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

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(54) **EXHAUST MANIFOLD**

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

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(51) **LOC (10) Cl.** **12-16**

(52) **U.S. Cl.**
USPC **D12/194**

(58) **Field of Classification Search**
USPC D12/194; D15/5; 293/113; 29/890.08;
180/89.2, 296, 309; 181/247-249, 264,
181/282, 239-241, 227, 228; 60/303, 313,
60/323; 138/37-39, 44, 103, 109
CPC F01N 13/082; F01N 13/085; F01N 13/087
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D452,694 S * 1/2002 Irie D15/5
2002/0062562 A1* 5/2002 Li et al. 29/890
2003/0113241 A1* 6/2003 Craig et al. 422/176
2005/0150222 A1* 7/2005 Kalish et al. 60/302
2010/0229540 A1* 9/2010 Waggoner et al. 60/298

2010/0307001 A1* 12/2010 Hill et al. 29/890
2012/0031178 A1* 2/2012 Odendall 73/114.75
2013/0098007 A1* 4/2013 Waggoner et al. 60/299

FOREIGN PATENT DOCUMENTS

JP 1053969 11/1999

* cited by examiner

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(57) **CLAIM**

The ornamental design for an exhaust manifold, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an exhaust manifold showing our new design;

FIG. 2 is a second perspective view thereof;

FIG. 3 is a front view thereof;

FIG. 4 is a rear view thereof;

FIG. 5 is a top view thereof;

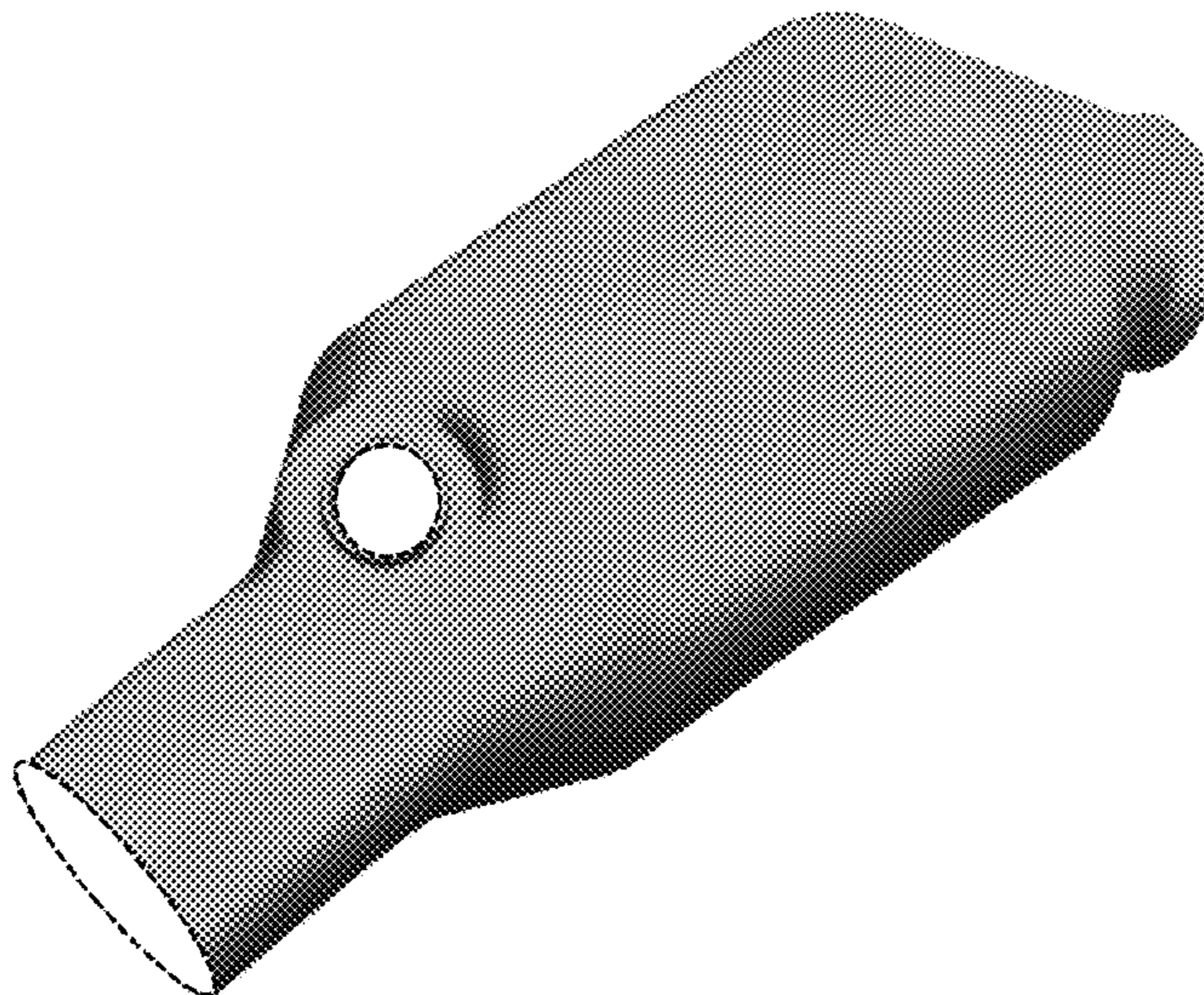
FIG. 6 is a bottom view thereof;

