



US00D644386S

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

(10) **Patent No.:** **US D644,386 S**

(45) **Date of Patent:** **\*\* Aug. 30, 2011**

(54) **FLOOR WIPER**

(75) Inventors: **Hirotohi Tawara**, Sumida-ku (JP);  
**Susumu Fujinami**, Chuo-ku (JP);  
**Tomohisa Hirata**, Chuo-ku (JP)

(73) Assignee: **Kao Corporation**, Tokyo (JP)

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

(21) Appl. No.: **29/367,622**

(22) Filed: **Aug. 10, 2010**

(30) **Foreign Application Priority Data**

Feb. 10, 2010 (JP) ..... D2010-003115

(51) **LOC (9) Cl.** ..... **04-01**

(52) **U.S. Cl.** ..... **D32/51**

(58) **Field of Classification Search** ..... D32/50,  
D32/51, 39-45; 15/116.1, 116.2, 119.2,  
15/147.1, 147.2, 150, 208, 209.1, 210.1,  
15/228; 401/137-140

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

D423,742	S *	4/2000	Kingry et al.	.....	D32/40
D465,890	S *	11/2002	Rivera et al.	.....	D32/50
D486,616	S *	2/2004	Hall et al.	.....	D32/45
D487,174	S *	2/2004	Colman et al.	.....	D32/45
D490,952	S *	6/2004	Ajluni	.....	D32/50
6,783,600	B2	8/2004	Tawara et al.		
D503,836	S *	4/2005	Hall et al.	.....	D32/50
D506,050	S *	6/2005	Lalanne et al.	.....	D32/45
D510,467	S	10/2005	Kizaki et al.		
7,003,840	B2	2/2006	Tawara et al.		
7,004,671	B2	2/2006	Tawara et al.		
7,134,160	B2	11/2006	Tawara et al.		
D548,909	S *	8/2007	Murray et al.	.....	D32/45
7,300,077	B2	11/2007	Tawara et al.		

D563,068	S *	2/2008	Jiang et al.	.....	D32/50
D564,164	S *	3/2008	Harper et al.	.....	D32/51
D583,118	S *	12/2008	Snyder	.....	D32/51

(Continued)

**FOREIGN PATENT DOCUMENTS**

JP 966892 10/1996

(Continued)

**OTHER PUBLICATIONS**

U.S. Appl. No. 12/812,645, filed Jul. 13, 2010, Kimura.

*Primary Examiner* — David Muller

(74) *Attorney, Agent, or Firm* — Oblon, Spivak,  
McClelland, Maier & Neustadt, L.L.P.

(57) **CLAIM**

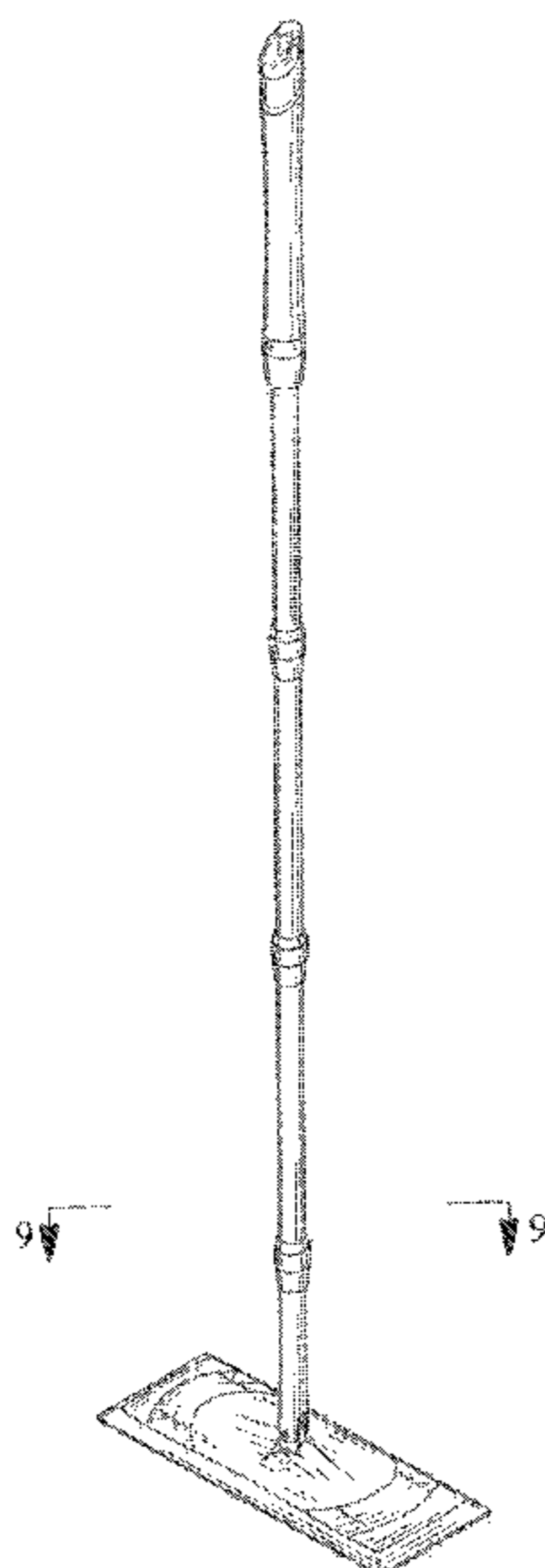
The ornamental design for a floor wiper, as shown and described.

