



US0D1032663S

(12) **United States Design Patent** (10) **Patent No.:** **US D1,032,663 S**
Liao (45) **Date of Patent:** **** Jun. 25, 2024**

(54) **FLUID PUMPING DEVICE**
(71) Applicant: **LIH YANN INDUSTRIAL CO., LTD.,**
Taichung (TW)
(72) Inventor: **Po-Lin Liao,** Taichung (TW)
(73) Assignee: **LIH YANN INDUSTRIAL CO., LTD.,**
Taichung (TW)
(**) Term: **15 Years**
(21) Appl. No.: **29/828,984**
(22) Filed: **Mar. 2, 2022**
(51) **LOC (14) Cl.** **15-02**
(52) **U.S. Cl.**
USPC **D15/7**
(58) **Field of Classification Search**
USPC D15/7, 150, 9.1; D9/440; D24/111, 108,
D24/133, 127, 130; D7/509, 302, 397,
D7/398, 515, 531, 300.2, 319, 376, 379,
D7/380, 384
CPC A61M 5/3129; A61M 5/178; A61M 5/315;
A61J 1/20; A61J 1/2048; A61J 1/2055;
F04B 53/14; F04B 33/00; F04B 33/005;
F04B 1/005; F04B 7/0003
See application file for complete search history.

8,418,522 B1 * 4/2013 Liao B21D 1/06
72/457
D747,796 S * 1/2016 Romao D24/112
D752,123 S * 3/2016 Liao D15/150
D834,682 S * 11/2018 Liao D23/231
(Continued)

OTHER PUBLICATIONS

Fluid Extractor, available in Amazon.com, date first available Oct. 9, 2020 [online], [site visited Jul. 12, 2023], Available from the internet URL: https://www.amazon.com/Extractor-Equipment-Industrial-Vehicles-Evacuation/dp/B08KXN6FVD/ref=sr_1_69_sspa?crd=1JSM08B7BHV&keywords=fluid+pump&qid=1689181512&s.*

Primary Examiner — Calvin E Vansant
Assistant Examiner — Eidiol Ghigliotty Torres
(74) *Attorney, Agent, or Firm* — MUNCY, GEISLER,
OLDS & LOWE, P.C.

(57) **CLAIM**

I claim the ornamental design for a fluid pumping device, as shown and described.

DESCRIPTION

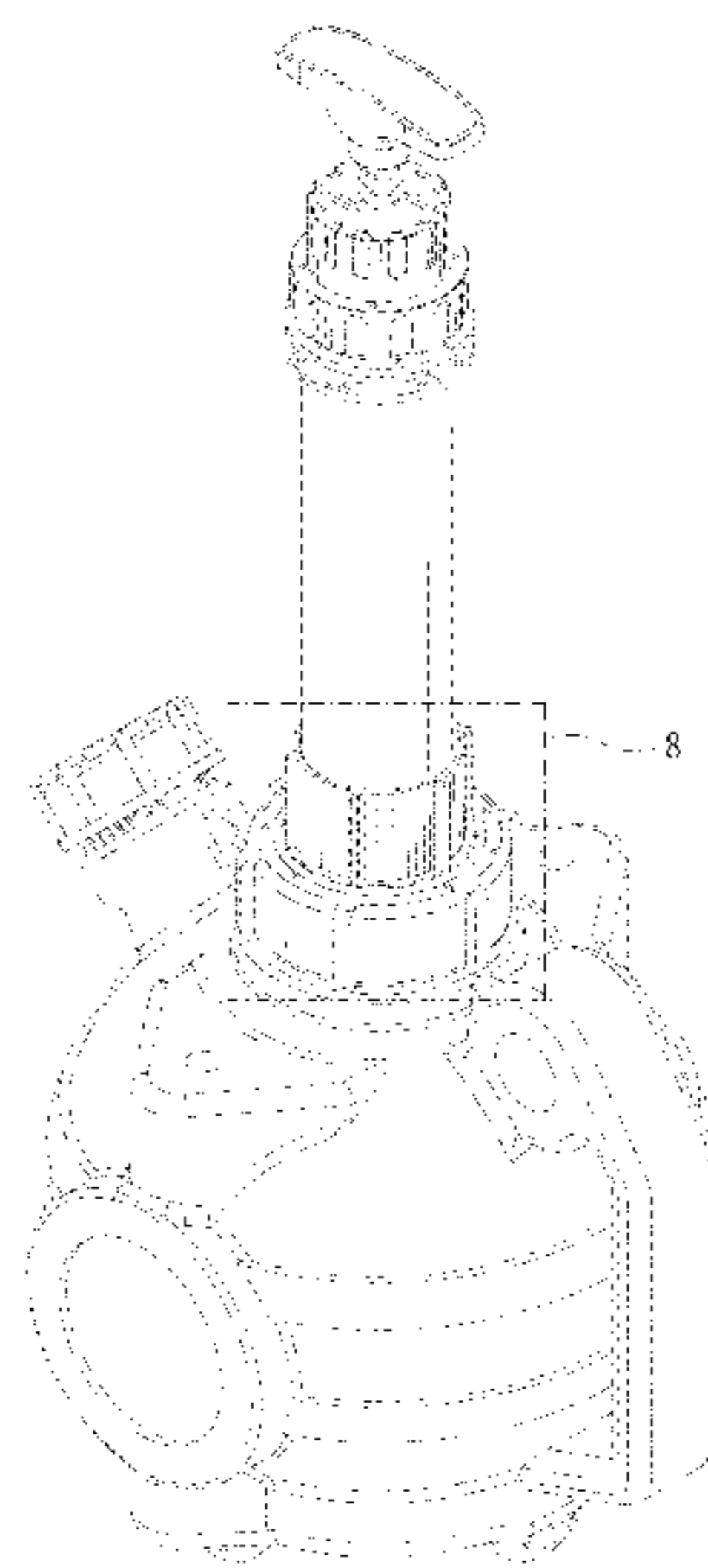
FIG. 1 is a top, front, and right perspective view of a fluid pumping device showing my new design; FIG. 2 is a front elevation view thereof; FIG. 3 is a rear elevation view thereof; FIG. 4 is a left side elevation view thereof; FIG. 5 is a right side elevation view thereof; FIG. 6 is a top plan view thereof; FIG. 7 is a bottom plan view thereof; and, FIG. 8 is a partial enlarged view of FIG. 1. The dash-dash broken lines in the drawings illustrate portions of the fluid pumping device which form no part of the claimed design. The dash-dot-dash broken lines shown in FIGS. 1 and 8 depict the boundaries of the enlarged detail views of the claimed design and form no part of the claimed design.

