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

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(45) **Date of Patent:** **** Mar. 17, 2020**

(54) **AIR DELIVERY TUBE**

4,437,691 A 3/1984 Laney
D280,765 S 9/1985 Alvino
4,621,632 A 11/1986 Bartels et al.
(Continued)

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Mark Simpson, Sydney (AU)

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

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FOREIGN PATENT DOCUMENTS

CN 201042552 Y 4/2008
CN 101541367 A 9/2009
(Continued)

OTHER PUBLICATIONS

WEST, "Respiratory Physiology", Lippincott Williams & Wilkins, 9th edition published 2012, 8 pages.
(Continued)

Related U.S. Application Data

(62) Division of application No. 29/625,910, filed on Nov. 14, 2017, now Pat. No. Des. 849,232, which is a division of application No. 29/553,470, filed on Feb. 2, 2016, now Pat. No. Des. 805,630.

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

(52) **U.S. Cl.**
USPC **D24/110**

(58) **Field of Classification Search**
USPC D24/110, 110.1-110.5, 127
CPC A61M 16/0616; A61M 16/0633; A61M 16/06; A61M 16/0666; A61M 16/0683; A61M 16/0875; A61M 16/0816; A61M 16/08; A61M 16/0605; A61M 16/0622; A61M 16/0644

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,073,335 A 3/1937 Connell
2,516,864 A 8/1950 Gilmore
3,388,705 A 6/1968 Grosshandler
4,188,081 A 2/1980 Holden et al.
4,283,594 A 8/1981 Somers

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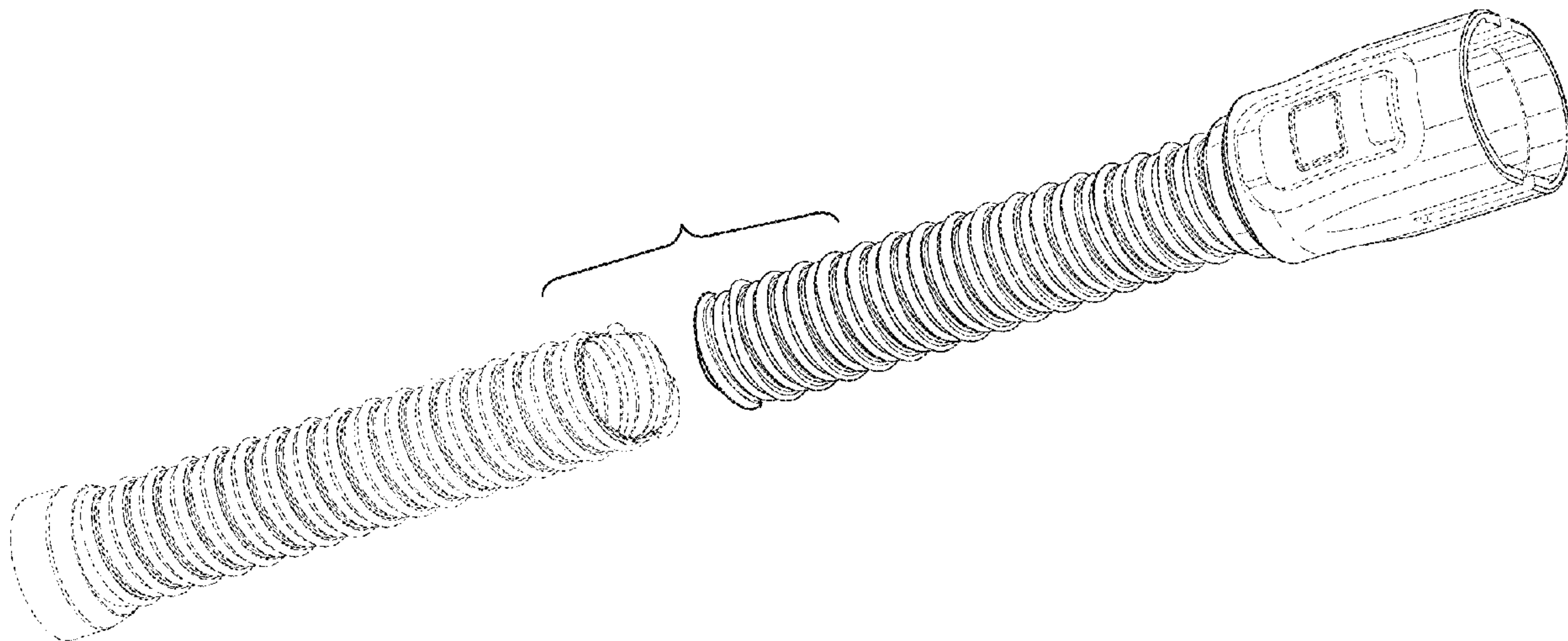
(57) **CLAIM**

