



US00D787004S

(12) **United States Design Patent** (10) **Patent No.:** **US D787,004 S**
Spector et al. (45) **Date of Patent:** **** May 16, 2017**

(54) **HANDGUARD ASSEMBLY**
(71) Applicant: **Radical Firearms, LLC**, Stafford, TX (US)
(72) Inventors: **David Morris Spector**, Missouri City, TX (US); **Philip Brent Middleton**, Sugar Land, TX (US)
(73) Assignee: **Radical Firearms, LLC**, Stafford, TX (US)
(**) Term: **15 Years**
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(52) **U.S. Cl.**
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CPC F41C 23/10; F41C 23/14; F41C 23/16;
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See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
D590,473 S * 4/2009 Fitzpatrick D22/103
D604,793 S * 11/2009 Fitzpatrick D22/108
D607,958 S 1/2010 Swan
D613,811 S * 4/2010 Swan D22/108
D616,520 S 5/2010 Starnes
D616,521 S * 5/2010 Starnes D22/108
D639,376 S 6/2011 Ding
D641,450 S * 7/2011 Ding D22/108
8,607,490 B1 * 12/2013 Zinsner F41C 23/16
42/71.01
D703,286 S 4/2014 Chen et al.
(Continued)

OTHER PUBLICATIONS
RF Upper 10.5" 5.56 M4 Profile RF Quad Rail FQR 10" Rail, RadicalFirearms.com, [online], [site visited Dec. 28, 2016]. <URL: http://www.radicalfirearms.com/product-p/fu10.5-5.56m4-10fqr.htm>.*

RF 10.5" M4 5.56MM Radical Rail Upper Assembly, RadicalFirearms.com, [online], [site visited Dec. 28, 2016]. <URL: http://www.radicalfirearms.com/product-p/fu10.5-5.56m4-9fhr.htm>.*

(Continued)

Primary Examiner — T. Chase Nelson
Assistant Examiner — Jonathan J Han
(74) *Attorney, Agent, or Firm* — Patterson & Sheridan, L.L.P.

