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(12) **United States Design Patent**
Horner-Richardson et al.

(10) **Patent No.: US D499,620 S**
(45) **Date of Patent: ** Dec. 14, 2004**

(54) **PLASMA ARC TORCH TIP WITH SECONDARY HOLES**
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(**) Term: **14 Years**

Primary Examiner—Philip S. Hyder

(21) Appl. No.: **29/173,319**

(74) *Attorney, Agent, or Firm*—Harness, Dickey & Pierce, P.L.C.

(22) Filed: **Dec. 26, 2002**

(57) **CLAIM**

Related U.S. Application Data

The ornamental design for a plasma arc torch tip with secondary holes, as shown and described.

(63) Continuation-in-part of application No. 29/166,921, filed on Sep. 4, 2002.

DESCRIPTION

(51) **LOC (7) Cl.** **08-05**

FIG. 1 is a perspective view of the plasma arc torch tip with secondary holes from the top;

(52) **U.S. Cl.** **D8/30**

FIG. 2 is a perspective view thereof from below, wherein the dashed lines indicate changes in surface contour;

(58) **Field of Search** D8/30; 219/121.5, 219/75, 121.51, 74, 121.48; 313/231.31, 231.41

FIG. 3 is a perspective view thereof from above and rotated from FIG. 1;

(56) **References Cited**

FIG. 4 is a side elevation view thereof;

U.S. PATENT DOCUMENTS

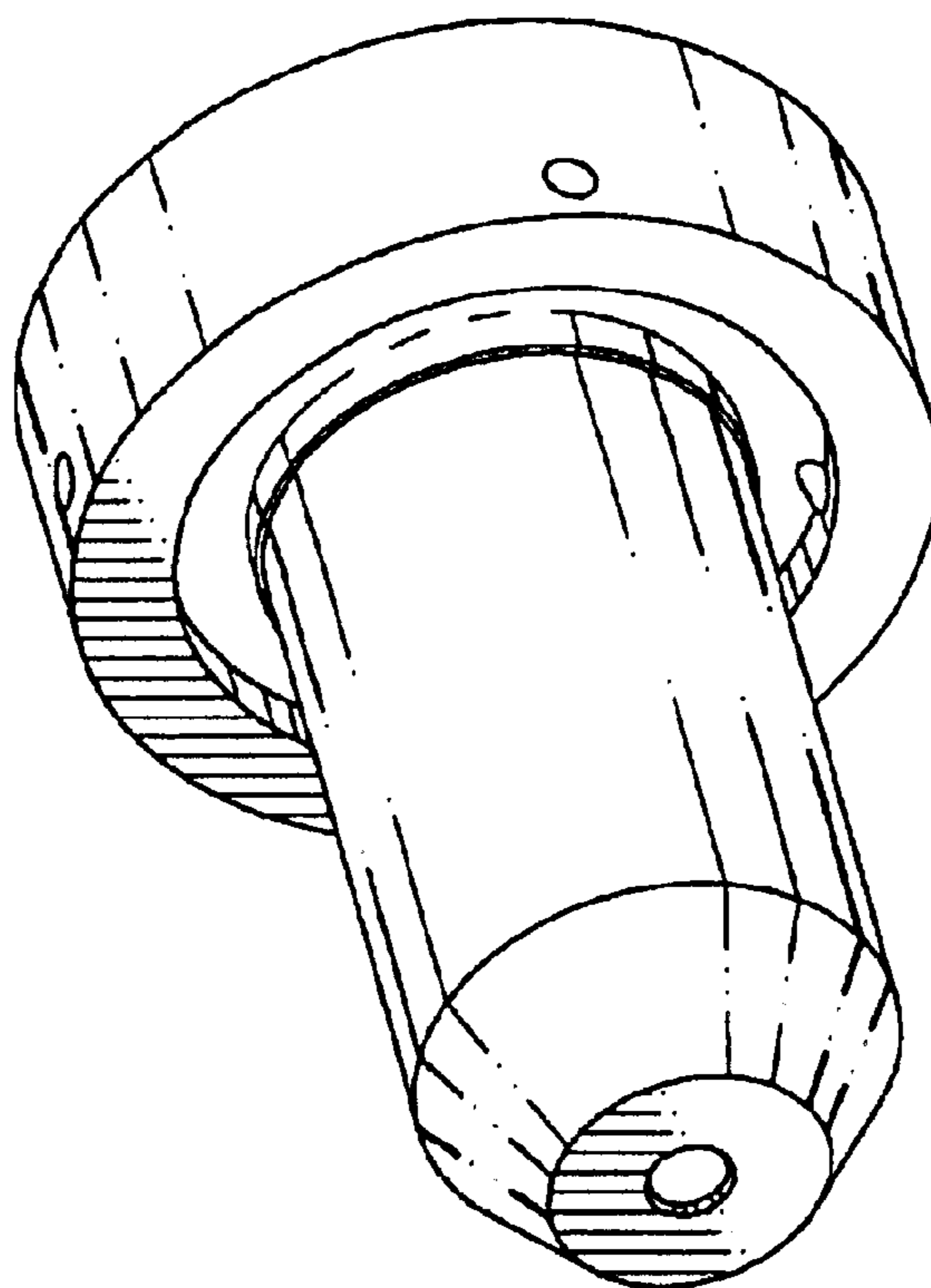
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FIG. 5 is a side elevation view thereof, rotated 90° from FIG. 4;

