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

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(54) **PUMP IMPELLER**

JP 1316511 S 12/2007

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(73) Assignee: **ShinMaywa Industries, Ltd.**, Hyogo (JP)

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

(21) Appl. No.: **29/346,880**

(22) Filed: **Nov. 6, 2009**

(51) **LOC (9) Cl.** **15-02**

(52) **U.S. Cl.** **D15/7**

(58) **Field of Classification Search** D15/7-9;
D23/231, 232, 225; 417/410.1, 359, 415-416,
417/234, 321, 265, 405

See application file for complete search history.

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(57) **CLAIM**

The ornamental design for a pump impeller, as shown and described.

DESCRIPTION

FIG. 1 is the impeller viewed obliquely from above.

FIG. 2 is the impeller viewed obliquely from below.

FIG. 3 is the impeller viewed from front.

FIG. 4 is the impeller viewed from back.

FIG. 5 is the impeller viewed from right.

FIG. 6 is the impeller viewed from left.

FIG. 7 is the impeller viewed from above.

FIG. 8 is the impeller viewed from below.

FIG. 9 is a cross section taken along the line 9—9 of FIG. 7.

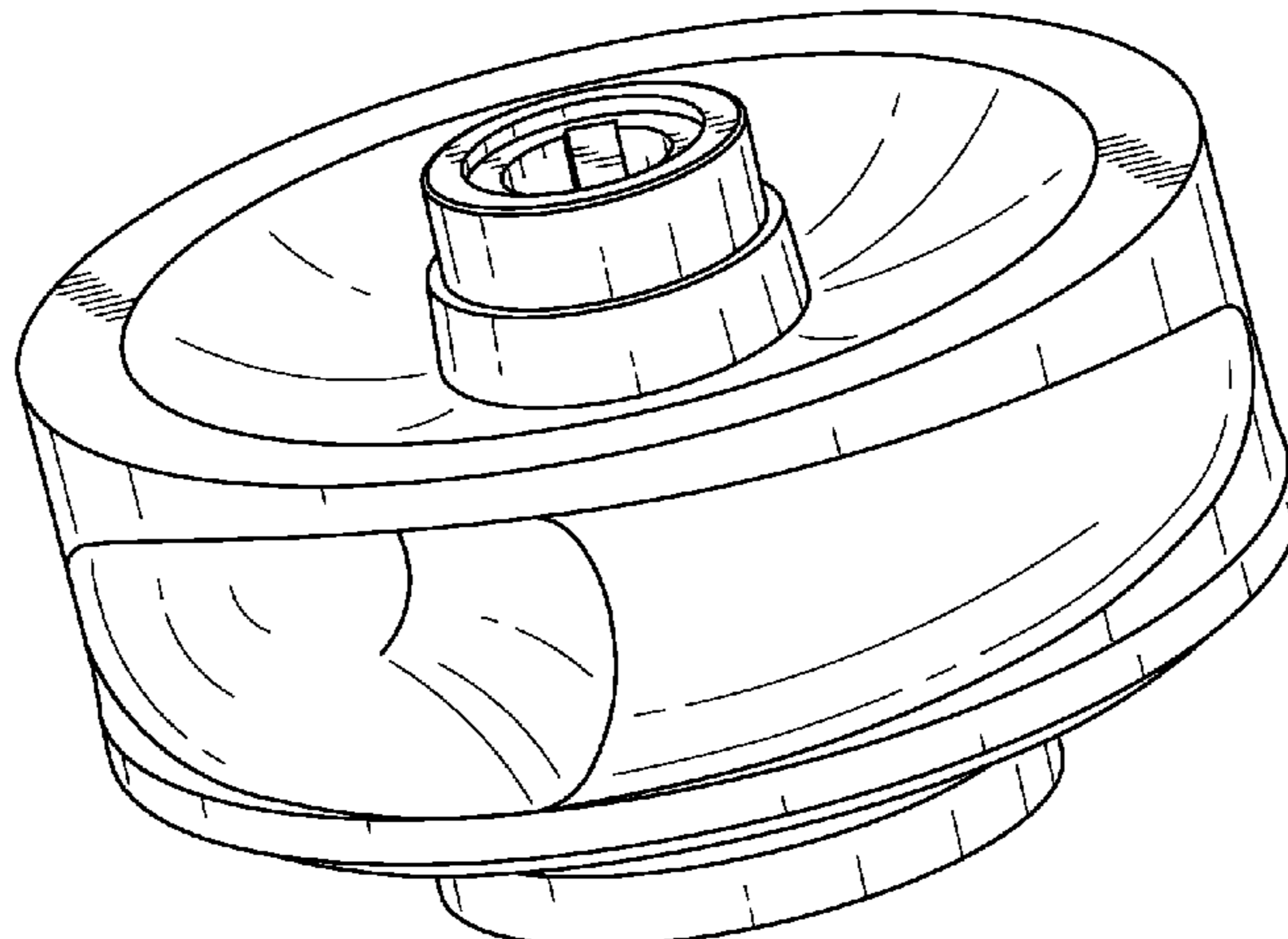
FIG. 10 is a cross section taken along the line 10—10 of FIG. 7.

FIG. 11 is a cross section taken along the line 11—11 of FIG. 7; and,

FIG. 12 is a cross section taken along the line 12—12 of FIG. 7.

The present article is an impeller provided in a pump. This impeller has two flow paths located to be symmetric about a central axis, including an inlet opening at the bottom as shown in FIG. 2, and outlets opening at the lateral side of the impeller as shown in FIGS. 3 and 4. The flow paths connect the inlet and the outlets.

