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(12) **United States Design Patent**  
**Pukall**

(10) **Patent No.:** **US D780,920 S**  
(45) **Date of Patent:** **\*\* Mar. 7, 2017**

(54) **DENTAL LIGHT HARDENING DEVICE**

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(72) Inventor: **Britta Pukall**, Thalwil (CH)

(73) Assignee: **Ivoclar Vivadent AG**, Schaan (LI)

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

(21) Appl. No.: **35/500,294**

(22) Filed: **May 13, 2015**

(80) **Hague Agreement Data**

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(52) **U.S. Cl.**  
USPC ..... **D24/152**

(58) **Field of Classification Search**

USPC ..... D24/133, 137, 138, 222, 141, 108, 111,  
D24/113, 127, 143, 148, 179, 216, 152,  
(Continued)

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D494,678 S \* 8/2004 Kemeny ..... D24/152

D532,907 S \* 11/2006 Feinbloom ..... D24/152

(Continued)

**OTHER PUBLICATIONS**

World Intellectual Property Organization (WIPO), Application for International Registration, May 13, 2015, pp. 1-36.

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*Assistant Examiner* — Eliza Bennett-Hattan

(74) *Attorney, Agent, or Firm* — Ann M. Knab; Thad McMurray

(57) **CLAIM**

The ornamental design for a dental light hardening device, as shown and described.

**DESCRIPTION**

The patent or application file contains at least one drawing executed in color. Copies of this patent or patent application publication with color drawing(s) will be provided by the Office upon request and payment of the necessary fee.

Fig. 1.1 is a left side view of a dental light hardening device, showing our new design with the base and the handset.

Fig. 1.2 is a left side of the dental light hardening device in Fig. 1.1 without the handset for clarity of disclosure.

Fig. 1.3 is a perspective view of the dental light hardening device in Fig. 1.1.

Fig. 1.4 is a perspective view of the dental light hardening device in Fig. 1.2 without the handset for clarity of disclosure.

Fig. 1.5 is a rear view of the dental light hardening device in Fig. 1.1.

Fig. 1.6 is a rear view of the dental light hardening device in Fig. 1.2 without the handset for clarity of disclosure.

Fig. 1.7 is a perspective view of the dental light hardening device in Fig. 1.1.

Fig. 1.8 is a perspective view of the dental light hardening device in Fig. 1.2 without the handset for clarity of disclosure.

Fig. 1.9 is a right side view of the dental light hardening device in Fig. 1.1.

Fig. 1.10 is a right side of the dental light hardening device in Fig. 1.2 without the handset for clarity of disclosure.

Fig. 1.11 is a perspective view of the dental light hardening device in Fig. 1.1.

Fig. 1.12 is a perspective view of the dental light hardening device in Fig. 1.2 without the handset for clarity of disclosure.

Fig. 1.13 is a front view of the dental light hardening device in Fig. 1.1.

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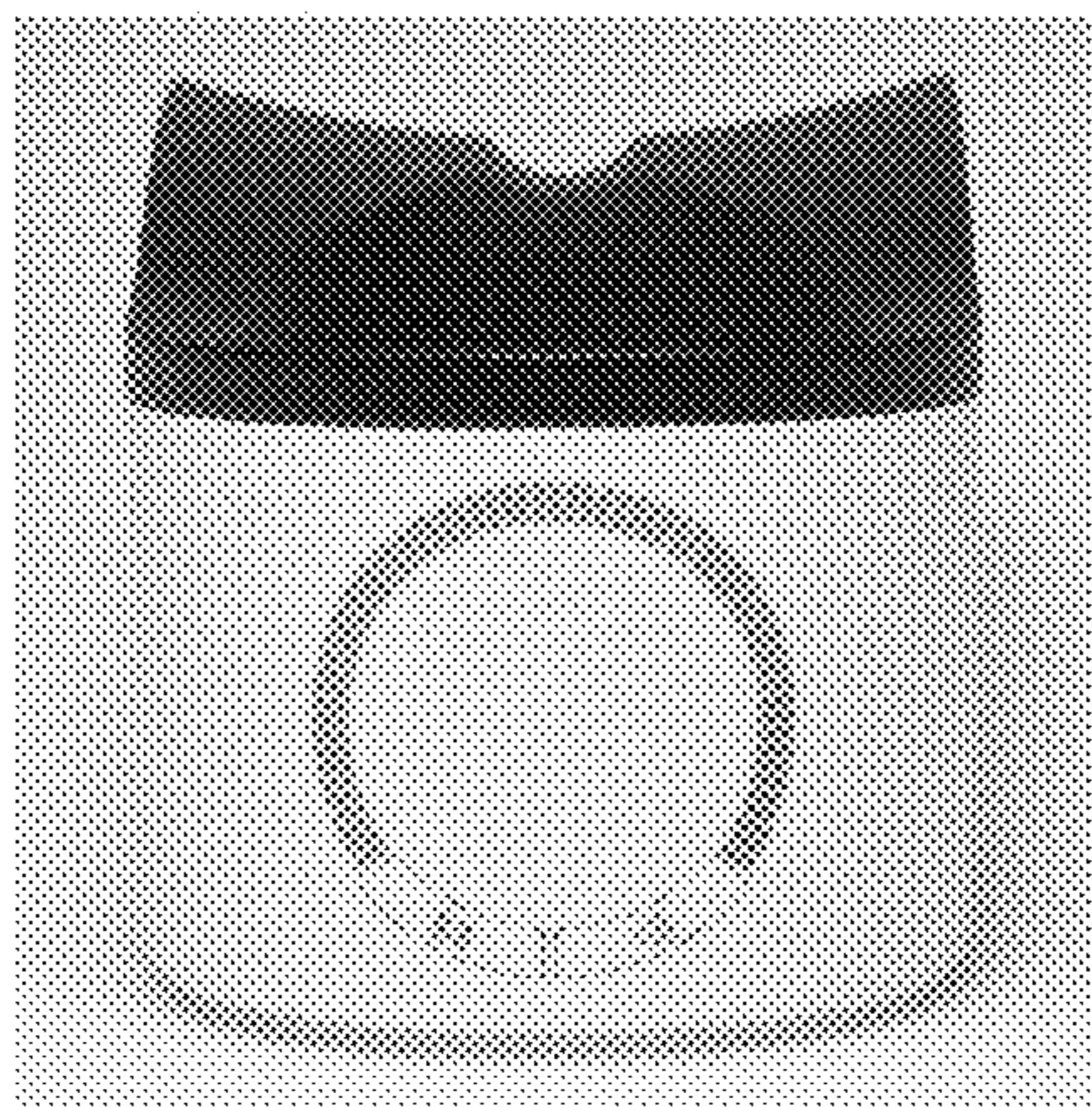


Fig. 1.14 is a front view of the dental light hardening device in Fig. 1.2 without the handset for clarity of disclosure.

Fig. 1.15 is a perspective view of the dental light hardening device in Fig. 1.1.

Fig. 1.16 is a perspective view of the dental light hardening device in Fig. 1.2 without the handset for clarity of disclosure.

Fig. 1.17 is a left side of the dental light hardening device in Fig. 1.1 without the base for clarity of disclosure.

Fig. 1.18 is a perspective view of Fig. 1.17 without the base for clarity of disclosure.

Fig. 1.19 is a rear view of Fig. 1.17 without the base for clarity of disclosure.

Fig. 1.20 is a perspective view of Fig. 1.17 without the base for clarity of disclosure.

Fig. 1.21 is a right side view of Fig. 1.17 without the base for clarity of disclosure.

Fig. 1.22 is a perspective view of Fig. 1.17 without the base for clarity of disclosure.

Fig. 1.23 is a perspective view of Fig. 1.17 without the base for clarity of disclosure.

Fig. 1.24 is a front view of Fig. 1.17 without the base for clarity of disclosure.

Fig. 1.25 is a top view of Fig. 1.1.

Fig. 1.26 is a top view of Fig. 1.2 without the handset for clarity of disclosure.

Fig. 1.27 is a bottom view of Fig. 1.1.

Fig. 1.28 is a top view of Fig. 1.17 without the base for clarity of disclosure.

Fig. 1.29 is a bottom view of Fig. 1.17 without the base for clarity of disclosure.

Fig. 2.1 is a perspective view of a second embodiment of a dental light hardening device, showing our new design without the base for clarity of disclosure.

Fig. 2.2 is a left side view of Fig. 2.1 without the base for clarity of disclosure.

Fig. 2.3 is a right side view of Fig. 2.1 without the base for clarity of disclosure.

Fig. 2.4 is a top view of Fig. 2.1 without the base for clarity of disclosure.

Fig. 2.5 is a bottom view of Fig. 2.1 without the base for clarity of disclosure.

Fig. 2.6 is a front view of Fig. 2.1 without the base for clarity of disclosure.

Fig. 2.7 is a rear view of Fig. 2.1 without the base for clarity of disclosure.

Fig. 2.8 is a perspective view of the second embodiment of a dental light hardening device, showing our new design without the handset for clarity of disclosure.

Fig. 2.9 is a left side view of Fig. 2.8 without the handset for clarity of disclosure.

Fig. 2.10 is a right side view of Fig. 2.8 without the handset for clarity of disclosure.

Fig. 2.11 is a top view of Fig. 2.8 without the handset for clarity of disclosure.

Fig. 2.12 is a bottom view of Fig. 2.8 without the handset for clarity of disclosure.

Fig. 2.13 is a rear view of Fig. 2.8 without the handset for clarity of disclosure.

Fig. 2.14 is a front view of Fig. 2.8 without the handset for clarity of disclosure.

Fig. 2.15 is a perspective view of the second embodiment of a dental light hardening device, showing our new design with the base and the handset.

The two embodiments of the dental light hardening device have been shown as separate components to provide ease of illustration in order to clearly show all elements of the claimed design.

**1 Claim, 44 Drawing Sheets  
(19 of 44 Drawing Sheet(s) Filed in Color)**

(58) **Field of Classification Search**  
 USPC .... D24/153, 154, 176; D8/4, 29.1, 29.2, 30, D8/31, 39  
 CPC ..... A61B 1/00128; A61B 1/018; A61B 17/320016; A61B 17/3423; A61B 1/00135; A61B 1/12; A61B 2017/00477; A61B 2017/347; A61B 17/00234; A61B 17/00491; A61B 1/00066; A61B 1/00133; A61B 1/00147  
 See application file for complete search history.

