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

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(54) **MOTION ASSISTING DEVICE**

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(52) **U.S. Cl.**  
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(58) **Field of Classification Search**  
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A63B 21/4009; A63B 23/0405; A61H

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(56) **References Cited**

U.S. PATENT DOCUMENTS

8,568,344 B2 10/2013 Ferguson et al.  
8,968,222 B2 \* 3/2015 Kazerooni ..... B25J 9/0006  
601/35  
9,022,956 B2 5/2015 Kazerooni et al.  
(Continued)

OTHER PUBLICATIONS

JTEKT Corporation | News releases (on-line), dated Dec. 12, 2018. Retrieved from Internet Nov. 24, 2020, URL: [https://www.jtekt.co.jp/e/news/181212\\_1.html](https://www.jtekt.co.jp/e/news/181212_1.html) (3 pages) (Year: 2018).

(Continued)

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(57) **CLAIM**

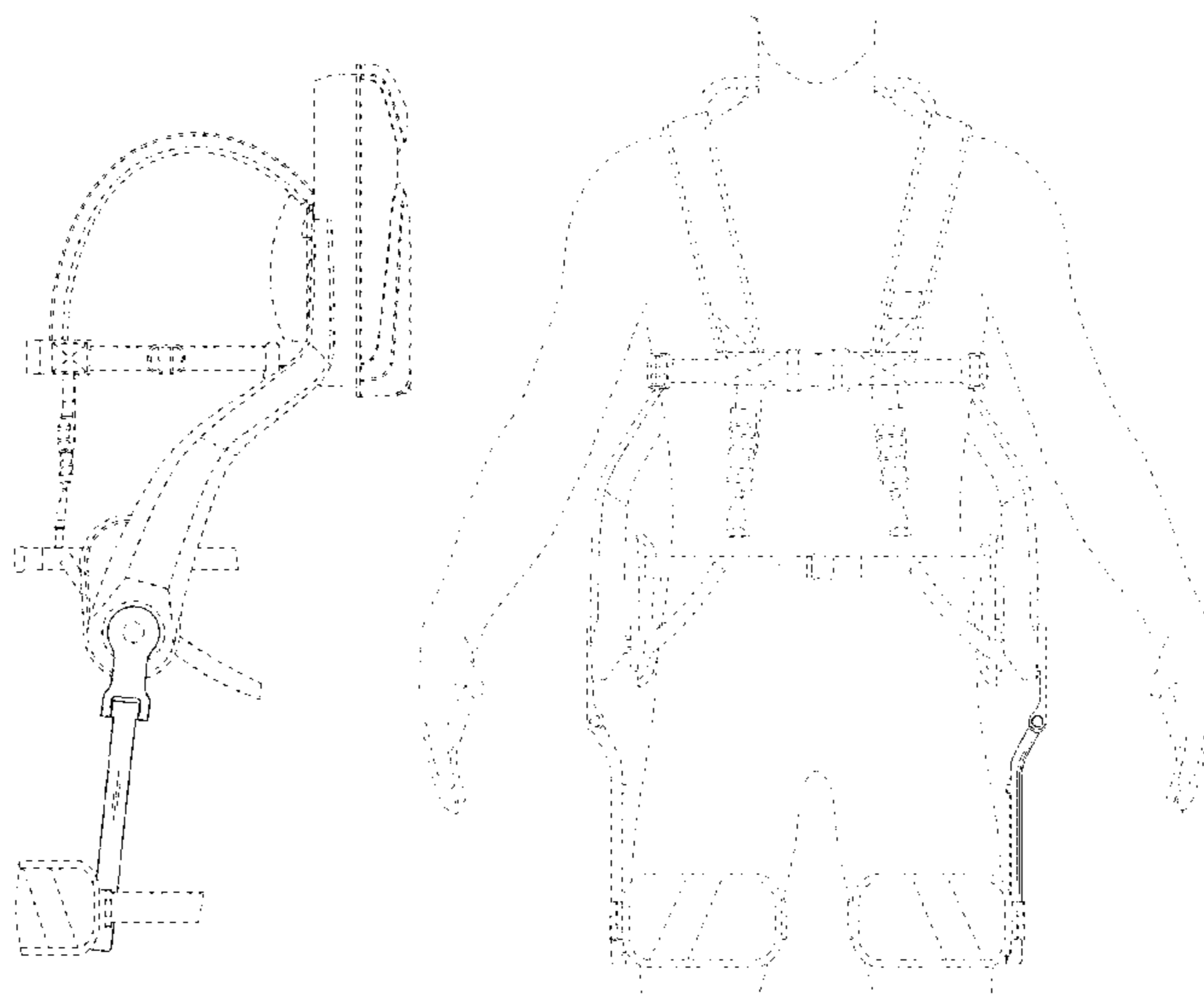
The ornamental design for a motion assisting device, as shown and described.

