



US00D836416S

(12) **United States Design Patent**
Cavanaugh, Jr.

(10) **Patent No.:** **US D836,416 S**

(45) **Date of Patent:** **** Dec. 25, 2018**

(54) **SHARPENING STEEL WITH ALTERNATING ANGLE GUIDES**

(71) Applicant: **Gerald R. Cavanaugh, Jr.**, Cedar Park, TX (US)

(72) Inventor: **Gerald R. Cavanaugh, Jr.**, Cedar Park, TX (US)

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

(21) Appl. No.: **29/605,731**

(22) Filed: **May 30, 2017**

(51) **LOC (11) Cl.** **08-05**

(52) **U.S. Cl.**
USPC **D8/91**

(58) **Field of Classification Search**
USPC D8/14, 90, 91, 92, 93
CPC B24D 15/02; B24D 15/06; B24D 15/065;
B24D 15/08

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D229,476 S *	12/1973	Farquharson	.....	D8/93
4,094,106 A *	6/1978	Harris	.....	B24D 15/06 451/555
D249,079 S *	8/1978	Soderman	.....	D21/723
4,599,919 A	7/1986	Fortenberry		
D299,614 S	1/1989	Young		
D367,598 S	3/1996	Fortenberry		
6,048,262 A *	4/2000	Ray	.....	B24D 15/08 451/524
D442,457 S *	5/2001	Ray	.....	D8/91
D444,691 S *	7/2001	Ray	.....	D8/91
D453,290 S	2/2002	Huang		
6,371,841 B1 *	4/2002	Ray	.....	B24D 15/08 451/523
D475,599 S	6/2003	Liu		
D487,691 S	3/2004	Huang		

6,805,619 B2	10/2004	Carbone		
D515,900 S	2/2006	Sours et al.		
7,153,201 B2 *	12/2006	Smith	.....	B24D 15/08 451/540
D551,531 S	9/2007	Zemel		
D560,461 S *	1/2008	Epstein	.....	D8/91
7,713,112 B2 *	5/2010	Huang	.....	B24D 15/06 451/524
7,887,397 B2 *	2/2011	Shen	.....	B24D 15/02 451/552
D654,342 S	2/2012	Cavanaugh		
8,221,199 B2	7/2012	Smith		

(Continued)

