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(12) **United States Design Patent**
Karvandi

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(54) **BLOOD FLOW RESTRICTION EXERCISE STRAP**

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(52) **U.S. Cl.**
USPC **D21/662**

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CPC . A45F 2003/142; A45F 3/14; A41D 13/0568;
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See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

40,911 A	12/1863	Cowles
D55,826 S	7/1920	Stih
1,447,967 A	3/1923	Rutledge
1,771,689 A	7/1930	Arthur
1,870,052 A	8/1932	Jones
D92,333 S	5/1934	Botty
2,009,325 A	7/1935	Morris
2,234,961 A	3/1941	Canada
2,363,872 A	11/1944	Kiessling
2,893,394 A	7/1959	Wilhelm

3,042,986 A	7/1962	Racette et al.
3,083,428 A	4/1963	Mcgill
3,086,529 A	4/1963	Munz et al.
3,100,484 A	8/1963	Berl
D215,195 S	9/1969	Krengel
3,641,630 A	2/1972	Farley
D243,293 S	2/1977	Scheimberg
4,414,969 A	11/1983	Heyman
D281,005 S *	10/1985	Larsen D21/694

(Continued)

OTHER PUBLICATIONS

Amazon, "Occlusion Training Bands", Dec. 19, 2017. https://www.amazon.com/Occlusion-Training-Bands-BFR-Restriction/dp/B0777QRRHH/ref=cm_cr_arp_d_product_top?ie=UTF8. Shown on p. 1. (Year: 2017).*

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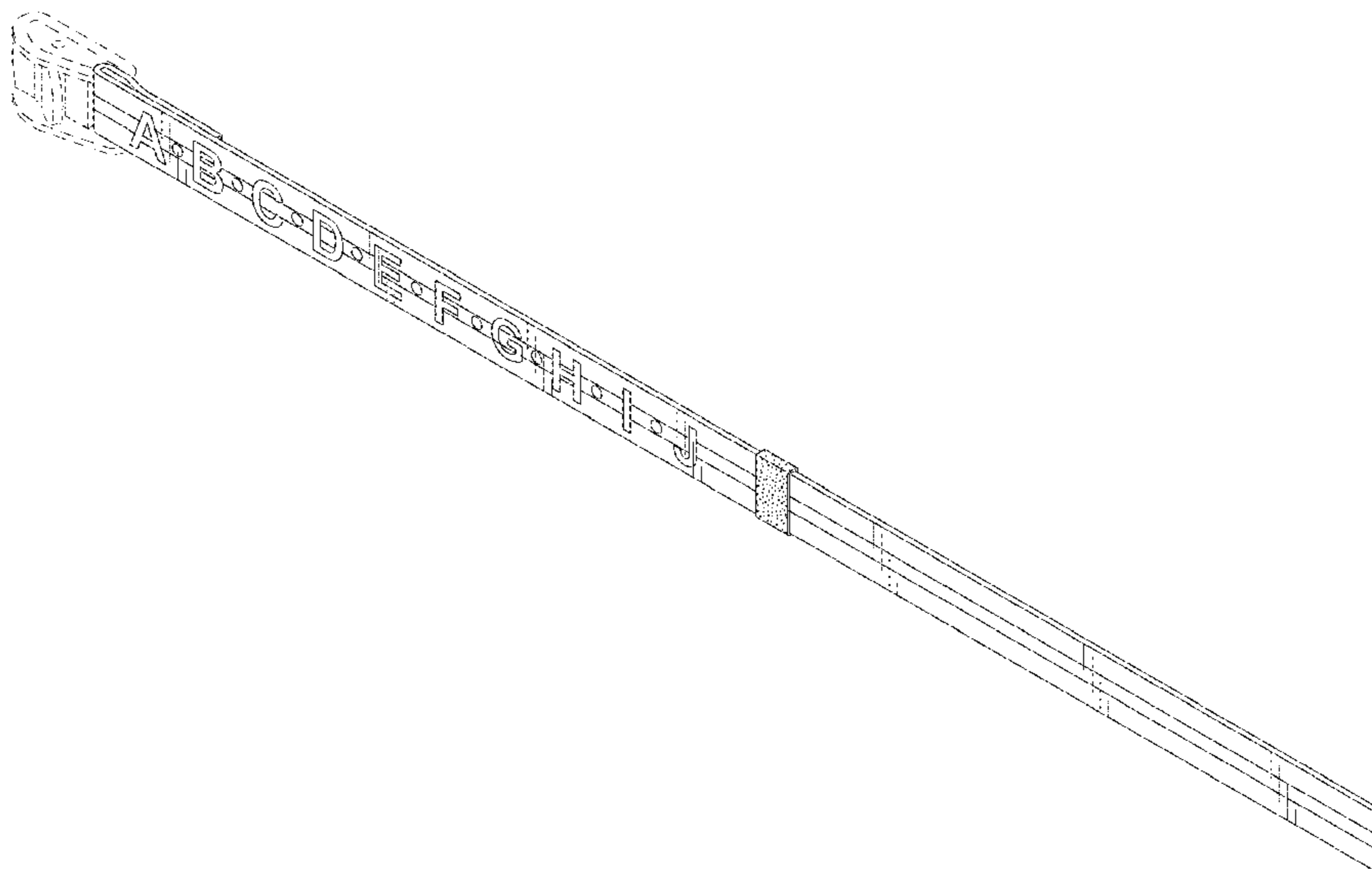
(57) **CLAIM**

