

US00D525401S

(12) **United States Design Patent** (10) **Patent No.:** **US D525,401 S**  
**Kida** (45) **Date of Patent:** **\*\* Jul. 18, 2006**

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

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

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

(21) Appl. No.: **29/205,610**

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

(30) **Foreign Application Priority Data**

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Nov. 27, 2003 (JP) ..... D2003-035346

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

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

(58) **Field of Classification Search** ..... D32/35;  
15/210.1, 231, 97.1  
See application file for complete search history.

(56) **References Cited**

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D434,181 S \* 11/2000 Watanabe et al. .... D28/9  
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(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 showing my design;  
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;  
FIG. 7 is a bottom view thereof;  
FIG. 8 is a front view thereof with its cap opened;  
FIG. 9 is a perspective view of a second embodiment of an optical connector end-face cleaner;  
FIG. 10 is a front view thereof;  
FIG. 11 is a rear view thereof;  
FIG. 12 is a right side view thereof;  
FIG. 13 is a left side view thereof;  
FIG. 14 is a top plan view thereof;  
FIG. 15 is a bottom view thereof;  
FIG. 16 is a front view thereof with its cleaning bar portion turned; and,  
FIG. 17 is a front view of a third embodiment of an optical connector end-face cleaner.

**1 Claim, 6 Drawing Sheets**

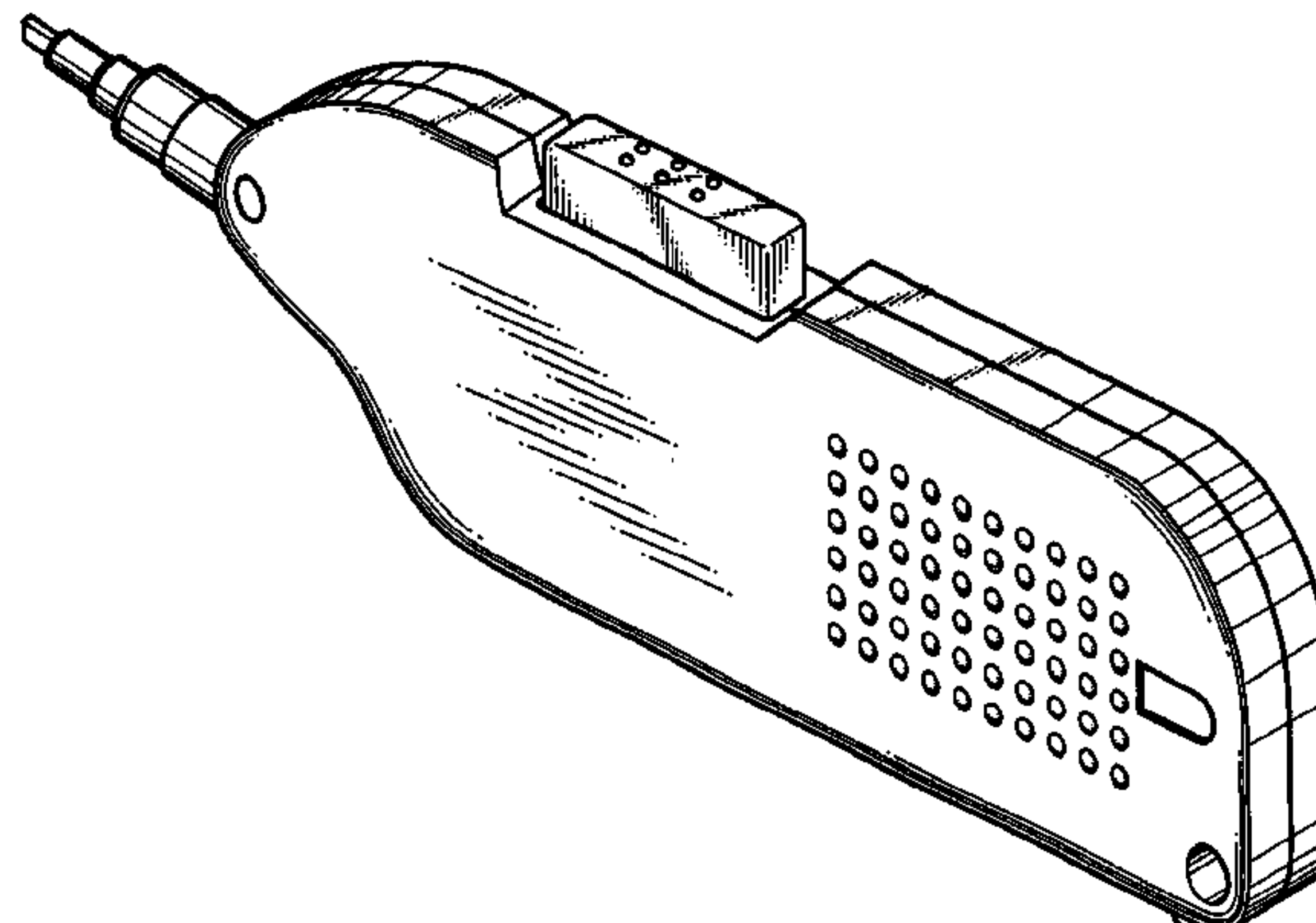
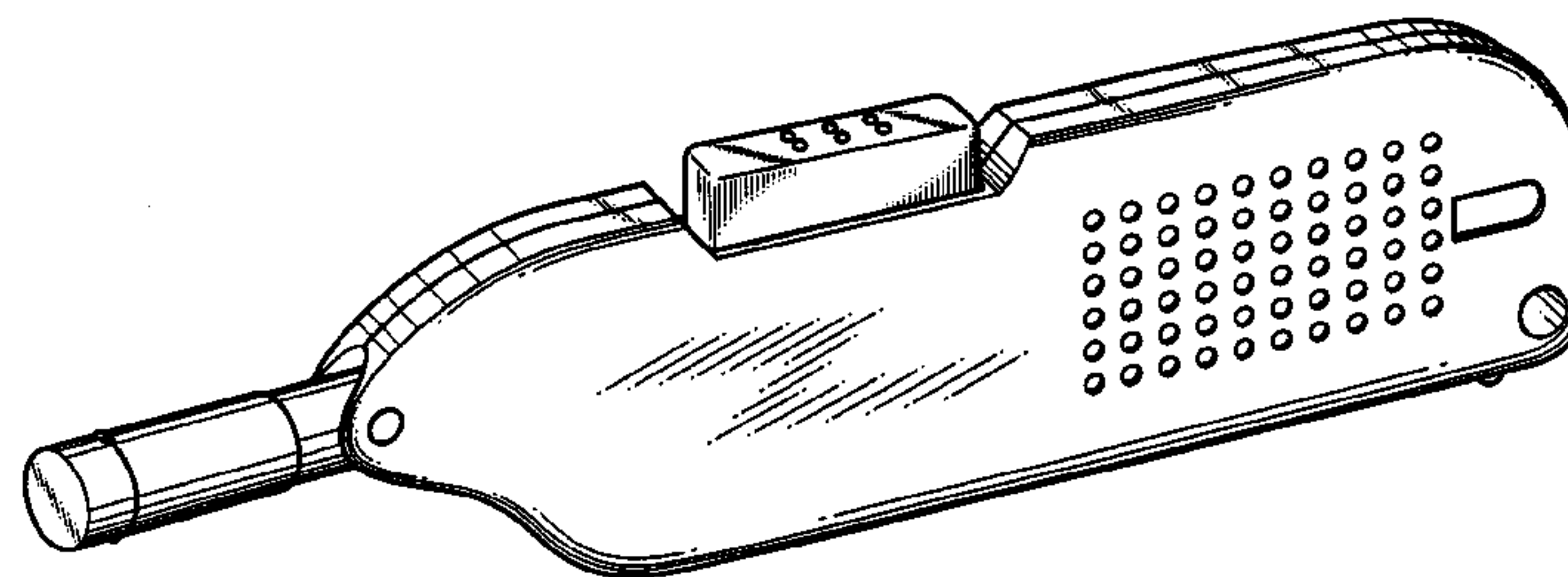


