



US00D945864S

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

(10) **Patent No.:** **US D945,864 S**

(45) **Date of Patent:** **\*\* \*Mar. 15, 2022**

(54) **RING AND HOOK WIRE MANAGEMENT SYSTEM WITH ANGLED HANGER**

(71) Applicant: **BDG Innovations, LLC**, Sacramento, CA (US)

(72) Inventors: **David Stubben**, Fair Oaks, CA (US);  
**Brent Iseman**, Pleasanton, CA (US);  
**Larry DeVore**, Rocklin, CA (US);  
**Randall Ross**, Tulare, CA (US)

(73) Assignee: **BDG Innovations, LLC**, Sacramento, CA (US)

(\*) Notice: This patent is subject to a terminal disclaimer.

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

(21) Appl. No.: **29/733,856**

(22) Filed: **May 7, 2020**

(51) **LOC (13) Cl.** ..... **09-06**

(52) **U.S. Cl.**  
USPC ..... **D8/356**

(58) **Field of Classification Search**  
USPC ..... D8/367, 354, 349, 356, 395; D12/162;  
224/248, 268, 904; 248/62  
CPC ... A47G 29/083; F16B 45/00; A63B 21/0557;  
B60P 7/0823; F16L 3/14; F16L 3/1218  
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D31,792 S \* 11/1899 Lemaire ..... D32/60  
1,336,558 A \* 4/1920 Gherardi ..... H02G 7/10  
248/61  
3,120,044 A \* 2/1964 Di Piano ..... D06F 55/00  
24/551

3,219,302 A \* 11/1965 Smith ..... A47G 1/20  
248/218.3  
3,263,026 A \* 7/1966 Kihs ..... H01Q 1/16  
174/154  
3,504,108 A \* 3/1970 Kihs ..... H01B 17/145  
174/154

(Continued)

*Primary Examiner* — Cynthia R Underwood  
(74) *Attorney, Agent, or Firm* — Temmerman Law;  
Mathew J. Temmerman

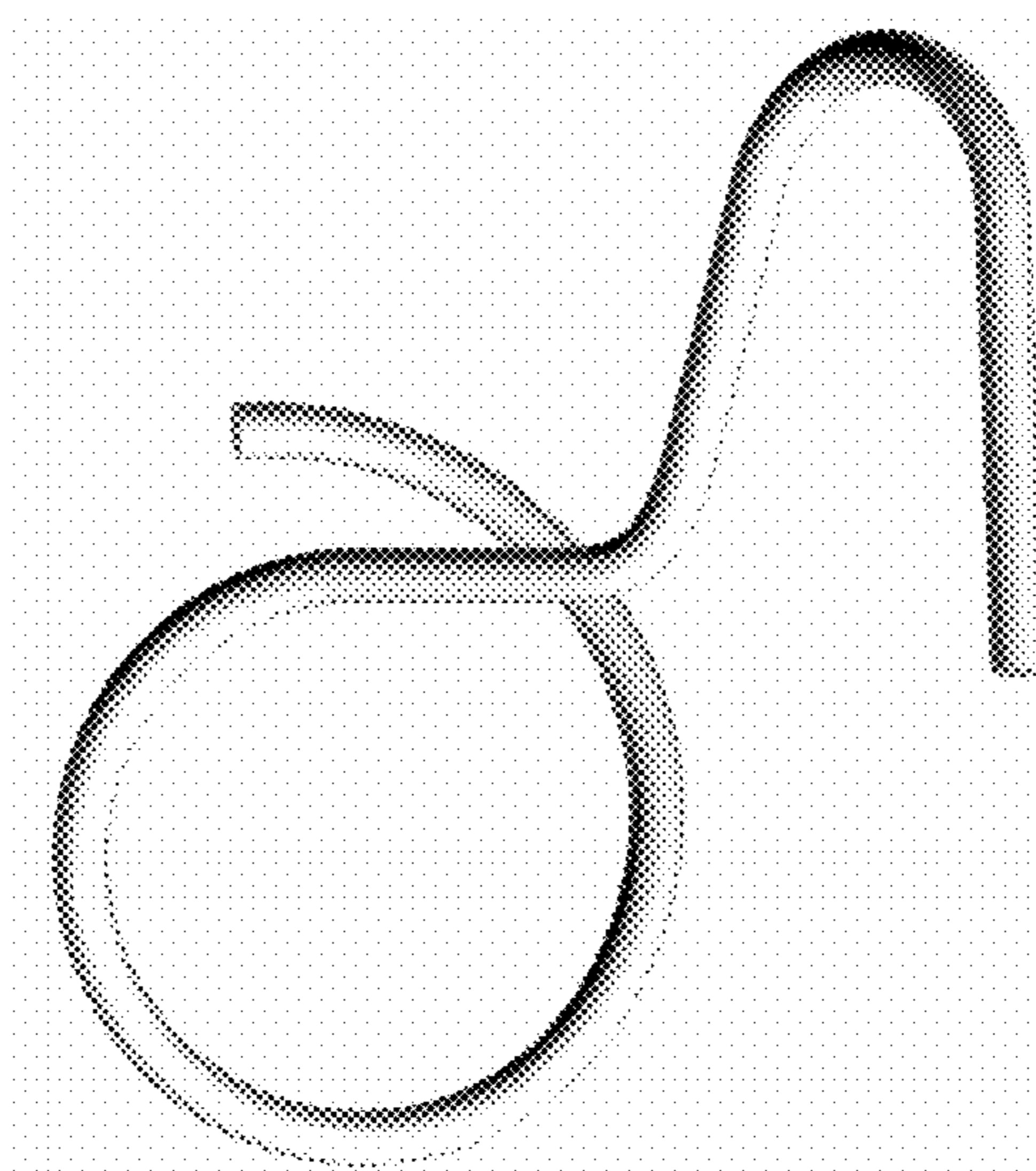
(57) **CLAIM**

The ornamental design for a ring and hook wire management system with angled hanger, as shown and described.

**DESCRIPTION**

FIG. 1 is a front view of a first embodiment of a ring and hook wire management system with angled hanger, showing our new design;  
FIG. 2 is a back view thereof;  
FIG. 3 is a top view thereof;  
FIG. 4 is a bottom view thereof;  
FIG. 5 is a left side view thereof;  
FIG. 6 is a right side view thereof;  
FIG. 7 is a perspective view thereof;  
FIG. 8 is a front view of a second embodiment of the ring and hook wire management system with angled hanger;  
FIG. 9 is a back view thereof;  
FIG. 10 is a top view thereof;  
FIG. 11 is a bottom view thereof;  
FIG. 12 is a left side view thereof;  
FIG. 13 is a right side view thereof;  
FIG. 14 is a perspective view thereof;  
FIG. 15 is a front view of a third embodiment of the ring and hook wire management system with angled hanger;  
FIG. 16 is a back view thereof;  
FIG. 17 is a top view thereof;  
FIG. 18 is a bottom view thereof;  
FIG. 19 is a left side view thereof;  
FIG. 20 is a right side view thereof; and,  
FIG. 21 is a perspective view thereof.

**1 Claim, 12 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

3,883,934 A \* 5/1975 Rochfort ..... F16B 2/248  
248/65  
4,232,847 A \* 11/1980 Cooper ..... E04G 21/10  
248/218.4  
D283,787 S \* 5/1986 Chap ..... D8/370  
4,714,221 A \* 12/1987 Cawrey ..... A47F 5/0823  
248/220.42  
4,742,979 A \* 5/1988 Syversten ..... F16L 3/1218  
248/303  
5,054,728 A \* 10/1991 Nigro, Jr. .... A47F 5/0823  
248/220.41  
5,176,302 A \* 1/1993 Smith ..... B44D 3/14  
224/672  
D373,072 S \* 8/1996 Durante ..... D8/367  
5,577,699 A \* 11/1996 Gardner ..... A47F 5/0006  
248/217.2  
5,651,521 A \* 7/1997 Aberg ..... A47B 57/56  
248/218.4  
D404,127 S \* 1/1999 Lammers ..... D24/141  
5,996,955 A \* 12/1999 Chen ..... F16B 12/32  
248/249  
D422,888 S \* 4/2000 Outten ..... D8/367  
D458,116 S \* 6/2002 Roethler ..... D8/367  
D489,963 S \* 5/2004 Mazooji ..... D8/370  
D499,956 S \* 12/2004 Wall ..... D8/370  
D504,934 S \* 5/2005 Amburgey ..... D22/149  
D532,074 S \* 11/2006 Travis, Sr. .... D22/149  
7,175,147 B1 \* 2/2007 Marks ..... B65D 55/16  
211/74  
D552,980 S \* 10/2007 Svedberg ..... D8/395  
D566,538 S \* 4/2008 Wrase ..... D8/395

D570,294 S \* 6/2008 Newcomb ..... D13/154  
D585,265 S \* 1/2009 Meyers ..... D8/370  
D585,266 S \* 1/2009 Meyers ..... D8/370  
D599,646 S \* 9/2009 Meyers ..... D8/370  
D600,102 S \* 9/2009 Larkin ..... D8/367  
7,823,852 B1 \* 11/2010 Reno ..... A47G 7/044  
248/302  
D648,208 S \* 11/2011 Platt ..... D8/367  
D661,574 S \* 6/2012 Platt ..... D8/367  
D672,227 S \* 12/2012 Hendricks ..... D8/394  
D673,031 S \* 12/2012 Hendricks ..... D8/394  
D679,095 S \* 4/2013 Williams ..... D3/328  
D687,291 S \* 8/2013 Hendricks ..... D8/394  
D699,556 S \* 2/2014 Hendricks ..... D8/394  
D801,157 S \* 10/2017 Turbenson ..... D8/367  
D801,158 S \* 10/2017 Turbenson ..... D8/367  
D801,159 S \* 10/2017 Turbenson ..... D8/367  
9,800,028 B1 \* 10/2017 Smith ..... F16L 3/02  
D865,497 S \* 11/2019 Williamson ..... D8/367  
D874,906 S \* 2/2020 Ruddick ..... D8/356  
D878,186 S \* 3/2020 Toye ..... D8/370  
10,670,170 B2 \* 6/2020 Shea ..... F16L 3/133  
D899,906 S \* 10/2020 Neusch ..... E01F 15/06  
D8/356  
D907,471 S \* 1/2021 Clark ..... D8/367  
D911,826 S \* 3/2021 Maynard ..... D8/367  
D919,417 S \* 5/2021 Wedding ..... D8/367  
D919,418 S \* 5/2021 Wedding ..... D8/367  
D922,182 S \* 6/2021 Wedding ..... D8/367  
D932,288 S \* 10/2021 Mefferd ..... D8/367  
2002/0000504 A1 \* 1/2002 Bayne ..... F21S 4/10  
248/302  
2016/0153587 A1 \* 6/2016 Smith ..... H02G 3/30  
29/515

