



US00D874646S

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

(10) **Patent No.:** **US D874,646 S**
(45) **Date of Patent:** **** Feb. 4, 2020**

(54) **HEADGEAR COMPONENT FOR A NASAL MASK ASSEMBLY**

FOREIGN PATENT DOCUMENTS

(71) Applicant: **Fisher & Paykel Healthcare Limited**,
Auckland (NZ)

AU 2005/100738 11/2005
EP 1057494 12/2000

(Continued)

(72) Inventors: **Callum Ross Gordon**, Auckland (NZ);
Ryan Anthony Graham, Auckland (NZ);
Bruno Sintive, Auckland (NZ);
Mark Andrew Thompson, Auckland (NZ);
Amit Galgali, Auckland (NZ);
Vicky Dan Gao, Auckland (NZ);
Cameron Robert Willis, Auckland (NZ);
Jake Baker Hocking, Auckland (NZ);
Priyanka Ferdinand Pereira, Auckland (NZ)

OTHER PUBLICATIONS

U.S. Appl. No. 29/596,665, filed Mar. 9, 2017, Gordon et al.
European Examination Report, 004248086-0001/004248086-0006,
dated Jan. 4, 2018, 6 pages.

Primary Examiner — Sheryl Lane

Assistant Examiner — Aula Soroush

(74) *Attorney, Agent, or Firm* — Knobbe, Martens, Olson & Bear, LLP

(73) Assignee: **Fisher & Paykel Healthcare Limited**,
Auckland (NZ)

(**) Term: **15 Years**

(57) **CLAIM**

(21) Appl. No.: **29/596,664**

The ornamental design for a headgear component for a nasal mask assembly, as shown and described.

(22) Filed: **Mar. 9, 2017**

(51) **LOC (12) Cl.** **29-02**

(52) **U.S. Cl.**
USPC **D24/110.4**

(58) **Field of Classification Search**
USPC D24/110–110.6, 127, 129; D29/110, 100,
D29/102, 105, 106, 108, 112; D2/865,
D2/875–877

CPC A61M 16/0616; A61M 16/0633; A61M
16/06; A61M 16/0666; A61M 16/0683;
A61M 16/0605; A61M 16/0622; A61M
16/0644; A61M 16/0875; A61M 16/0816;

(Continued)

DESCRIPTION

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

FIG. 1 is a top, front and side perspective view of a headgear component for a nasal mask assembly showing our new design, shown in a flat configuration;
FIG. 2 is a front elevation view thereof;
FIG. 3 is a rear elevation view thereof;
FIG. 4 is a right side elevation view thereof;
FIG. 5 is a left side elevation view thereof;
FIG. 6 is a bottom plan view thereof;
FIG. 7 is a top plan view thereof; and,
FIG. 8 is an enlarged view of FIG. 2.

