



US00D658285S

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

(10) **Patent No.:** **US D658,285 S**
(45) **Date of Patent:** **** Apr. 24, 2012**

(54) **FEMORAL NECK ELEVATOR**
(75) Inventors: **Chad Ryshkus**, Kansasville, WI (US);
Douglas J. Roger, Rancho Mirage, CA (US)

(73) Assignee: **Greatbatch Ltd.**, Clarence, NY (US)

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

(21) Appl. No.: **29/398,338**

(22) Filed: **Jul. 29, 2011**

(51) **LOC (9) Cl.** **24-02**

(52) **U.S. Cl.** **D24/135**

(58) **Field of Classification Search** D24/133,
D24/135, 140; 606/89, 90; 600/210, 217
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,381,685	A	5/1968	von Solbrig	
3,955,568	A	5/1976	Neufeld	
D275,227	S	8/1984	Garner	
4,642,121	A	2/1987	Keller	
4,934,352	A	6/1990	Sullivan	
4,955,885	A *	9/1990	Meyers	606/53
4,995,875	A *	2/1991	Coes	606/90
D318,116	S	7/1991	Michelson	
5,217,463	A	6/1993	Mikhail	
5,351,680	A	10/1994	Jung	
5,431,153	A *	7/1995	Lee	600/183
D393,318	S	4/1998	Wolter	
5,743,853	A	4/1998	Lauderdale	
D395,510	S	6/1998	Furnish	
D442,687	S	5/2001	Schulz	
6,267,767	B1 *	7/2001	Strobel et al.	606/104
D449,689	S	10/2001	Comeau et al.	
6,428,472	B1	8/2002	Haas	
6,679,888	B2	1/2004	Green	
6,855,149	B2	2/2005	Dye	
6,875,173	B2 *	4/2005	Suddaby	600/210

6,926,728	B2	8/2005	Zucherman et al.	
D522,140	S	5/2006	Stalcup et al.	
D523,142	S	6/2006	Stalcup et al.	
D531,310	S	10/2006	Wolter	
7,214,186	B2	5/2007	Ritland	
D568,471	S	5/2008	Engler	
D571,468	S *	6/2008	Wu	D24/135
7,468,077	B2	12/2008	Rochetin	
D585,547	S *	1/2009	Bisleri	D24/135

(Continued)

FOREIGN PATENT DOCUMENTS

CN 201356580 12/2009

(Continued)

OTHER PUBLICATIONS

Innomed, Bent Hohmann Retractors.

(Continued)

Primary Examiner — Bridget L Eland

(74) *Attorney, Agent, or Firm* — Steven W. Winn

(57) **CLAIM**

The ornamental design for a femoral neck elevator, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a femoral neck elevator according to the present ornamental design.