Fig.1

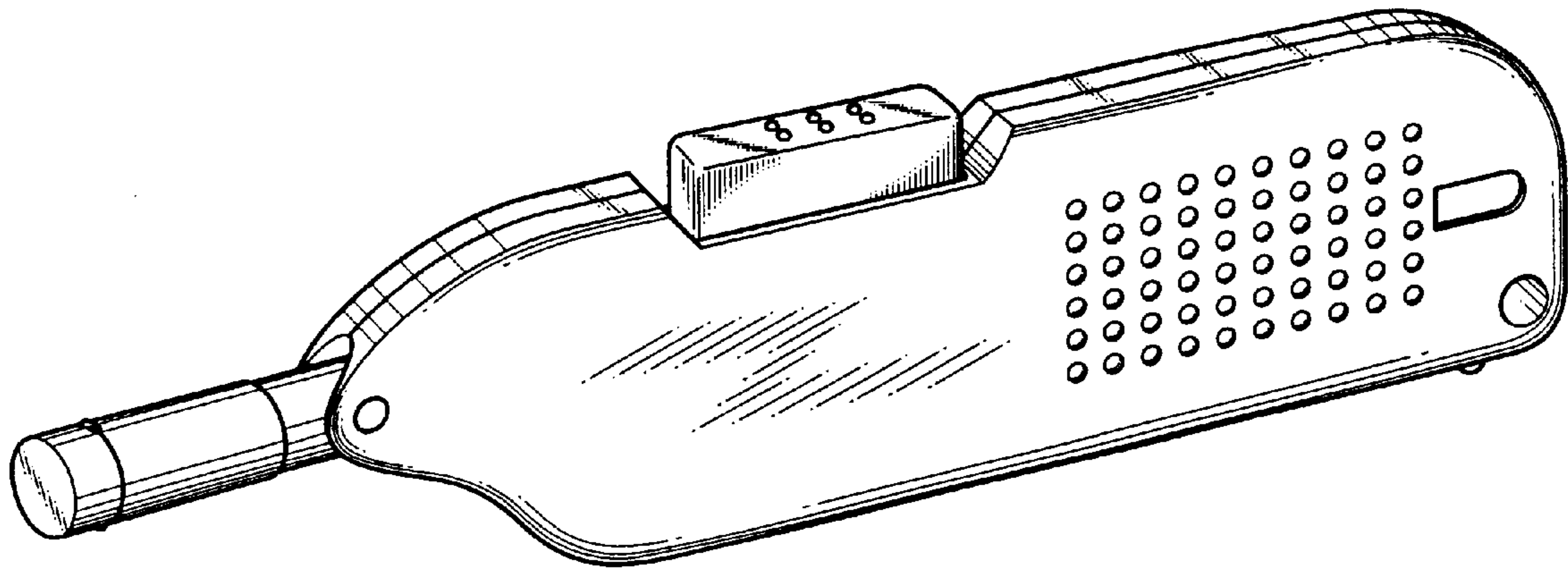


Fig.2

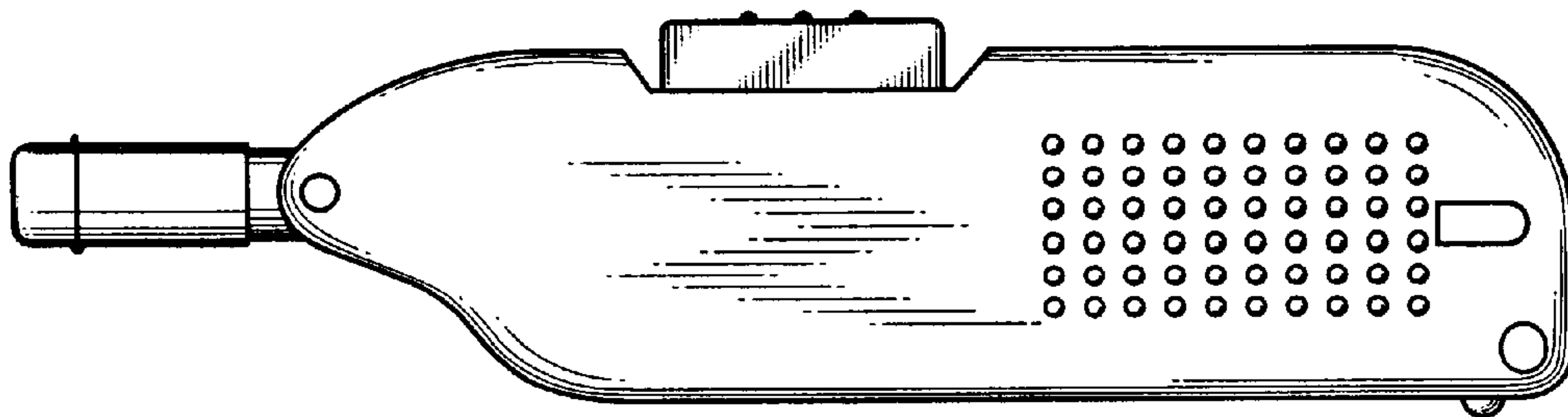


Fig.3

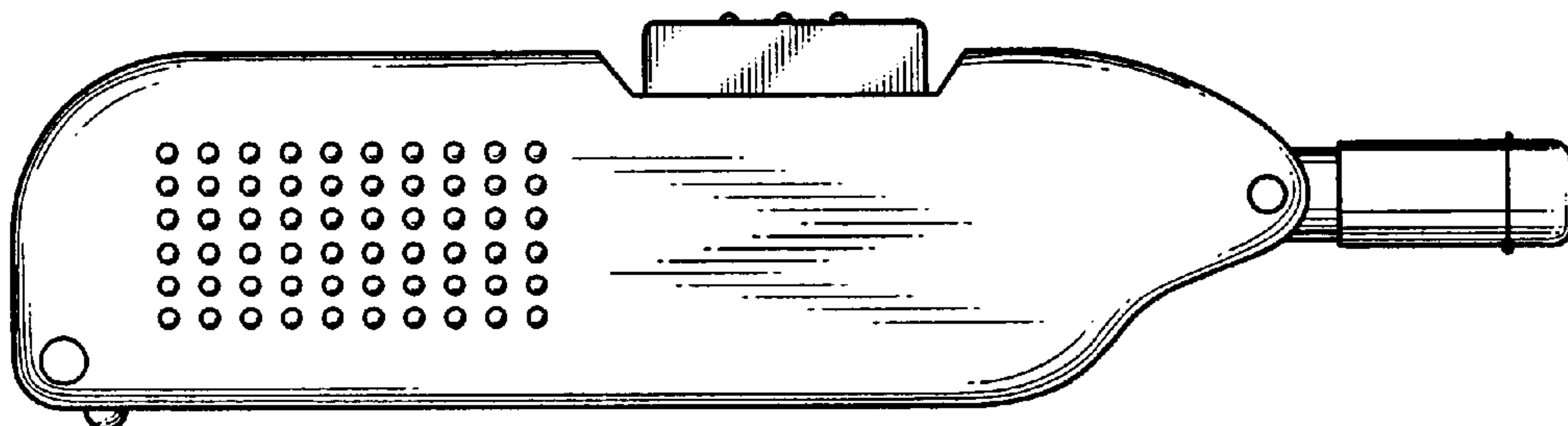