\* cited by examiner



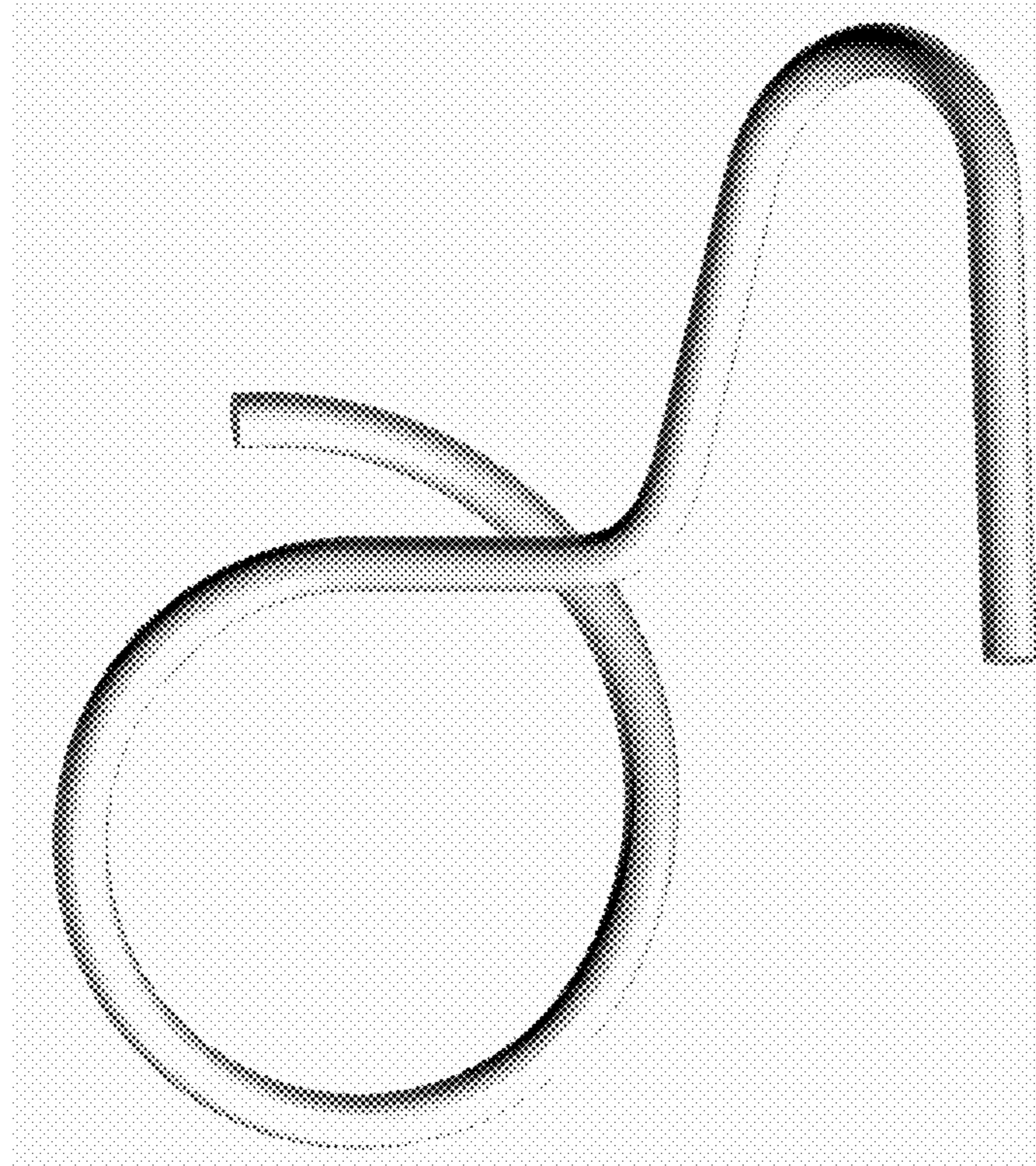


FIG. 1

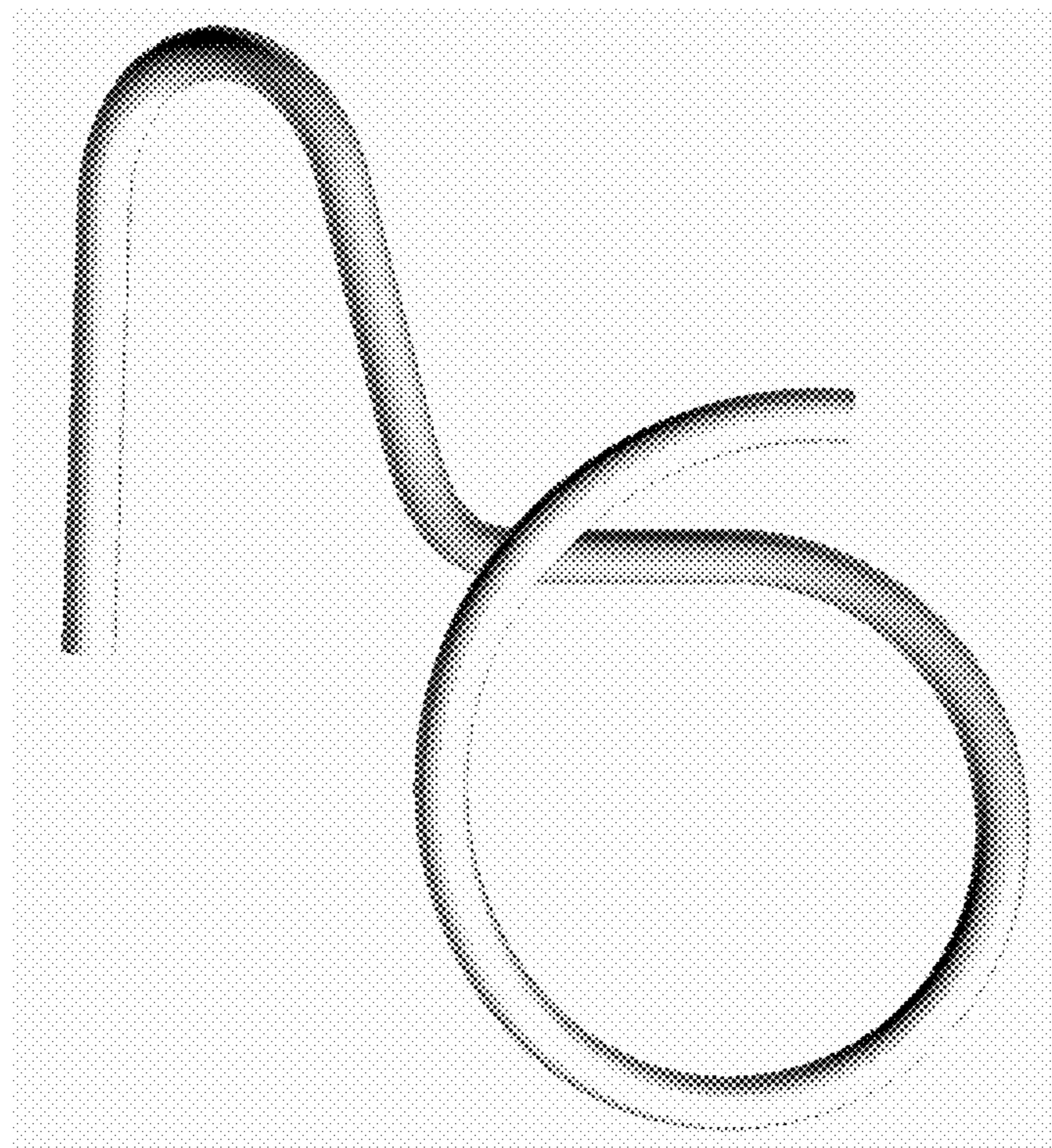
