



US00D934413S

(12) **United States Design Patent** (10) **Patent No.:** **US D934,413 S**
Nicholas et al. (45) **Date of Patent:** **** Oct. 26, 2021**

(54) **INJECTION DEVICE**

5/31585; A61M 2005/2407; A61M 2005/2492; A61M 2205/581; A61M 2205/582

(71) Applicant: **Sanofi-Aventis Deutschland GMBH**, Frankfurt am Main (DE)

See application file for complete search history.

(72) Inventors: **Courtney Nicholas**, East Greenbush, NY (US); **Scott Barton**, East Greenbush, NY (US); **Bart Burgess**, East Greenbush, NY (US); **Alexei Goraltchouk**, East Greenbush, NY (US)

(56) **References Cited**

U.S. PATENT DOCUMENTS

(73) Assignee: **Sanofi-Aventis Deutschland GMBH**, Frankfurt am Main (DE)

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

(21) Appl. No.: **29/743,758**

(22) Filed: **Jul. 23, 2020**

4,046,145 A	9/1977	Choksi et al.
4,840,185 A	6/1989	Hernandez
4,900,309 A	2/1990	Netherton et al.
4,986,817 A	1/1991	Code
5,147,328 A	9/1992	Dragosits et al.
5,336,197 A	8/1994	Kuracina et al.
5,478,316 A	12/1995	Bitdinger et al.
5,509,903 A	4/1996	Grendahl et al.
5,519,931 A	5/1996	Reich
5,554,127 A	9/1996	Crouther et al.
5,554,133 A	9/1996	Haffner et al.
5,709,662 A	1/1998	Olive et al.
5,716,346 A	2/1998	Farris
5,843,036 A	12/1998	Olive et al.
5,921,966 A	7/1999	Bendek et al.
5,997,513 A	12/1999	Smith et al.
D426,299 S	6/2000	Bydlon et al.
D428,651 S	7/2000	Andersson et al.
6,206,855 B1	3/2001	Kunkel et al.
D462,760 S	9/2002	Ahlgrim et al.
D479,599 S	9/2003	Bainton
D479,601 S	9/2003	Tyce
D479,602 S	9/2003	Bainton
D479,603 S	9/2003	Tyce
D479,747 S	9/2003	Bainton
D479,748 S	9/2003	Tyce
D481,120 S	10/2003	Hawley et al.
D488,864 S	4/2004	Fago et al.
D490,149 S	5/2004	Hawley et al.
D490,150 S	5/2004	Hawley et al.
D490,151 S	5/2004	Hawley et al.
D492,027 S	6/2004	Tyce et al.
D492,405 S	6/2004	Bainton
D493,526 S	7/2004	Hwang
7,189,217 B2	3/2007	Chang et al.
7,307,265 B2	12/2007	Polsinelli et al.
D561,894 S	2/2008	Hudson
7,338,474 B2	3/2008	Kirk
7,414,254 B2	8/2008	Polsinelli et al.
D581,047 S	11/2008	Koshidaka
7,449,012 B2	11/2008	Young et al.
D590,876 S	4/2009	Shi
D598,539 S	8/2009	Tyce
D599,008 S	8/2009	Tyce

Related U.S. Application Data

(62) Division of application No. 29/645,283, filed on Apr. 25, 2018, now Pat. No. Des. 892,312.

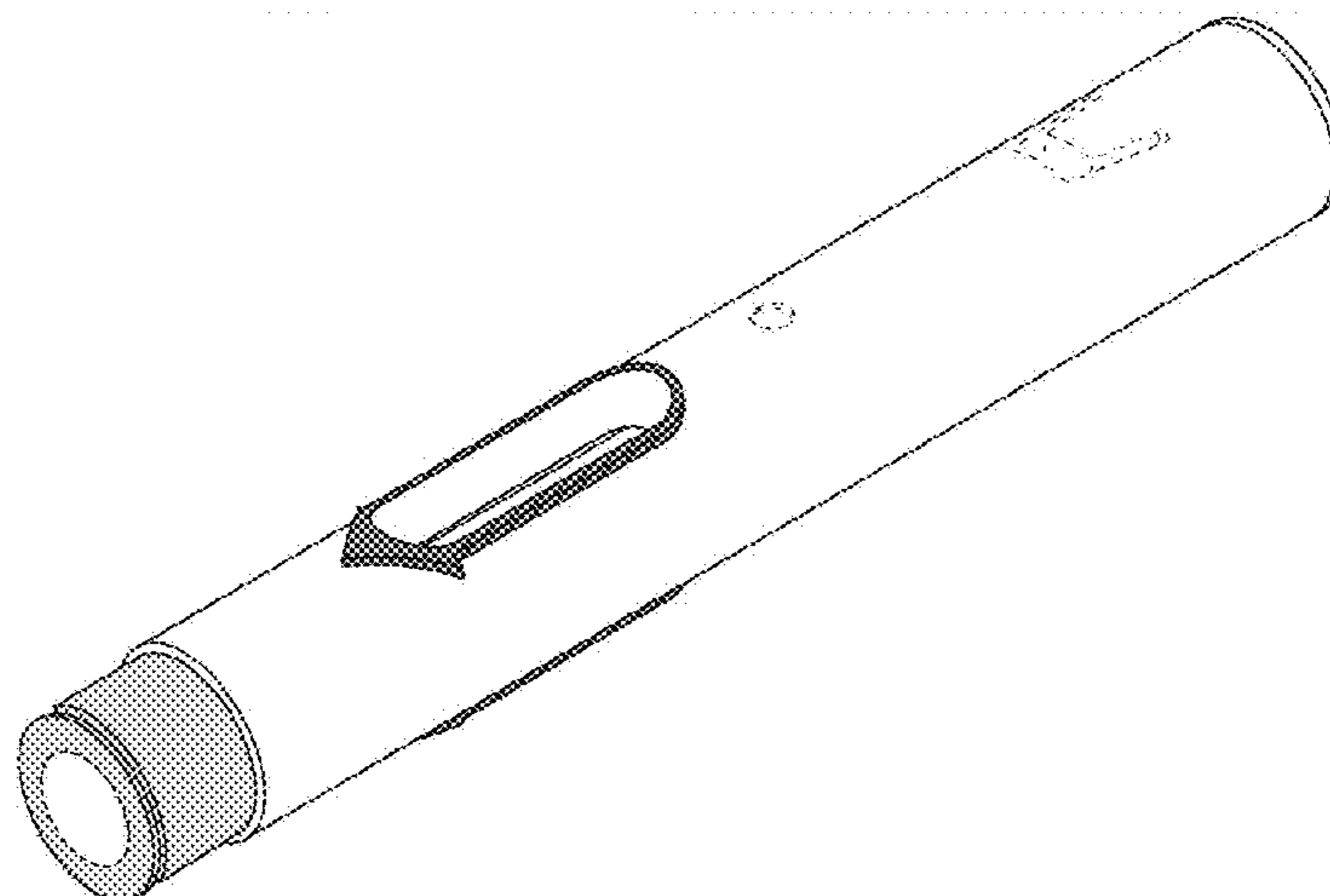
(30) **Foreign Application Priority Data**

Oct. 25, 2017 (EM) 004420388

(51) **LOC (13) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/113**

(58) **Field of Classification Search**
USPC D24/112-114, 133, 186, 127-131;
606/181, 185; 604/264, 272, 115, 232,
604/187, 158, 164.08, 192, 263, 163, 181,
604/184, 198, 227; 600/101, 139, 143;
128/200.24, 207.14, 207.15;
D19/115-123, 177, 193
CPC A61M 5/3156; A61M 5/31591; A61M
5/3155; A61M 5/3157; A61M 5/24;
A61M 5/31501; A61M 5/31551; A61M



