



US00D886172S

(12) **United States Design Patent** (10) **Patent No.:** **US D886,172 S**
Dill et al. (45) **Date of Patent:** **** Jun. 2, 2020**

(54) **ANCHOR ASSEMBLY DRILL BIT**

(71) Applicant: **Illinois Tool Works Inc.**, Glenview, IL (US)

(72) Inventors: **Michael Dill**, Elk Grove Village, IL (US); **Miguel E. Mendez Jaquez**, Palatine, IL (US)

(73) Assignee: **Illinois Tool Works Inc.**, Glenview, IL (US)

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

(21) Appl. No.: **29/676,229**

(22) Filed: **Jan. 9, 2019**

(51) **LOC (12) Cl.** **15-03**

(52) **U.S. Cl.**
USPC **D15/139**

(58) **Field of Classification Search**
USPC D15/21, 138, 139; D8/1, 3, 8, 98
CPC B23K 26/032; B23K 11/0026; B23K 11/062; B23K 11/066; B23K 11/0873; B23K 11/0876; B23K 11/115; B23K 11/24; B23K 11/248; B23K 11/252; B23K

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,034,494 A 3/1936 Stoll
2,914,983 A 12/1959 Kopf et al.

(Continued)

FOREIGN PATENT DOCUMENTS

AU 2005204302 4/2006
DE 37 39 371 6/1989

(Continued)

OTHER PUBLICATIONS

International Search Report and Written Opinion from International Application No. PCT/US2019/013035, dated Mar. 22, 2019 (19 pages).

Primary Examiner — Khawaja Anwar

(74) Attorney, Agent, or Firm — Neal, Gerber & Eisenberg LLP

(57) **CLAIM**

An ornamental design for an anchor assembly drill bit, as shown and described.

DESCRIPTION

This application is related to the following commonly owned co-pending patent applications: U.S. application Ser. No. 16/243,541, entitled “Self-Drilling Anchor Assembly,”; U.S. application Ser. No. 29/676,208, entitled “Anchor Assembly Drill Bit,”; U.S. application Ser. No. 29/676,214, entitled “Anchor Assembly Drill Bit,”; U.S. application Ser. No. 29/676,217, entitled “Anchor Assembly Drill Bit,”; U.S. application Ser. No. 29/676,225, entitled “Anchor Assembly Drill Bit,”; U.S. application Ser. No. 29/676,241, entitled “Anchor Assembly Sleeve,”; U.S. application Ser. No. 29/676,243, entitled “Anchor Assembly Sleeve,”; and U.S. application Ser. No. 29/676,246, entitled “Anchor Assembly Sleeve,”.

FIG. 1 is a top side perspective view of an anchor assembly drill bit of our new design.

FIG. 2 is a top view of the anchor assembly drill bit of FIG. 1, the bottom view being a mirror image thereof.