Fig.4

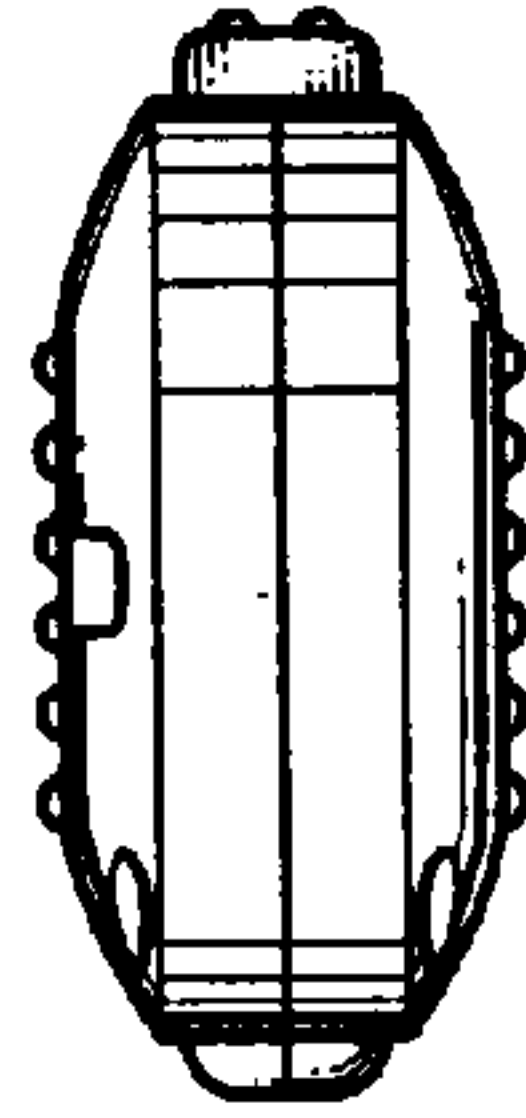


Fig.5

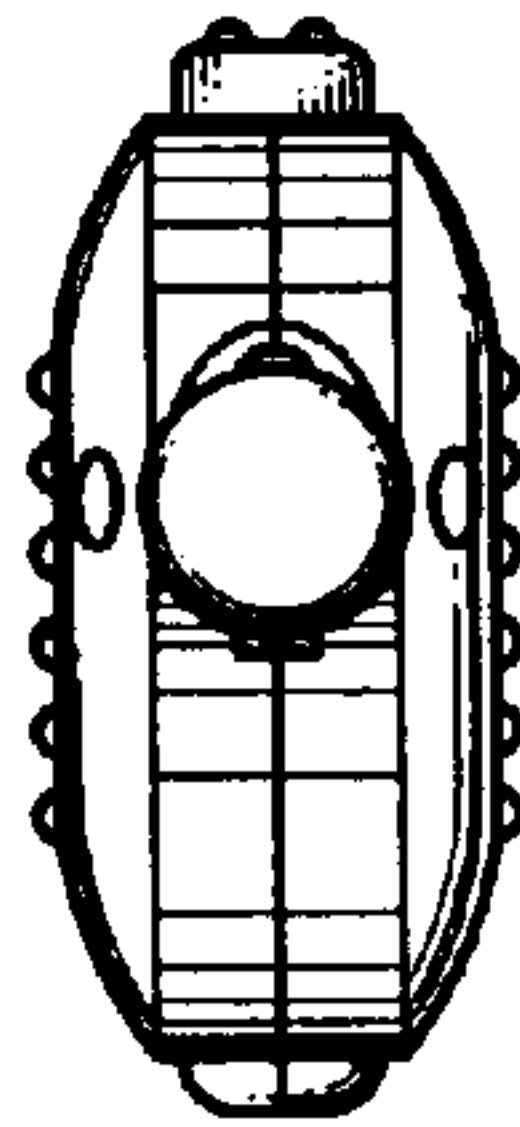


Fig.6

