



US00D554549S

(12) **United States Design Patent** (10) **Patent No.:** **US D554,549 S**
Amamiya et al. (45) **Date of Patent:** **** Nov. 6, 2007**

(54) **REFRACTOMETER**

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(73) Assignee: **ATAGO Co, Ltd.**, Tokyo (JP)

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

(21) Appl. No.: **29/234,936**

(22) Filed: **Jul. 25, 2005**

(30) **Foreign Application Priority Data**

Jan. 31, 2005 (JP) 2005-002494

(51) **LOC (8) Cl.** **10-04**

(52) **U.S. Cl.** **D10/78**

(58) **Field of Classification Search** D10/78,
D10/81; 356/128-137, 243.1, 246

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,890,916 A * 1/1990 Rainer 356/135
D348,849 S * 7/1994 Thompson D10/78
6,195,160 B1 * 2/2001 Rainer et al. 356/135
D511,980 S * 11/2005 McFarland et al. D10/78

* cited by examiner

Primary Examiner—Antoine D. Davis

(74) *Attorney, Agent, or Firm*—McAndrews, Held & Malloy, Ltd.

(57) **CLAIM**

The ornamental design for a refractometer, as substantially shown and described.

DESCRIPTION

FIG. 1 is a top, front, and right side perspective view of first embodiment of our new design for a refractometer in an open position;

FIG. 2 is a top, front, and right side perspective view thereof in a closed position;

FIG. 3 is a top plan view thereof in a closed position;

FIG. 4 is a bottom plan view thereof in a closed position;

FIG. 5 is a right side elevation view thereof in a closed position, the left side being a mirror image thereof;

FIG. 6 is a rear elevation view thereof in a closed position;

FIG. 7 is a front elevation view thereof in a closed position;

FIG. 8 is a top, front, and right side perspective view of a second embodiment of our new design for a refractometer in an open position;

FIG. 9 is a top, front, and right side perspective view thereof in a closed position;

FIG. 10 is a top plan view thereof in a closed position;

FIG. 11 is a bottom plan view thereof in a closed position;

FIG. 12 is a right side elevation view thereof in a closed position, the left side being a mirror image thereof;

FIG. 13 is a front elevation view thereof in a closed position;

FIG. 14 is a rear elevation view thereof in a closed position;

FIG. 15 is a top, front, and right side perspective view of a third embodiment of our new design for a refractometer in an open position;

FIG. 16 is a top, front, and right side perspective view thereof in a closed position;

FIG. 17 is a top plan view thereof in a closed position;

FIG. 18 is a bottom plan view thereof in a closed position;

FIG. 19 is a right side elevation view thereof in a closed position, the left side being a mirror image thereof;

FIG. 20 is a rear elevation view thereof in a closed position;

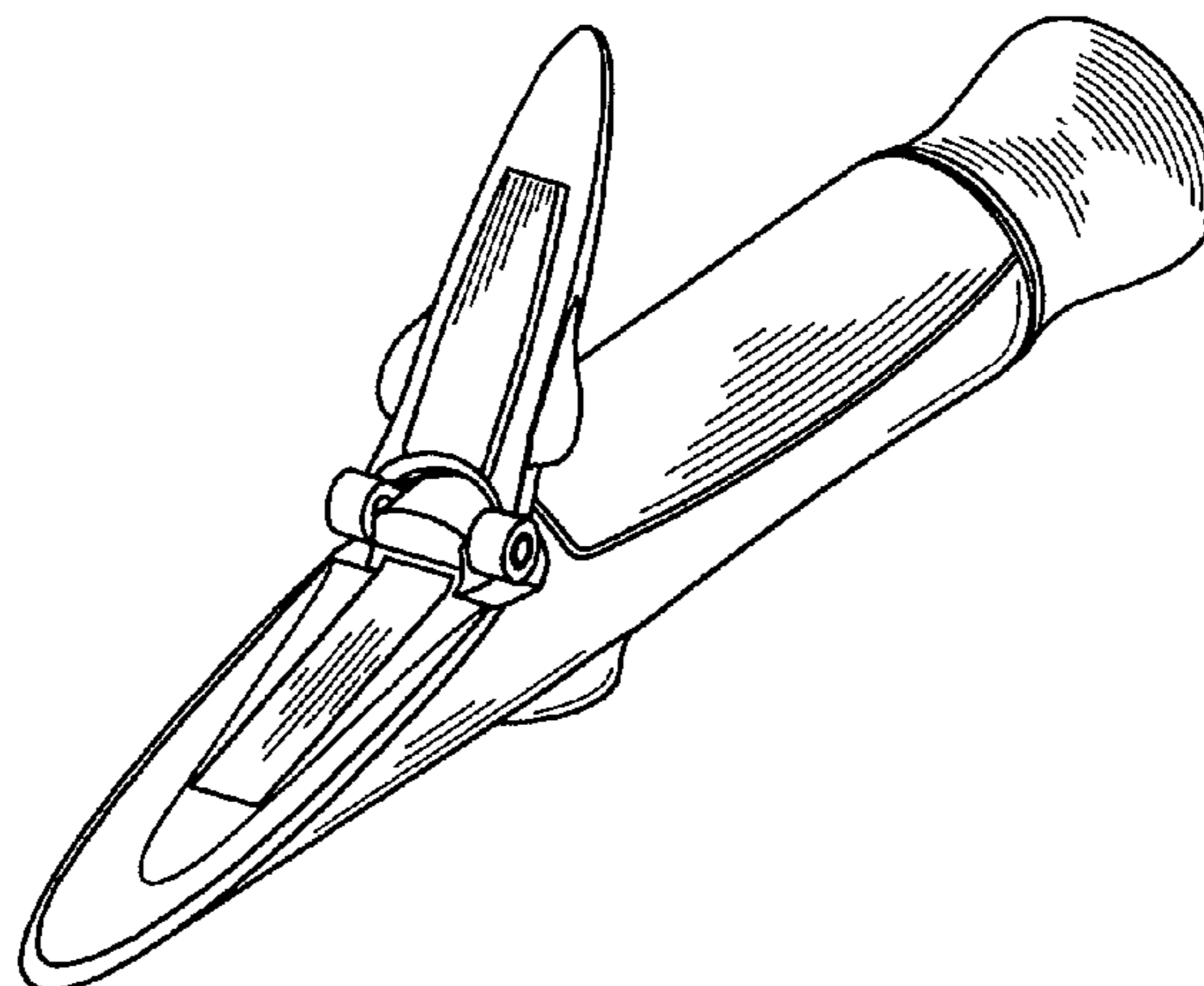


FIG. **21** is a front elevation view thereof in a closed position;

FIG. **22** is a top, front, and right side perspective view of a fourth embodiment of our new design for a refractometer in an open position;

FIG. **23** is a top, front, and right side perspective view thereof in a closed position;

FIG. **24** is a top plan view thereof in a closed position;

FIG. **25** is a bottom plan view thereof in a closed position;

FIG. **26** is a right side elevation view thereof in a closed position, the left side being a mirror image thereof;

FIG. **27** is a front elevation view thereof in a closed position; and,

FIG. **28** is a rear elevation view thereof in a closed position.