1 Claim, 7 Drawing Sheets



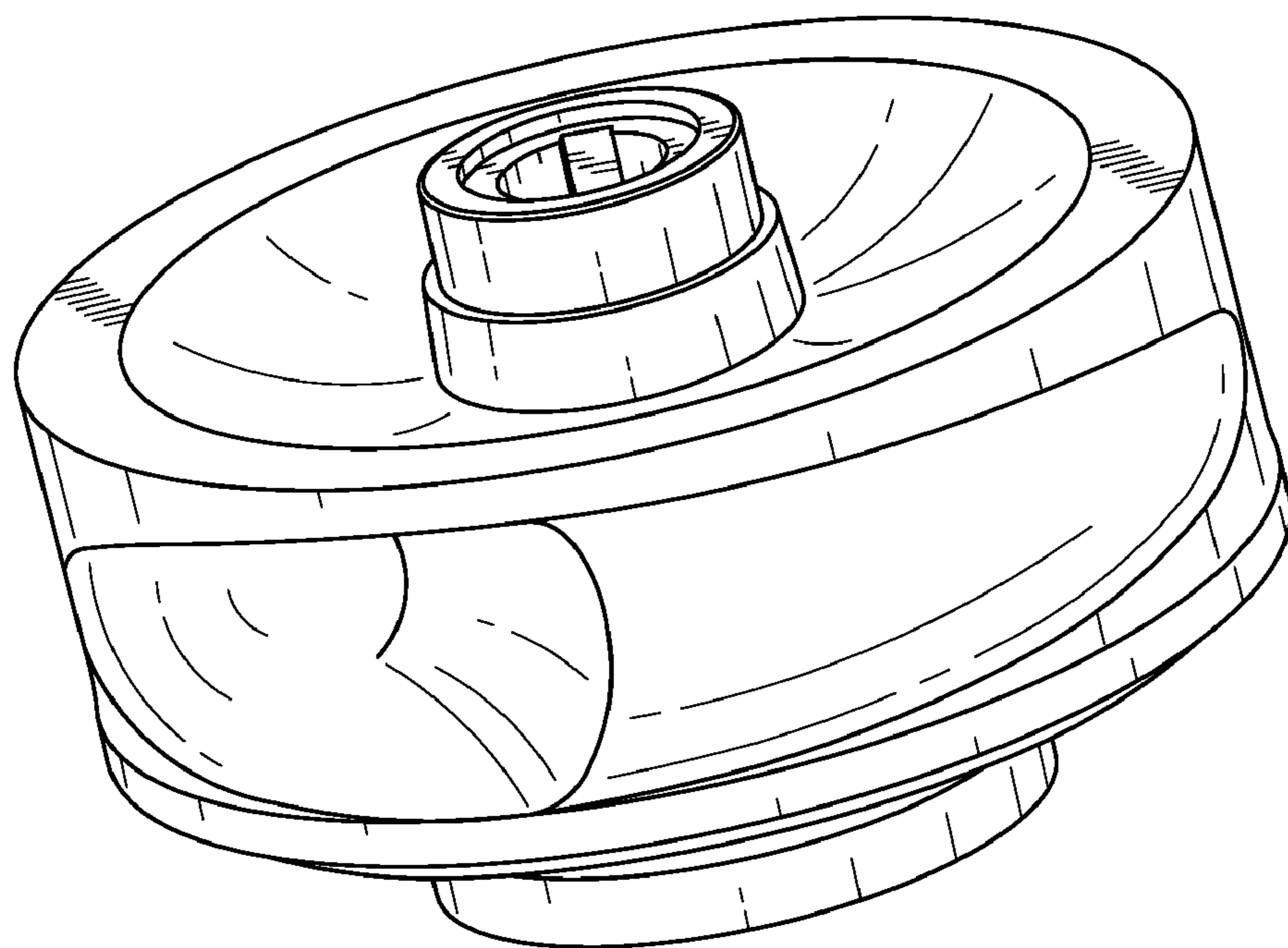


FIG. 1