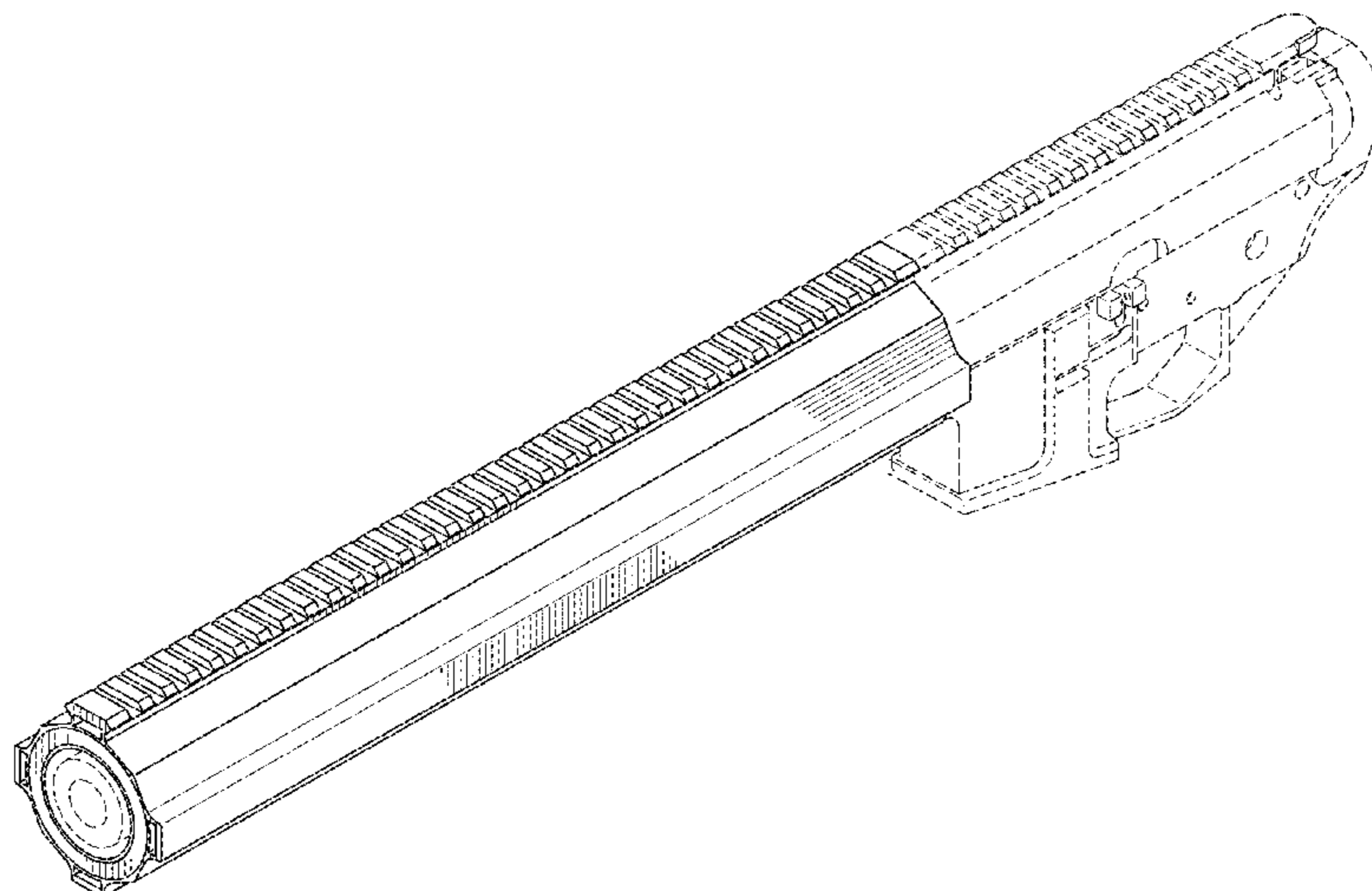
(57) **CLAIM**

The ornamental design for a handguard assembly, as shown and described.

DESCRIPTION

FIG. 1 is an isometric view of a handguard assembly positioned about a barrel assembly of an auto-loading firearm.
FIG. 2 is an elevation view of one end of the handguard assembly of FIG. 1, the other end being identical.
FIG. 3 is an elevation view of one side of the handguard assembly of FIG. 1, the other side being identical.
FIG. 4 is a top plan view of the handguard assembly of FIG. 1.
FIG. 5 is a bottom plan view of the handguard assembly of FIG. 1.
FIG. 6 is a cross-sectional elevation view of the handguard assembly along lines 6-6 of FIG. 3.
FIG. 7 is a cross-sectional side view of the handguard assembly along lines 7-7 of FIG. 2, the other side being a mirror image; and,
FIG. 8 is a cross-sectional side view of the handguard assembly along lines 8-8 of FIG. 2, the other side being a mirror image.
The broken lines in the figures are used to illustrate environment and unclaimed parts and form no part of the claimed design.