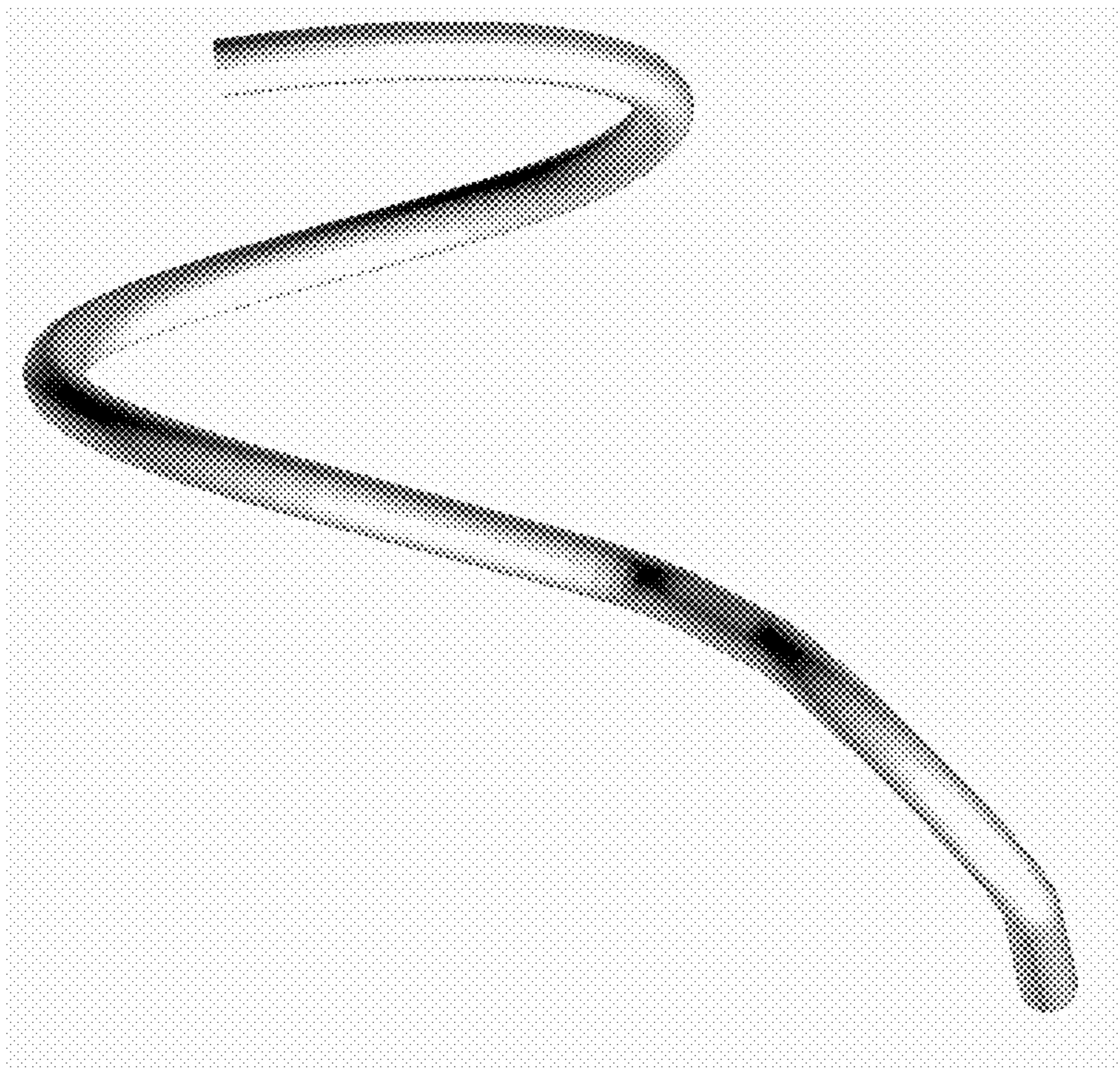
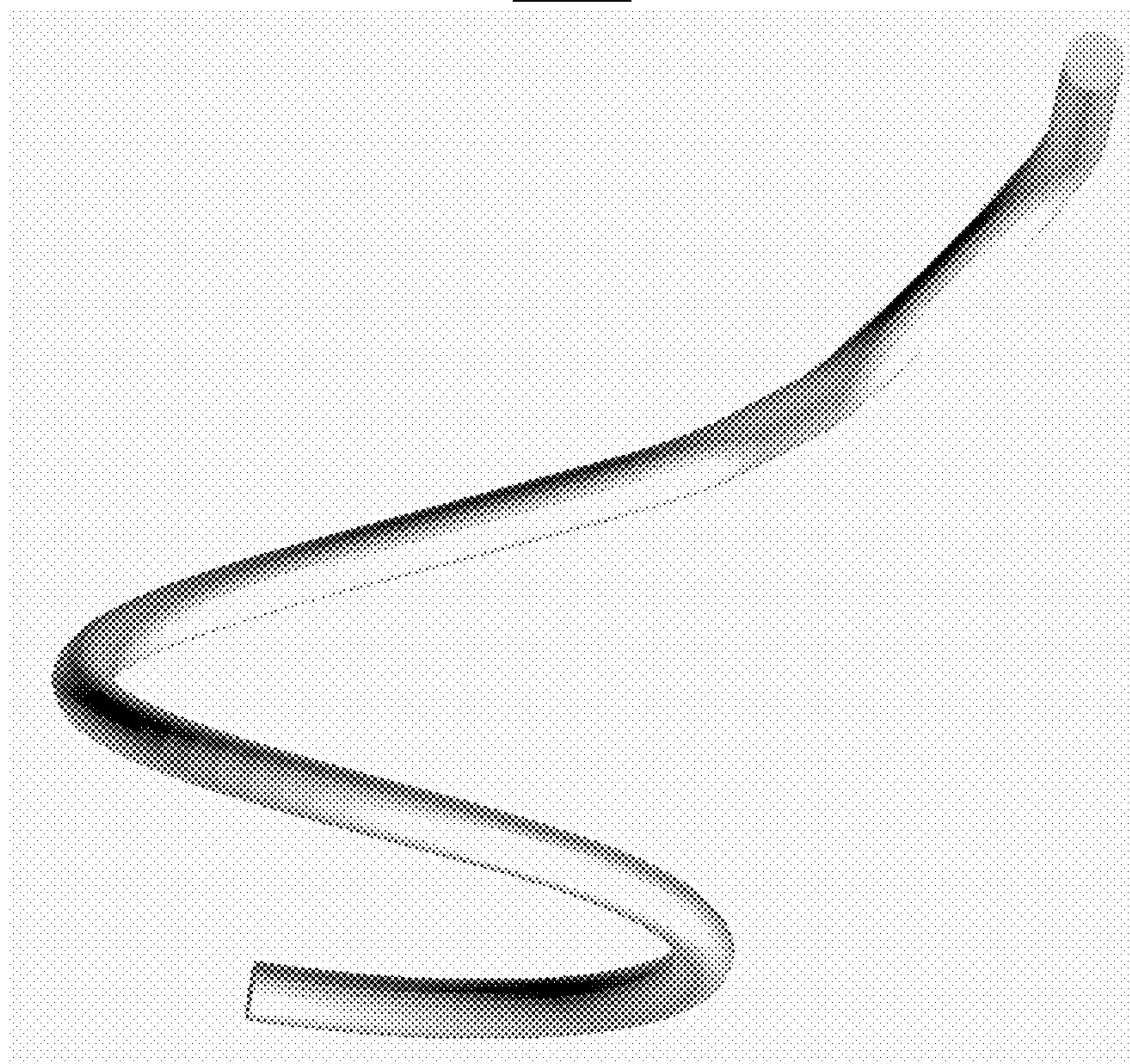


