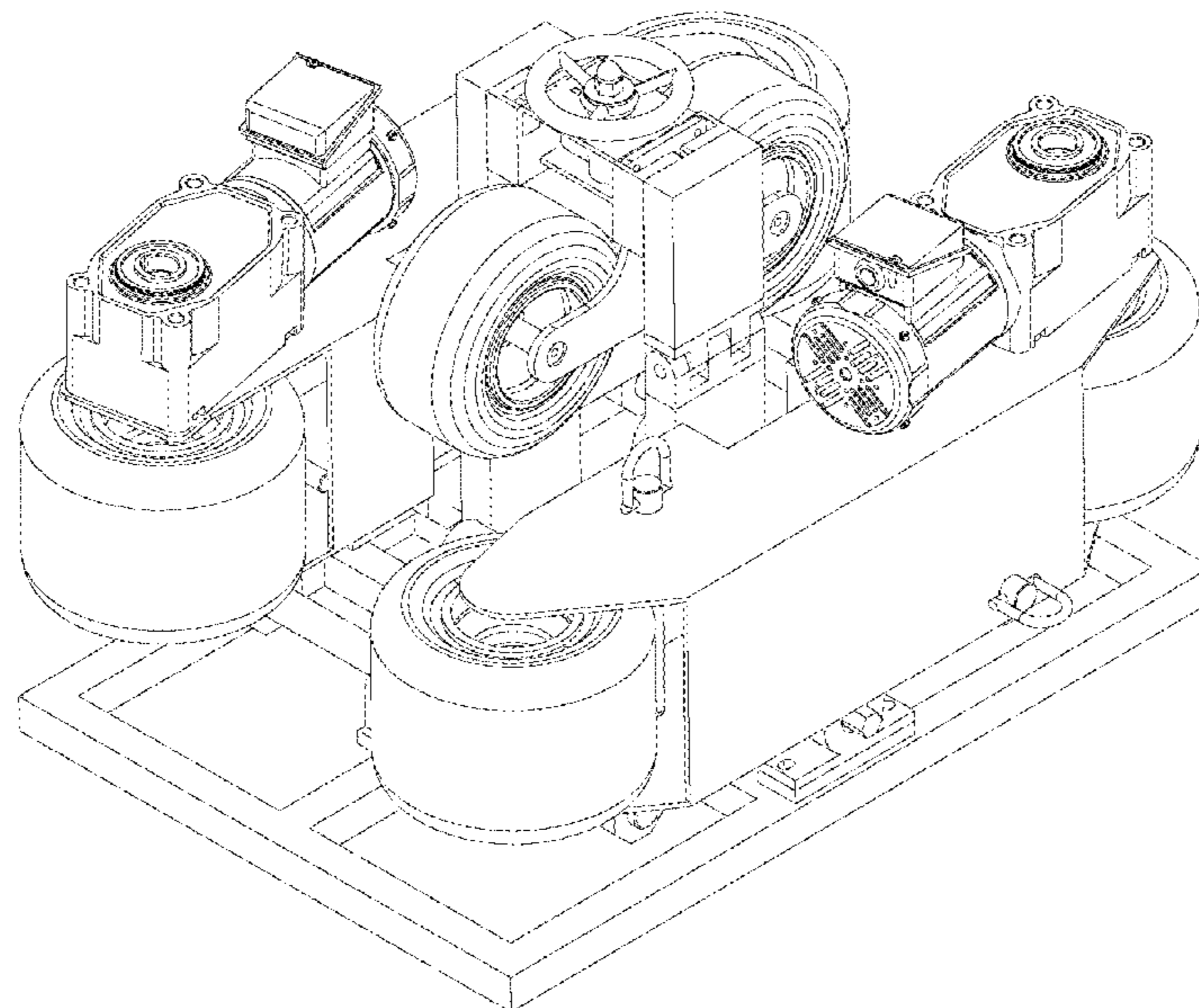
We claim, the ornamental design for a cable transfer apparatus, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a cable transfer apparatus, showing our new design;  
FIG. 2 is a front elevational view thereof, a rear view being identical;  
FIG. 3 is a left side elevational view thereof, a right side elevational view being identical;  
FIG. 4 is a top plan view thereof; and,  
FIG. 5 is a bottom plan view thereof.

