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(12) **United States Design Patent** (10) **Patent No.:** **US D966,557 S**  
**Maxfield et al.** (45) **Date of Patent:** **\*\* Oct. 11, 2022**

(54) **LADDER**  
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(\*\*) Term: **15 Years**  
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1,284,171 A 8/1981 Owen  
4,376,470 A 3/1983 Ashton  
4,407,045 A 10/1983 Boothe  
4,549,632 A 10/1985 Inoue  
4,560,030 A 12/1985 Mucelli  
4,566,150 A 1/1986 Boothe  
4,593,790 A 6/1986 Brewer et al.  
4,666,327 A 5/1987 Su  
4,666,328 A 5/1987 Ryu  
4,697,305 A 10/1987 Boothe  
D310,884 S 9/1990 Patton et al.  
(Continued)

**FOREIGN PATENT DOCUMENTS**

CA 2881525 A1 9/2015  
KR 200146389 Y1 6/1999

**OTHER PUBLICATIONS**

International Search Report and Written Opinion dated Nov. 13, 2019 for International Application No. PCT/US2019/036172.  
(Continued)

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(57) **CLAIM**

The ornamental design for a ladder, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a ladder;  
FIG. 2 is a front view of the ladder shown in FIG. 1;  
FIG. 3 is a rear view of the ladder shown in FIG. 1;  
FIG. 4 is a right side view of the ladder shown in FIG. 1;  
FIG. 5 is a left side view of the ladder shown in FIG. 1; and,  
FIG. 6 is a top side view of the ladder shown in FIG. 1.  
The broken lines in the figures are shown for the purpose of illustrating boundaries of the ladder and form no part of the claimed design.

