

US00D909192S

(12) **United States Design Patent** (10) **Patent No.:** **US D909,192 S**
Koelling et al. (45) **Date of Patent:** **** Feb. 2, 2021**

(54) **CHANNEL LOCK FASTENER**

47/0025; A47B 96/06; A47F 5/10; A61B
17/064; A61B 17/068

See application file for complete search history.

(71) Applicant: **Lockdowel, Inc.**, Fremont, CA (US)

(72) Inventors: **Fred Koelling**, Foster City, CA (US);
Bryan Koelling, Carmel Valley, CA
(US); **Daniel Savage**, San Mateo, CA
(US); **Hoang Dang**, San Jose, CA (US)

(73) Assignee: **Lockdowell, Inc.**, Fremont, CA (US)

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

(21) Appl. No.: **29/734,148**

(22) Filed: **May 8, 2020**

Related U.S. Application Data

(60) Division of application No. 29/698,855, filed on Jul.
19, 2019, now Pat. No. Des. 885,171, which is a
continuation of application No. 16/216,901, filed on
Dec. 11, 2018, which is a continuation of application
No. 15/215,506, filed on Jul. 20, 2016, now Pat. No.
10,197,081.

(51) **LOC (13) Cl.** **08-08**

(52) **U.S. Cl.**
USPC **D8/382**; D8/387; D8/390

(58) **Field of Classification Search**
USPC D8/349, 354, 372, 382, 385, 387, 388,
D8/389, 390, 391; D6/328, 329, 703,
D6/572, 622, 702, 705
CPC F16B 12/20; F16B 12/22; F16B 12/24;
F16B 12/26; F16B 12/125; F16B 12/10;
F16B 2012/103; F16B 2012/106; A47B
47/04; A47B 47/025; A47B 47/042; A47B
2230/0077; A47B 2230/0081; A47B

(56) **References Cited**

U.S. PATENT DOCUMENTS

979,853 A 12/1910 Hartshorn
3,310,327 A 3/1967 Tremblay
3,674,068 A 7/1972 Lucci
3,752,553 A 8/1973 Bildahl et al.
3,894,377 A 7/1975 Welch
4,199,907 A 4/1980 Bains
4,258,464 A 3/1981 Ullman, Jr.

(Continued)

FOREIGN PATENT DOCUMENTS

CA 2280528 A1 4/2000
CN 103 216 505 A 7/2013

(Continued)

OTHER PUBLICATIONS

International Search Report, dated Nov. 28, 2016, for corresponding
International Application No. PCT/US2016/043205.

(Continued)

Primary Examiner — Sandra Snapp

Assistant Examiner — Ieisha N Price

(74) *Attorney, Agent, or Firm* — Kilpatrick Townsend &
Stocketon LLP

(57) **CLAIM**

The ornamental design for a channel lock fastener, as shown
and described.

DESCRIPTION

FIG. 1 is perspective view of a channel lock fastener
embodying our new design;
FIG. 2 is a front elevational view thereof, the rear elevational
view being a mirror image thereof;
FIG. 3 is a right side elevational view thereof, the left side
elevational view being a mirror image thereof;

(Continued)