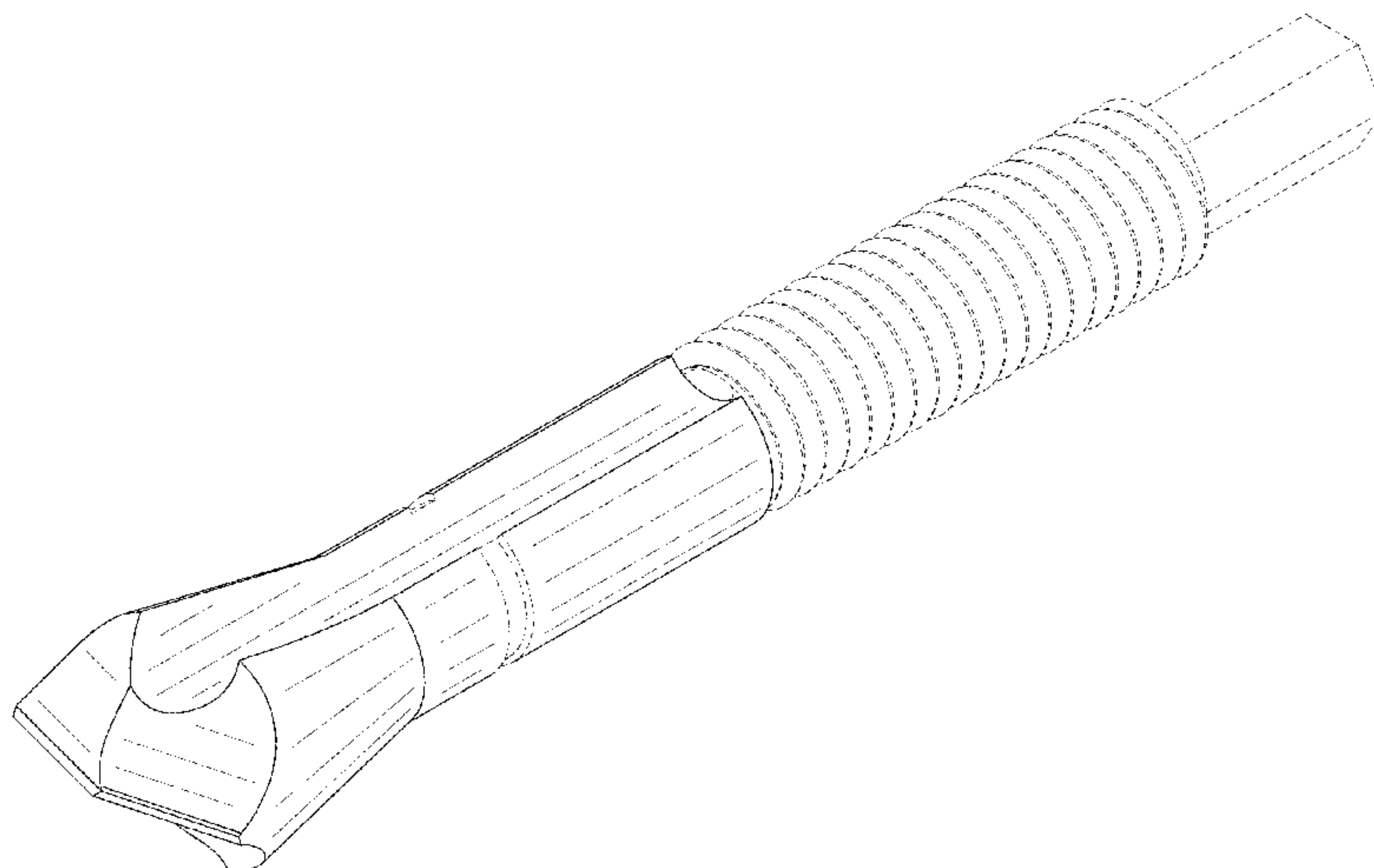
FIG. 3 is a first side view of the anchor assembly drill bit of FIG. 1, the second opposite side view being a mirror image thereof.

FIG. 4 is a front end view of the anchor assembly drill bit of FIG. 1; and,

FIG. 5 is a rear end view of the anchor assembly drill bit of FIG. 1.

The broken lines shown in the drawings represent unclaimed portions of the drill bit and form no part of the claimed design.