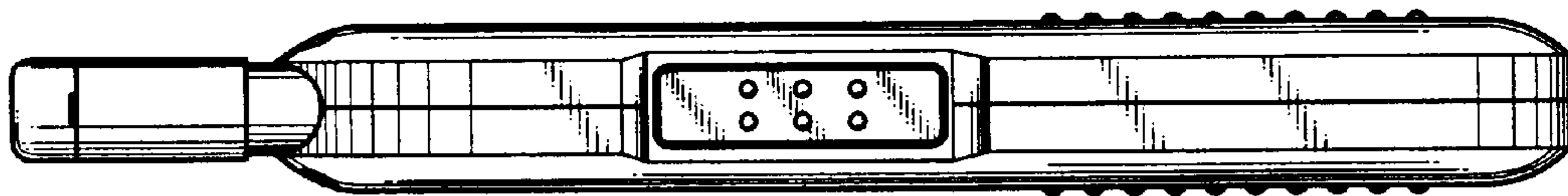


Fig.7

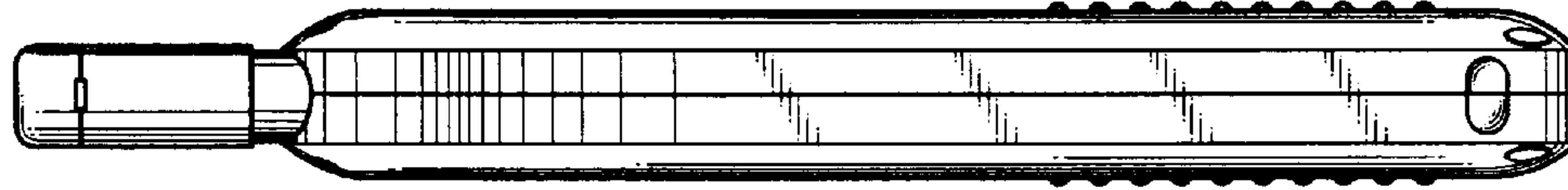


Fig.8

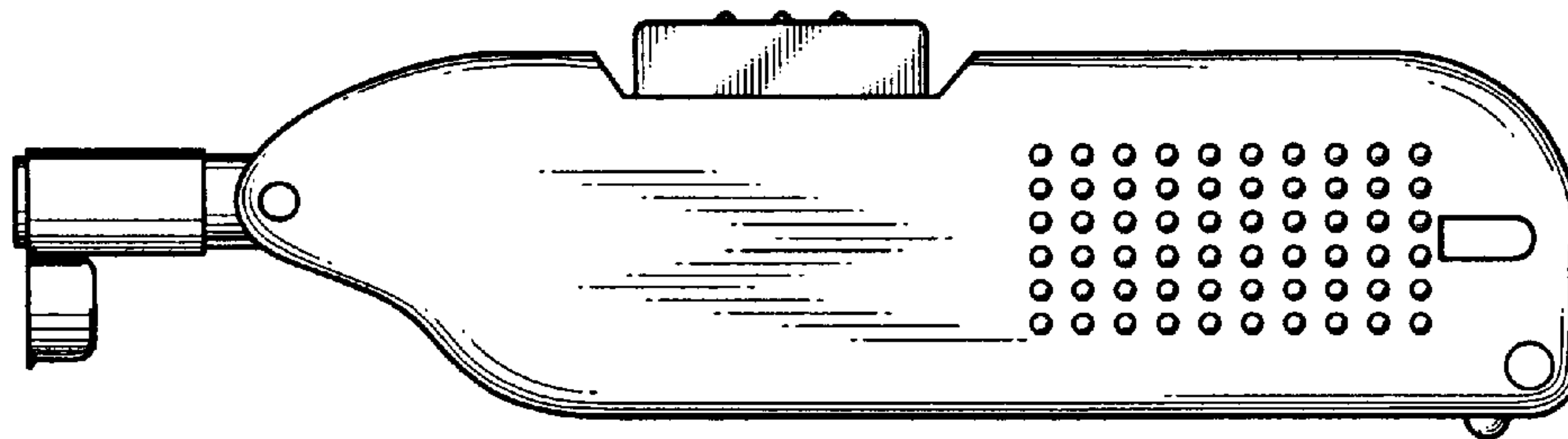


Fig.9

