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(12) **United States Design Patent** (10) **Patent No.:** **US D893,016 S**
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- (54) **NASAL CANNULA ASSEMBLY**
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Related U.S. Application Data

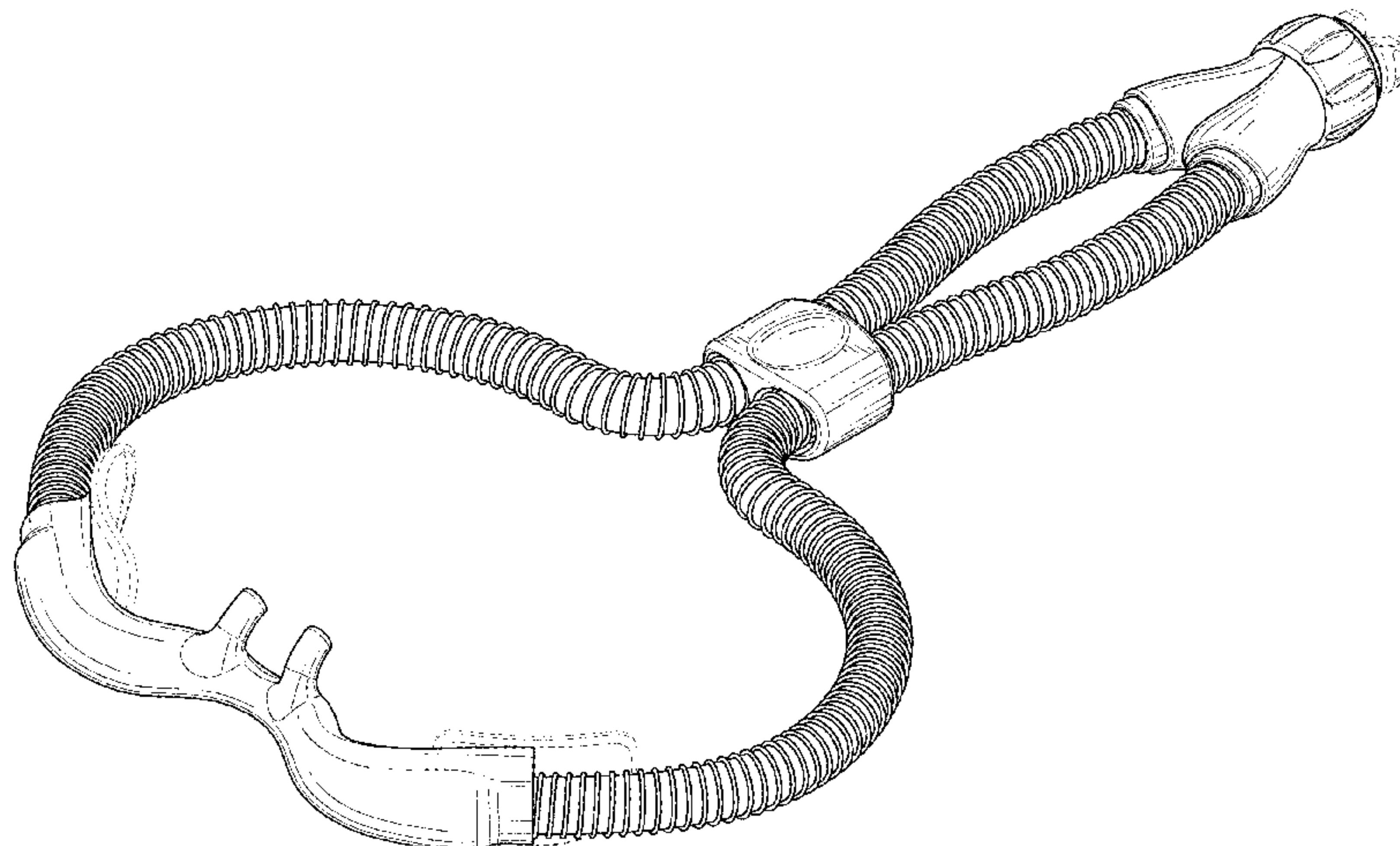
- (60) Continuation of application No. 29/677,003, filed on
Jan. 16, 2019, now Pat. No. Des. 870,878, which is a
division of application No. 29/627,024, filed on Nov.
21, 2017, now Pat. No. Des. 849,242.
- (51) **LOC (12) Cl.** **29-02**
- (52) **U.S. Cl.**
USPC **D24/110.4; D24/110.5**
- (58) **Field of Classification Search**
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D24/127–128, 164; D21/660
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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,807,262 A 12/1952 Lew
3,288,136 A 11/1966 Lund