1 Claim, 7 Drawing Sheets

(56) **References Cited**

U.S. PATENT DOCUMENTS

940,572 A * 11/1909 Agner B05C 17/01
222/391
982,661 A * 1/1911 Dickens B65D 83/0005
239/320
1,434,117 A * 10/1922 Hazard F16N 3/12
222/386
D262,739 S * 1/1982 Nitshke D24/114
D322,471 S * 12/1991 Myers D23/231
D323,031 S * 1/1992 Ahlstrand D24/114
D323,391 S * 1/1992 Payne D24/112
D328,643 S * 8/1992 Mitchell D24/114
D454,358 S * 3/2002 Davis D15/7
D517,579 S * 3/2006 Frank D15/150



(56)

References Cited

U.S. PATENT DOCUMENTS

D864,351 S * 10/2019 Yang D15/7
D865,948 S * 11/2019 Mandaroux D24/114
D865,949 S * 11/2019 Mandaroux D24/114
D865,950 S * 11/2019 Mandaroux D24/114
D866,753 S * 11/2019 Mandaroux D24/114
D867,582 S * 11/2019 Mandaroux D24/114
D876,620 S * 2/2020 Ho D24/112
D877,894 S * 3/2020 Ho D24/112
D878,569 S * 3/2020 Reynolds D24/114
D886,987 S * 6/2020 Kaye D24/114
D889,639 S * 7/2020 Johnson D24/114
D890,921 S * 7/2020 Lin D24/114
D895,110 S * 9/2020 Takada D24/130
D900,307 S * 10/2020 Carper D24/112
10,895,252 B2 * 1/2021 Liao F04B 9/103
D909,571 S * 2/2021 Futami D24/114
D920,409 S * 5/2021 Liao D15/150

D924,015 S * 7/2021 Pu D7/669
D936,219 S * 11/2021 Reynolds D24/130
D938,023 S * 12/2021 Hernandez F04B 9/103
D24/130
D939,003 S * 12/2021 Liao B21D 1/06
D15/150
D942,819 S * 2/2022 Yang D7/669
D943,737 S * 2/2022 Hernandez D24/114
D953,089 S * 5/2022 Scheinert D24/114
D954,258 S * 6/2022 Hang F16N 11/02
D24/112
D957,469 S * 7/2022 Liu B05C 17/01
D15/7
D957,625 S * 7/2022 Reynolds B65D 83/0005
D24/114
D961,067 S * 8/2022 Schootstra F16N 3/12
D24/114
2014/0190772 A1 * 7/2014 Noordover F16N 11/02
184/14