FIG. 6 is a top plan view thereof, wherein the dashed lines indicate changes in surface contour; and,

FIG. 7 is a bottom plan view thereof.

1 Claim, 4 Drawing Sheets



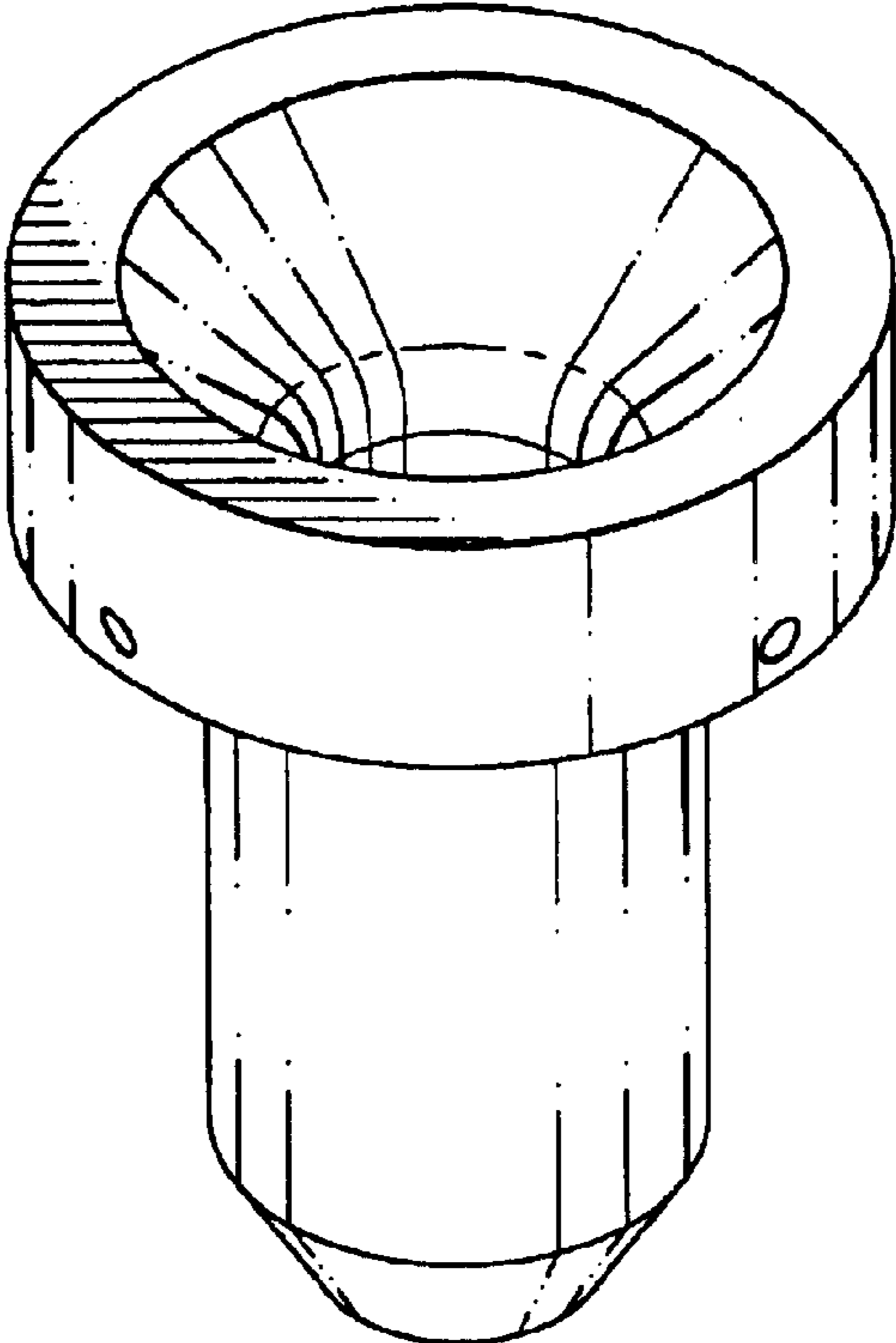


FIG. 1