**DESCRIPTION**

FIG. 1 is a front elevational view of a motion assisting device showing our new design.  
FIG. 2 is a rear elevational view thereof.  
FIG. 3 is a top plan view thereof.  
FIG. 4 is a bottom plan view thereof.  
FIG. 5 is a right side elevational view thereof.  
FIG. 6 is a left side elevational view thereof; and,  
FIG. 7 is another front elevational view thereof showing a use state.

The outline of the partial human body shown in broken lines shown in FIG. 7 is for the purpose of illustrating an environment of use of the motion assisting device and forms no part of the claimed design. The remaining broken lines that show portions of the motion assisting device also form no part of the claimed design.

**1 Claim, 7 Drawing Sheets**



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(58) Field of Classification Search

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See application file for complete search history.

(56) References Cited

U.S. PATENT DOCUMENTS

D781,430 S 3/2017 Konishi et al.  
 9,604,369 B2\* 3/2017 Angold ..... B25J 17/00  
 D784,545 S 4/2017 Jangir  
 D784,547 S 4/2017 Kwon et al.  
 9,687,409 B2 6/2017 Teng et al.  
 9,731,162 B2 8/2017 Martin  
 9,782,322 B2 10/2017 Nagarajan et al.  
 9,808,073 B1 11/2017 Maxwell et al.  
 9,907,722 B2 3/2018 Aguirre-Ollinger et al.  
 D831,276 S 10/2018 Pennington, Jr. et al.  
 10,166,679 B2 1/2019 Tanibayashi et al.  
 10,288,384 B2 5/2019 Kinnings  
 10,328,300 B2\* 6/2019 Ko ..... A63B 21/22  
 10,426,688 B2\* 10/2019 Robertson ..... A61H 3/00  
 10,449,105 B2 10/2019 Hollander  
 10,610,439 B2 4/2020 Ohta et al.  
 10,624,809 B2\* 4/2020 Tsai ..... A61H 1/0262  
 D887,013 S\* 6/2020 Son ..... D24/190  
 10,695,255 B2 6/2020 Choi et al.  
 D889,672 S\* 7/2020 Takama ..... D24/190  
 10,709,632 B2 7/2020 Endo  
 10,710,237 B2 7/2020 Kumeno et al.  
 D901,023 S 11/2020 Park et al.  
 10,835,443 B2\* 11/2020 Tsai ..... A61H 1/0266  
 D903,881 S\* 12/2020 Ohta ..... D24/190  
 10,871,422 B2\* 12/2020 Nabeshima ..... G01M 7/08  
 2011/0183819 A1 7/2011 Pharoe  
 2011/0264014 A1\* 10/2011 Angold ..... B25J 9/0006  
 601/35  
 2012/0292361 A1\* 11/2012 Thiruppathi ..... A45F 3/08  
 224/576  
 2015/0197008 A1\* 7/2015 Yoon ..... B25J 9/0006  
 700/250  
 2016/0158593 A1 6/2016 Craig et al.  
 2018/0071129 A1 3/2018 Ozsecen et al.  
 2018/0325764 A1 11/2018 Yagi  
 2018/0338880 A1\* 11/2018 Ohta ..... A61H 3/008

