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(12) **United States Design Patent** (10) **Patent No.:** **US D902,959 S**
Liao et al. (45) **Date of Patent:** **** Nov. 24, 2020**

(54) **PUMPING DEVICE** D314,039 S * 1/1991 Manchester D23/231
D324,868 S * 3/1992 Jacobs D15/7
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Yu-Kuo Liao, Taichung (TW) (Continued)

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Yu-Kuo Liao, Taichung (TW) TW M280453 U 11/2005

(**) Term: **15 Years** OTHER PUBLICATIONS

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(22) Filed: **Mar. 20, 2019**
Amazon.com, HORUSDY 200cc Fluid Extractor, (first available Apr. 25, 2018), Available for sale on Amazon.com URL:<https://www.amazon.com/HORUSDY-Extractor-Syringe-Suction-Transfer/dp/B07CNQMZYJ> (Year: 2018).*

Related U.S. Application Data

(63) Continuation-in-part of application No. 15/426,900, filed on Feb. 7, 2017, now abandoned, which is a continuation-in-part of application No. 14/312,575, filed on Jun. 23, 2014, now abandoned.
Primary Examiner — Sheryl Lane
Assistant Examiner — Mark T. Philipps

(51) **LOC (12) Cl.** **15-02**
(52) **U.S. Cl.**
USPC **D15/7**
(74) *Attorney, Agent, or Firm* — Muncy, Geissler, Olds & Lowe, P.C.

(58) **Field of Classification Search** (57) **CLAIM**
USPC D15/7, 9.1; D23/231
CPC F04B 9/14; F04B 47/024; F04B 33/00; We claim the ornamental design for a pumping device, as shown and described.

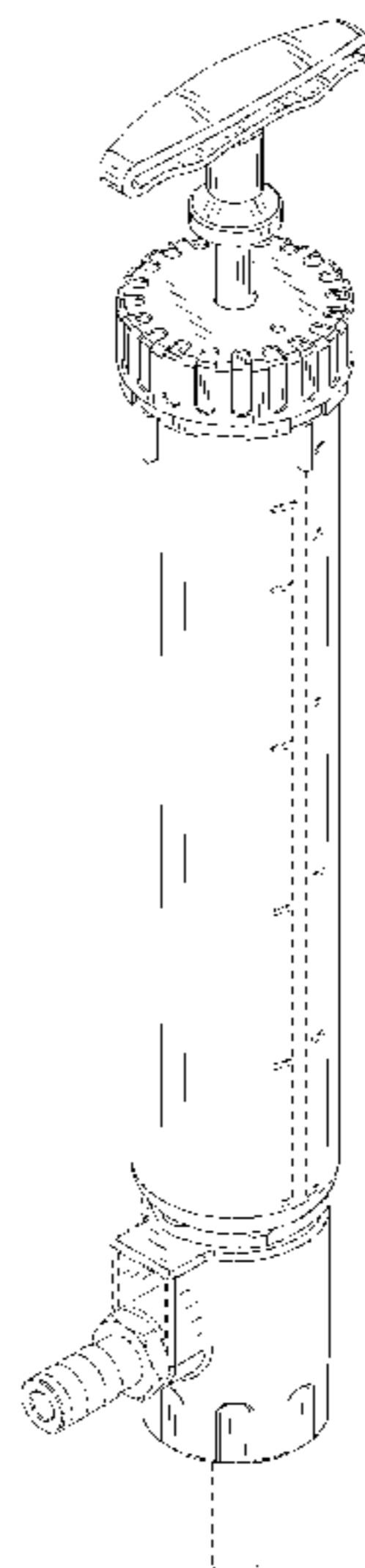
F04B 33/005; F16K 11/0712; B67D 7/00; B67D 7/007; B67D 7/04; B67D 7/60
See application file for complete search history.