1 Claim, 5 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

8,726,558 B1 * 5/2014 Nason F41G 11/003
42/71.01
D709,502 S 7/2014 Shen
D709,582 S * 7/2014 Geissele D22/108
D710,964 S * 8/2014 Chvala D22/108
D713,484 S 9/2014 Firpo et al.
8,863,426 B1 * 10/2014 Zinsner F41C 23/16
42/71.01
D717,908 S * 11/2014 Montes D22/108
D720,421 S * 12/2014 Chen D22/108
8,904,691 B1 * 12/2014 Kincel F41C 23/16
42/71.01
D721,407 S 1/2015 Chu
8,931,196 B1 * 1/2015 Larue F41A 11/04
42/71.01
D724,171 S * 3/2015 Trusty D22/108
9,127,906 B2 9/2015 Wells et al.
D747,428 S * 1/2016 Chen D22/108
D748,754 S * 2/2016 Chastain D22/108
D750,192 S 2/2016 Silvers et al.
D751,663 S 3/2016 Ding et al.
D752,170 S * 3/2016 Koutn D22/108
D752,171 S * 3/2016 Chen D22/108
9,273,926 B2 * 3/2016 Wood F41G 11/003
D757,201 S * 5/2016 Meier D22/108
9,389,043 B1 * 7/2016 Zhang F41C 23/16
9,464,866 B1 * 10/2016 Liang F41C 23/16
2010/0162604 A1 * 7/2010 Dubois F41A 21/482
42/18
2010/0319231 A1 * 12/2010 Stone F41C 23/16
42/71.01
2012/0036756 A1 * 2/2012 Brown F41A 3/66
42/71.01
2012/0124880 A1 * 5/2012 Leclair F41A 21/484
42/71.01
2013/0068089 A1 * 3/2013 Brown F41A 5/18
89/193
2014/0013642 A1 * 1/2014 Larson, Jr. F41C 23/16
42/71.01
2014/0026459 A1 * 1/2014 Yan F41C 23/16
42/71.01
2014/0075804 A1 * 3/2014 Langevin F41C 23/16
42/16

2014/0130390 A1 * 5/2014 Geissele F41C 23/16
42/71.01
2014/0224114 A1 * 8/2014 Faxon F41A 15/14
89/193
2014/0373419 A1 * 12/2014 Leclair F41C 23/16
42/71.01
2015/0007476 A1 * 1/2015 Dextraze F41G 11/003
42/71.01
2015/0040455 A1 * 2/2015 Lewis F41A 3/26
42/75.02
2015/0090105 A1 4/2015 Pace
2015/0226501 A1 * 8/2015 Gibbens F41A 3/66
42/16
2015/0316347 A1 * 11/2015 Shea F41C 23/16
42/75.02
2016/0010946 A1 * 1/2016 Gibbens F41G 11/003
42/71.01
2016/0209162 A1 * 7/2016 Geissele F41C 27/22

OTHER PUBLICATIONS

RA-901 AR-15 Slimline Handguard, RiseArmament.com, [online], [site visited Dec. 28, 2016]. <URL: <http://www.risearmament.com/RA-901-Slimline-Handguard>>.*
PWS 15" Handguard KeyMod AR15 Primary Weapons AR-15 Forearm, VTSupply.com, [online], [site visited Dec. 28, 2016]. <URL: <http://vtsupply.com/pws-15-handguard-keymod-ar15-primary-weapons-ar-15-forearm.html>>.*
AR-15 Quad Rail Handguard—15 inch | Free Float | Black, MonstrumTactical.com, [online], [site visited Dec. 28, 2016]. <URL: <https://monstrumtactical.com/collections/free-float-quad-rail-handguards-ar-15/products/ar-15-quad-rail-15-inch-free-float-black>>.*
2A Armament BL-Rail M-Lok 10" Handguard Black, [online], [site visited Dec. 28, 2016]. <URL: <http://deserttacticalsolutions.com/2a-armament-blrail-mlok-10-handguard-black-p-20405.html?zenid=c76ff206ce9a8466186630de2c994cf8>>.*
Omega Mfg Inc 15" Super Ultra Slim Keymod Ar 15 Handguard Rail Steel Barrel Nut, DeltaTeamTactical.com, [online], [site visited Dec. 28, 2016]. <URL: https://www.deltateamtactical.com/Omega-Mfg-Inc-15-Super-Ultra-Slim-Keymod-Ar-15-Handguard-Rail-Steel-Barrel-Nut_p_4383.html>.*

