



US00D966847S

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

(10) **Patent No.:** **US D966,847 S**

(45) **Date of Patent:** **\*\* Oct. 18, 2022**

(54) **SPANNER**

(71) Applicant: **Wen-Tang Tsai**, Taichung (TW)

(72) Inventor: **Wen-Tang Tsai**, Taichung (TW)

(\*\*) Term: **15 Years**

(21) Appl. No.: **29/769,378**

(22) Filed: **Feb. 4, 2021**

(51) **LOC (13) Cl.** ..... **08-05**

(52) **U.S. Cl.**

USPC ..... **D8/27**; D8/26

(58) **Field of Classification Search**

USPC ..... D8/14, 21, 24-27, 29, 51, 59, 107;  
D24/133, 147; 81/57.13, 57.39, 60

CPC ..... B25B 21/004; B25B 13/46; B25B 13/463

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

1,473,436	A *	11/1923	Leopold	.....	B25G 1/063
					81/58.3
1,811,137	A *	6/1931	Kress	.....	B25G 1/085
					81/177.9
2,028,561	A *	1/1936	Pilger	.....	B25G 1/063
					81/177.9
D111,026	S *	8/1938	Hosford	.....	D8/DIG. 8
2,886,998	A *	5/1959	Scott	.....	B25B 13/08
					403/92
2,954,714	A *	10/1960	Swenson	.....	B25B 13/463
					173/210
3,732,756	A *	5/1973	Thomasian	.....	B25B 13/463
					81/62
4,184,552	A *	1/1980	Anderson	.....	B25B 21/02
					173/93.5
4,293,044	A *	10/1981	Anderson	.....	B25B 19/00
					173/93.5
4,328,720	A *	5/1982	Shiel	.....	B25B 13/56
					81/177.85
D316,216	S *	4/1991	Gierke	.....	D8/61

D352,645	S *	11/1994	Ichikawa	.....	D8/61
6,186,030	B1 *	2/2001	Whitley	.....	B25B 13/465
					81/58.3
6,279,434	B1 *	8/2001	Brown	.....	B25B 13/48
					81/439

(Continued)

**OTHER PUBLICATIONS**

“Mark Heineken On Starting PRIME8, the Functional & Durable Skate Tool Brand”; BoardsportSource.com; Sep. 02, 2021; accessed May 4, 2022; URL:< <https://www.boardsportsource.com/2021/09/02/mark-heineken-on-starting-prime8-functional-durable-skate-tool-brand/> > (Year: 2021).\*

