



US00D700312S

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

(10) **Patent No.:** **US D700,312 S**  
(45) **Date of Patent:** **\*\* Feb. 25, 2014**

(54) **COOLING FAN**

(75) Inventors: **Naoya Inada**, Tokyo (JP); **Jiro Watanabe**, Tokyo (JP)

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

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

(21) Appl. No.: **29/419,217**

(22) Filed: **Apr. 26, 2012**

(51) **LOC (10) Cl.** ..... **23-04**

(52) **U.S. Cl.**  
USPC ..... **D23/413**

(58) **Field of Classification Search**  
USPC ..... D23/370–385, 411–414, 365, 364;  
415/60, 66, 68, 208.1, 213.1, 214.1;  
310/257; 361/695; 126/299 D, 299 R;  
D26/51, 72, 73; D32/15, 16

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D191,401 S *	9/1961	Gesmar	.....	D23/413
D507,640 S *	7/2005	Chiu et al.	.....	D23/379
D508,560 S *	8/2005	Chiu et al.	.....	D23/379
D564,653 S *	3/2008	Iwase et al.	.....	D23/413
D565,171 S *	3/2008	Lin	.....	D23/413
D570,471 S *	6/2008	Iwase et al.	.....	D23/413
D663,689 S *	7/2012	Lee	.....	D13/115
D668,606 S *	10/2012	Lee	.....	D13/115
D681,188 S *	4/2013	Hu et al.	.....	D23/413
D683,840 S *	6/2013	Rasmussen	.....	D23/379
D688,783 S *	8/2013	DeFilippis	.....	D23/379
2013/0022479 A1 *	1/2013	Haaf et al.	.....	417/369

\* cited by examiner

*Primary Examiner* — Susan Bennett Hattan

*Assistant Examiner* — Janice Hallmark

(74) *Attorney, Agent, or Firm* — Fox Rothschild LLP;  
Richard C. Woodbridge; Ryan N. Miller

(57) **CLAIM**

The ornamental design for a cooling fan, as shown and described.

**DESCRIPTION**

FIG. 1 is a front view of the cooling fan embodying our new ornamental design and with environmental structure shown in phantom.

FIG. 2 is a rear view of the cooling fan shown in FIG. 1.

FIG. 3 is a cross sectional view showing one blade.

FIG. 4 is another cross sectional view with the cooling fan inverted showing one blade.

FIG. 5 is an edge view of a blade.

FIG. 6 is the view of FIG. 5 inverted.

FIG. 7 is a perspective view of the cooling fan showing one blade in isolation.

FIG. 8 is a front view of a single cooling fan blade similar to the view in FIG. 1 but without the environmental structure shown in phantom.

FIG. 9 is a rear view of a single cooling fan blade similar to the view in FIG. 2 but without the environmental structure shown in phantom.

FIG. 10 is a side view of a single cooling fan blade similar to the view in FIG. 3 but without the environmental structure shown in phantom.

FIG. 11 is a inverted view of a single cooling fan blade similar to the view in FIG. 4 but without the environmental structure shown in phantom.

FIG. 12 is a edge view of a single cooling fan blade similar to the view in FIG. 5 but without the environmental structure shown in phantom.

FIG. 13 is an inverted edge view of a single cooling fan blade similar to the view in FIG. 6 but without the environmental structure shown in phantom.

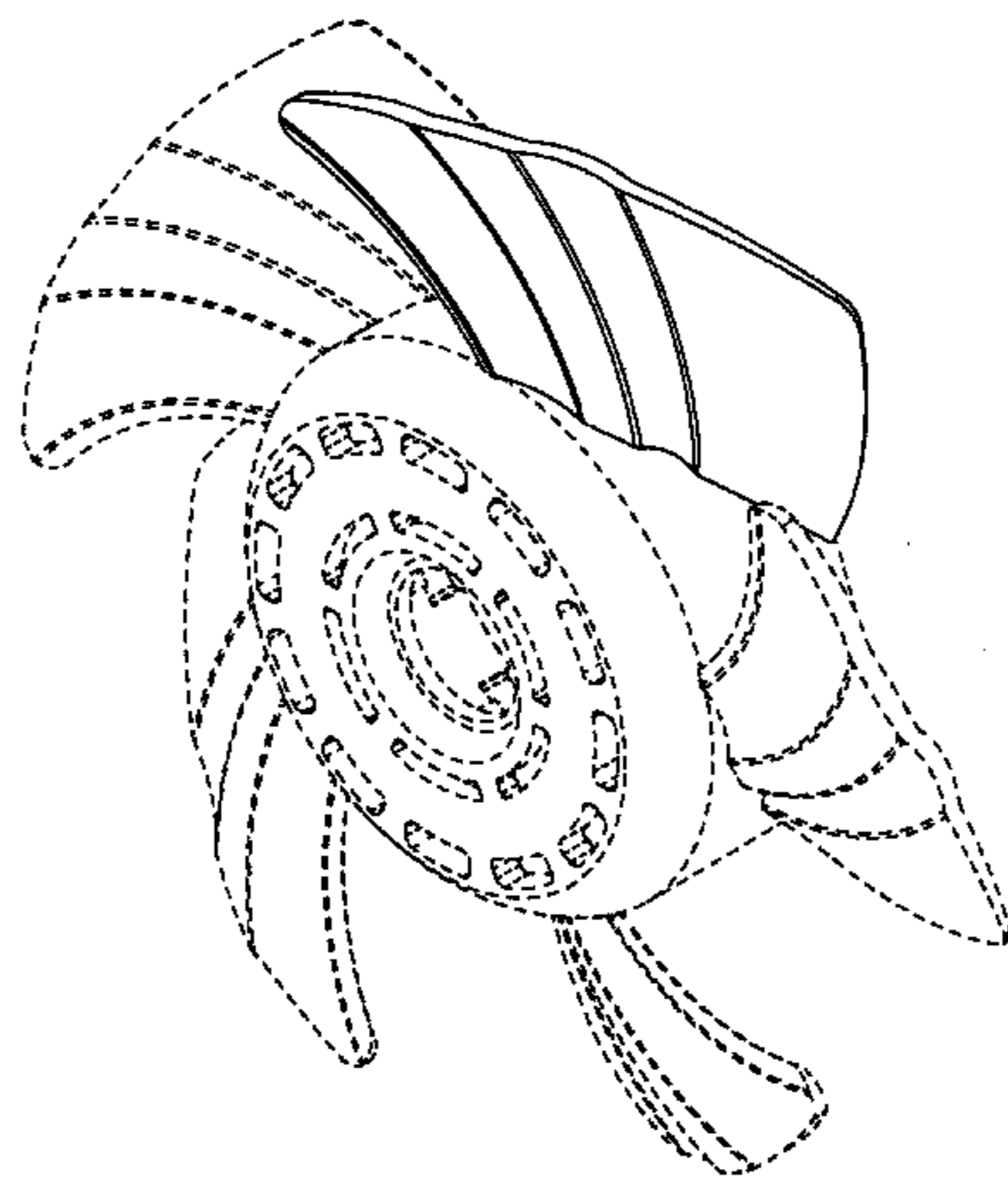
FIG. 14 is a perspective view of a single cooling fan blade indicating the location of cross-sectional views A-A and B-B found in FIGS. 15 and 16 respectively.

FIG. 15 is a cross-sectional view of the blade shown in FIG. 14 from location A-A; and,

FIG. 16 is a cross-sectional view of the blade shown in FIG. 14 from location B-B.