* cited by examiner

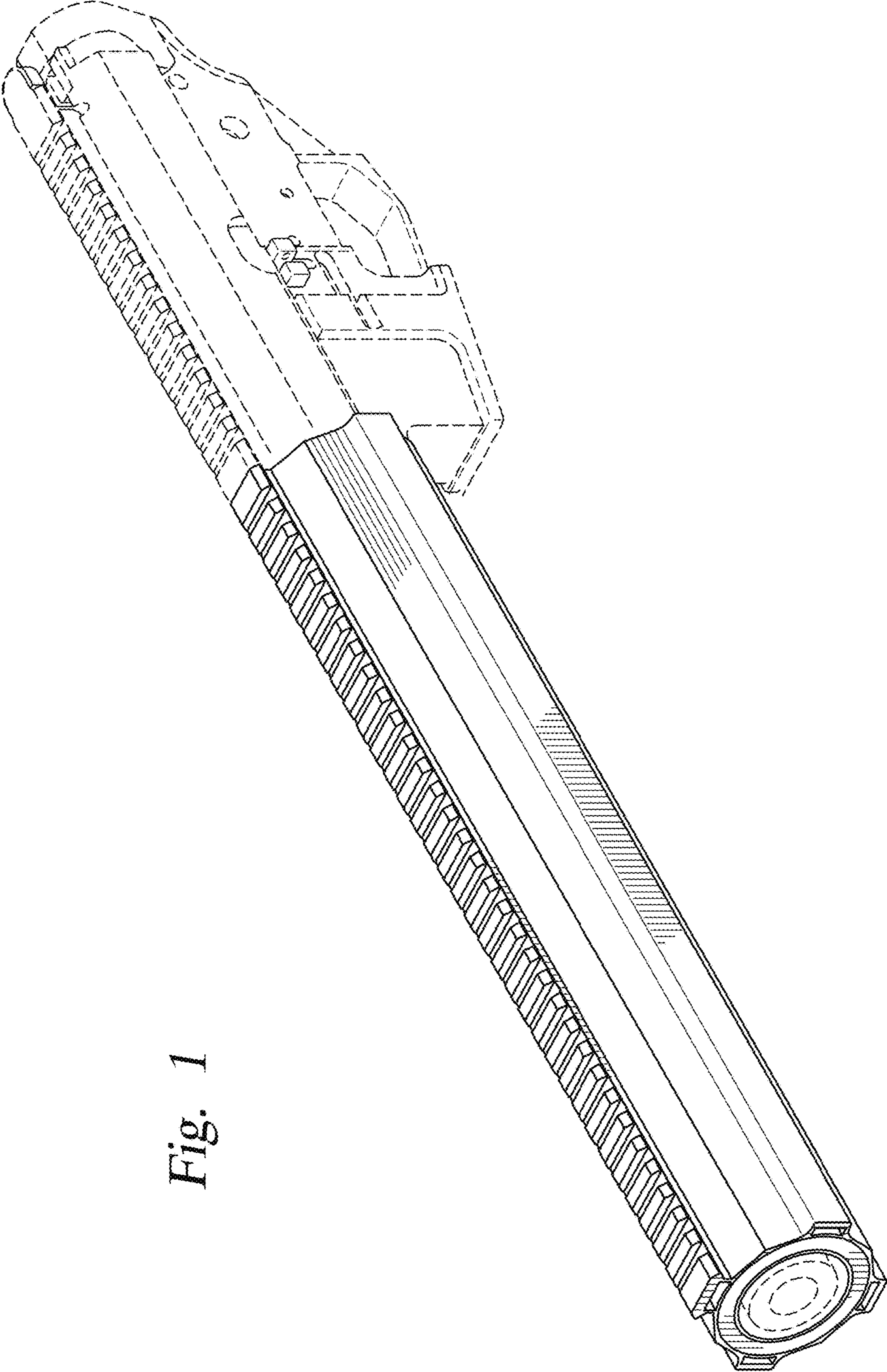


Fig. 1