Primary Examiner — Philip S Hyder

(74) *Attorney, Agent, or Firm* — Andrew W. Chu; Craft Chu PLLC

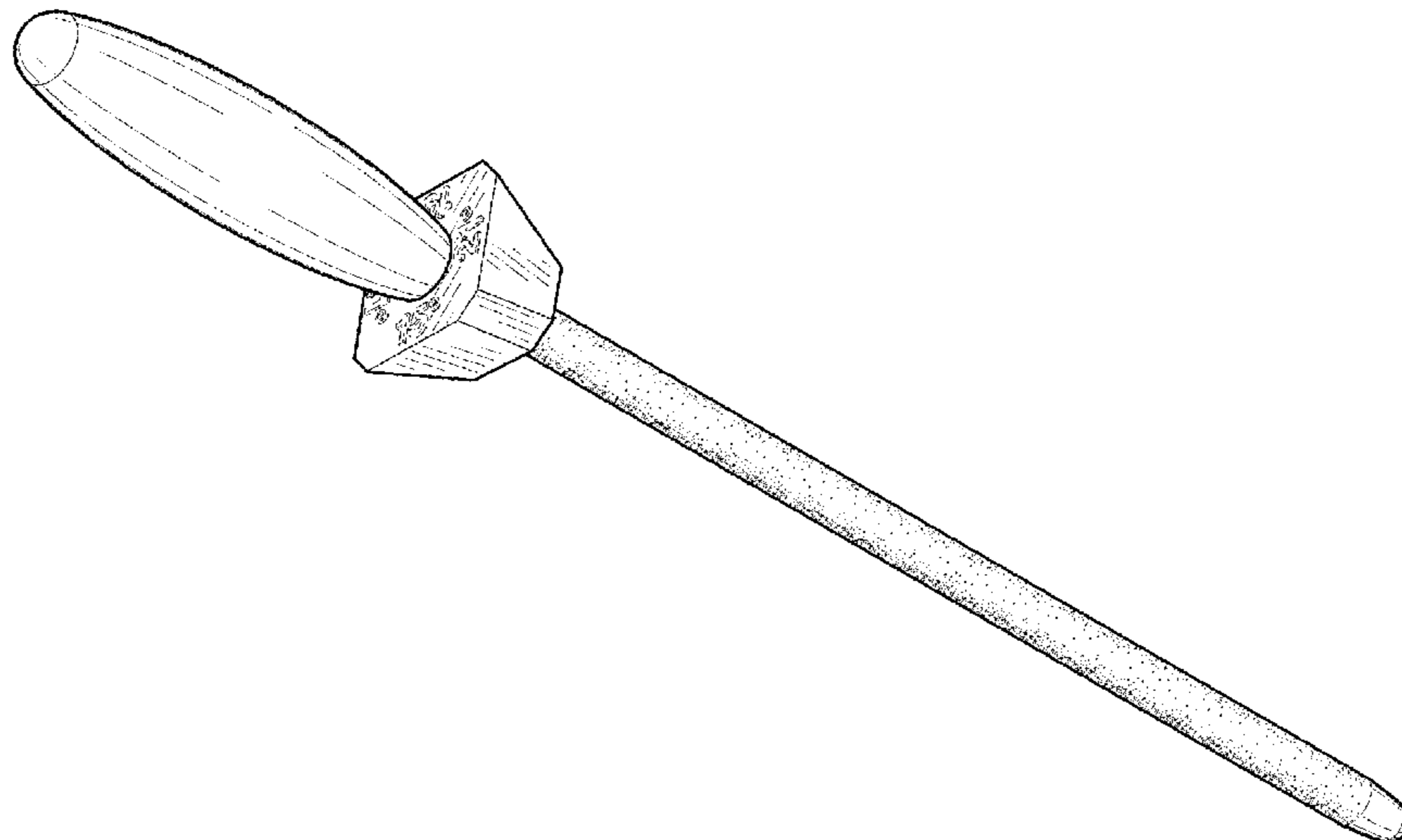
(57) **CLAIM**

The ornamental design for a sharpening steel handle with alternating angle guides, as shown and described.

DESCRIPTION

FIG. 1 is a top perspective view of a sharpening steel with alternating angle guides showing my new design;
 FIG. 2 is a bottom perspective view thereof;
 FIG. 3 is a top plan view;
 FIG. 4 is a bottom plan view
 FIG. 5 is a side elevation view thereof;
 FIG. 6 is an opposite side elevation view thereof;
 FIG. 7 is a front elevation view thereof; and,
 FIG. 8 is a back elevation view thereof.
 FIGS. 1, 2 and 5-8 show a patterned surface on the shaft portion, indicating a textured surface different from the surface of the handle portion.
 FIGS. 1 and 3 show text in broken lines as environmental features, indicating the alternating angles of the angle guides shown as alternating angles of 15° and 21°. The broken lines are not part of the claimed subject matter.

1 Claim, 2 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

8,512,105	B2	8/2013	Smith	
2009/0117838	A1*	5/2009	Huang	..... B24D 15/06 451/555