1 Claim, 8 Drawing Sheets

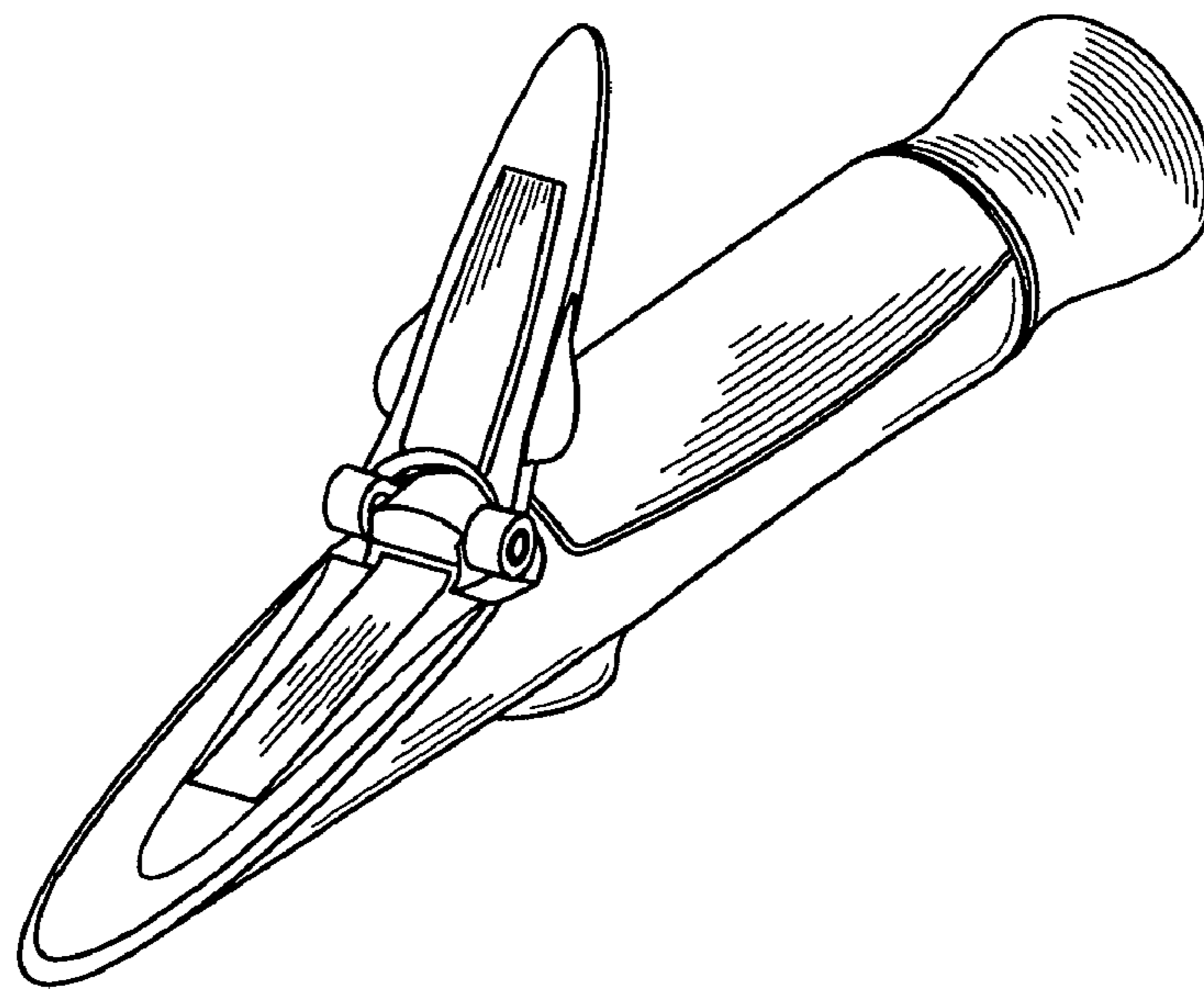


FIG. 1

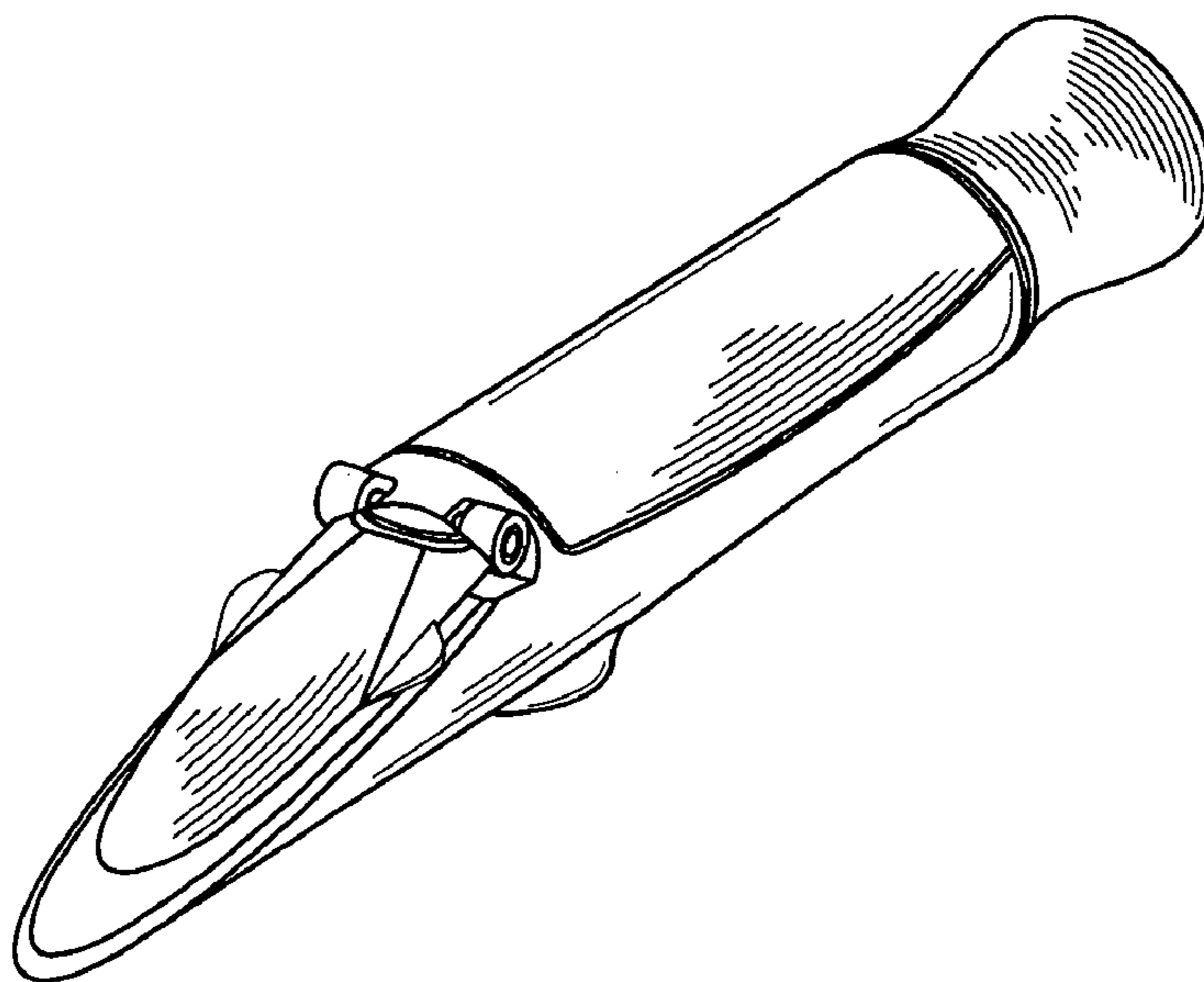


FIG. 2

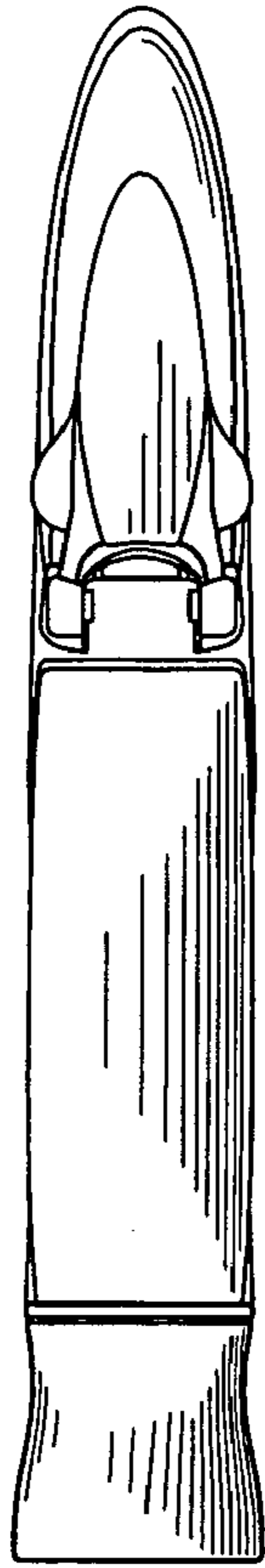


FIG. 3

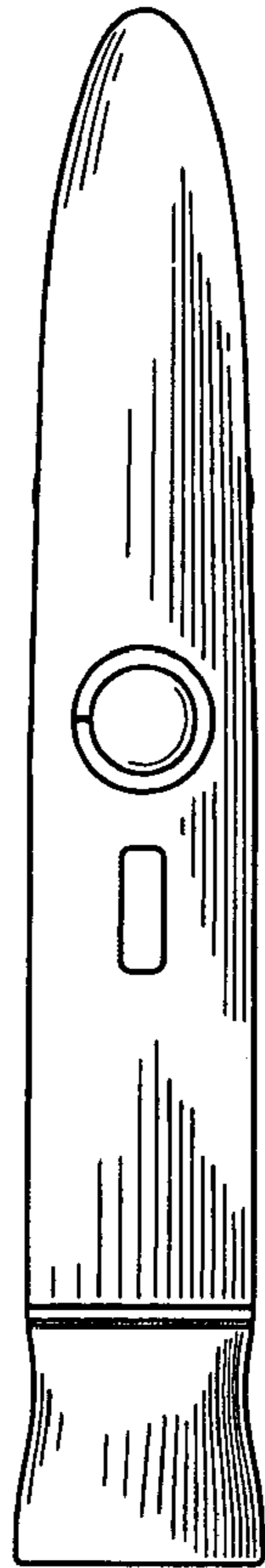


