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

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(54) **CORE BARREL LATCH BODY WITH AXIAL GROOVES**

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(73) Assignee: **Longyear TM, Inc.**, South Jordan, UT (US)

(**) Term: **14 Years**

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Related U.S. Application Data

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(51) **LOC (9) Cl.** **15-03**

(52) **U.S. Cl.** **D15/21**

(58) **Field of Classification Search** D15/21, D15/28; 175/403, 58, 236, 243, 246, 317, 175/44, 255, 234, 230, 19, 249, 285, 258, 175/72, 251, 247, 244; 173/137; 166/214, 166/237, 285, 177.4, 98

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

2,510,865	A *	6/1950	Cooper	.....	175/403
2,829,868	A *	4/1958	Pickard et al.	.....	175/246
3,092,191	A *	6/1963	Mori et al.	.....	175/226
3,103,981	A *	9/1963	Harper	.....	175/236
3,115,188	A *	12/1963	Cochran et al.	.....	166/332.4
3,126,064	A	3/1964	Miller		
3,225,845	A *	12/1965	Koontz et al.	.....	175/236
3,346,059	A *	10/1967	Svendsen	.....	175/246
3,363,705	A *	1/1968	Jensen	.....	175/226
3,461,981	A *	8/1969	Linn et al.	.....	175/246
3,494,418	A *	2/1970	Young	.....	166/123

3,543,870	A *	12/1970	Martinsen	.....	175/60
3,977,482	A *	8/1976	Reed et al.	.....	175/246
4,664,204	A	5/1987	Nenkov et al.		
4,800,969	A *	1/1989	Thompson	.....	175/246
4,823,872	A *	4/1989	Hopmann	.....	166/217
4,832,138	A	5/1989	Hallez		

(Continued)

FOREIGN PATENT DOCUMENTS

EP 1757770 A1 2/2007

(Continued)

OTHER PUBLICATIONS

Office Action dated Jan. 6, 2011 from U.S. Appl. No. 12/427,586, filed Apr. 21, 2009 (17 Pages).

(Continued)

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(57) **CLAIM**

The ornamental design for a core barrel latch body with axial grooves, as shown and described.

DESCRIPTION

FIG. 1 is a front elevational view of a core barrel latch body with axial grooves showing my new design as used in a core barrel assembly;

FIG. 2 is an enlarged exploded perspective view thereof;

FIG. 3 is an enlarged assembled front elevational view thereof;

FIG. 4 is a right elevational view thereof;

FIG. 5 is a back elevational view thereof;