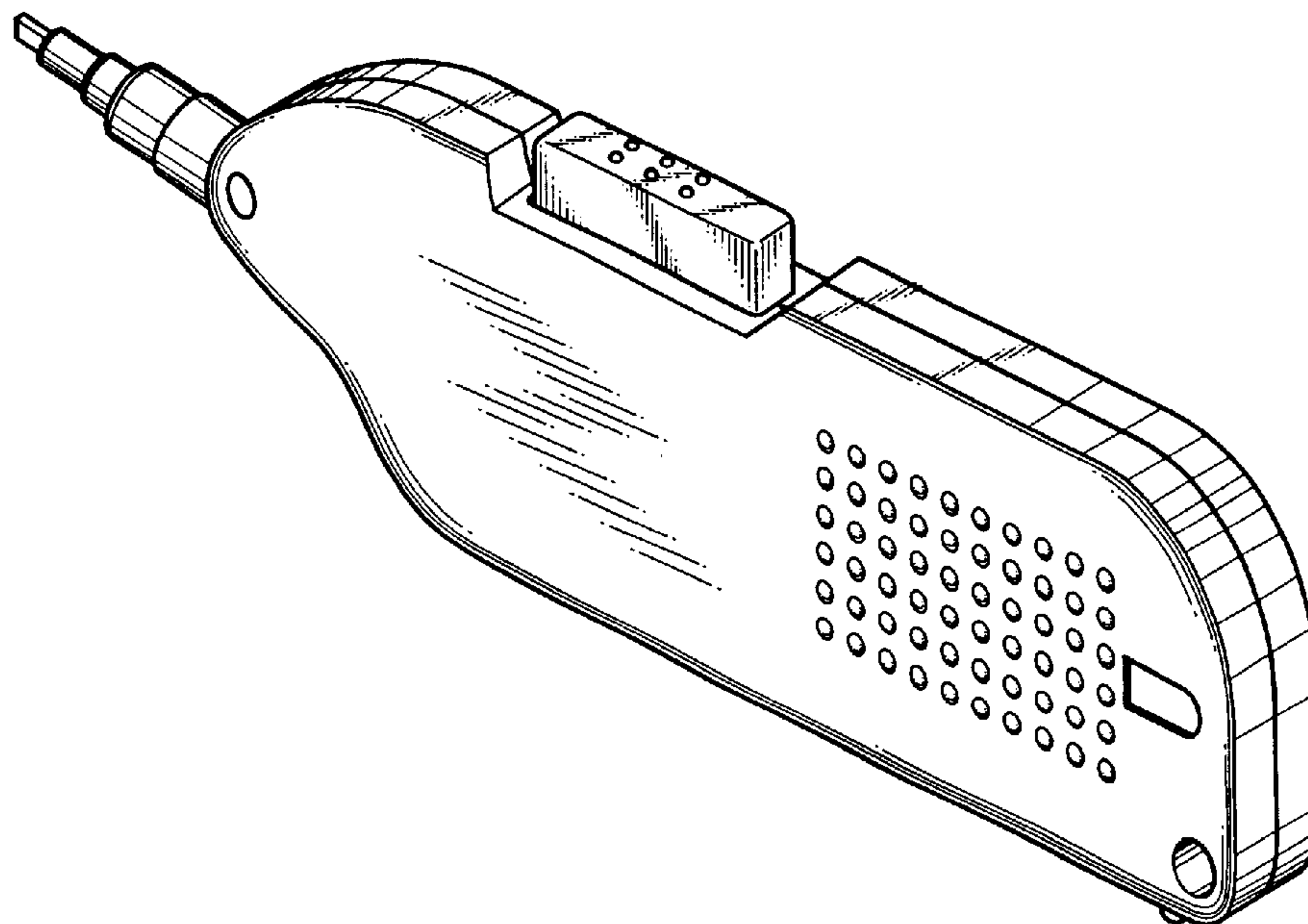


Fig. 10

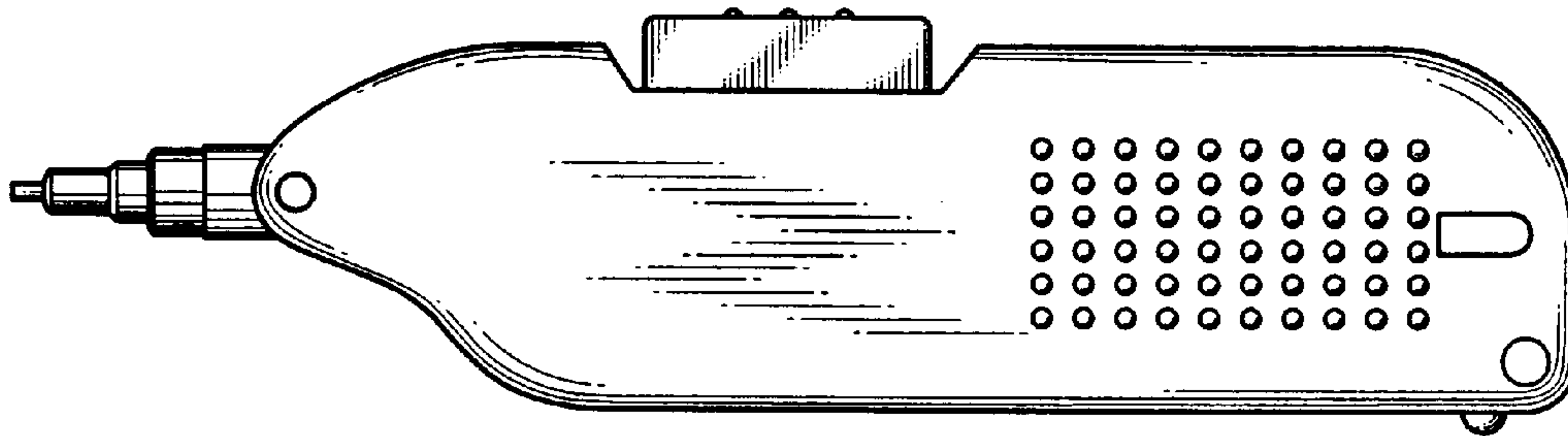


Fig. 11

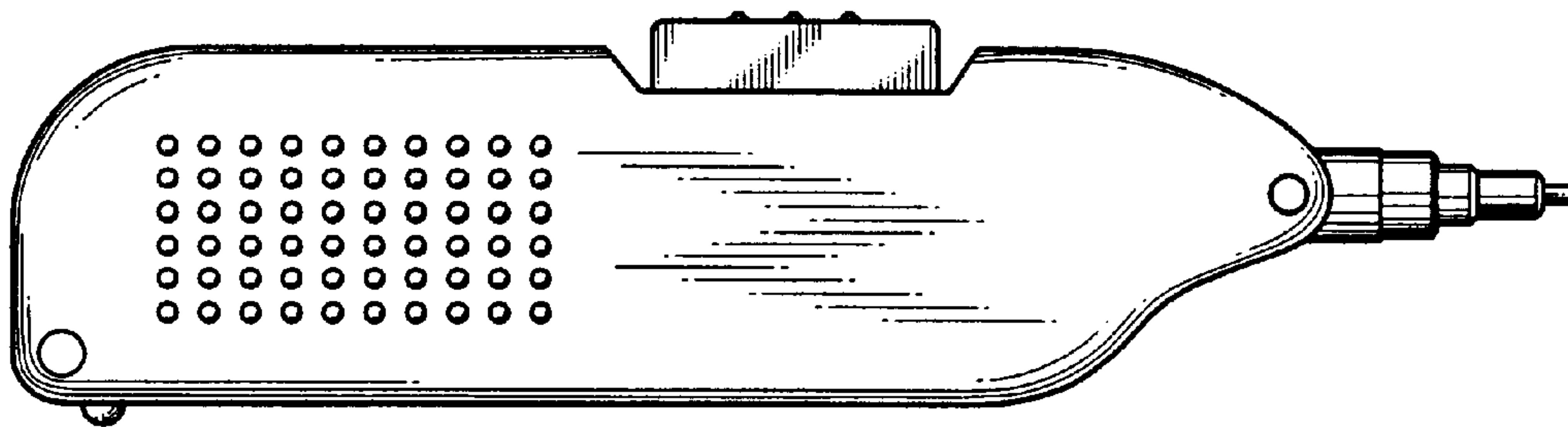