The ornamental design for a blood flow restriction exercise strap, as shown and described.

DESCRIPTION

FIG. 1 is a top front perspective view of the blood flow restriction exercise strap showing my new design; FIG. 2 is a front elevation view thereof; FIG. 3 is a rear elevation view thereof; FIG. 4 is a top plan view thereof; FIG. 5 is a bottom plan view thereof; FIG. 6 is a right elevation view thereof; and, FIG. 7 is a left elevation view thereof. The broken lines shown in the drawings illustrate portions of the blood flow restriction exercise strap that form no part of the claimed design.

1 Claim, 3 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

4,733,440	A	3/1988	Ogawa		D662,557	S	6/2012	Nawracaj	
D300,810	S	4/1989	Reaume		D676,627	S *	2/2013	Doss	D2/624
4,881,303	A	11/1989	Martini		8,439,943	B2	5/2013	Chao	
D304,977	S	12/1989	Pappas		8,486,106	B2	7/2013	Warburton	
D311,232	S *	10/1990	Drennan	D21/692	8,561,267	B2	10/2013	Chang	
5,005,527	A	4/1991	Hatfield		D697,712	S	1/2014	Morton	
5,036,864	A	8/1991	Yewer, Jr.		8,635,746	B2	1/2014	Bellamy et al.	
D322,854	S	12/1991	Campbell		8,747,284	B2	6/2014	Ingram	
5,161,351	A	11/1992	Woodruff		D707,917	S	7/2014	James et al.	
D333,626	S	3/1993	Chang		D710,739	S	8/2014	Miller	
D333,640	S	3/1993	Keller		8,821,425	B2	9/2014	Cox	
5,254,065	A *	10/1993	Pollock	A63B 21/154 482/129	8,834,331	B1	9/2014	Boatwright	
5,279,057	A	1/1994	Melin et al.		8,887,313	B2	11/2014	McGuin	
5,291,638	A	3/1994	Huang		D726,841	S	4/2015	Wright	
D346,482	S	5/1994	Merrill		D733,525	S *	7/2015	Petzl	D8/356
D350,401	S	9/1994	Kok		D742,461	S	11/2015	Baldwin	
5,500,959	A	3/1996	Yewer, Jr.		D747,176	S *	1/2016	Petzl	D8/356
D369,674	S *	5/1996	Schreiner	D2/624	D747,591	S	1/2016	Holloway et al.	
D373,011	S *	8/1996	Rippel	D2/624	D749,568	S	2/2016	Magi et al.	
5,551,447	A	9/1996	Hoffman et al.		D751,065	S	3/2016	Magi	
D383,993	S *	9/1997	Kalbach	D11/3	D753,344	S	4/2016	Kantor	
5,661,877	A	9/1997	Bloomer		D753,892	S	4/2016	Hutchinson	
5,685,787	A	11/1997	Kogut		9,339,693	B1	5/2016	Pegram et al.	
D389,987	S *	2/1998	O'Byrne	D2/624	D759,993	S	6/2016	Stinson	
D390,492	S	2/1998	Riley		D761,924	S	7/2016	Sato	
D393,337	S *	4/1998	Seki	D2/624	9,380,817	B1	7/2016	Drake	
5,740,591	A	4/1998	Hopkins		D788,859	S	6/2017	Virtusio	
5,745,920	A	5/1998	Olivier		D793,671	S *	8/2017	Grenville	D2/853
5,746,685	A	5/1998	Glaser		D794,490	S	8/2017	Lindgren	
5,816,984	A	10/1998	Weiss		D810,843	S *	2/2018	Karvandi	D21/662
5,888,180	A	3/1999	Dewberry		D810,962	S	2/2018	McGowan et al.	
6,049,953	A *	4/2000	McCay	A44B 18/00 24/302	D815,390	S *	4/2018	Adrianse	D2/627
D427,651	S	7/2000	Bodman		D819,218	S	5/2018	Inzer	
6,081,925	A	7/2000	Reiber		D827,057	S	8/2018	Piotrowski et al.	
D432,446	S	10/2000	Santos		D828,467	S *	9/2018	Karvandi	D21/662
6,149,618	A	11/2000	Sato		D828,688	S *	9/2018	Hogard	D2/627