**DESCRIPTION**

FIG. 1 is a front perspective view of a floor wiper;  
 FIG. 2 is a rear perspective view thereof;  
 FIG. 3 is a front view thereof;  
 FIG. 4 is a rear view thereof;  
 FIG. 5 is a right side view thereof, a left side view being a mirror image thereof;  
 FIG. 6 is a top plan view thereof;  
 FIG. 7 is a bottom plan view thereof;  
 FIG. 8 is an enlarged view taken at line 8—8 in FIG. 1;  
 FIG. 9 is an enlarged view taken at line 9—9 in FIG. 2;  
 FIG. 10 is an enlarged view taken at line 10—10 in FIG. 3;  
 FIG. 11 is an enlarged view taken at line 11—11 in FIG. 4;  
 FIG. 12 is an enlarged view taken at line 12—12 in FIG. 5;  
 FIG. 13 is an enlarged top plan view; and,  
 FIG. 14 is an enlarged bottom plan view.

The tip portion of the handle is made of transparent material covering a part inside so that inner part can be seen through the transparent material.

**1 Claim, 11 Drawing Sheets**



# US D644,386 S

Page 2

---

## U.S. PATENT DOCUMENTS

D585,612 S \* 1/2009 Soller et al. .... D32/50  
D615,260 S \* 5/2010 Koenig ..... D32/45

## FOREIGN PATENT DOCUMENTS

JP 985291 7/1997  
JP 986112 7/1997  
JP 986918 8/1997  
JP 994534 11/1997  
JP 996567 11/1997  
JP 1147550 7/2002  
JP 1176939 6/2003

JP 1212727 7/2004  
JP 1231509 2/2005  
JP 1240677 5/2005  
JP 1241006 5/2005  
JP 1243709 6/2005  
JP 1246686 8/2005  
JP 1261945 2/2006  
JP 1296475 3/2007  
JP 1304994 7/2007  
JP 1319732 1/2008  
JP 1365708 7/2009  
JP 1377211 1/2010