2019/0001493 A1\* 1/2019 Hyun ..... B25J 9/1633  
 2019/0091094 A1 3/2019 Romo et al.  
 2019/0192373 A1\* 6/2019 Vouga ..... A61H 1/0262  
 2019/0254908 A1 8/2019 Ortlieb et al.  
 2019/0282429 A1 9/2019 Son et al.  
 2019/0314238 A1 10/2019 Kobayashi  
 2019/0328553 A1\* 10/2019 Sankai ..... A61F 2/72  
 2019/0344432 A1\* 11/2019 Grenier ..... A45F 3/10  
 2019/0358808 A1 11/2019 Yoshimi et al.  
 2020/0078253 A1\* 3/2020 Song ..... G16H 20/30  
 2020/0078254 A1\* 3/2020 Uematsu ..... A61H 1/0237  
 2020/0179218 A1 6/2020 Katoh et al.  
 2020/0206062 A1\* 7/2020 Kim ..... B25J 9/0006  
 2020/0237600 A1\* 7/2020 Arai ..... B25J 13/088  
 2020/0281803 A1\* 9/2020 Teng ..... A45B 7/005  
 2020/0289030 A1 9/2020 Ikeuchi  
 2020/0289357 A1 9/2020 Sato et al.  
 2020/0297571 A1\* 9/2020 Takahashi ..... G16H 50/30  
 2020/0337934 A1 10/2020 Wang et al.  
 2020/0368094 A1 11/2020 Yoshimi et al.  
 2020/0383865 A1\* 12/2020 Barnes ..... A41D 13/0007  
 2020/0405566 A1\* 12/2020 Chan ..... G06F 3/011  
 2020/0406449 A1\* 12/2020 Bilodeau ..... A61H 1/0262  
 2021/0000678 A1\* 1/2021 Yasuhara ..... A61H 1/0244  
 2021/0030613 A1 2/2021 Kodama et al.  
 2021/0052408 A1\* 2/2021 Takahashi ..... A61F 5/0123  
 2021/0052460 A1\* 2/2021 Soucy ..... A61H 1/0262  
 2021/0069053 A1\* 3/2021 Terada ..... A61H 3/00  
 2021/0077335 A1\* 3/2021 Yoshimi ..... A61H 1/0292  
 2021/0077839 A1\* 3/2021 Arai ..... B25J 9/0006  
 2021/0078162 A1\* 3/2021 Yoshimi ..... B25J 9/104  
 2021/0078163 A1\* 3/2021 Ohtsubo ..... B25J 9/0006  
 2021/0128389 A1\* 5/2021 Ohta ..... A61H 1/0292  
 2021/0128390 A1\* 5/2021 Choi ..... A61H 3/00  
 2021/0137722 A1\* 5/2021 Arai ..... A61F 5/0102  
 2021/0291354 A1\* 9/2021 Kobayashi ..... A61H 1/0244  
 2021/0369534 A1\* 12/2021 Kobayashi ..... A61H 1/0244

OTHER PUBLICATIONS

U.S. Notice of Allowance dated Oct. 6, 2021 in U.S. Appl. No.  
 29/693,987 (6 pages).  
 U.S. Non-Final Office Action dated Jun. 18, 2021 in U.S. Appl. No.  
 29/772,524 (9 pages).  
 U.S. Notice of Allowance dated Oct. 7, 2021 in U.S. Appl. No.  
 29/772,524 (6 pages).  
 U.S. Non-Final Office Action dated Jun. 18, 2021 in U.S. Appl. No.  
 29/772,529 (9 pages).

