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(12) **United States Design Patent**
Larrow et al.

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(54) **MANIFOLD CARTRIDGE**

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

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Related U.S. Application Data

(63) Continuation-in-part of application No. 16/047,136, filed on Jul. 27, 2018, now Pat. No. 11,109,999.

(51) **LOC (13) Cl.** **23-01**

(52) **U.S. Cl.**
USPC **D23/209**

(58) **Field of Classification Search**
USPC D24/110, 110.4; D23/386
CPC A61F 2007/0006; A61F 7/0085
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D235,035 S * 4/1975 Rosenberg A61B 18/1477
D23/209
D253,721 S * 12/1979 Gibeck D23/209

D302,040 S * 7/1989 Lambert D23/314
D367,532 S * 2/1996 Sirianne D24/162
D590,490 S * 4/2009 Lary D23/386
D664,640 S * 7/2012 Smutney D24/110
D700,697 S * 3/2014 Ho D24/110.4
D731,065 S * 6/2015 Winter D24/162
D917,039 S * 4/2021 Chen A61F 7/0085
D24/108
11,109,999 B2 * 9/2021 DeMore, Jr. A61F 7/0085
2006/0276781 A1 * 12/2006 van der Weide .. A61B 18/1477
606/41

* cited by examiner

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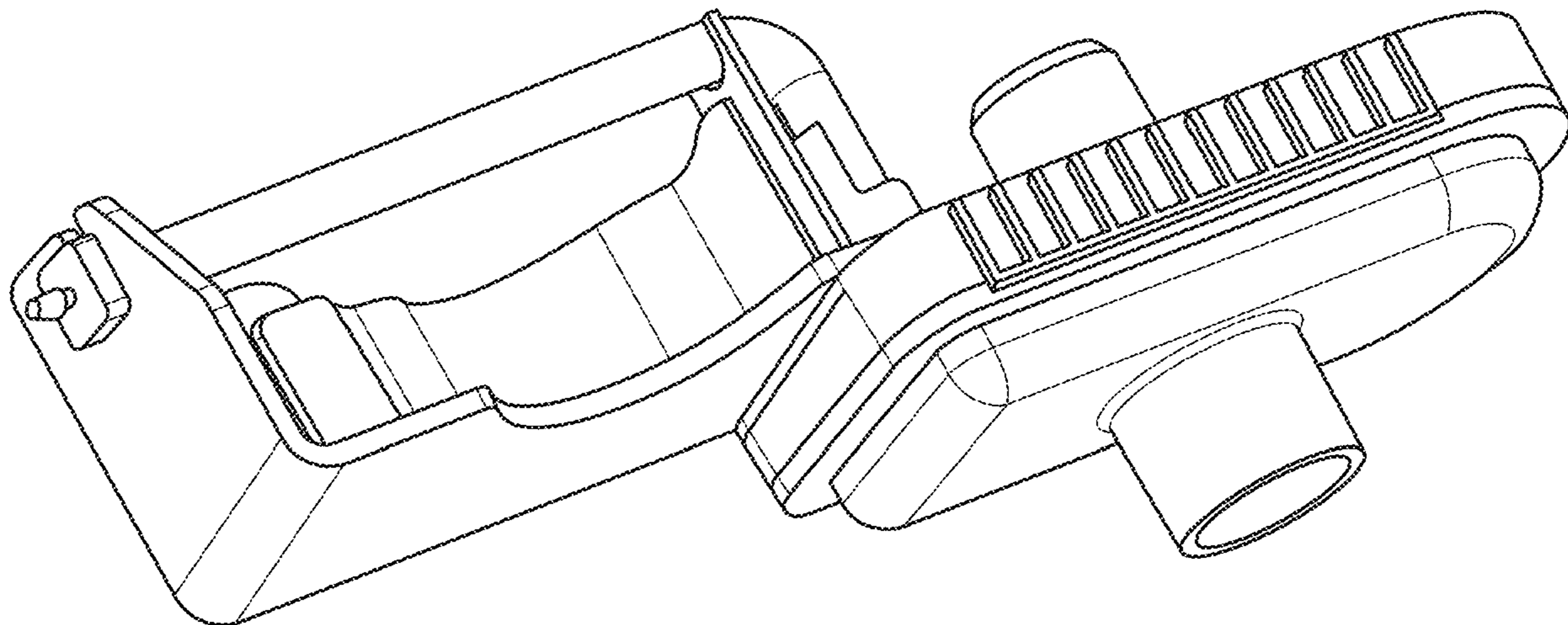
(57) **CLAIM**

The ornamental design for a manifold cartridge, as shown and described.