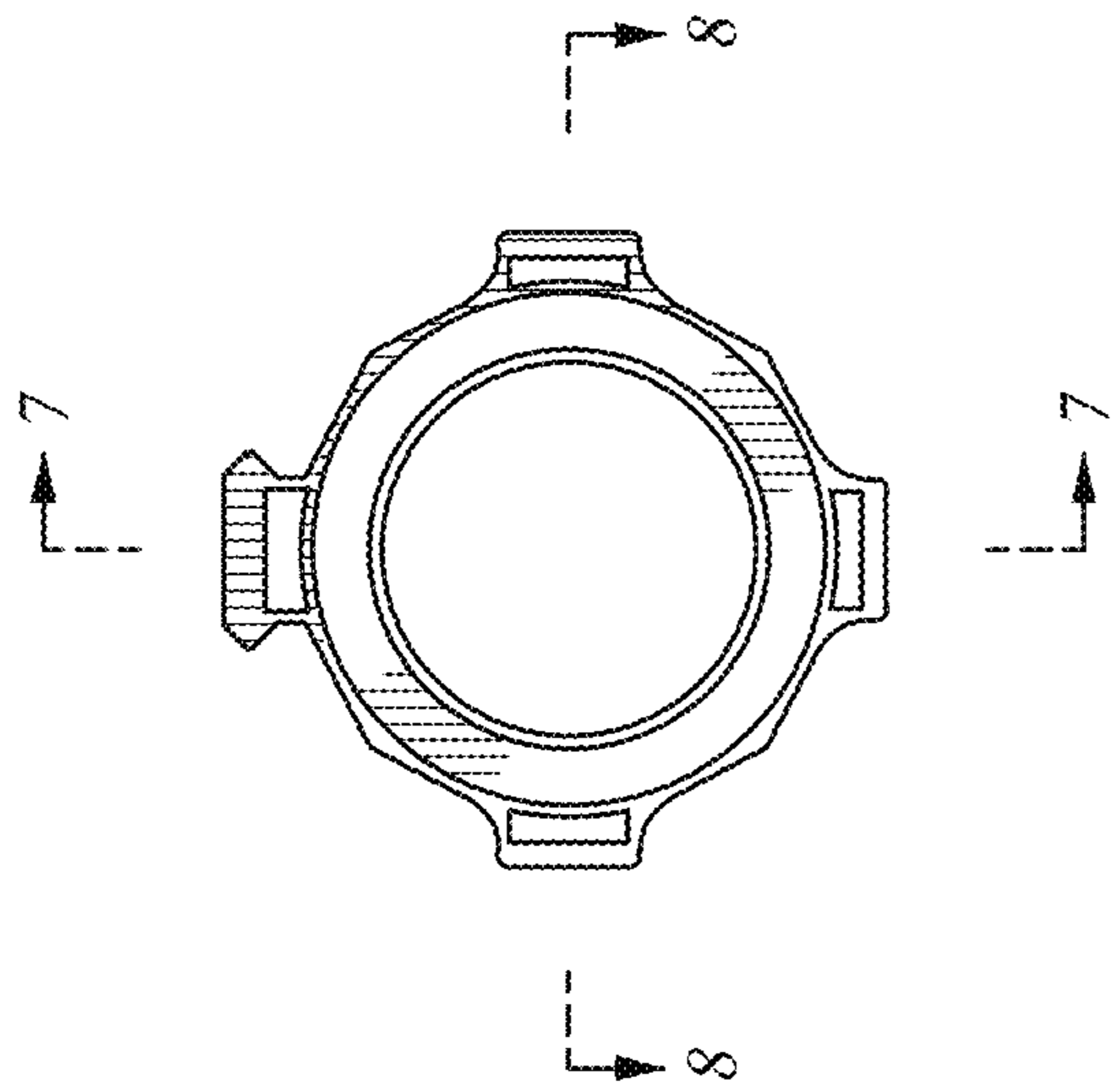


Fig. 2

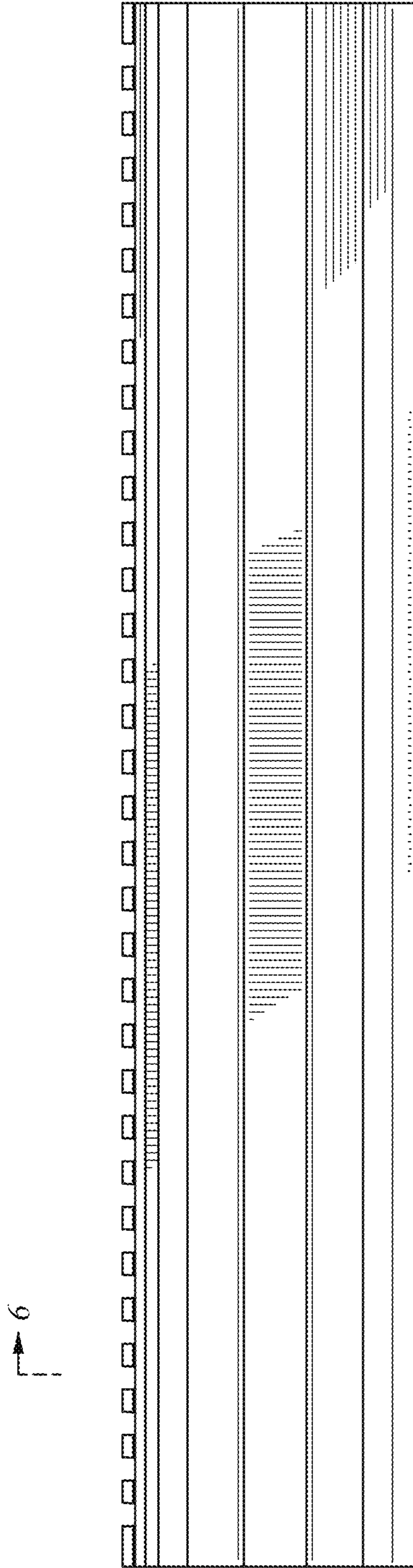


Fig. 3

