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

(10) **Patent No.:** **US D813,628 S**  
(45) **Date of Patent:** **\*\* Mar. 27, 2018**

(54) **GAS SOLDERING IRON**  
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(72) Inventor: **Chin-Lin Tsai**, New Taipei (TW)  
(\*\*) Term: **15 Years**  
(21) Appl. No.: **29/587,246**  
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(30) **Foreign Application Priority Data**

Jul. 14, 2016 (TW) ..... 105304019

(51) **LOC (11) Cl.** ..... **08-05**  
(52) **U.S. Cl.**  
USPC ..... **D8/30; D15/144.1**

(58) **Field of Classification Search**  
USPC ..... D8/29.1, 29.2, 30; D15/144, 144.1,  
D15/144.2; D24/144  
CPC ..... B23K 3/021; B23K 3/022; B23K 3/023;  
B23K 3/033; B23K 3/046  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

4,688,552 A \* 8/1987 Tsai ..... B23K 3/022  
126/414  
D300,297 S \* 3/1989 Arehart ..... D8/30  
D317,704 S \* 6/1991 Zaborowski ..... D8/30  
D330,998 S \* 11/1992 Watmore ..... D8/30

5,803,061 A \* 9/1998 Kao ..... B23K 3/022  
126/413  
5,928,536 A \* 7/1999 Lee ..... B23K 3/033  
219/229  
D442,447 S \* 5/2001 Fujiwara ..... D8/30  
6,805,275 B1 \* 10/2004 Kao ..... B23K 3/022  
126/413  
6,874,671 B2 \* 4/2005 Hirano ..... B23K 3/022  
126/414  
9,314,863 B2 \* 4/2016 Teraoka ..... B23K 3/033

\* cited by examiner

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(57) **CLAIM**

The ornamental design for gas soldering iron, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of gas soldering iron showing the design;

FIG. 2 is a front side view thereof;

FIG. 3 is a rear side view thereof;

FIG. 4 is a left side view thereof;

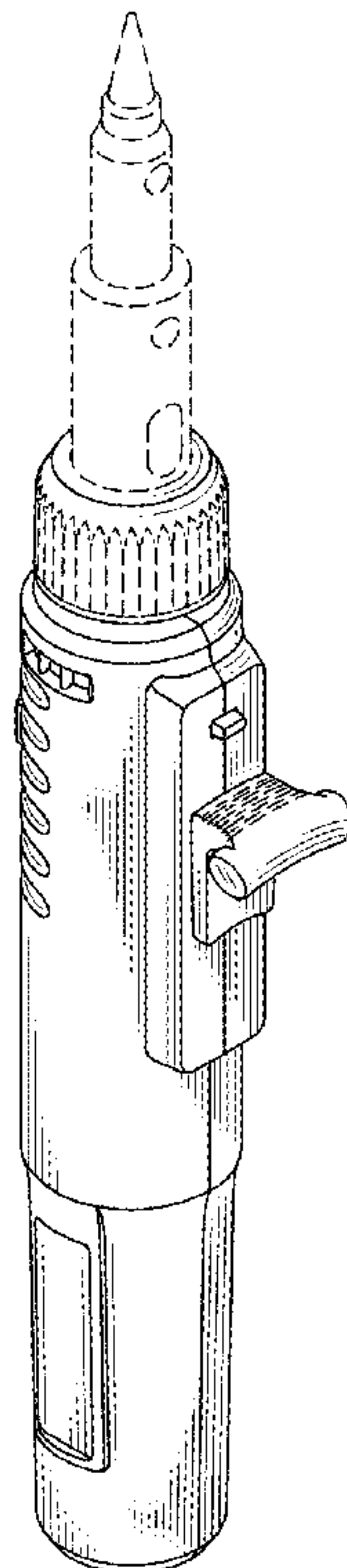
FIG. 5 is a right side view thereof;

FIG. 6 is a top elevation view thereof; and,

FIG. 7 is a bottom elevation view thereof.

The broken lines are included for the purpose of illustrating portions of the gas soldering iron that form no part of the claimed design.

