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(12) **United States Design Patent**  
**Asano et al.**

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(45) **Date of Patent:** **\*\* May 19, 2015**

(54) **MICROMETER**

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Kawasaki (JP)

(73) Assignee: **MITUTOYO CORPORATION**,  
Kawasaki (JP)

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

(21) Appl. No.: **29/482,736**

(22) Filed: **Feb. 21, 2014**

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Sep. 2, 2013 (JP) ..... 2013-020231  
Sep. 2, 2013 (JP) ..... 2013-020258  
Sep. 2, 2013 (JP) ..... 2013-020259  
Sep. 2, 2013 (JP) ..... 2013-020260  
Sep. 2, 2013 (JP) ..... 2013-020289  
Sep. 2, 2013 (JP) ..... 2013-020290  
Sep. 2, 2013 (JP) ..... 2013-020291

(51) **LOC (10) Cl.** ..... **10-04**

(52) **U.S. Cl.**  
USPC ..... **D10/73**

(58) **Field of Classification Search**  
CPC ..... G01B 3/20; G01B 3/205; G01B 5/24;  
G01B 3/18; G01B 3/008  
USPC ..... D10/73, 74, 79, 80; 33/783-832,  
33/DIG. 12

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D268,740 S \* 4/1983 Tanada ..... D10/73  
D273,468 S \* 4/1984 Ueda et al. .... D10/73

D273,469 S \* 4/1984 Ueda et al. .... D10/73  
4,578,868 A \* 4/1986 Sasaki et al. .... D10/73  
D429,172 S \* 8/2000 Reymond ..... D10/73  
6,308,433 B1 \* 10/2001 Takahashi et al. .... 33/819  
6,915,591 B2 \* 7/2005 Hayashida et al. .... 33/815  
7,013,576 B2 \* 3/2006 Hayashida et al. .... 33/813  
7,020,979 B2 \* 4/2006 Hayashida et al. .... 33/813  
7,467,480 B2 \* 12/2008 Hayashida et al. .... 33/813  
D611,371 S \* 3/2010 Ohtani et al. .... D10/73  
8,091,251 B1 \* 1/2012 Zhang et al. .... 33/819  
8,296,966 B2 \* 10/2012 Hayashida et al. .... 33/815  
8,413,348 B2 \* 4/2013 Tsuji ..... 33/815  
8,739,428 B2 \* 6/2014 Emtman ..... 33/815

**FOREIGN PATENT DOCUMENTS**

CN 302042008 S 8/2012  
JP D701024 3/1987  
JP D1072314 6/2000  
JP D1189771 11/2003  
JP D1191546 12/2003  
JP D1267102 4/2006  
JP D1408521 2/2011

**OTHER PUBLICATIONS**

Schut Geometrische Messtechnik GmbH 2002 Messzeuge und  
Messsysteme HD14023162, Oct. 31, 2002.  
Mitutoyo Catalog No. 13 42 Measuring Instruments Catalog  
HC24008504, May 28, 2012.

\* cited by examiner

*Primary Examiner* — Antoine D Davis

(74) *Attorney, Agent, or Firm* — Oliff PLC

(57) **CLAIM**

The ornamental design for a micrometer, as shown and  
described.

**DESCRIPTION**

FIG. 1 is a perspective view of a micrometer in a first embodi-  
ment;

FIG. 2 is a front view thereof;

FIG. 3 is a top view thereof;

FIG. 4 is a left side view thereof;

FIG. 5 is a right side view thereof;

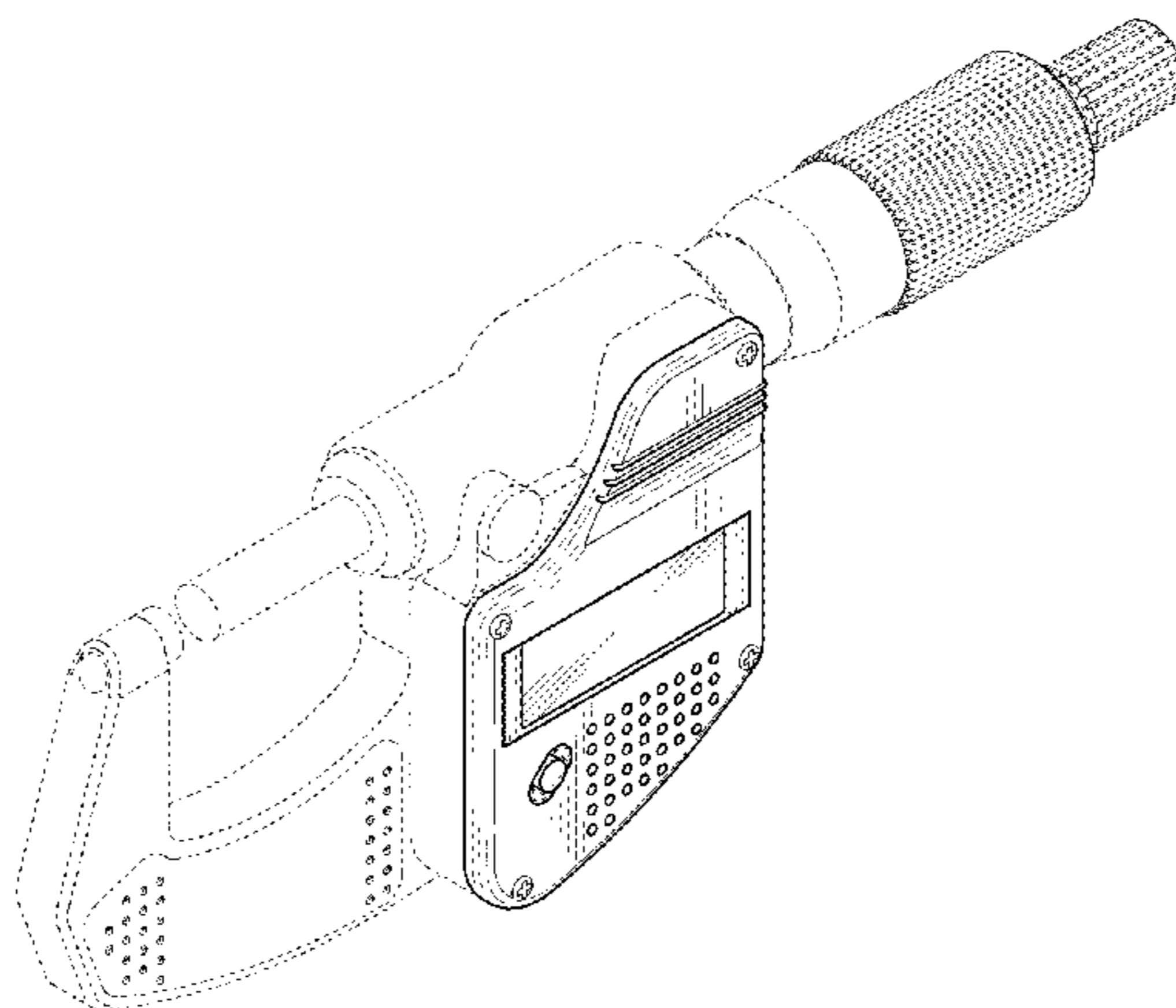


FIG. 6 is a rear view thereof;  
FIG. 7 is a bottom view thereof;  
FIG. 8 is a second perspective view thereof;  
FIG. 9 is a perspective view of the micrometer in a second embodiment;  
FIG. 10 is a front view thereof;  
FIG. 11 is a top view thereof;  
FIG. 12 is a left side view thereof;  
FIG. 13 is a right side view thereof;  
FIG. 14 is a rear view thereof;  
FIG. 15 is a bottom view thereof;  
FIG. 16 is a second perspective view thereof;  
FIG. 17 is a perspective view of the micrometer in a third embodiment;  
FIG. 18 is a front view thereof;  
FIG. 19 is a top view thereof;  
FIG. 20 is a right side view thereof;  
FIG. 21 is a left side view thereof;  
FIG. 22 is a rear view thereof;

FIG. 23 is a bottom view thereof;  
FIG. 24 is a second perspective view thereof;  
FIG. 25 is a perspective view of the micrometer in a fourth embodiment;  
FIG. 26 is a front view thereof;  
FIG. 27 is a top view thereof;  
FIG. 28 is a right side view thereof;  
FIG. 29 is a left side view thereof;  
FIG. 30 is a rear view thereof;  
FIG. 31 is a bottom view thereof;  
FIG. 32 is a second perspective view thereof;  
FIG. 33 is an enlarged view of a portion of each embodiment;  
and,  
FIG. 34 is a cross-sectional view taken through the enlarged portion seen in FIG. 33.  
The broken lines depict environmental subject matter only and form no part of the claimed design.