*Primary Examiner* — Rachel A. Voorhies

*Assistant Examiner* — Benjamin D. Wannemacher

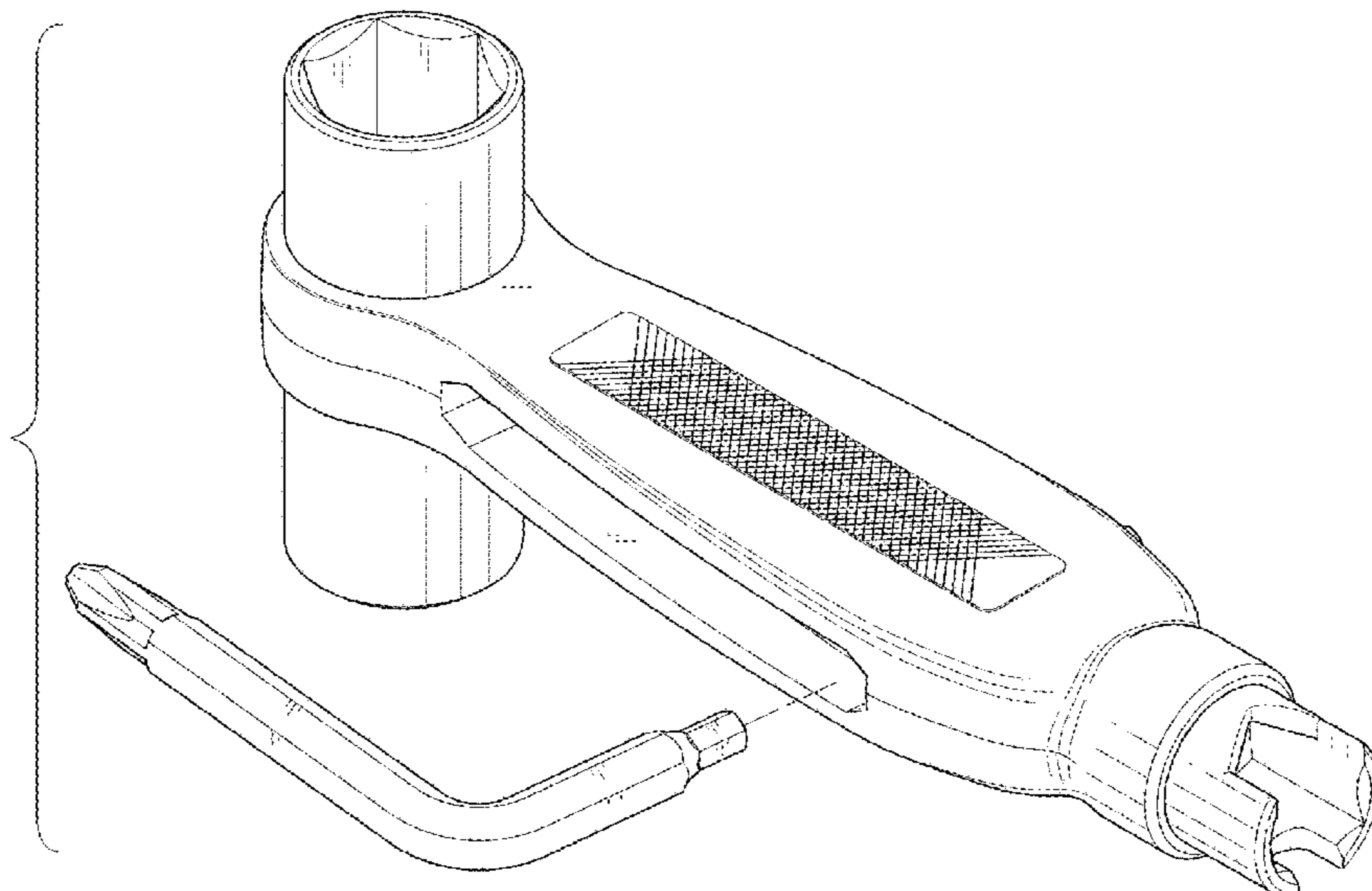
(57) **CLAIM**

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

**DESCRIPTION**

FIG. 1 is a perspective view of a spanner showing my new design;  
FIG. 2 is a front view thereof;  
FIG. 3 is a rear view thereof;  
FIG. 4 is a left view thereof;  
FIG. 5 is a right view thereof;  
FIG. 6 is a top view thereof;  
FIG. 7 is a bottom view thereof;  
FIG. 8 is another perspective view thereof;  
FIG. 9 is a cross-sectional view taken along 9-9 of FIG. 2; and,  
FIG. 10 is an exploded perspective view thereof.  
The dash-dash broken lines are included for the purpose of illustrating portions of the Ratchet spanner and form no part of the claimed design. The dash-long dash broken lines are included for the purpose of illustrating alignment and form no part of the claimed design.

**1 Claim, 10 Drawing Sheets**



(56)

**References Cited**

U.S. PATENT DOCUMENTS

6,502,483	B1 *	1/2003	Swank	.....	B25B 13/56 81/177.4
6,557,442	B1 *	5/2003	Owoc	.....	B25G 1/063 81/177.8
6,877,404	B2 *	4/2005	Chen	.....	B25G 1/063 81/177.9
6,957,600	B2 *	10/2005	Hu	.....	B25B 13/04 81/177.8
7,059,218	B1 *	6/2006	Lin	.....	B25G 1/063 81/62
7,127,766	B1 *	10/2006	Carter	.....	B25B 13/48 81/437
D551,525	S *	9/2007	Desbrunes	.....	B25B 13/56 81/177.5
D559,054	S *	1/2008	Tuan Mu	.....	D8/14
D580,721	S *	11/2008	Chen	.....	B25B 13/56 81/177.4
D622,561	S *	8/2010	Brown, III	.....	B25B 13/48 D8/14
D654,337	S *	2/2012	Huang	.....	D8/14
D658,460	S *	5/2012	Wang	.....	B25B 13/48 81/437
D725,977	S *	4/2015	Tsai	.....	D8/14
D804,274	S *	12/2017	Tsai	.....	D8/105
2004/0139826	A1 *	7/2004	Hsien	.....	B25B 13/463 81/63.2
2007/0131062	A1 *	6/2007	Burwell	.....	B25G 1/085 81/60
2007/0131066	A1 *	6/2007	Burwell	.....	B25B 13/56 81/177.5