The broken lines in the drawings depict environmental subject matter only and form no part of the claimed design.

**1 Claim, 16 Drawing Sheets**



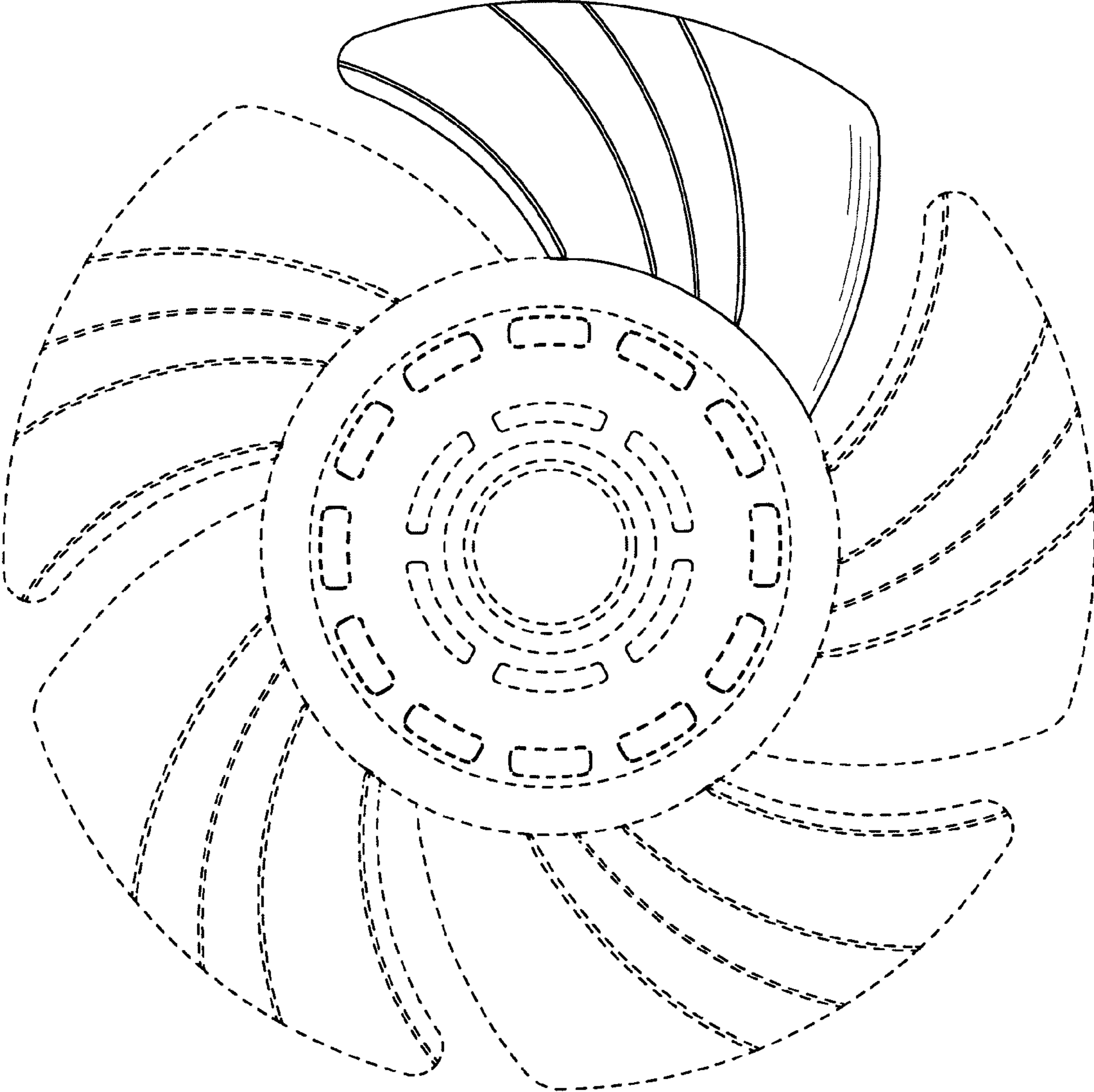


Fig. 1

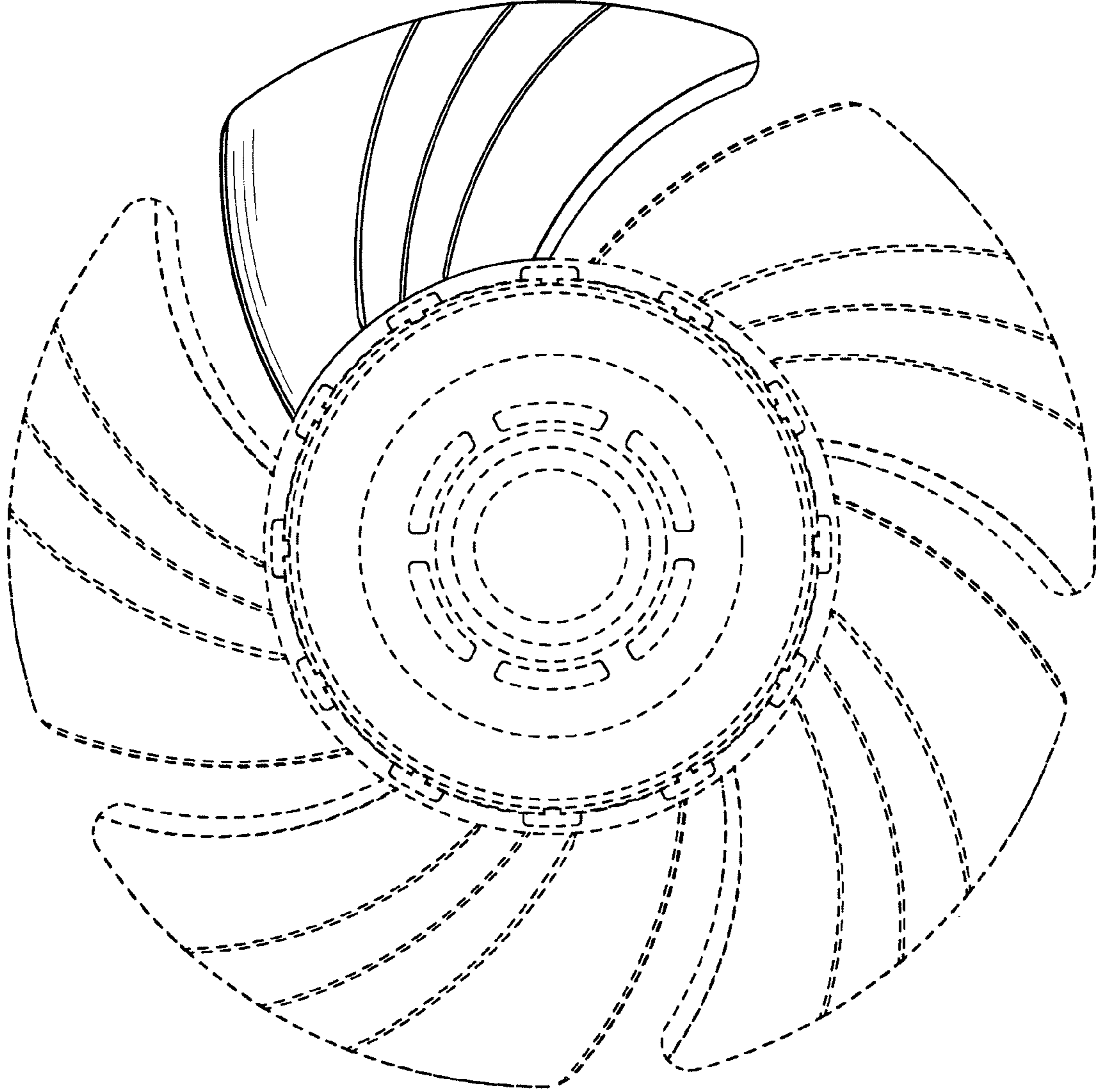


Fig. 2

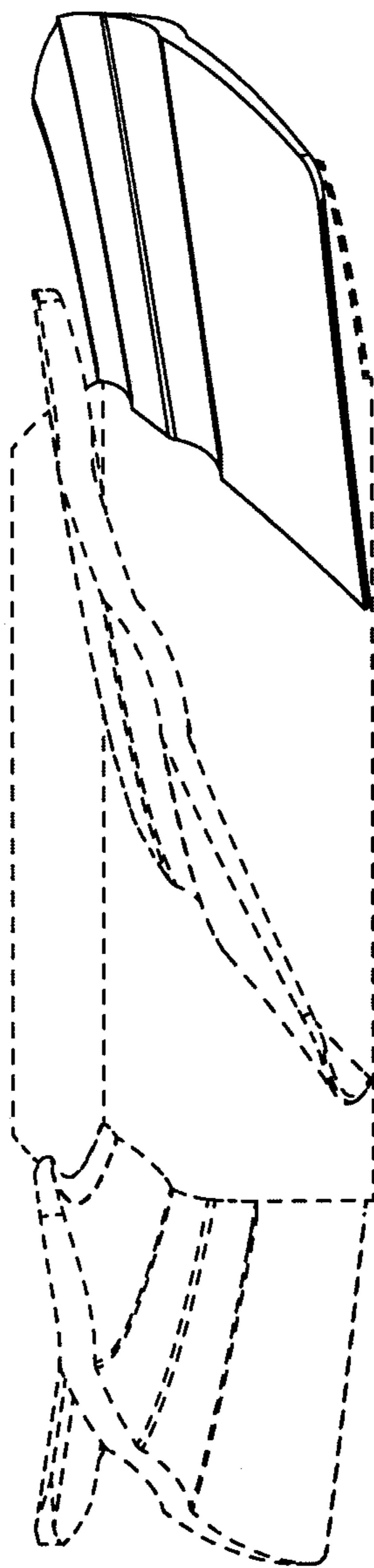


