



US00D719588S

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

(10) **Patent No.:** **US D719,588 S**

(45) **Date of Patent:** **** Dec. 16, 2014**

(54) **UNDERCARRIAGE TRACK SYSTEM FOR MOBILE EARTHMOVING MACHINE**

(75) Inventors: **Robert L. Meyer**, Metamora, IL (US);
Gregory J. Kaufmann, Metamora, IL (US);
Mark Steven Diekevers, Metamora, IL (US);
Timothy A. Thorson, Morton, IL (US)

(73) Assignee: **Caterpillar Inc.**, Peoria, IL (US)

(**) Term: **14 Years**

(21) Appl. No.: **29/426,089**

(22) Filed: **Jun. 29, 2012**

(51) **LOC (10) Cl.** **15-03**

(52) **U.S. Cl.**
USPC **D15/28**

(58) **Field of Classification Search**
CPC B62D 55/20; B62D 55/108; B62D 55/12;
B62D 55/14; B62D 55/15
USPC D15/28, 22-26; 305/196, 106, 119, 202
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,952,545 A * 3/1934 Gotshall 29/891.1
2,549,930 A 4/1951 Riegel et al.

(Continued)

FOREIGN PATENT DOCUMENTS

EP 1834863 9/2007
EP 2055509 A1 5/2009

(Continued)

OTHER PUBLICATIONS

Track Shoe photograph taken approximately Feb. 1, 2012,
Cheiyabinsk, Russia.

(Continued)

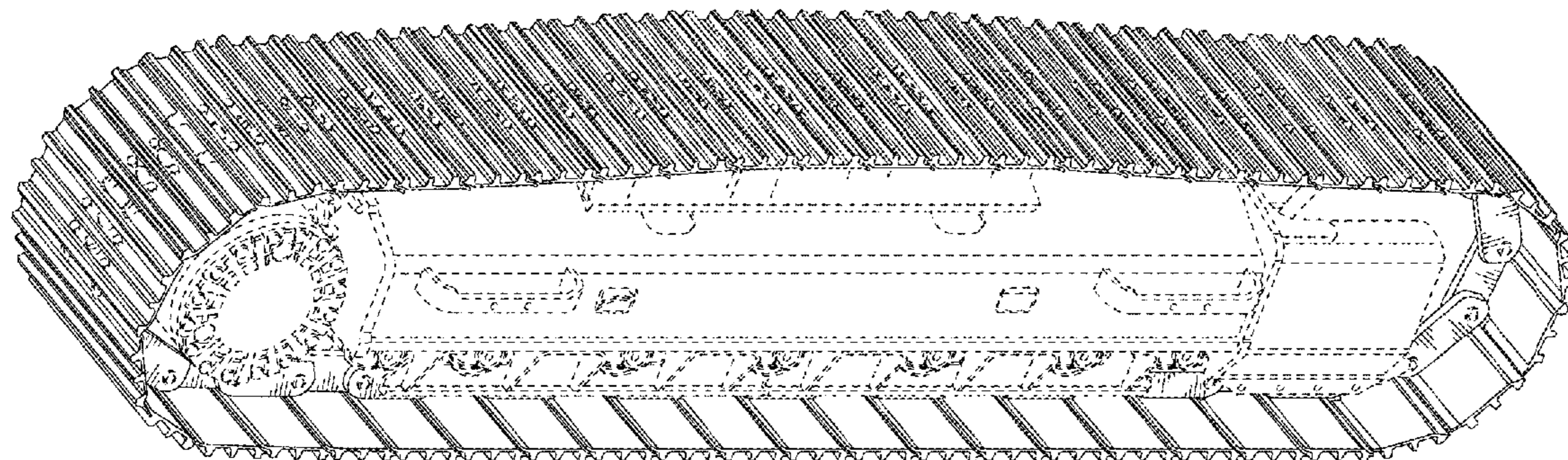
Primary Examiner — Mark Goodwin
(74) *Attorney, Agent, or Firm* — Saidman Design Law Group

(57) **CLAIM**
The ornamental design for an undercarriage track system for mobile earthmoving machine, as shown and described.

DESCRIPTION

FIG. 1 is a front view of an undercarriage track system for mobile earthmoving machine showing our new design in use condition;
FIG. 2 is a top perspective view thereof;
FIG. 3 is a bottom perspective view thereof;
FIG. 4 is a front view thereof;
FIG. 5 is a rear view thereof;
FIG. 6 is a left side view thereof, the right side being a mirror image;
FIG. 7 is a top view thereof;
FIG. 8 is a bottom view thereof;
FIG. 9 is an enlarged, partial top perspective view thereof;
FIG. 10 is an enlarged, partial bottom perspective view thereof;
FIG. 11 is an enlarged, partial front view thereof;
FIG. 12 is a top perspective view of a second embodiment thereof with the broken line environmental structures removed for ease of illustration;
FIG. 13 is a bottom perspective view thereof;
FIG. 14 is a front view thereof, the rear view being identical;
FIG. 15 is a left side view thereof, the right side view being identical;
FIG. 16 is a top view thereof; and,
FIG. 17 is a bottom view thereof.
The broken lines illustrate environmental structure and form no part of the claimed design.
The dashed broken lines illustrate environmental structure and form no part of the claimed design.
The relatively light shade lines on the surface portions indicate contour and not surface decoration.

1 Claim, 13 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2,874,005 A 2/1959 Ragnar
 D186,214 S * 9/1959 Francis D15/28
 3,035,872 A * 5/1962 Rich 305/108
 3,089,021 A * 5/1963 Hawes et al. 219/104
 3,372,959 A * 3/1968 Watts, Jr. 305/191
 3,972,570 A 8/1976 Massieon
 4,003,608 A * 1/1977 Carter 305/196
 4,021,082 A 5/1977 Rasmussen
 4,099,795 A 7/1978 Roley
 RE29,718 E 8/1978 Reinsma et al.
 RE29,723 E 8/1978 Haslett et al.
 D251,845 S 5/1979 Joupperi et al.
 4,176,887 A * 12/1979 Alpers et al. 305/196
 4,241,956 A 12/1980 Meisel, Jr.
 4,253,708 A 3/1981 Haslett
 4,257,653 A 3/1981 Meisel, Jr. et al.
 4,324,437 A 4/1982 Narang
 D274,333 S 6/1984 Martin, Jr.
 4,514,014 A 4/1985 Balzer et al.
 4,763,961 A * 8/1988 Parrott 305/109
 4,805,968 A 2/1989 Connerley
 D302,276 S 7/1989 Briggs et al.
 D314,388 S 2/1991 Brewer et al.
 5,255,964 A 10/1993 Hara
 5,279,377 A 1/1994 Oertley
 5,333,710 A 8/1994 Oertley
 5,409,306 A 4/1995 Bentz
 5,725,292 A 3/1998 Keedy et al.
 5,752,574 A 5/1998 Oertley
 5,826,884 A 10/1998 Anderton et al.
 5,873,640 A 2/1999 Oertley
 6,102,408 A 8/2000 Anderton et al.
 6,105,969 A 8/2000 Anderton et al.
 6,120,405 A 9/2000 Oertley et al.
 6,220,378 B1 4/2001 Oertley et al.
 6,250,726 B1 6/2001 Burdick et al.
 6,267,458 B1 7/2001 Hansen et al.
 6,322,173 B1 11/2001 Maguire et al.
 6,322,473 B1 11/2001 Burdick et al.
 6,354,679 B1 3/2002 Maguire et al.
 6,402,862 B1 6/2002 Anderton et al.
 6,454,366 B1 9/2002 Frank
 6,474,754 B1 11/2002 Hasselbusch
 6,527,347 B2 3/2003 Brawley et al.
 6,536,851 B2 3/2003 Grob et al.
 6,631,961 B1 10/2003 Bedford et al.
 6,948,783 B2 9/2005 Hoff
 D510,742 S * 10/2005 Stover D15/28
 6,951,096 B2 10/2005 Maguire et al.
 7,007,360 B2 3/2006 Huenefeld et al.
 7,066,289 B2 6/2006 Fujita et al.
 7,100,353 B1 9/2006 Maguire
 7,237,631 B2 7/2007 Livesay et al.
 D549,244 S * 8/2007 Noel D15/28
 7,252,349 B2 8/2007 Livesay et al.
 7,345,255 B2 3/2008 Yamazaki et al.
 7,374,257 B2 5/2008 Oertley
 D598,937 S 8/2009 Lyasko
 D603,880 S * 11/2009 Brazier D15/28
 7,614,709 B2 11/2009 Oertley
 7,661,774 B2 * 2/2010 Yamamoto et al. 305/201
 7,776,451 B2 8/2010 Jiang et al.
 7,806,209 B2 10/2010 Standish et al.
 7,832,815 B2 11/2010 VanderVeen
 7,877,977 B2 2/2011 Johannsen et al.
 7,922,266 B2 4/2011 Dietrich
 7,967,087 B2 6/2011 Arulraja et al.