* cited by examiner

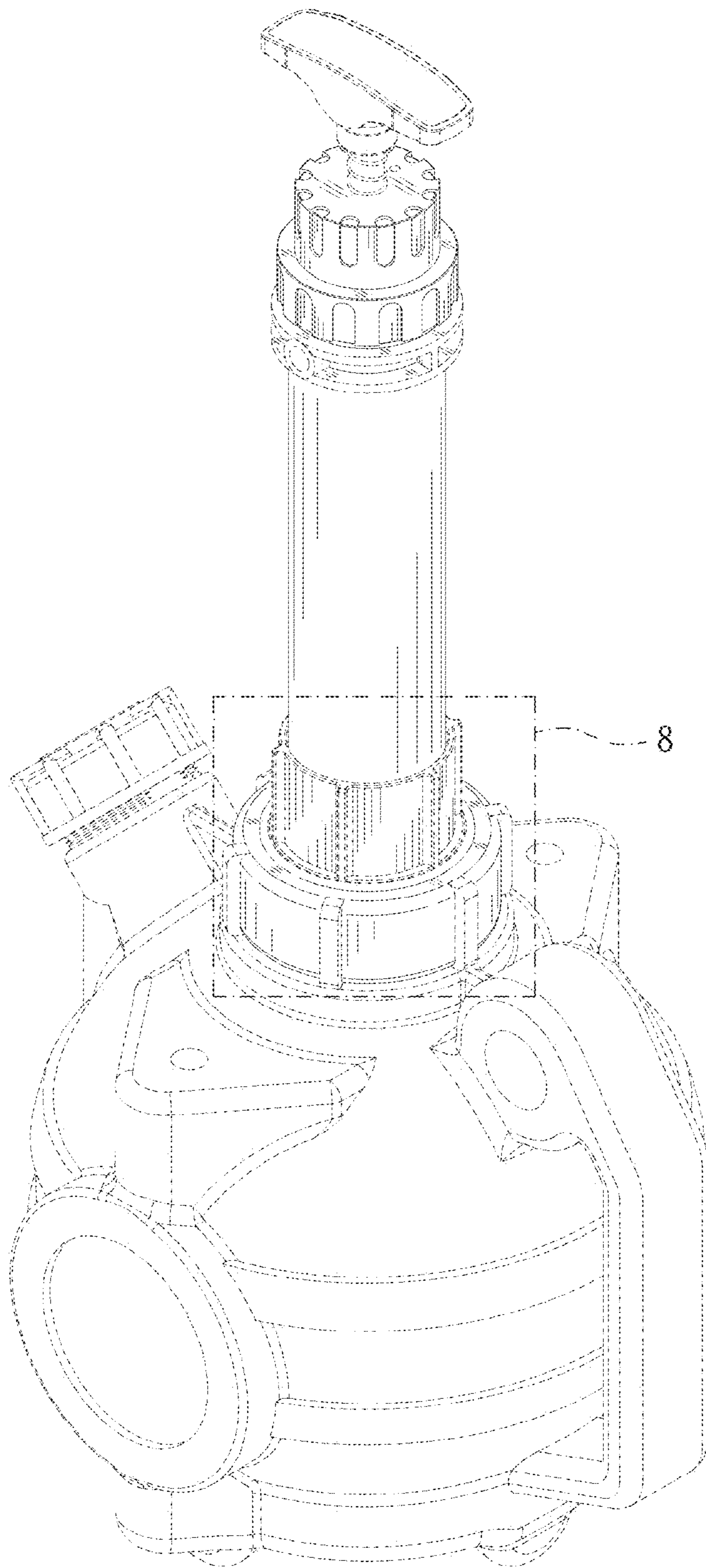


FIG. 1