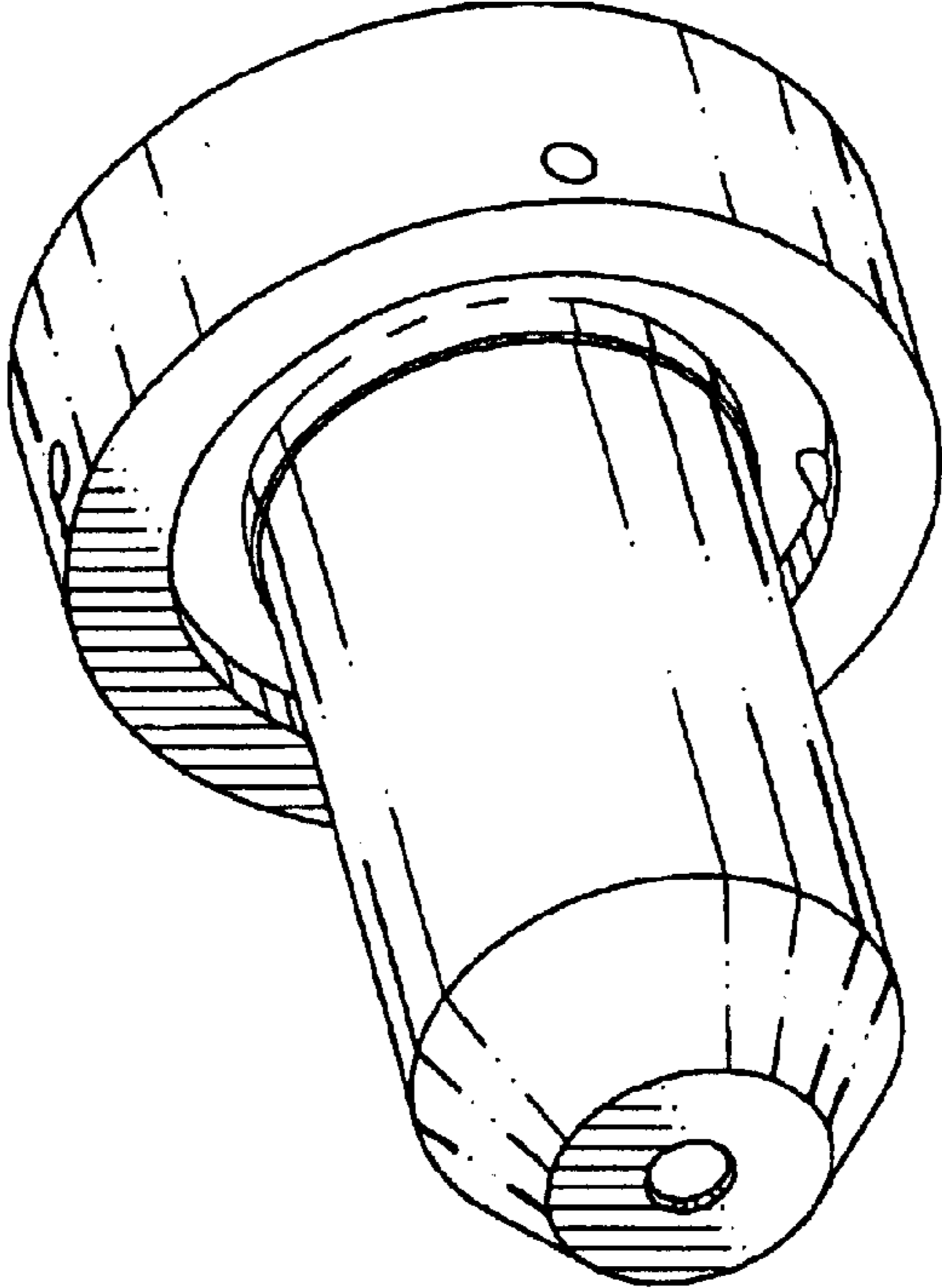


FIG. 2

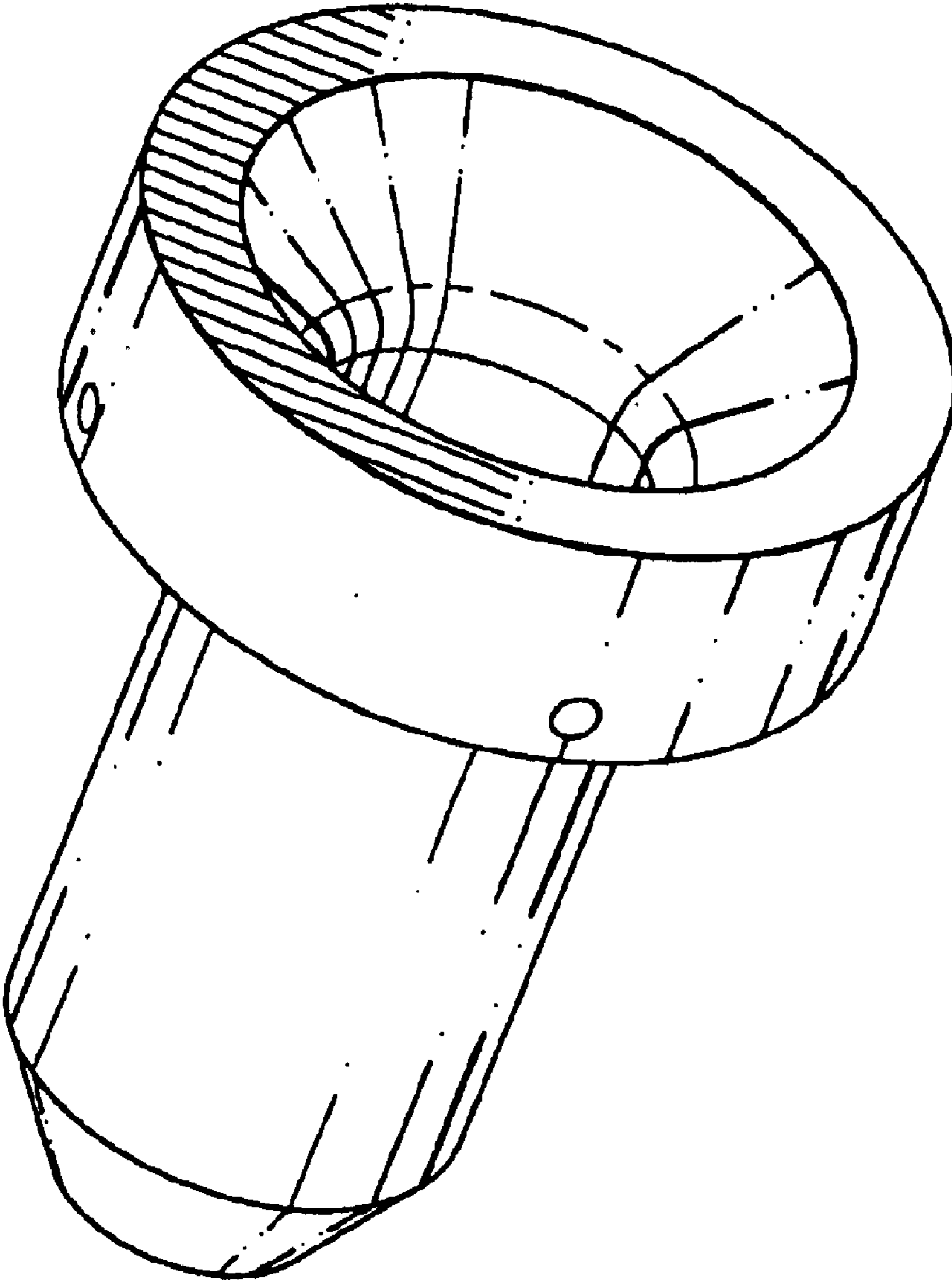