1 Claim, 3 Drawing Sheets



(58) **Field of Classification Search**

CPC 11/257; B23K 11/3018; B23K 11/3054;
B23K 11/36; B23K 15/0013; B23K
15/02; B23K 15/08; B23K 15/085; B23K
1/0014; B23K 1/0018; B23K 1/0056;
B23K 20/12; B23K 20/1215; B23K
2201/001; B23K 2201/04; B23K
2201/125; B23K 2203/04; B23K 2203/10;
B23K 2203/16; B23K 2203/26; B23K
2203/42; B23K 2203/52; B23K 26/03;
B23K 26/034; B23K 26/044; B23K
26/0619; B23K 26/123; B23K 26/1429;
B23K 26/20; B23K 26/28; B23K 26/362;
B23K 26/38; B23K 26/382; B23K 31/02;
B23K 31/12; B23K 35/0222; B23K
35/0244; B23K 35/025; B23K 35/0261;
B23K 35/286; B23K 35/3006; B23K
35/3013; B23K 35/302; B23K 35/3033;
B23K 35/3046; B23K 35/327; B23K
35/36; B23K 35/3603; B23K 35/3605;
B23K 35/3613; B23K 35/365; B23K
37/04; B23K 9/02; B23K 9/073; B23K
9/091; B23K 9/092; B23K 9/095; B23K
9/0956; B23K 9/1006

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,316,796	A	5/1967	Young
4,026,186	A	5/1977	Williams, Jr. et al.
4,173,918	A	11/1979	Piersall
4,883,395	A	11/1989	Klaric
5,183,357	A	2/1993	Palm
5,246,323	A	9/1993	Vernet et al.
5,816,759	A	10/1998	Ernst et al.
5,820,321	A	10/1998	Gruber
6,065,918	A	5/2000	Adams
6,164,884	A	12/2000	Mayr
6,270,303	B1	8/2001	Gauthier et al.
6,325,580	B1	12/2001	Diamond
6,712,544	B2	3/2004	Krüger et al.
6,827,535	B2	12/2004	Fuchs et al.
6,829,871	B1	12/2004	McSherry et al.
6,935,821	B2	8/2005	Bodin et al.
6,942,439	B2	9/2005	Rouger
7,261,505	B2	8/2007	Ernst et al.
7,357,613	B2	4/2008	Houck et al.
7,713,010	B2	5/2010	Cheng
7,744,320	B2	6/2010	Kobetsky et al.
7,896,594	B2	3/2011	Nardi et al.
7,901,170	B2	3/2011	Usui
8,444,355	B2	5/2013	Gaudron et al.
8,491,244	B2	7/2013	Kobetsky et al.

8,678,730	B2	3/2014	Gaudron et al.
9,255,594	B2	2/2016	Cabrit et al.
9,512,868	B2	12/2016	Stempniewski et al.
9,541,116	B2	1/2017	Cabaj et al.
9,562,558	B2	2/2017	Anasis et al.
9,581,185	B2	2/2017	Anasis et al.
9,856,897	B2	1/2018	Schaeffer
9,970,465	B2	5/2018	Gstach et al.
9,970,467	B2	5/2018	Dijkhuis et al.
D823,089	S *	7/2018	Shikama D8/70
10,018,213	B2	7/2018	Gstach et al.
D826,299	S *	8/2018	Bailleres D15/139
D833,490	S *	11/2018	Defougeres D15/139
10,190,617	B2	1/2019	Anasis et al.
D847,885	S *	5/2019	Okida D15/140
D857,772	S *	8/2019	van den Boogaart D15/139
D858,595	S *	9/2019	Sharivker B23C 5/10
			D15/139
D860,273	S *	9/2019	Sharivker D15/139
2003/0026673	A1	2/2003	Filipp
2004/0096288	A1	5/2004	Haug et al.
2004/0223832	A1	11/2004	Aasgaard
2006/0133908	A1	6/2006	Kunz et al.
2006/0165505	A1	7/2006	Aasgaard
2007/0224015	A1	9/2007	Ayrle
2010/0111639	A1	5/2010	Gaudron
2011/0081217	A1	4/2011	Wissling et al.
2012/0128444	A1	5/2012	Podesser et al.
2012/0201619	A1 *	8/2012	Olsson B23B 51/02
			408/230
2012/0263553	A1	10/2012	Greenfield
2012/0282044	A1 *	11/2012	Volokh B23C 5/10
			407/53
2013/0317508	A1 *	11/2013	Ellis A61B 17/1615
			606/80
2014/0003873	A1 *	1/2014	Han B23C 5/10
			407/54
2014/0010613	A1	1/2014	Gaudron et al.
2014/0072384	A1	3/2014	Wissling
2014/0193220	A1 *	7/2014	Tamura B23B 51/02
			408/230
2015/0056029	A1 *	2/2015	Shimamoto B23B 27/045
			407/115
2015/0063935	A1 *	3/2015	Lau B23B 51/00
			408/213
2016/0303664	A1 *	10/2016	Azegami B23C 5/1009
2017/0167517	A1	6/2017	Wissling