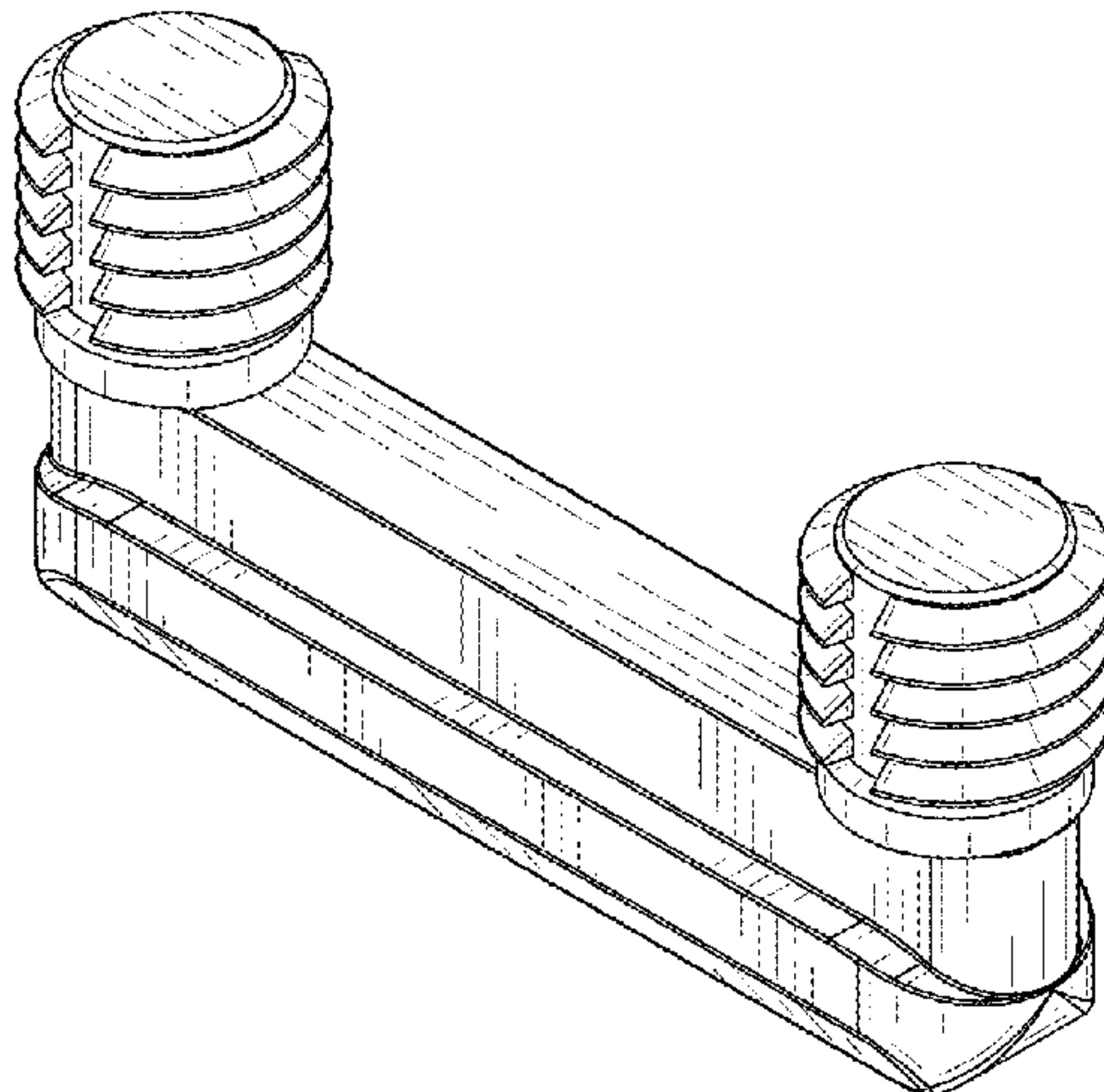


FIG. 4 is a top plan view thereof; and,
FIG. 5 is a bottom plan view thereof.

1 Claim, 2 Drawing Sheets

(56)

References Cited

U.S. PATENT DOCUMENTS

4,332,205	A	6/1982	Corl	
4,634,309	A *	1/1987	Dewey	F16B 12/24 403/231
D294,676	S *	3/1988	Egner	D8/382
4,922,678	A	5/1990	Scheiwiller	
4,932,105	A	6/1990	Muller	
4,942,709	A	7/1990	Waldron	
D309,985	S *	8/1990	Cox	D6/300
5,090,835	A	2/1992	Cox	
5,380,119	A	1/1995	Hadden	
D356,729	S *	3/1995	Kassouni	D8/387
5,430,983	A	7/1995	Taipalensuu	
D377,601	S	1/1997	Kozyrski	
5,611,637	A *	3/1997	Brustle	A47B 88/00 403/297
5,636,934	A	6/1997	Nakanishi et al.	
D384,271	S *	9/1997	Kozyrski	D6/300
5,934,486	A	8/1999	Jarvis et al.	
6,186,698	B1	2/2001	Knapp	
6,761,008	B2	7/2004	Chen et al.	
7,225,751	B2	6/2007	Rueckert	
8,104,989	B2	1/2012	Liu et al.	
8,549,796	B2	10/2013	Heather	
8,608,407	B1	12/2013	Vaughn et al.	
8,641,315	B2	2/2014	Liu et al.	
8,821,594	B2	9/2014	Burgazli et al.	
9,051,953	B2	6/2015	Imel et al.	
D857,487	S *	8/2019	Thompson	D8/390
2003/0026651	A1	2/2003	Ley	