US D934,413 S

D599,009 S	8/2009	Tyce		9,468,722 B2	10/2016	Olson	
D599,010 S	8/2009	Tyce		D770,611 S *	11/2016	Saussaye	D24/114
D599,011 S	8/2009	Tyce		D773,039 S	11/2016	Sanders et al.	
D600,794 S	9/2009	Tyce		D773,648 S	12/2016	Wohlfahrt et al.	
D600,795 S	9/2009	Tyce		D774,639 S *	12/2016	Saussaye	D24/113
D606,649 S	12/2009	Tyce		D774,641 S	12/2016	Miggels et al.	
D606,650 S	12/2009	Tyce		D777,907 S	1/2017	Amendkwasnik et al.	
7,635,348 B2	12/2009	Raven et al.		9,566,380 B1	2/2017	Tcholakian	
D608,442 S	1/2010	Tyce		D780,909 S	3/2017	Burkett et al.	
D610,251 S	2/2010	Tyce		9,586,010 B2	3/2017	Mesa et al.	
D610,252 S	2/2010	Tyce		9,604,004 B2	3/2017	Jakobsen	
D610,676 S	2/2010	Tyce		D796,025 S	8/2017	Lo	
D612,486 S	3/2010	Van der Stappen		D810,281 S	2/2018	Holmqvist et al.	
7,682,155 B2	3/2010	Raven et al.		D810,282 S	2/2018	Ratjen	
D619,244 S *	7/2010	Van der Stappen	D24/113	D830,539 S	10/2018	Boyaval et al.	
D619,247 S	7/2010	Loe, Jr.		D844,775 S *	4/2019	Jansen	D24/112
D622,374 S	8/2010	Julian et al.		10,279,130 B2	5/2019	Mosebach et al.	
7,794,432 B2	9/2010	Young et al.		D851,754 S *	6/2019	Boyaval	D24/113
D627,061 S *	11/2010	Van der Stappen	D24/113	2004/0116875 A1	6/2004	Fischer et al.	
D629,509 S	12/2010	Julian et al.		2007/0039156 A1	2/2007	Reich	
7,846,136 B2	12/2010	Witowski		2007/0113861 A1	5/2007	Knudsen et al.	
7,905,352 B2	3/2011	Wyrick		2008/0009808 A1	1/2008	Berler	
D641,077 S	7/2011	Sanders et al.		2008/0269692 A1	10/2008	James et al.	
D651,305 S	12/2011	Hawley et al.		2008/0289984 A1	11/2008	Raven et al.	
8,269,201 B2	9/2012	Fago et al.		2012/0123350 A1 *	5/2012	Giambattista	A61M 5/2033 604/198
D671,638 S	11/2012	Young et al.					
D676,957 S	2/2013	Schneider et al.		2013/0030375 A1	1/2013	Daily et al.	
8,376,998 B2	2/2013	Daily et al.		2013/0041328 A1	2/2013	Daniel	
D677,380 S	3/2013	Julian et al.		2013/0041347 A1	2/2013	Daniel	
D688,790 S	8/2013	Guarraia et al.		2013/0211330 A1	8/2013	Pedersen et al.	
D688,791 S	8/2013	Guarraia et al.		2013/0281934 A1	10/2013	Wilmot et al.	
D688,793 S	8/2013	Guarraia et al.		2014/0358037 A1	12/2014	Crawford et al.	
D690,416 S	9/2013	Cappello et al.		2014/0371684 A1	12/2014	Holmqvist	
8,529,510 B2	9/2013	Giambattista et al.		2015/0011944 A1	1/2015	Young et al.	
D692,129 S	10/2013	Dubuc et al.		2015/0045742 A1	2/2015	Cheung	
D694,879 S	12/2013	Julian et al.		2015/0051580 A1	2/2015	Shain et al.	
D695,892 S	12/2013	Cappello et al.		2015/0065960 A1	3/2015	Osman	
D696,397 S	12/2013	Guarraia et al.		2015/0073383 A1	3/2015	Wilmot et al.	
D696,771 S	12/2013	Schneider et al.		2015/0080807 A1	3/2015	Schneider et al.	
D696,773 S	12/2013	Schneider et al.		2015/0190590 A1	7/2015	Richter et al.	
D696,775 S	12/2013	Guarraia et al.		2015/0335829 A1	11/2015	Giambattista et al.	
D697,205 S	1/2014	Schneider et al.		2015/0352278 A1	12/2015	Morita et al.	
D703,314 S	4/2014	Schneider et al.		2015/0374918 A1	12/2015	Kumar et al.	
D707,351 S	6/2014	Kunze		2016/0051760 A1	2/2016	Krusell et al.	
D707,352 S	6/2014	Liu et al.		2016/0051764 A1	2/2016	Dreier et al.	
8,801,679 B2	8/2014	Iio et al.		2016/0067407 A1	3/2016	Daniel	
8,821,451 B2	9/2014	Daniel		2016/0089498 A1	3/2016	Daniel	
D714,932 S	10/2014	Hall et al.		2016/0151586 A1	6/2016	Kemp	
D715,422 S	10/2014	Hall et al.		2016/0158460 A1	6/2016	Mesa et al.	
D716,442 S	10/2014	Magome et al.		2016/0193417 A1	7/2016	Guillermo et al.	
8,864,718 B2	10/2014	Karlsen et al.		2016/0213845 A1	7/2016	Holmqvist	
8,870,827 B2	10/2014	Young et al.		2016/0263327 A1	9/2016	Radmer et al.	
D717,428 S	11/2014	Sendatzki et al.		2016/0279334 A1	9/2016	Daniel	
D717,940 S	11/2014	Magome et al.		2016/0317745 A1	11/2016	Kjeldsen et al.	
8,888,713 B2	11/2014	Crawford et al.		2016/0375196 A1	12/2016	Wilmot et al.	
9,022,982 B2	5/2015	Karlsson et al.		2017/0173264 A1 *	6/2017	Bendek	A61M 5/31501
9,078,973 B2	7/2015	Harms et al.		2018/0008775 A1	1/2018	Stefanov	
9,132,236 B2	9/2015	Karlsson et al.		2018/0311442 A1	11/2018	Saussaye et al.	
D740,937 S	10/2015	Schneider et al.		2018/0339109 A1	11/2018	Halseth	
9,199,038 B2	12/2015	Daniel		2018/0353692 A1	12/2018	Saussaye et al.	
9,216,251 B2	12/2015	Daniel		2019/0266921 A1 *	8/2019	Chang	G09B 23/285
9,220,841 B2	12/2015	Daniel					
9,220,847 B2	12/2015	Holmqvist et al.					
9,247,899 B2	2/2016	Shaw et al.					
D752,211 S	3/2016	Sanders et al.					
D755,369 S	5/2016	Sanders et al.					
D755,370 S	5/2016	Riess et al.					
D757,254 S	5/2016	Wohlfahrt et al.					
D757,255 S	5/2016	Wohlfahrt et al.					
D758,567 S	6/2016	Wohlfahrt et al.					
D758,568 S	6/2016	Wohlfahrt et al.					
D758,569 S	6/2016	Wohlfahrt et al.					
D758,570 S	6/2016	Wohlfahrt et al.					
D764,657 S	8/2016	Bokelman et al.					
D765,239 S *	8/2016	Hauck	D24/113				
D765,240 S *	8/2016	Hauck	D24/113				
D766,425 S *	9/2016	Hauck	D24/113				
D767,119 S *	9/2016	Hauck	D24/113				
D770,038 S	10/2016	Ahlgrim et al.					

FOREIGN PATENT DOCUMENTS

EP	2716318	4/2014
FR	3043562	5/2017
WO	WO 2015/026737	2/2015
WO	WO 2019/006296	1/2019

OTHER PUBLICATIONS

Team consulting website, variable dose injection device, Sep. 25, 2020, <https://www.team-consulting.com/work/variable-dose-injection-device/> (Year: 2020).*

Schreiner Group website, Schreiner MediPharm Develops Multi-functional Labels for SHL Medical Auto Injectors, Oct. 11, 2016, <https://www.schreiner-group.com/en/press/detail-smp-usa/415.html> (Year: 2016).*

Yds delivery systems website, YpsoMate—the 2-step autoinjector, Sep. 27, 2020, <https://yds.ypsomed.com/en/injection-systems/auto-injectors/ypsomate.html> (Year: 2020).*

PCT International Preliminary Report on Patentability in International Application No. PCT/US2018/040282, dated Dec. 31, 2019, 7 pages.

PCT International Search Report and Written Opinion issued in Application No. PCT/US2018/040282 dated Nov. 13, 2018, 13 pages.

SHL Medical Products Molly Auto Injectors (http://www.shl-group.com/Products_SHLMedical_AutoInjectors_Molly.html), last accessed Jul. 26, 2018.

* cited by examiner

Primary Examiner — Nathan M Johnston

(74) *Attorney, Agent, or Firm* — Fish & Richardson P.C.

(57)

CLAIM

The ornamental design for an injection device, substantially as shown and described.

DESCRIPTION

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent publication with color drawings(s) will be provided by the Office upon request and payment of the necessary fee.

Injection device without cap—color #1

FIG. 1 is a first embodiment of a first perspective view of an injection device showing our new design;

FIG. 2 is a second perspective view thereof;

FIG. 3 is a front view thereof;

FIG. 4 is a back view thereof

FIG. 5 is a side view thereof;

FIG. 6 is a top view thereof; and

FIG. 7 is a bottom view thereof.

Injection device without cap—color #2

FIG. 8 is a second embodiment of a first perspective view of an injection device showing our new design;

FIG. 9 is a second perspective view thereof;

FIG. 10 is a front view thereof;

FIG. 11 is a back view thereof;

FIG. 12 is a side view thereof;

FIG. 13 is a top view thereof; and

FIG. 14 is a bottom view thereof.

Injection device without cap—color #3

FIG. 15 is a third embodiment of a first perspective view of an injection device showing our new design;

FIG. 16 is a second perspective view thereof;

FIG. 17 is a front view thereof;

FIG. 18 is a back view thereof;

FIG. 19 is a side view thereof;

FIG. 20 is a top view thereof; and

FIG. 21 is a bottom view thereof.

Injection device without cap—line drawing

FIG. 22 is a fourth embodiment of a first perspective view of an injection device showing our new design;

FIG. 23 is a second perspective view thereof;

FIG. 24 is a front view thereof;

FIG. 25 is a back view thereof;

FIG. 26 is a side view thereof;

FIG. 27 is a top view thereof; and,

FIG. 28 is a bottom view thereof.

The broken lines show portions of the design that form no part of the claimed design.