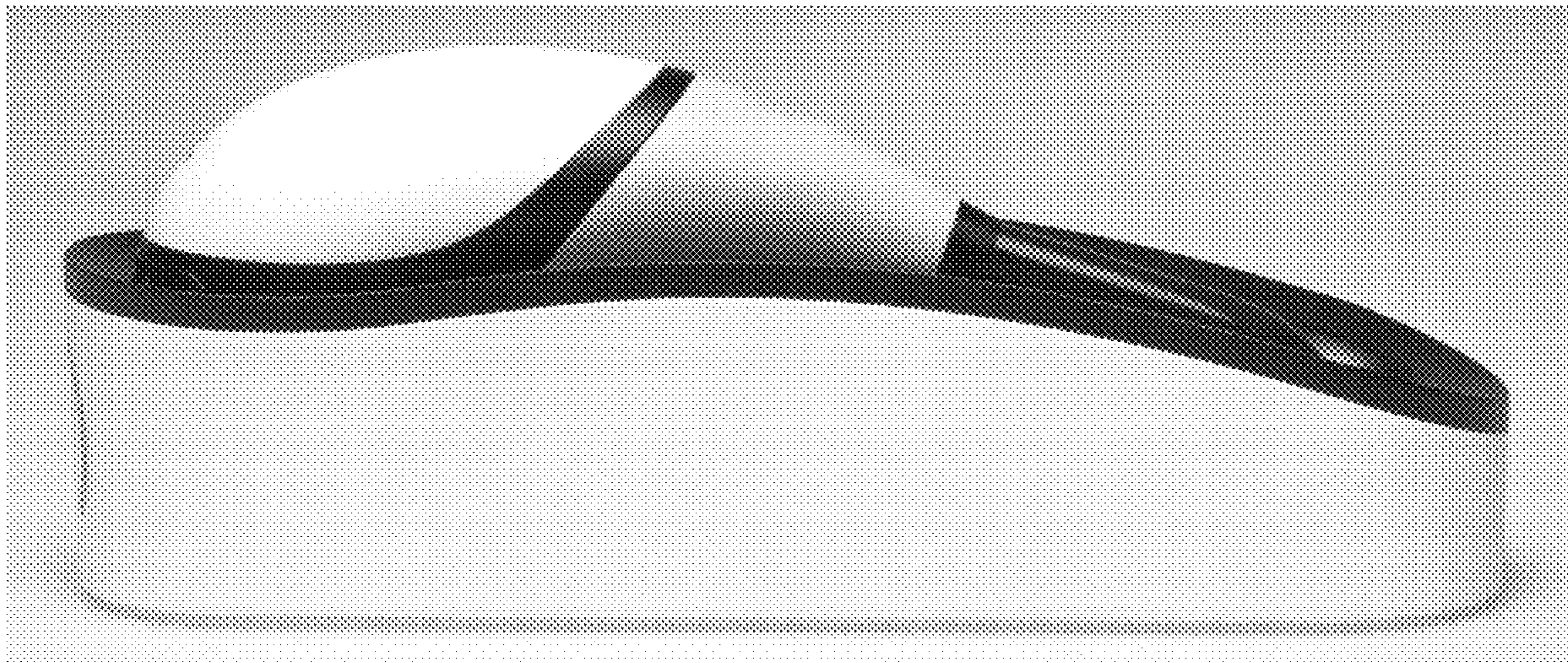
(56) **References Cited**

U.S. PATENT DOCUMENTS

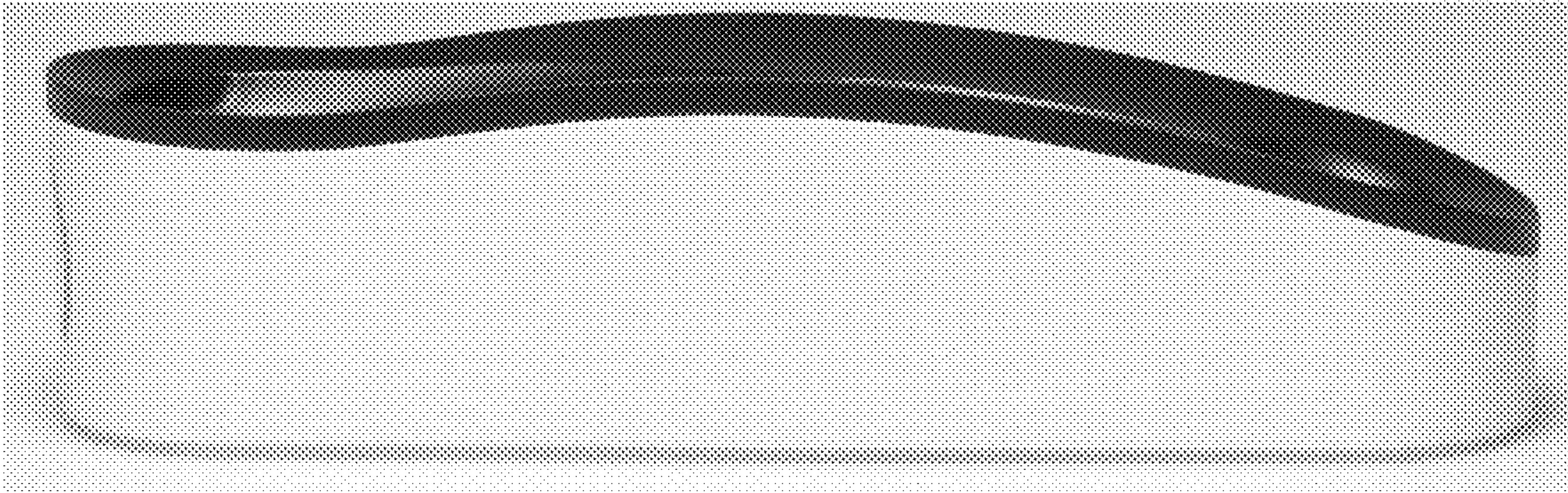
|          |   |   |         |             |       |         |
|----------|---|---|---------|-------------|-------|---------|
| D557,416 | S | * | 12/2007 | Wang        | ..... | D24/152 |
| D574,081 | S | * | 7/2008  | Berry Pitts | ..... | D24/152 |
| D599,018 | S | * | 8/2009  | Plank       | ..... | D24/152 |
| D618,799 | S | * | 6/2010  | Plank       | ..... | D24/152 |
| D627,058 | S | * | 11/2010 | Ko          | ..... | D24/108 |
| D669,978 | S | * | 10/2012 | Gebski      | ..... | D24/111 |
| D708,741 | S | * | 7/2014  | Harrison    | ..... | D24/133 |
| D714,936 | S | * | 10/2014 | Weber       | ..... | D24/133 |

\* cited by examiner

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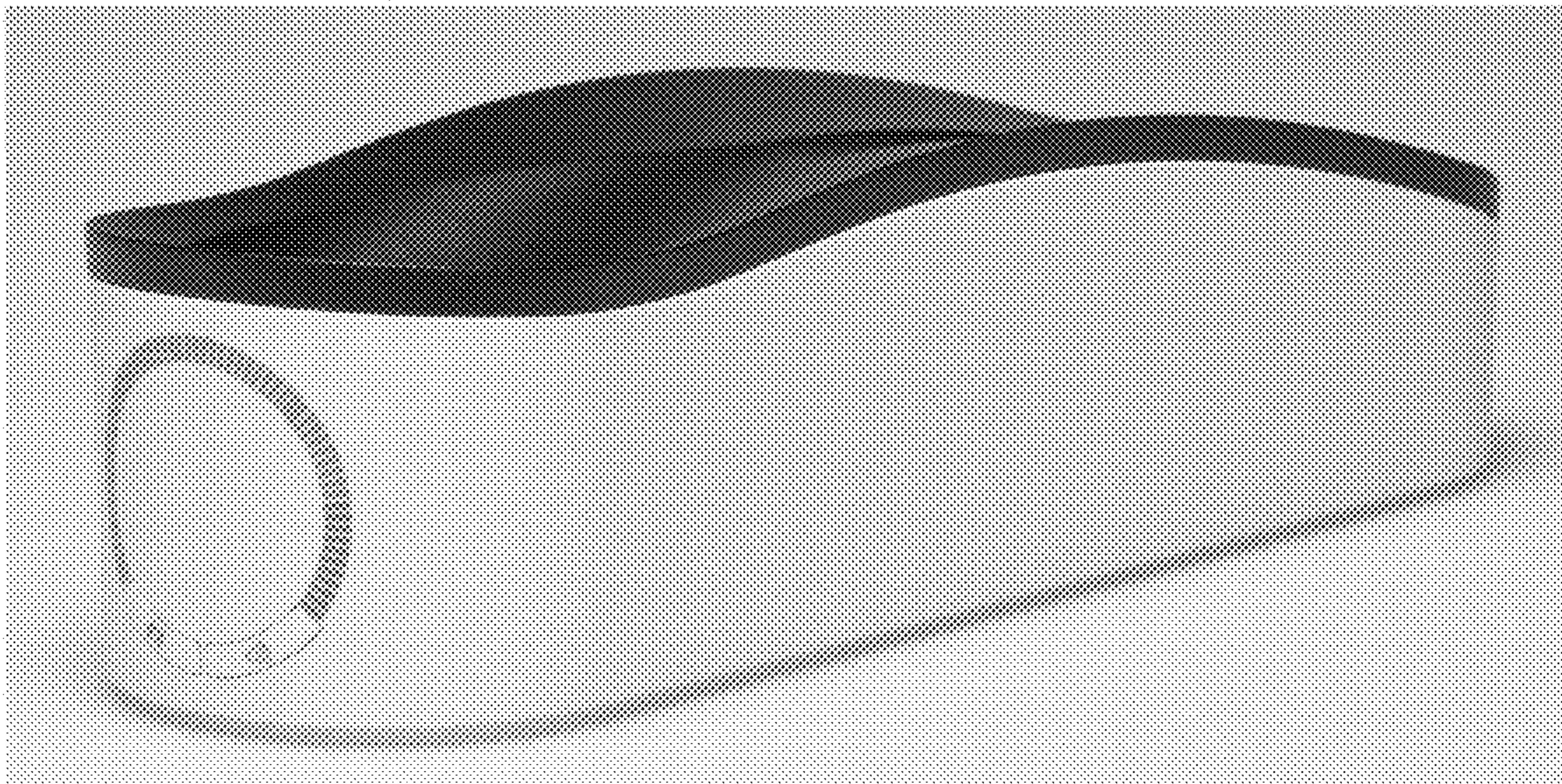
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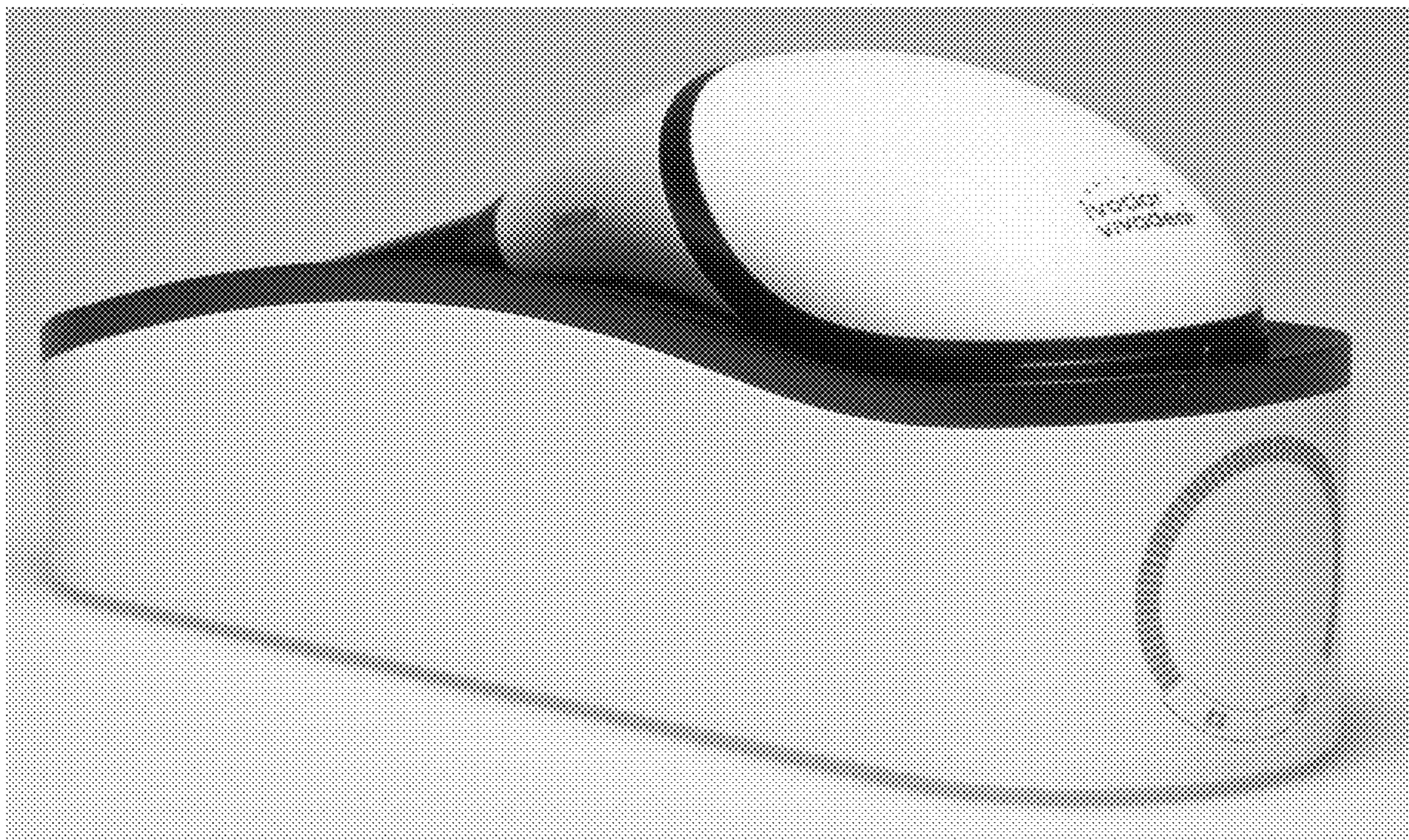


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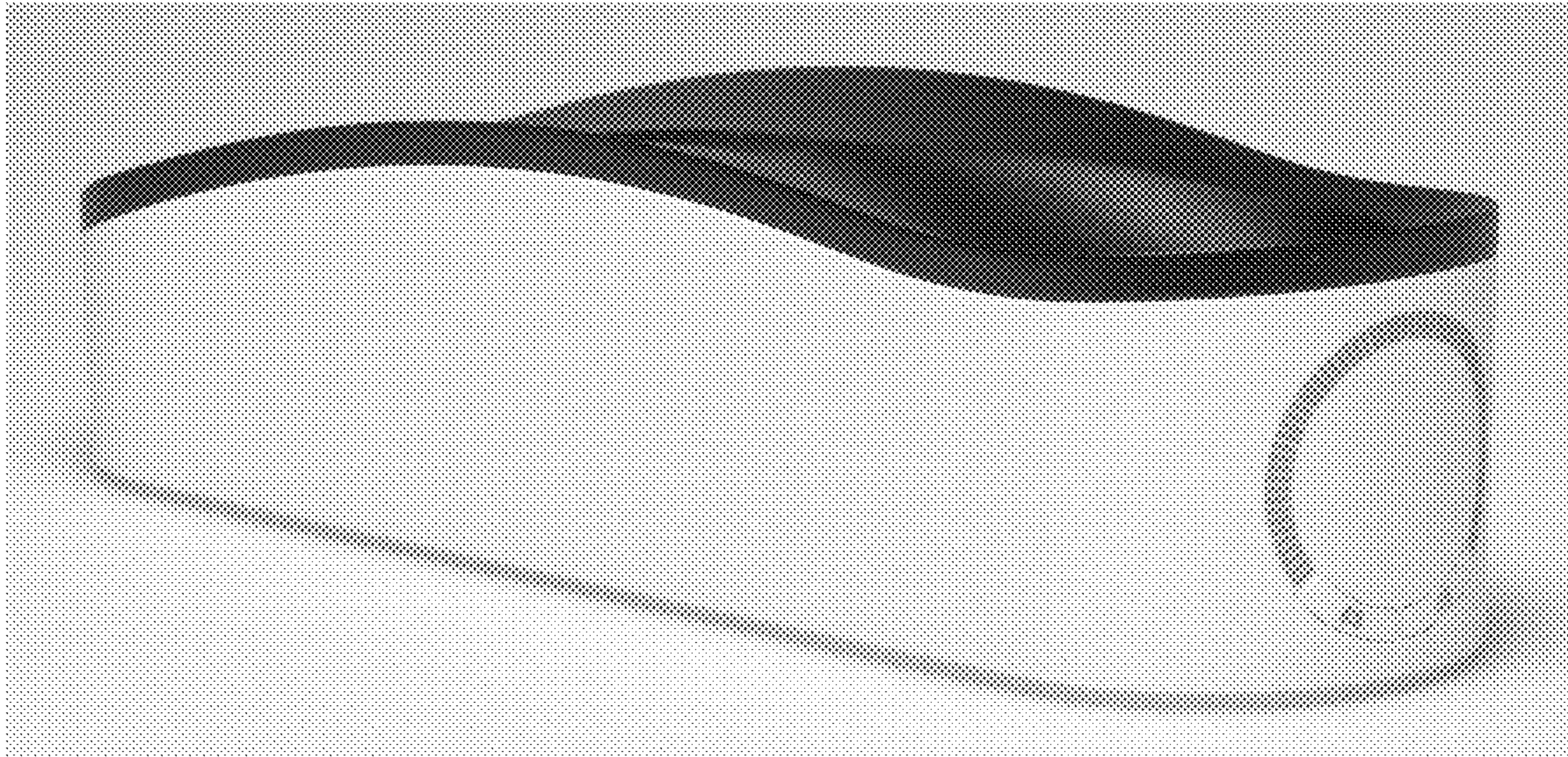




