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(12) **United States Design Patent** (10) **Patent No.:** **US D939,003 S**
Liao (45) **Date of Patent:** **** Dec. 21, 2021**

(54) **OIL INJECTOR**
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Taichung (TW)
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(52) **U.S. Cl.**
USPC **D15/150**
(58) **Field of Classification Search**
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CPC B01F 15/026; B01F 15/0243;
B01F 15/0479; B01F 15/00123; B01F
15/00142; B29B 7/94; F16N 11/00; F16N
2210/12
See application file for complete search history.

(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
222/387
1,434,117 A * 10/1922 Hazard F16N 3/12
222/386
1,583,533 A * 5/1926 Deming F16N 3/12
222/386
3,231,149 A * 1/1966 Yuza A23G 3/28
222/324
4,567,784 A * 2/1986 Hambric F16H 1/22
184/13.1
5,706,873 A * 1/1998 Benoit F16N 31/002
137/513.7

D396,868 S * 8/1998 Pingel D15/151
D429,264 S * 8/2000 Lindstrand D15/150
6,244,309 B1 * 6/2001 Martin B65B 39/004
141/286
D517,579 S * 3/2006 Frank D15/150
D752,123 S * 3/2016 Liao D15/150
9,815,038 B2 * 11/2017 Leach B01F 1/0027
D920,409 S * 5/2021 Liao D15/150
2010/0213217 A1 * 8/2010 Strong B05C 17/015
222/327
2011/0158738 A1 * 6/2011 Bainbridge B43K 8/12
401/206
2013/0045523 A1 * 2/2013 Leach B01F 1/0027
435/214
2014/0190772 A1 * 7/2014 Noordover F16N 11/04
184/14

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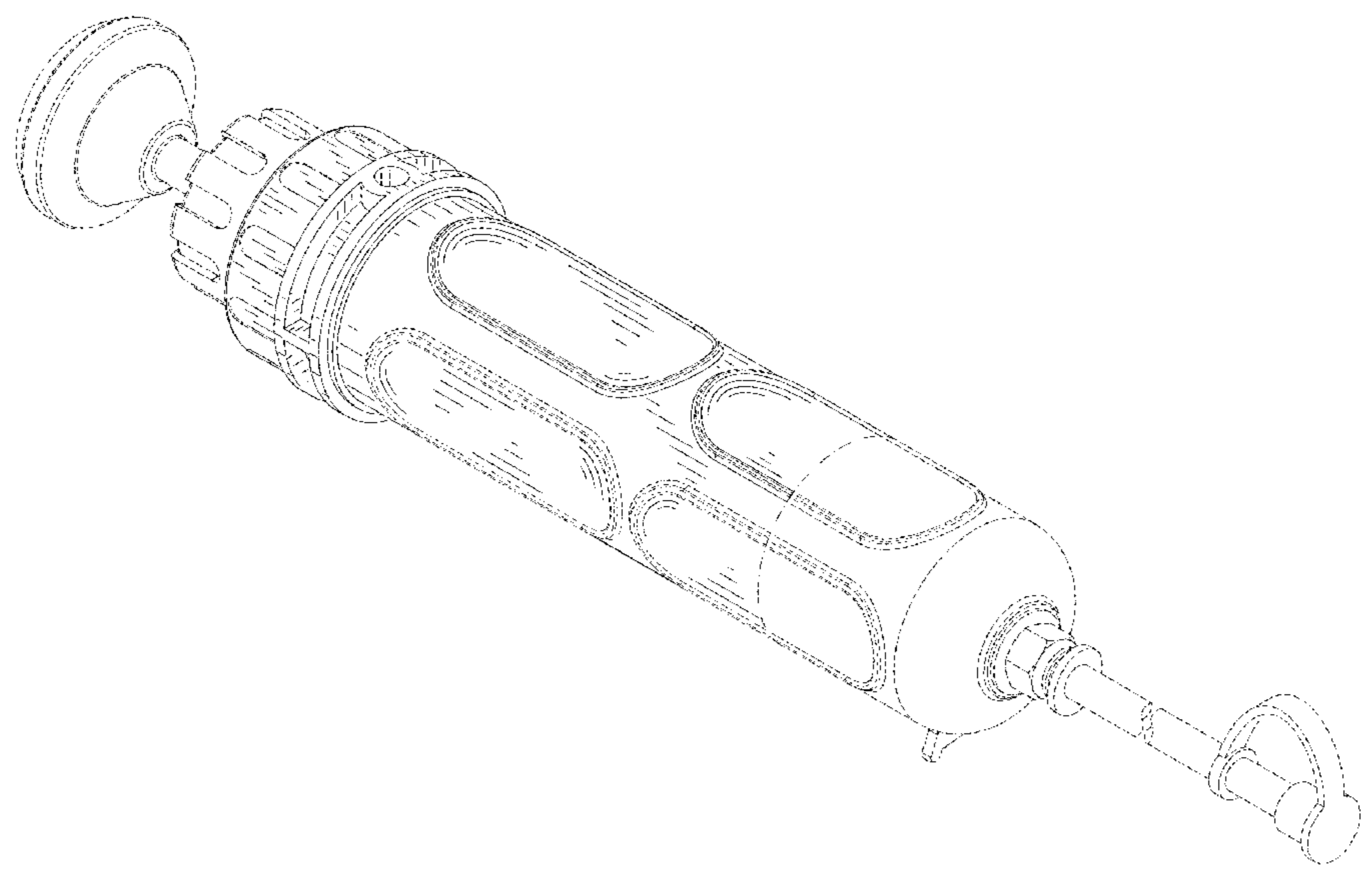
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(57) **CLAIM**
I claim the ornamental design for an oil injector, as shown and described.