D437,623	S	2/2001	Ormsby		10,070,701	B1	9/2018	Liu	
D441,413	S	5/2001	Cataldi, Jr. et al.		10,117,472	B2	11/2018	Robbins	
D449,136	S	10/2001	Vallance		10,130,162	B2 *	11/2018	Tang	A45F 5/00
D453,366	S	2/2002	French		10,194,917	B1	2/2019	Carson et al.	
6,349,493	B1	2/2002	Newman et al.		D843,525	S *	3/2019	Karvandi	D21/694
6,352,074	B1	3/2002	Okada		10,245,460	B2 *	4/2019	Hetrick	A63B 21/068
D455,213	S	4/2002	Weaver et al.		D853,501	S *	7/2019	Karvandi	D21/662
6,381,810	B2	5/2002	Hsieh		D856,444	S	8/2019	Karvandi	
6,398,749	B1	6/2002	Slautterback		10,568,636	B2	2/2020	Demas et al.	
D462,772	S	9/2002	Lamping et al.		10,583,971	B2	3/2020	Kruzel	
6,485,448	B2	11/2002	Lamping et al.		2001/0022013	A1	9/2001	Hsieh	
D470,793	S	2/2003	Horn et al.		2002/0160891	A1	10/2002	Gallagher	
6,564,385	B2	5/2003	McCarthy		2003/0019080	A1	1/2003	Anthony et al.	
D481,851	S *	11/2003	Greaige	D2/624	2003/0148861	A1	8/2003	McBride	
D488,287	S *	4/2004	Berger	D2/624	2003/0177561	A1	9/2003	Sloot	
D488,842	S	4/2004	Mills et al.		2006/0025807	A1	2/2006	Licata et al.	
D489,422	S	5/2004	Feder		2006/0089668	A1	4/2006	Warburton	
D495,118	S	8/2004	Sherman		2007/0032359	A1	2/2007	Toronto	
6,884,254	B2	4/2005	Brooks		2007/0193004	A1	8/2007	Chou	
6,899,720	B1	5/2005	McMillan		2008/0120755	A1	5/2008	Ingram et al.	
D508,872	S	8/2005	Hoeppner		2008/0148529	A1	6/2008	Huang	
D511,450	S	11/2005	Seth		2008/0216213	A1	9/2008	Lin et al.	
6,960,223	B1	11/2005	Ambach		2008/0312682	A1	12/2008	Shams et al.	
7,043,762	B2	5/2006	Greenhalgh		2009/0183299	A1	7/2009	Conway	
D546,953	S	7/2007	Young		2010/0217307	A1	8/2010	Warburton	
D547,228	S	7/2007	Rozsavolgyi		2010/0312271	A1	12/2010	Chao	
D558,427	S	1/2008	Solin		2011/0125036	A1	5/2011	Nakajima et al.	
D558,842	S	1/2008	Dore et al.		2011/0247179	A1	10/2011	Bellamy et al.	
D562,123	S	2/2008	Jackson		2011/0313435	A1	12/2011	Aldridge et al.	
7,334,301	B2	2/2008	Huang		2013/0331236	A1	12/2013	Moss	
7,444,720	B2	11/2008	Huang		2014/0213420	A1	7/2014	Harris	
7,468,067	B2	12/2008	Licata et al.		2015/0052655	A1	2/2015	McCully	
7,712,192	B2	5/2010	Lin et al.		2015/0158615	A1	6/2015	Downs	
7,950,072	B1	5/2011	Hanson		2016/0174665	A1	6/2016	Kung	
D647,279	S *	10/2011	Shi	D2/629	2016/0317864	A1	11/2016	Sato	
D653,408	S *	1/2012	Sajid	D30/152	2017/0000249	A1	1/2017	Beck	
D659,570	S	5/2012	Hetke et al.		2017/0354422	A1	12/2017	Brub	
					2018/0042616	A1	2/2018	Demas et al.	
					2018/0140929	A1	5/2018	Pellegrino	
					2018/0273263	A1	9/2018	Kruzel	
					2019/0076153	A1 *	3/2019	Karvandi	A61B 17/1327
					2019/0274693	A1	9/2019	Carson et al.	
					2019/0314036	A1	10/2019	Huang	

(56)

References Cited

U.S. PATENT DOCUMENTS

OTHER PUBLICATIONS

Amazon Occlusion Training Bands, [online], [site visited Feb. 24, 2017]. Available from Internet, URL: <https://www.amazon.com/dp/B00ZJTEM1U/>.