\* cited by examiner

Fig. 1

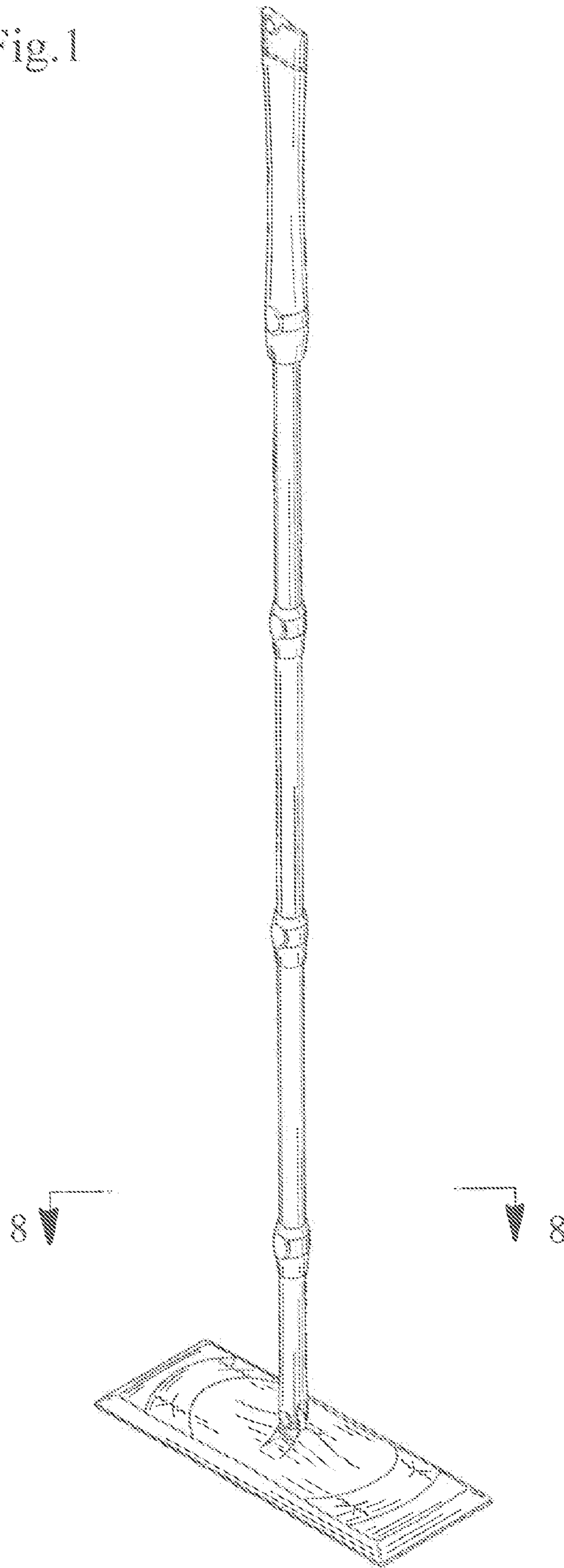


Fig.2

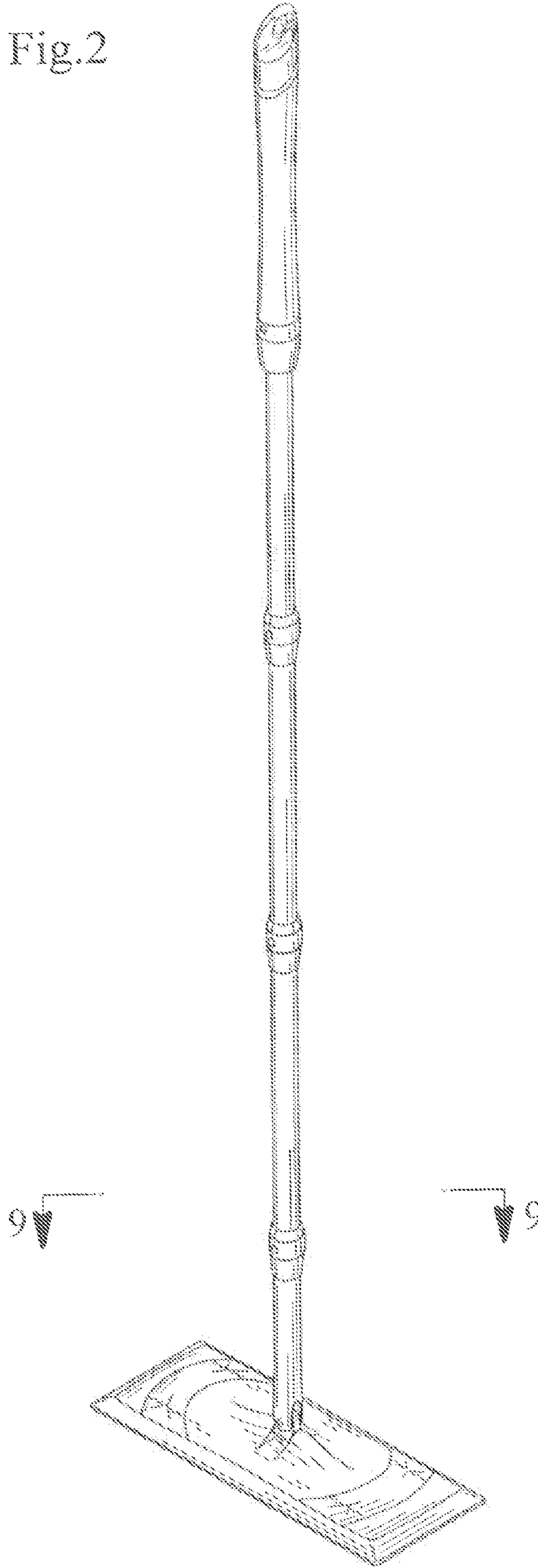