**1 Claim, 6 Drawing Sheets**

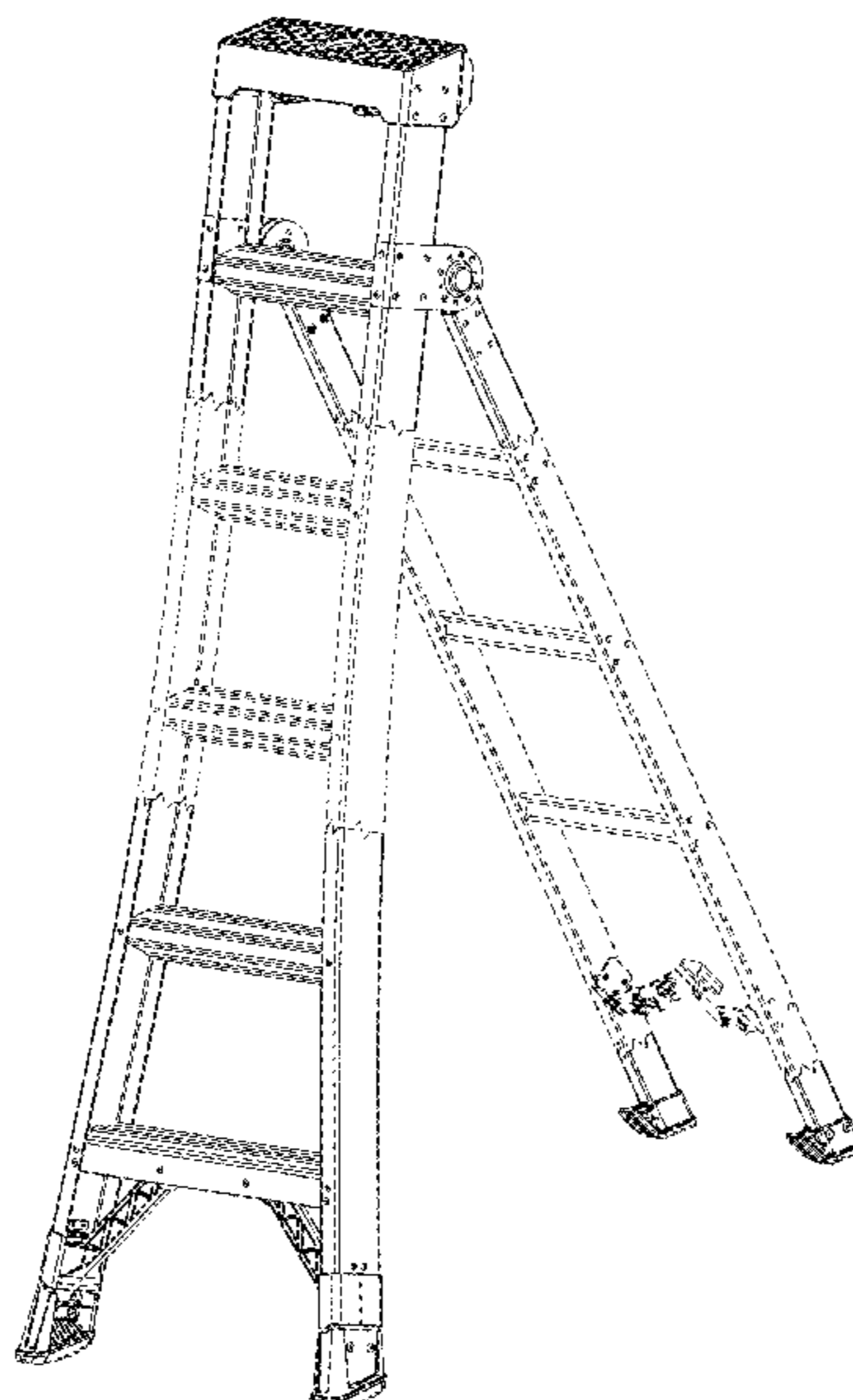
**Related U.S. Application Data**

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(51) **LOC (13) Cl.** ..... **25-04**  
(52) **U.S. Cl.**  
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(58) **Field of Classification Search**  
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182/22, 180.1, 124, 115, 173, 23  
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See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

507,784 A 10/1893 Congdon  
1,024,380 A 4/1912 Vierheller  
2,316,939 A 4/1943 De Luca  
2,639,853 A 5/1953 Pierce  
2,899,008 A 8/1959 Larson  
4,155,422 A 5/1979 Larson et al.  
4,182,431 A 1/1980 Wing et al.



(56)

References Cited

U.S. PATENT DOCUMENTS

5,228,511 A 7/1993 Boquel et al.  
 D340,773 S 10/1993 Bartnicki et al.  
 5,279,387 A 1/1994 Swiderski et al.  
 5,511,285 A 4/1996 Bush et al.  
 5,573,081 A 11/1996 Bartnicki et al.  
 D388,883 S 1/1998 Thivierge et al.  
 5,850,894 A 12/1998 Busenhart  
 5,937,968 A 8/1999 Gibson et al.  
 6,220,389 B1 4/2001 Krause  
 6,343,406 B1 2/2002 Yeh  
 6,443,260 B1 9/2002 Katz et al.  
 6,711,780 B2 3/2004 Lee  
 6,866,117 B2 3/2005 Moss  
 7,032,711 B1 4/2006 Katz et al.  
 D549,356 S 8/2007 Gibson  
 D576,290 S \* 9/2008 Meyers ..... D25/64  
 D576,291 S 9/2008 Latimer  
 D597,685 S 8/2009 Gibson et al.  
 7,575,097 B2 8/2009 Sheridan et al.  
 7,753,170 B1 7/2010 Gibson  
 7,886,872 B2 \* 2/2011 Astor ..... E06C 7/14  
 182/129  
 8,186,481 B2 5/2012 Moss et al.  
 8,210,313 B2 7/2012 Astor  
 8,251,180 B1 8/2012 Paige  
 9,016,434 B2 4/2015 Moss et al.  
 D764,073 S 8/2016 Wang  
 D766,461 S 9/2016 Peterson et al.  
 D766,462 S 9/2016 Peterson et al.  
 D766,463 S 9/2016 Peterson et al.  
 D819,834 S 6/2018 Fiedeler  
 10,030,448 B2 7/2018 Miller  
 10,087,682 B2 10/2018 Pfeifer  
 10,138,680 B2 11/2018 Williams et al.  
 D835,807 S 12/2018 Lentine et al.  
 D840,055 S 2/2019 Jeff  
 10,487,576 B2 11/2019 Ballard et al.  
 10,487,578 B2 11/2019 Smith et al.  
 10,590,703 B2 3/2020 Parker et al.