DESCRIPTION

FIG. 1 is a top front perspective view of a manifold cartridge;
FIG. 2 is a front perspective view thereof;
FIG. 3 is a top rear perspective view thereof;
FIG. 4 is a bottom rear perspective view thereof;
FIG. 5 is a front elevational view thereof;
FIG. 6 is a rear elevational view thereof;
FIG. 7 is a left side elevational view thereof;
FIG. 8 is a right side elevational view thereof;
FIG. 9 is a top plan view thereof; and,
FIG. 10 is a bottom plan view thereof.

1 Claim, 8 Drawing Sheets



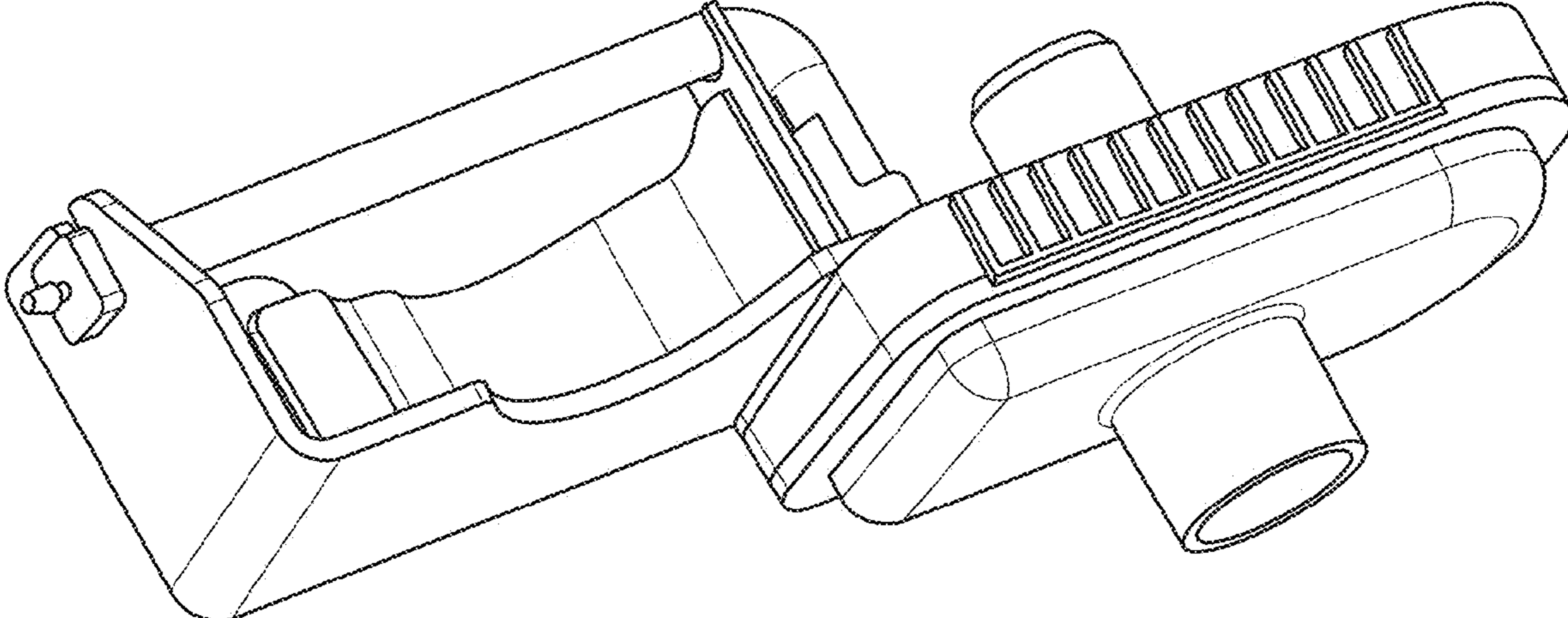


FIG. 1