\* cited by examiner

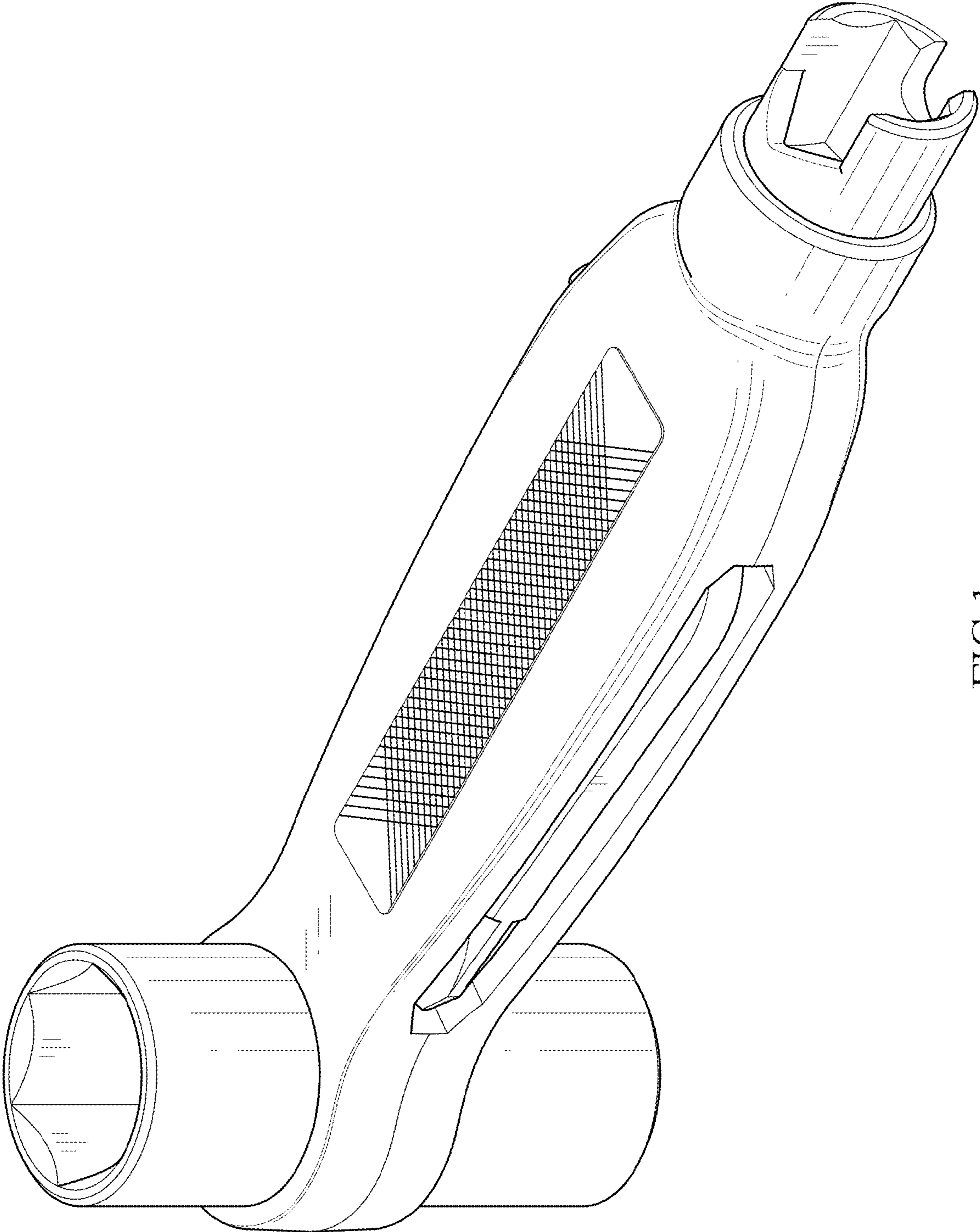


FIG.1