DESCRIPTION

(56) **References Cited**
U.S. PATENT DOCUMENTS
1,217,886 A * 2/1917 Hopkins A61H 9/005 601/8
1,396,529 A 11/1921 Rudolph
1,414,463 A 5/1922 Grant
D150,097 S * 6/1948 Russell D23/231
D168,658 S * 1/1953 Russell D23/231
D170,387 S * 9/1953 Russell D23/231
2,883,939 A * 4/1959 Russell B05B 11/02 417/555.1
D255,826 S * 7/1980 Stout D23/231
D287,531 S * 12/1986 Evans D23/231
D295,660 S * 5/1988 Chiarella D23/231

FIG. 1 is a top, front, right perspective view of a pumping device showing our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a rear view thereof;
FIG. 4 is a left view thereof;
FIG. 5 is a right view thereof;
FIG. 6 is a top plan view thereof;
FIG. 7 is a bottom plan view thereof;
FIG. 8 a cross-section view taken along the line 8-8 in FIG. 2; and,
FIG. 9 is a partially enlarged view of FIG. 8.
The broken line showing of a pumping device is included for the purpose of illustrating portions of the article and forms no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D632,306 S * 2/2011 Wang D15/7
D725,230 S * 3/2015 Chen D23/231
D834,682 S * 11/2018 Liao D23/231
D864,351 S * 10/2019 Yang D23/231
2004/0228750 A1 11/2004 Huang et al.
2009/0291005 A1* 11/2009 Kilian F04B 9/14
417/437
2012/0097275 A1 4/2012 Yang
2012/0233989 A1* 9/2012 Fortin A43B 13/203
60/325
2013/0014836 A1* 1/2013 Cain F04B 9/14
137/511

