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

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(45) **Date of Patent:** **** Aug. 6, 2013**

(54) **CLEANING DEVICE FOR OPTICAL CONNECTORS**

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(73) Assignee: **NTT Advanced Technology Corporation**, Tokyo (JP)

(**) Term: **14 Years**

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(30) **Foreign Application Priority Data**

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(51) **LOC (9) Cl.** **08-99**

(52) **U.S. Cl.**
USPC **D8/51**

(58) **Field of Classification Search**
USPC D32/35, 40, 45, 52; D4/146, 114, D4/121, 127, 130, 132-133, 136, 138; 15/105.52, 107, 114, 118, 237, 142, 104.92, 15/21.1, 320-321, 323; 401/146, 6, 268, 401/118, 123, 131; 369/71, 72; 134/6, 9
See application file for complete search history.

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(57) **CLAIM**

The ornamental design for cleaning device for optical connectors, as shown and described.

DESCRIPTION

FIG. 1 is a right side elevation view illustrating a main body and an attachment covering a front portion of the main body of my new design with a cap portion of the attachment in a closed position.

FIG. 2 is a top plan view thereof.

FIG. 3 is a rear elevation view thereof.

FIG. 4 is a bottom plan view thereof.

FIG. 5 is a front elevation view thereof.

FIG. 6 is a left side elevation view thereof.

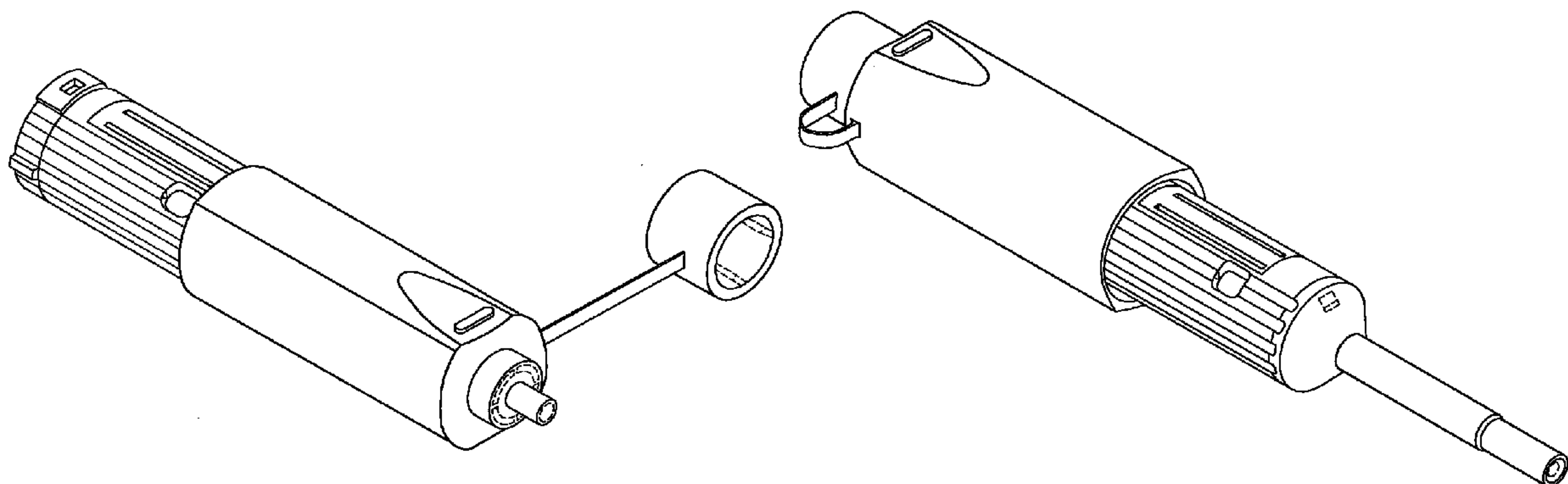
FIG. 7 is a front, side perspective view thereof.

FIG. 8 is a front, side perspective view thereof with the cap in an open position; and,

FIG. 9 is a front perspective view thereof with a guide and a cleaning shaft attached to the front portion of a main body of the cleaning device with the attachment now covering a rear portion of the main body.

