



US00D829891S

(12) **United States Design Patent** (10) **Patent No.:** **US D829,891 S**
Shaw et al. (45) **Date of Patent:** **** Oct. 2, 2018**

(54) **SYRINGE WITH OFFSET NEEDLE
RETRACTION CHAMBER AND FRONTAL
ATTACHMENT**

FOREIGN PATENT DOCUMENTS

CN 1155846 7/1995
EP 0479303 8/1992
EP 1161962 12/2001

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(57) **CLAIM**

We claim the ornamental design for a syringe with offset needle retraction chamber and frontal attachment, as shown and described.

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DESCRIPTION

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

FIG. 1 is a right front perspective view of a syringe with offset needle retraction chamber and frontal attachment when the frontal attachment and a syringe plunger handle are each disposed in a first position, with a forwardly projecting needle shown in phantom outline;
FIG. 2 is a front elevation view thereof;
FIG. 3 is a rear elevation view thereof;
FIG. 4 is a top plan view thereof that is inclined to facilitate placement on the drawing sheet;
FIG. 5 is a bottom plan view thereof that is inclined to facilitate placement on the drawing sheet;
FIG. 6 is a right side elevation view thereof that is inclined to facilitate placement on the drawing sheet;
FIG. 7 is a left side elevation view thereof that is inclined to facilitate placement on the drawing sheet;
FIG. 8 is a right front perspective view of the syringe with offset needle retraction chamber and frontal attachment of FIG. 1 when the frontal attachment and the syringe plunger handle are each disposed in a second position and the needle previously shown in phantom outline is not visible;
FIG. 9 is a front elevation view of the syringe with offset needle retraction chamber and frontal attachment when the frontal attachment and the syringe plunger handle are each disposed in a second position as in FIG. 8 and the needle previously shown in phantom outline is not visible;
FIG. 10 is a rear elevation view of the syringe with offset needle retraction chamber and frontal attachment when the

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Related U.S. Application Data

(63) Continuation-in-part of application No. 14/020,465, filed on Sep. 6, 2013, which is a continuation-in-part (Continued)

(51) **LOC (11) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/114**

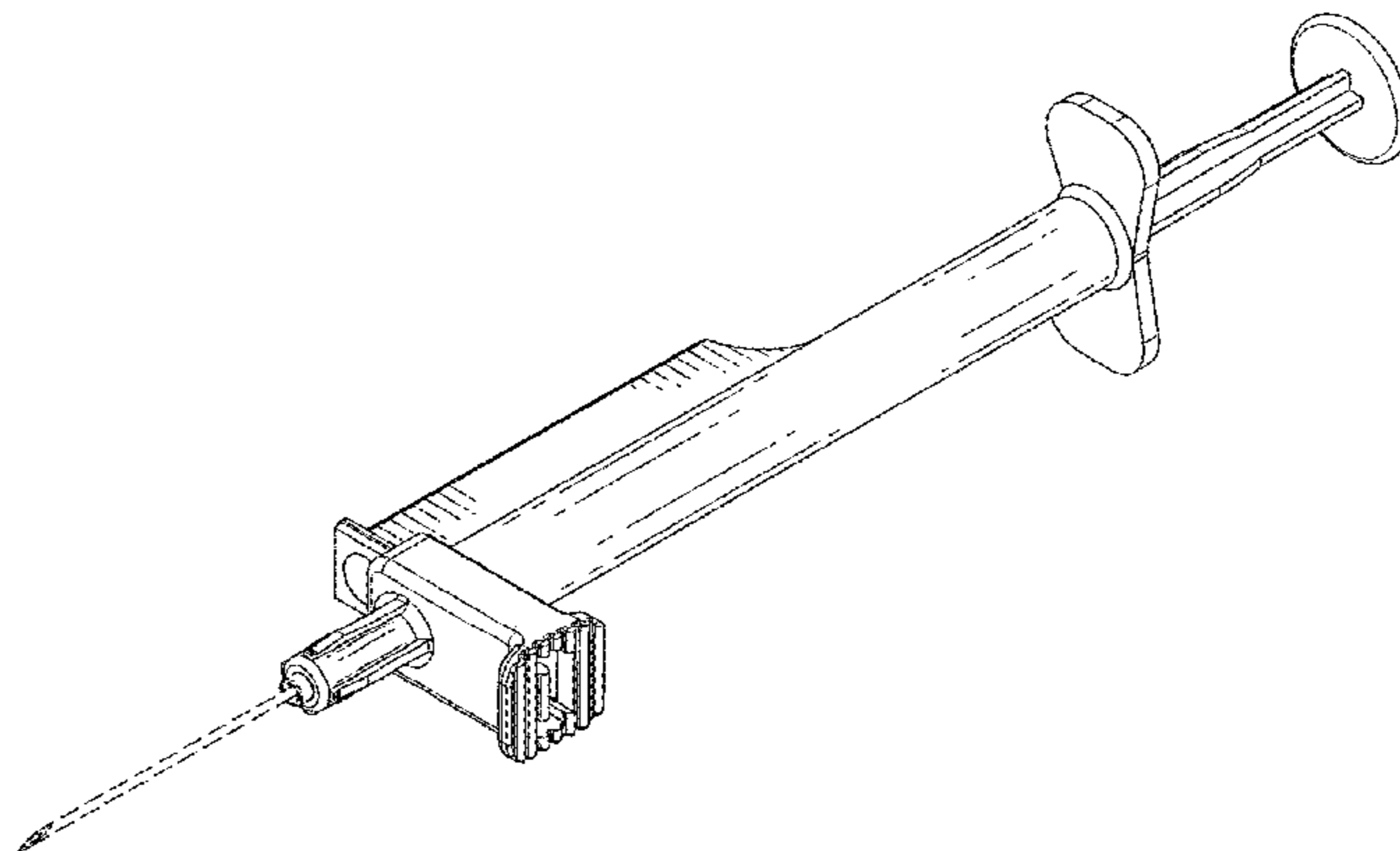
(58) **Field of Classification Search**
USPC D24/112–114, 108, 133, 130, 127, 186; 606/181, 185; 604/264, 272, 187, 181, 604/184, 227
(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,466,446 A 8/1984 Baidwan et al.
4,747,831 A 5/1988 Kulli
(Continued)

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frontal attachment and the syringe plunger handle are each disposed in a second position as in FIG. 8 and the needle previously shown in phantom outline is not visible; FIG. 11 is a top plan view of the syringe with offset needle retraction chamber and frontal attachment when the frontal attachment and the syringe plunger handle are each disposed in a second position as in FIG. 8;

FIG. 12 is a bottom plan view of the syringe with offset needle retraction chamber and frontal attachment when the frontal attachment and the syringe plunger handle are each disposed in a second position as in FIG. 8 and the needle previously shown in phantom outline is not visible;

FIG. 13 is a right side elevation view of the syringe with offset needle retraction chamber and frontal attachment when the frontal attachment and the syringe plunger handle are each disposed in a second position as in FIG. 8 and the needle previously shown in phantom outline is not visible; and,

FIG. 14 is a left side elevation view of the syringe with offset needle retraction chamber and frontal attachment when the frontal attachment is positioned as in FIG. 8 and the needle previously shown in phantom outline is not visible.