**1 Claim, 5 Drawing Sheets**

- (56) **References Cited**  
U.S. PATENT DOCUMENTS  
1,854,617 A \* 4/1932 Maloon ..... E02F 5/102  
405/183  
2,203,435 A \* 6/1940 Kempe ..... H02G 1/06  
242/390.2  
2,223,110 A \* 11/1940 Kempe ..... H02G 1/06  
242/390.2



(56)

References Cited

U.S. PATENT DOCUMENTS

4,050,260 A \* 9/1977 Lemay ..... E02F 5/103  
405/174  
4,051,989 A \* 10/1977 Zehren ..... B65H 51/14  
226/190  
4,382,581 A \* 5/1983 Wimer ..... G02B 6/4464  
254/134.3 FT  
4,456,225 A \* 6/1984 Lucas ..... H02G 9/10  
254/134.3 FT  
4,543,932 A \* 10/1985 Sturdy ..... F02D 9/02  
123/342  
4,650,370 A \* 3/1987 Kassner ..... E02F 5/10  
173/100  
5,317,774 A \* 6/1994 Beudet, Jr. .... H02G 1/085  
254/134.3 FT  
5,364,043 A \* 11/1994 Linderoth ..... B65H 54/2857  
242/397  
5,388,781 A \* 2/1995 Sauber ..... B65H 54/02  
242/365.6  
5,464,193 A \* 11/1995 Wrate ..... B65H 51/32  
254/134.3 FT  
6,086,050 A \* 7/2000 Wiederkehr ..... F16L 55/1658  
254/266  
D800,406 S \* 10/2017 Runzel ..... D34/14  
2005/0074293 A1 \* 4/2005 Searby ..... E02F 5/12  
405/180  
2007/0119997 A1 \* 5/2007 Boon ..... B65H 75/4407  
242/159  
2017/0088382 A1 \* 3/2017 van der Laan .... H01B 13/0214  
2017/0088388 A1 \* 3/2017 Lillich ..... B65H 54/2827  
2018/0282109 A1 \* 10/2018 Colleoni ..... H02G 11/02  
2018/0316165 A1 \* 11/2018 Colleoni ..... B60M 1/28  
2019/0245331 A1 \* 8/2019 Palmer ..... H02G 1/081  
2021/0016989 A1 \* 1/2021 Shin ..... B65H 57/18  
2021/0016992 A1 \* 1/2021 Shin ..... B65H 75/4413