8,011,740 B2 9/2011 Matthys
 8,075,069 B2 * 12/2011 Pech et al. 305/195
 8,167,384 B2 5/2012 Tan
 8,172,342 B2 5/2012 Diekevers et al.
 2002/0070606 A1 6/2002 Poetter
 2003/0122423 A1 7/2003 Banerjee et al.
 2003/0122425 A1 7/2003 Banerjee
 2003/0217453 A1 11/2003 Maguire et al.
 2003/0217454 A1 11/2003 Maguire et al.
 2004/0032166 A1 2/2004 Maguire et al.
 2005/0040708 A1 2/2005 Yamamoto et al.
 2008/0164756 A1 * 7/2008 Yamamoto et al. 305/200
 2008/0265666 A1 10/2008 Livesay et al.
 2009/0026836 A1 * 1/2009 Maeda 305/198
 2009/0121542 A1 5/2009 Hunold et al.
 2010/0133898 A1 6/2010 Johannsen et al.
 2010/0139993 A1 6/2010 Sebright et al.
 2010/0156169 A1 6/2010 Angot et al.
 2012/0012407 A1 1/2012 Daniels et al.
 2012/0103704 A1 5/2012 Beasley et al.
 2012/0121320 A1 5/2012 Abello et al.
 2012/0146398 A1 6/2012 Nebergall et al.
 2012/0146399 A1 6/2012 Nebergall et al.
 2012/0146400 A1 6/2012 Nebergall et al.
 2012/0153714 A1 6/2012 Yelistratov
 2013/0002009 A1 1/2013 Meyer et al.
 2014/0001827 A1 * 1/2014 Kaufmann et al. 305/137

FOREIGN PATENT DOCUMENTS

EP 2367712 9/2011
 EP 2367713 9/2011
 JP 57-101681 6/1982
 JP 2002-29462 1/2002
 WO 2012/082231 6/2012
 WO 2012/082449 6/2012
 WO 2012/116674 9/2012
 WO 2013/003103 A1 1/2013

OTHER PUBLICATIONS

Caterpillar, "Heavy Duty Track," © 2008.
 Caterpillar, "Cat® Enhanced Sealed and Lubricated Track (SALT) Undercarriage," © 2011.
 Caterpillar, "Cat® Undercarriage Assurance Programs," © 2010.
 Caterpillar, "Maximizing Track Life," © 2007.
 Caterpillar, "Rubber Track Undercarriage," © 2009.
 Caterpillar, "Cat® Undercarriage," © 2011.
 Caterpillar, "Cat® Sleeve Bearing Track Undercarriage," © 2006.
 Caterpillar, "Cat® SystemOne™ Undercarriage for Cat® Machines," © 2009.
 Caterpillar, "Undercarriage System and Components," © 2007.
 U.S. Appl. No. 29/426,090, entitled "Undercarriage Track Shoe for Mobile Earthmoving Machine," filed Jun. 29, 2012.
 U.S. Appl. No. 29/426,091, entitled "Undercarriage Track Link for Mobile Earthmoving Machine," filed Jun. 29, 2012.
 U.S. Appl. No. 29/426,112, entitled "Undercarriage Track Component for Mobile Earthmoving Machine," filed Jun. 29, 2012.
 U.S. Appl. No. 61/666,596, entitled "Track Link Assembly," filed Jun. 29, 2012.
 U.S. Appl. No. 61/666,590, entitled "Undercarriage Assembly," filed Jun. 29, 2012.
 U.S. Appl. No. 61/666,559, entitled "Undercarriage Guiding Assembly," filed Jun. 29, 2012.
 U.S. Appl. No. 61/666,567, entitled "Track Link," filed Jun. 29, 2012.
 U.S. Appl. No. 61/666,517, entitled "Undercarriage Assembly With Carrier Skid," filed Jun. 29, 2012.