The dashed lines immediately adjacent to the claimed areas in FIG. 2 represent the boundaries of the claimed design. The dashed lines in the figures illustrate the portions of the design that form no part of the claimed design. None of the broken lines form any part of the claimed design.

1 Claim, 10 Drawing Sheets

Related U.S. Application Data

of application No. 13/714,819, filed on Dec. 14, 2012, now Pat. No. 9,138,545.

- (58) **Field of Classification Search**
 CPC A61M 5/178; A61M 3/00; A61M 5/20; A61M 5/31; A61M 5/3146; A61M 5/3129; A61M 5/3148; A61M 5/315
 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,813,426 A 3/1989 Haber et al.
 4,813,935 A 3/1989 Haber et al.
 4,941,883 A 7/1990 Venturini
 4,973,316 A 11/1990 Dysarz
 D326,154 S * 5/1992 Deguchi D24/112
 5,163,916 A 11/1992 Sunderland
 5,263,942 A 11/1993 Smedley et al.
 5,298,023 A 3/1994 Haber et al.
 5,370,628 A 12/1994 Allison et al.
 5,395,337 A 3/1995 Clemens et al.
 5,423,758 A 6/1995 Shaw
 5,445,618 A 8/1995 Adobbati
 5,503,010 A 4/1996 Yamanaka
 5,573,510 A 12/1996 Isaacson

5,685,863 A 11/1997 Botich et al.
 5,704,920 A 1/1998 Gyure
 5,728,073 A 3/1998 Whisson
 5,779,679 A 7/1998 Shaw
 D397,434 S * 8/1998 Pike D24/112
 5,795,339 A 8/1998 Erskine
 5,957,887 A 9/1999 Osterlind et al.
 5,984,731 A 10/1999 Kovelman
 6,039,713 A 3/2000 Botich et al.
 6,083,040 A 5/2000 Owen et al.
 6,210,371 B1 4/2001 Shaw
 D445,495 S * 7/2001 Schaefer D24/108
 6,277,102 B1 8/2001 Carilli
 6,468,250 B2 10/2002 Yang
 6,500,153 B1 * 12/2002 Sheppard A61B 17/3401
 604/164.01
 D484,239 S * 12/2003 Anderson D24/112
 6,794,423 B1 9/2004 Li
 6,808,512 B1 10/2004 Lin et al.
 D505,200 S * 5/2005 Simpson D24/114
 7,351,224 B1 4/2008 Shaw
 D601,243 S * 9/2009 Bierman D24/112
 D616,985 S * 6/2010 Ade D24/130
 D617,454 S * 6/2010 Shaw D24/130
 D617,893 S * 6/2010 Bierman D24/112
 D657,462 S * 4/2012 Siroky D24/130
 D657,867 S * 4/2012 Effenberger D24/114
 8,292,852 B2 10/2012 Mulholland
 8,343,094 B2 1/2013 Shaw
 D690,417 S * 9/2013 Solomon D24/114
 2001/0021827 A1 9/2001 Ferguson et al.
 2002/0068907 A1 6/2002 Dysarz
 2002/0082560 A1 6/2002 Yang
 2003/0078540 A1 4/2003 Saulenas et al.
 2003/0171695 A1 9/2003 Zurcher
 2003/0181871 A1 9/2003 Wilkinson et al.
 2003/0236504 A1 12/2003 Chen
 2004/0015135 A1 1/2004 Wilkinson
 2004/0019329 A1 1/2004 Erskine
 2004/0133172 A1 7/2004 Wilkinson
 2004/0204688 A1 10/2004 Lin et al.
 2005/0004524 A1 1/2005 Newby et al.
 2005/0288607 A1 12/2005 Konrad
 2006/0155244 A1 7/2006 Popov
 2006/0189934 A1 8/2006 Kuracina et al.
 2006/0235354 A1 10/2006 Kaal et al.
 2007/0260189 A1 11/2007 Shaw et al.
 2008/0132851 A1 6/2008 Shaw et al.
 2008/0132854 A1 6/2008 Sharp
 2008/0287881 A1 11/2008 Klehne
 2008/0319345 A1 12/2008 Swenson
 2009/0198196 A1 8/2009 West et al.
 2009/0306601 A1 12/2009 Shaw et al.
 2010/0000040 A1 1/2010 Shaw et al.
 2010/0003067 A1 1/2010 Stow et al.
 2010/0241029 A1 9/2010 Mahurkar
 2010/0286604 A1 11/2010 Shaw
 2010/0317999 A1 12/2010 Shaw et al.
 2011/0264037 A1 10/2011 Foshee et al.
 2012/0022464 A1 1/2012 Zivkovic et al.
 2012/0071790 A1 3/2012 Mahurkar
 2012/0071827 A1 3/2012 Zivkovic et al.
 2012/0078225 A1 3/2012 Zivkovic et al.
 2012/0226232 A1 9/2012 Shaw et al.
 2012/0259243 A1 10/2012 Shaw et al.
 2012/0316466 A1 12/2012 Crawford et al.

