



US00D885514S

(12) **United States Design Patent** (10) **Patent No.:** **US D885,514 S**
Potter et al. (45) **Date of Patent:** **** May 26, 2020**

(54) **ARROW VANE**

(71) Applicant: **Bohning Company, Ltd.**, Lake City,
MI (US)

(72) Inventors: **Robert L. Potter**, McBain, MI (US);
Larry R. Griffith, Lake City, MI (US)

(73) Assignee: **BOHNING COMPANY, LTD.**, Lake
City, MI (US)

(**) Term: **15 Years**

(21) Appl. No.: **29/671,385**

(22) Filed: **Nov. 27, 2018**

(51) **LOC (12) Cl.** **22-03**

(52) **U.S. Cl.**

USPC **D22/115; D22/107**

(58) **Field of Classification Search**

USPC **D22/107, 115**

CPC **F42B 6/04; F42B 6/08; F42B 6/003; F42B**
6/02; F42B 12/362

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,842,540	A *	1/1932	Cowdery	.....	F42B 6/04	473/586
2,443,395	A	6/1948	Lutins			
2,887,319	A *	5/1959	Lay	.....	F42B 6/06	473/586
3,002,314	A	10/1961	Brottman			
3,595,579	A	7/1971	Benoit			
3,604,708	A *	9/1971	Brozina	.....	F42B 6/08	473/584
3,749,623	A	7/1973	Benoit			
3,815,916	A *	6/1974	Meszaros	.....	F42B 6/06	473/586

(Continued)

OTHER PUBLICATIONS

“Arrow Fletching and F.O.C. Balance” [online], Jon Henry, [Pub-
lished on Mar. 20, 2011], retrieved from the Internet: <[https://www.](https://www.longrangehunting.com/articles/arrow-fletching-and-f-o-c-balance.482/)

[longrangehunting.com/articles/arrow-fletching-and-f-o-c-balance.482/](https://www.longrangehunting.com/articles/arrow-fletching-and-f-o-c-balance.482/)>.

(Continued)

Primary Examiner — Khawaja Anwar

Assistant Examiner — Mojtaba Tehrani

(74) *Attorney, Agent, or Firm* — Warner Norcross + Judd,
LLP

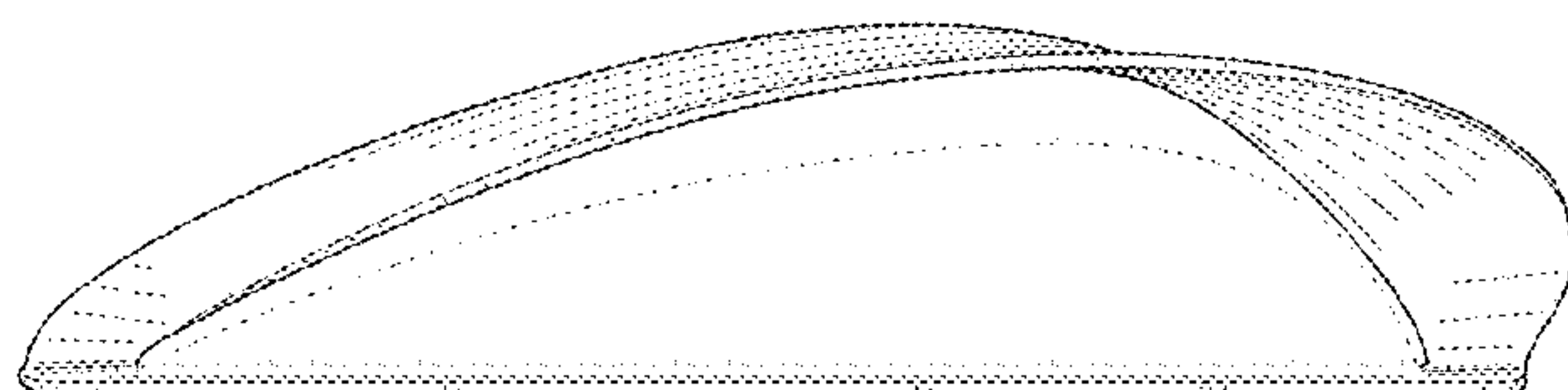
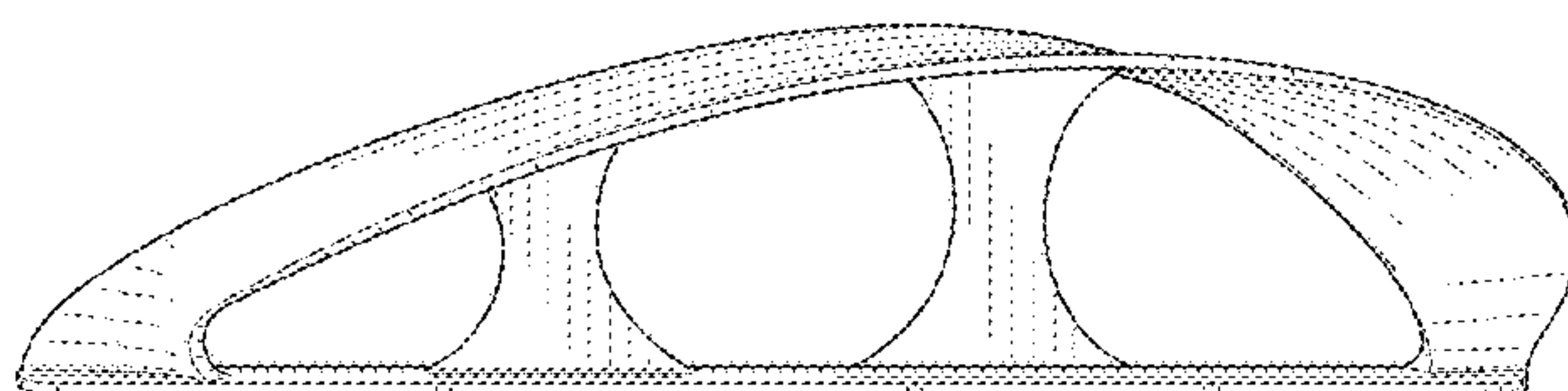
(57) **CLAIM**