* cited by examiner

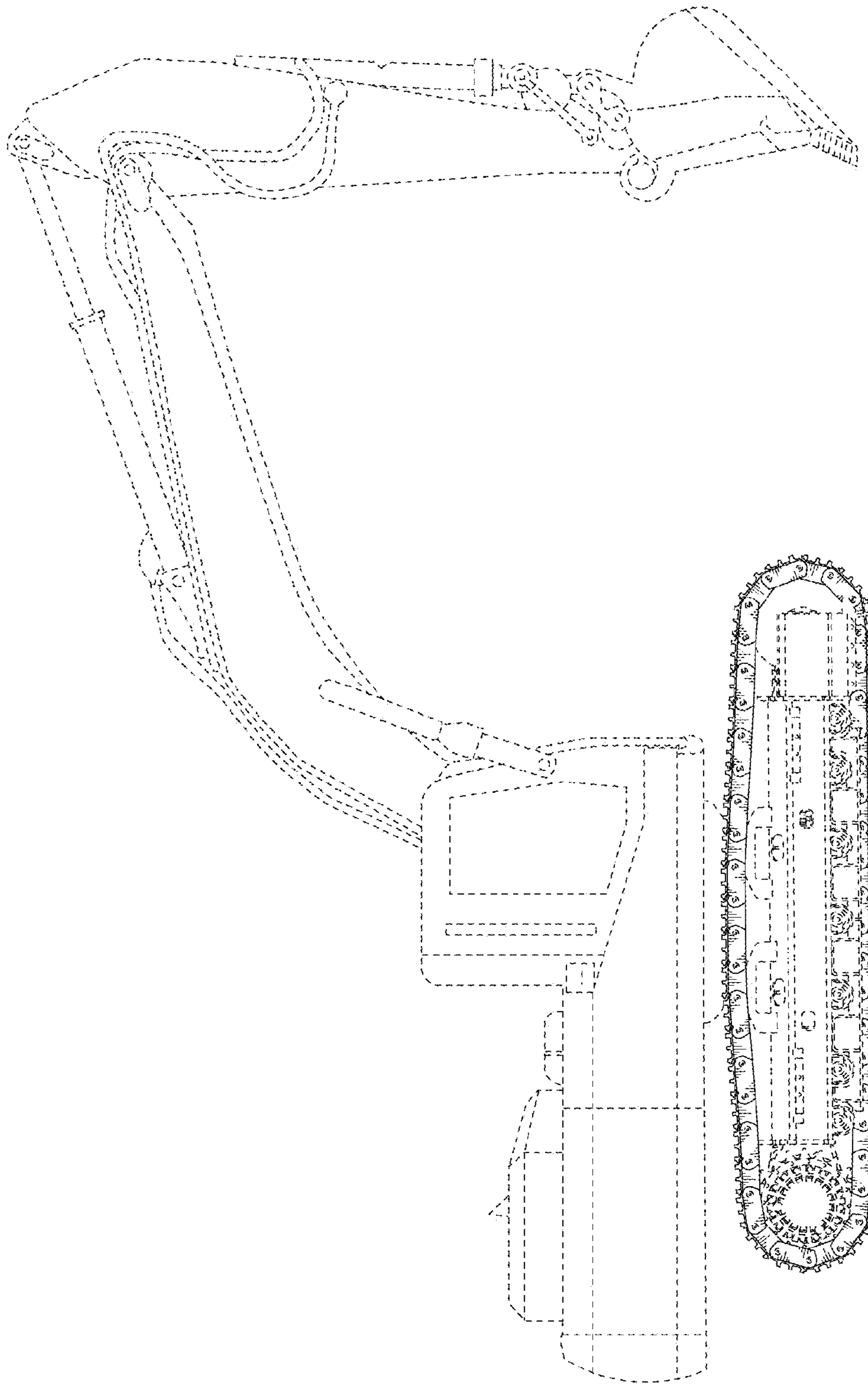


FIG. 1

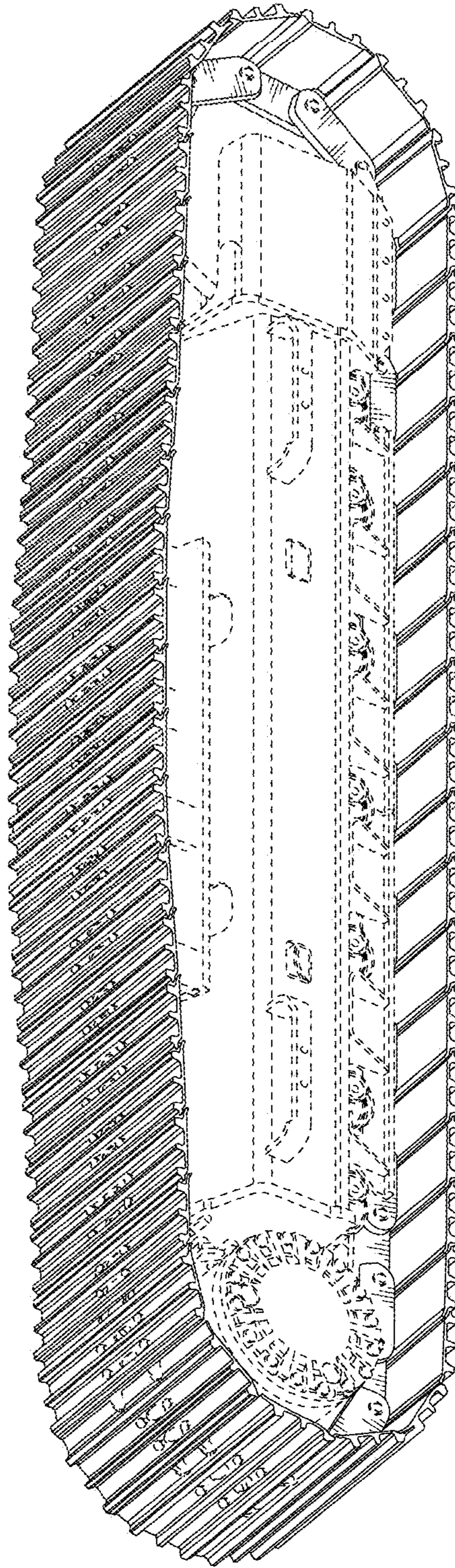


FIG. 2

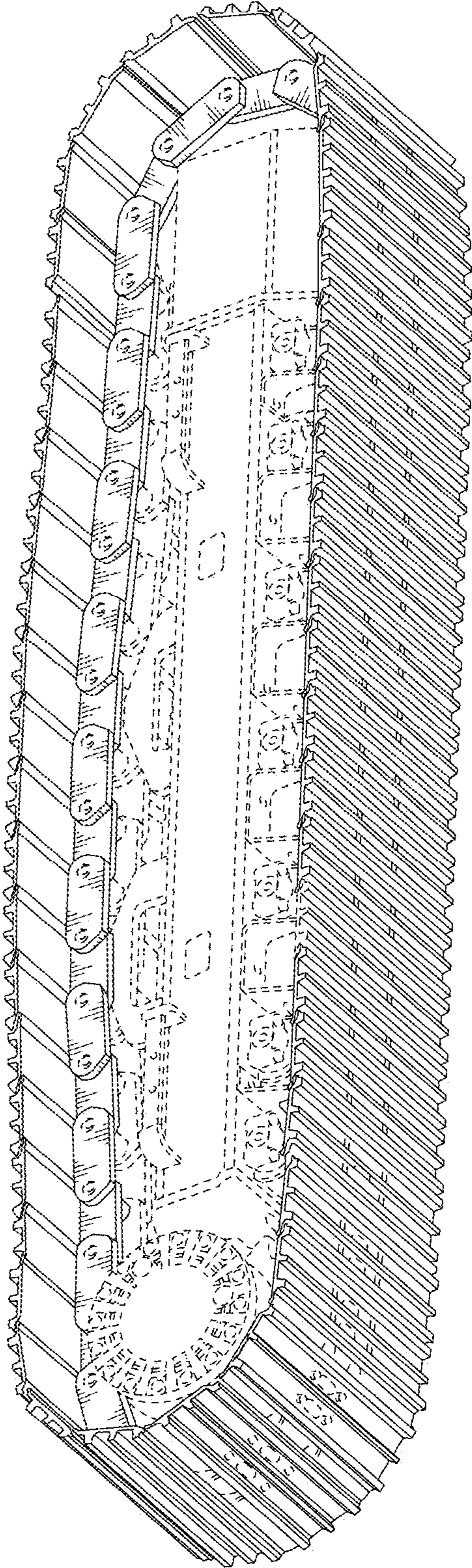