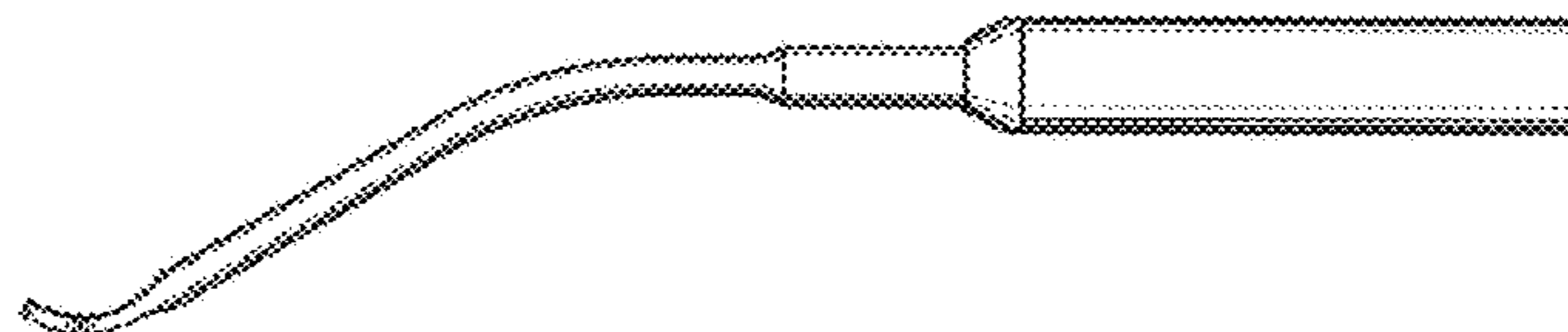
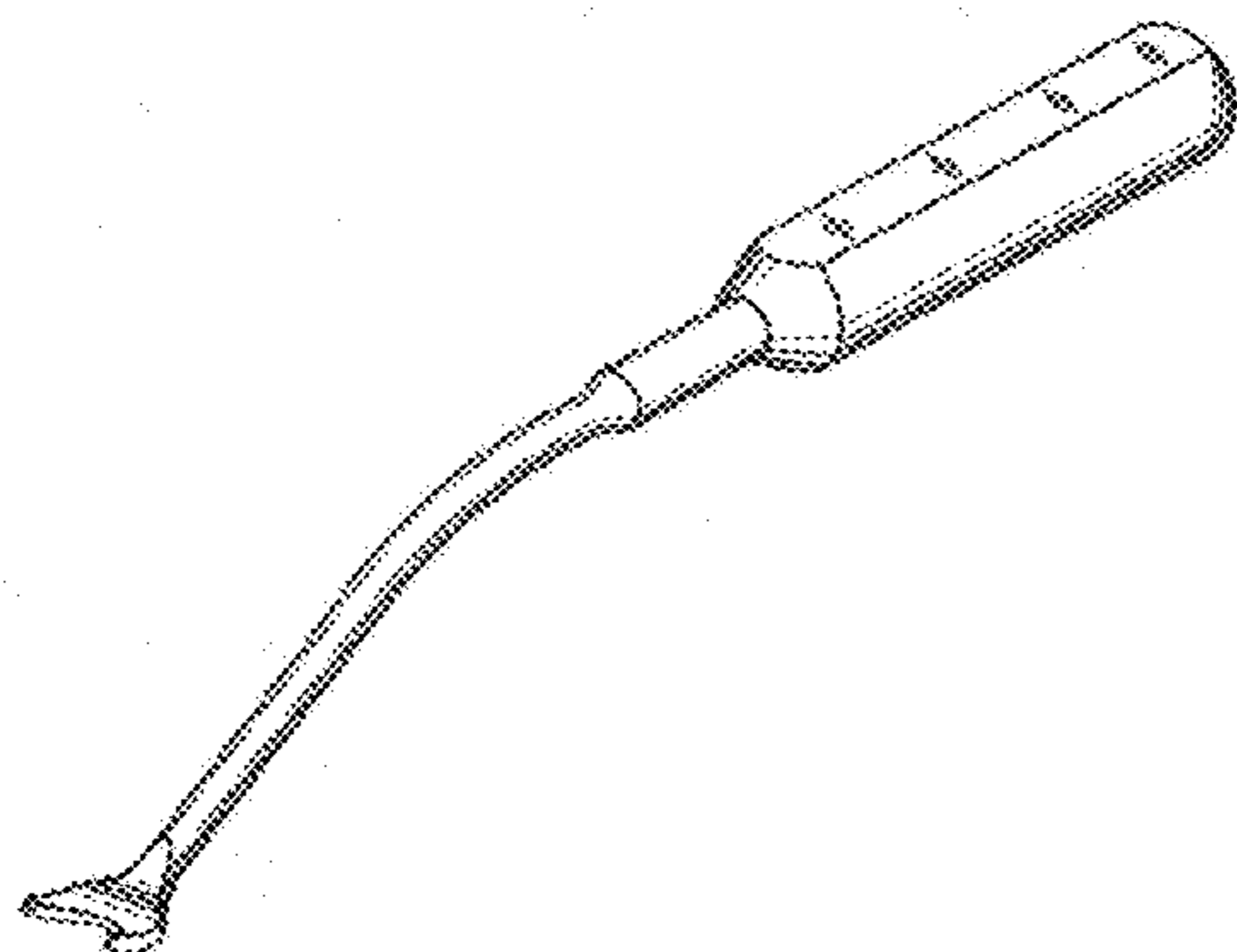
FIG. 2 is a first end plan view of the femoral neck elevator shown in FIG. 1.

