



US00D886081S

(12) **United States Design Patent** (10) **Patent No.:** **US D886,081 S**
Goins (45) **Date of Patent:** **** Jun. 2, 2020**

(54) **SOUND REFLECTOR**
(71) Applicant: **Matthew Goins**, Knoxville, TN (US)
(72) Inventor: **Matthew Goins**, Knoxville, TN (US)
(**) Term: **15 Years**

3,881,056 A 4/1975 Gibson et al.
4,037,052 A 7/1977 Doi
D293,903 S * 1/1988 Kolenda D12/187
5,744,218 A * 4/1998 Barnes B32B 27/00
428/192
D421,340 S * 3/2000 Whitaker D4/199
6,408,080 B1 6/2002 Koizumi
D512,787 S * 12/2005 Lonneman D25/138

(21) Appl. No.: **29/667,774**

(22) Filed: **Oct. 24, 2018**

(51) **LOC (12) Cl.** **14-01**

(52) **U.S. Cl.**
USPC **D14/217**

(58) **Field of Classification Search**
USPC D14/217, 225-229, 248, 356, 358, 383,
D14/384, 385, 386, 433, 434, 439, 496,
D14/204, 207-216; D17/22, 99;
D24/215; D25/18, 21, 48.8, 58, 138
CPC G10K 11/002; G10K 11/02; G10K 11/16;
G10K 11/162; G10K 11/18; G10K 11/20;
H04R 1/34; H04R 1/342; H04R 3/00
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,299,616 A 4/1919 Rieber
1,624,873 A * 4/1927 Landis G10K 11/28
116/137 R
D74,615 S 3/1928 Lyons
1,732,722 A 10/1929 Horn
1,755,931 A 4/1930 Mueller
1,899,966 A * 3/1933 Jensen H04R 1/342
381/160
2,017,122 A 10/1935 Hanson
2,049,586 A 8/1936 Hanson et al.
2,228,024 A 1/1941 Abrahams
3,053,339 A 9/1962 Kishi et al.
3,305,043 A 2/1967 Pfund et al.
3,483,940 A 12/1969 Weisenthal
D222,269 S 10/1971 Gibson
3,723,962 A 3/1973 Hotchner

OTHER PUBLICATIONS

“How Effective Are Portable Vocal Booths?,” portable acoustic screens pictured therein, online, no post date, URL: <https://www.soundonsound.com/reviews/how-effective-are-portable-vocal-booths>, retrieved Jan. 15, 2020.*

(Continued)

Primary Examiner — Jeffrey D Asch
Assistant Examiner — Rebekah A Caruso
(74) *Attorney, Agent, or Firm* — Pitts & Lake, P.C.