FIG. 2

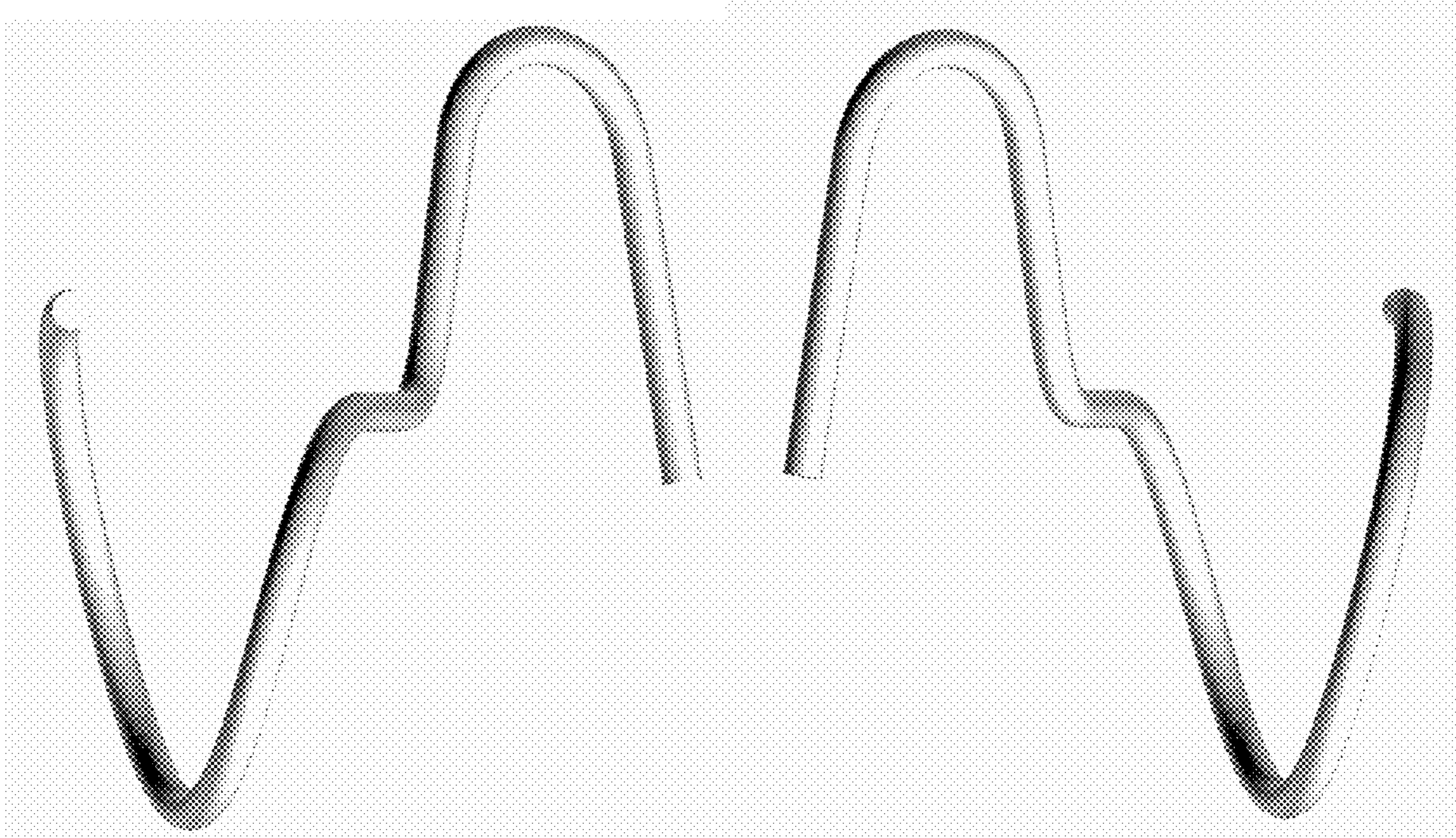


**FIG. 3**



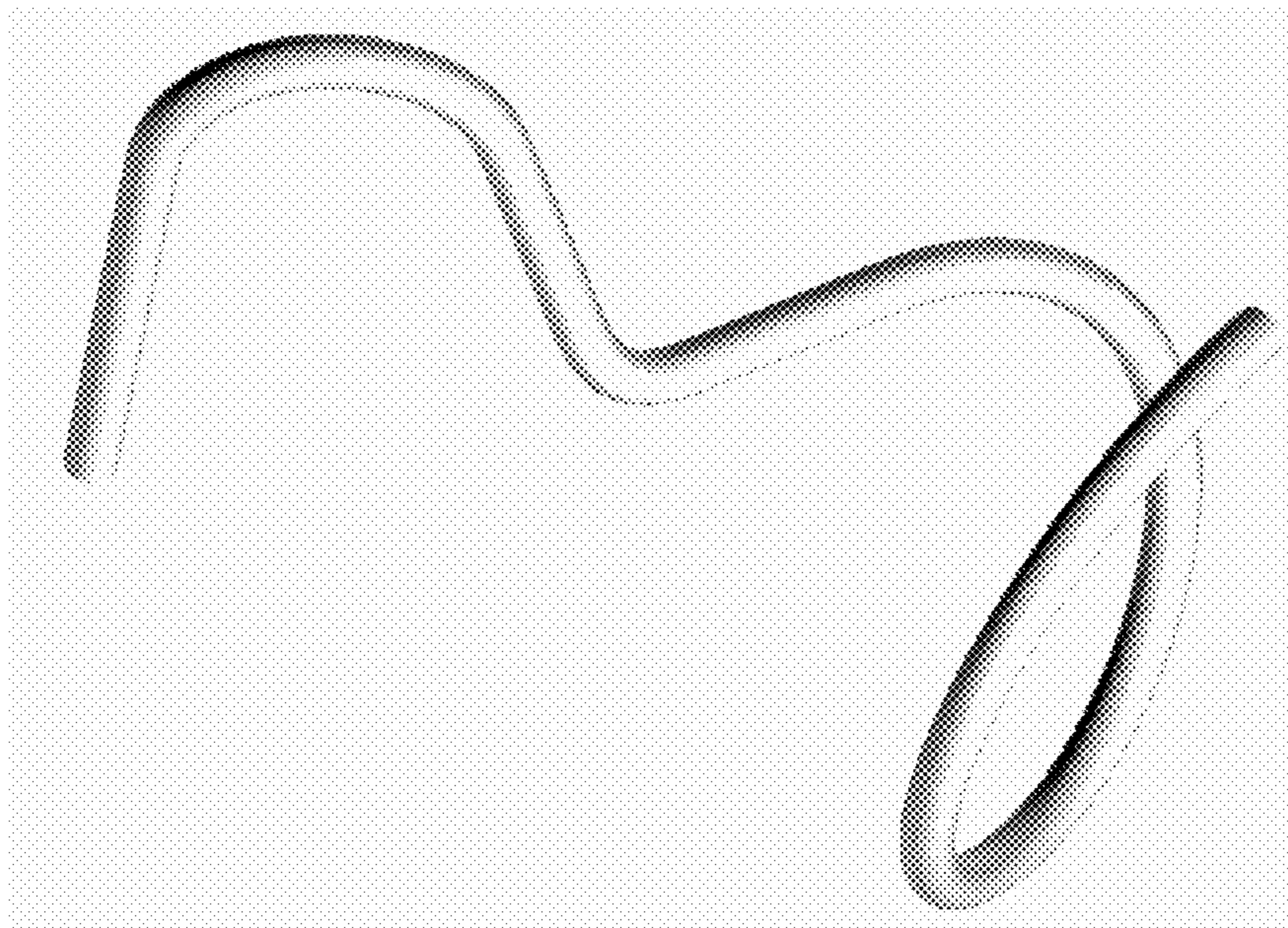
**FIG. 4**





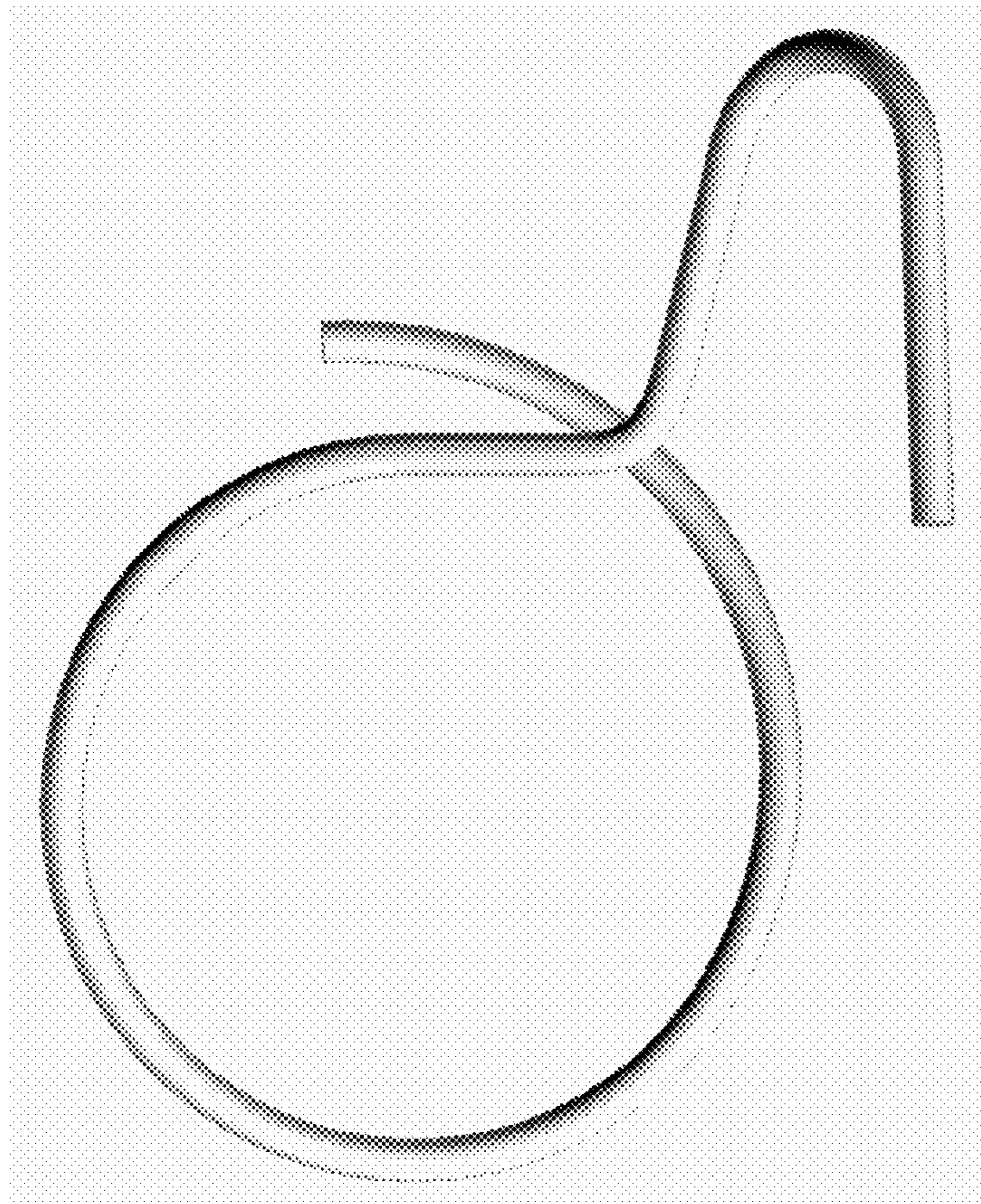