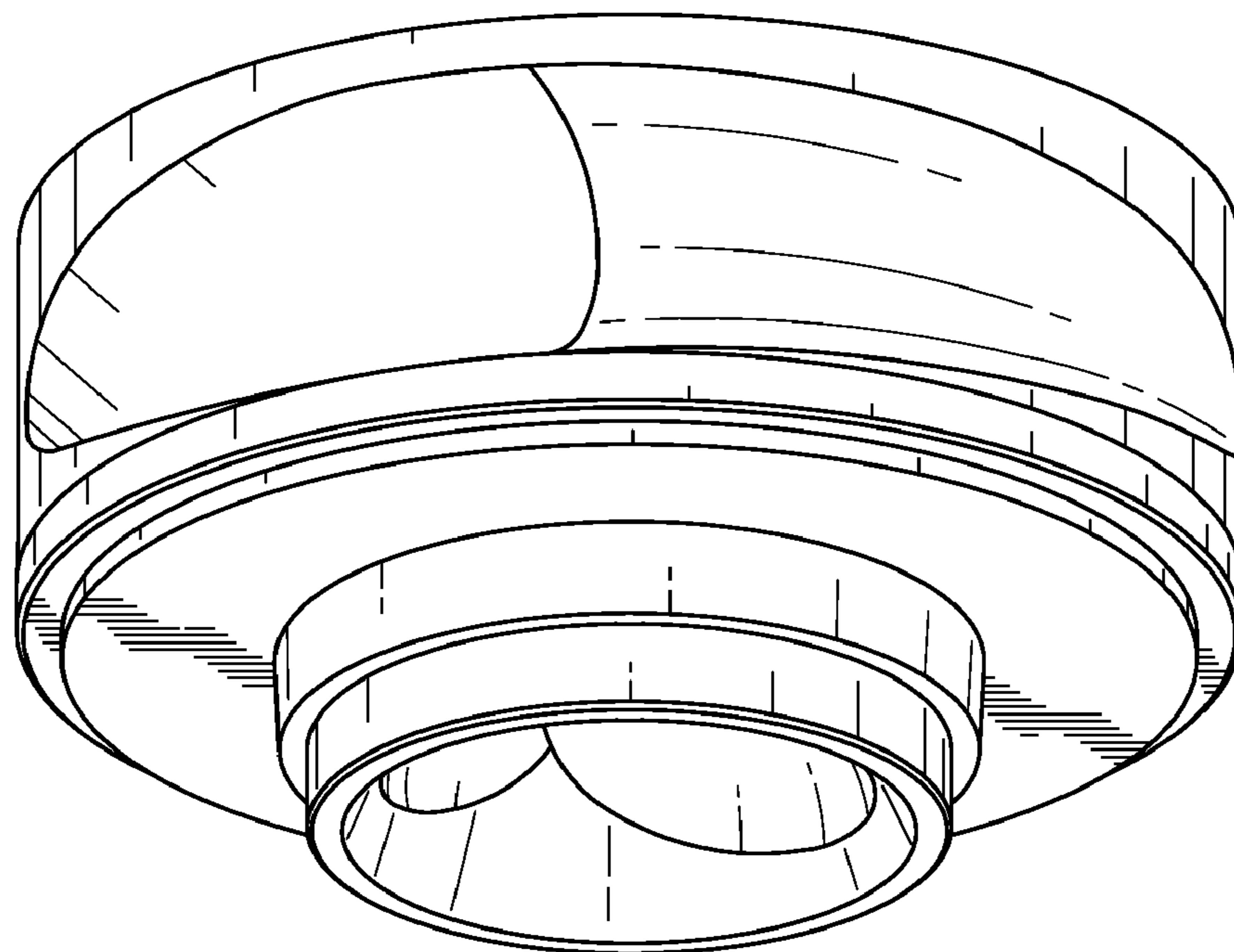


FIG. 2

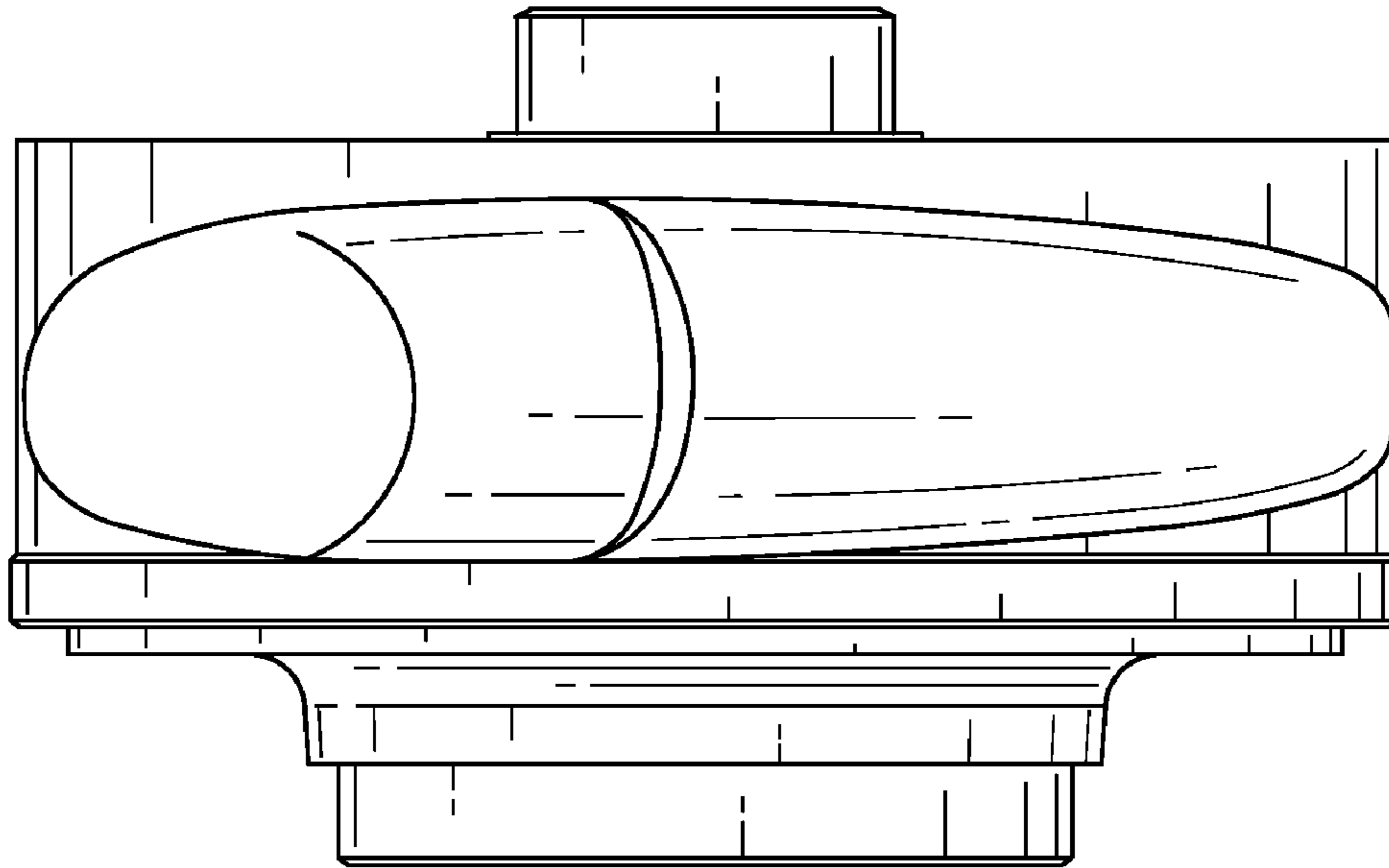


FIG. 3