10,597,941 B2 \* 3/2020 Moss ..... E06C 1/16  
 10,612,305 B2 4/2020 Mora et al.  
 D885,607 S 5/2020 Miner et al.  
 10,648,234 B2 \* 5/2020 Skubic ..... E06C 1/393  
 D911,555 S 2/2021 Maxfield et al.  
 D912,847 S 3/2021 Maxfield et al.  
 D912,848 S 3/2021 Maxfield et al.  
 D920,541 S \* 5/2021 Mittanck ..... D25/64  
 D921,224 S \* 6/2021 Mittanck ..... D25/64  
 D935,054 S \* 11/2021 Maxfield ..... D25/64  
 D943,772 S \* 2/2022 Maxfield ..... D25/64  
 D944,417 S 2/2022 B. et al.  
 11,274,494 B2 3/2022 Leng  
 2003/0188923 A1 10/2003 Moss  
 2005/0173194 A1 8/2005 Pate et al.  
 2006/0060423 A1 3/2006 Astor  
 2008/0107529 A1 5/2008 Friedman  
 2008/0149421 A1 6/2008 Barker  
 2010/0200331 A1 8/2010 Hager  
 2011/0024232 A1 2/2011 Leng  
 2012/0097481 A1 4/2012 Schienke et al.  
 2014/0251729 A1 9/2014 Parker  
 2016/0076304 A1 3/2016 Smith et al.  
 2016/0348434 A1 12/2016 Williams et al.  
 2017/0130530 A1 5/2017 Lawler et al.  
 2017/0152710 A1 6/2017 Miller  
 2017/0356244 A1 12/2017 Peterson et al.  
 2018/0002982 A1 1/2018 Dressel  
 2018/0171714 A1 6/2018 Dings  
 2018/0187489 A1 7/2018 Parker et al.  
 2018/0230746 A1 8/2018 Maxfield et al.  
 2018/0258698 A1 9/2018 Minock  
 2018/0298691 A1 10/2018 Cook et al.  
 2019/0376341 A1 12/2019 Maxfield et al.  
 2020/0048962 A1 2/2020 Moreno Moncada

OTHER PUBLICATIONS

International Search Report and Written Opinion for International Application No. PCT/US2020/015074 dated Apr. 1, 2020.