**FIG. 5**

**FIG. 6**

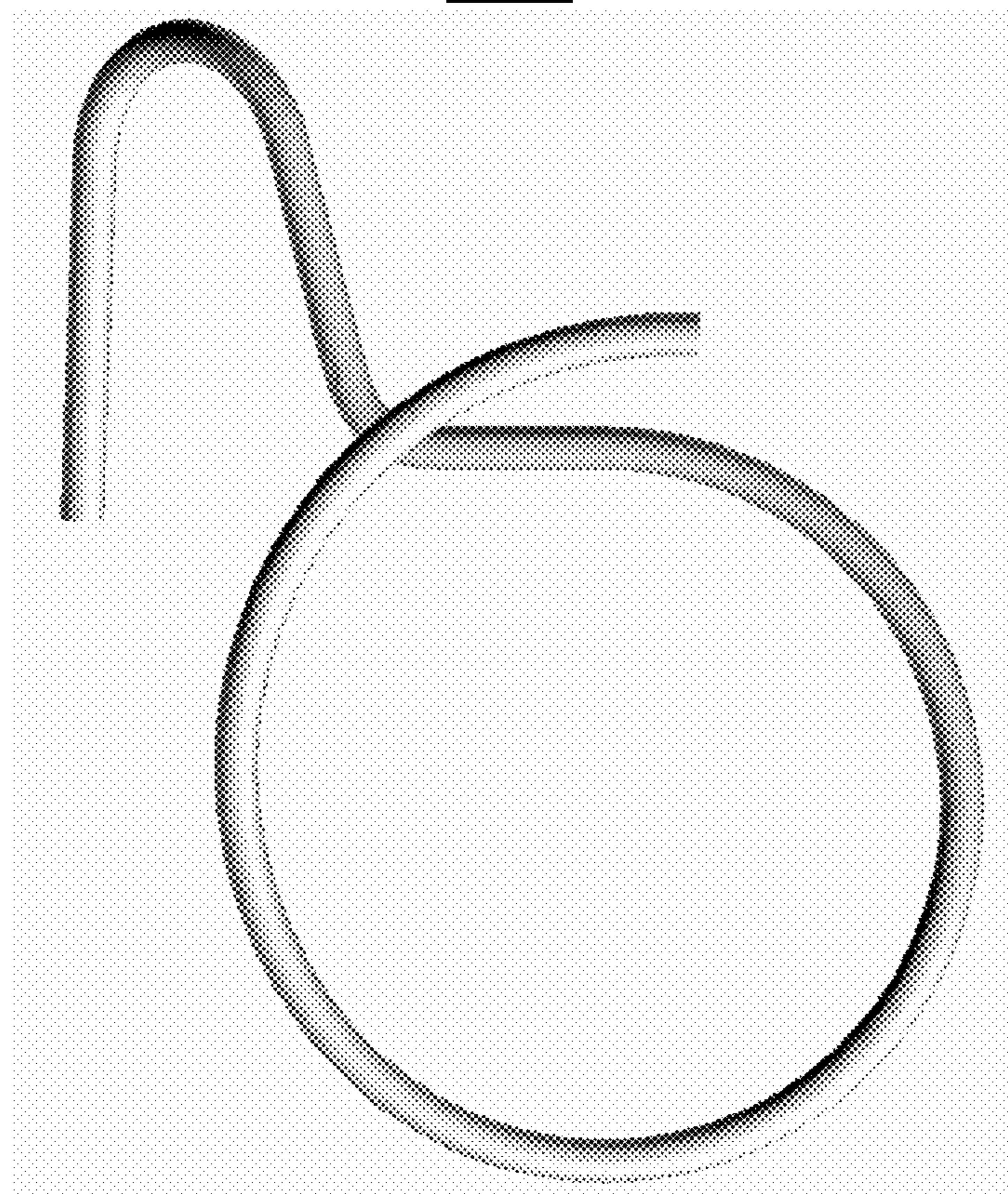


**FIG. 7**





**FIG. 8**



**FIG. 9**



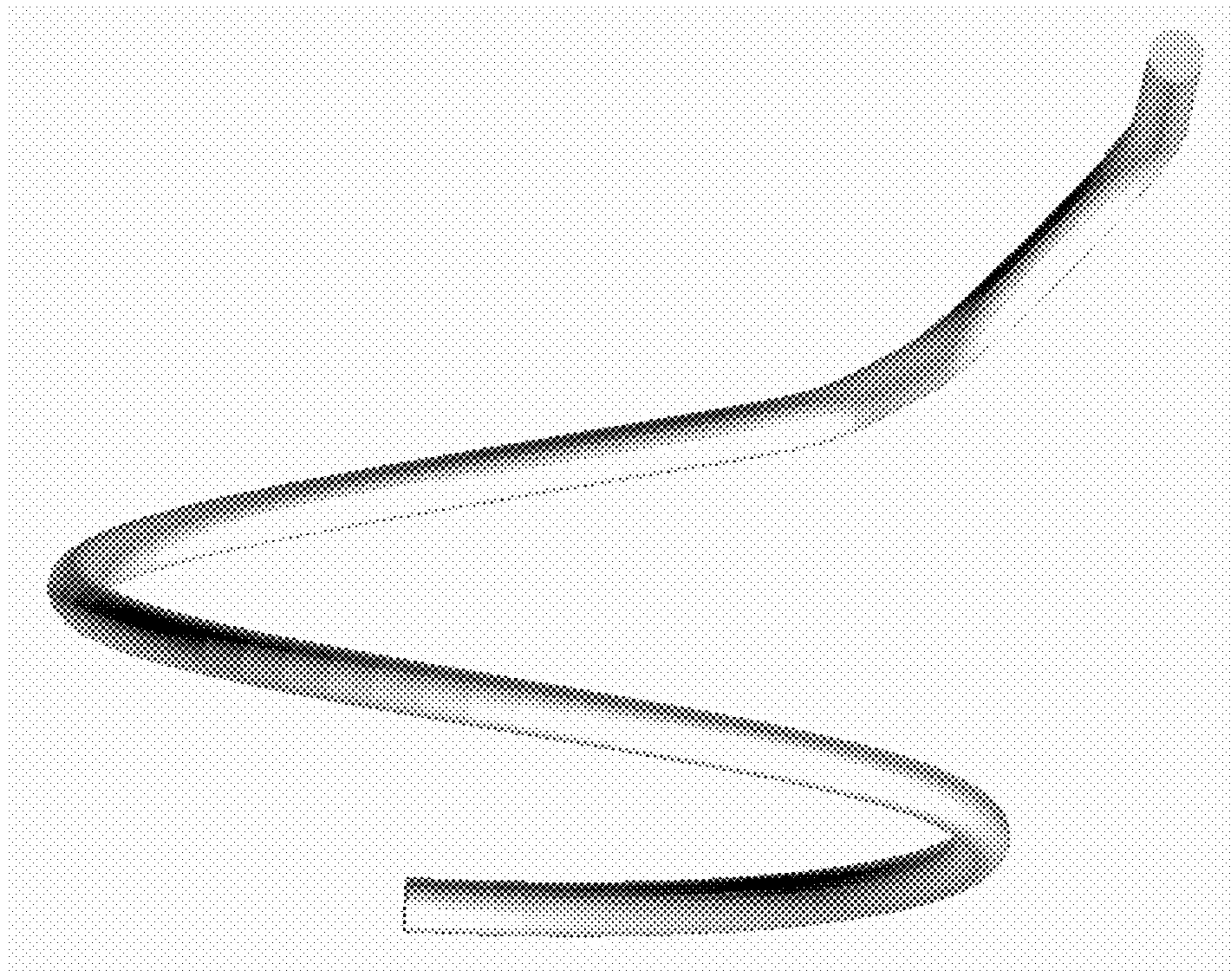


