



US00D976879S

(12) **United States Design Patent** (10) **Patent No.:** **US D976,879 S**  
**Yang** (45) **Date of Patent:** **\*\* \*Jan. 31, 2023**

(54) **ANTENNA**

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(72) Inventor: **Ruidian Yang**, Guangdong (CN)

(57) **CLAIM**

(73) Assignee: **SHENZHEN ANTOP TECHNOLOGY LIMITED**, Shenzhen (CN)

The ornamental design for an antenna, as shown and described.

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

**DESCRIPTION**

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

FIG. 1 is a front elevational view of an antenna showing my new design;

(21) Appl. No.: **29/738,599**

FIG. 2 is a rear elevational view thereof;

(22) Filed: **Jun. 18, 2020**

FIG. 3 is a left side elevational view thereof;

**Related U.S. Application Data**

FIG. 4 is a right side elevational view thereof;

(62) Division of application No. 29/625,417, filed on Nov. 9, 2017, now Pat. No. Des. 900,075.

FIG. 5 is a top plan view thereof;

(51) **LOC (14) Cl.** ..... **14-03**

FIG. 6 is a bottom plan view thereof;

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

FIG. 7 is a front, right perspective view thereof;

USPC ..... **D14/230**

FIG. 8 is a front, left perspective view thereof; and

(58) **Field of Classification Search**

USPC .... D14/230–238, 138, 238.1, 299, 343, 356, D14/358, 496; D13/182

FIG. 9 is a rear, right perspective view thereof;

(Continued)

FIG. 10 is a front elevational view of a second embodiment of an antenna showing my new design;

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,634,975 A ‡ 1/1987 Eccleston ..... G01V 3/107 324/232

FIG. 11 is a rear elevational view thereof;

D523,850 S ‡ 6/2006 Godar ..... D14/235

FIG. 12 is a left side elevational view thereof;

(Continued)

FIG. 13 is a right side elevational view thereof;

**OTHER PUBLICATIONS**

Antop SBS-301 HD Smart Antenna: HDTV & FM Amplified Antenna with Smart Boost System, online, no post date, URL: <https://antopusa.com/product/sbs-301/>, retrieved May 21, 2020. ‡

FIG. 14 is a top plan view thereof;

(Continued)

FIG. 15 is a bottom plan view thereof;

FIG. 16 is a front, right perspective view thereof;

FIG. 17 is a front, left perspective view thereof; and

FIG. 18 is a rear, right perspective view thereof;

FIG. 19 is a front elevational view of a third embodiment of an antenna showing my new design;

FIG. 20 is a rear elevational view thereof;

FIG. 21 is a left side elevational view thereof;

FIG. 22 is a right side elevational view thereof;

FIG. 23 is a top plan view thereof;

FIG. 24 is a bottom plan view thereof;

FIG. 25 is a front, right perspective view thereof;

FIG. 26 is a front, left perspective view thereof; and

FIG. 27 is another front, left perspective view thereof;

(Continued)

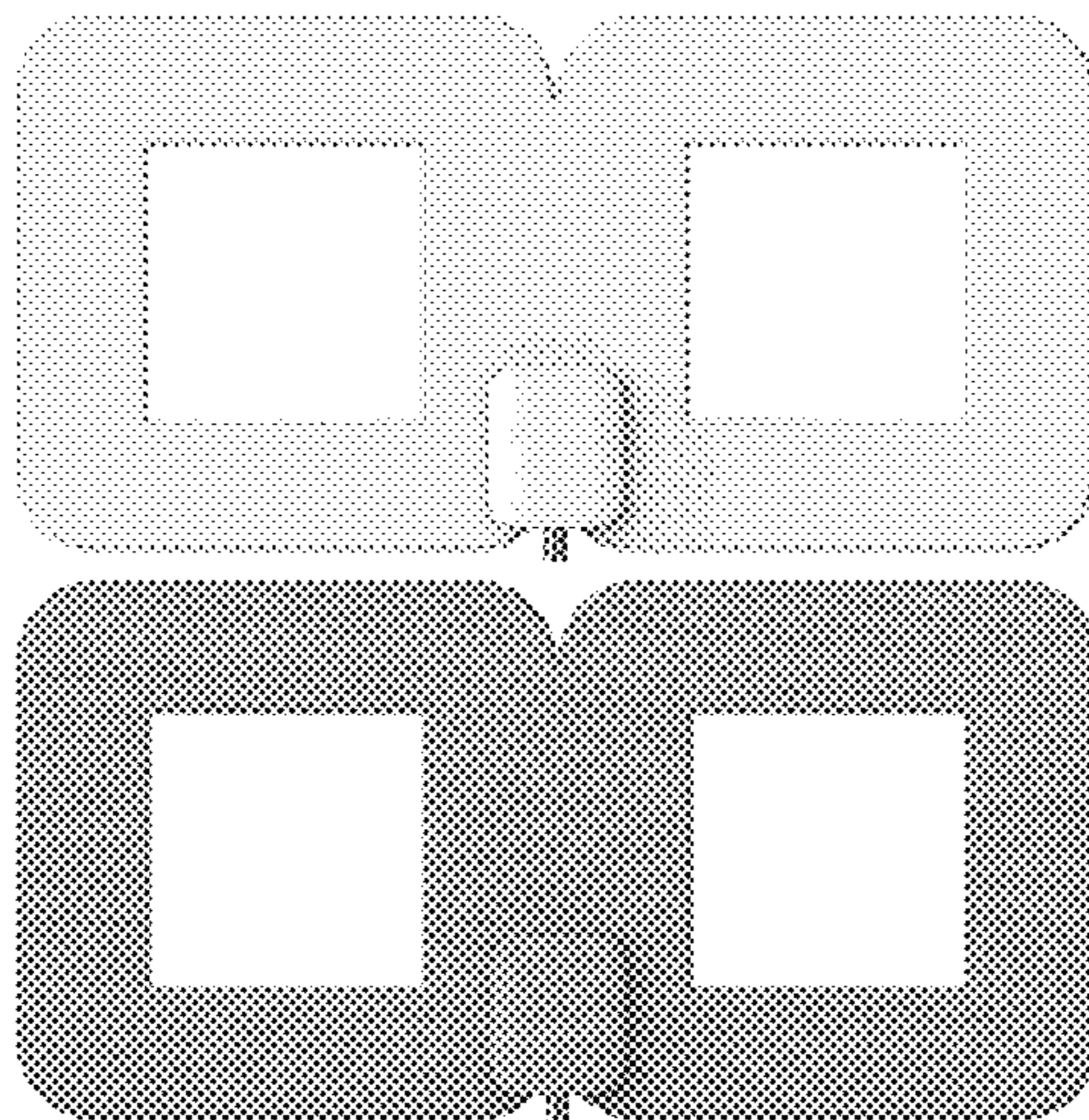


FIG. 28 is a front elevational view of a fourth embodiment of an antenna showing my new design;  
 FIG. 29 is a rear elevational view thereof;  
 FIG. 30 is a left side elevational view thereof;  
 FIG. 31 is a right side elevational view thereof;  
 FIG. 32 is a top plan view thereof;  
 FIG. 33 is a bottom plan view thereof;  
 FIG. 34 is a front, right perspective view thereof;  
 FIG. 35 is a front, left perspective view thereof; and,  
 FIG. 36 is a rear, right perspective view thereof.

**1 Claim, 36 Drawing Sheets**

**(58) Field of Classification Search**

CPC ..... H01Q 1/12; H01Q 1/22; H01Q 1/007;  
 H01Q 1/38; H01Q 7/00; H01Q 9/40;  
 H01Q 9/285; H01Q 9/065; H01Q 9/44;  
 H01Q 9/265; H01Q 19/10; H01Q 19/106;  
 H01Q 19/12; H01Q 19/13; H01Q 19/15;  
 H01Q 19/30; H01Q 21/28; H01Q 21/06;  
 H01Q 21/062; H01Q 21/293; G05D 1/02;  
 G05D 1/0234

See application file for complete search history.

**(56) References Cited**

**U.S. PATENT DOCUMENTS**

D598,434	S	‡	8/2009	Schneider	.....	D14/230
D656,131	S	*	3/2012	Suleiman	.....	D14/230
D697,059	S	‡	1/2014	Miller	.....	D14/230
D754,641	S	*	4/2016	Suleiman	.....	D14/230
D760,705	S	‡	7/2016	Matsuoka	.....	D14/230
D761,771	S	‡	7/2016	Winstead	.....	D14/230
D788,085	S	‡	5/2017	Matsuoka	.....	D14/230
D806,689	S	*	1/2018	Deng	.....	D14/234
D815,622	S	‡	4/2018	Yang	.....	D14/230
D815,623	S	‡	4/2018	Yang	.....	D14/230
D829,695	S	*	10/2018	Wu	.....	D14/230
D831,622	S	‡	10/2018	Yang	.....	D14/230
D832,827	S	‡	11/2018	Yang	.....	D14/230
D837,188	S	‡	1/2019	Yang	.....	D14/230
D838,698	S	‡	1/2019	Yang	.....	D14/230
D838,700	S	‡	1/2019	Yang	.....	D14/230