Fig.3

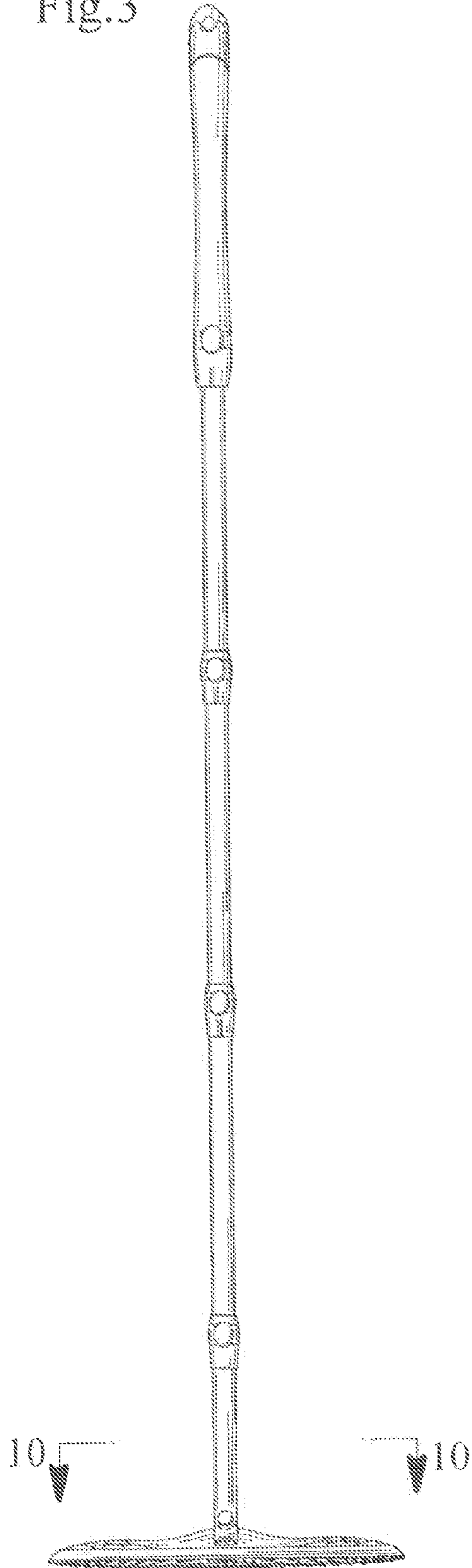


Fig.4

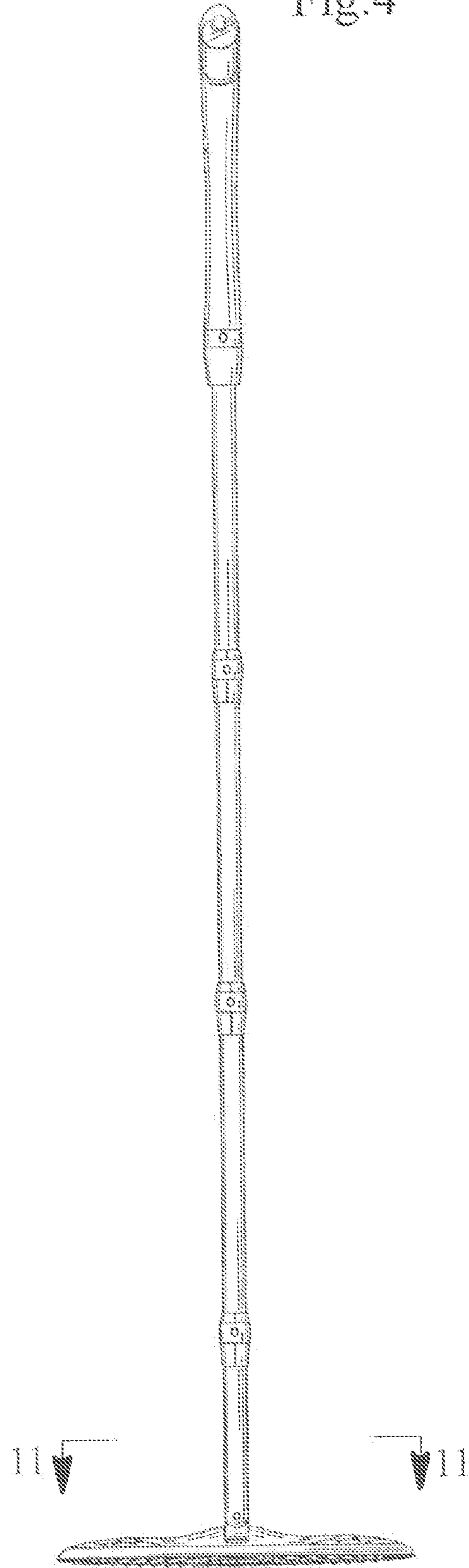


Fig. 5