FIG. 3

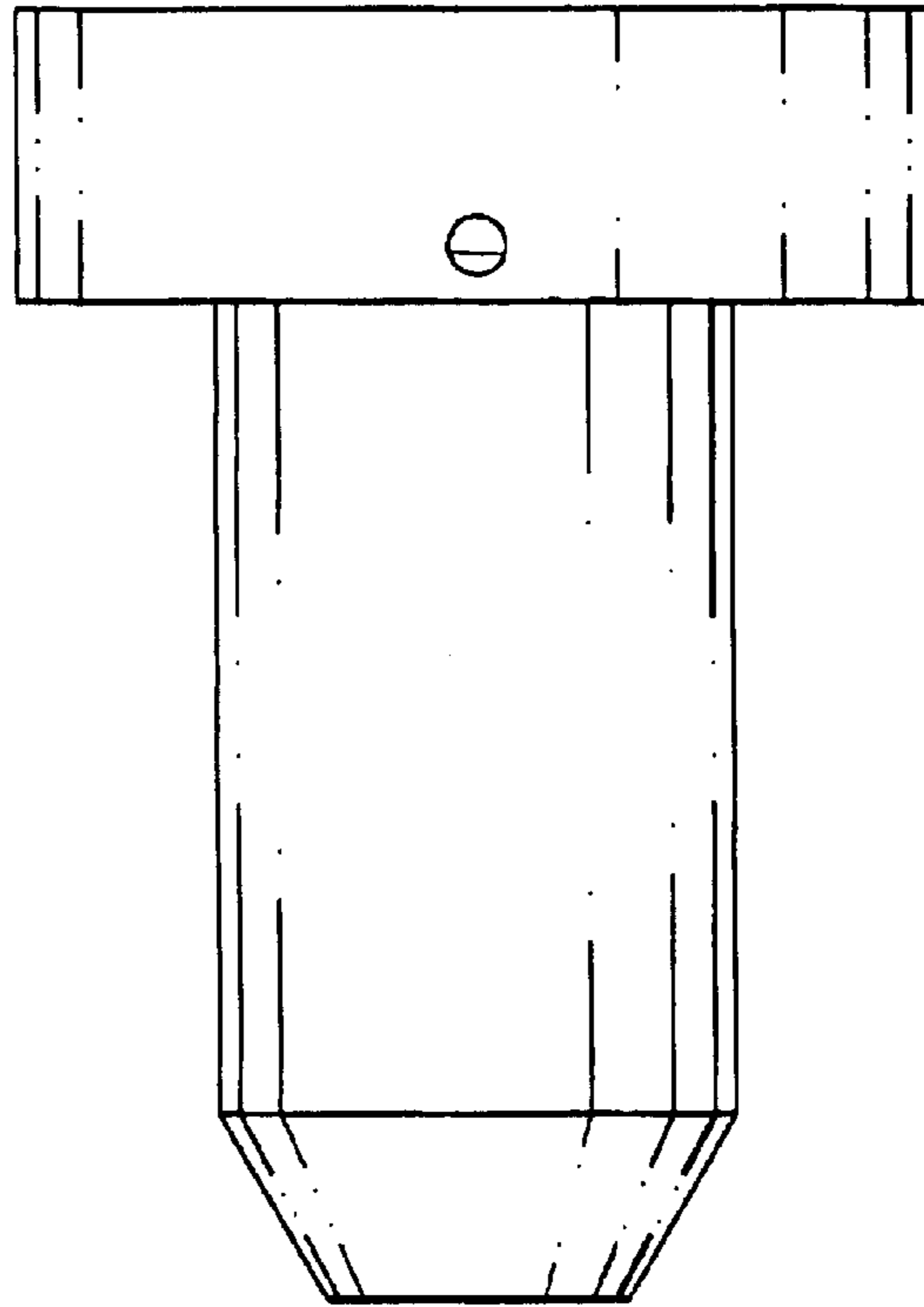


FIG. 4