D838,701	S	‡	1/2019	Yang	.....	D14/230
D838,702	S	‡	1/2019	Yang	.....	D14/230
D838,703	S	‡	1/2019	Yang	.....	D14/230
D838,704	S	‡	1/2019	Yang	.....	D14/230
D843,982	S	‡	3/2019	Yang	.....	D14/230
D843,983	S	‡	3/2019	Yang	.....	D14/230
D847,798	S	‡	5/2019	Yang	.....	D14/230
D849,722	S	‡	5/2019	Yang	.....	D14/230
D850,425	S	‡	6/2019	Yang	.....	D14/230
D852,172	S	‡	6/2019	Wu	.....	D14/230
D856,314	S	‡	8/2019	Yang	.....	D14/230
D856,315	S	‡	8/2019	Yang	.....	D14/230
D857,675	S	*	8/2019	Wu	.....	D14/230
D864,172	S	‡	10/2019	Yang	.....	D14/230
D865,725	S	‡	11/2019	Yang	.....	D14/230
D867,347	S	‡	11/2019	Ross, III	.....	D14/230
D872,712	S	‡	1/2020	Yang	.....	D14/230
D872,714	S	‡	1/2020	Yang	.....	D14/230
D883,264	S	‡	5/2020	Ross, III	.....	D14/230
D884,743	S	‡	5/2020	Liu	.....	D14/496
D888,697	S	*	6/2020	Ross, III	.....	D14/230
D892,096	S	*	8/2020	Feit	.....	D14/230
D896,791	S	*	9/2020	Yang	.....	D14/230
D896,792	S	*	9/2020	Yang	.....	D14/230
D896,793	S	*	9/2020	Yang	.....	D14/230
D896,794	S	*	9/2020	Yang	.....	D14/230
D896,796	S	*	9/2020	Yang	.....	D14/230
D896,797	S	*	9/2020	Yang	.....	D14/230
D900,075	S	*	10/2020	Yang	.....	D14/230
D901,464	S	*	11/2020	Yang	.....	D14/230
D901,465	S	*	11/2020	Yang	.....	D14/230
D901,466	S	*	11/2020	Yang	.....	D14/230
D918,187	S	*	5/2021	Feit	.....	D14/230
D918,879	S	*	5/2021	Feit	.....	D14/230
2016/0149288	A1	‡	5/2016	Wang	.....	H01Q 1/007 343/906

**OTHER PUBLICATIONS**

Mohu Leaf Metro Indoor HDTV Antenna, online, no post date, URL: <https://store.gomohu.com/leaf-metro-indoor-hdtv-antenna.html>, retrieved May 21, 2020.‡  
 ANTOP SBS-301 HD Smart Antenna: HDTV & FM Amplified Antenna with Smart Boost System, online, no post date, URL: <https://antopusa.com/product/sbs-301/>, retrieved May 21, 2020.