\* cited by examiner

FIG. 1

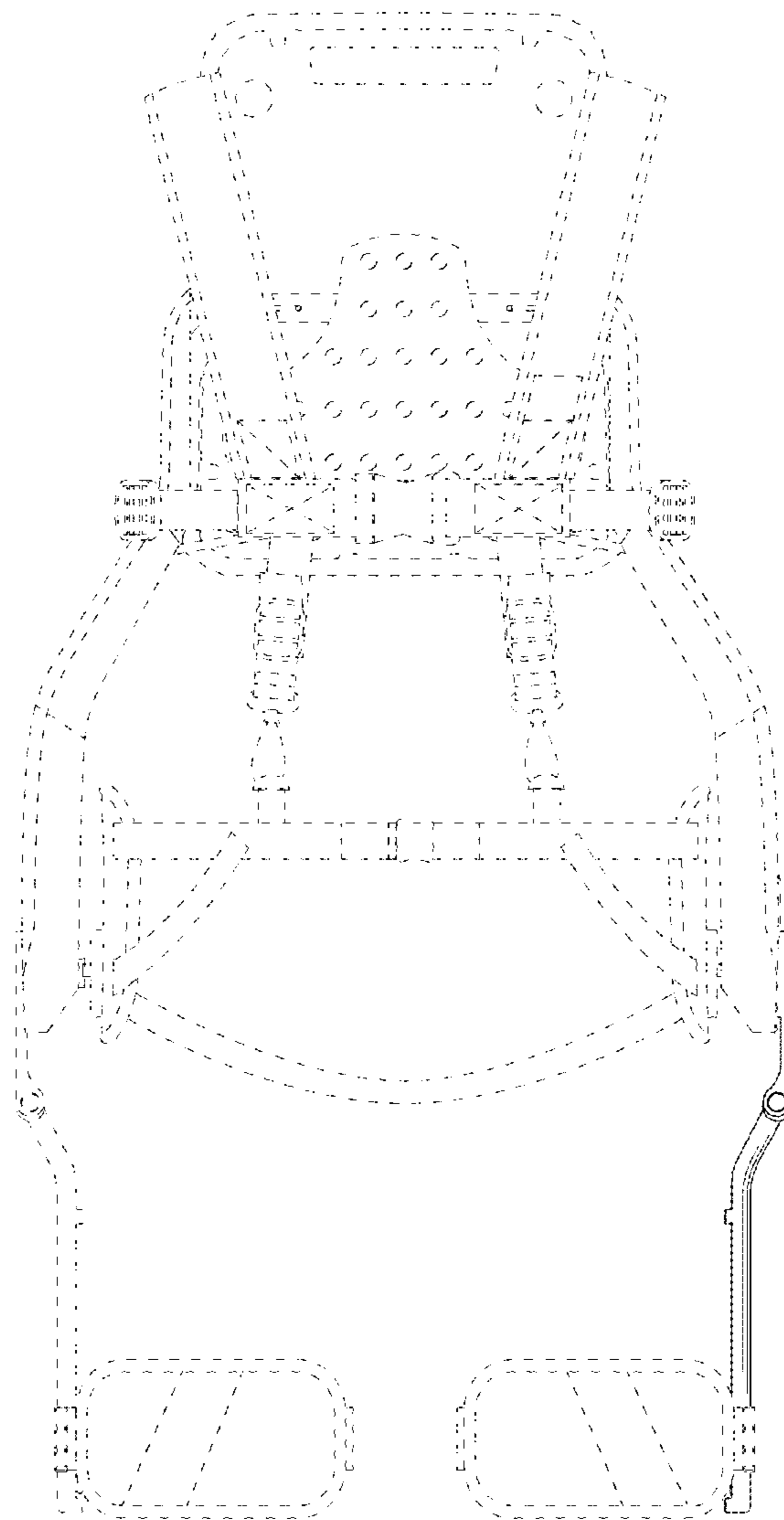