FIG. 3

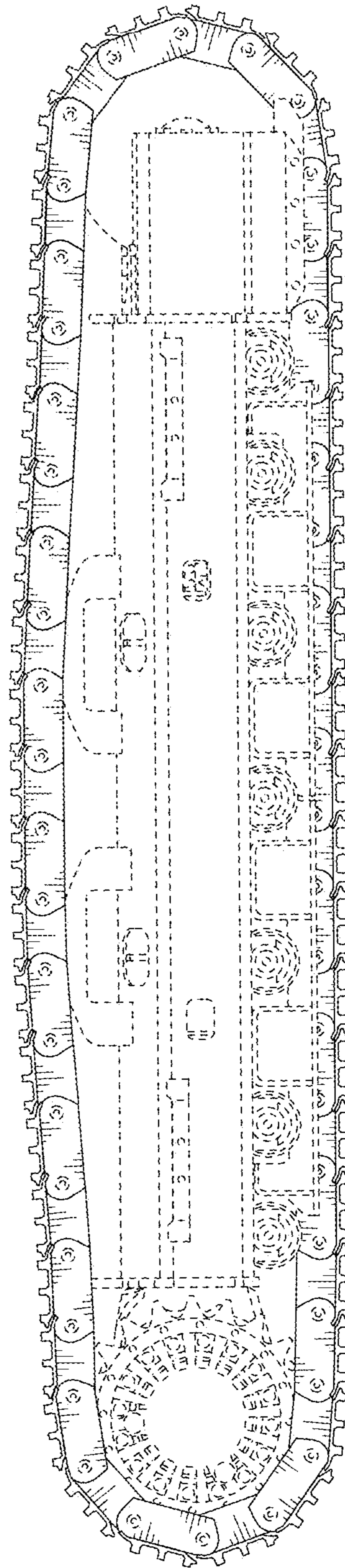


FIG. 4

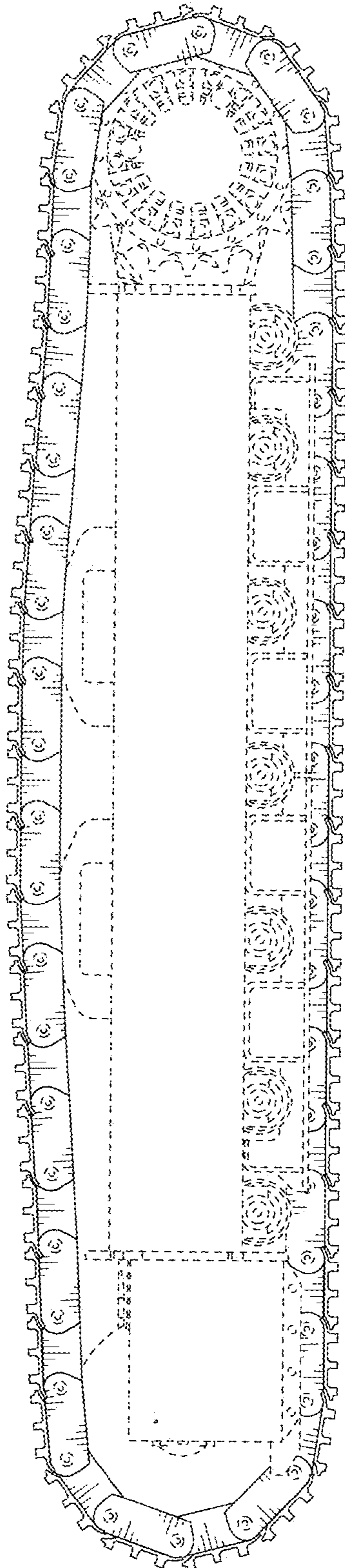


FIG. 5

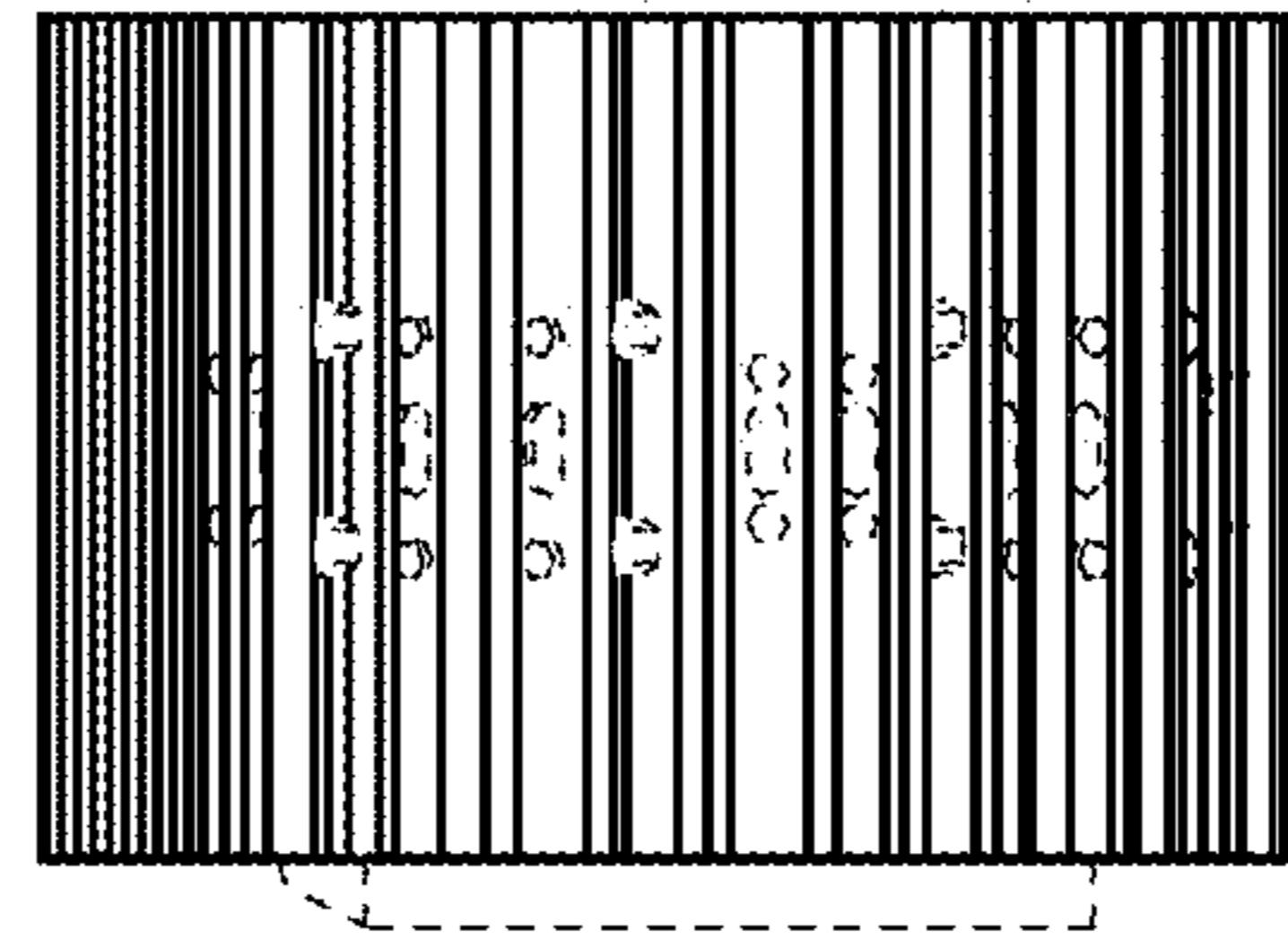