* cited by examiner

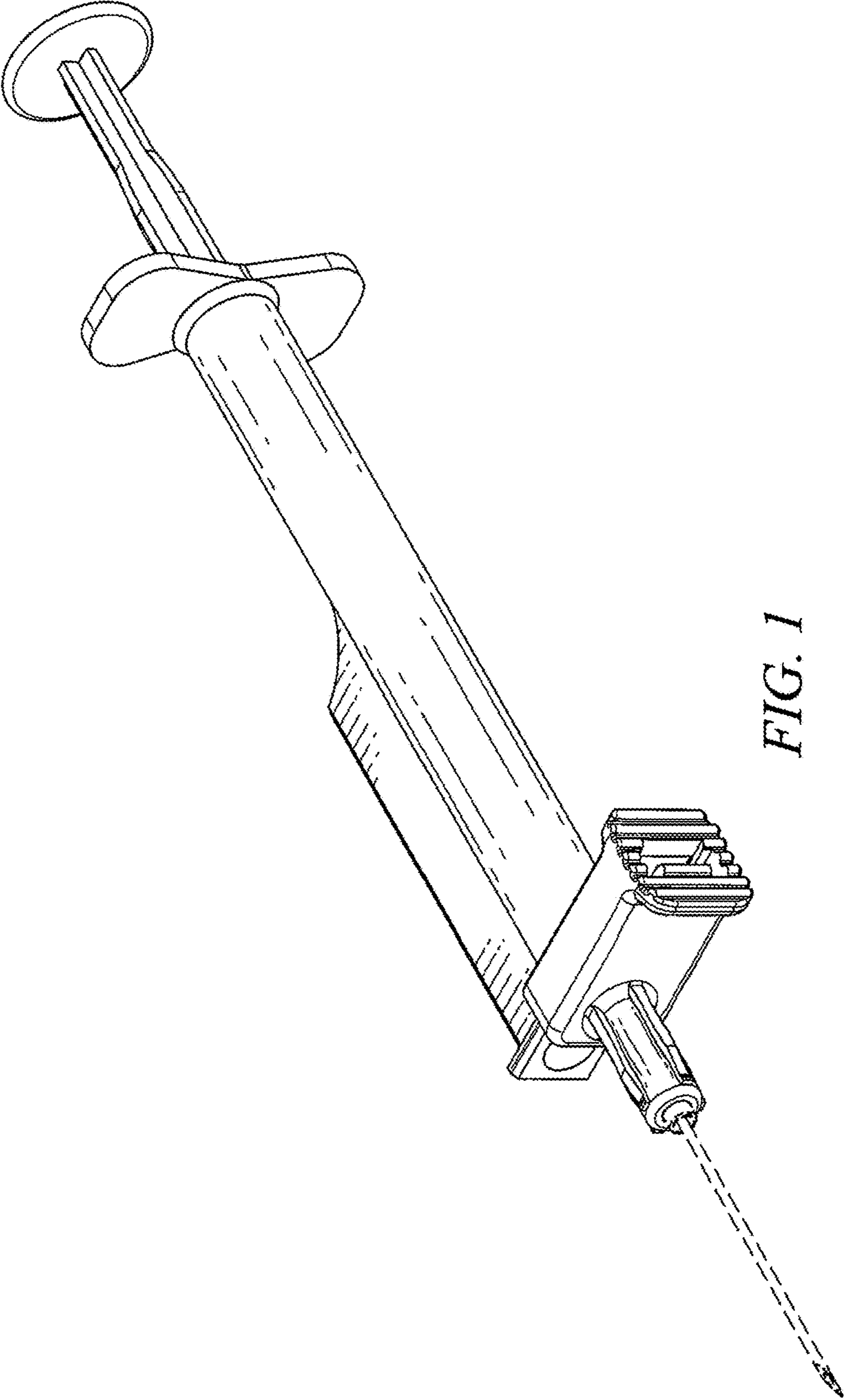


FIG. 1

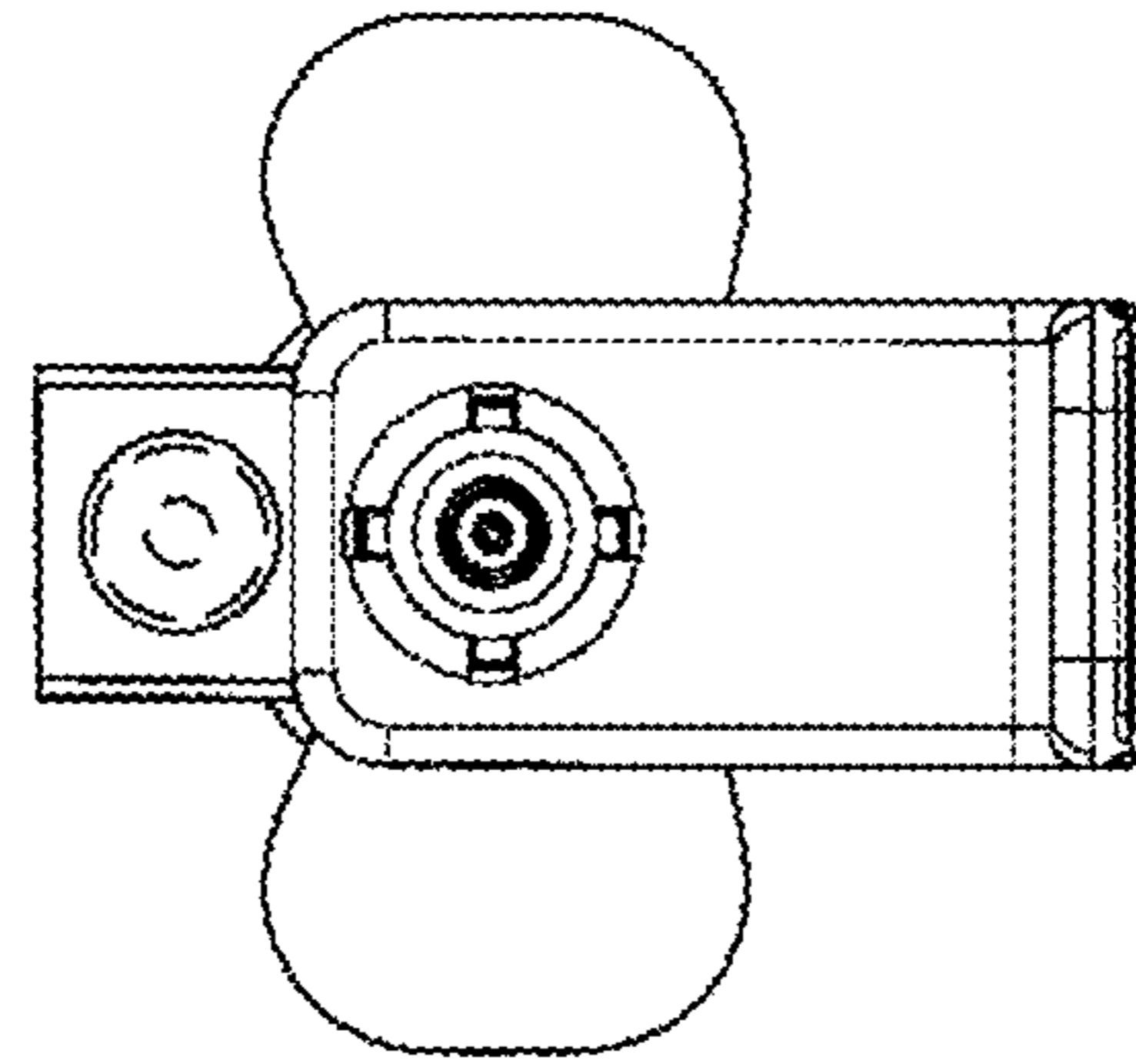


FIG. 2