No claim is made to the portions shown in broken lines.

1 Claim, 6 Drawing Sheets



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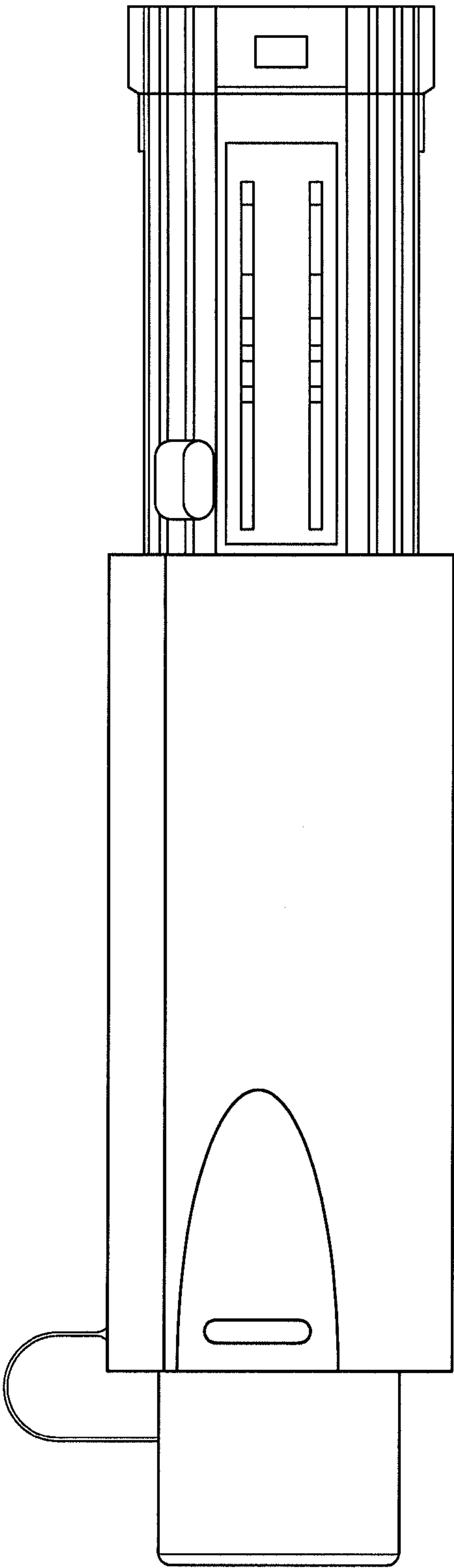