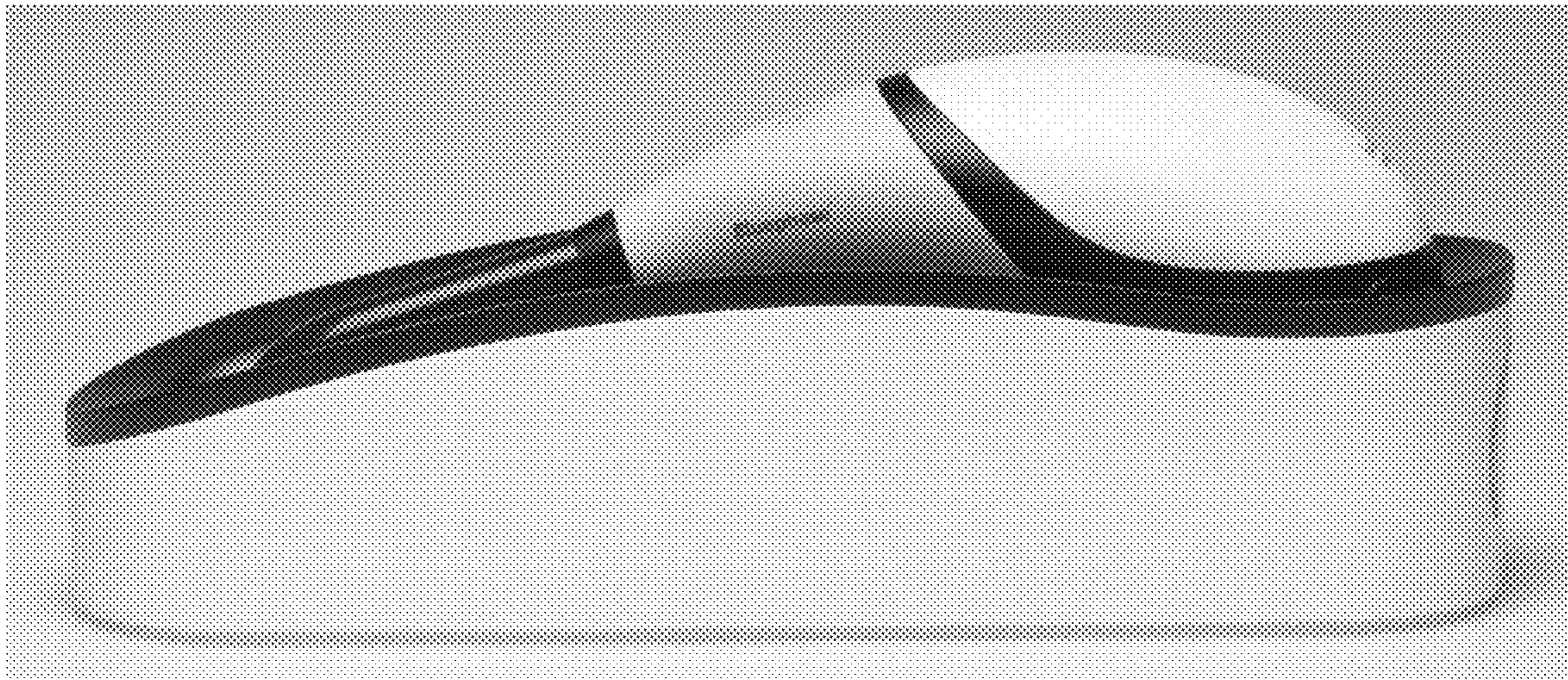
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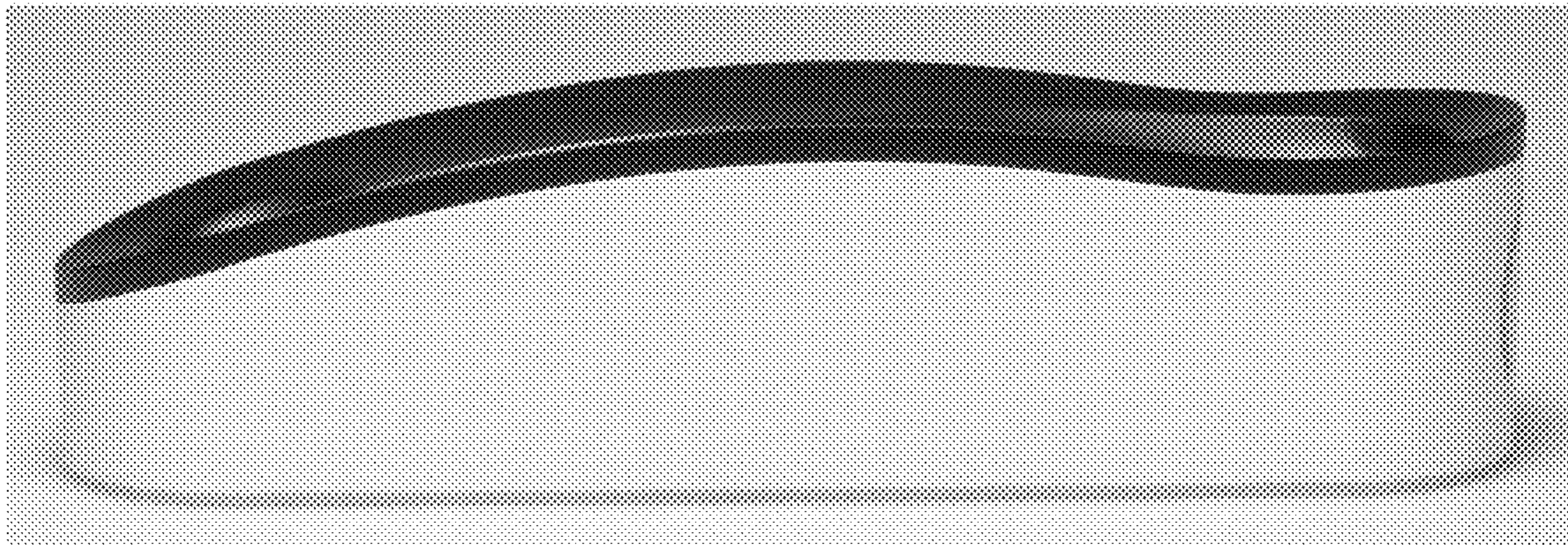
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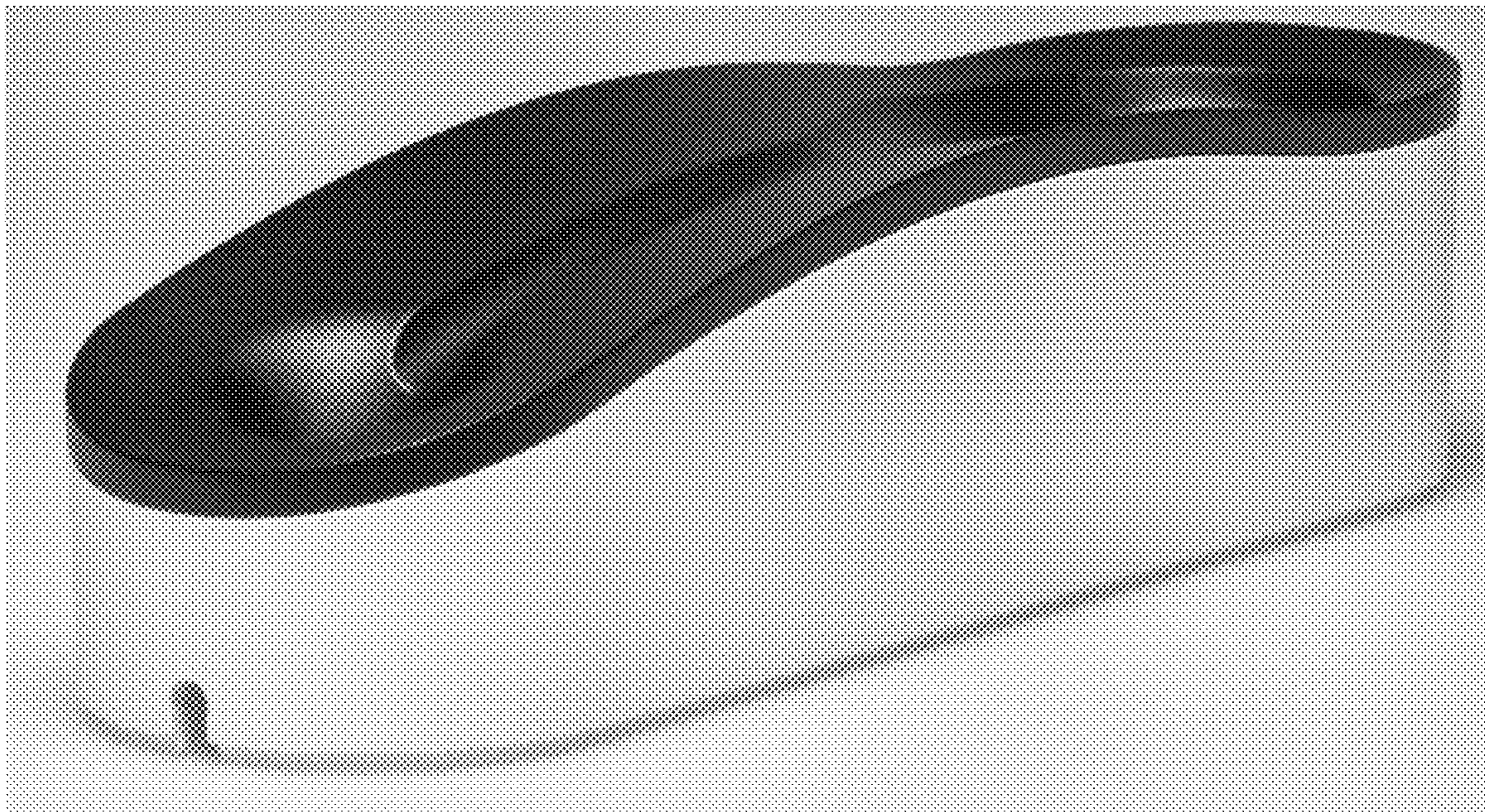
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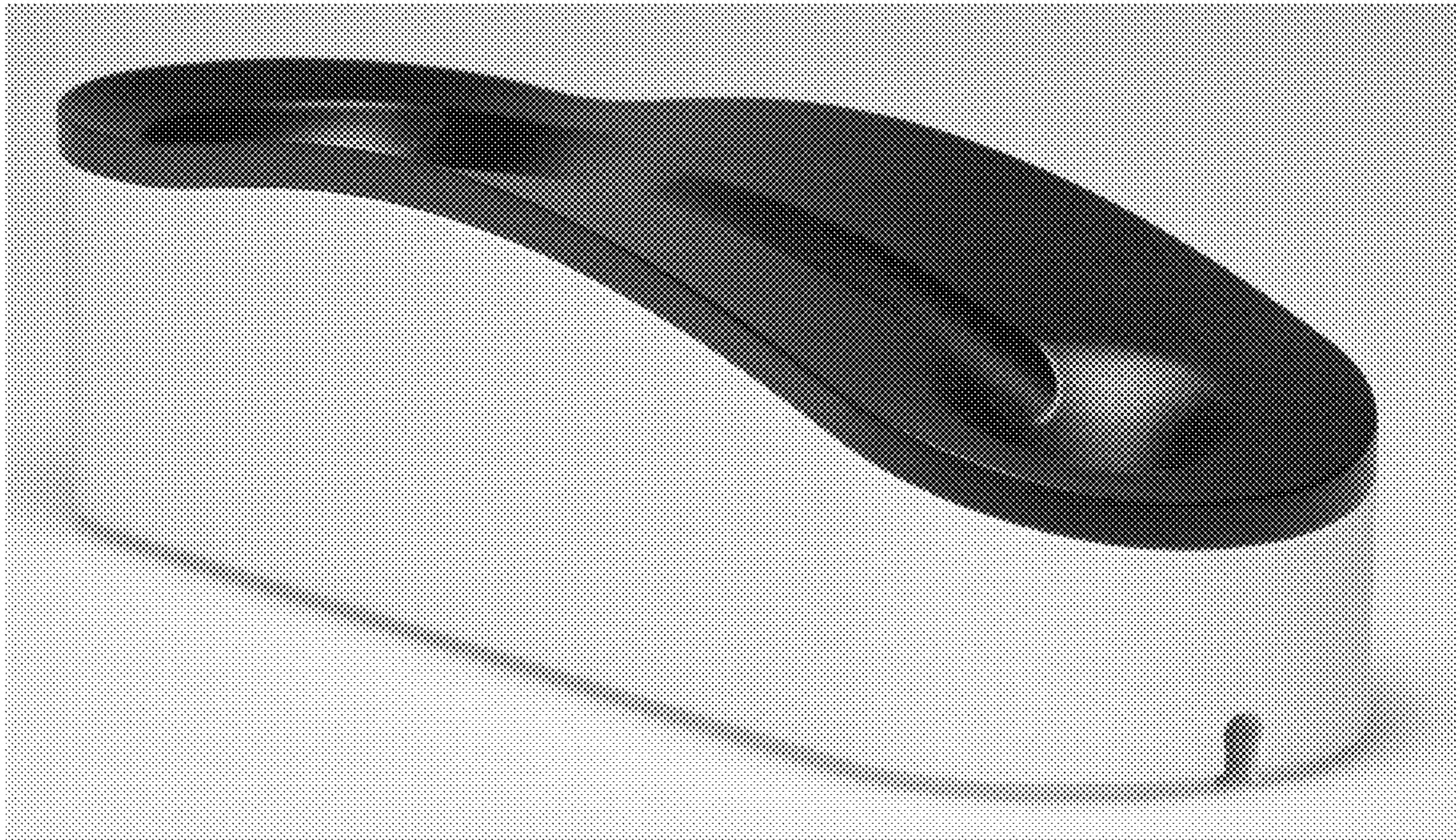