The ornamental design for an arrow vane, as shown and
described.

DESCRIPTION

FIG. 1 is a rear perspective view of the first embodiment of
an arrow vane, showing our new design;
FIG. 2 is a right side view thereof;
FIG. 3 is a left side view thereof;
FIG. 4 is a front view thereof;
FIG. 5 is a rear view thereof;
FIG. 6 is a top view thereof;
FIG. 7 is a bottom view thereof;
FIG. 8 is a rear perspective view of the second embodiment
of an arrow vane, showing our new design;
FIG. 9 is a right side view thereof;
FIG. 10 is a left side view thereof;
FIG. 11 is a front view thereof;
FIG. 12 is a rear view thereof;
FIG. 13 is a top view thereof; and,
FIG. 14 is a bottom view thereof.
FIGS. 1-14 show features of an arrow vane in broken lines.
These features are shown for environmental purposes and do
not form any part of the claimed design. Further, any broken
lines immediately adjacent the solid-line portions of the
design form the boundary of the design, with the broken
lines forming no part of the claimed design.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

3,897,062	A *	7/1975	Christensen	.....	F42B 6/08	473/583
4,003,576	A	1/1977	Carella			
D243,527	S *	3/1977	Schnipke	.....	D22/115	
4,392,654	A	7/1983	Carella			
4,477,084	A	10/1984	Austin			
4,488,728	A	12/1984	Humphrey			
4,502,692	A	3/1985	Humphrey			
4,534,568	A *	8/1985	Tone	.....	F42B 6/04	403/164
4,615,552	A	10/1986	Bengtson			
5,024,448	A	6/1991	Barrie			
5,039,110	A	8/1991	Honda			
5,112,062	A *	5/1992	Pratt	.....	F42B 6/003	473/585
5,427,385	A *	6/1995	Conrad	.....	F42B 6/003	473/586
5,443,273	A	8/1995	Lovorn			
5,613,688	A	3/1997	Carella			
5,669,836	A *	9/1997	Hill	.....	F42B 6/08	473/574
6,142,896	A	11/2000	Simo et al.			
D449,090	S	10/2001	DelMonte			
D465,541	S *	11/2002	Surrusco	.....	D22/115	
6,695,727	B1 *	2/2004	Kuhn	.....	F42B 6/06	473/586
6,966,856	B1 *	11/2005	Hajek	.....	F42B 6/08	473/583
7,037,223	B2 *	5/2006	Kuhn	.....	F42B 6/08	473/583
7,074,143	B2 *	7/2006	Czemske	.....	F42B 6/06	473/586
D599,874	S	9/2009	Klein			
D606,615	S	12/2009	Andrews			
D612,444	S	3/2010	Klein			
7,914,406	B2	3/2011	Andrews			
8,025,596	B2	9/2011	Klein			
8,038,552	B2	10/2011	Song			
8,105,189	B1	1/2012	Huang			
8,286,953	B2	10/2012	Barnes et al.			
8,388,473	B2 *	3/2013	Smith	.....	F42B 6/04	473/578
8,388,474	B1	3/2013	Griffith et al.			
8,485,923	B2	7/2013	Kozlik et al.			
8,523,718	B1	9/2013	Kuhn			
8,602,926	B2	12/2013	Griffith et al.			
D713,919	S *	9/2014	Rager	.....	D22/107	
D716,901	S *	11/2014	Billsby	.....	D22/107	
8,920,269	B2 *	12/2014	Rager	.....	C21D 9/0068	473/583
8,920,270	B2	12/2014	DeLap et al.			
D729,336	S *	5/2015	Rager	.....	D22/107	
9,028,348	B2 *	5/2015	Lazenby	.....	F42B 6/04	473/581
9,039,550	B1	5/2015	Broberg			
9,121,678	B1 *	9/2015	Kendall	.....	F42B 6/04	
9,250,047	B2	2/2016	Song			
D750,723	S *	3/2016	Rager	.....	D22/107	
D788,249	S	5/2017	Kim			
D788,250	S	5/2017	Kim			
D833,559	S	11/2018	Kim			
10,408,585	B1 *	9/2019	Potter	.....	F42B 6/06	
2005/0159256	A1	7/2005	Simo et al.			
2007/0173359	A1	7/2007	Mowery et al.			
2009/0186723	A1	7/2009	Andrews			
2013/0072331	A1 *	3/2013	Goodwin	.....	F42B 6/08	473/570
2013/0274041	A1	10/2013	Griffith et al.			
2014/0004983	A1	1/2014	DeLap et al.			
2016/0377393	A1	12/2016	Potter			