FIG. 1

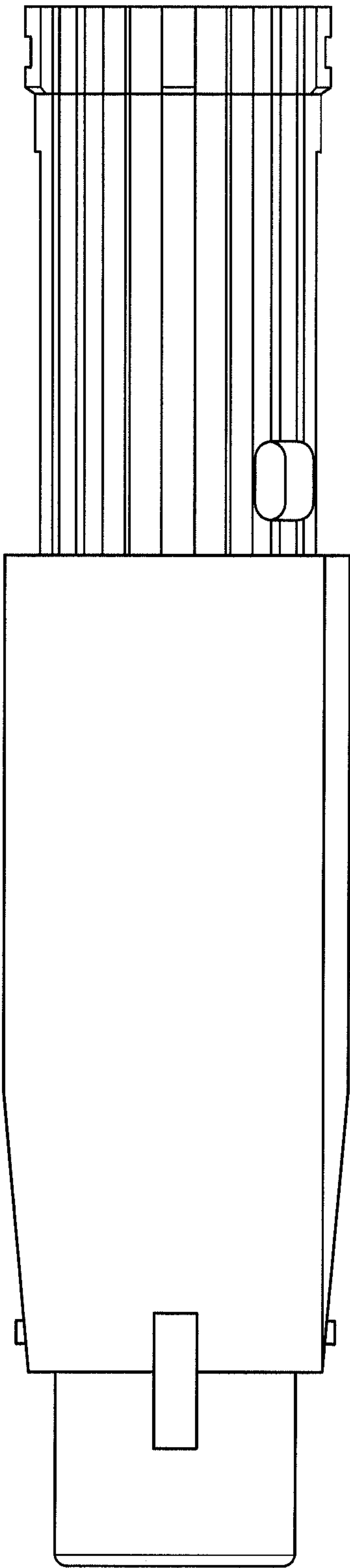


FIG. 2