\* cited by examiner

‡ imported from a related application

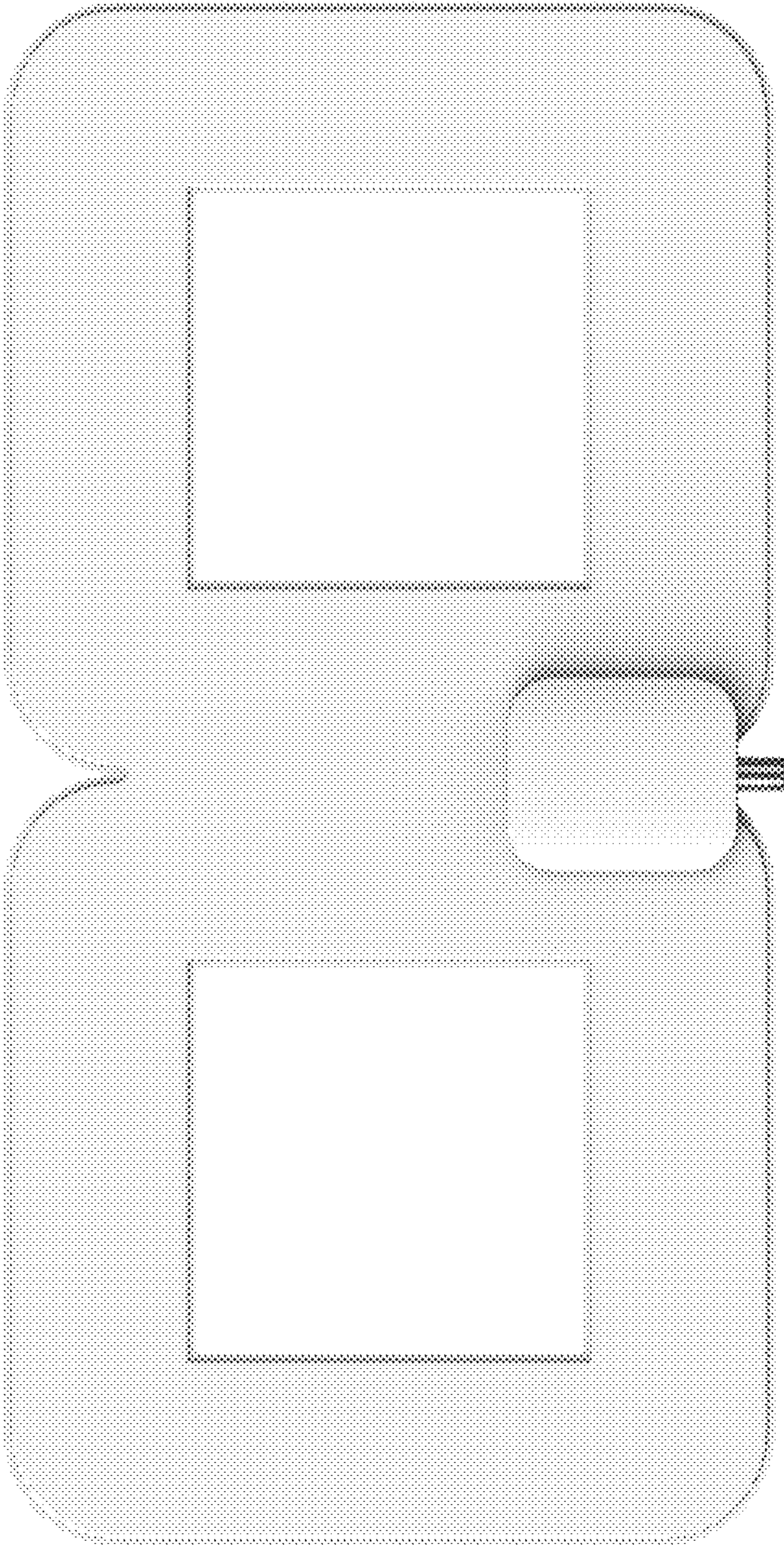


FIG. 1

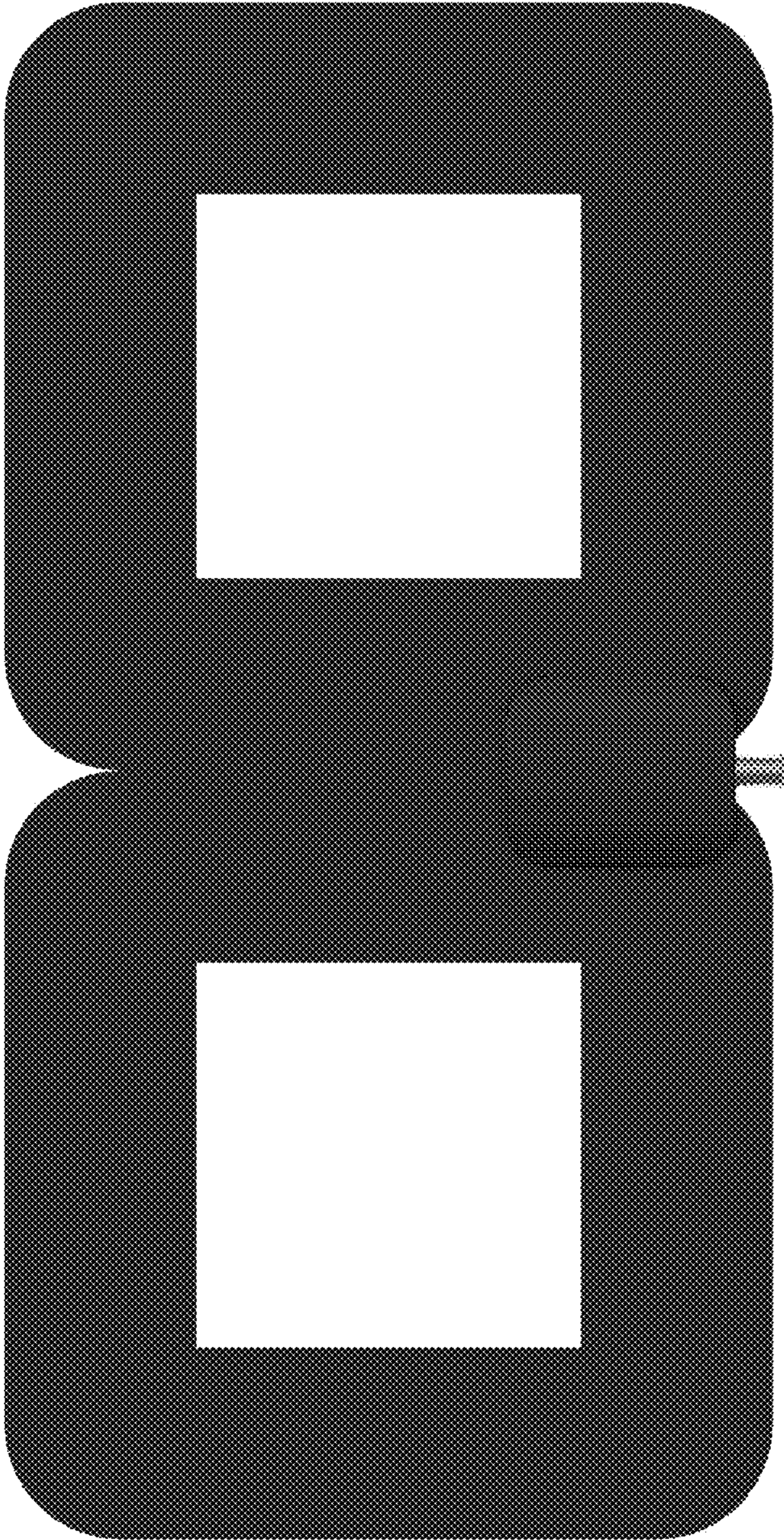


FIG. 2



FIG. 3

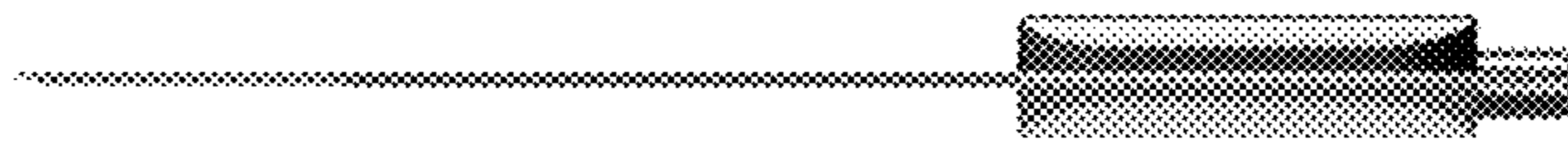


FIG. 4



FIG. 5



FIG. 6