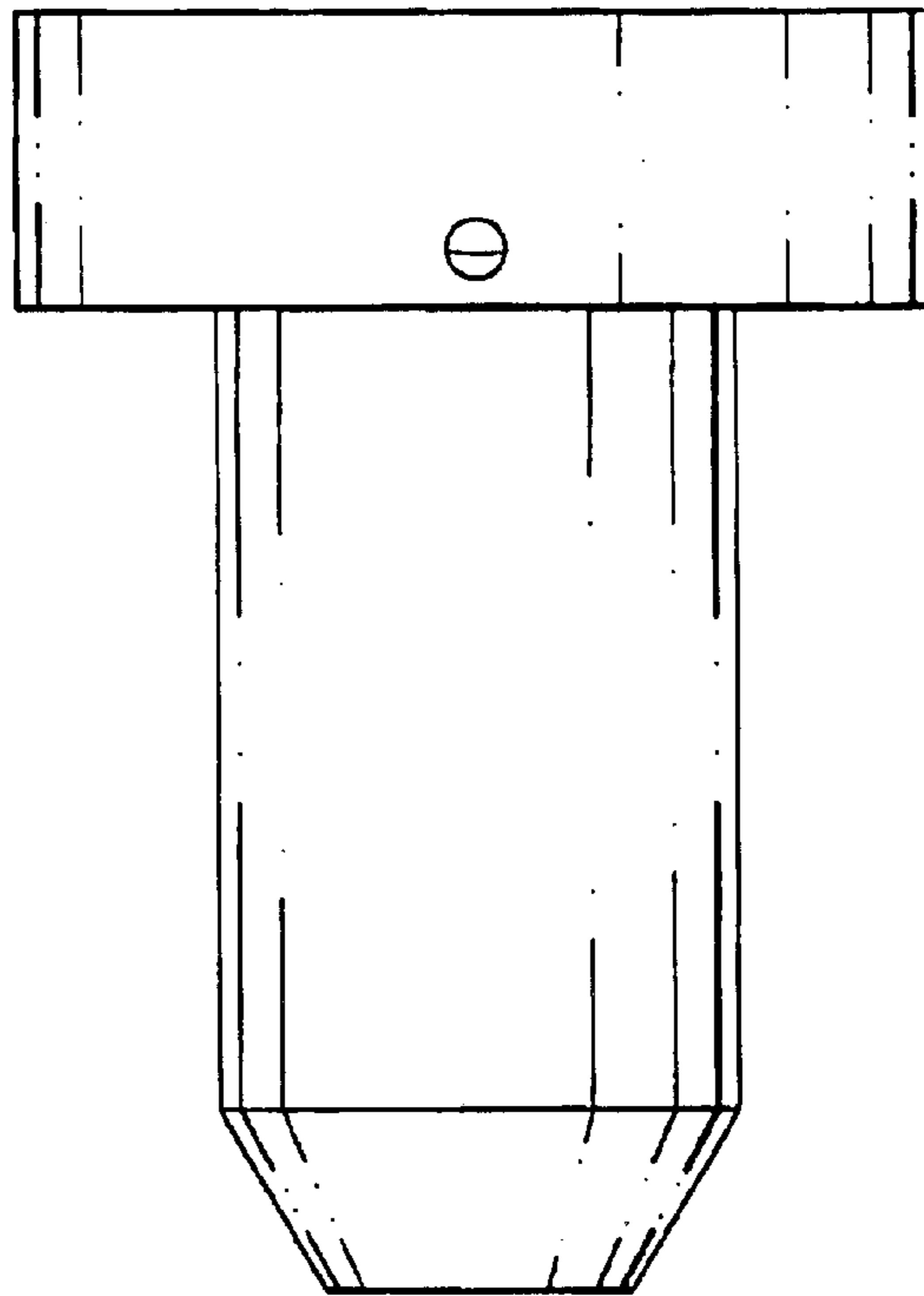


FIG. 5

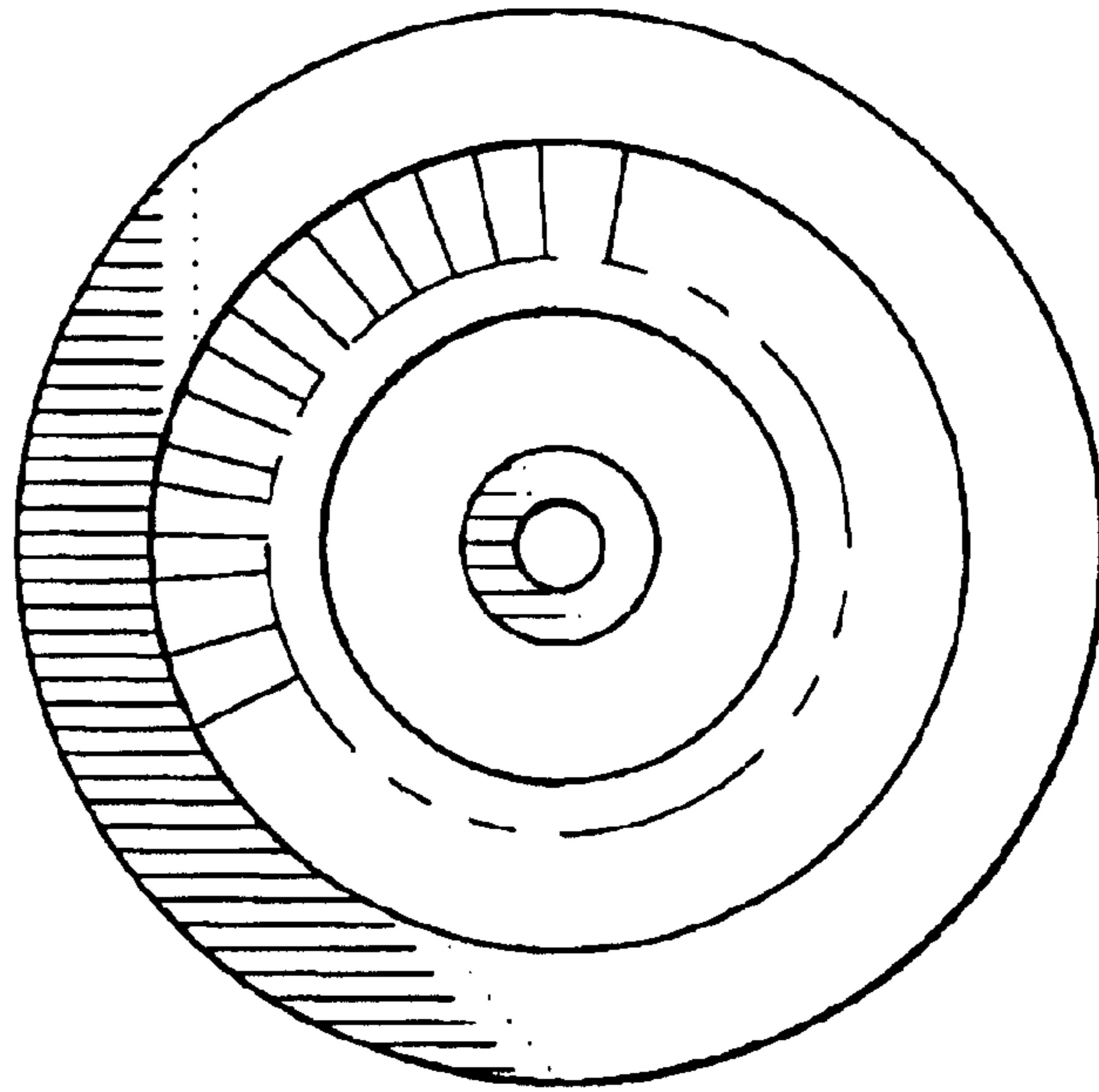


