



US00D818409S

(12) **United States Design Patent** (10) **Patent No.:** **US D818,409 S**
Woodhouse et al. (45) **Date of Patent:** **** May 22, 2018**

(54) **VEHICLE PIANO KEY SHIFTER**
(71) Applicant: **Ford Global Technologies, LLC**,
Dearborn, MI (US)
(72) Inventors: **David Woodhouse**, Troy, MI (US); **Soo Young Kang-Morales**, Northville, MI (US); **Ryan G. Niemiec**, Northville, MI (US); **Ryan Blodi**, Farmington Hills, MI (US)

9,219,472 B2 12/2015 Buttolo et al.
D764,990 S * 8/2016 Sethapun D12/192
D811,969 S * 3/2018 Sethapun D12/192
2011/0219901 A1 9/2011 Giefer et al.
2012/0133501 A1 5/2012 Walter et al.
2013/0270896 A1 10/2013 Buttolo et al.
2013/0270899 A1 10/2013 Buttolo et al.
2013/0328616 A1 12/2013 Buttolo et al.
2015/0308566 A1 10/2015 Bialas et al.

(Continued)

FOREIGN PATENT DOCUMENTS

(73) Assignee: **Ford Global Technologies, LLC**,
Dearborn, MI (US)

WO 2011137267 A1 11/2011

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

OTHER PUBLICATIONS

(21) Appl. No.: **29/601,547**

“Touch Sensors Design Guide” by Atmel, 10620 D-AT42-04/09, Revised Apr. 2009, 72 pages, Copyrighted 2008-2009 Atmel Corporation.

(22) Filed: **Apr. 24, 2017**

(Continued)

(51) **LOC (11) Cl.** **12-16**

(52) **U.S. Cl.**
USPC **D12/192**

(58) **Field of Classification Search**
USPC D12/192, 415, 418, 419, 110, 114, 345;
D15/17, 28; D10/46, 98, 102-103,
D10/122-127
CPC G08G 1/096883; G01C 21/16; G01C
21/3688; G01C 21/30

See application file for complete search history.

Primary Examiner — Katrina A Betton
(74) *Attorney, Agent, or Firm* — Vichit Chea; Price Heneveld LLP

(57) **CLAIM**

The ornamental design for a vehicle piano key shifter, as shown and described.