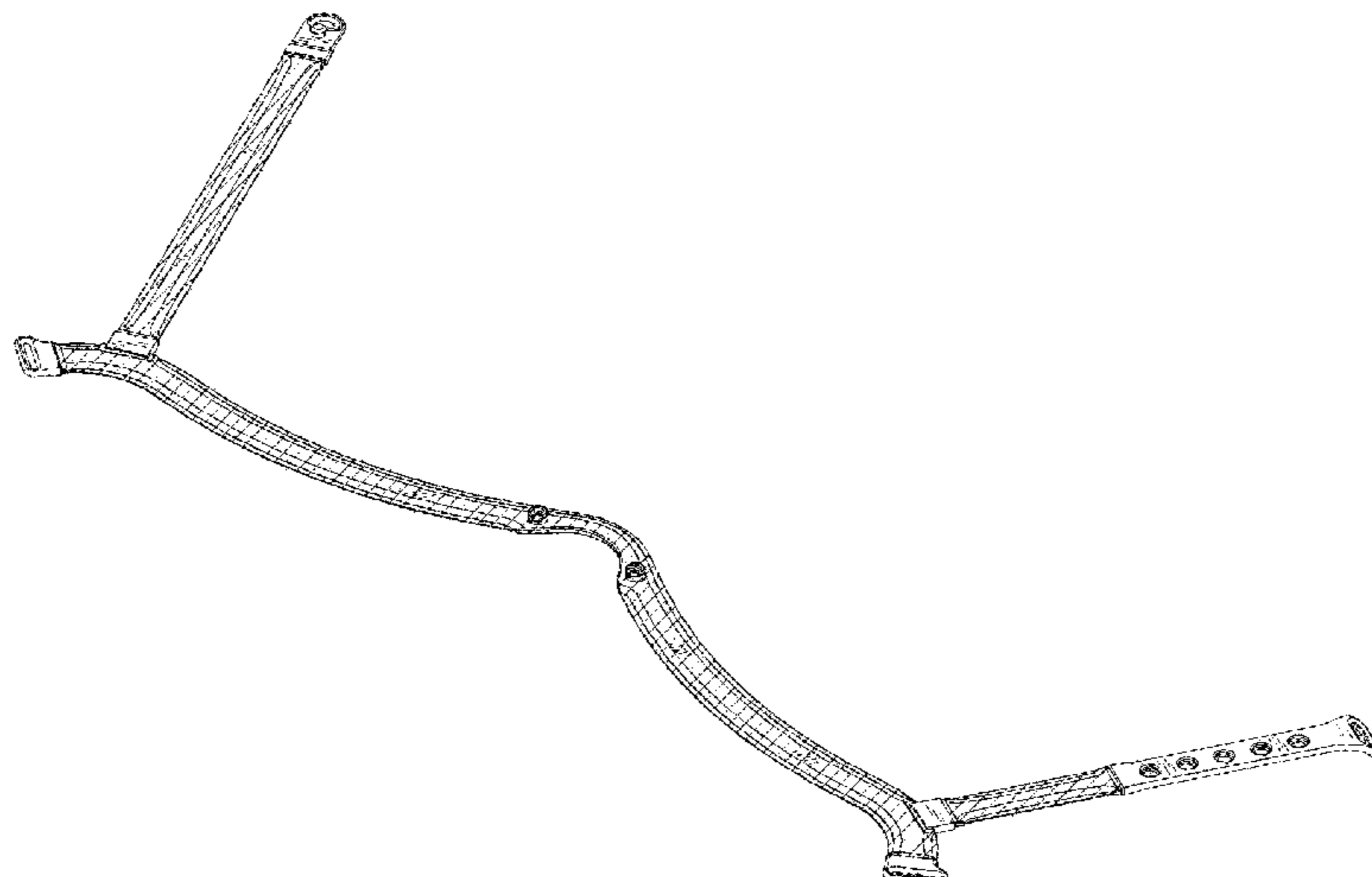
(56) **References Cited**

U.S. PATENT DOCUMENTS

1,610,793 A 12/1926 Leo
2,353,643 A 7/1944 Bulbulian

(Continued)

1 Claim, 8 Drawing Sheets
(1 of 8 Drawing Sheet(s) Filed in Color)



(58) **Field of Classification Search**
 CPC A61M 16/08; B63C 11/205; B63C 11/16;
 B63C 11/186; B63C 11/12
 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,452,722 A 11/1948 Boothby et al.
 2,620,794 A 12/1952 George
 2,970,593 A 2/1961 Seeler
 3,040,741 A 6/1962 Carolan
 3,042,035 A 7/1962 George
 3,065,747 A 11/1962 Charles
 3,079,917 A 3/1963 Godfrey
 3,295,529 A 1/1967 Stephen et al.
 3,530,031 A 9/1970 Loew
 3,792,702 A 2/1974 Delest
 3,815,596 A 6/1974 Keener et al.
 3,824,999 A 7/1974 King
 3,850,168 A 11/1974 Ferguson et al.
 3,850,171 A 11/1974 Ball et al.
 4,033,353 A 7/1977 La Rosa
 4,454,880 A 6/1984 Muto et al.
 4,480,639 A 11/1984 Peterson et al.
 4,513,896 A 4/1985 Hirsch
 4,753,233 A 6/1988 Grimes
 4,915,105 A 4/1990 Lee
 4,947,488 A 8/1990 Ashinoff
 4,960,121 A 10/1990 Nelson et al.
 5,237,986 A 8/1993 Seppala et al.
 5,243,971 A * 9/1993 Sullivan A61M 16/06
 128/204.18
 5,485,837 A 1/1996 Solesbee et al.
 5,560,354 A 10/1996 Berthon-Jones et al.
 5,657,752 A 8/1997 Landis et al.
 5,676,133 A 10/1997 Hickle et al.
 5,724,965 A 3/1998 Handke et al.
 5,832,918 A 11/1998 Pantino
 5,921,239 A 7/1999 McCall et al.
 6,019,101 A 2/2000 Cotner et al.
 6,119,694 A * 9/2000 Correa A61M 16/0666
 128/207.13
 D439,326 S * 3/2001 Hecker D24/110.1
 6,338,342 B1 1/2002 Fecteau et al.
 6,386,198 B1 5/2002 Rugless
 6,418,929 B1 7/2002 Norfleet
 6,431,172 B1 8/2002 Bordewick
 6,467,483 B1 10/2002 Kopacko et al.
 6,470,886 B1 10/2002 Jestrabek-Hart
 6,497,232 B2 12/2002 Fecteau et al.
 6,561,190 B1 5/2003 Kwok
 6,581,594 B1 6/2003 Drew et al.
 6,584,977 B1 7/2003 Serowski
 6,591,837 B1 7/2003 Byram
 6,729,333 B2 5/2004 Barnett et al.
 6,892,729 B2 5/2005 Smith et al.
 6,928,657 B2 8/2005 Bell et al.
 6,951,218 B2 10/2005 Gradon et al.
 7,077,139 B2 7/2006 Amante et al.
 7,255,106 B2 8/2007 Gallem et al.
 7,353,827 B2 4/2008 Geist
 7,448,386 B2 11/2008 Ho et al.
 7,461,656 B2 12/2008 Gunaratnam et al.
 D586,907 S * 2/2009 Judson D24/110.1
 7,493,902 B2 2/2009 White et al.
 7,556,043 B2 7/2009 Ho et al.
 7,658,189 B2 2/2010 Davidson et al.
 7,703,457 B2 4/2010 Barnett et al.
 7,743,767 B2 6/2010 Ging et al.
 7,753,051 B2 7/2010 Burrow et al.
 D623,288 S * 9/2010 Lubke D24/110.1
 7,845,352 B2 12/2010 Sleeper et al.
 7,856,982 B2 12/2010 Matula, Jr. et al.
 7,874,291 B2 1/2011 Ging et al.
 7,874,293 B2 1/2011 Gunaratnam et al.
 7,896,003 B2 3/2011 Matula et al.