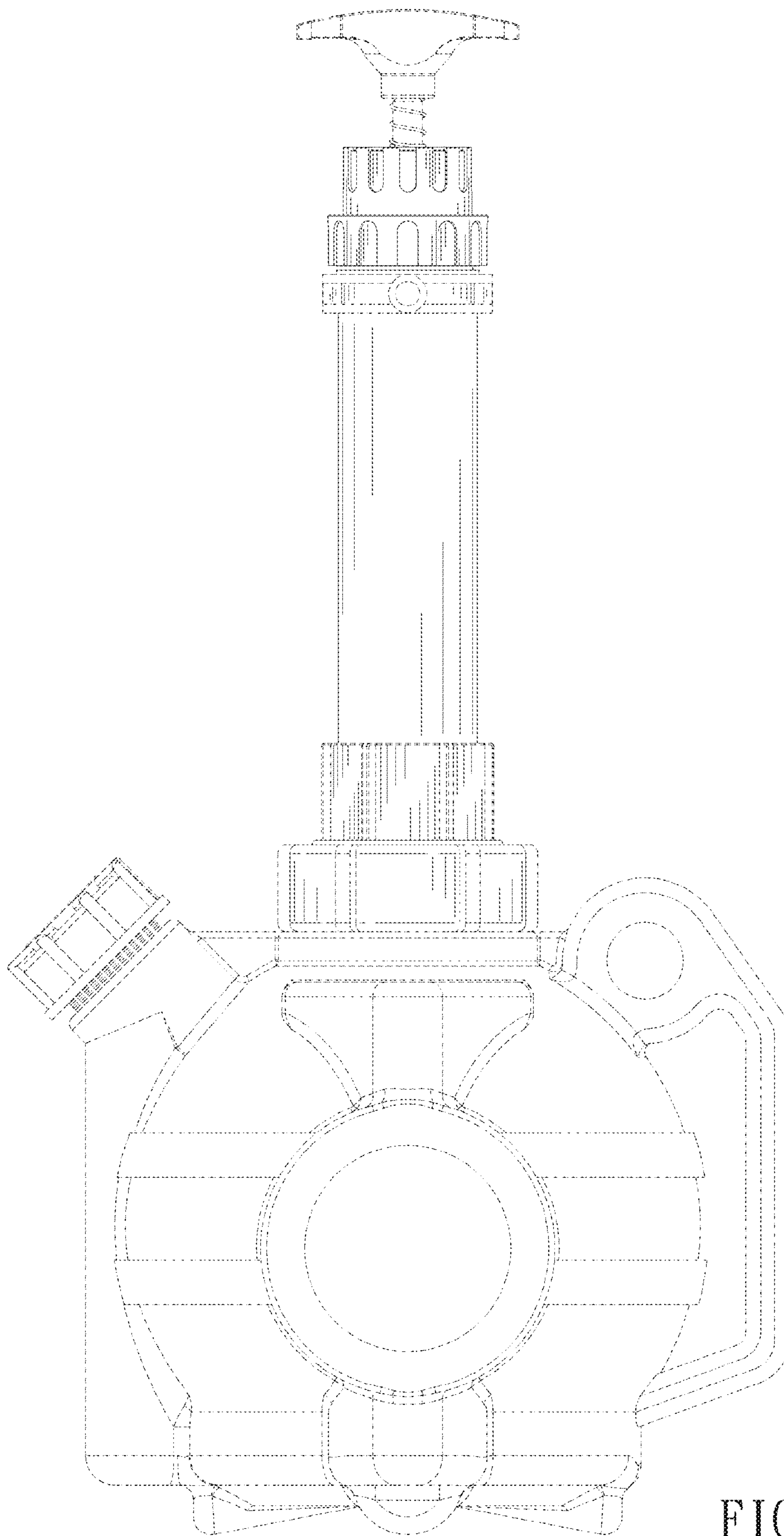


FIG. 2