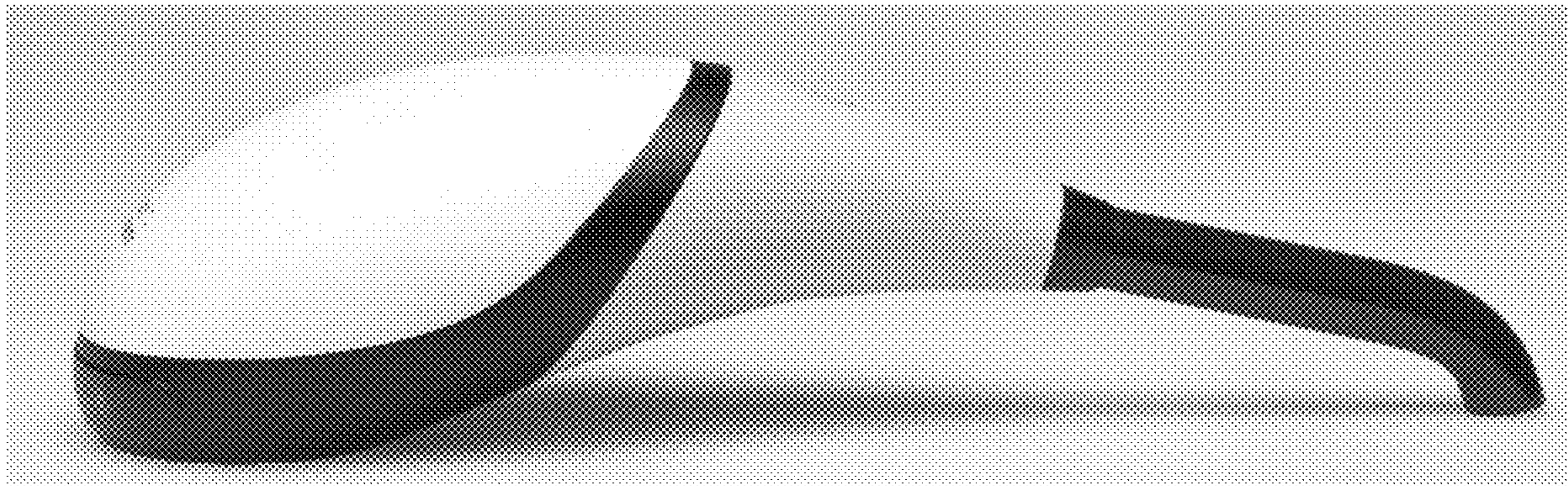
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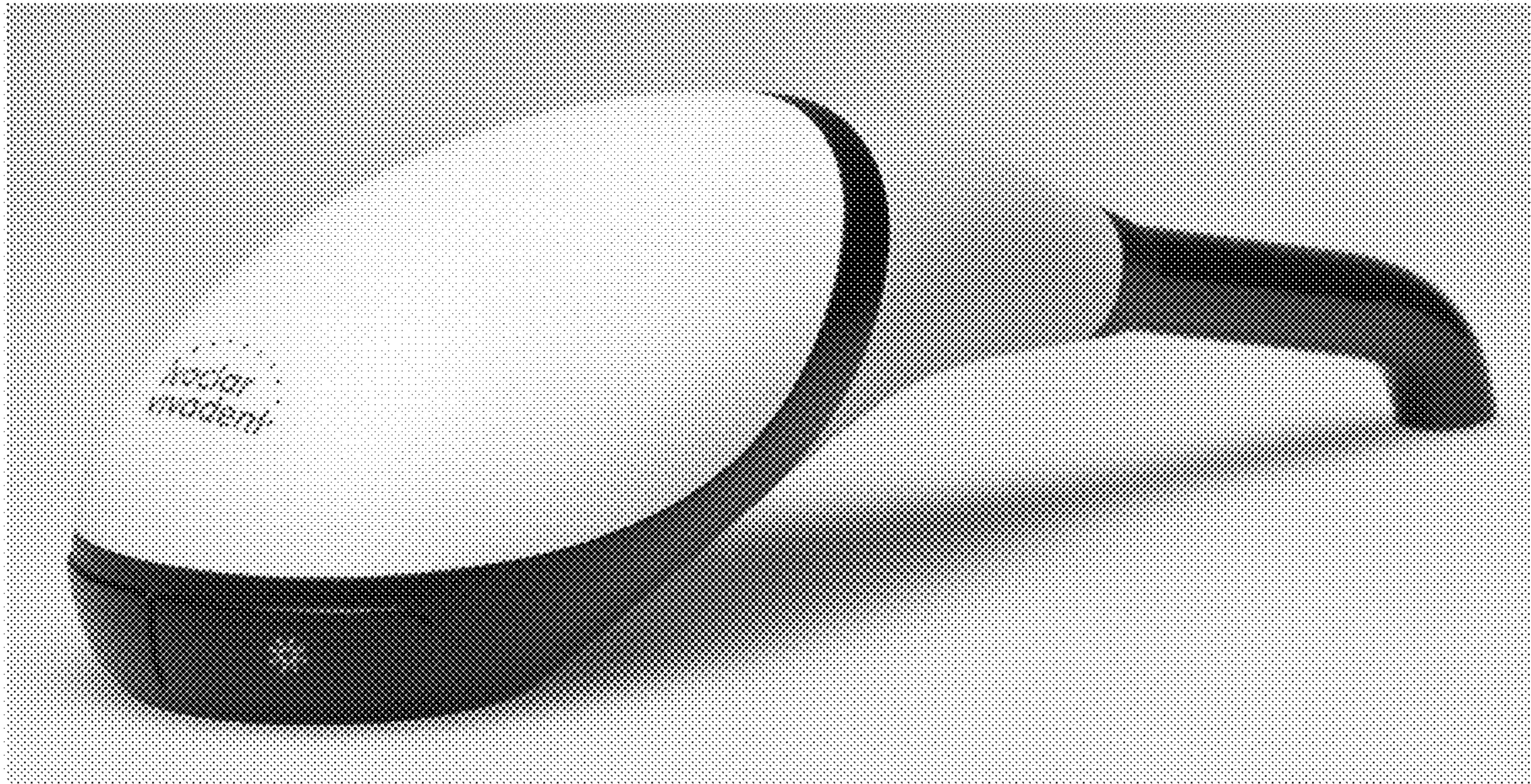
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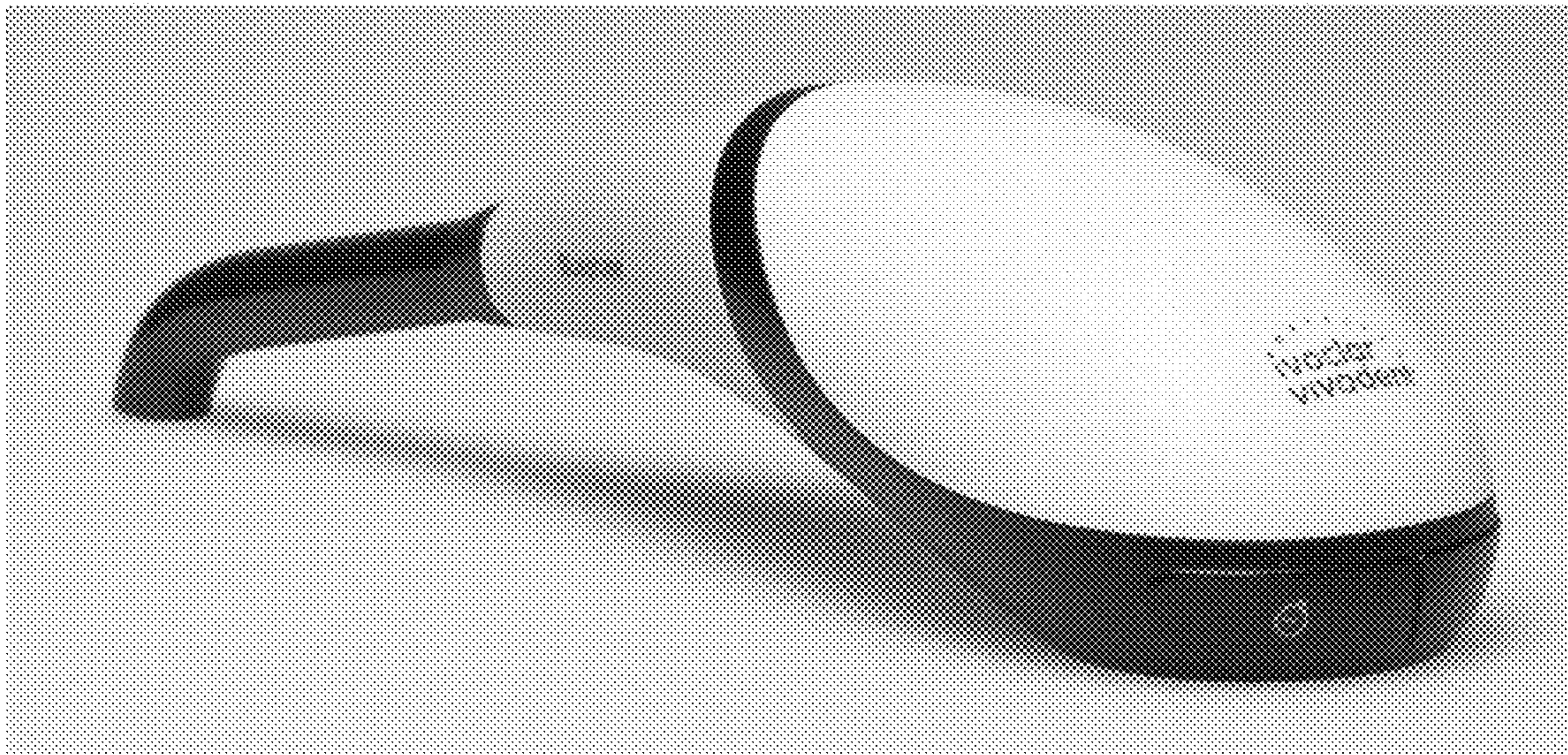
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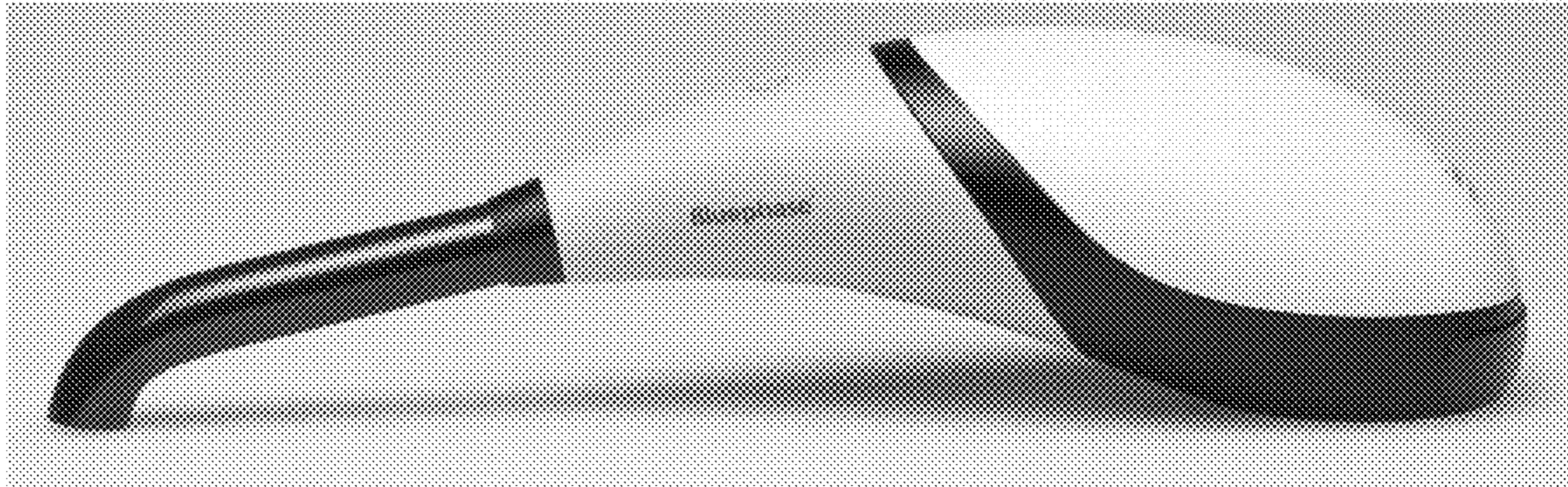
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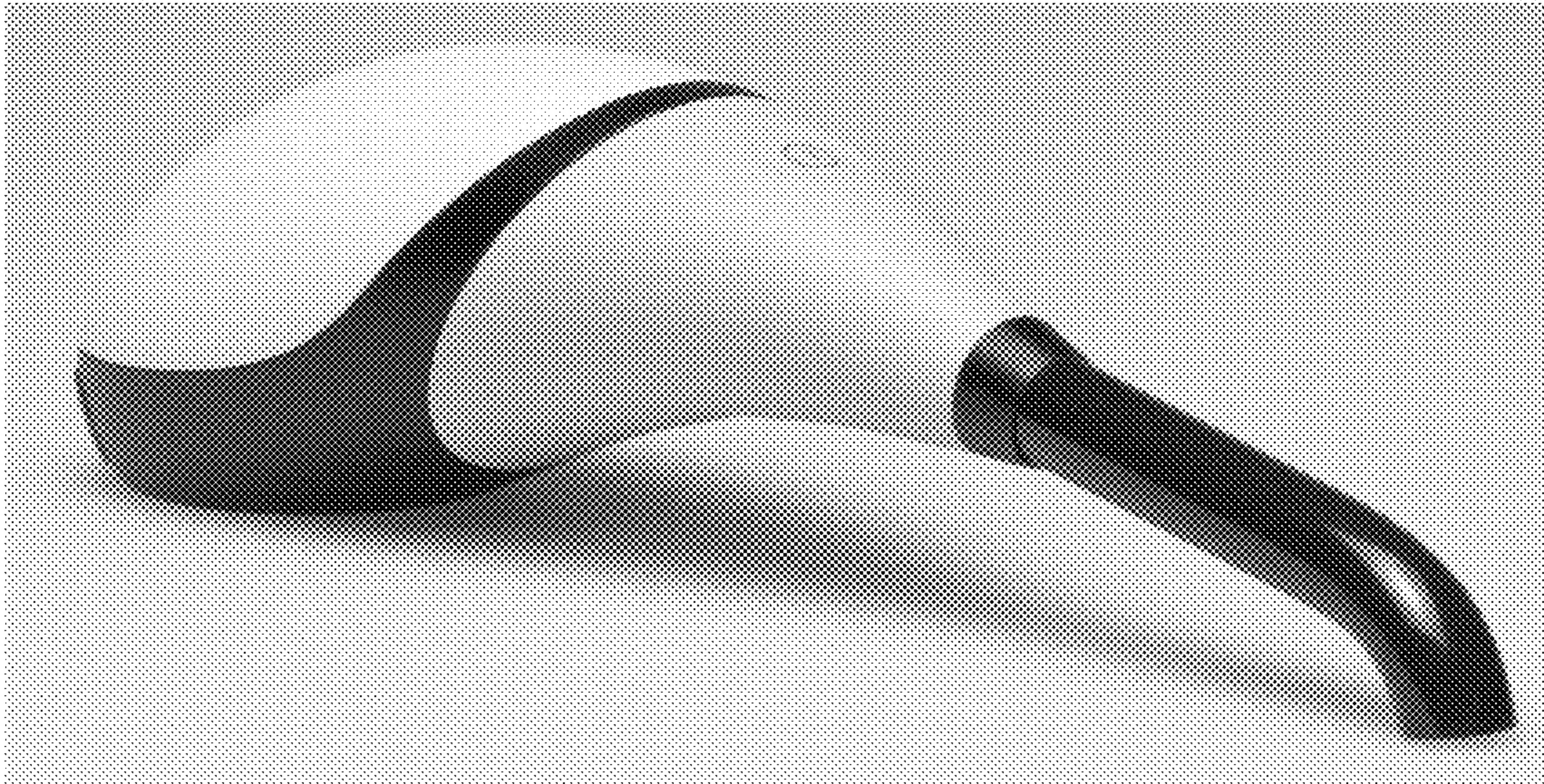


