



US00D777947S

(12) **United States Design Patent** (10) **Patent No.:** **US D777,947 S**
Simmons et al. (45) **Date of Patent:** **** Jan. 31, 2017**

(54) **MODULAR LADDER**
(71) Applicant: **ConXtech, Inc.**, Pleasanton, CA (US)
(72) Inventors: **Robert J. Simmons**, Hayward, CA (US); **Maxwell C. Simmons**, Hayward, CA (US); **Daniel R. Hester**, Oakland, CA (US)

3,071,205 A 1/1963 Beck, Jr.
3,106,986 A * 10/1963 Ray E06C 7/185
182/106
3,148,477 A 9/1964 Bjorn et al.
3,270,997 A 9/1966 Gethmann
3,396,499 A 8/1968 Biffani
(Continued)

FOREIGN PATENT DOCUMENTS

(73) Assignee: **ConXtech, Inc.**, Pleasanton, CA (US)
(**) Term: **14 Years**

DE 2758992 A1 7/1979
DE 102009050139 A1 4/2011
(Continued)

(21) Appl. No.: **29/522,400**
(22) Filed: **Mar. 30, 2015**
(51) **LOC (10) Cl.** **25-04**
(52) **U.S. Cl.**
USPC **D25/64**
(58) **Field of Classification Search**
USPC D25/62-69; 182/93, 151, 178.2, 194,
182/178.4, 21, 22, 104, 120, 187, 106,
182/198, 206, 113, 116; 482/35
CPC A63G 21/00; A63G 31/00; E06C 7/182;
E06C 1/30; E04G 5/10
See application file for complete search history.

OTHER PUBLICATIONS

ConXtech, 'ConX Modular Pipe Rack' [online], Jan. 6, 2013, Retrieved from the internet: <<http://www.conxtech.com/conx-system/conx-modular-pipe-rack/>>, p. 1, figure 1, paragraphs 1, 2; p. 2, paragraph 1; 3 pages.

(Continued)

Primary Examiner — Cynthia Ramirez
Assistant Examiner — Gino Colan
(74) *Attorney, Agent, or Firm* — Kolisch Hartwell, P.C.

(57) **CLAIM**

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

(56) **References Cited**

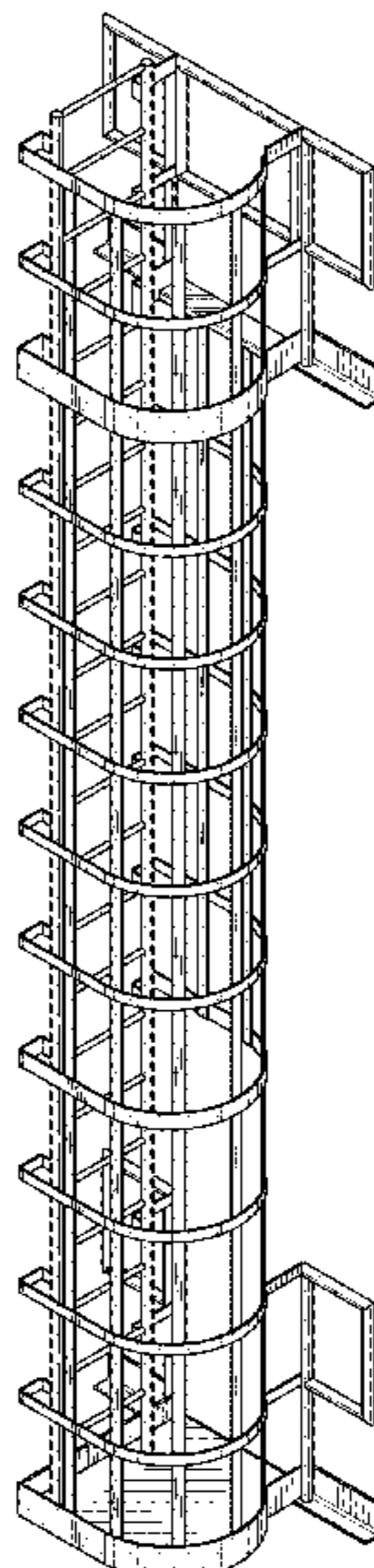
U.S. PATENT DOCUMENTS

835,059 A 11/1906 Curley
925,677 A 6/1909 Belcher
1,110,185 A 9/1914 Brown et al.
1,367,044 A 2/1921 Hausler
1,400,066 A 12/1921 Huck
1,471,094 A 10/1923 Bloss
1,729,743 A 10/1929 Jorgensen et al.
2,008,087 A 7/1935 Stromberg
2,539,664 A * 1/1951 Hay E06C 7/185
182/106
2,569,653 A 10/1951 Boedecker
2,673,700 A 3/1954 Eberhardt

