



US00D511871S

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

(10) **Patent No.:** **US D511,871 S**  
(45) **Date of Patent:** **\*\* Nov. 22, 2005**

(54) **OPTICAL CONNECTOR END-FACE CLEANER**

(75) Inventor: **Takahisa Kida**, Tokyo (JP)

(73) Assignee: **Seikoh Giken, Co., Ltd.** (JP)

(\*\*) Term: **14 Years**

(21) Appl. No.: **29/205,611**

(22) Filed: **May 18, 2004**

(30) **Foreign Application Priority Data**

Nov. 27, 2003 (JP) ..... 2003-035336

(51) **LOC (8) Cl.** ..... **08-99**

(52) **U.S. Cl.** ..... **D32/35**

(58) **Field of Search** ..... D32/35; 15/210.1,  
15/231, 97.1

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

5,117,528 A \* 6/1992 Kanayama et al. .... 15/210.1

D434,181 S \* 11/2000 Watanabe et al. .... D28/9

D473,358 S \* 4/2003 Miller ..... D32/35

\* cited by examiner

*Primary Examiner*—Holly Baynham

(74) *Attorney, Agent, or Firm*—Saidman DesignLaw Group

(57) **CLAIM**

The ornamental design for an optical connector end-face cleaner, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of an optical connector end-face cleaner;

FIG. 2 is a front view thereof;

FIG. 3 is a rear view thereof;

FIG. 4 is a right side view thereof;

FIG. 5 is a left side view thereof;

FIG. 6 is a top plan view thereof; and

FIG. 7 is a bottom view thereof.

FIG. 8 is a front view thereof with its guard arm turned down;

FIG. 9 is a rear view thereof;

FIG. 10 is a right side view thereof;

FIG. 11 is a left side view thereof;

FIG. 12 is a top plan view thereof; and,

FIG. 13 is a bottom view thereof.