2004/0067098	A1	4/2004	Sun	
2004/0223805	A1	11/2004	Benedetti et al.	
2005/0097851	A1	5/2005	Lubera et al.	
2006/0174579	A1	8/2006	Matson	
2008/0159806	A1	7/2008	Niswonger	
2010/0003077	A1	1/2010	Kelley	
2010/0079045	A1	4/2010	Yeh	
2010/0254757	A1	10/2010	Saul	
2011/0085853	A1	4/2011	Liu	
2011/0255915	A1	10/2011	Chen et al.	
2012/0301217	A1	11/2012	Liu et al.	
2012/0321378	A1	12/2012	Velez, Jr.	
2013/0239509	A1	9/2013	Wang	
2013/0287484	A1	10/2013	Phillips	
2014/0150368	A1	6/2014	MacDonald	
2014/0294498	A1	10/2014	Logan	
2015/0147113	A1	5/2015	Crabtree	
2015/0219137	A1 *	8/2015	Koelling	F16B 21/082 29/453
2015/0354612	A1	12/2015	Koch	
2017/0023041	A1 *	1/2017	Koelling	A47B 47/04
2017/0023043	A1 *	1/2017	Koelling	F16B 12/22
2018/0220798	A1 *	8/2018	Koelling	A47B 88/427
2019/0211859	A1 *	7/2019	Liu	F16B 12/125

FOREIGN PATENT DOCUMENTS

DE	295 11 055	2/1996
DE	10 2011 122 697	6/2013
JP	S05126547 U	10/1975
WO	WO 2015/158622 A1	10/2015
WO	WO 2016/133455 A1	8/2016

OTHER PUBLICATIONS

Written Opinion of the International Searching Authority, dated Nov. 28, 2016, for corresponding International Application No. PCT/US2016/043205.