DESCRIPTION

FIG. 1 is a perspective view of a modular ladder showing our new design;
FIG. 2 is a front elevational view thereof;
FIG. 3 is a rear elevational view thereof;
FIG. 4 is a left elevational view thereof;
FIG. 5 is a right elevational view thereof;
FIG. 6 is a top plan view thereof shown in a larger scale; and,
FIG. 7 is a bottom plan view thereof shown in a larger scale.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

3,401,739 A 9/1968 Opletal
 3,410,044 A 11/1968 Moog
 3,533,592 A 10/1970 Jennings
 3,562,988 A 2/1971 Gregoire
 3,684,011 A 8/1972 Presley et al.
 3,685,866 A 8/1972 Patenaude
 3,706,169 A 12/1972 Rensch
 3,784,151 A 1/1974 Steele
 3,829,999 A 8/1974 Bernstein
 3,977,801 A 8/1976 Murphy
 4,019,298 A 4/1977 Johnson, IV
 4,059,931 A 11/1977 Mongan
 4,306,397 A 12/1981 Ramseyer
 4,360,230 A 11/1982 Wood et al.
 4,438,607 A 3/1984 Nelson
 4,522,001 A 6/1985 Meyer
 4,577,449 A 3/1986 Celli
 4,684,285 A 8/1987 Cable
 4,701,131 A 10/1987 Hildebrandt et al.
 4,736,554 A 4/1988 Tyler
 4,742,665 A 5/1988 Baierl
 4,754,712 A 7/1988 Olson et al.
 4,821,844 A 4/1989 Huffman et al.
 4,830,144 A 5/1989 Werner
 4,852,501 A 8/1989 Olson et al.
 4,905,436 A 3/1990 Matsuo et al.
 5,061,111 A 10/1991 Hosokawa
 5,240,089 A 8/1993 Spera
 5,244,300 A 9/1993 Perreira et al.
 5,289,665 A 3/1994 Higgins
 5,342,138 A 8/1994 Saito et al.
 5,590,974 A 1/1997 Yang
 5,605,410 A 2/1997 Pantev
 5,615,529 A 4/1997 Johnson et al.
 5,617,931 A 4/1997 Zygmunt et al.
 5,678,375 A 10/1997 Juola
 6,082,070 A 7/2000 Jen
 6,092,347 A 7/2000 Hou
 6,106,186 A 8/2000 Taipale et al.
 6,219,989 B1 4/2001 Tumura
 6,378,265 B1 4/2002 Konstandt
 6,390,719 B1 5/2002 Chan
 6,554,102 B2 4/2003 Schwörer
 6,607,053 B1* 8/2003 Warren E06C 7/182
 182/106
 6,651,393 B2 11/2003 Don et al.
 6,802,169 B2 10/2004 Simmons
 6,837,016 B2 1/2005 Simmons et al.
 6,913,422 B2 7/2005 Rogers
 6,929,094 B1* 8/2005 Kohlmeier E06C 7/185
 182/106
 7,021,020 B2 4/2006 Simmons et al.
 7,032,712 B2 4/2006 Schwörer
 7,082,694 B2 8/2006 Lyman, Jr.
 7,137,478 B2* 11/2006 Becker E04G 5/10
 182/106
 7,469,485 B1 12/2008 Perdue
 7,470,081 B2 12/2008 Miyahara et al.

D611,166 S 3/2010 Hammer
 7,677,522 B2 3/2010 Bakos
 7,941,985 B2 5/2011 Simmons
 8,011,150 B2 9/2011 Luttrell et al.
 8,056,299 B2 11/2011 Liskey
 8,132,774 B1 3/2012 Whatcott
 8,136,460 B2 3/2012 Tait et al.
 8,161,698 B2 4/2012 Migliore
 8,161,707 B2 4/2012 Simmons
 8,297,002 B2 10/2012 Fernández Fernández
 8,297,887 B2 10/2012 Ness et al.
 8,381,877 B1* 2/2013 Freund E06C 1/10
 182/116
 8,522,507 B2 9/2013 Asada et al.
 8,528,298 B2 9/2013 Semaan et al.
 8,627,615 B2 1/2014 Moyher
 8,646,232 B2 2/2014 Liskey
 9,103,132 B2 8/2015 Simmons et al.
 9,109,874 B2 8/2015 Simmons et al.
 2002/0043038 A1 4/2002 Cerrato
 2003/0178253 A1 9/2003 Tatge et al.
 2004/0237439 A1 12/2004 Powell
 2005/0066612 A1 3/2005 Simmons
 2005/0189172 A1* 9/2005 Becker E04G 5/10
 182/106
 2007/0256391 A1 11/2007 Mifsud et al.
 2008/0245023 A1 10/2008 Simmons
 2009/0052980 A1 2/2009 Williams
 2010/0316441 A1 12/2010 Vicentelli
 2012/0110947 A1 5/2012 Simmons
 2012/0160137 A1 6/2012 Linares
 2012/0292131 A1 11/2012 Lovas
 2013/0319796 A1 12/2013 Davis
 2014/0144006 A1* 5/2014 Ashouri E06C 7/185
 29/525.08
 2014/0183330 A1 7/2014 Simmons et al.
 2014/0202795 A1 7/2014 Simmons et al.
 2014/0208666 A1 7/2014 Simmons et al.
 2016/0017657 A1* 1/2016 Wilson E06C 1/30
 182/178.2