**1 Claim, 4 Drawing Sheets**

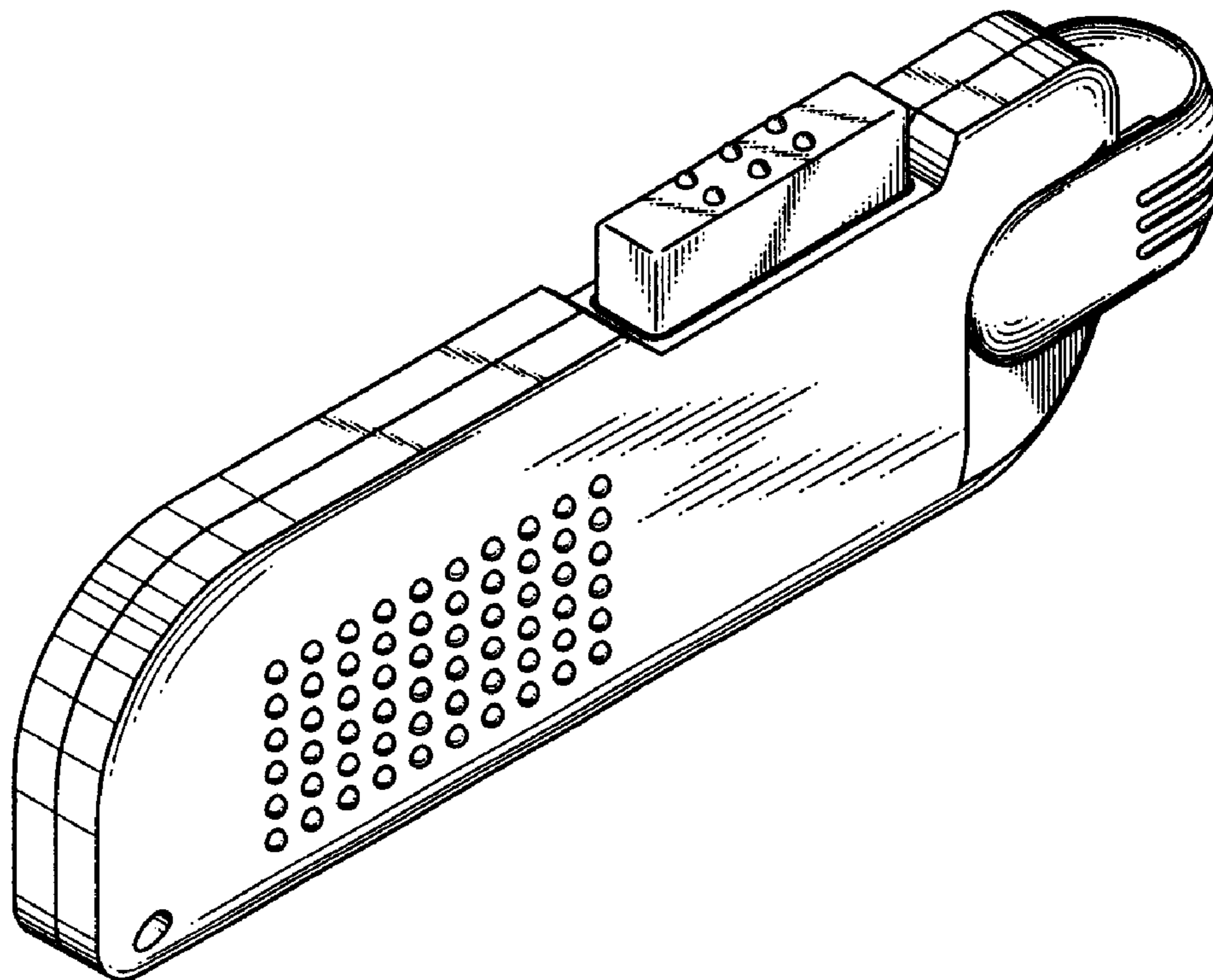


Fig.1