**1 Claim, 4 Drawing Sheets**



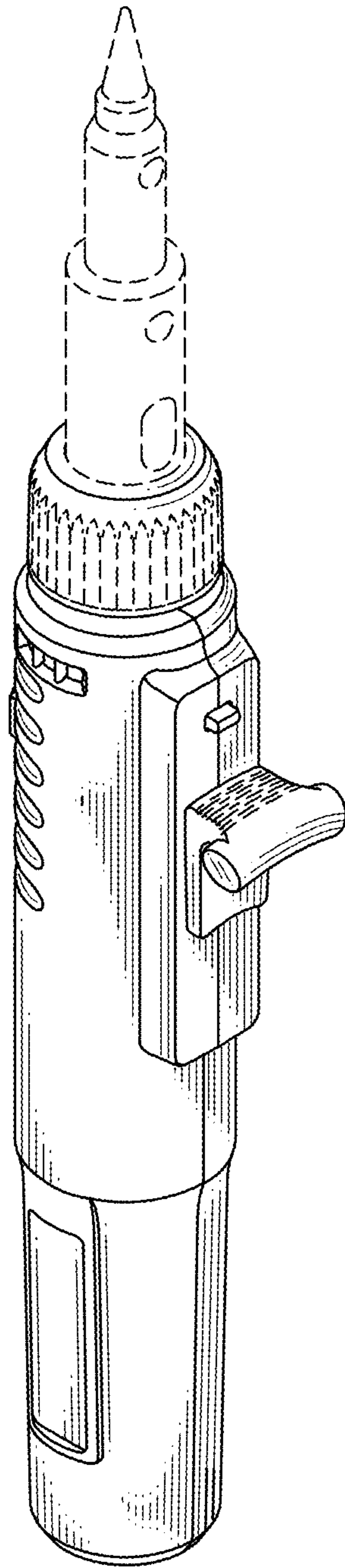


FIG. 1

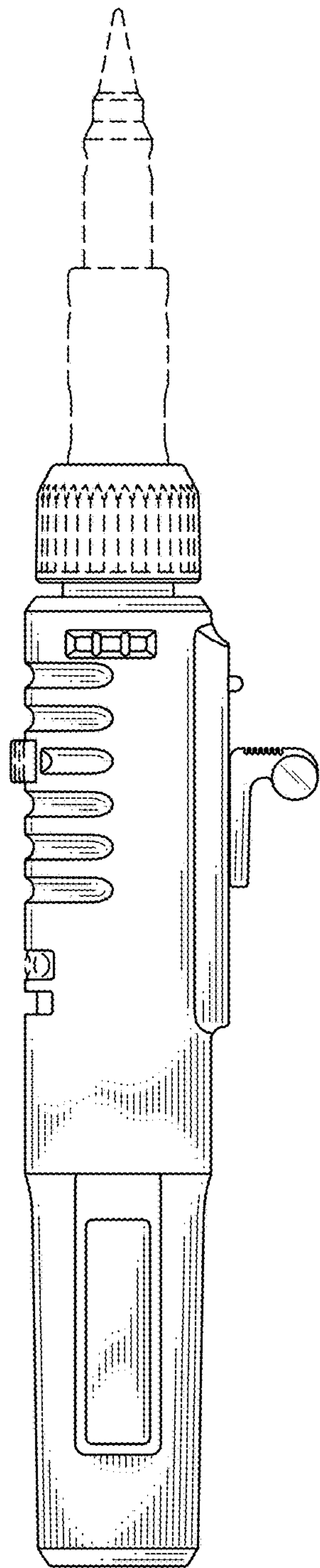