* cited by examiner

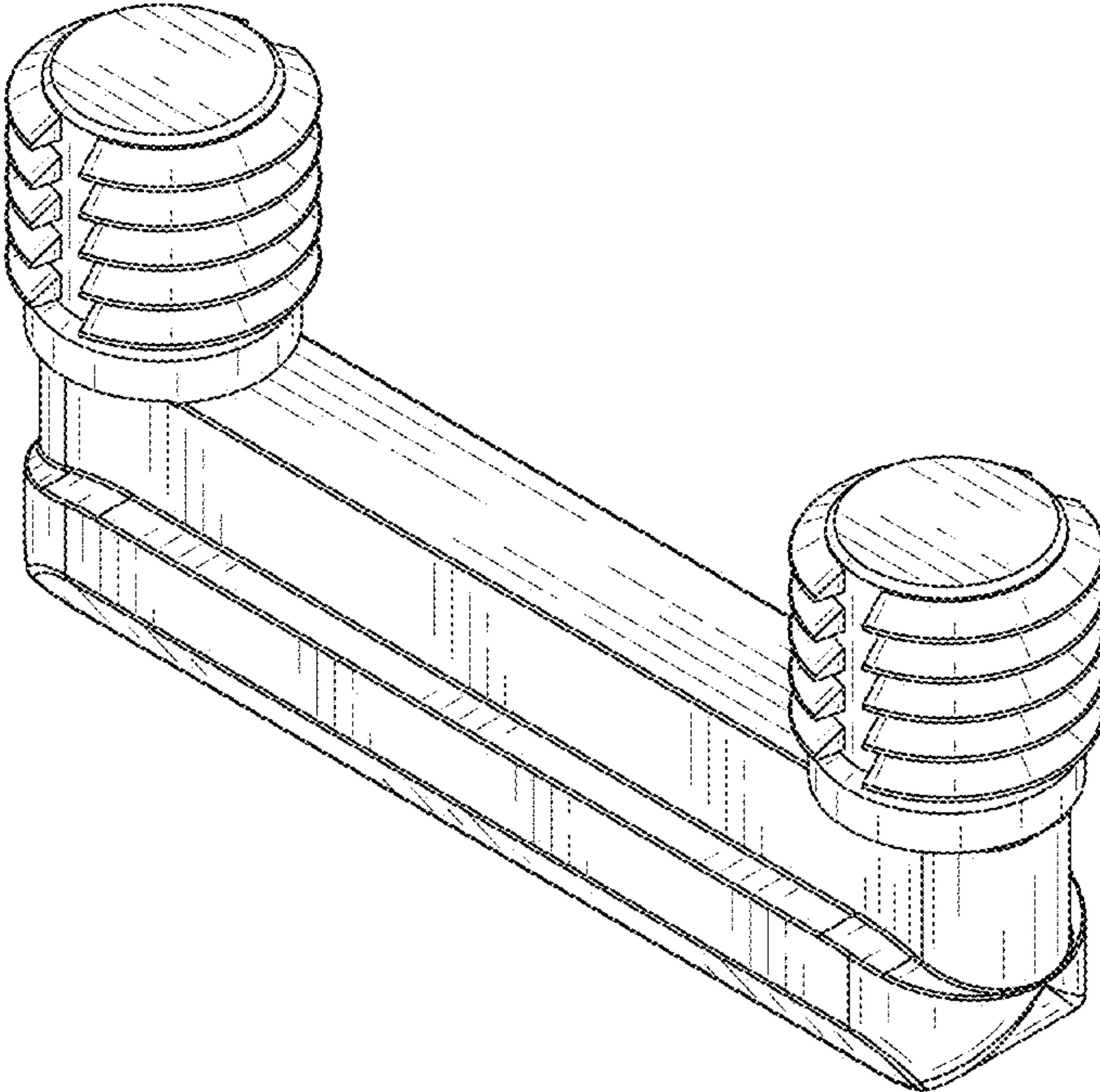


FIG. 1