FIG. 4

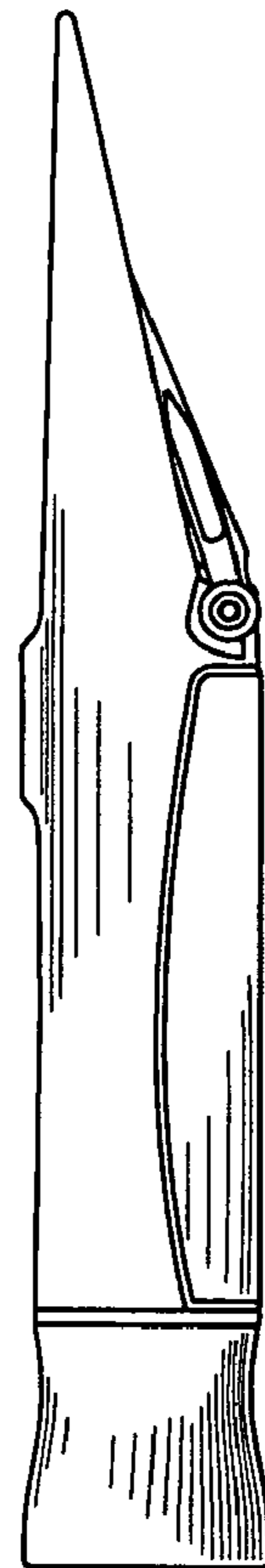


FIG. 5

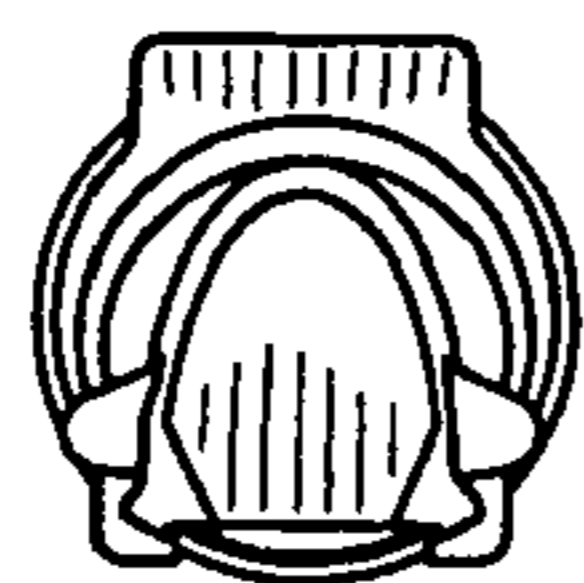


FIG. 6

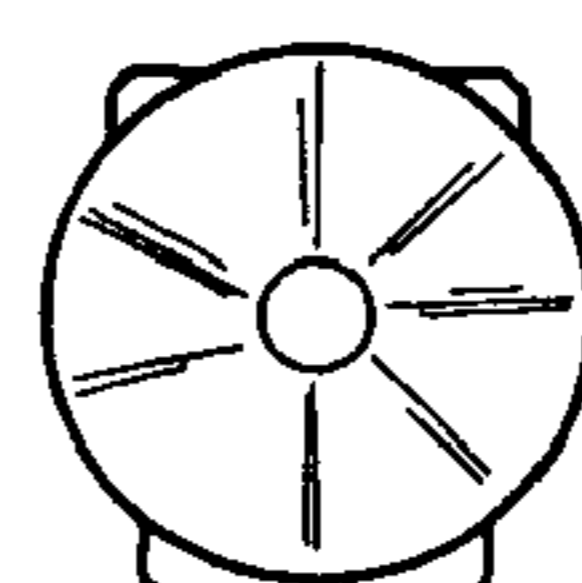


FIG. 7

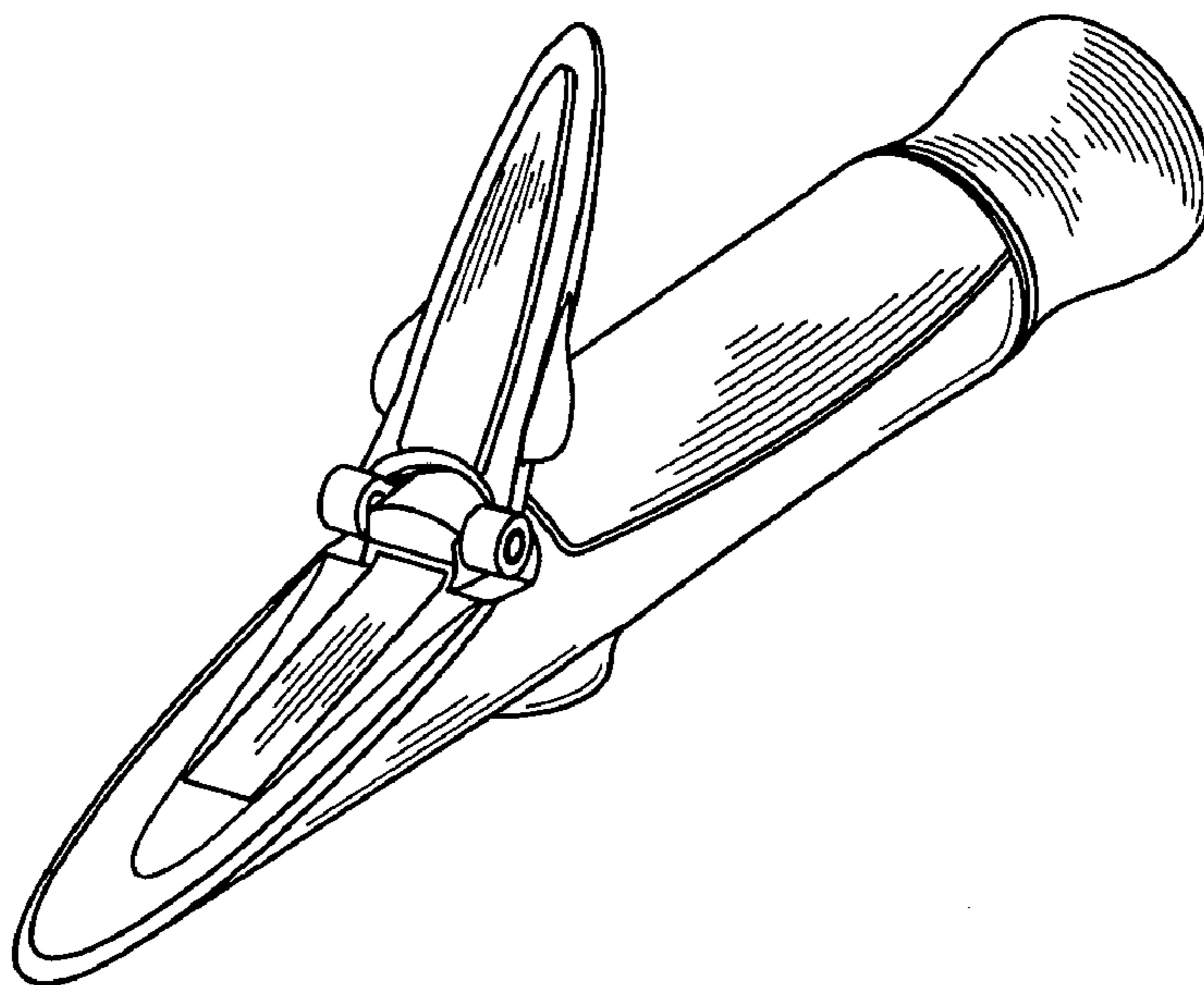