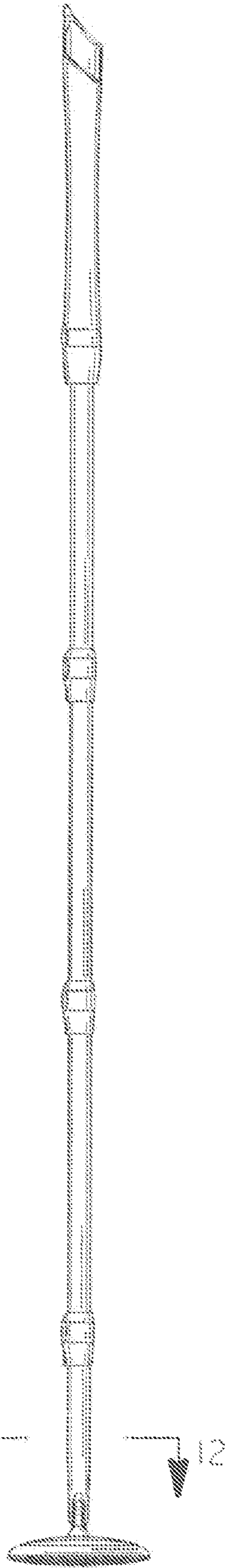


Fig. 6

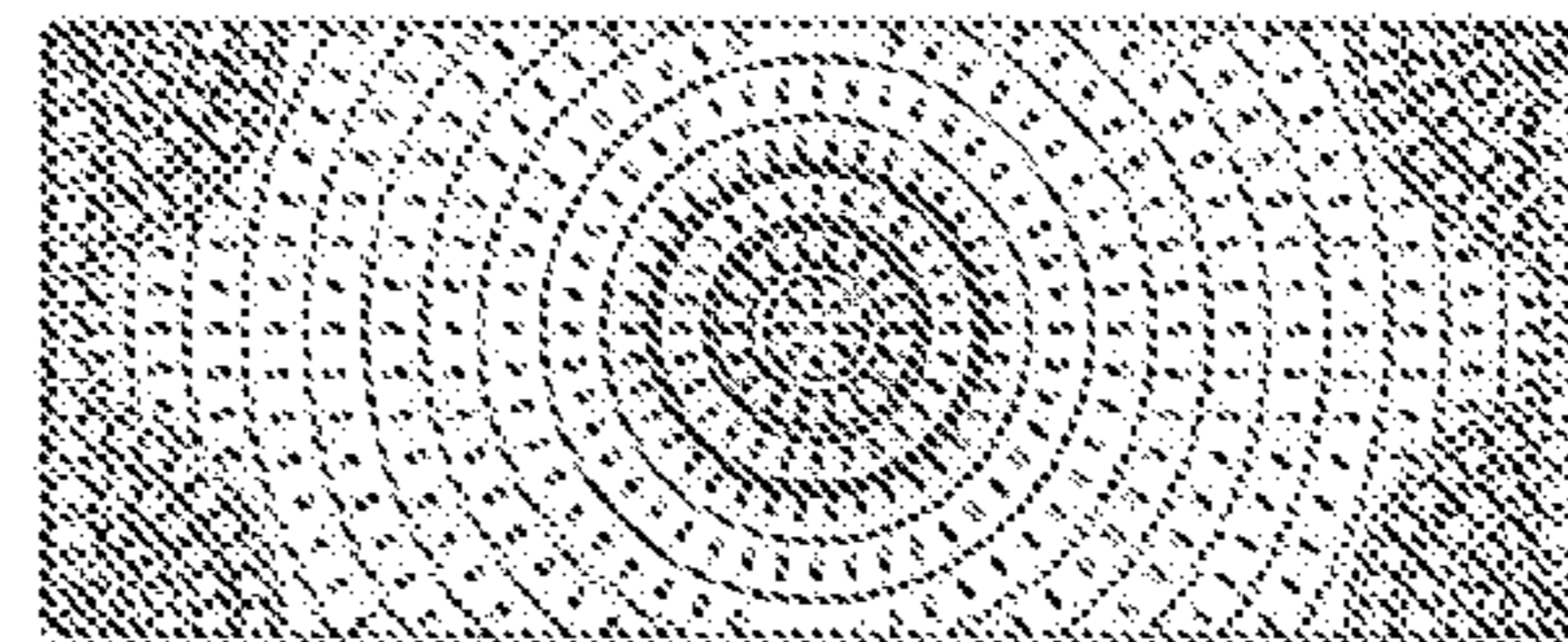
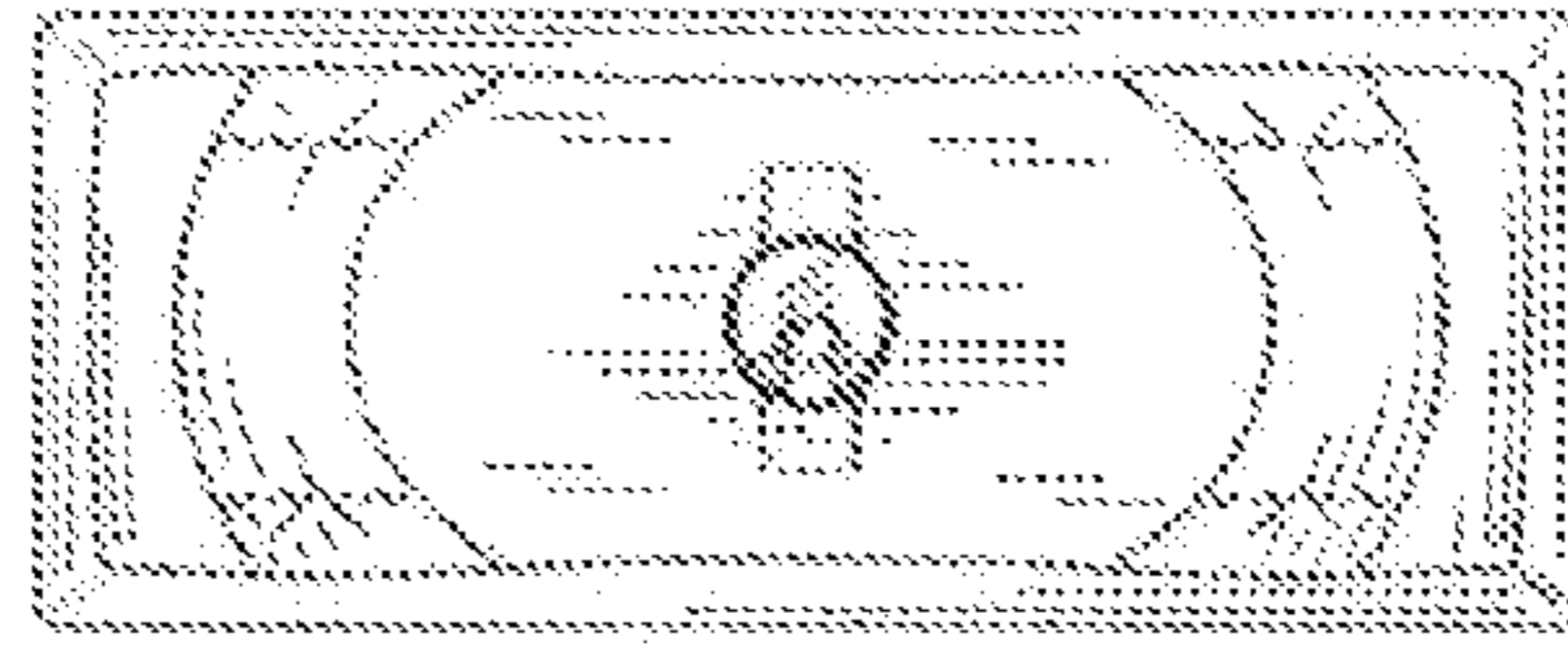