OTHER PUBLICATIONS

“Fletching With Feathers vs Vanes” [online], advancecompoundbow.com [Published on Sep. 25, 2017], retrieved from the Internet: <<http://advancecompoundbow.com/fletching-with-feathers-vs-vanes/>>.

European Search Report, dated Dec. 17, 2019, for EP patent application EP 19185586, a foreign counterpart.

* cited by examiner

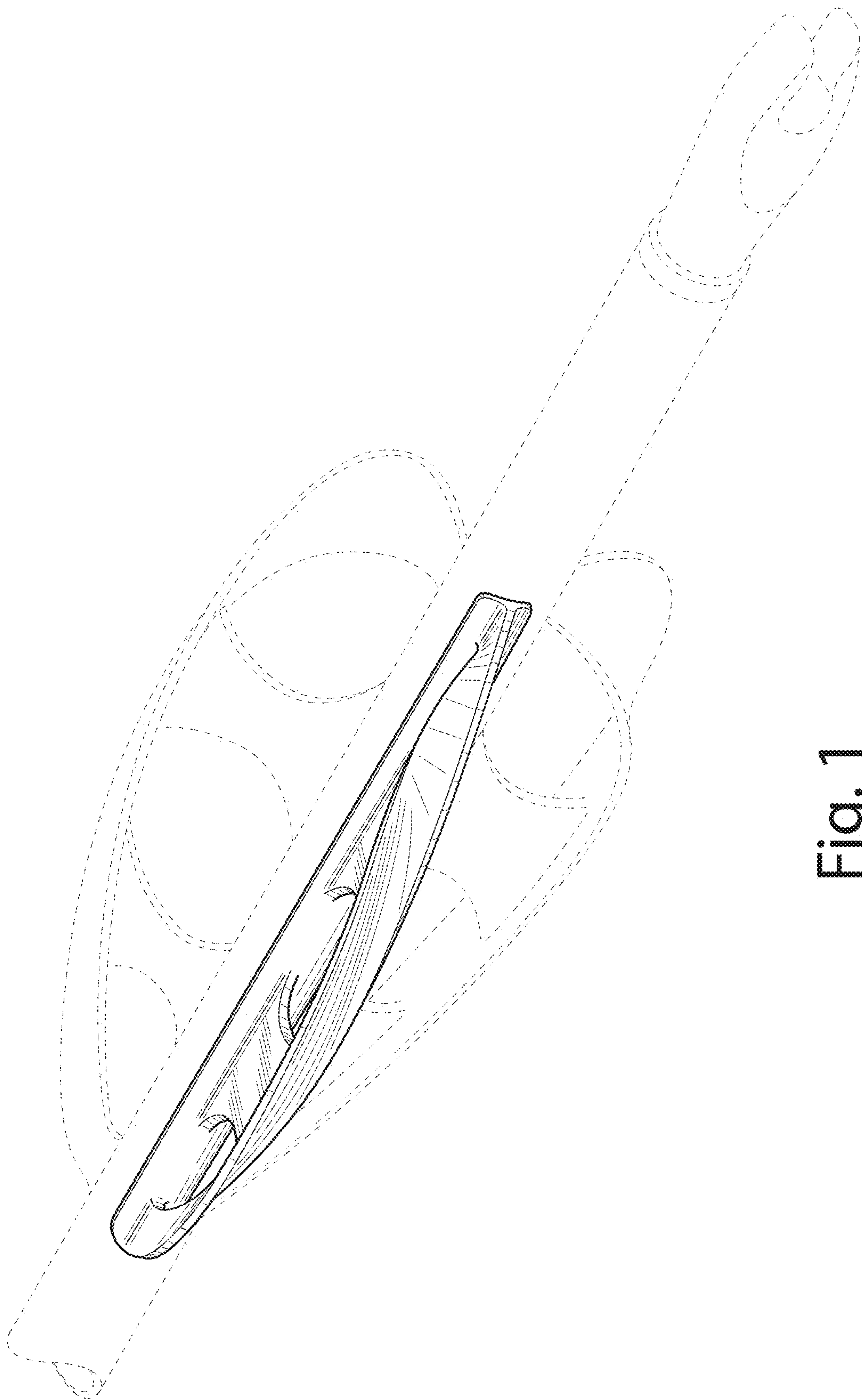


Fig. 1

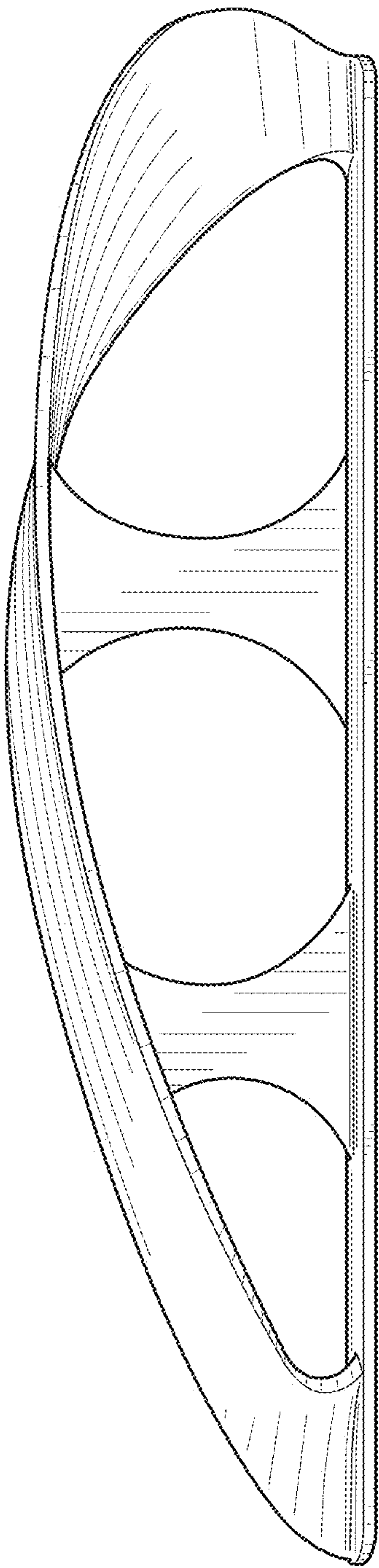


Fig. 2

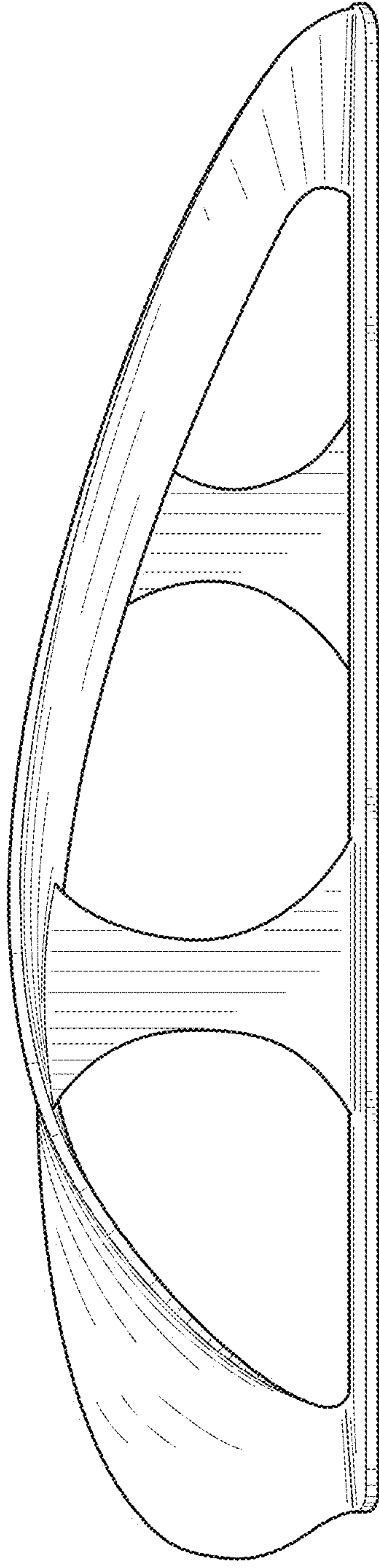


Fig. 3

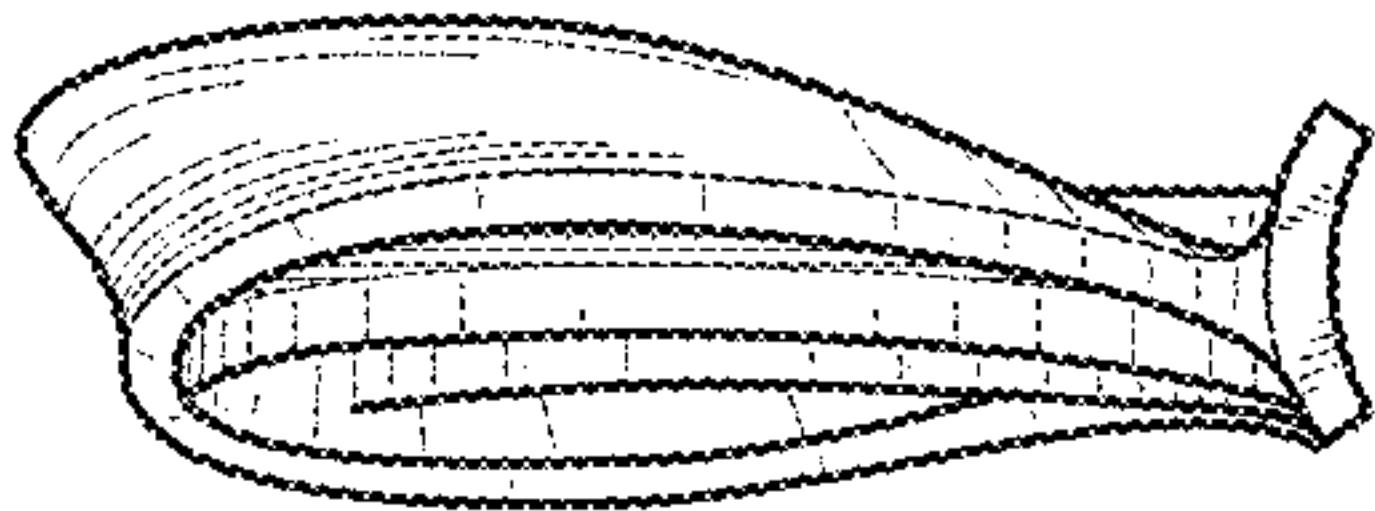