* cited by examiner

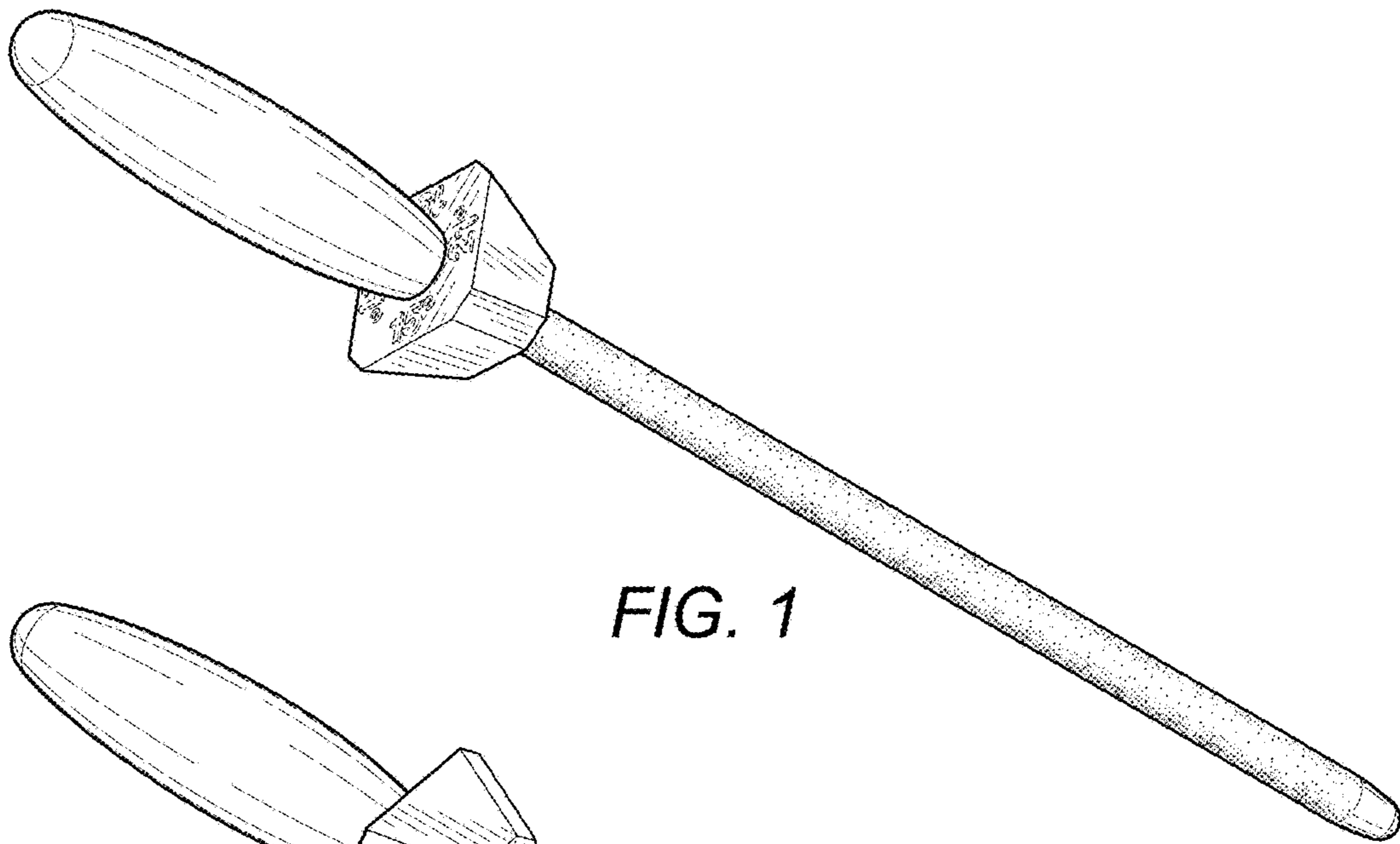


FIG. 1

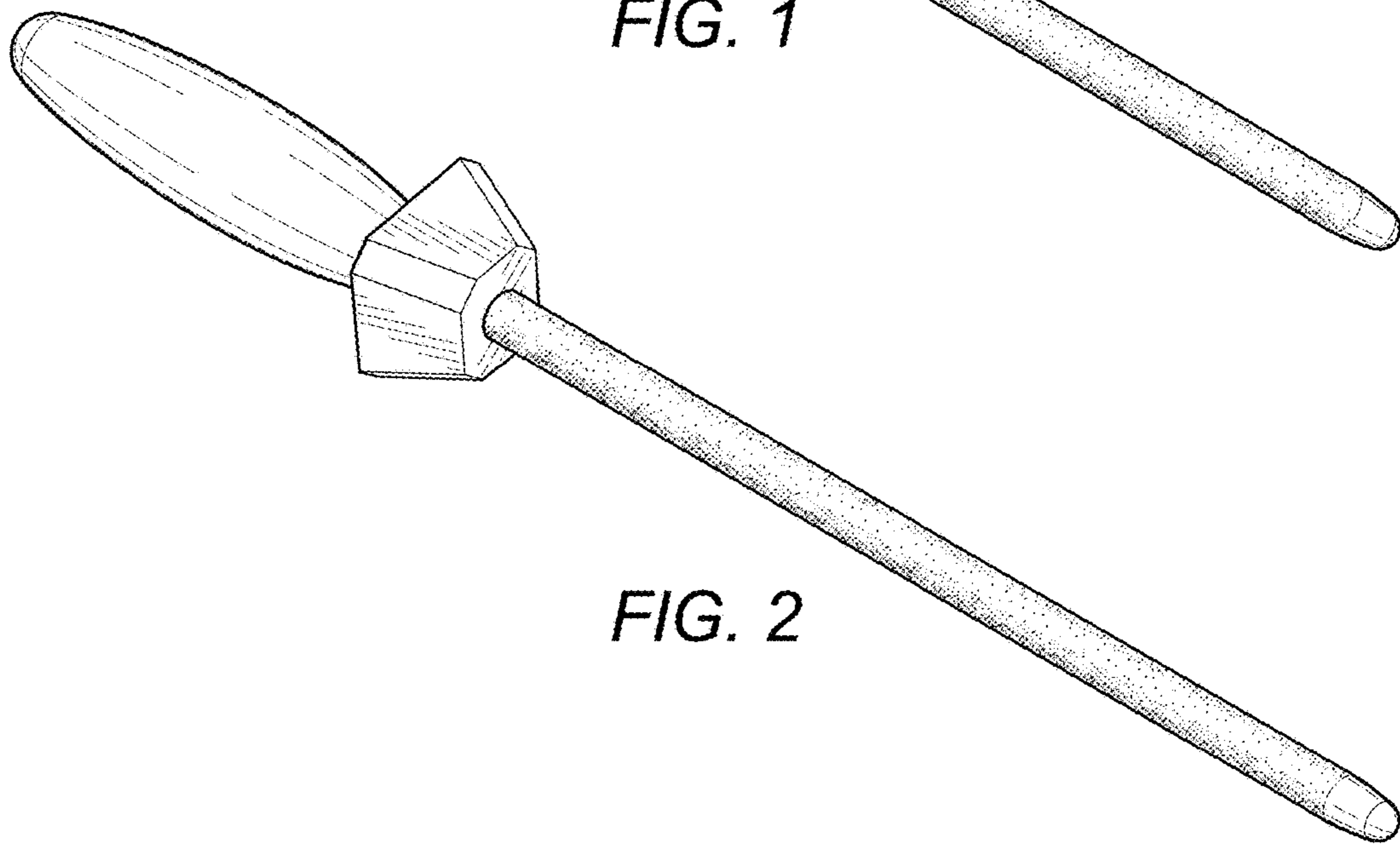


FIG. 2