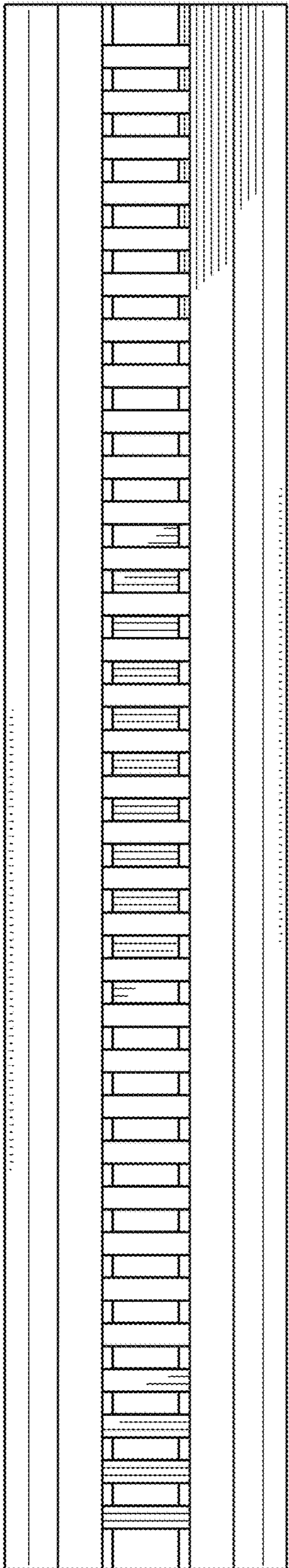


Fig. 4

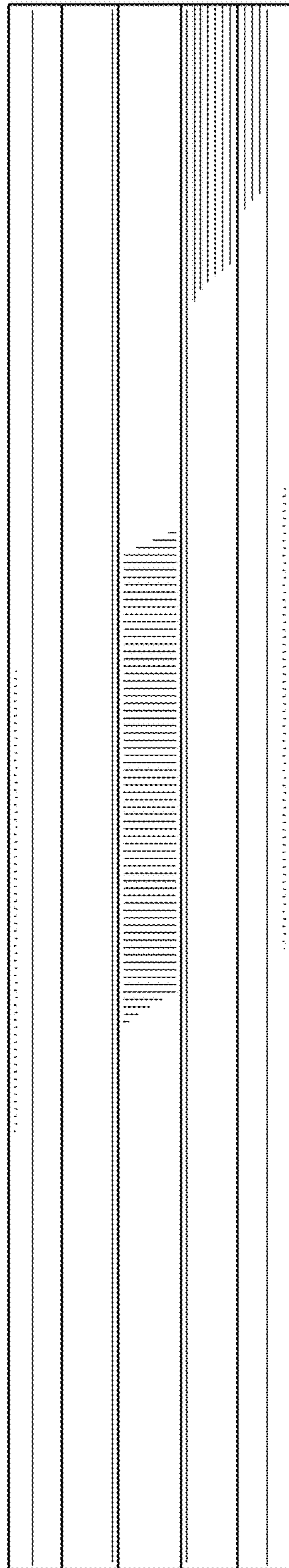