The ornamental design for an air delivery tube, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an air delivery tube showing our new design;
FIG. 2 is another perspective view thereof;
FIG. 3 is a front view thereof;
FIG. 4 is a rear view thereof;
FIG. 5 is a top view thereof;
FIG. 6 is a bottom view thereof;
FIG. 7 is a left end view thereof;
FIG. 8 is a right end view thereof; and,
FIG. 9 is a reverse perspective view thereof.
The air delivery tube is shown with a symbolic break in its length. The appearance of any portion of the article between the break lines forms no part of the claimed design. The broken lines in the drawings depict portions of the air delivery tube that form no part of the claimed design.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,714,279	A	12/1987	Custeau	8,636,479	B2	1/2014	Kenyon et al.
4,782,832	A	11/1988	Trimble et al.	8,638,014	B2	1/2014	Sears et al.
D302,040	S	7/1989	Lambert	D708,316	S	7/2014	Bertinetti et al.
4,944,310	A	7/1990	Sullivan	8,770,198	B2	7/2014	Yee
5,054,156	A	10/1991	Watanabe et al.	8,783,298	B2	7/2014	Zucker
5,309,902	A	5/1994	Kee et al.	D710,989	S	8/2014	Bertinetti et al.
5,336,192	A	8/1994	Palestrant	8,905,031	B2	12/2014	Barlow
5,382,242	A	1/1995	Horton et al.	D736,371	S	8/2015	Row
5,392,770	A	2/1995	Clawson et al.	D741,477	S	10/2015	Rogers
D360,027	S	7/1995	Psaros	D742,508	S	11/2015	Row
5,429,398	A	7/1995	Lupke	D743,556	S	11/2015	Bath et al.
5,607,316	A	3/1997	Ishikawa	D744,108	S	11/2015	Verma et al.
5,640,951	A	6/1997	Huddart et al.	D751,687	S	3/2016	Daly
5,762,382	A	6/1998	Perneti	D751,688	S	3/2016	Daly
D405,522	S	2/1999	Hoenig	D760,258	S	6/2016	Bertinetti et al.
D421,298	S	2/2000	Kenyon et al.	D761,422	S	7/2016	Row
6,078,730	A	6/2000	Huddart et al.	D762,843	S	8/2016	Formica et al.
6,099,046	A	8/2000	Oh	D805,630	S	12/2017	Formica
D436,401	S	1/2001	Remes et al.	9,974,917	B2	5/2018	Bafile
D454,637	S	3/2002	Nestenborg	D822,818	S	7/2018	Maekkelberghe
6,532,959	B1	3/2003	Berthon-Jones	D841,147	S	2/2019	McCool D24/110
6,581,594	B1	6/2003	Drew et al.	D841,148	S	2/2019	Stoks D24/110
D476,731	S	7/2003	Cise et al.	10,232,072	B2	3/2019	Leyva A61L 2/202
D486,909	S	2/2004	Cise et al.	D849,232	S	5/2019	Formica D24/110
6,691,707	B1	2/2004	Gunaratnam et al.	2003/0236015	A1	12/2003	Edirisuriya et al.
D493,520	S	7/2004	Bertinetti et al.	2006/0106345	A1	5/2006	Flaker et al.
D493,884	S	8/2004	Virr et al.	2006/0118113	A1	6/2006	Bremner et al.
6,892,729	B2	5/2005	Smith et al.	2006/0266365	A1	11/2006	Stallard
6,953,354	B2	10/2005	Edirisuriya	2007/0040378	A1	2/2007	Sheppard et al.
D544,598	S	6/2007	Lithgow et al.	2007/0169776	A1	7/2007	Kepler et al.
7,226,302	B2	6/2007	Walter	2007/0181130	A1	8/2007	Worley
7,237,770	B2	7/2007	Lipscombe et al.	2007/0181132	A1	8/2007	Worley
D550,349	S	9/2007	Lithgow et al.	2007/0218734	A1	9/2007	Walter et al.
7,306,205	B2	12/2007	Huddart et al.	2008/0054635	A1	3/2008	Skiba et al.
D560,795	S	1/2008	Lithgow et al.	2008/0066756	A1	3/2008	Lang et al.
D561,890	S	2/2008	Lithgow et al.	2008/0077176	A1	3/2008	Hanlon et al.
D561,891	S	2/2008	Lithgow et al.	2008/0105257	A1	5/2008	Klasek et al.
D570,473	S	6/2008	Hamaguchi et al.	2009/0044808	A1	2/2009	Guney et al.
D578,204	S	10/2008	Lithgow et al.	2009/0050156	A1	2/2009	Ng et al.
D580,060	S	11/2008	Adams	2009/0110378	A1	4/2009	Bradley et al.
D585,131	S	1/2009	Trevor-Wilson et al.	2009/0123886	A1	5/2009	Vaska
D585,540	S	1/2009	Lithgow et al.	2009/0126817	A1	5/2009	Gray
D590,494	S	4/2009	Lithgow et al.	2009/0223514	A1	9/2009	Smith et al.
D602,585	S	10/2009	Blackwell et al.	2009/0266361	A1	10/2009	Bilger
D604,830	S	11/2009	Lithgow et al.	2010/0000534	A1	1/2010	Kooij et al.
D611,593	S	3/2010	Lithgow et al.	2010/0083965	A1	4/2010	Virr et al.
D612,480	S	3/2010	Cork et al.	2010/0116272	A1	5/2010	Row et al.
D614,286	S	4/2010	Lithgow et al.	2010/0236552	A1	9/2010	Kwok et al.
D621,031	S	8/2010	Lithgow et al.	2011/0017212	A1	1/2011	Kenyon et al.
7,814,907	B2	10/2010	Bremner et al.	2011/0023874	A1	2/2011	Bath et al.
D627,044	S	11/2010	Virr et al.	2011/0100363	A1	5/2011	Barclay et al.
D628,288	S	11/2010	Row et al.	2011/0155132	A1	6/2011	Virr et al.
7,827,987	B2	11/2010	Woodard et al.	2011/0180068	A1	7/2011	Kenyon et al.
D629,891	S	12/2010	Virr et al.	2011/0308520	A1	12/2011	McAuley
D629,892	S	12/2010	Hill et al.	2012/0227738	A1	9/2012	Virr
7,866,944	B2	1/2011	Kenyon et al.	2012/0285454	A1	11/2012	Nibu et al.
7,874,292	B2	1/2011	Smith et al.	2013/0008440	A1	1/2013	Maurer et al.
D634,406	S	3/2011	Kilmas	2013/0011823	A1	1/2013	Hassanein et al.
D635,244	S	3/2011	Virr et al.	2013/0047987	A1	2/2013	Mays
D635,245	S	3/2011	Virr et al.	2013/0206140	A1	8/2013	Kepler et al.
D635,654	S	4/2011	Virr et al.	2013/0239961	A1	9/2013	Ross et al.
D638,536	S	5/2011	Row et al.	2013/0263854	A1	10/2013	Taylor et al.
D638,537	S	5/2011	Virr et al.	2013/0280055	A1	10/2013	Daly et al.
D638,933	S	5/2011	Hill et al.	2013/0333701	A1	12/2013	Herron
D641,467	S	7/2011	Amann	2014/0102452	A1	4/2014	Forrester
D643,114	S	8/2011	Virr et al.	2014/0130802	A1	5/2014	Virr et al.
D650,479	S	12/2011	Row et al.	2014/0158133	A1	6/2014	Acosta
D652,916	S	1/2012	Row et al.	2014/0202460	A1	7/2014	Bath et al.
D652,917	S	1/2012	Hill et al.	2014/0216459	A1	8/2014	Vos et al.
D655,813	S	3/2012	Row et al.	2014/0246025	A1	9/2014	Cragg et al.
D658,283	S	4/2012	Burz et al.	2015/0021909	A1	1/2015	Gulliver
D659,235	S	5/2012	Bertinetti et al.	2015/0108670	A1	4/2015	Magee
D671,209	S	11/2012	Row et al.	2015/0122260	A1	5/2015	Daly
8,360,059	B2	1/2013	Koulechov	2015/0128944	A1	5/2015	Buechi
D677,789	S	3/2013	Row et al.	2015/0283350	A1	10/2015	Miller
				2015/0306332	A1	10/2015	Bafile
				2016/0015558	A1	1/2016	Bott
				2017/0100556	A1	4/2017	Munkelt
				2017/0100557	A1	4/2017	Worley