FIG. 2

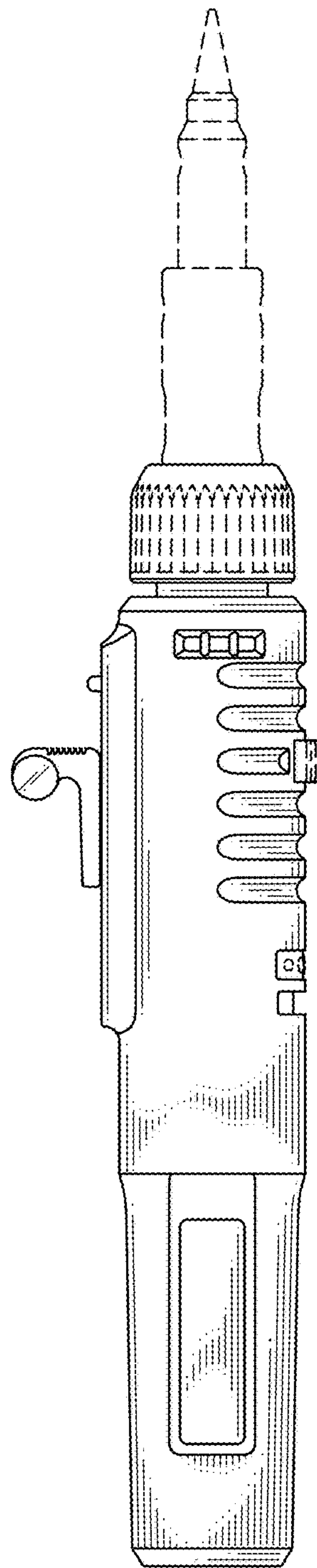


FIG. 3

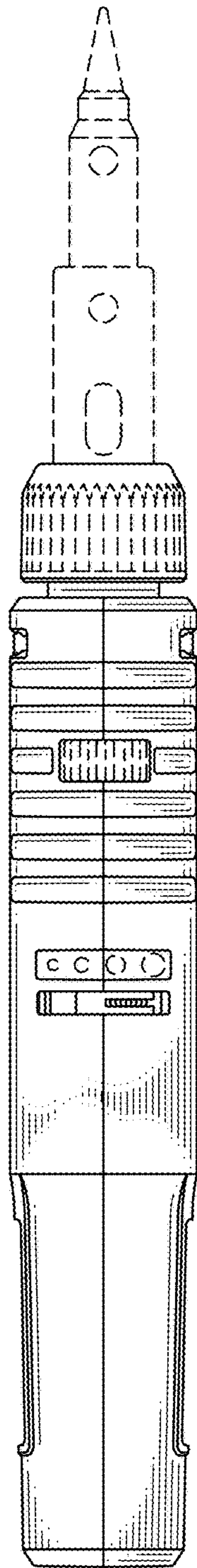


FIG. 4

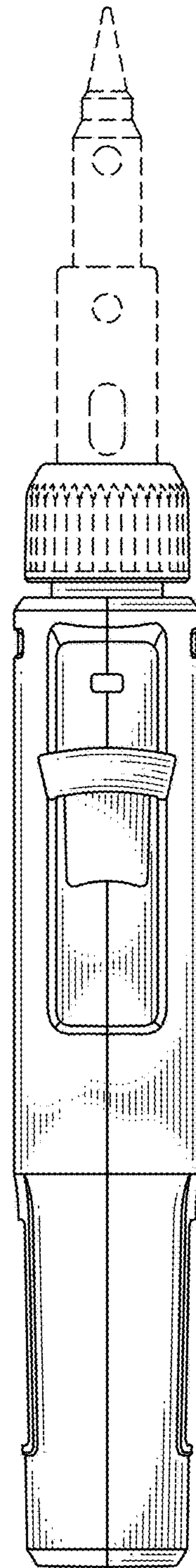