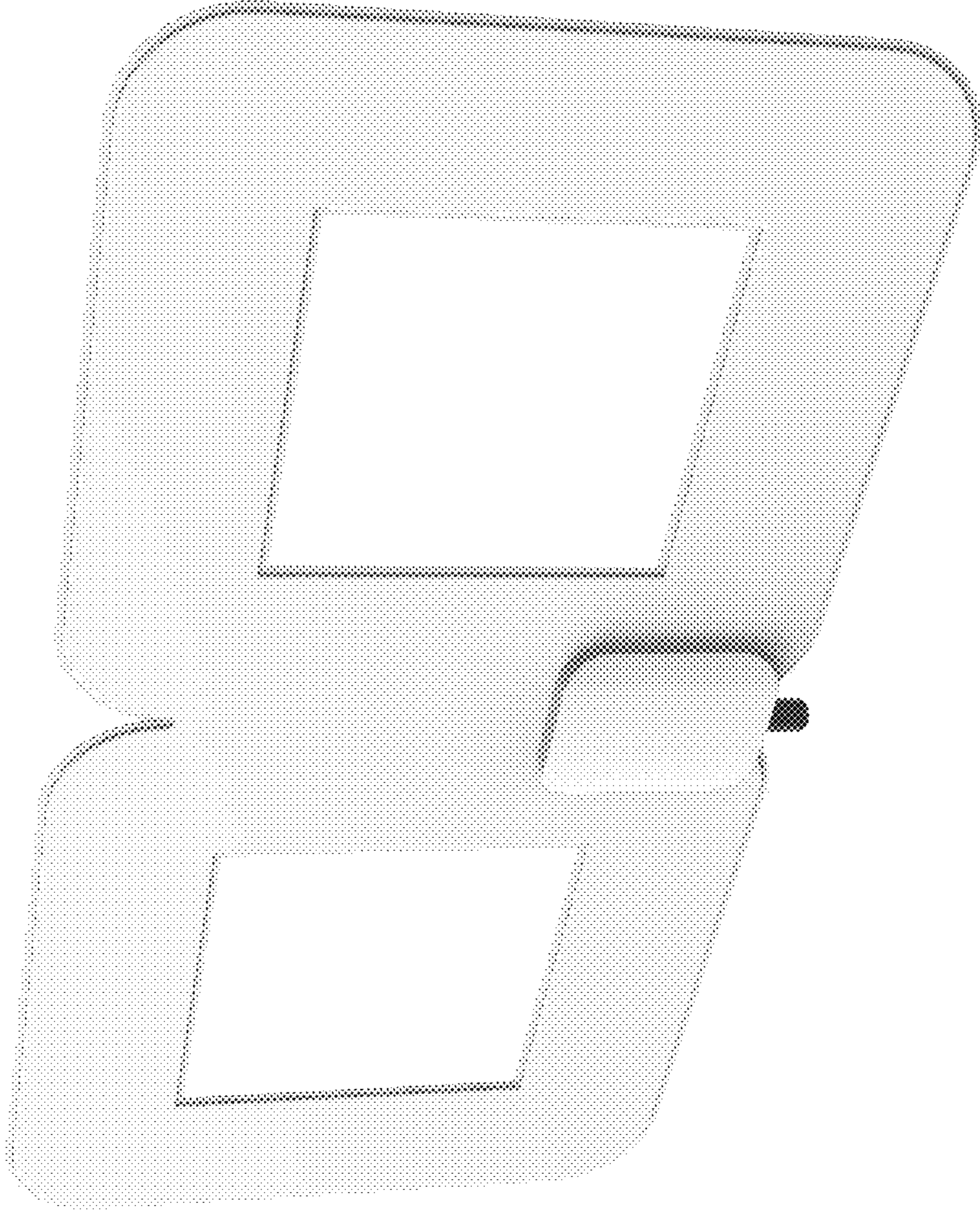


FIG. 7

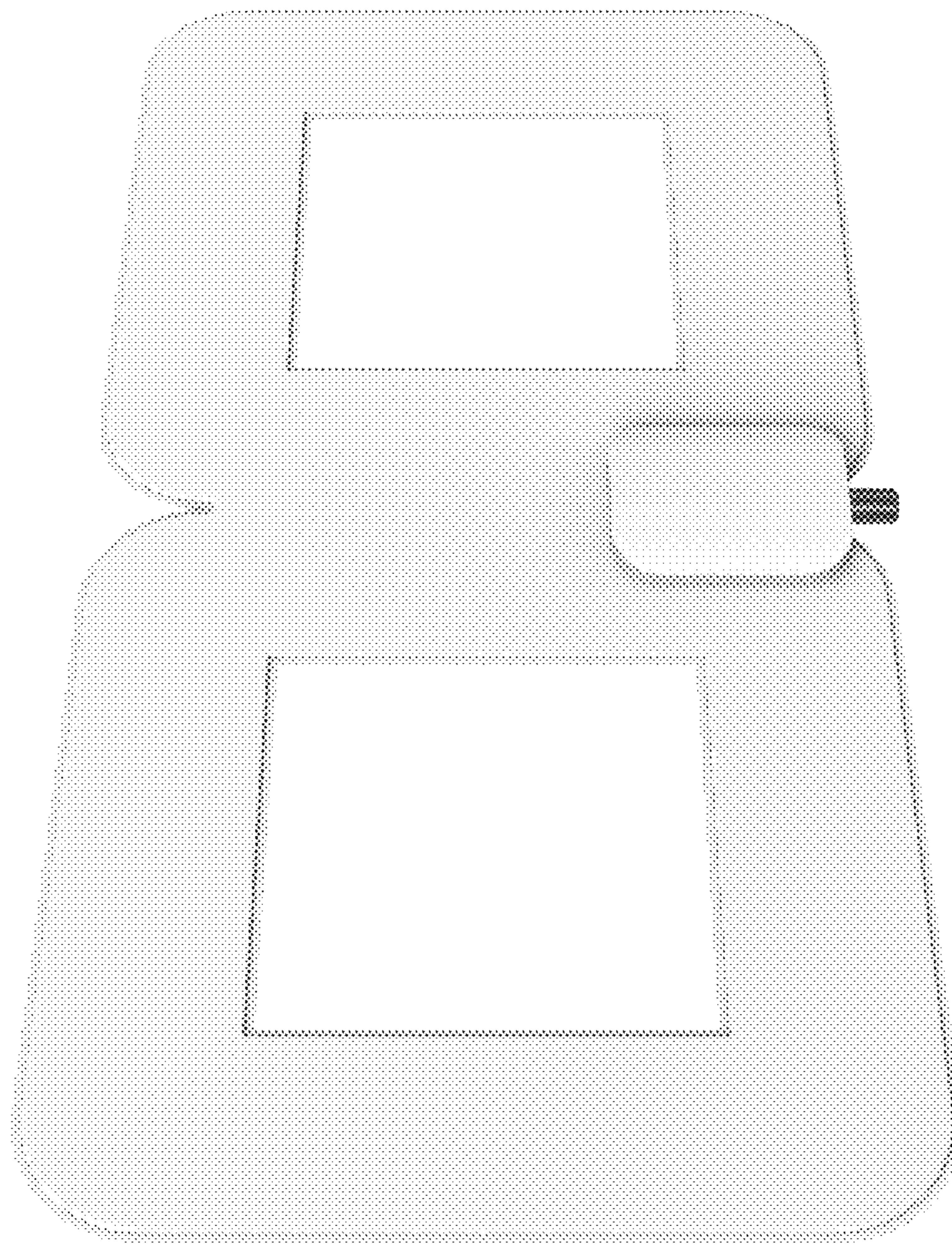


FIG. 8



FIG. 9

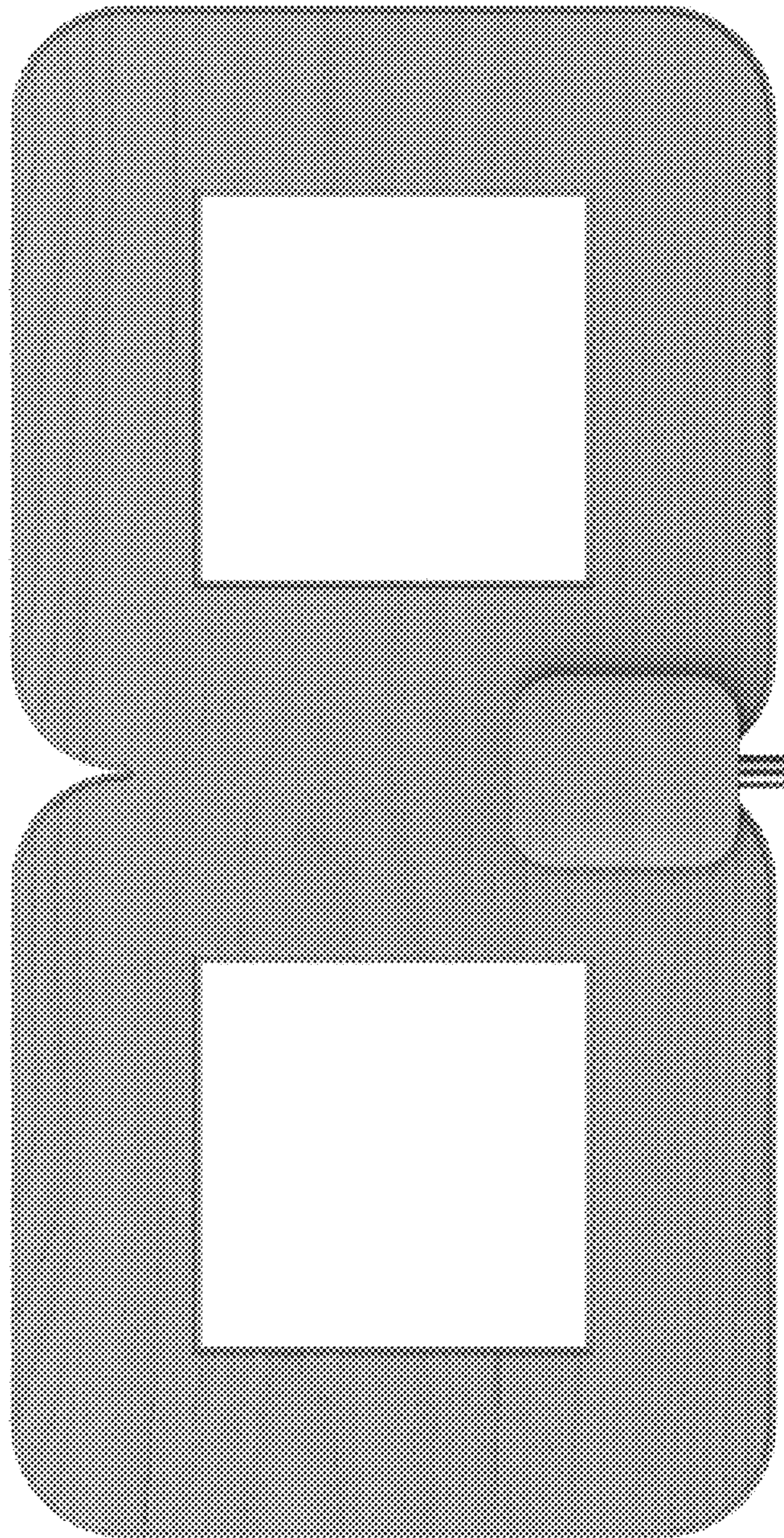


FIG. 10

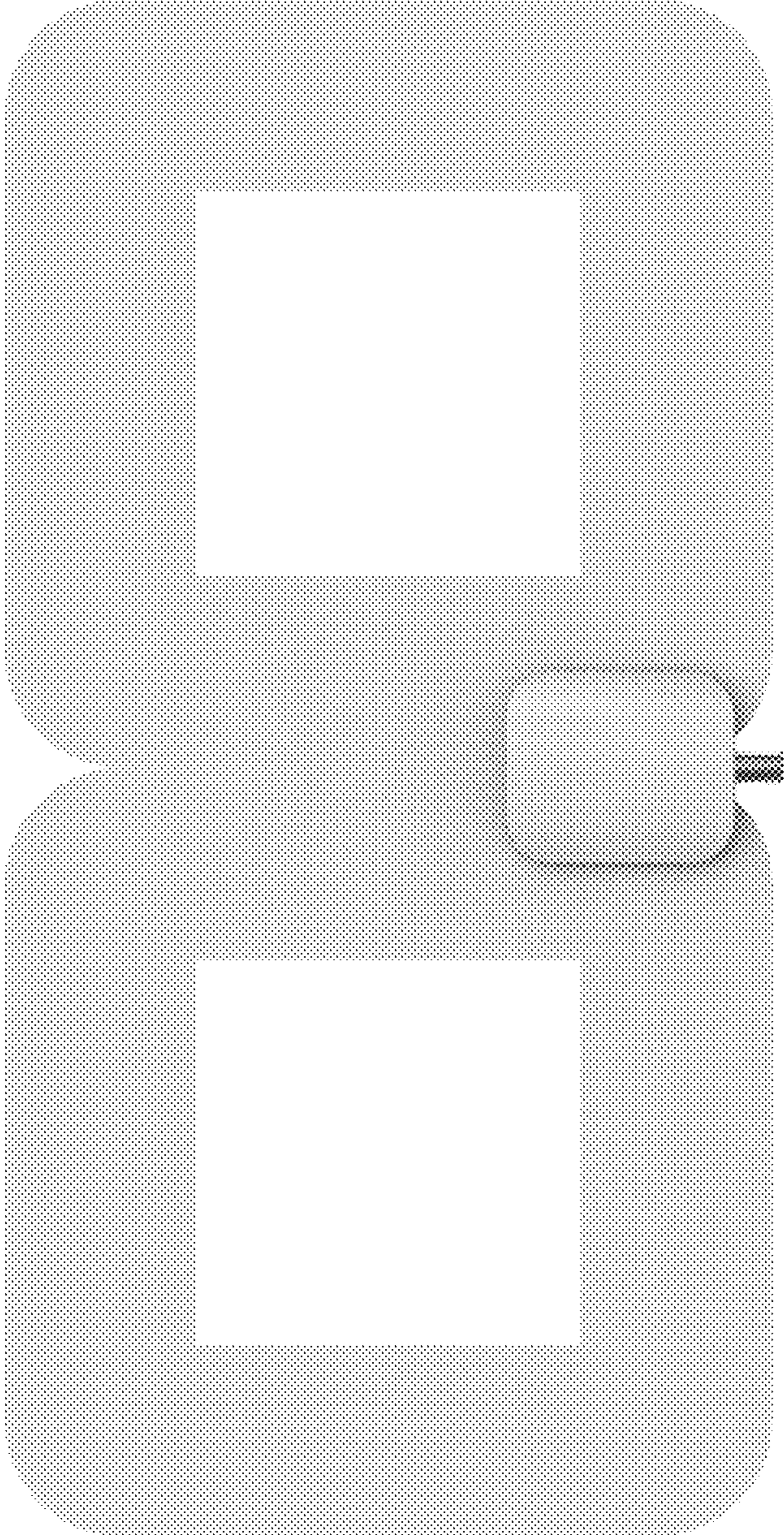


FIG. 11



FIG. 12