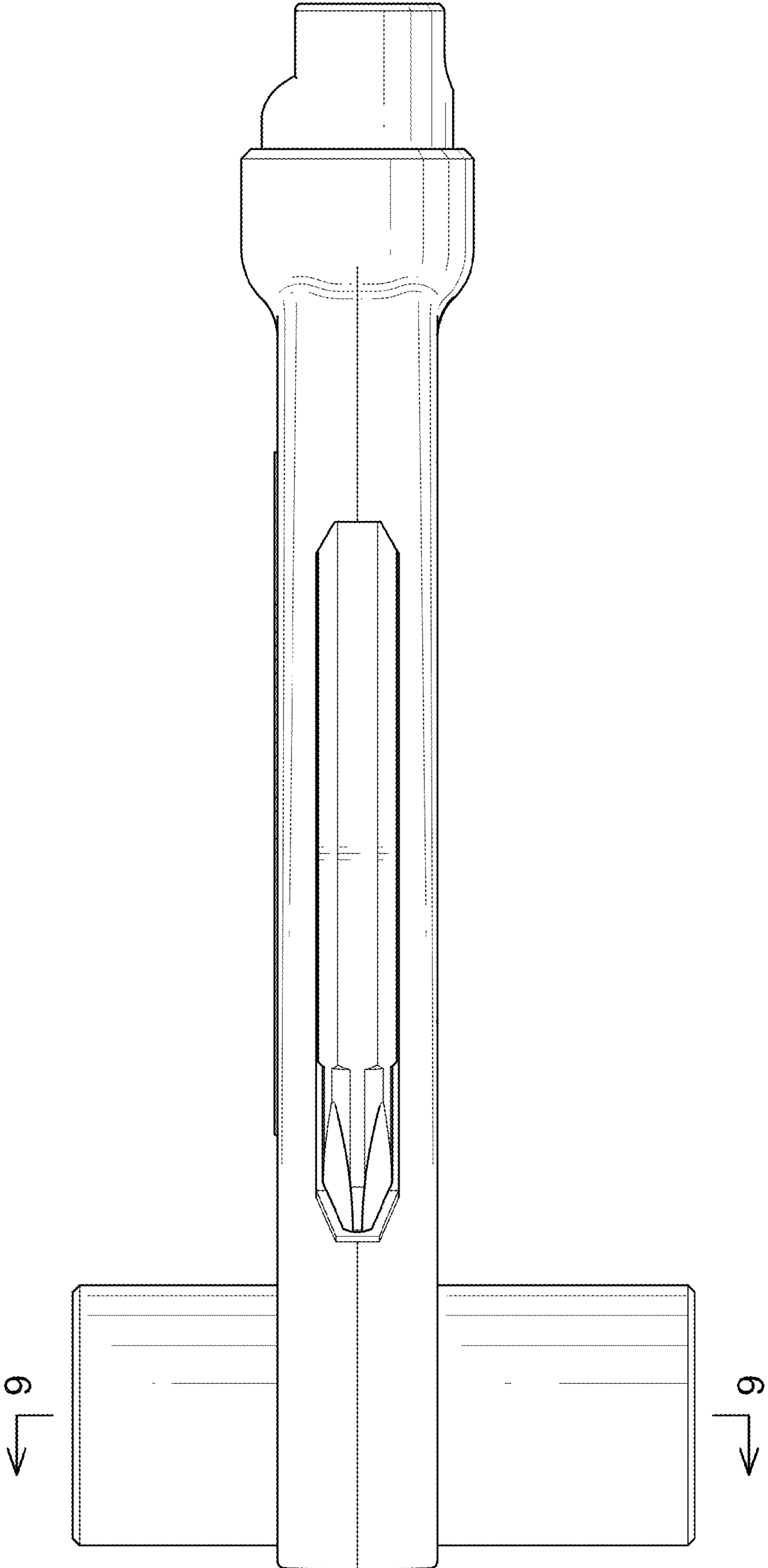


FIG.2

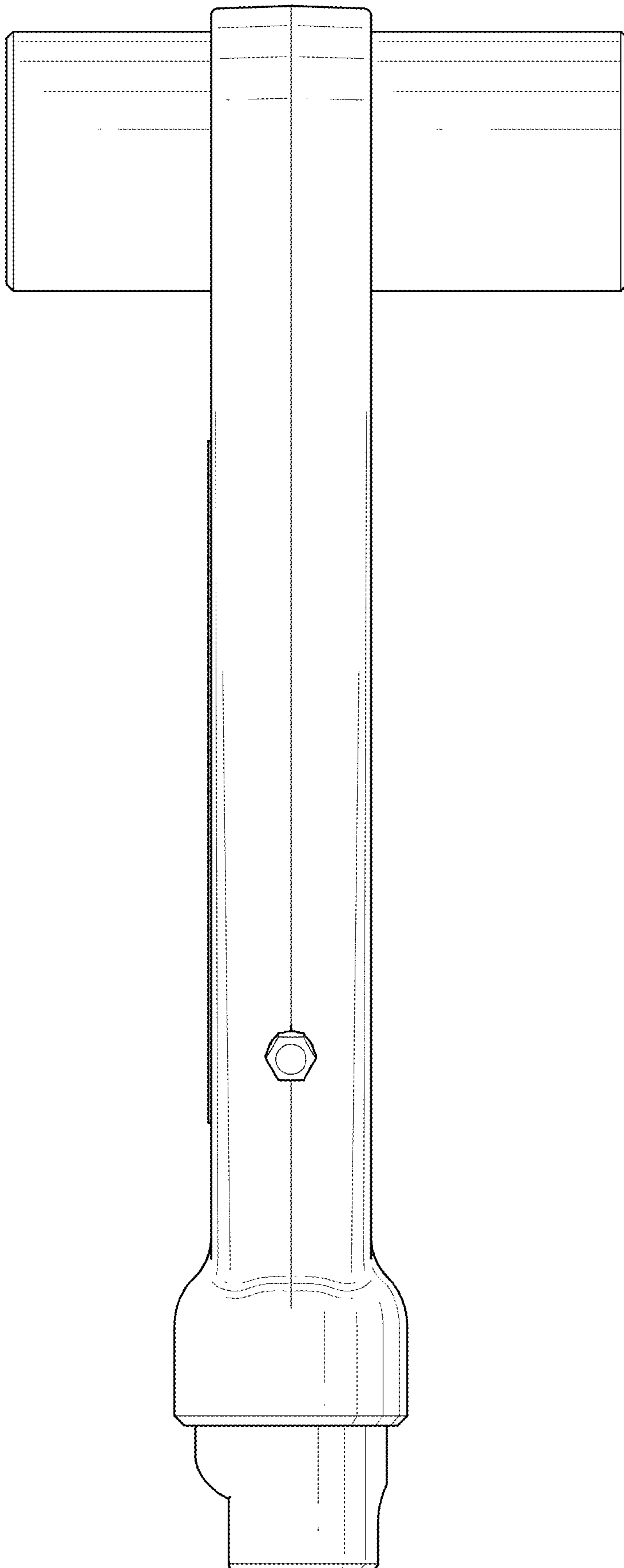


FIG.3