FIG. 6

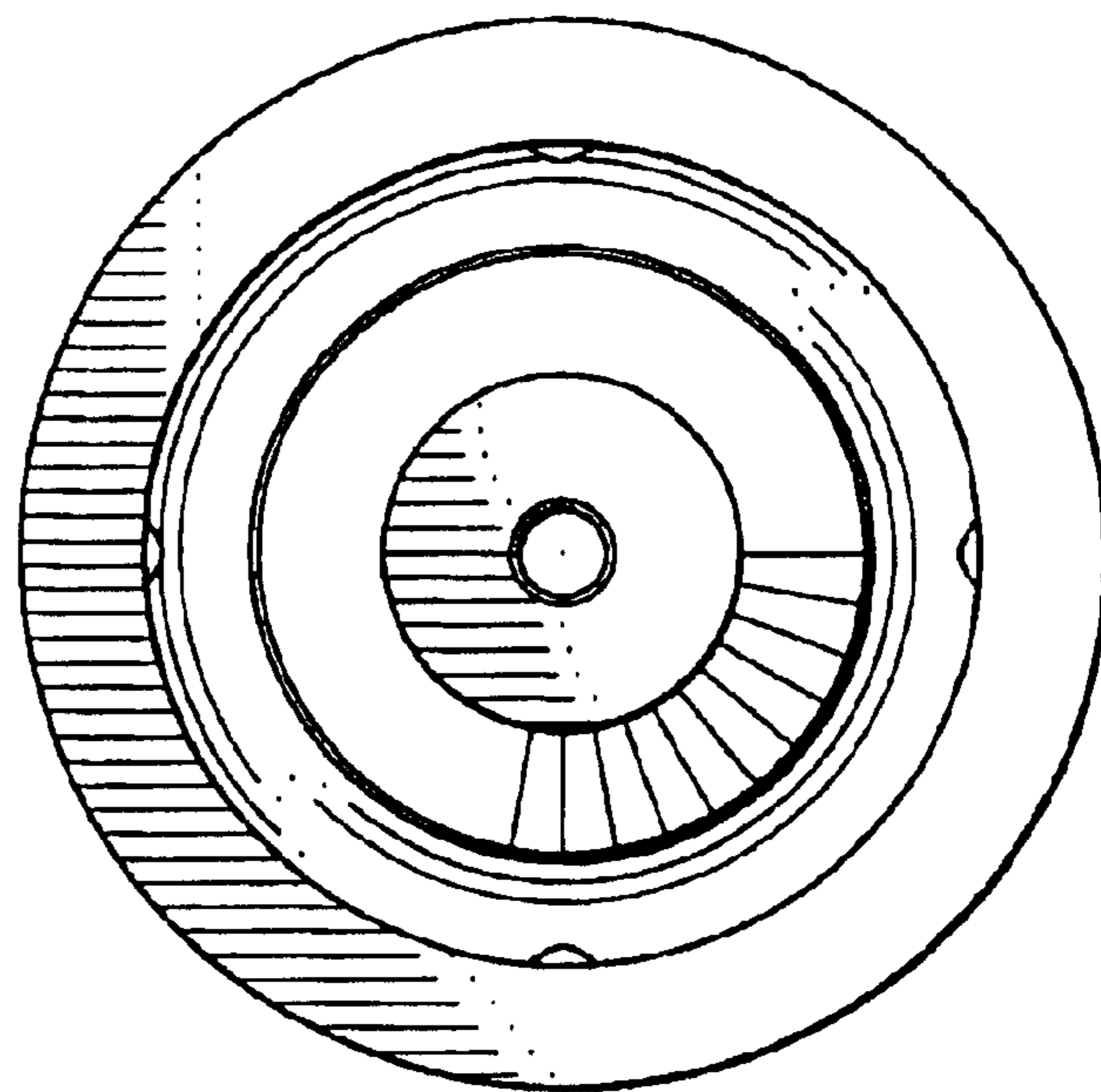


FIG. 7