DESCRIPTION

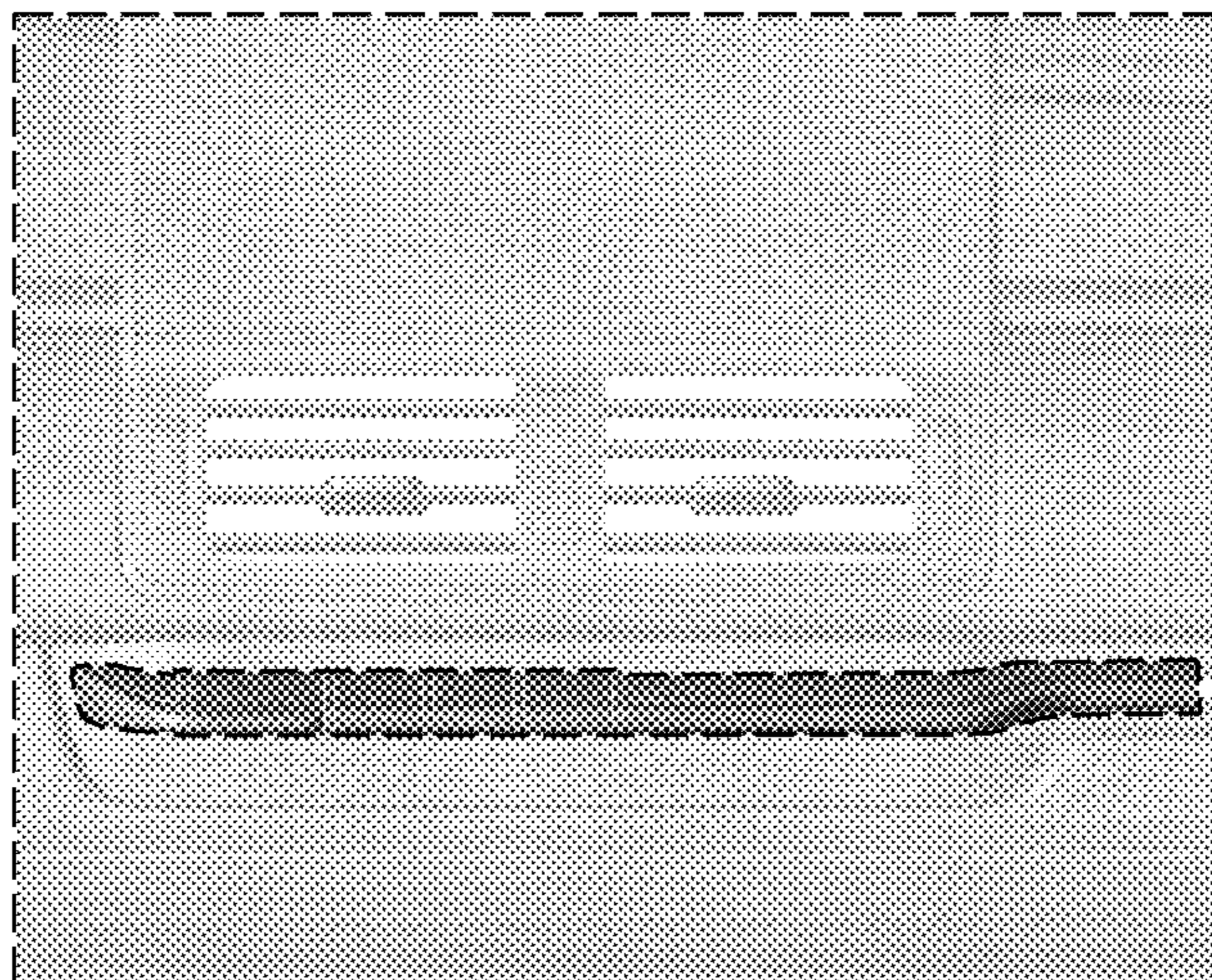
(56) **References Cited**

U.S. PATENT DOCUMENTS

D371,123 S * 6/1996 Amundsen D10/108
D552,040 S * 10/2007 Girard D13/162
D585,013 S * 1/2009 Schmid D12/317
D593,025 S * 5/2009 Schmid D12/317
D658,592 S * 5/2012 Kim D13/162
8,413,536 B2 4/2013 Giefer et al.
D705,146 S * 5/2014 Takagi D12/192
8,933,708 B2 1/2015 Buttolo et al.
D721,995 S * 2/2015 Johansson D12/192
8,975,903 B2 3/2015 Salter et al.

FIG. 1 is a top front perspective view of a vehicle piano key shifter;
FIG. 2 is a top front perspective view thereof;
FIG. 3 is a front elevational view thereof;
FIG. 4 is a rear elevational view thereof;
FIG. 5 is a left side elevational view thereof;
FIG. 6 is a right side elevational view thereof;
FIG. 7 is a top view thereof; and,
FIG. 8 is a bottom view thereof.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

2017/0274765 A1* 9/2017 Woodhouse B60K 20/08

OTHER PUBLICATIONS

2015 MKZ Interior, www.lincoln.com, 2 pages, Nov. 7, 2016.
2015 Toyota Prius Brochure, 21 pages, 2015.
"Teletouch," <https://en.wikipedia.org/wiki/Teletouch>, 4 pages,
dated Nov. 20, 2015.
Lincoln MKC 2016 brochure, 6 pages, 2016.
2015 Acura TLX SH-AWD Long-Term Road Test, www.edmunds.com, 5 pages, 2015.