Fig. 3

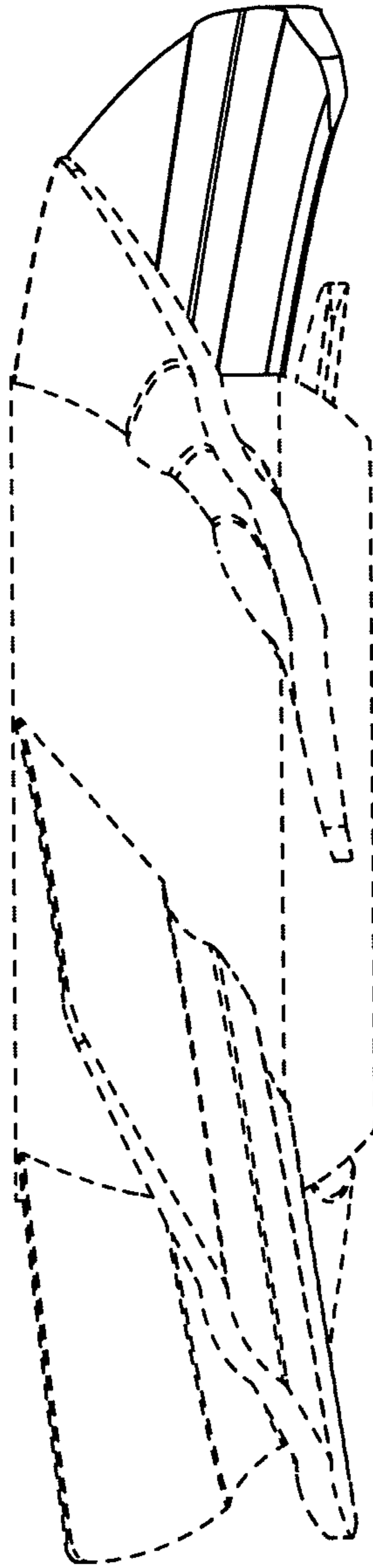


Fig. 4

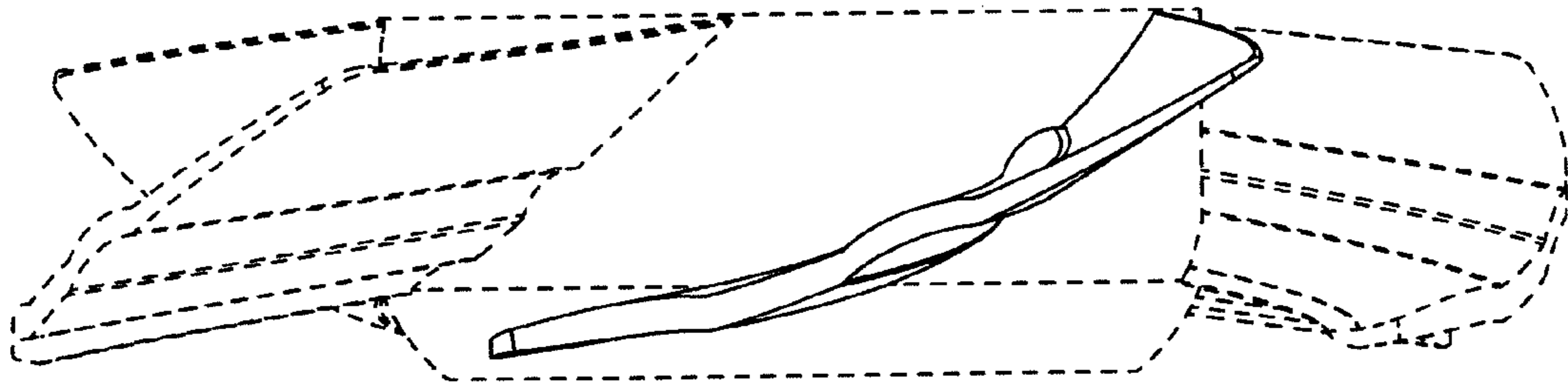


Fig. 5