**1 Claim, 21 Drawing Sheets**

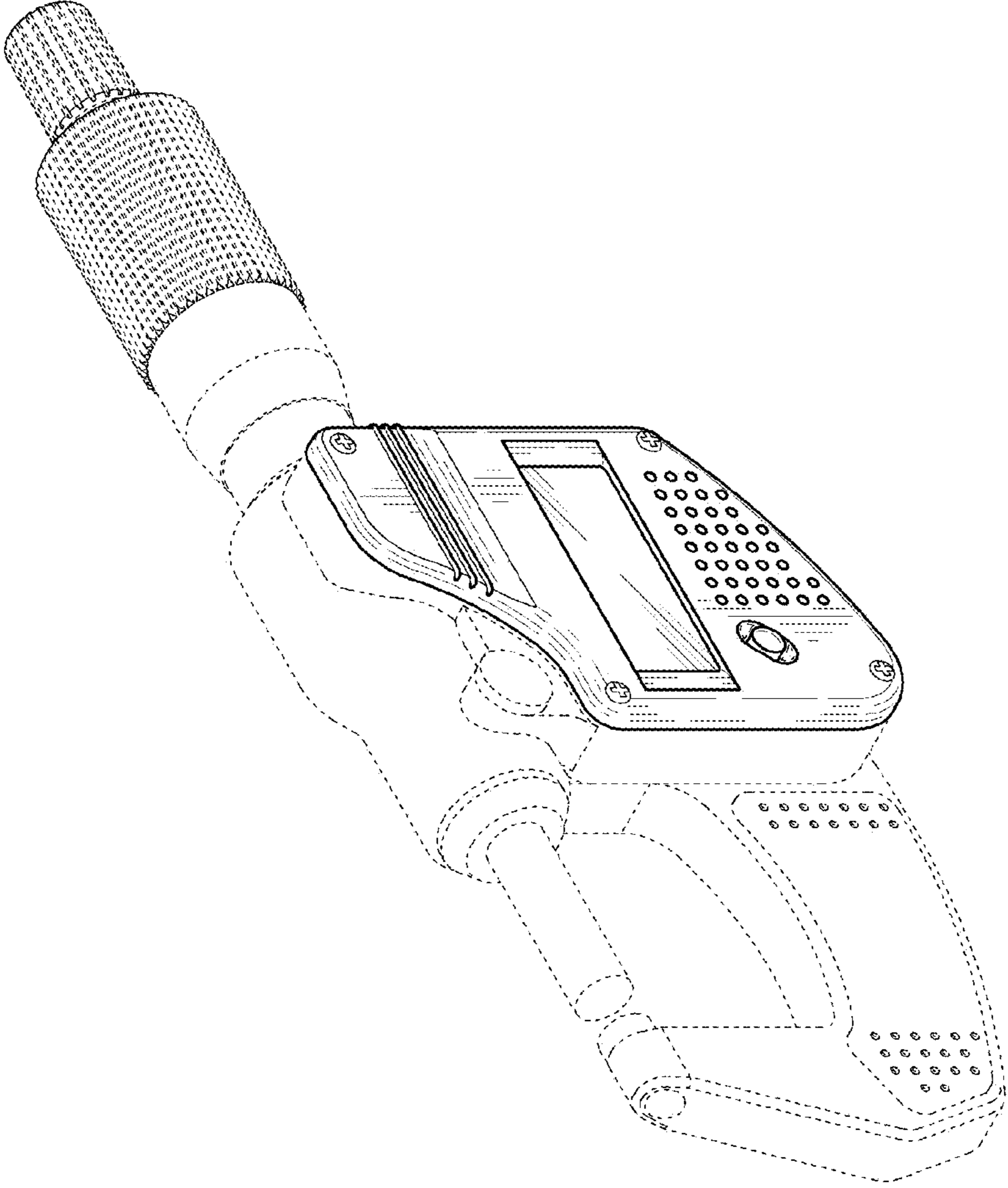


FIG. 1

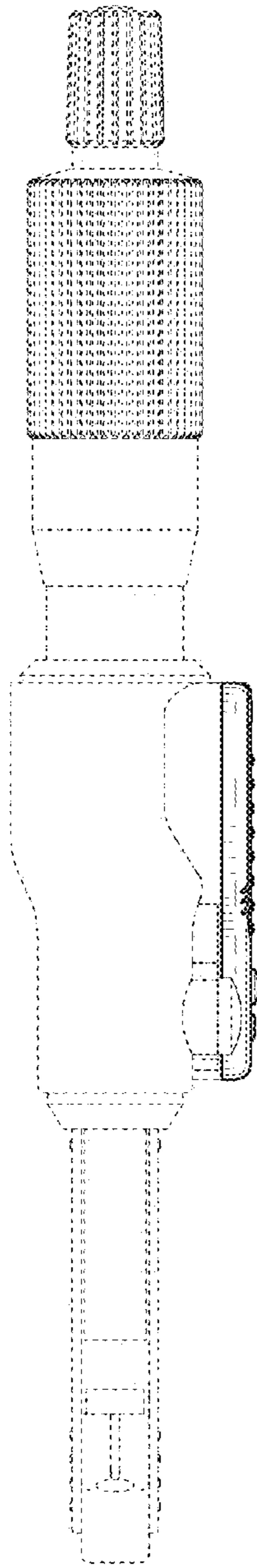


FIG. 3

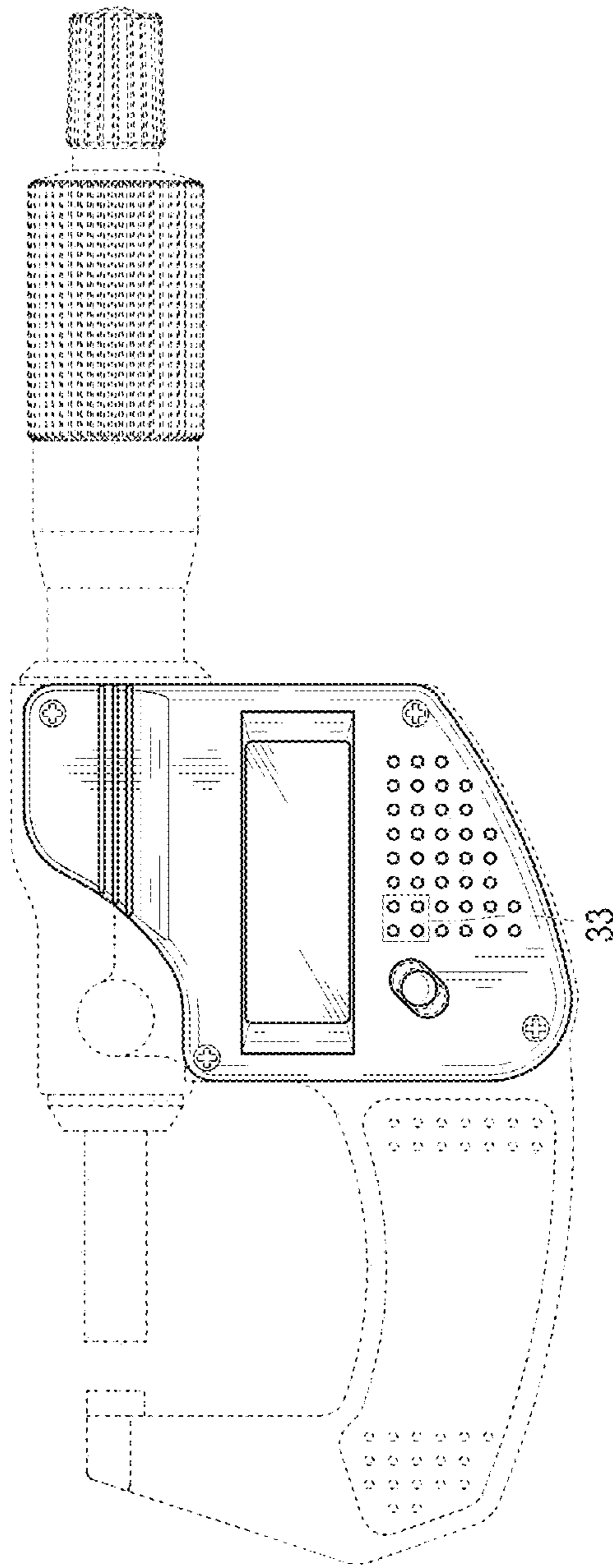


FIG. 2

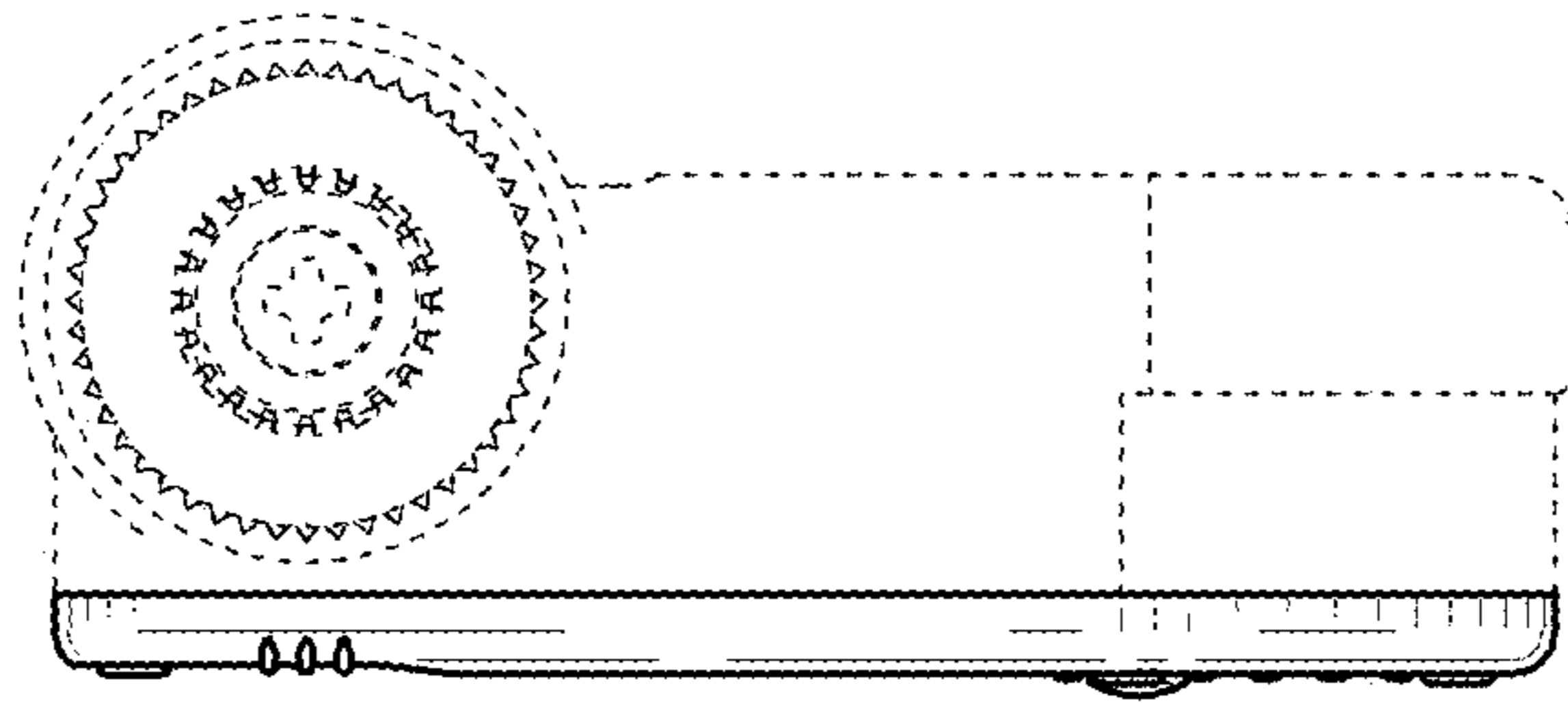


FIG. 5