FIG. 8

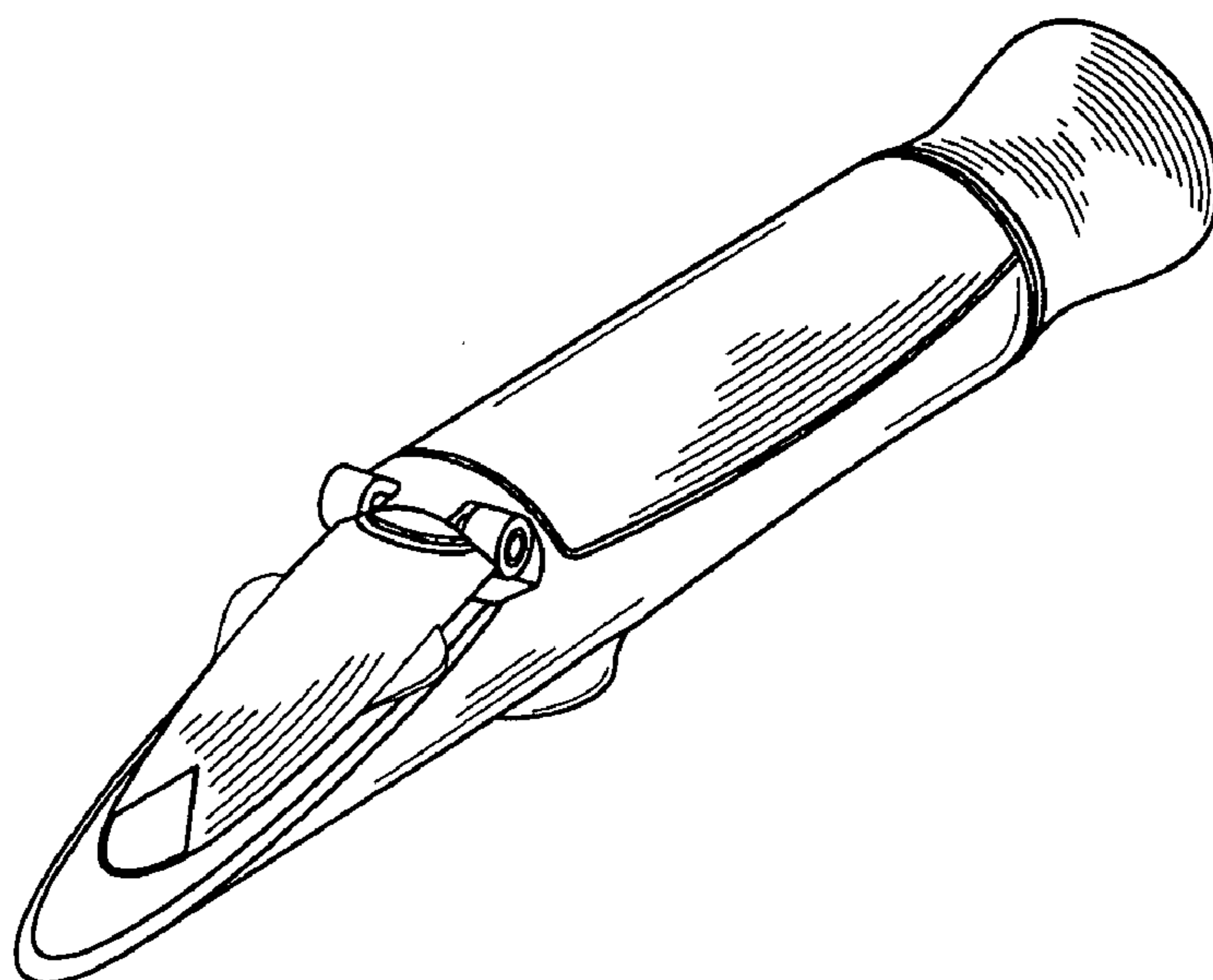


FIG. 9

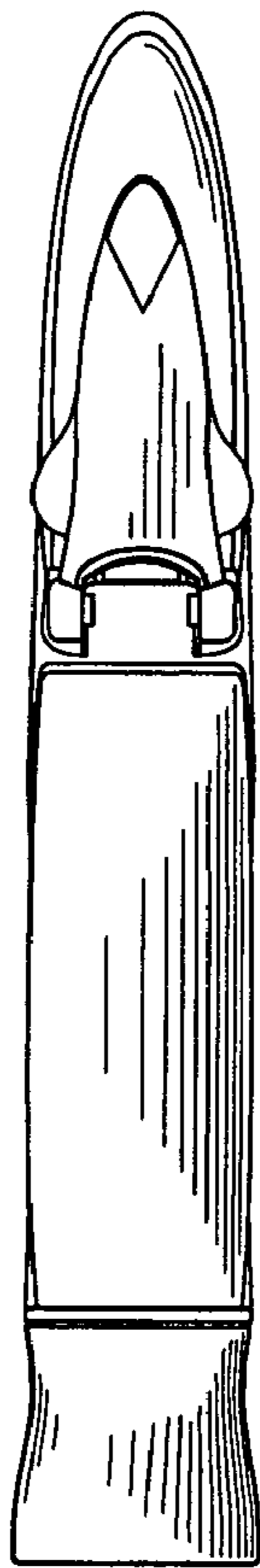


FIG. 10

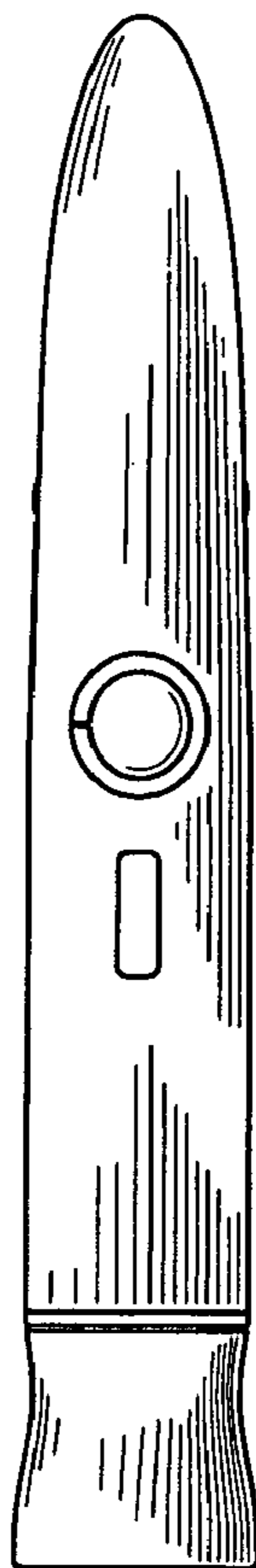


FIG. 11

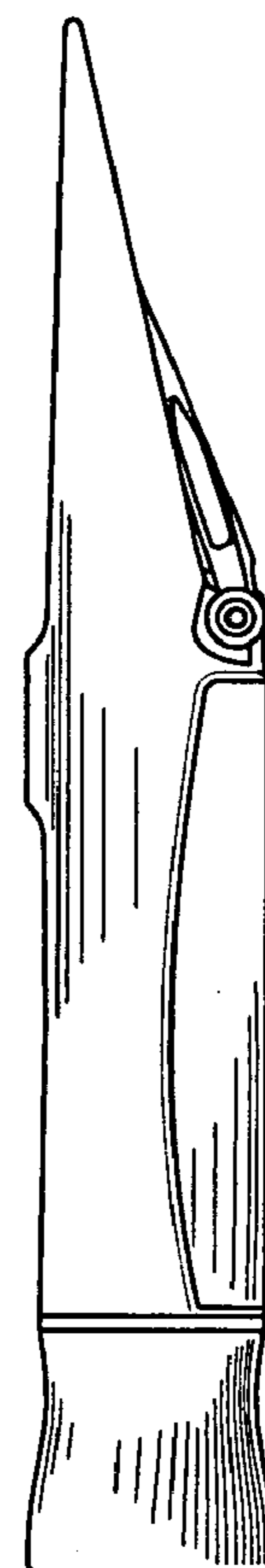