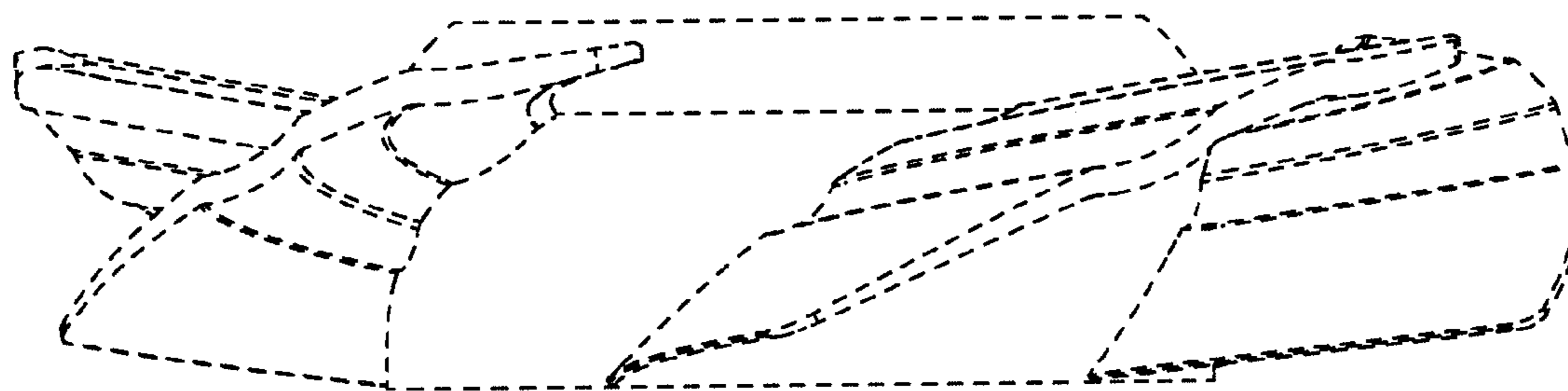


Fig. 6

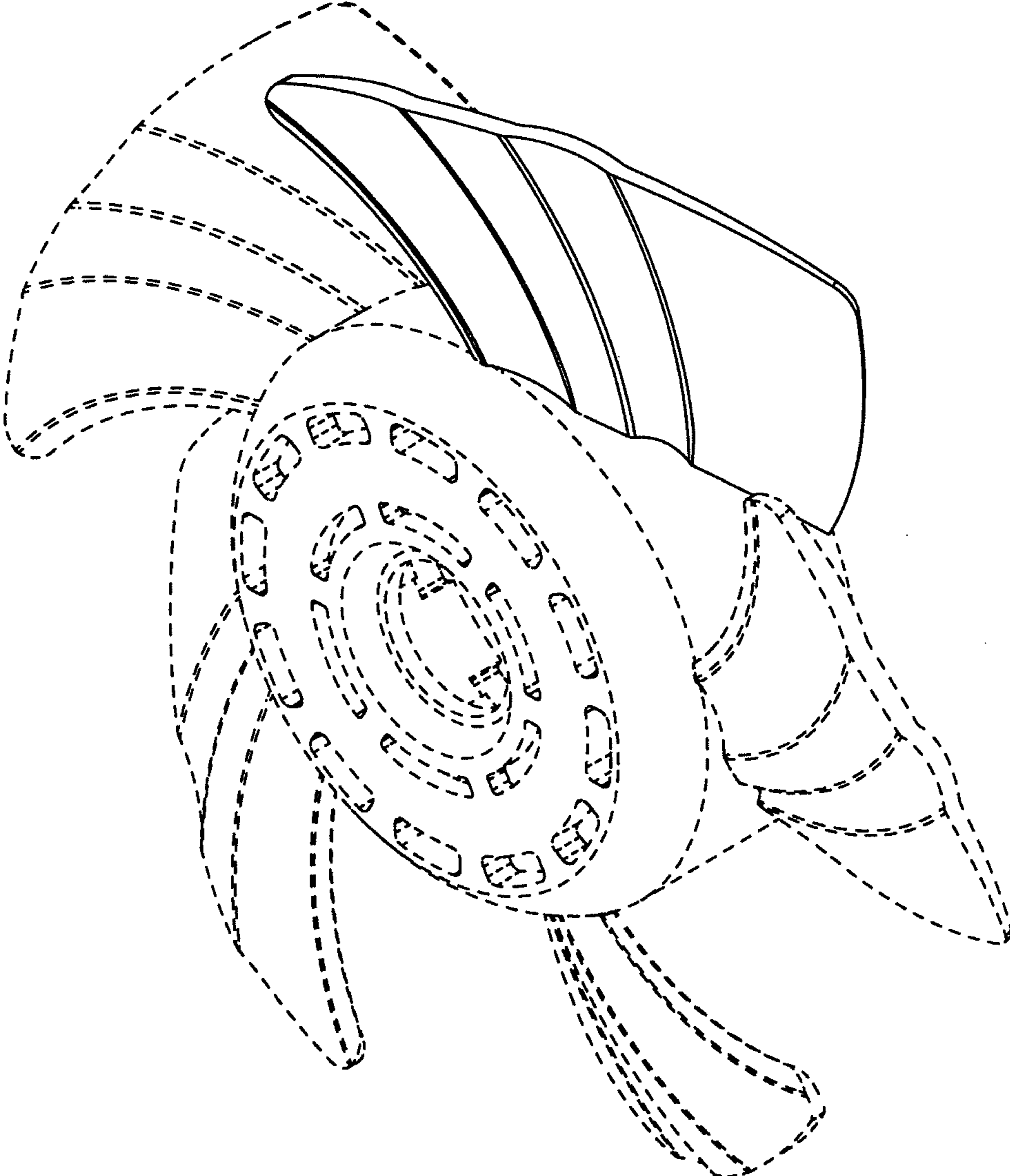


Fig. 7



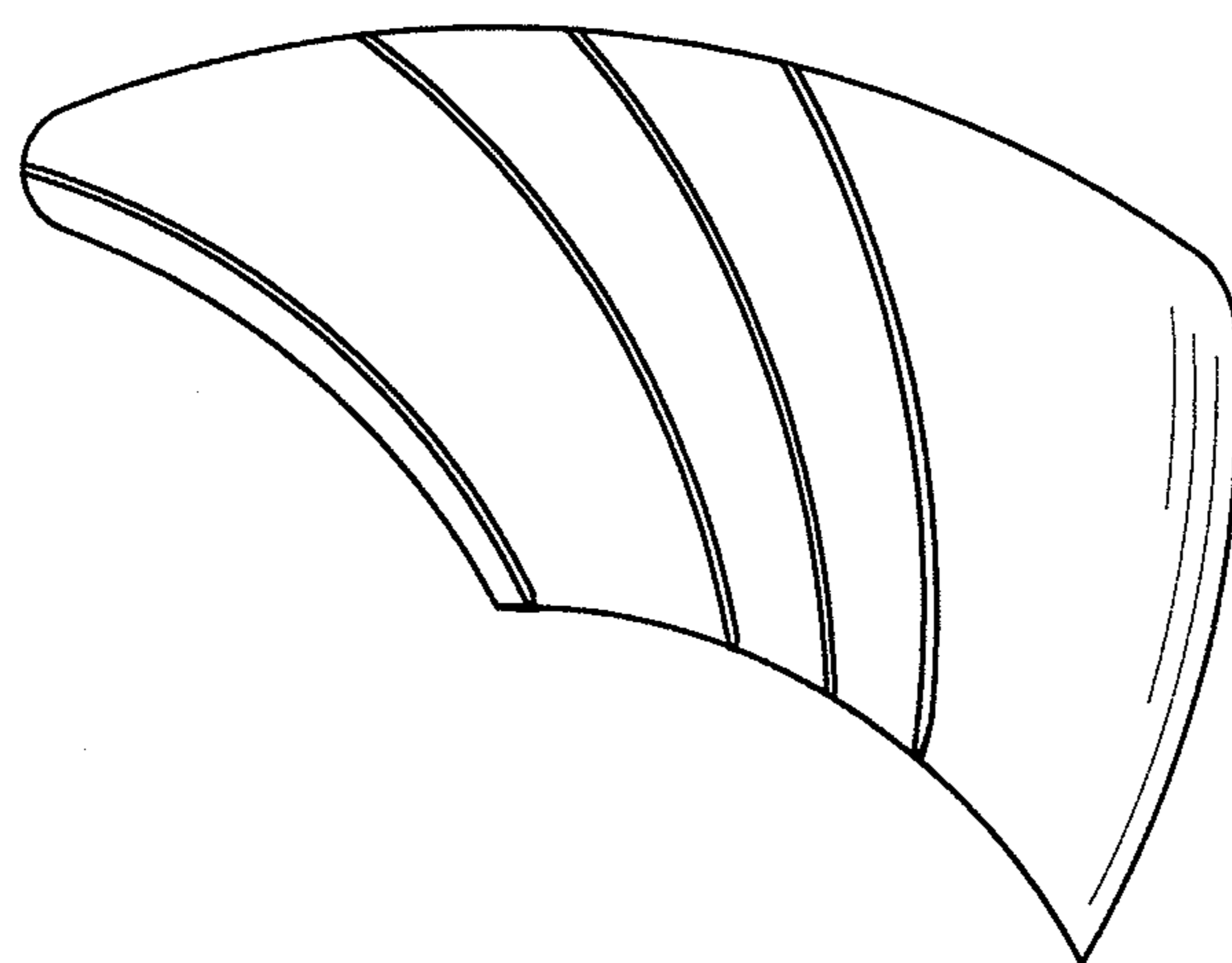


Fig. 8