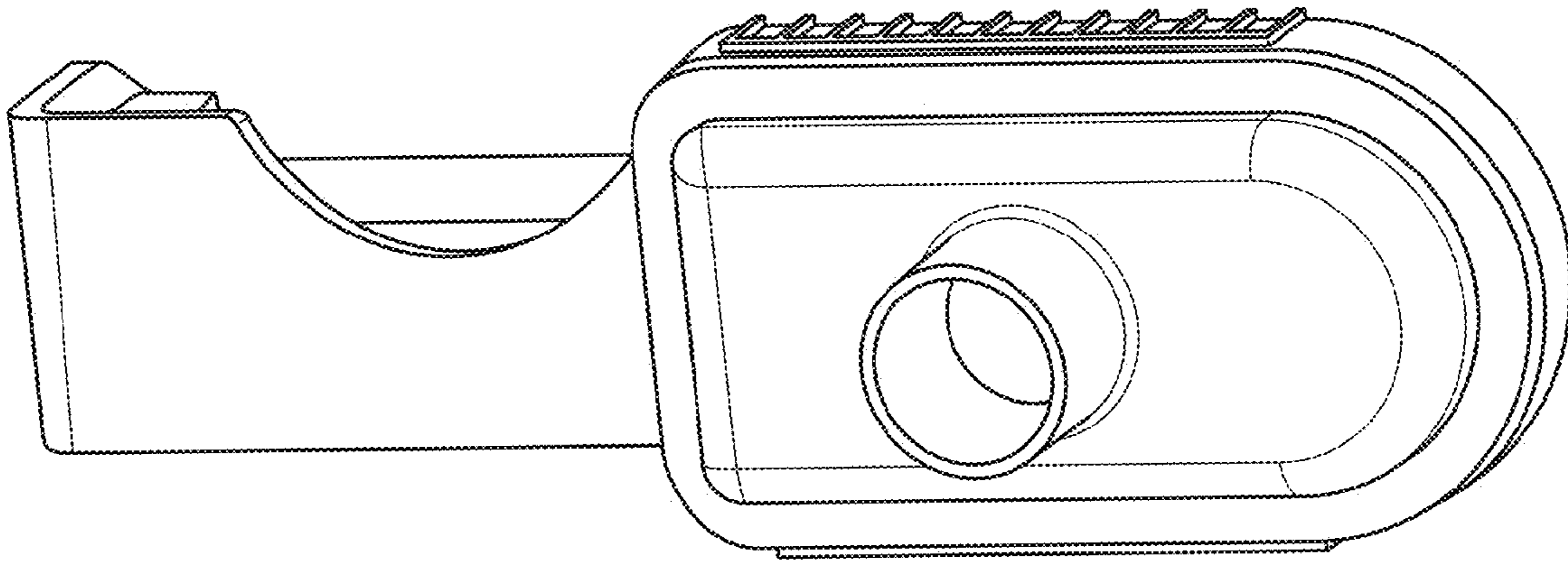


FIG. 2

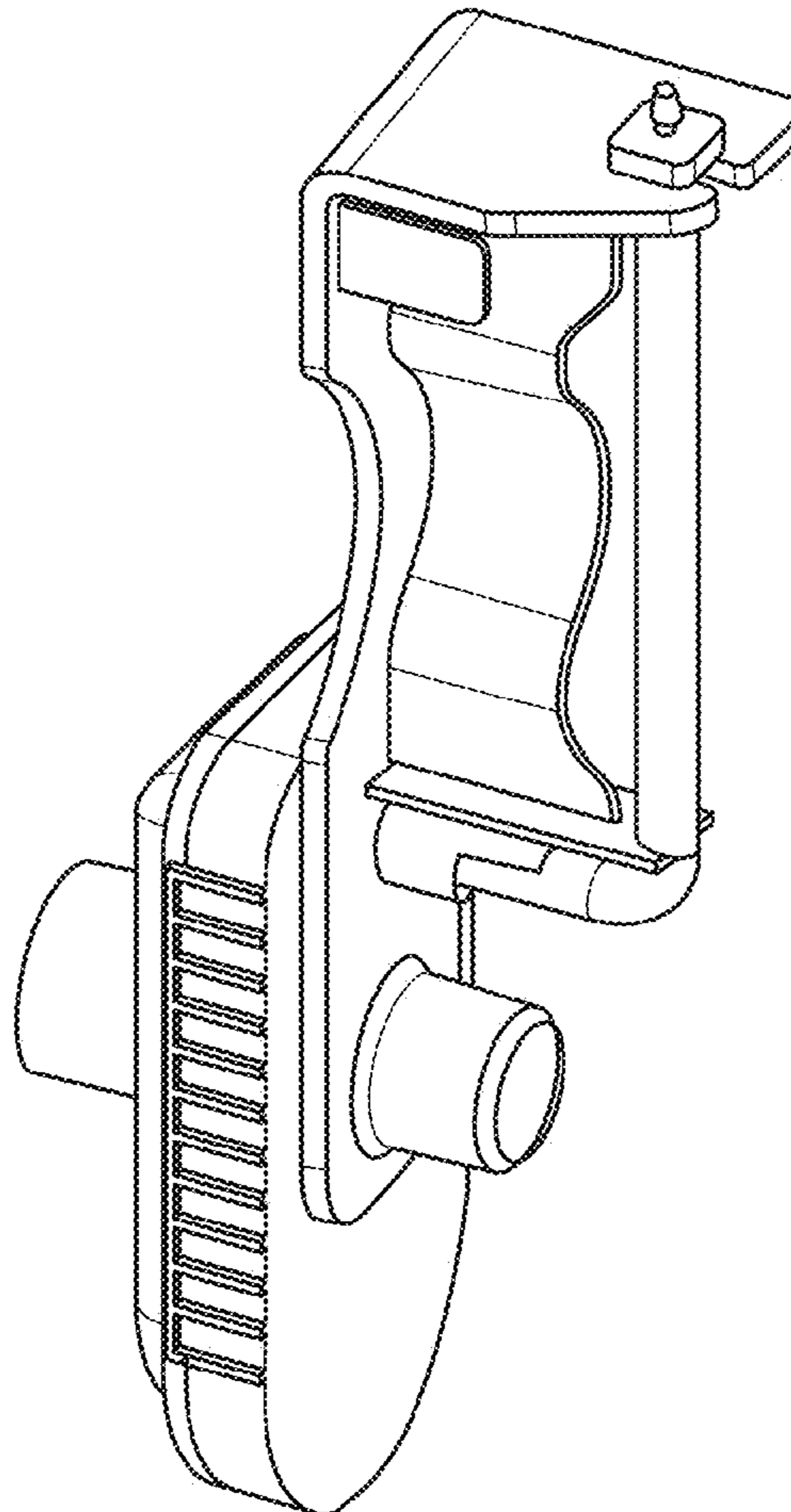


FIG. 3

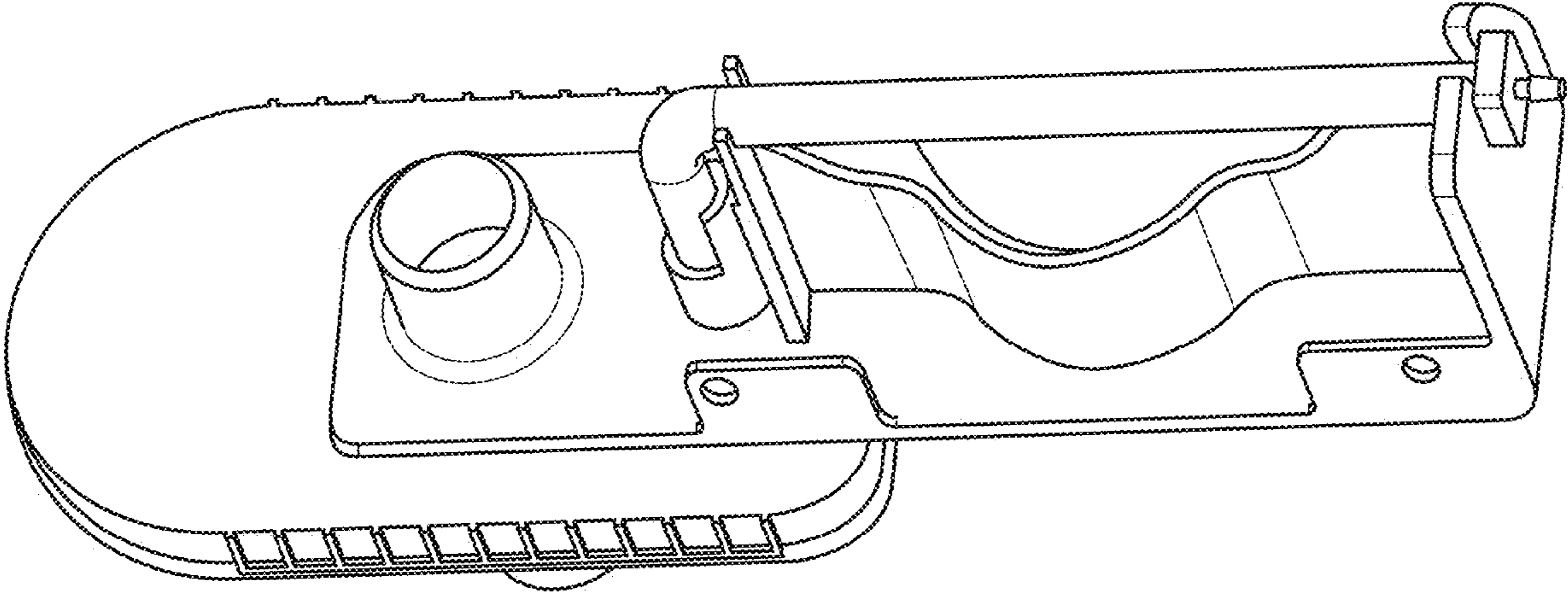


FIG. 4