7,931,023 B2 4/2011 Berthon-Jones et al.
 7,975,694 B2 7/2011 Ho
 7,997,267 B2 8/2011 Ging et al.
 8,042,546 B2 10/2011 Gunaratnam et al.
 8,061,355 B2 11/2011 Jaffe et al.
 8,100,126 B2 1/2012 McAuley et al.
 8,118,027 B2 2/2012 Matula, Jr. et al.
 D656,231 S * 3/2012 Henry D24/110.1
 8,127,764 B2 3/2012 Ho et al.
 8,127,765 B2 3/2012 Ho et al.
 8,132,270 B2 3/2012 Lang et al.
 8,161,971 B2 4/2012 Jaffe et al.
 D659,237 S * 5/2012 Lubke D24/110.1
 8,186,352 B2 5/2012 Gunaratnam et al.
 D664,250 S * 7/2012 Scheiner D24/110.1
 8,291,906 B2 10/2012 Kooij et al.
 8,297,285 B2 10/2012 Henry et al.
 8,371,302 B2 2/2013 Ging et al.
 8,397,728 B2 3/2013 D'Souza et al.
 8,505,535 B2 8/2013 Jones et al.
 D691,712 S * 10/2013 Judson D24/110.1
 D692,554 S * 10/2013 Siew D24/110.1
 8,550,084 B2 10/2013 Ng et al.
 8,573,201 B2 11/2013 Rummery et al.
 8,573,212 B2 11/2013 Lynch et al.
 8,636,007 B2 1/2014 Rummery et al.
 D704,329 S * 5/2014 Collazo D24/110.1
 D708,736 S * 7/2014 Judson D24/110.5
 8,950,404 B2 2/2015 Formica et al.
 9,032,955 B2 5/2015 Lubke et al.
 9,044,564 B2 6/2015 Dravitzki et al.
 9,095,673 B2 8/2015 Barlow et al.
 D737,953 S * 9/2015 Wells D24/110
 D740,935 S * 10/2015 Cullen D24/110.1
 9,149,594 B2 10/2015 Kooij et al.
 D743,535 S * 11/2015 Wells D24/110
 D751,687 S * 3/2016 Daly D24/110
 D757,252 S * 5/2016 Von Moger D24/110.5
 D764,049 S * 8/2016 Cullen D24/110.4
 D770,036 S * 10/2016 Walls D24/110.4
 D771,238 S * 11/2016 Scheiner D24/110.1
 9,517,320 B2 12/2016 Barlow et al.
 9,539,403 B2 1/2017 Eves et al.
 D787,661 S * 5/2017 Edwards D24/110.4
 D787,662 S * 5/2017 Guney D24/110.4
 D794,772 S * 8/2017 Cullen D24/110.4
 D797,921 S * 9/2017 Huang D24/110.4
 D805,630 S * 12/2017 Formica D24/110
 D808,516 S * 1/2018 Edwards D24/110.4
 D815,728 S * 4/2018 Walls D24/110.4
 2003/0196655 A1 10/2003 Ging et al.
 2004/0211427 A1 10/2004 Jones et al.
 2004/0226566 A1 11/2004 Gunaratnam et al.
 2005/0051171 A1 3/2005 Booth
 2005/0076912 A1 4/2005 Eifler et al.
 2006/0042629 A1 3/2006 Geist
 2006/0169286 A1 8/2006 Eifler et al.
 2007/0062536 A1 3/2007 McAuley et al.
 2007/0095350 A1 5/2007 Darkin et al.
 2007/0175479 A1 8/2007 Groll
 2007/0175480 A1 8/2007 Gradon et al.
 2008/0047560 A1 2/2008 Veliss et al.
 2008/0092904 A1 4/2008 Gunaratnam et al.
 2008/0092906 A1 4/2008 Gunaratnam et al.
 2008/0190432 A1 8/2008 Blochlinger et al.
 2008/0196727 A1 8/2008 Ho et al.
 2008/0210241 A1 9/2008 Schulz et al.
 2009/0044808 A1 2/2009 Guney et al.
 2009/0078264 A1 3/2009 Martin et al.
 2009/0151729 A1 6/2009 Judson et al.
 2009/0151733 A1 6/2009 Welchel et al.
 2009/0199856 A1 8/2009 Berlin
 2009/0223519 A1 9/2009 Eifler et al.
 2010/0000544 A1 1/2010 Blaszczykiewicz et al.
 2010/0006101 A1 1/2010 McAuley et al.
 2010/0132717 A1 6/2010 Davidson et al.
 2010/0192955 A1 8/2010 Biener et al.
 2010/0192957 A1 8/2010 Hobson et al.
 2010/0229868 A1 9/2010 Rummery et al.