FIG. 10

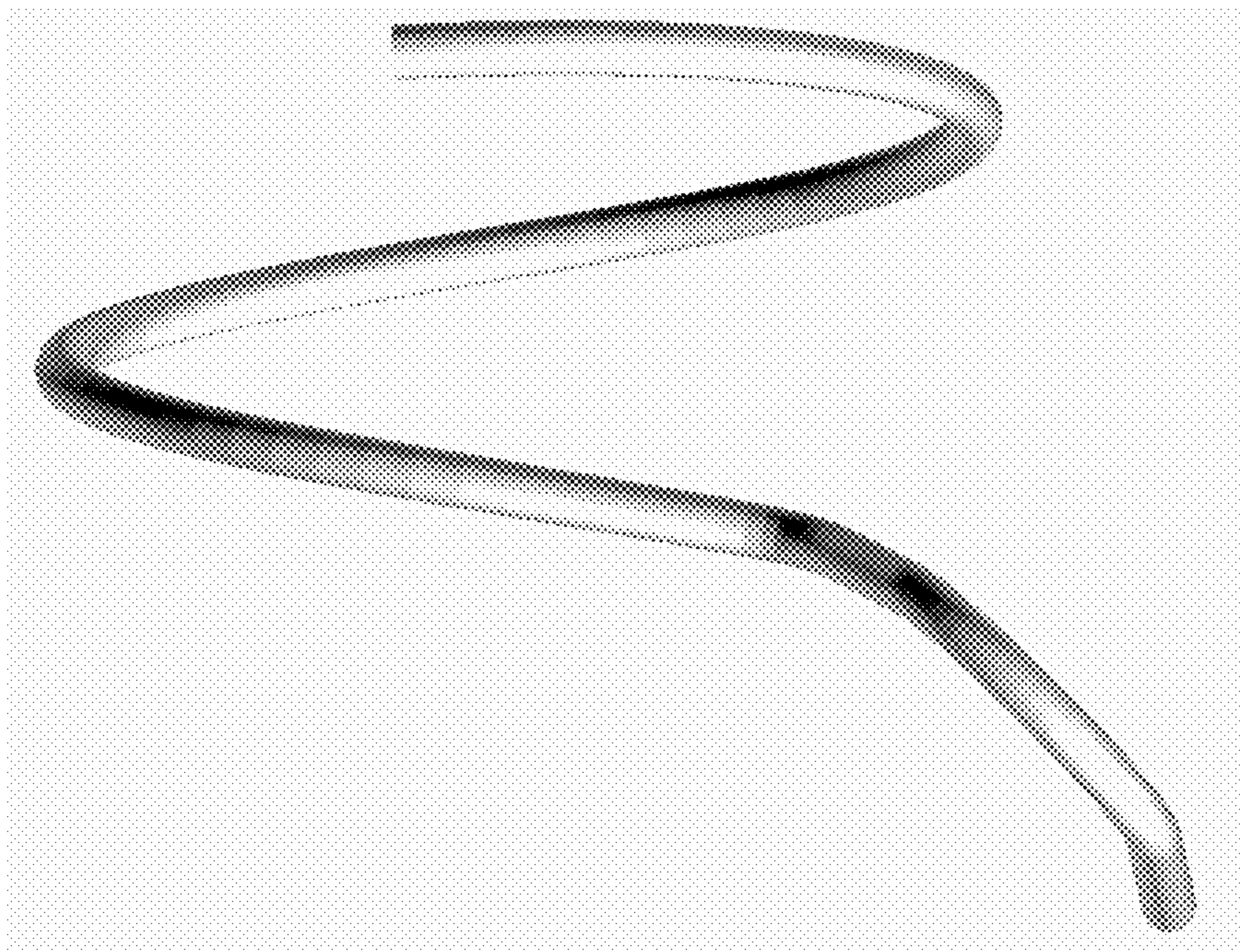


FIG. 11

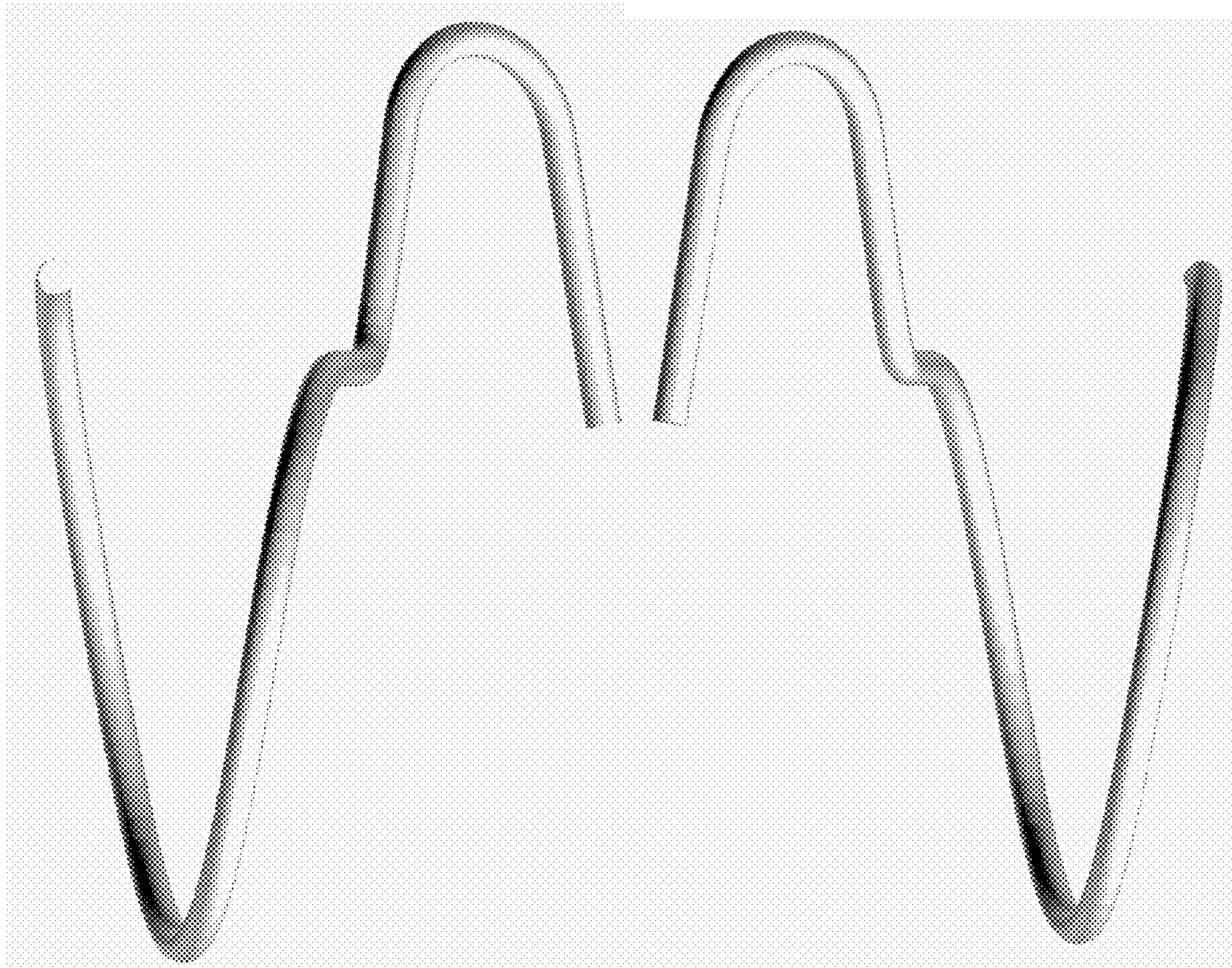


FIG. 12

FIG. 13



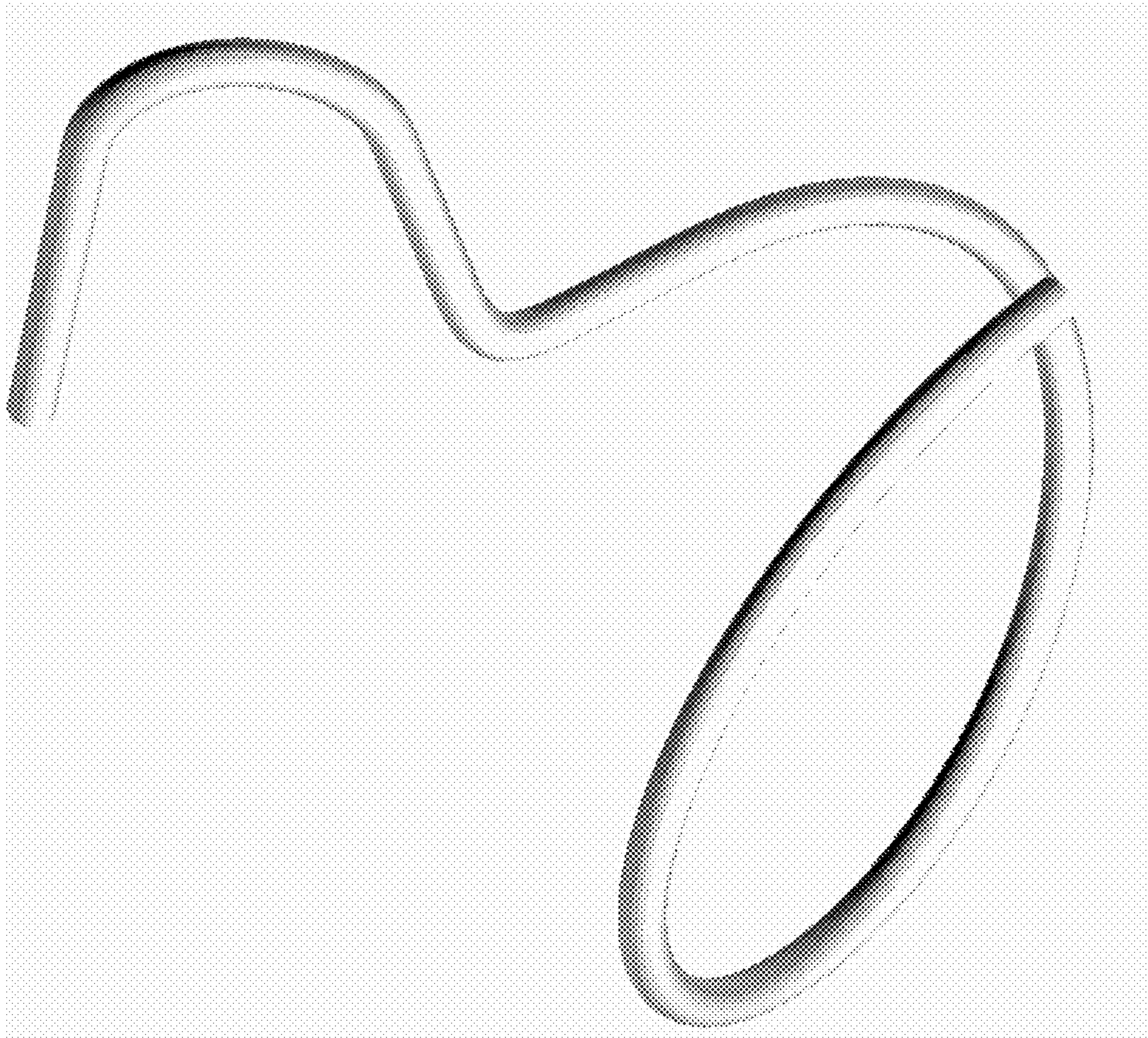