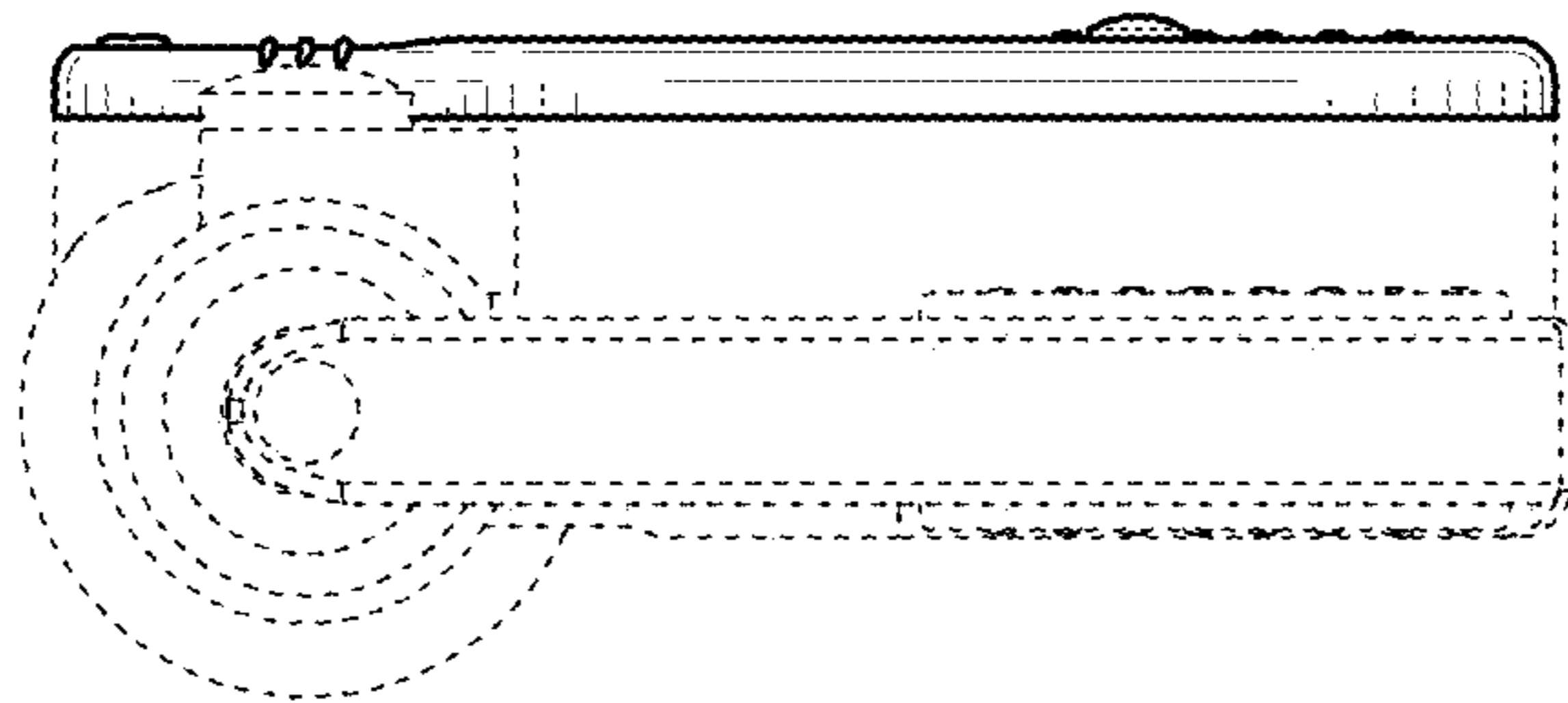


FIG. 4

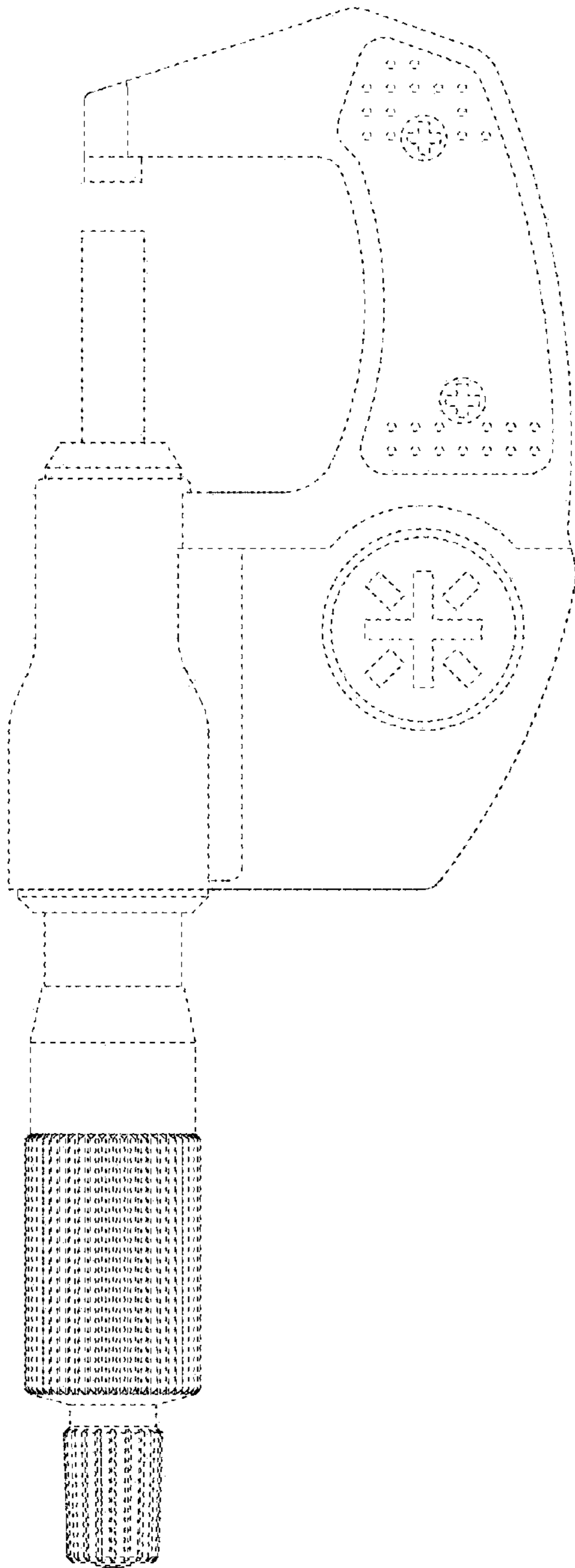


FIG. 6

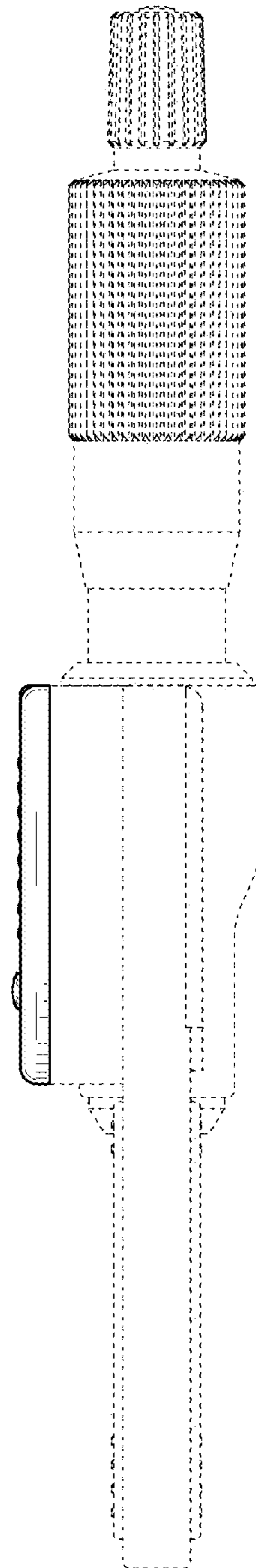


FIG. 7

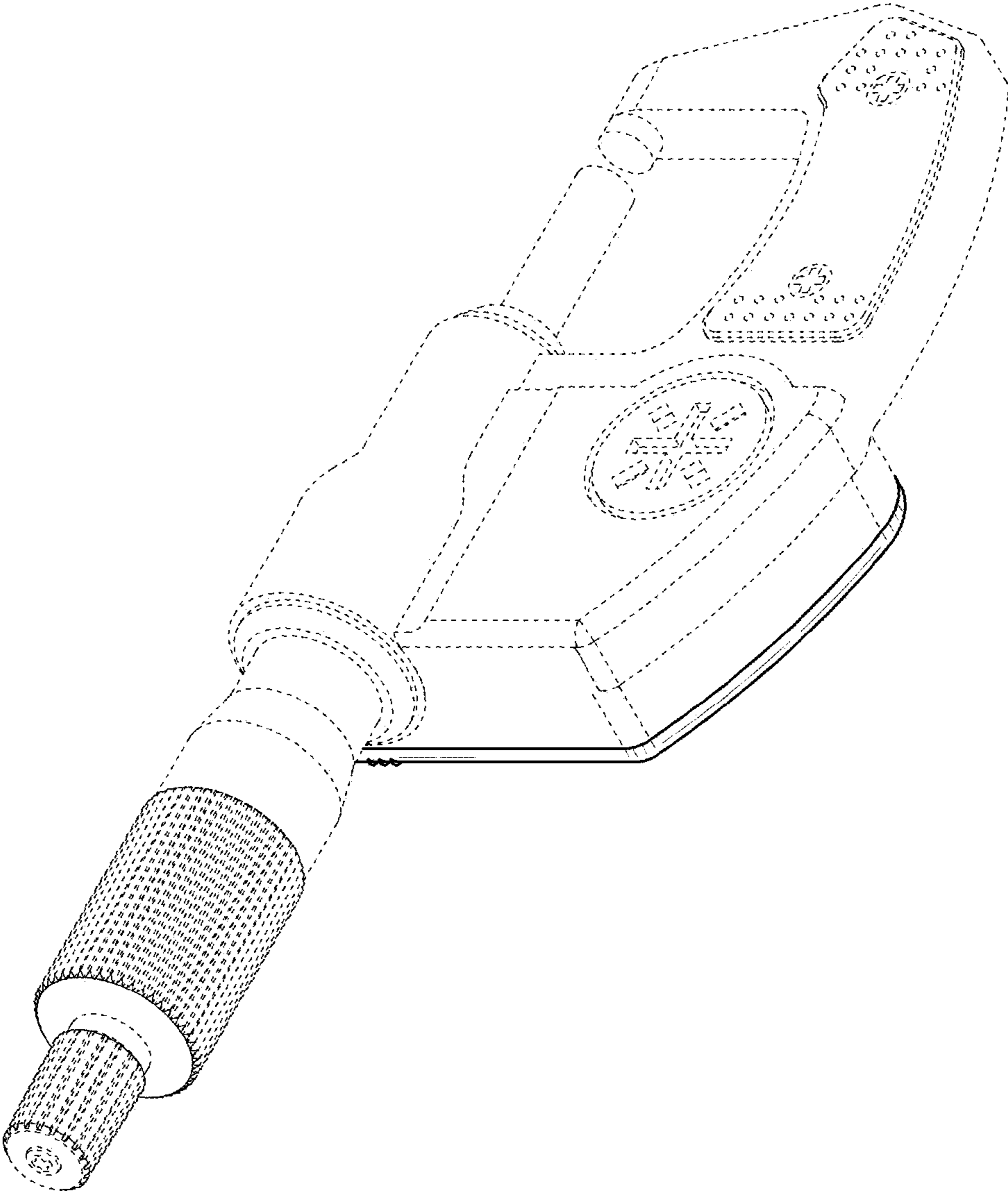


FIG. 8

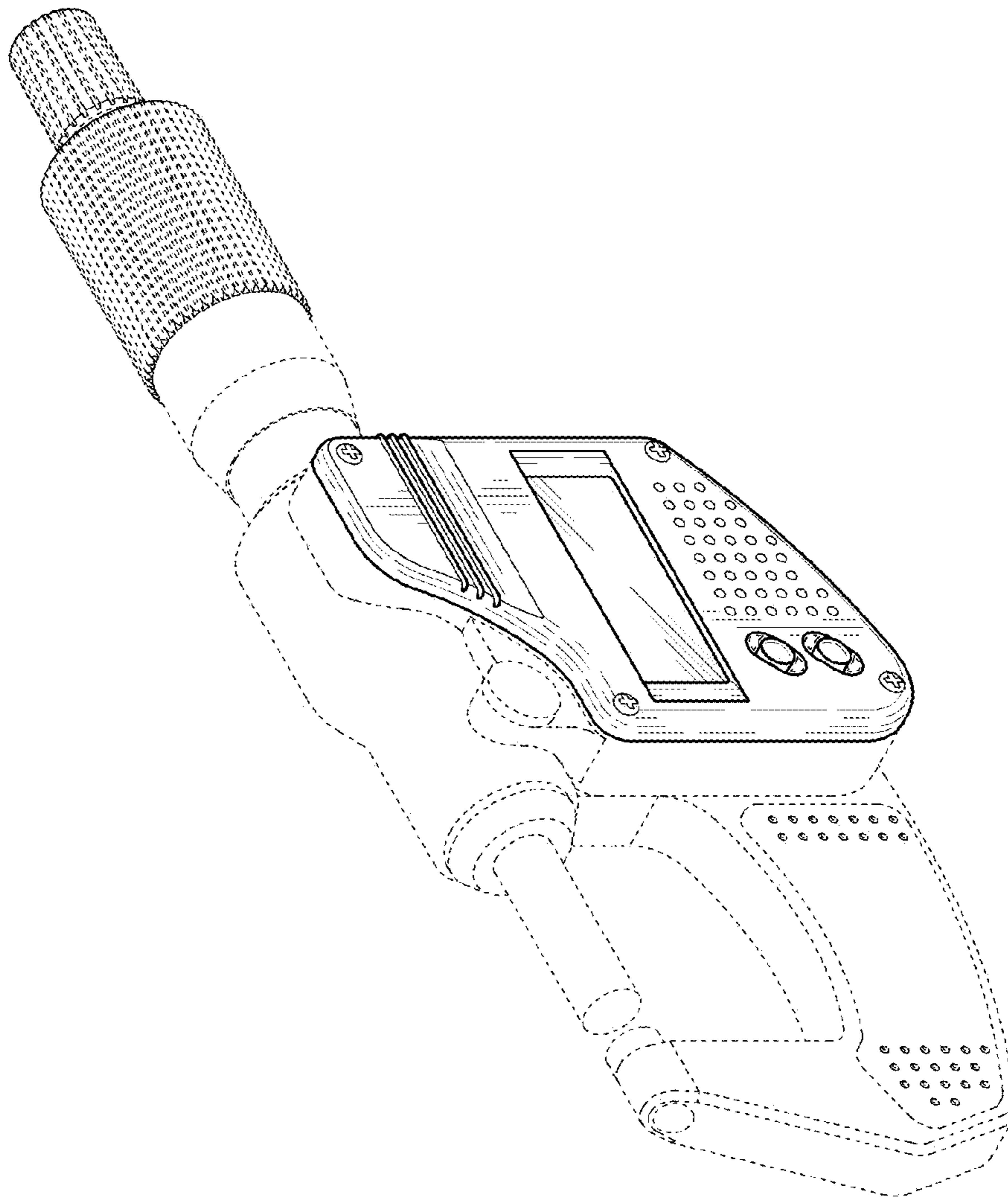


FIG. 9