Fig. 5

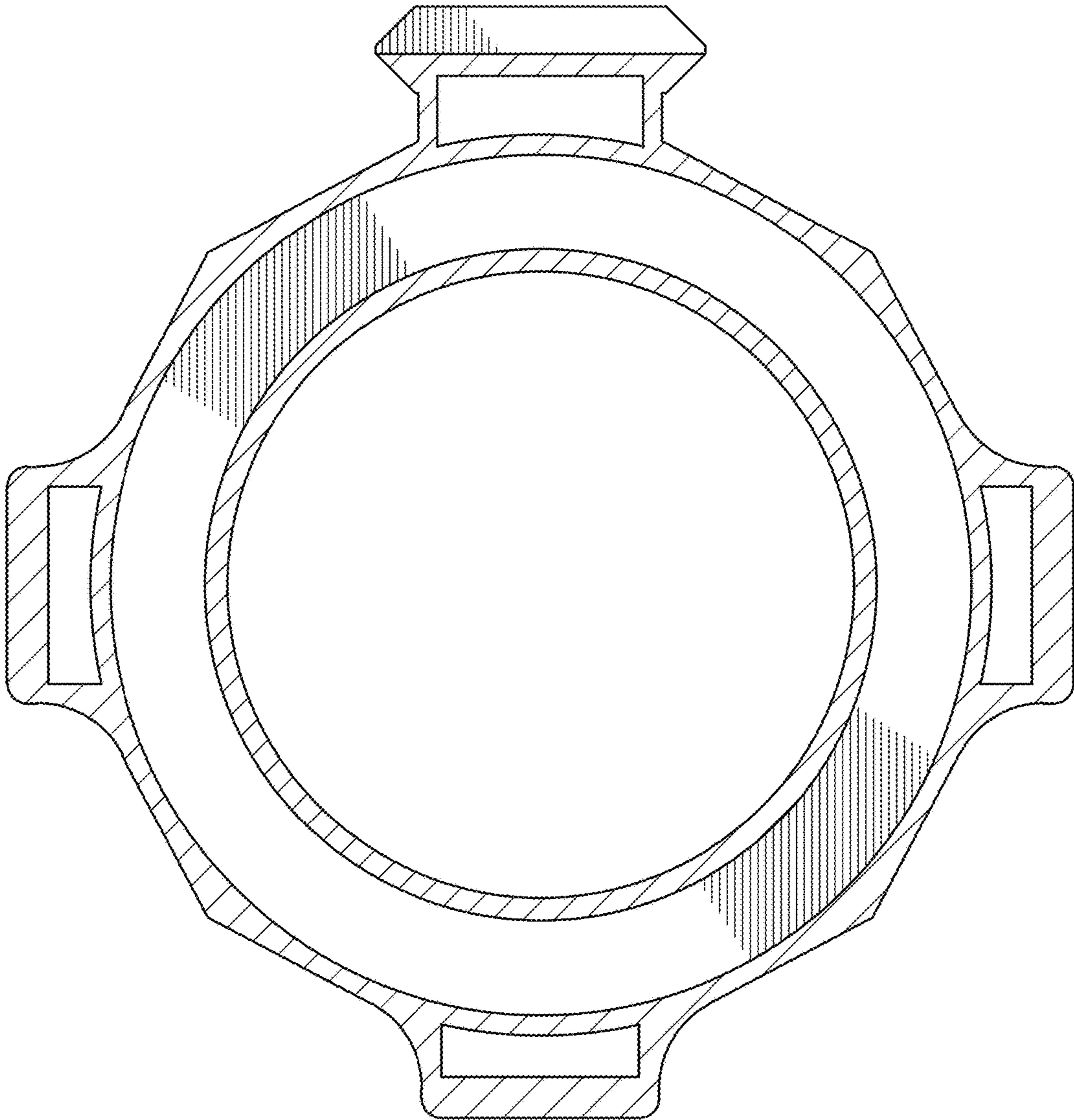


Fig. 6