\* cited by examiner

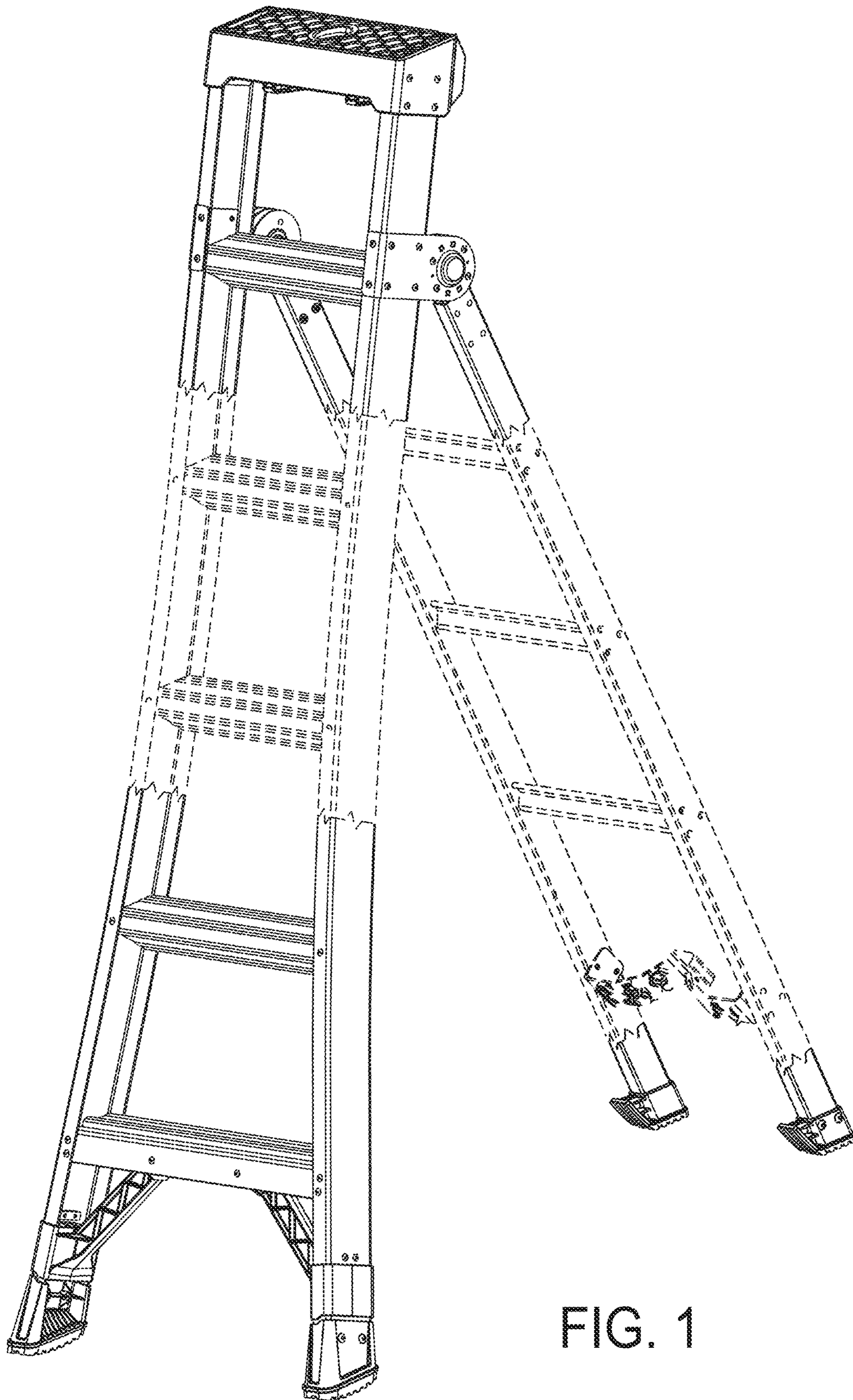