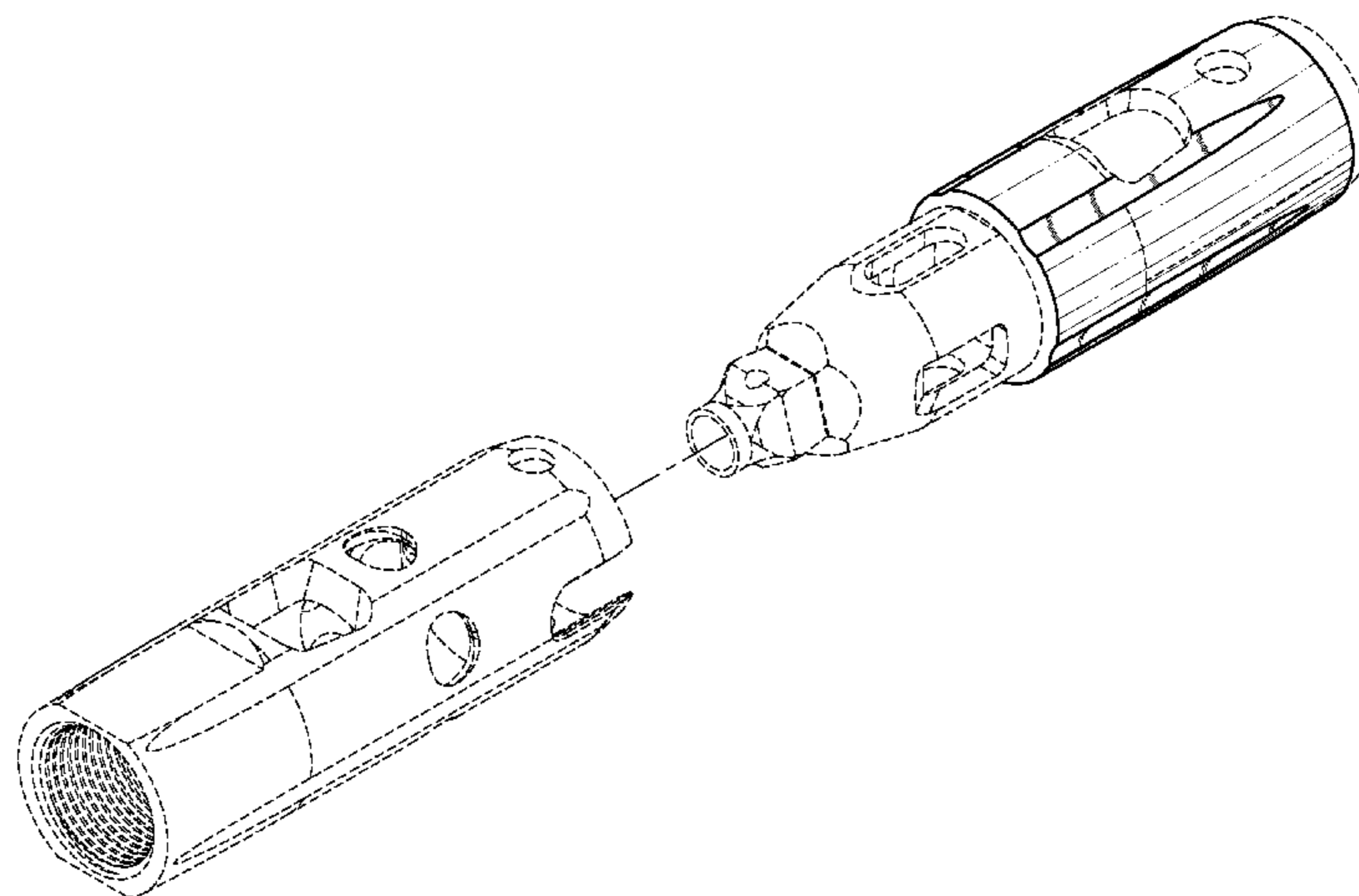
FIG. 6 is a left elevational view thereof;

FIG. 7 is a top plan view thereof; and,

FIG. 8 is a bottom plan view thereof.

The broken lines showing environment in the drawings are included for illustrative purposes only and form no part of the claimed design.

1 Claim, 5 Drawing Sheets



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U.S. PATENT DOCUMENTS

4,834,198 A 5/1989 Thompson
4,930,587 A * 6/1990 Young et al. 175/251
5,020,612 A 6/1991 Williams
5,267,620 A 12/1993 Lee
5,311,950 A 5/1994 Spektor
5,325,930 A 7/1994 Harrison
5,662,182 A * 9/1997 McLeod et al. 175/258
5,785,134 A * 7/1998 McLeod et al. 175/258
5,799,742 A 9/1998 Soinski
5,934,393 A 8/1999 Marshall
5,992,543 A * 11/1999 Soinski et al. 175/58
D420,013 S * 2/2000 Warren et al. D15/21
6,019,181 A * 2/2000 Soinski et al. 175/58
6,029,758 A 2/2000 Novacovicci et al.
6,039,129 A 3/2000 McLeod
6,059,053 A * 5/2000 McLeod 175/258
6,089,335 A 7/2000 Able
6,371,205 B1 4/2002 Langan et al.
6,425,449 B1 7/2002 Marshall
6,564,885 B2 5/2003 Attwater
6,708,784 B1 3/2004 Borg
7,296,638 B2 11/2007 Beach
7,314,101 B2 1/2008 Beach
7,730,965 B2 * 6/2010 Jordan et al. 175/5
D622,293 S * 8/2010 Drenth et al. D15/21
D622,294 S * 8/2010 Drenth et al. D15/21
D622,741 S * 8/2010 Drenth et al. D15/21
D624,564 S * 9/2010 Drenth et al. D15/21
7,841,400 B2 * 11/2010 Wells et al. 166/242.6
D632,309 S * 2/2011 Coyle, Jr. D15/21