(56)

References Cited

U.S. PATENT DOCUMENTS

2017/0209610 A1 7/2017 Leyva
 2017/0361051 A1 12/2017 Eifler
 2018/0200471 A1 7/2018 Sims
 2018/0214659 A1 8/2018 Forrester
 2018/0280652 A1 10/2018 Sims
 2018/0369533 A1* 12/2018 Buechi A61M 16/1095

FOREIGN PATENT DOCUMENTS

CN 102170932 A 8/2011
 CN 102686282 A 9/2012
 CN 103055400 A 4/2013
 CN 103124575 A 5/2013
 EM 001312953-0001 3/2012
 EM 001312953-0002 3/2012
 EM 001312953-0003 3/2012
 EM 001312953-0004 3/2012
 EM 001312953-0005 3/2012
 EP 1 369 141 A1 12/2003
 EP 1 741 462 A1 1/2007
 EP 2 703 034 A2 8/2013
 FR 2579896 A1 10/1986
 GB 1030840 5/1966
 GB 1364127 A 8/1974
 JP 2006-109534 A 4/2006
 JP 2013-018017 A 1/2013
 TW 200711671 A 4/2007
 WO WO 98/04310 A1 2/1998
 WO WO 98/34665 A1 8/1998
 WO WO 00/78381 A1 12/2000
 WO WO 2004/073778 A1 9/2004
 WO WO 2005/063328 A1 7/2005
 WO WO 2006/019323 A1 2/2006
 WO WO 2006/074513 A1 7/2006
 WO WO 2006/130903 A1 12/2006
 WO WO 2006/133480 A1 12/2006
 WO WO 2008/095245 A1 8/2008
 WO WO 2009/052560 A1 4/2009
 WO WO 2009/077045 A1 6/2009
 WO WO 2010/031126 A1 3/2010
 WO WO 2010/135785 A1 12/2010
 WO WO 2011/056080 A1 5/2011
 WO WO 2011/122964 A1 10/2011
 WO WO 2011/149362 A1 12/2011
 WO WO 2012/154064 A2 11/2012
 WO WO 2012/160477 A1 11/2012
 WO WO 2012/171072 A1 12/2012
 WO WO 2013/020167 A1 2/2013

OTHER PUBLICATIONS

“BalContact Springs Current Carrying Contact Elements DM-7, BalContact Advantages”, BAL SEAL Canted Coil Spring Catalog, Report No. 621-9, 2003, Bal Seal Engineering Company, Inc., 27 pages.
 Office Action dated Jan. 29, 2016 in U.S. Appl. No. 12/461,967 (30 pages).
 Office Action dated Dec. 4, 2014 in U.S. Appl. No. 29/456,477 (9 pages).
 Office Action dated Dec. 3, 2014 in U.S. Appl. No. 29/456,458 (7 pages).
 Office Action dated Nov. 7, 2014 in Design U.S. Appl. No. 29/482,519 (5 pages).
 ResMed S9™ Series, No Other Sleep Therapy System Delivers, 2010 (12 pages).
 Philips Respironics, System One Sleep Therapy System, May 2012 (2 pages).
 Fisher & Paykel Healthcare, Icon Brochure, 2010 (2 pages).
 Fisher & Paykel Healthcare, Icon User Manual, Jan. 2010 (214 pages).
 Row et al., Design U.S. Appl. No. 29/311,222, filed Jan. 22, 2009.
 U.S. App. No. 29/456,458, filed May 2013, Formica et al.
 U.S. App. No. 29/502,152, filed Sep. 2014, Bertinetti et al.
 U.S. App. No. 29/480,971, filed Jan. 2014, Desvoves et al.
 Virr et al., Design U.S. Appl. No. 29/311,183, filed Jan. 12, 2009, for “Cuff for Air Delivery Tube.”
 Row et al., Design U.S. Appl. No. 29/443,523, filed Jan. 18, 2013 for “Cuff for Air Delivery Tube.”
 Formica et al., Design U.S. Appl. 29/553,470, filed Feb. 2, 2016 for “Air Delivery Tube” (parent application).
 Formica et al., Design U.S. Appl. No. 29/625,470, filed Nov. 14, 2017 for “Air Delivery Tube” (parent application).
 Bath et al., Design U.S. Appl. No. 29/482,519, filed Feb. 19, 2014, for “Positive Airway Pressure Delivery Console.”
 Verma et al., Design U.S. Appl. No. 29/482,541, filed Feb. 19, 2014, for “Humidifier Reservoir for Positive Airway Pressure Delivery Console.”
 Formica et al., Design U.S. Appl. No. 29/485,313, filed Mar. 18, 2014, for “Air Delivery Tube.”
 Bertinetti et al., Design U.S. Appl. No. 29/492,344, filed May 30, 2014, for “Display Screen with Graphical User Interface.”
 Huby et al., U.S. Appl. No. 61/838,971, filed Jun. 25, 2013, for “Outlet Connection Assembly and Method of Making the Same.”
 Foote et al., U.S. Appl. No. 61/987,245, filed May 1, 2014, for “Outlet Connection Assembly and Method of Making the Same.”