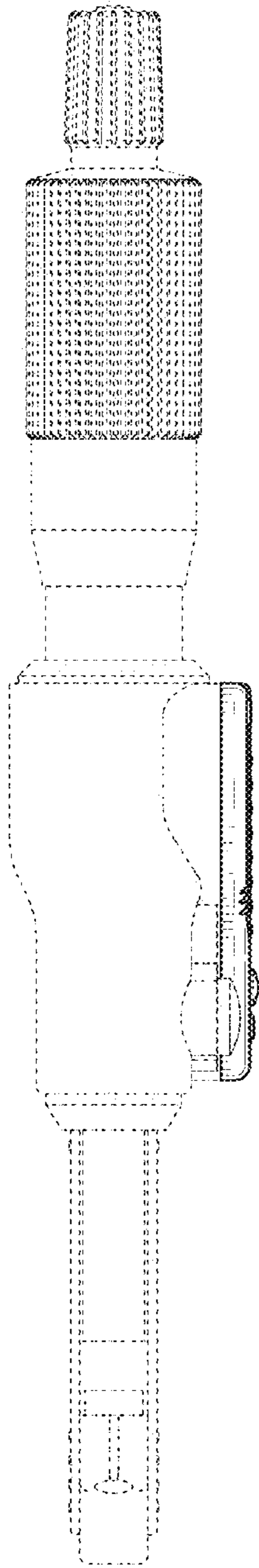


FIG. 11

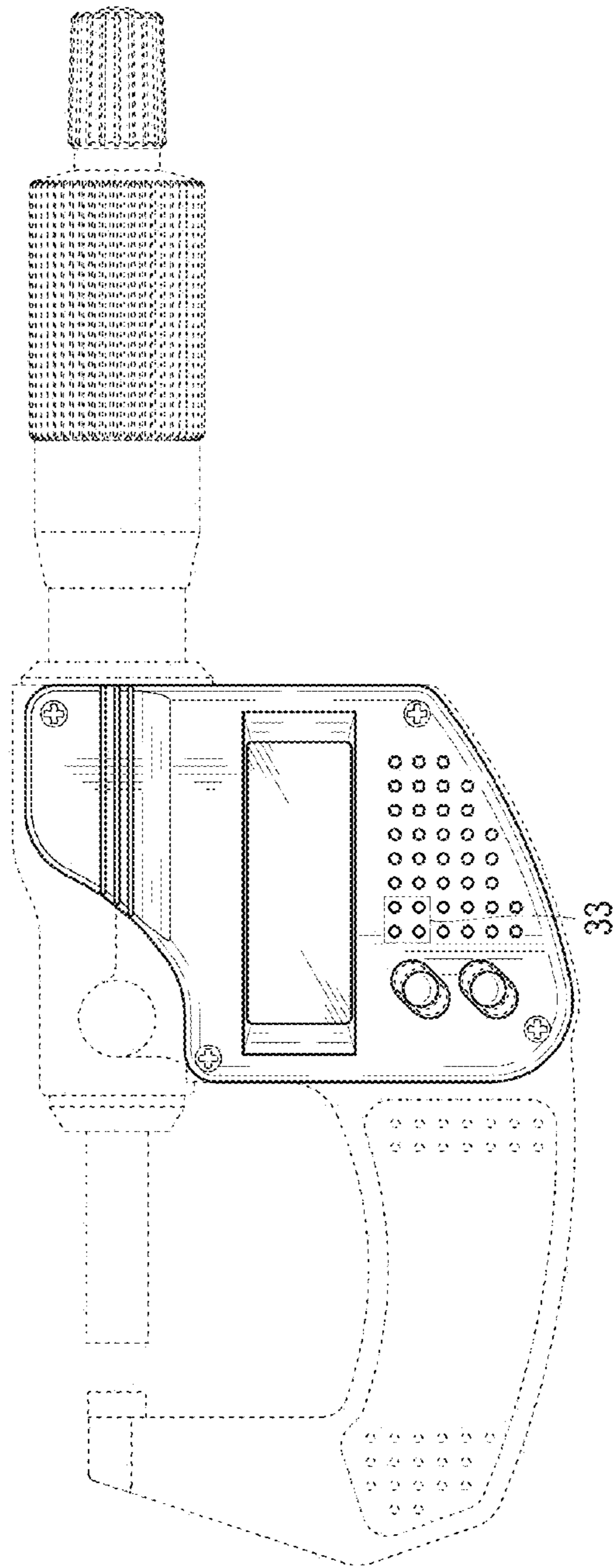


FIG. 10

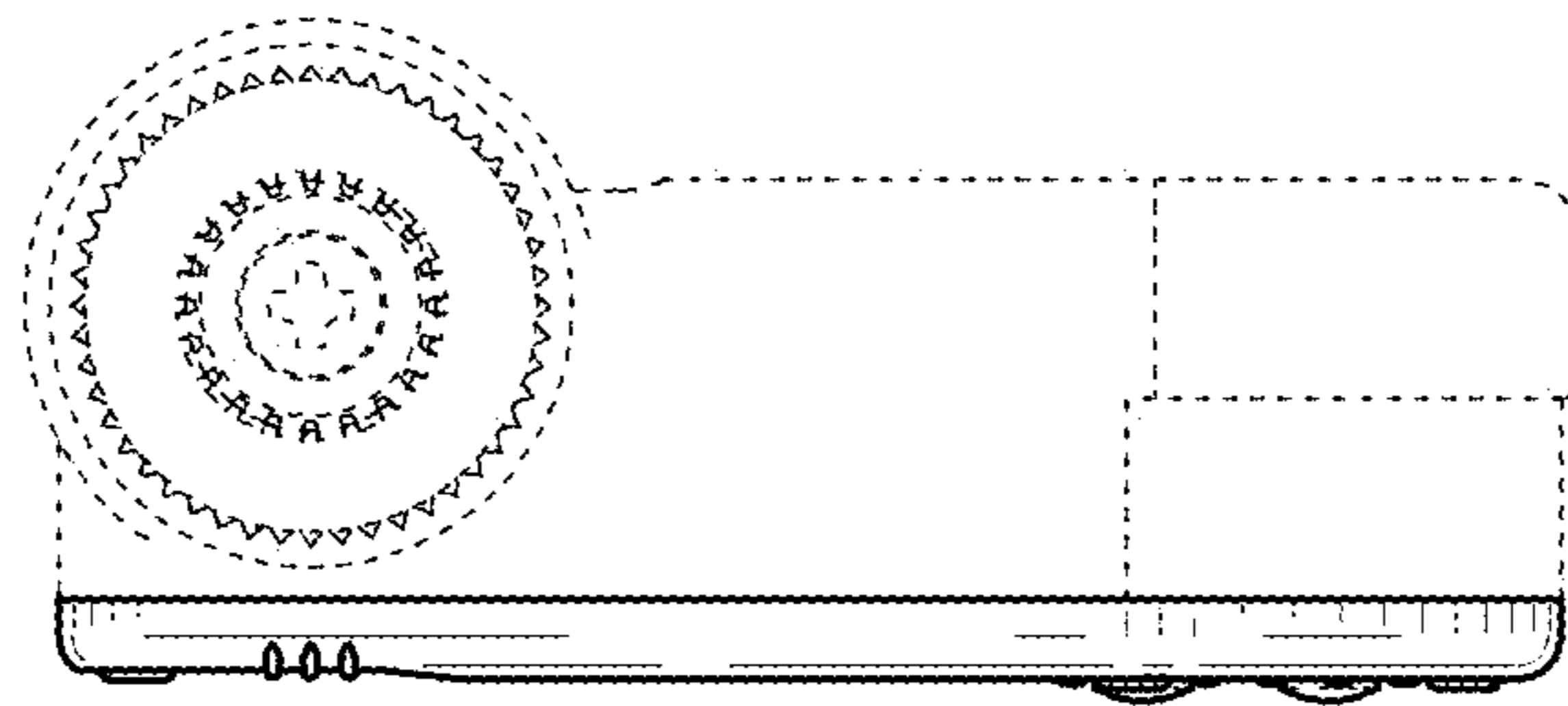


FIG. 13

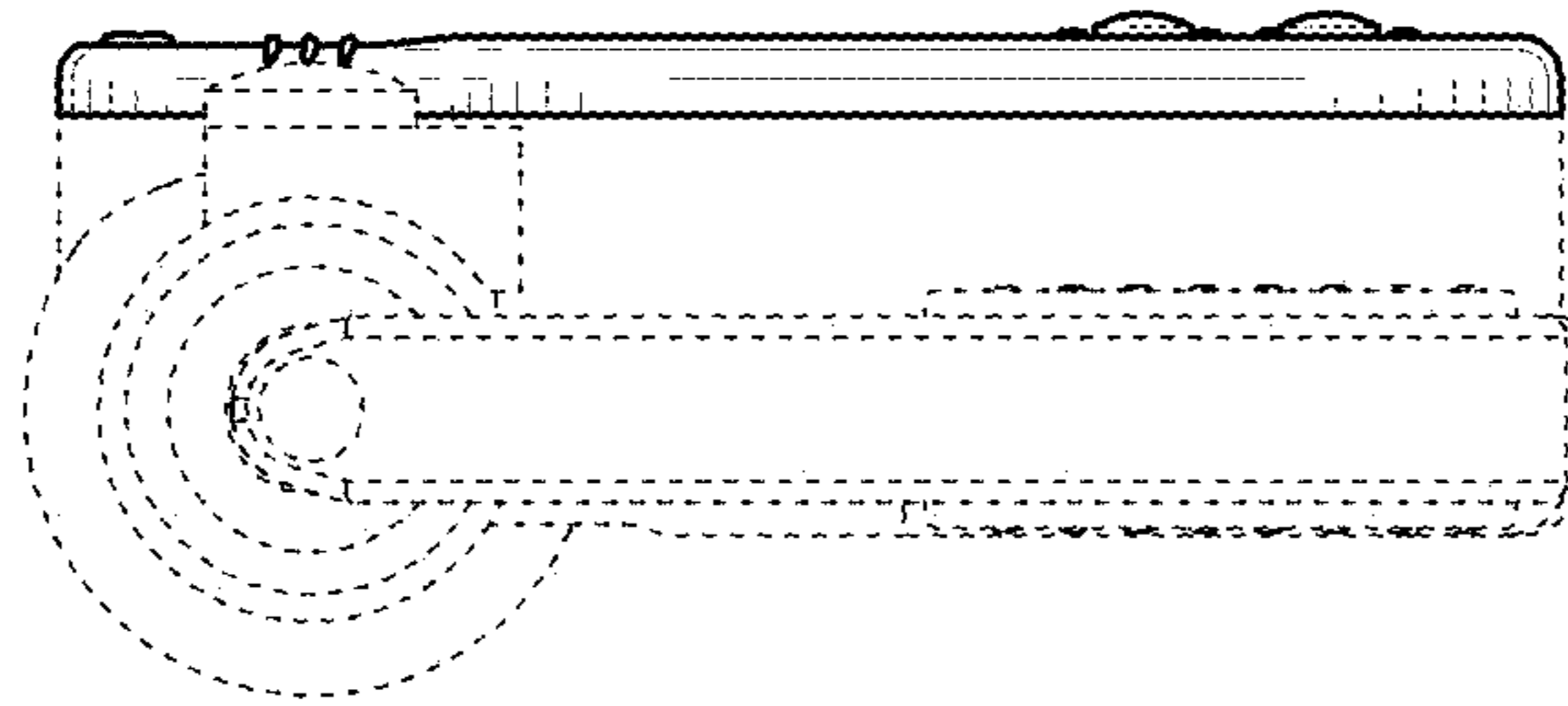


FIG. 12

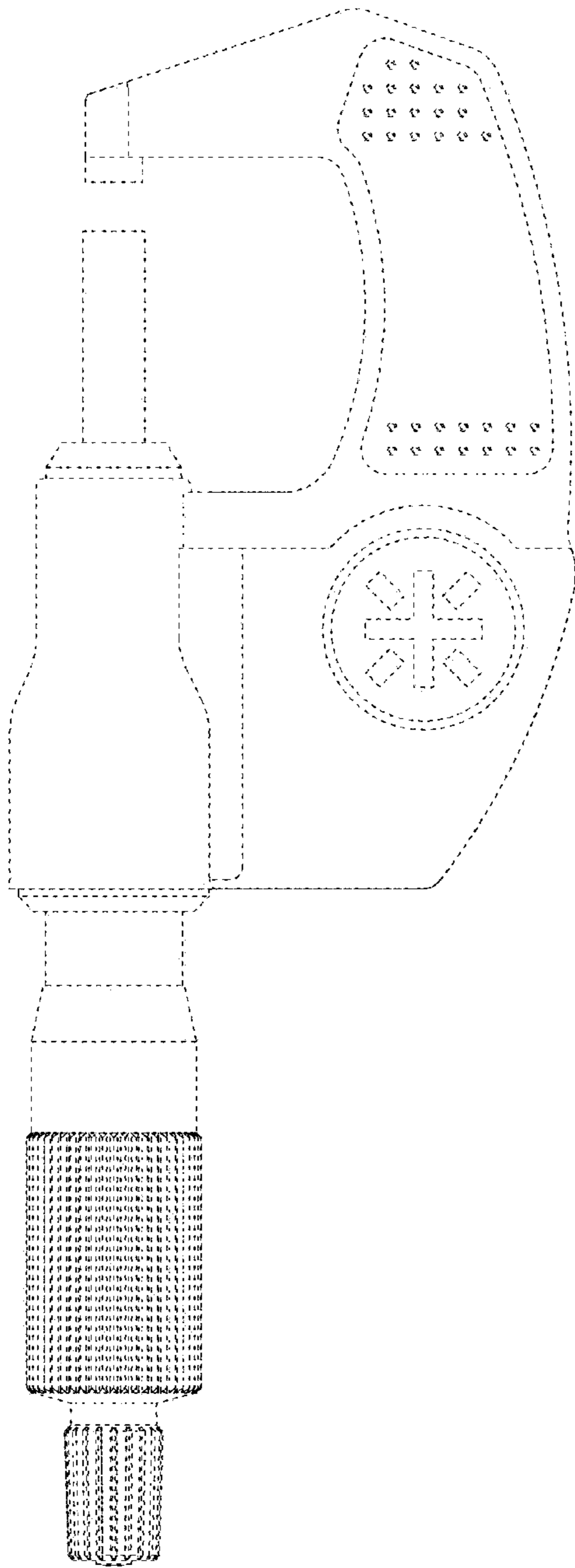


FIG. 14