\* cited by examiner

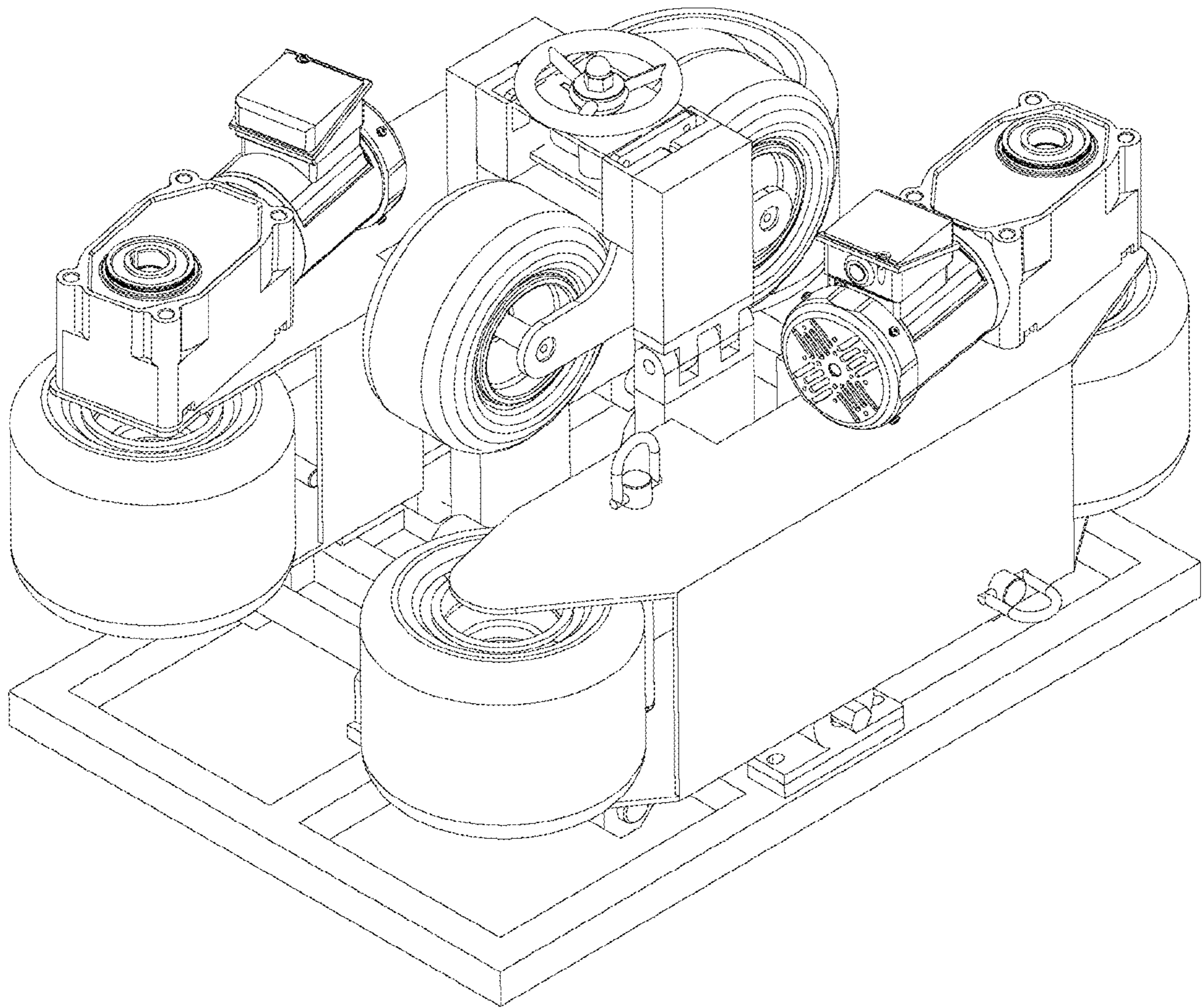