Fig. 7

Fig. 8

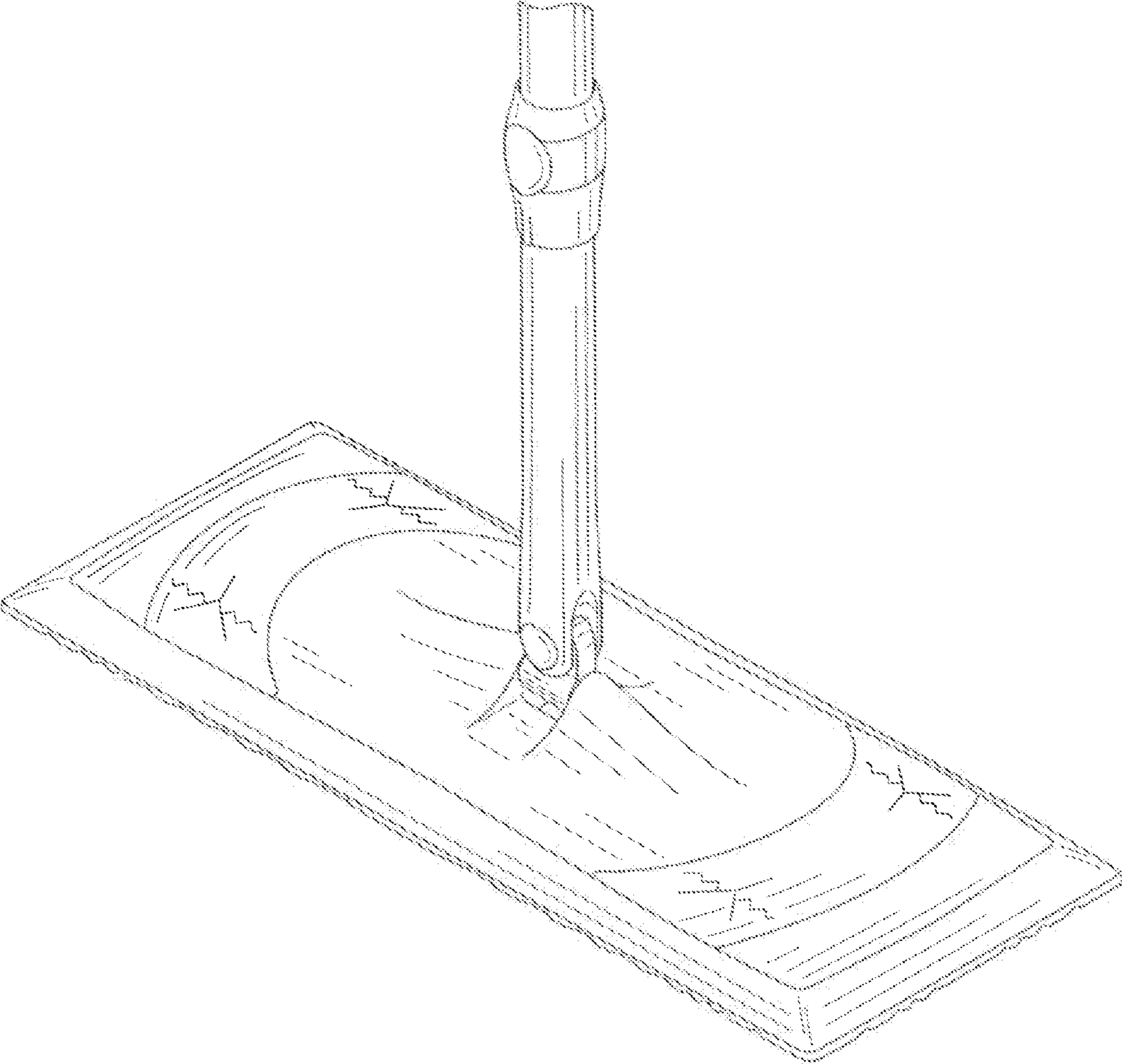


Fig. 9

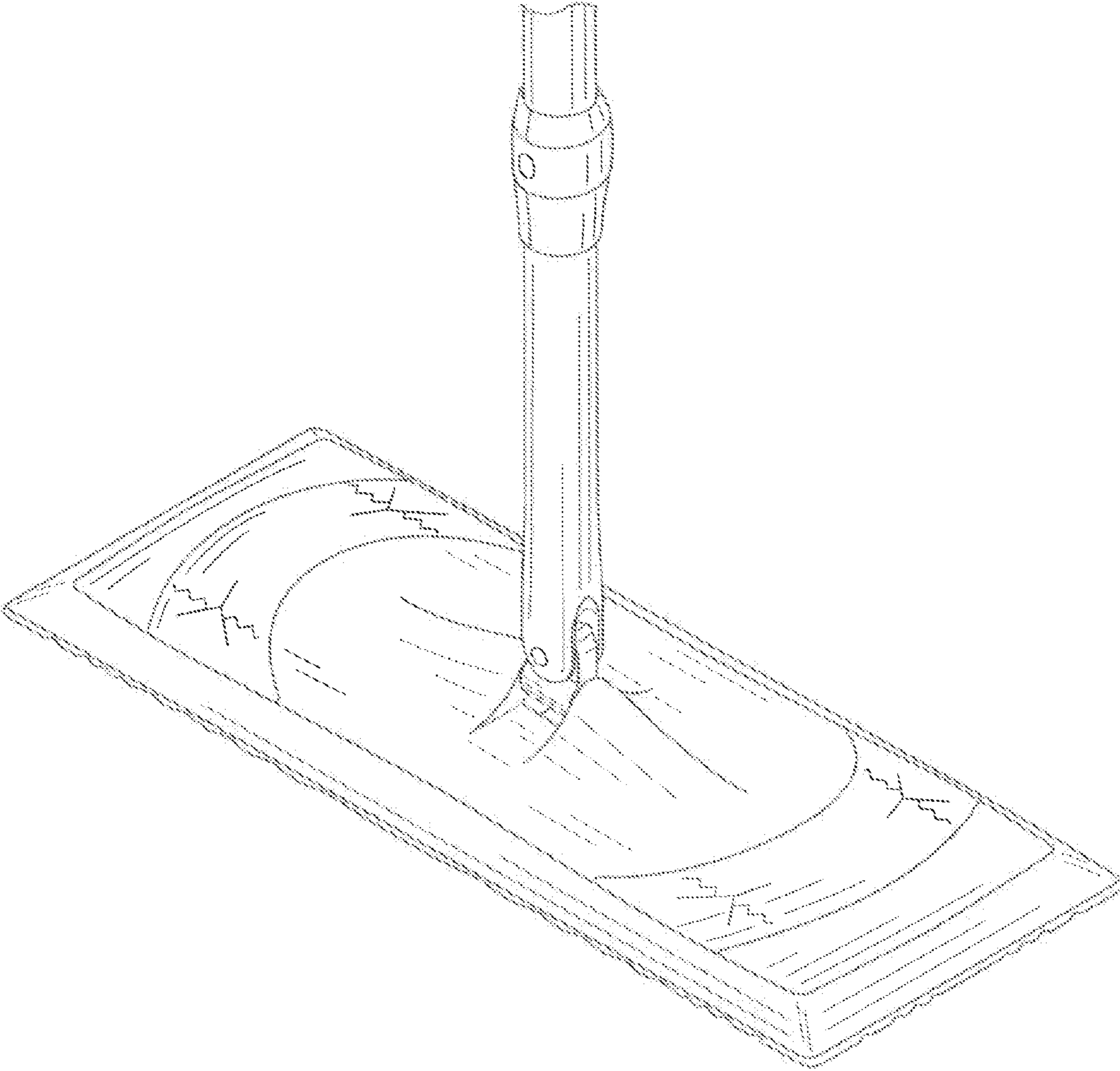