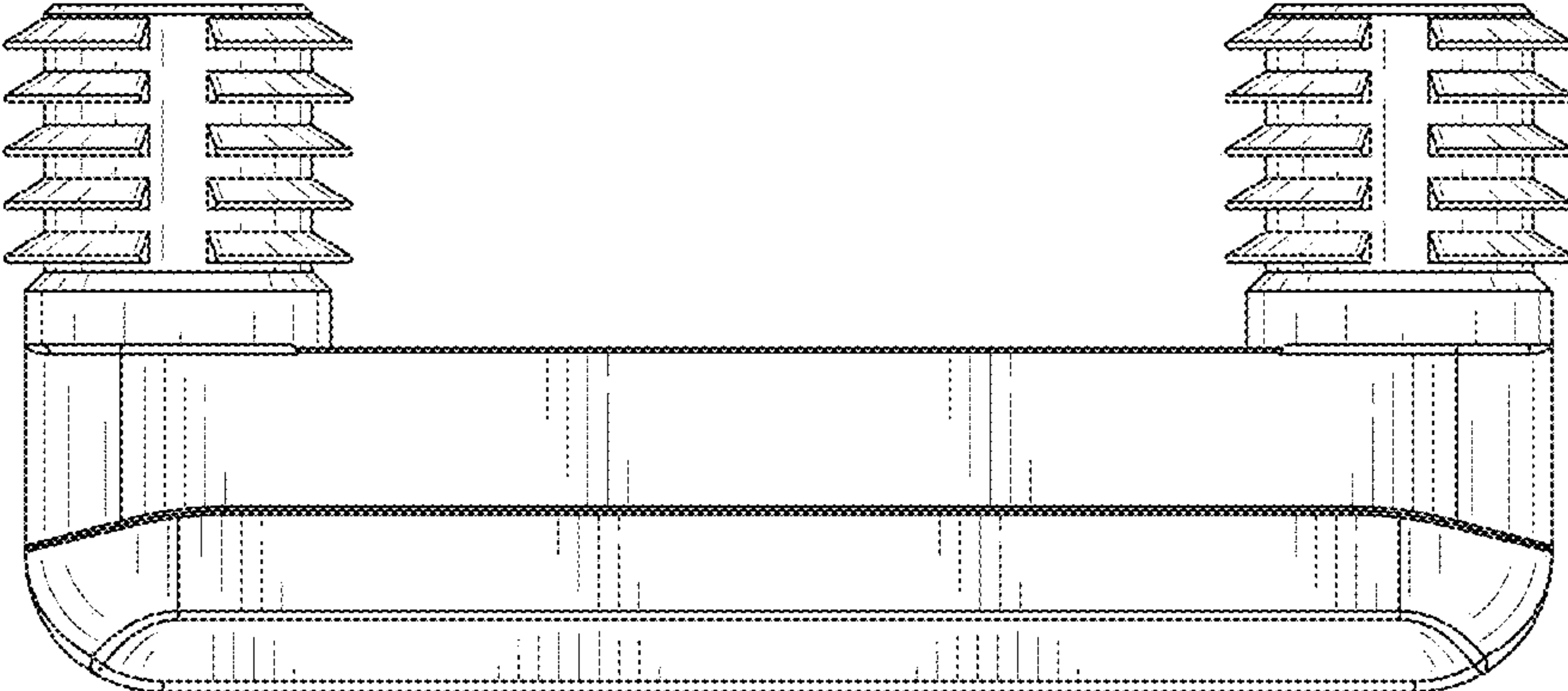


FIG. 2

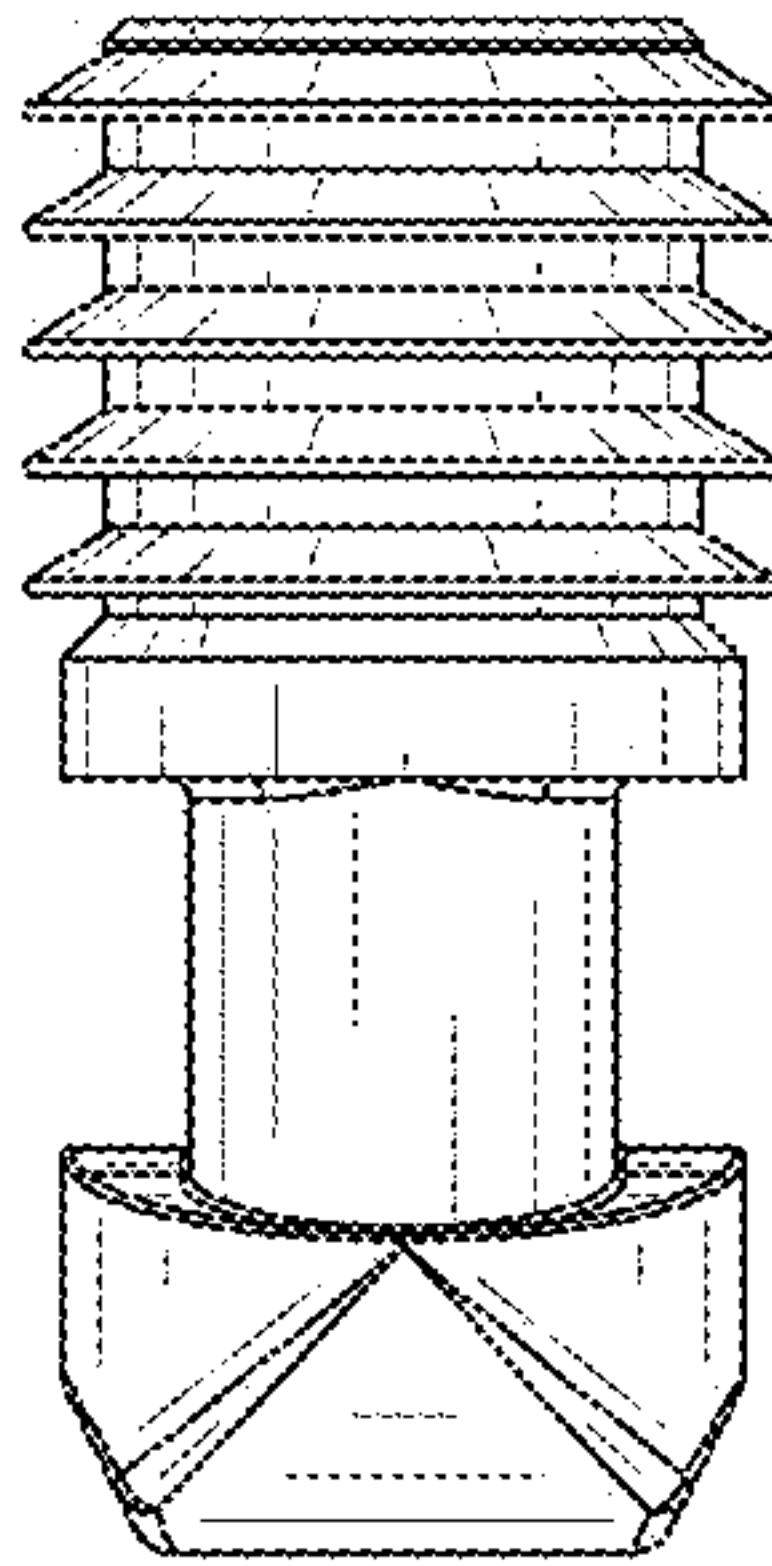


FIG. 3