Fig. 5

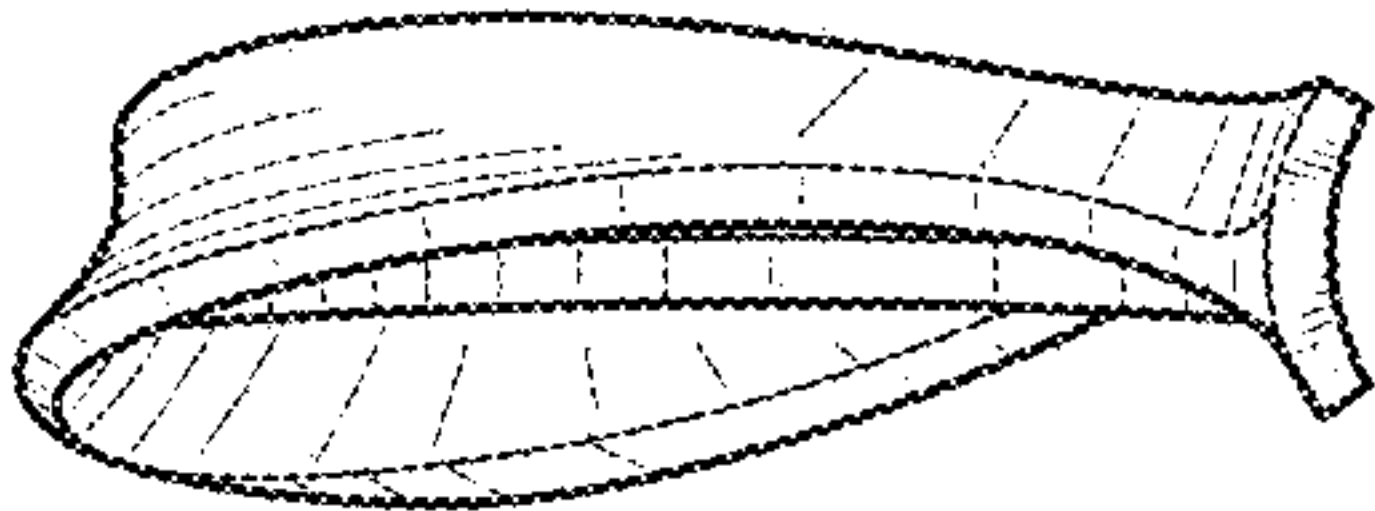


Fig. 4

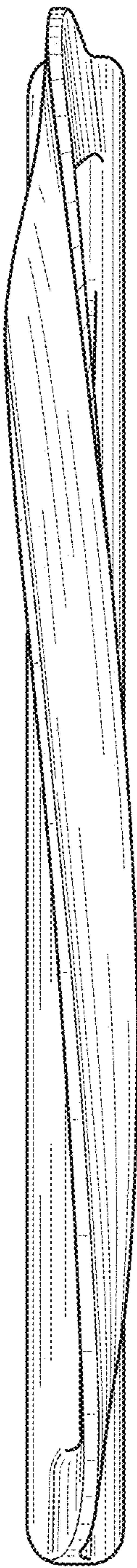


Fig. 6

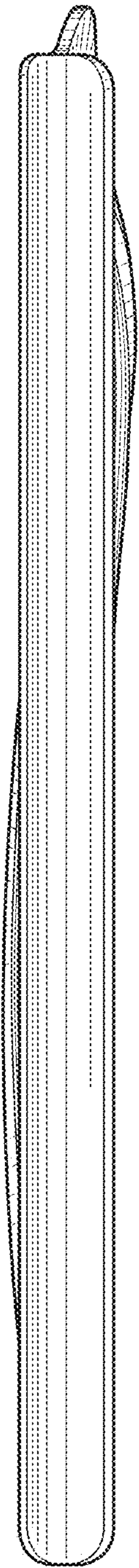


Fig. 7