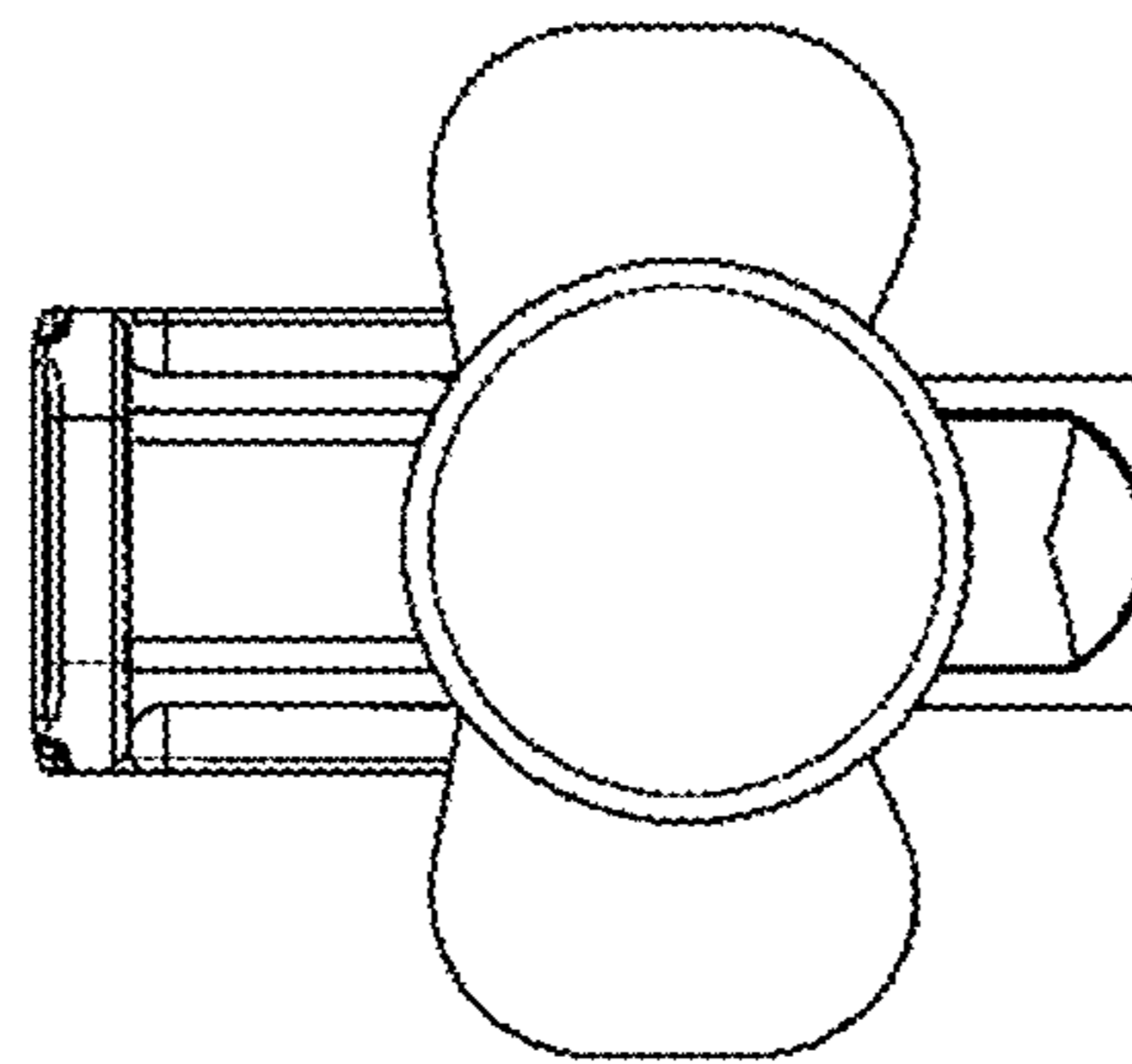


FIG. 3

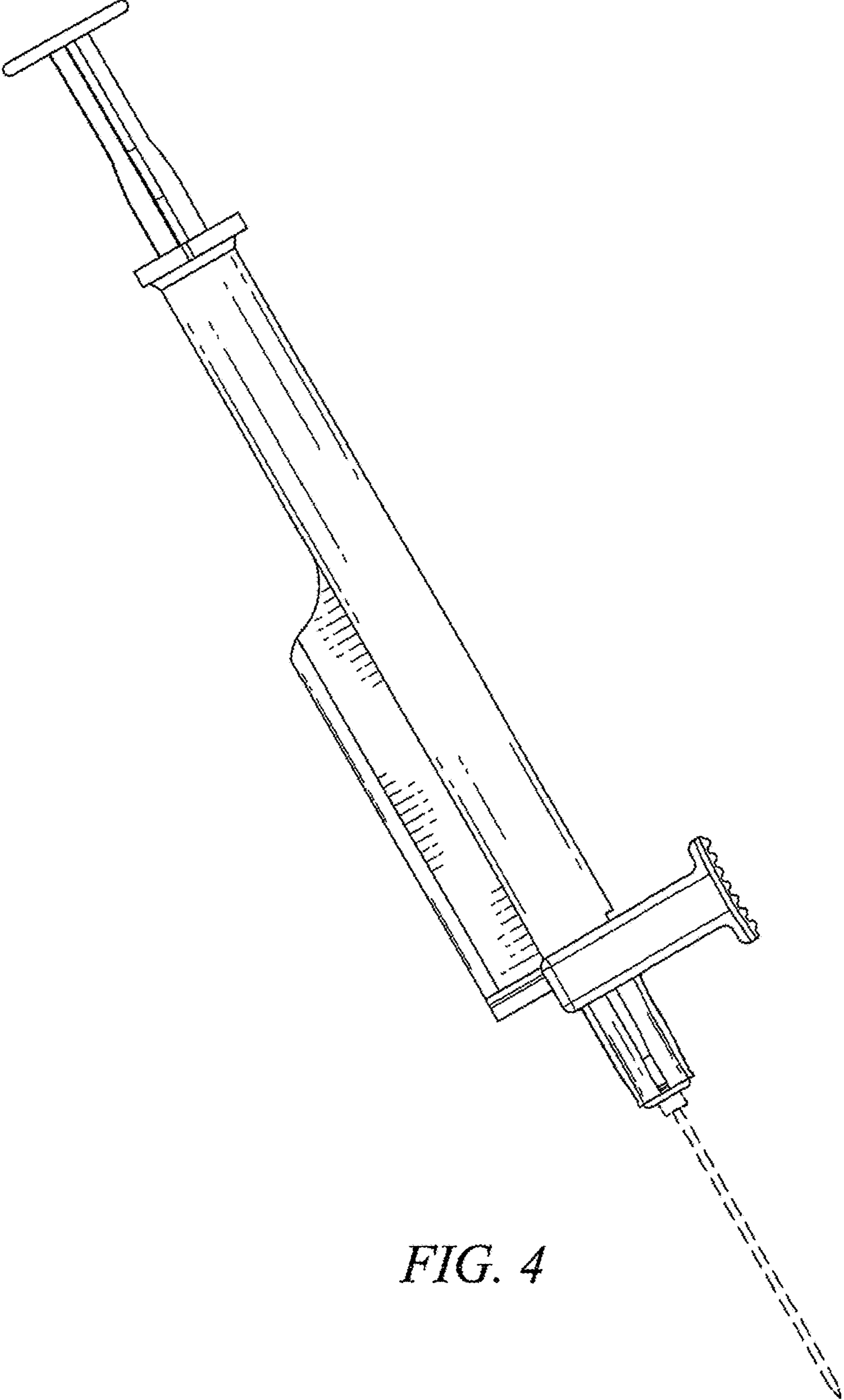


FIG. 4

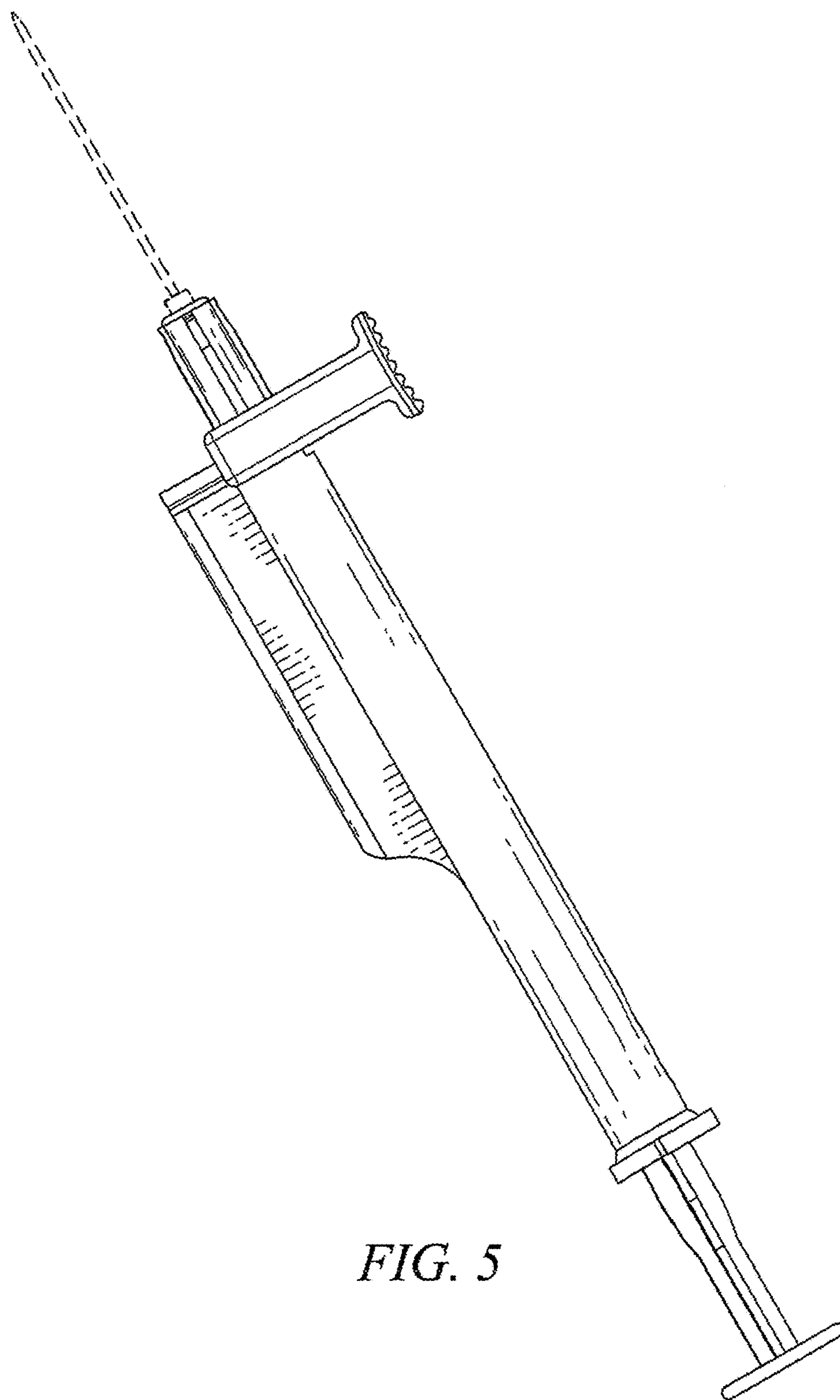