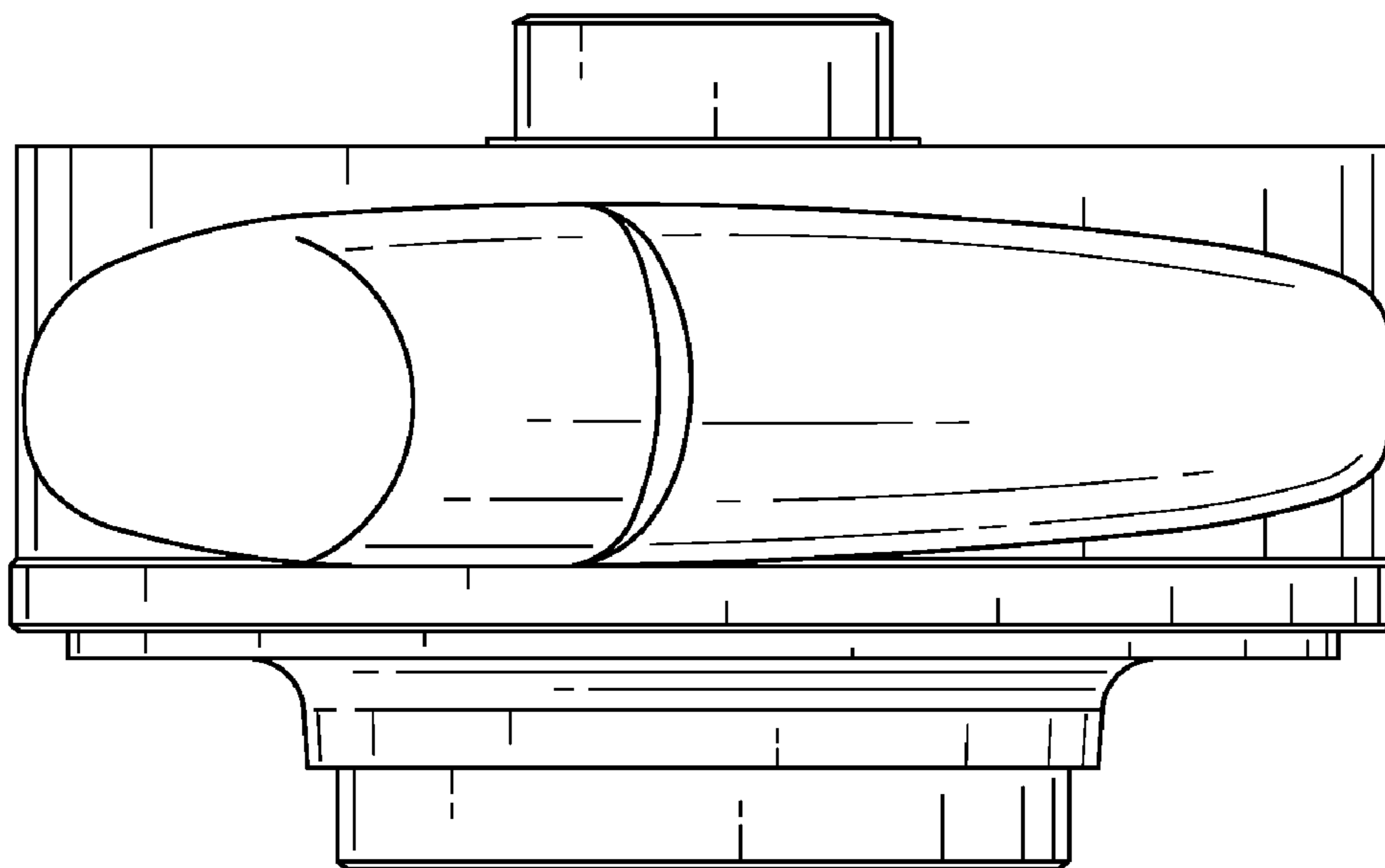


FIG. 4

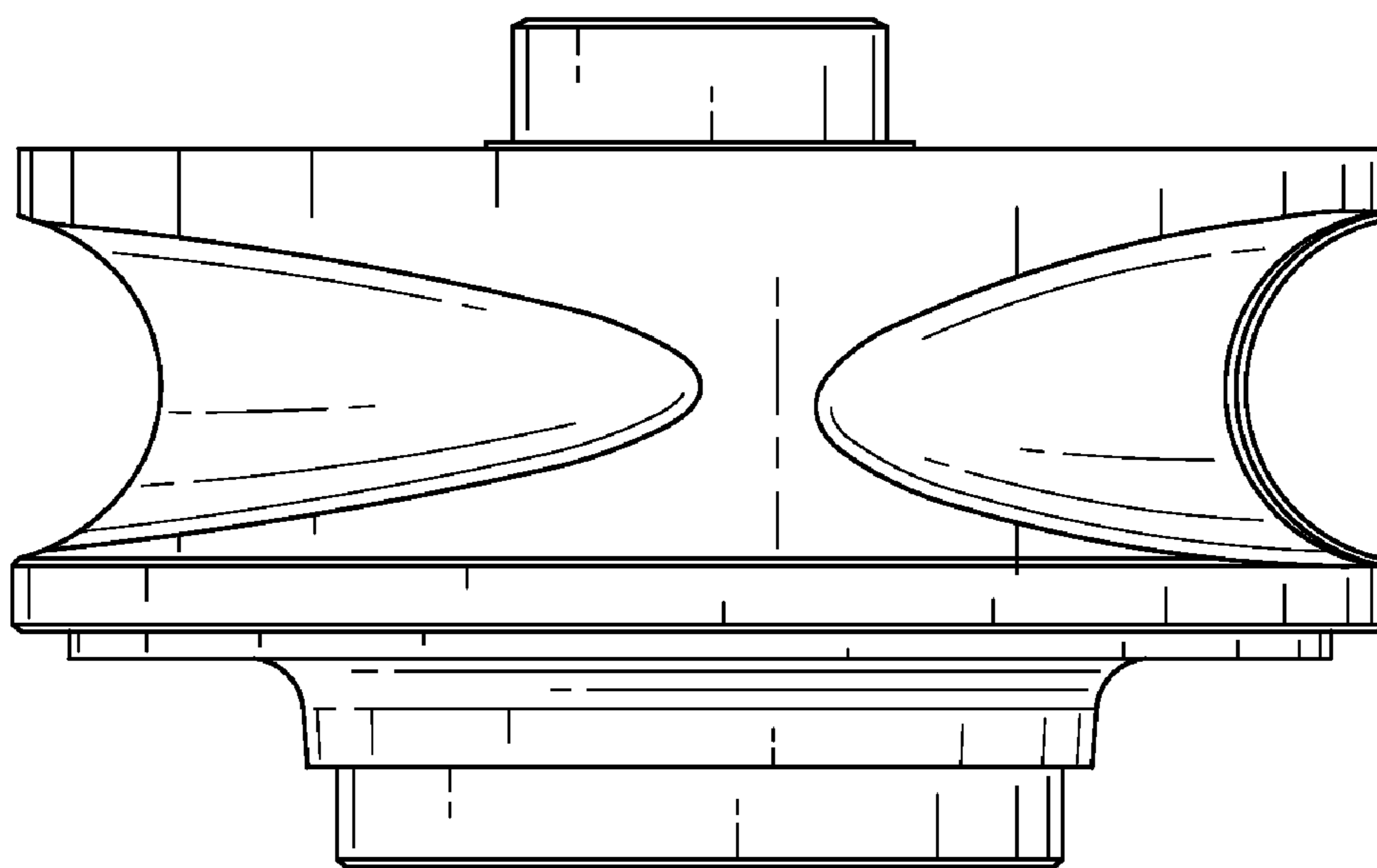