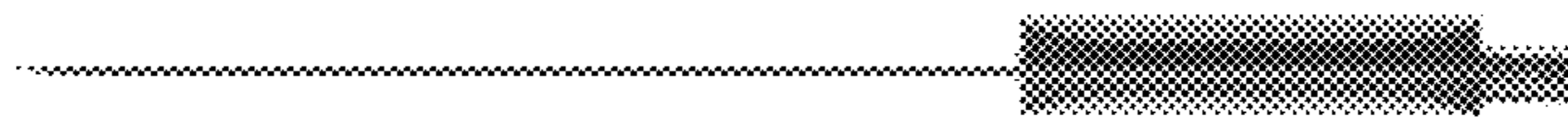


FIG. 13

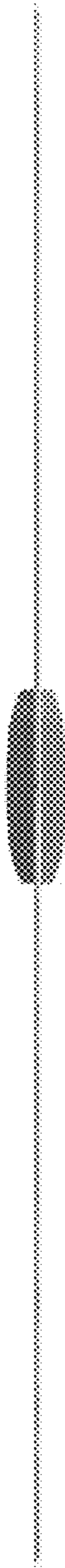


FIG. 14





FIG. 15

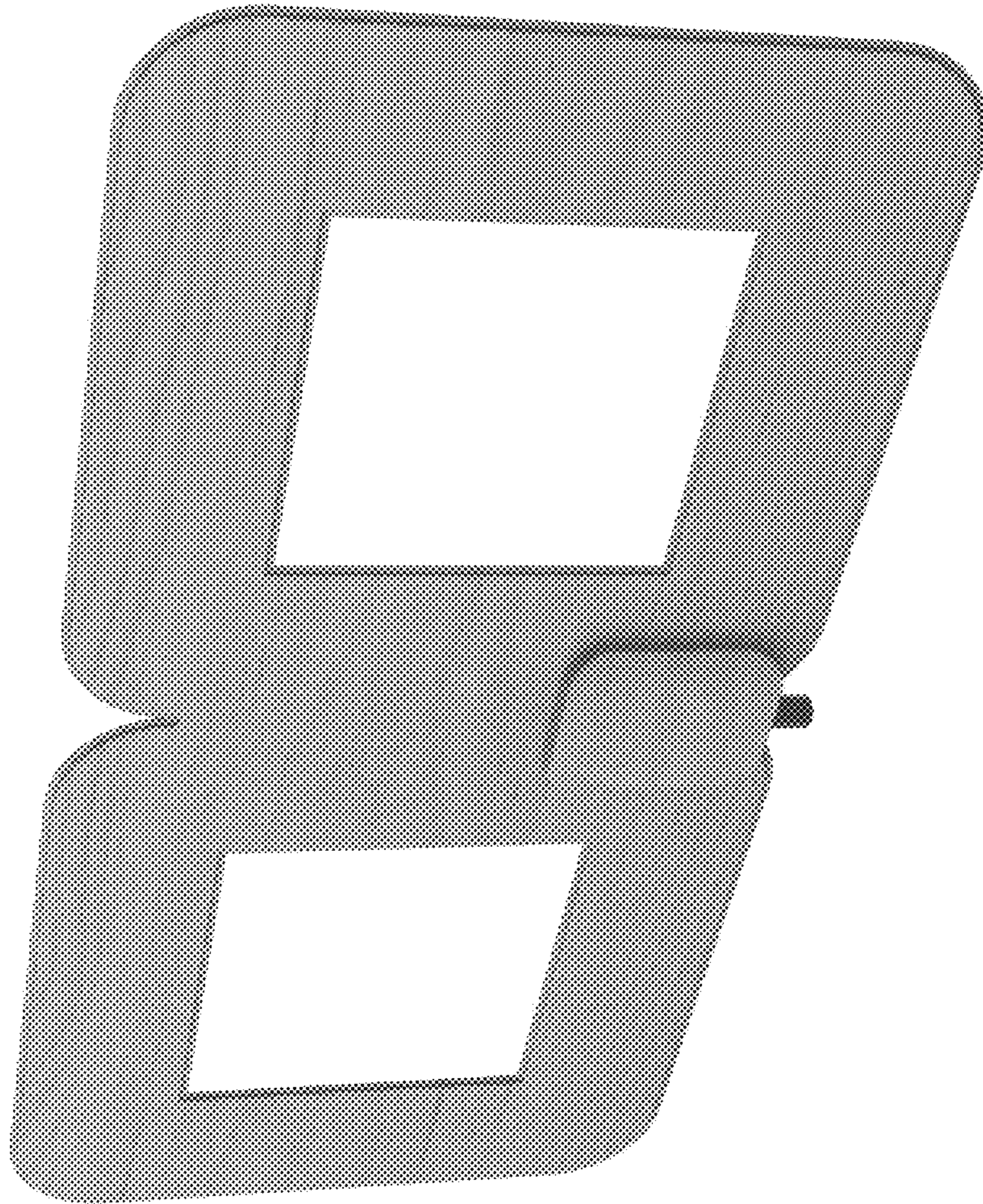


FIG. 16

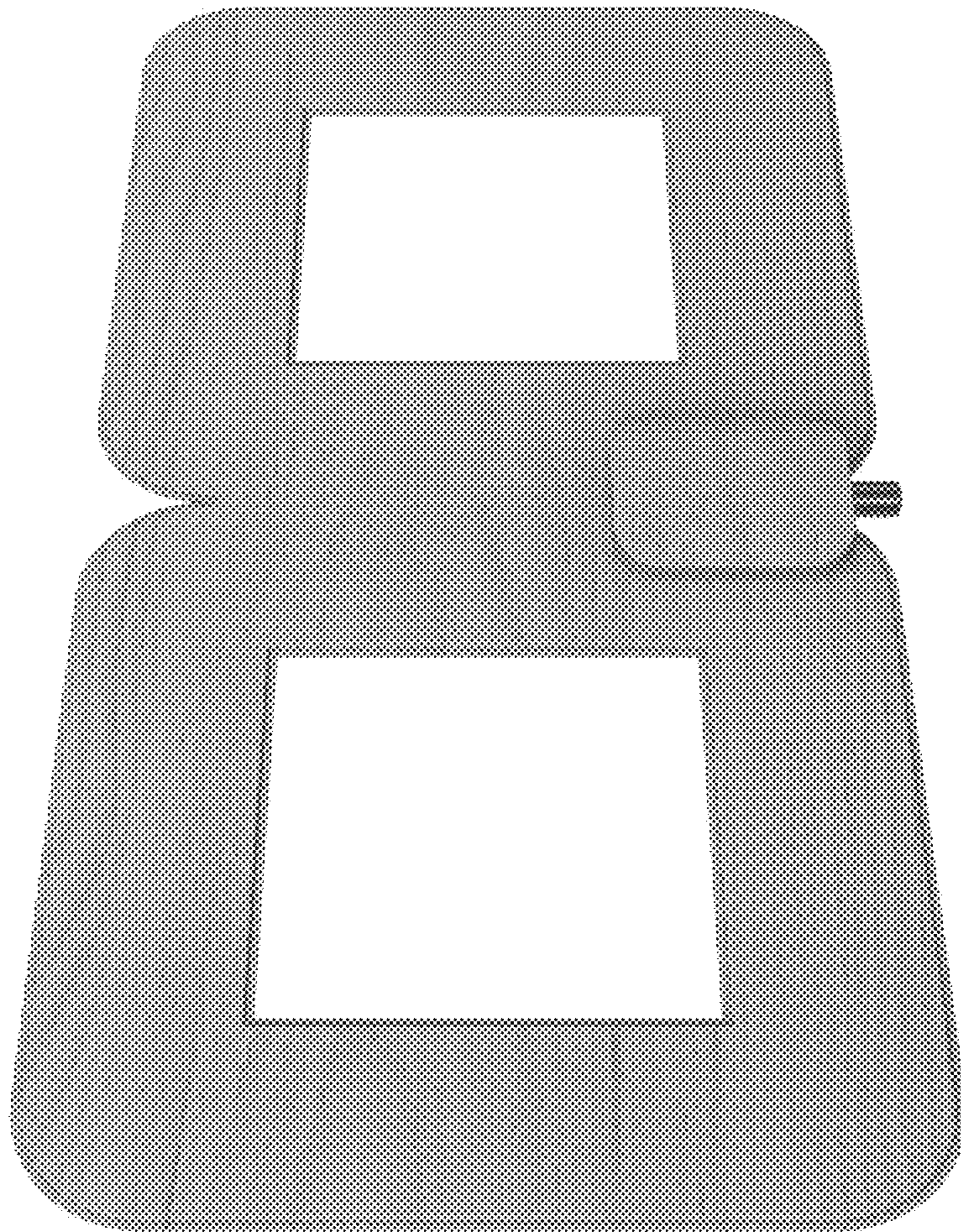


FIG. 17

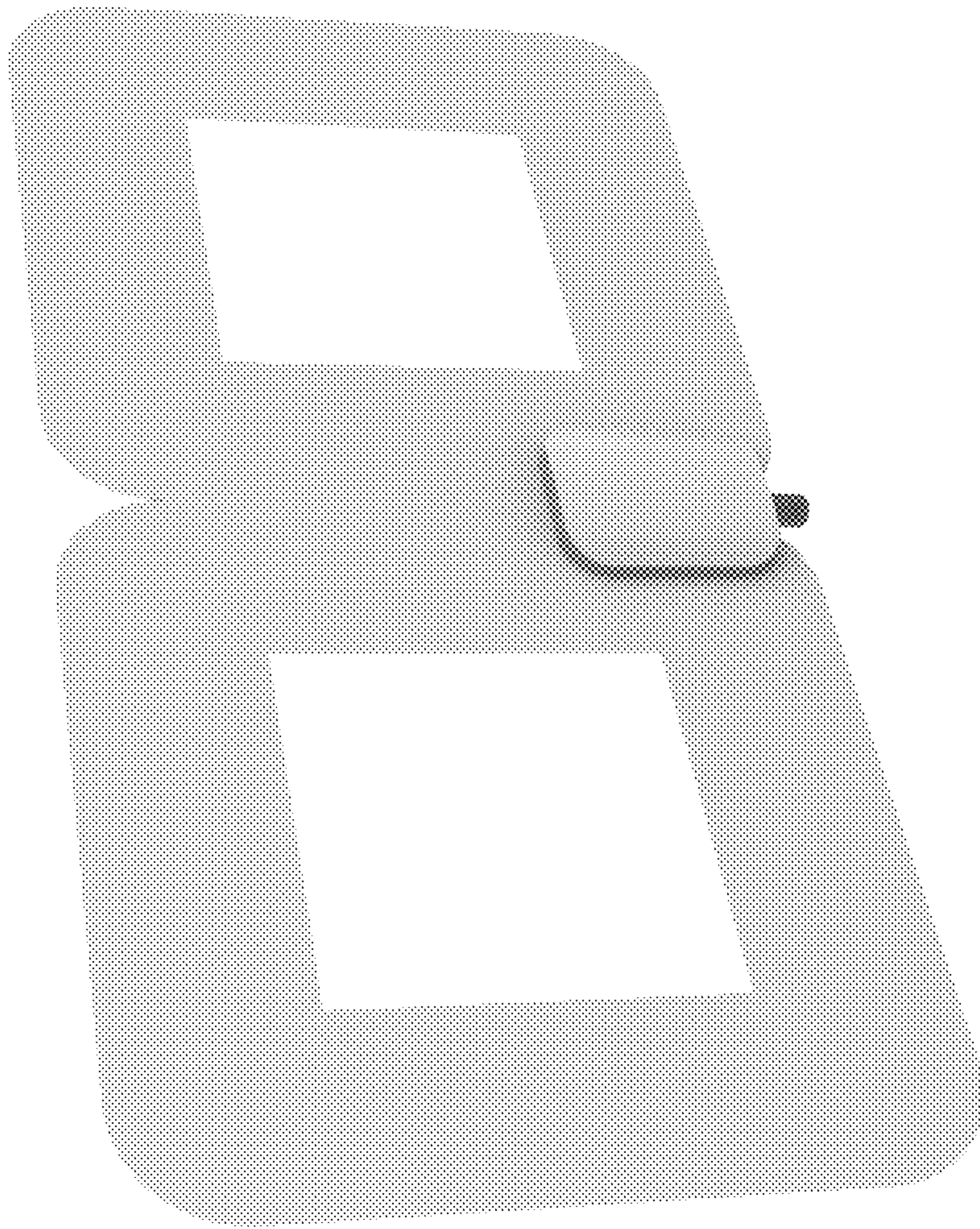