* cited by examiner

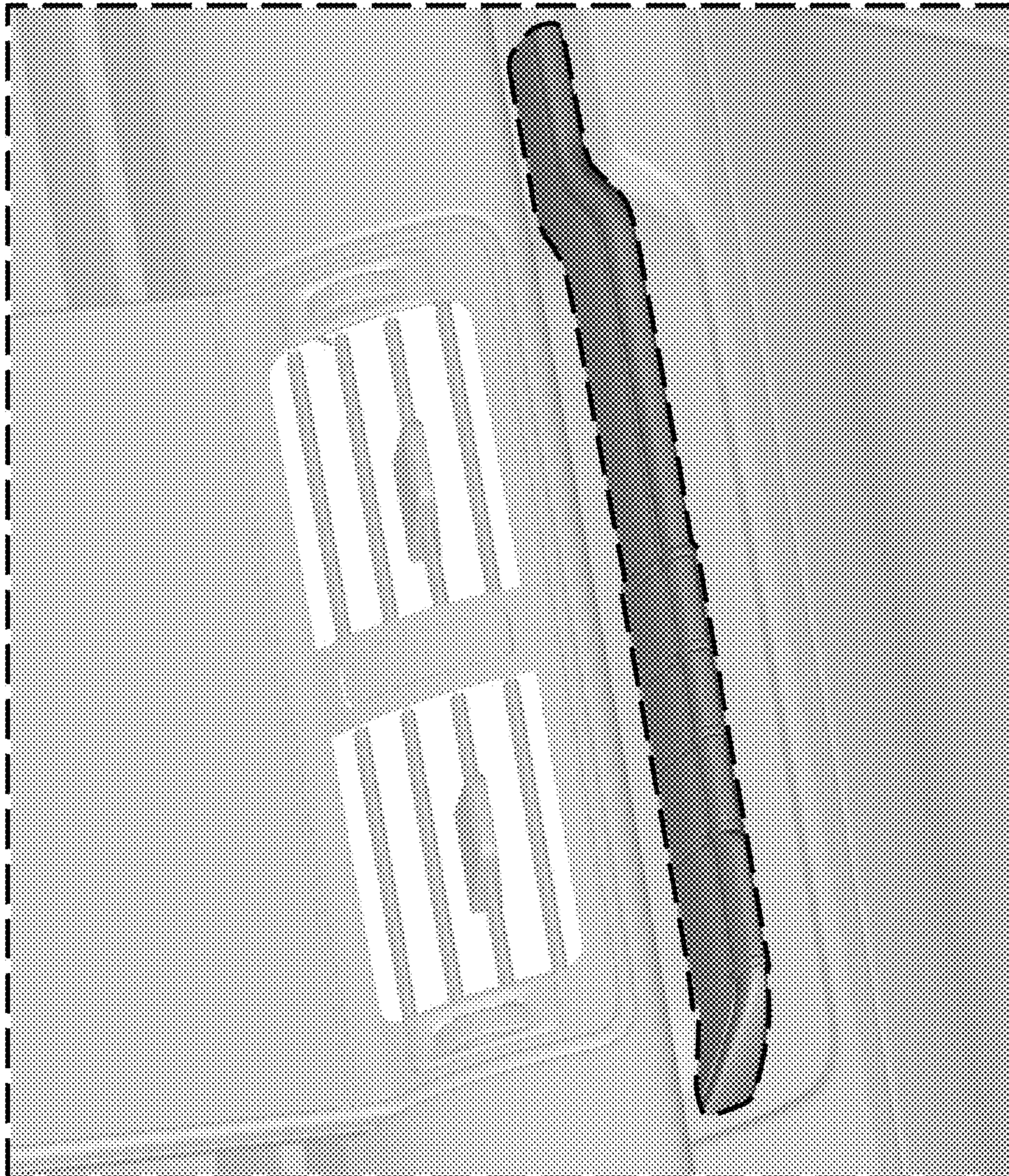