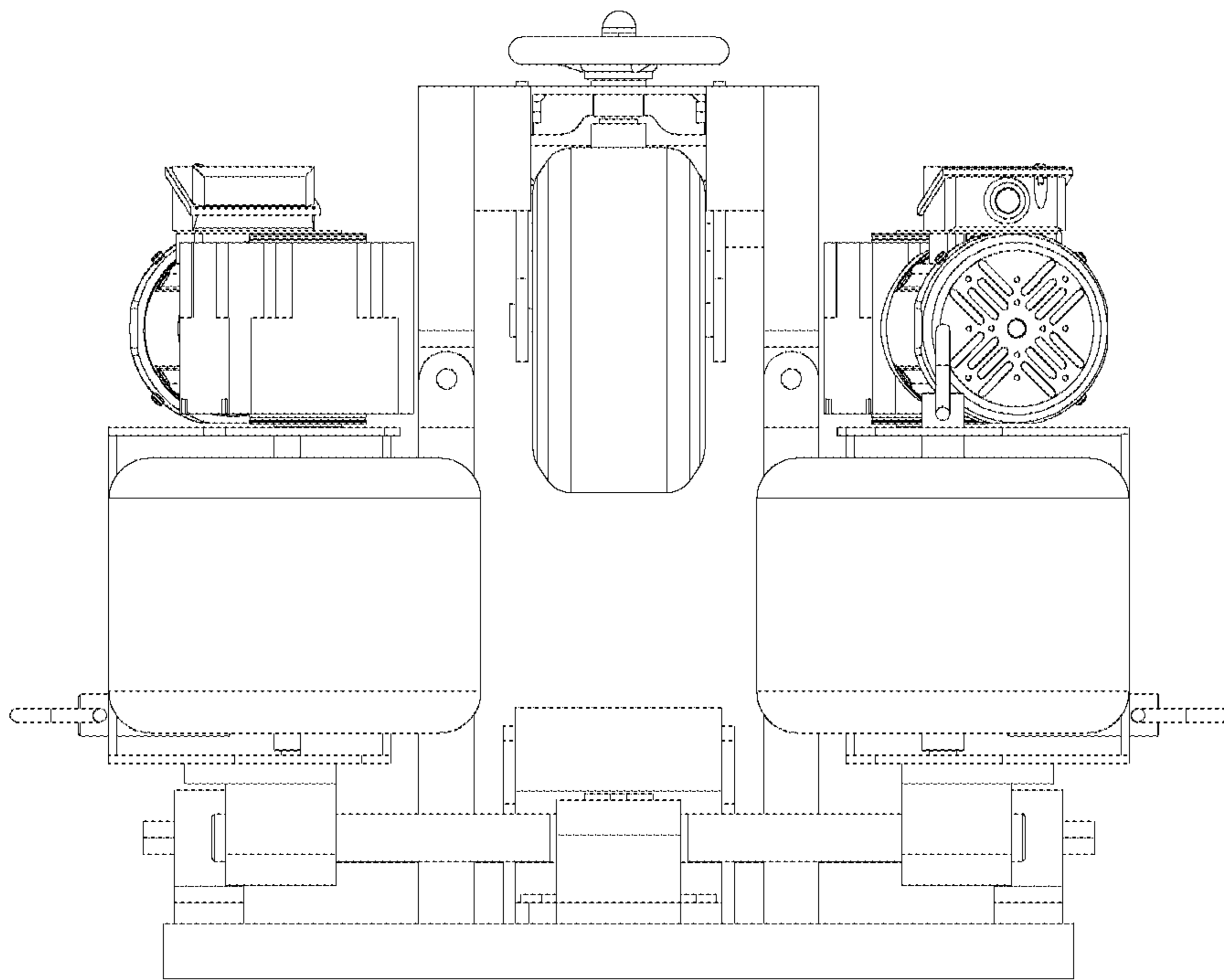
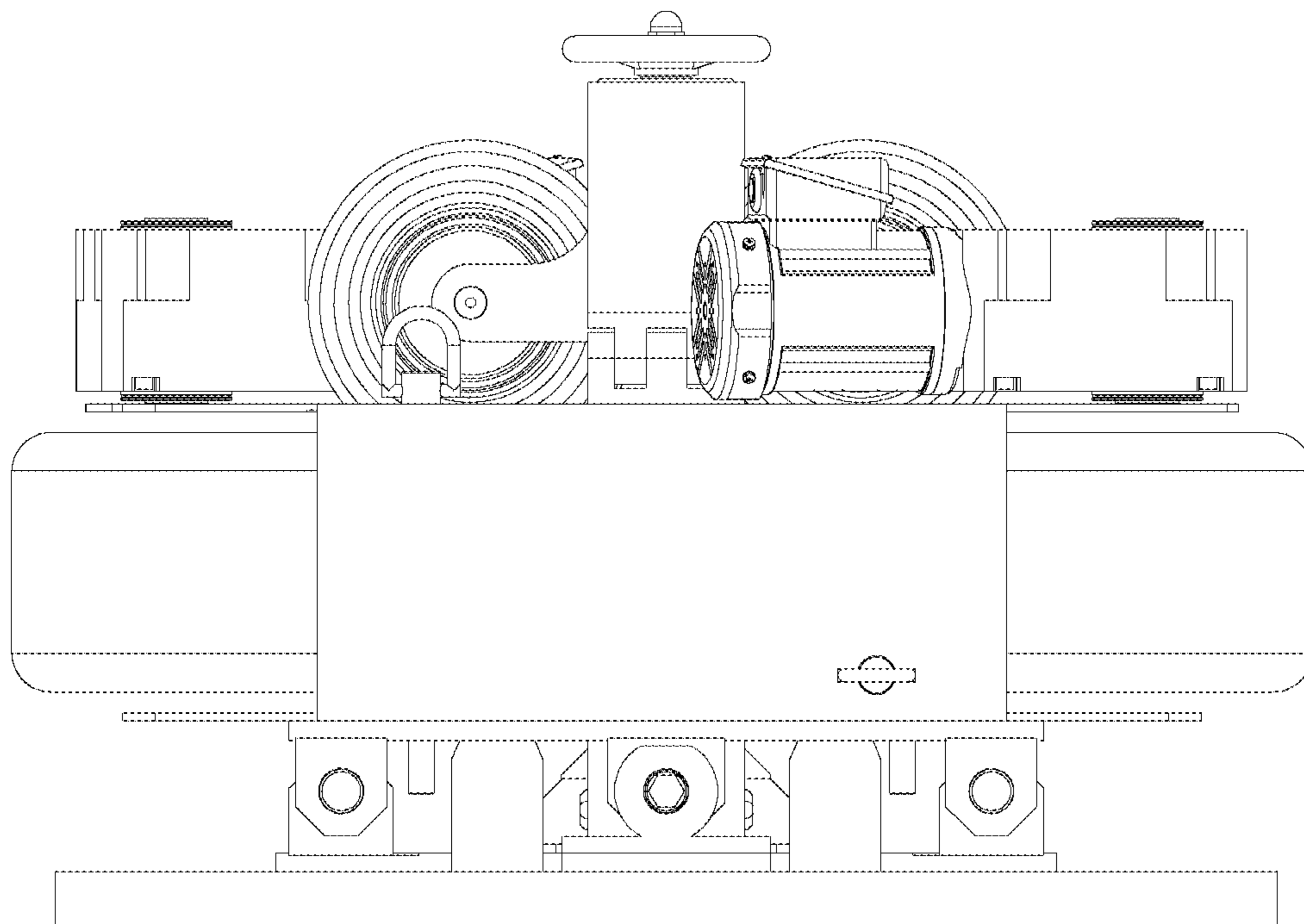