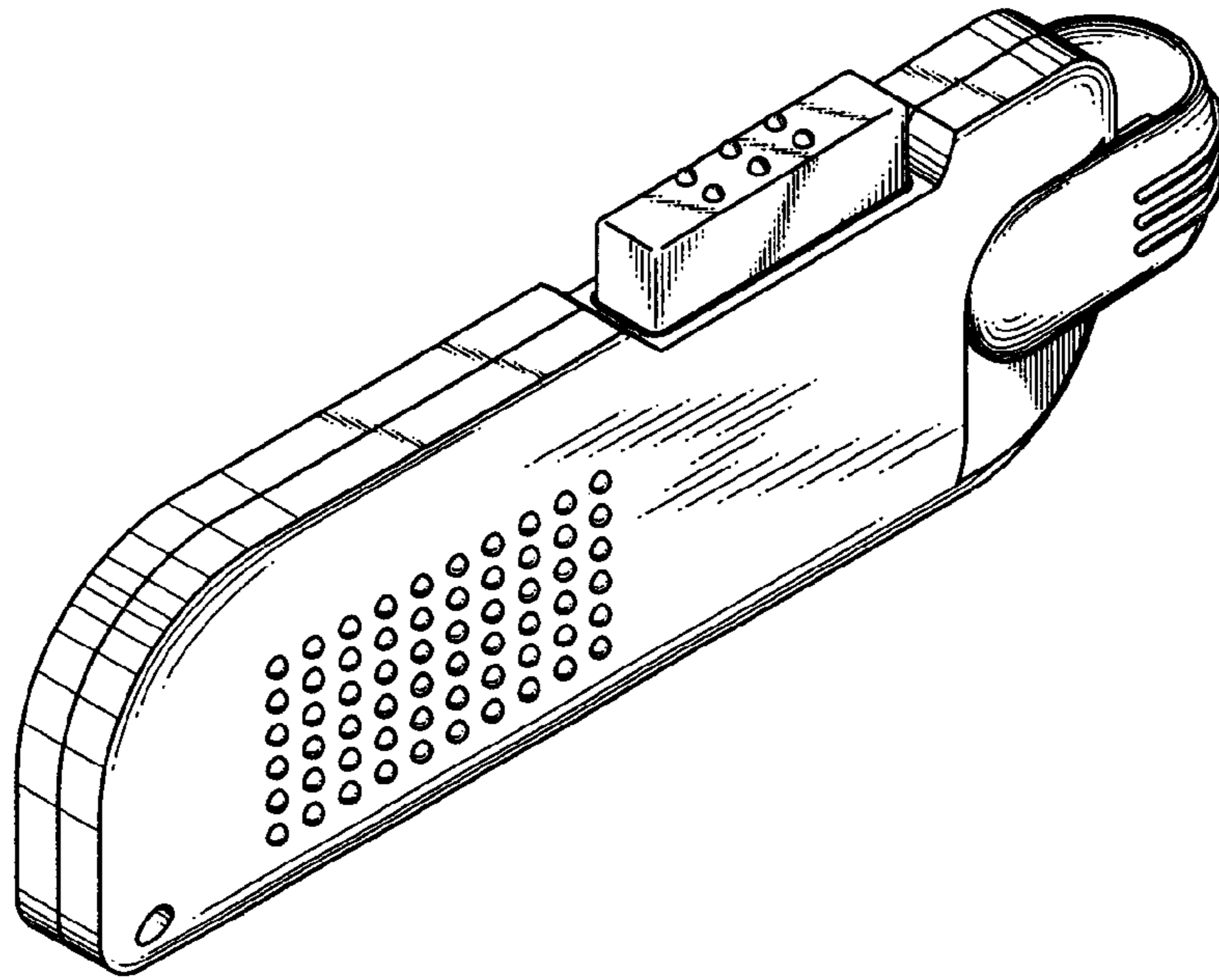


Fig.2

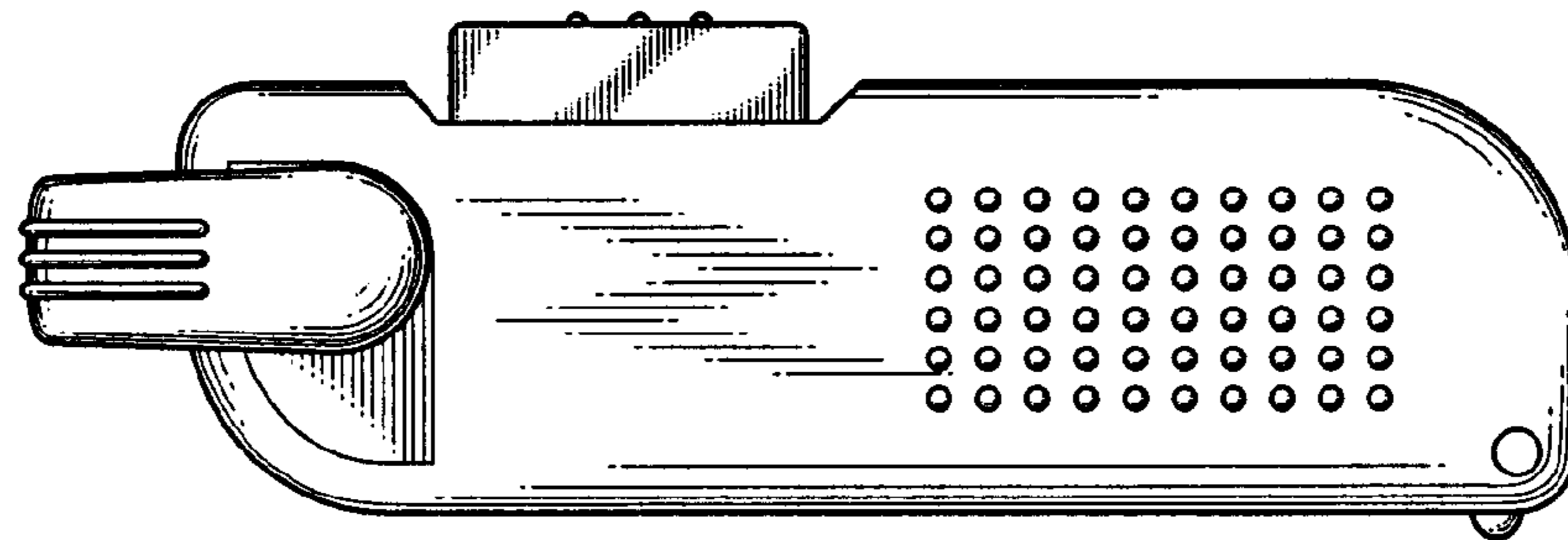


Fig.3