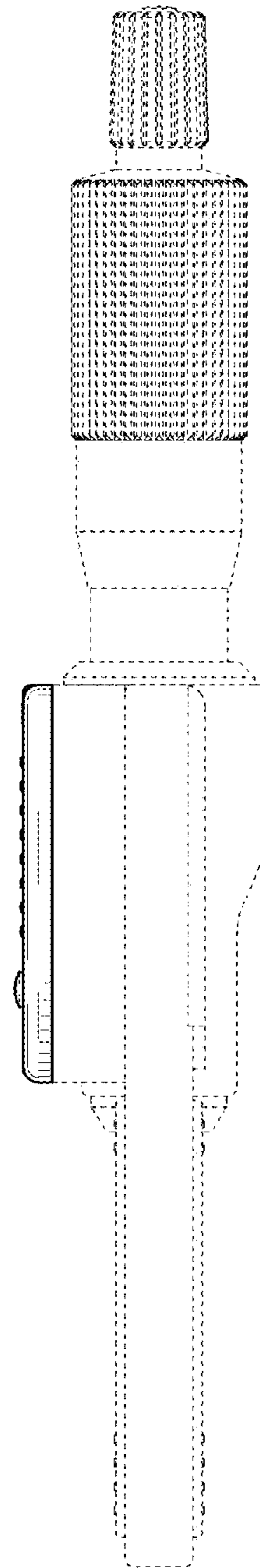


FIG. 15

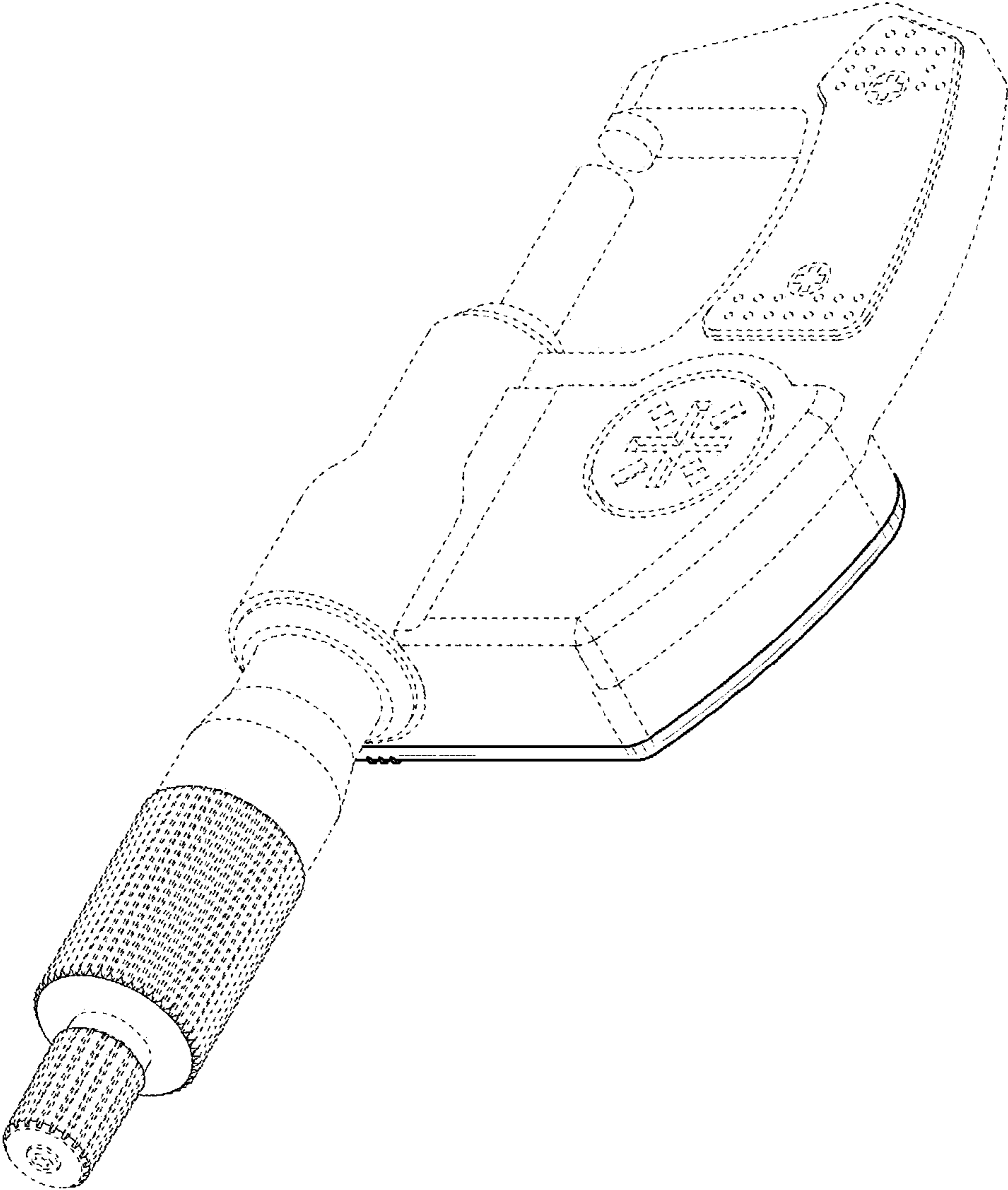


FIG. 16

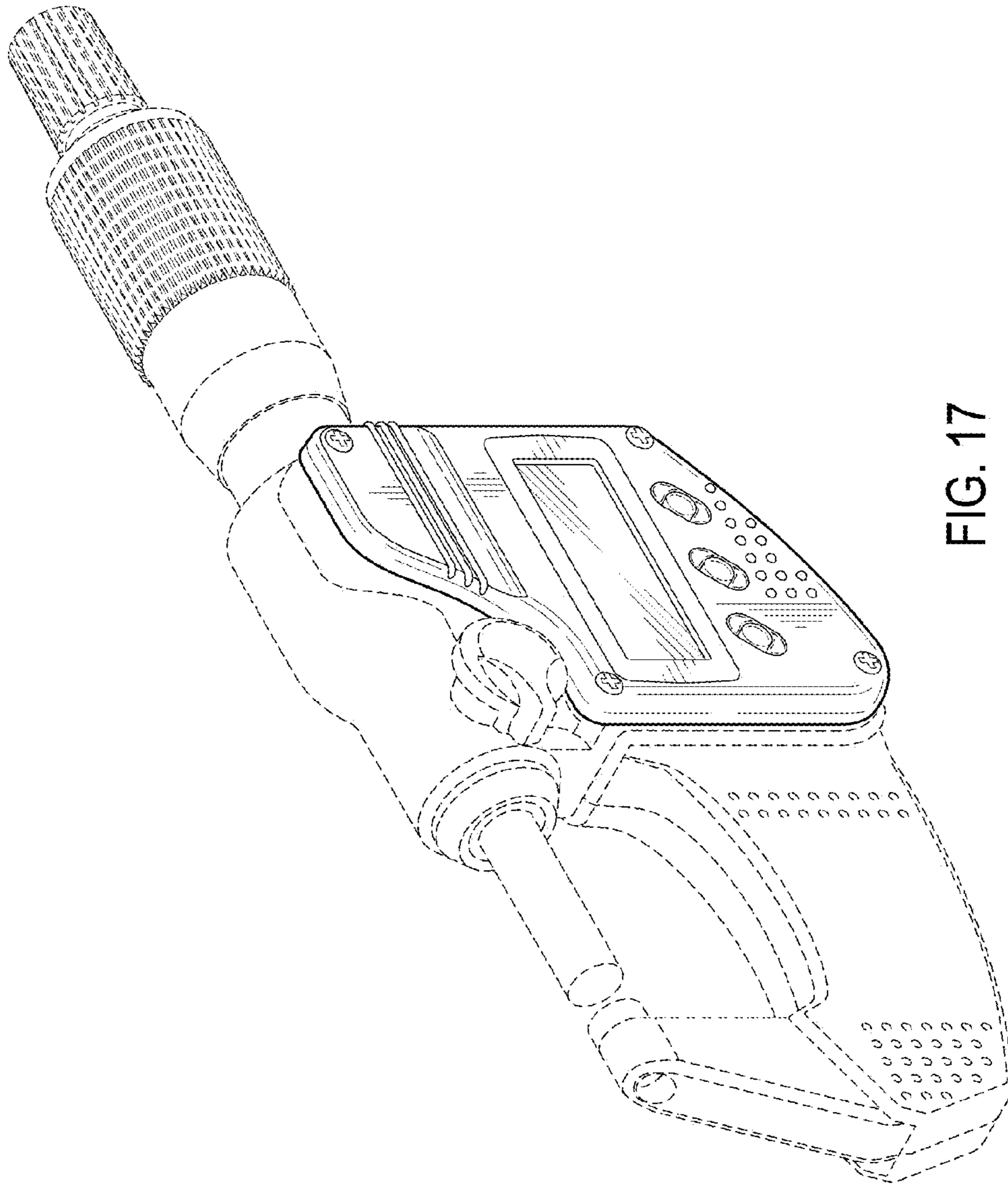


FIG. 17

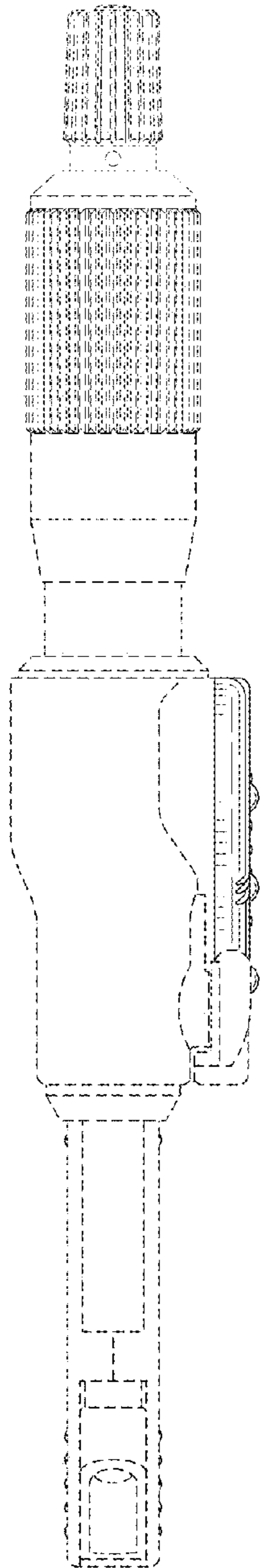


FIG. 19

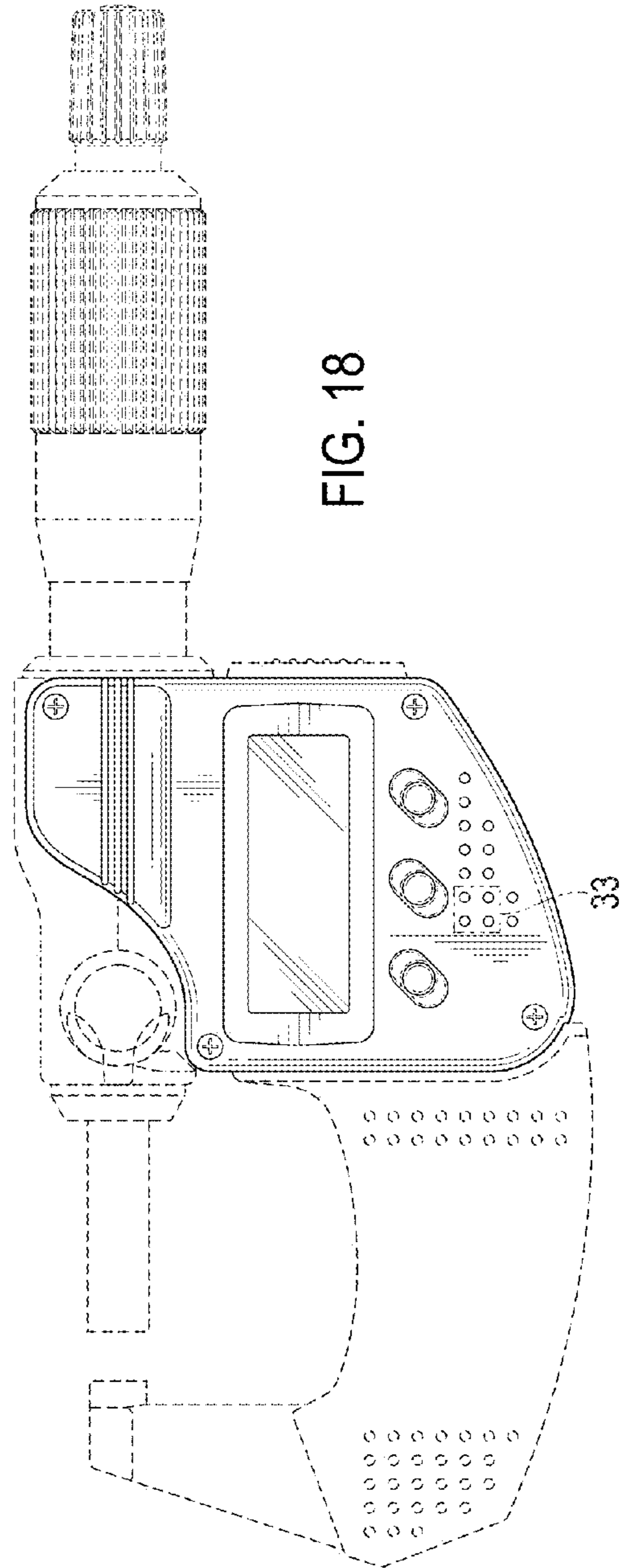


FIG. 18