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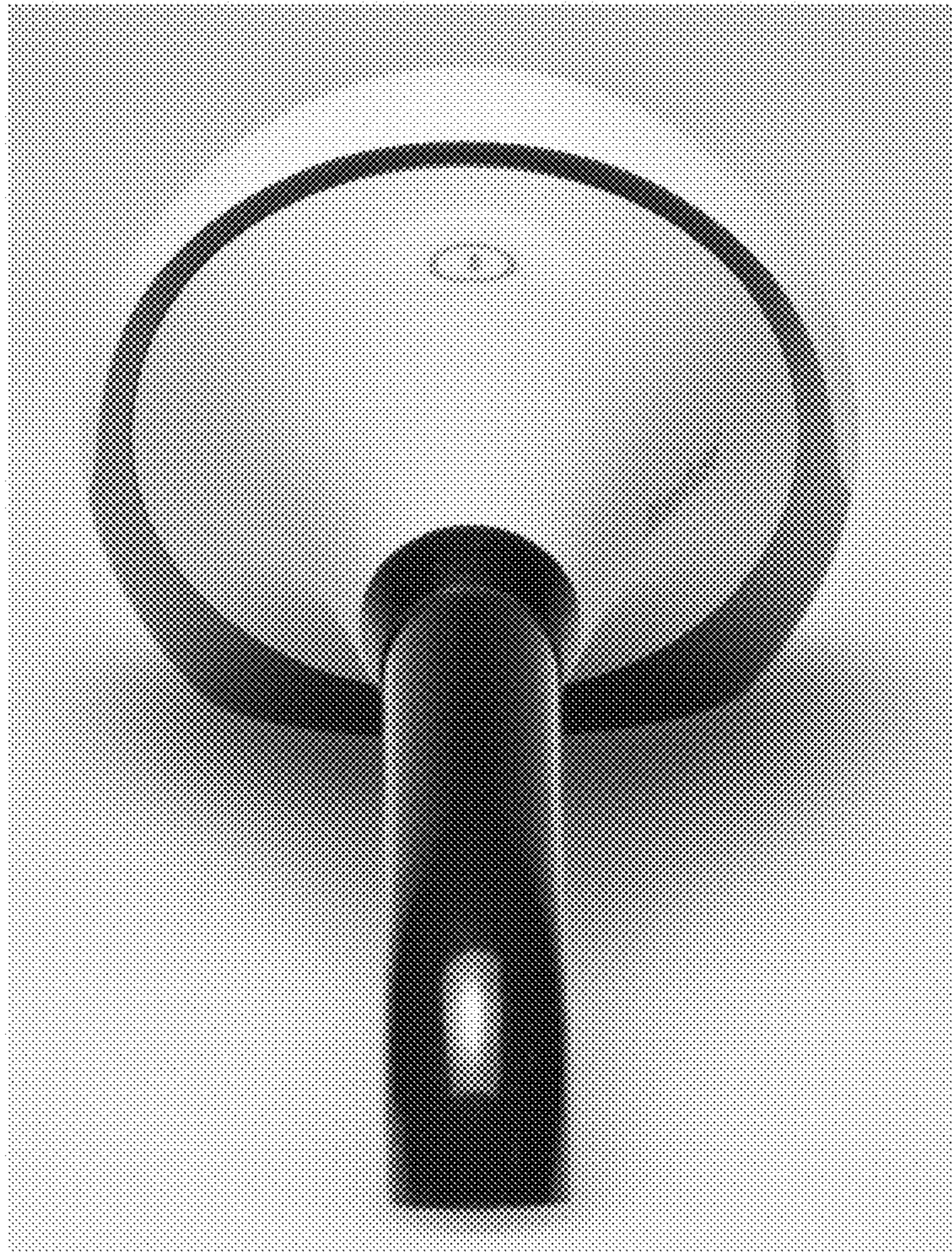




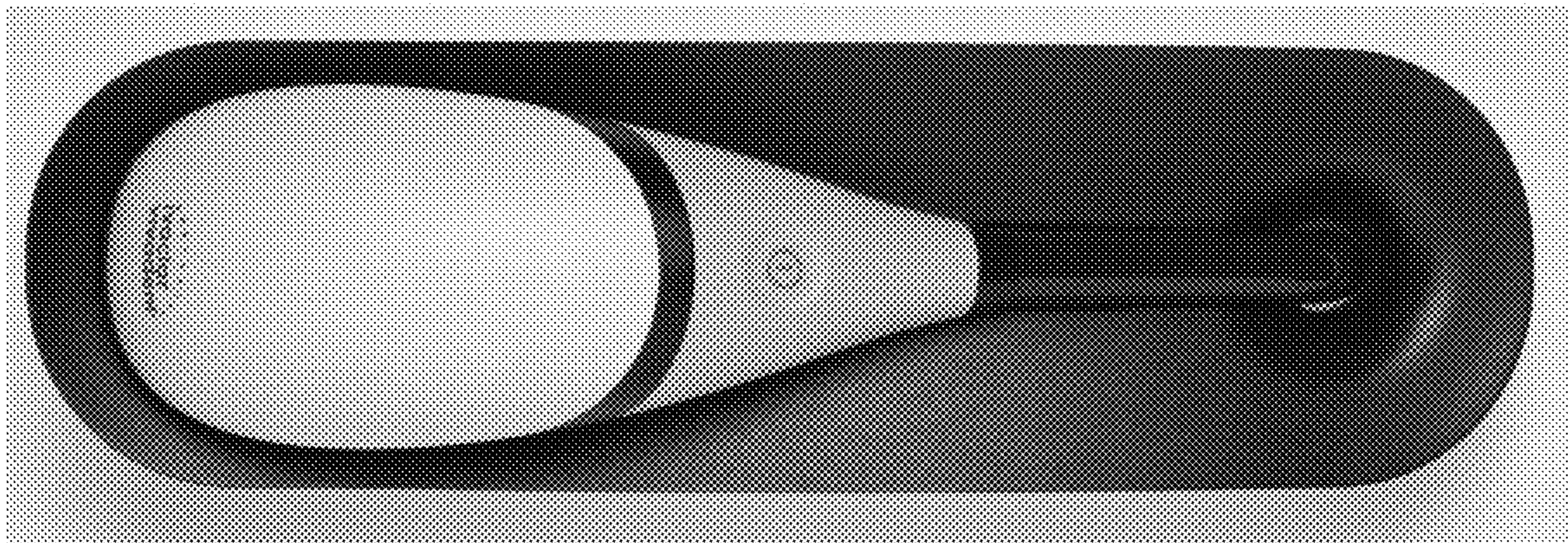
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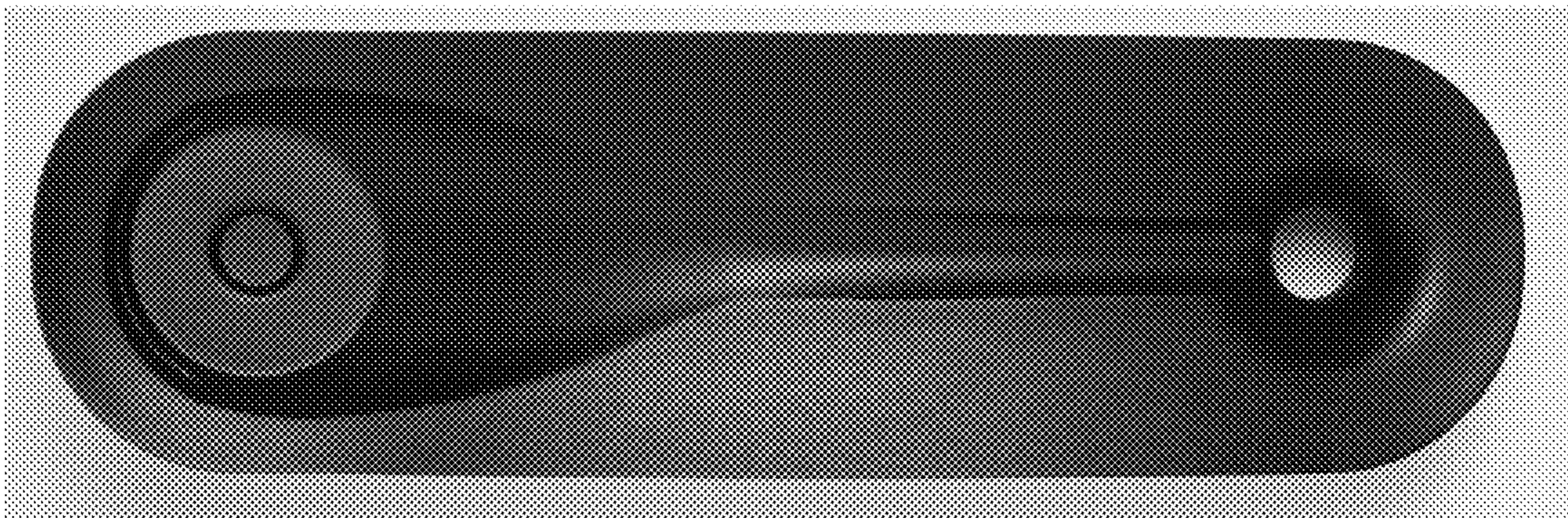
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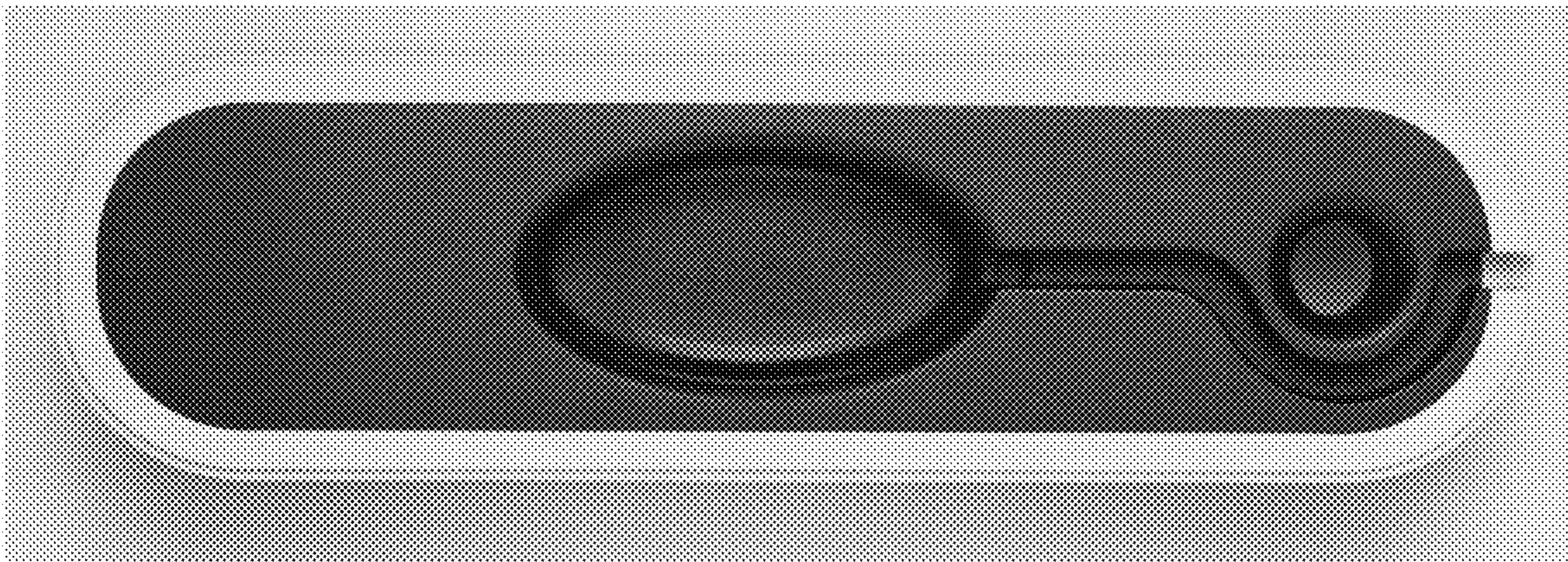
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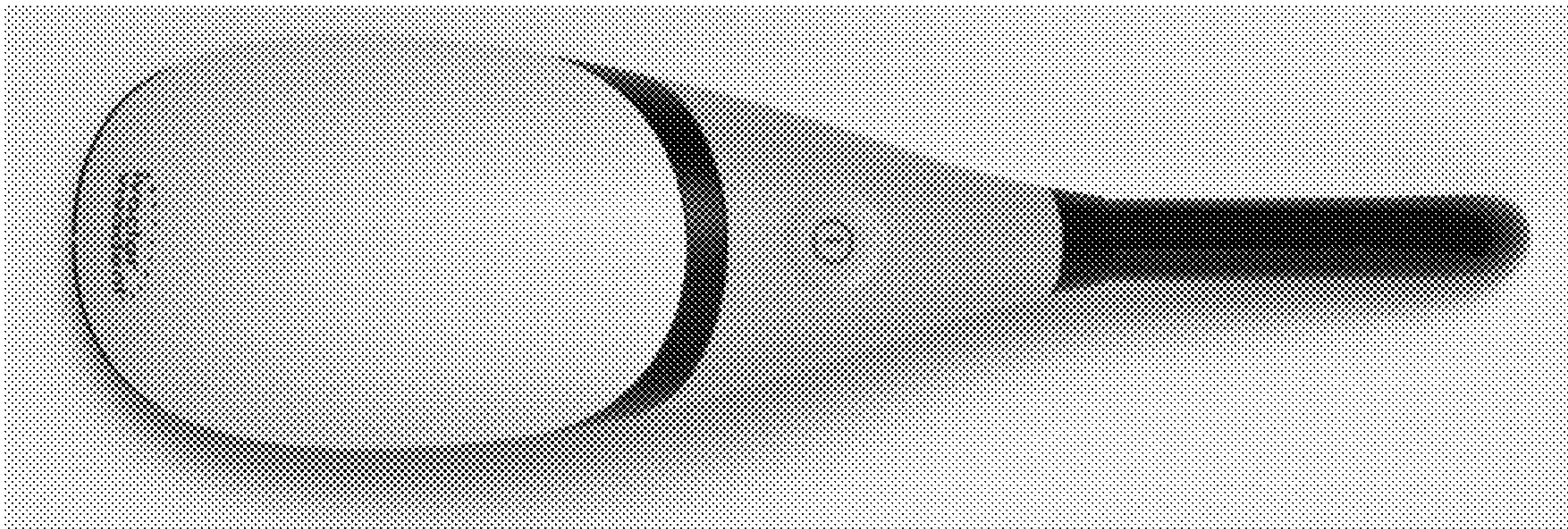
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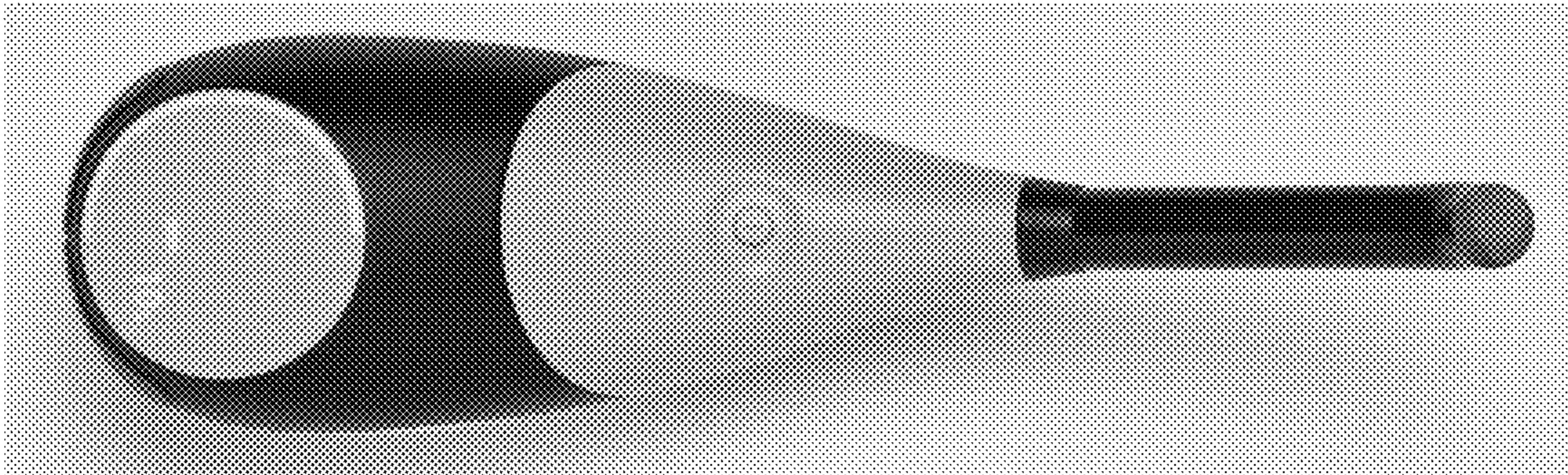
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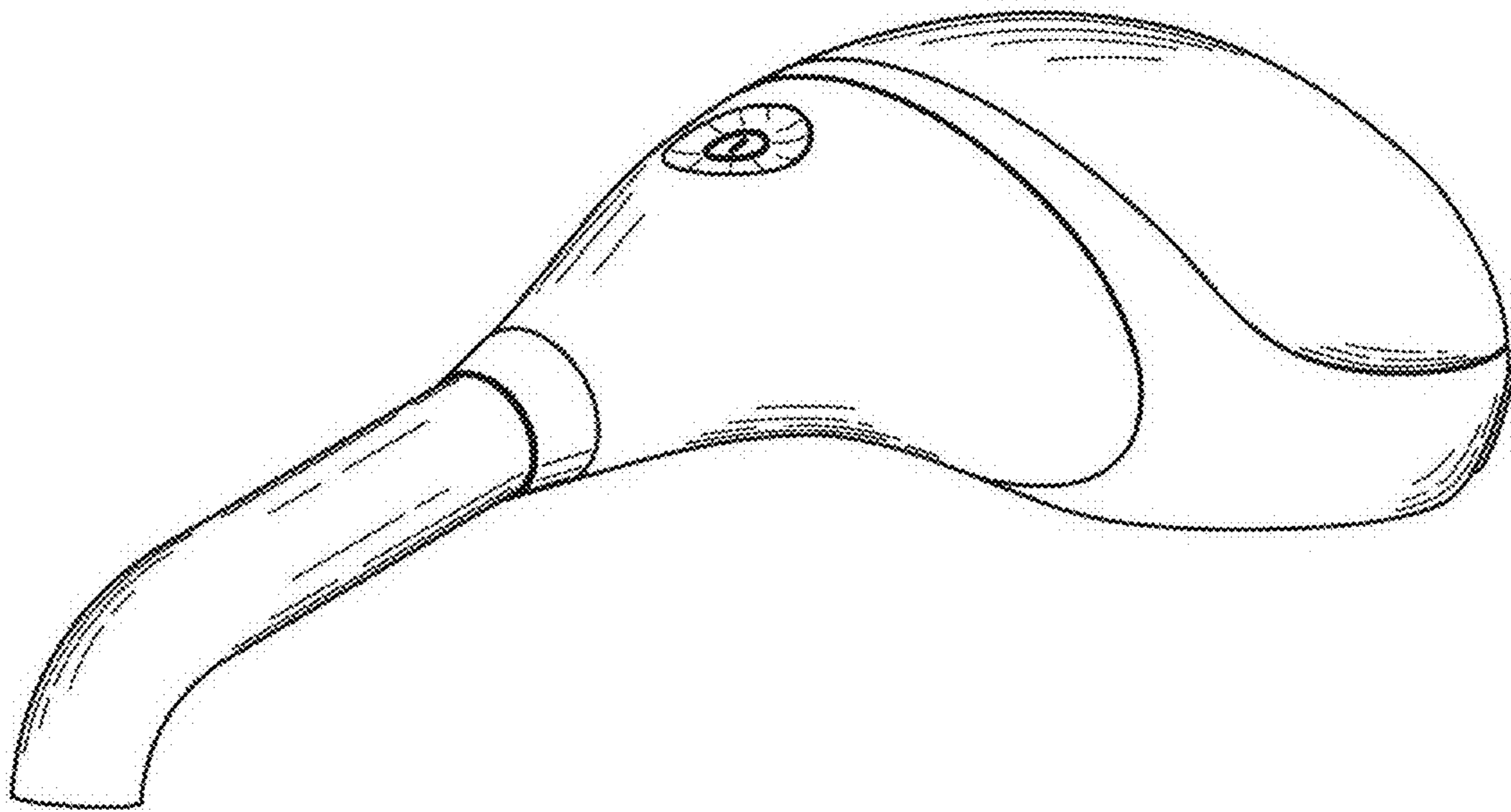
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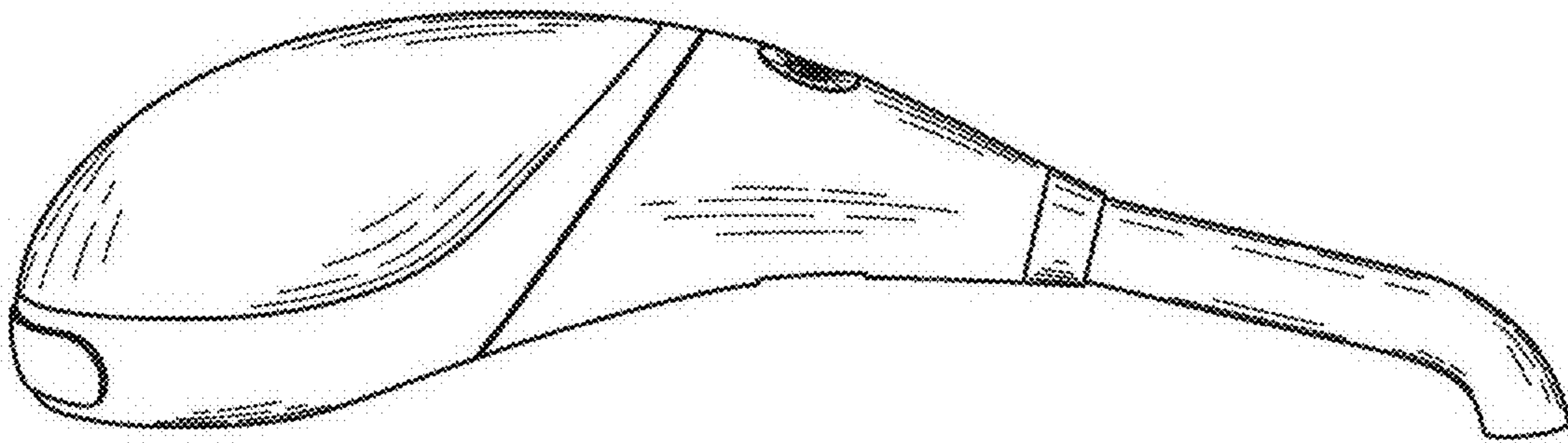