FIG. 1

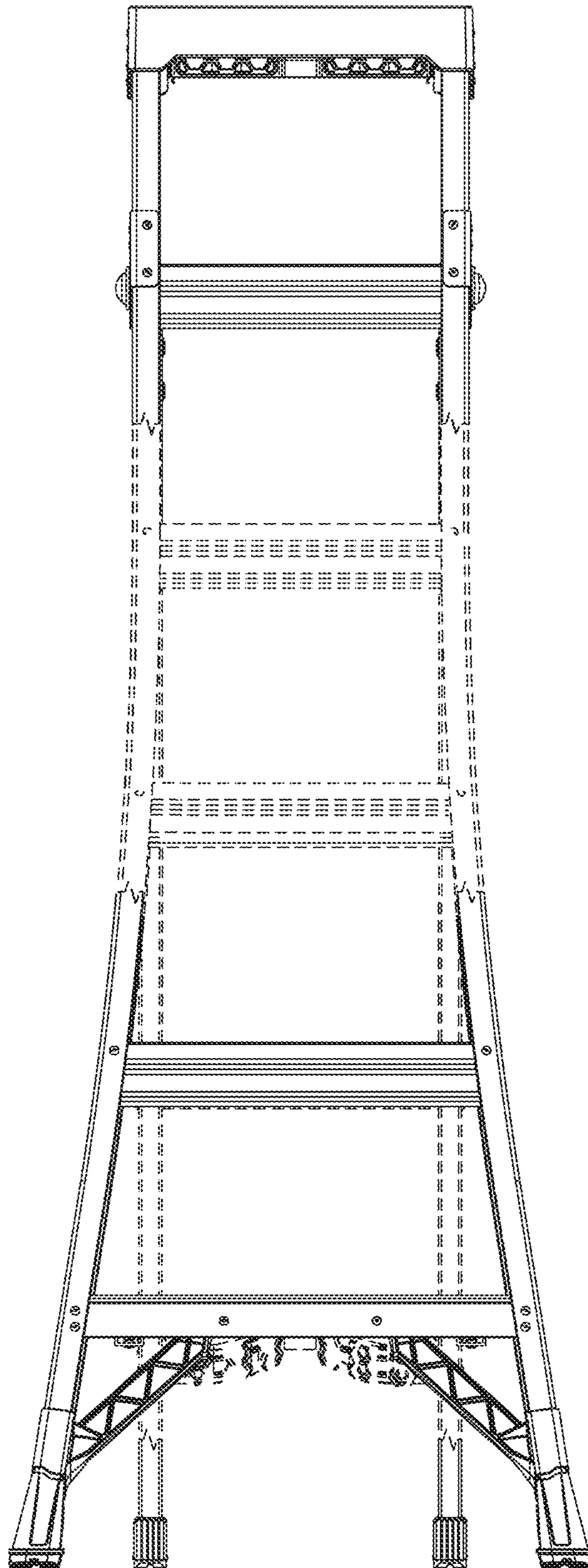


FIG. 2