**1 Claim, 16 Drawing Sheets
(12 of 16 Drawing Sheet(s) Filed in Color)**

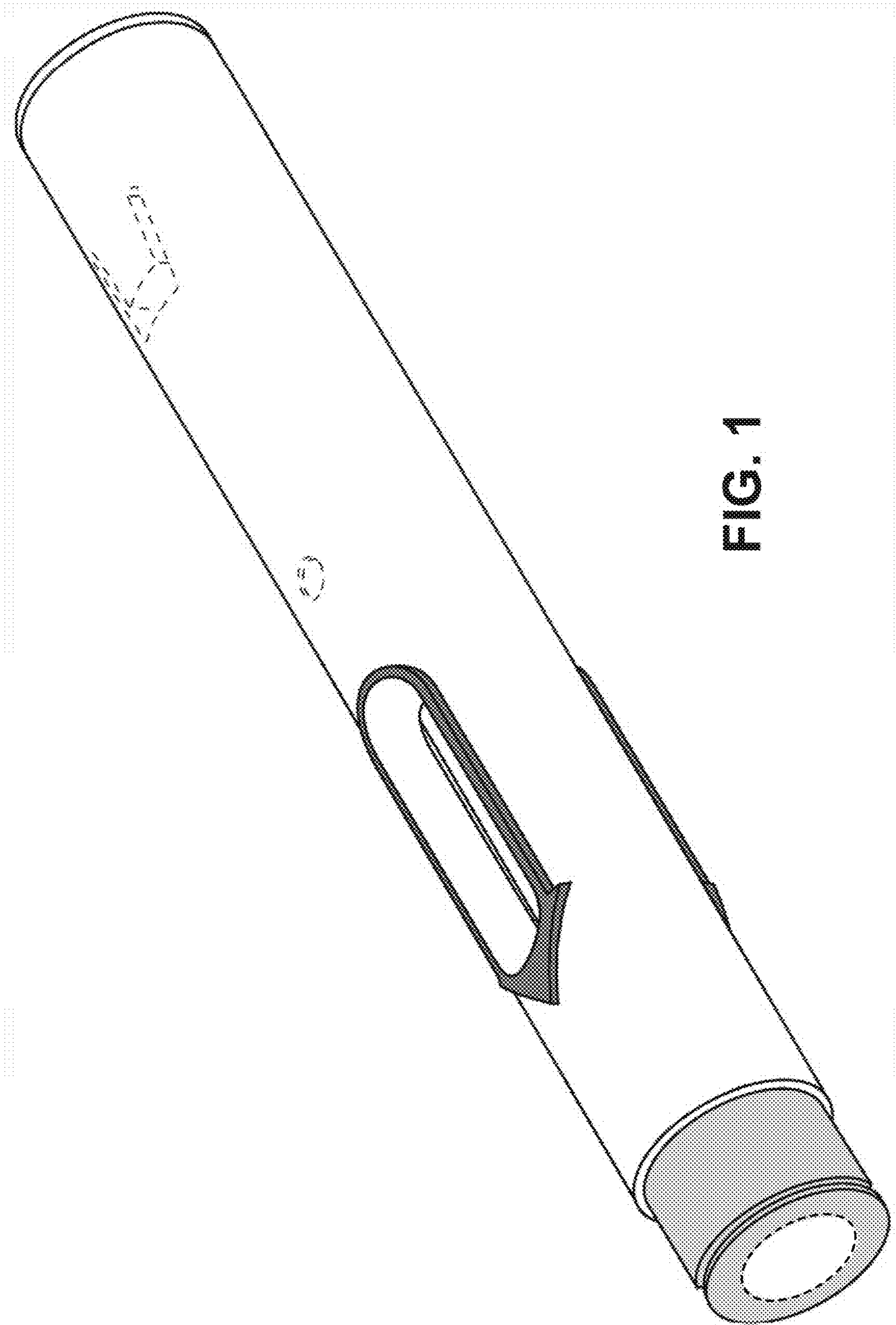


FIG. 1

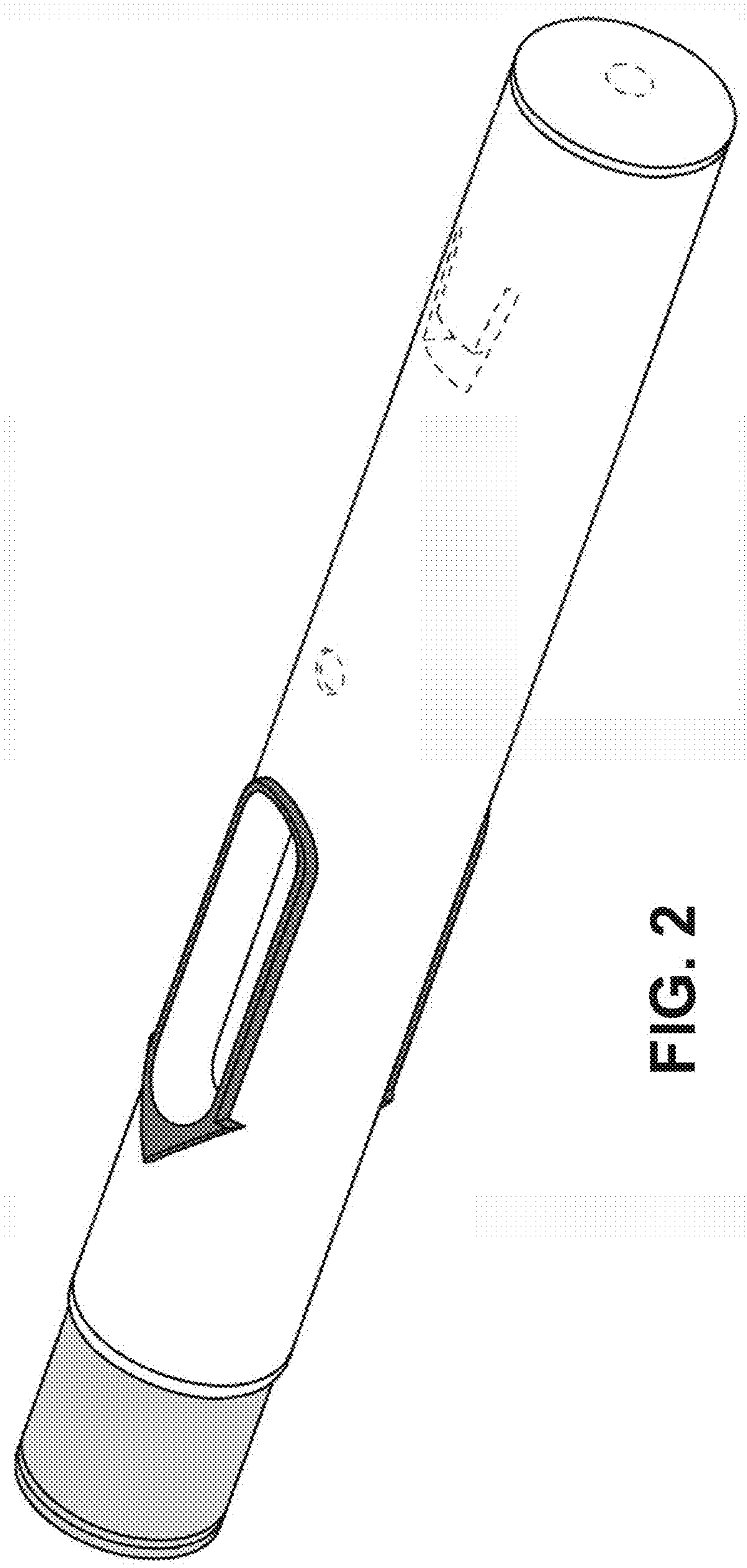


FIG. 2

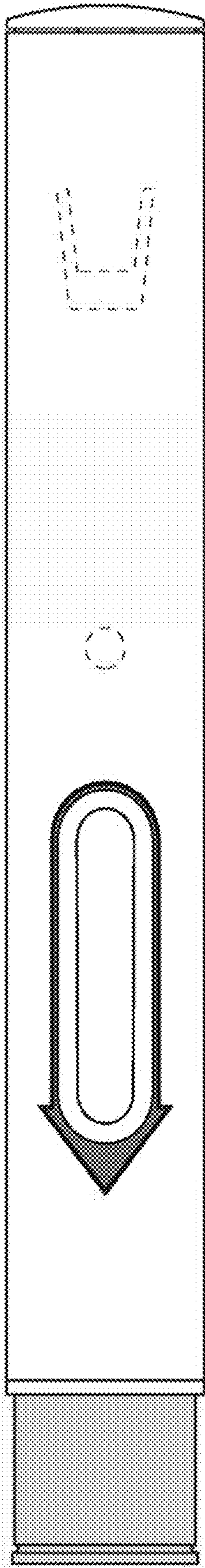


FIG. 3

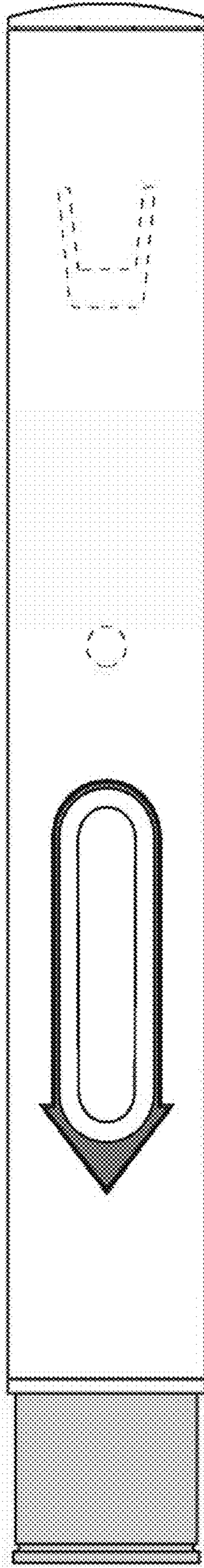