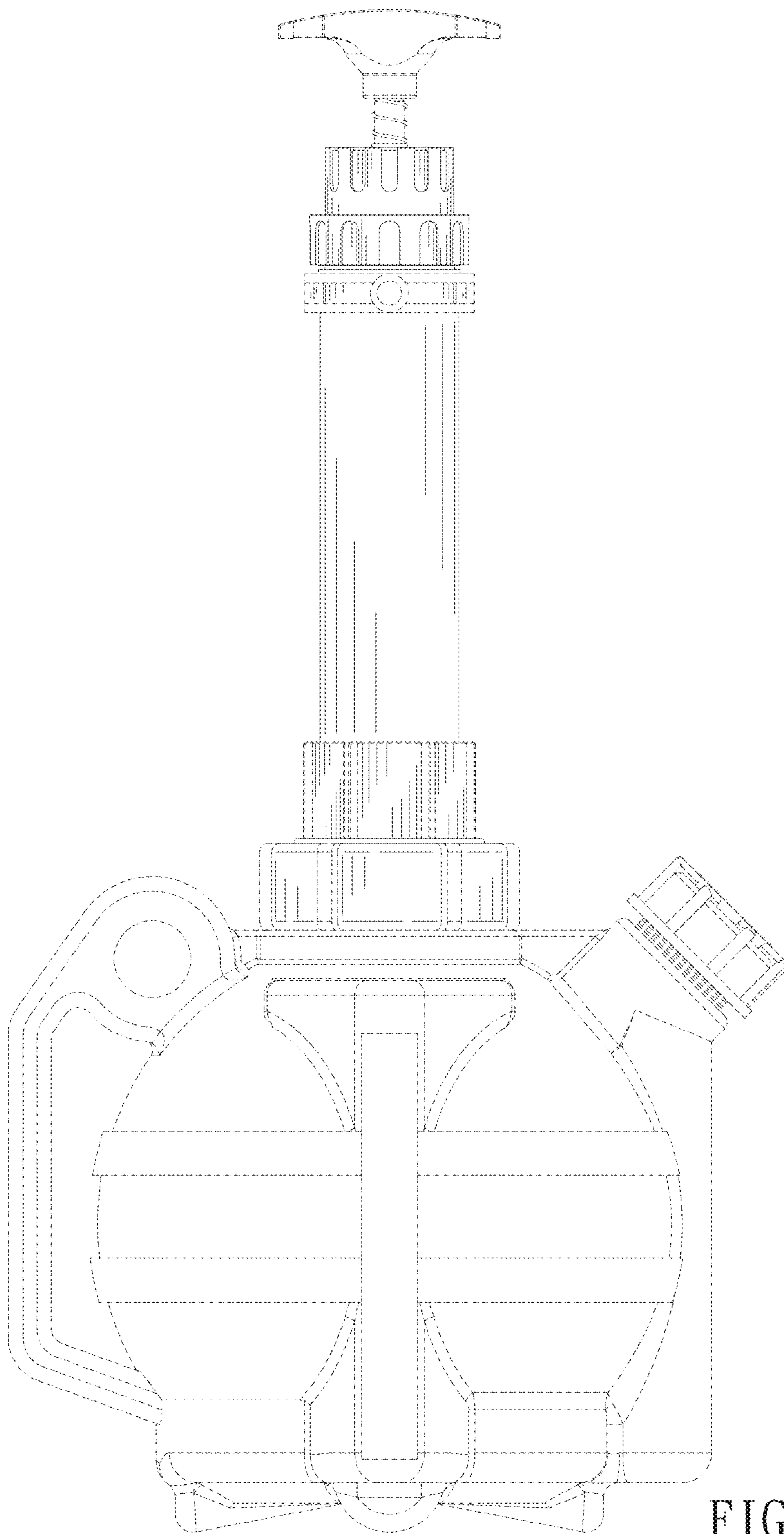


FIG. 3

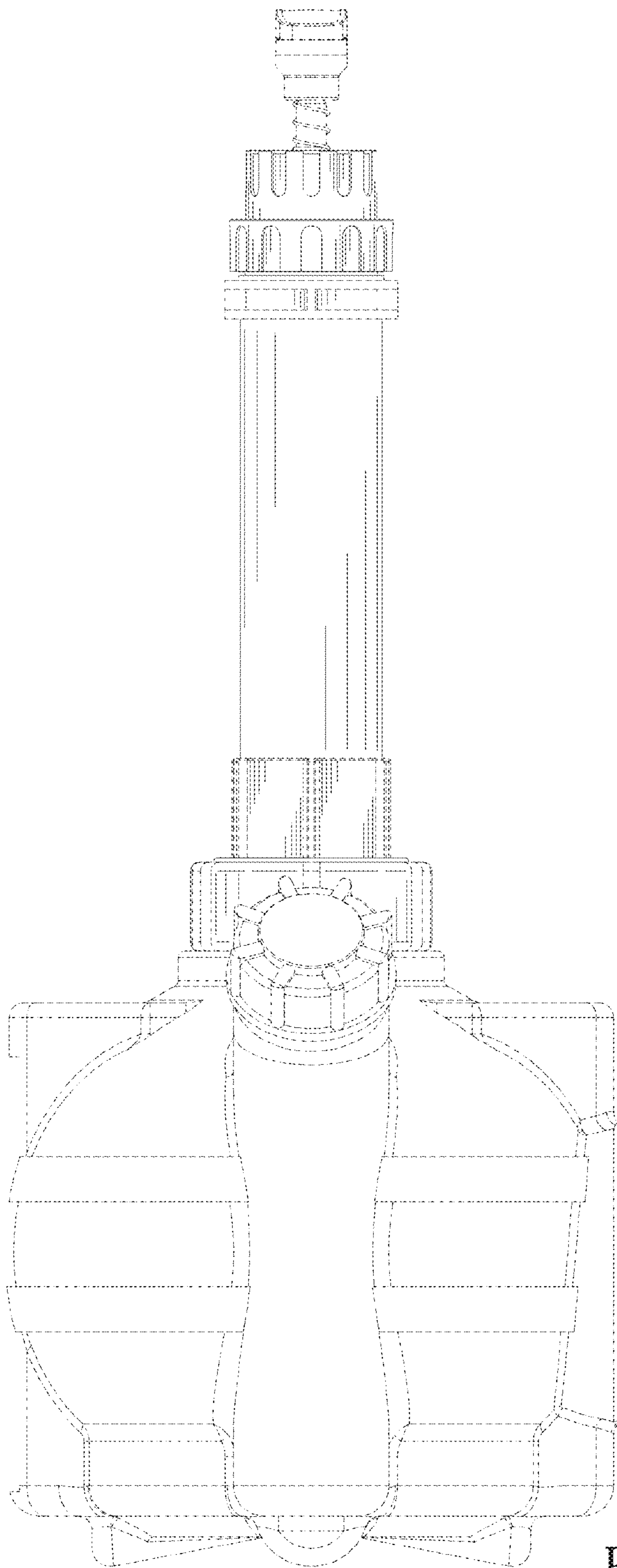