FIG. 12



FIG. 13

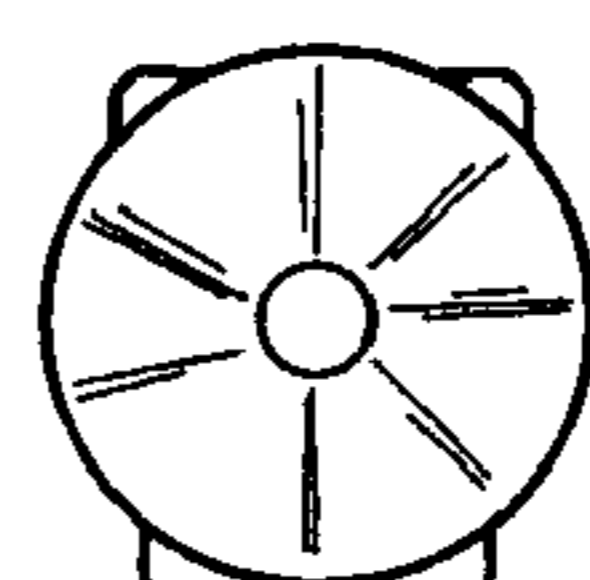


FIG. 14

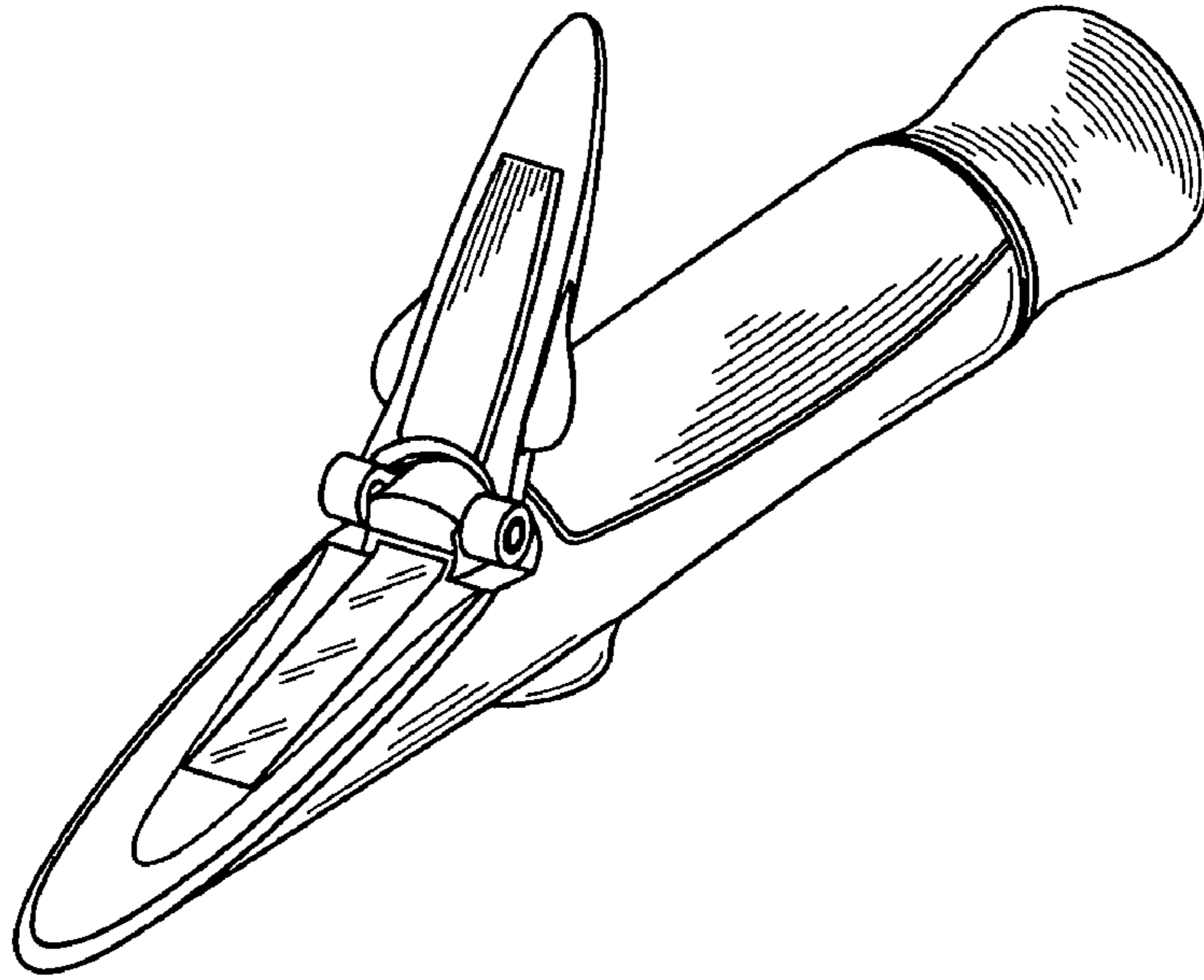


FIG. 15

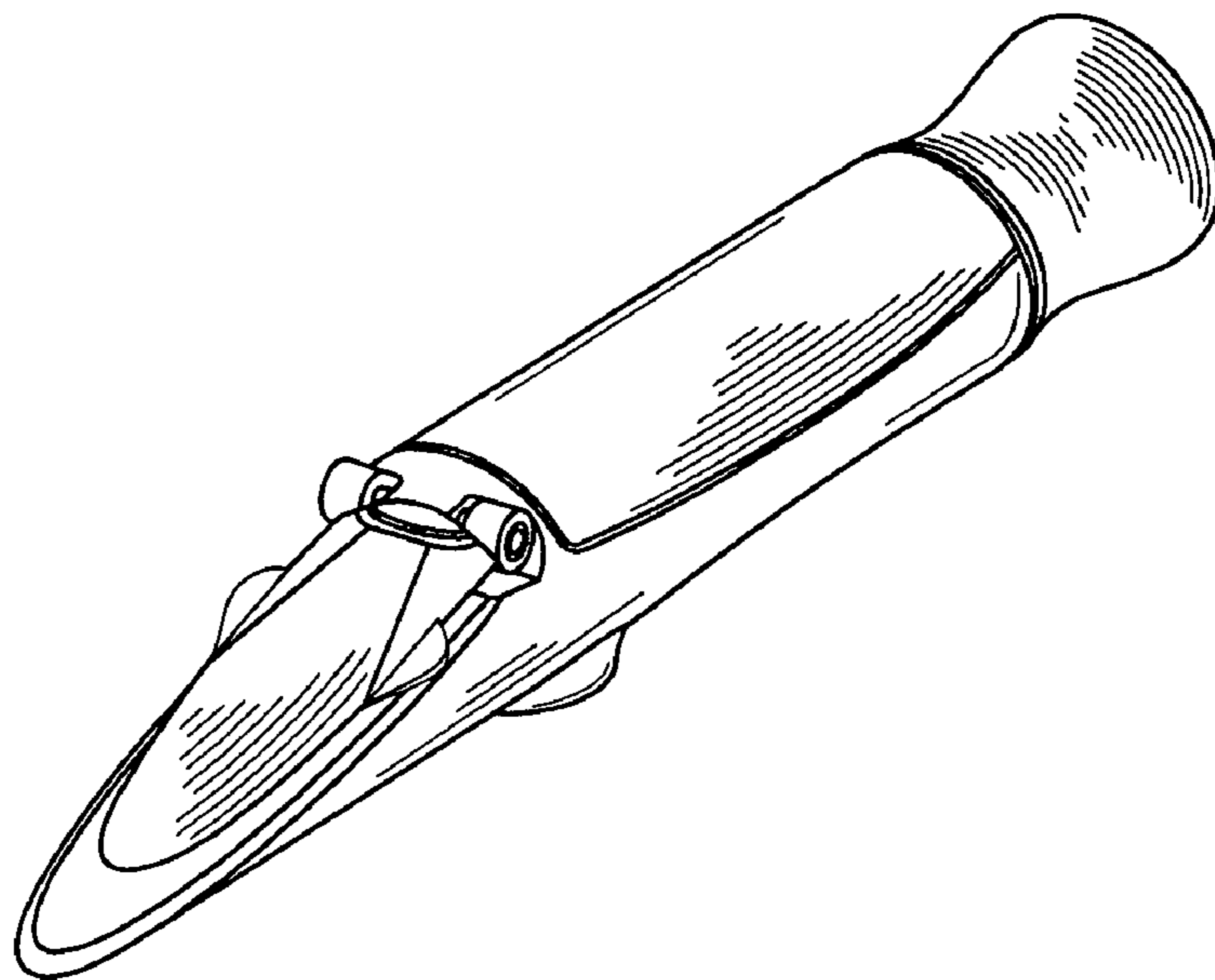


FIG. 16