FIG. 3 is a side view of the femoral neck elevator shown in FIG. 1.

FIG. 4 is a top view of the femoral neck elevator shown in FIG. 1; and,

FIG. 5 is a second end plan view of the femoral neck elevator shown in FIG. 1.

1 Claim, 5 Drawing Sheets



US D658,285 S

Page 2

U.S. PATENT DOCUMENTS

D589,145 S 3/2009 Miller
D622,382 S * 8/2010 Richter et al. D24/135
D628,291 S 11/2010 Palmer et al.
D629,896 S 12/2010 Horton
7,909,848 B2 3/2011 Patel et al.
2004/0073254 A1 * 4/2004 Wyman et al. 606/205
2005/0059978 A1 3/2005 Sherry et al.
2005/0182301 A1 8/2005 Acker et al.
2005/0203538 A1 * 9/2005 Lo et al. 606/99
2007/0021655 A1 1/2007 Sayeg et al.
2007/0060795 A1 3/2007 Vayser et al.
2007/0066872 A1 3/2007 Morrison et al.
2007/0208226 A1 9/2007 Grey et al.
2009/0012370 A1 * 1/2009 Gutierrez et al. 600/201

2009/0192626 A1 * 7/2009 Keefer et al. 623/22.29
2009/0216089 A1 8/2009 Davidson
2009/0221876 A1 * 9/2009 Cobb et al. 600/201

FOREIGN PATENT DOCUMENTS

EP 0986329 11/2009
JP 2003310624 11/2003

OTHER PUBLICATIONS

Innomed, Cobra Retractors.
Innomed, Minimally Invasive Hip Surgery Retractors.
Innomed, Mueller-Type Femoral Neck Retractor.