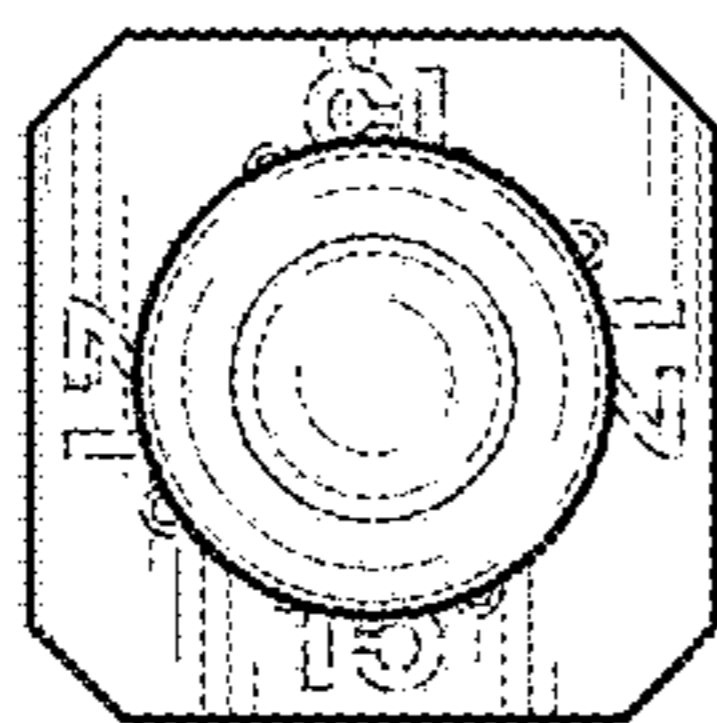


FIG. 3

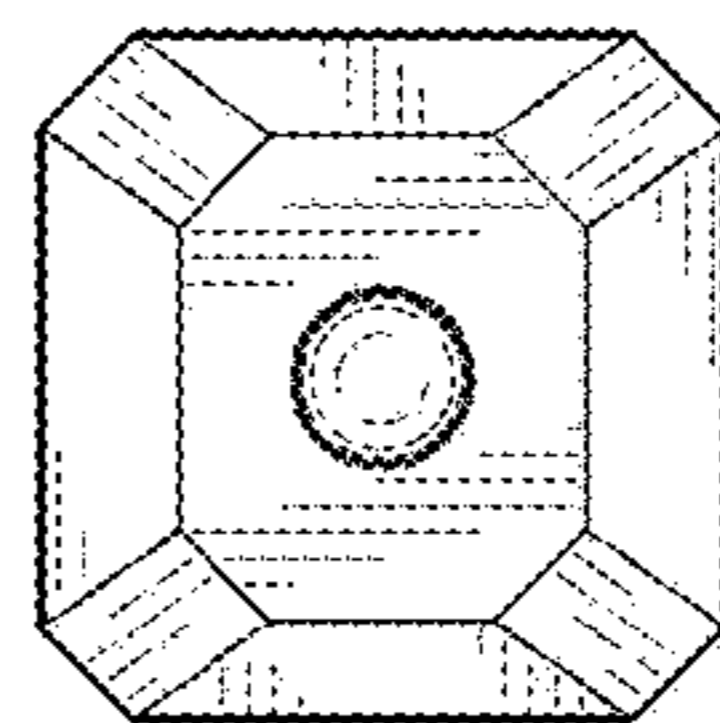


FIG. 4

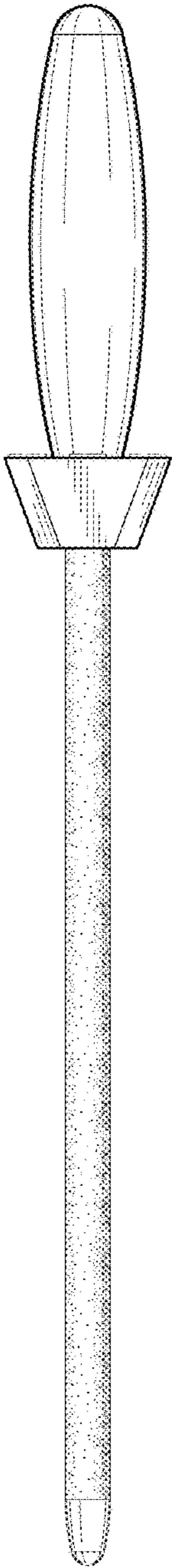


FIG. 5