FIG. 7 is a right side view thereof; and,

FIG. 8 is a left side view thereof.

The drawings include gray-scale shading which represents contour, not surface ornamentation or any particular color. The drawings include shadows and reflections that form no part of the claimed design. The broken lines indicate boundaries of the claimed design and form no part thereof; the white areas within the broken lines also form no part of the claimed design.

1 Claim, 4 Drawing Sheets



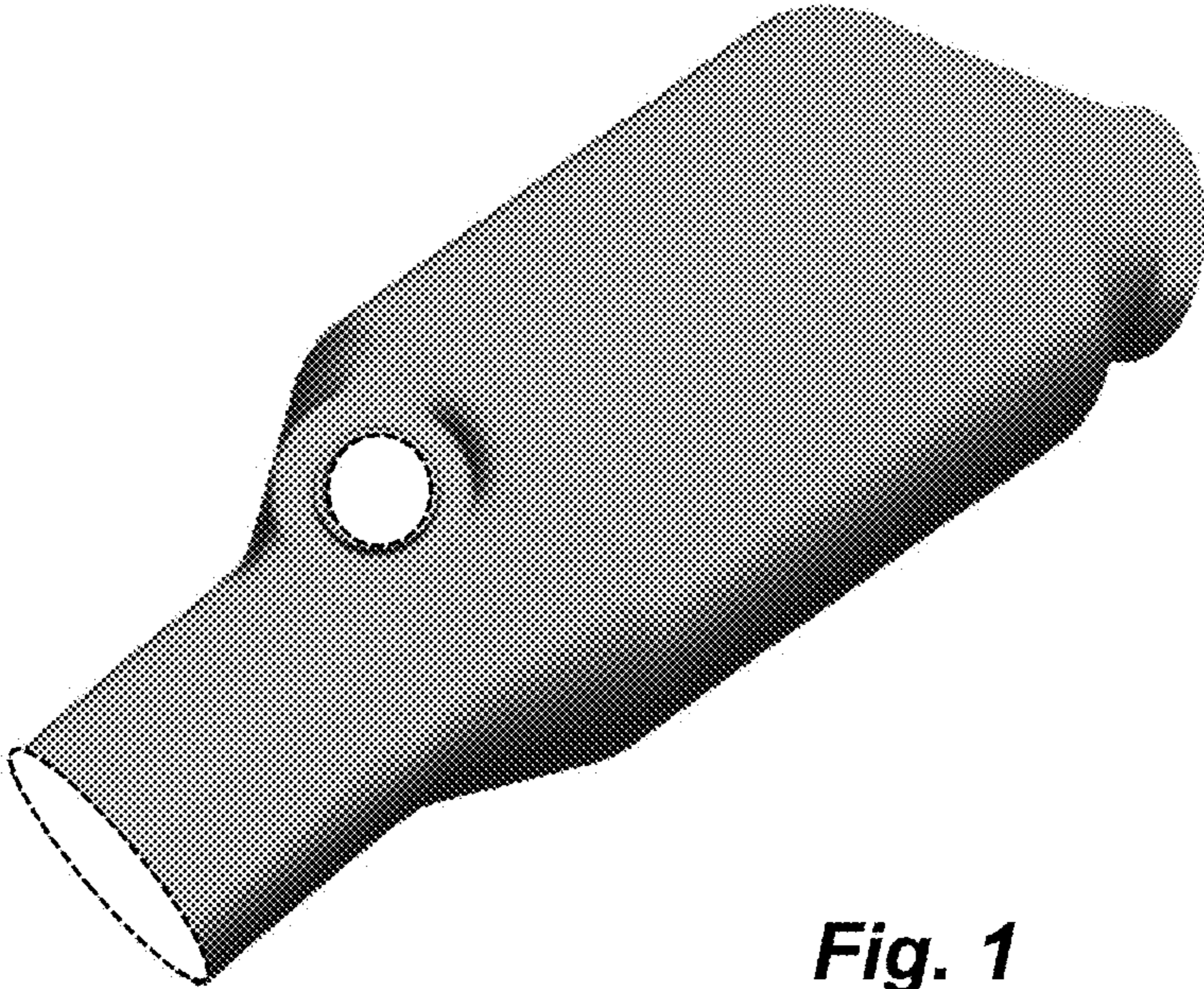