FIG. 5

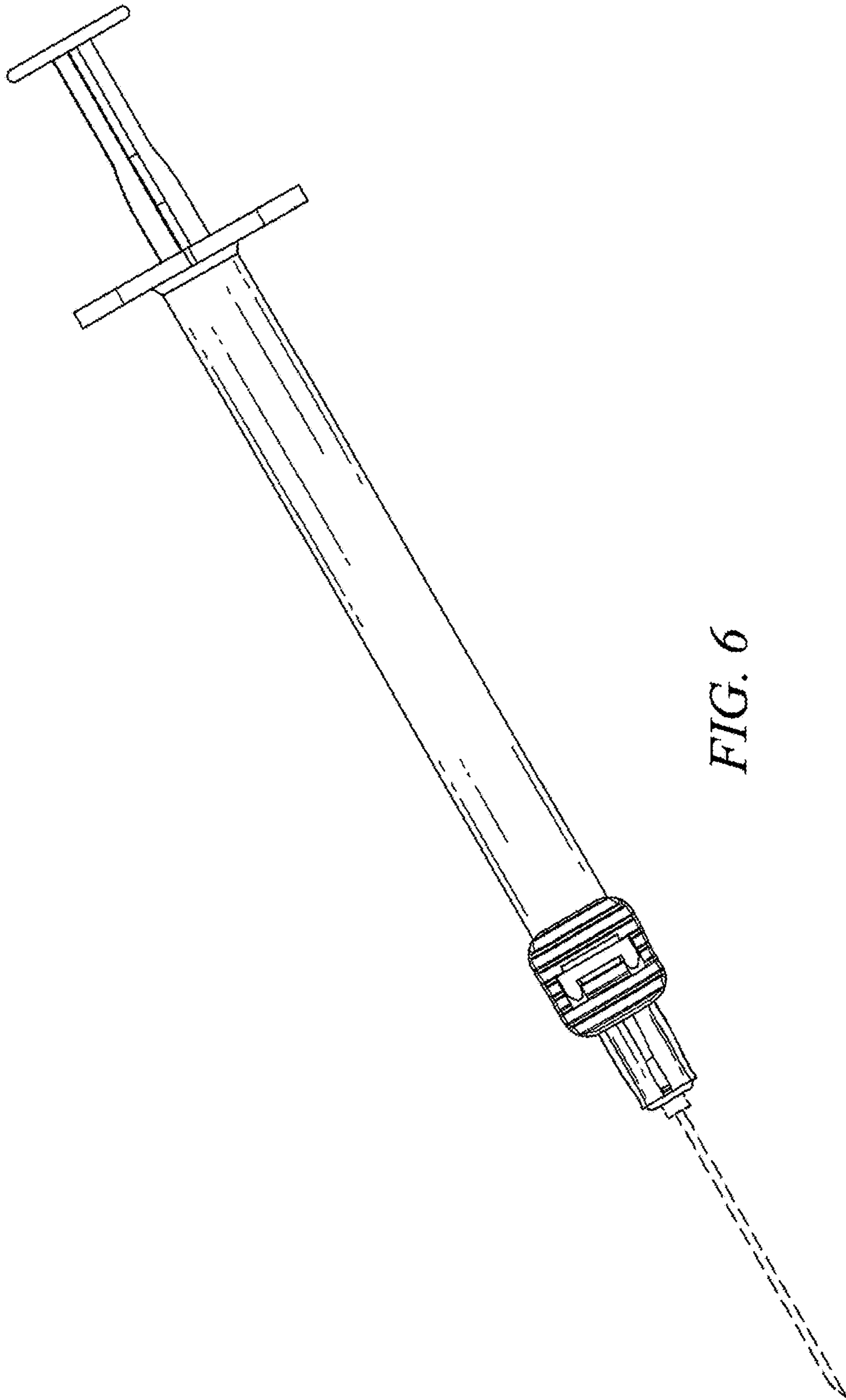


FIG. 6

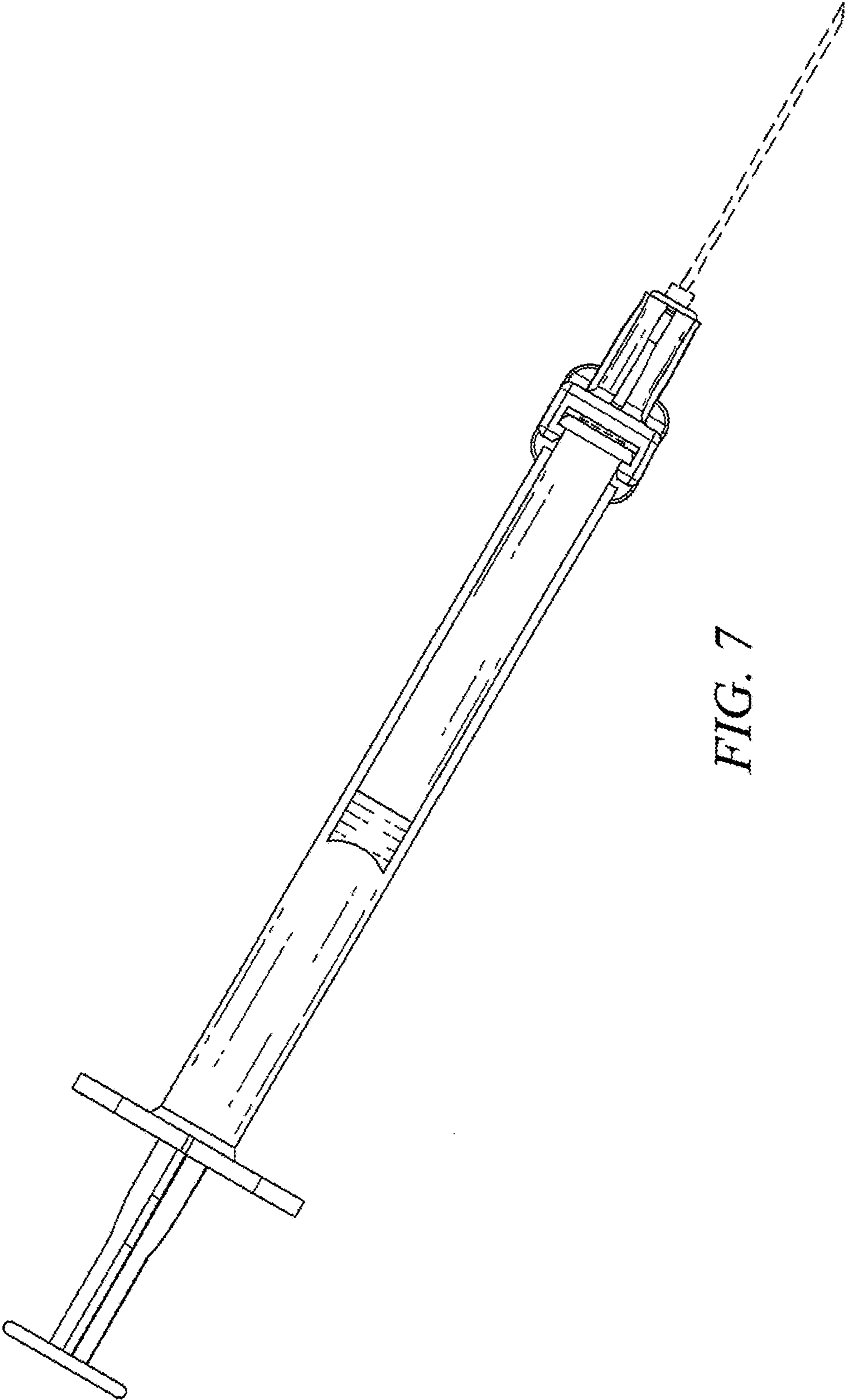