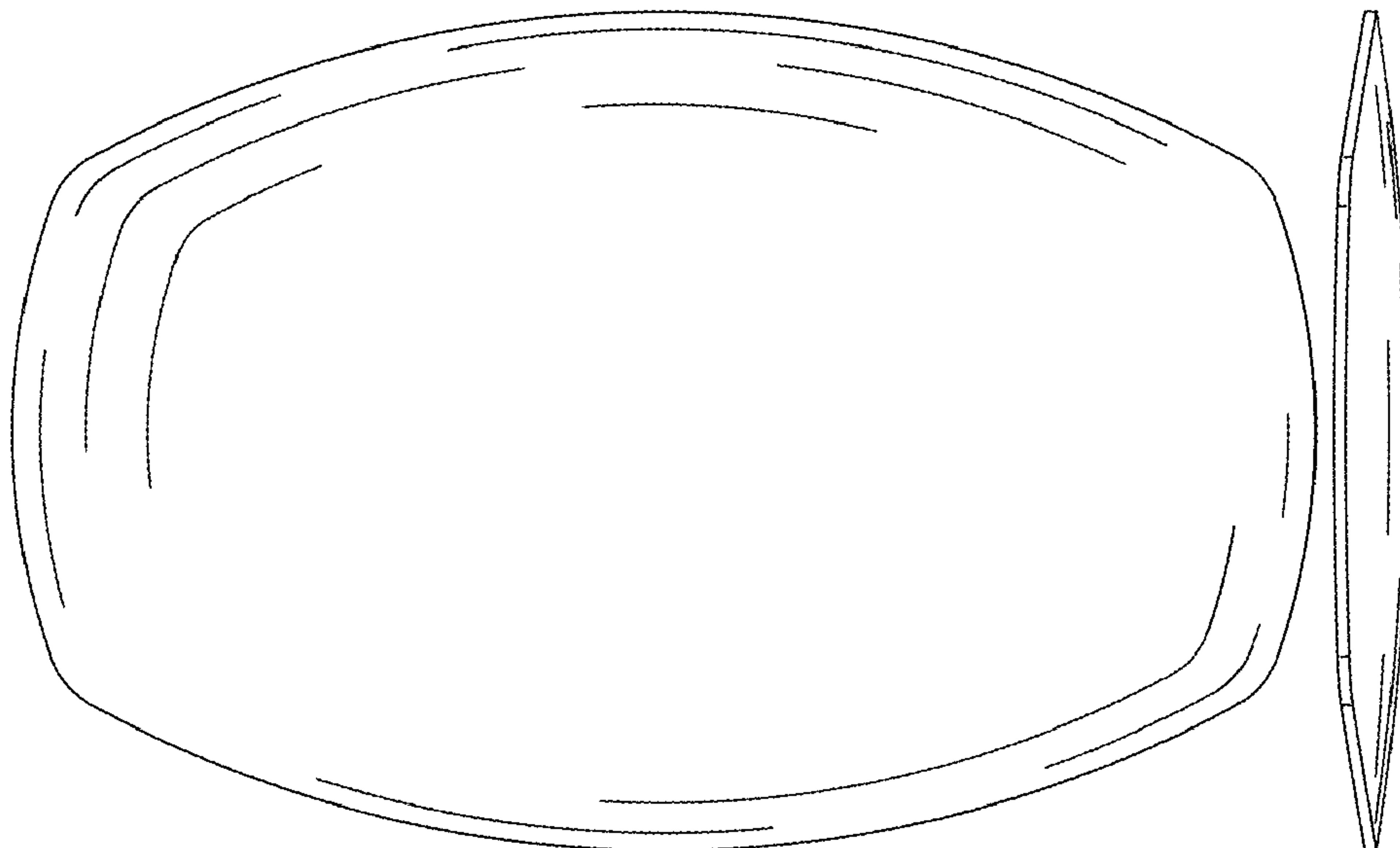
(57) **CLAIM**

I claim the ornamental design for a sound reflector, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a design of the present invention for a sound reflector;
FIG. 2 is a front view the sound reflector of FIG. 1;
FIG. 3 is a rear view of the sound reflector of FIG. 1;
FIG. 4 is a right-side elevation view of the sound reflector of FIG. 1, the opposite left-side elevation view being a mirror-image of this figure; and,
FIG. 5 is a top view of the sound reflector of FIG. 1, the opposite bottom view being an inverted image of this figure. In FIG. 1, features of a stand for the sound reflector are shown in broken lines. These features are for illustrative purposes only and form no part of the claimed design.

1 Claim, 3 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D582,053 S * 12/2008 Williams D25/58
 D609,844 S * 2/2010 Ngai D26/88
 8,003,878 B2 8/2011 Gaynier
 D646,320 S * 10/2011 Perks D17/99
 D650,006 S * 12/2011 Perks D17/99
 D651,325 S * 12/2011 Martin D25/138
 8,091,605 B1 * 1/2012 Melhart G10K 11/20
 160/135
 D712,056 S * 8/2014 Deramo D24/215
 D715,446 S * 10/2014 Lee D24/167
 D716,958 S * 11/2014 Thomas D24/200
 D717,365 S * 11/2014 Kuijt D17/13
 D721,181 S * 1/2015 Schiebl D24/189
 D724,746 S * 3/2015 Ruel D24/190
 9,014,402 B2 4/2015 Terpstra et al.
 D764,430 S * 8/2016 Sovertkov D14/138 G
 D795,854 S * 8/2017 Kim D14/248
 D796,069 S * 8/2017 Van Dore D25/138
 D796,699 S * 9/2017 Van Dore D25/138
 D797,318 S * 9/2017 Van Dore D25/138
 9,986,333 B1 * 5/2018 Sun H04R 1/08
 10,359,989 B2 * 7/2019 Armstrong H04R 1/342
 D856,311 S * 8/2019 Vu D14/224
 D866,524 S * 11/2019 McElveen H04R 1/406
 D14/217

2006/0032698 A1 2/2006 Reck
 2008/0302599 A1 * 12/2008 Zou G10K 11/168
 181/290
 2014/0131135 A1 * 5/2014 Hinson G10K 11/16
 181/284
 2014/0224570 A1 * 8/2014 Dupuy E04B 1/99
 181/175
 2018/0295441 A1 * 10/2018 D'Penha H04R 1/2861
 2018/0363558 A1 * 12/2018 Weaver F02C 7/045