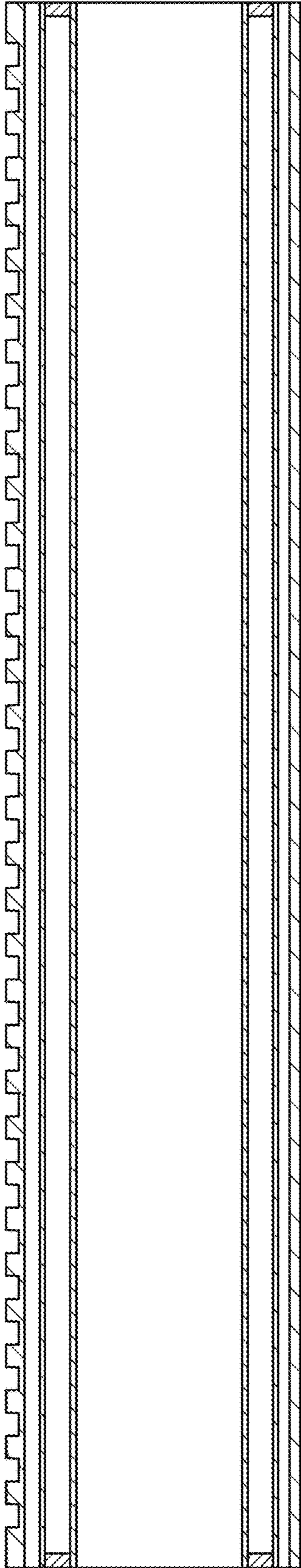


Fig. 7

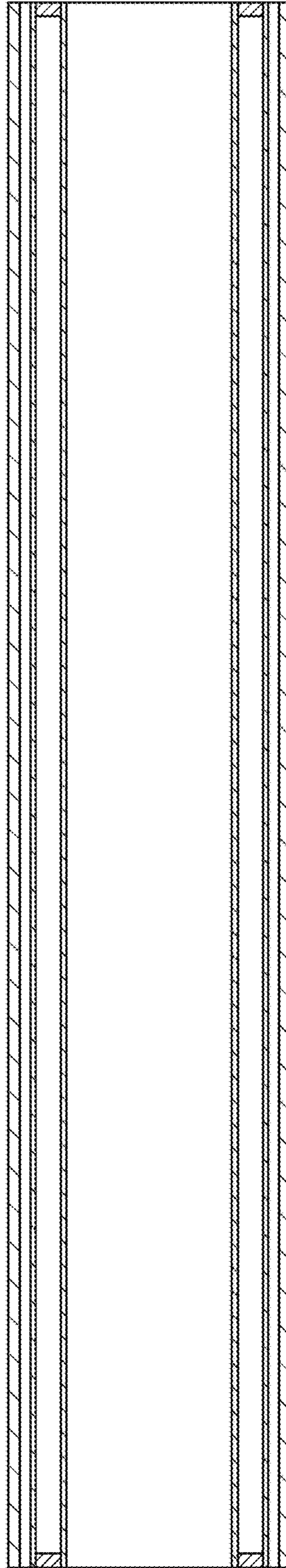


Fig. 8