FIG. 7

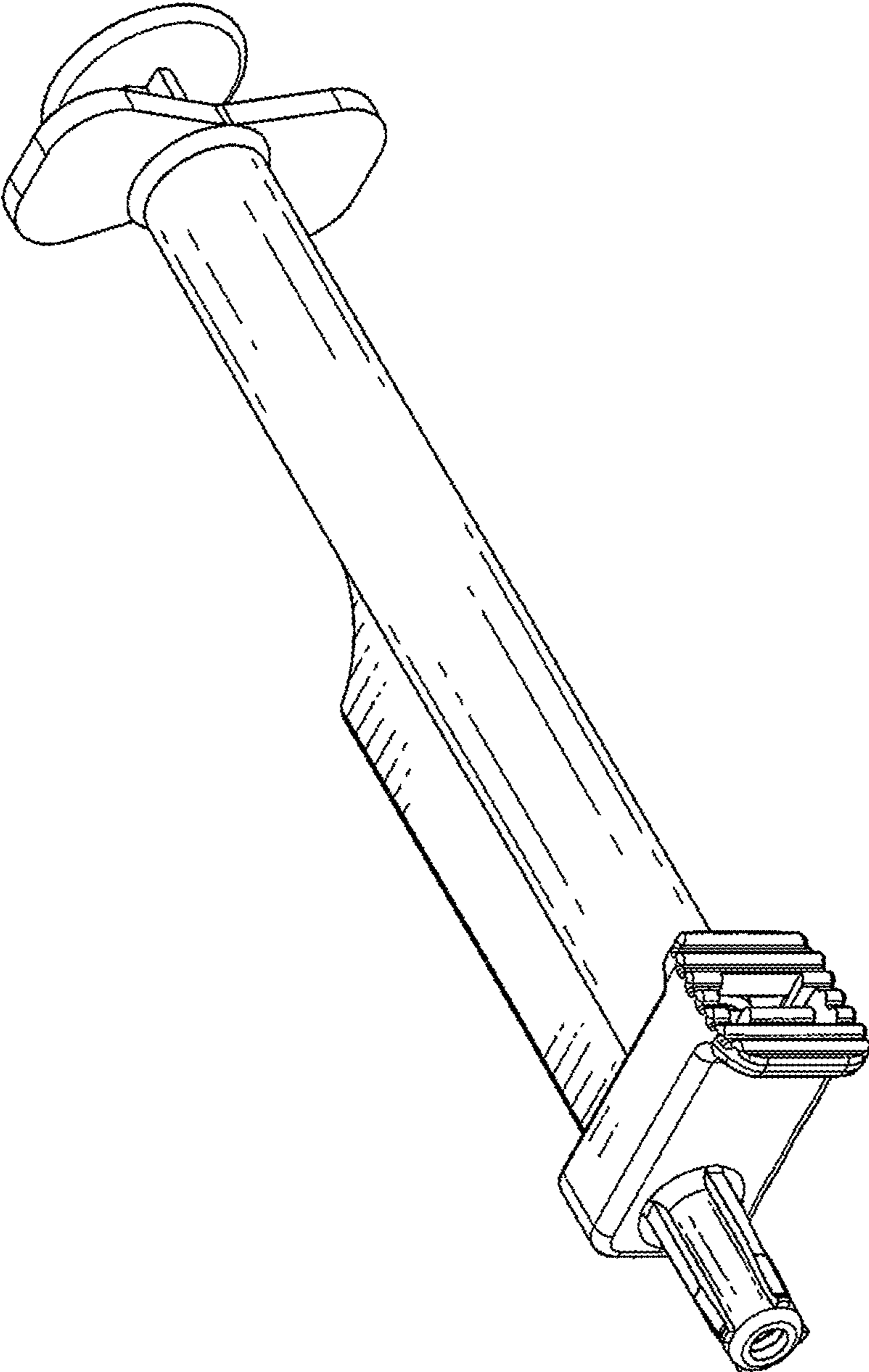


FIG. 8

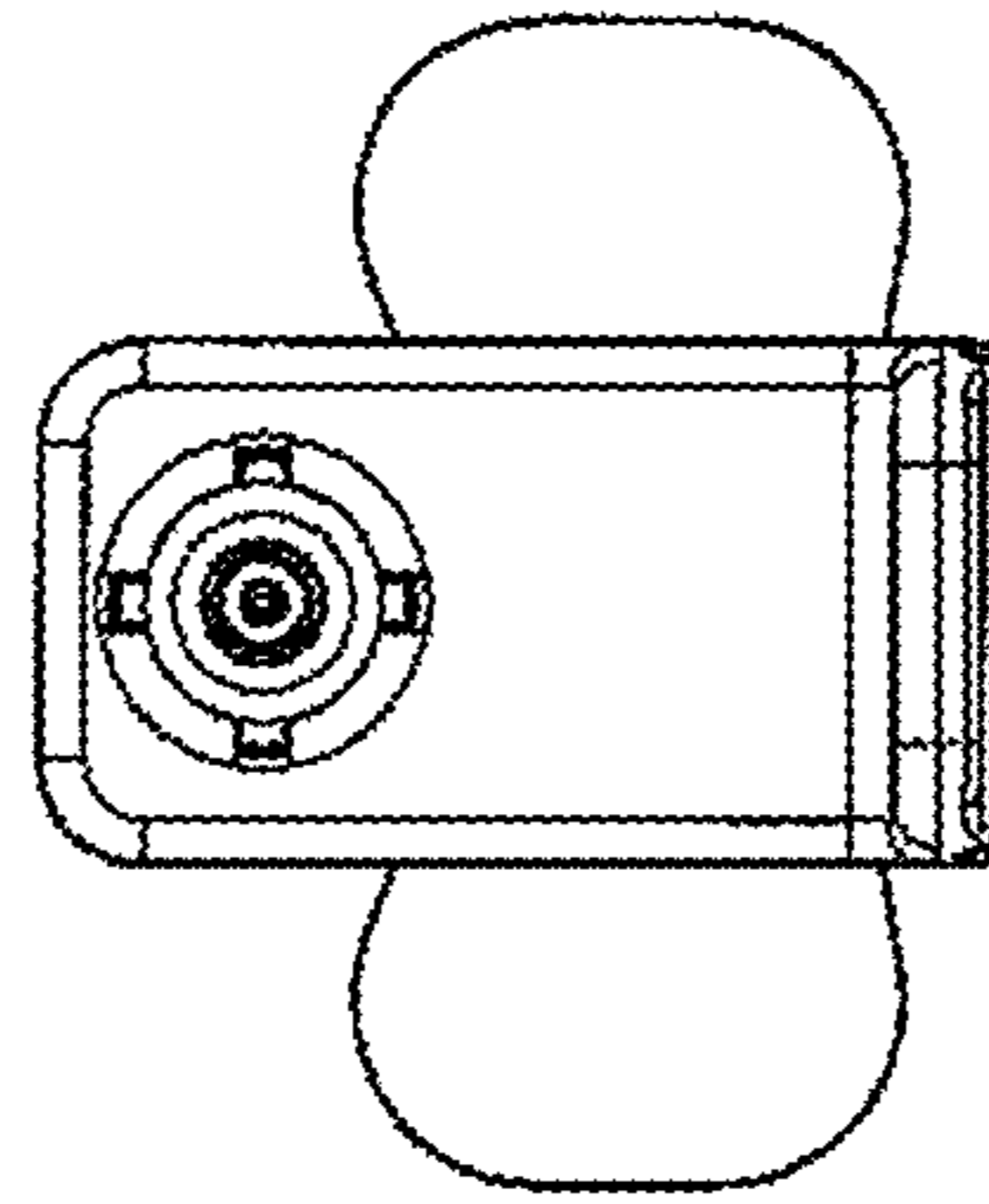


FIG. 9