Bear Grips by Bear Grips dated Jan. 3, 2015. Found online [Dec. 6, 2018]. URL: https://www.amazon.com/Bear-Grips-II-band-support-lifting/dp/B00OPW9W3U/ref=cm_era_r_p_d_pro_duct_top?ie=UTF8.

BFR Bands by BFR Bands dated Oct. 31, 2015. Found online [Dec. 6, 2018]. URL: https://www.amazon.com/BFR-Occlusion-Training-Restriction-Quick-Release/dp/B01C2BAE82/ref=cm_cr_ar_p_d_pro_duct_top?ie=UTF8.

BFR Bands, [online], [site visited Jan. 25, 2017]. Available from Internet, URL: <http://www.bfrbands.com/>.

Elite 2.0 BFR Bands, [online], [site visited Jan. 25, 2017]. Available from Internet, URL: <http://www.occlusiontrainingbands.com/product/elite-bfr-bands/>.

Facebook Exerscribe Photos, Mar. 11, 2017, [online], [site visited Jul. 17, 2020]. Retrieved from URL: <https://www.facebook.com/exerscribe/photos/a.478392955590457/1250285948401150/> (Year: 2017).

Occlusion Training Bands by Exerscribe dated Mar. 5, 2015. Found online [Dec. 6, 2018]. URL: https://www.amazon.com/Occlusion-Training-Restriction-without-Lifting/product-reviews/BOOZHJ8DYE/ref=cm_era_r_getr_d_paging_btm_8?ie=UTF8&reviewerType=all_reviews&sortBy=recent&pageNumber=8.

QUAD by BFR dated no date given. Found online [Dec. 6, 2018]. URL: <https://www.bfrshop.com/collections/lower-body-bands/products/quad-wrap-occlusion-training-bands>.

QUAD Wraps by BFR Bands dated Oct. 13, 2017. Found online [Dec. 6, 2018]. https://www.youtube.com/watch?time_continue=48&v=vQ6aKq08taA.

Youtube PRO Premium BFR Bands Trailer, Oct. 21, 2019, [online], [site visited Jul. 17, 2020]. Retrieved from URL: https://www.youtube.com/watch?v=AspbWrkLey8&feature=emb_logo (Year: 2019).

Youtube PRO X and PRO BFR Bands Comparison, Oct. 20, 2017, [online], [site visited Jul. 17, 2020]. Retrieved from URL: <https://www.youtube.com/watch?v=ZhoF-Vwrs-A> (Year: 2017).