FIG. 5

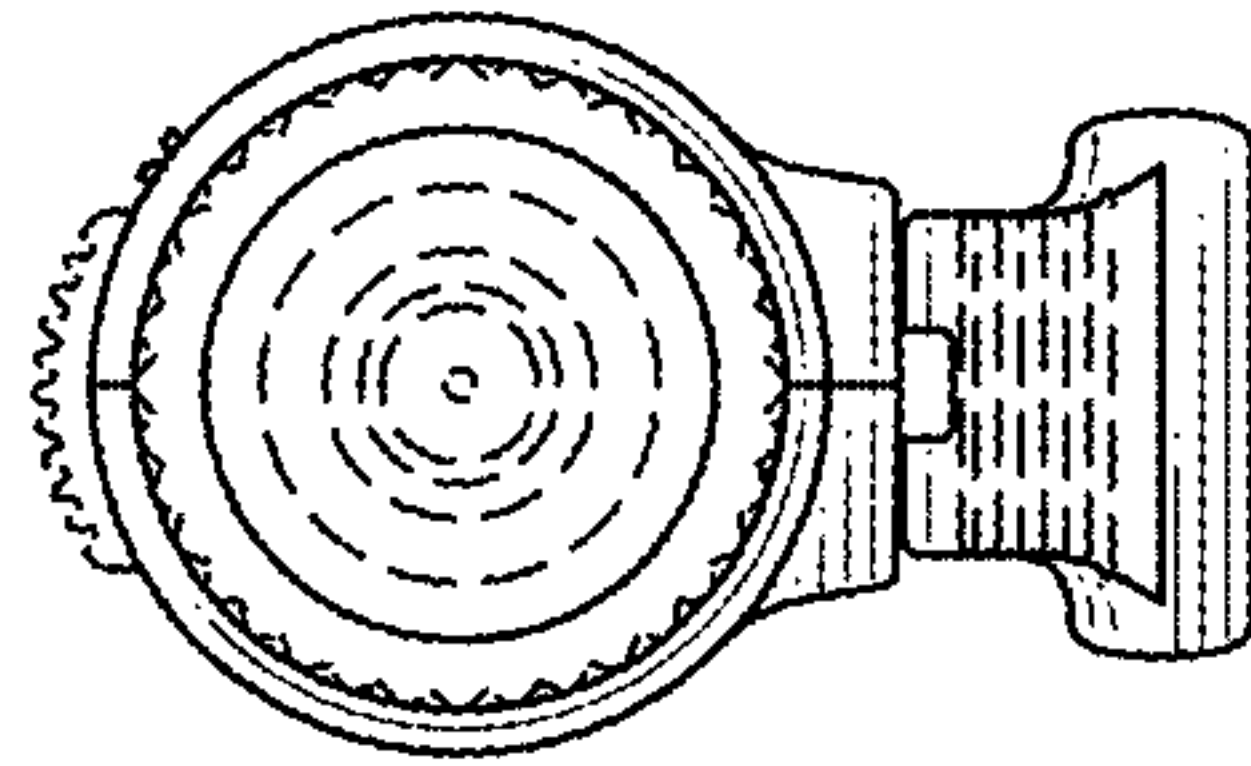


FIG. 6

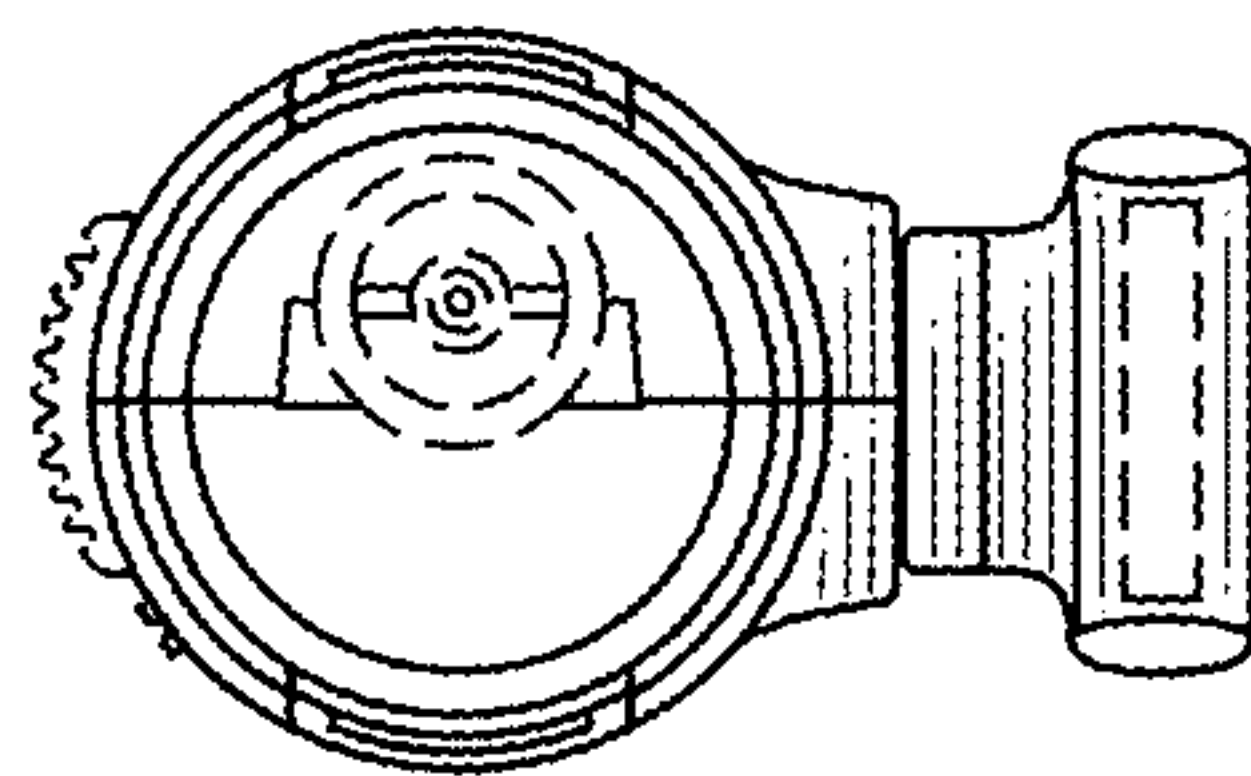


FIG. 7