FIG. 6

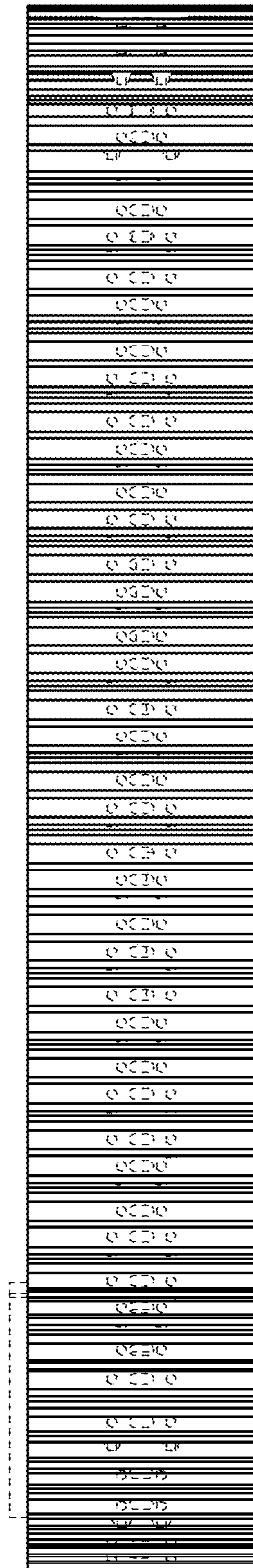


FIG. 7

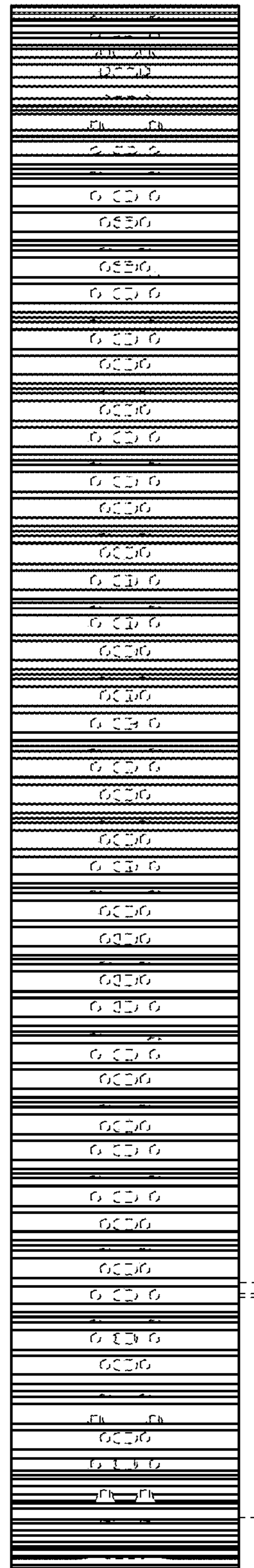


FIG. 8