* cited by examiner

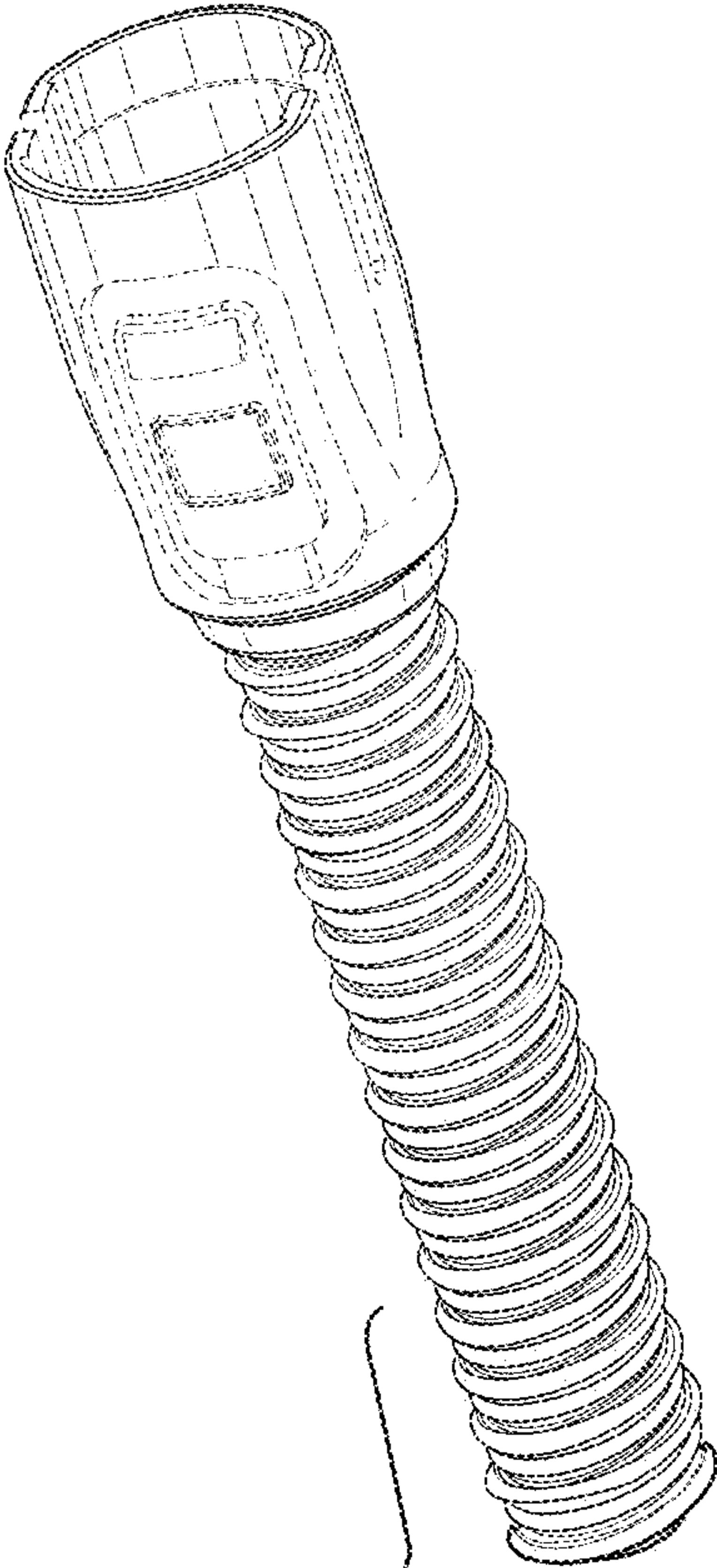