Fig. 1

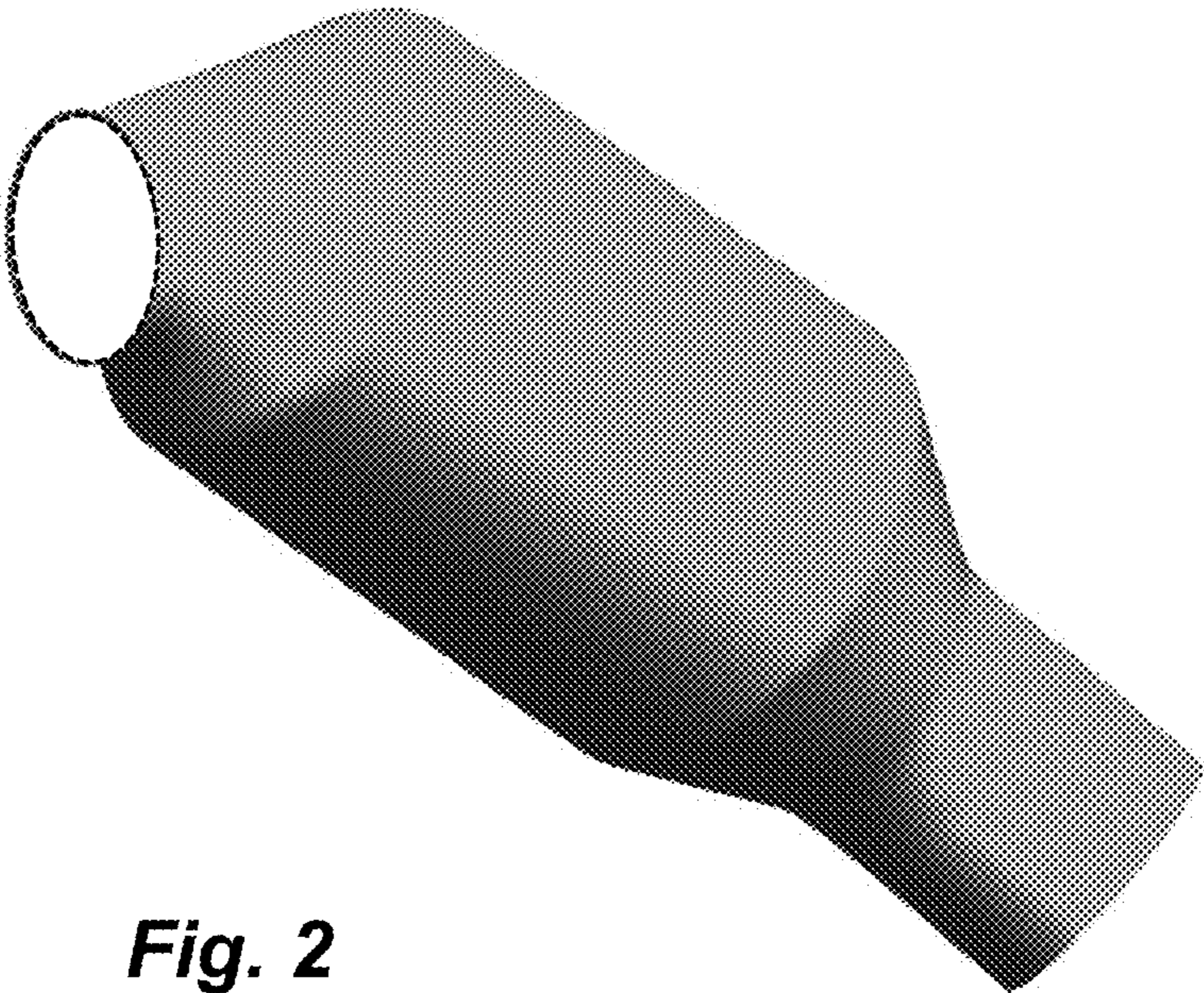


Fig. 2

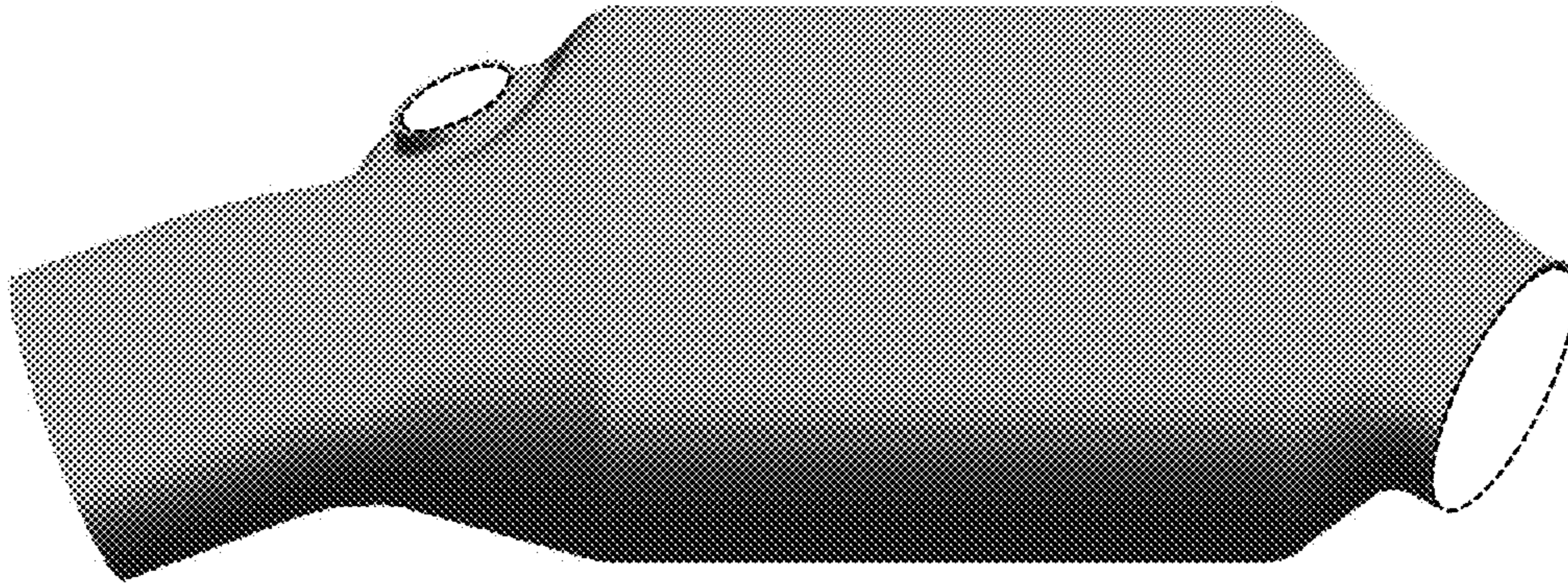


Fig. 3

