



US00D833490S

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

(10) **Patent No.:** **US D833,490 S**

(45) **Date of Patent:** **\*\* Nov. 13, 2018**

- (54) **DRILL BIT**
- (71) Applicant: **DIAGER**, Poligny (FR)
- (72) Inventor: **François Defougeres**, Poligny (FR)
- (73) Assignee: **DIAGER**, Poligny (FR)
- (\*\*) Term: **15 Years**
- (21) Appl. No.: **29/601,354**
- (22) Filed: **Apr. 21, 2017**

**Related U.S. Application Data**

- (63) Continuation of application No. 29/526,820, filed on May 13, 2015, now abandoned.
- (51) **LOC (11) Cl.** ..... **15-09**
- (52) **U.S. Cl.**  
USPC ..... **D15/139**
- (58) **Field of Classification Search**  
USPC ..... D8/70, 71; D15/138, 139  
CPC . B23B 51/02; B23B 2251/14; B23B 2251/50;  
B23B 2251/204; B23B 2226/75; B28D  
1/146  
See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

- 5,137,398 A \* 8/1992 Omori ..... B23B 51/048  
175/420.2
- D332,492 S \* 1/1993 Rosenberg ..... D15/139
- 5,184,926 A \* 2/1993 Hemmings ..... B23B 51/02  
408/226
- D345,495 S \* 3/1994 Priddy ..... D8/70
- 5,375,672 A \* 12/1994 Peay ..... E21B 10/58  
175/420.1
- 5,433,281 A \* 7/1995 Black ..... E21B 10/58  
175/420.1
- 5,630,478 A \* 5/1997 Schimke ..... E21B 10/445  
175/420.1

- 5,649,796 A \* 7/1997 Durney ..... B27G 15/00  
408/144
- 5,893,688 A \* 4/1999 Wiker ..... B23B 51/02  
175/394
- 6,021,857 A \* 2/2000 Birk ..... B23B 51/00  
175/415
- 6,126,367 A \* 10/2000 Reed ..... B23B 51/02  
408/1 R
- D477,978 S \* 8/2003 Hyde ..... D8/70
- D510,586 S \* 10/2005 Sollami ..... D15/139
- D510,943 S \* 10/2005 Sollami ..... D15/139
- D515,116 S \* 2/2006 Sollami ..... D15/139
- D520,537 S \* 5/2006 Cardew ..... D15/139
- D531,650 S \* 11/2006 Switzer ..... D15/139
- D559,874 S \* 1/2008 Kobayashi ..... D15/139
- D566,734 S \* 4/2008 Croisdale ..... D15/139
- D615,839 S \* 5/2010 Richter ..... D15/139
- D624,097 S \* 9/2010 Kenny ..... D15/139
- D678,369 S \* 3/2013 Santamarina ..... D15/139
- D688,715 S \* 8/2013 Lampe ..... D15/139
- 8,807,248 B2 \* 8/2014 Bise ..... E21B 10/58  
175/420.1
- D723,076 S \* 2/2015 Lampe ..... D15/139
- D735,254 S \* 7/2015 O'Malley ..... D15/139

(Continued)

*Primary Examiner* — Patricia A Palasik  
(74) *Attorney, Agent, or Firm* — Fredrikson & Byron,  
P.A.