FIG. 4

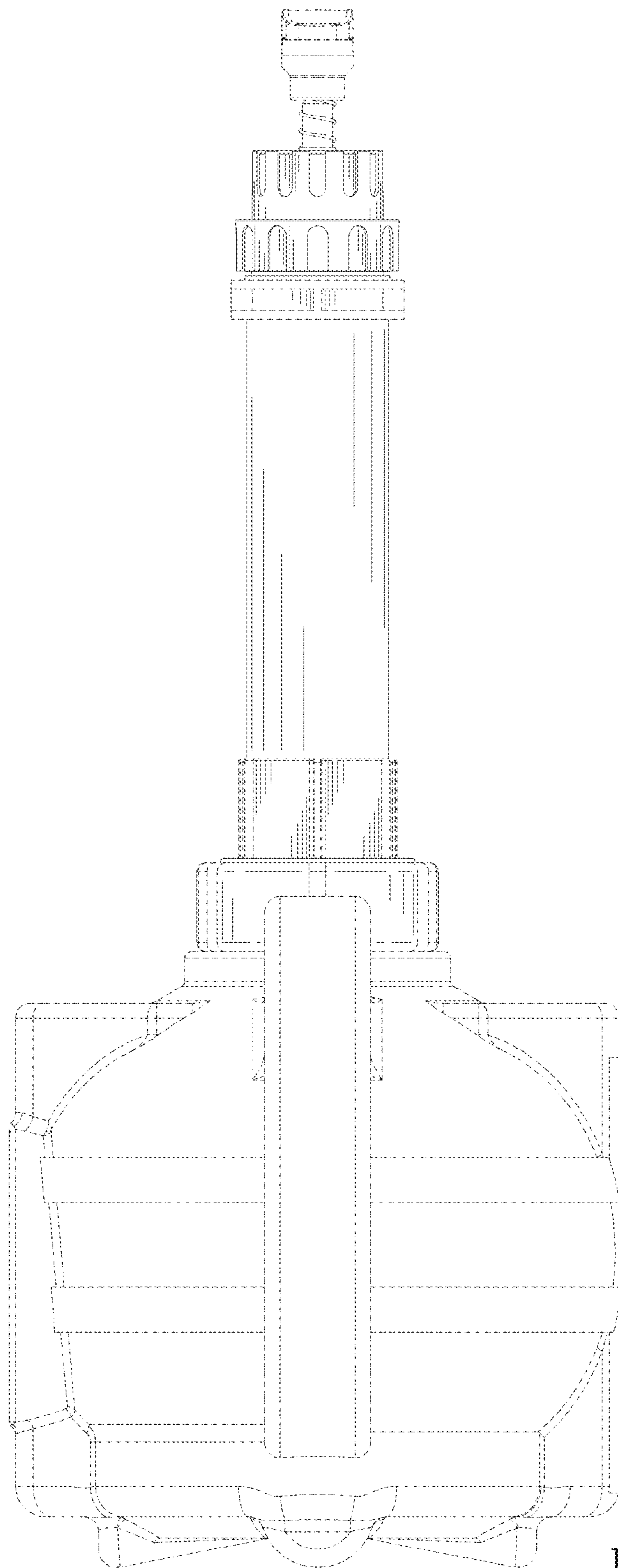


FIG. 5