Fig. 10

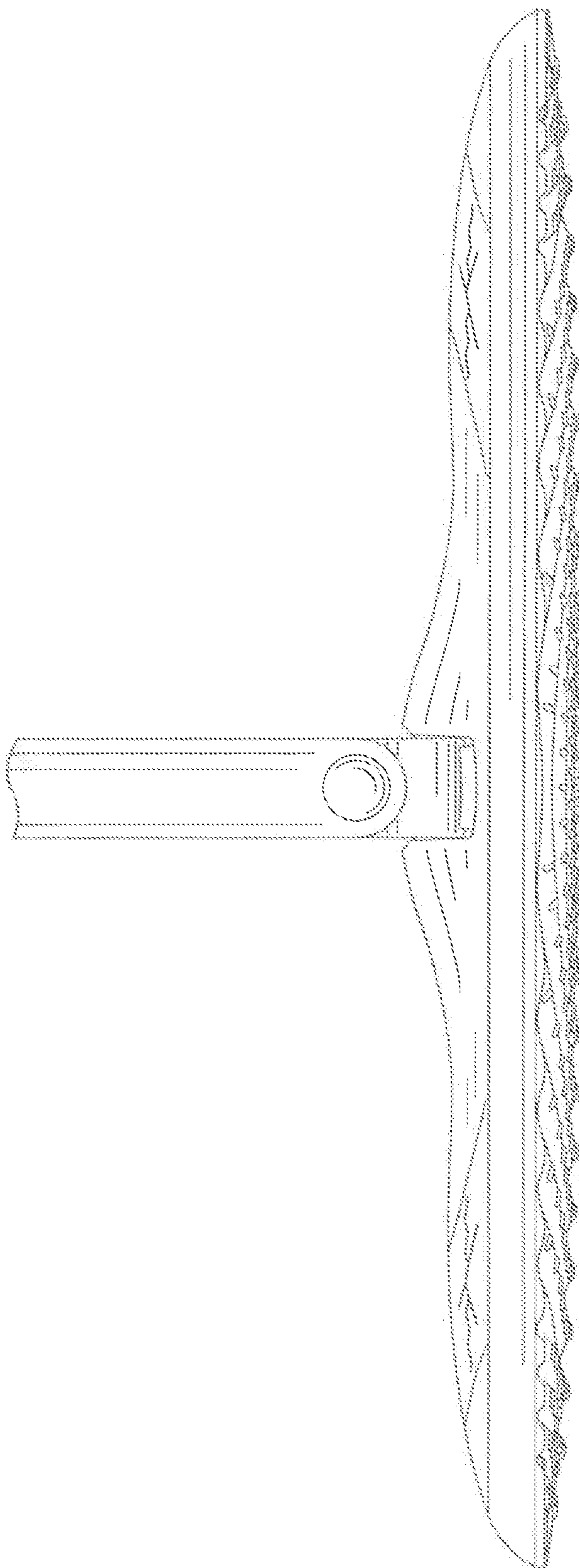


Fig. 11

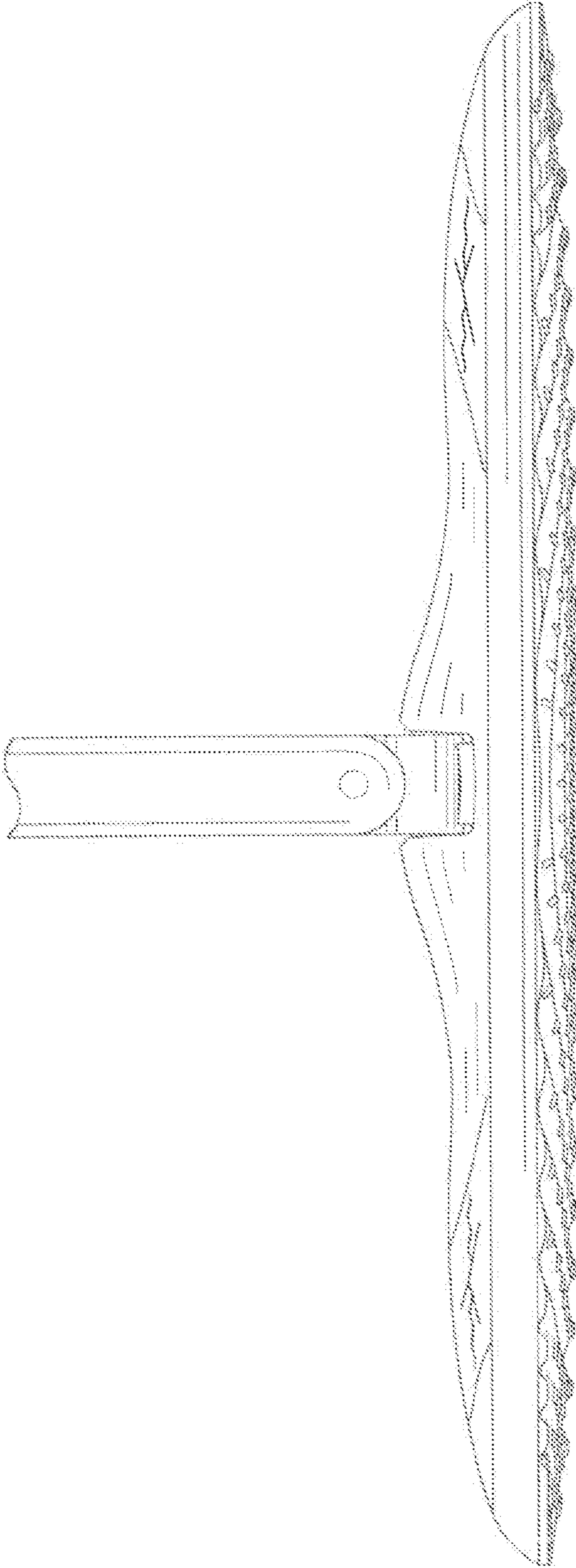