* cited by examiner

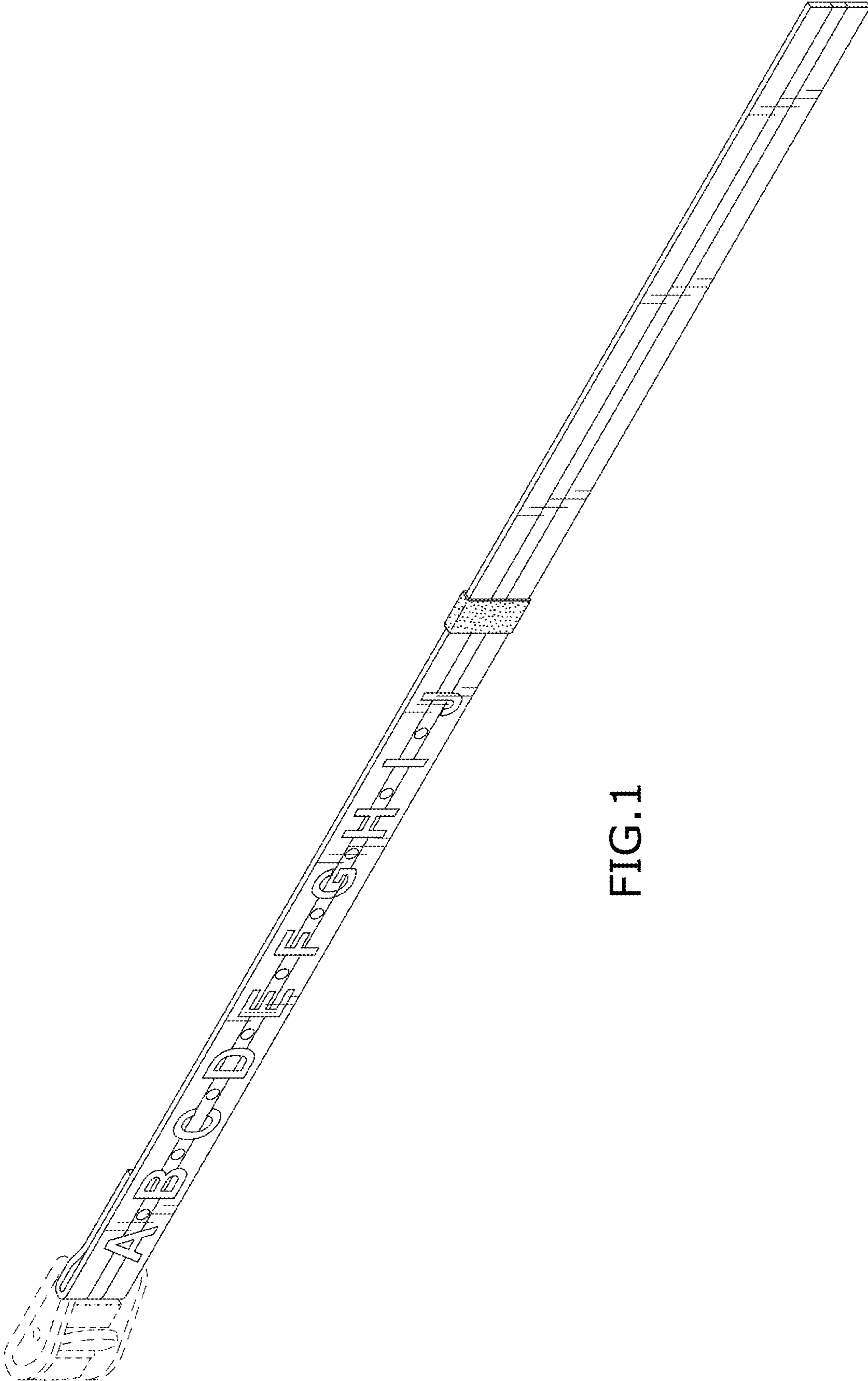


FIG.1

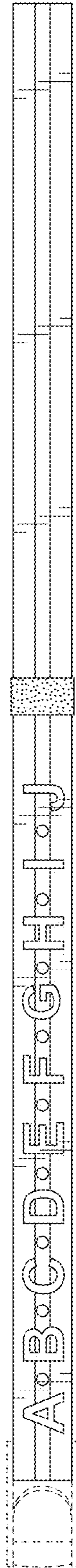


FIG. 2

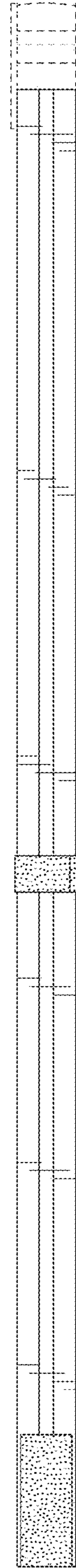


FIG. 3

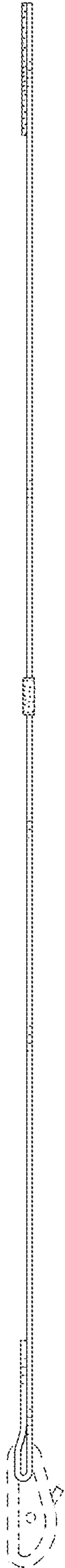


FIG. 4

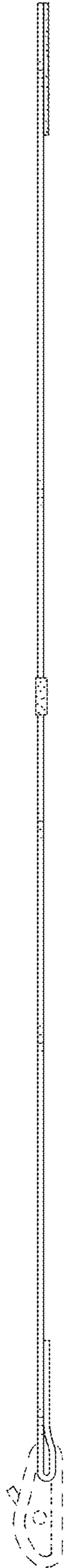


FIG. 5



FIG. 6

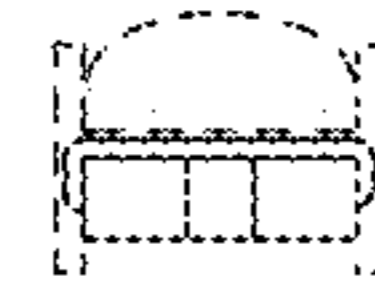


FIG. 7