* cited by examiner

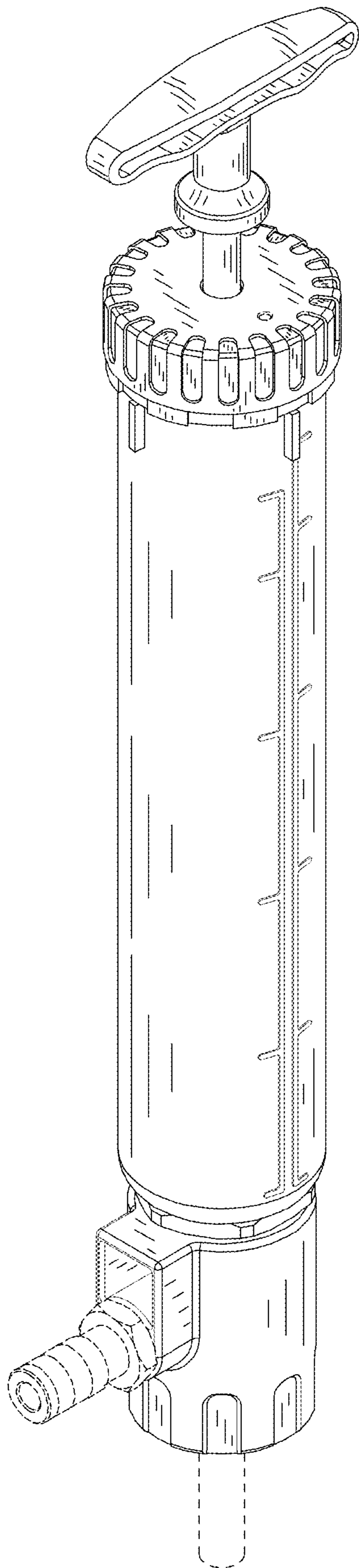


FIG. 1

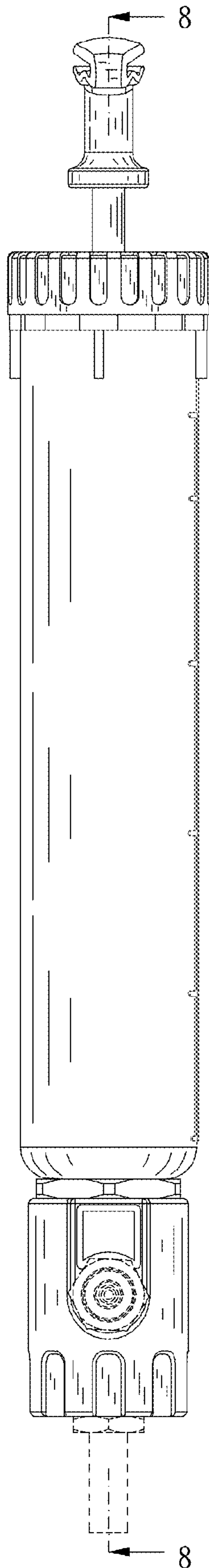