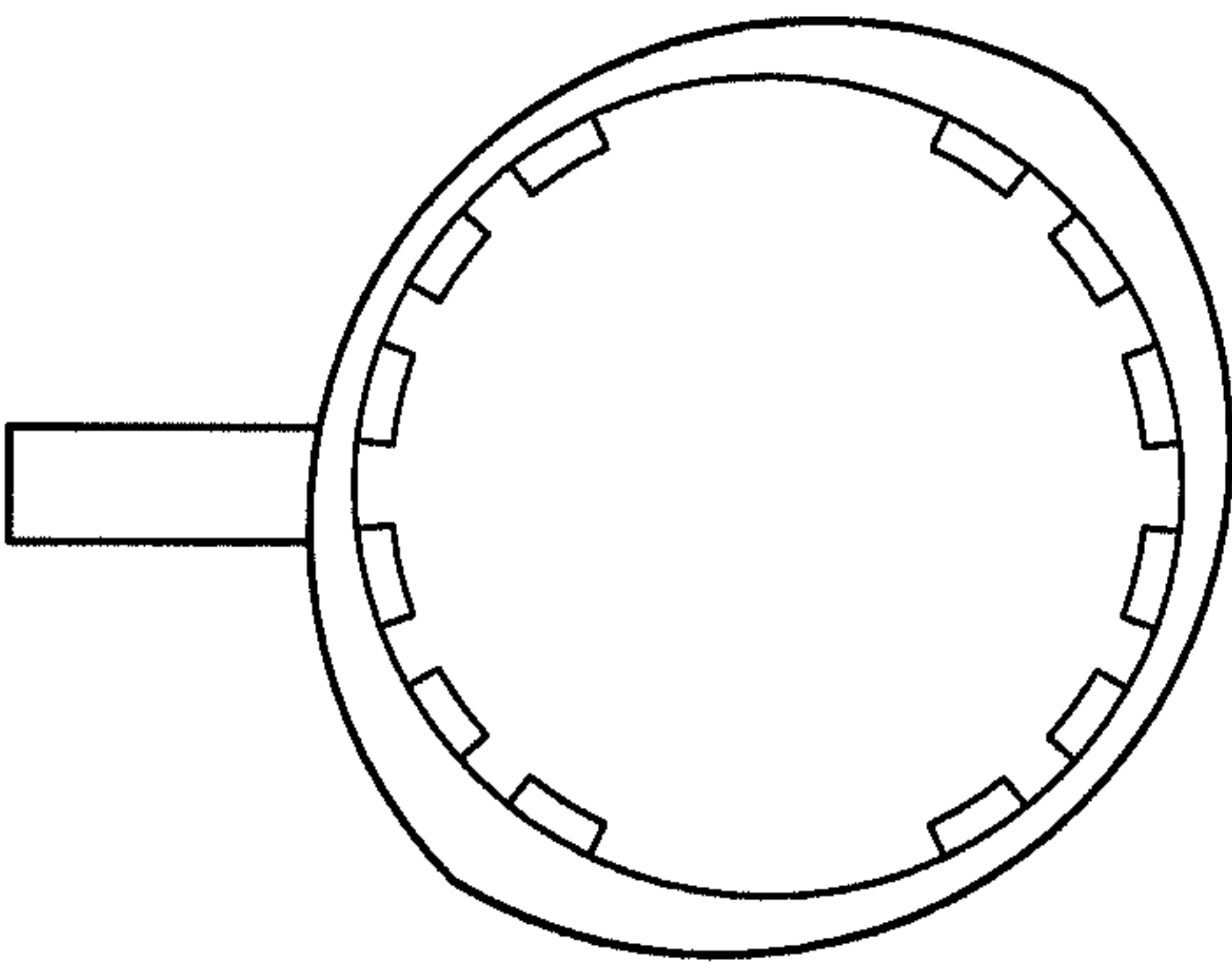


FIG. 3

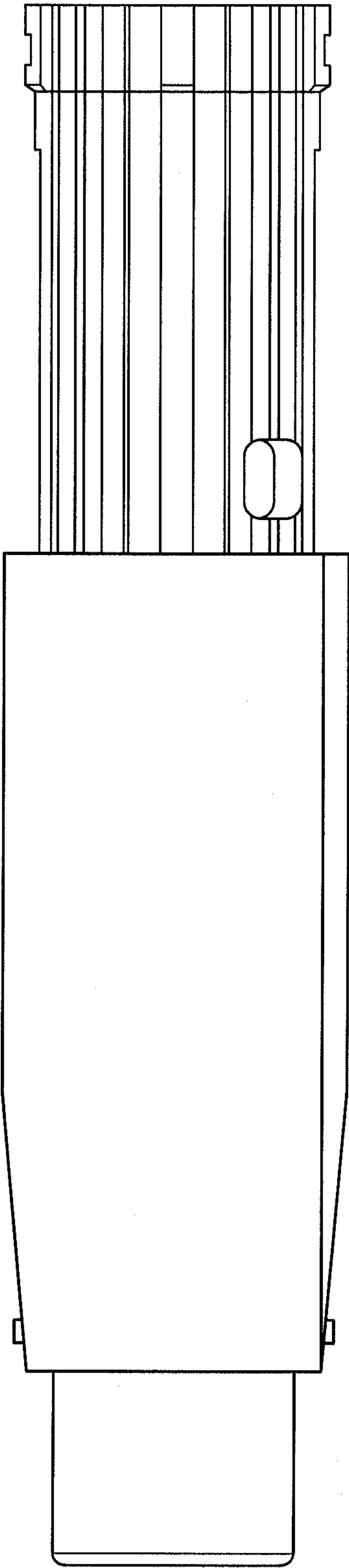