Figure 1

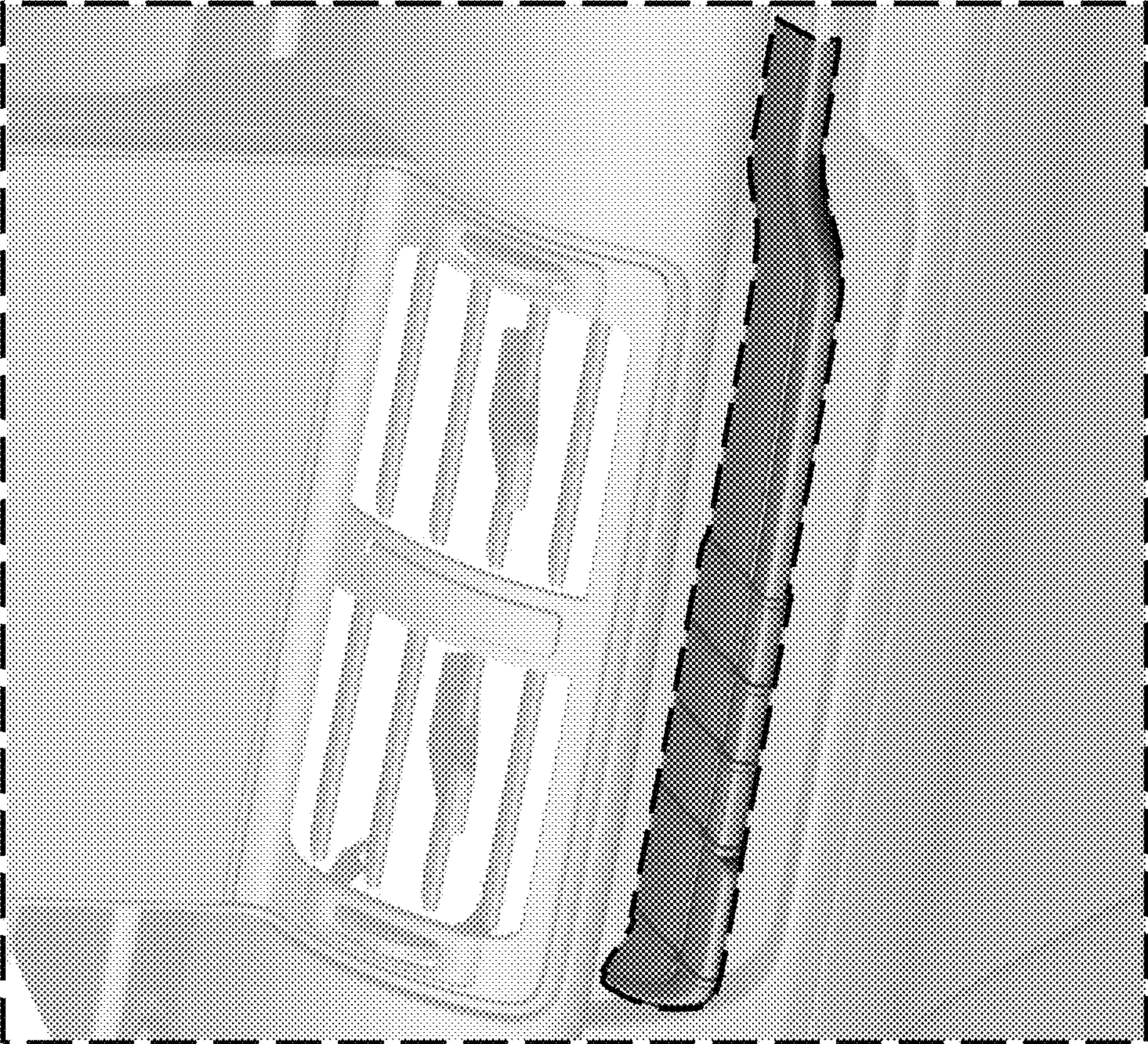