DESCRIPTION

FIG. 1 is a top, front, right perspective view of an oil injector showing my new design;
FIG. 2 is a front elevational view thereof;
FIG. 3 is a rear elevational view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top plan view thereof;
FIG. 7 is a bottom plan view thereof; and,
FIG. 8 is a bottom, front, left perspective view.
The broken lines in the drawings illustrate portions of the oil injector which form no part of the claimed design.
The dot-dashed line in the figures defines the boundary of claimed design and forms no part of the claimed design.

1 Claim, 6 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2014/0367409 A1* 12/2014 Digregorio B65D 83/0005
222/389
2015/0128873 A1* 5/2015 Prescott A01K 13/003
119/665
2015/0144655 A1* 5/2015 Li B01F 15/0237
222/32
2015/0192246 A1* 7/2015 Patel B67D 3/0032
184/14
2016/0074819 A1* 3/2016 Boticki B01F 3/0865
366/152.2

* cited by examiner

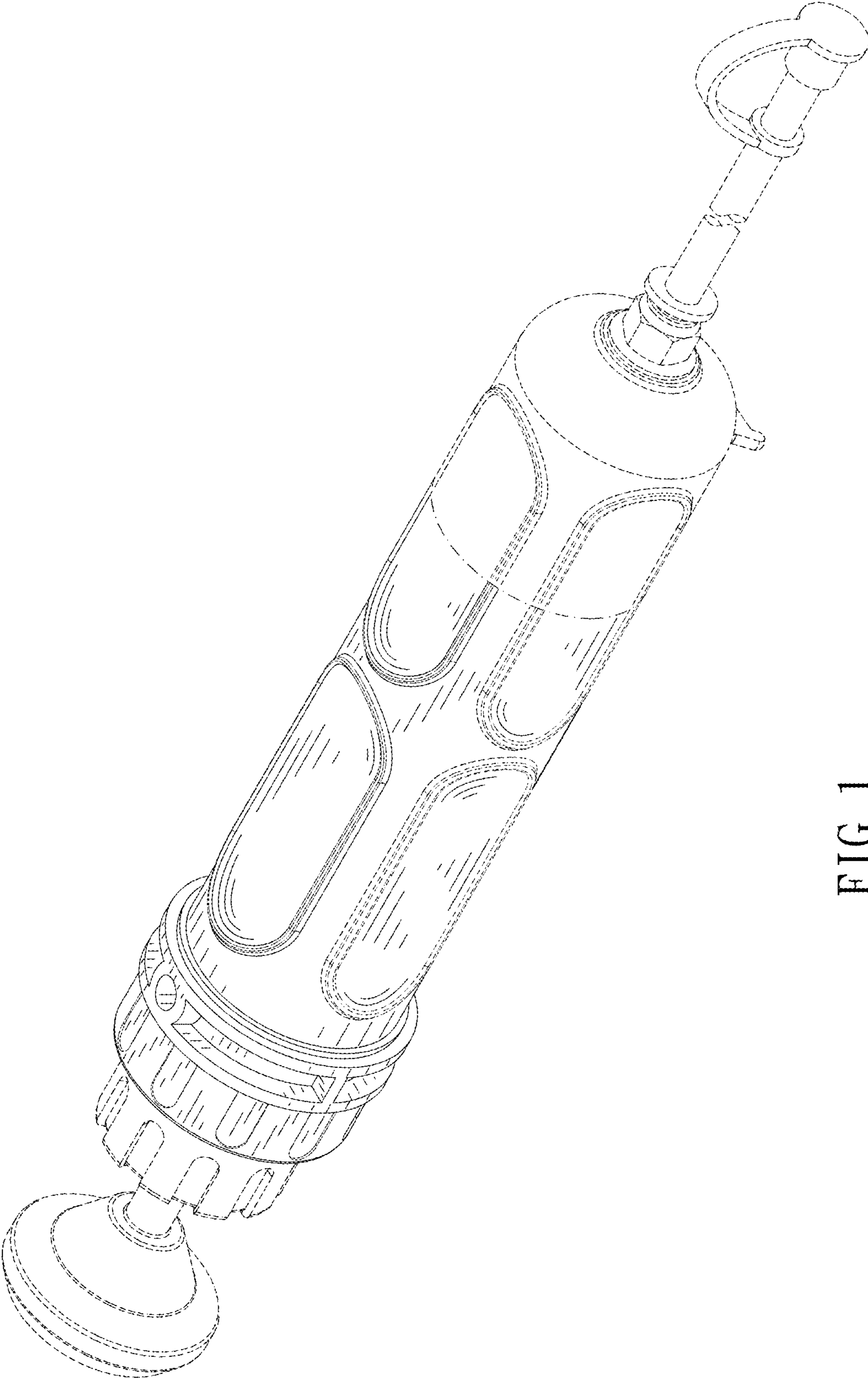


FIG. 1

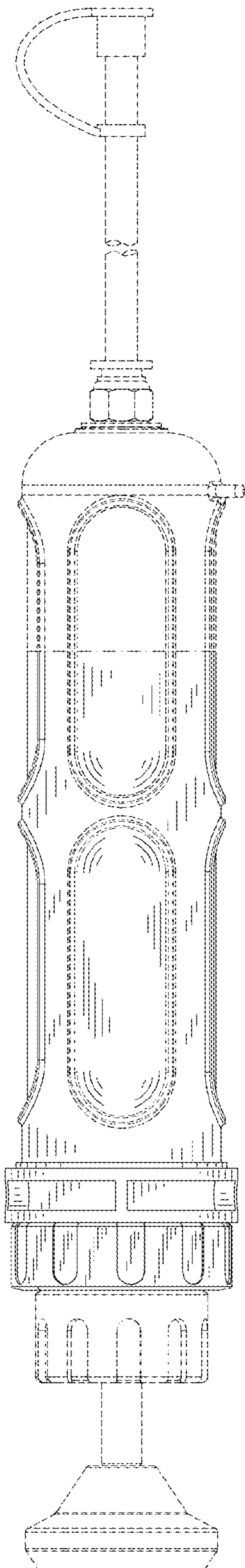


FIG. 2

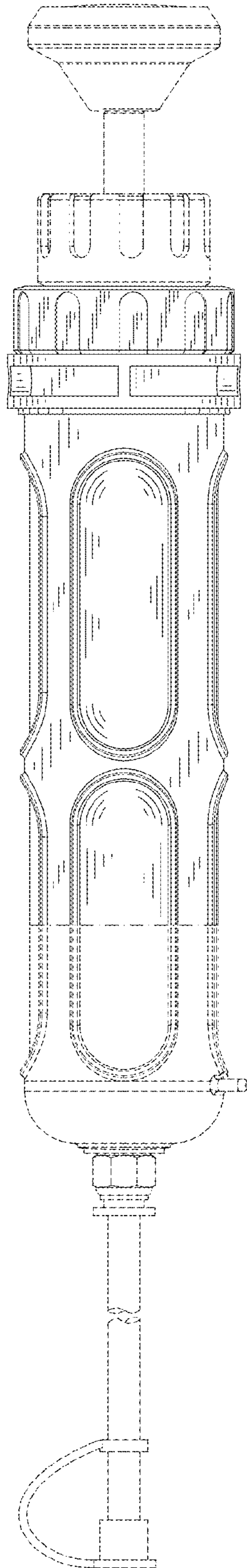


FIG. 3

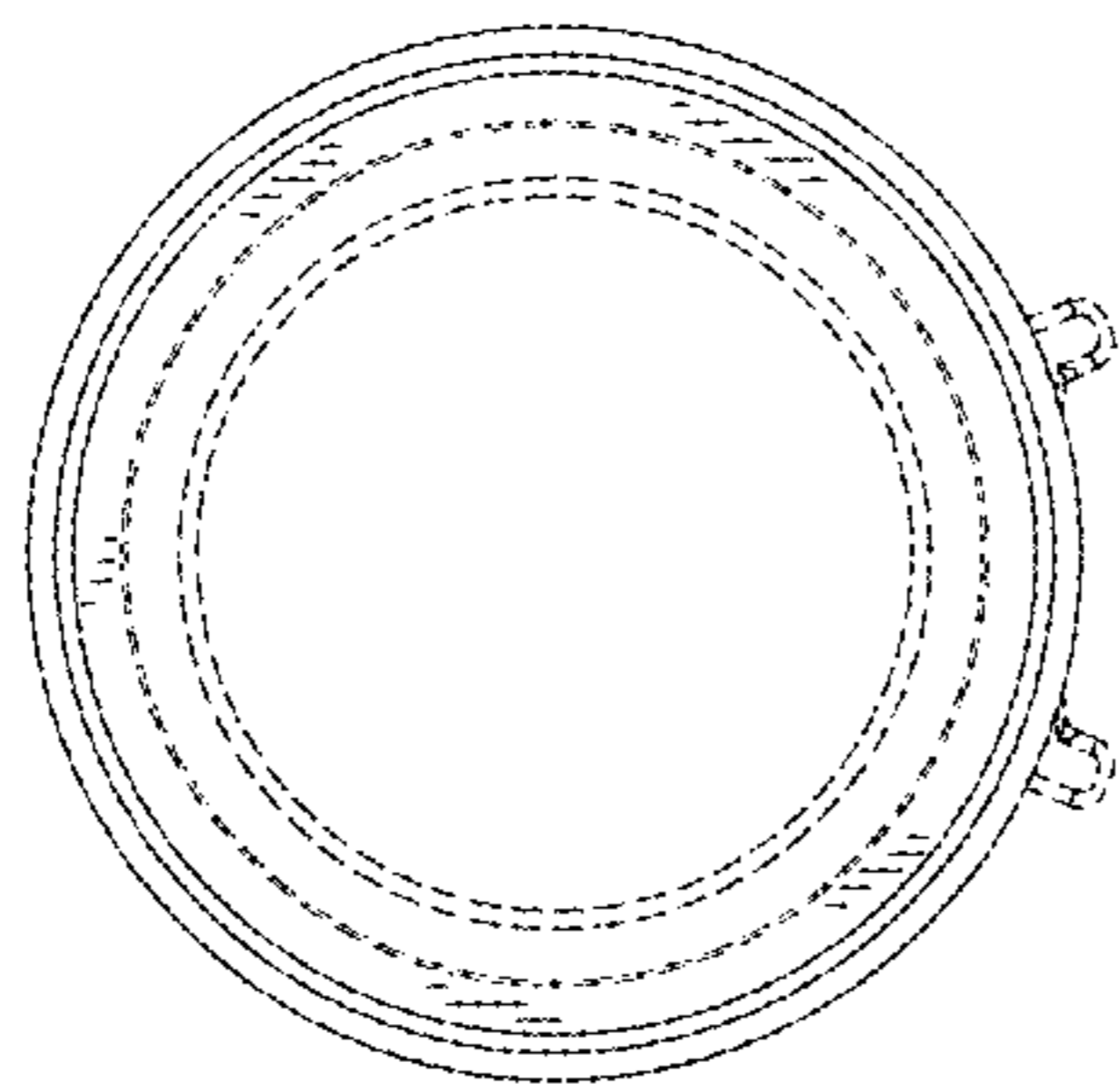