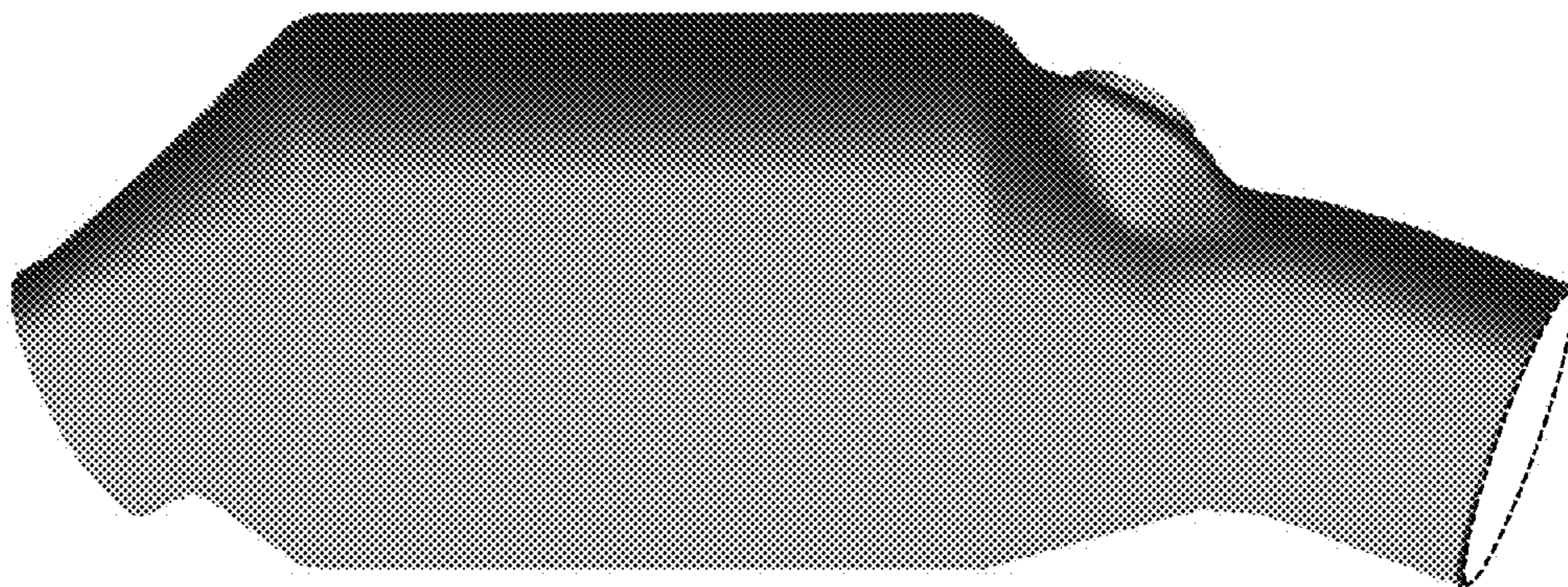


Fig. 4

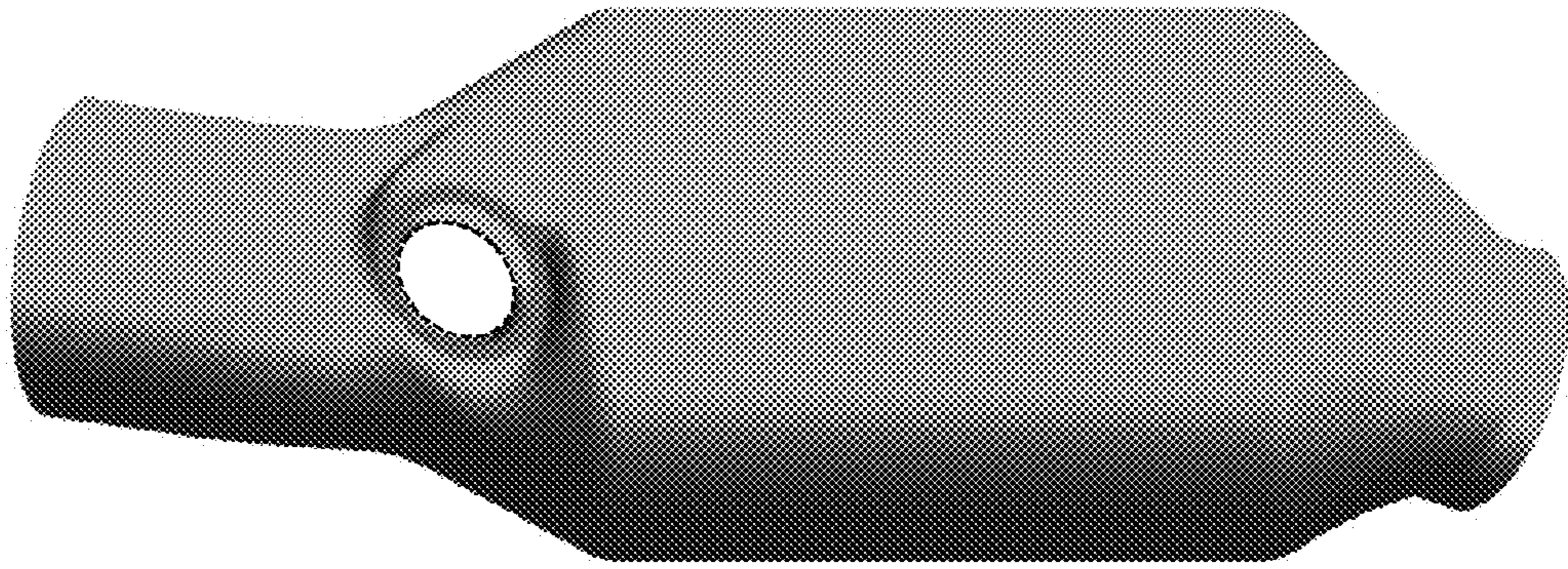


Fig. 5

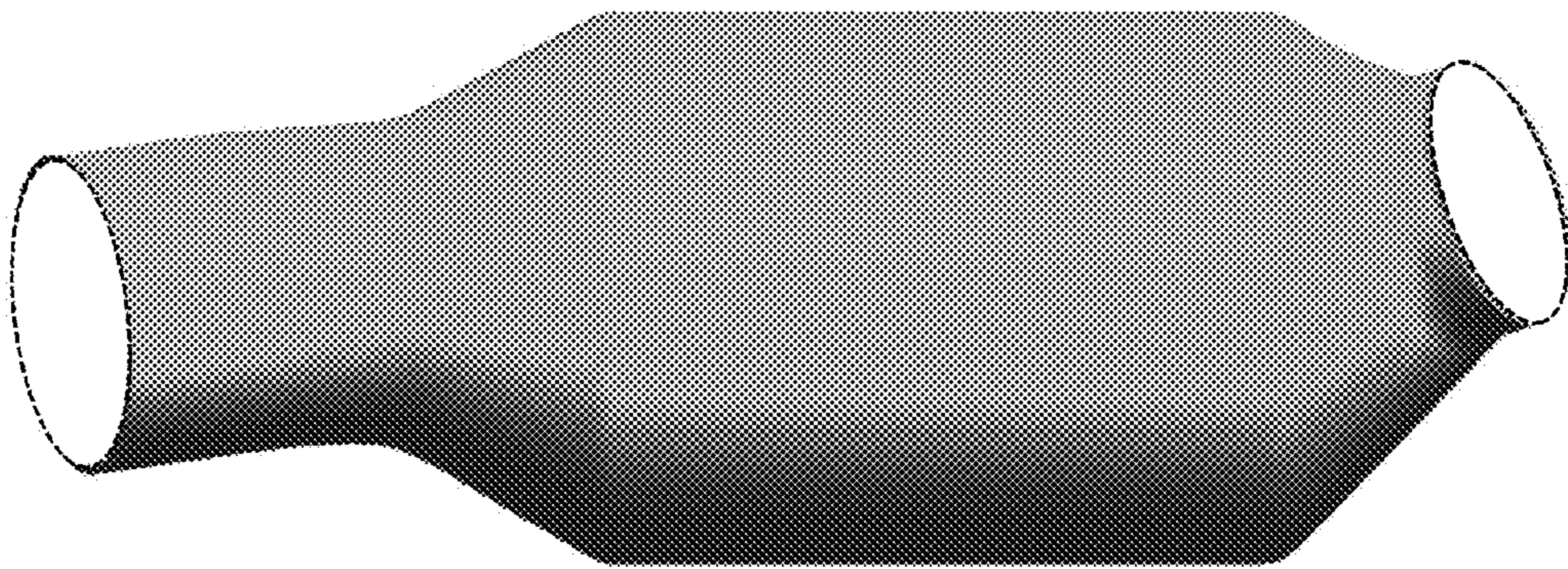