FIG. 5

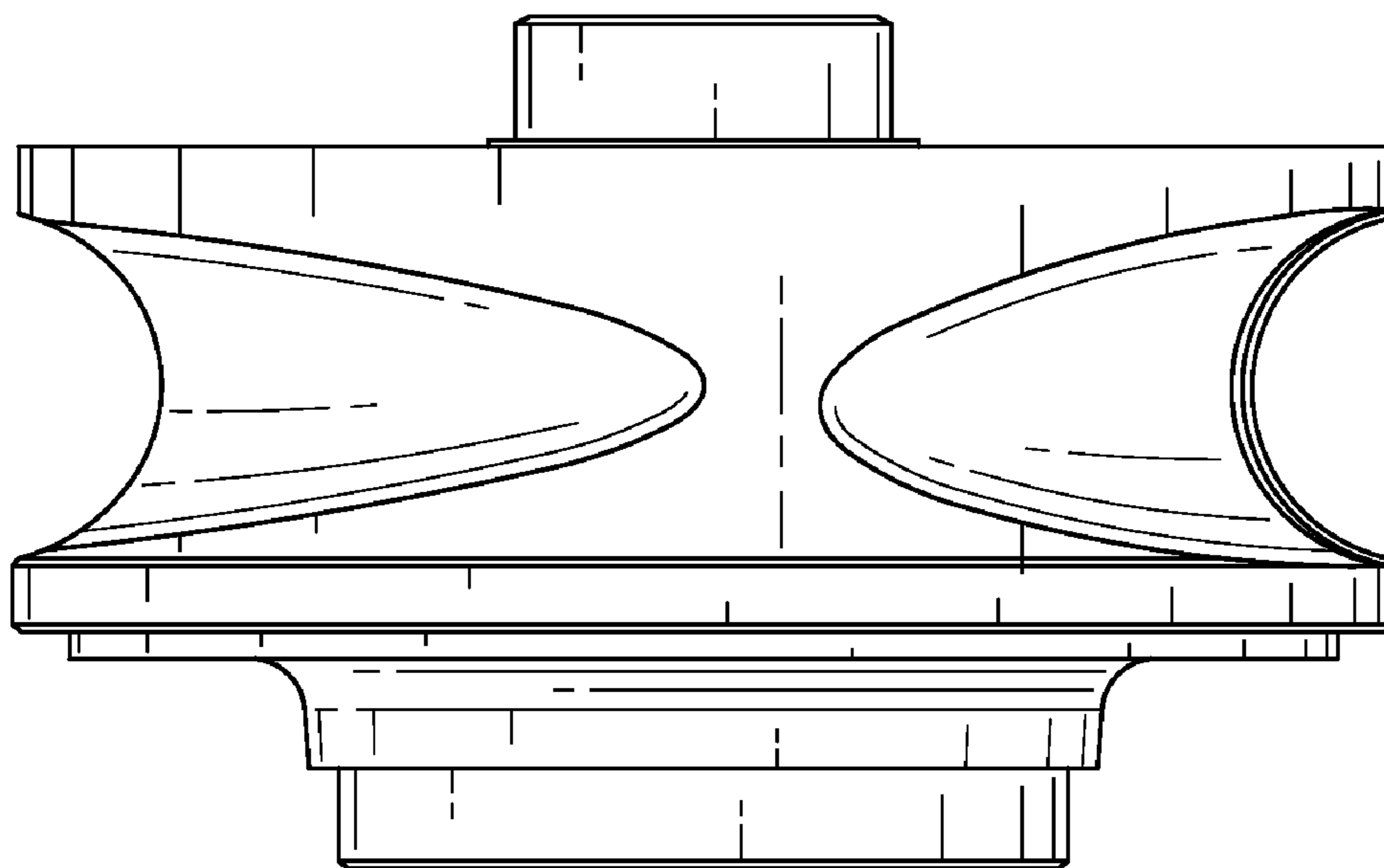


FIG. 6

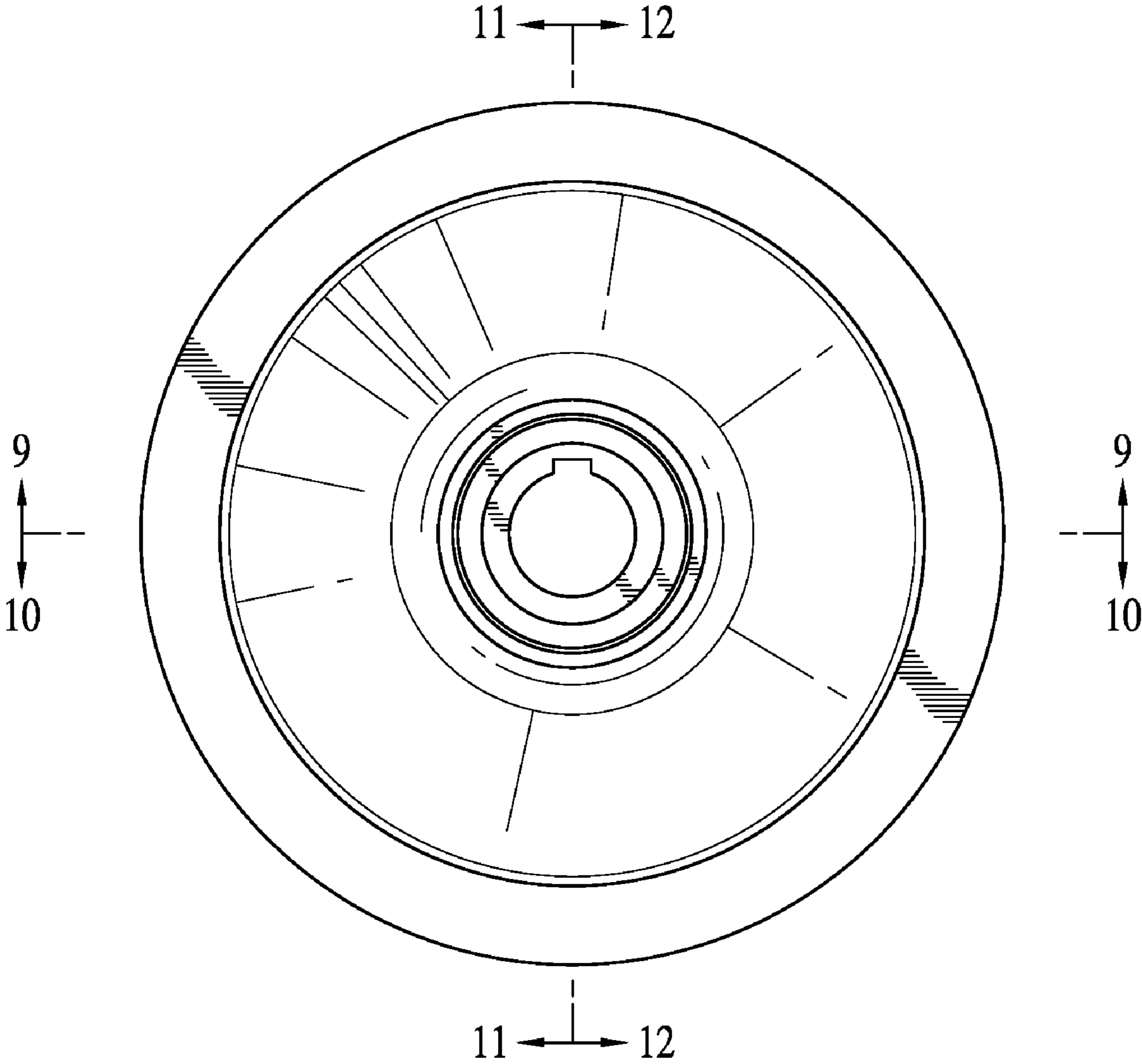