FIG. 4

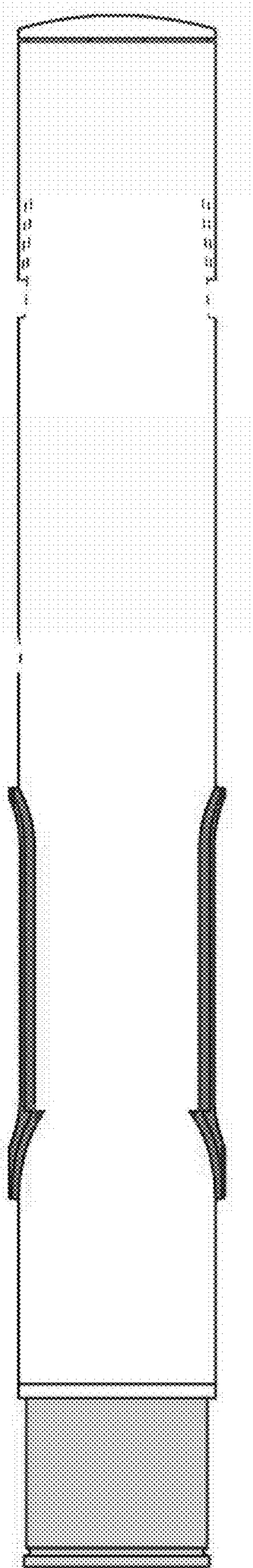


FIG. 5

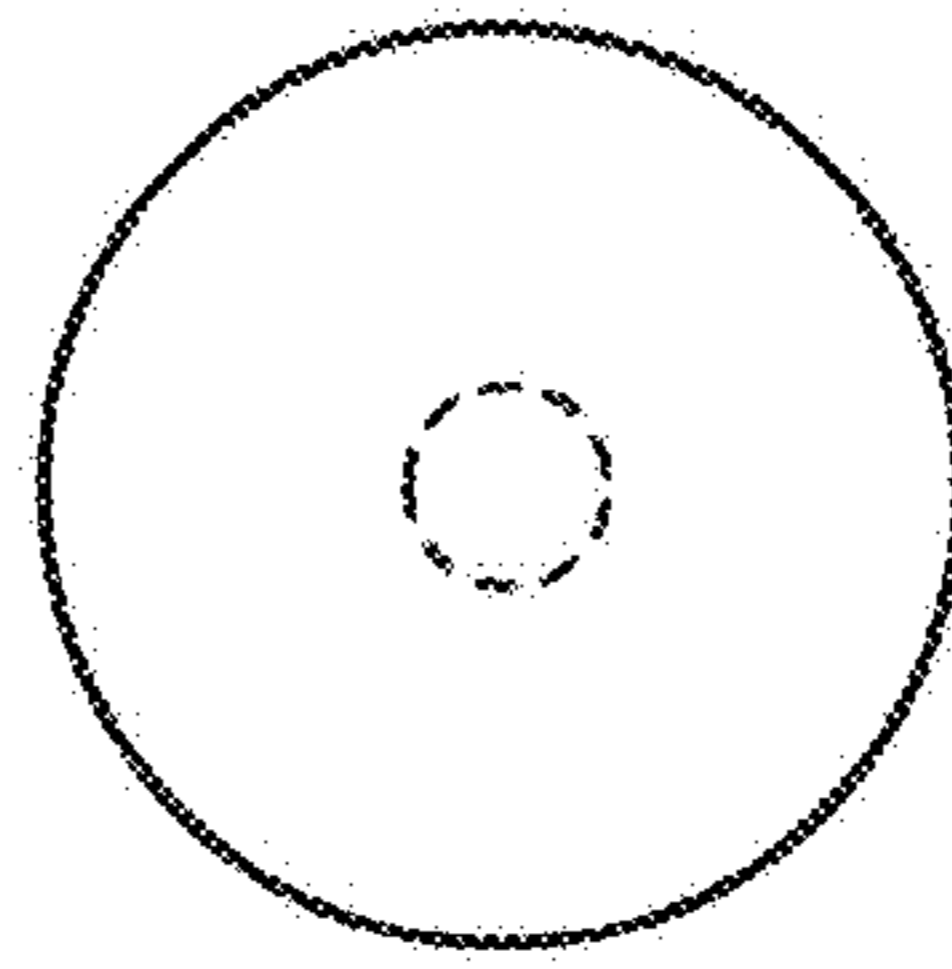


FIG. 7

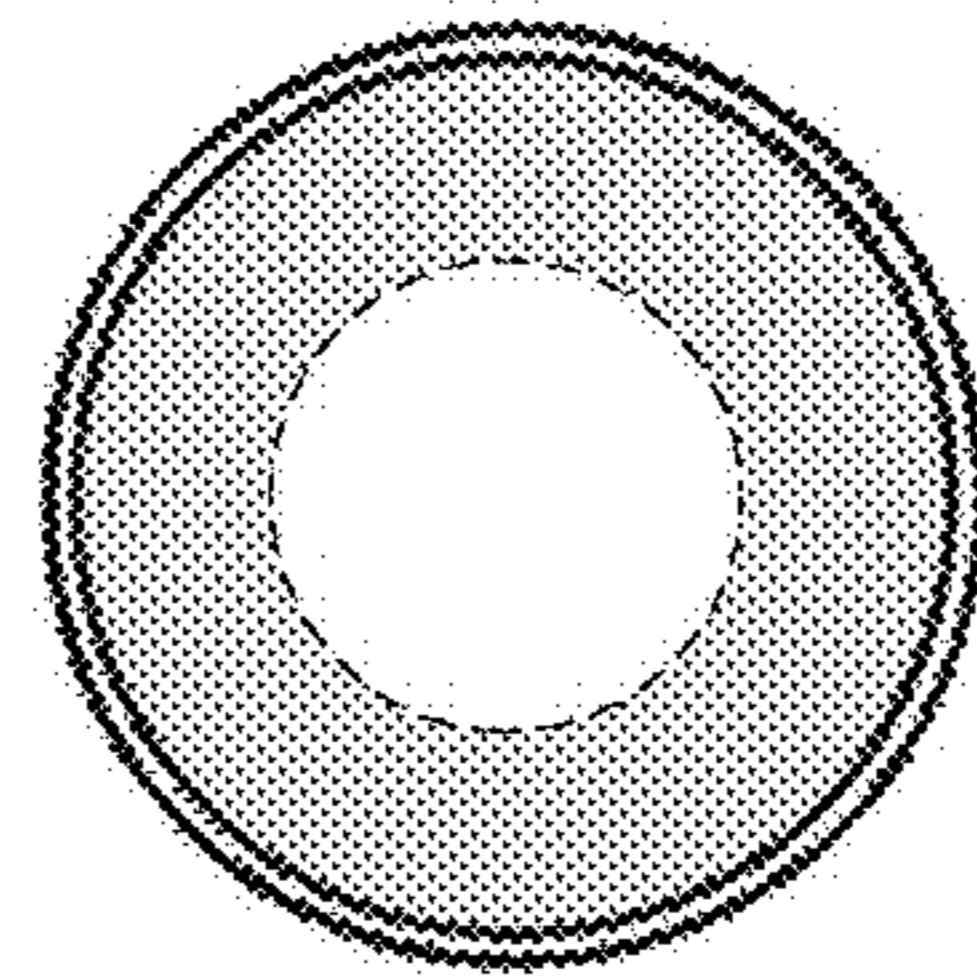


FIG. 6

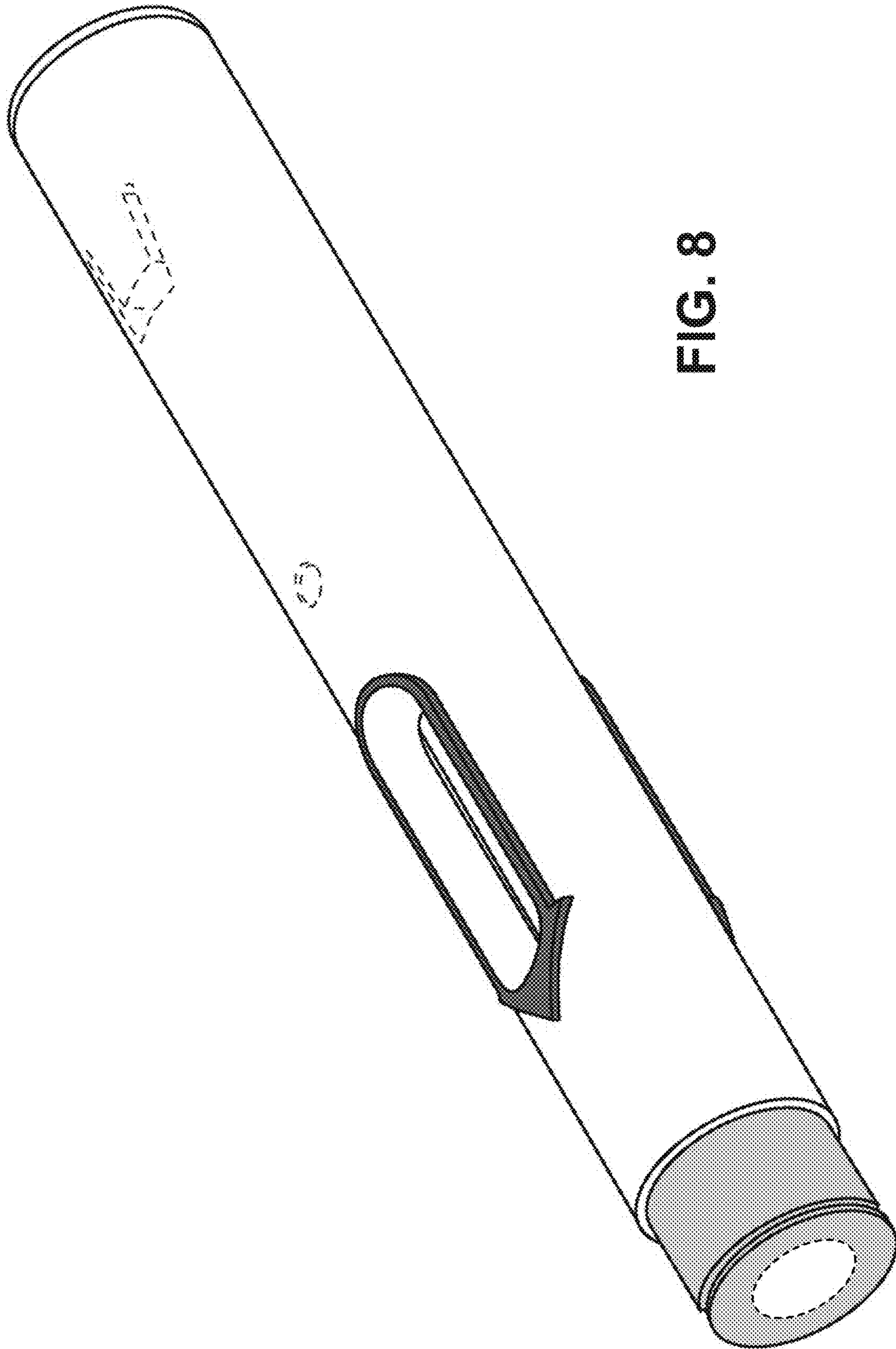


FIG. 8

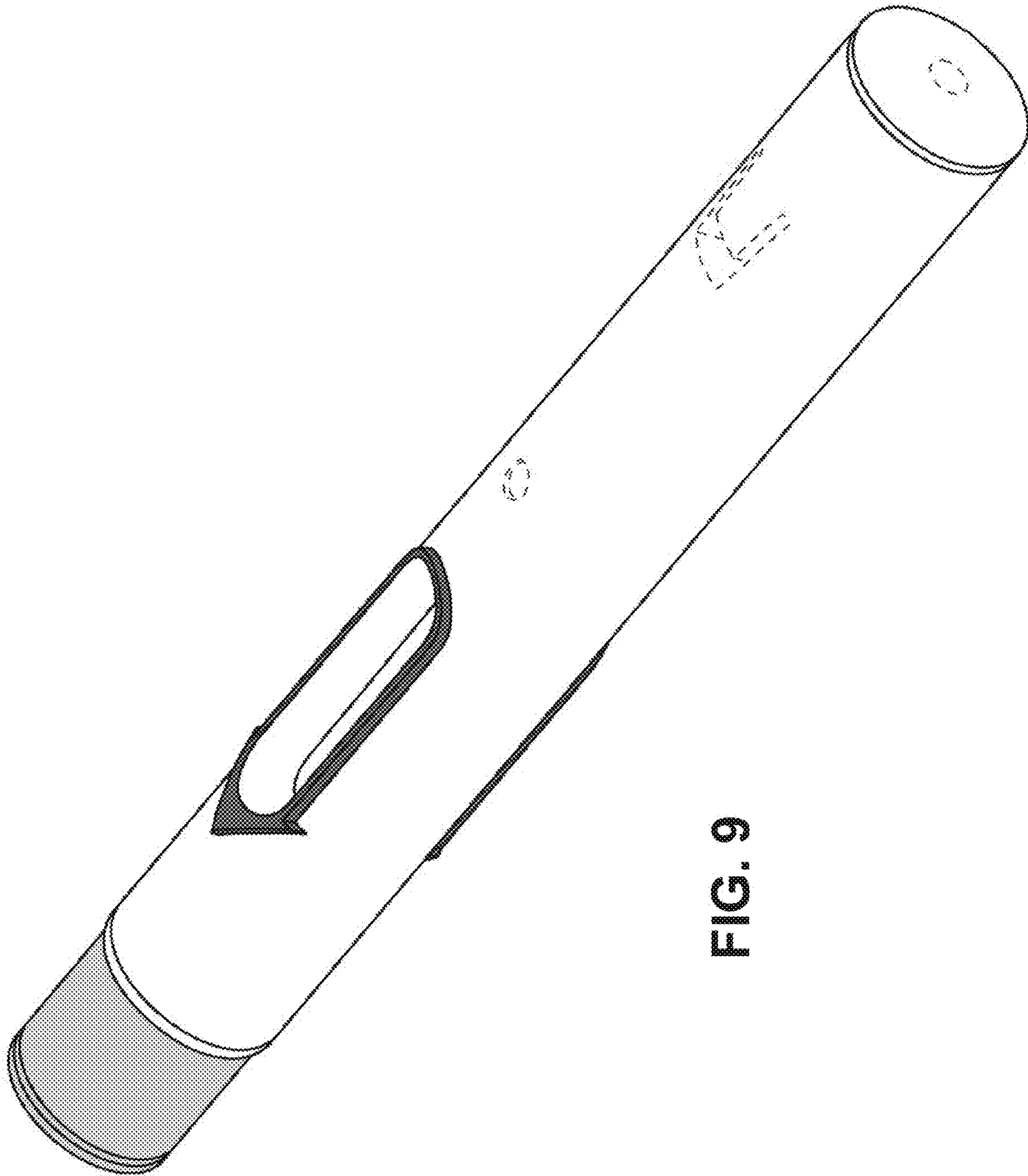