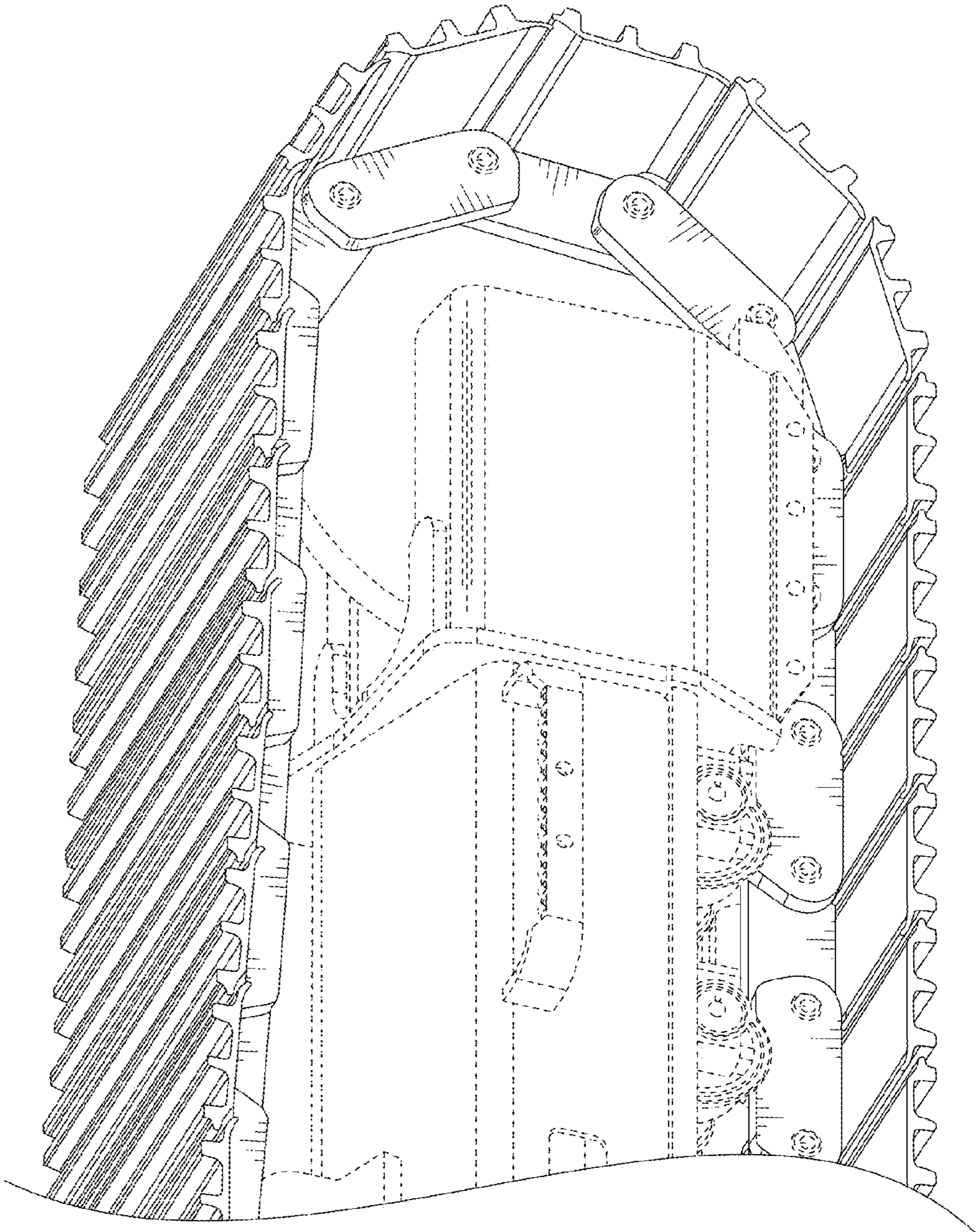


FIG. 9

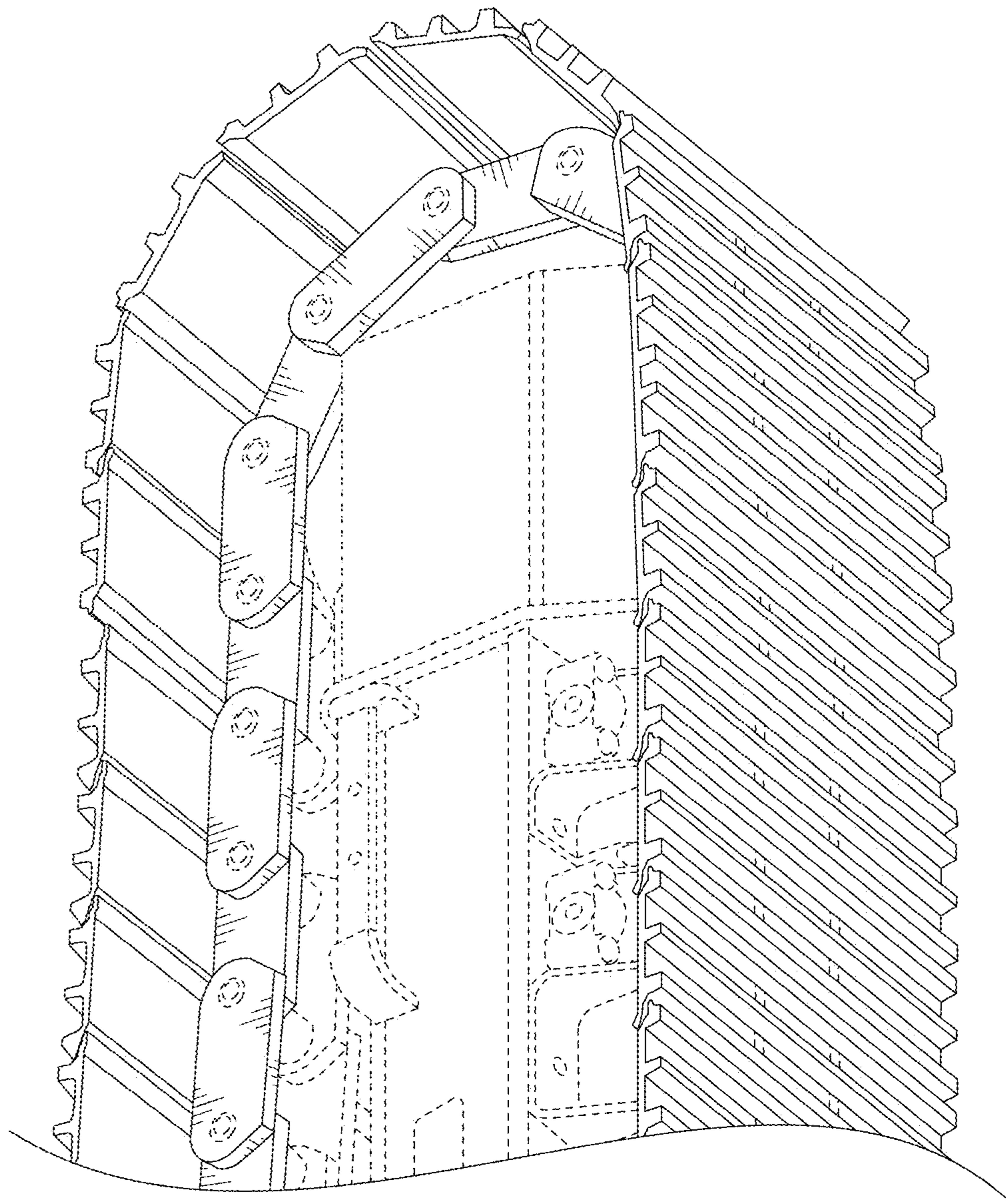


FIG. 10

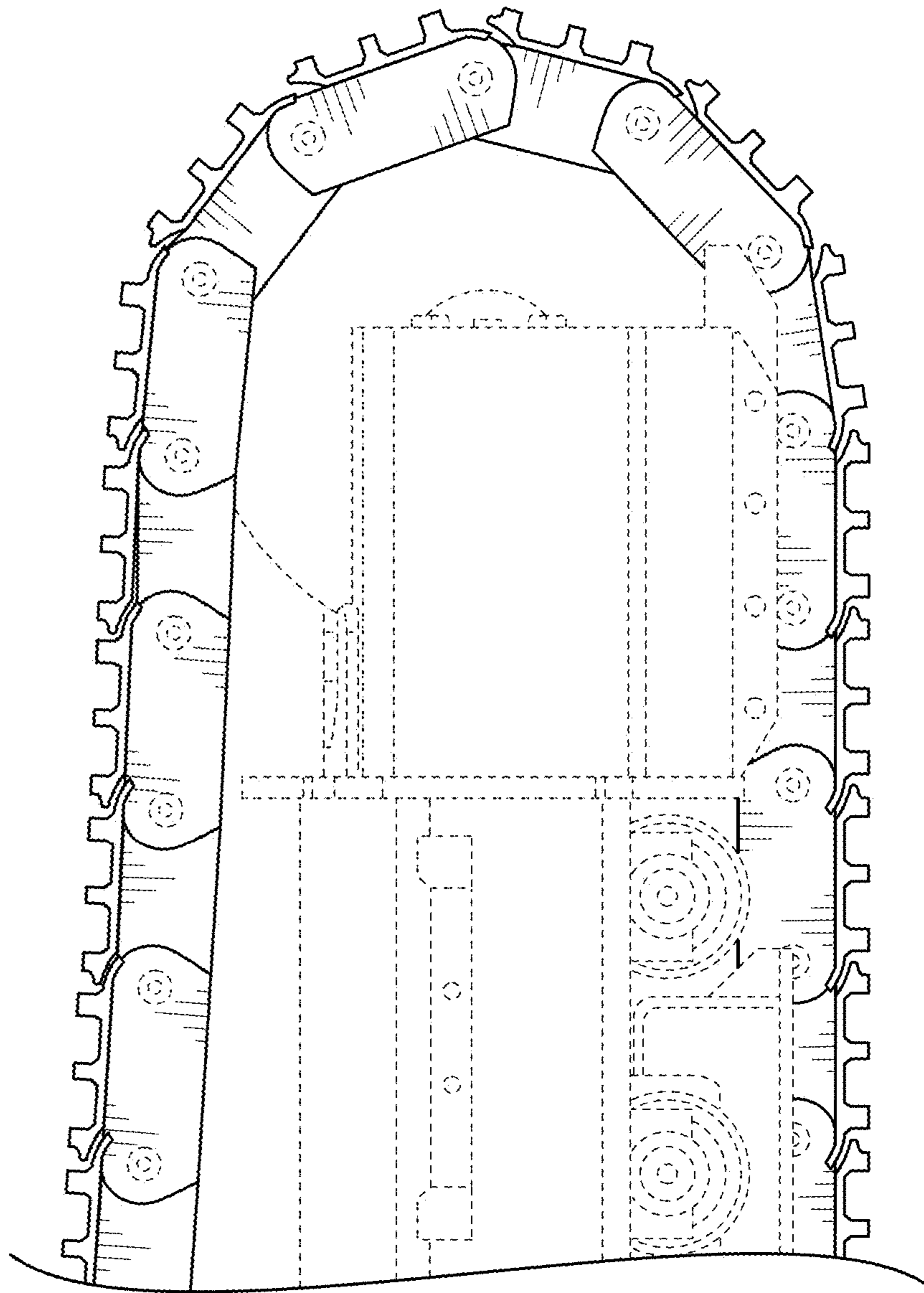


FIG. 11