FOREIGN PATENT DOCUMENTS

EP	1 072 802	1/2001
EP	2 567 107	3/2013
GB	2 254 392	10/1992
JP	2000 230520	8/2000
WO	WO 97/49929	12/1997
WO	WO 2007/104094	9/2007
WO	WO 2008/041836	4/2008

* cited by examiner

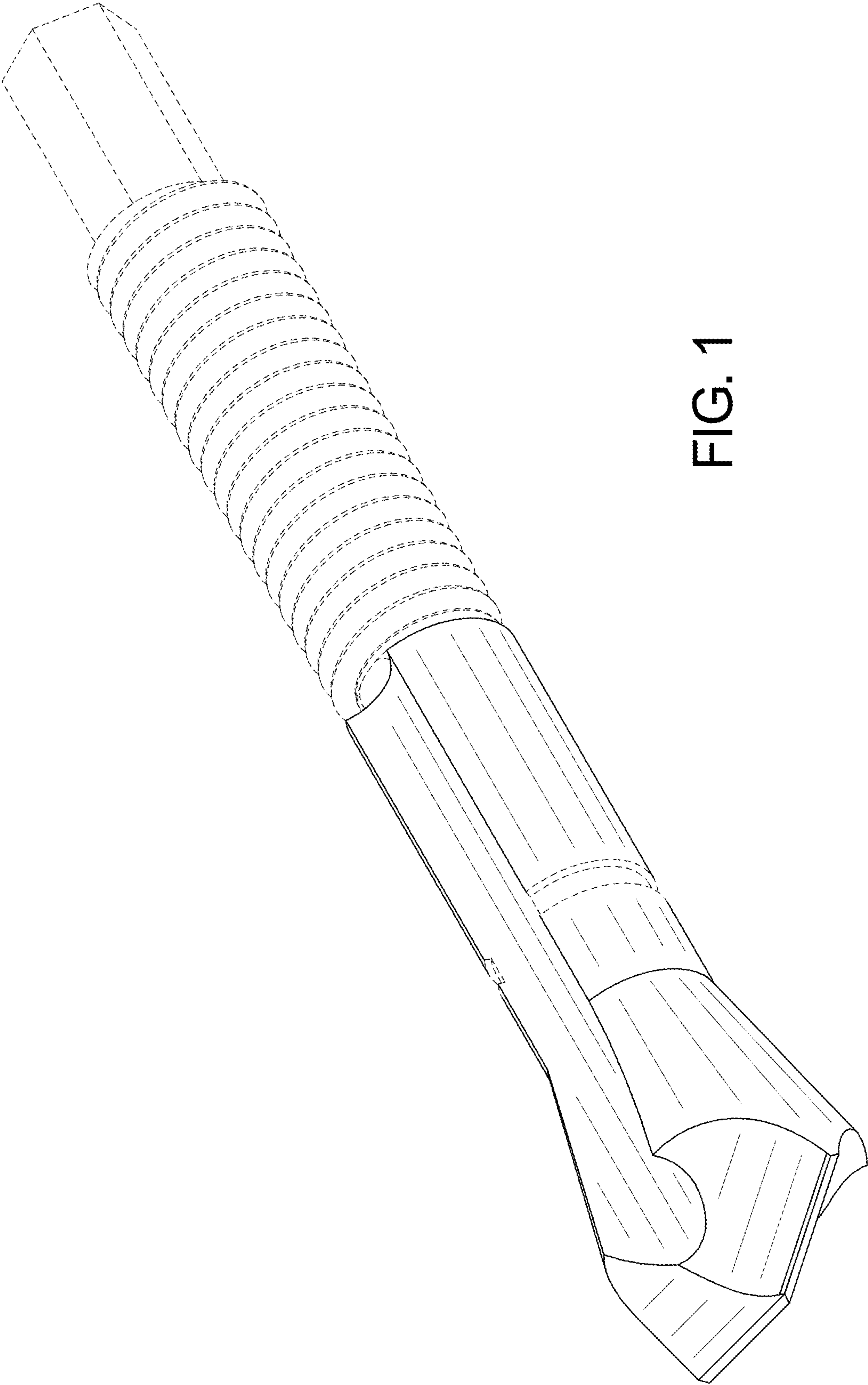