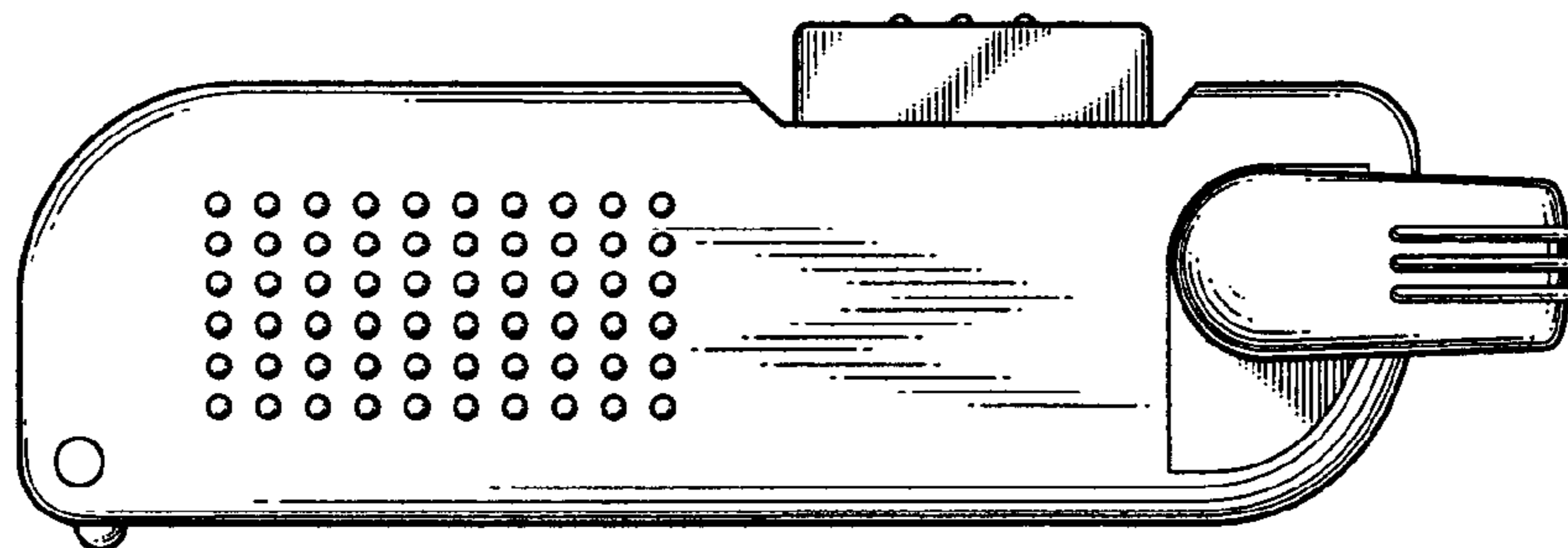


Fig.4

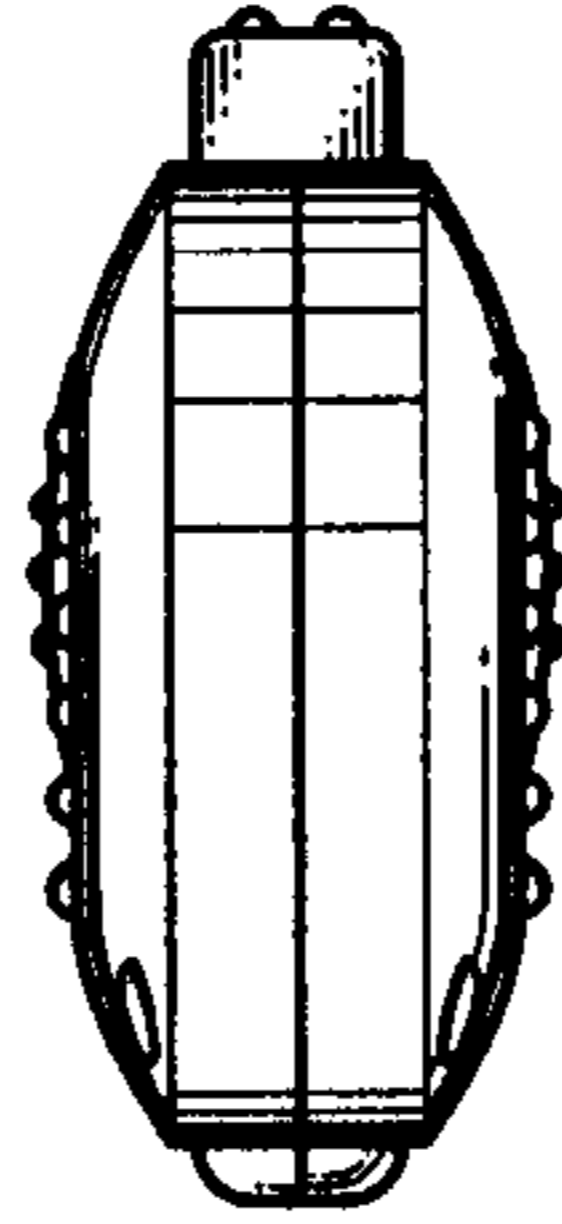


Fig.5