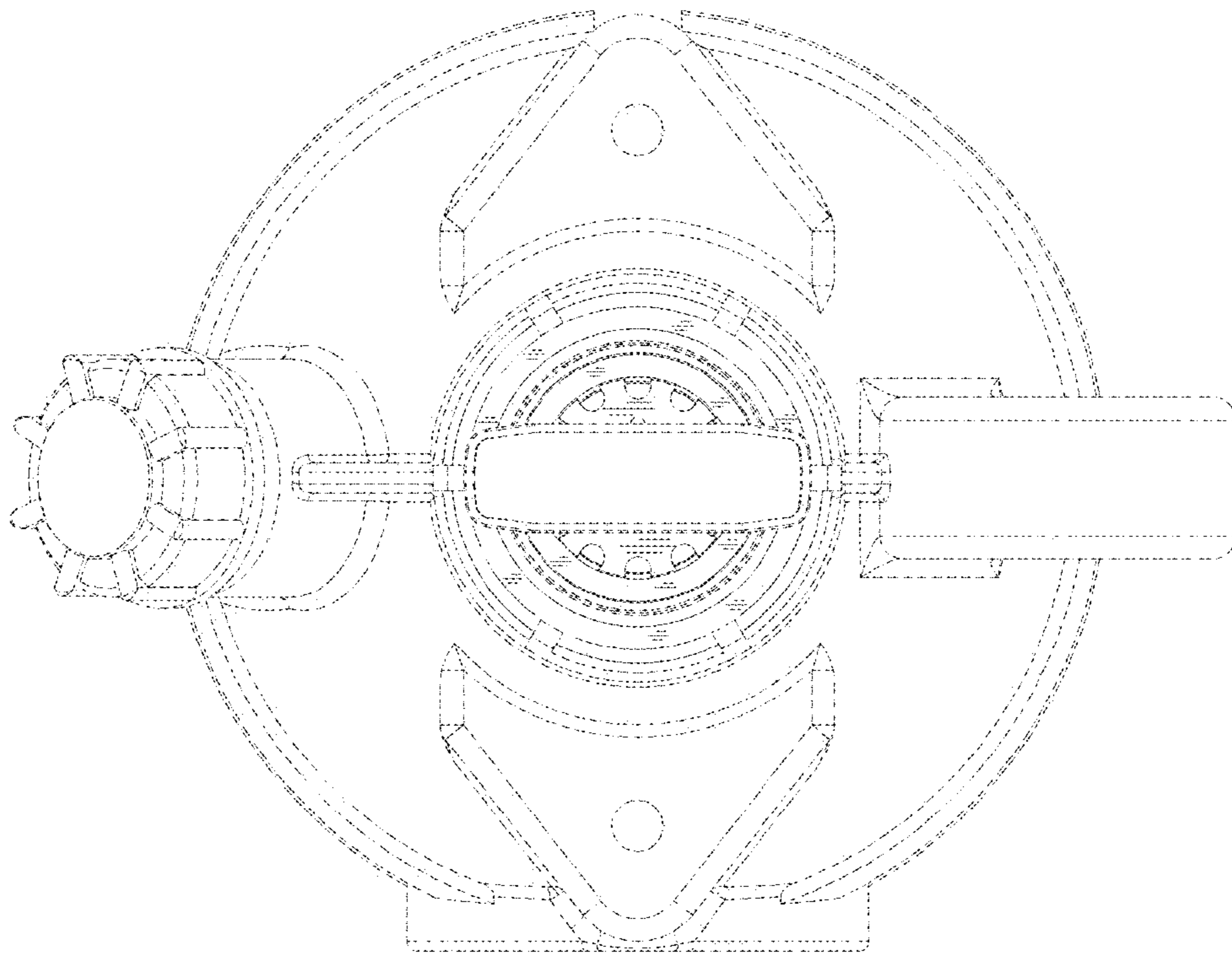


FIG. 6

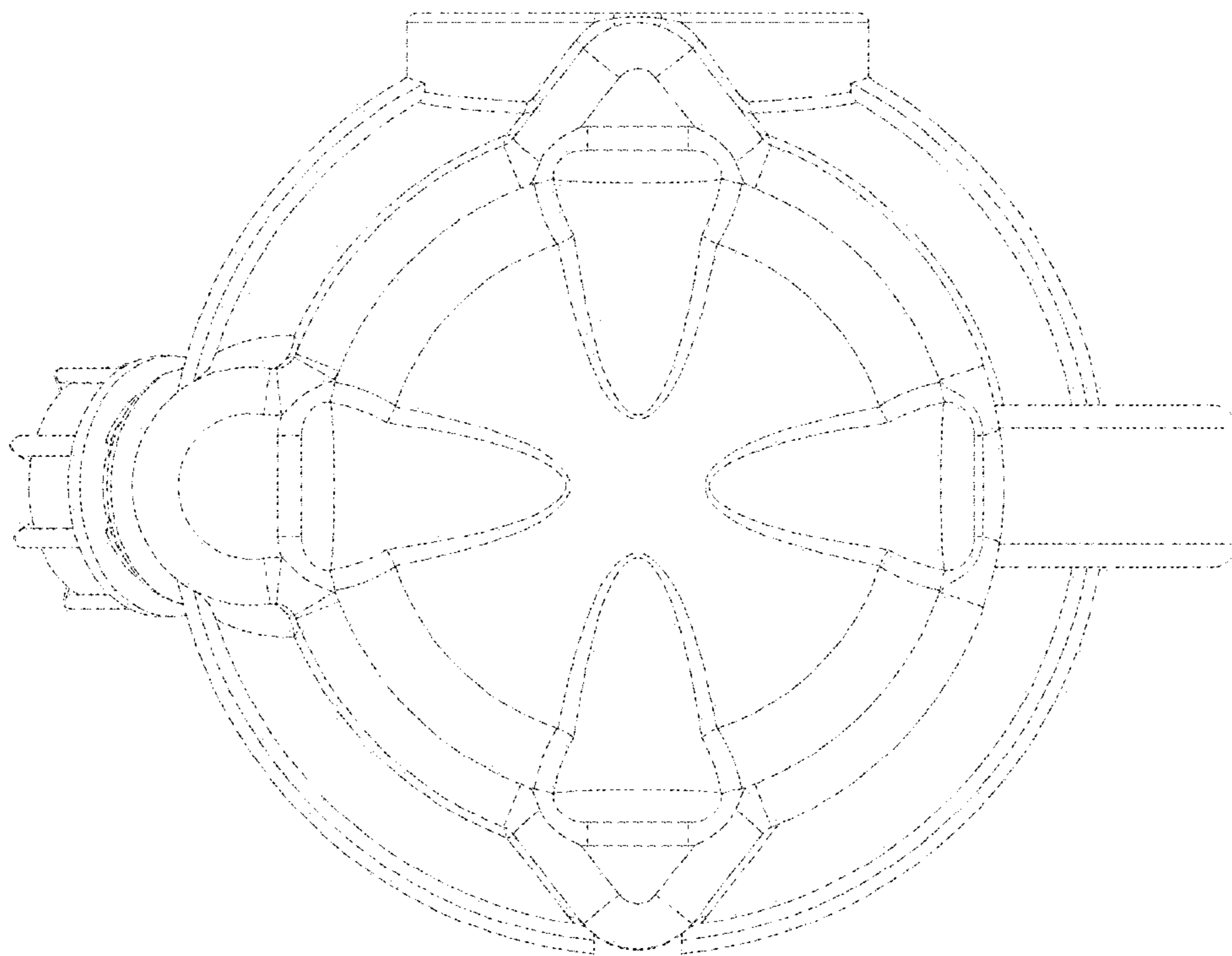