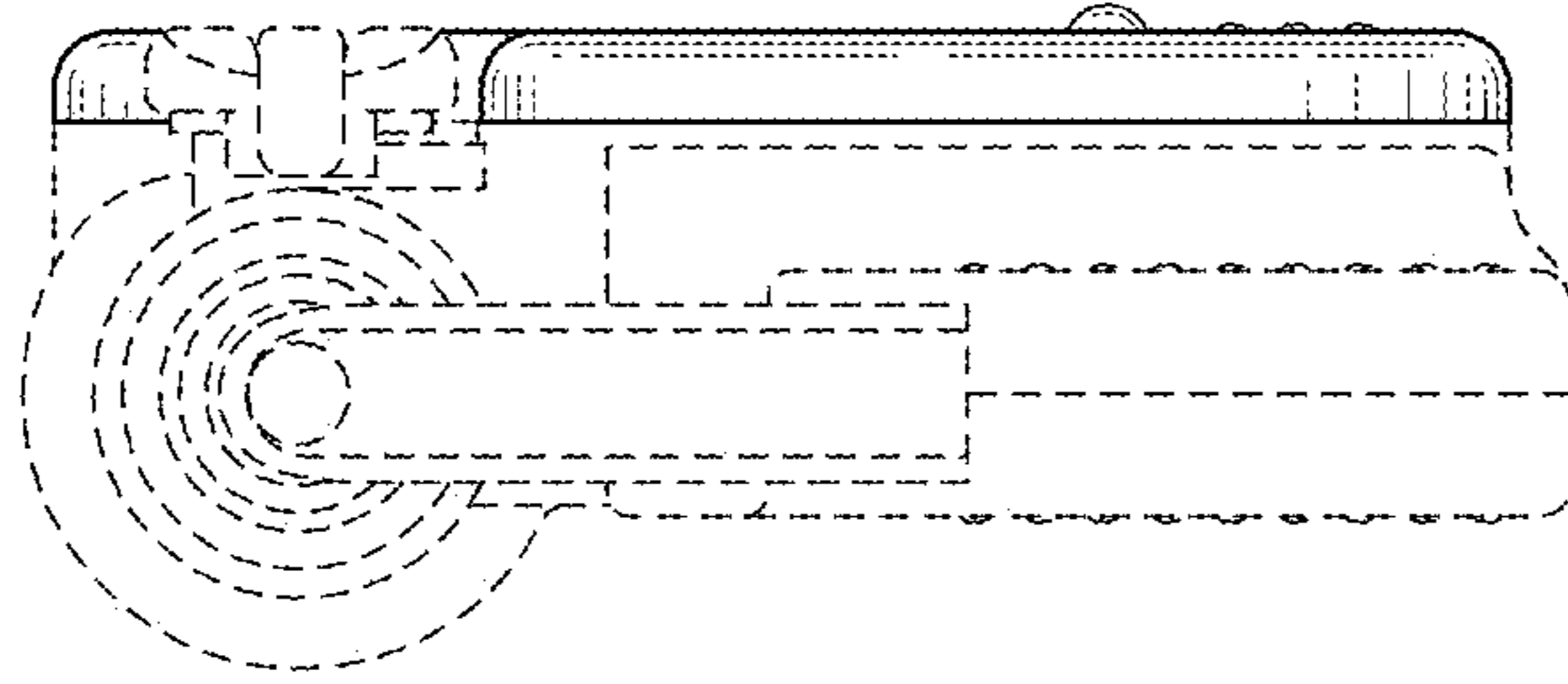


FIG. 21

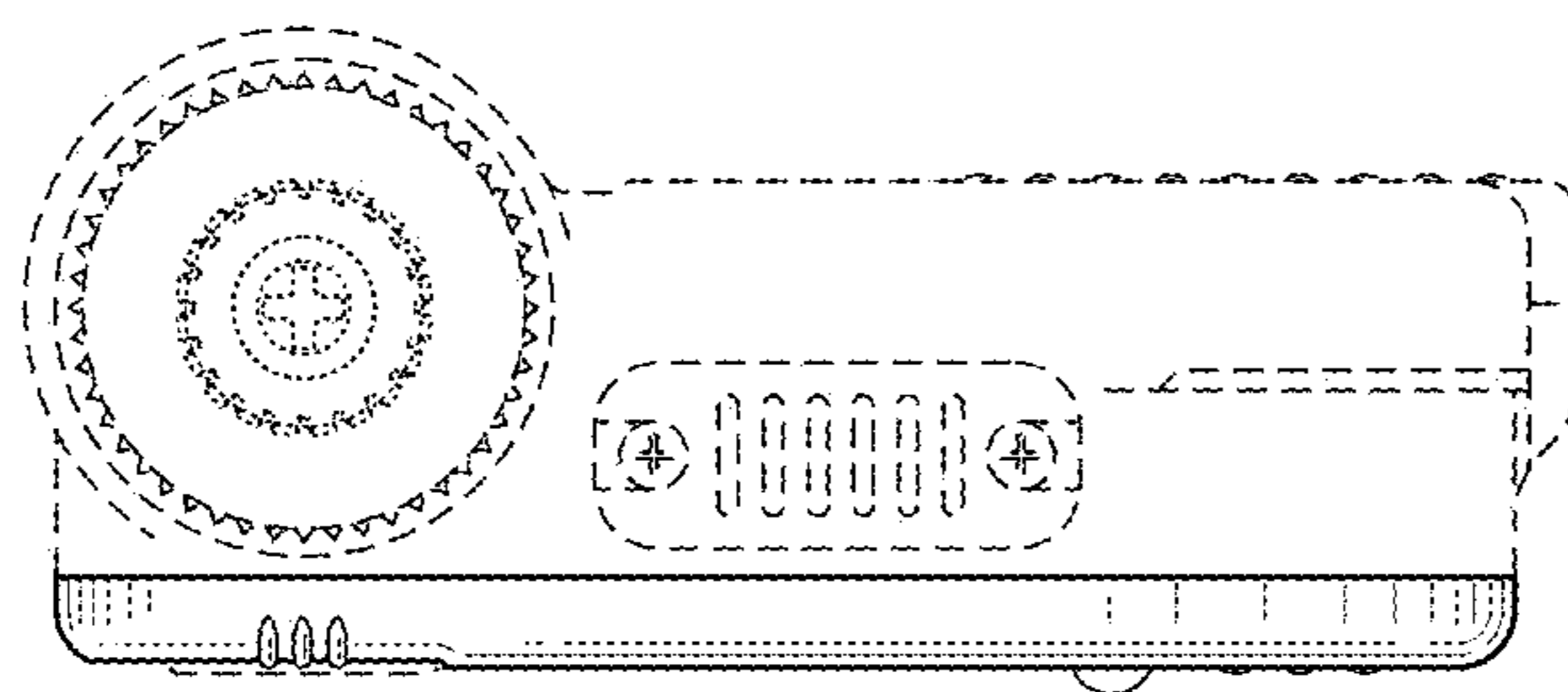


FIG. 20

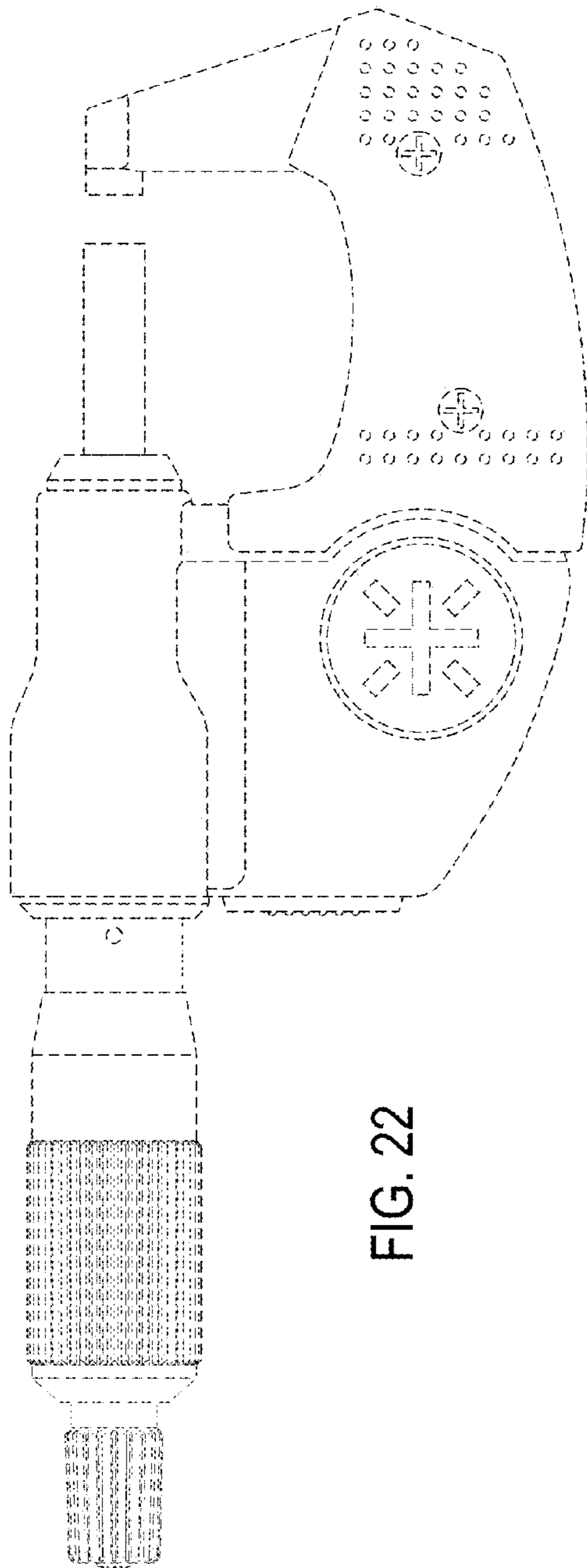


FIG. 22

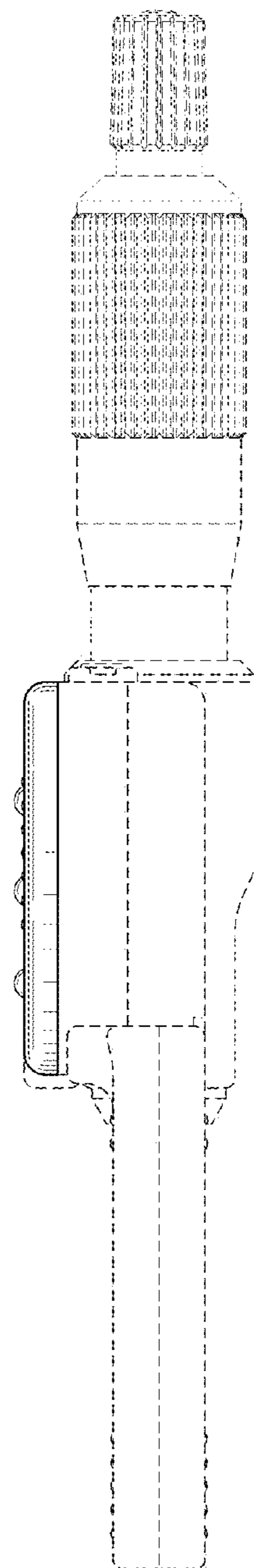


FIG. 23



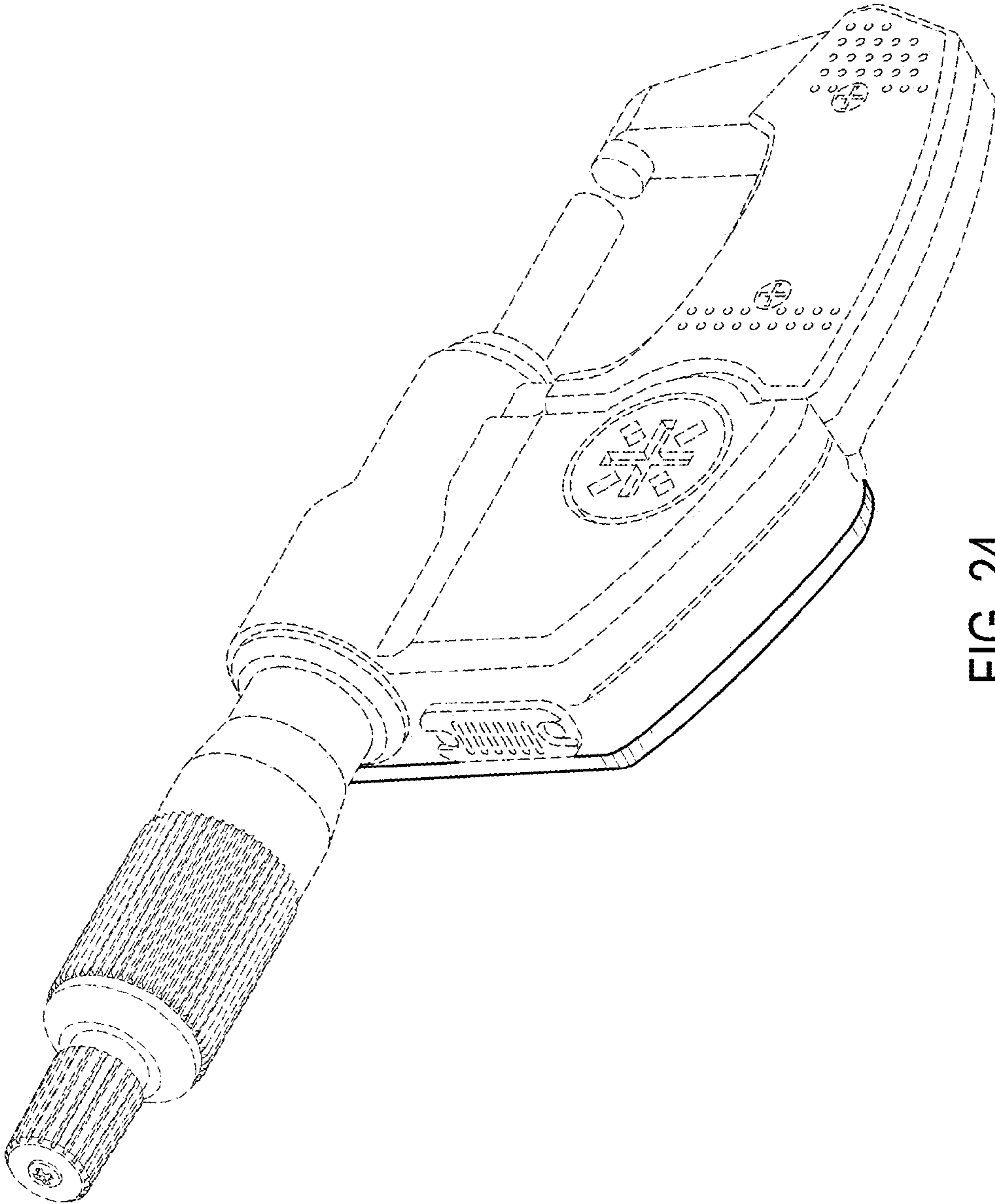


FIG. 24