FIG. 1

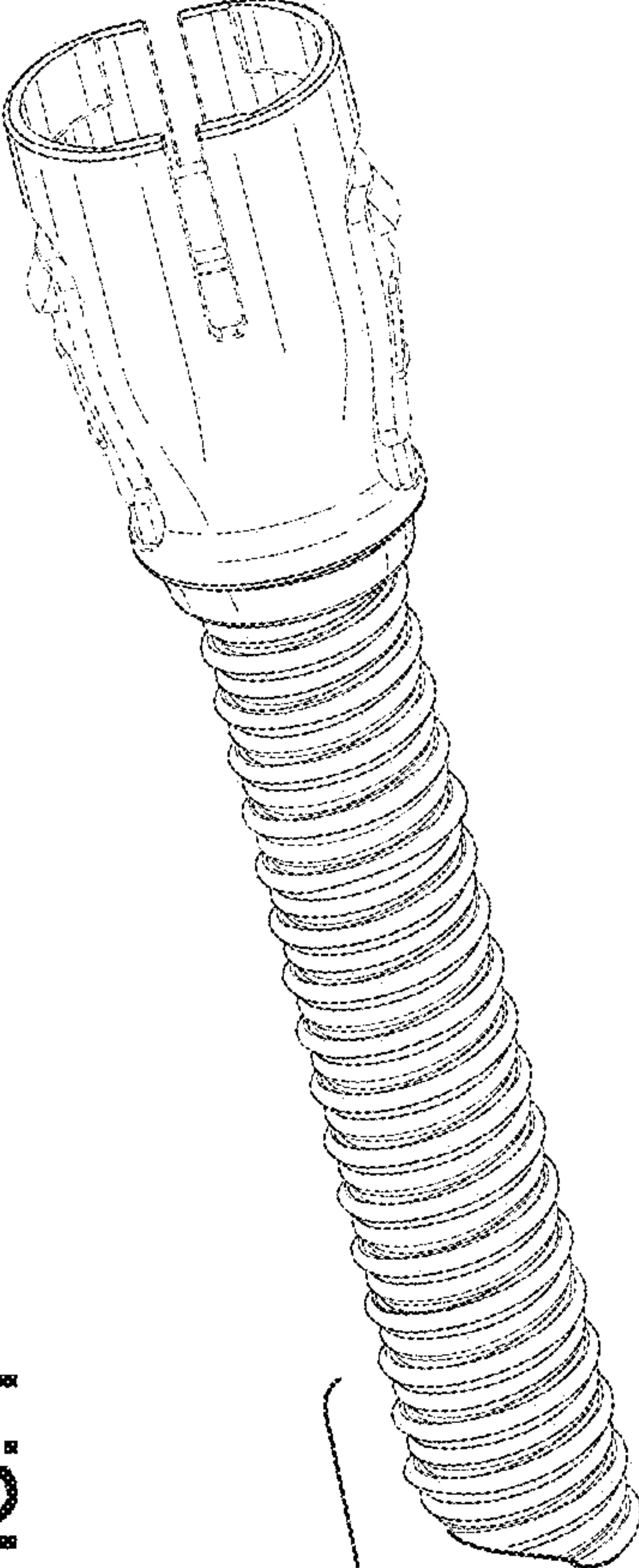