FIG. 1

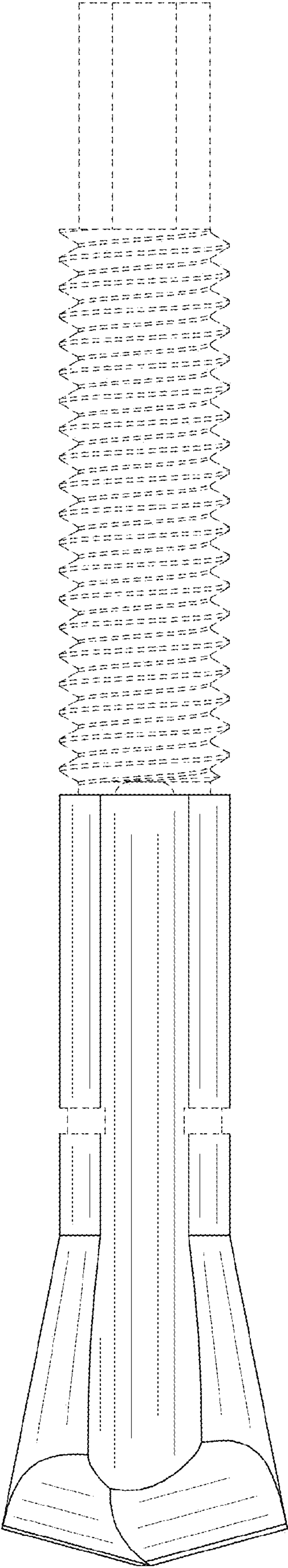


FIG. 2

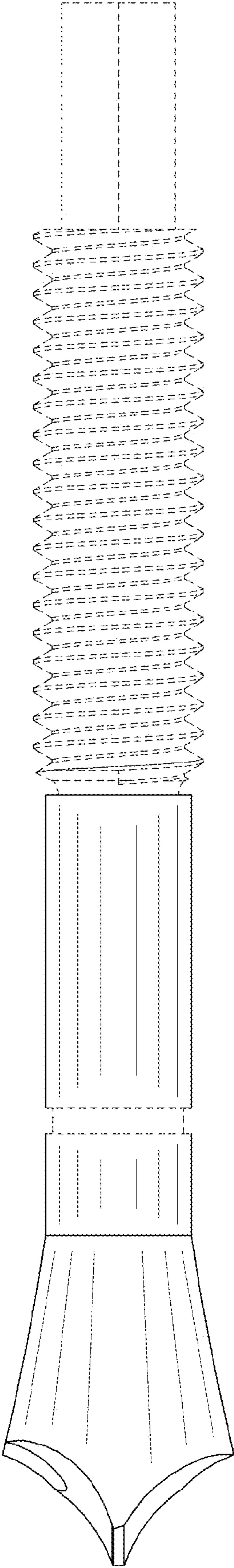