FIG. 9

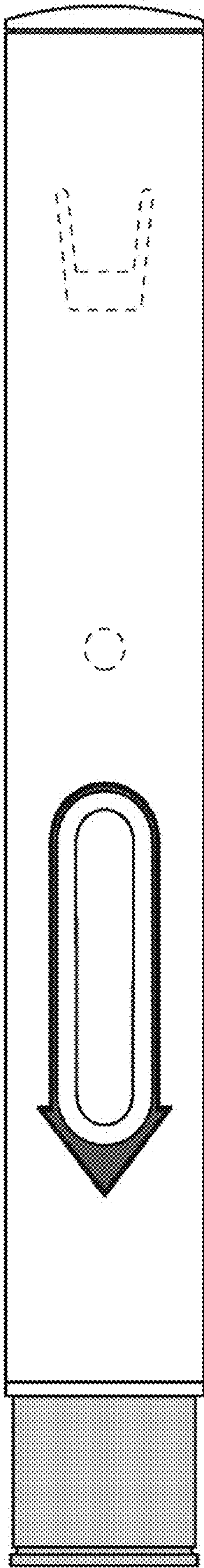


FIG. 10

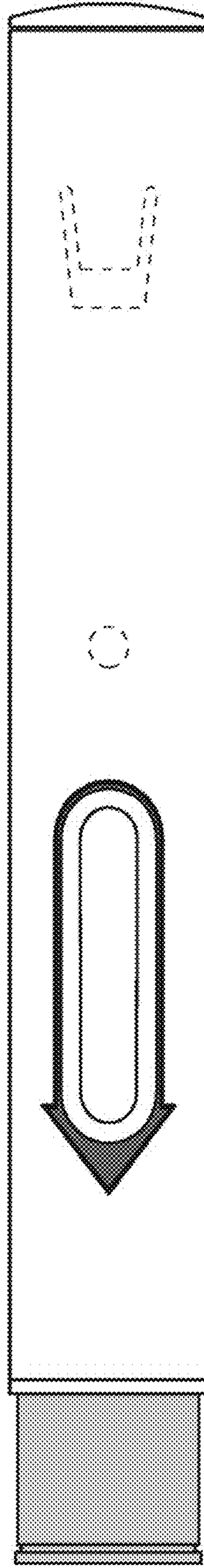


FIG. 11

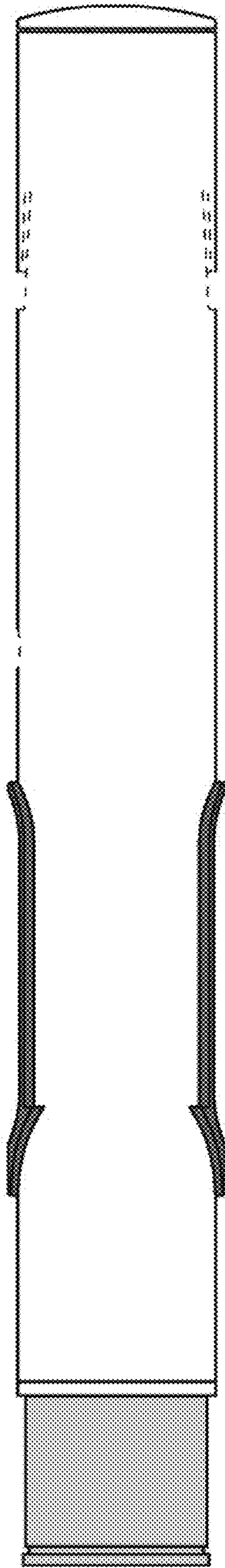


FIG. 12

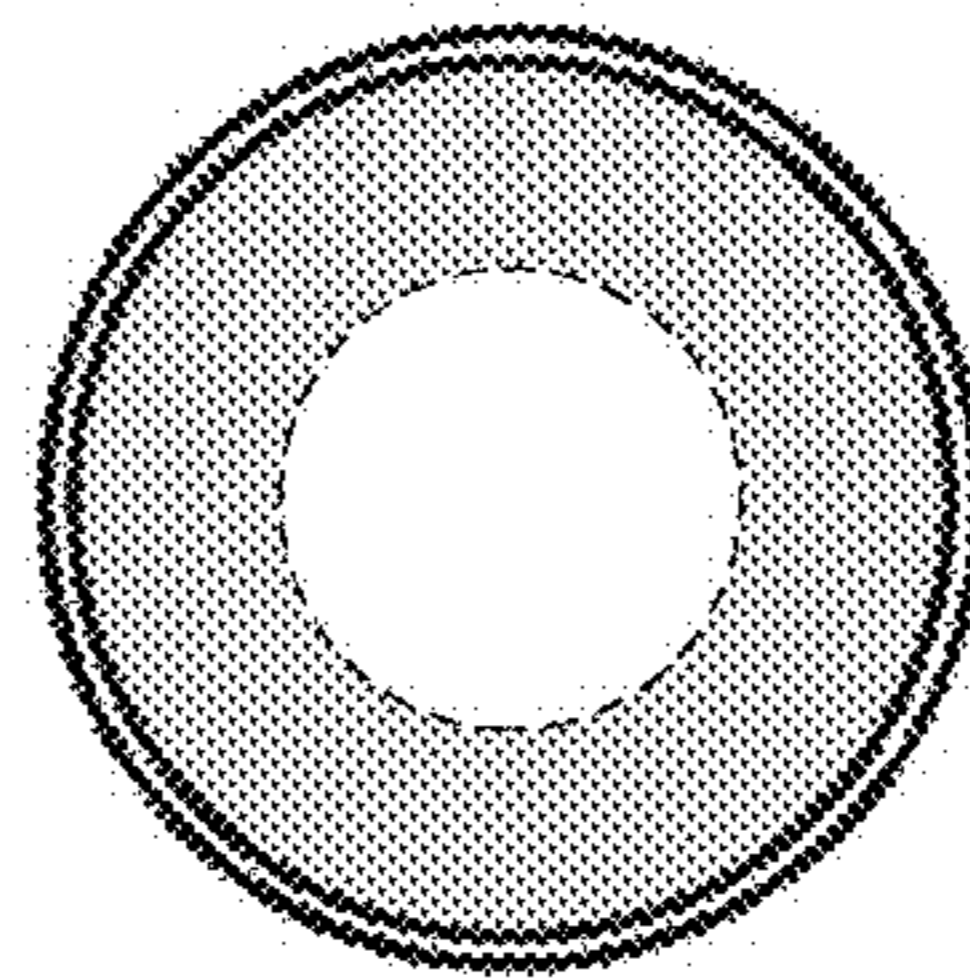


FIG. 13