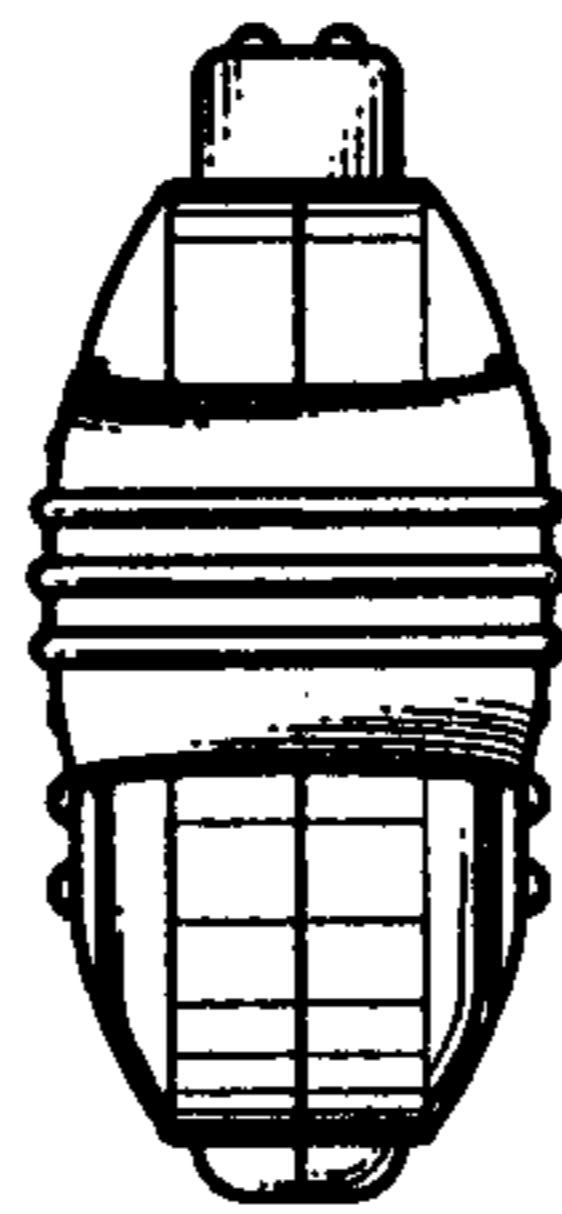


Fig.6

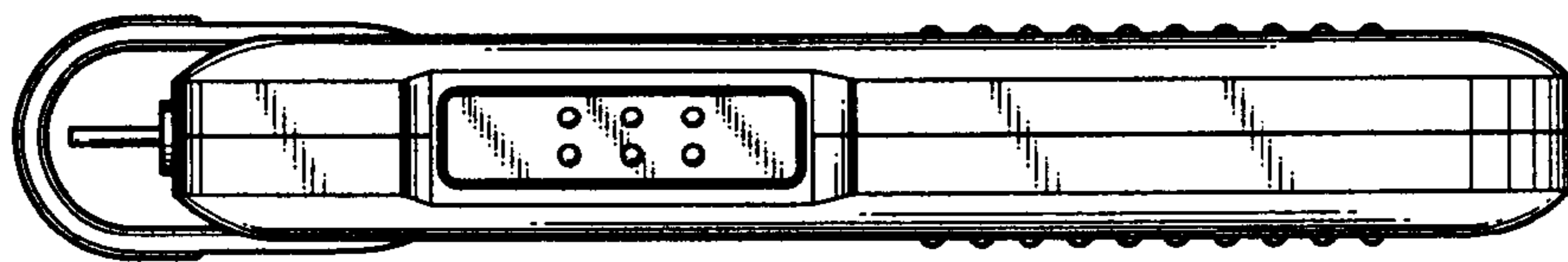


Fig.7