FIG. 7

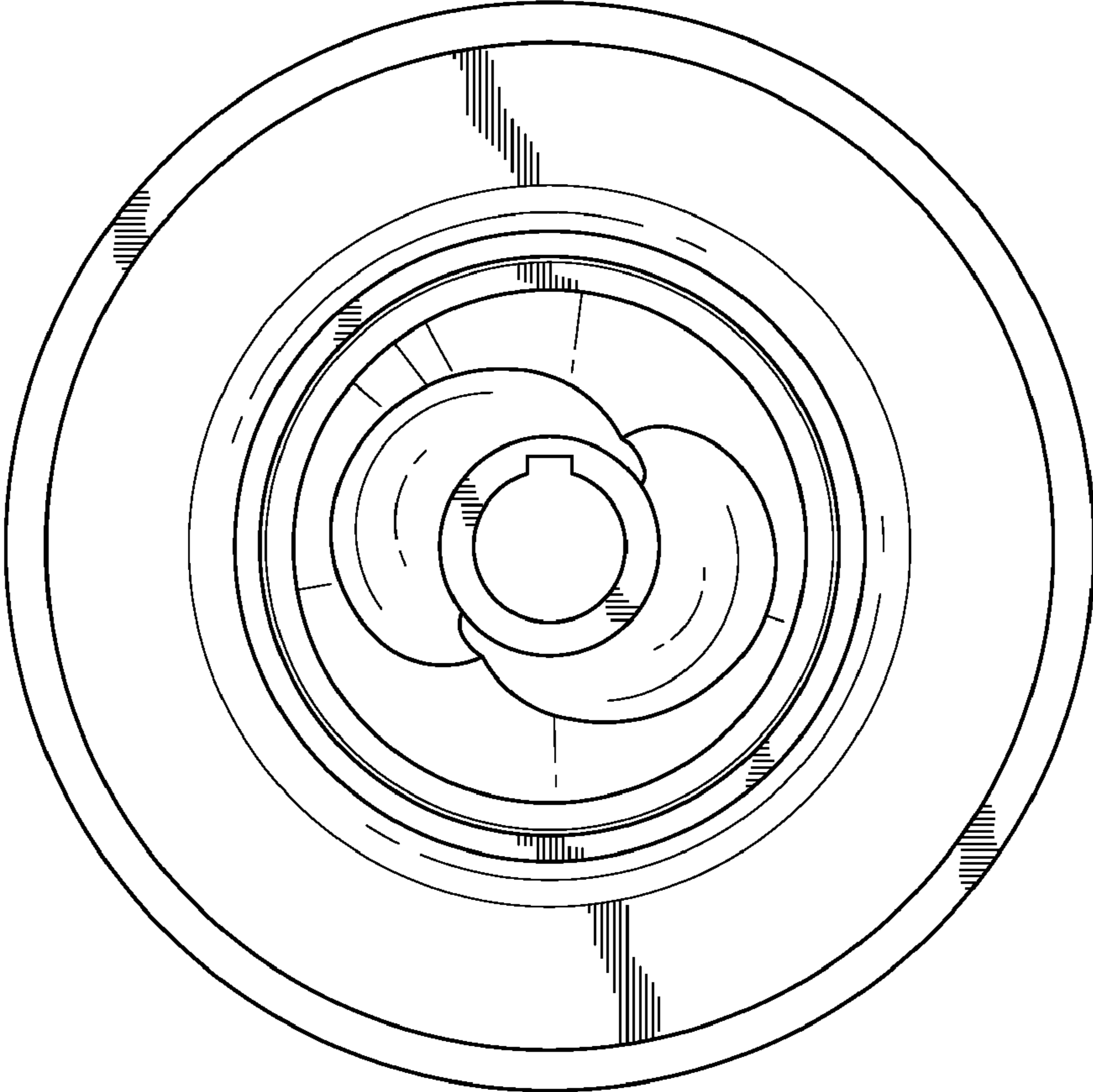


FIG. 8

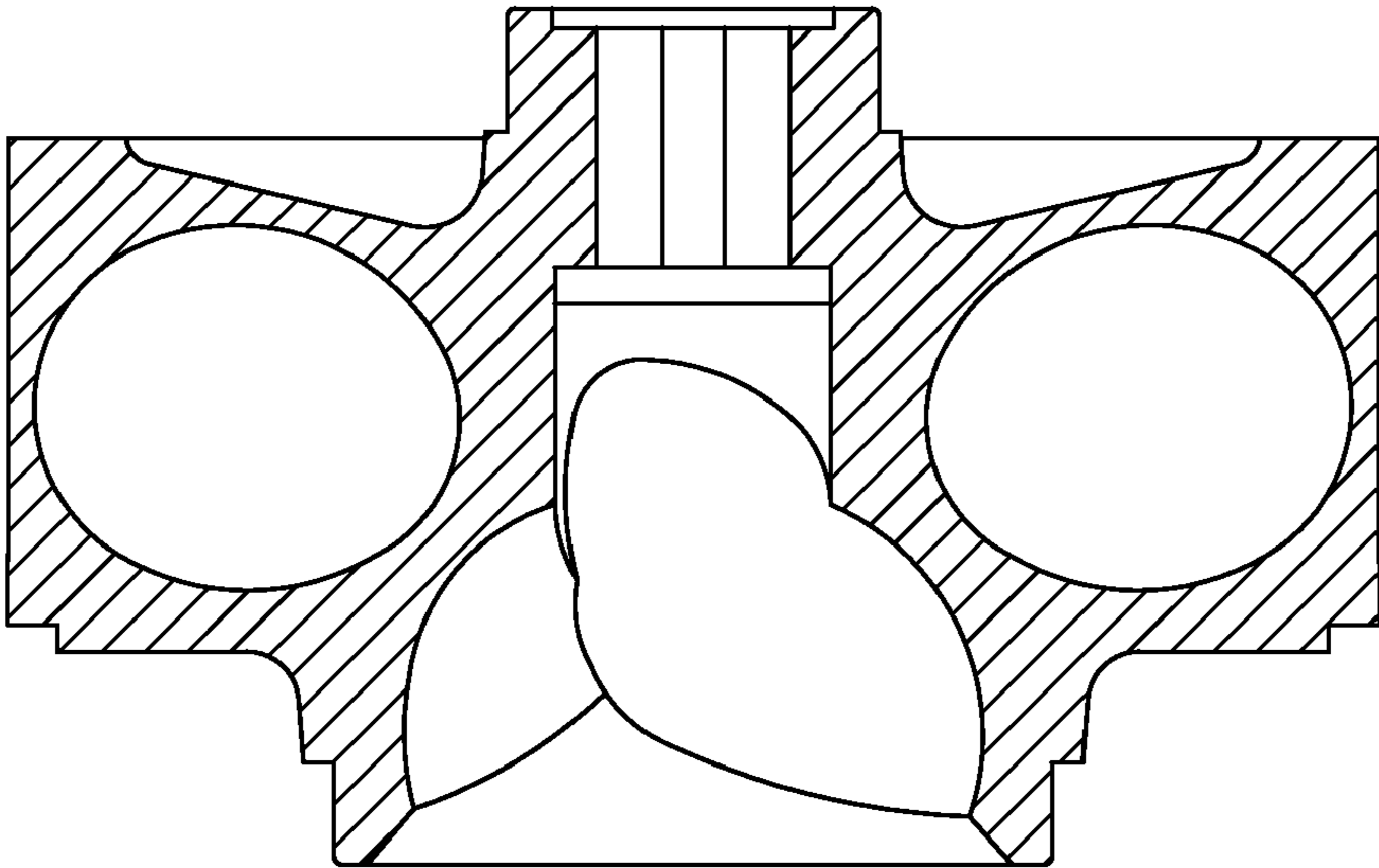