(56)

References Cited

U.S. PATENT DOCUMENTS

2010/0313891 A1 12/2010 Veliss et al.
 2010/0319700 A1 12/2010 Ng et al.
 2011/0067704 A1 3/2011 Kooij et al.
 2011/0126841 A1 6/2011 Matula, Jr. et al.
 2011/0146685 A1 6/2011 Allan et al.
 2011/0232649 A1 9/2011 Collazo et al.
 2011/0240030 A1 10/2011 Ho et al.
 2011/0247627 A1 10/2011 Omura et al.
 2011/0265796 A1 11/2011 Amarasinghe et al.
 2011/0308526 A1 12/2011 Ho et al.
 2011/0315141 A1 12/2011 Lavi et al.
 2012/0037161 A1 2/2012 Ging et al.
 2012/0067349 A1 3/2012 Barlow et al.
 2012/0090622 A1* 4/2012 Chang A61M 16/0666
 128/207.18
 2012/0132209 A1 5/2012 Rummery et al.
 2012/0138060 A1 6/2012 Barlow
 2012/0152255 A1 6/2012 Barlow et al.
 2012/0216812 A1 8/2012 Pastoor et al.
 2012/0222680 A1 9/2012 Eves et al.
 2012/0304999 A1 12/2012 Swift et al.
 2012/0318270 A1 12/2012 McAuley et al.
 2013/0000648 A1 1/2013 Madaus et al.
 2013/0037030 A1 2/2013 Matula, Jr.
 2013/0139822 A1 6/2013 Gibson et al.
 2013/0152937 A1 6/2013 Jablonski
 2013/0220327 A1 8/2013 Barlow et al.
 2013/0319422 A1 12/2013 Ho et al.
 2014/0000614 A1* 1/2014 Chang A61M 16/0666
 128/205.25
 2014/0026890 A1 1/2014 Haskard et al.
 2014/0053844 A1 2/2014 Rummery et al.
 2014/0060544 A1 3/2014 Matula, Jr. et al.
 2014/0073847 A1 3/2014 Mujwid et al.
 2014/0150798 A1 6/2014 Fong et al.
 2014/0166018 A1 6/2014 Dravitzki et al.
 2014/0174448 A1 6/2014 Dravitzki et al.
 2014/0190486 A1 7/2014 Dunn et al.
 2014/0209098 A1 7/2014 Dunn et al.
 2014/0238402 A1 8/2014 Austin et al.
 2015/0090268 A1 4/2015 Madaus et al.
 2015/0128953 A1 5/2015 Formica et al.
 2015/0151071 A1 6/2015 Moger et al.
 2015/0174355 A1 6/2015 Willard et al.
 2015/0290415 A1 10/2015 Dunn