7,900,716 B2 * 3/2011 Ibrahim et al. 175/55
2004/0216927 A1 11/2004 Beach
2005/0034894 A1 2/2005 Beach et al.
2005/0241825 A1 11/2005 Burris, II et al.
2009/0032256 A1 * 2/2009 Sun et al. 166/285
2009/0173542 A1 * 7/2009 Ibrahim et al. 175/55
2009/0283328 A1 * 11/2009 Drivdahl et al. 175/58

FOREIGN PATENT DOCUMENTS

GB 992246 5/1965
WO 03038232 A1 5/2003
WO 2009108113 A1 9/2009
WO 2010096860 A1 9/2010

OTHER PUBLICATIONS

Notice of Allowance dated Feb. 25, 2011 from U.S. Appl. No. 12/427,586, filed Apr. 21, 2009 (6 Pages).
International Search Report and Written Opinion dated Oct. 28, 2009 as issued in International Application No. PCT/US2009/041435 filed Apr. 22, 2009.
Notice of Allowance dated Apr. 6, 2011 from U.S. Appl. No. 29/383,340, filed Jan. 14, 2011 (10 pages).
Notice of Allowance dated Apr. 6, 2011 from U.S. Appl. No. 29/383,561, filed Jan. 19, 2011 (10 pages).
Notice of Allowance dated May 26, 2011 from U.S. Appl. No. 29/383,623, filed Jan. 20, 2011 (10 pages).
Issue Notification dated Jun. 8, 2011 from U.S. Appl. No. 12/427,586, filed Apr. 21, 2009 (1 page).