FIG. 4

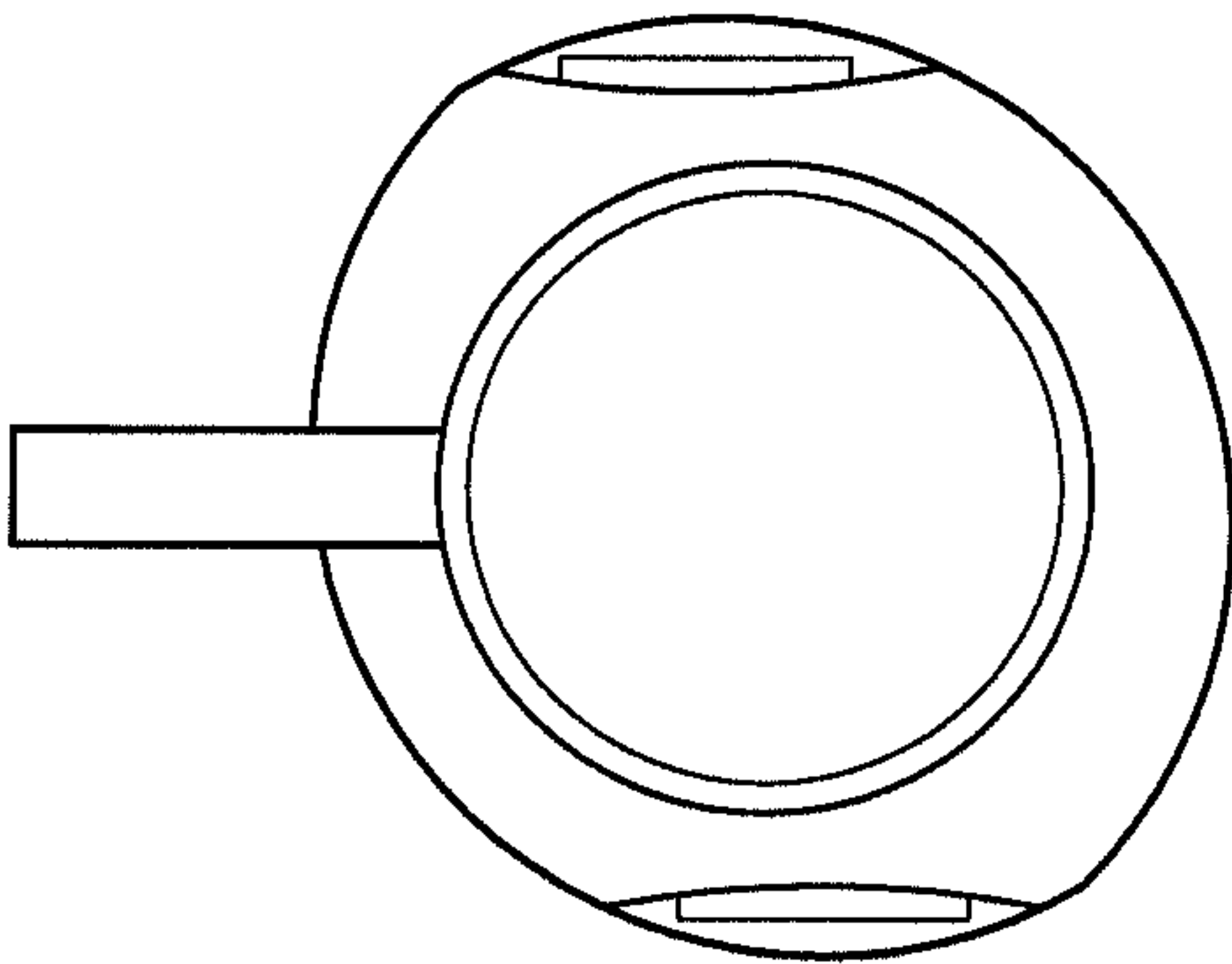