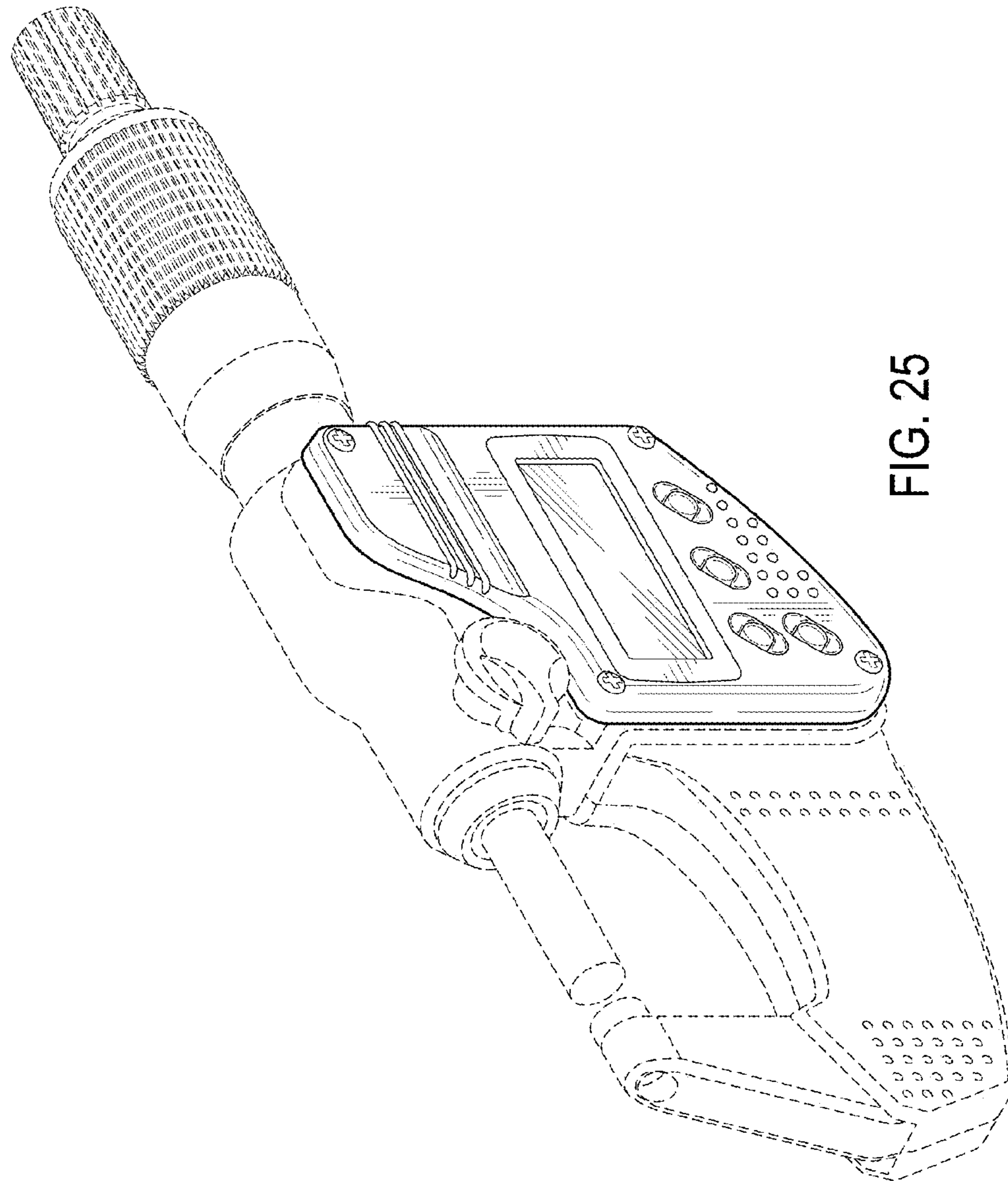


FIG. 25

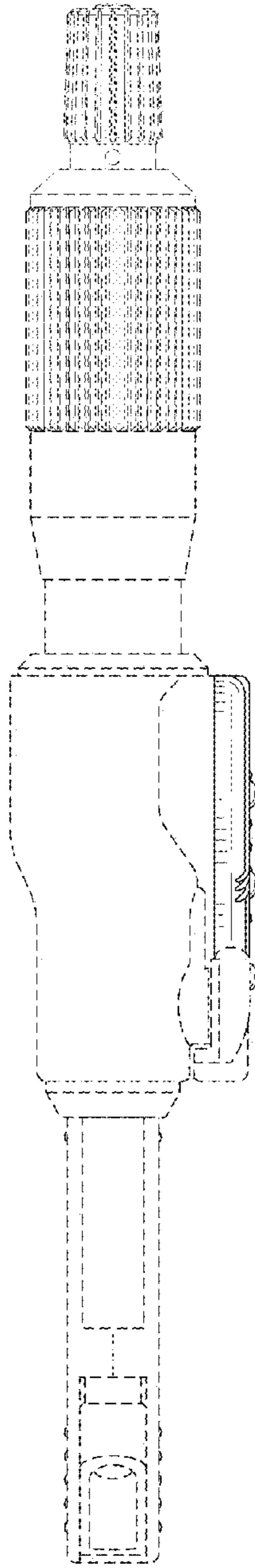


FIG. 27

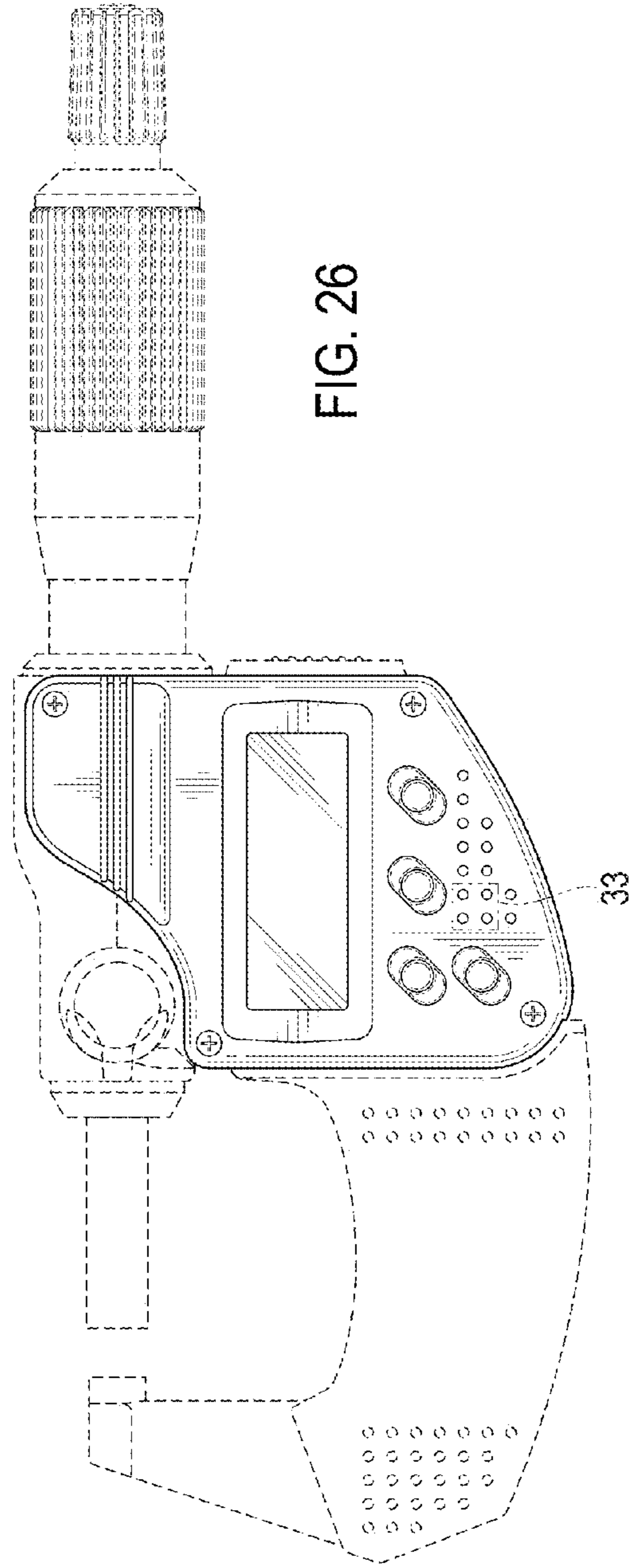


FIG. 26

33

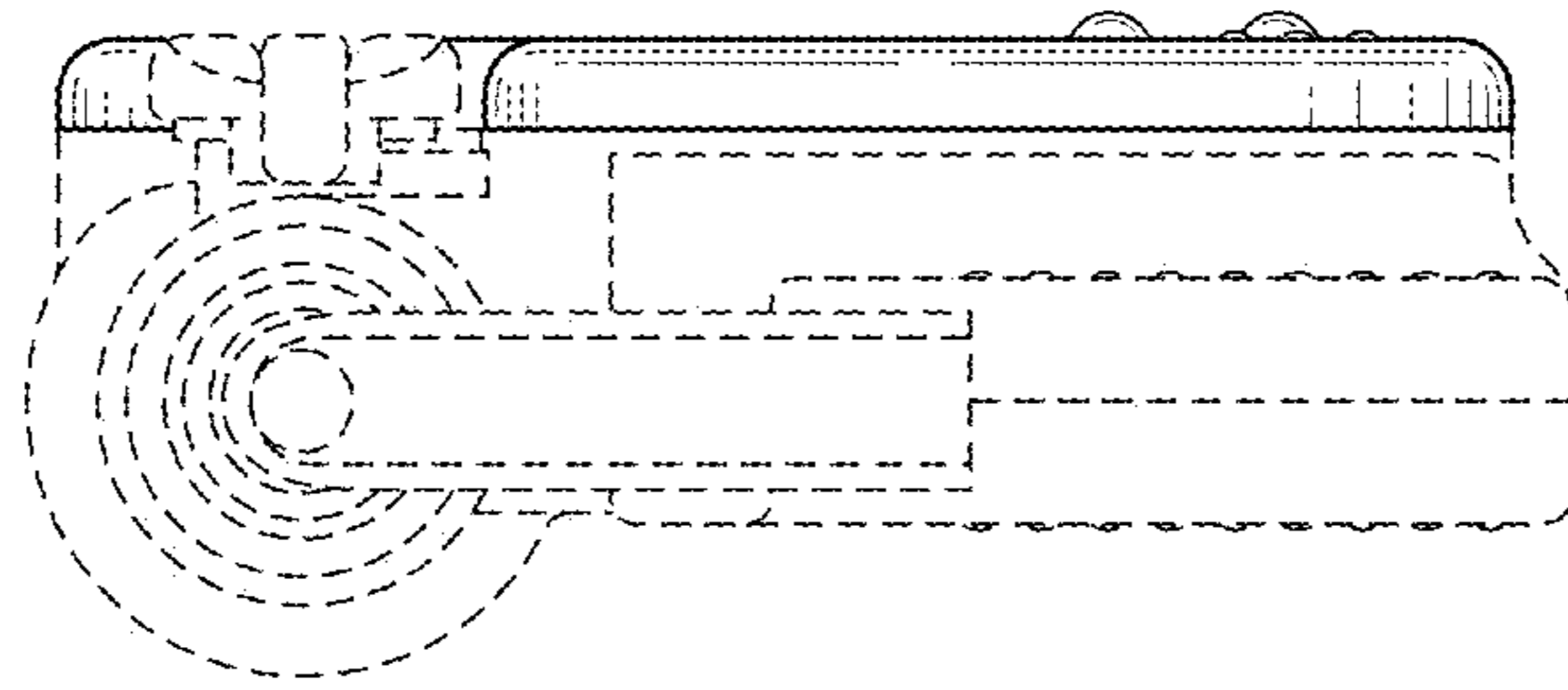


FIG. 29

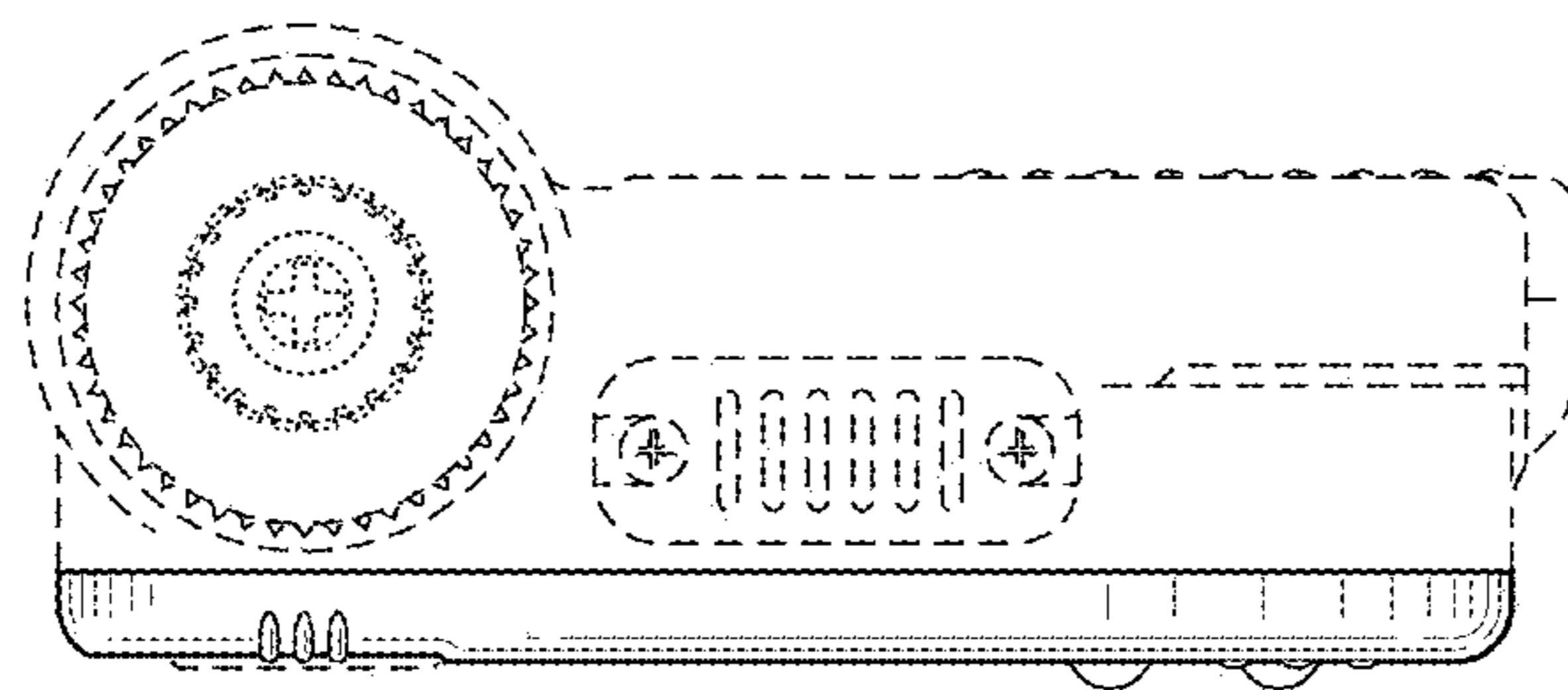


FIG. 28