FIG. 18

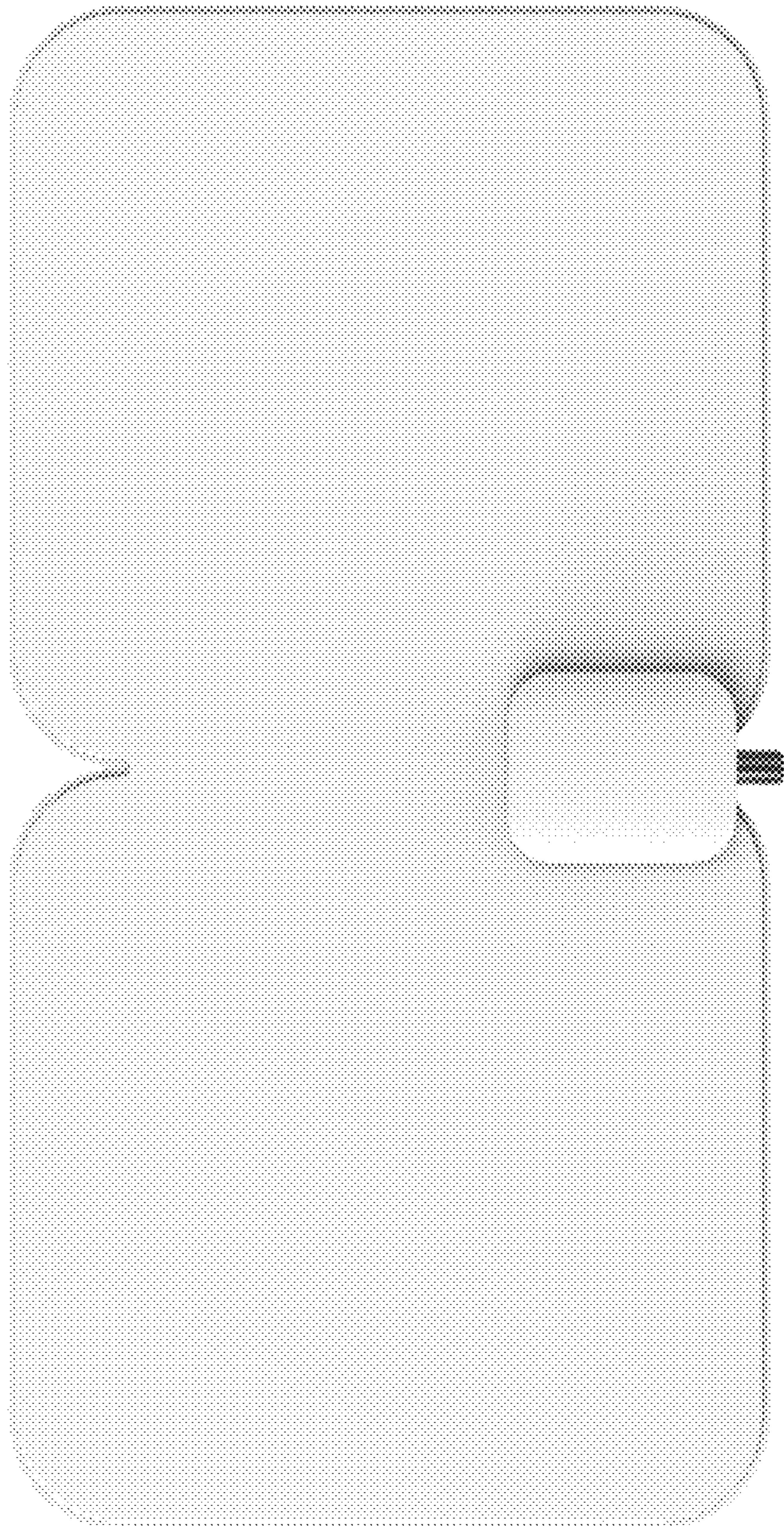


FIG. 19

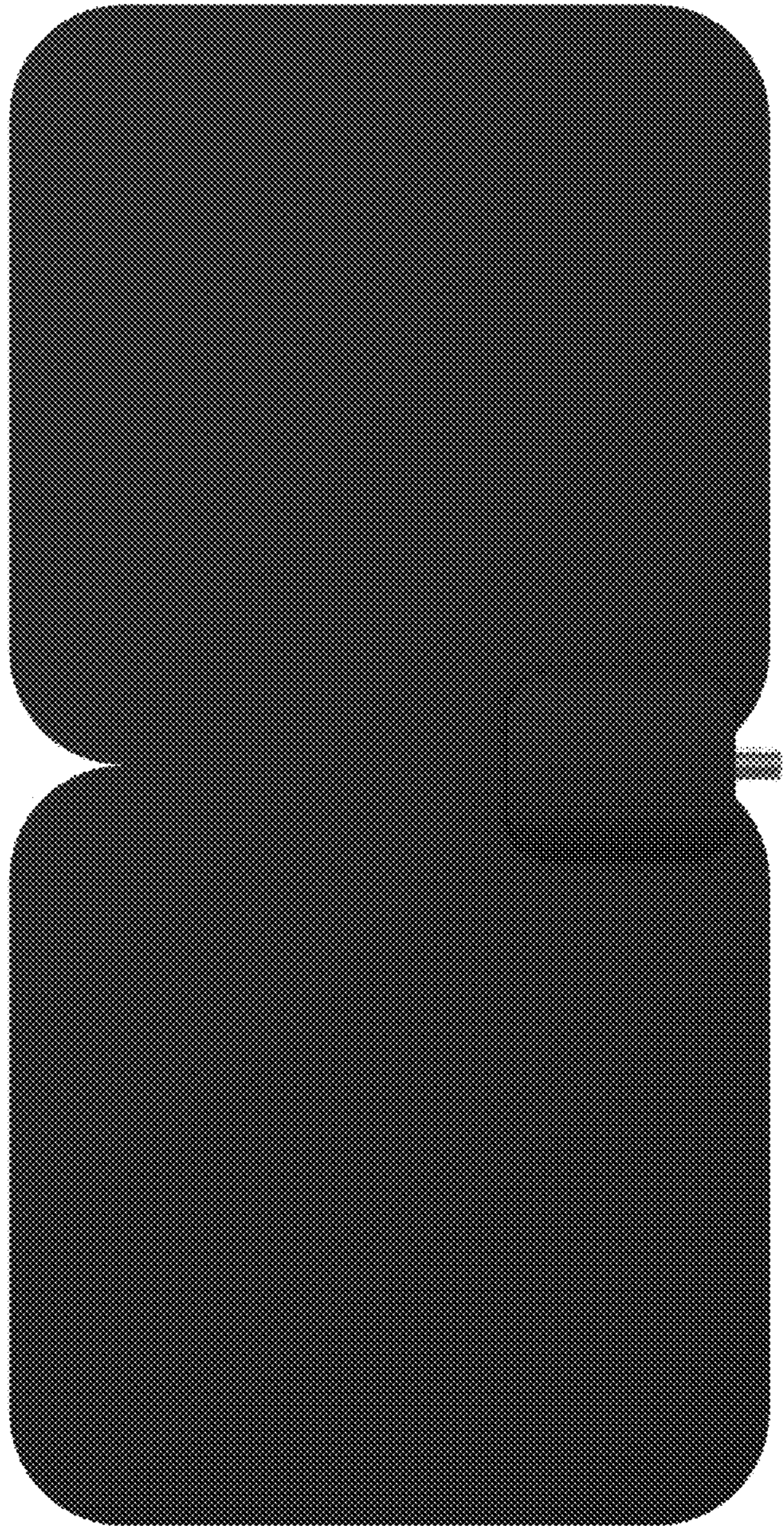


FIG. 20

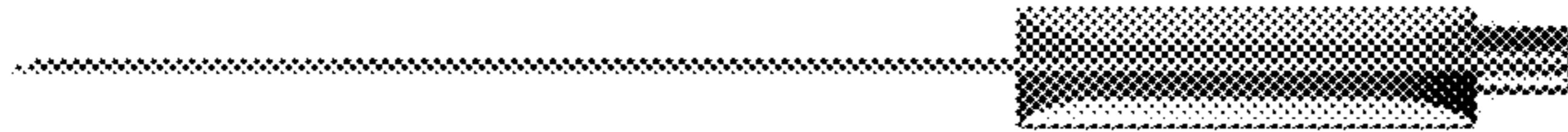


FIG. 21



FIG. 22



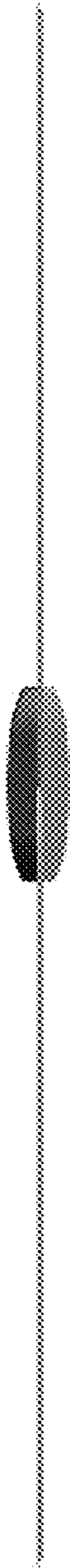


FIG. 23