FIG. 1



**FIG. 2**



**FIG. 3**

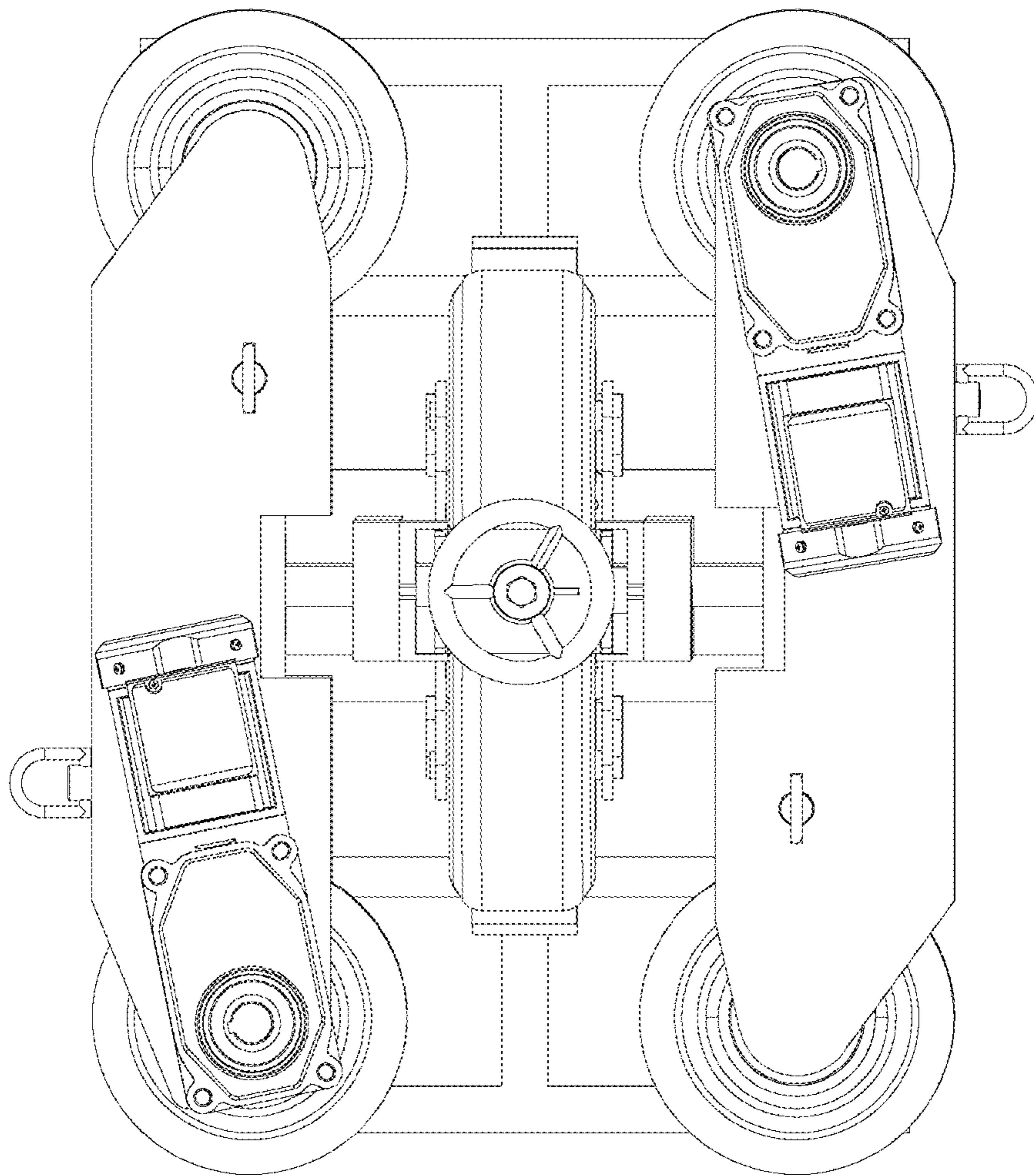