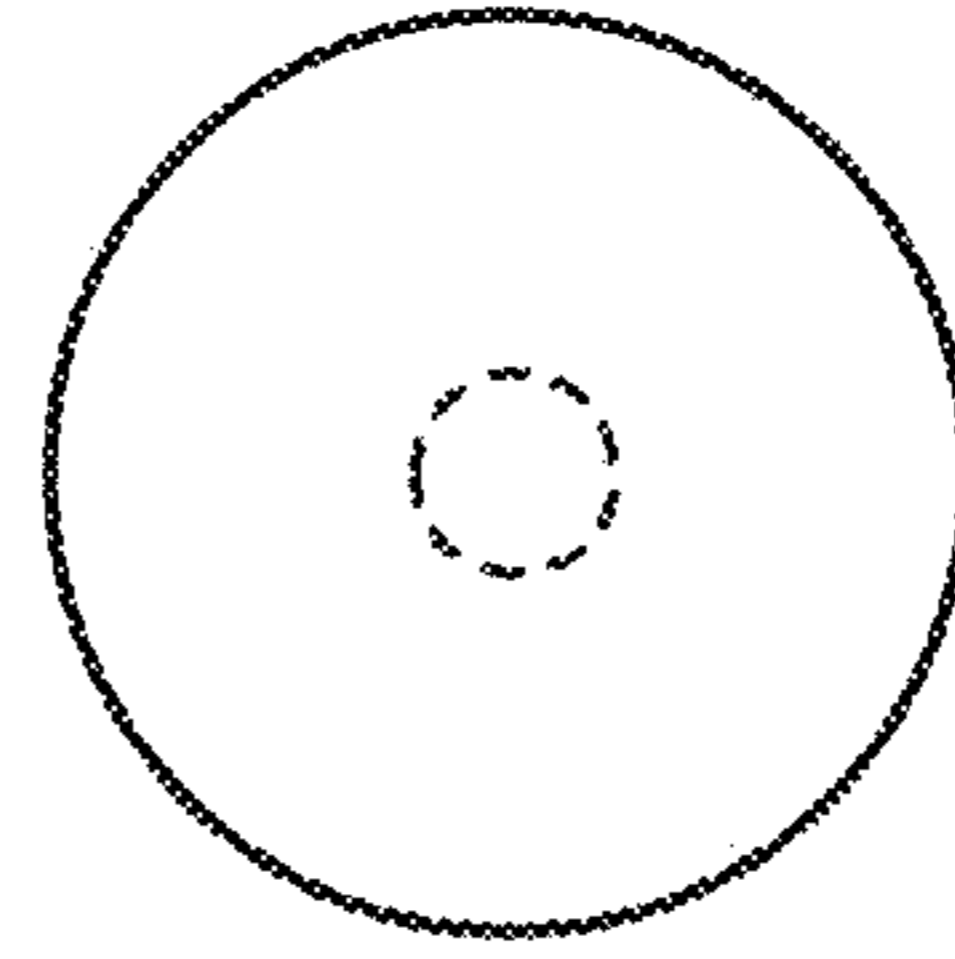


FIG. 14

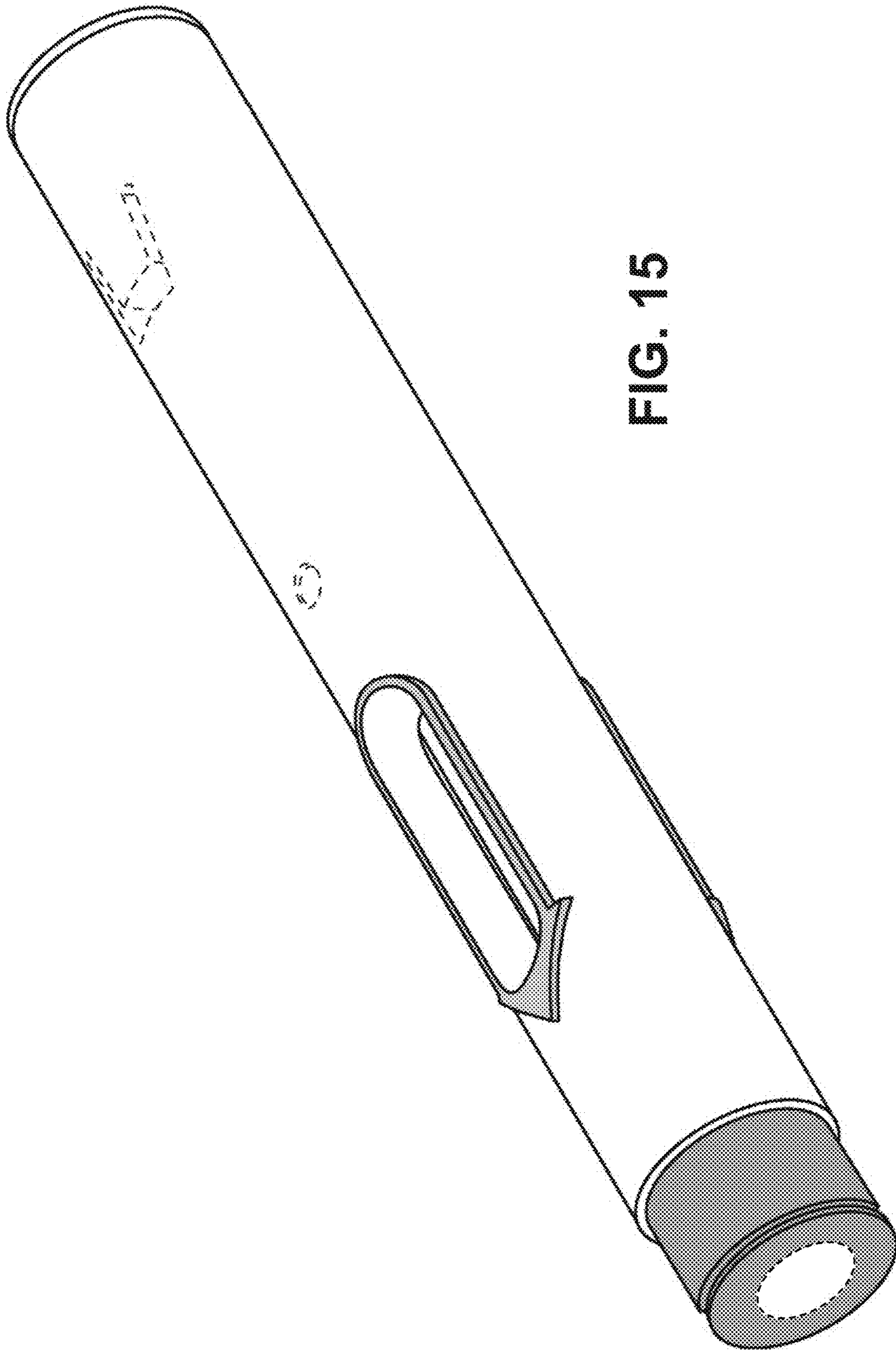


FIG. 15

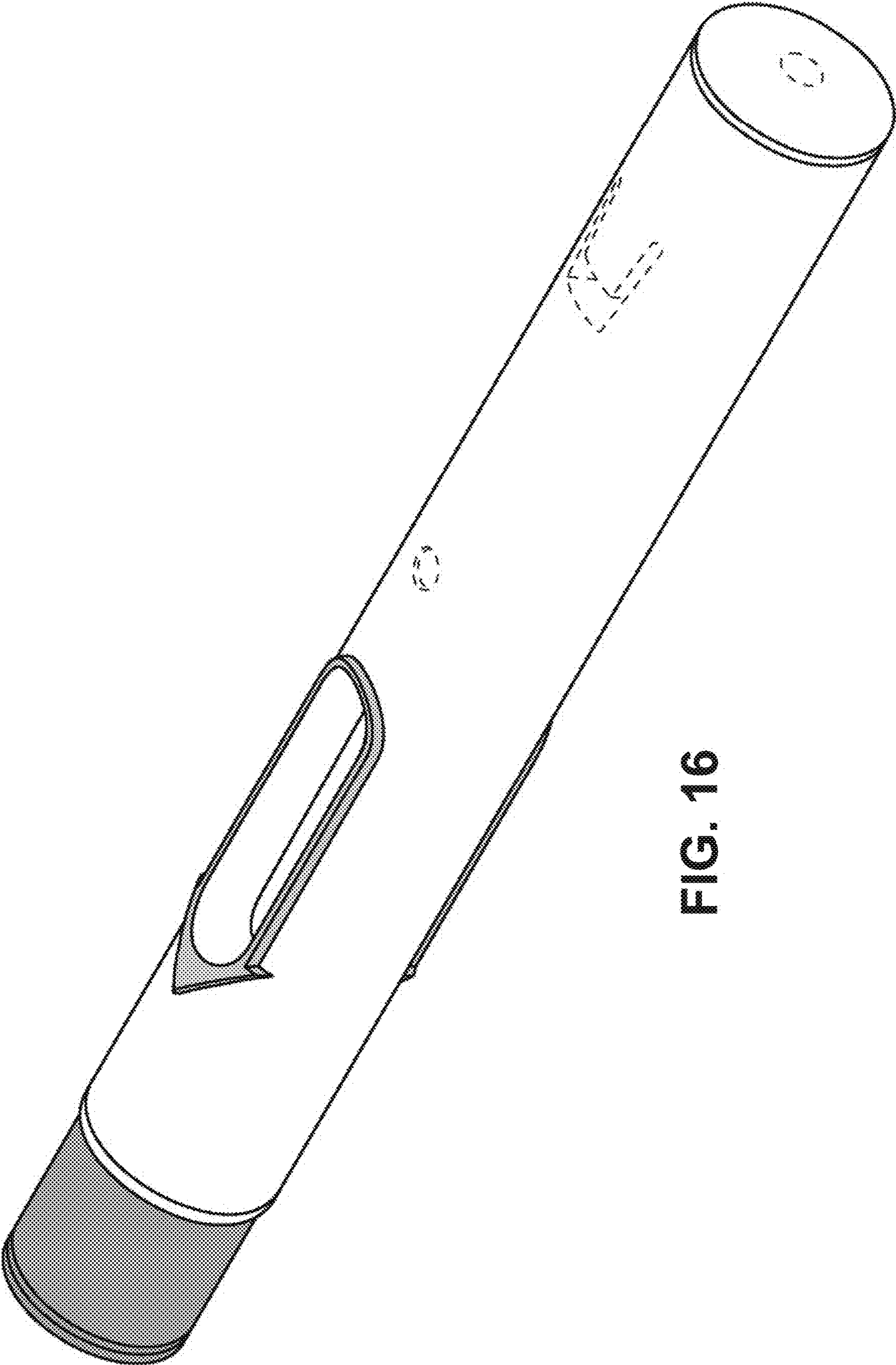


FIG. 16

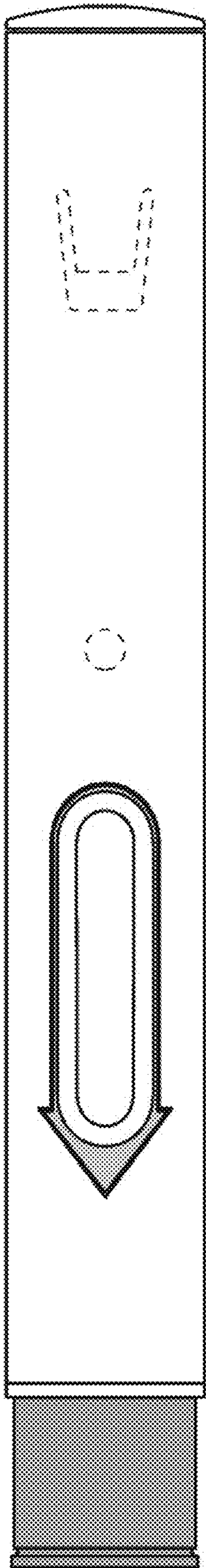


FIG. 17

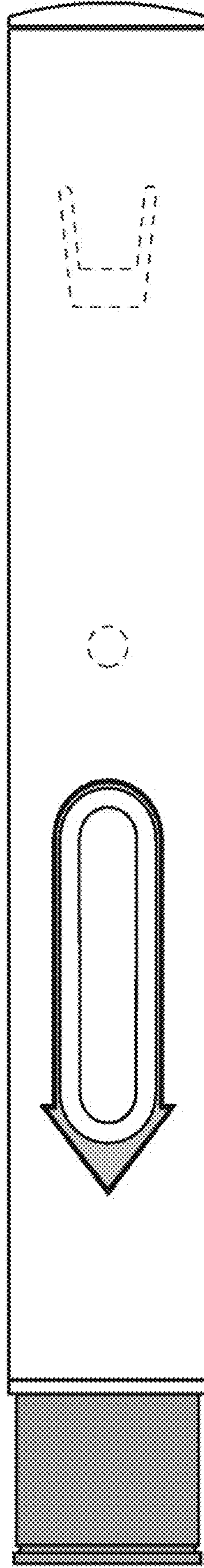


FIG. 18