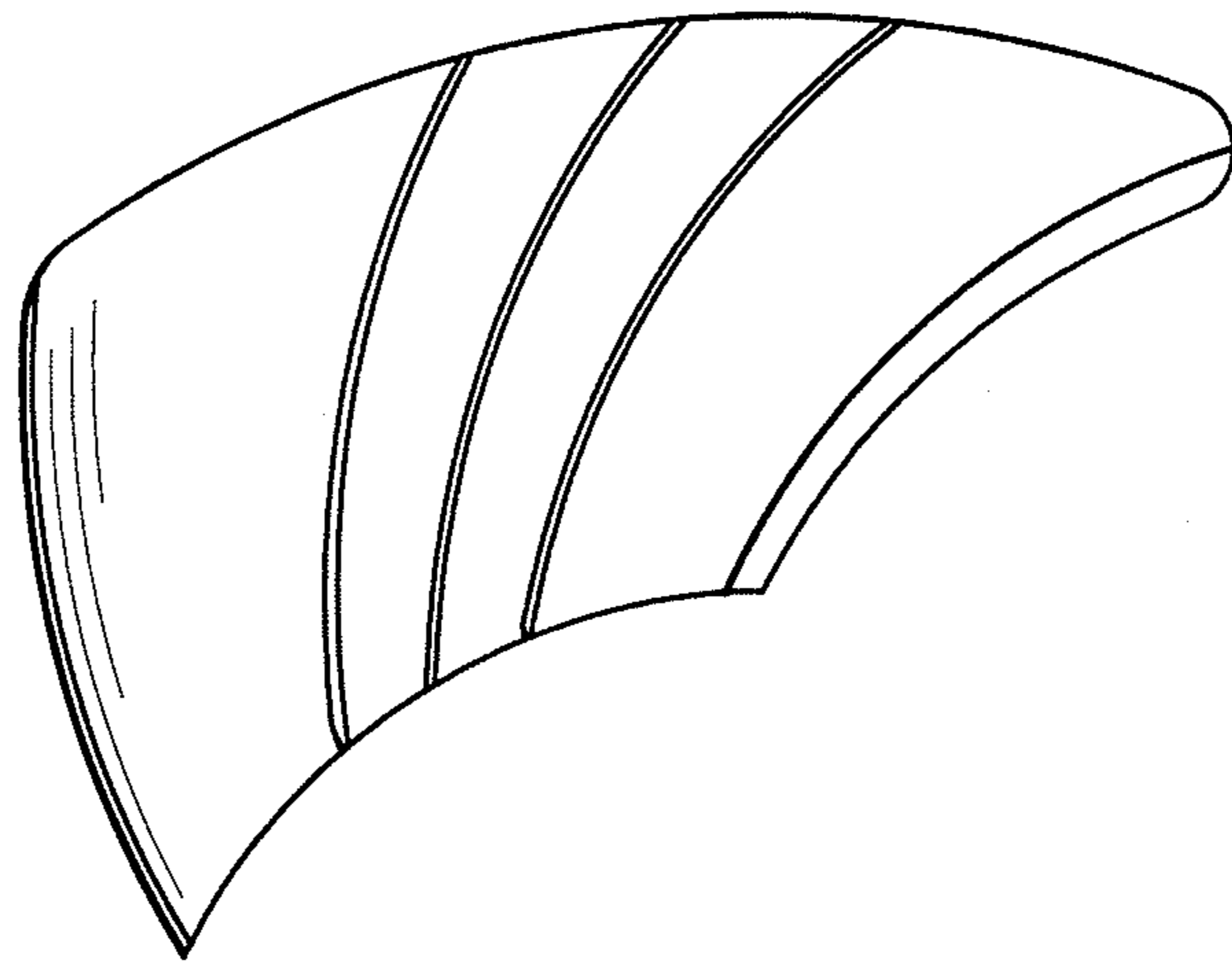


Fig. 9

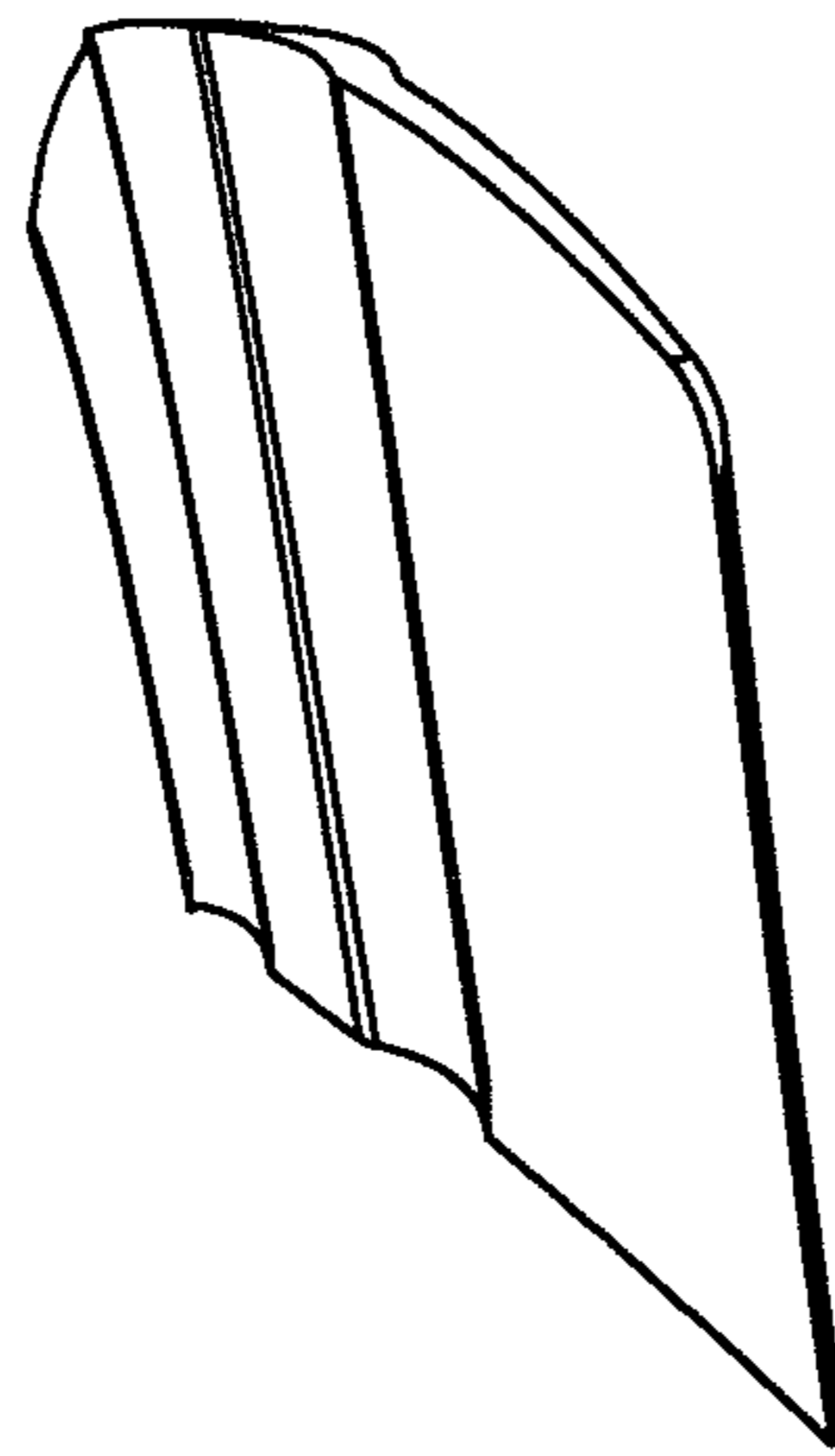


Fig. 10

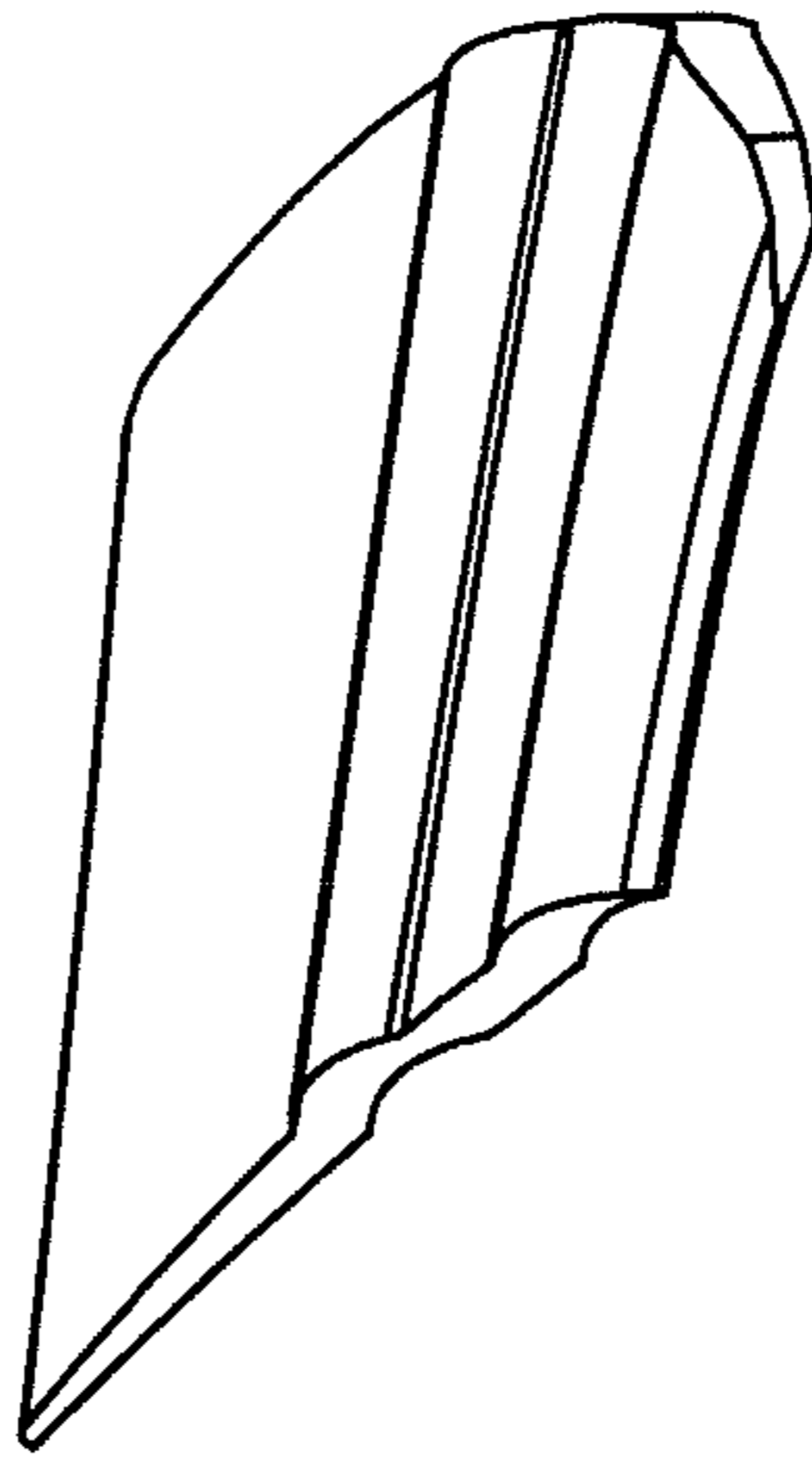