FIG. 2

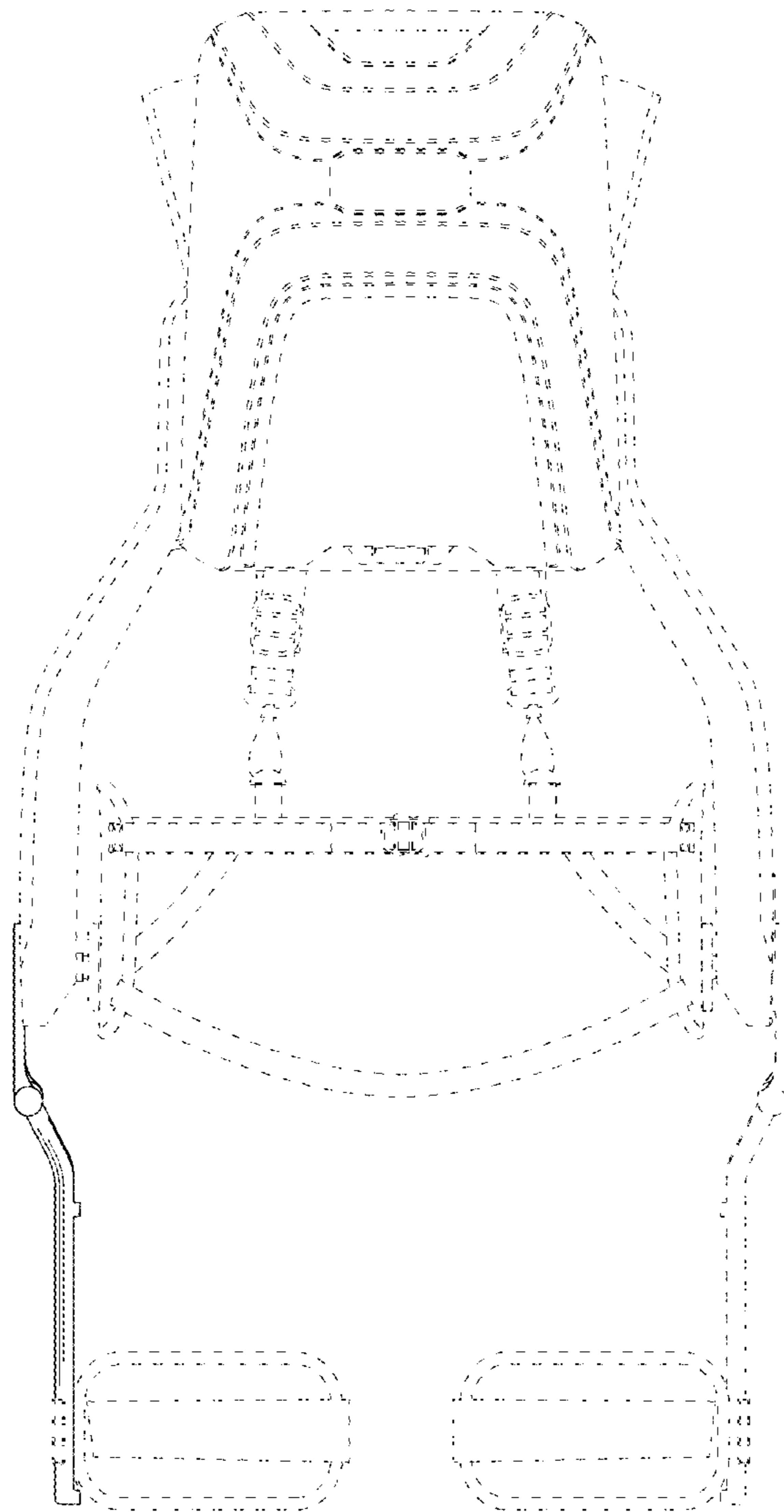


FIG. 3