3,513,844 A	5/1970	Smith
D228,692 S	10/1973	King
4,106,505 A	8/1978	Slater et al.
4,122,857 A	10/1978	Haerr
4,446,869 A	5/1984	Knodle
4,584,997 A	4/1986	DeLong
4,589,684 A	5/1986	Nowacki et al.
4,601,495 A	7/1986	Webb
4,686,354 A	8/1987	Makin
4,808,160 A	2/1989	Timmons et al.
D300,271 S	3/1989	Rudolph et al.
D300,272 S	3/1989	Rudolph et al.
4,818,320 A	4/1989	Weichselbaum
5,040,527 A	8/1991	Larson et al.
5,163,914 A	11/1992	Abel
5,292,312 A	3/1994	Delk et al.
5,292,313 A	3/1994	Delk et al.
5,300,037 A	4/1994	Delk et al.
5,308,339 A	5/1994	Kalt et al.
5,335,656 A	8/1994	Bowe et al.
D363,541 S	10/1995	Cottone, Sr. et al.
5,672,159 A	9/1997	Warrick
5,682,881 A	11/1997	Winthrop et al.
5,752,511 A	5/1998	Simmons et al.
D431,634 S	10/2000	Mantz
6,206,134 B1	3/2001	Stark
6,328,038 B1	12/2001	Kessler et al.
6,439,234 B1	8/2002	Curti et al.
6,447,486 B1	9/2002	Tollini
D468,015 S	12/2002	Horppu
D472,316 S	3/2003	Douglas et al.
6,536,428 B1	3/2003	Smith et al.
D472,630 S	4/2003	Douglas et al.
6,893,055 B2	5/2005	Thomas et al.
6,915,705 B1	7/2005	Truitt
D535,742 S	1/2007	VonDohlen et al.
7,178,521 B2	2/2007	Burrow et al.
D551,340 S	9/2007	Wood et al.
7,331,348 B1	2/2008	Beevers
7,353,826 B2	4/2008	Sleeper et al.
7,370,652 B2	5/2008	Matula, Jr. et al.
7,406,966 B2	8/2008	Wondka
7,469,719 B2	12/2008	Gray
D616,091 S	5/2010	Kyvik et al.
D616,542 S	5/2010	Kyvik et al.
D627,059 S	11/2010	Wood et al.
D645,547 S	9/2011	Lombardi et al.
D654,573 S	2/2012	Lombardi et al.
D661,785 S	6/2012	Johnson
D665,496 S	8/2012	Lee
8,317,203 B2	11/2012	Hermle et al.
D672,037 S	12/2012	Miller
D678,510 S	3/2013	Koschany



International Preliminary Report on Patentability, PCT/NZ2012/000142; dated Feb. 20, 2014; 6 pages.
Japanese Examination Report and English translation; dated Aug. 19, 2015; 4 pages.
Japanese Examination Report, JP 2014524961A; dated Nov. 8, 2017; 2 pages.
TW Search Report; English Translation; dated May 18, 2016; 1 page.
UK Examination Report; GB15162878; dated Oct. 8, 2015; 8 pages.
UK Examination Report; GB15162852; dated Oct. 8, 2015; 7 pages.
UK Examination Report; GB15225840; dated Feb. 4, 2016; 8 pages.
UK Examination Report; GB15162878; dated Feb. 4, 2016; 5 pages.
UK Examination Report; GB15162852; dated Feb. 4, 2016; 5 pages.
UK Examination Report; GB15225832; dated Feb. 4, 2016; 5 pages.
UK Examination Report; GB13066352; dated Feb. 4, 2016; 3 pages.
UK Examination Report; GB16031130; dated Mar. 4, 2016; 7 pages.
UK Examination Report; GB16032922; dated Mar. 11, 2016; 6 pages.
AU Examination Report; 2011318681; dated Apr. 12, 2016; 3 pages.
Optiflow Junior: Easy Care, Effective Flow. Fisher & Paykel. Brochure. Date Published: 2012 (Year: 2012).
Optiflow Junior 2. Fisher & Paykel Healthcare. Web archive date: Jun. 26, 2018. Retrieved from Internet: <https://web.archive.org/.../1001/https://www.fphcare.com/us/hospital/infant-respiratory/nasal-high-flow-therapy/understand/optiflow-junior-2/> (Year: 2018).