Fig. 11

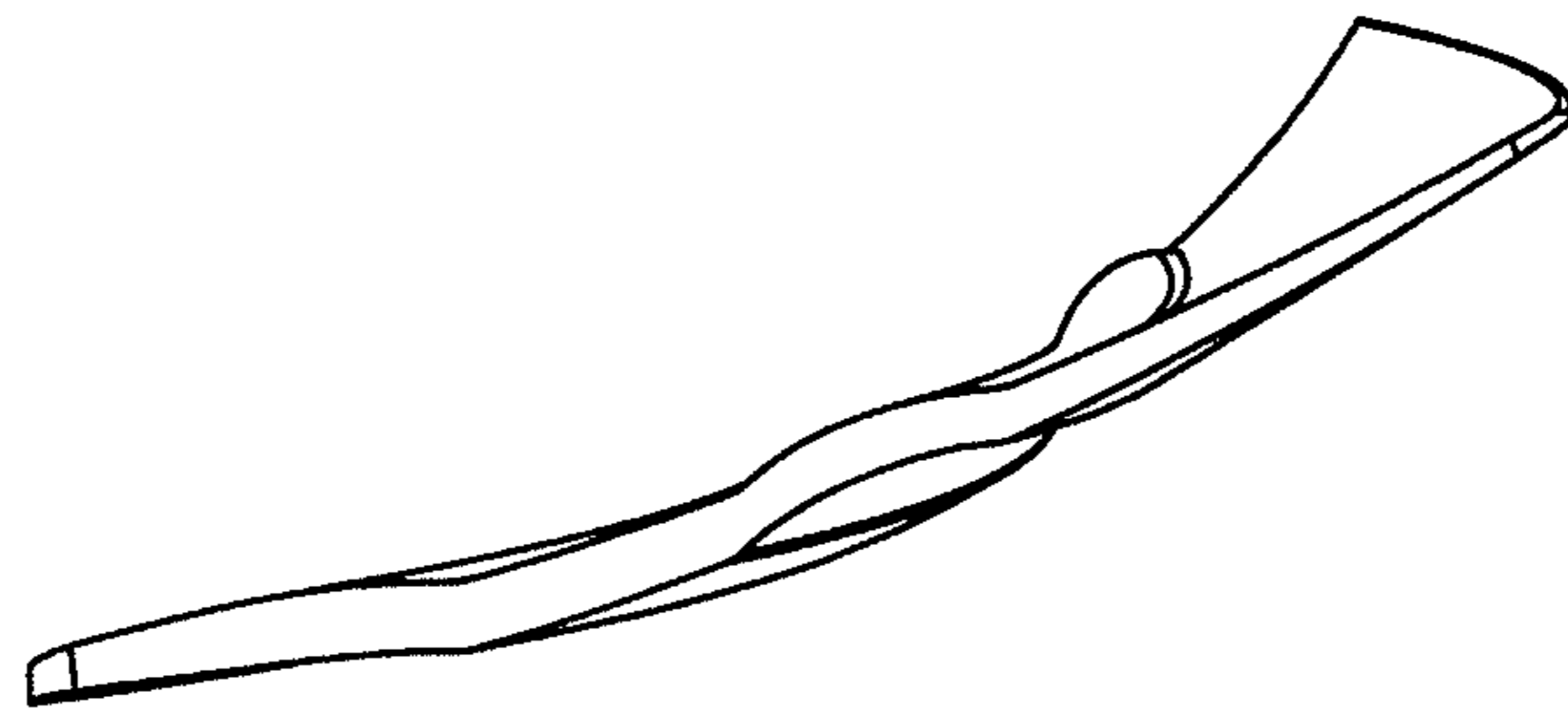


Fig. 12

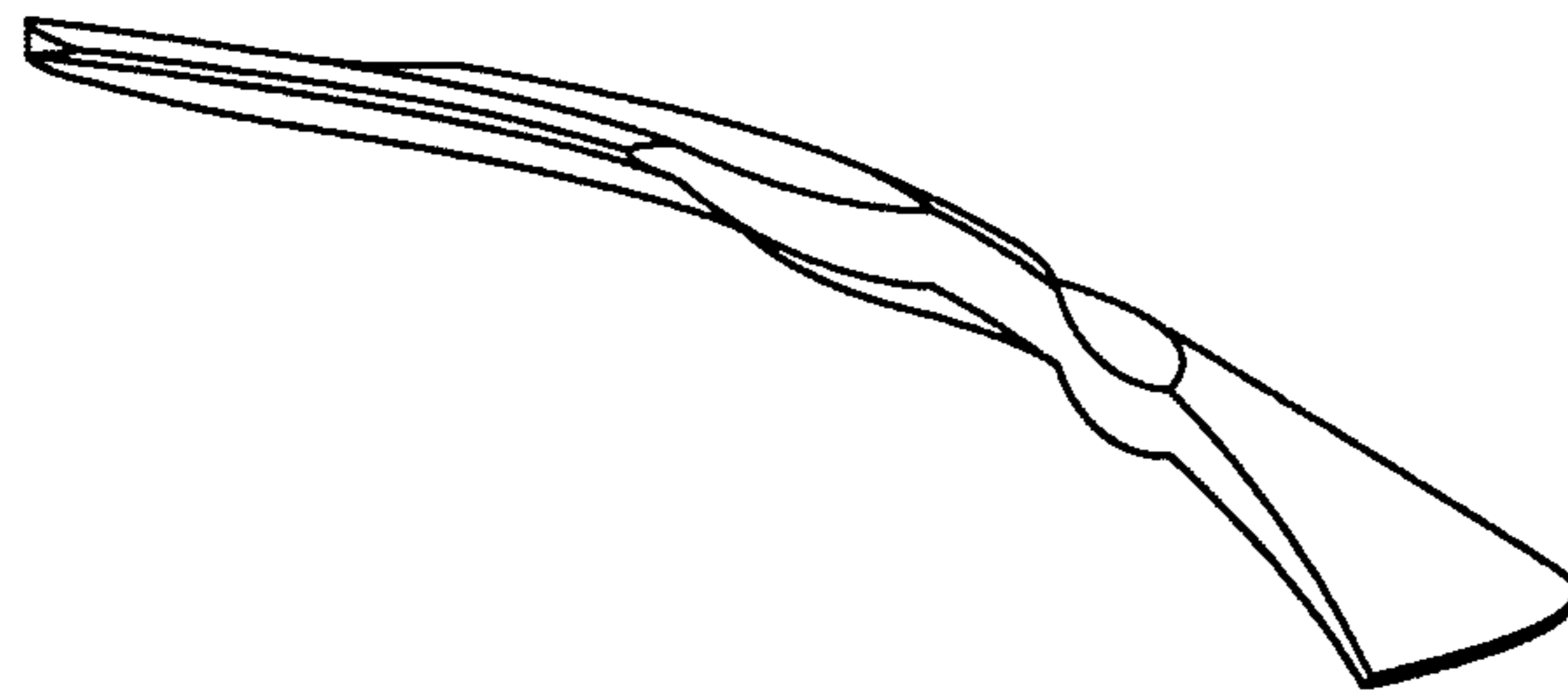


Fig. 13