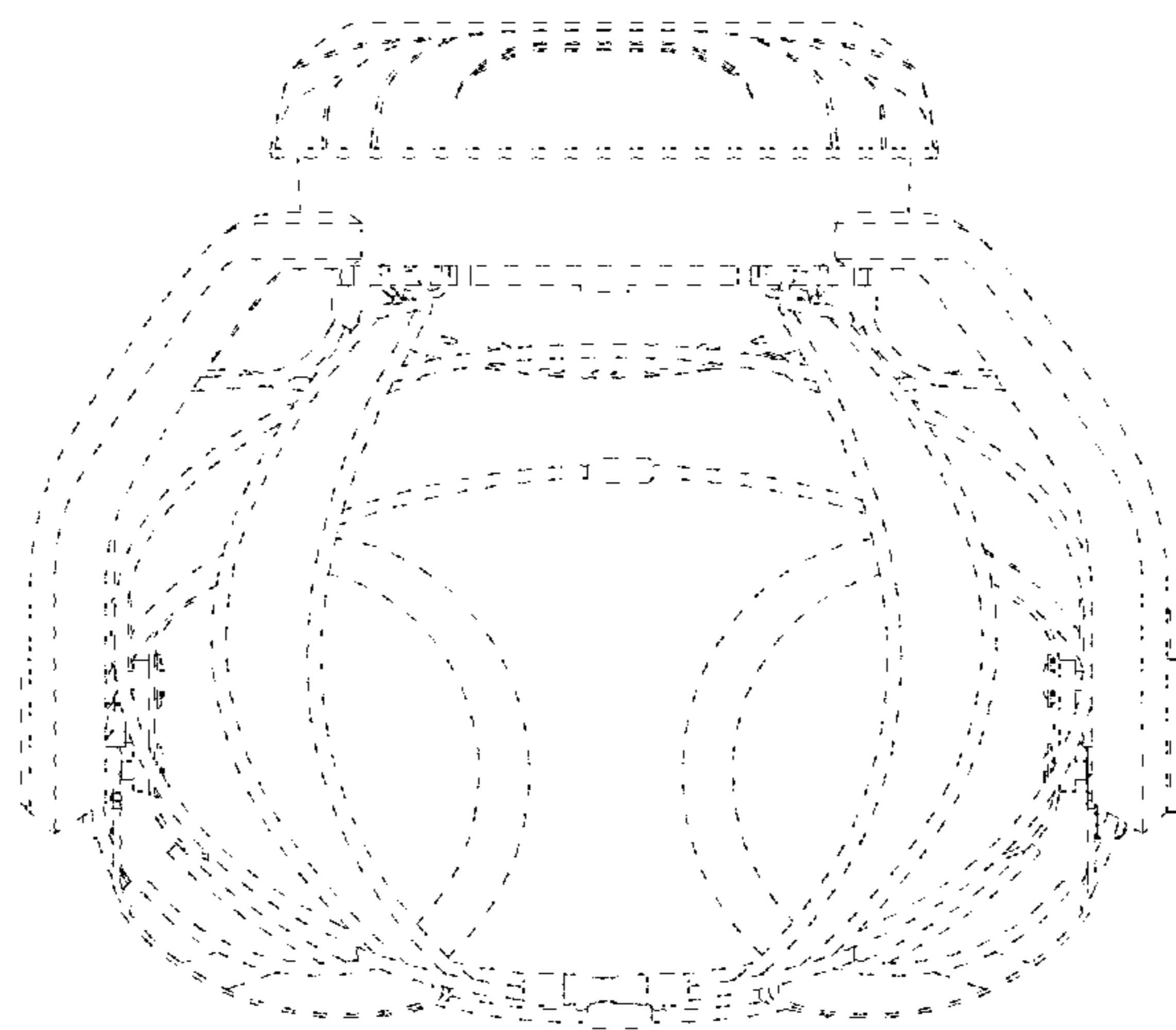


FIG. 4