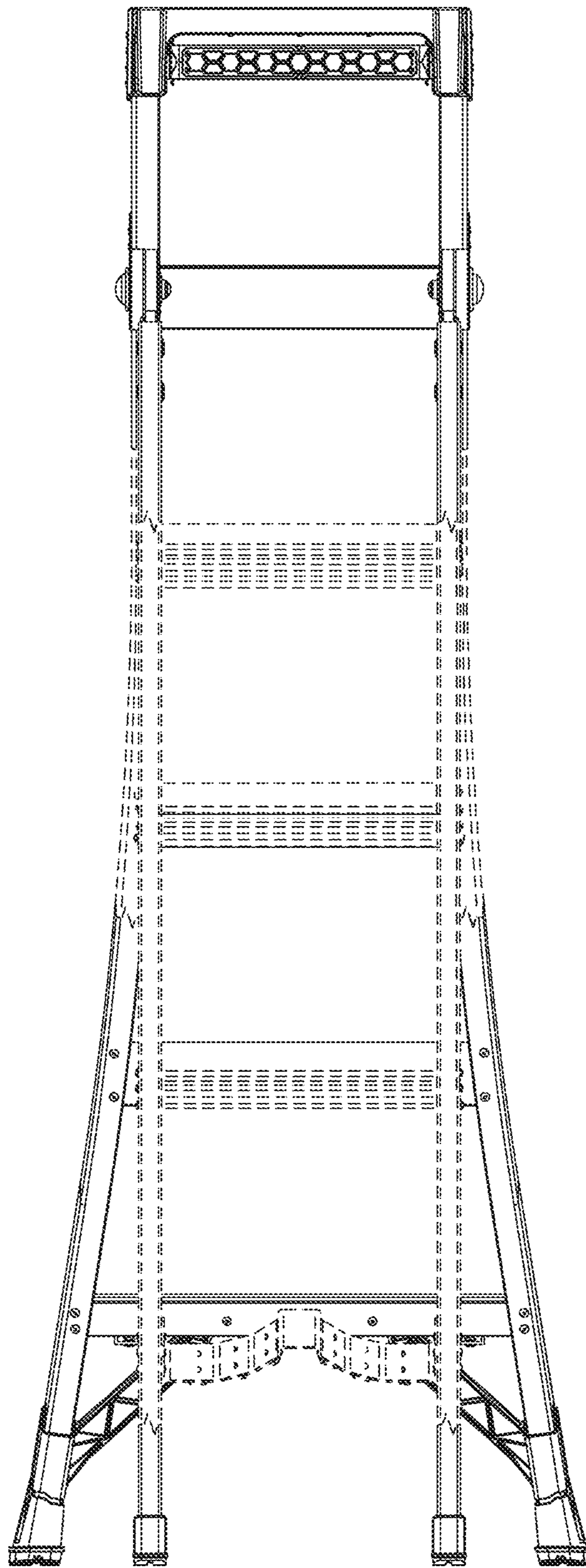


FIG. 3

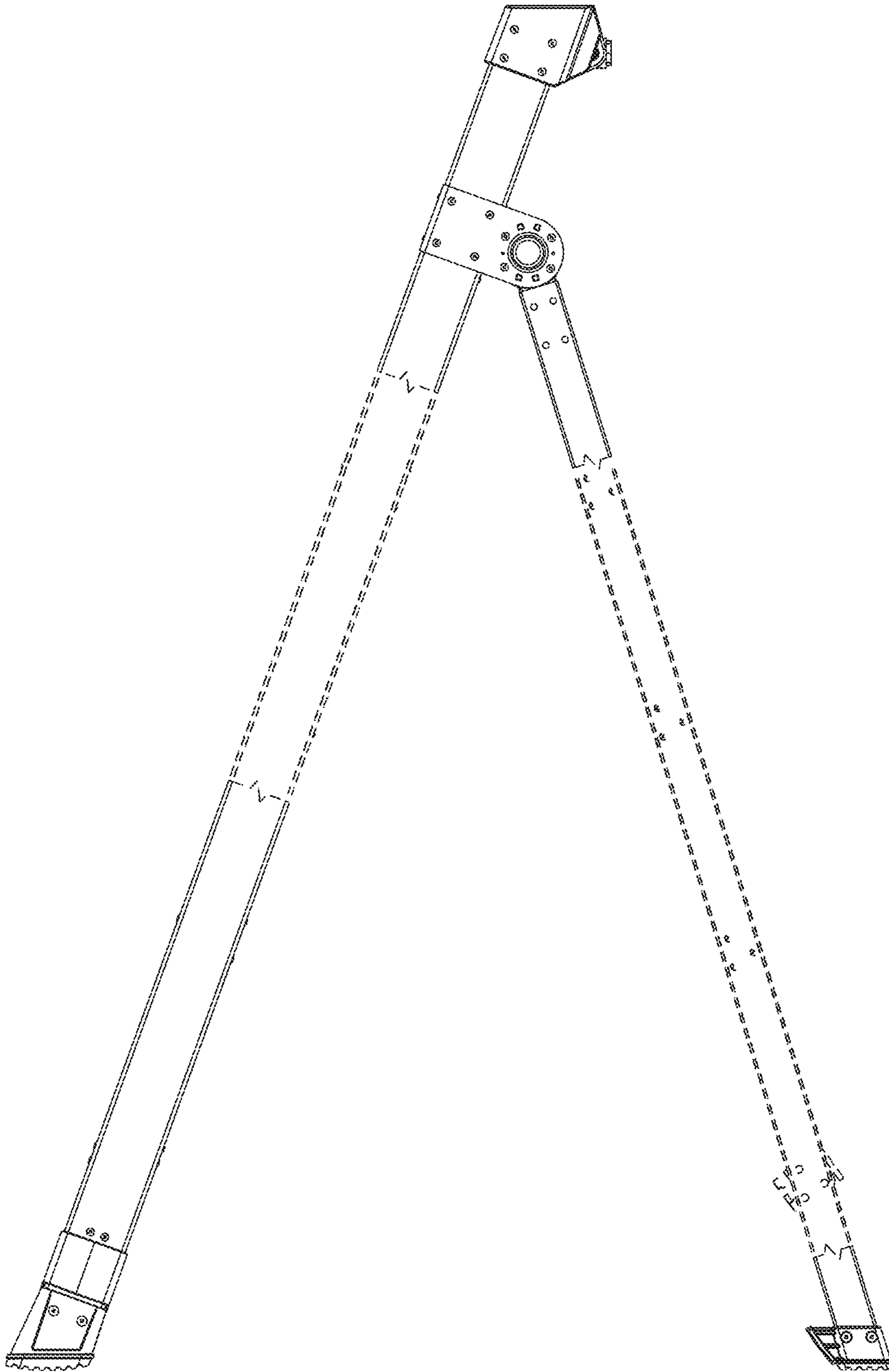