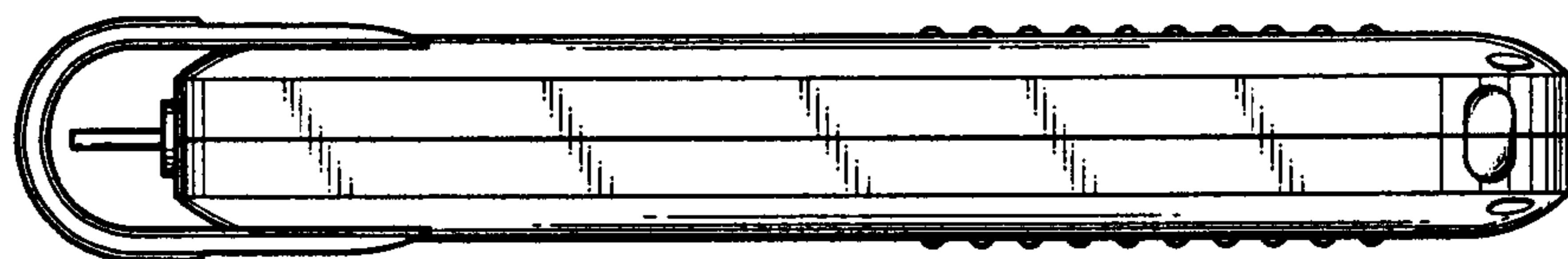


Fig.8

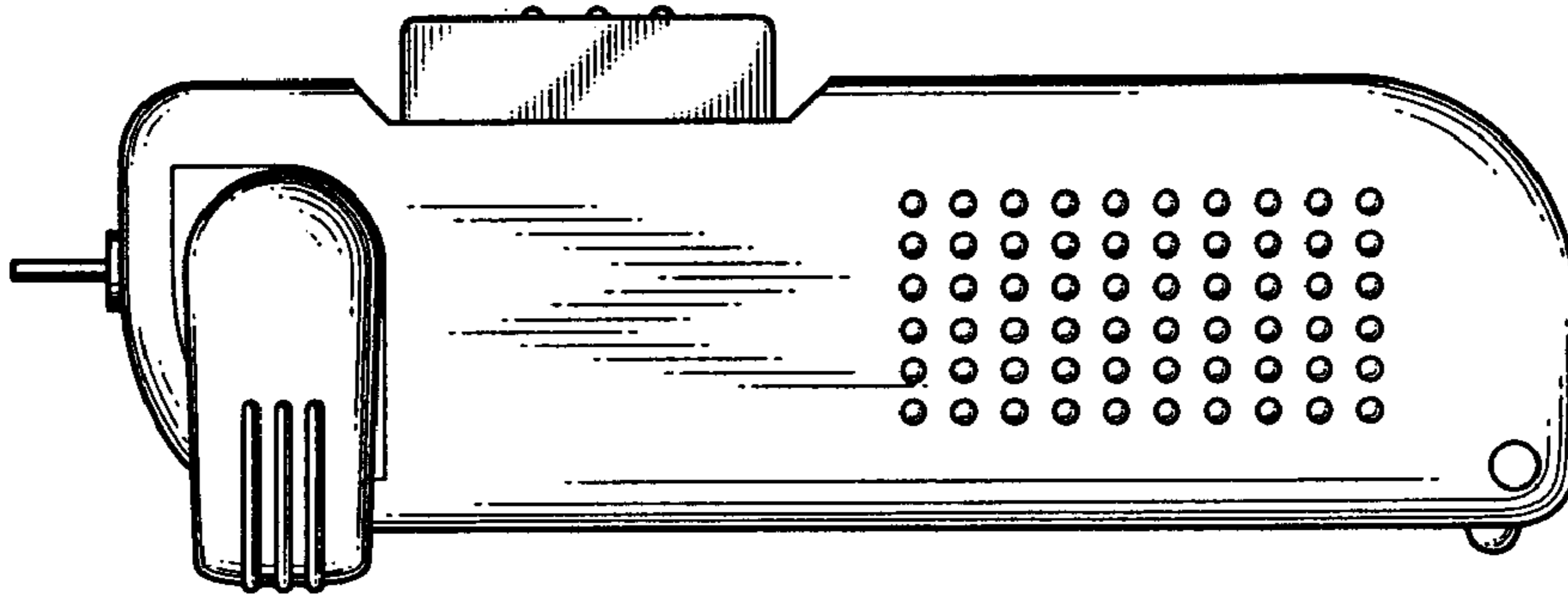


Fig.9