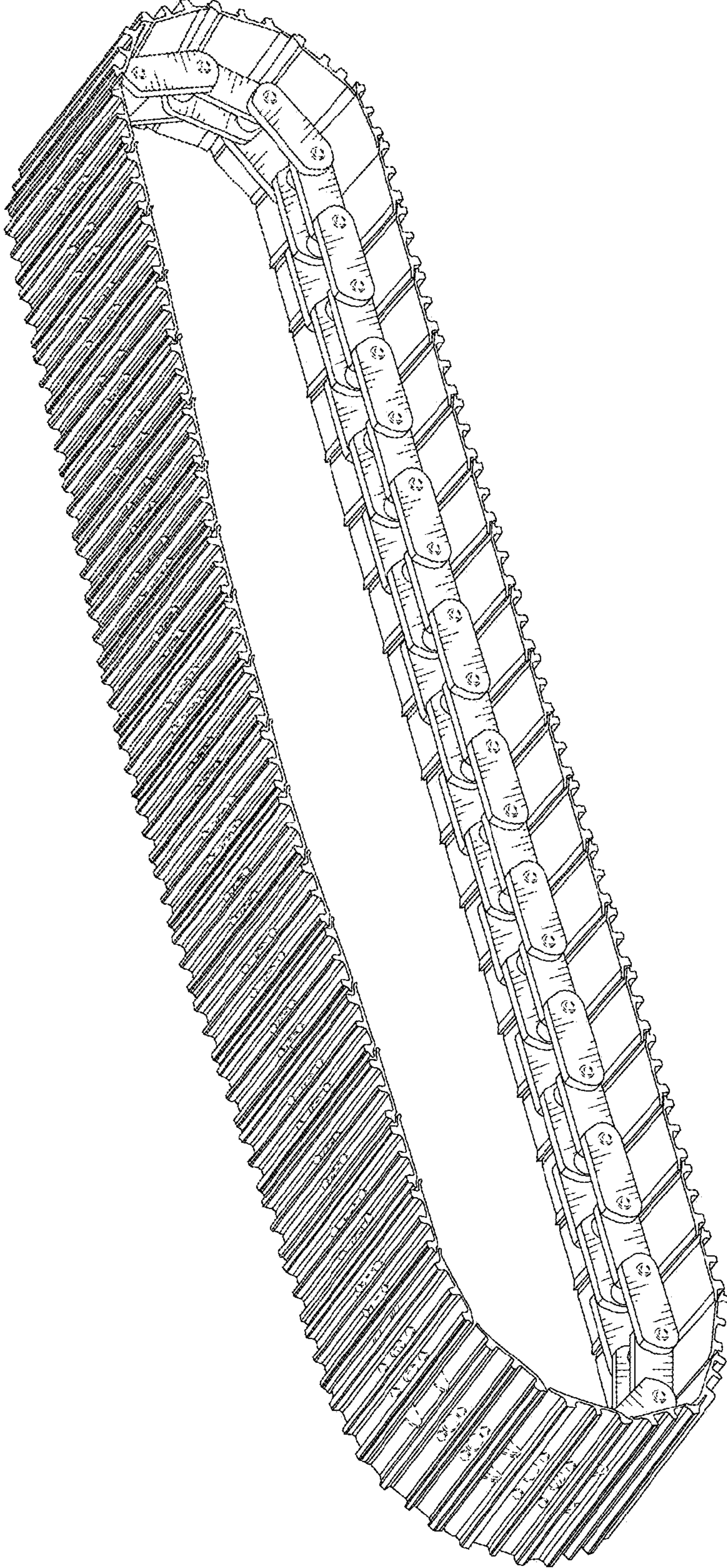


FIG. 12

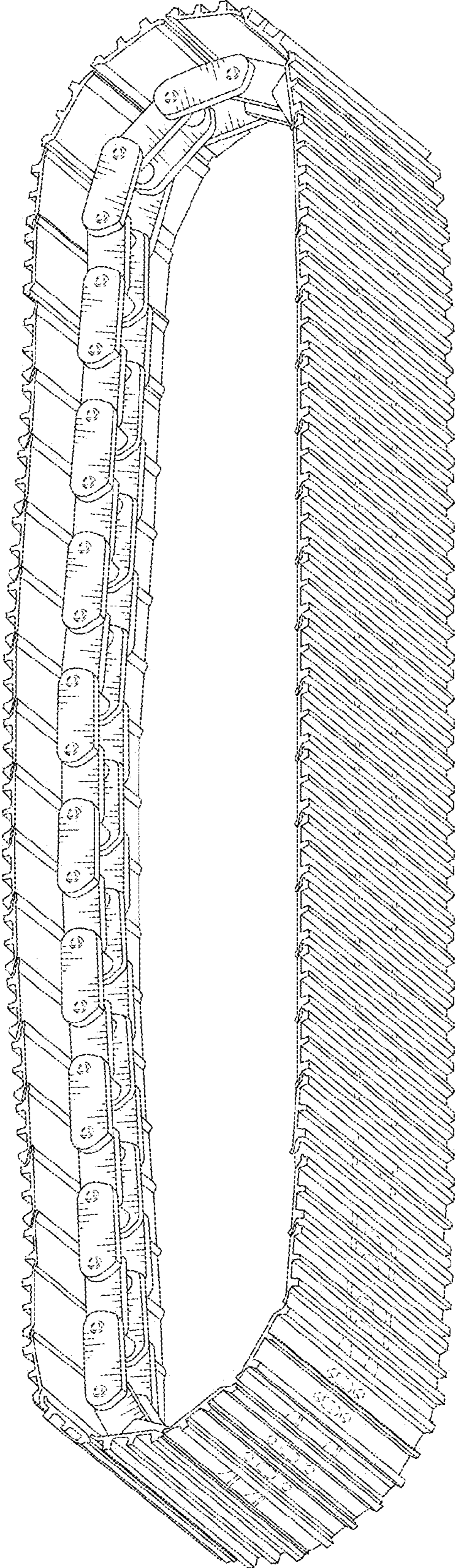


FIG. 13

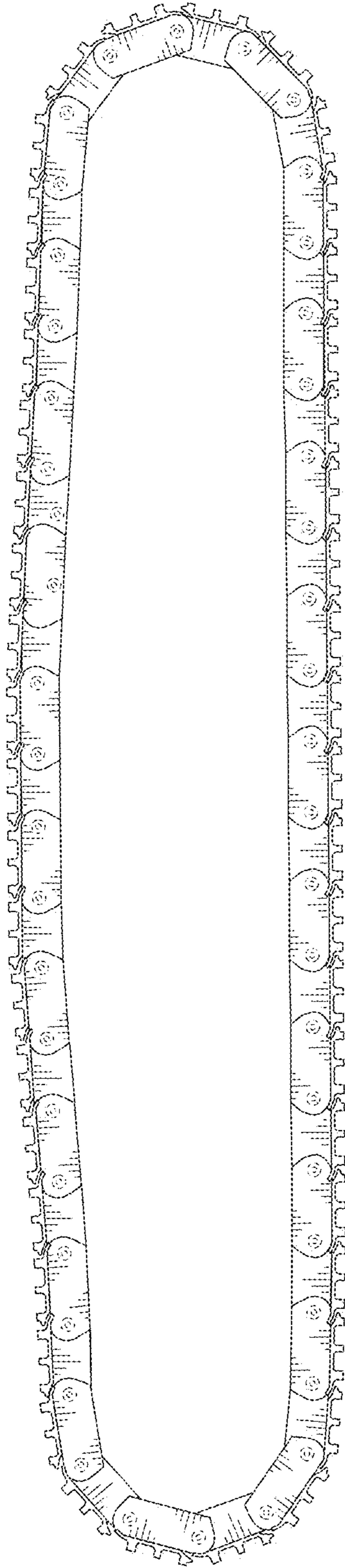


FIG. 14