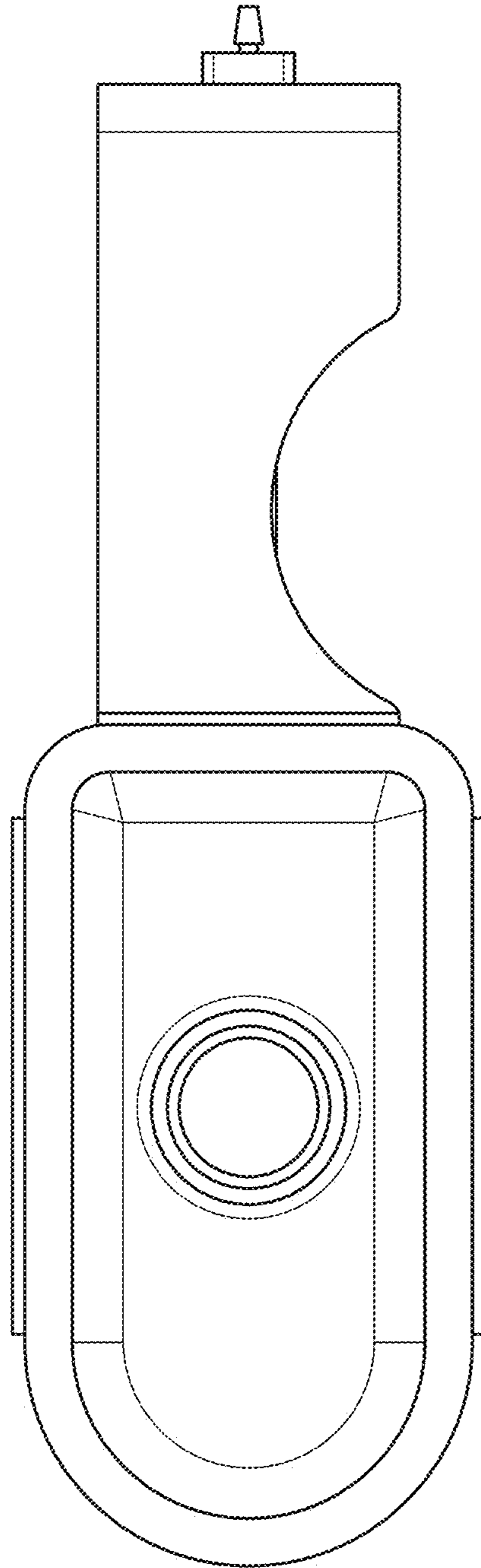


FIG. 5

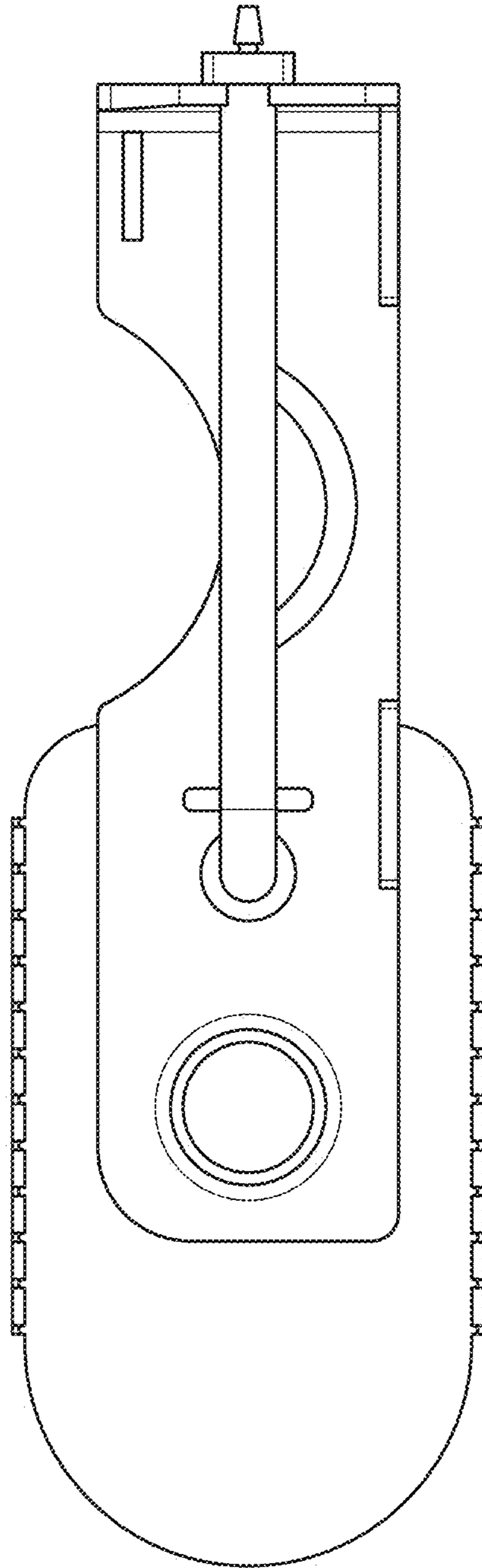


FIG. 6

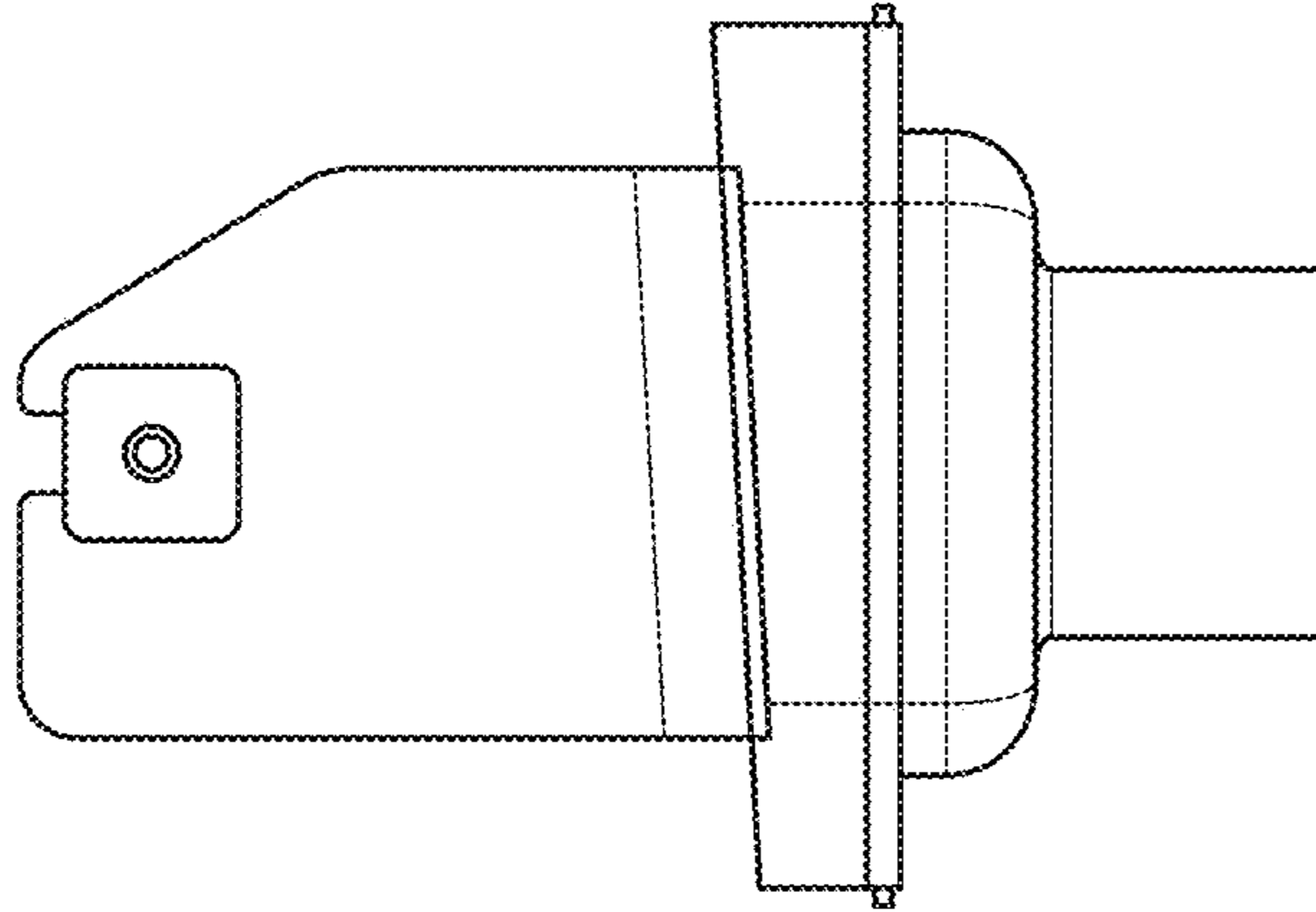


FIG. 7