FIG. 2

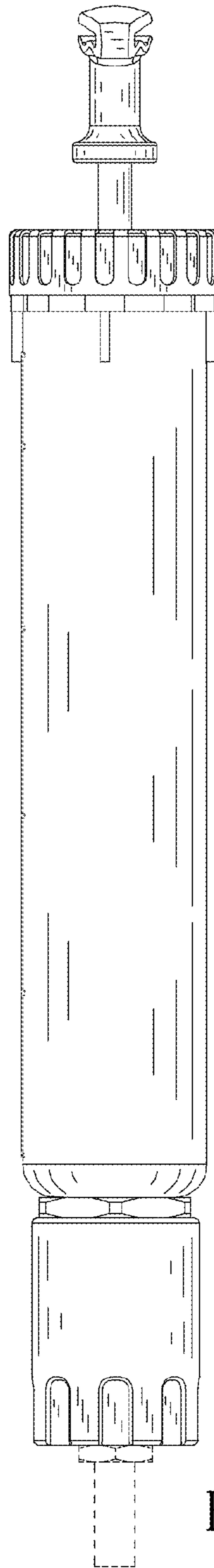


FIG. 3

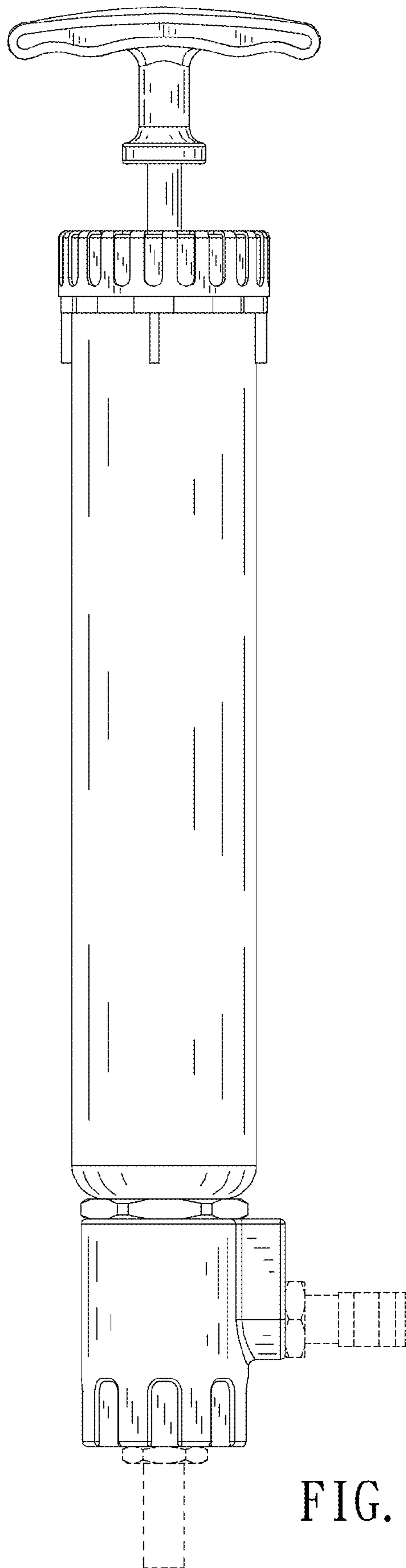


FIG. 4

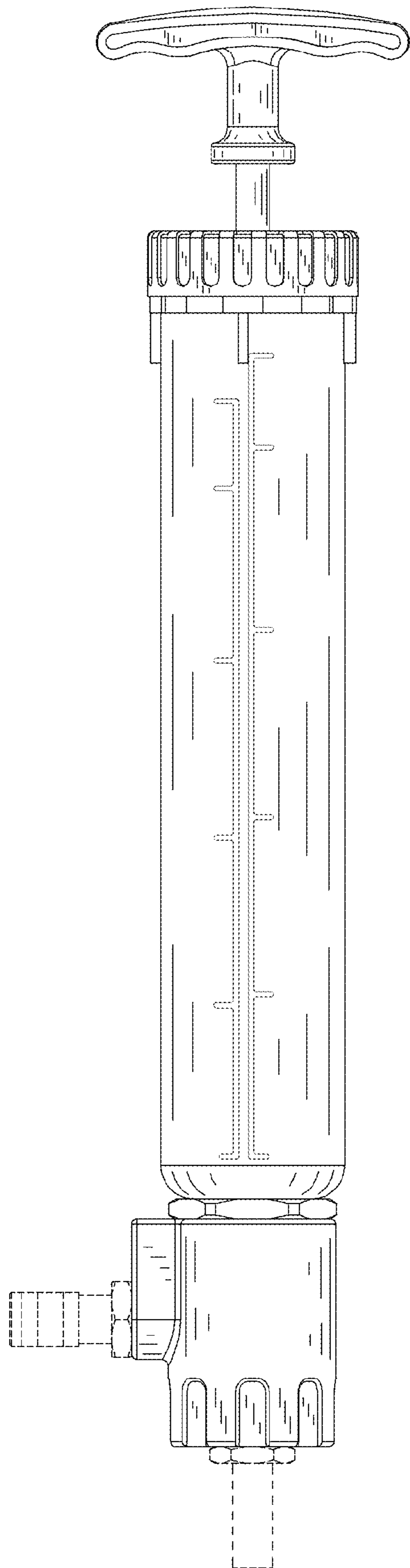


FIG. 5