FIG. 7

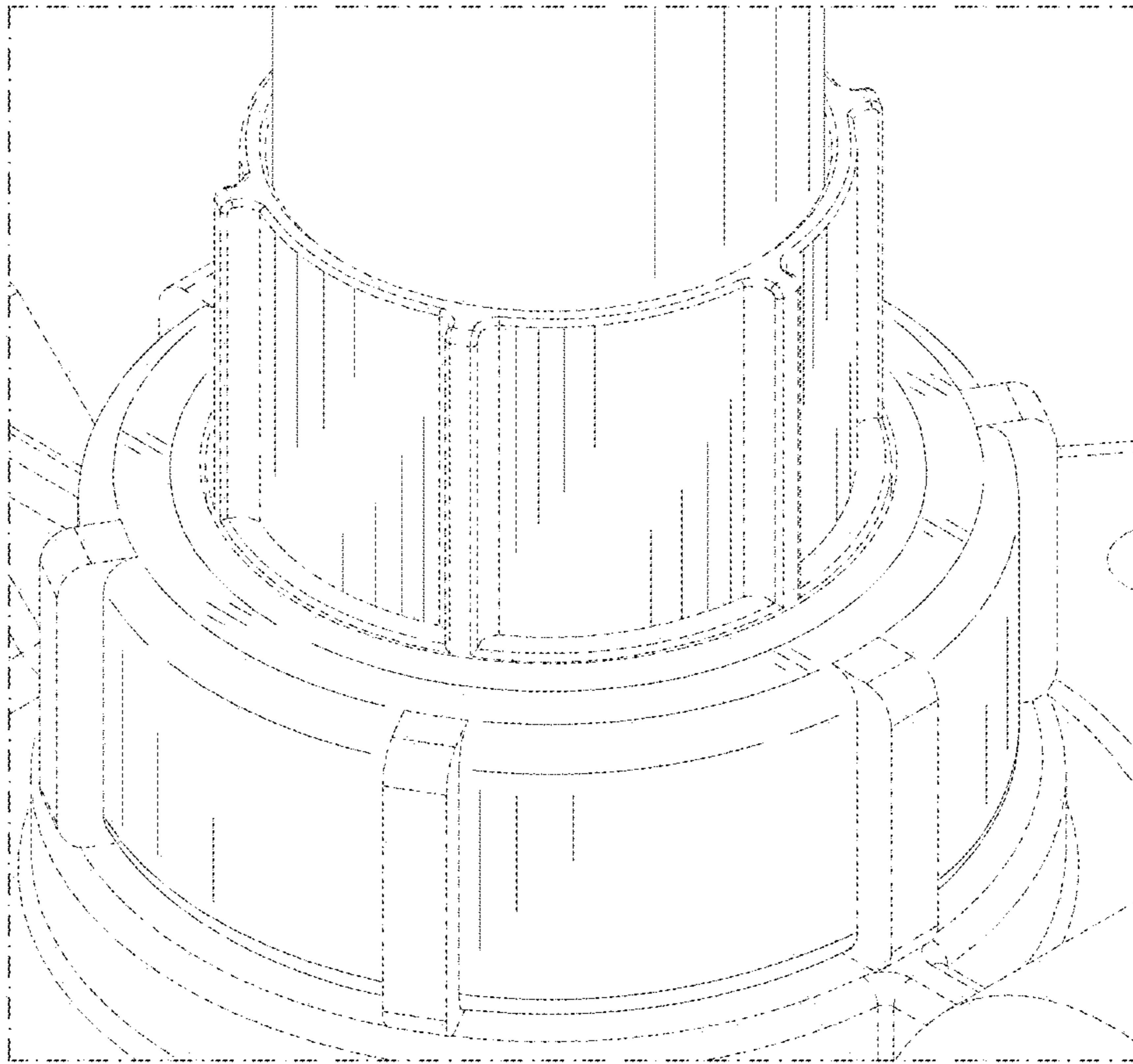


FIG. 8