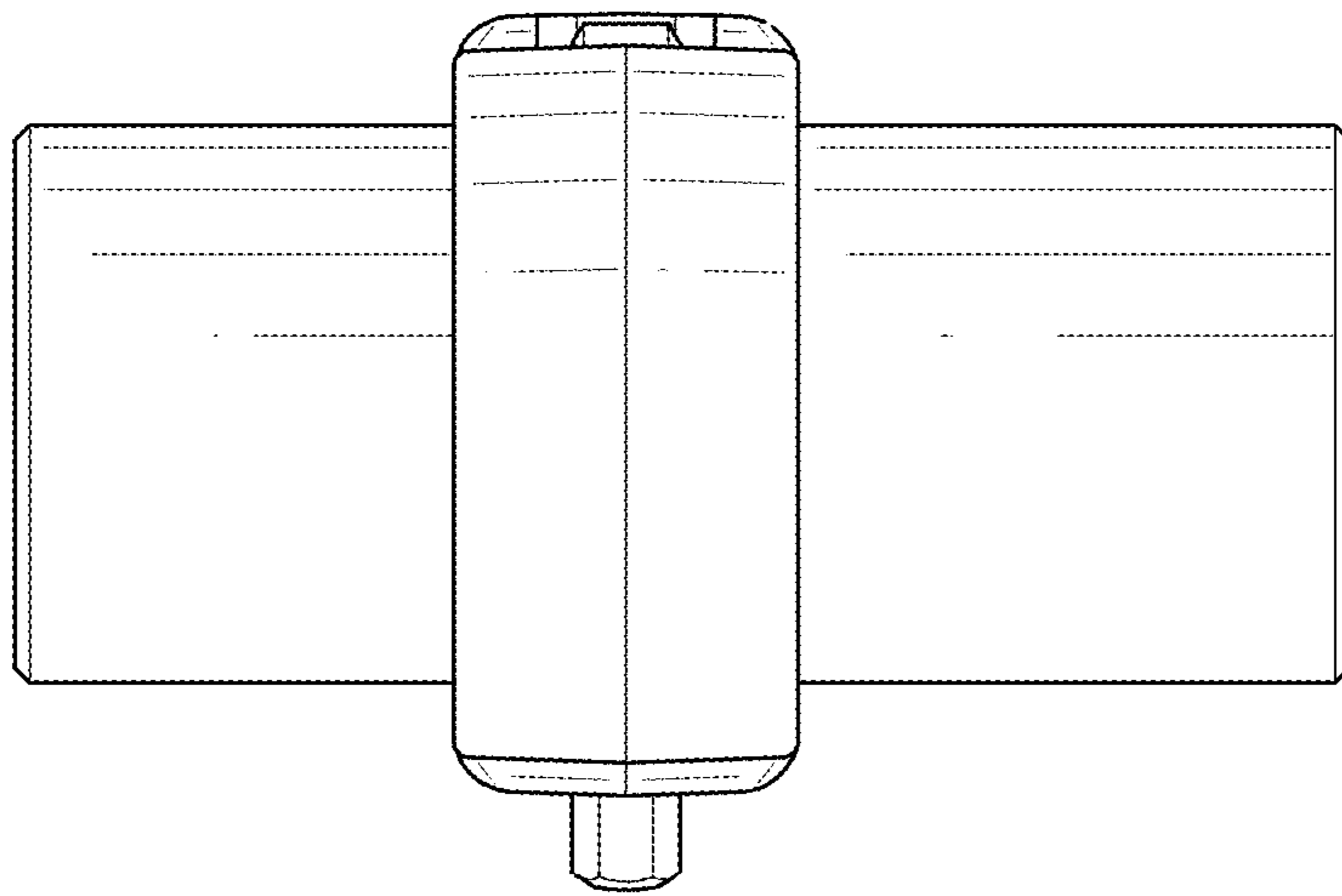


FIG.4

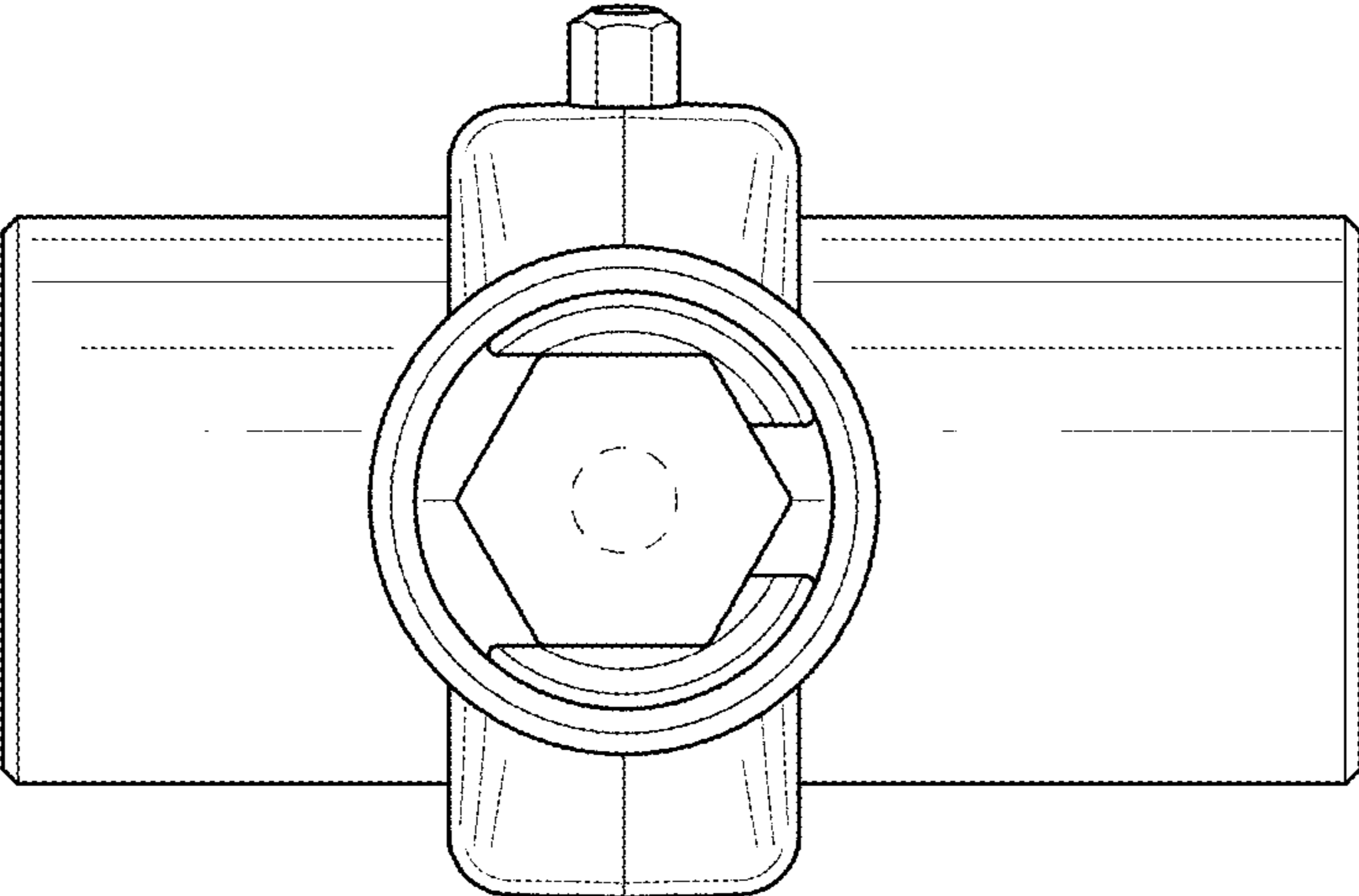