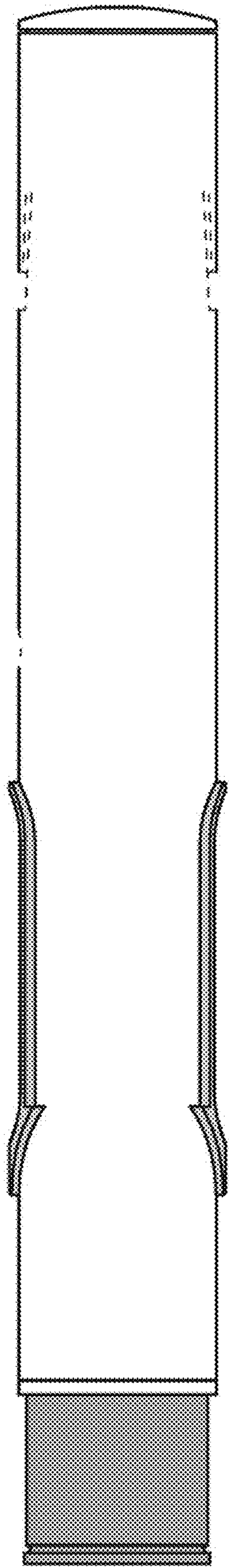


FIG. 19

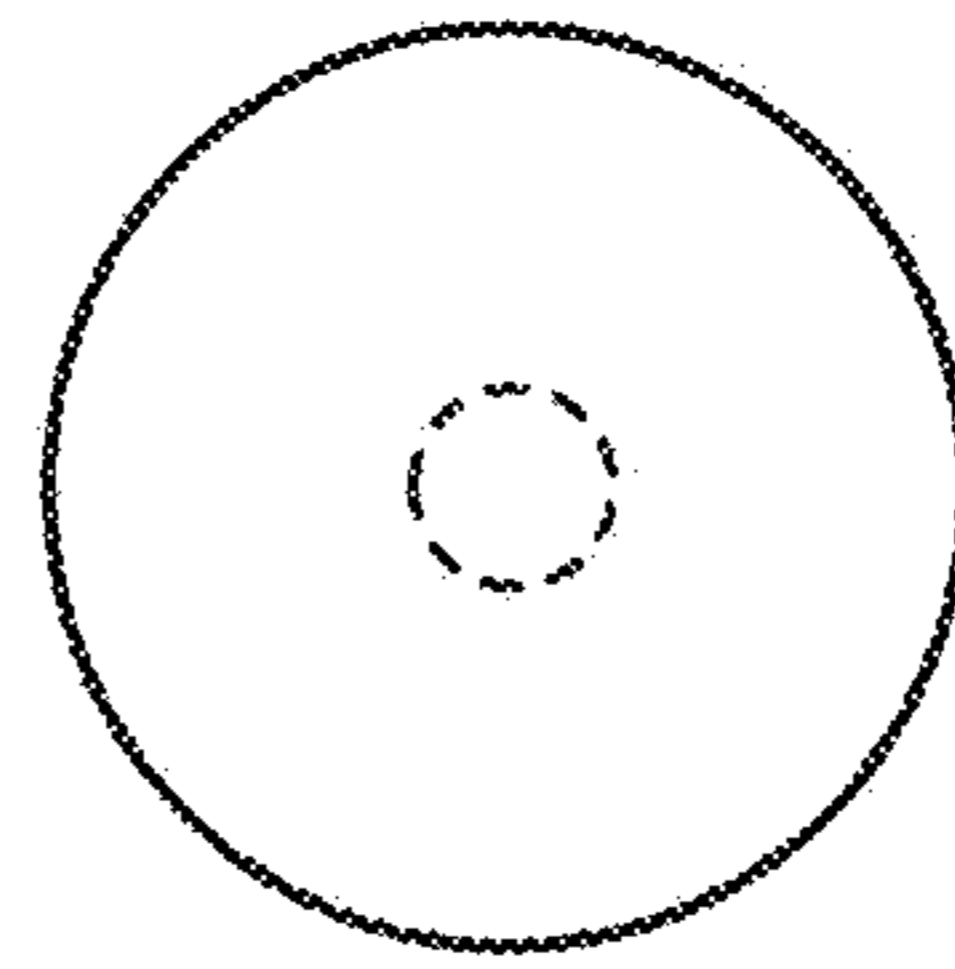


FIG. 21

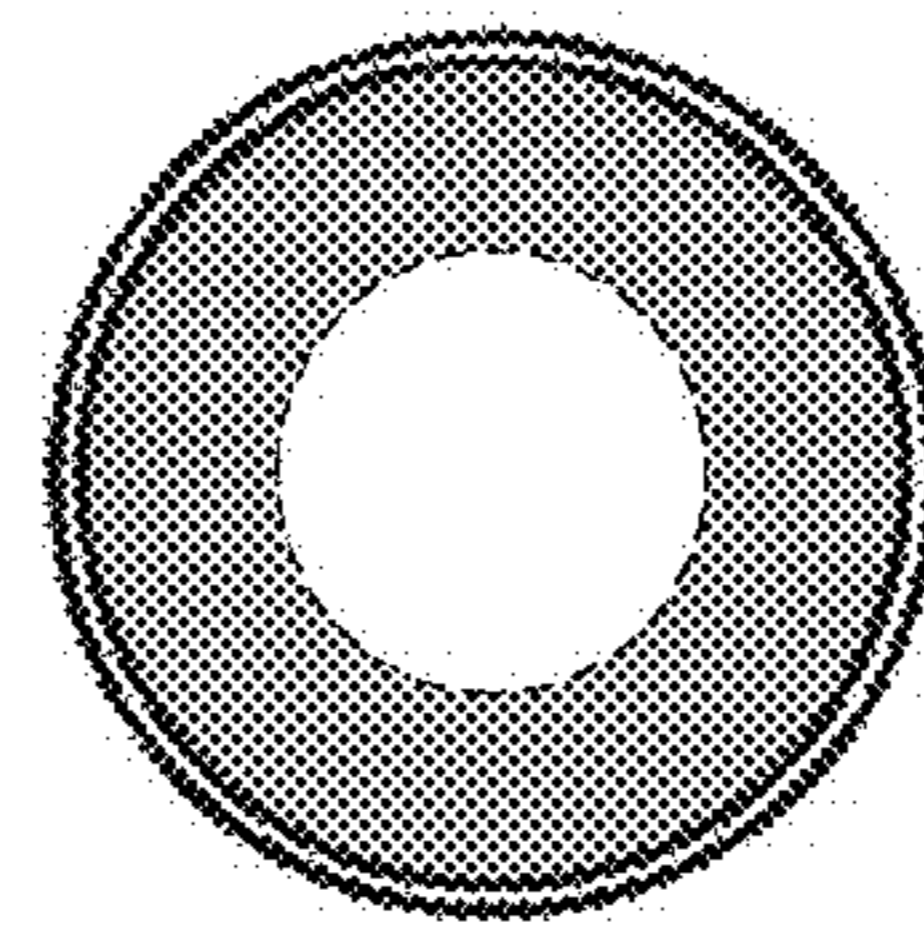


FIG. 20

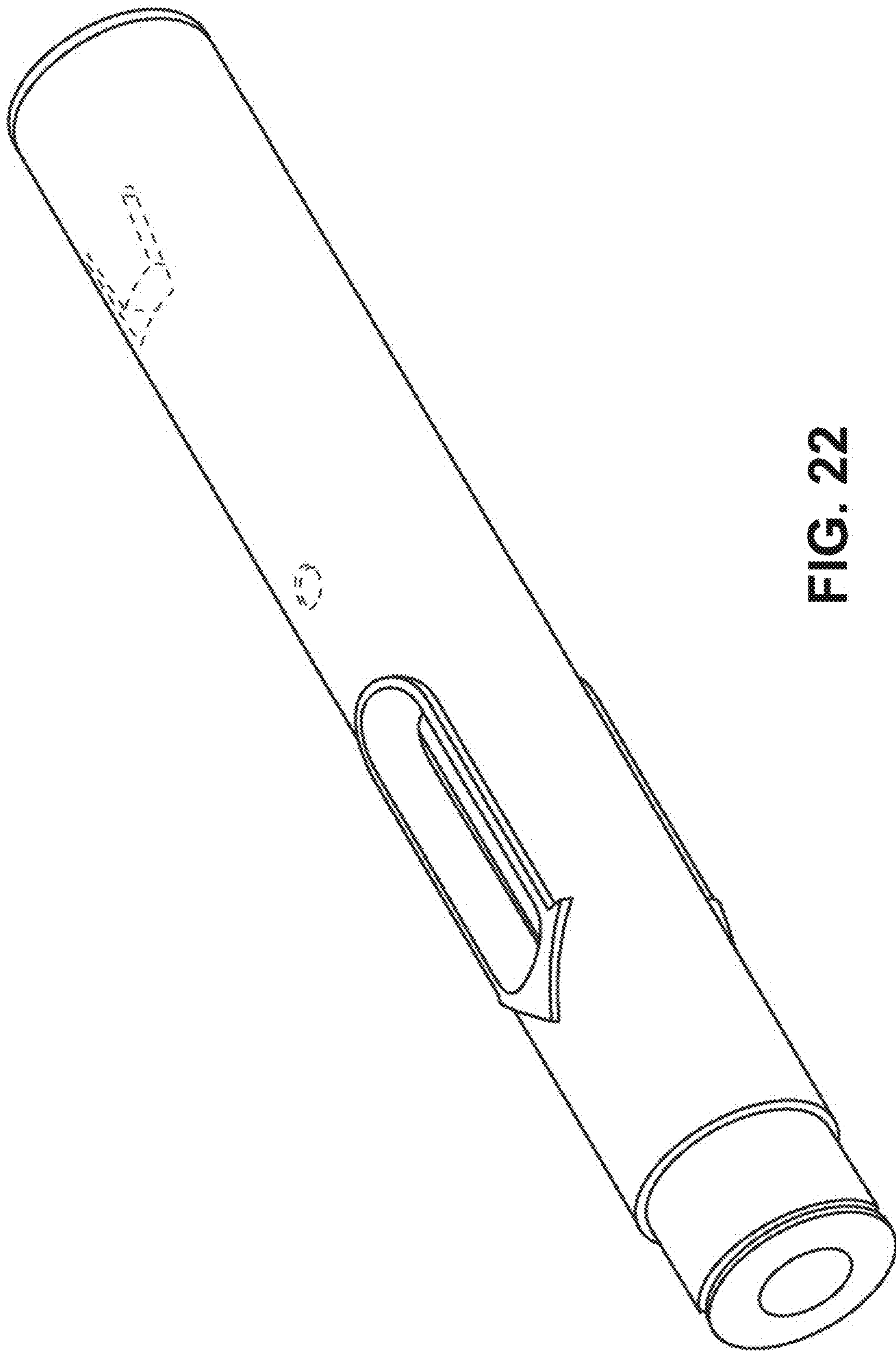


FIG. 22

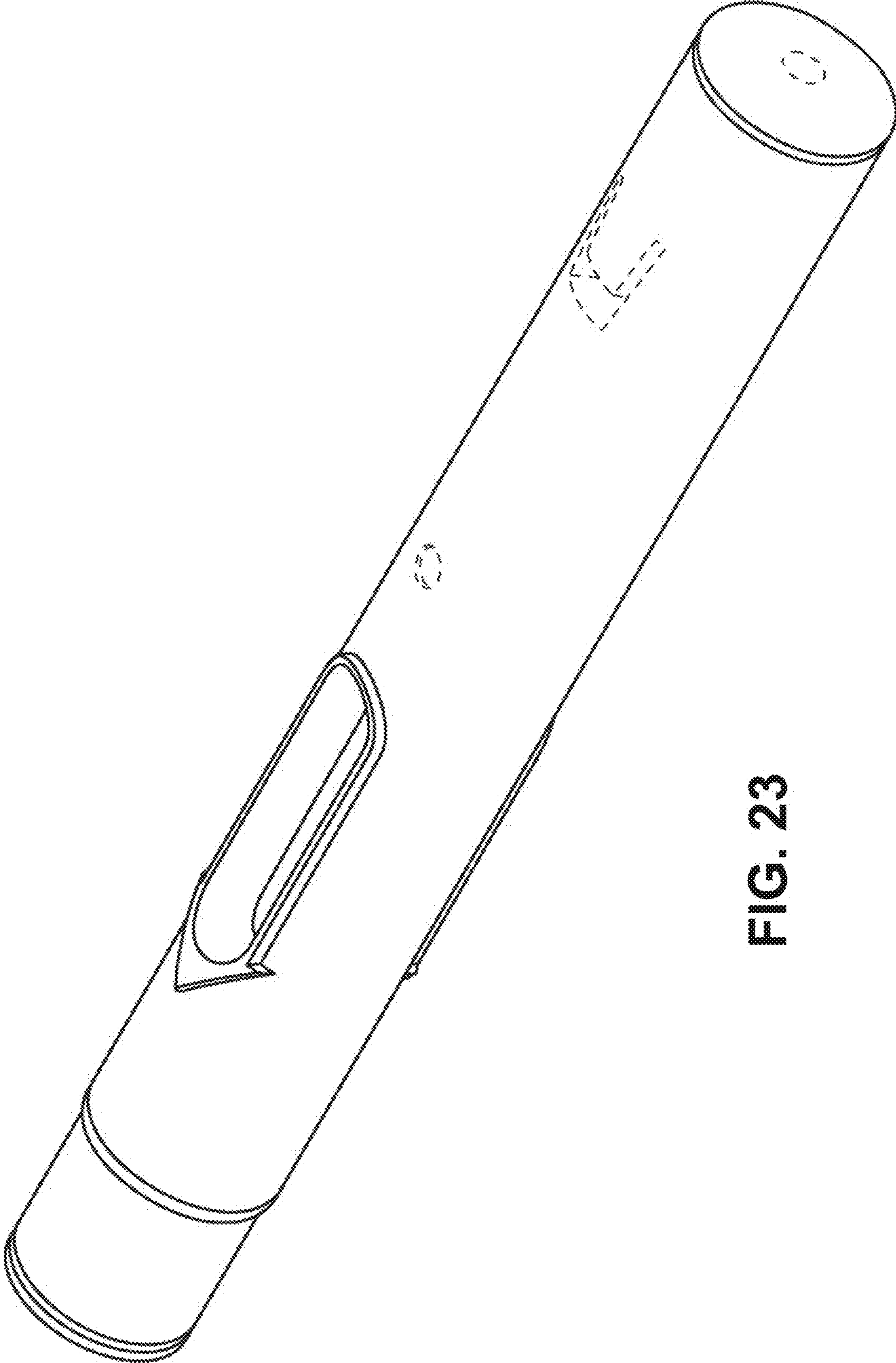


FIG. 23