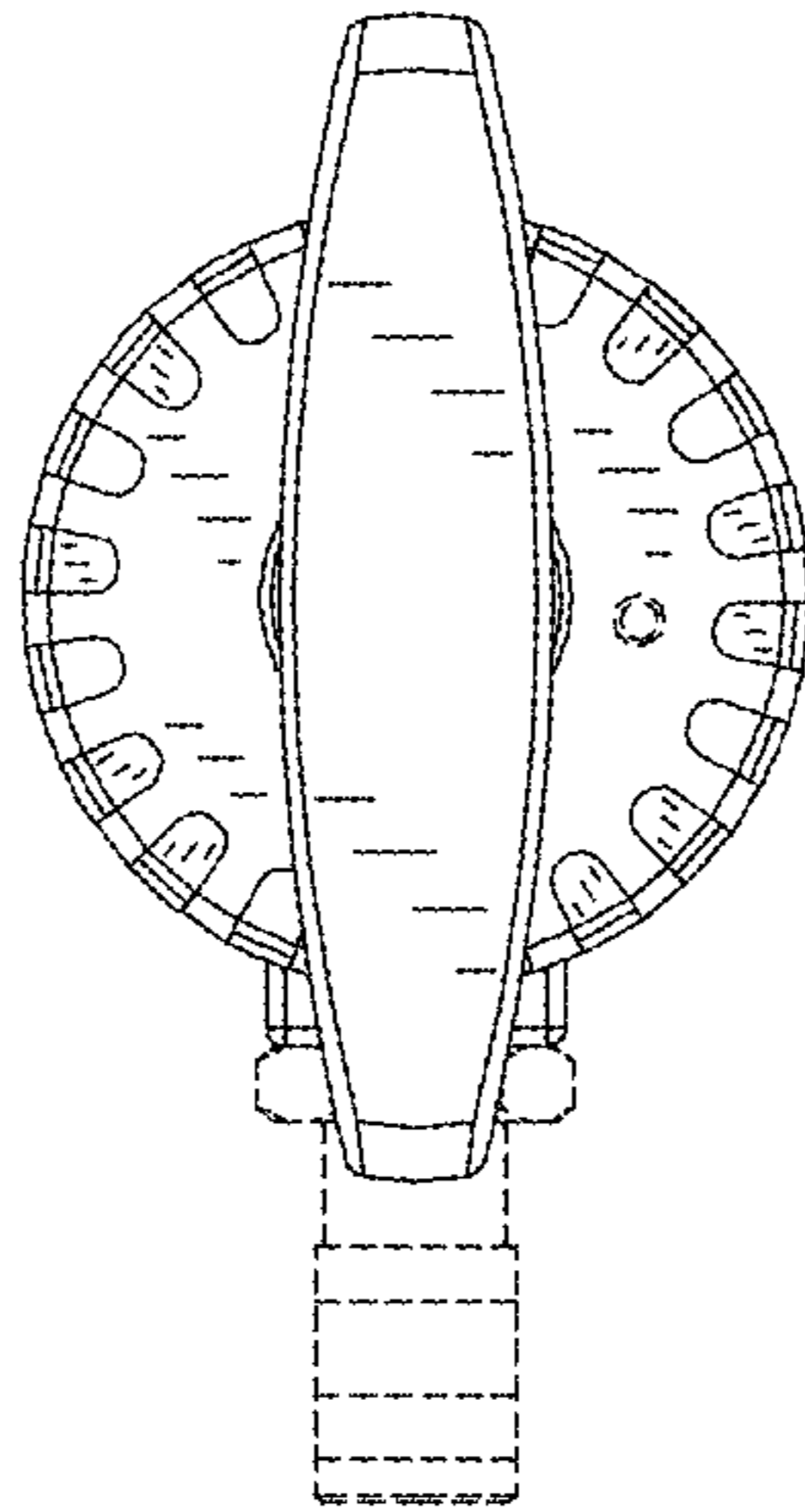


FIG. 6

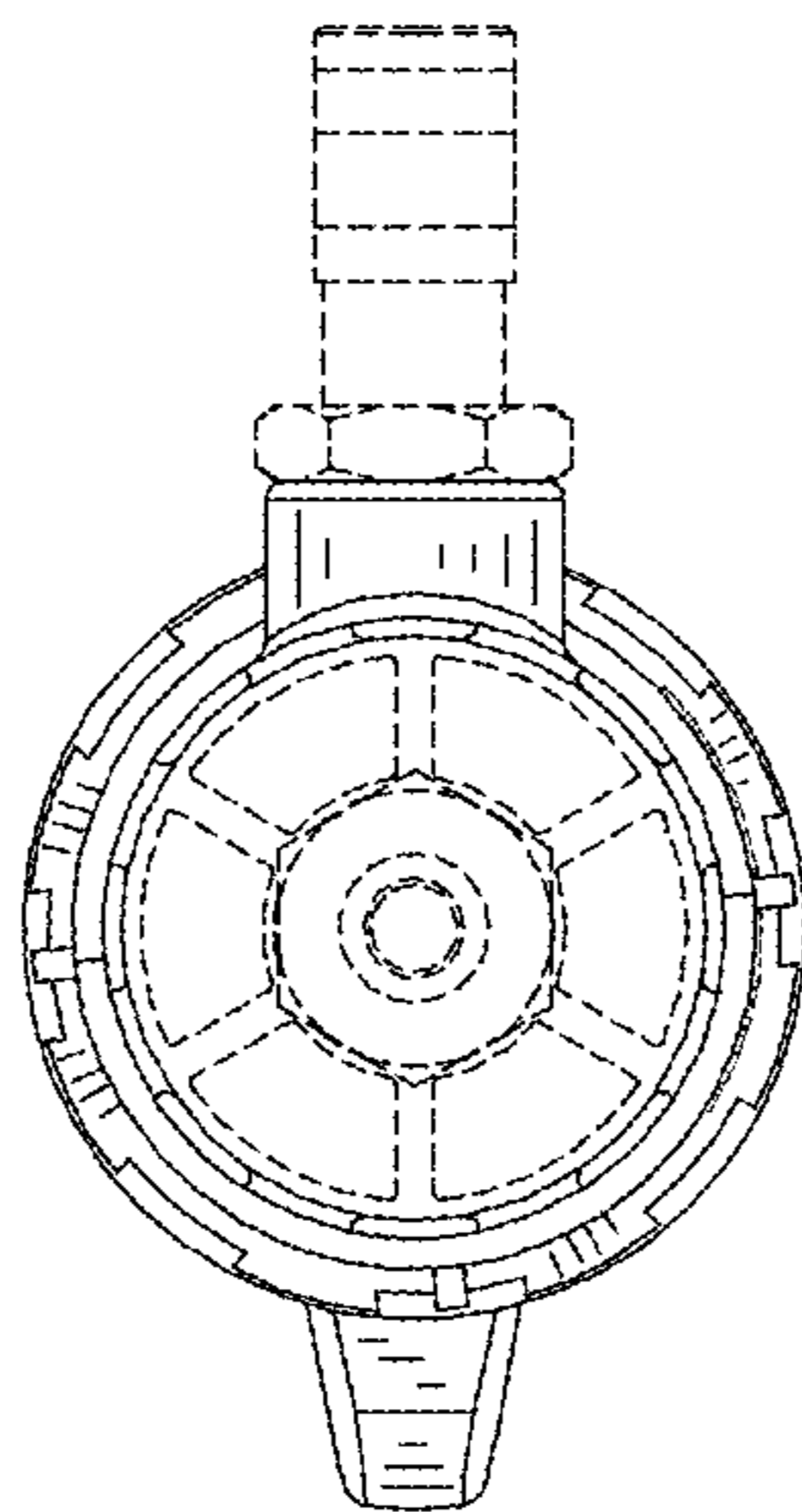


FIG. 7

