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(12) **United States Design Patent** (10) **Patent No.:** **US D978,057 S**
Bochud et al. (45) **Date of Patent:** **** Feb. 14, 2023**

(54) **AIRCRAFT WINGLET**
(71) Applicant: **BOMBARDIER INC.**, Dorval (CA)
(72) Inventors: **Pascal Bochud**, Saint-Laurent (CA);
David Leblond, Montreal (CA);
François Pepin, Beaconsfield (CA)
(73) Assignee: **BOMBARDIER INC.**, Dorval (CA)
(**) Term: **15 Years**
(21) Appl. No.: **29/763,633**
(22) Filed: **Dec. 23, 2020**
(51) **LOC (14) Cl.** **12-07**
(52) **U.S. Cl.**
USPC **D12/345**
(58) **Field of Classification Search**
USPC D12/1, 2, 3, 4, 16.1, 174, 319-345;
D21/436-455
CPC B64C 29/0033; B64C 2201/021; B64C
29/02; B64C 2201/088; B64C 2201/104;
B64C 2201/141
See application file for complete search history.

9,302,766 B2 4/2016 Gratzer
9,908,612 B2 3/2018 Fox
9,988,142 B2 6/2018 Heller
10,287,002 B2 5/2019 Guida
10,336,440 B2 7/2019 Williams
10,501,170 B2 12/2019 Lynas et al.
10,538,307 B2 1/2020 Dees et al.
10,625,847 B2 4/2020 Dhandhanania
D921,564 S * 6/2021 Wolz D12/343
D924,119 S * 7/2021 Roman B64C 3/58
D12/345
D930,549 S * 9/2021 Bochud D12/345
2009/0039204 A1 2/2009 Eberhardt
2009/0084904 A1 4/2009 Detert
(Continued)

FOREIGN PATENT DOCUMENTS

WO 2012007358 A1 1/2012
WO 2020146399 A1 1/2020

Primary Examiner — John A Voytek
(74) *Attorney, Agent, or Firm* — Norton Rose Fulbright
Canada LLP

(57) **CLAIM**

We claim the ornamental design for an aircraft winglet, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of an aircraft illustrating an aircraft winglet according to our new design in use; FIG. 2 is a perspective view of the aircraft winglet; 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 broken lines illustrate environmental structure and form no part of the claimed design.

1 Claim, 8 Drawing Sheets

(56) **References Cited**
U.S. PATENT DOCUMENTS
4,674,709 A 6/1987 Welles
4,722,499 A 2/1988 Klug
5,275,358 A 1/1994 Goldhammer et al.
5,992,793 A * 11/1999 Perry B64C 27/463
244/17.11
6,578,798 B1 * 6/2003 Dizdarevic B64C 23/069
244/35 R
D494,127 S * 8/2004 Eatkins D12/319
7,900,876 B2 3/2011 Eberhardt
7,988,099 B2 8/2011 Bray
8,366,056 B2 2/2013 Garang
8,936,219 B2 * 1/2015 Roman B64C 3/58
244/45 R
8,944,386 B2 2/2015 Gratzer



(56)

References Cited

U.S. PATENT DOCUMENTS

2011/0024573	A1	2/2011	Kirk et al.	
2012/0312928	A1	12/2012	Gratzer et al.	
2013/0092797	A1	4/2013	Wright et al.	
2013/0139421	A1	6/2013	Edmond et al.	
2013/0256460	A1	10/2013	Roman et al.	
2015/0003994	A1*	1/2015	Braaten	F03D 1/0633 29/889.71
2015/0041597	A1	2/2015	Theurich et al.	
2015/0146443	A1*	5/2015	Gagnon	B64D 47/04 362/470
2015/0203190	A1	7/2015	Witte	
2016/0009379	A1	1/2016	Witte et al.	
2020/0269971	A1*	8/2020	Xi	B64C 23/072
2021/0197961	A1*	7/2021	Bochud	B64C 23/069