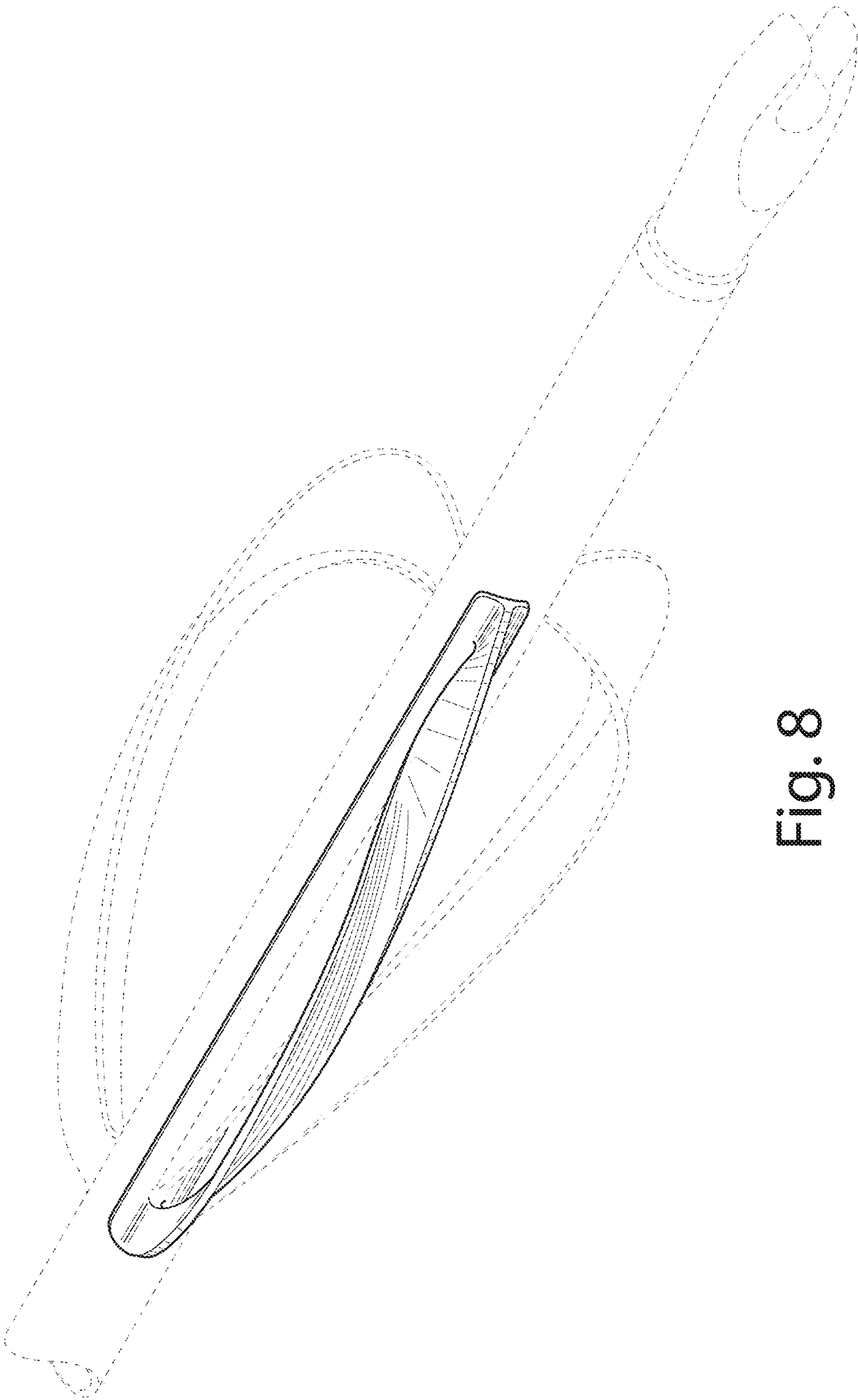


Fig. 8

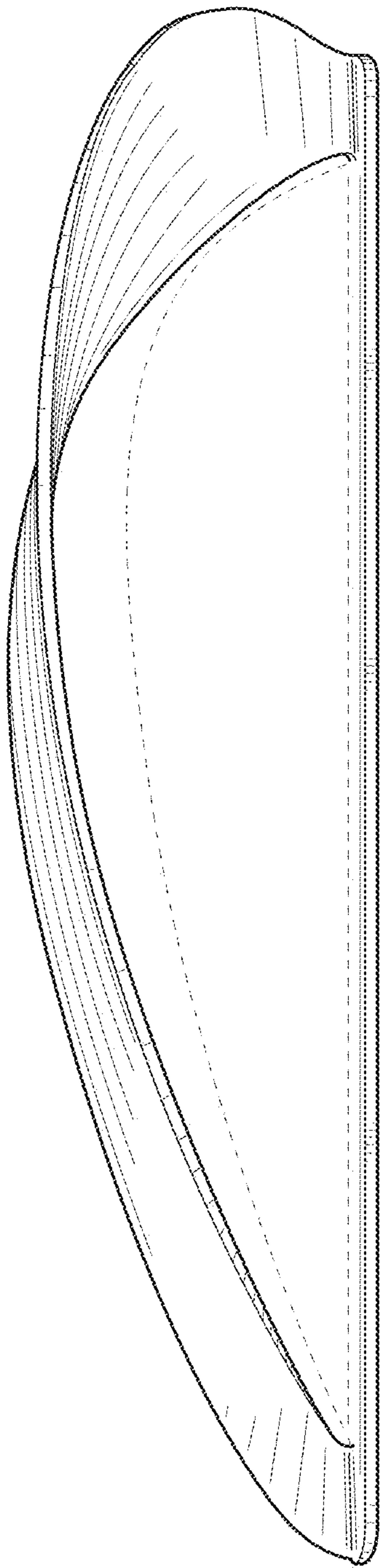


Fig. 9

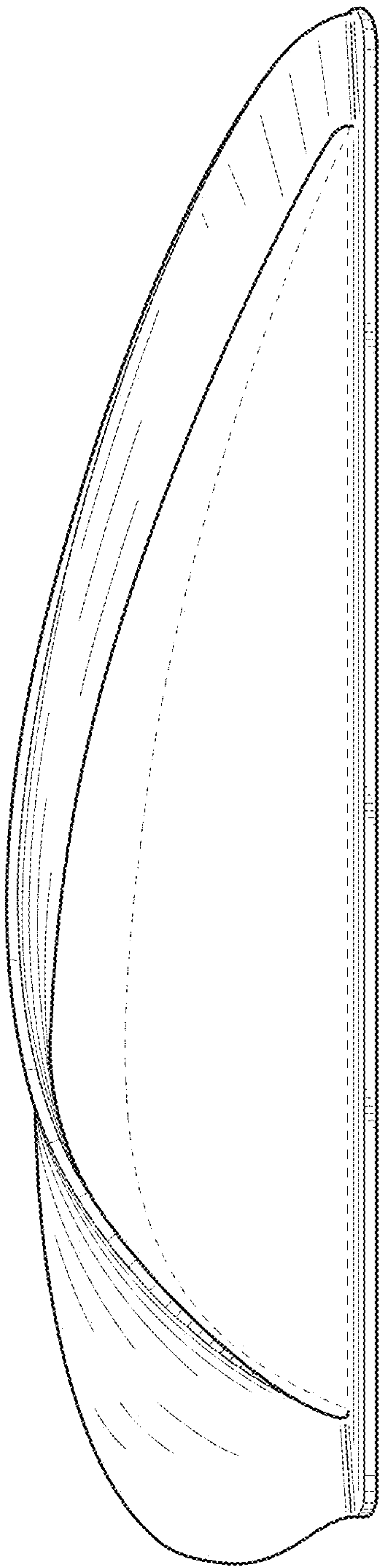


Fig. 10

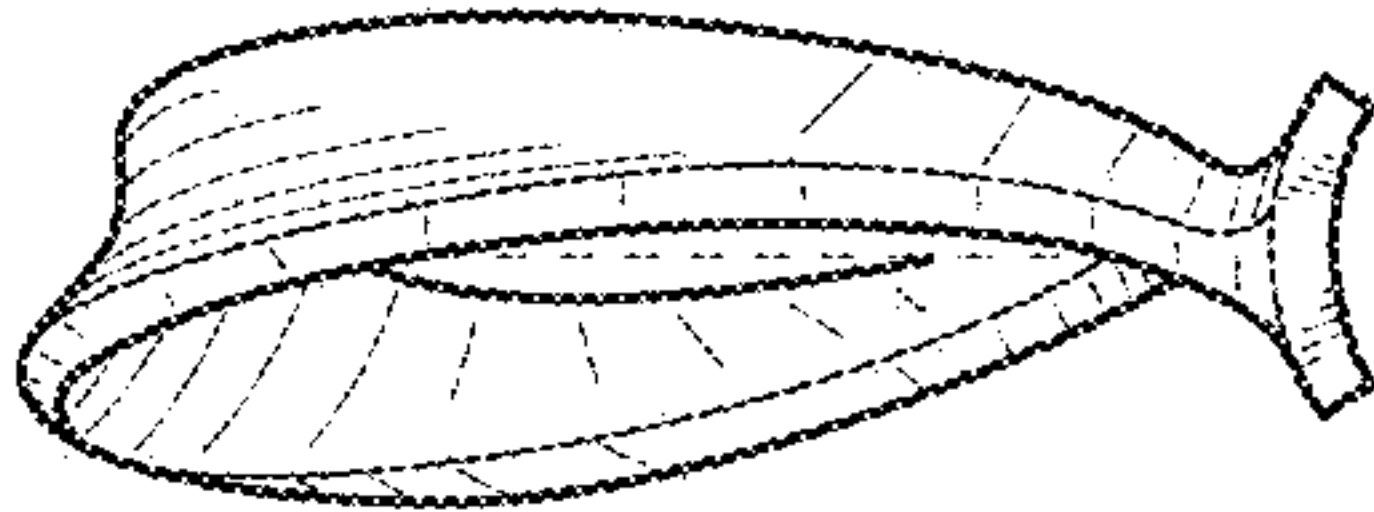