FIG. 4

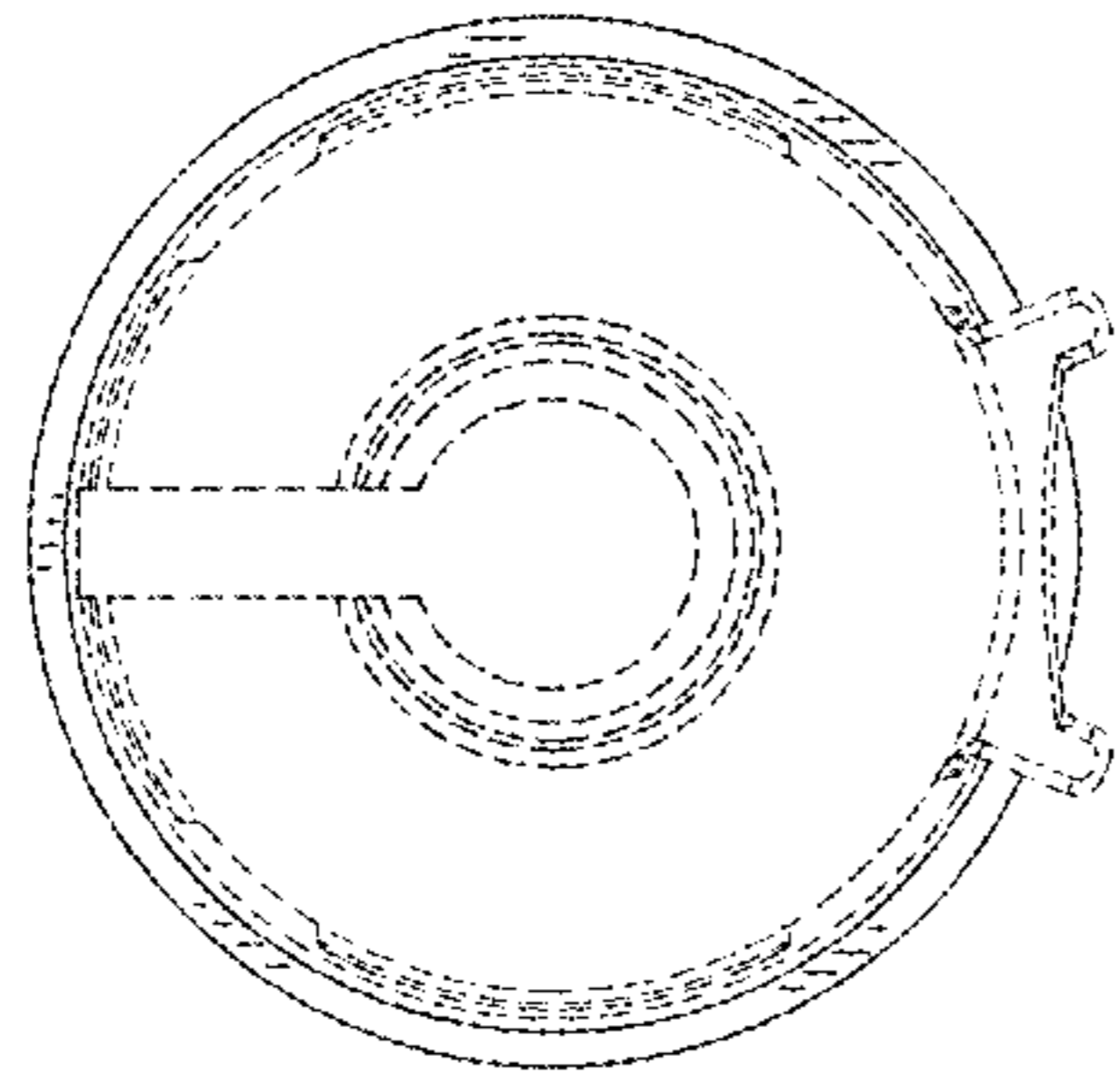


FIG. 5

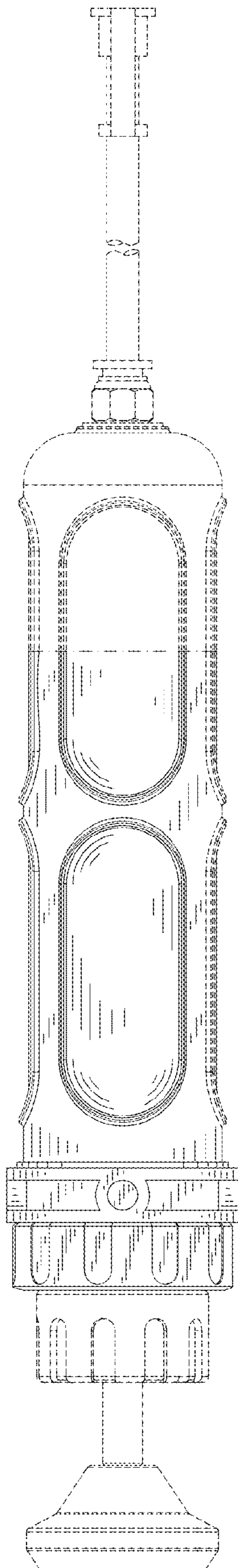


FIG. 6

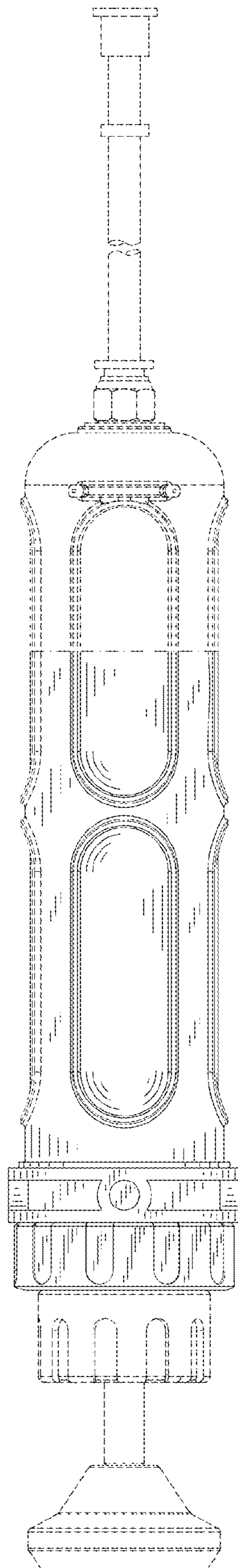


FIG. 7

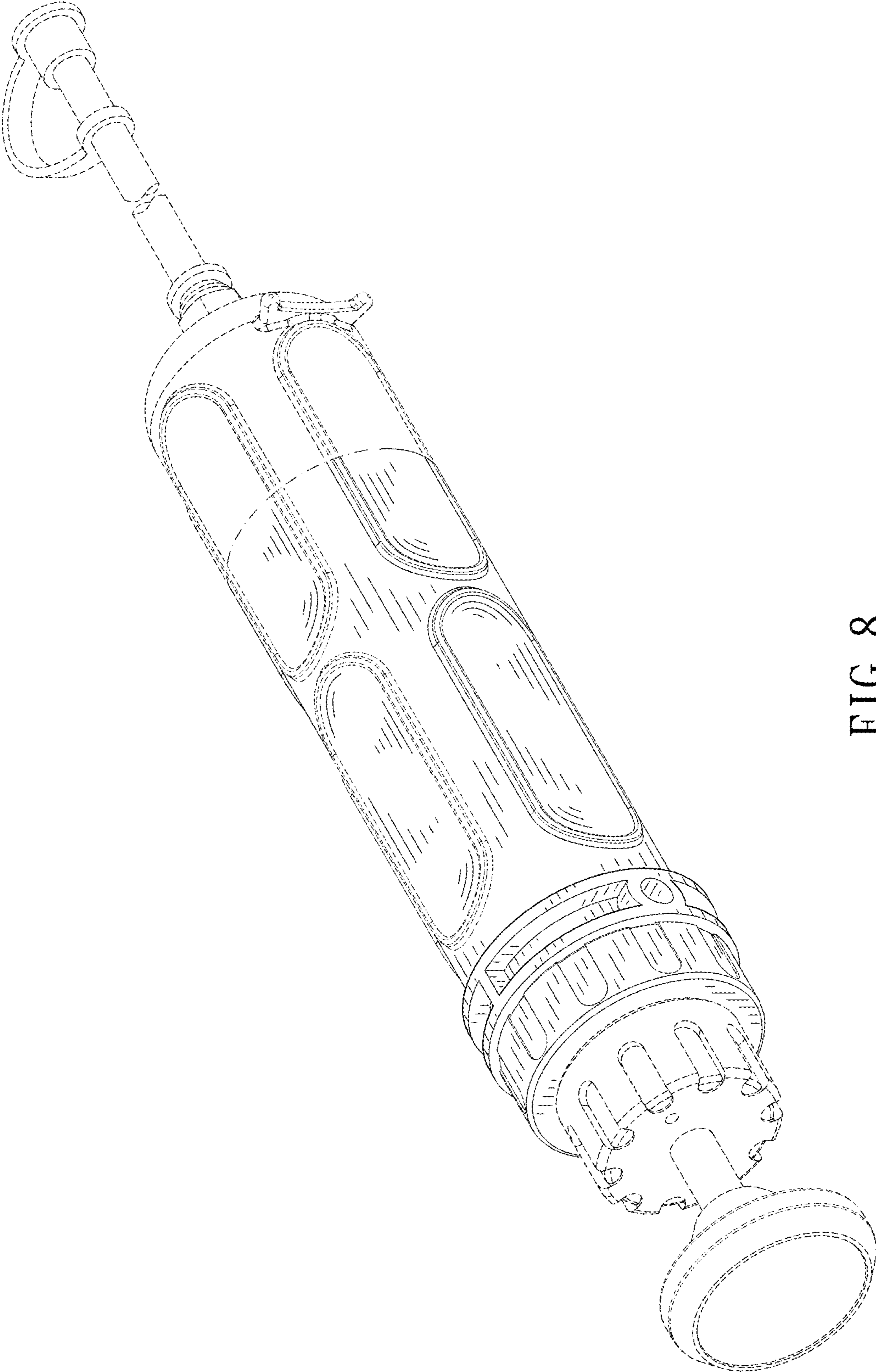


FIG. 8