FIG. 5

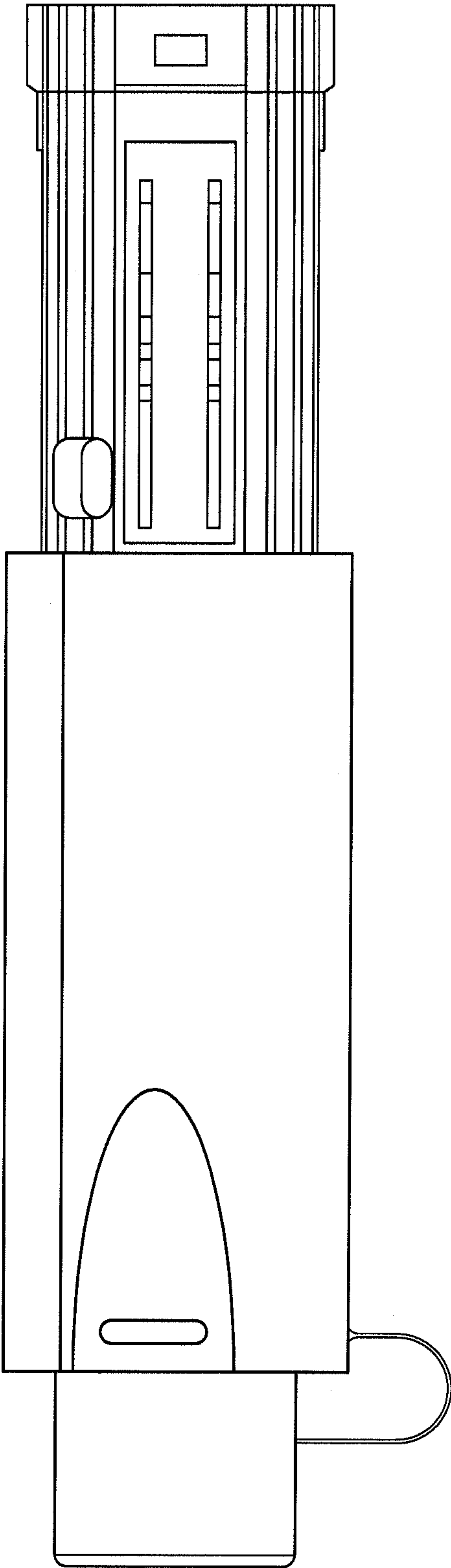