FOREIGN PATENT DOCUMENTS

FR 2471461 A1 6/1981
 FR 2613403 A1 10/1988
 GB 1204327 A 9/1970
 GB 2261651 A 5/1993
 JP 11-22001 A 1/1999
 JP 2000-110236 A 4/2000
 WO 9836134 A1 8/1998
 WO 2011047830 A1 4/2011

OTHER PUBLICATIONS

ConXtech Brochure, 'Conx Modular Pipe Rack' [online], Apr. 16, 2014, Retrieved from the internet: <http://www.conxtech.com_wpcontent_uploads_files_documents_ConX_Modular_Pipe_Rack_Brochure.pdf>; entire document, 25 pages.

* cited by examiner

Fig. 1

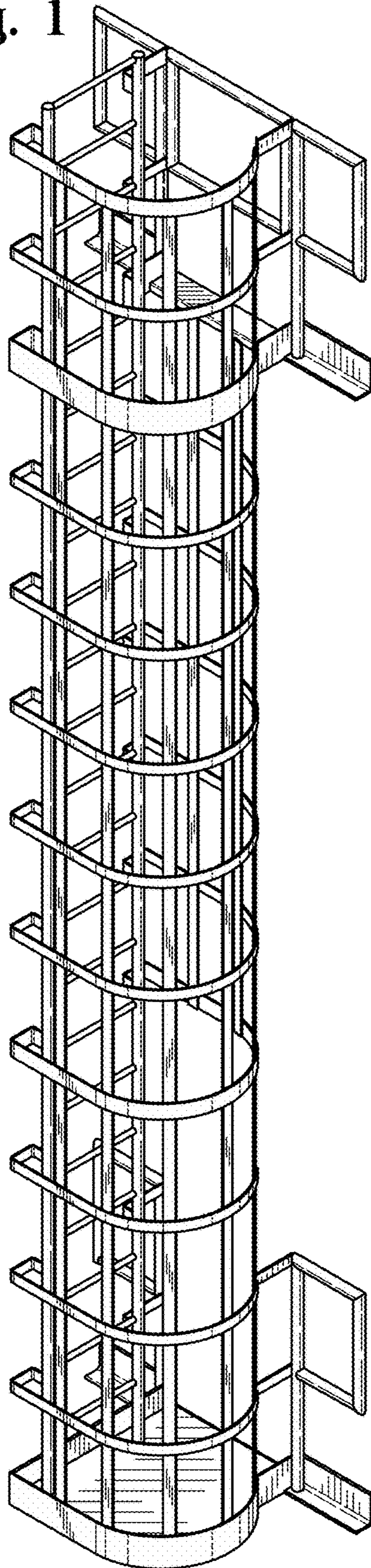