FIG. 9

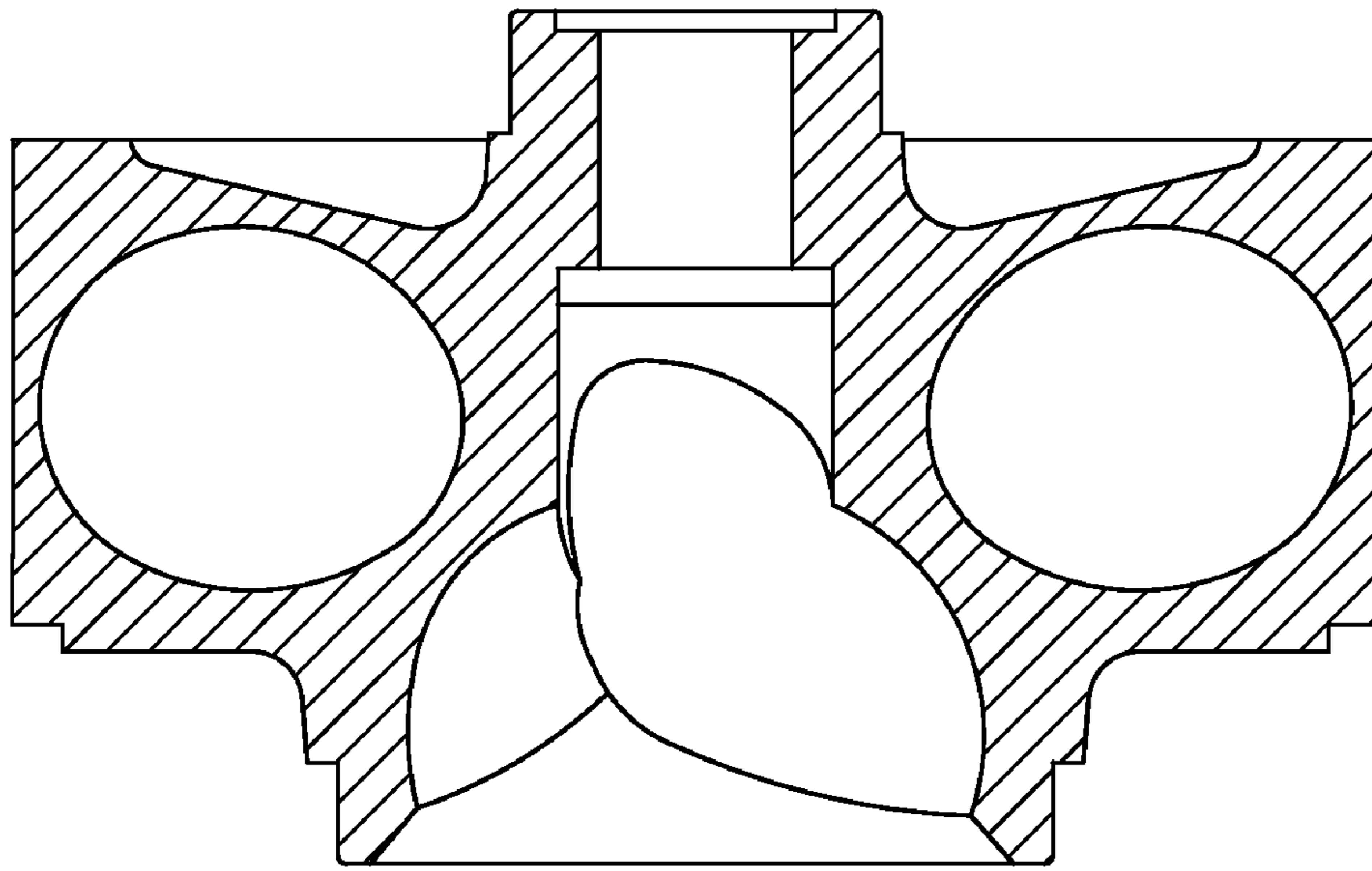


FIG. 10