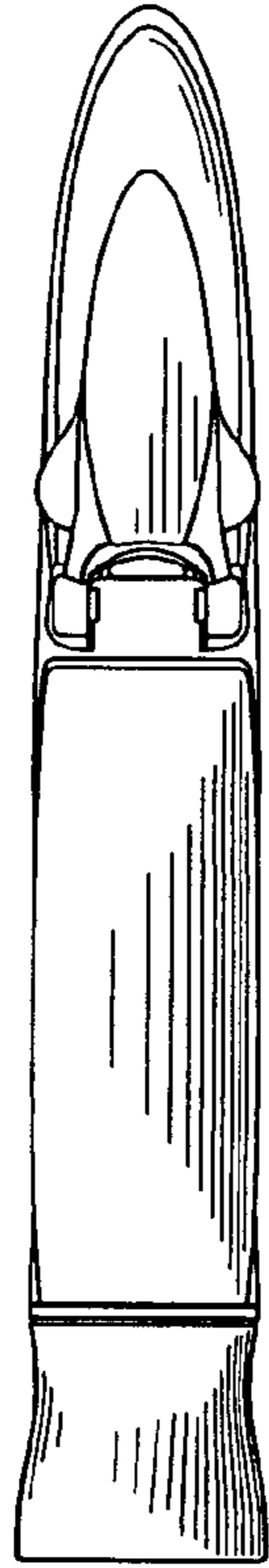


FIG. 17

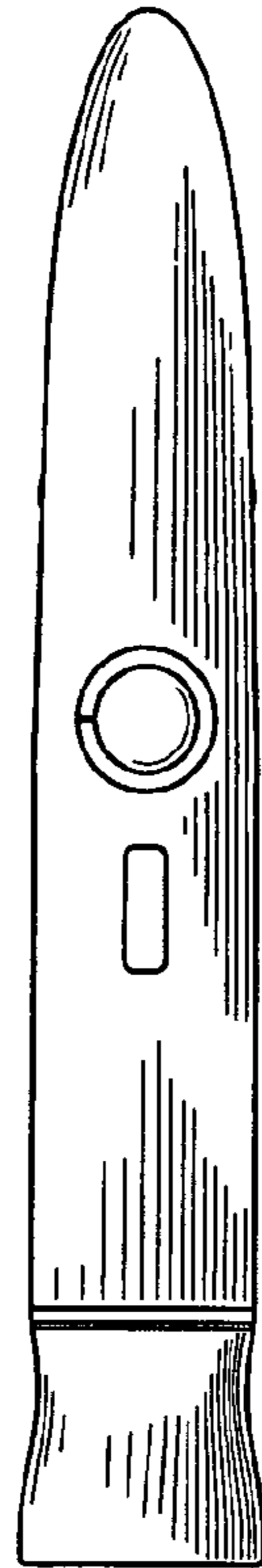


FIG. 18

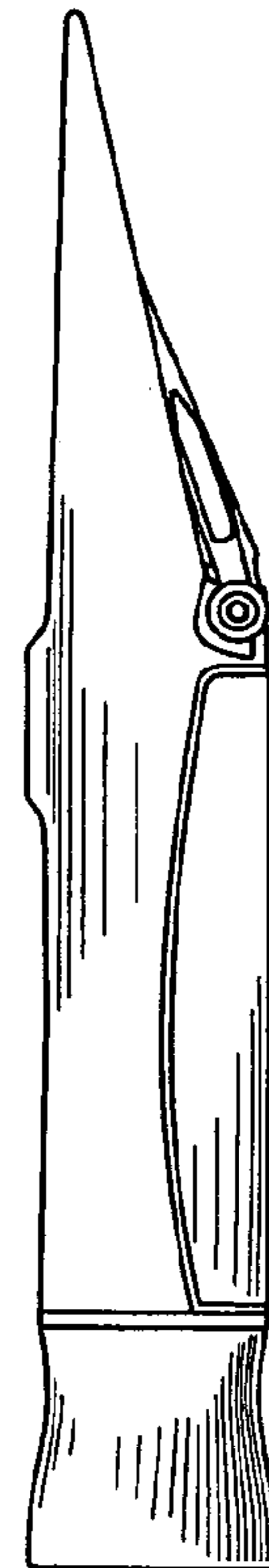


FIG. 19

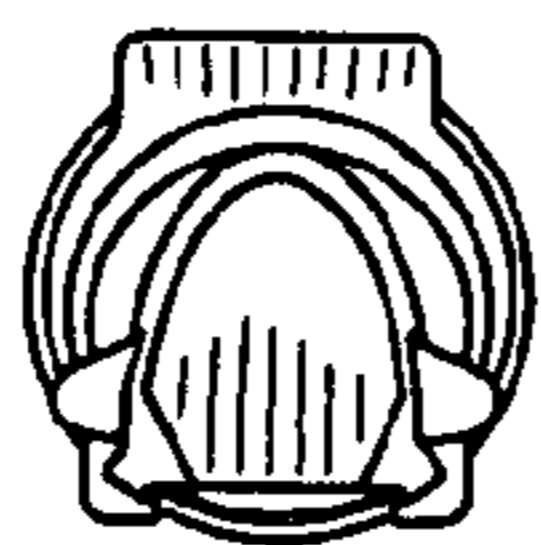


FIG. 20