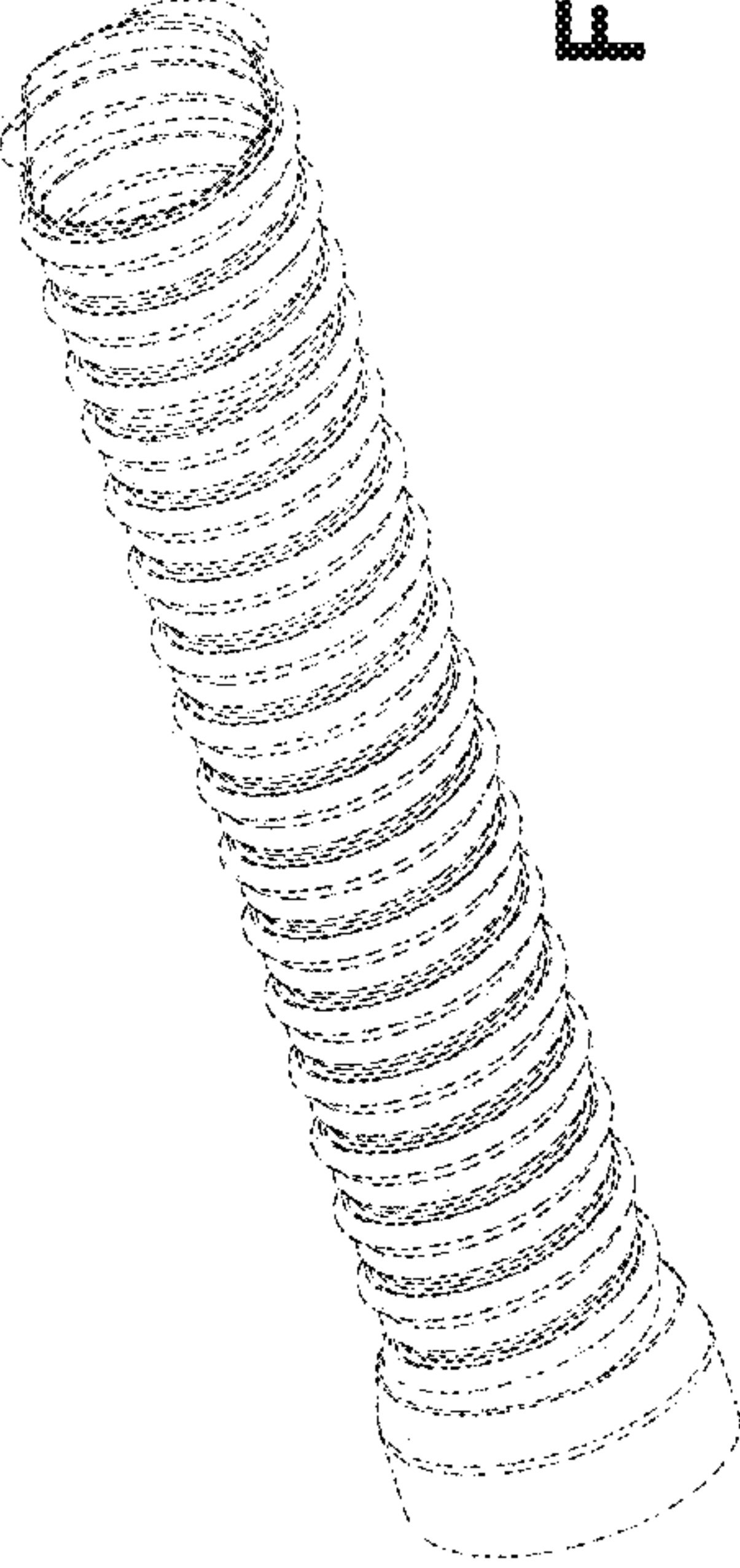
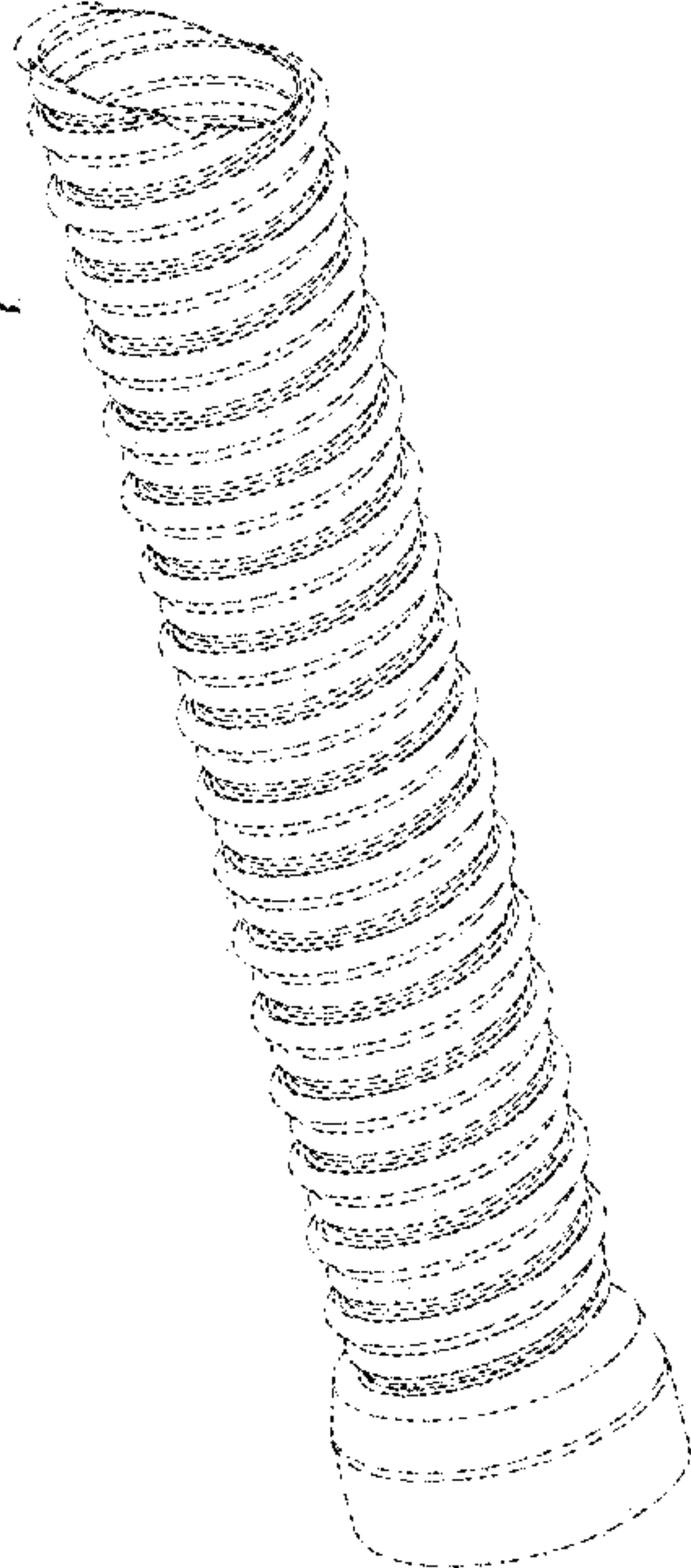