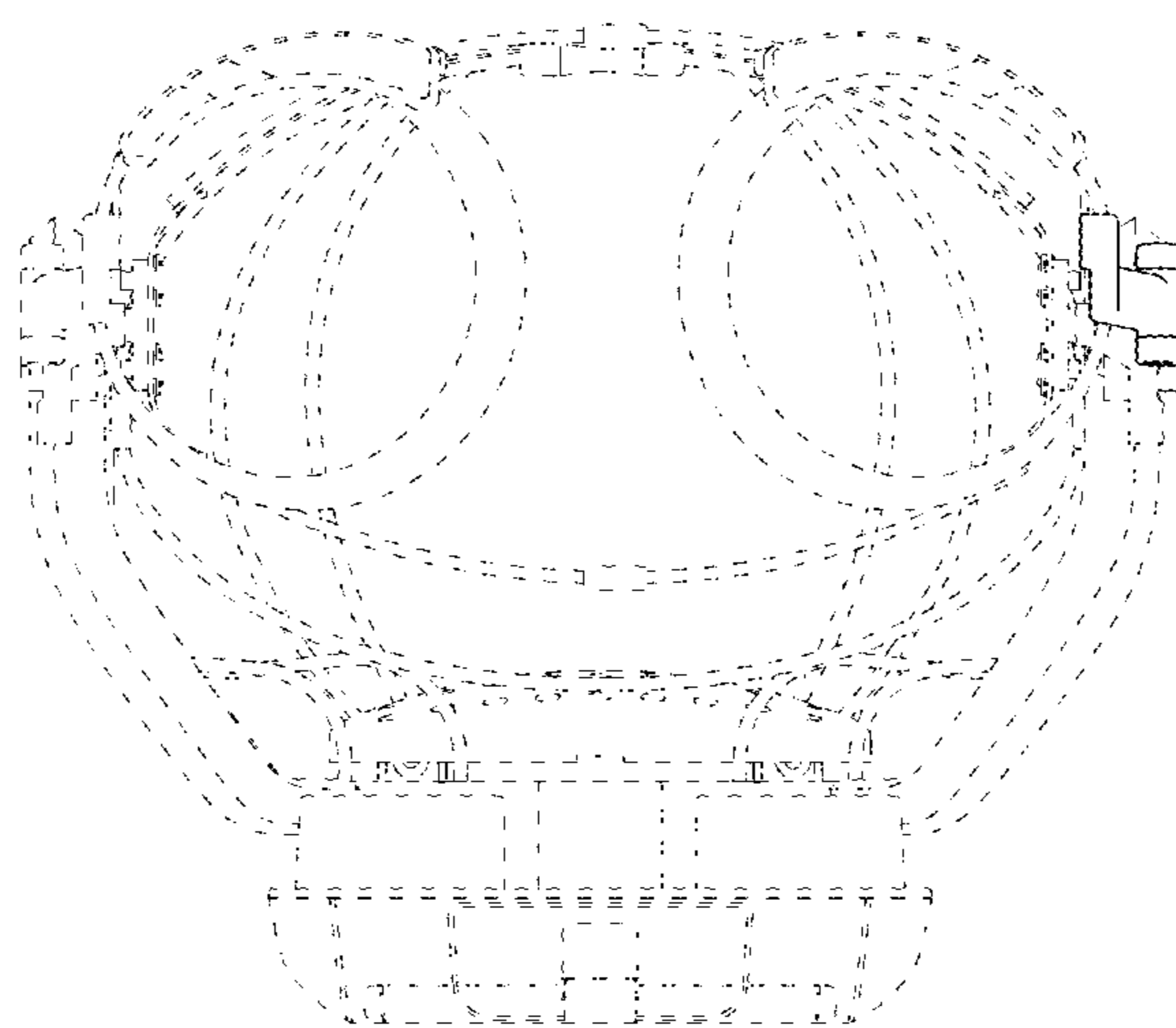


FIG. 5

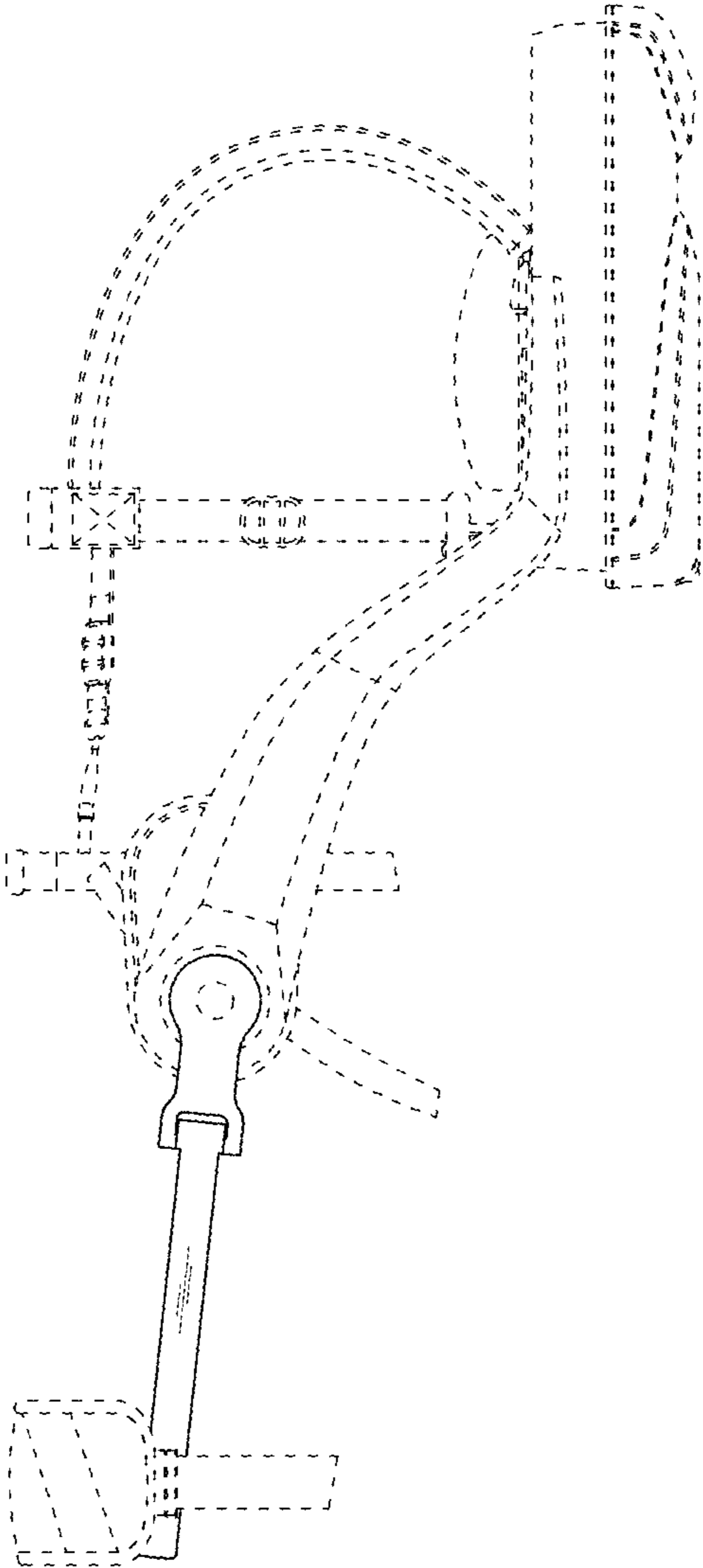