Figure 2

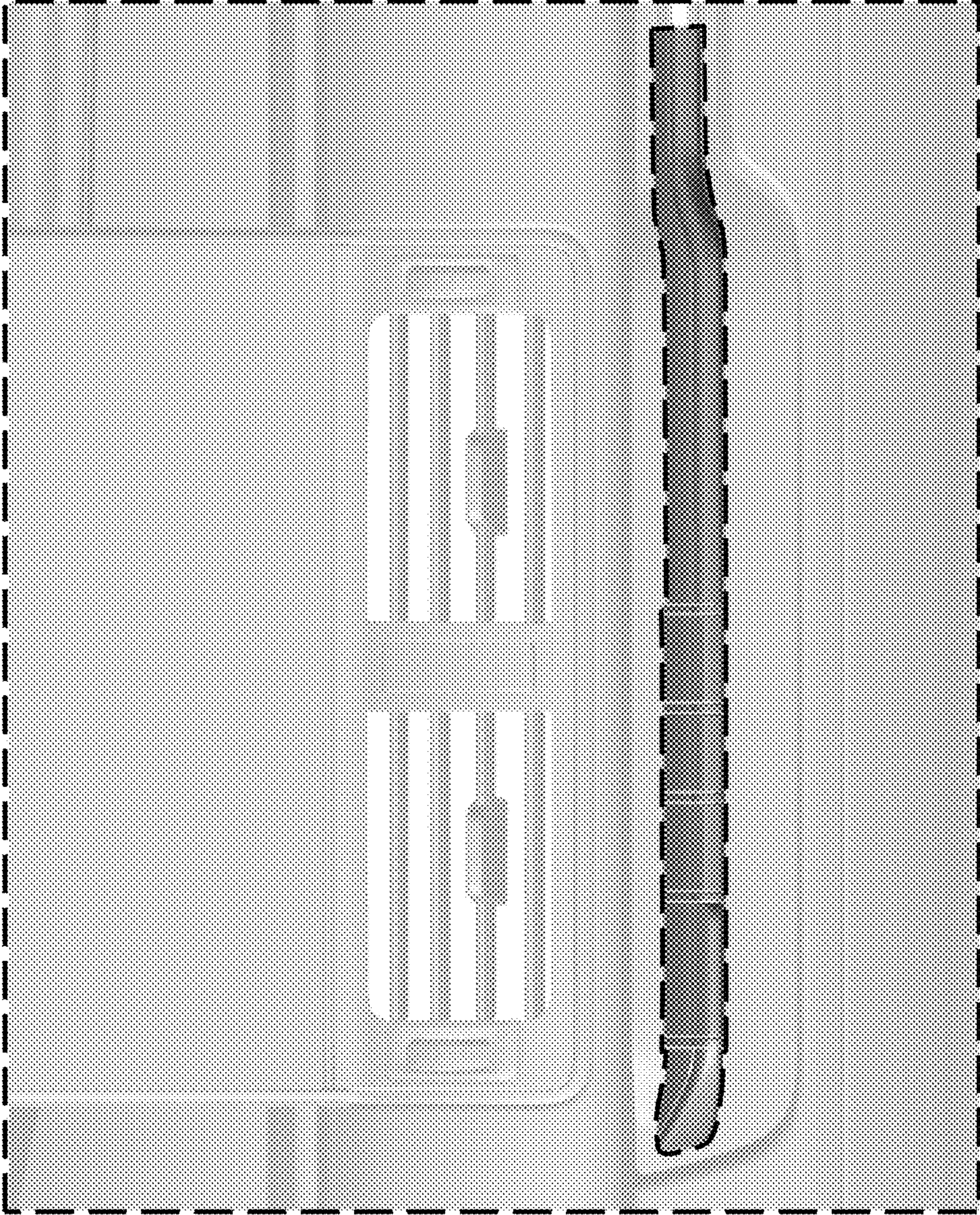


Figure 3