FIG. 14

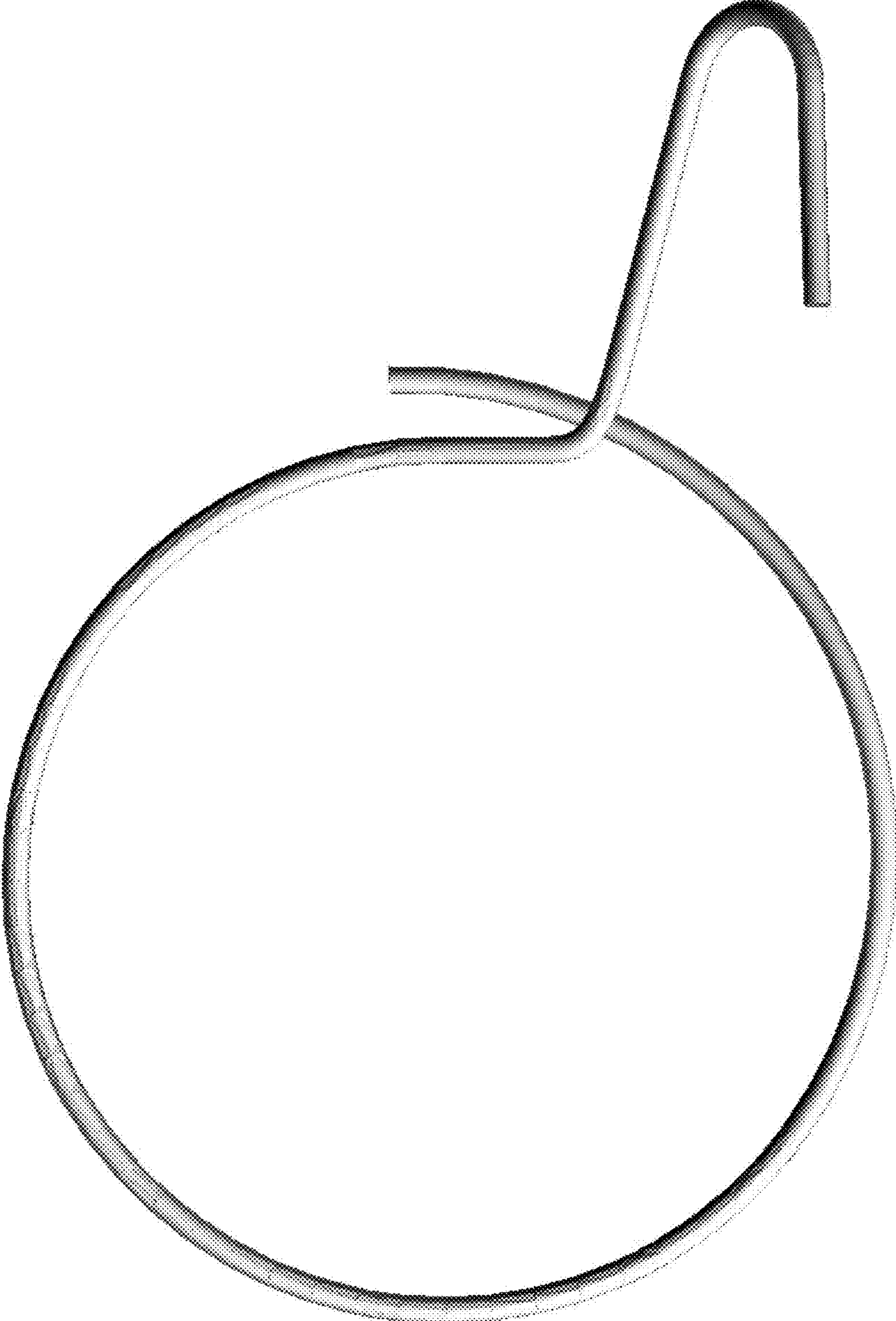
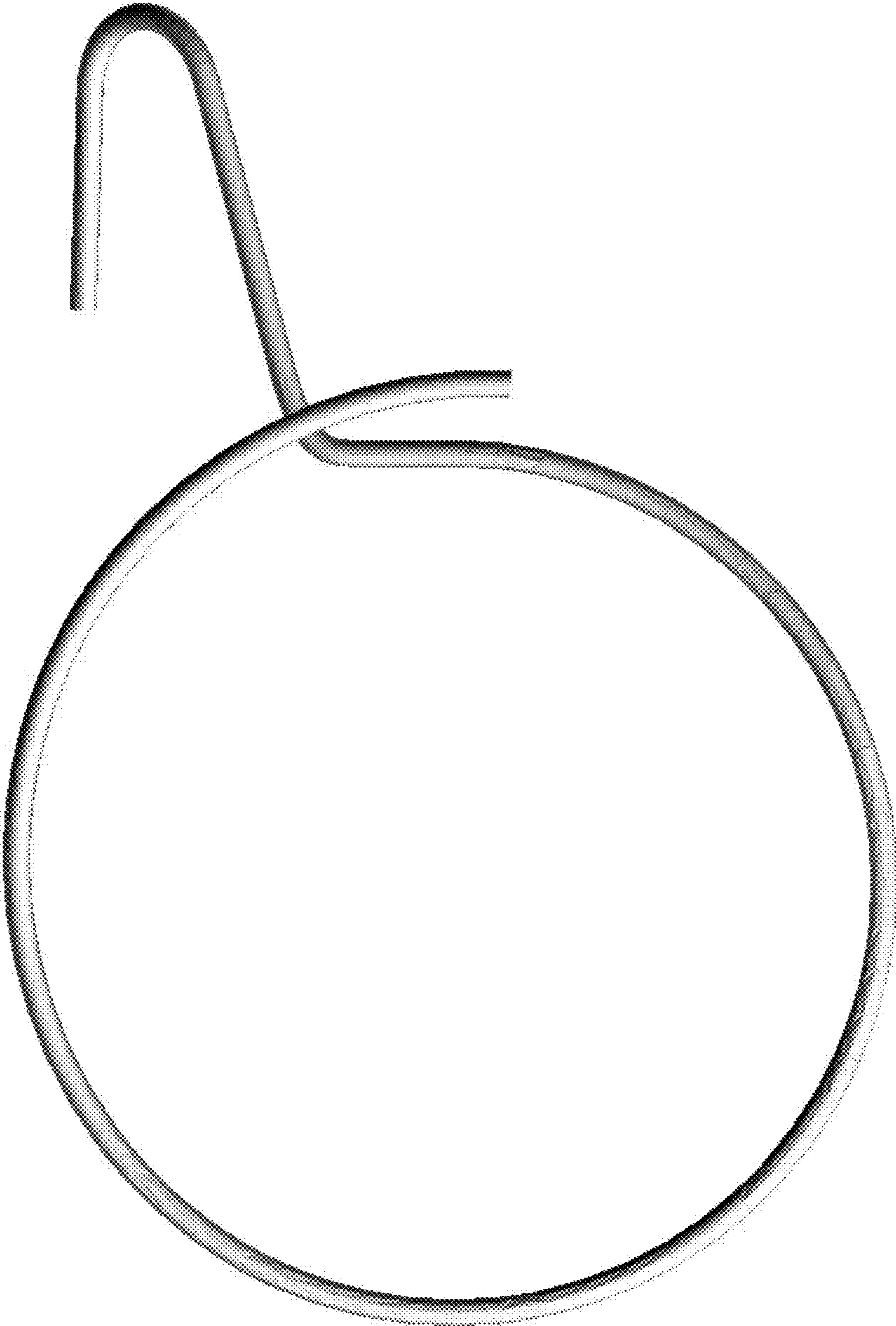
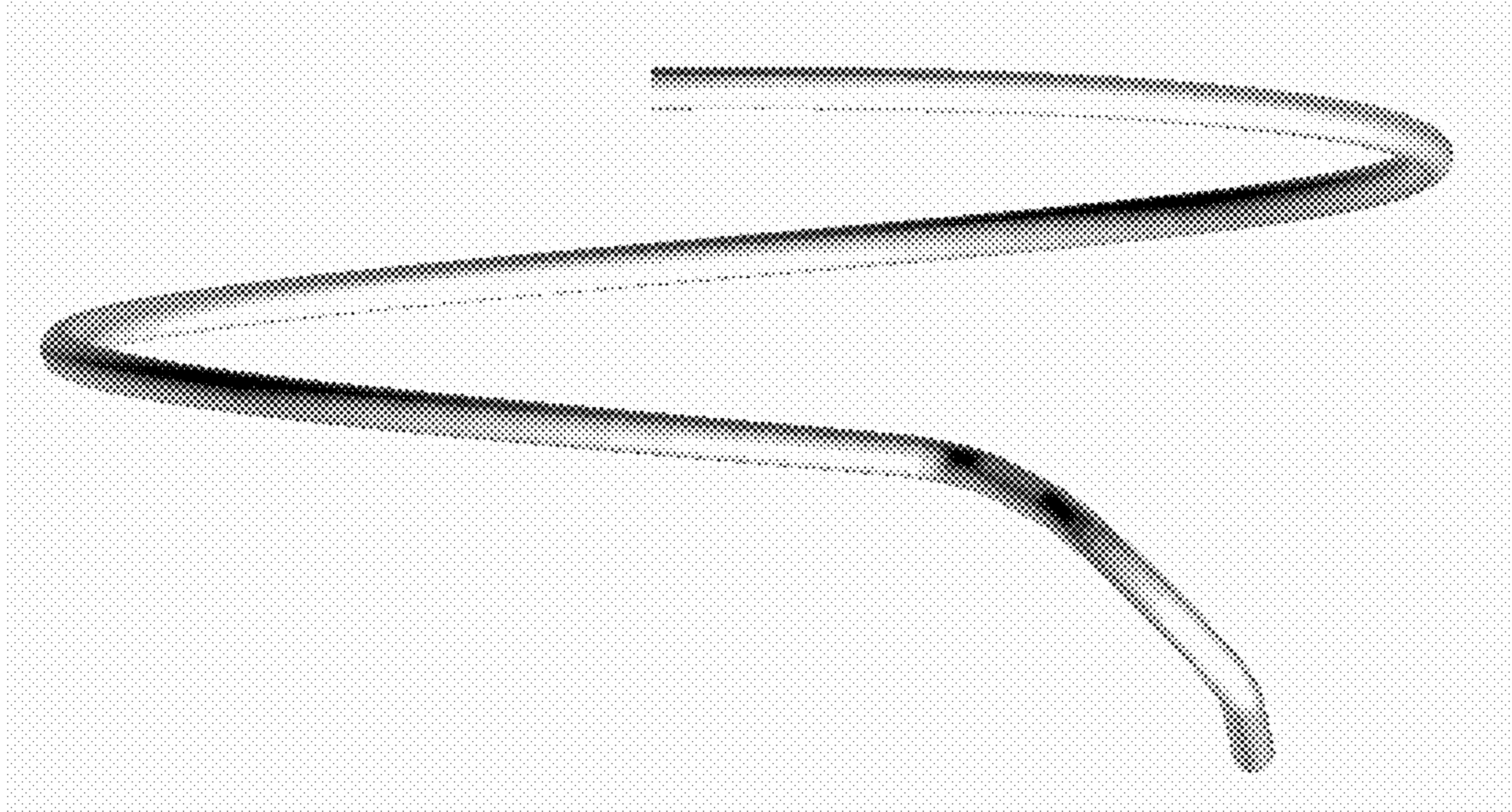