FIG. 6

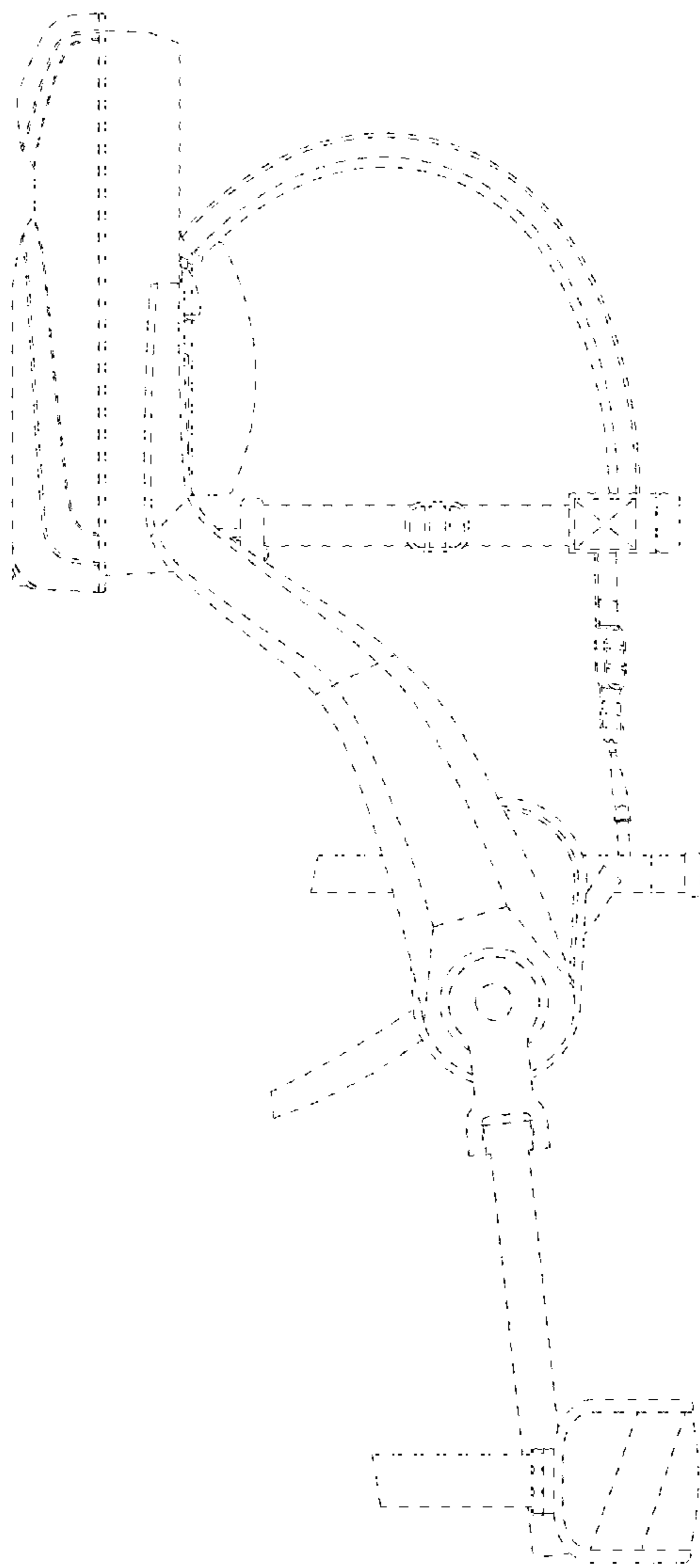




FIG. 7