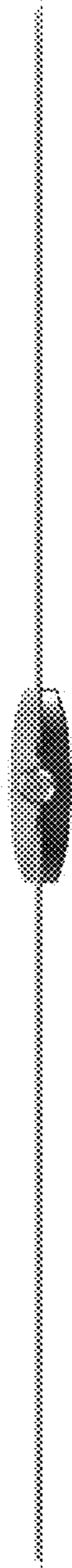


FIG. 24



FIG. 25

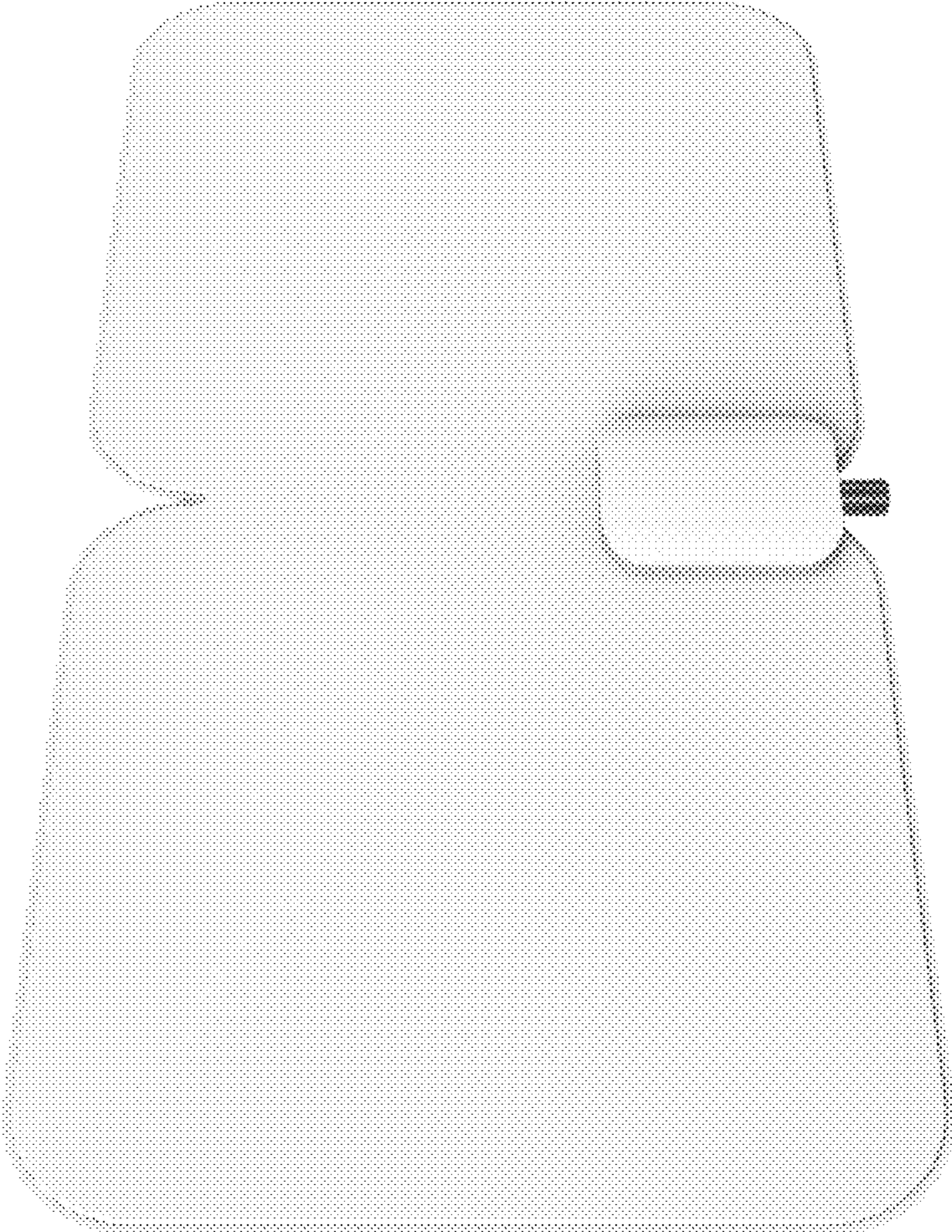


FIG. 26

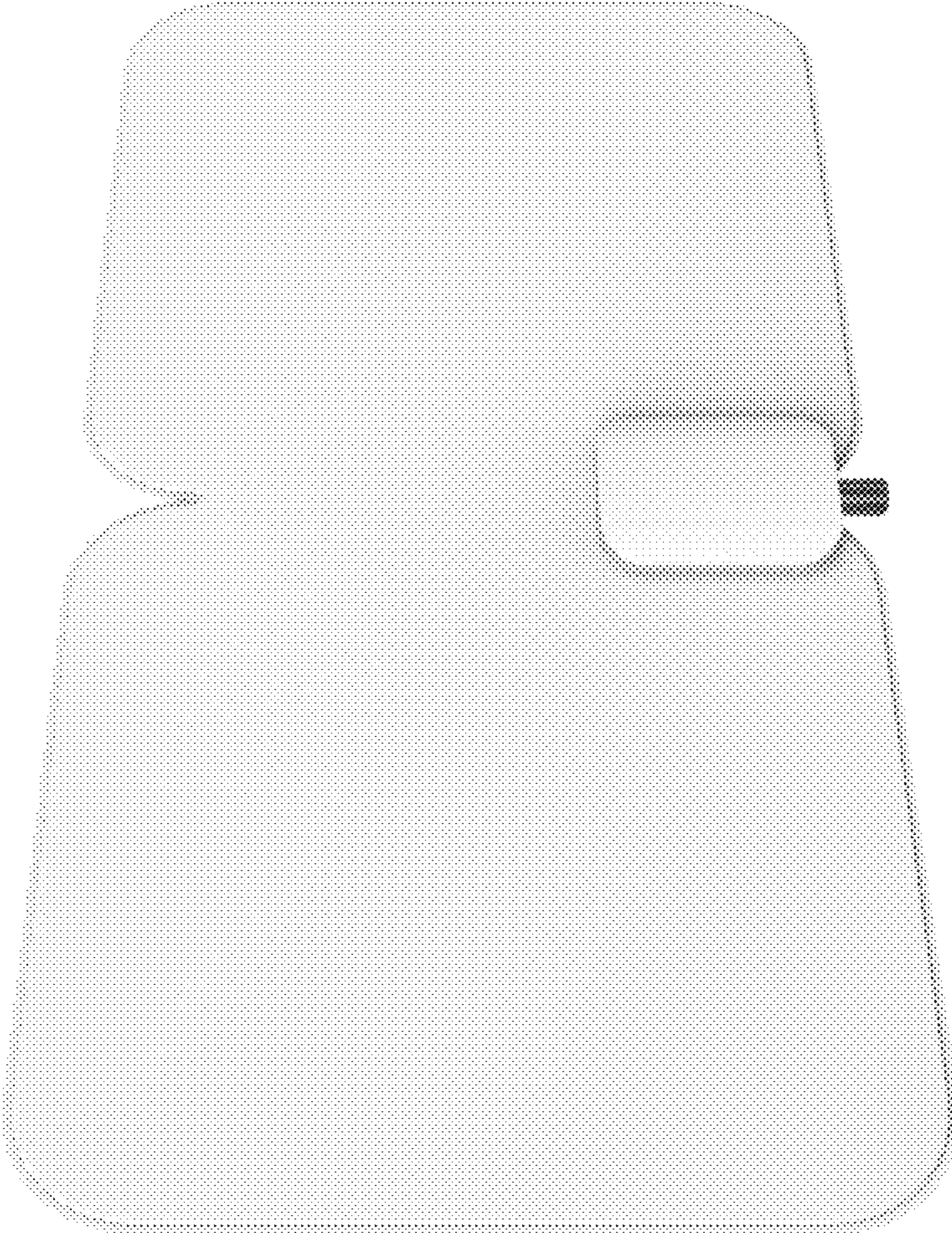


FIG. 27

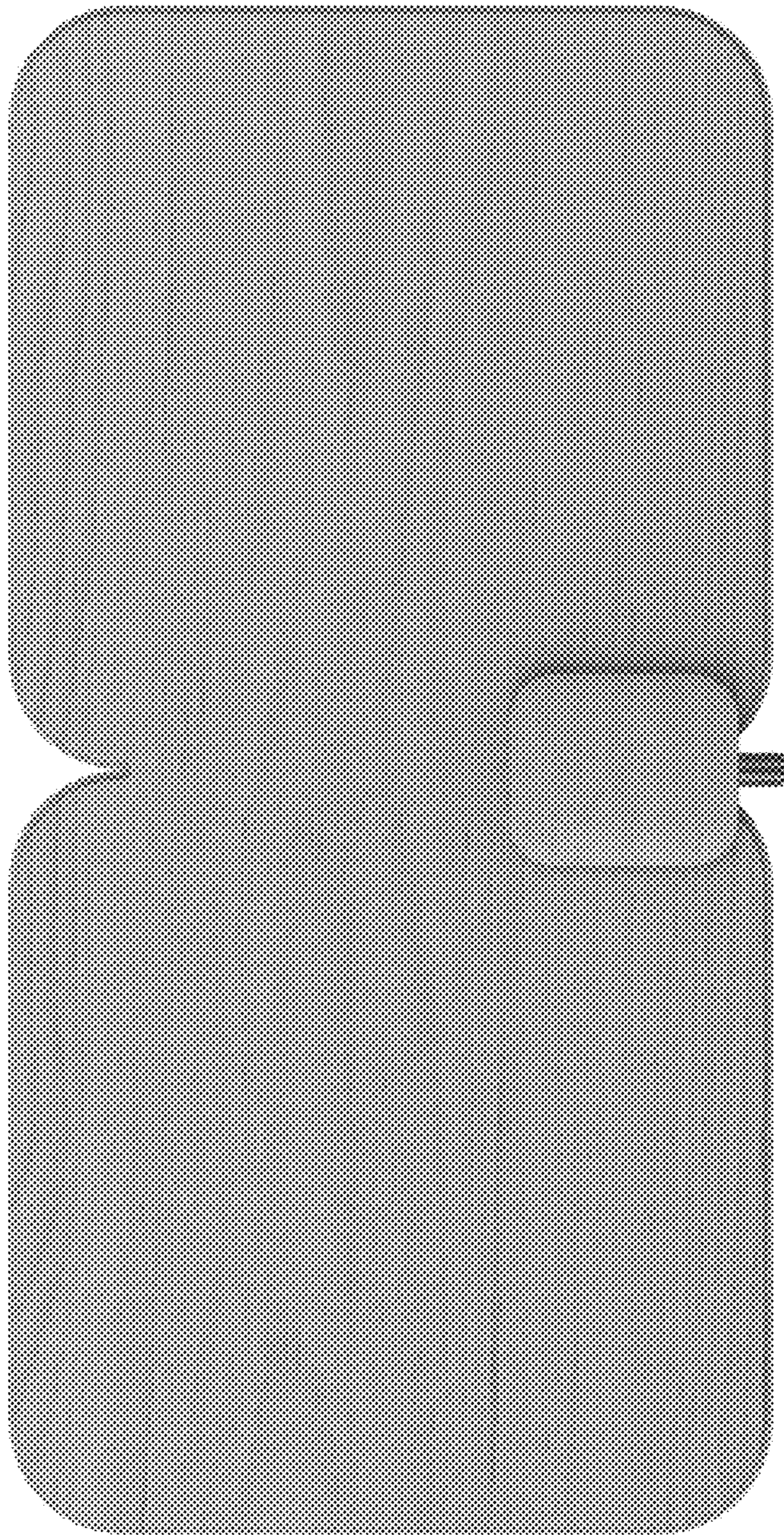


FIG. 28

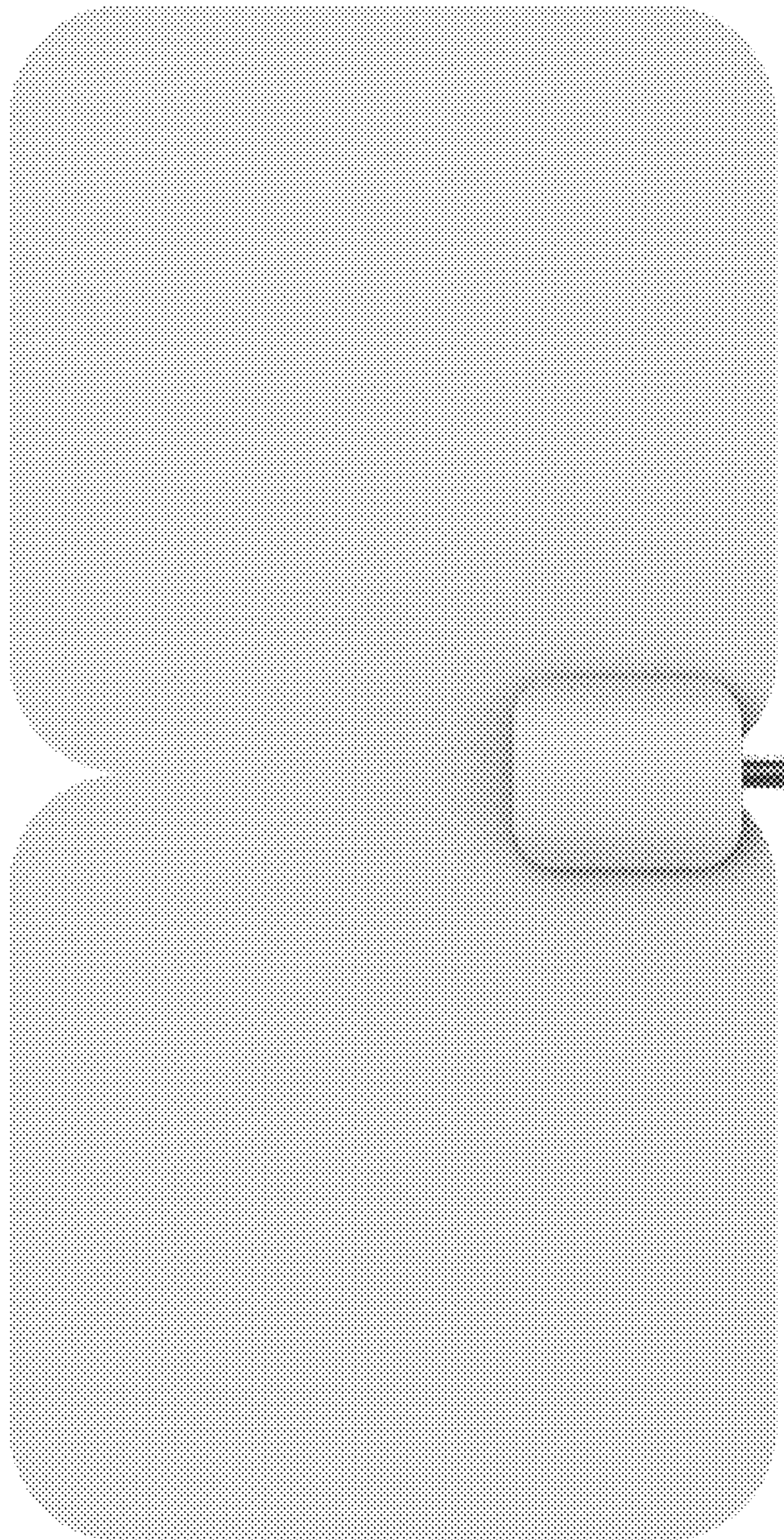