FIG. 5

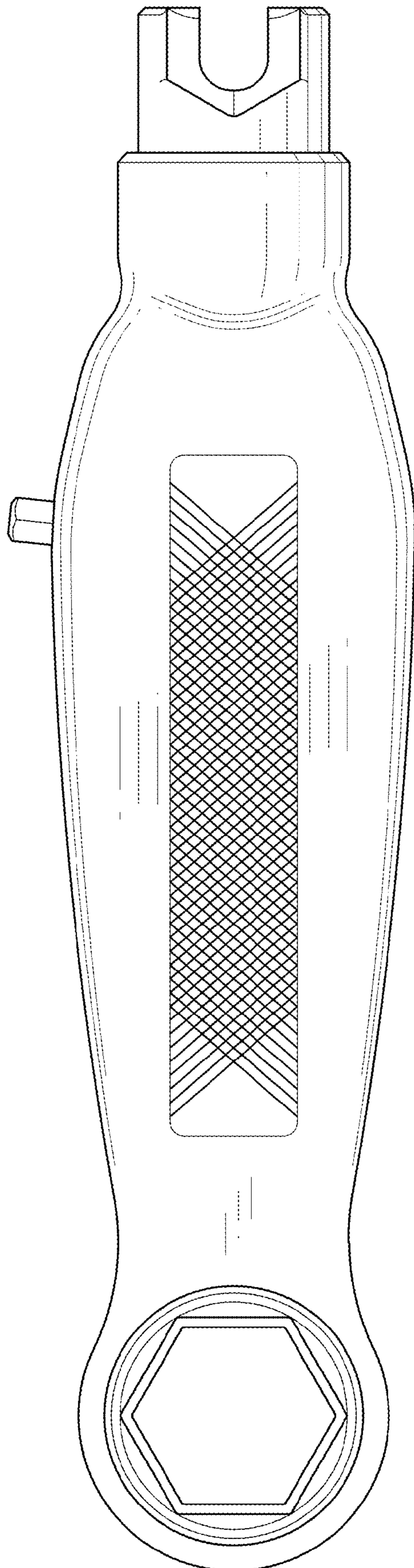


FIG.6



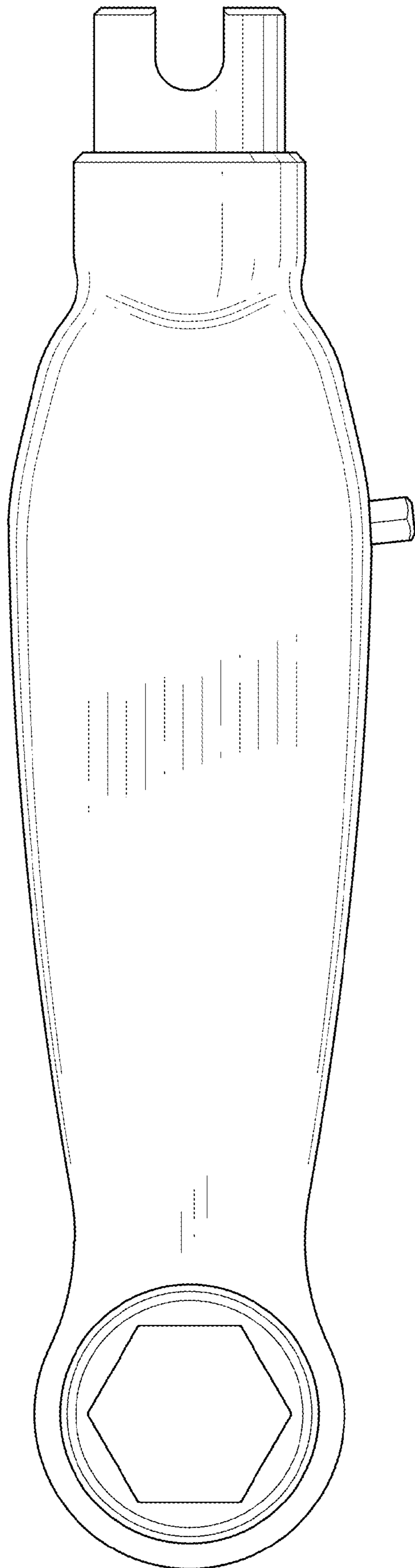