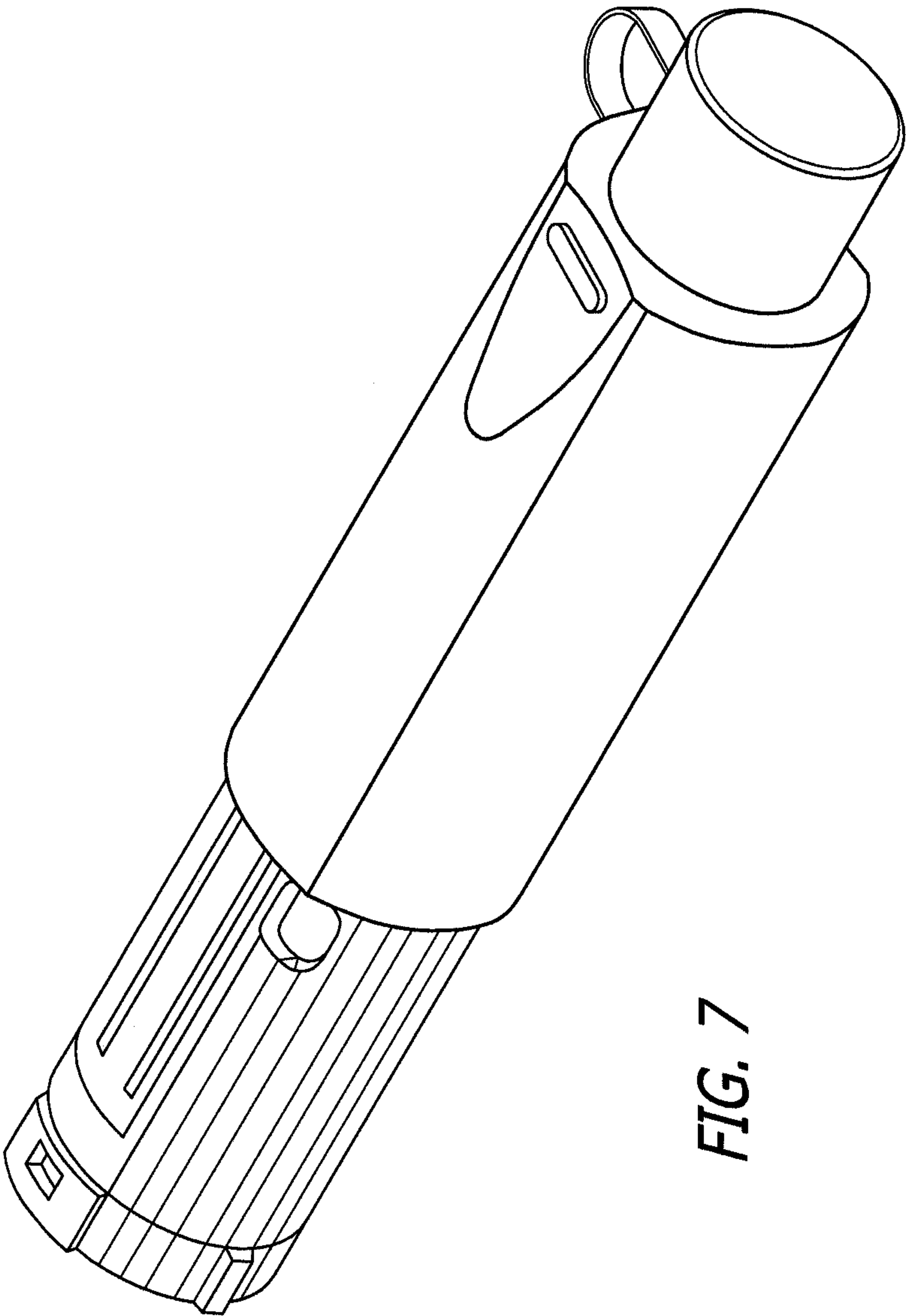
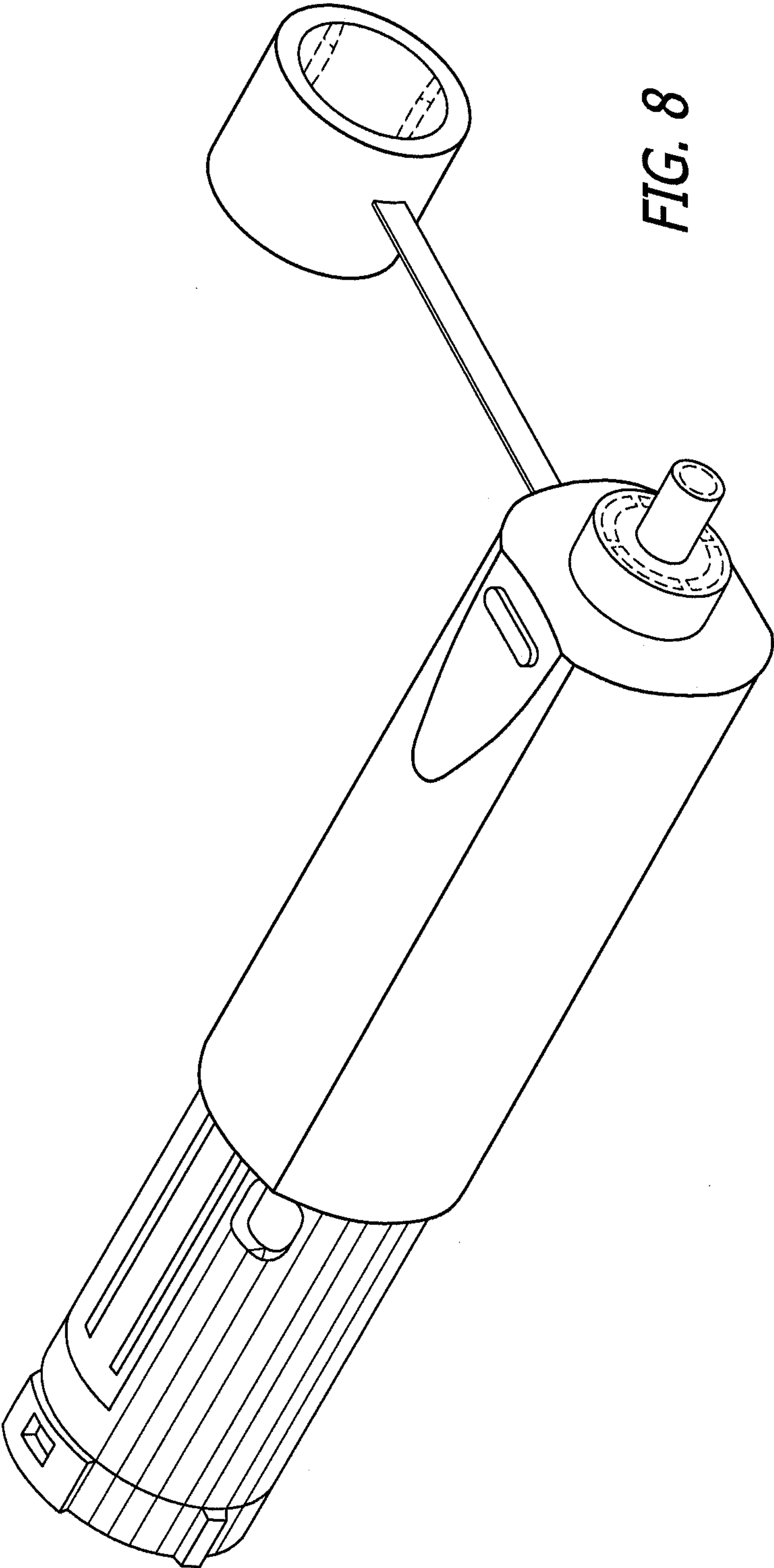