* cited by examiner

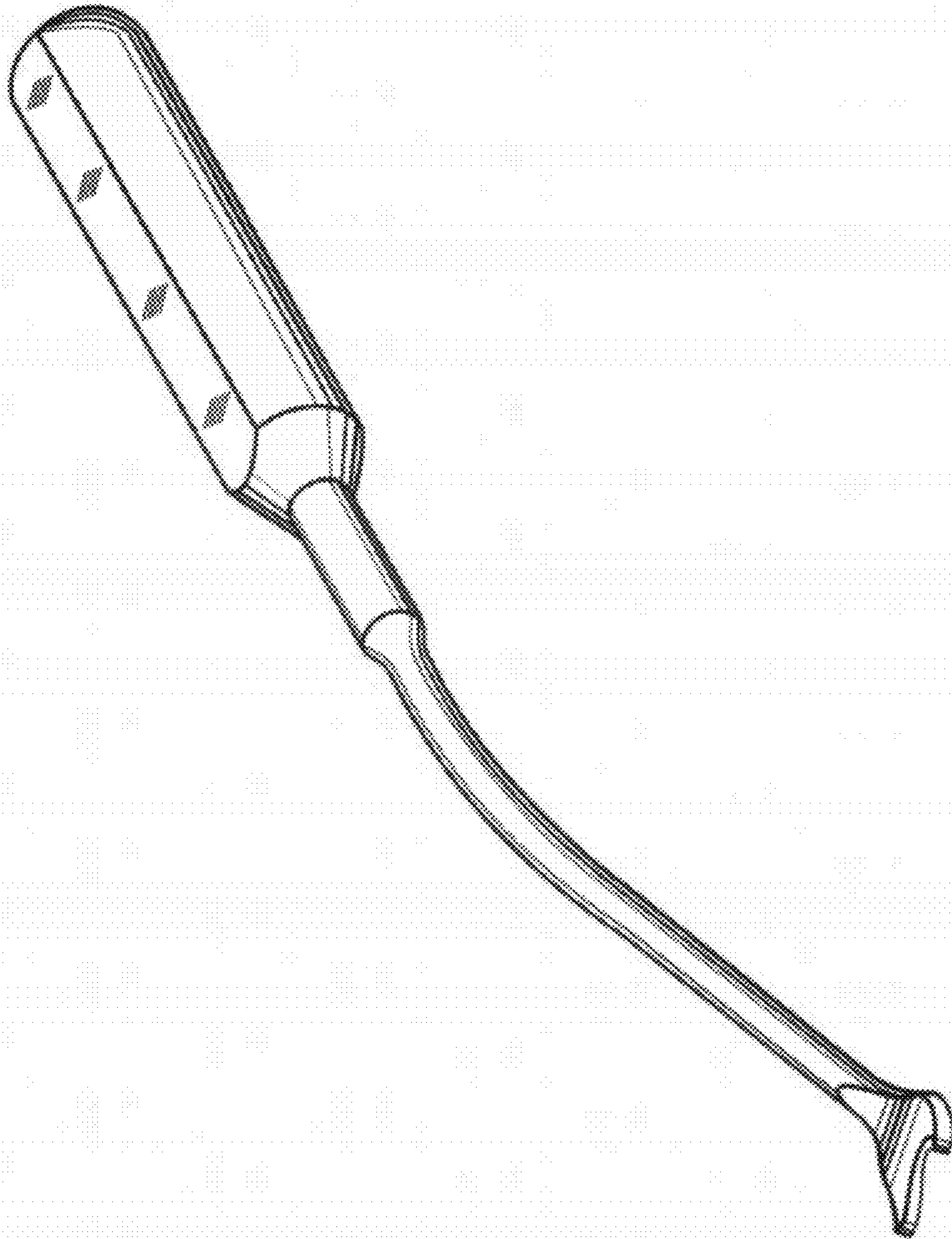


FIG. 1