2015/0352307 A1 12/2015 Rutan
 2017/0000964 A1* 1/2017 Shafer A61M 16/06
 2017/0368285 A1* 12/2017 Wood A61M 16/0666
 2018/0001044 A1* 1/2018 Stephens A61M 16/0605
 2018/0272094 A1* 9/2018 Eves A61M 16/0622
 2018/0289912 A1* 10/2018 McAuley A61M 16/06
 2019/0030272 A1* 1/2019 Graham A61M 16/0622

FOREIGN PATENT DOCUMENTS

EP 1488820 12/2004
 EP 1163923 12/2011
 EP 2444113 4/2012
 EP 2481435 8/2012
 GB 377926 8/1932
 GB 823887 11/1959
 GB 826198 12/1959
 GB 880942 10/1961
 GB 974960 11/1964
 GB 1049604 11/1966
 GB 2367757 4/2002
 WO WO 1993/021788 11/1993
 WO WO 1997/000092 1/1997
 WO WO 1997/048432 12/1997
 WO WO 2002/11804 2/2002
 WO WO 2004/073778 9/2004
 WO WO 2005/094928 10/2005
 WO WO 2008/007985 1/2008
 WO WO 2009/026627 3/2009
 WO WO 2009/052560 4/2009
 WO WO 2009/144695 12/2009
 WO WO 2010/131189 11/2010
 WO WO 2011/062510 5/2011
 WO WO 2011/142678 11/2011
 WO WO 2012/028995 3/2012
 WO WO 2012/045127 4/2012
 WO WO 2012/052902 4/2012
 WO WO 2012/055886 5/2012
 WO WO 2013/006065 1/2013
 WO WO 2013/071359 5/2013
 WO WO 2013/170290 11/2013
 WO WO 2014/015382 1/2014
 WO WO 2014/015383 1/2014
 WO WO 2014/110626 7/2014
 WO WO 2014/110622 7/2014
 WO WO 2014/124323 8/2014
 WO WO 2015/070289 5/2015