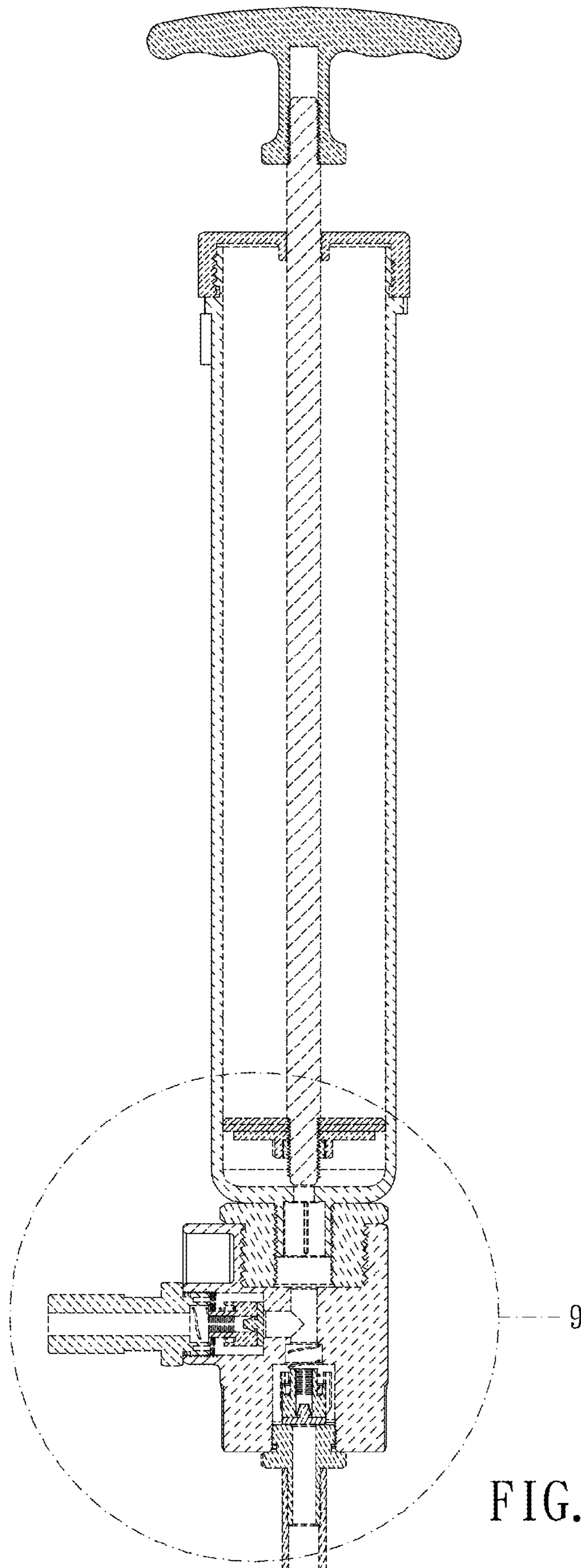


FIG. 8

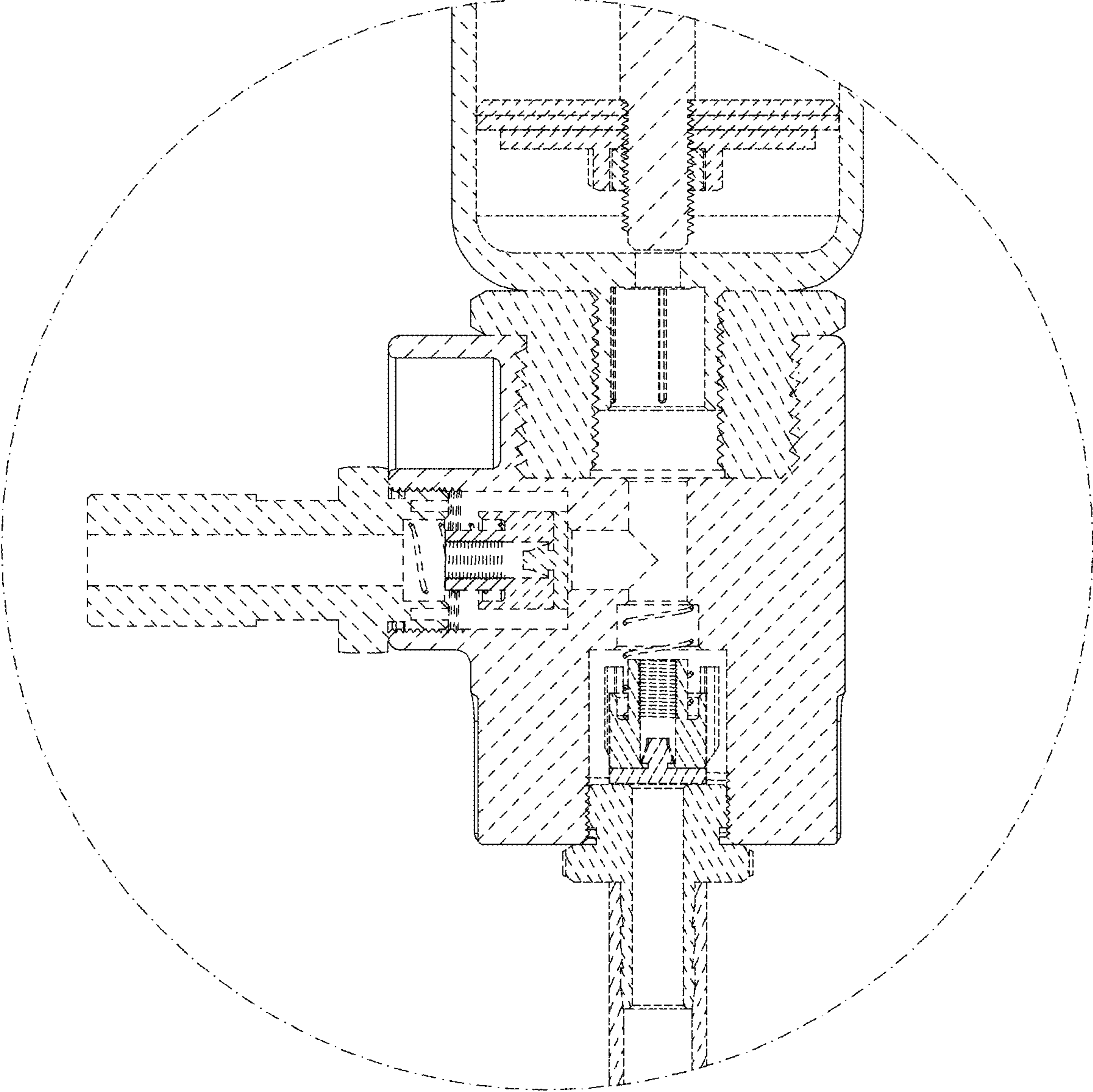


FIG. 9