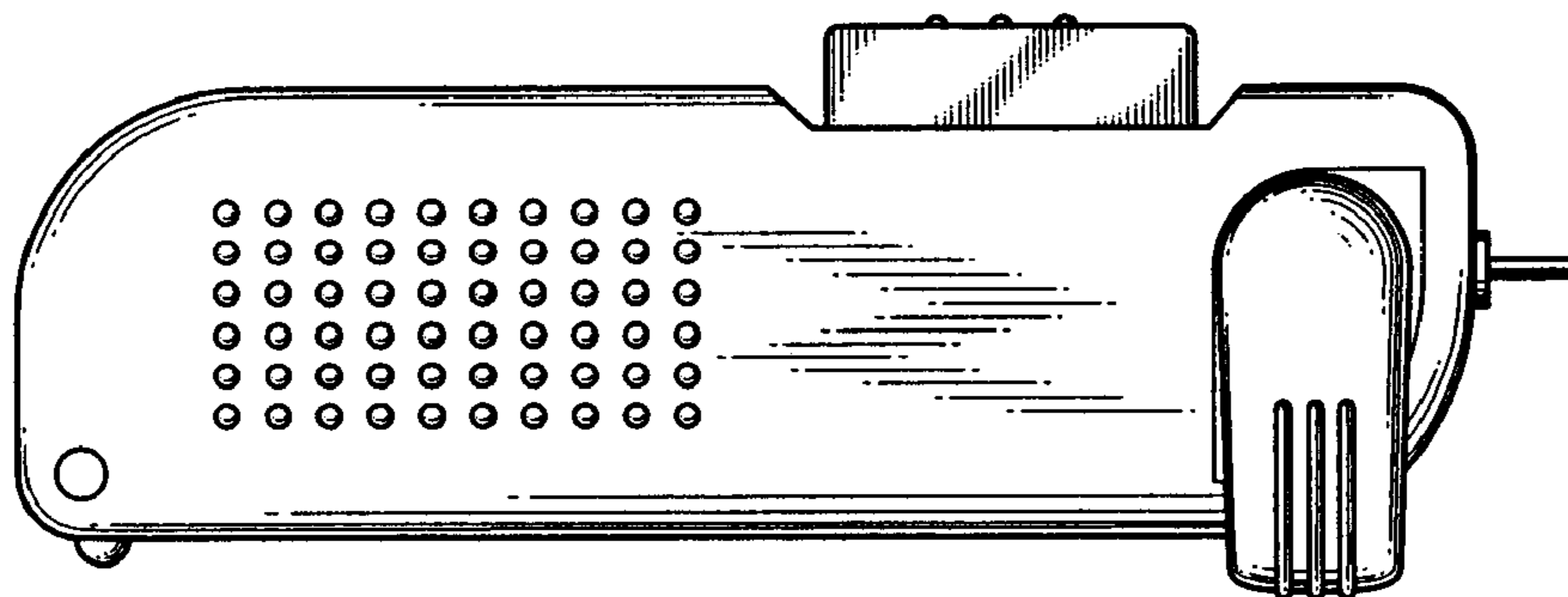


Fig.10

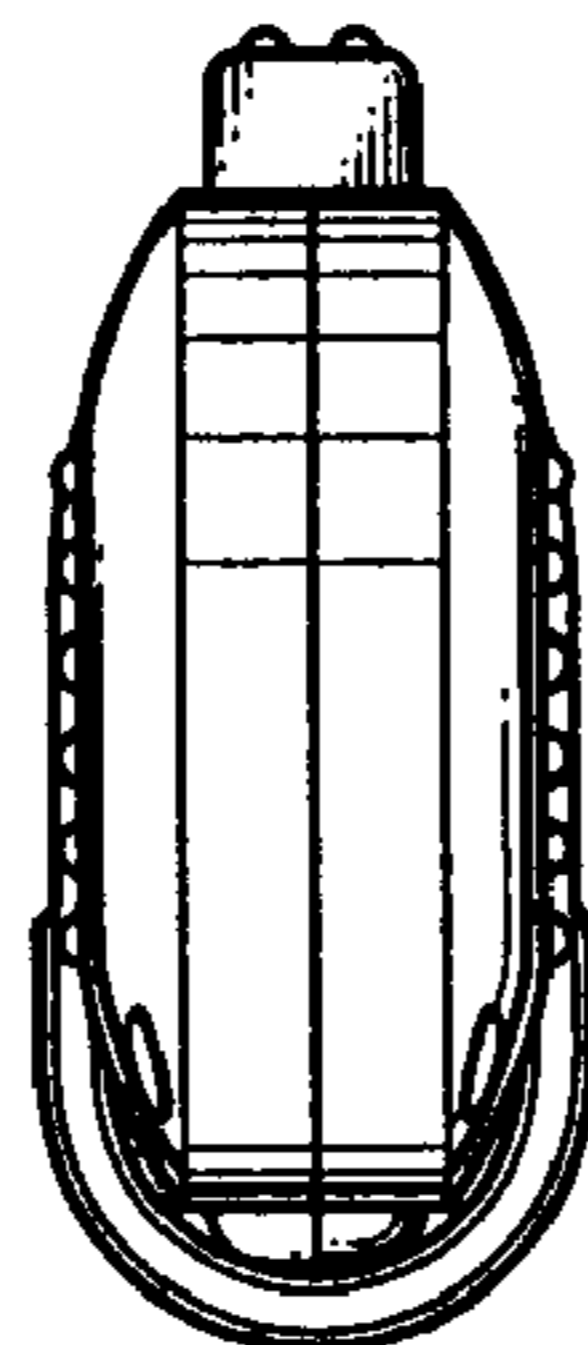


Fig.11