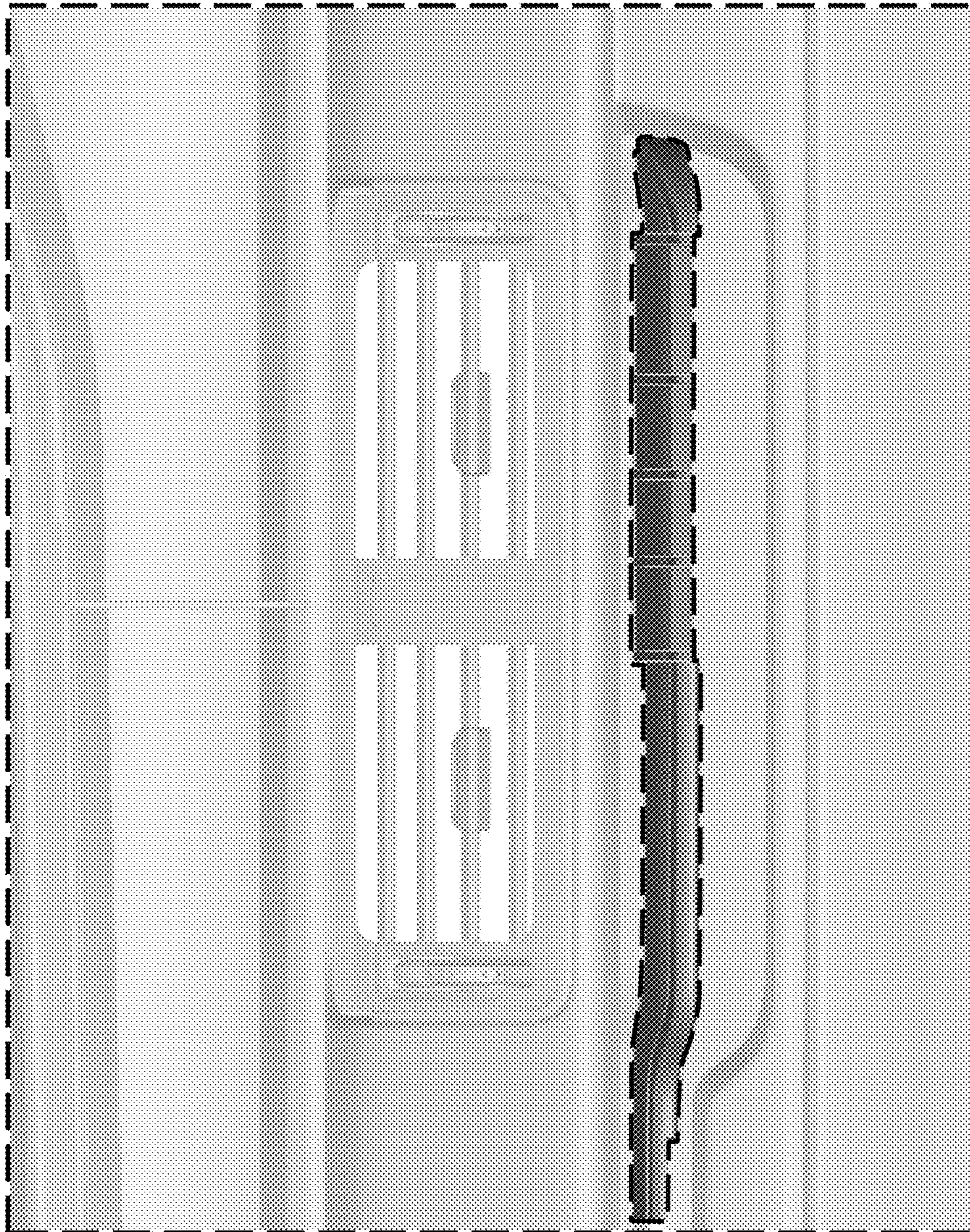


Figure 4