FIG. 15

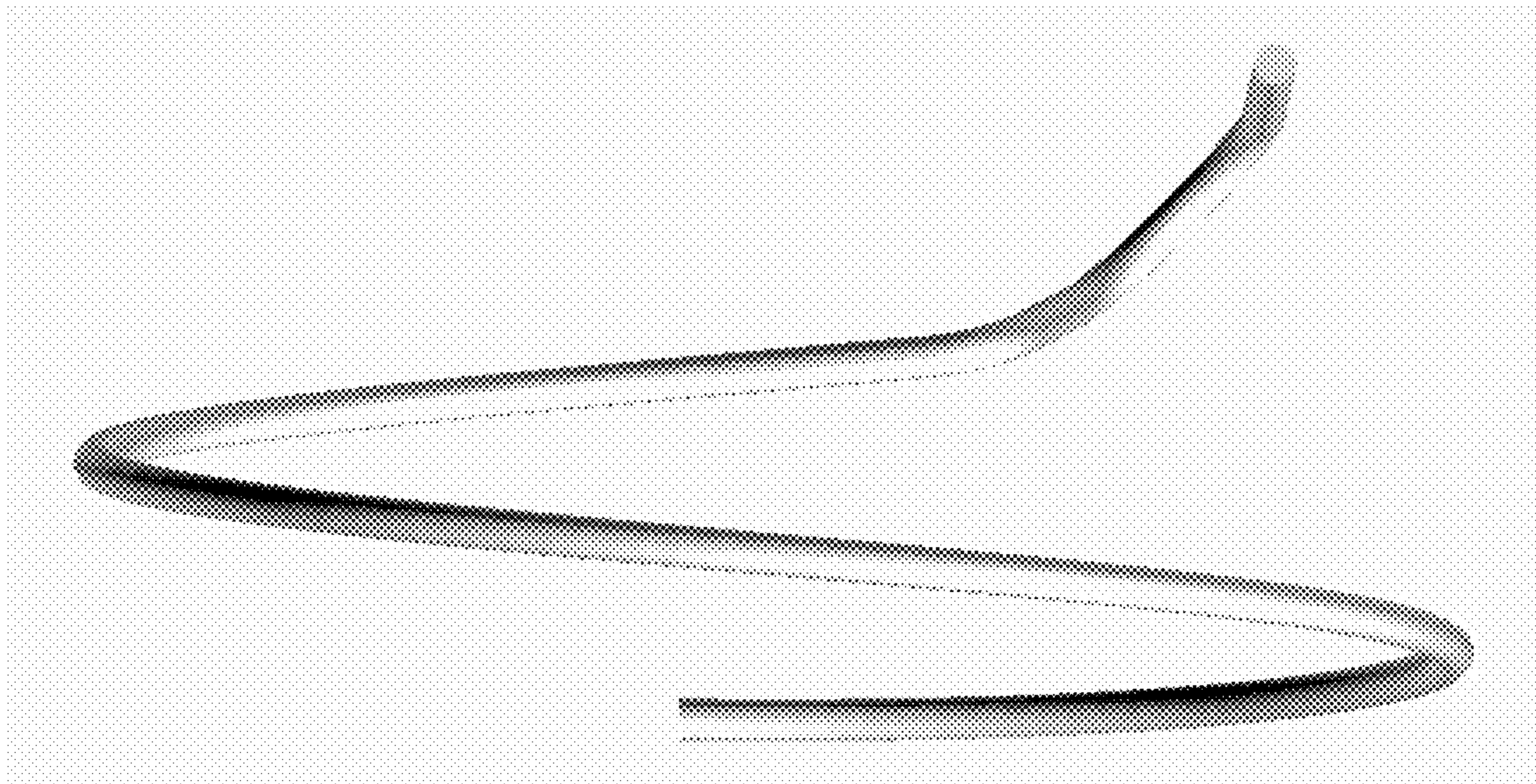




**FIG. 16**



**FIG. 17**



**FIG. 18**



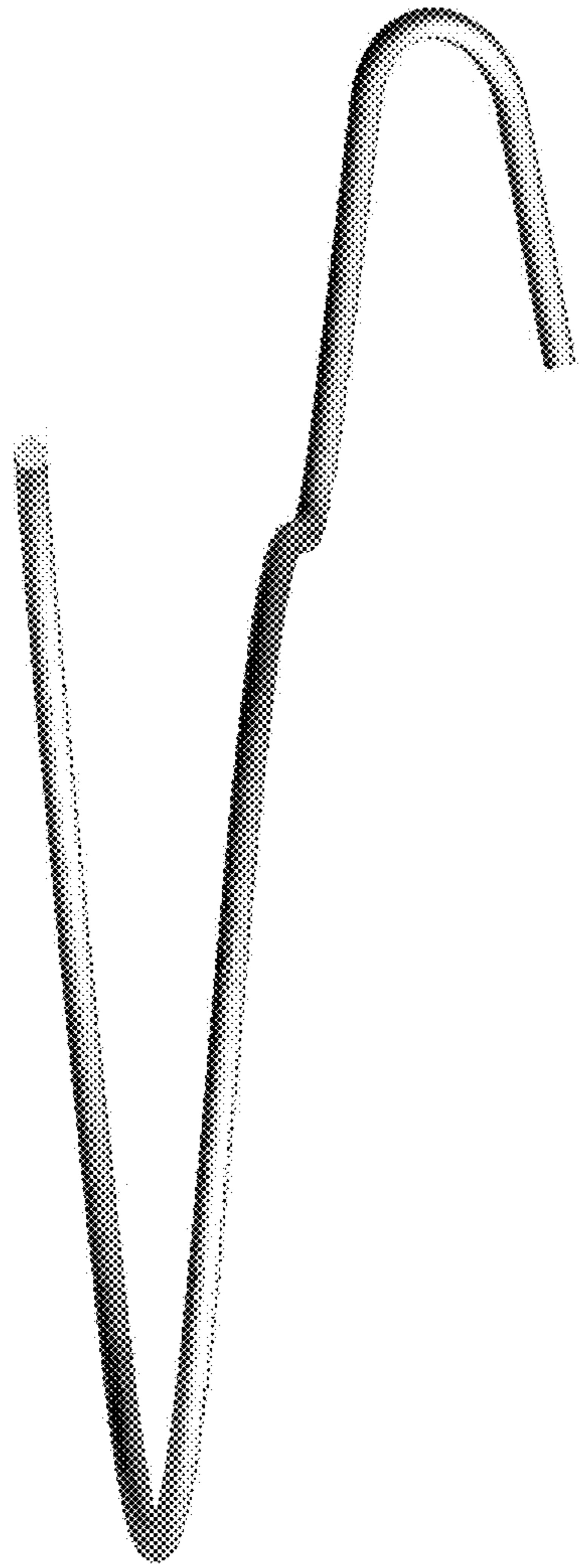


FIG. 19

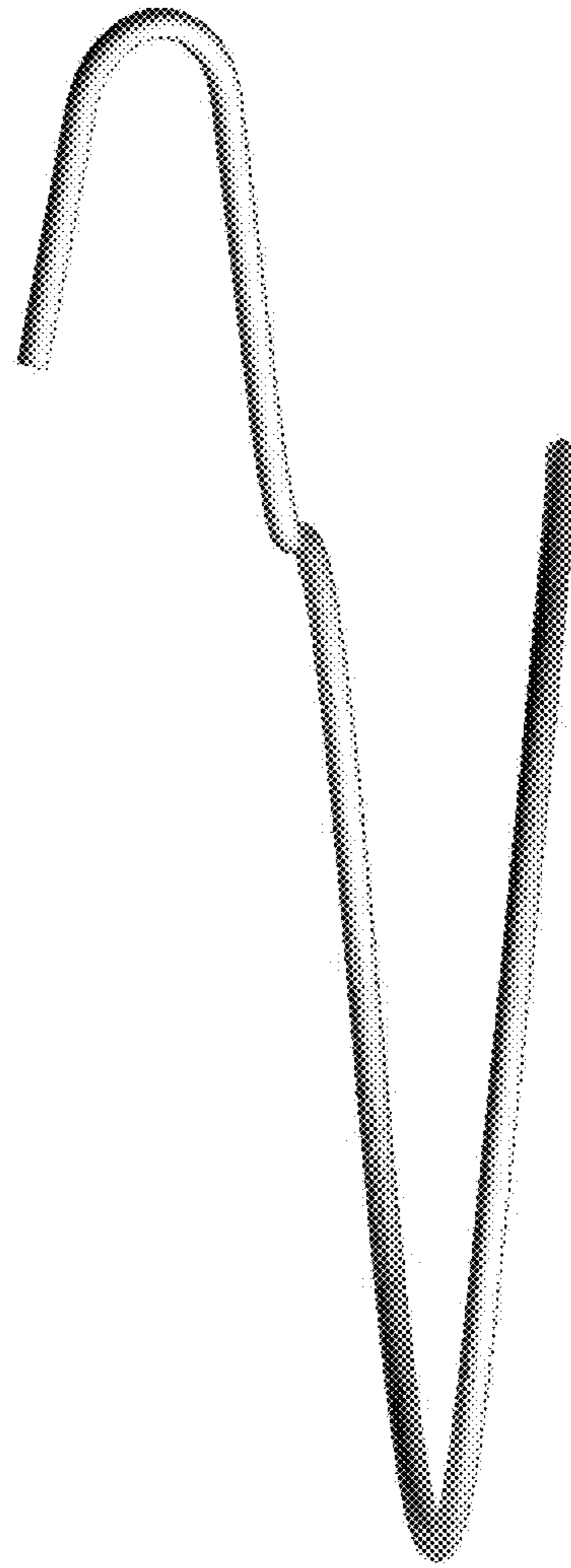


FIG. 20

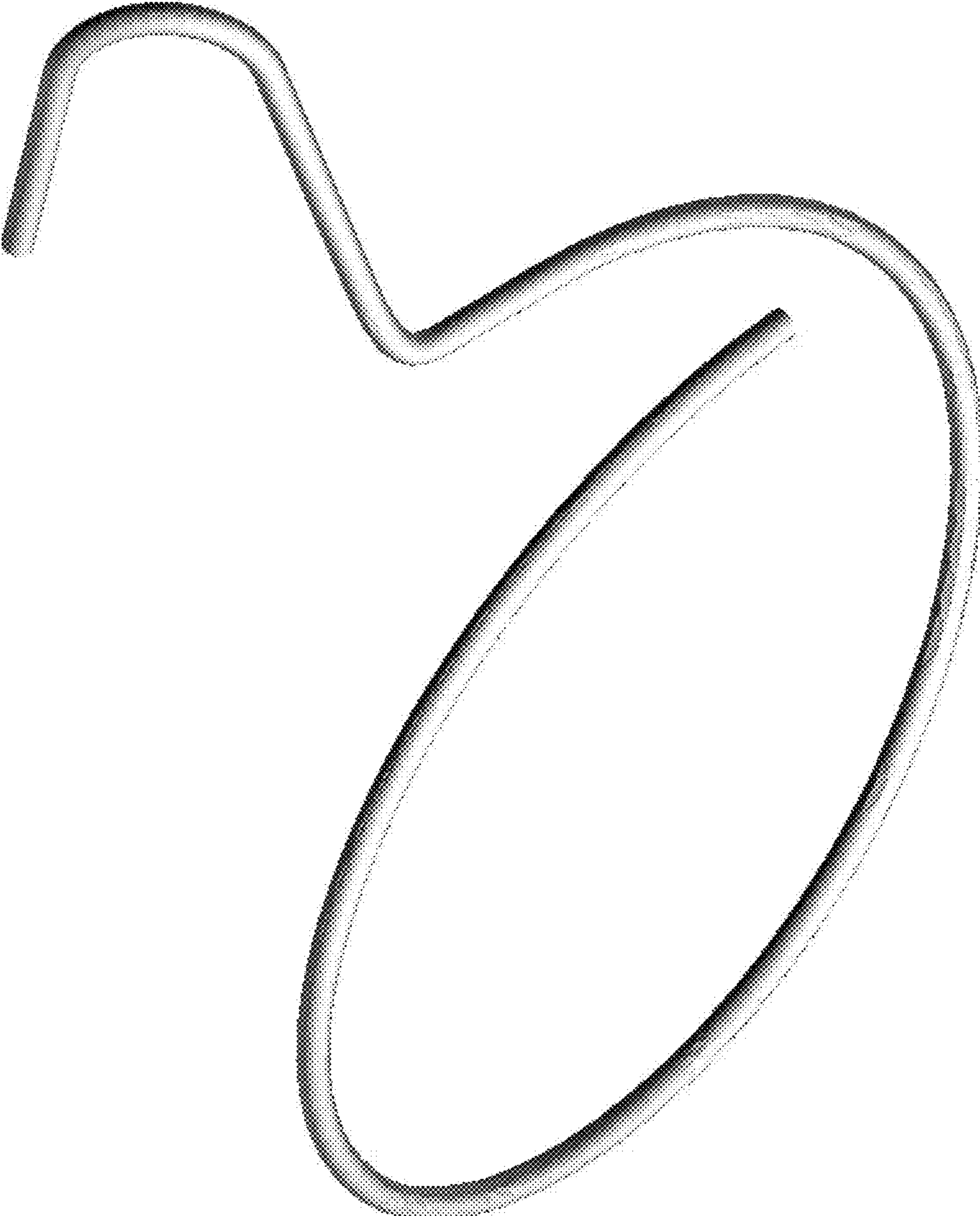


FIG. 21