* cited by examiner

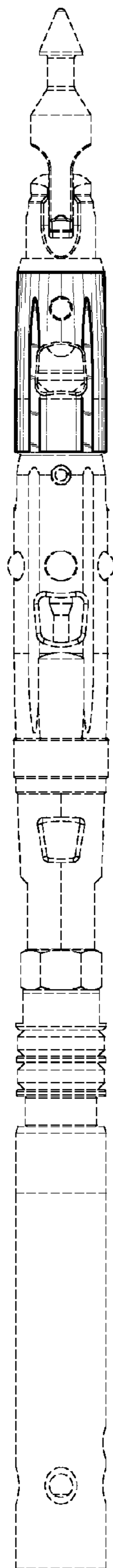


Fig. 1

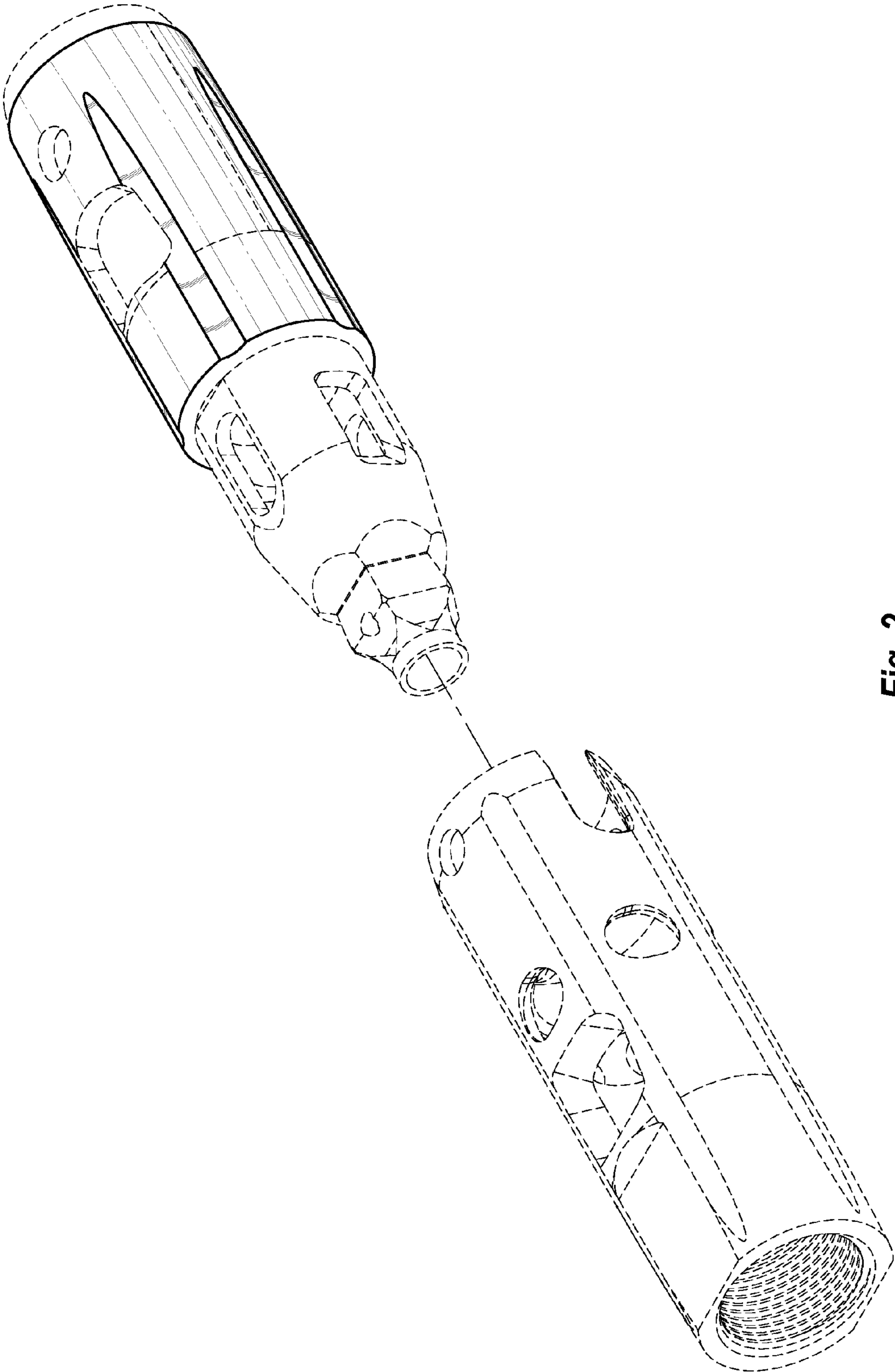