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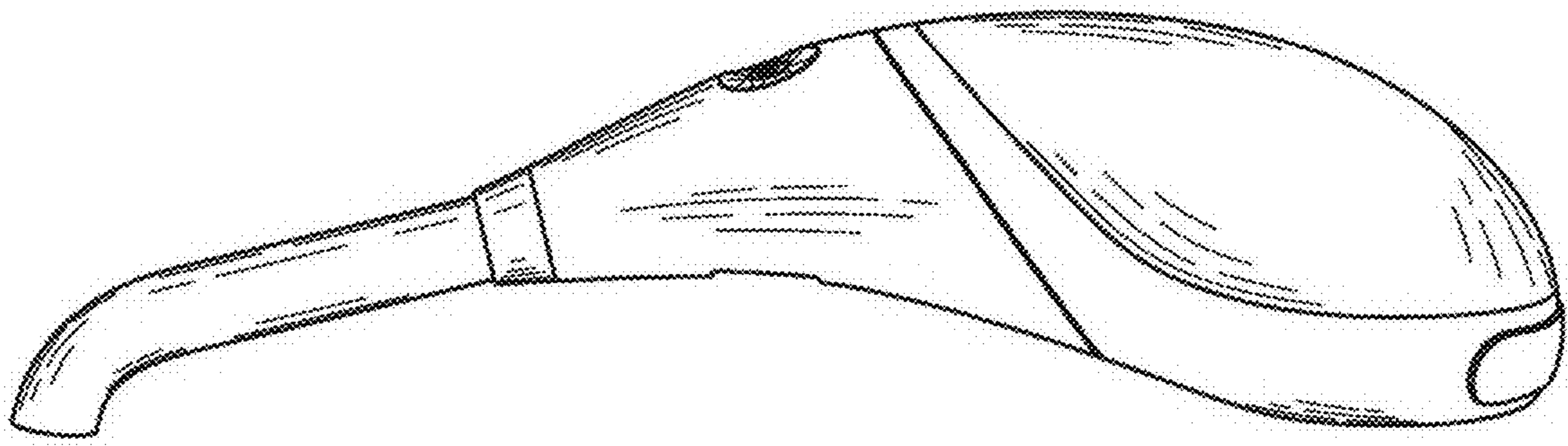