* cited by examiner

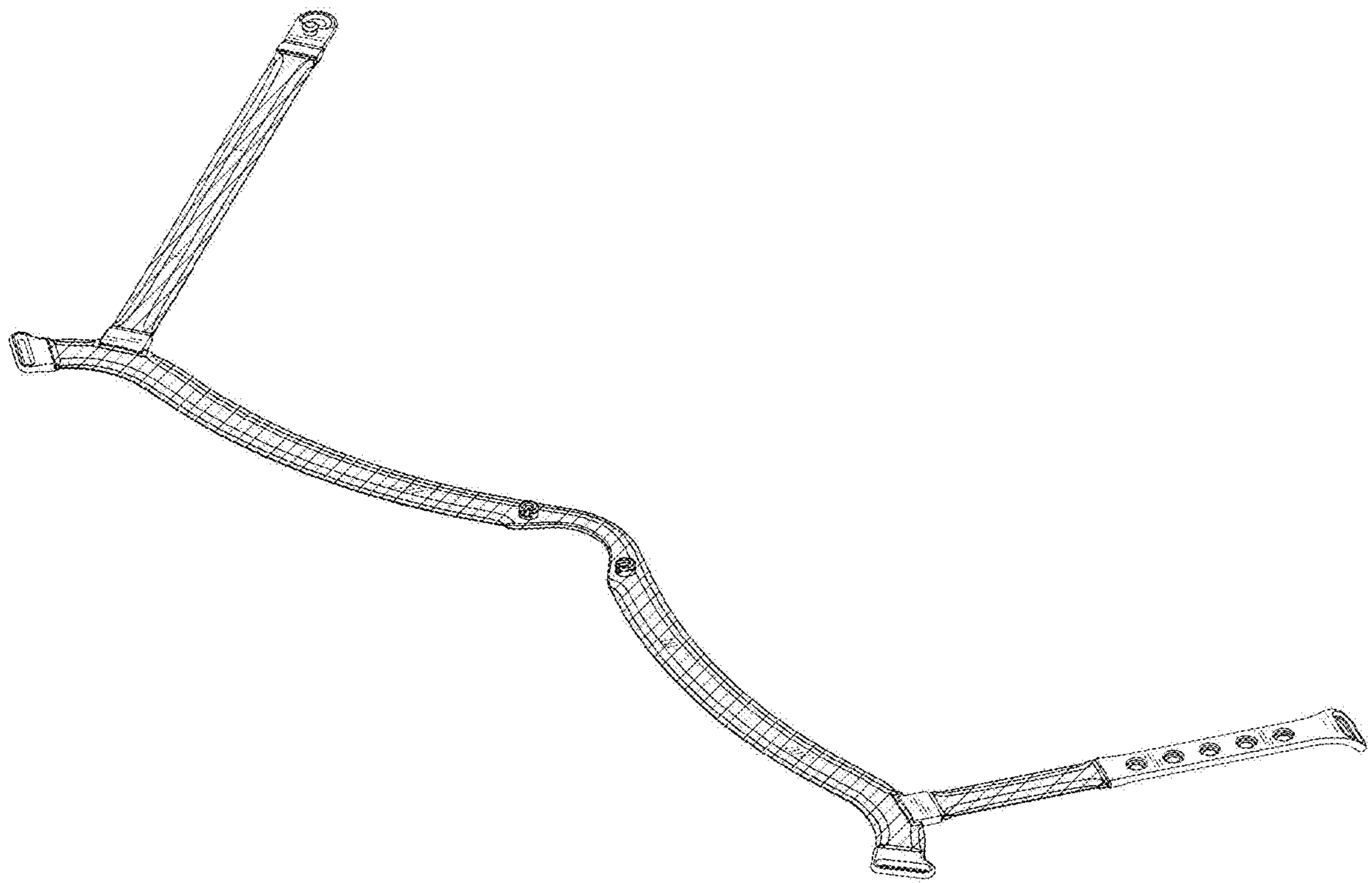


FIG. 1

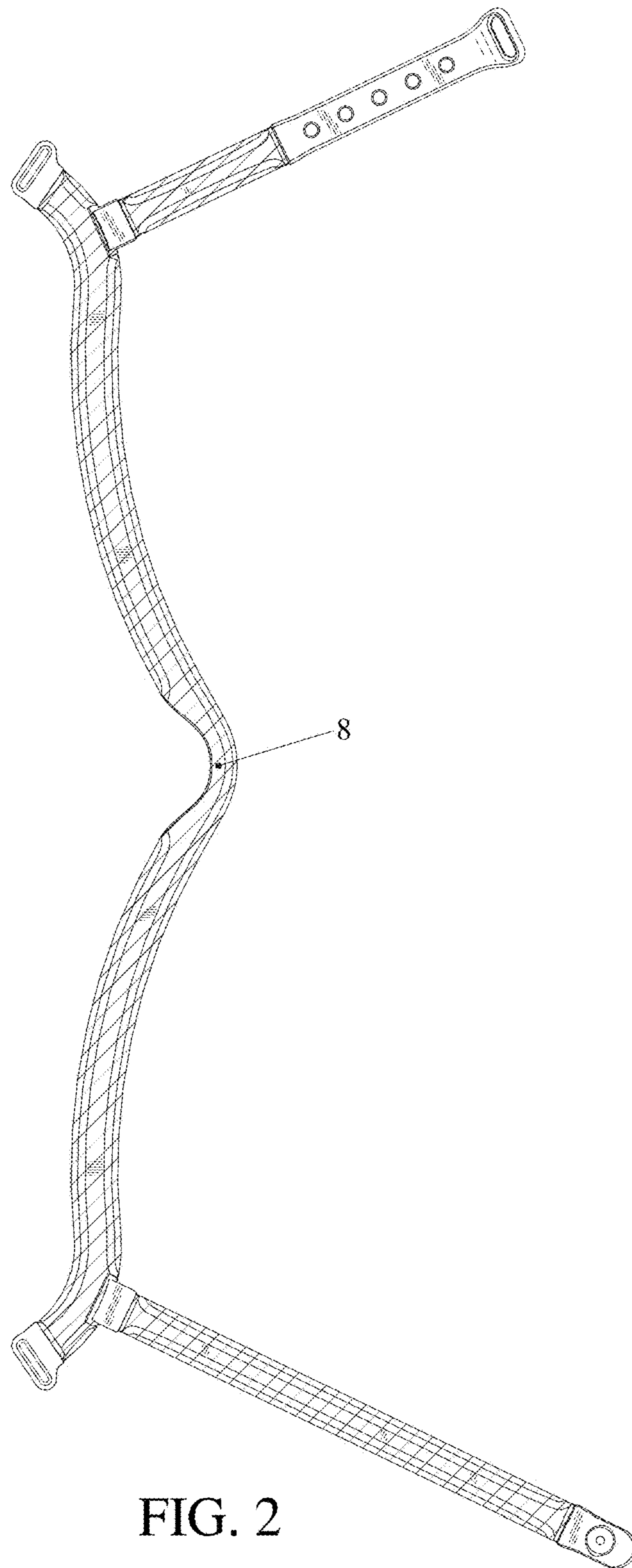


FIG. 2