FIG. 3

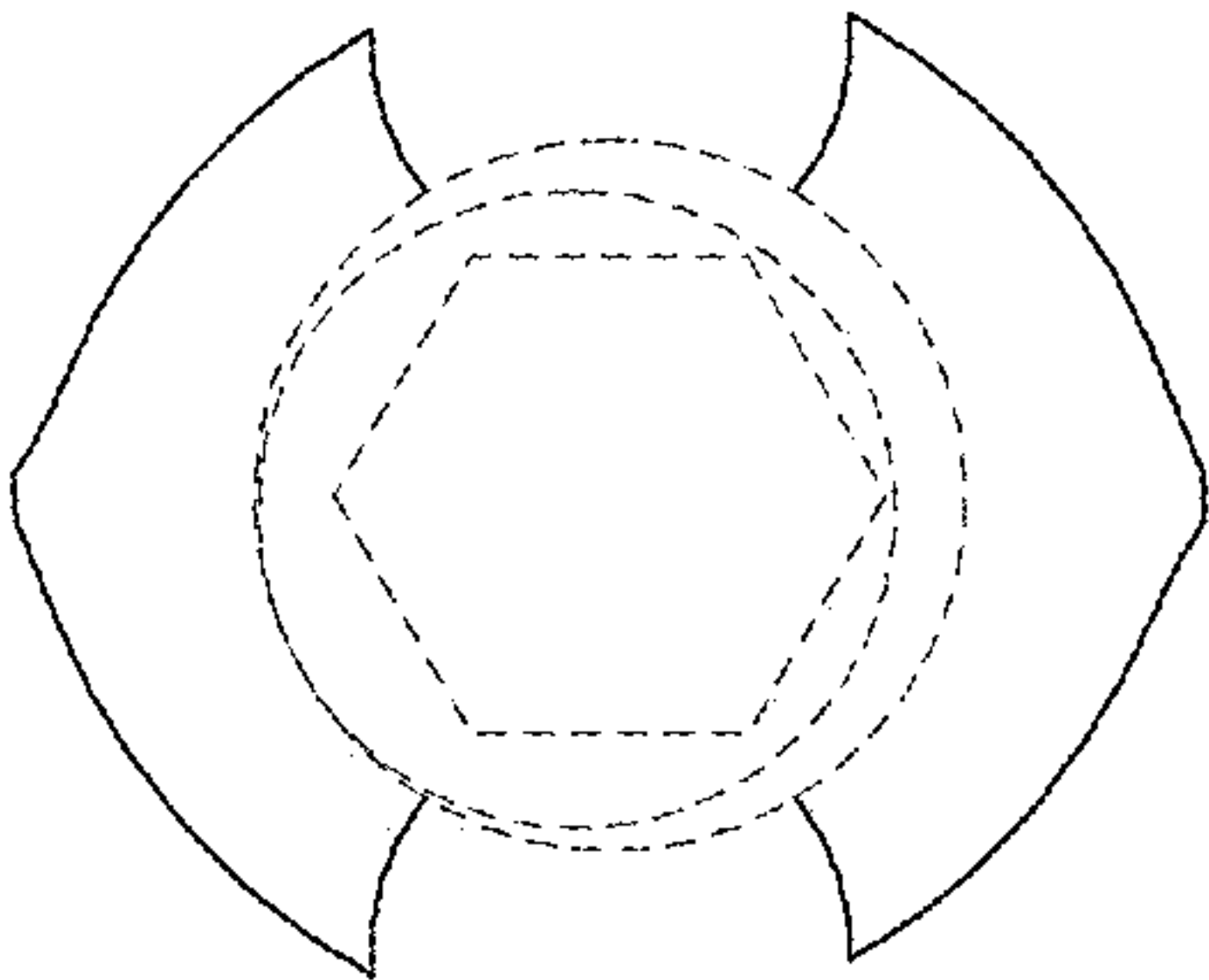


FIG. 5

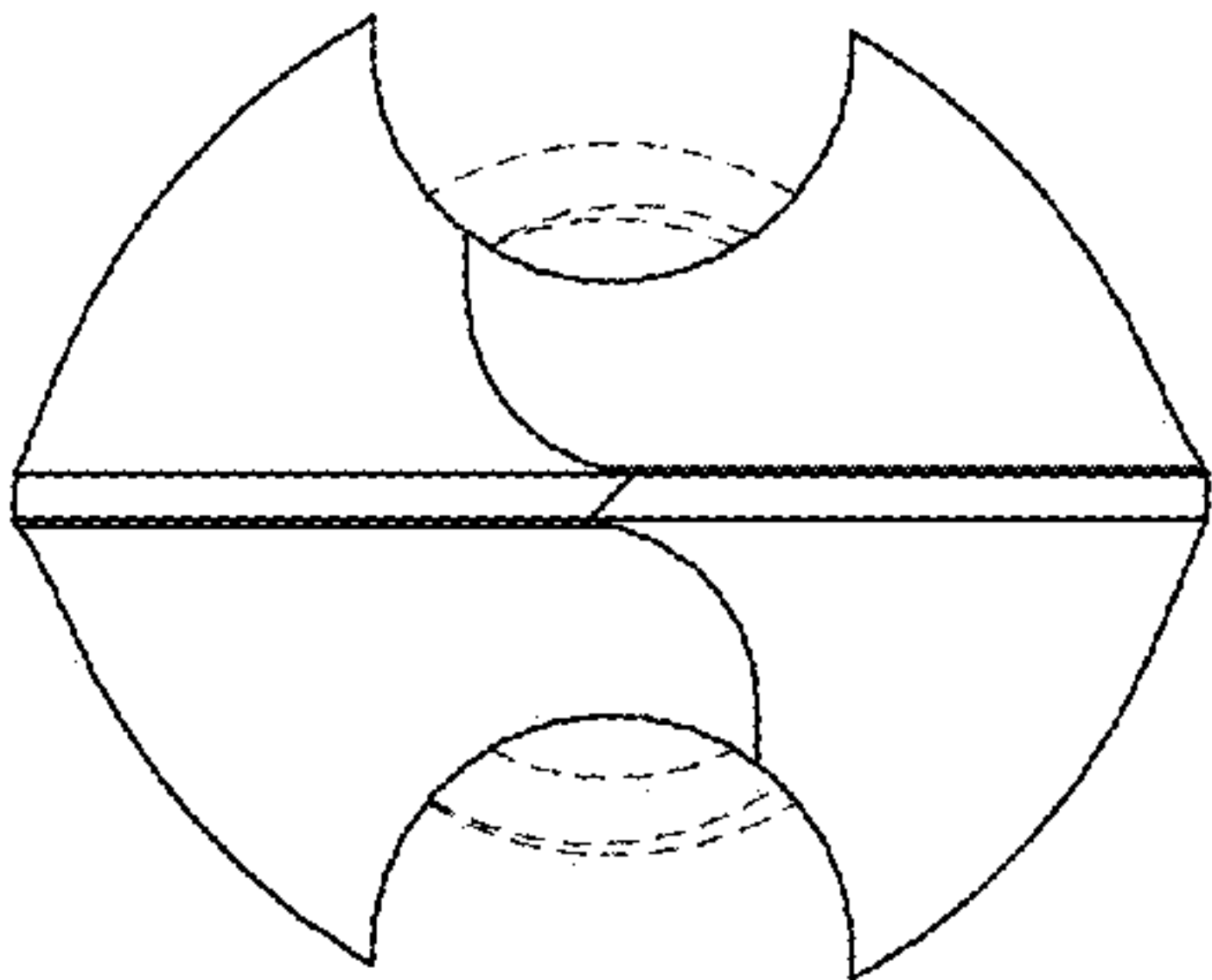


FIG. 4