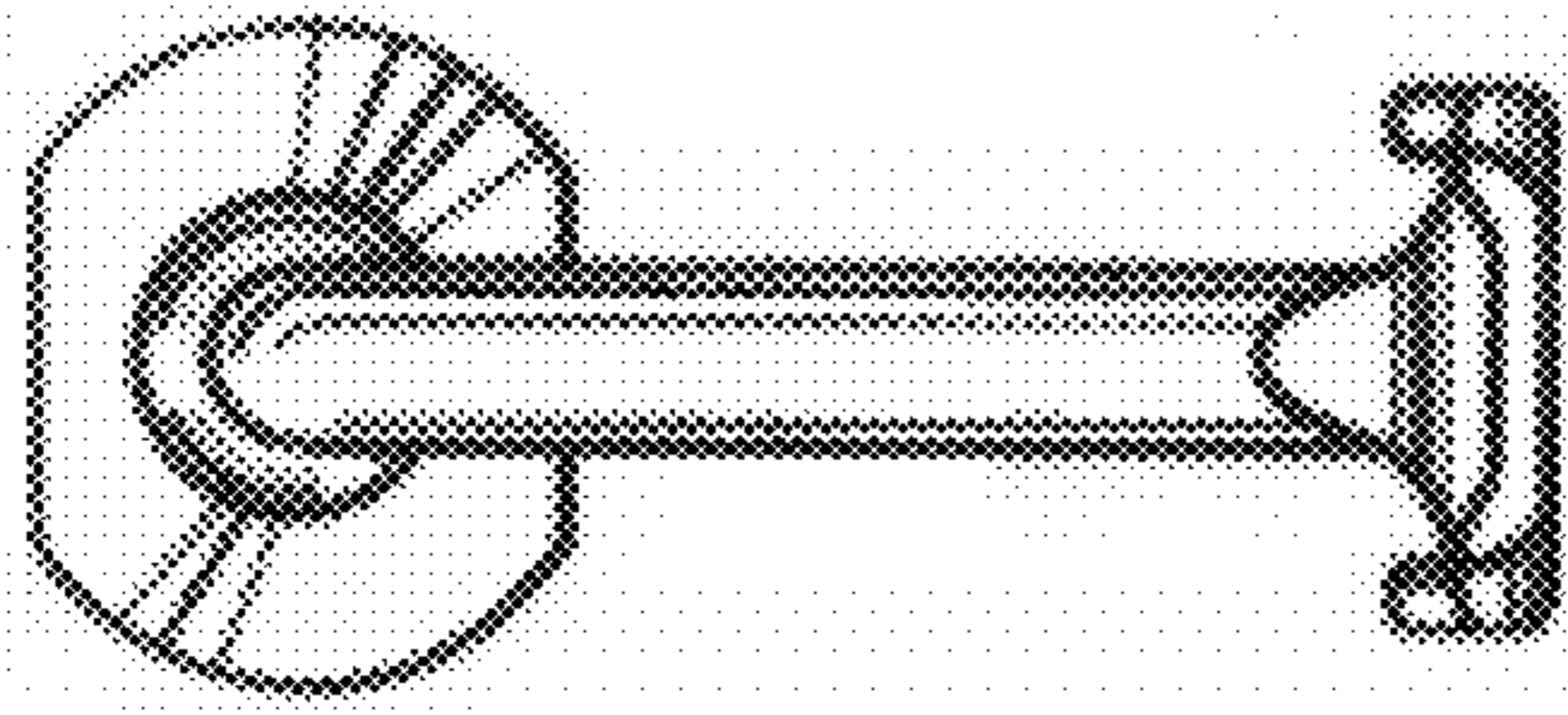


FIG. 2

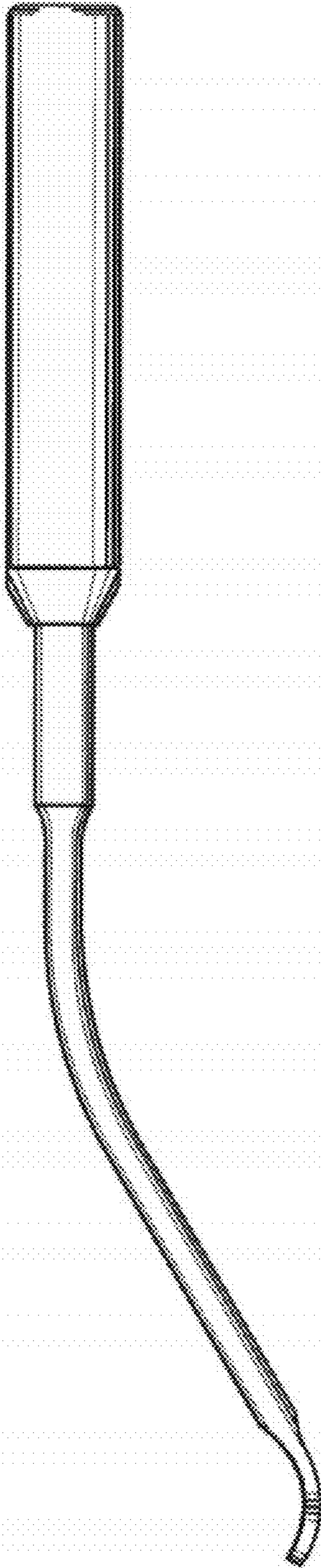


FIG. 3