Fig. 2

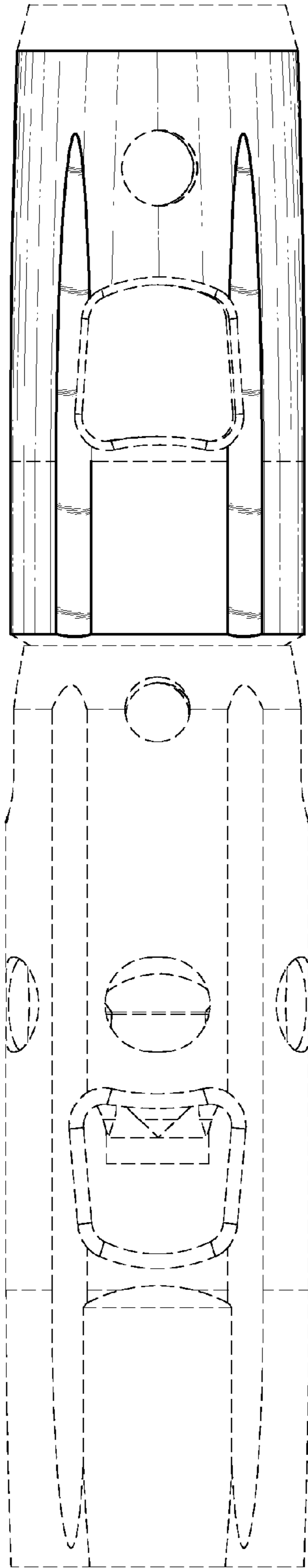


Fig. 3

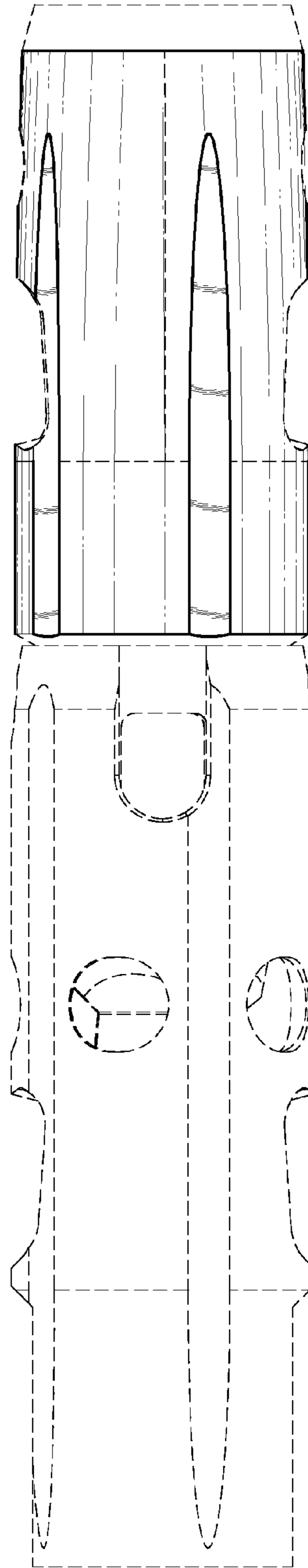