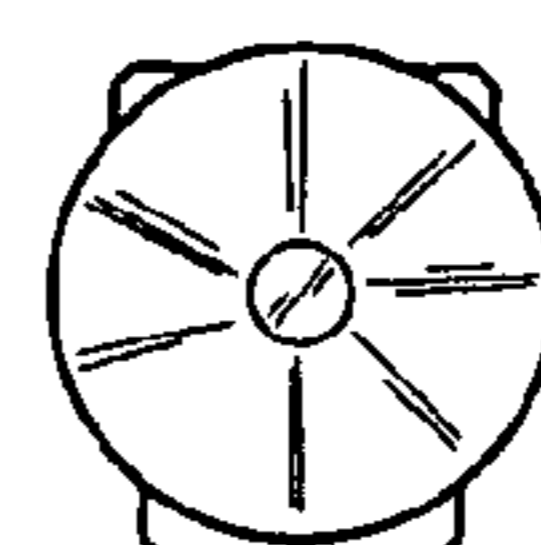


FIG. 21

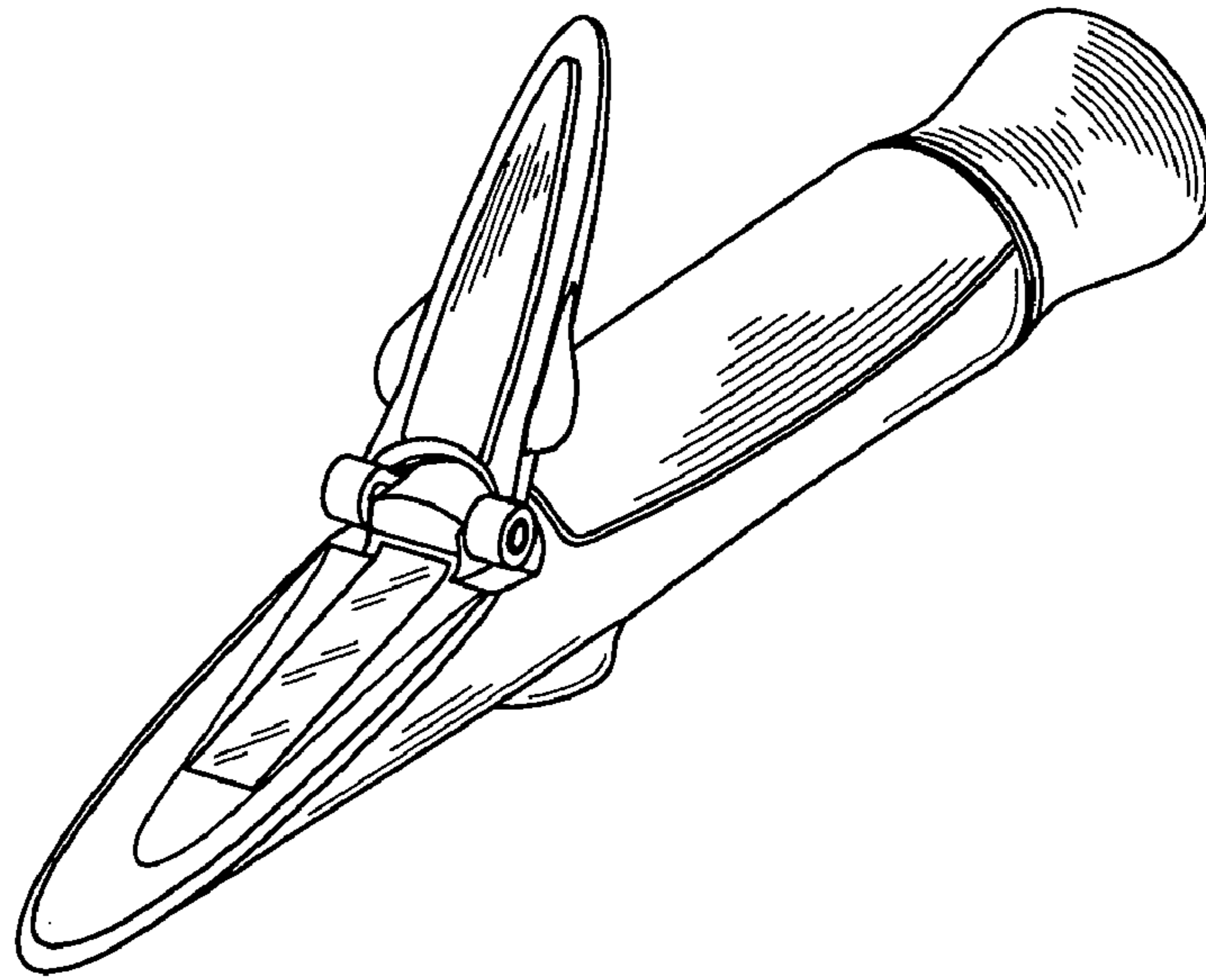


FIG. 22

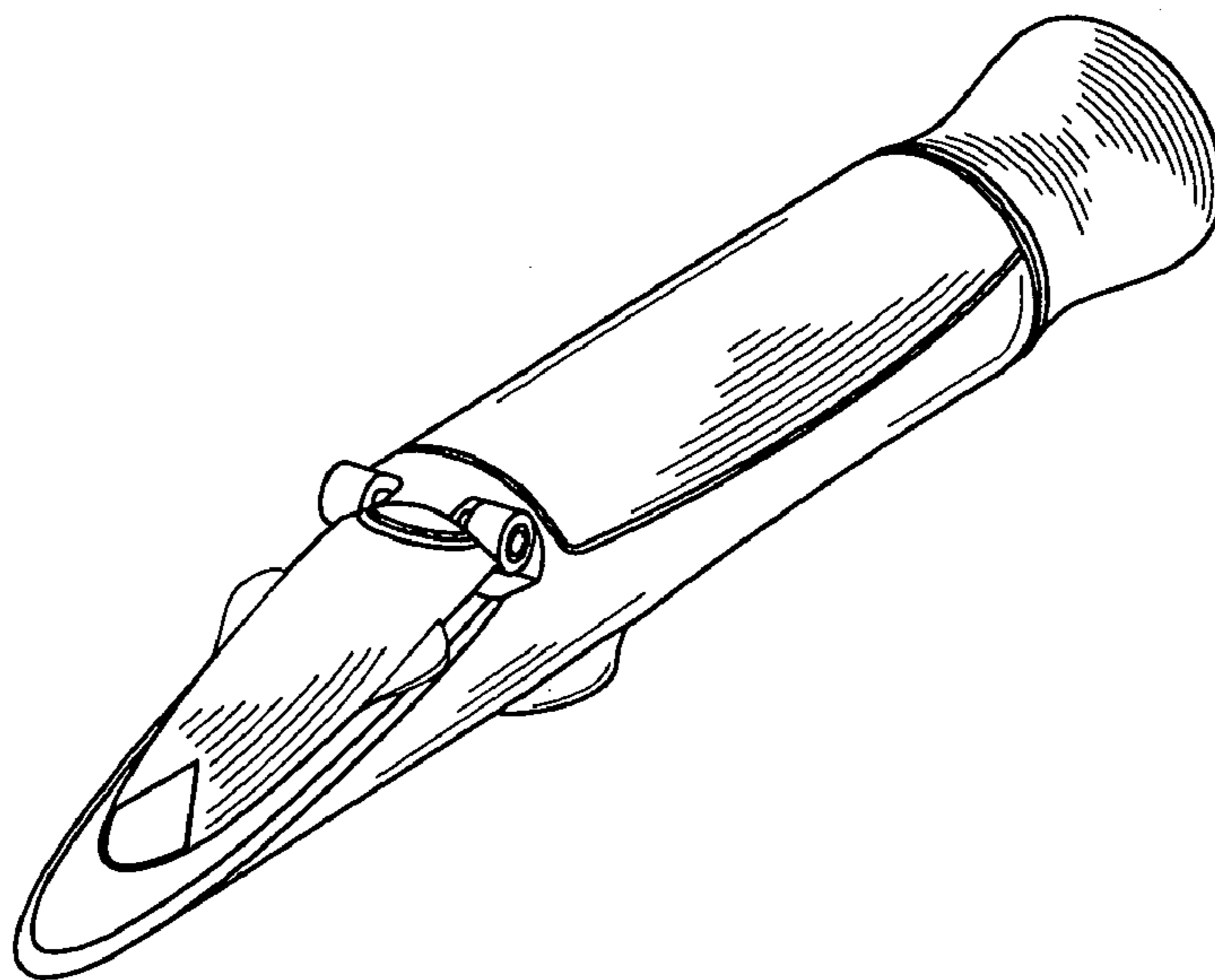


FIG. 23

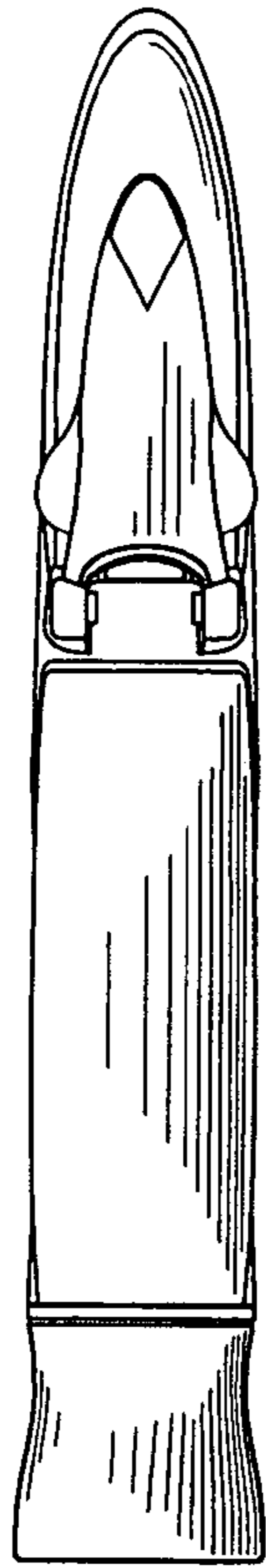


FIG. 24