Fig. 2

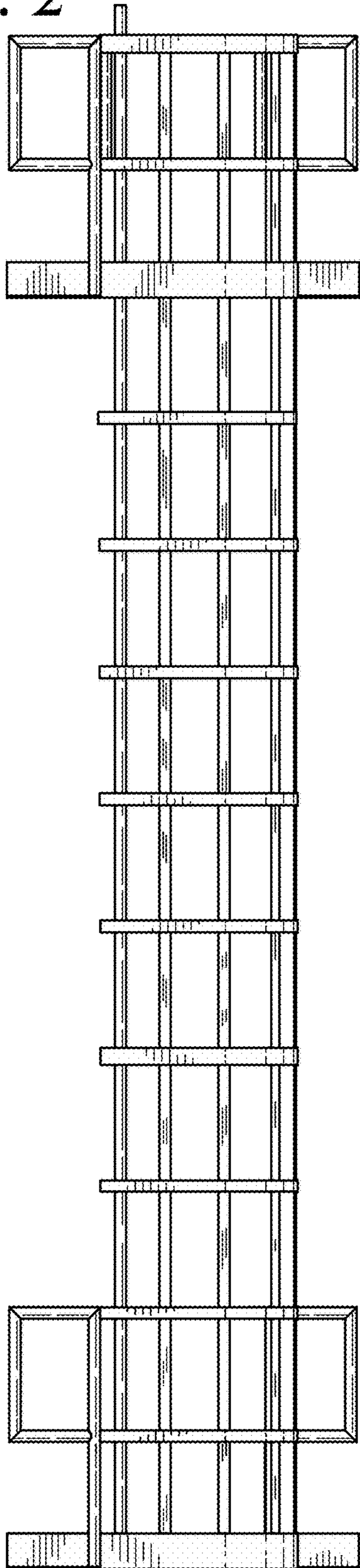


Fig. 3

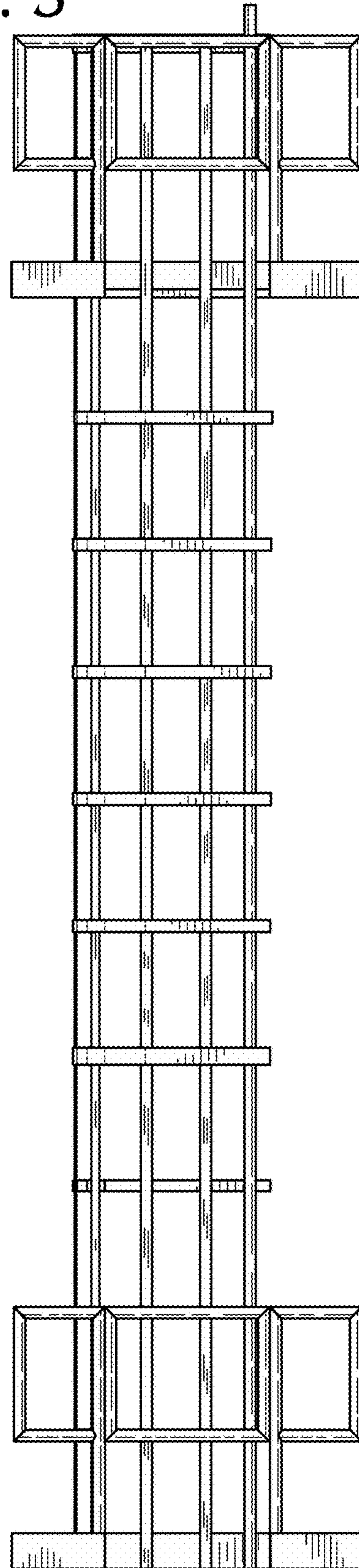


Fig. 4

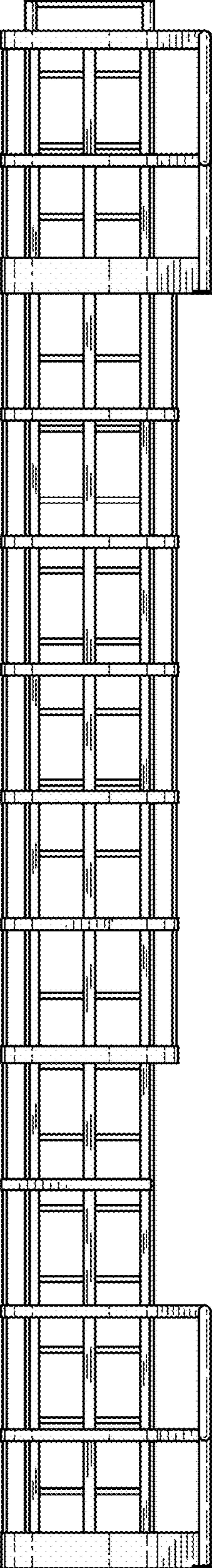


Fig. 5

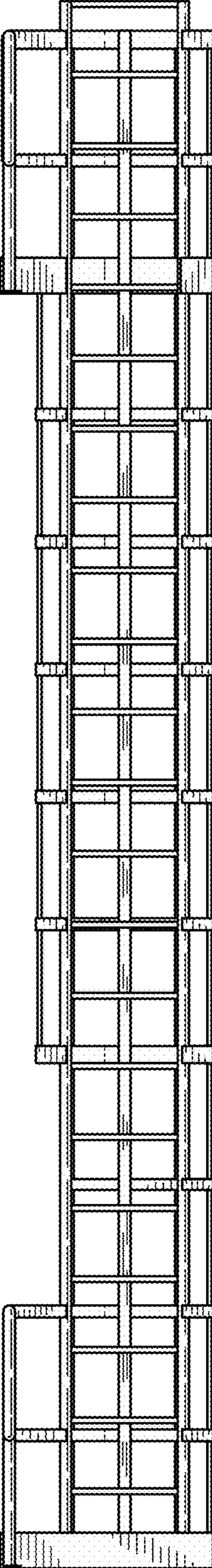


Fig. 6

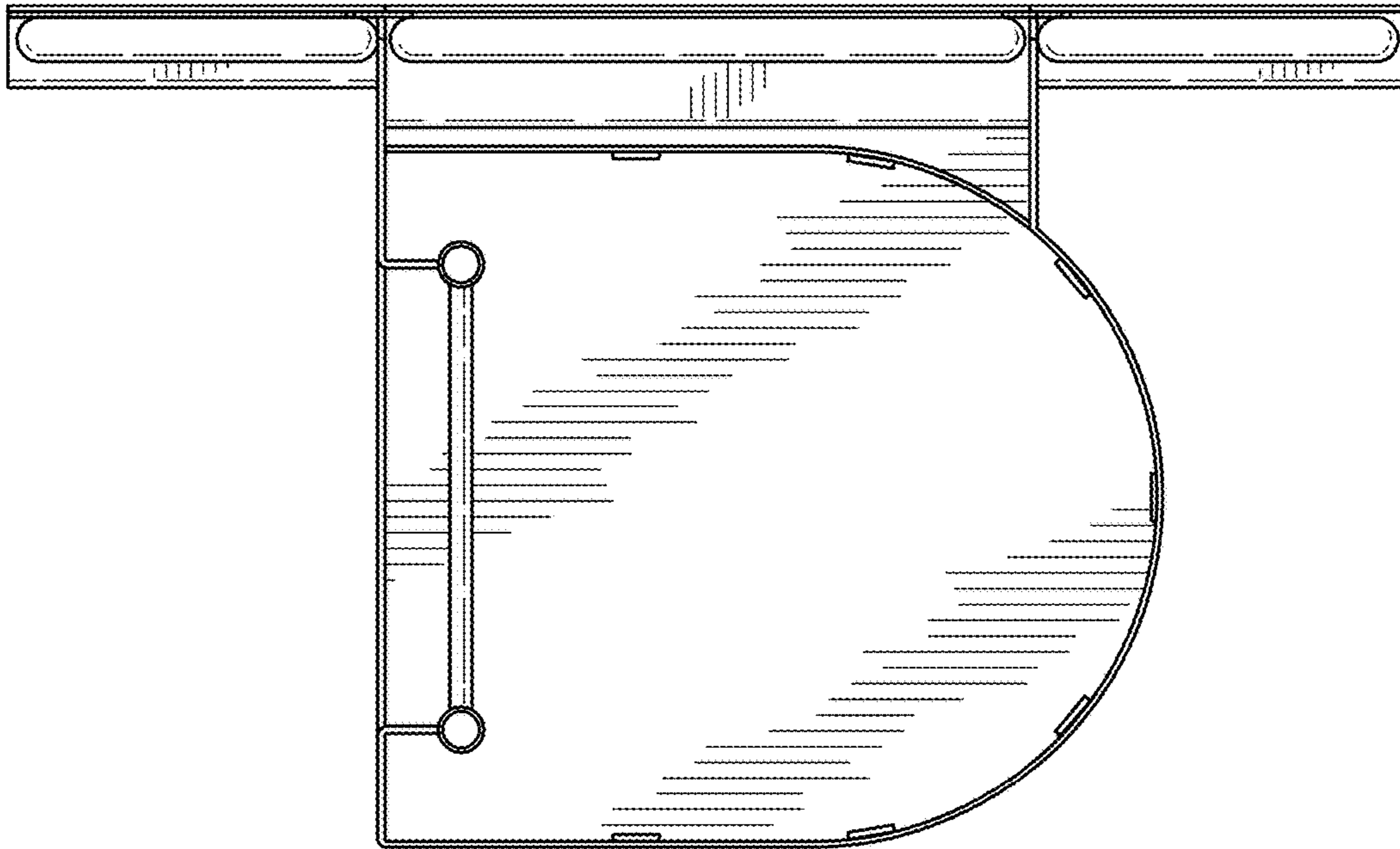


Fig. 7