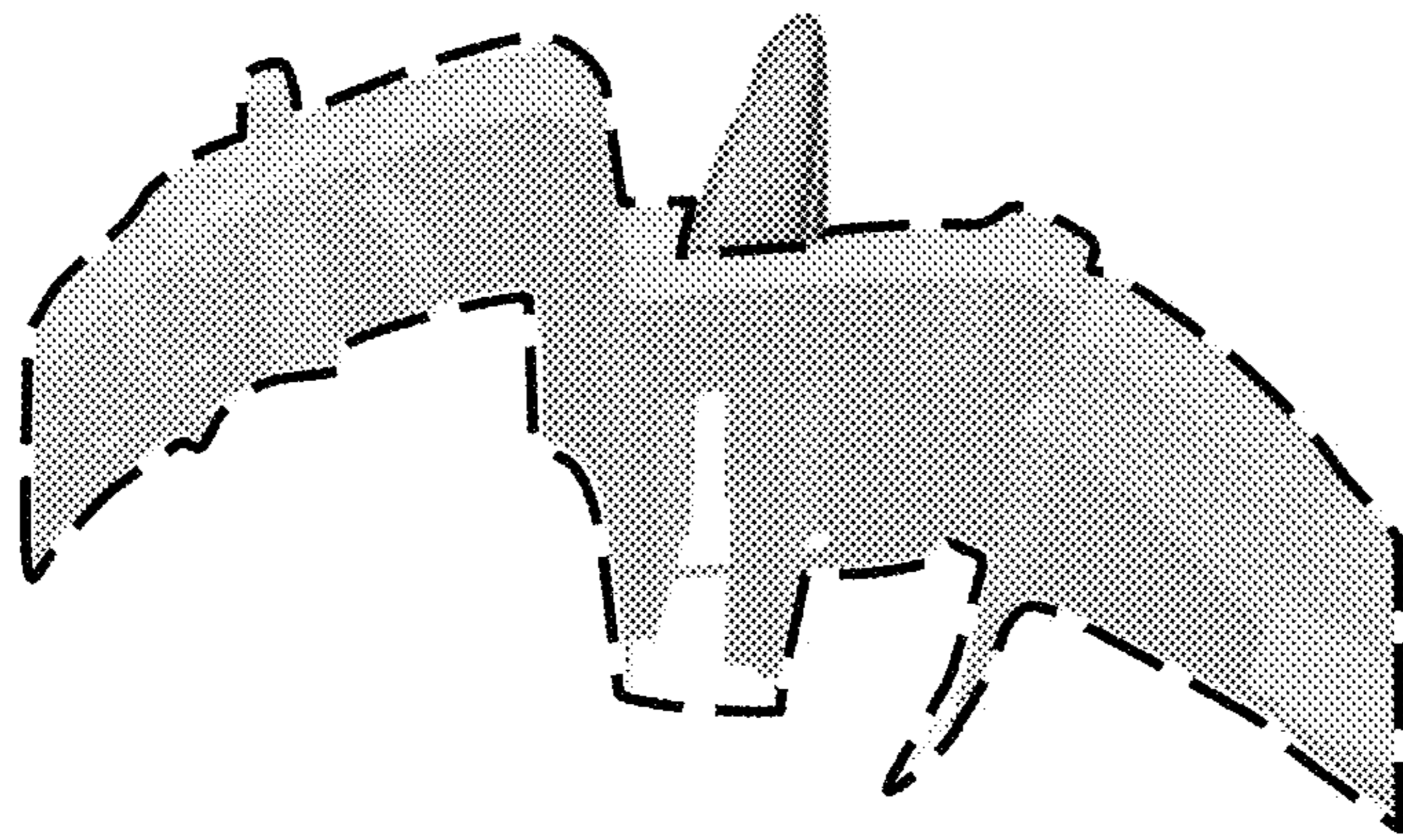


Figure 5