* cited by examiner

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(57) **CLAIM**

The ornamental design for a nasal cannula assembly, as shown and described.

DESCRIPTION

FIG. 1 is a top, front and right side perspective view of a nasal cannula assembly embodying our new design.
FIG. 2 is a top, rear and right side perspective view thereof.
FIG. 3 is a top view thereof.
FIG. 4 is a bottom view thereof.
FIG. 5 is a right side view thereof.
FIG. 6 is a left side view thereof.
FIG. 7 is a front view thereof; and,
FIG. 8 is a rear view thereof.
Broken lines are used to illustrate portions of the nasal cannula assembly which form no part of the claimed design.

1 Claim, 6 Drawing Sheets

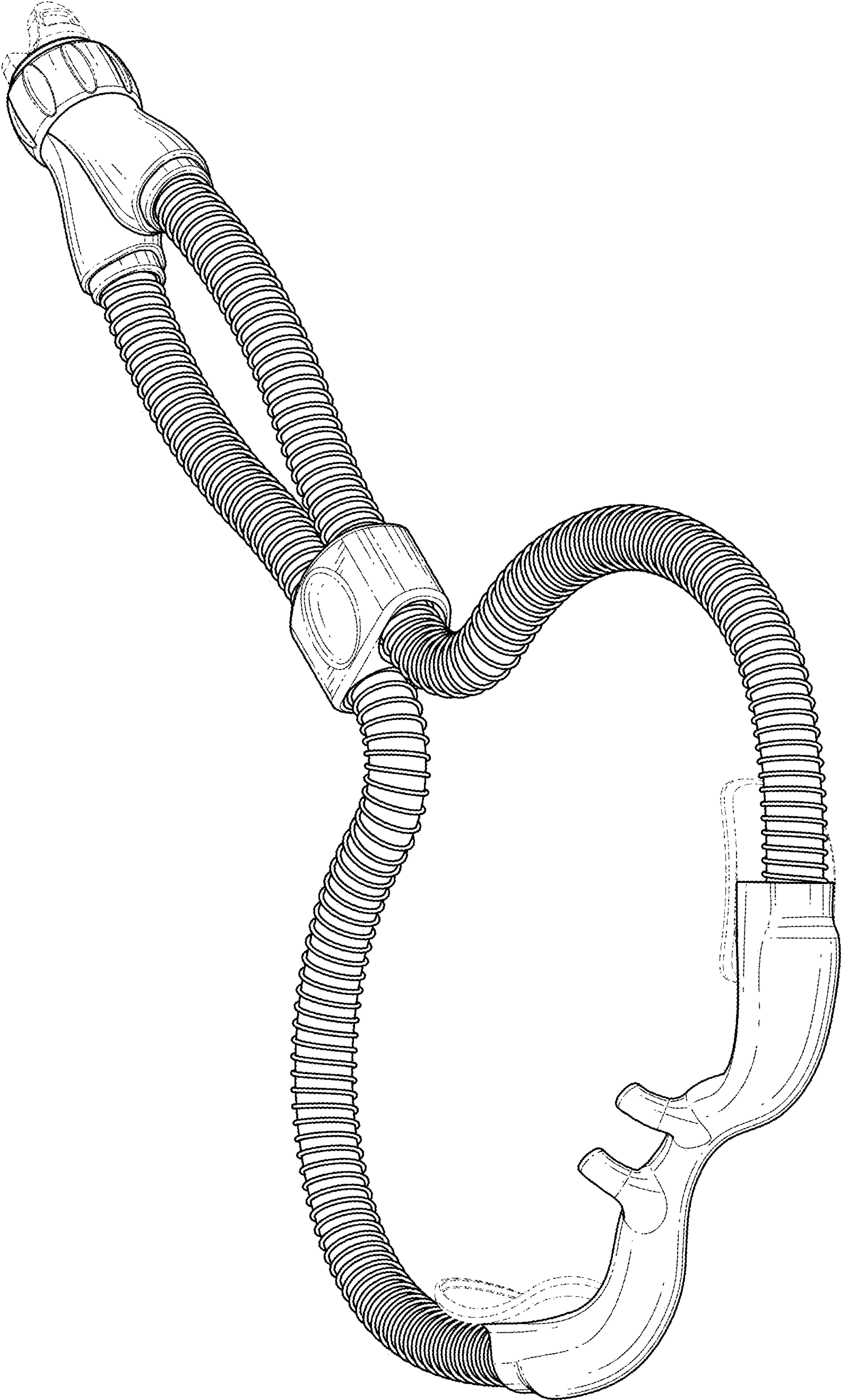


FIG. 1

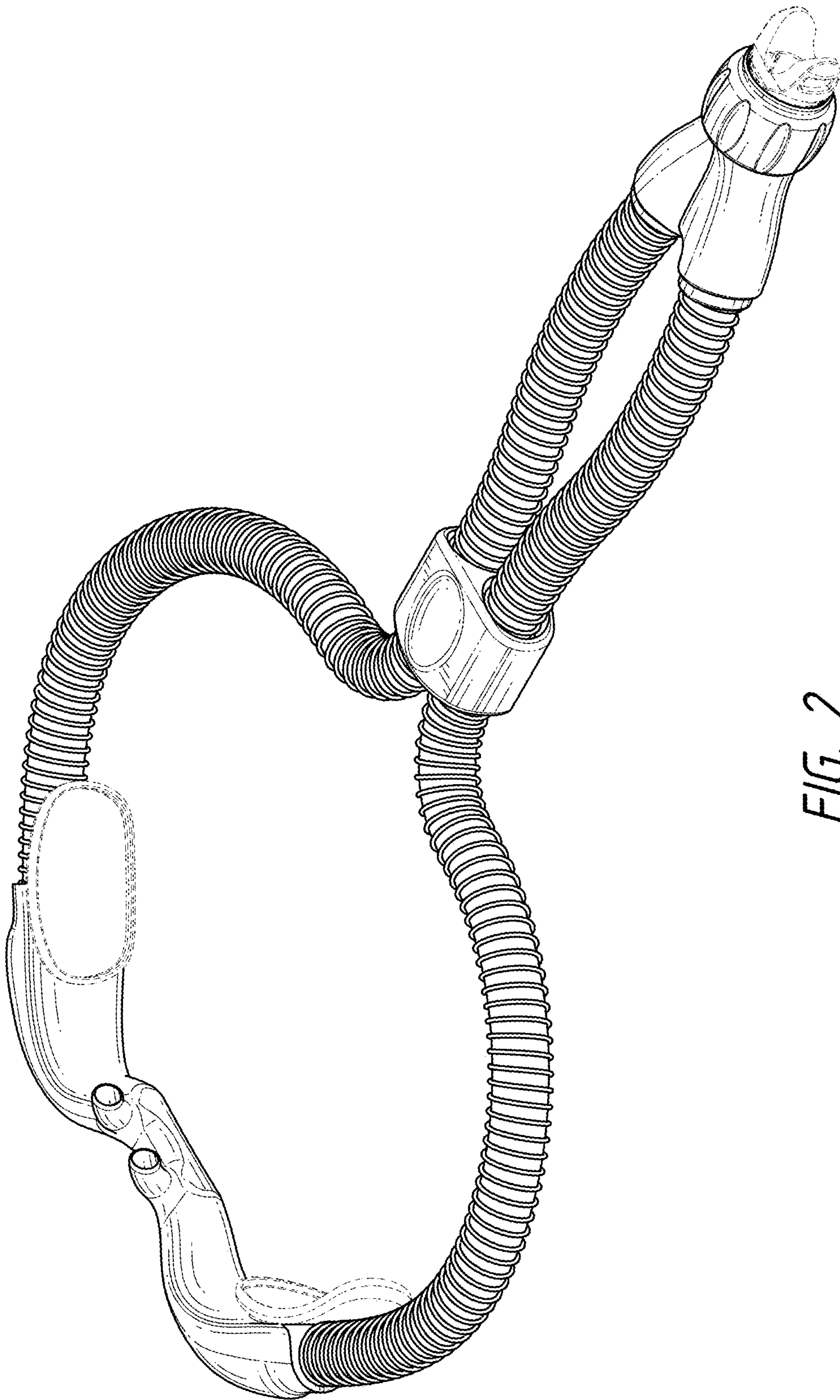


FIG. 2

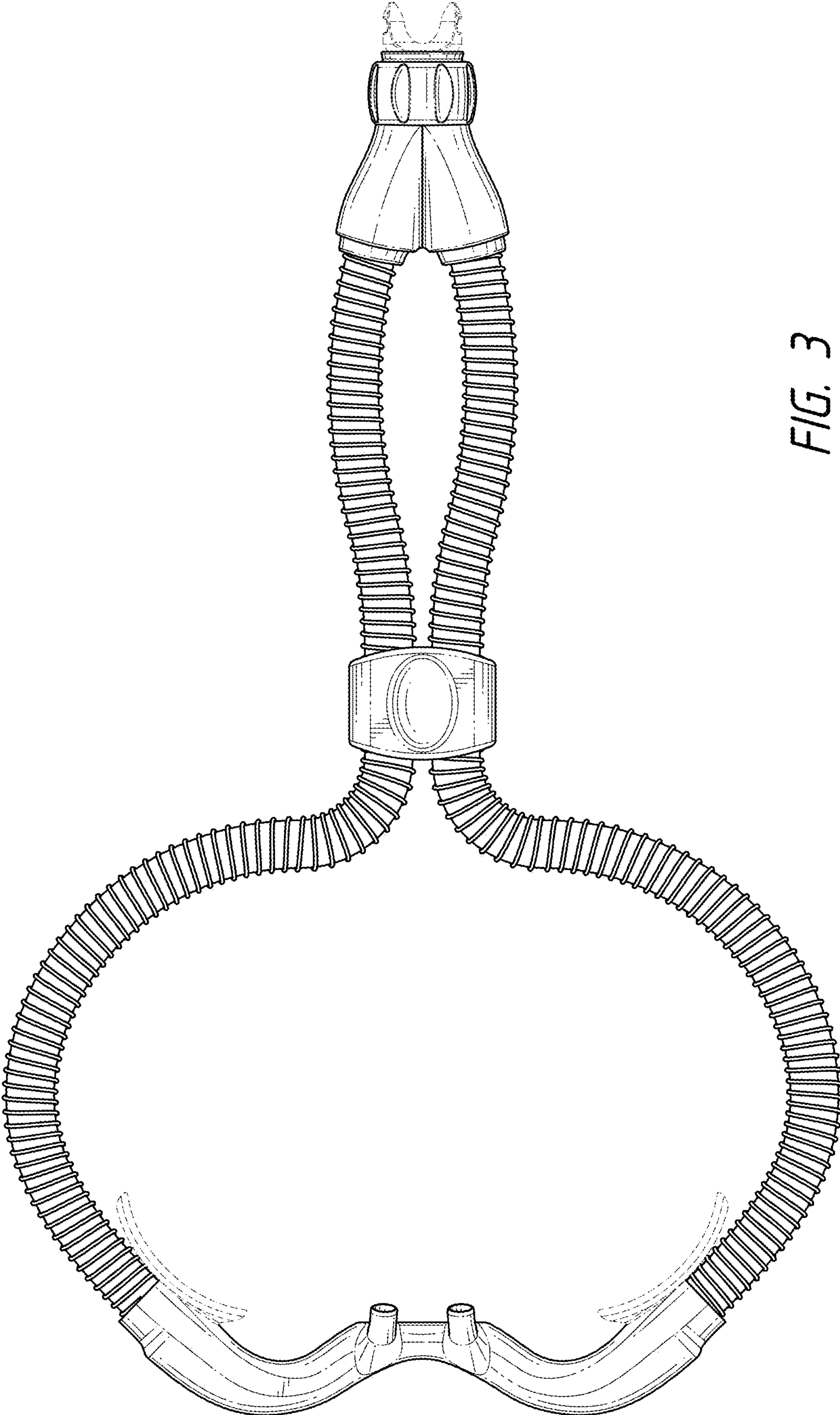


FIG. 3

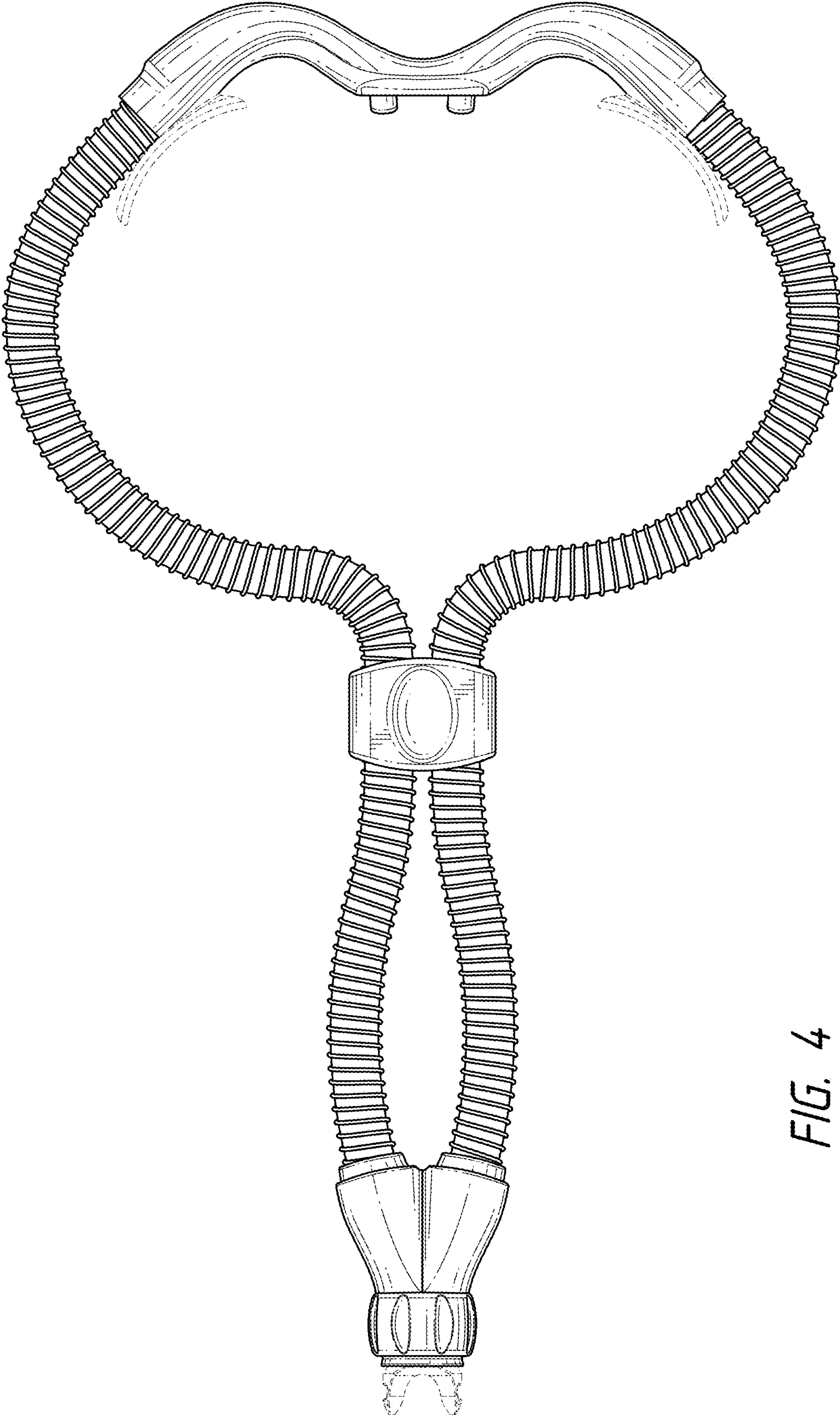