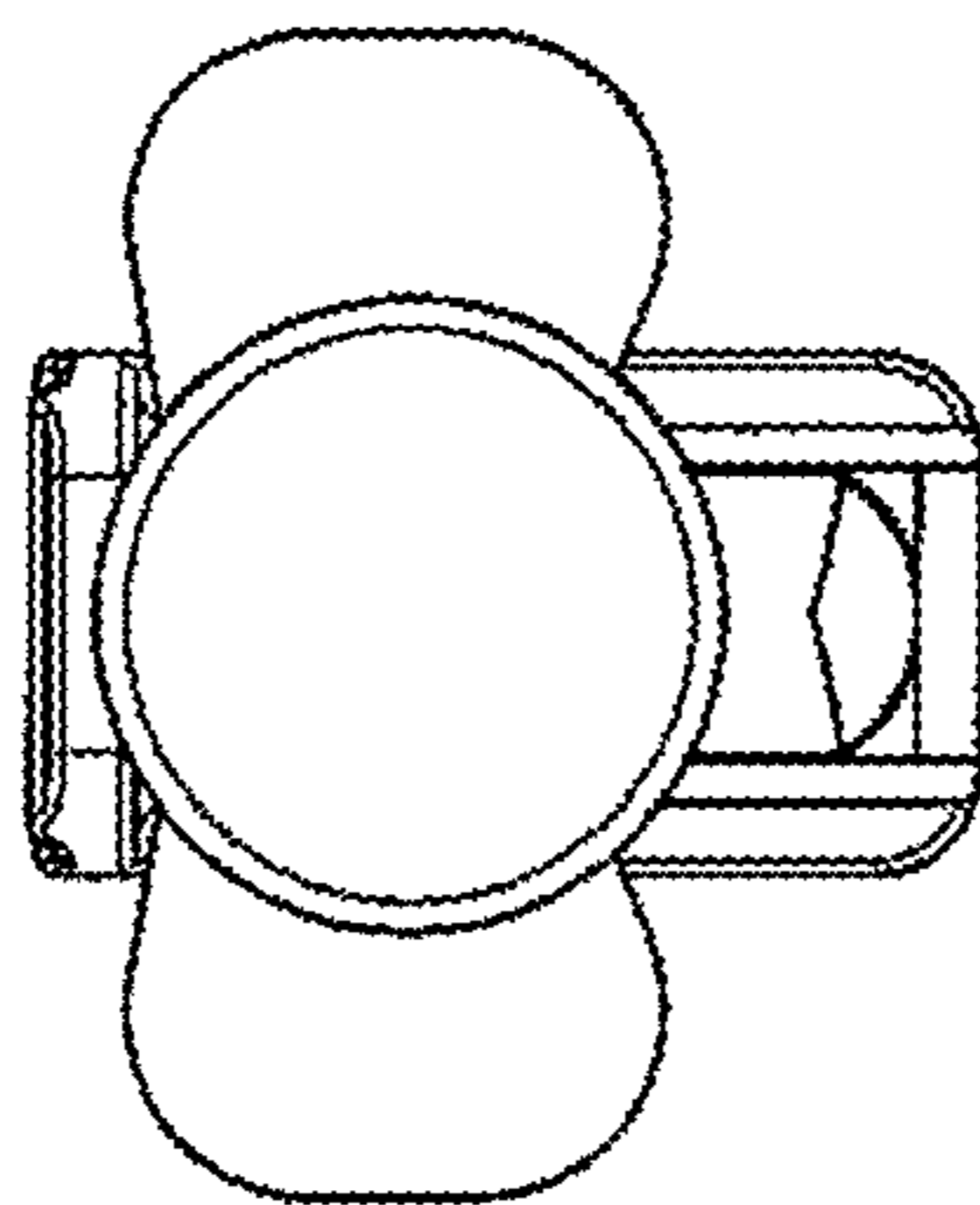


FIG. 10

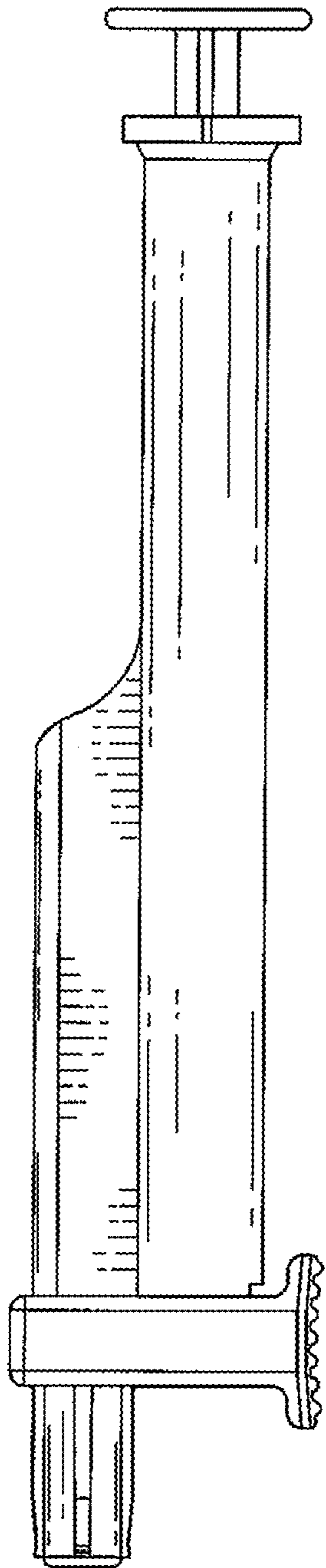


FIG. 11

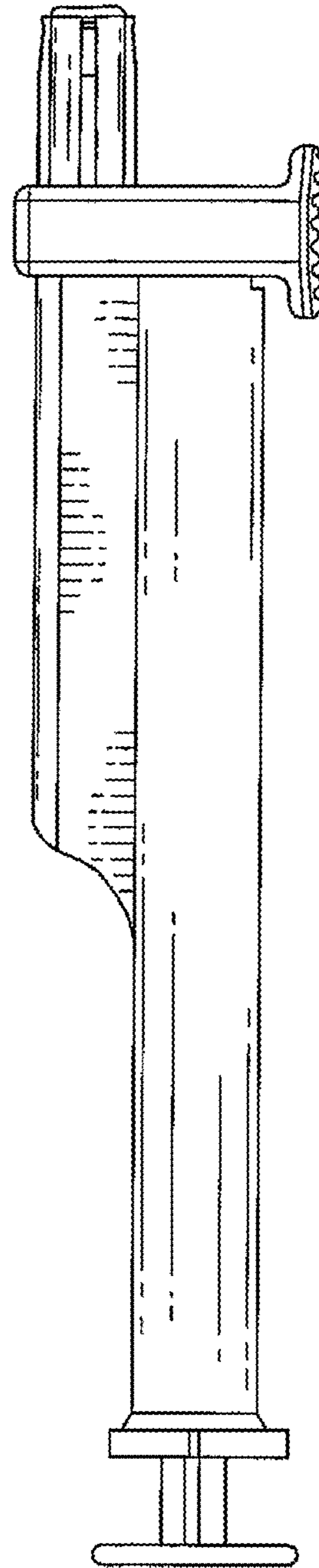