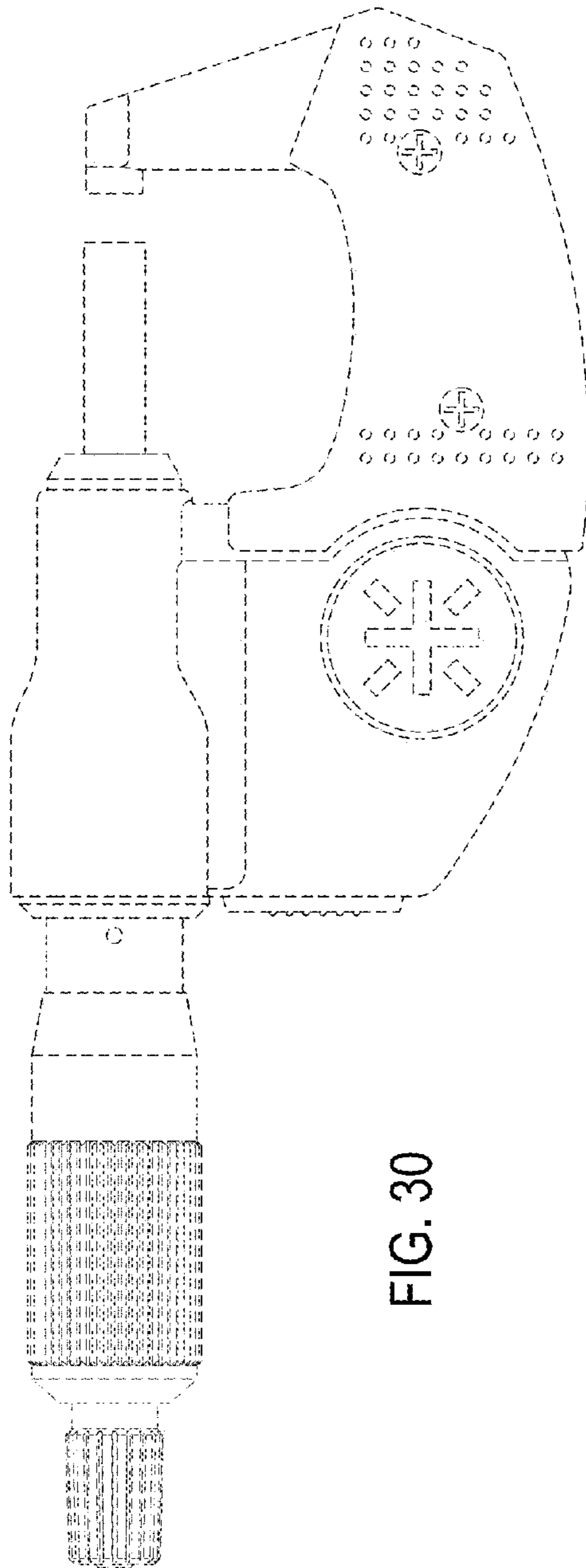


FIG. 30

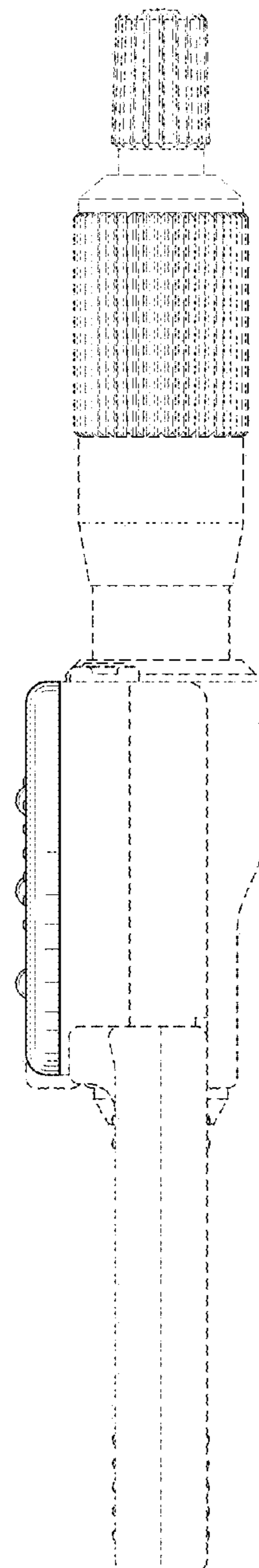


FIG. 31

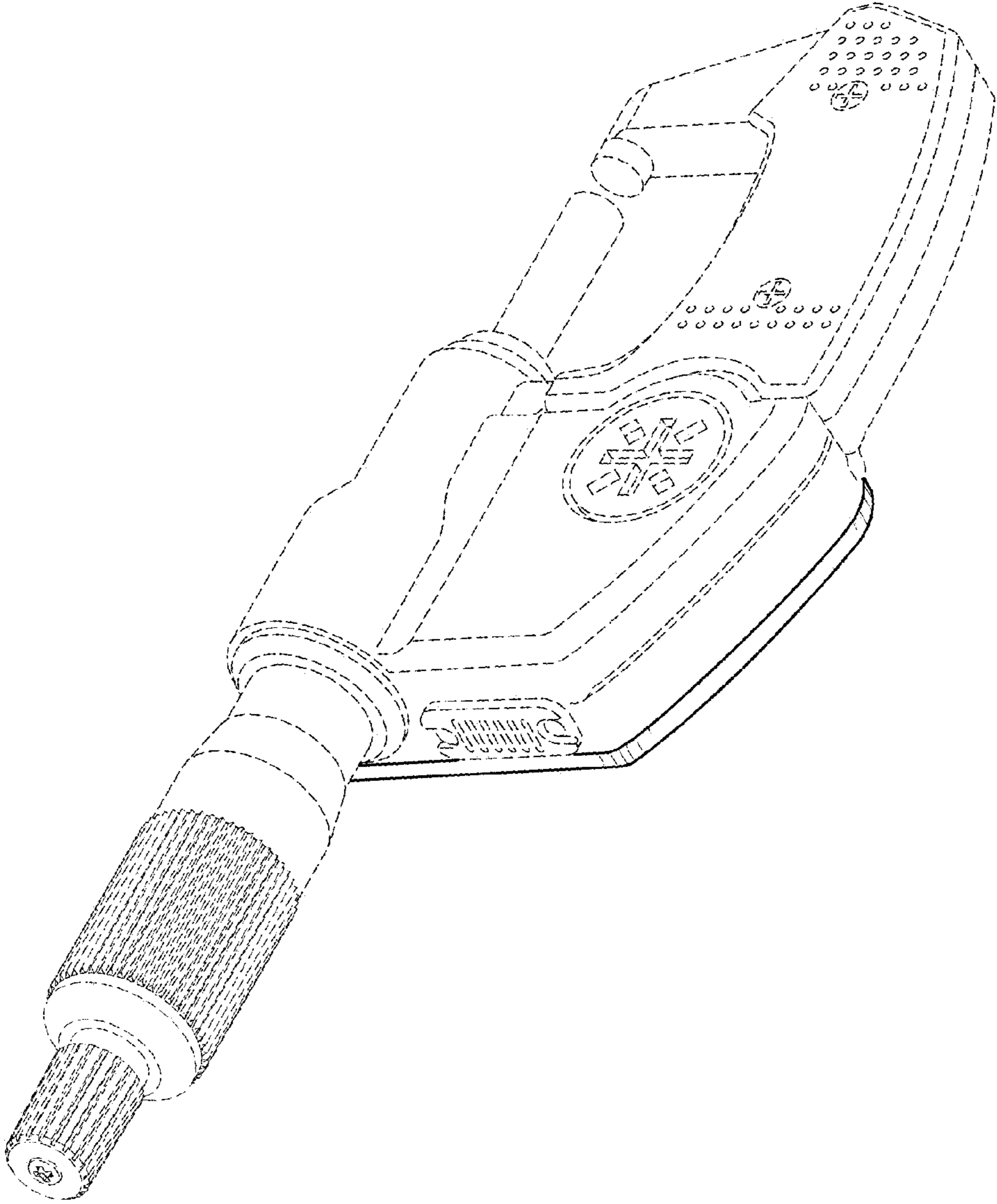


FIG. 32

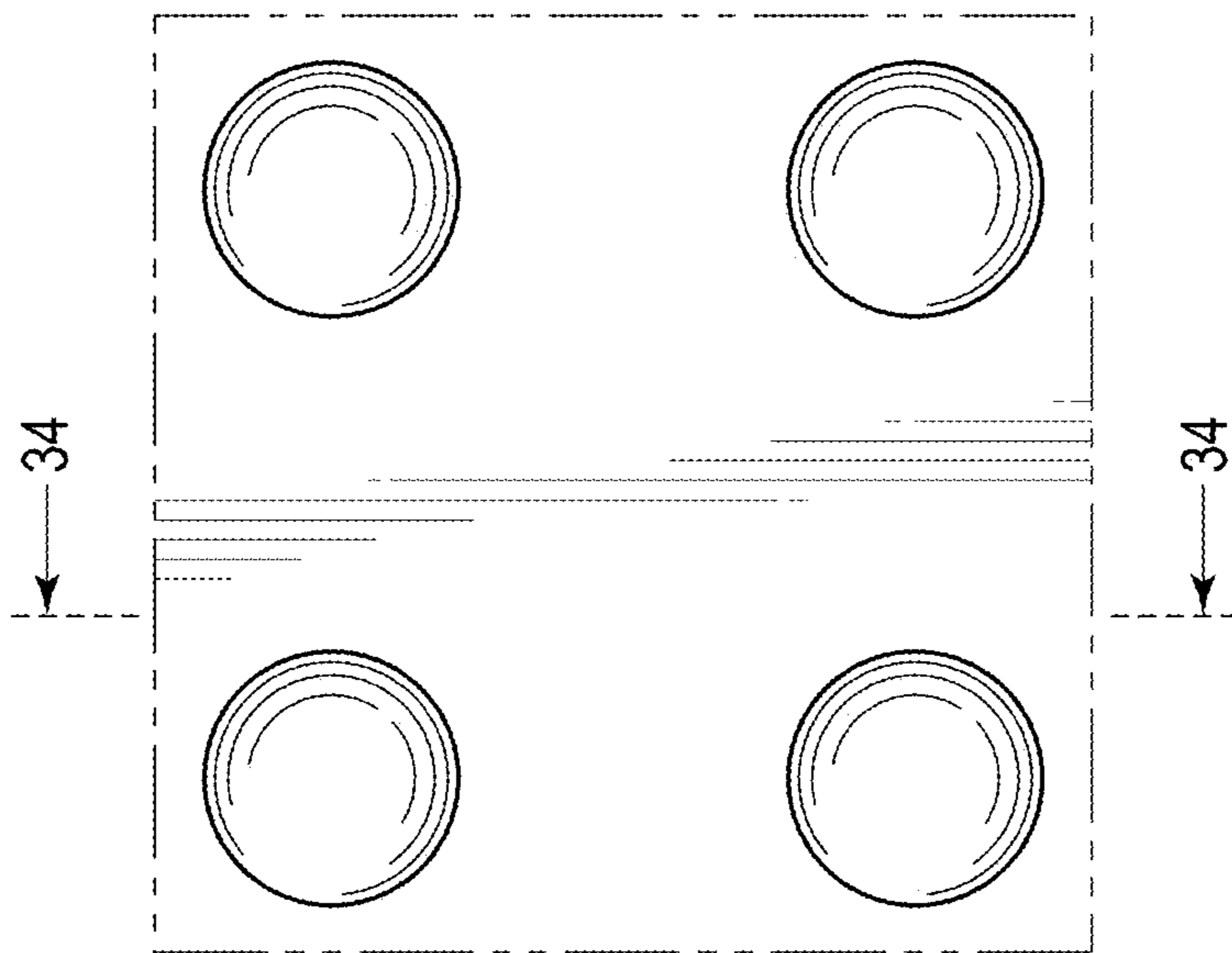


FIG. 33

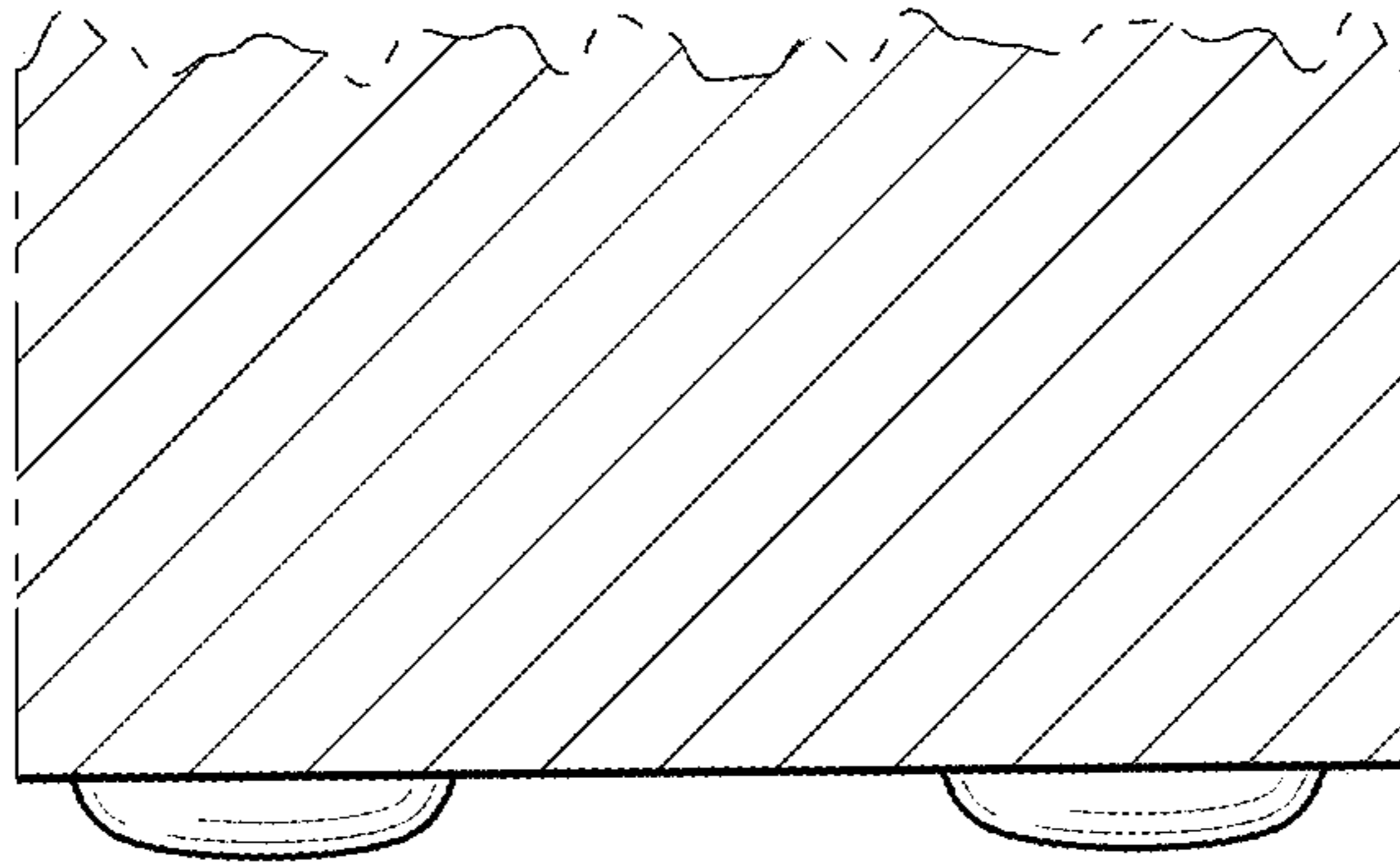


FIG. 34