Fig. 4

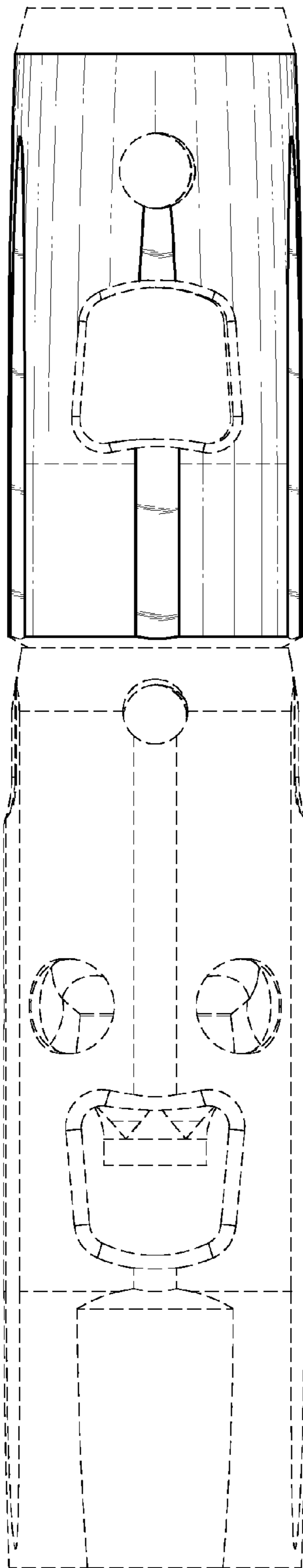


Fig. 5

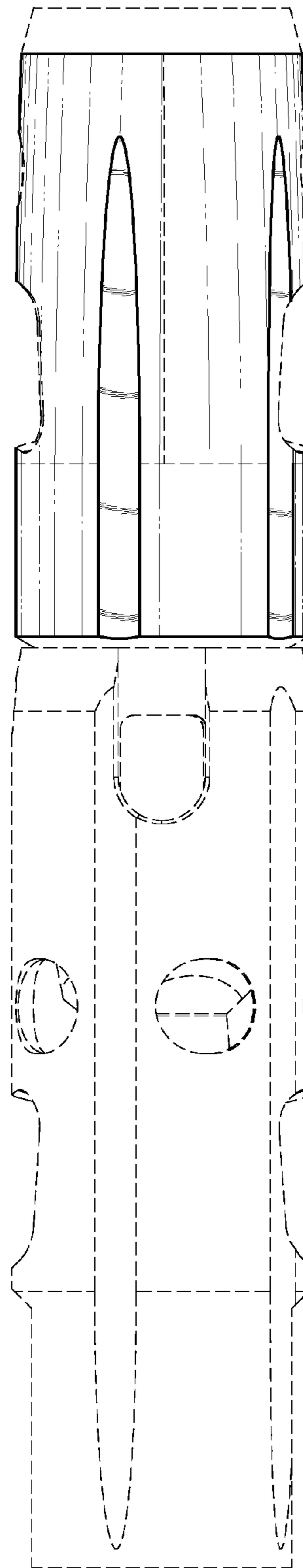