FIG. 2



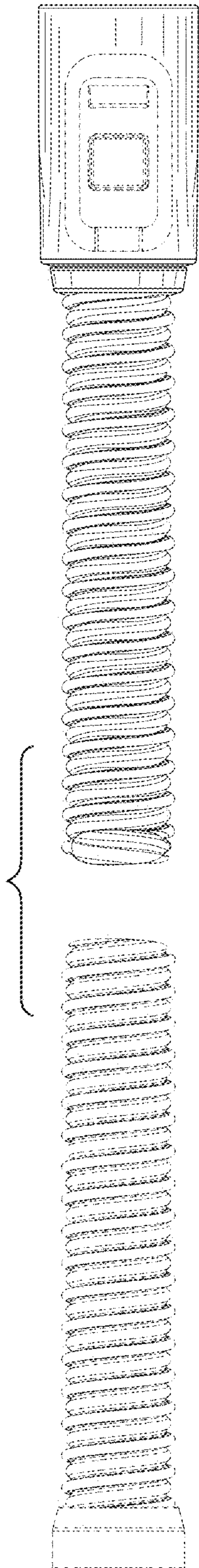


FIG. 3

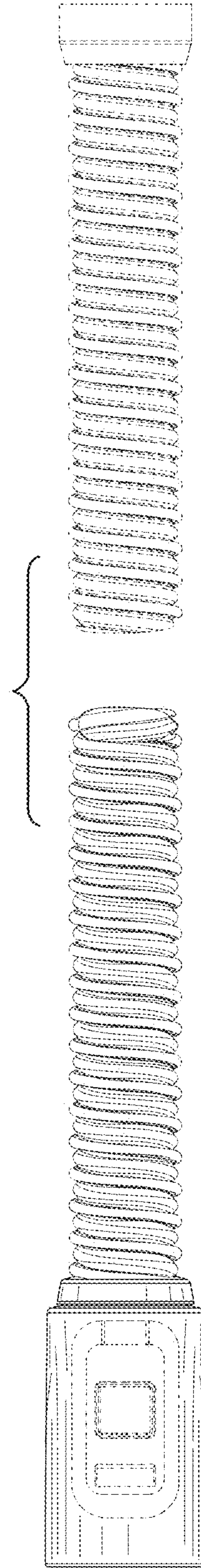


FIG. 4

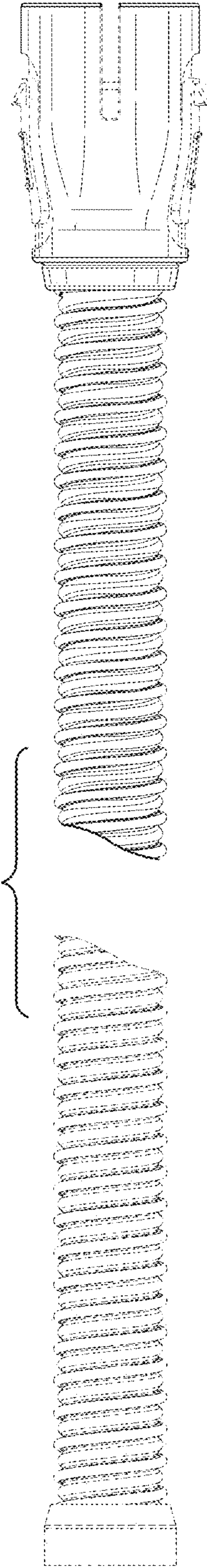


FIG. 5