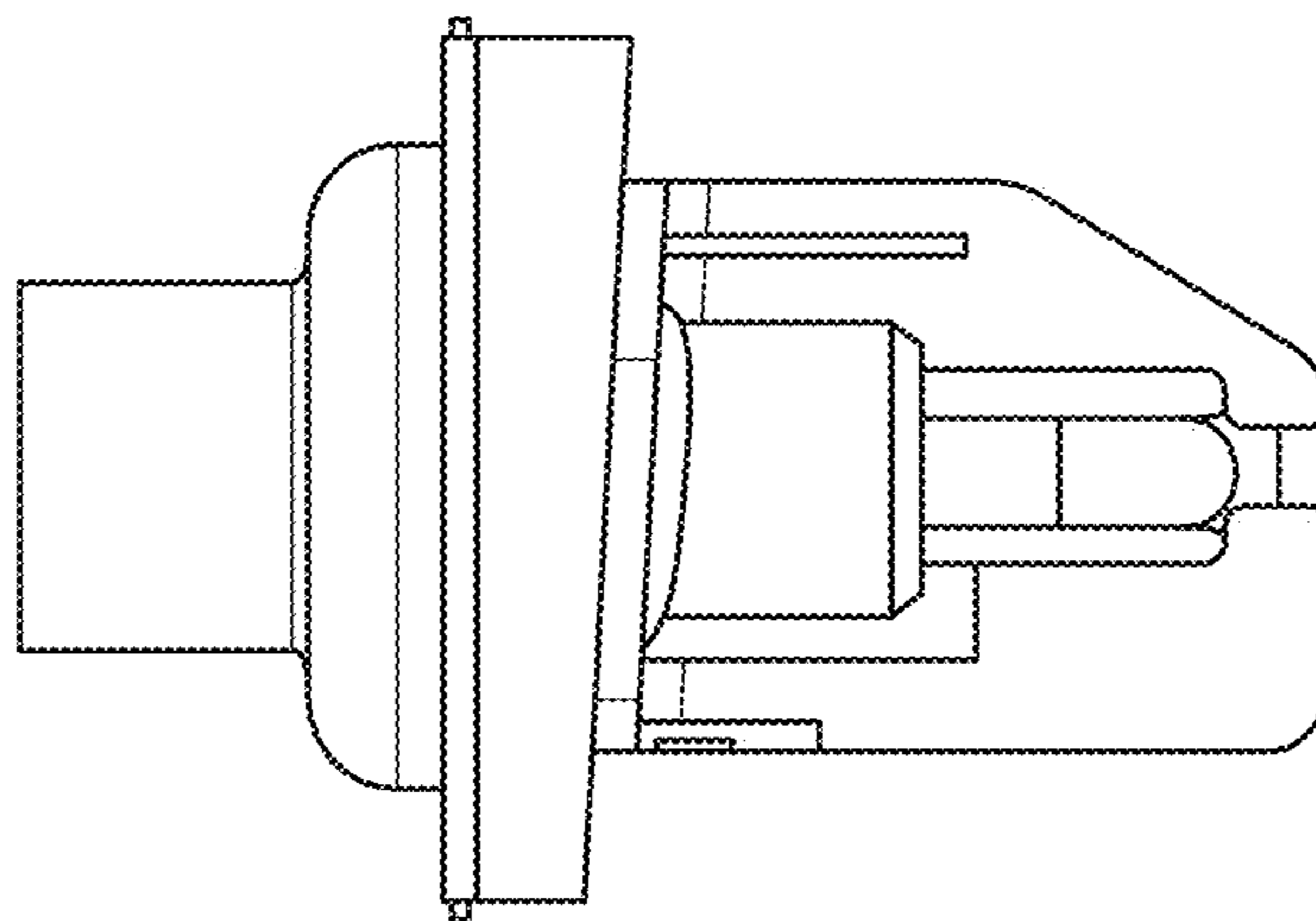


FIG. 8

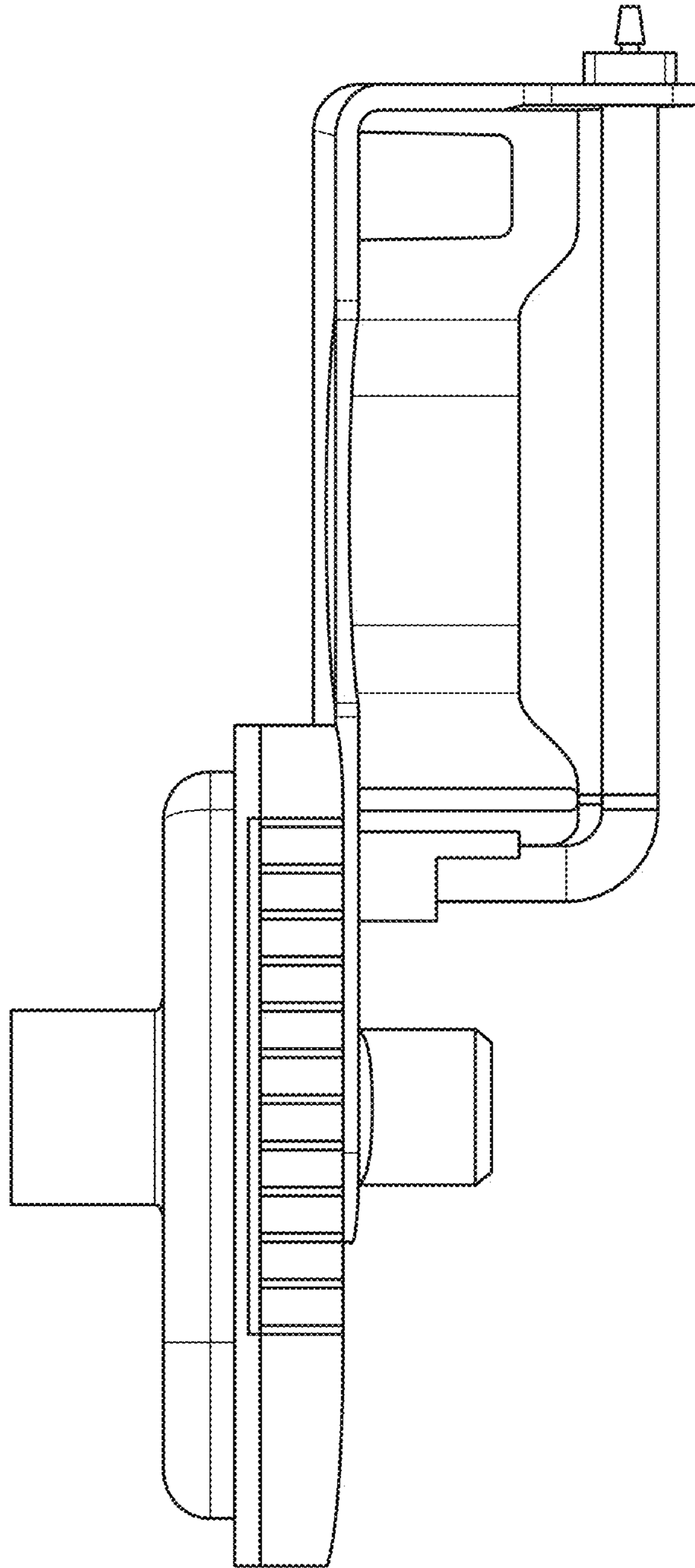


FIG. 9

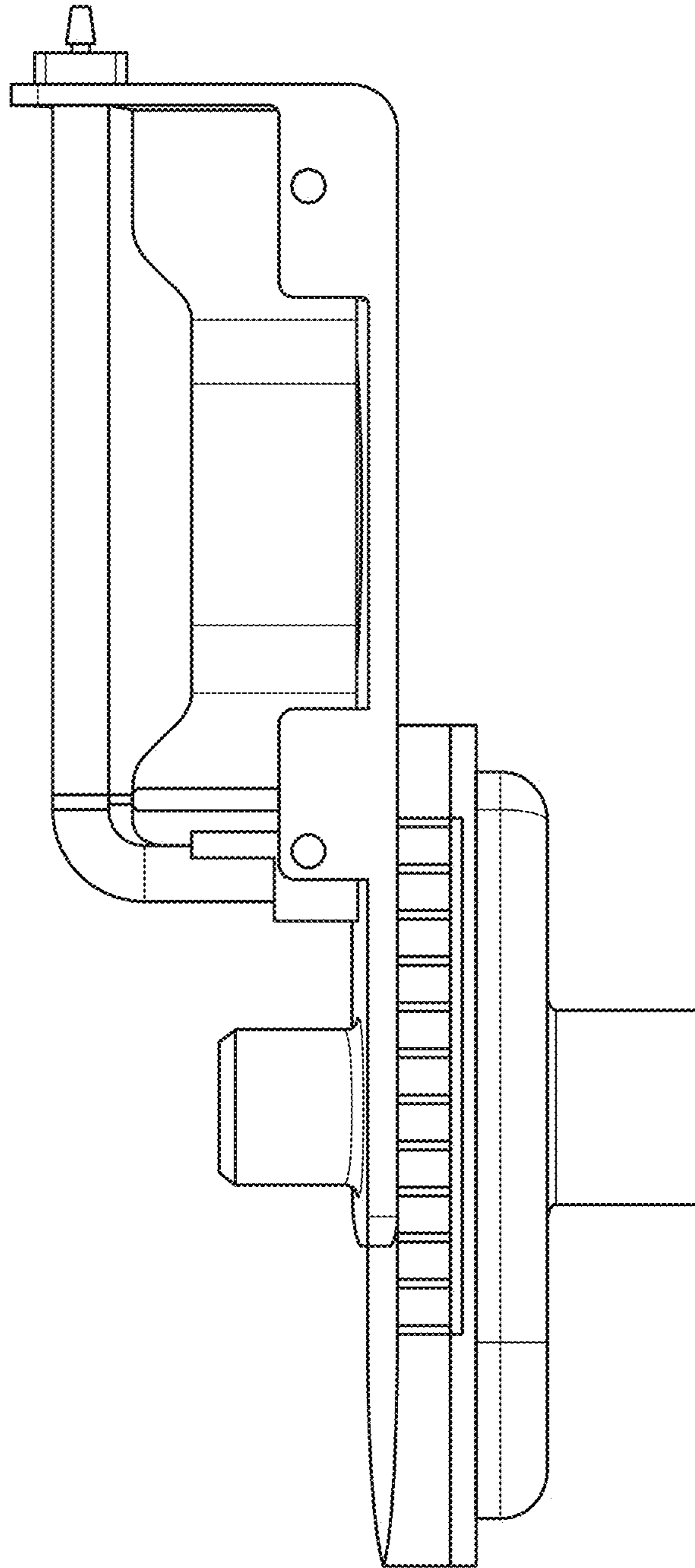


FIG. 10