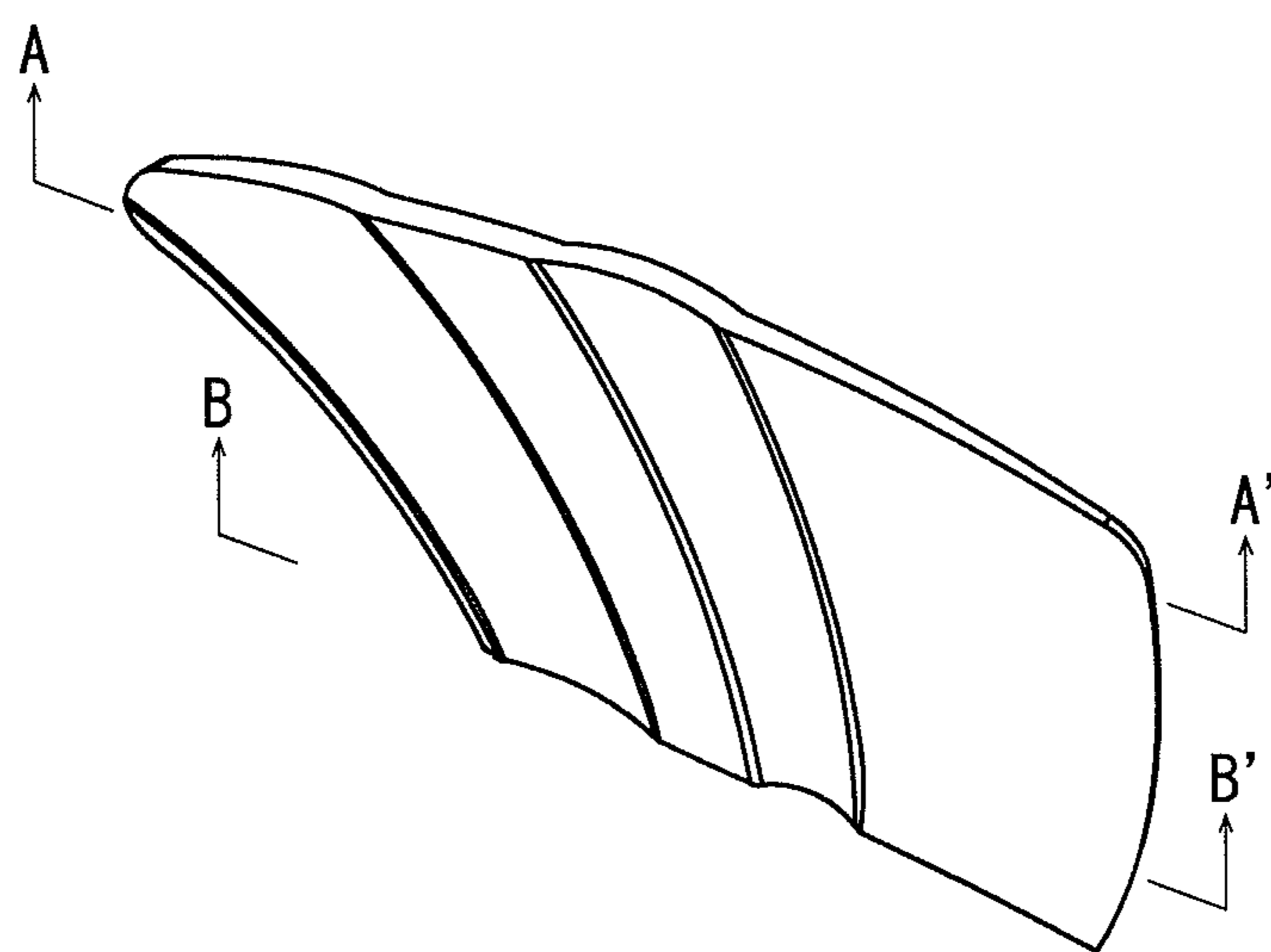


Fig. 14

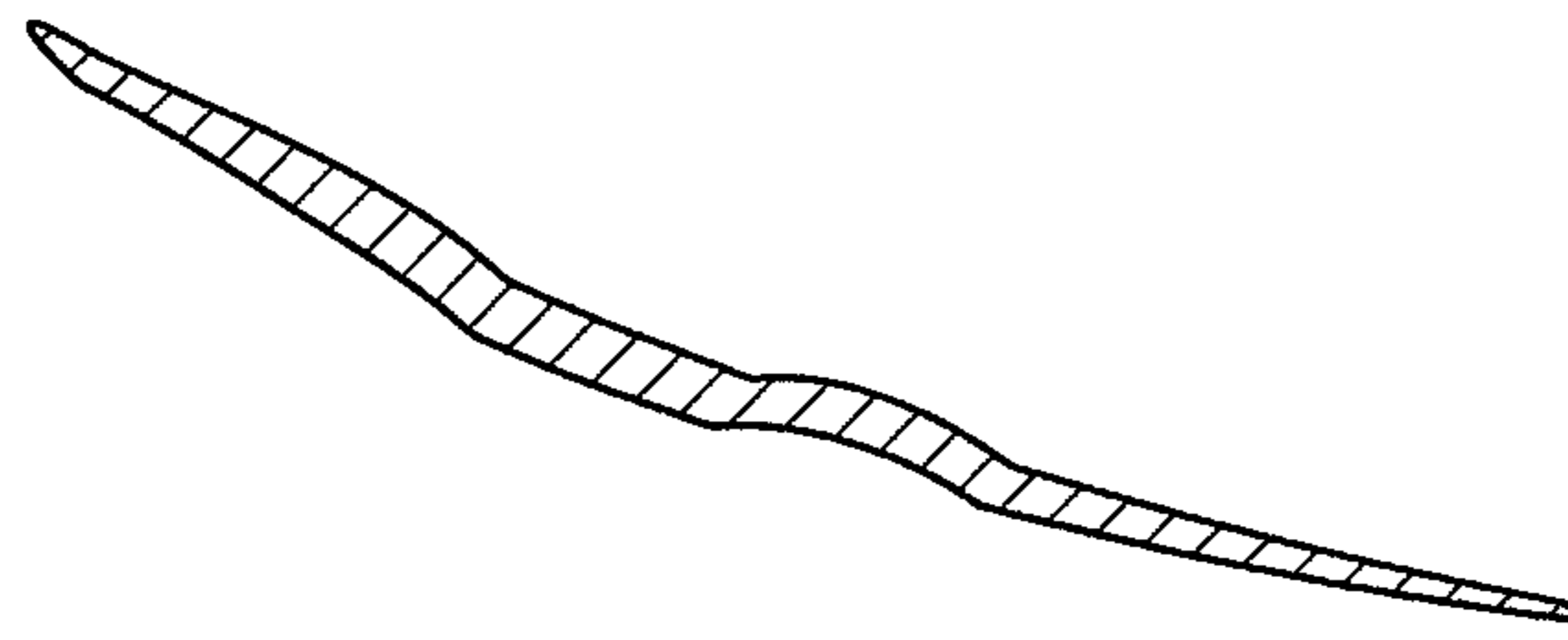


Fig. 15



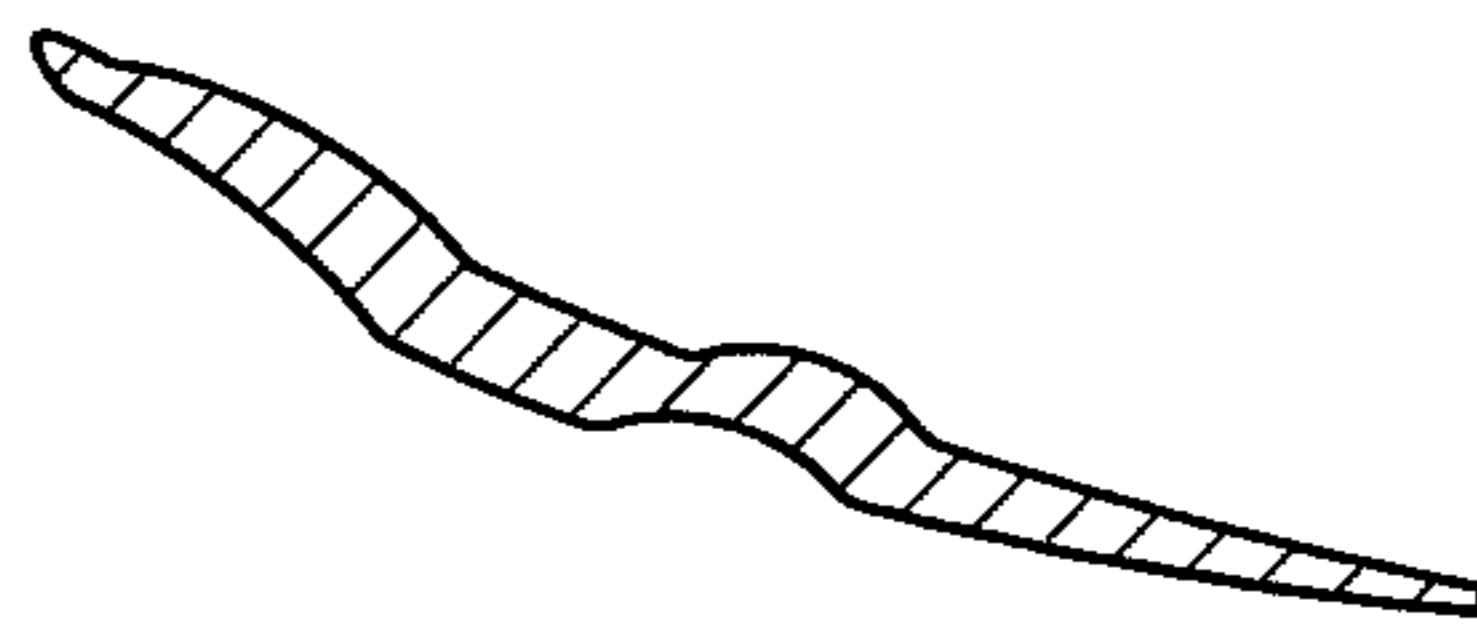


Fig. 16