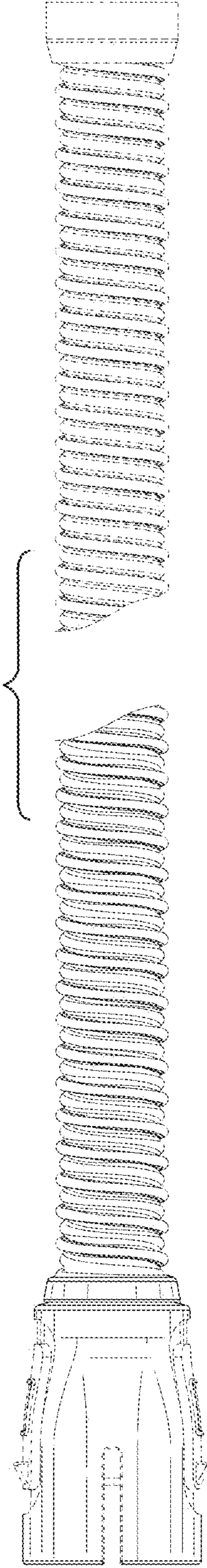


FIG. 6

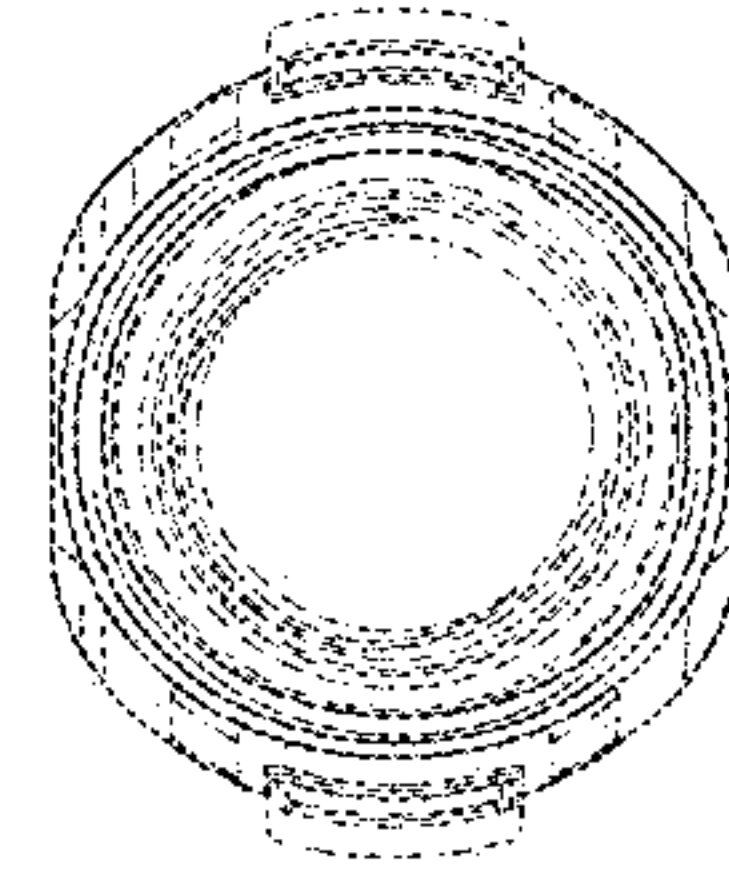


FIG. 8

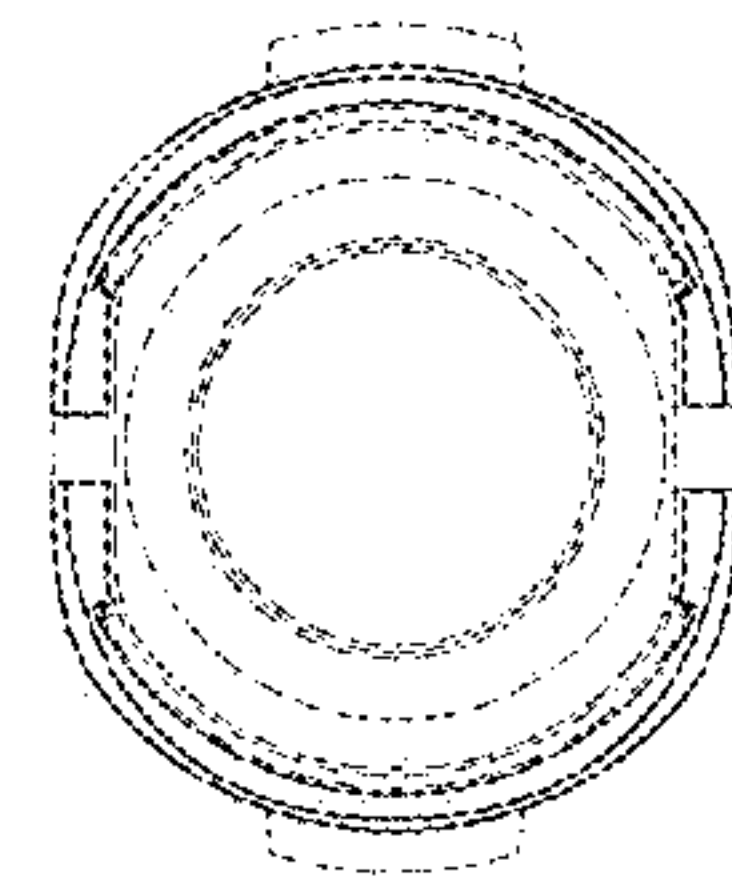


FIG. 7

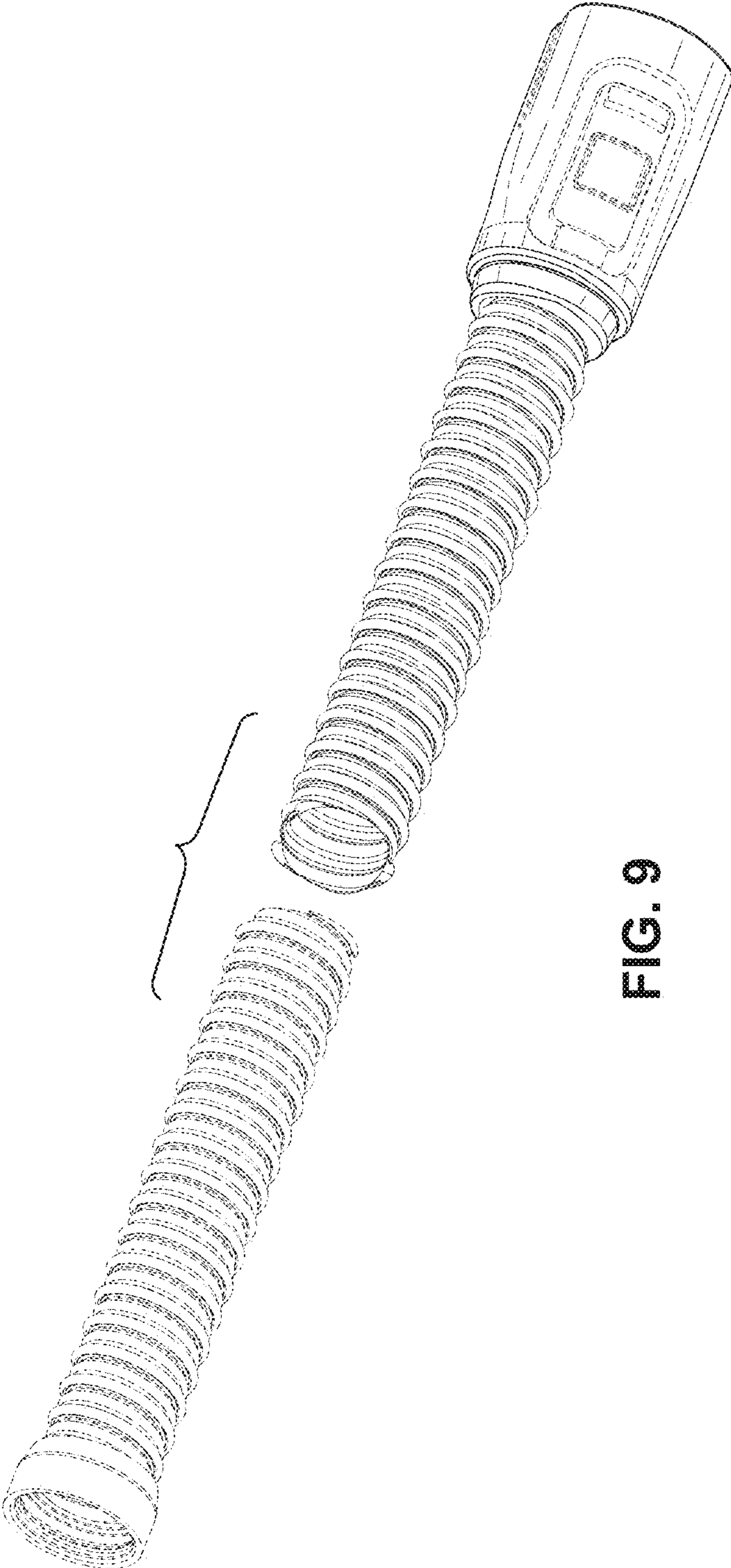


FIG. 9