FIG.7

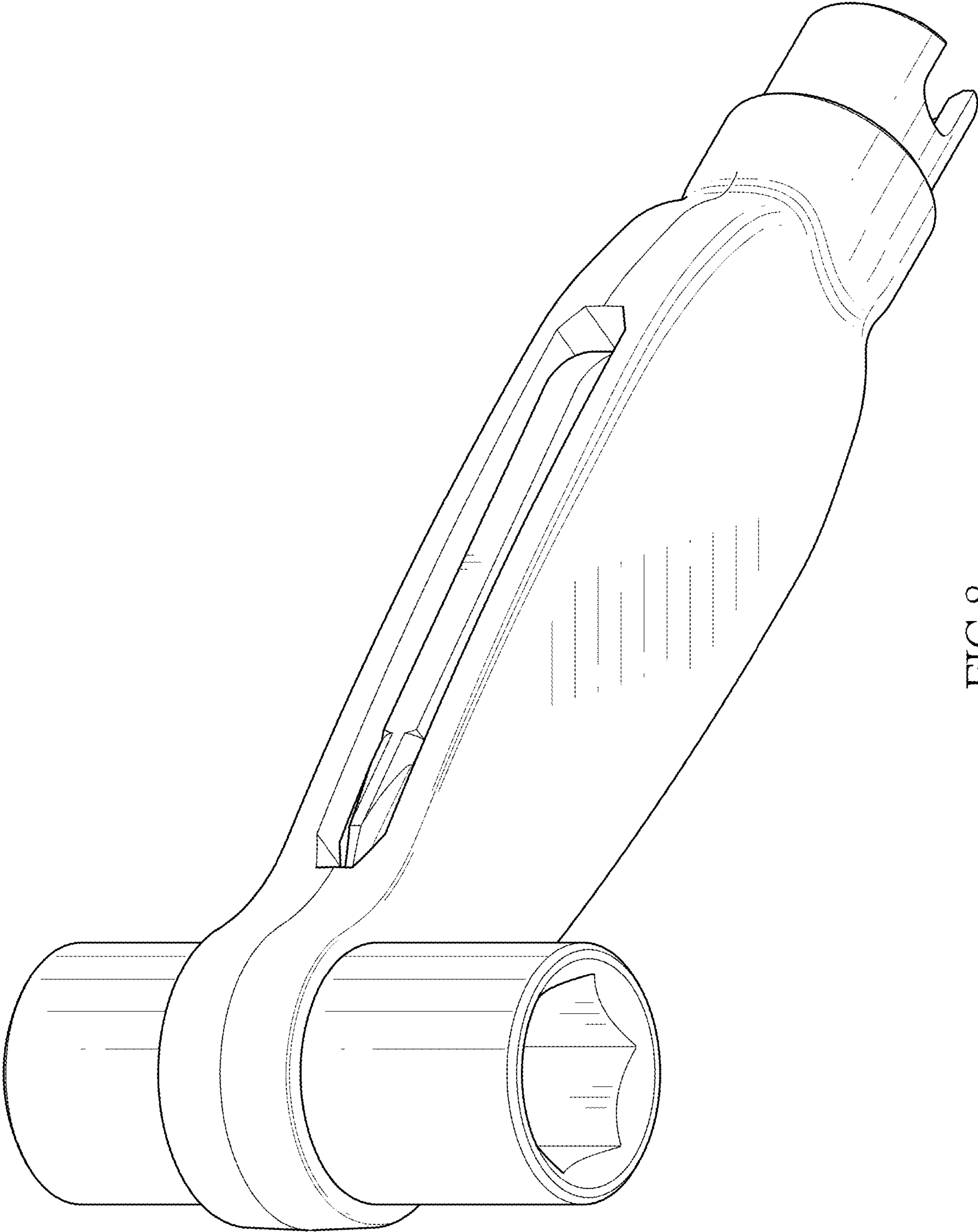


FIG.8