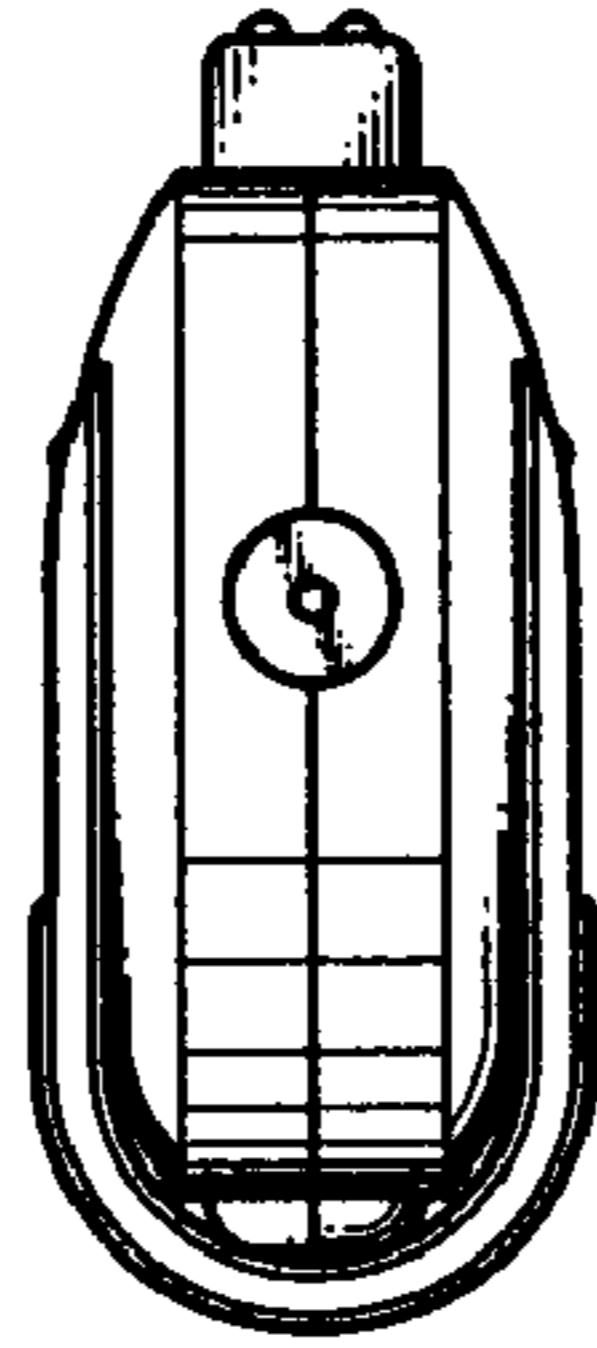


Fig.12

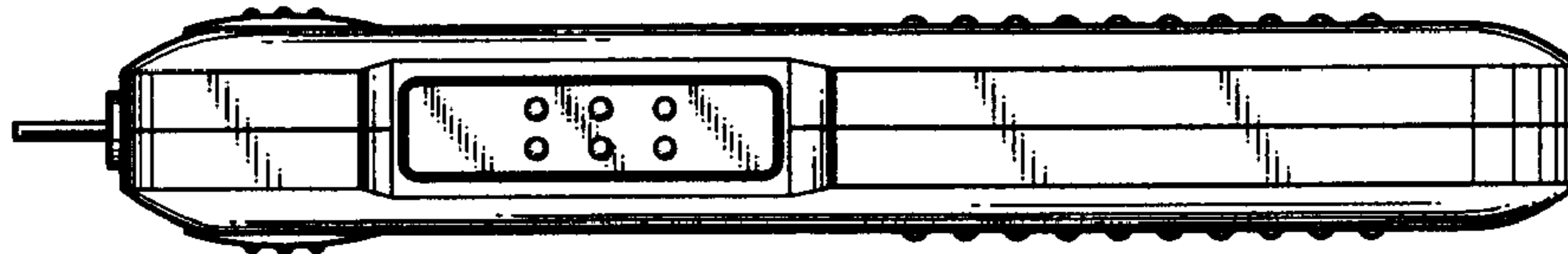


Fig.13