Fig. 12

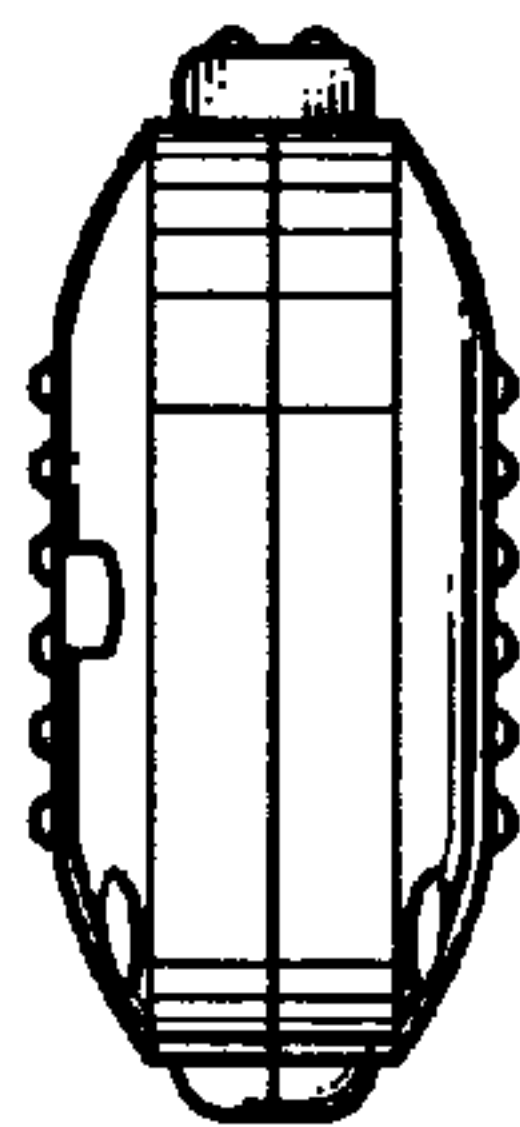




Fig.13

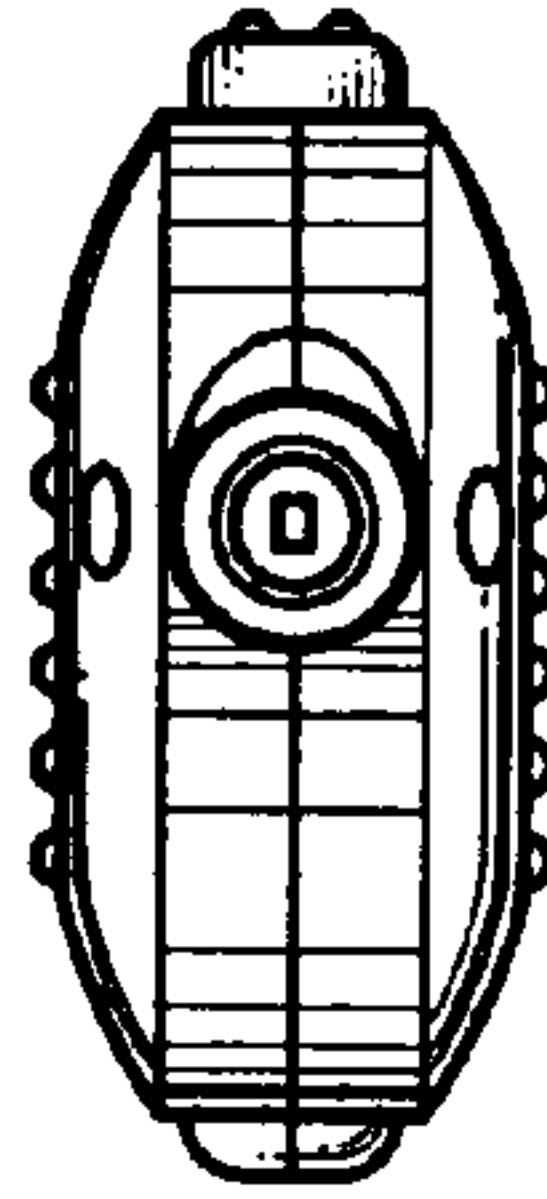


Fig.14