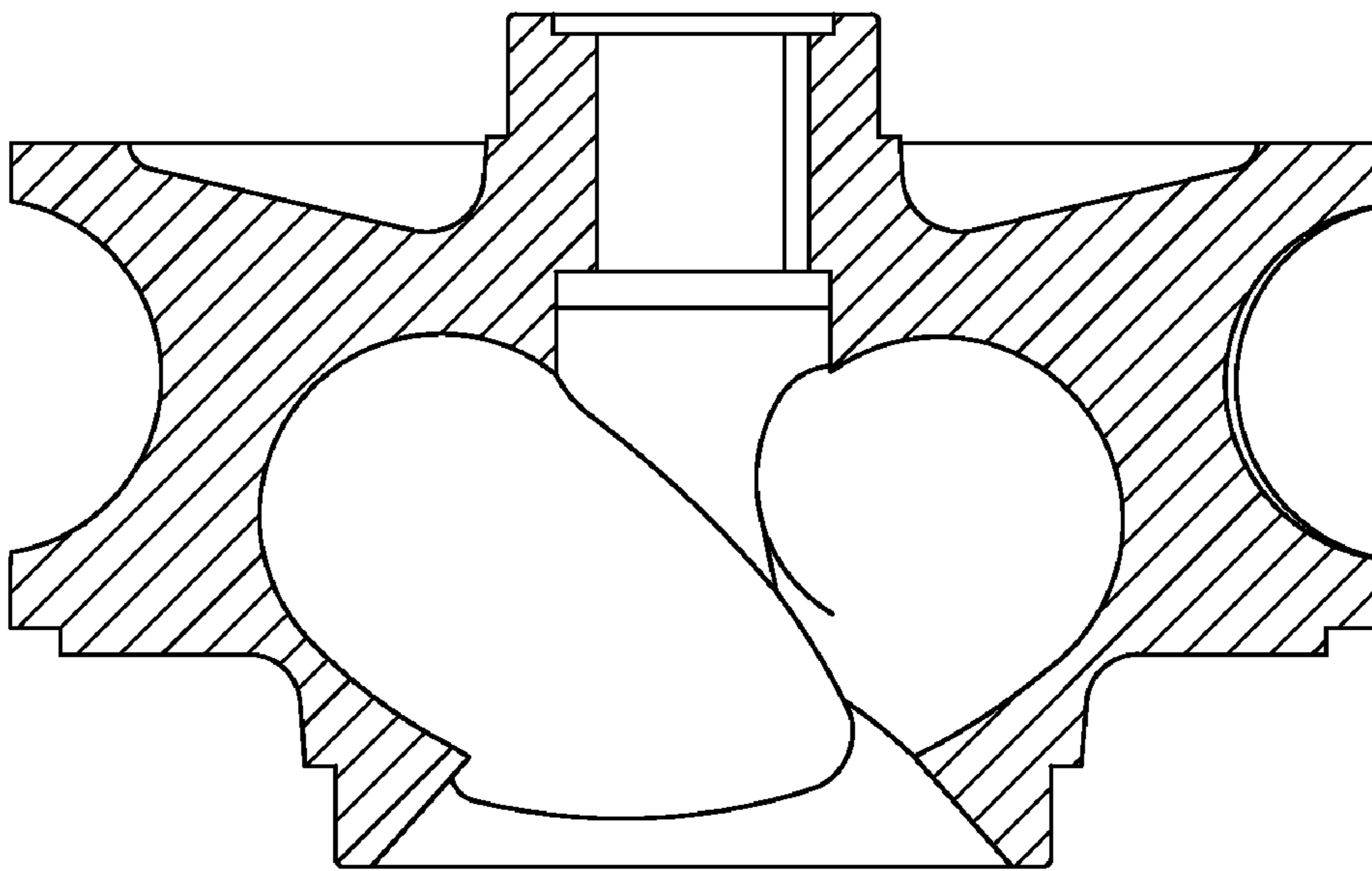


FIG. 11

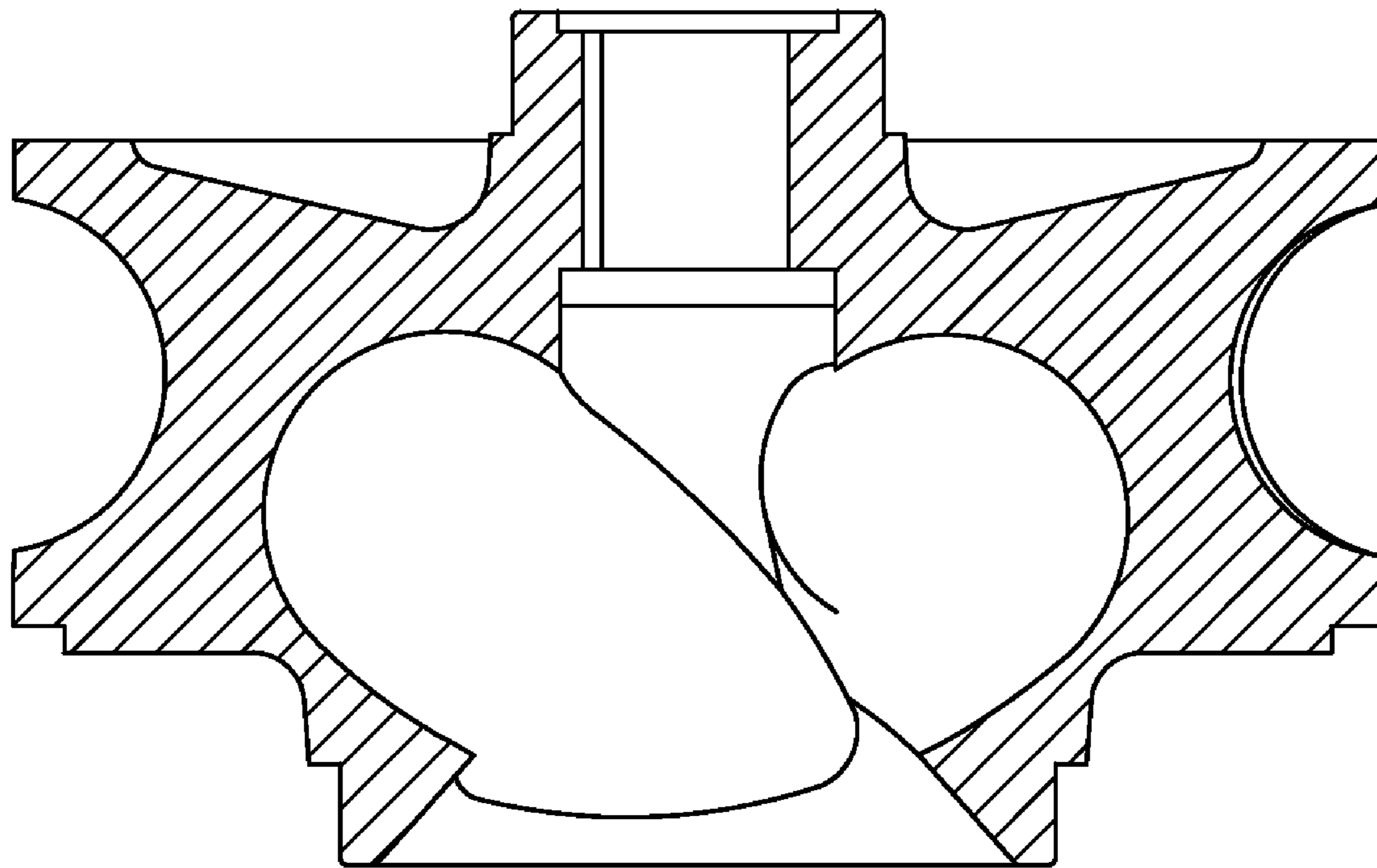


FIG. 12