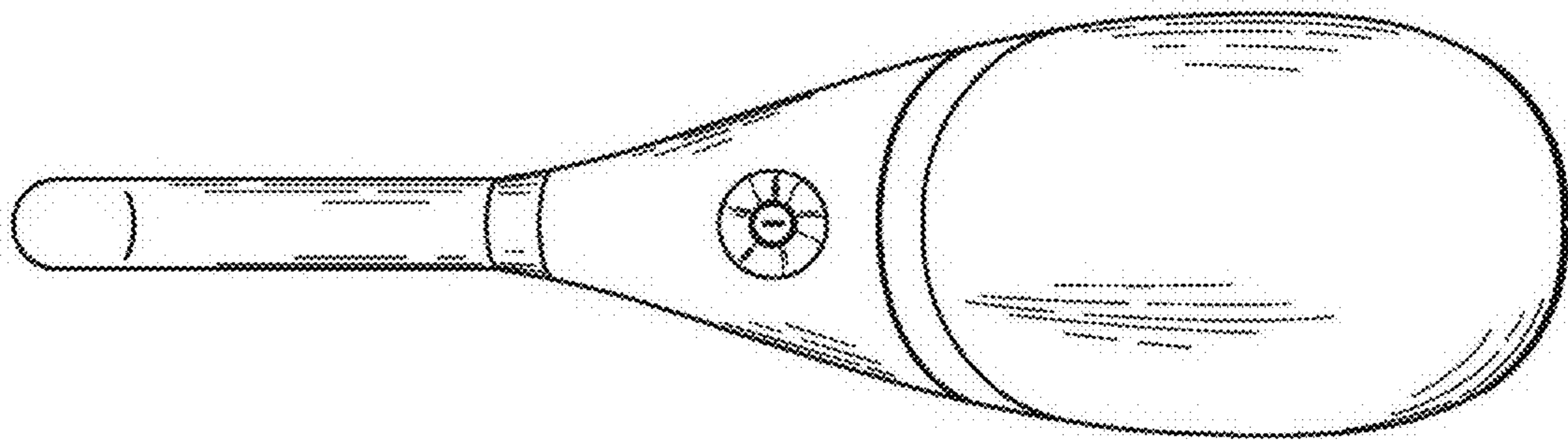
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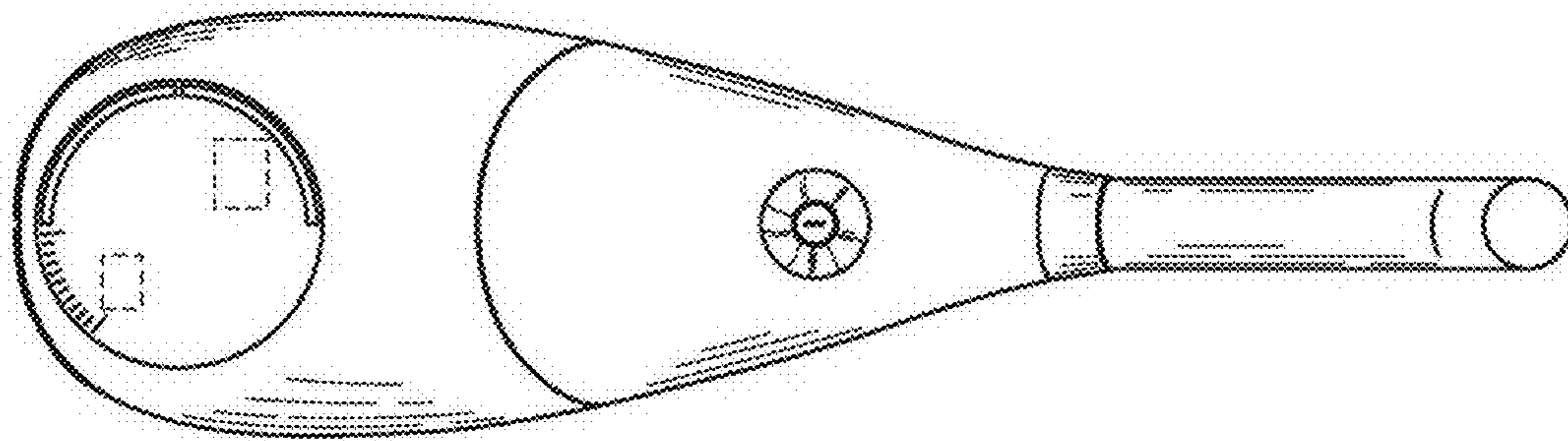
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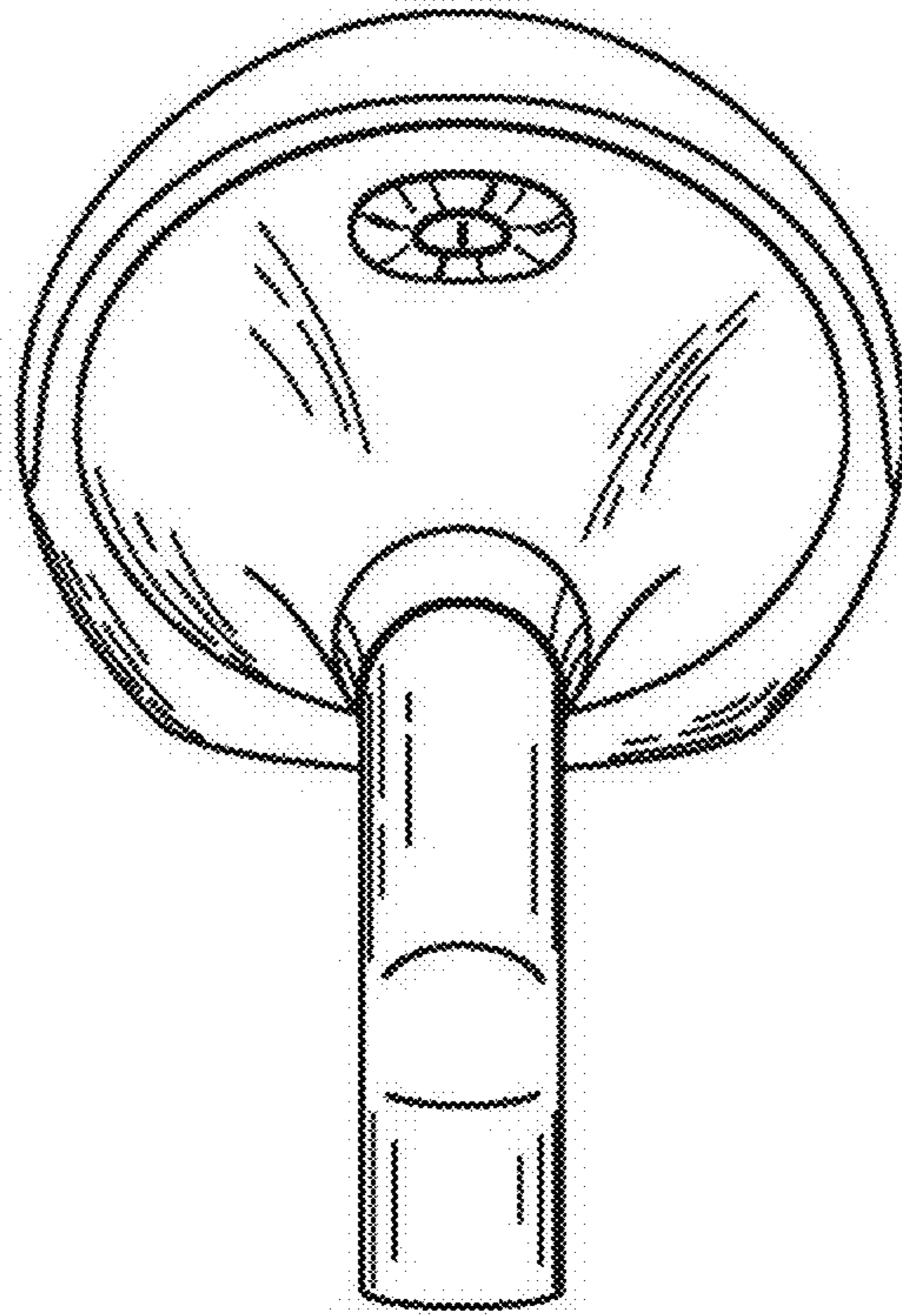
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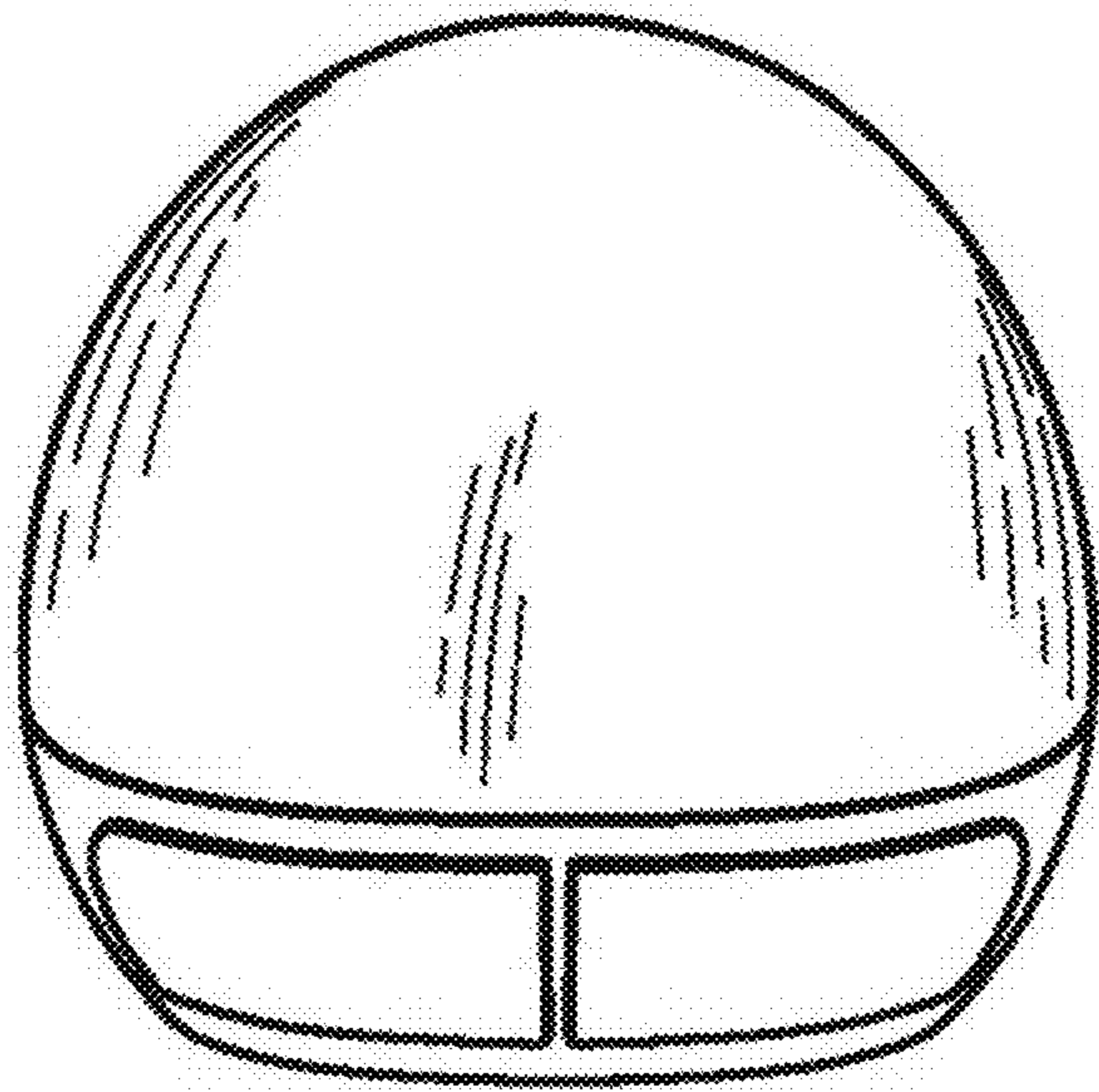
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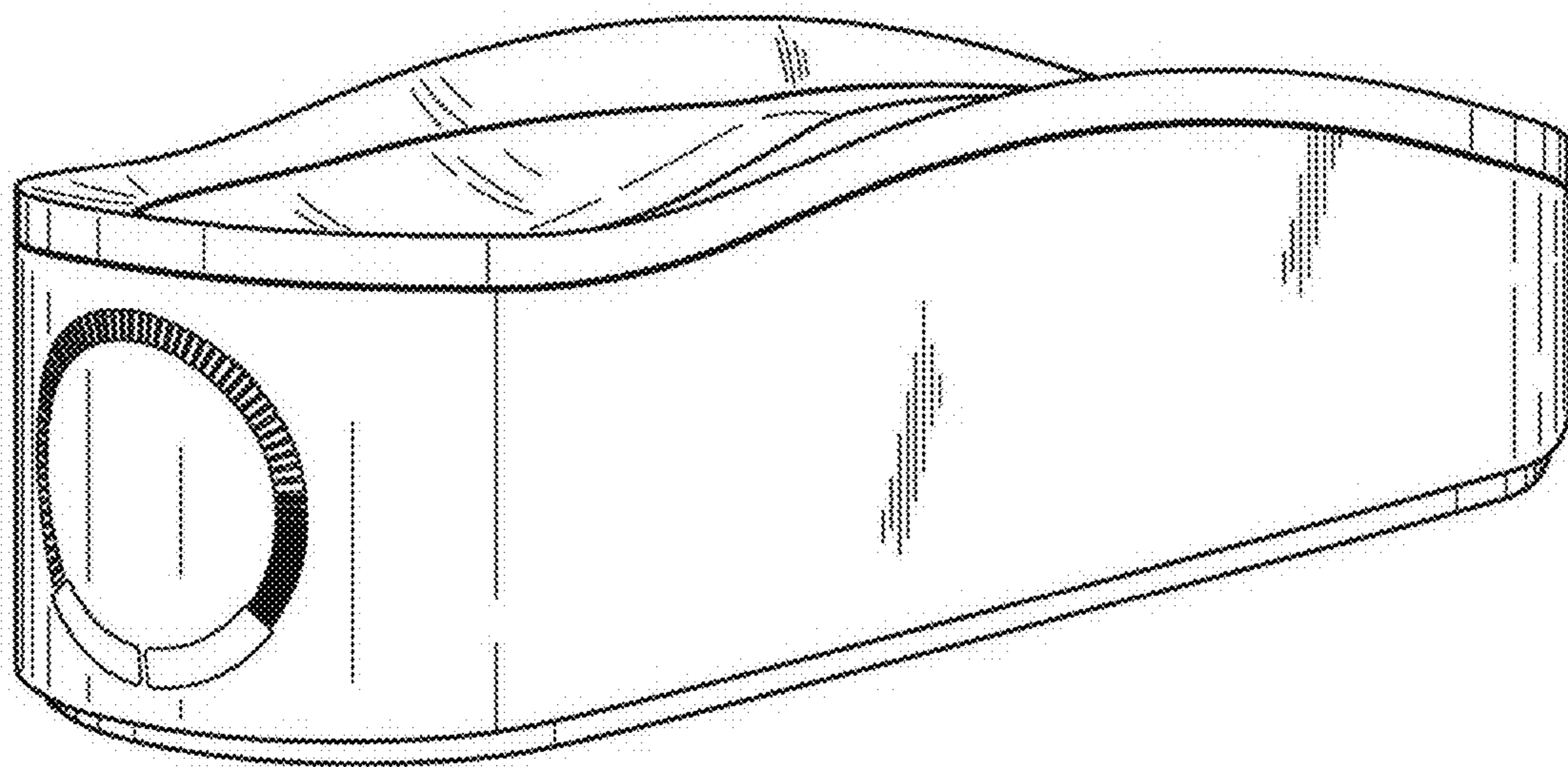
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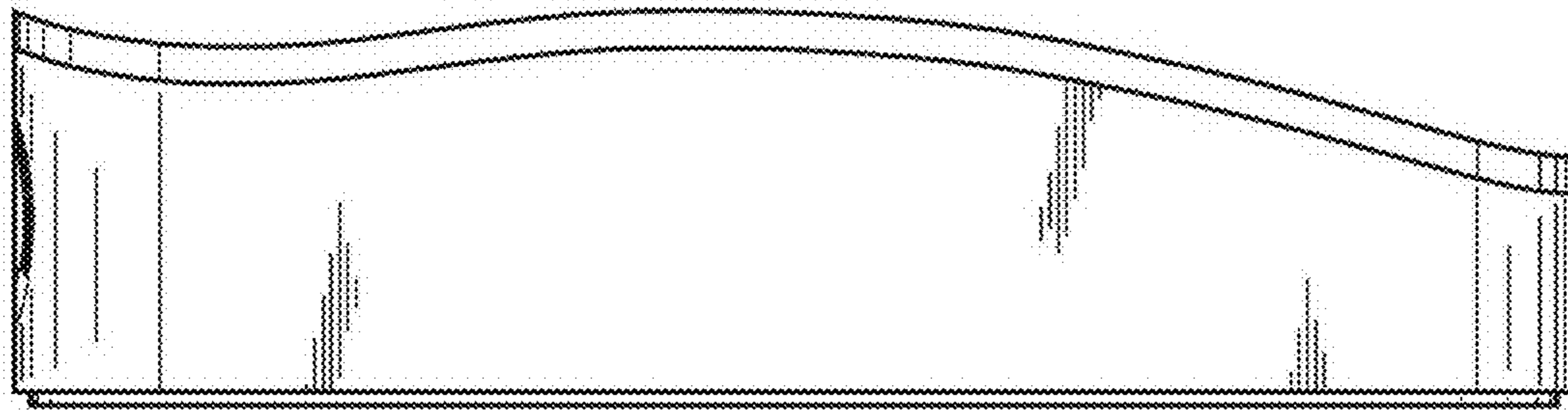
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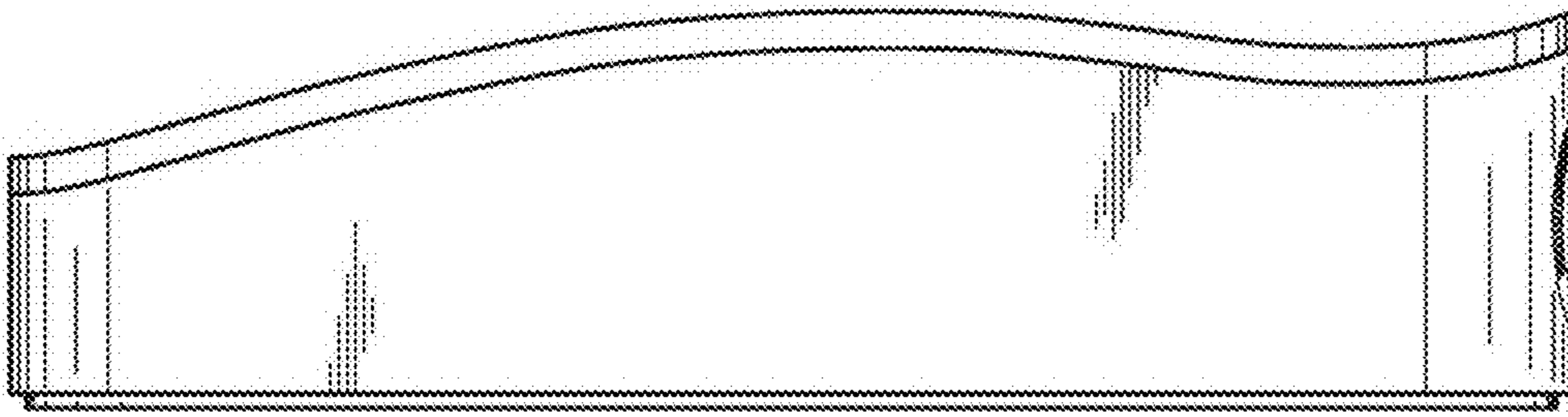