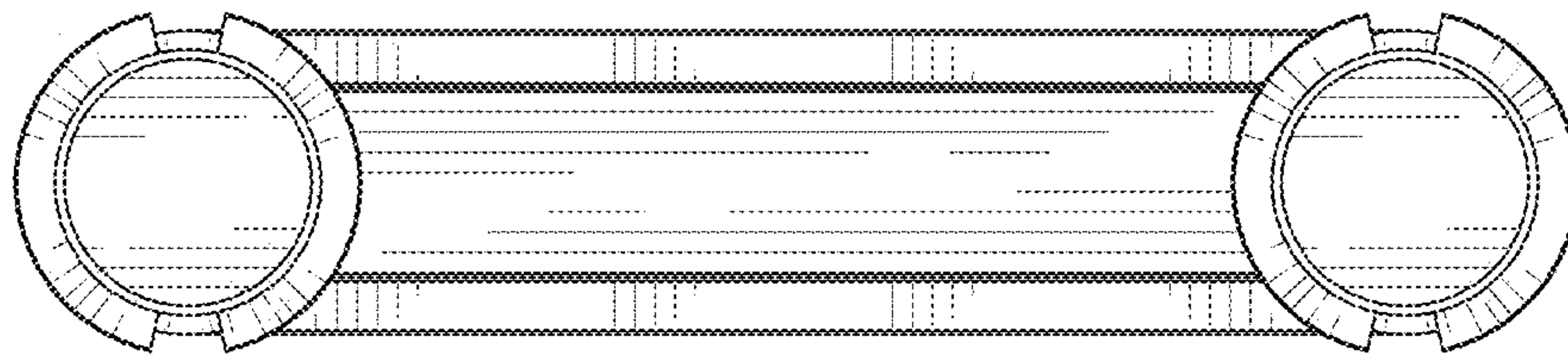


FIG. 4

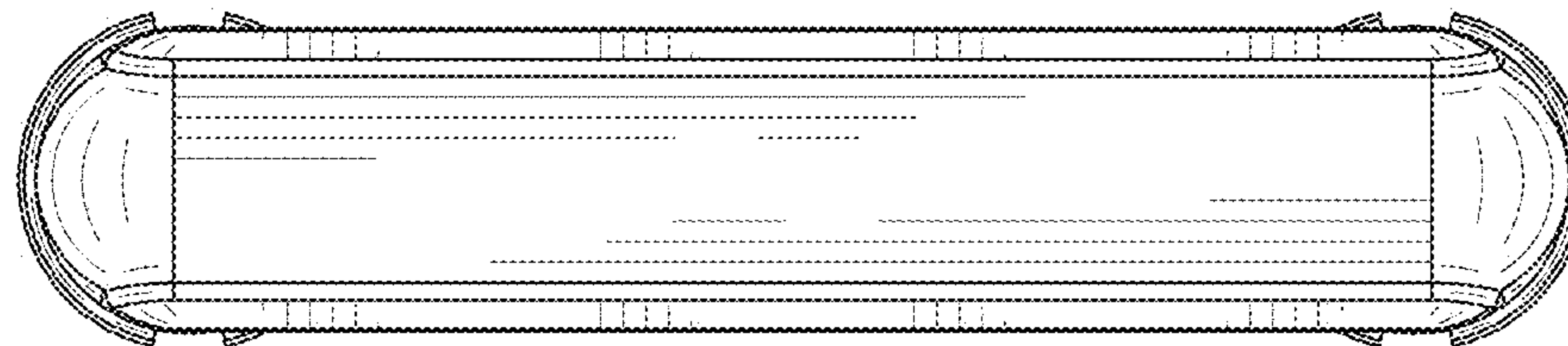


FIG. 5