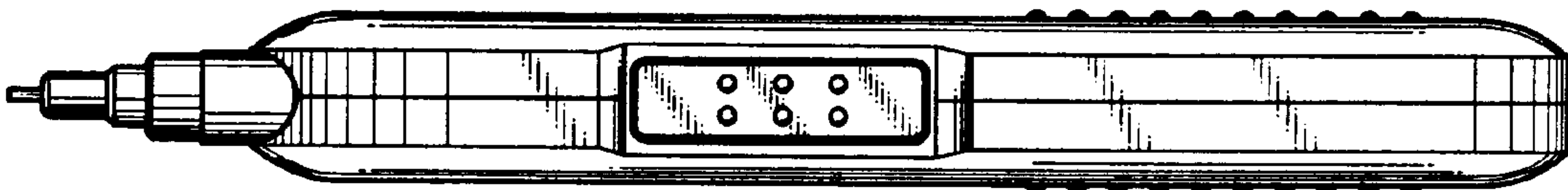


Fig.15

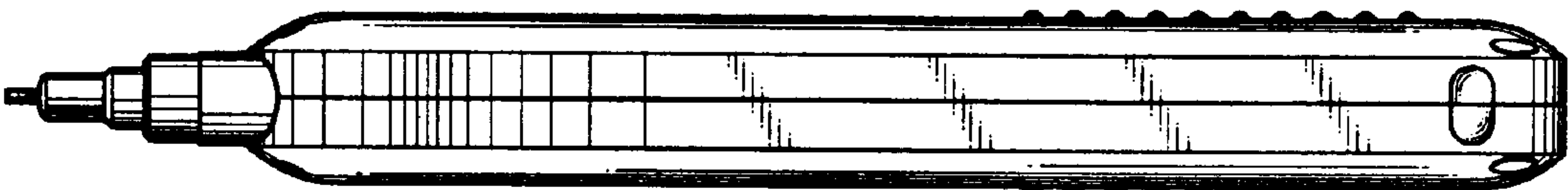


Fig.16

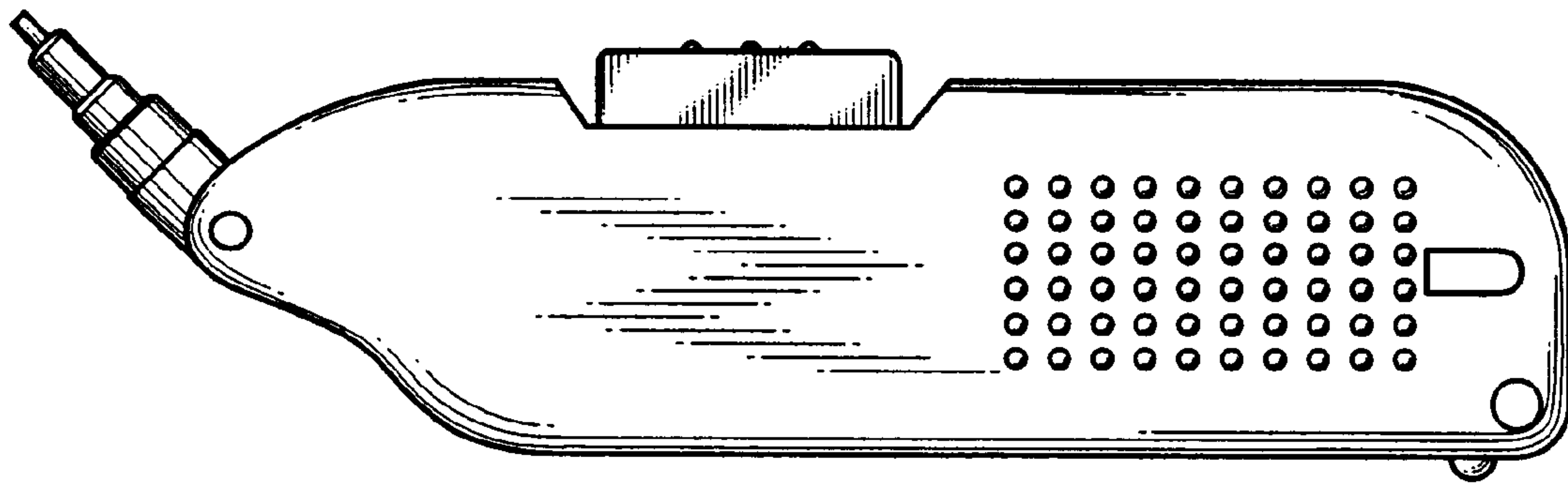


Fig.17