Fig. 12

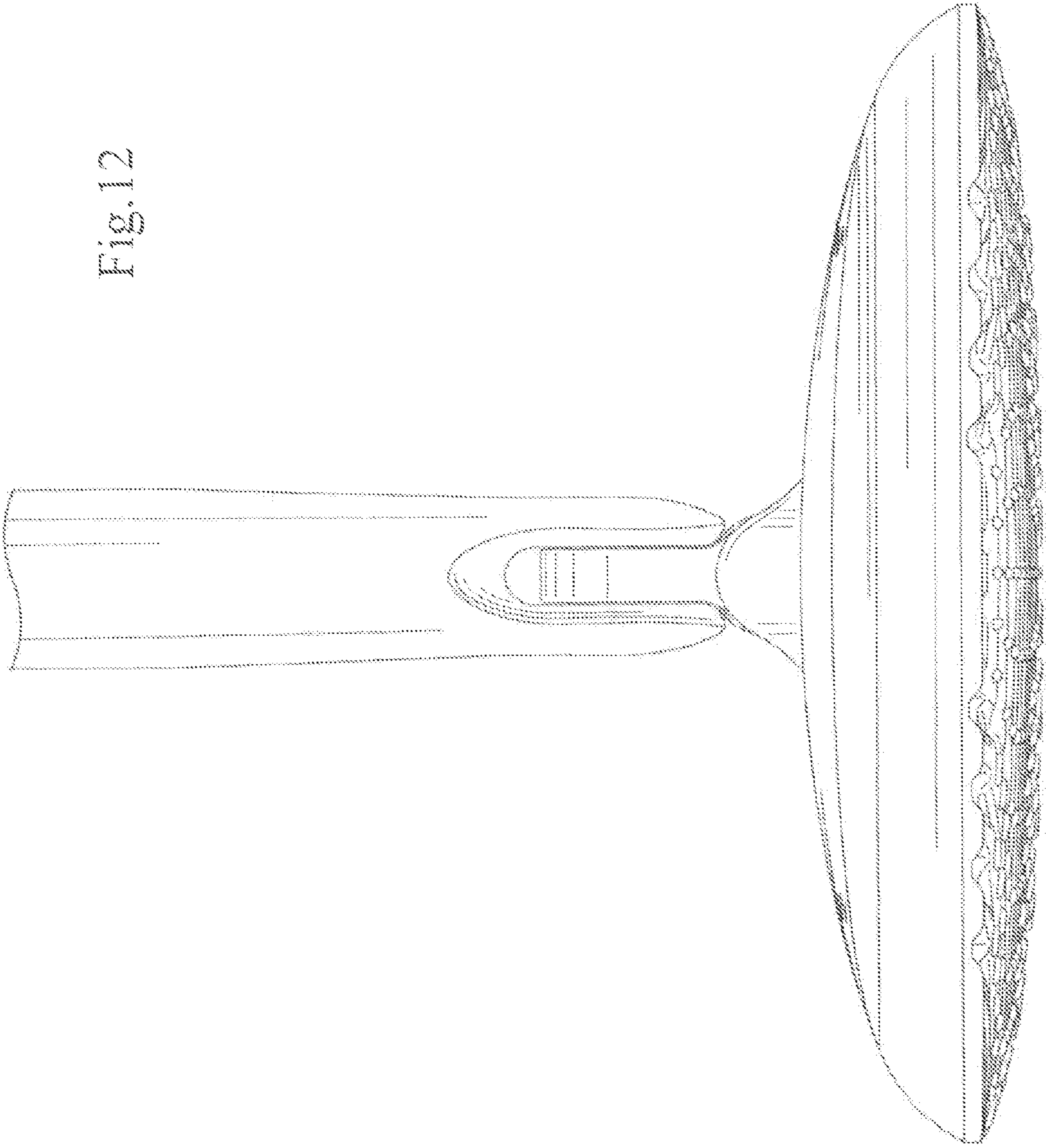


Fig. 13

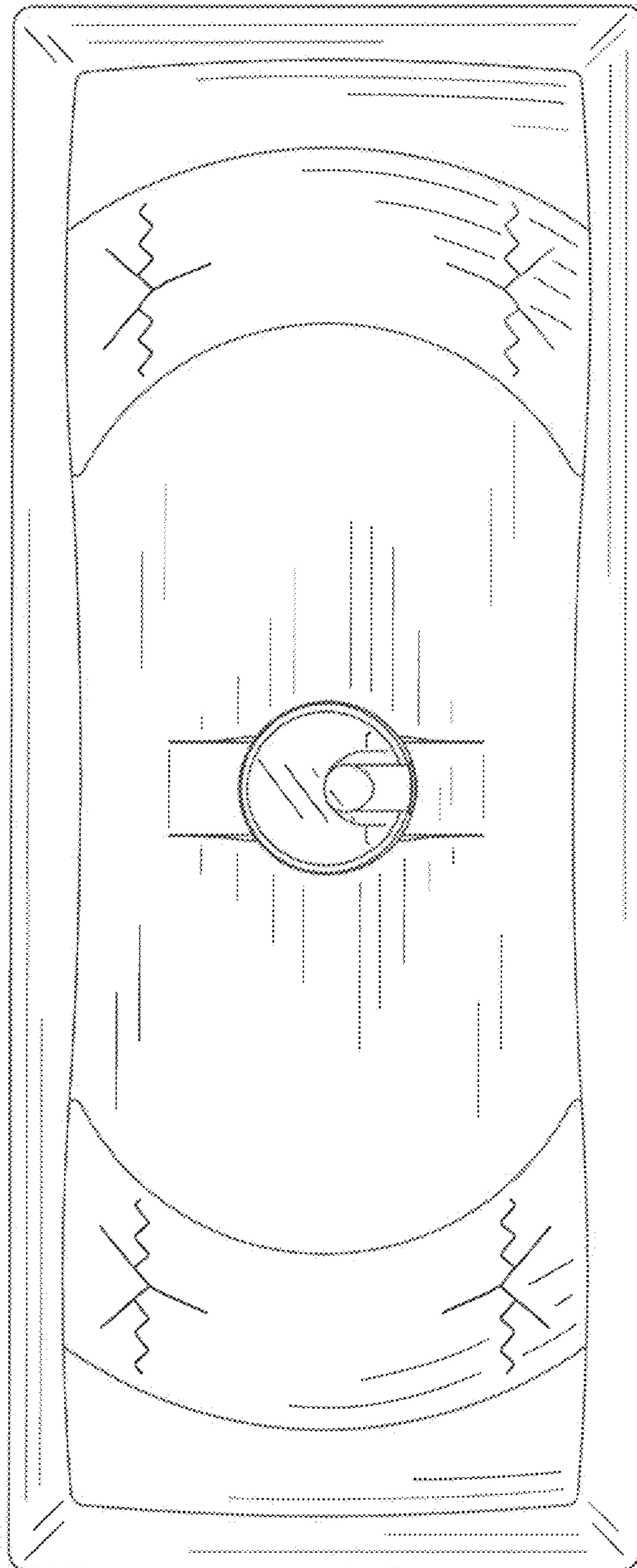


Fig. 14