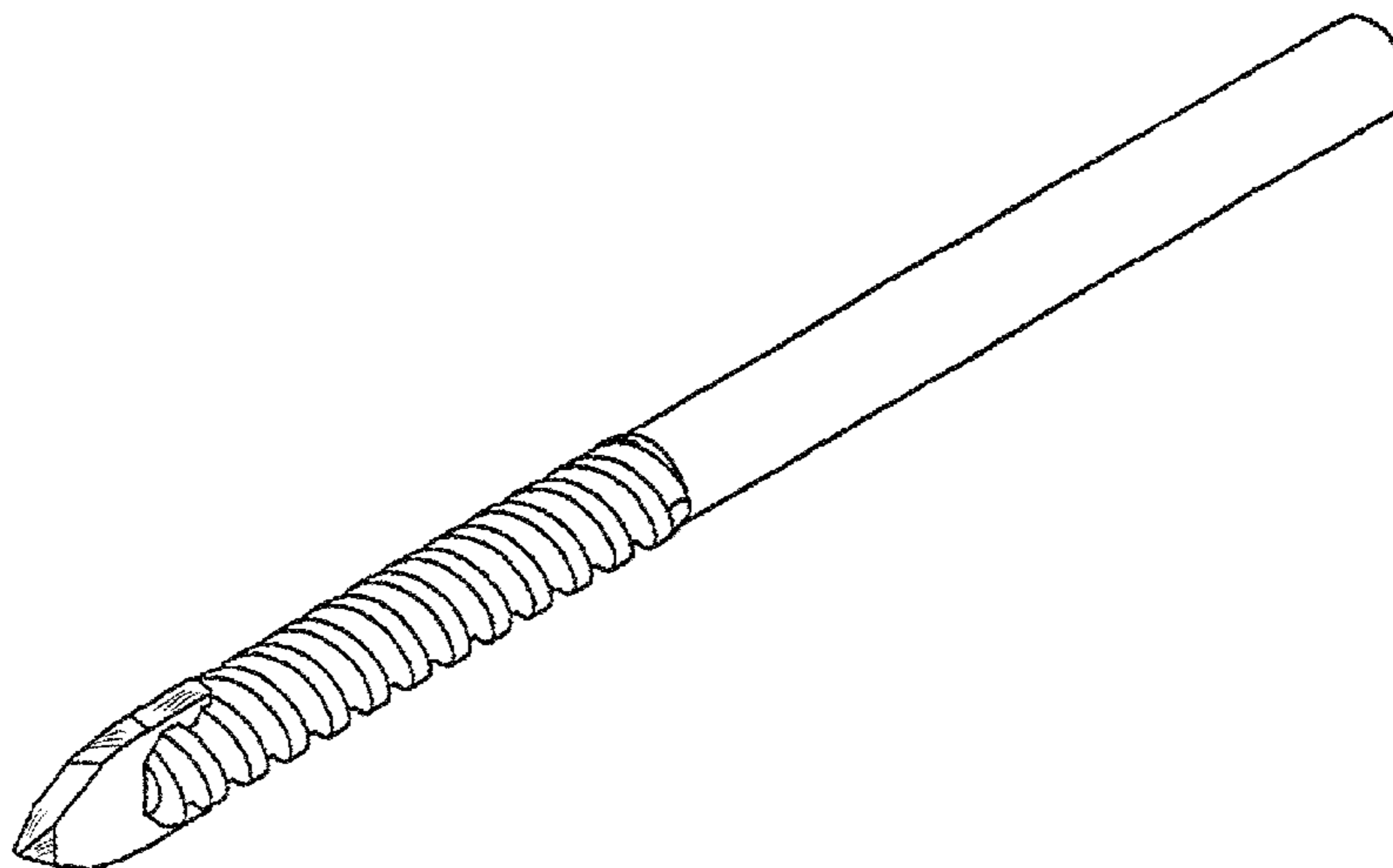
(57) **CLAIM**

I claim the ornamental design for a drill bit, as shown and described.

**DESCRIPTION**

FIG. 1 is a side perspective view of a drill bit incorporating my new design;  
FIG. 2 is a left side elevational view thereof;  
FIG. 3 is a top elevational view thereof the bottom elevational view is a mirror image; and,  
FIG. 4 is a front elevational view thereof.

**1 Claim, 2 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

D741,924 S \* 10/2015 Lee ..... D15/139  
 2001/0013431 A1\* 8/2001 Huber ..... B23B 51/00  
 175/420.1  
 2002/0040813 A1\* 4/2002 Kleine ..... B23B 51/02  
 175/394  
 2002/0053472 A1\* 5/2002 Kleine ..... B23B 51/02  
 175/394  
 2005/0126829 A1\* 6/2005 Meierhofer ..... B23B 51/02  
 175/395  
 2005/0205306 A1\* 9/2005 Miyanaga ..... B23B 51/02  
 175/323  
 2009/0028654 A1\* 1/2009 Turrini ..... B23B 51/0081  
 408/1 R  
 2009/0148250 A1\* 6/2009 Chappell ..... B23B 51/02  
 408/230  
 2010/0092259 A1\* 4/2010 Borschert ..... B23B 51/02  
 408/230  
 2010/0098500 A1\* 4/2010 Weaver ..... E21D 21/0026  
 405/259.1