FIG. 12

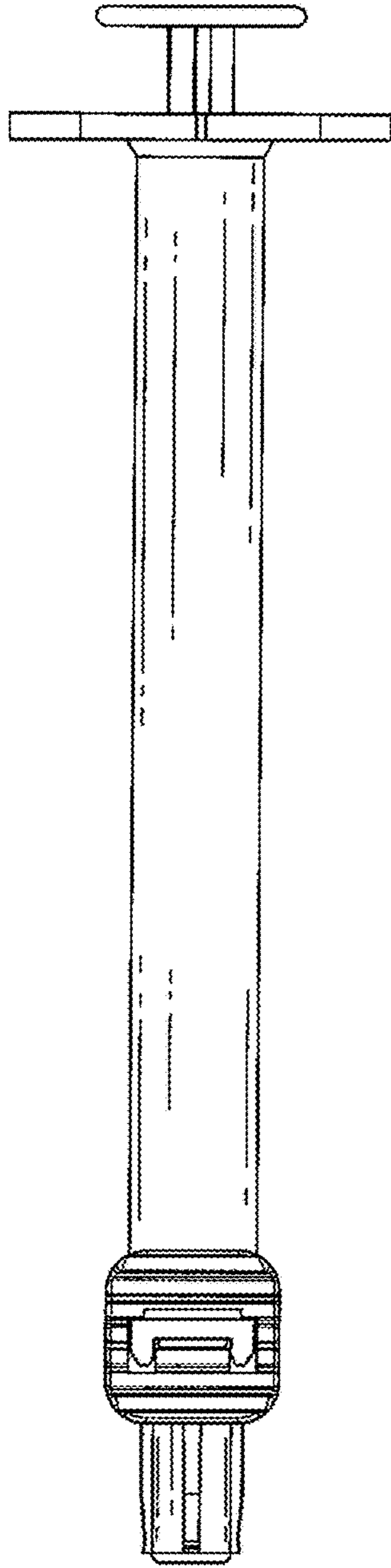


FIG. 13

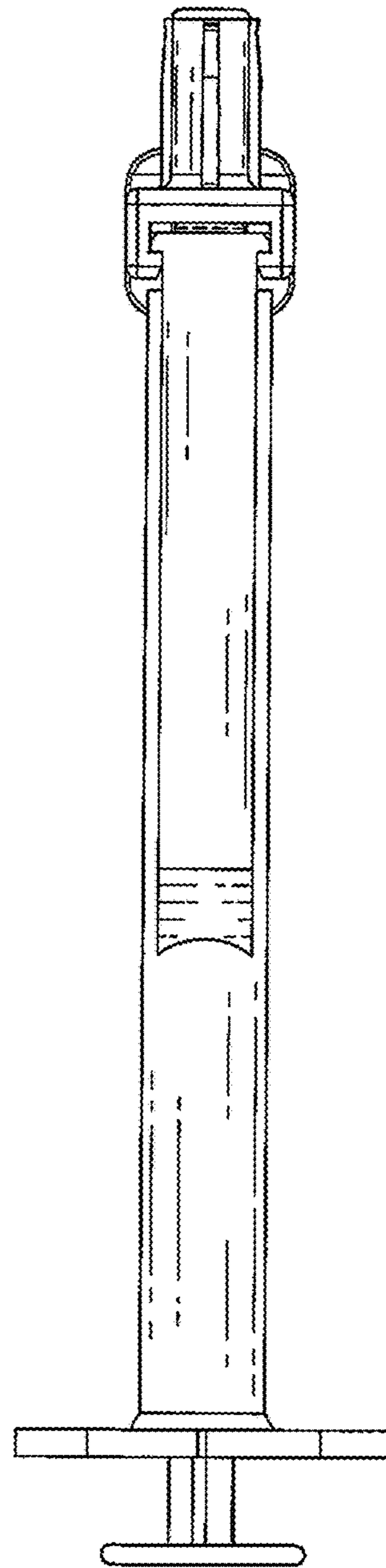


FIG. 14