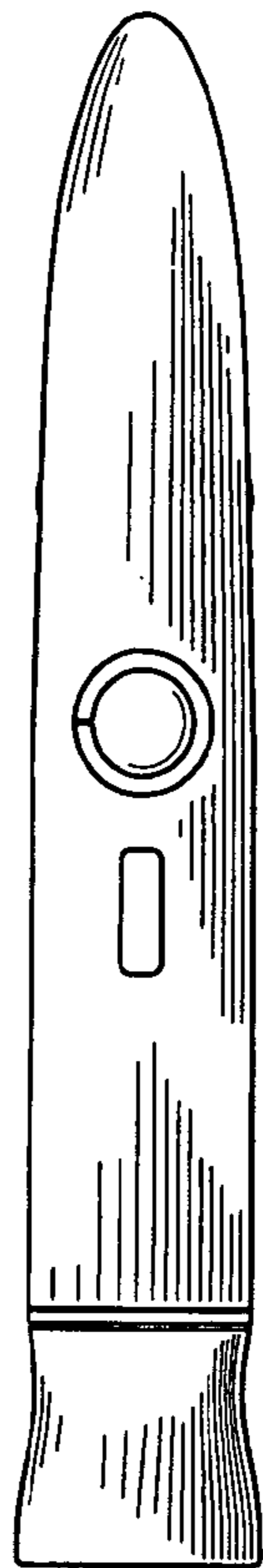


FIG. 25

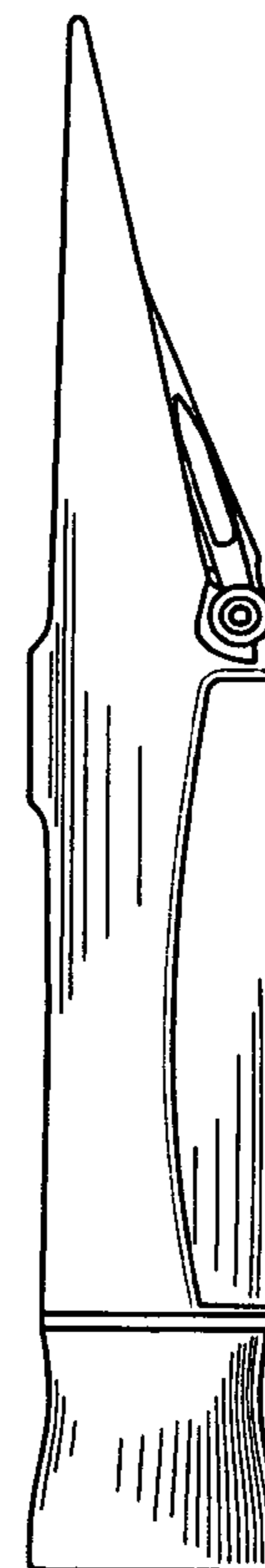


FIG. 26

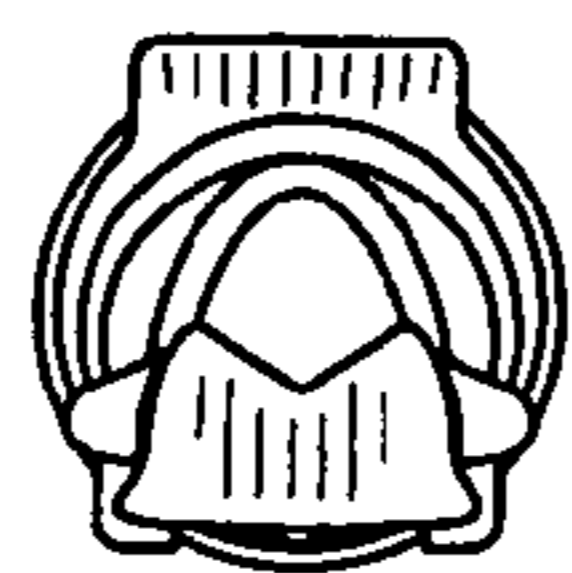


FIG. 27

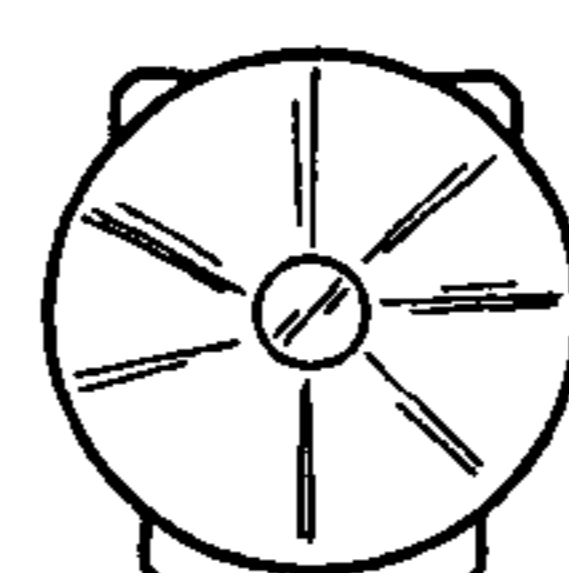


FIG. 28