Fig. 11

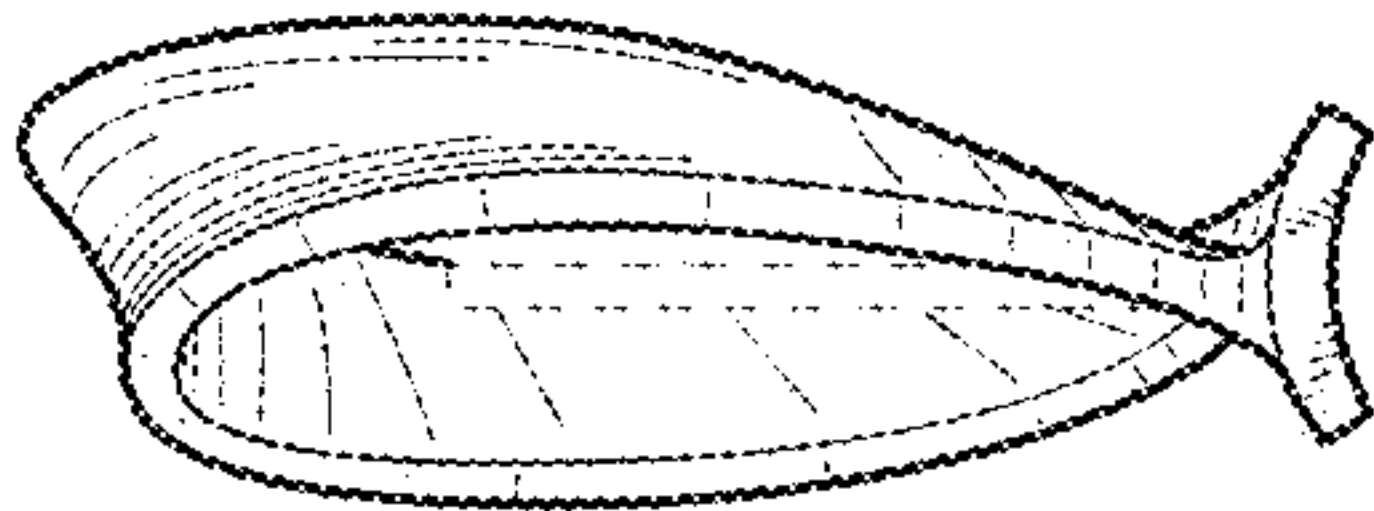


Fig. 12

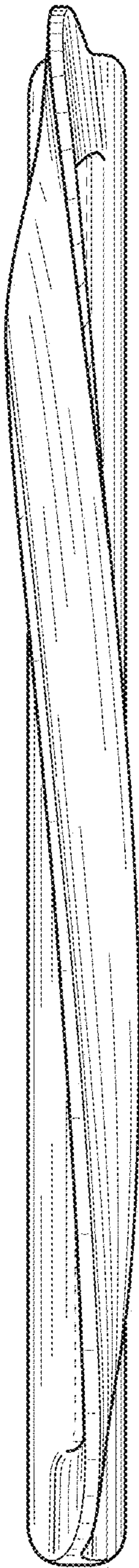


Fig. 13

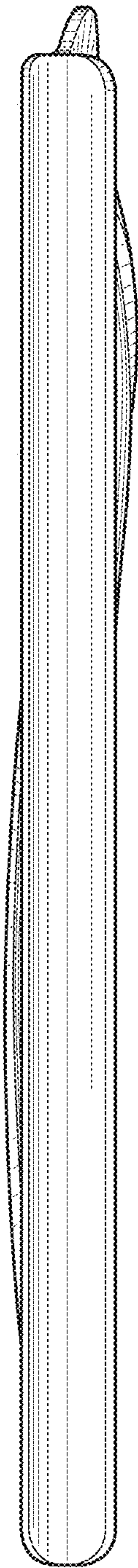


Fig. 14