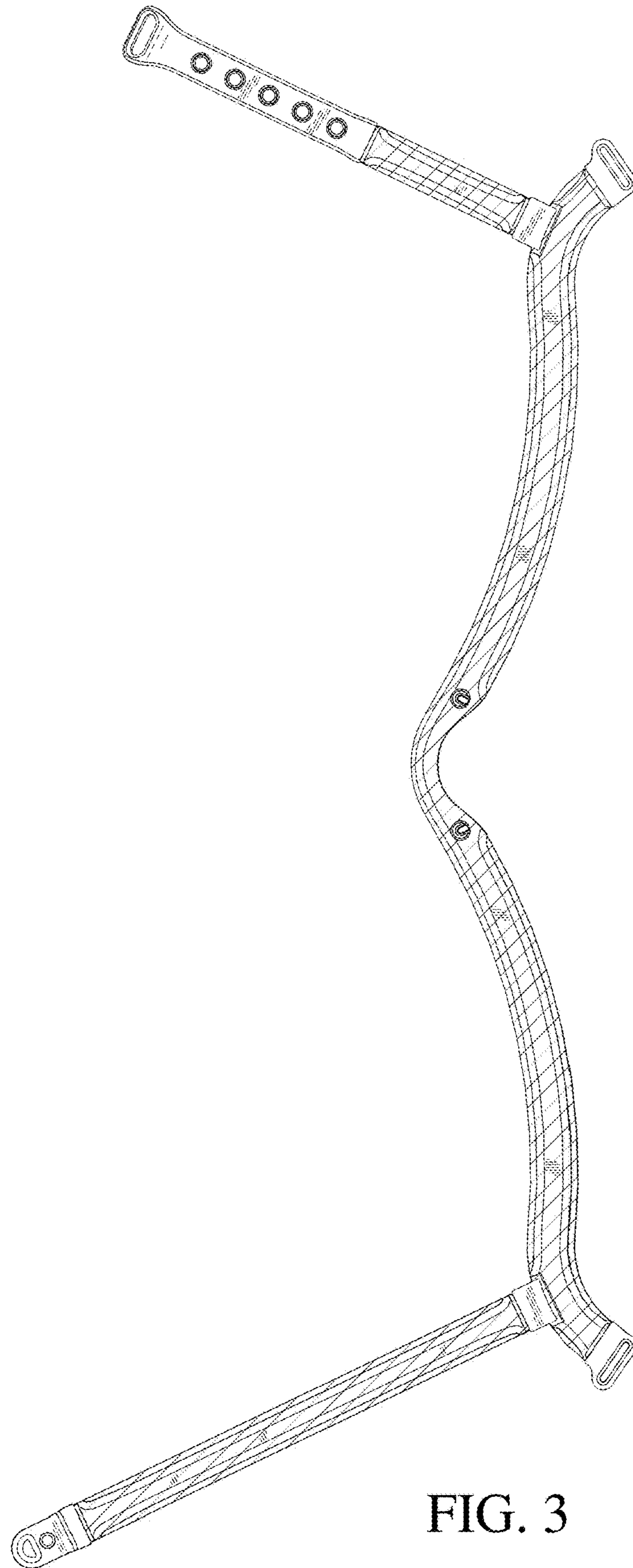


FIG. 3

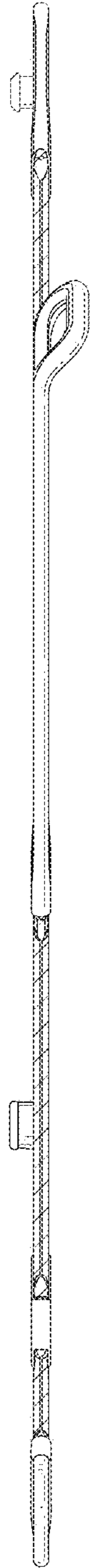


FIG. 4

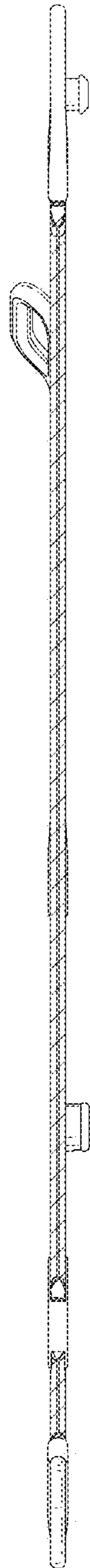


FIG. 5