FIG. 4

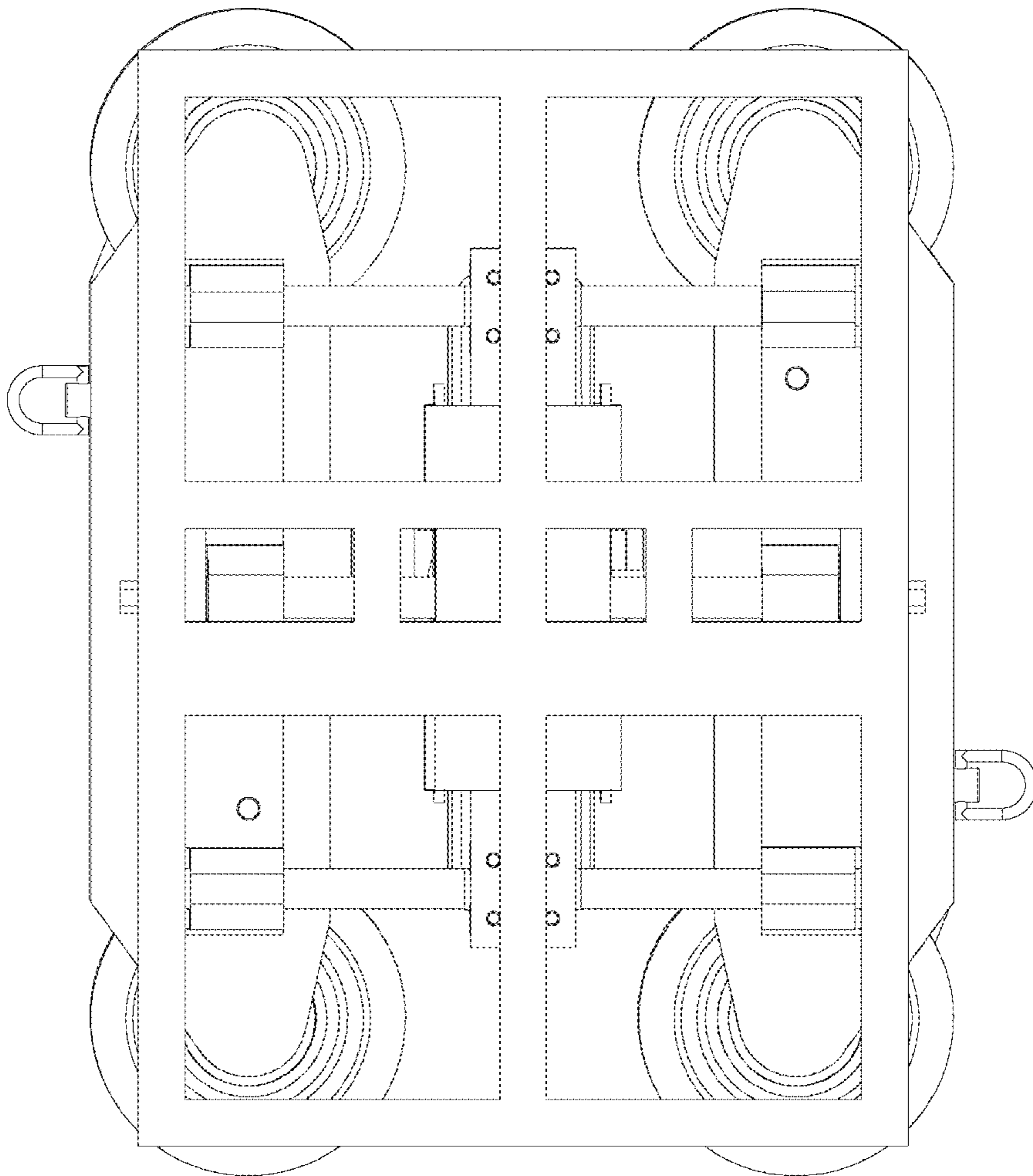


FIG. 5