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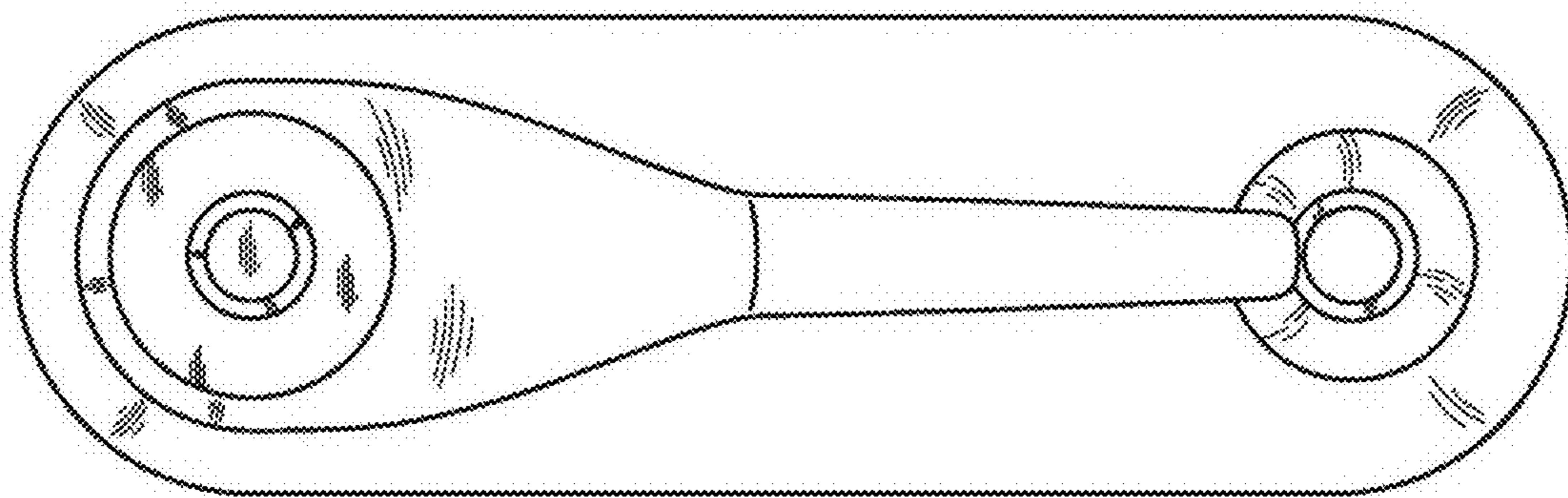




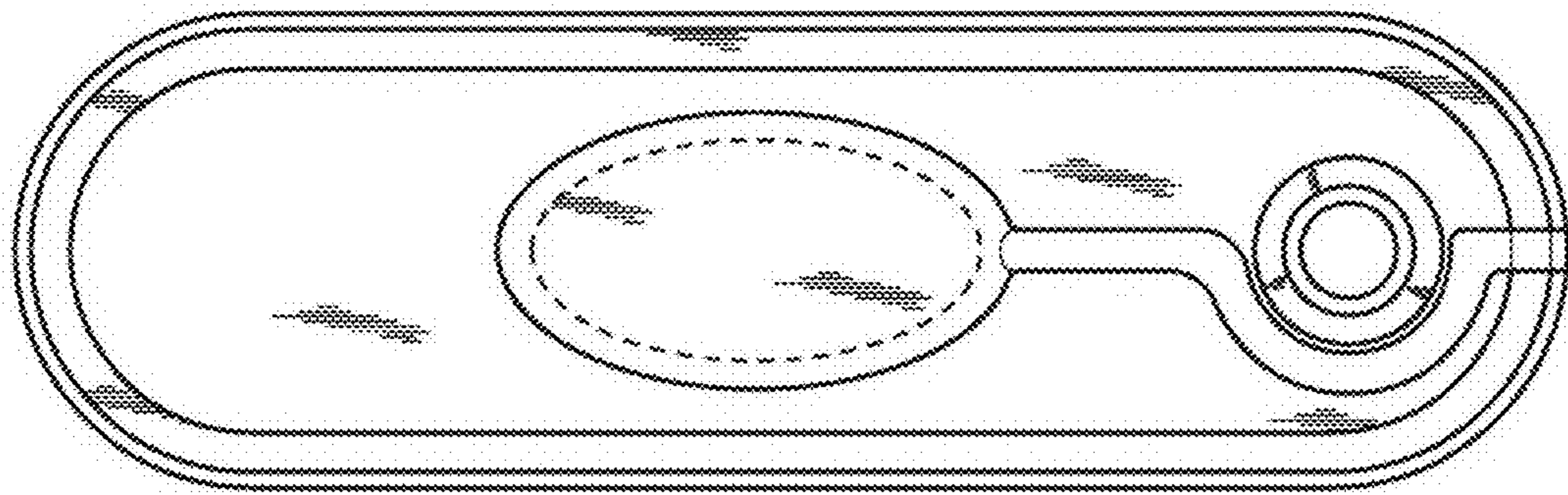
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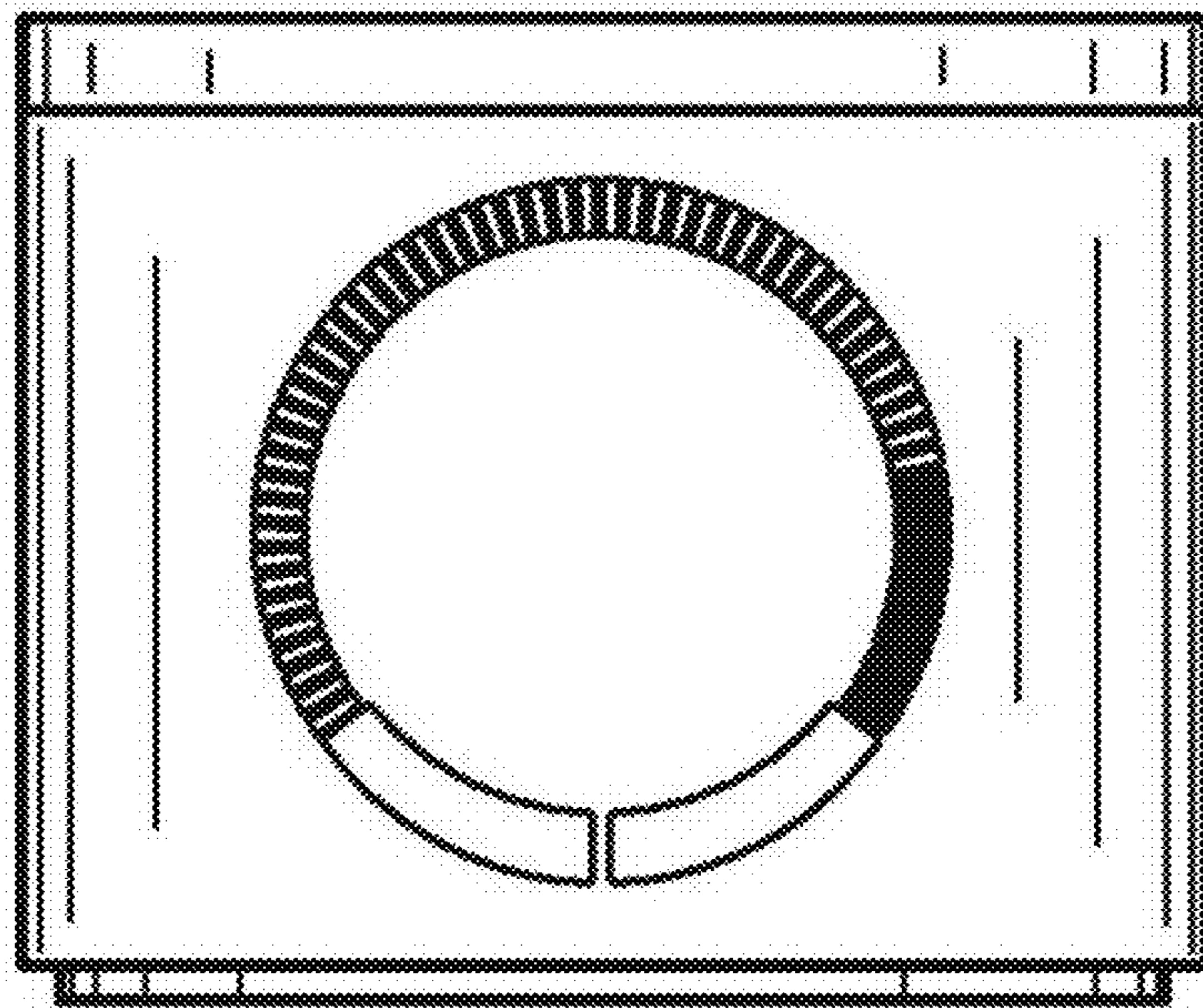
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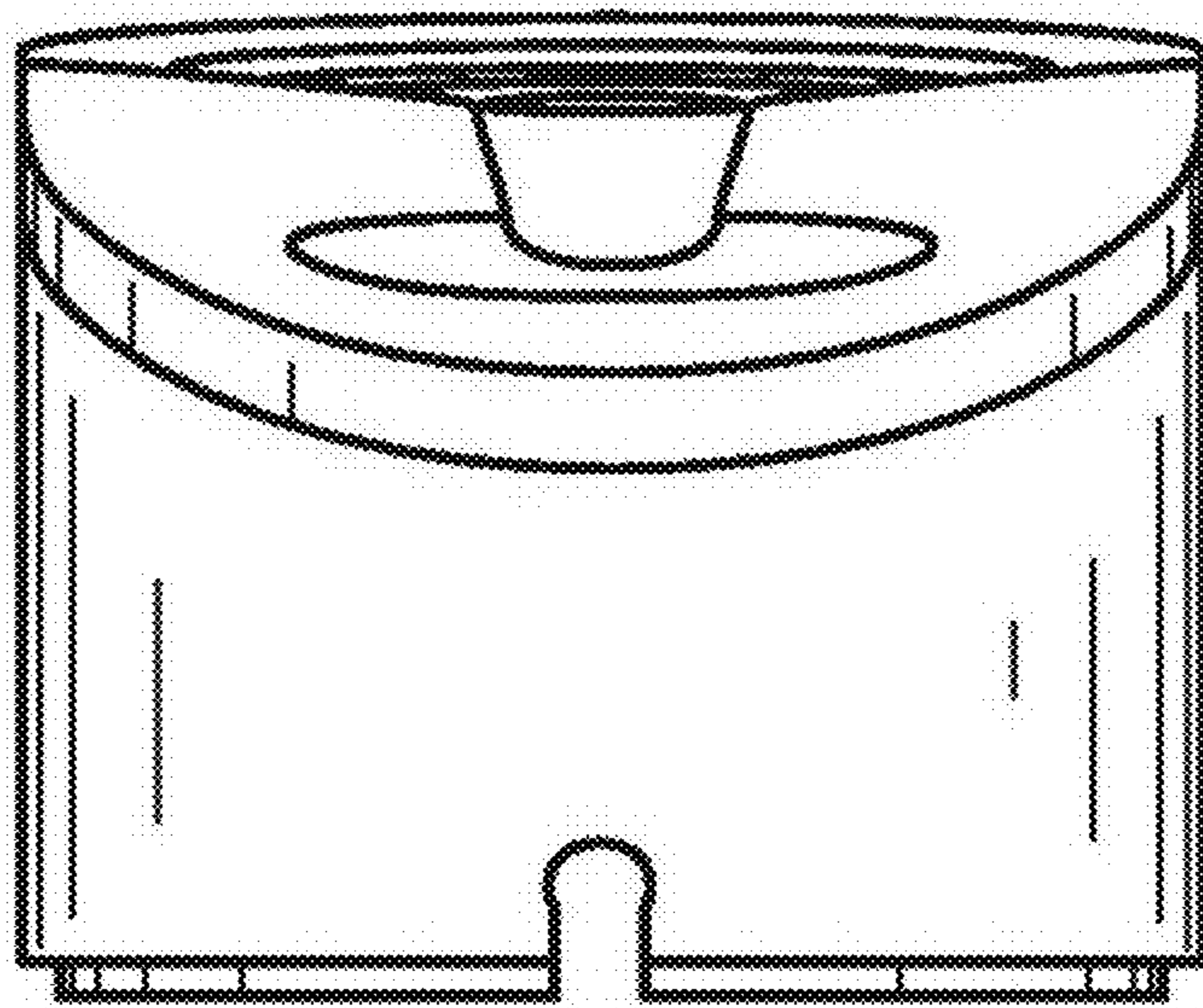
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2.13



2.14



2.15