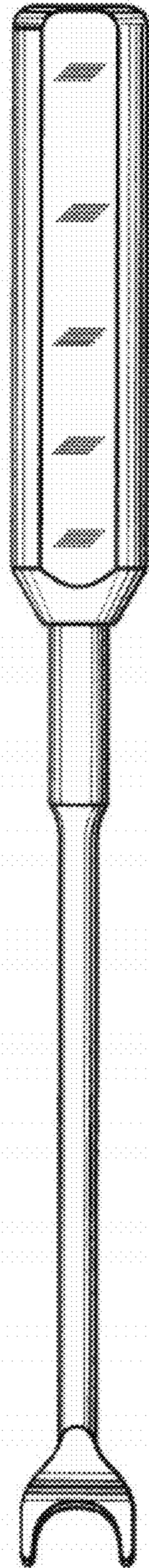


FIG. 4

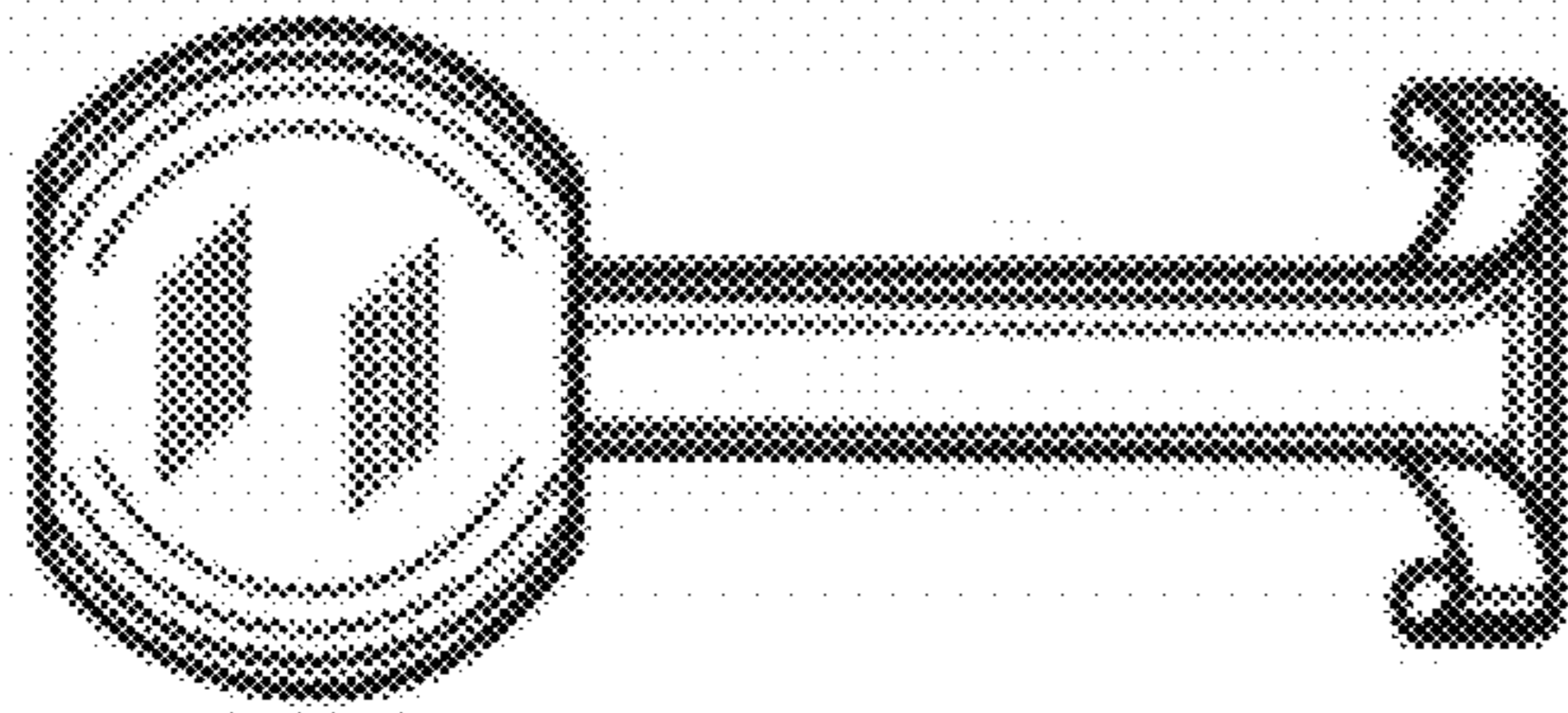


FIG. 5