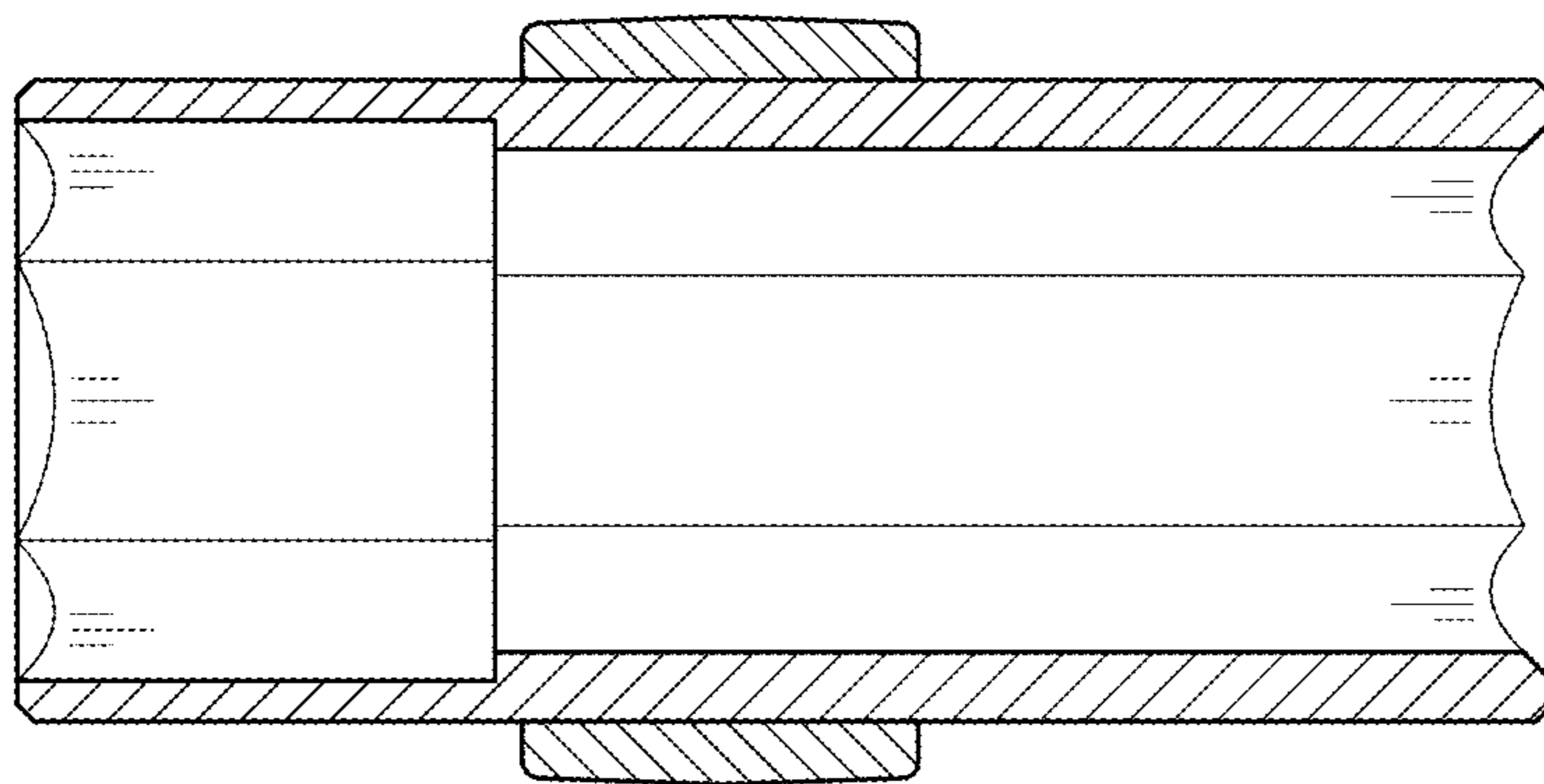


FIG.9

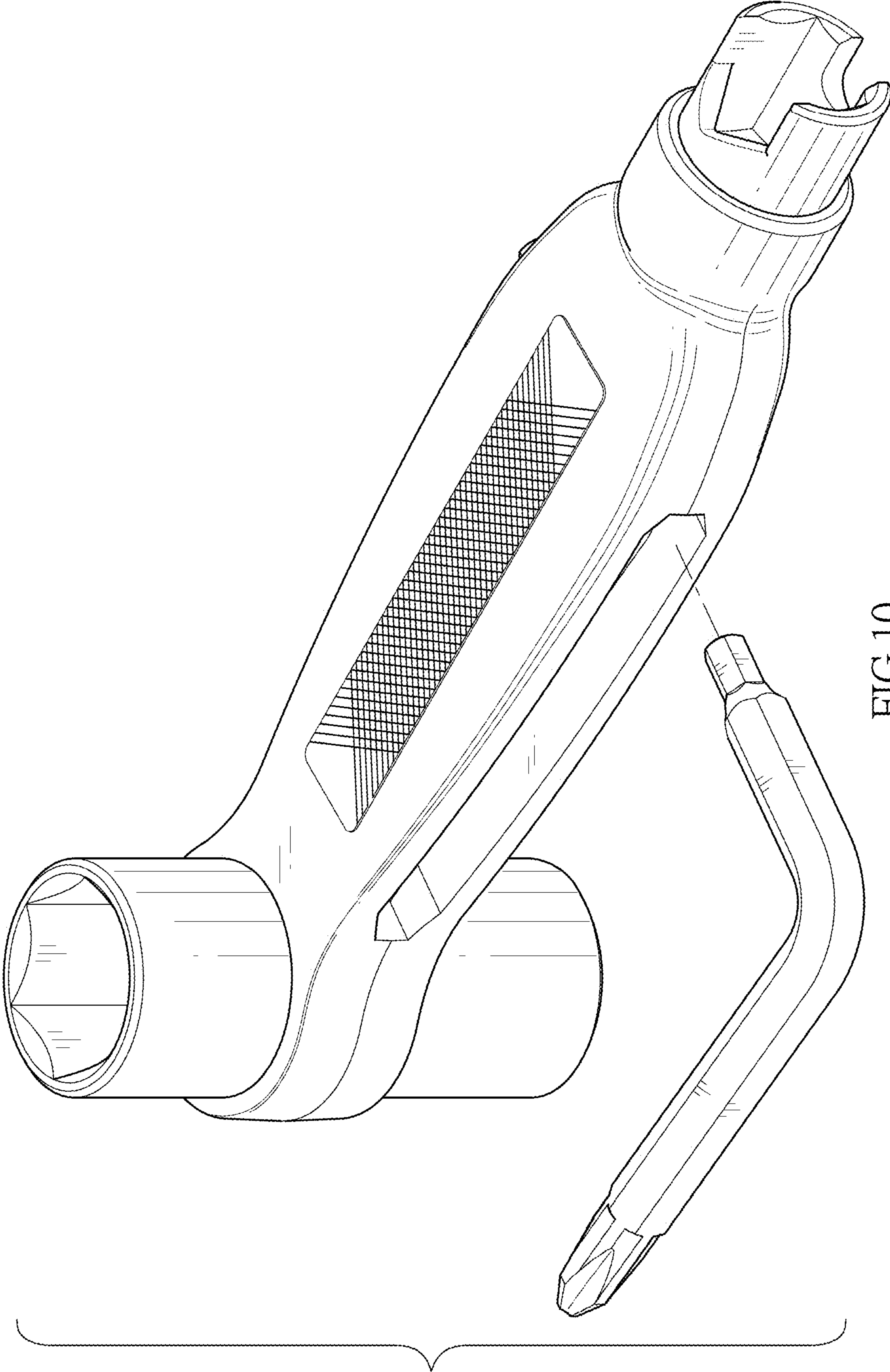


FIG.10