OTHER PUBLICATIONS

Sydney Opera House Concert Hall acoustics to be upgraded in \$200 million renewal project, sound reflectors pictured therein, online, post date Nov. 11, 2016, URL: <https://www.abc.net.au/news/2016-11-11/sydney-opera-house-concert-hall-upgrade-will-improve-acoustics/8017594>, retrieved Jan. 15, 2020.*
 Andermatt Concert Hall, acoustic reflectors pictured therein, online, post date 2019, URL: <https://www.architonic.com/de/project/studio-seilern-architects-ander-matt-concert-hall/20049985>, retrieved Jan. 15, 2020.*
 "Ana Mernik Assignment 5: Acoustics Research," acoustic reflectors pictured therein, online, post date Mar. 23, 2014, URL: <http://ug2fab2.blogspot.com/2014/03/ana-mernik-assignment-5-acoustics.html>, retrieved Jan. 15, 2020.*

* cited by examiner

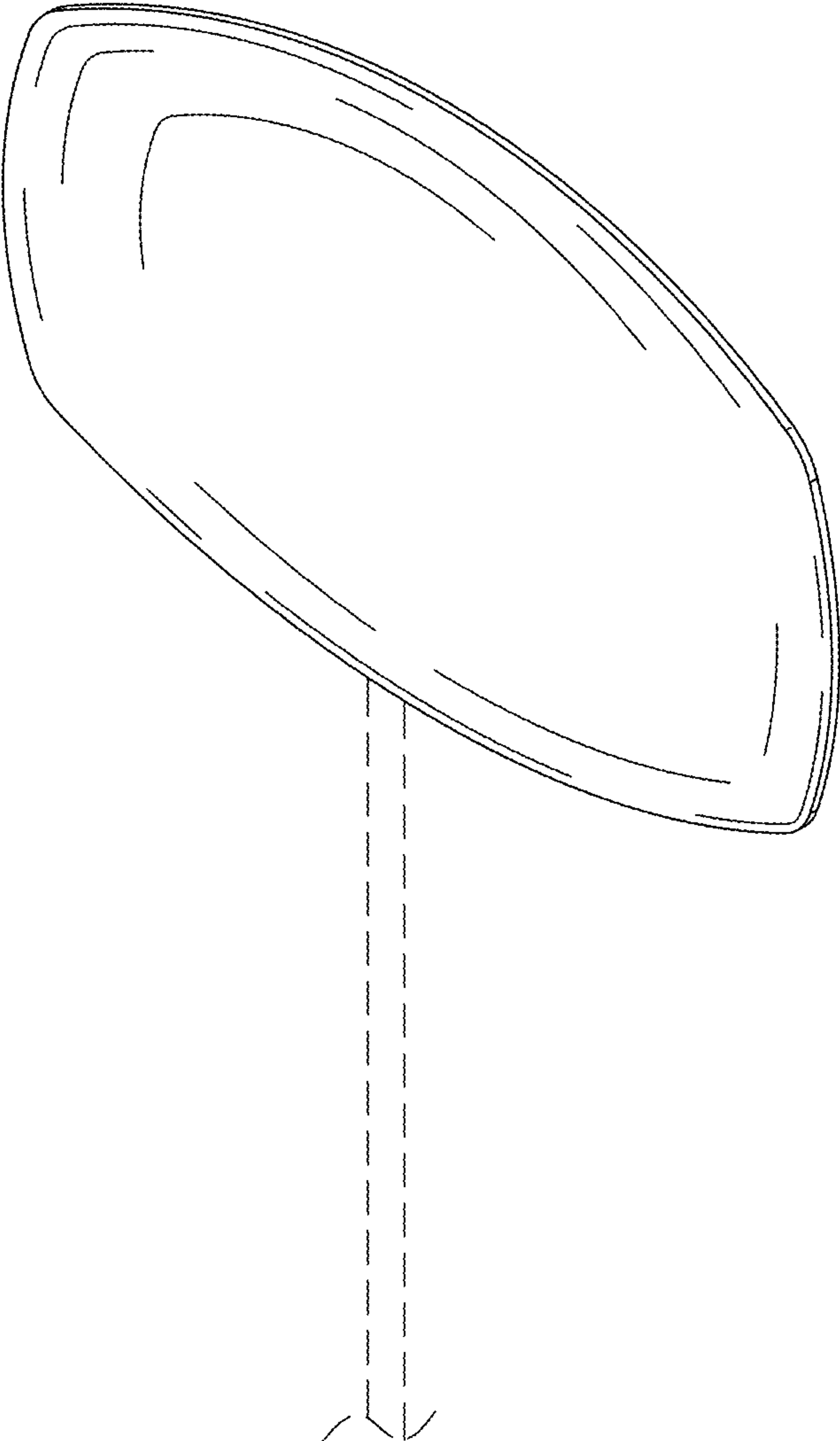


Fig. 1

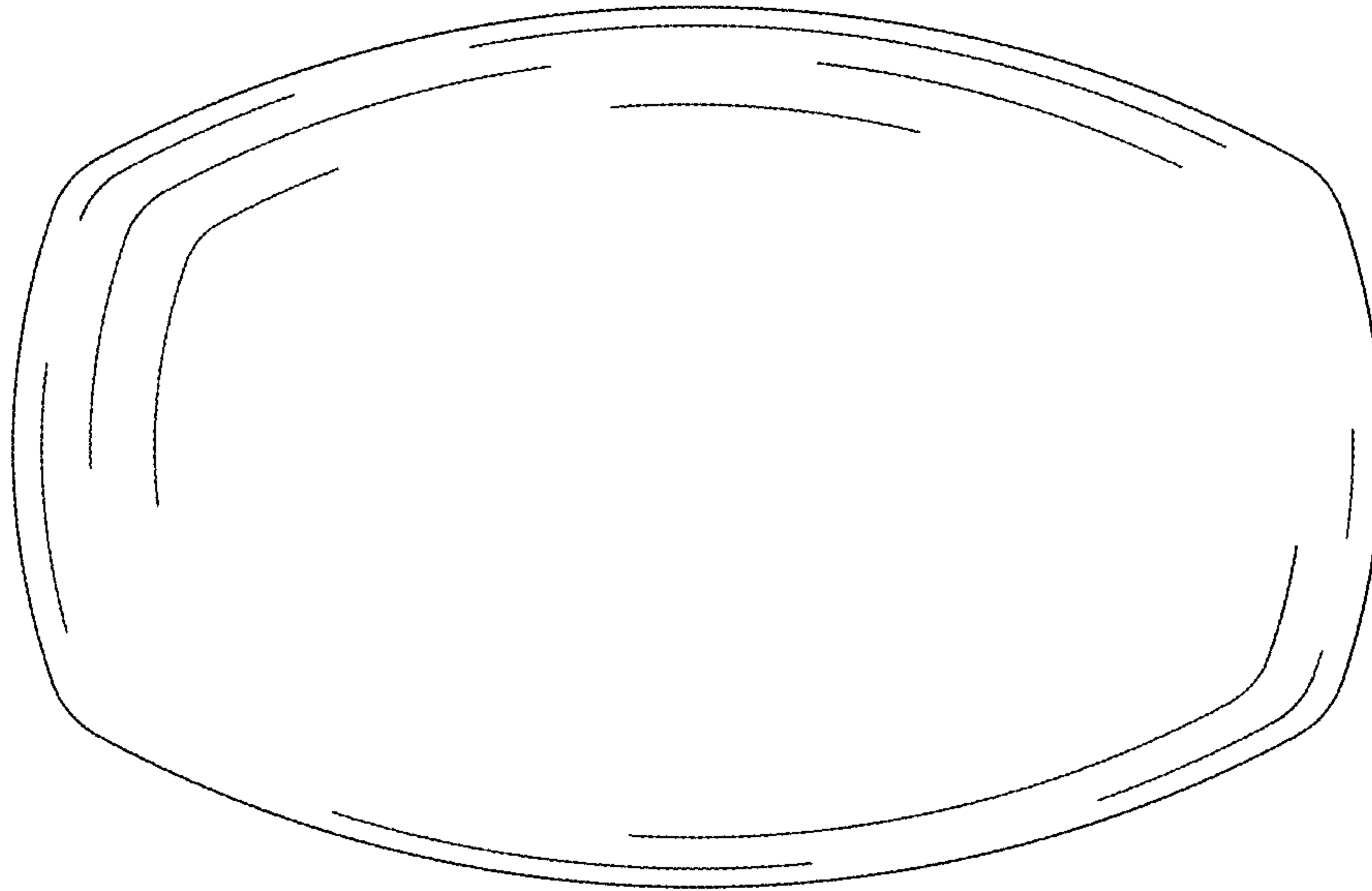


Fig. 2

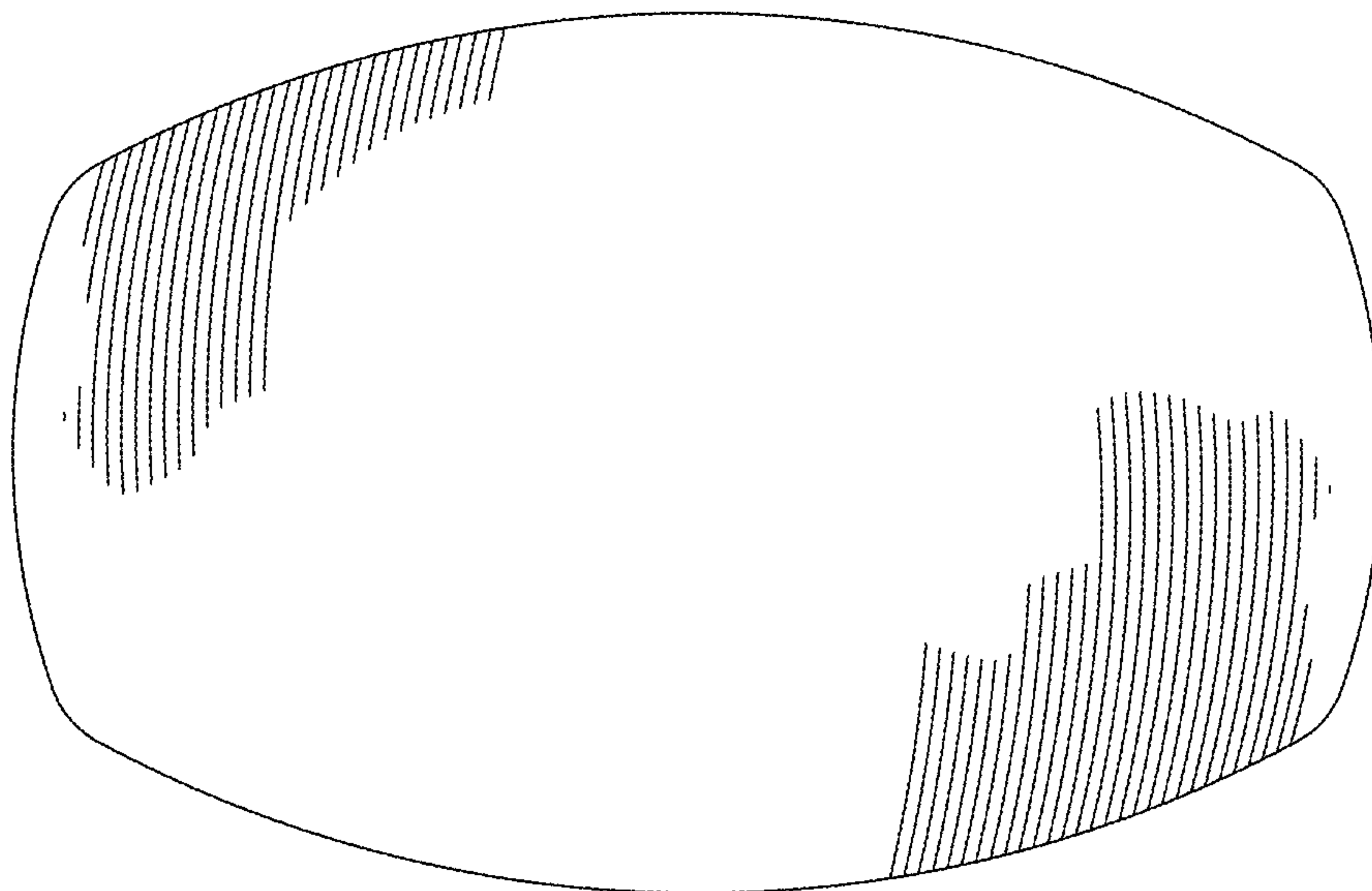


Fig. 3



Fig.4

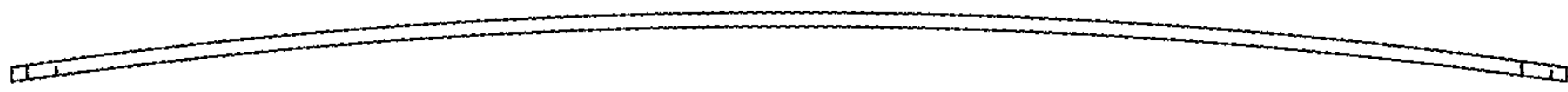


Fig.5