* cited by examiner

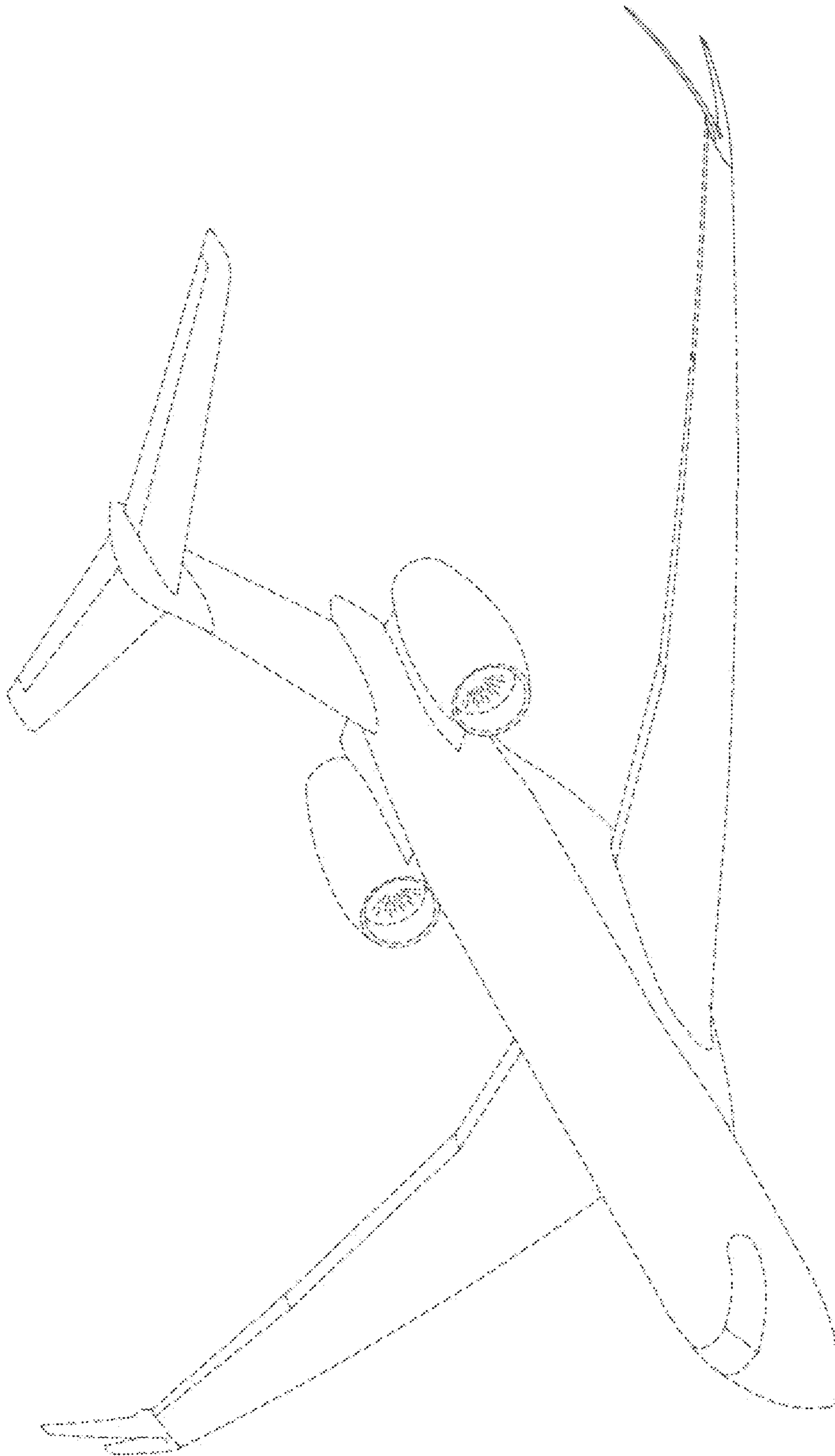


FIG. 1



FIG. 2

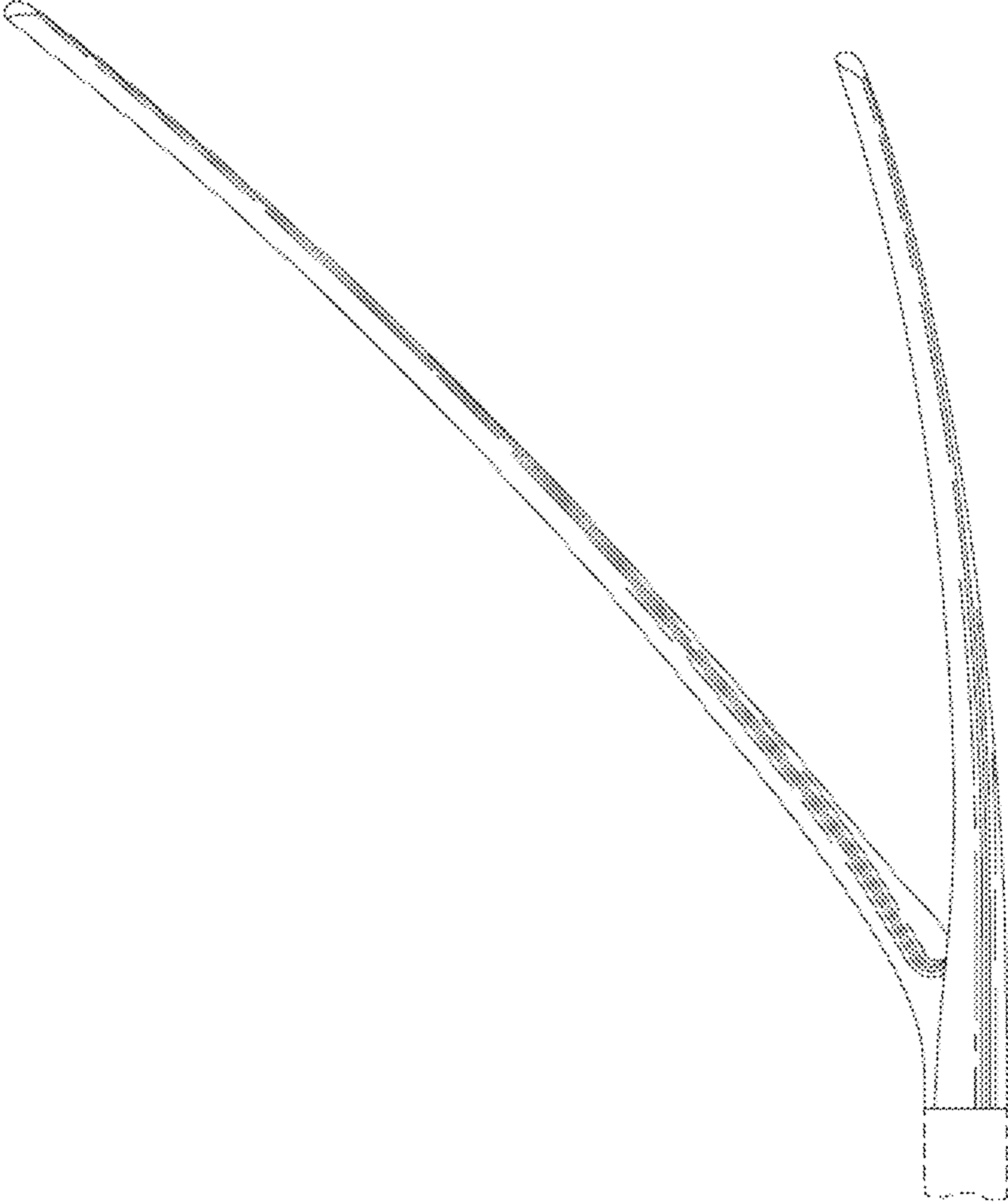


FIG. 3



FIG. 4

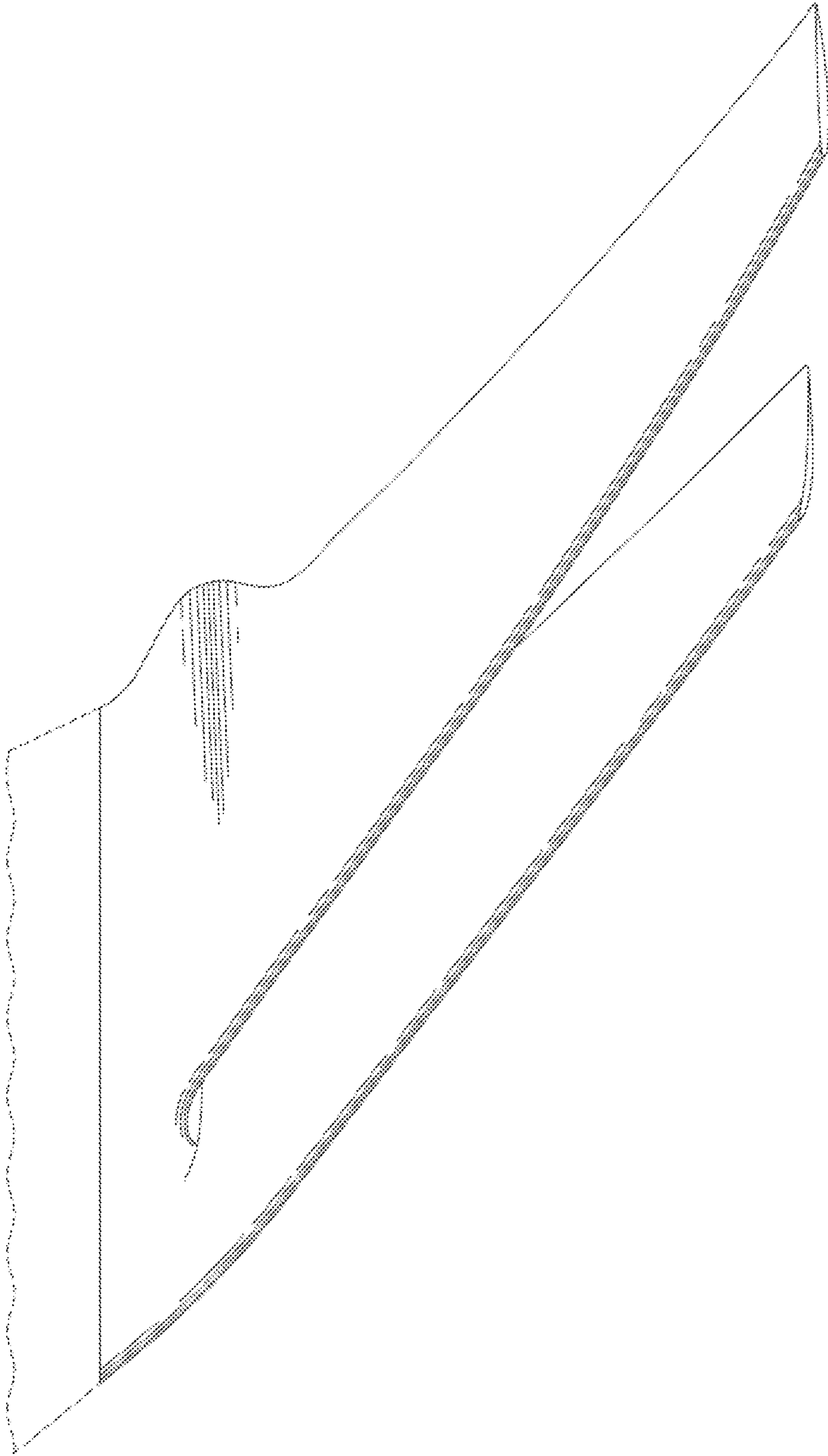