FIG. 4

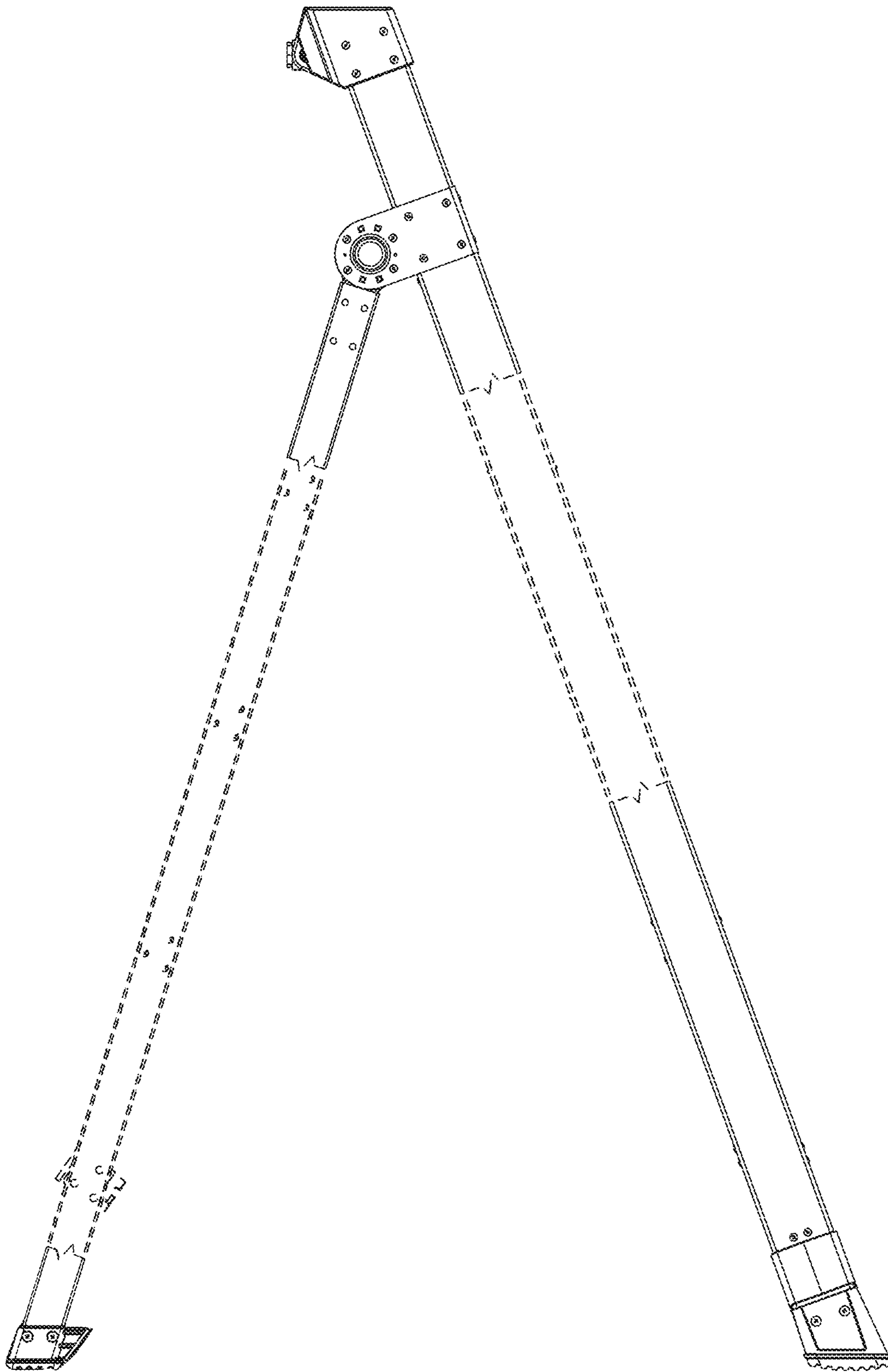