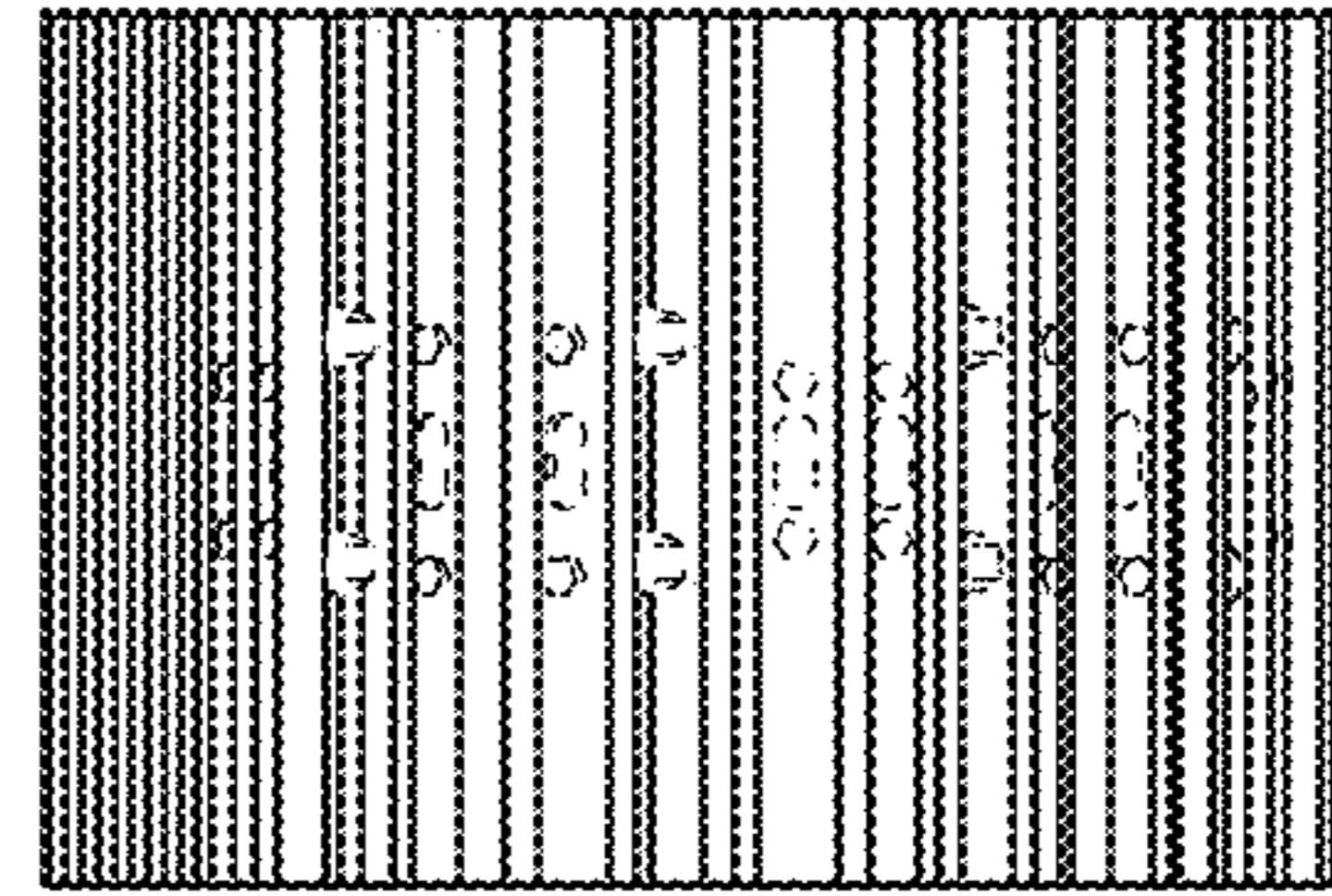


FIG. 15

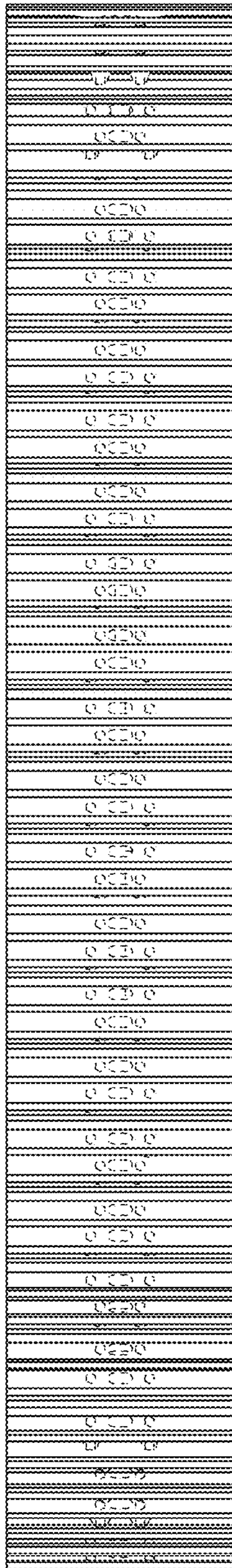


FIG. 16

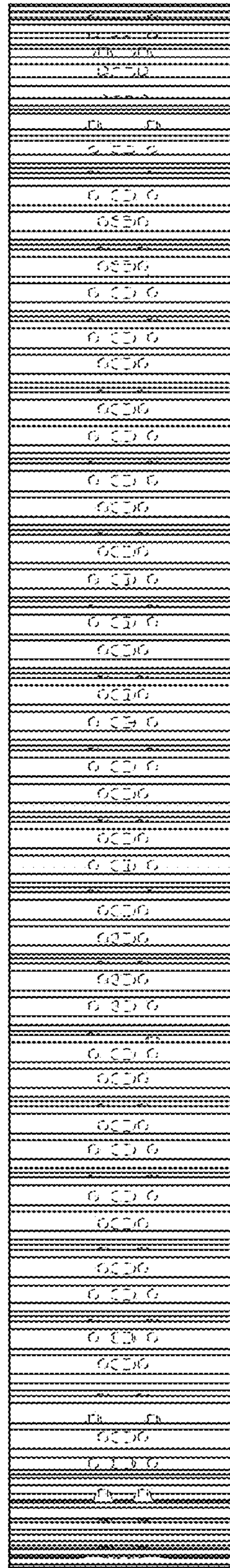


FIG. 17