FIG. 29



FIG. 30



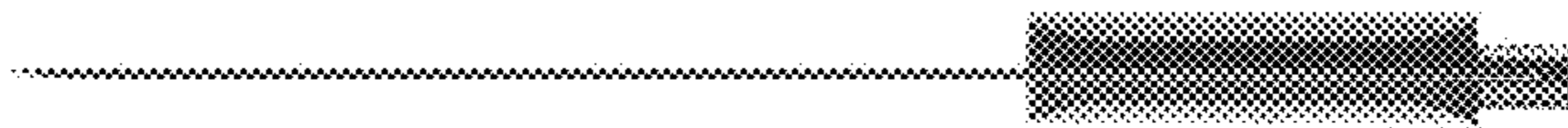


FIG. 31



FIG. 32

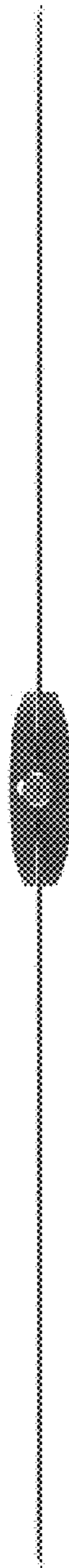


FIG. 33

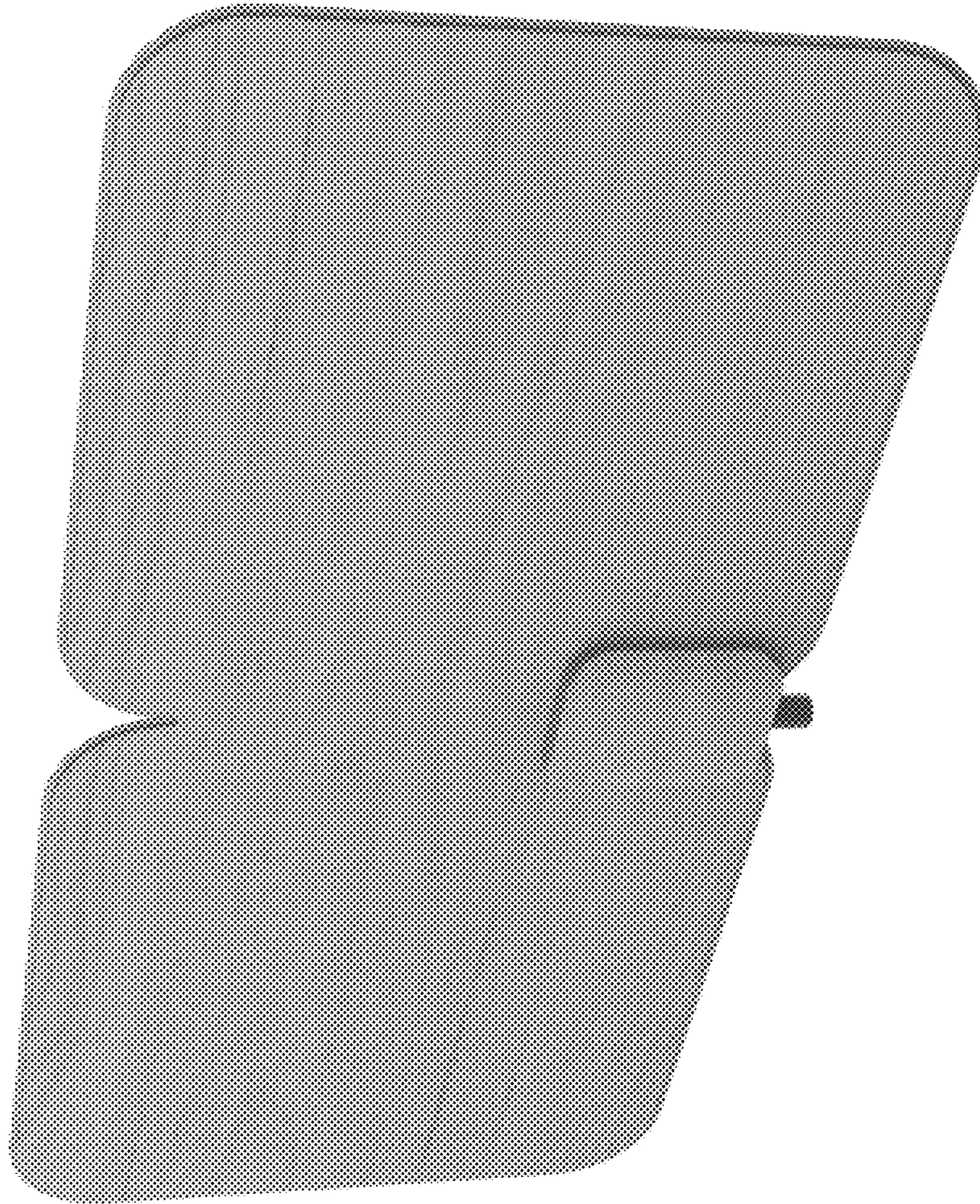


FIG. 34



FIG. 35

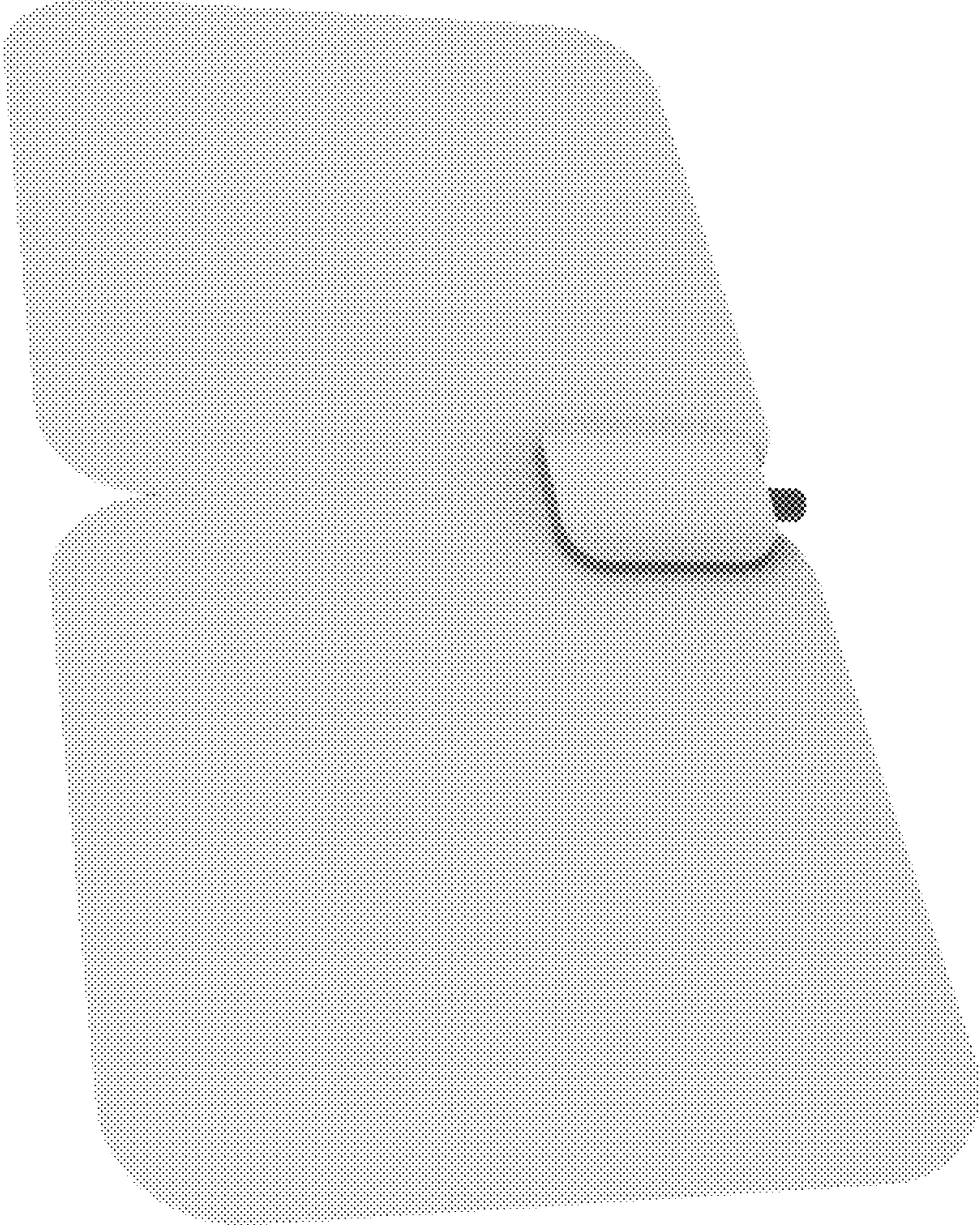


FIG. 36