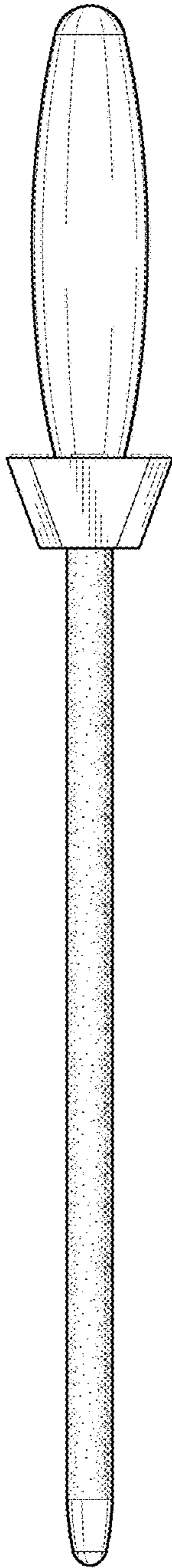


FIG. 6

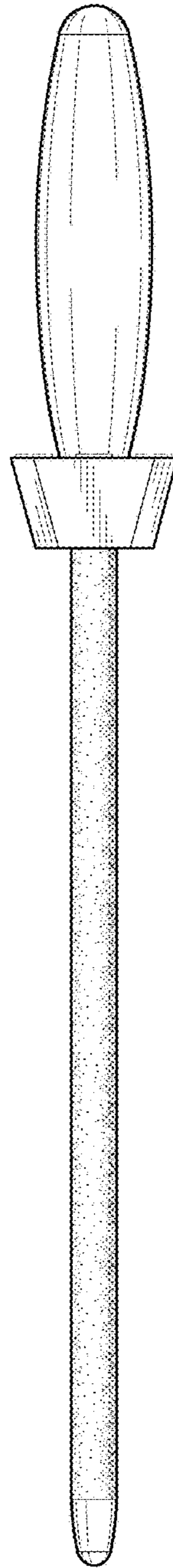


FIG. 7

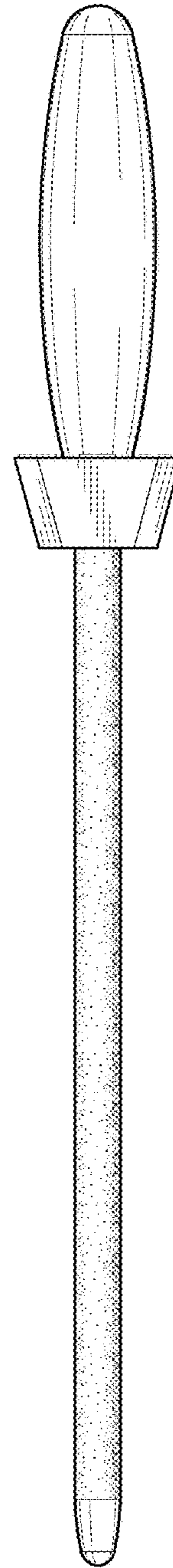


FIG. 8