FIG. 5

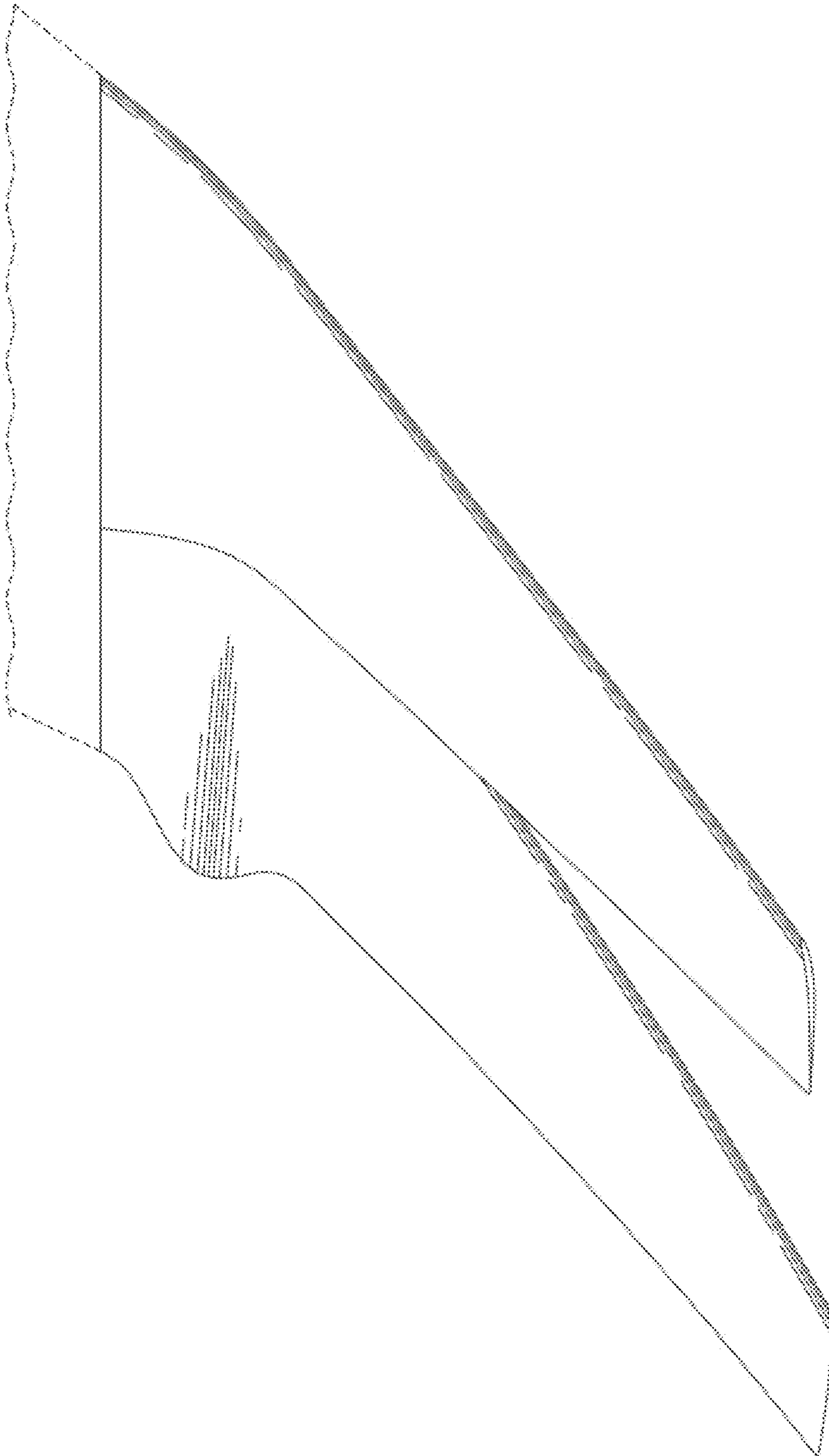


FIG. 6

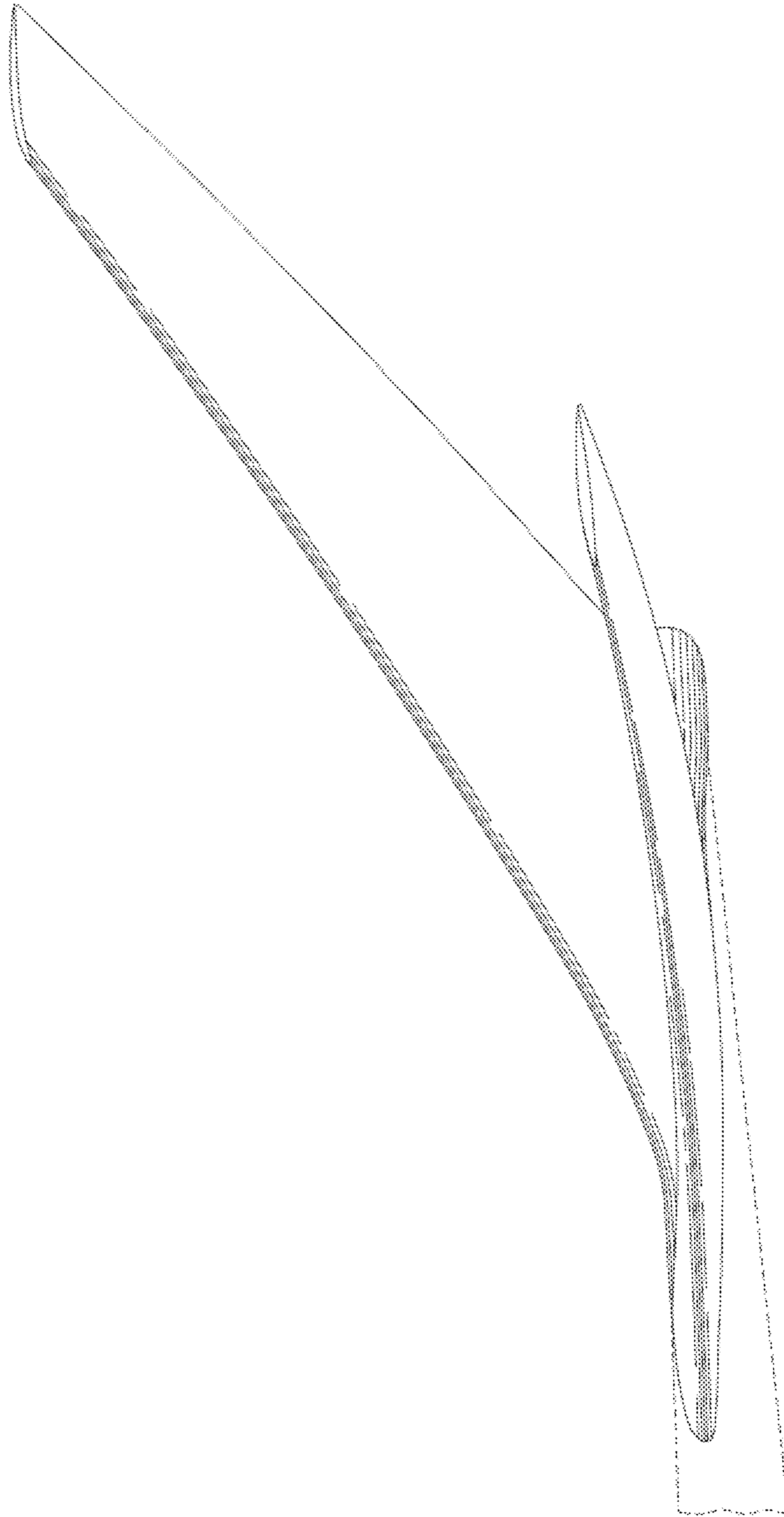


FIG. 7

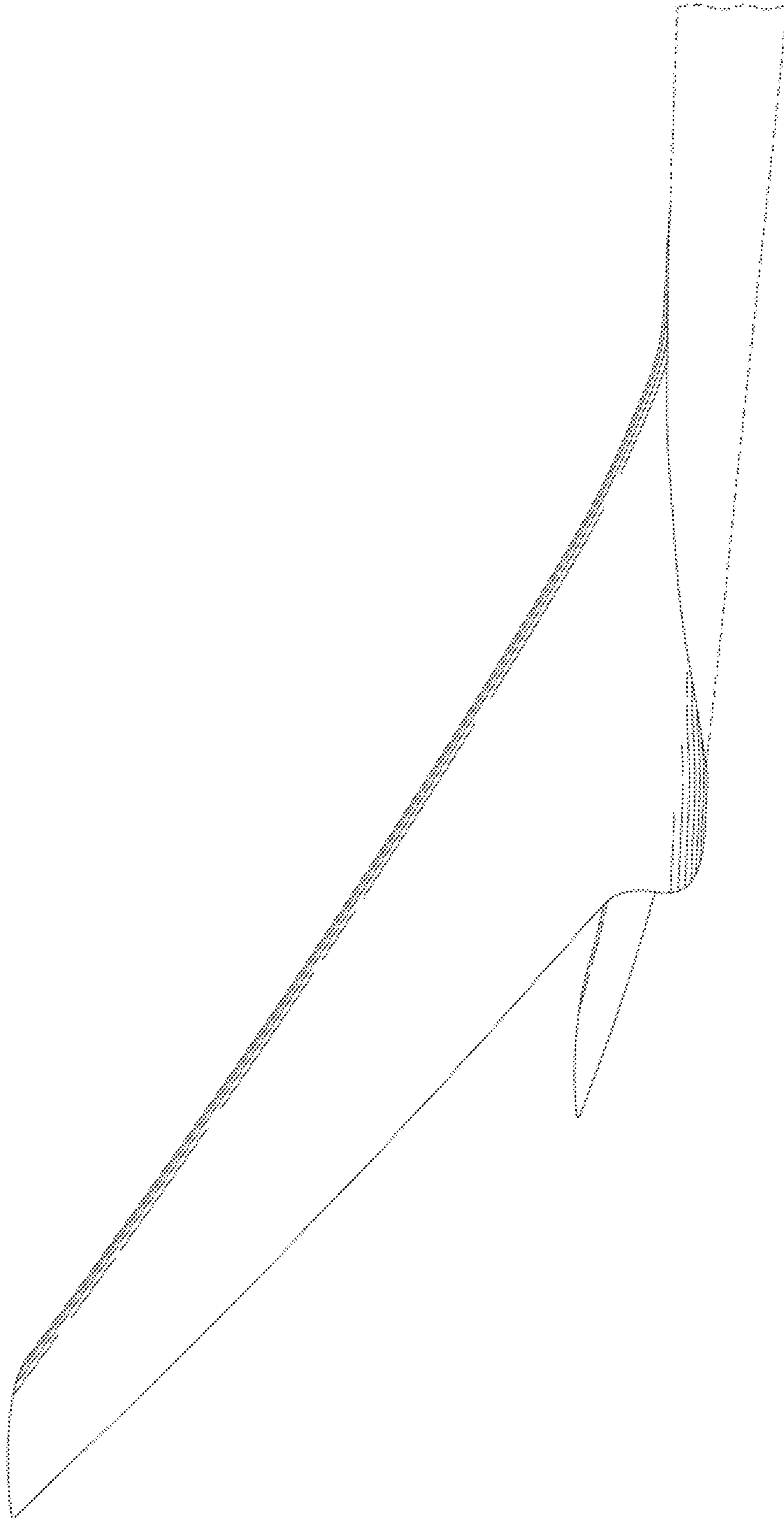


FIG. 8

UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION

PATENT NO. : D978,057 S
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INVENTOR(S) : Pascal Bochud et al.

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It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

On the Title Page

After (72) Inventors: Pascal Bochud, Saint-Laurent (CA); David LeBlond, Montreal (CA); François
Pepin, Beaconsfield (CA), insert Item (73):
-- (73) Assignee: BOMBARDIER INC., Dorval (CA) --

Signed and Sealed this
First Day of October, 2024
Katherine Kelly Vidal

Katherine Kelly Vidal
Director of the United States Patent and Trademark Office