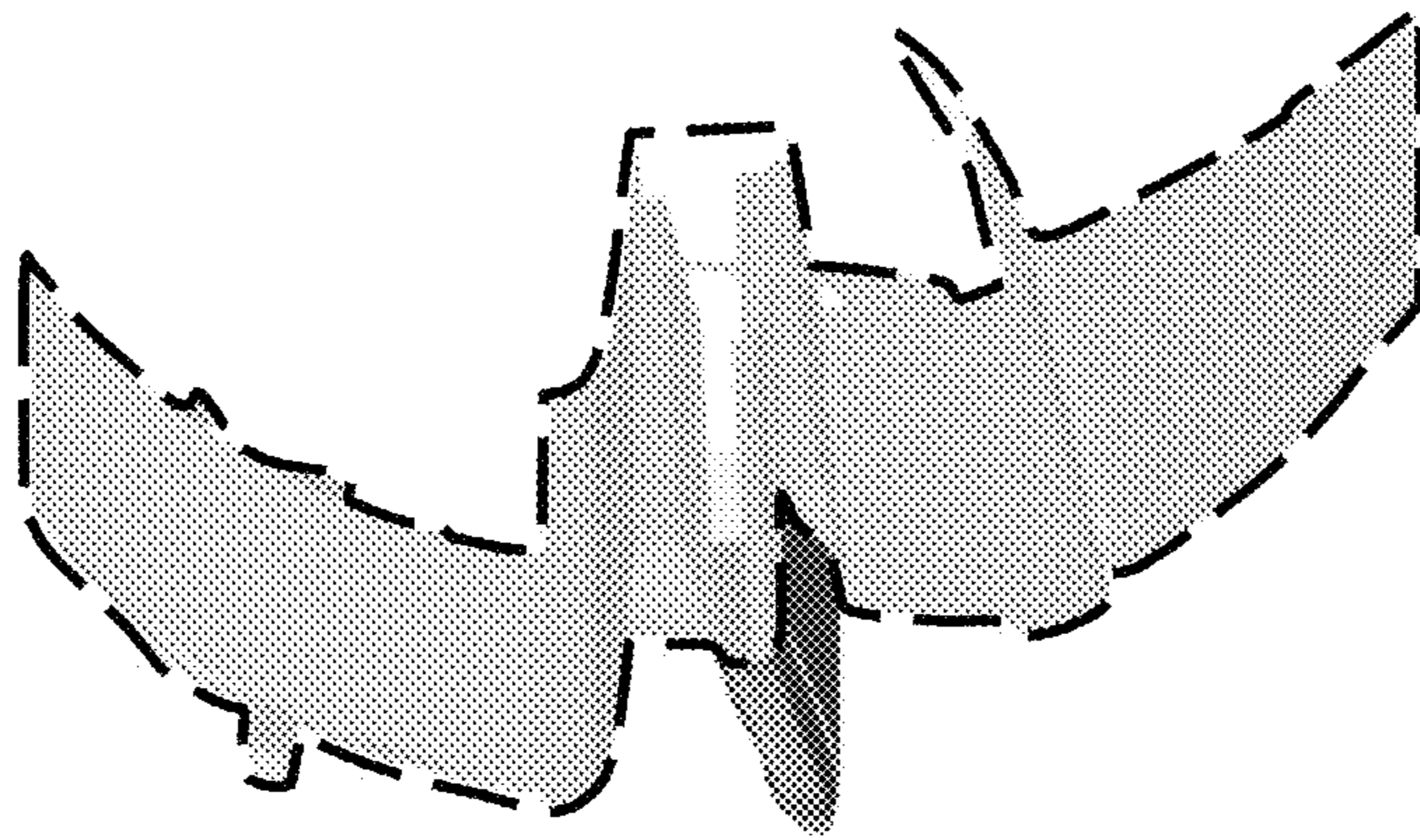


Figure 6



Figure 7

Figure 8