FIG. 5

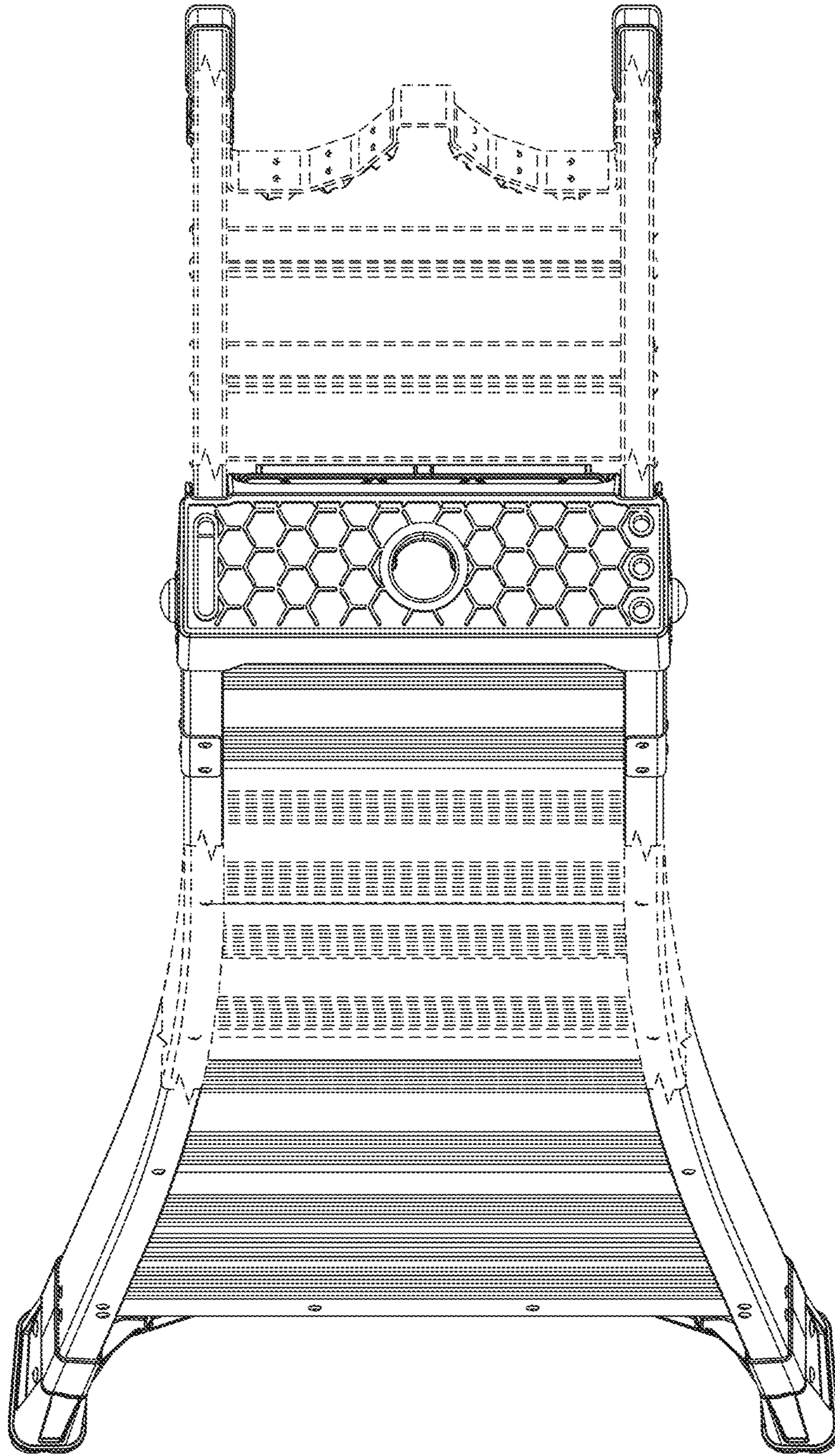


FIG. 6