Fig. 6

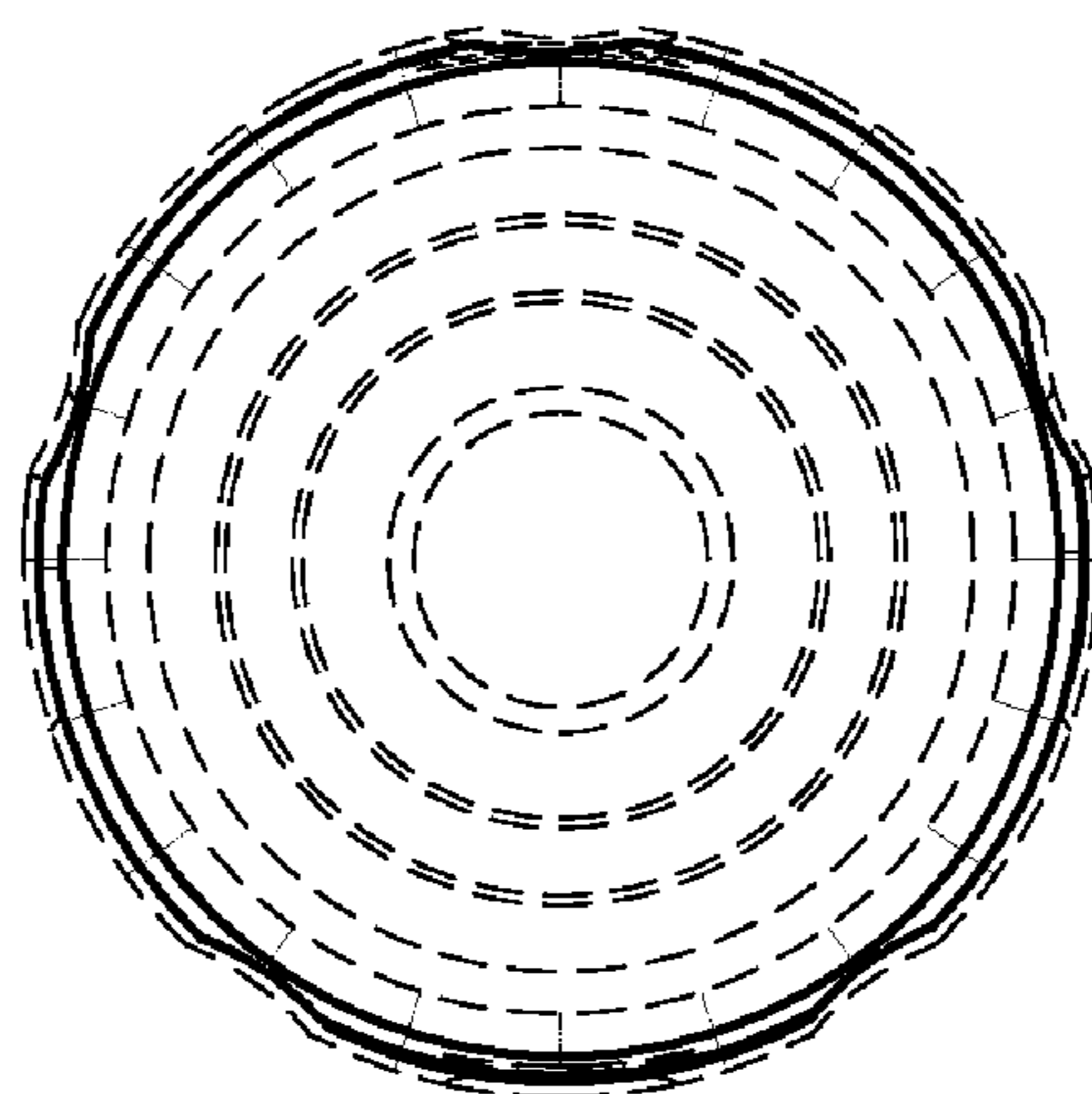


Fig. 7

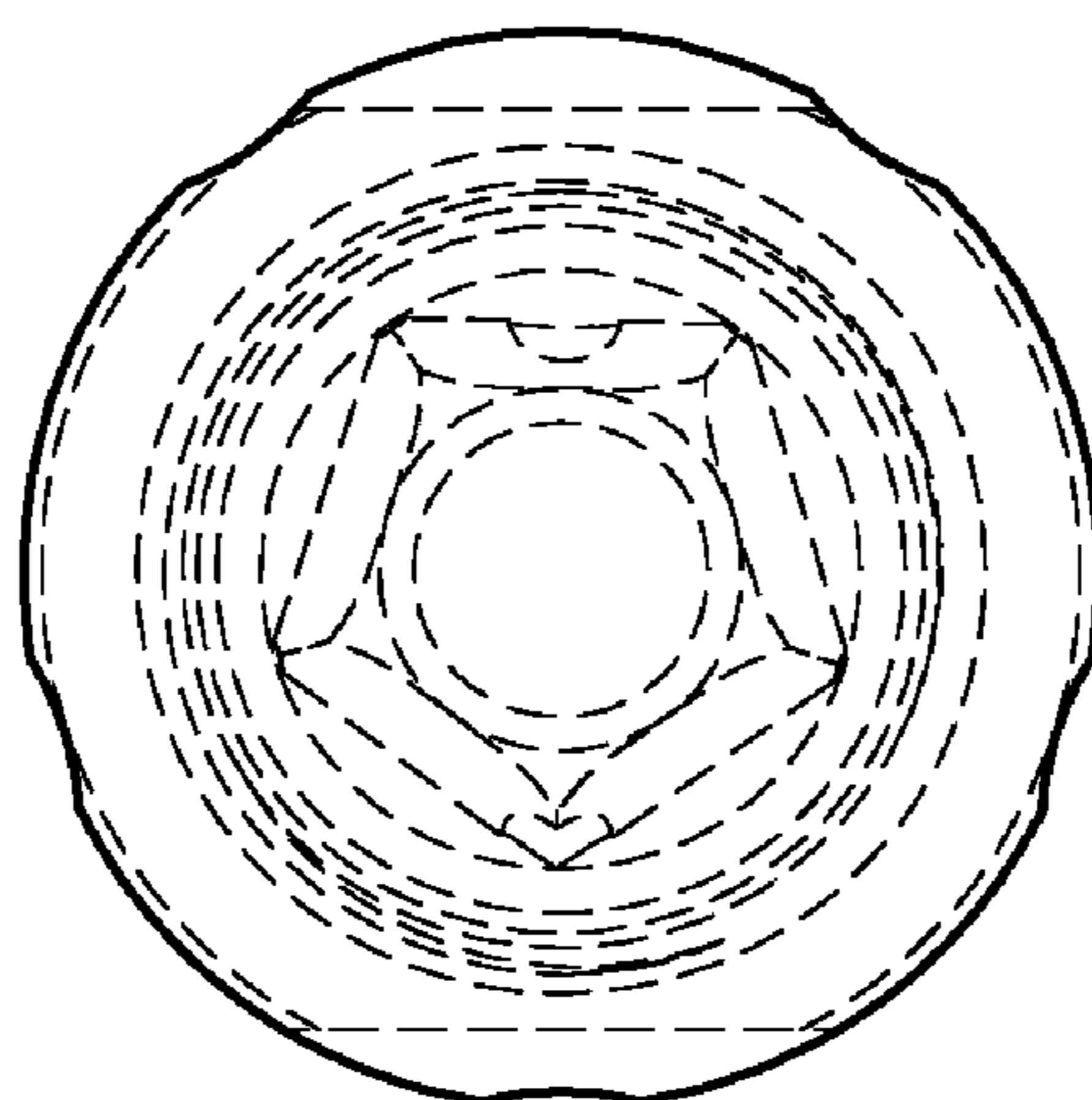


Fig. 8