Fig. 6

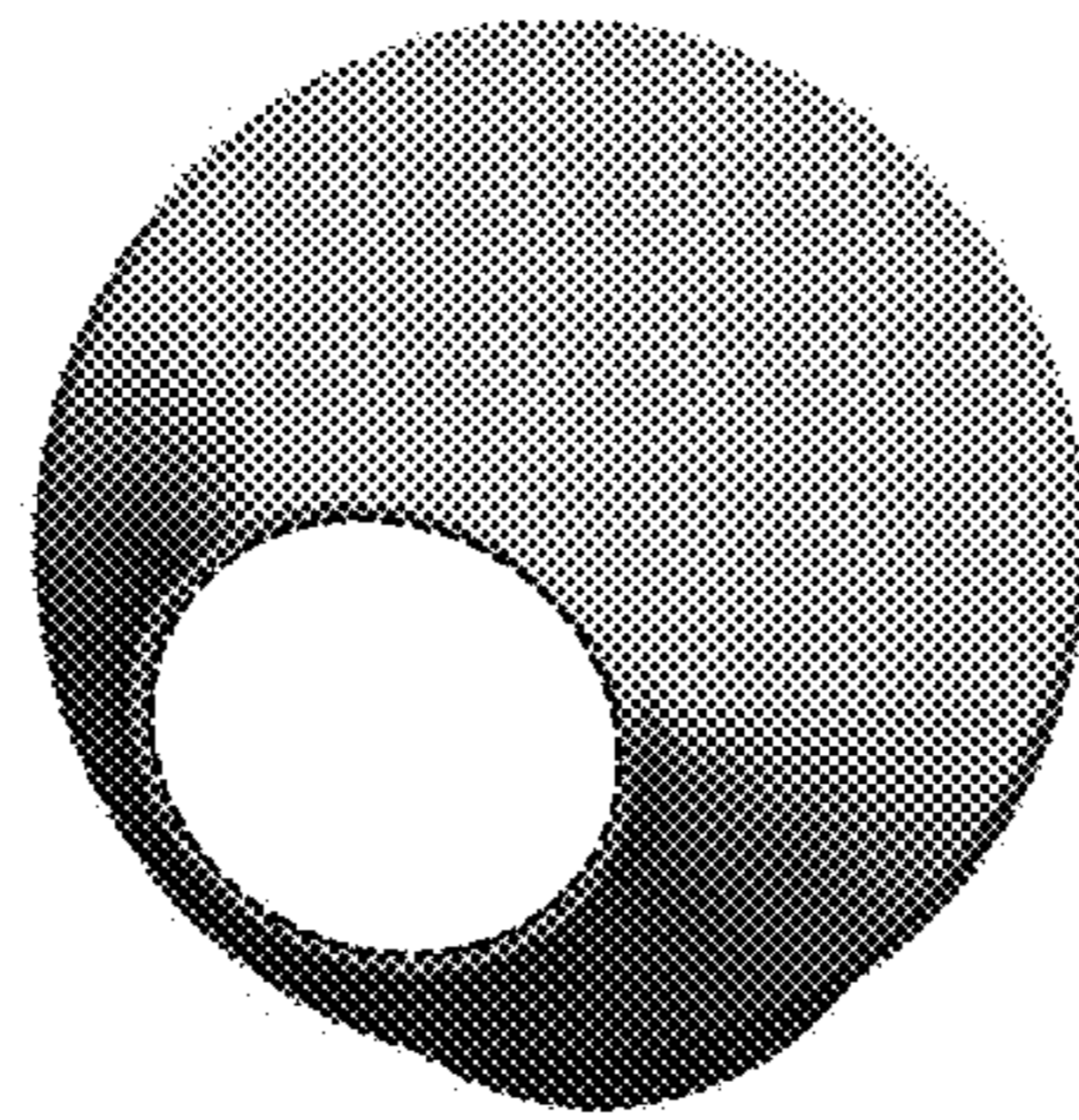


Fig. 7

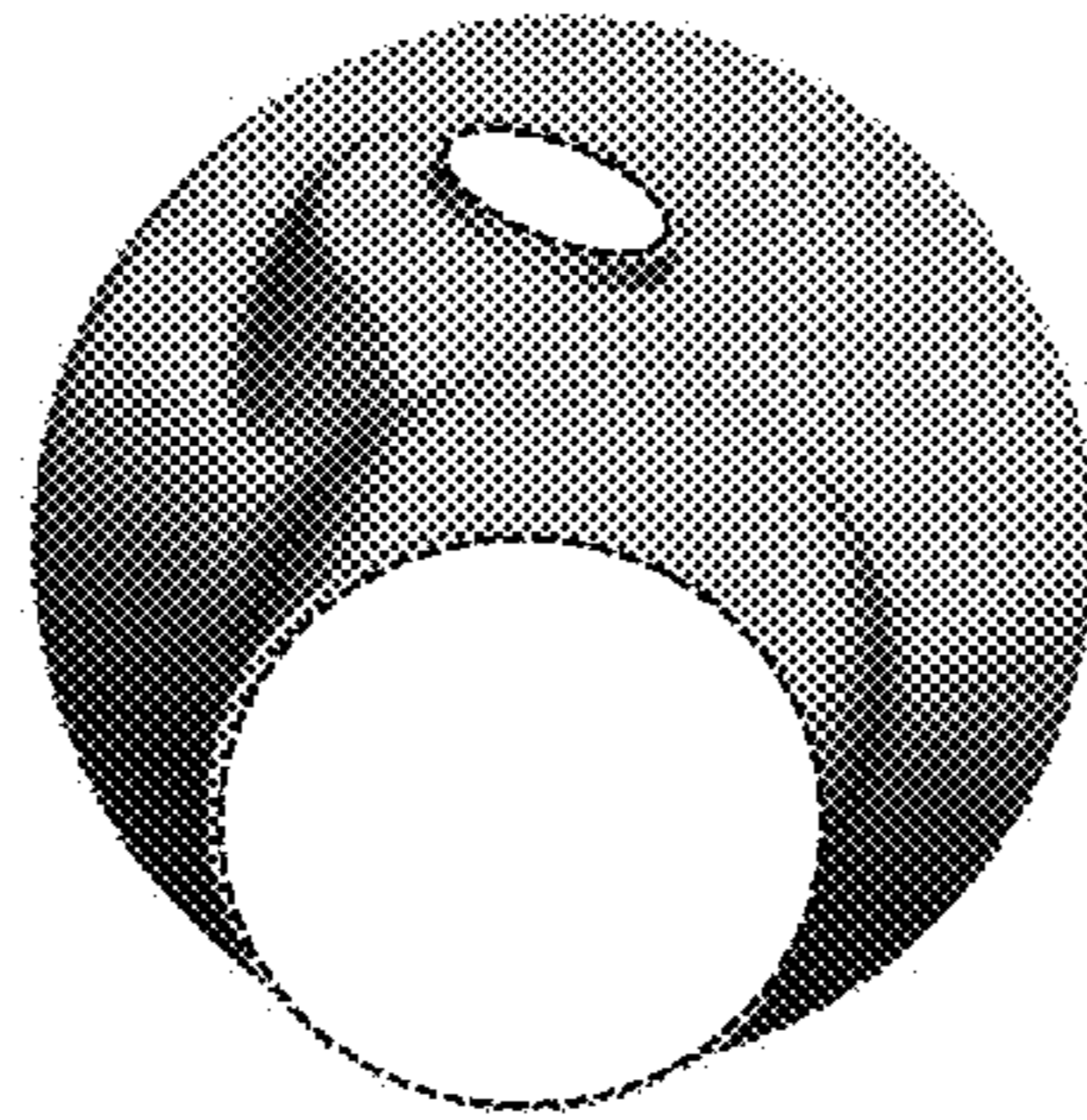


Fig. 8