FIG. 6





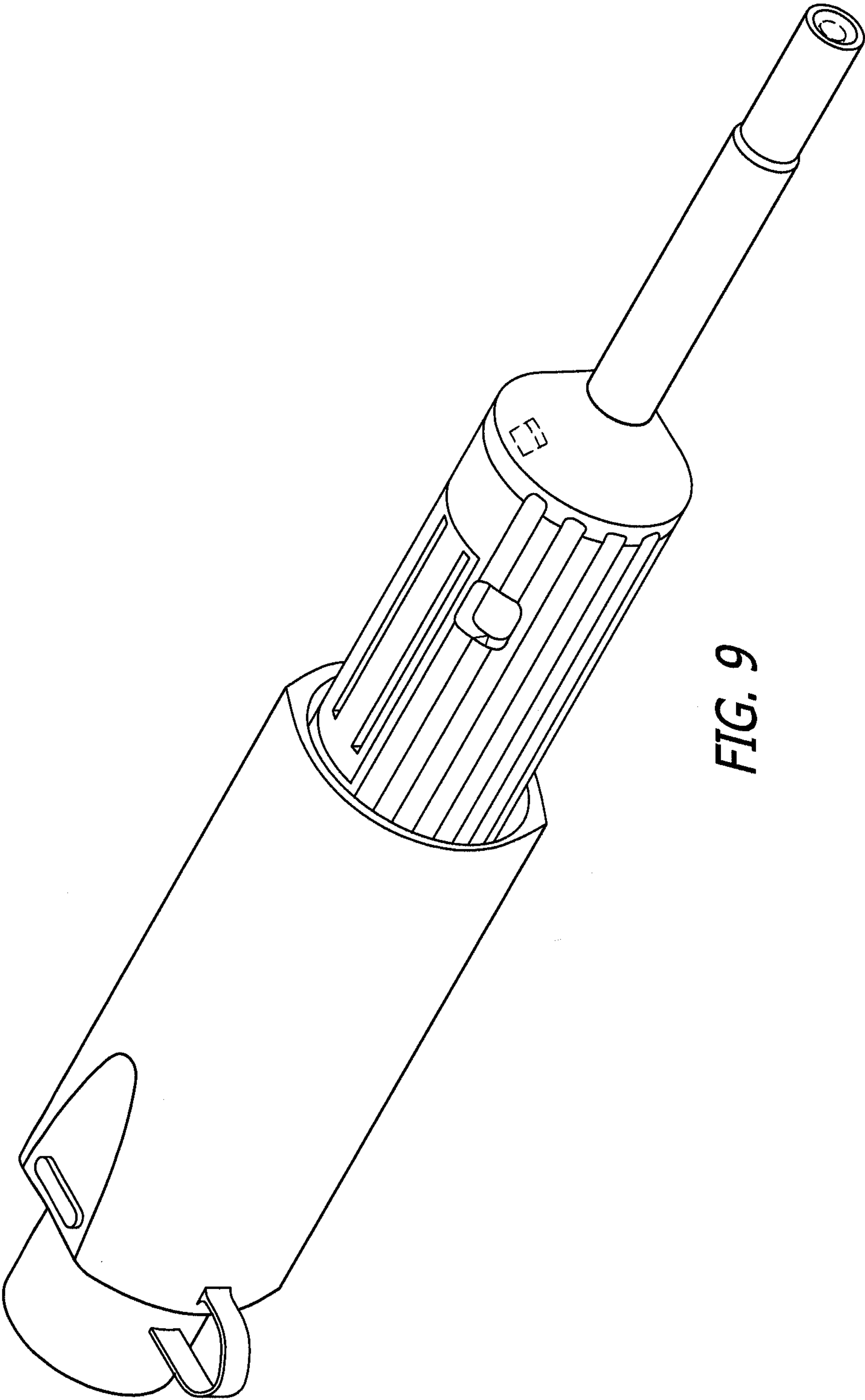


FIG. 9