FIG. 4

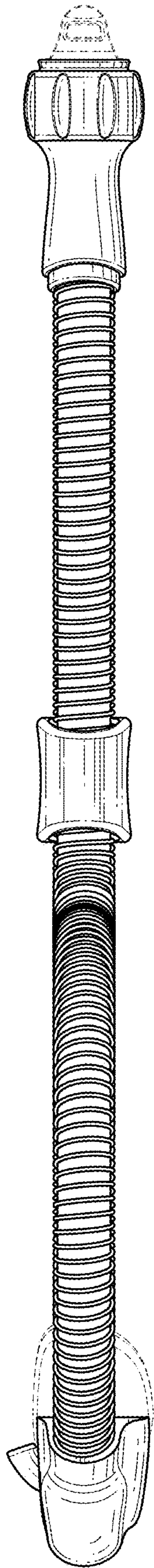


FIG. 5

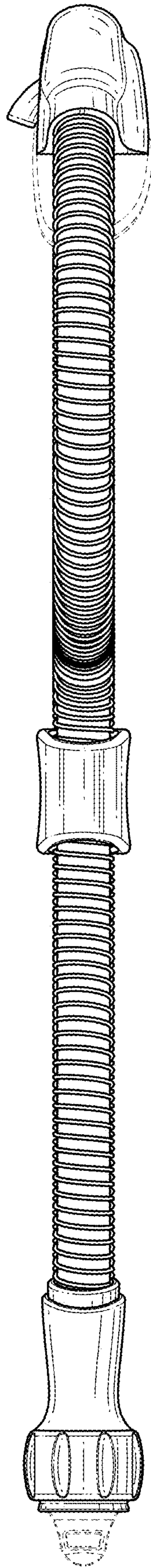


FIG. 6

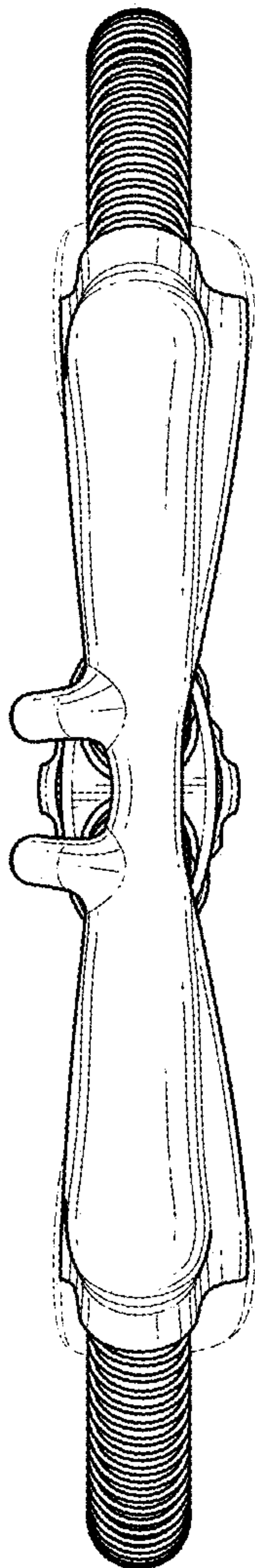


FIG. 7

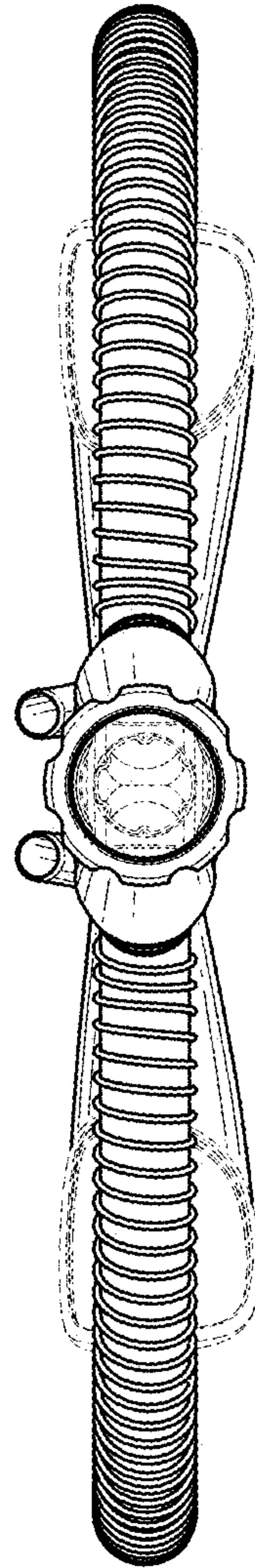


FIG. 8