2010/0135741 A1\* 6/2010 Probst ..... B23B 51/02  
 408/230  
 2010/0183391 A1\* 7/2010 Kersten ..... B23B 51/02  
 408/227  
 2010/0296887 A1\* 11/2010 Moseley ..... B23B 51/02  
 408/227  
 2011/0168453 A1\* 7/2011 Kersten ..... B23B 51/02  
 175/415  
 2012/0003057 A1\* 1/2012 Leyba ..... B23B 31/005  
 408/226  
 2012/0241223 A1\* 9/2012 Bise ..... E21B 10/38  
 175/428  
 2013/0213717 A1\* 8/2013 Bise ..... E21B 10/26  
 175/388  
 2013/0317508 A1\* 11/2013 Ellis ..... A61B 17/1615  
 606/80  
 2013/0319774 A1\* 12/2013 Hammer ..... E21B 10/44  
 175/394  
 2015/0063935 A1\* 3/2015 Lau ..... B23B 51/00  
 408/213

\* cited by examiner

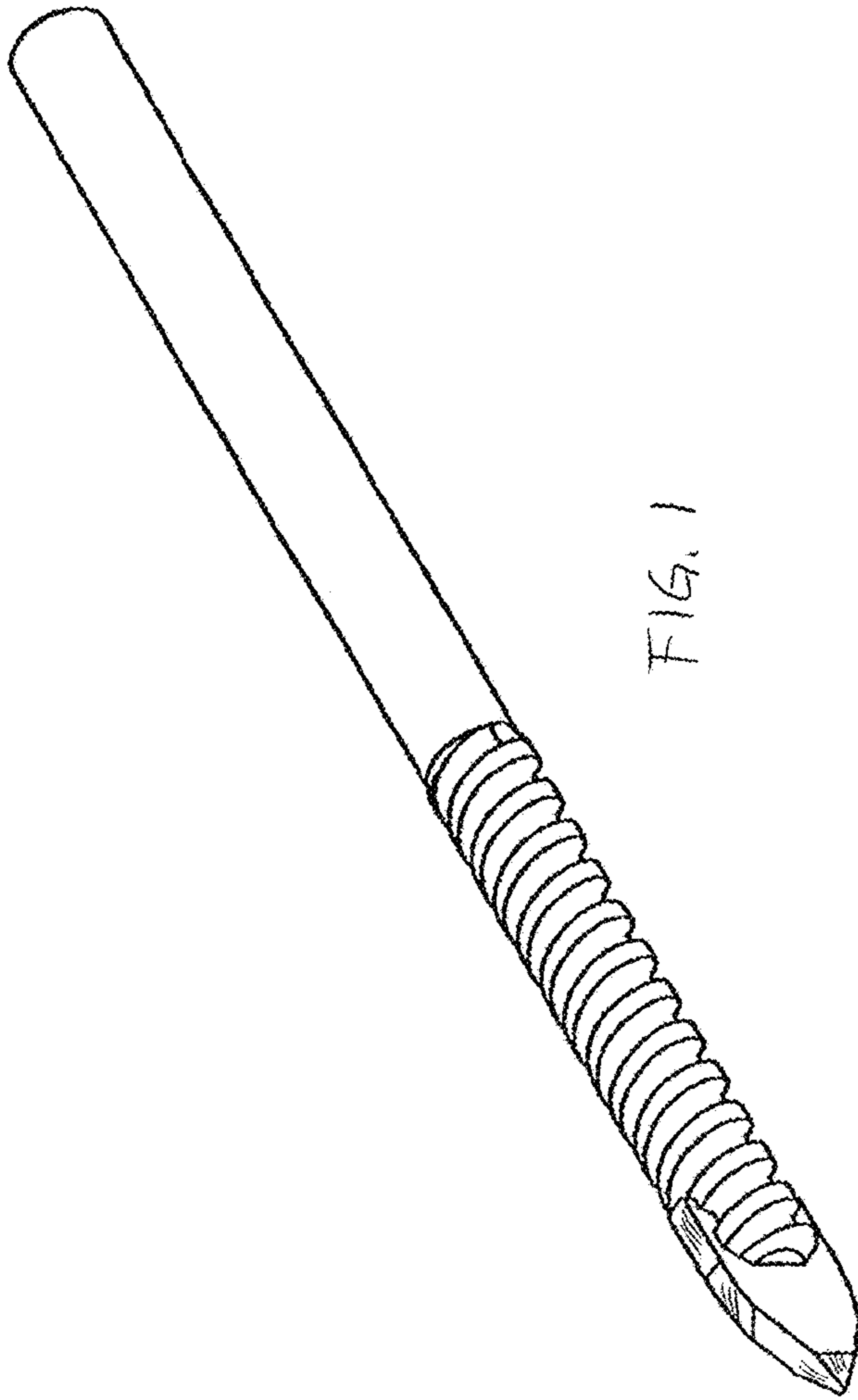


FIG. 1



FIG. 2



FIG. 3

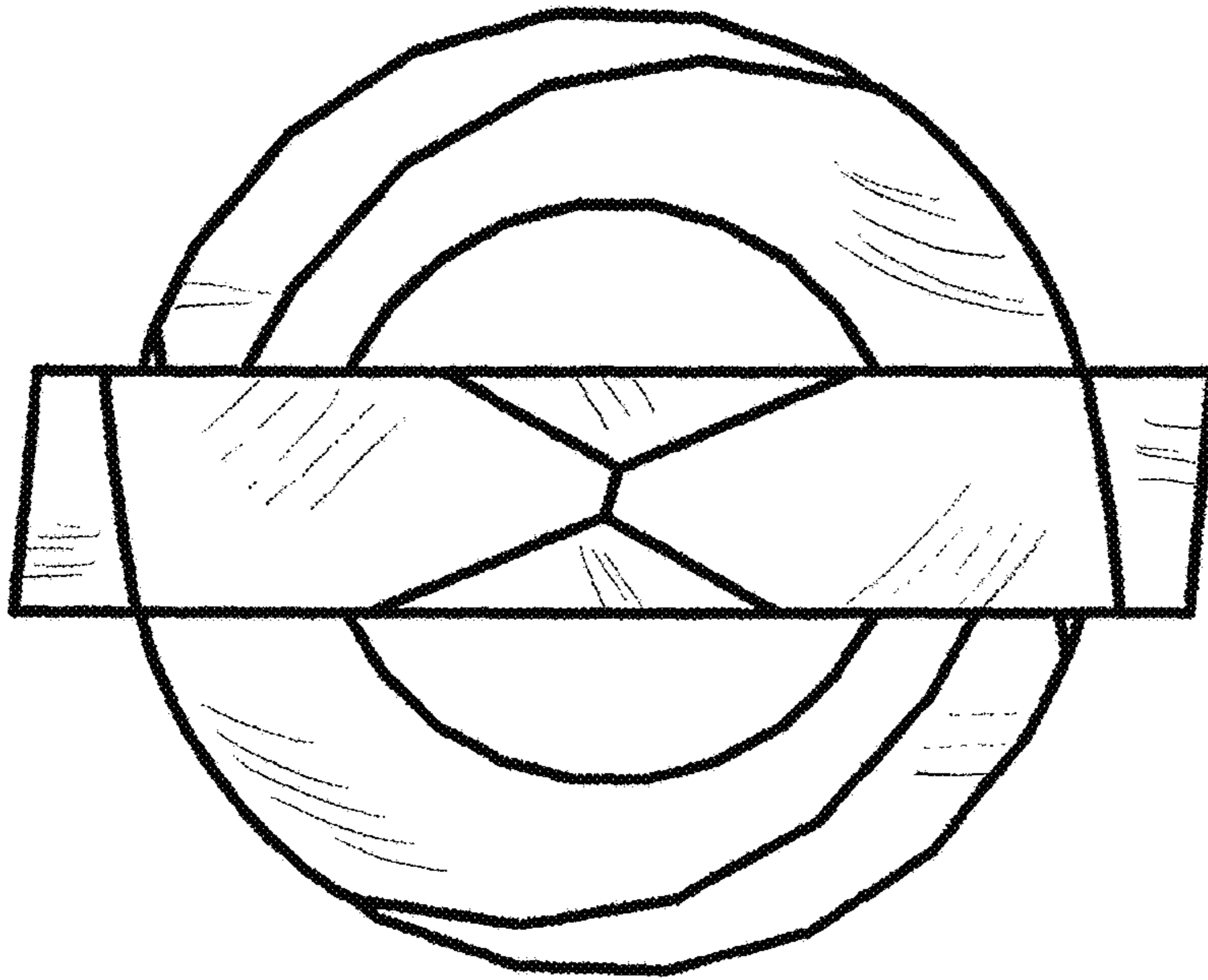


FIG. 4