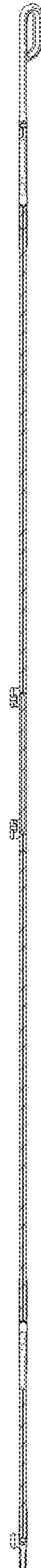


FIG. 6

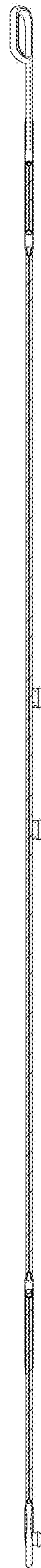


FIG. 7

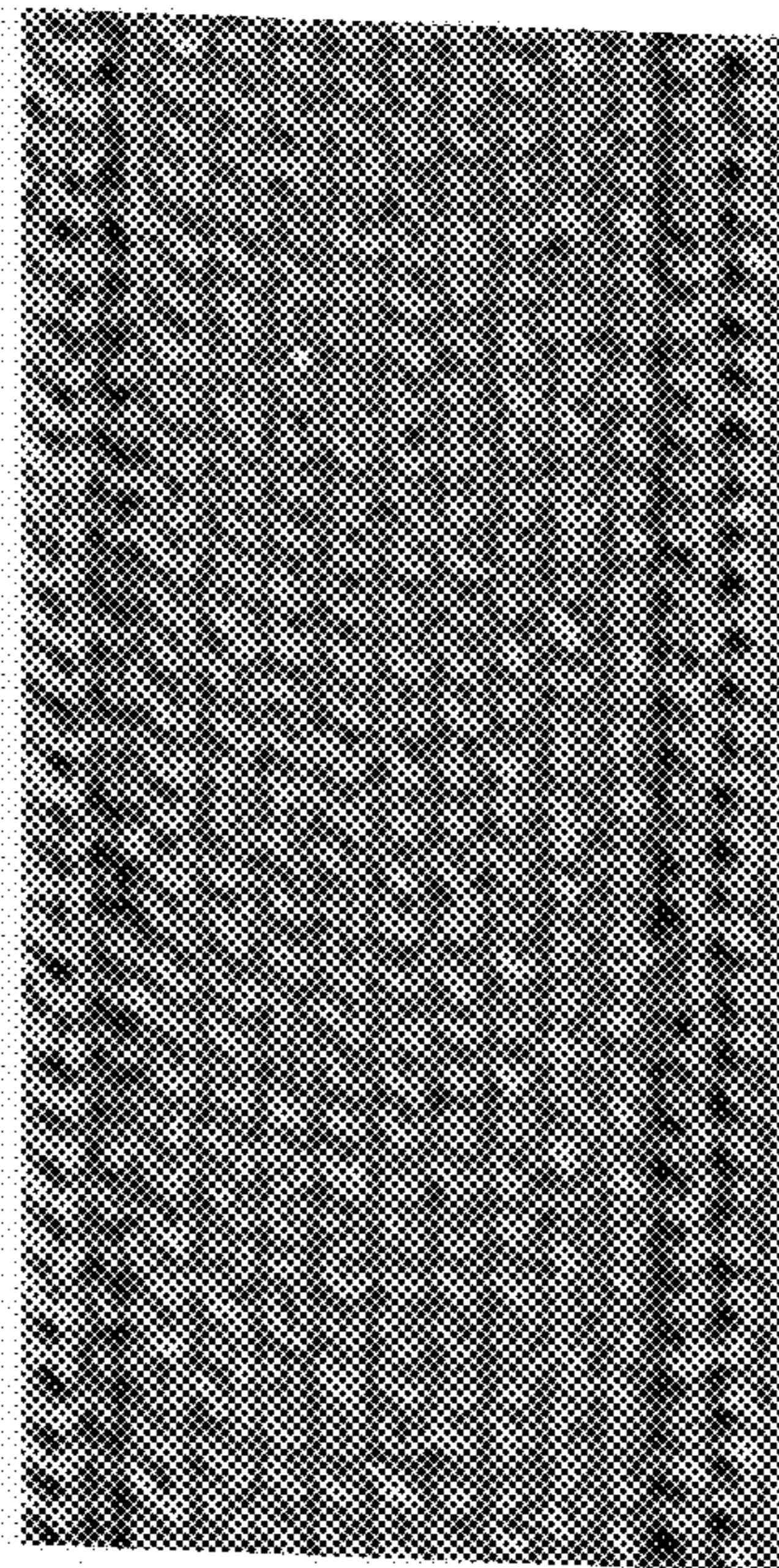


FIG. 8