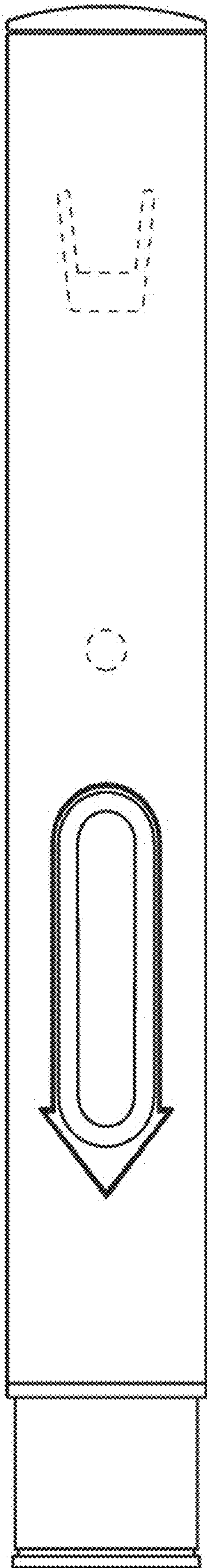


FIG. 24

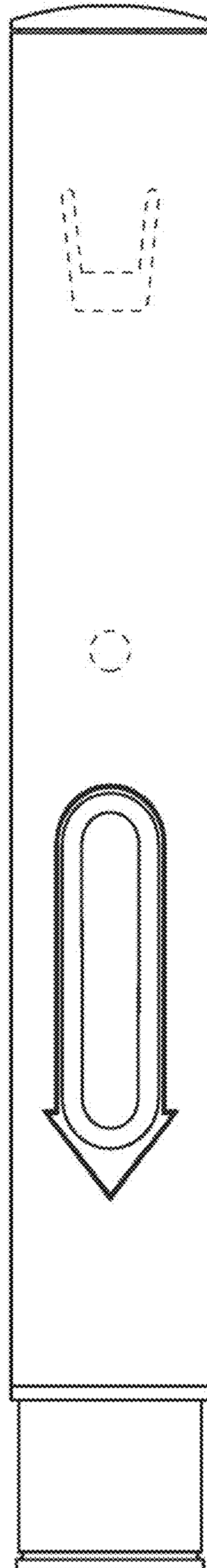


FIG. 25

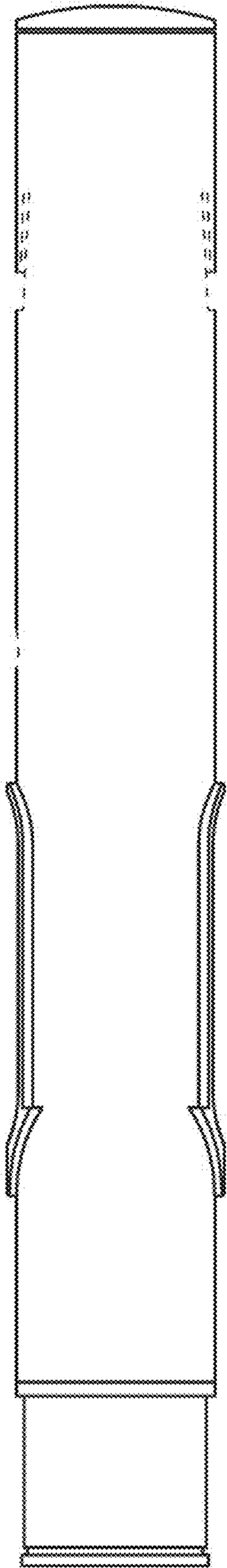


FIG. 26

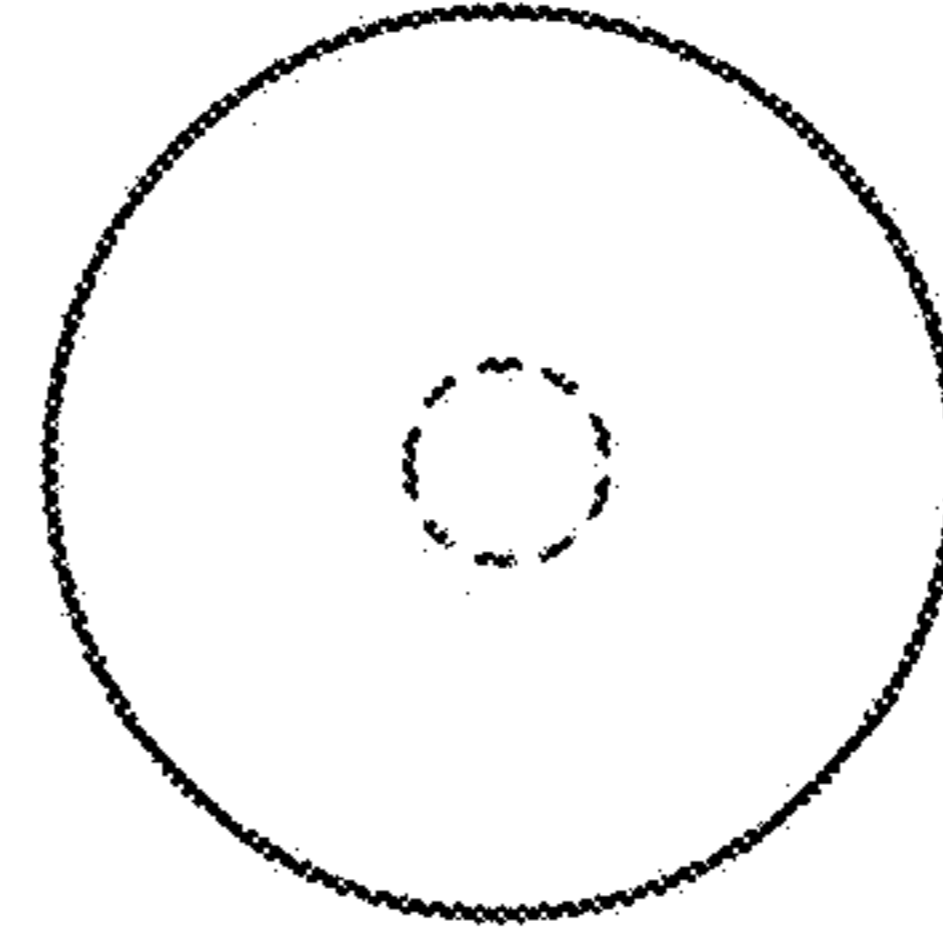


FIG. 27

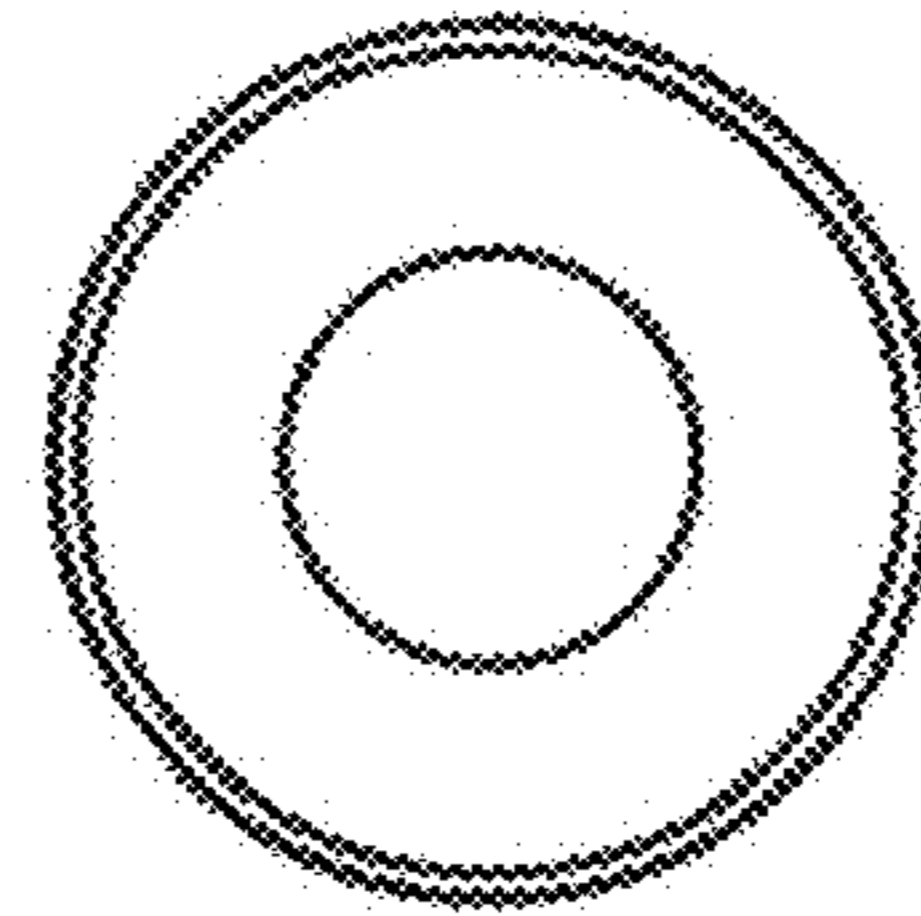


FIG. 28