



US00D829393S

(12) **United States Design Patent** (10) **Patent No.:** **US D829,393 S**
Shin (45) **Date of Patent:** **** Sep. 25, 2018**

(54) **VACUUM CLEANER**
(71) Applicant: **LG ELECTRONICS INC., Seoul (KR)**
(72) Inventor: **Mijoo Shin, Seoul (KR)**
(73) Assignee: **LG ELECTRONICS INC., Seoul (KR)**
(**) Term: **15 Years**
(21) Appl. No.: **35/502,083**
(22) Filed: **Jun. 10, 2016**
(80) **Hague Agreement Data**
Int. Filing Date: **Jun. 10, 2016**
Int. Reg. No.: **DM/091304**
Int. Reg. Date: **Jun. 10, 2016**
Int. Reg. Pub. Date: **Dec. 16, 2016**

(30) **Foreign Application Priority Data**
Dec. 14, 2015 (KR) 30-2015-0063699
(51) **LOC (11) Cl.** **15-05**
(52) **U.S. Cl.**
USPC **D32/18**
CPC **A47L 5/225 (2013.01)**
(58) **Field of Classification Search**
USPC D32/17, 18, 21, 22, 31, 34
CPC A47L 5/24; A47L 5/28; A47L 5/34; A47L 5/362; A47L 5/36; A47L 11/34; A47L 9/325; A47L 9/20; A47L 9/02; A47L 9/32; A47L 9/322; A47L 9/327; A47L 7/0038
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS
D307,656 S * 5/1990 Yuen D32/22
D307,657 S * 5/1990 Li 15/329

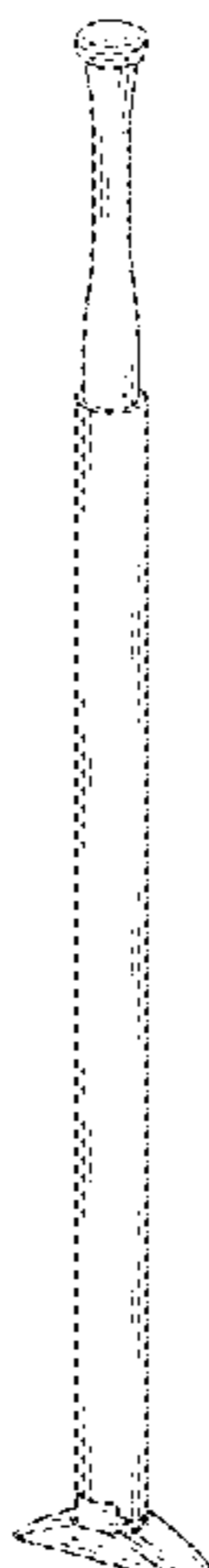
D418,266 S * 12/1999 Medema D32/22
D437,666 S * 2/2001 Park D32/22
D483,160 S * 12/2003 Houghton D32/18
D510,162 S * 9/2005 Ma D32/18
D545,011 S * 6/2007 Agren D32/22
D564,156 S * 3/2008 Agren D32/31
D565,814 S * 4/2008 Agren D32/22
D565,816 S * 4/2008 Agren D32/22
D574,563 S * 8/2008 Fjellman D32/22
D582,111 S * 12/2008 Agren D32/22
D613,469 S * 4/2010 Agren D32/22
D636,954 S * 4/2011 Liu D32/22
D643,980 S * 8/2011 Kim D32/22
8,151,411 B2 * 4/2012 Beskow A47L 5/225
15/143.1
D677,844 S * 3/2013 Nicora D32/22
(Continued)

Primary Examiner — Richard E Chilcot
(74) *Attorney, Agent, or Firm* — Birch, Stewart, Kolasch & Birch, LLP

(57) **CLAIM**
The ornamental design for a vacuum cleaner, as shown and described.

DESCRIPTION
1. Vacuum cleaner
1.1 is a perspective view of a vacuum cleaner, showing our new design;
1.2 is a front elevation view thereof;
1.3 is a rear elevation view thereof;
1.4 is a left-side elevation view thereof;
1.5 is a right-side elevation view thereof;
1.6 is a top plan view thereof;
1.7 is a bottom plan view thereof;
1.8 is another perspective view thereof, mounted on a charging holder and having its handle inserted;
1.9 is another perspective view thereof, shown separate from the charging holder; and
1.10 is another perspective view thereof, in a use condition. The broken lines shown in figures 1.7 through 1.9 are for the purpose of illustrating environmental structure and form no part of the claimed design.

1 Claim, 10 Drawing Sheets



(56)

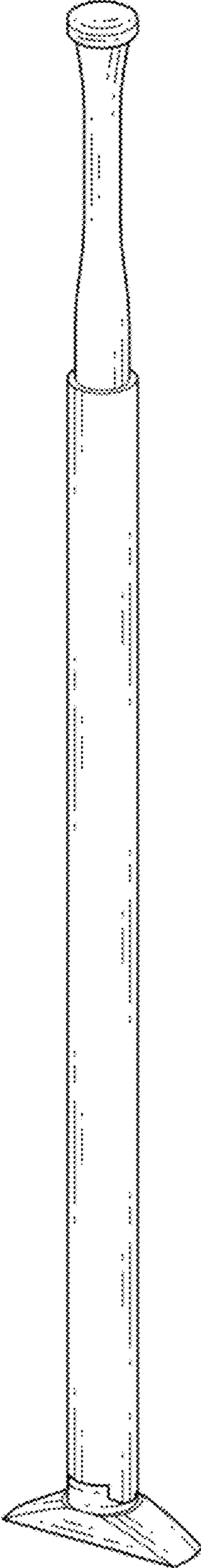
References Cited

U.S. PATENT DOCUMENTS

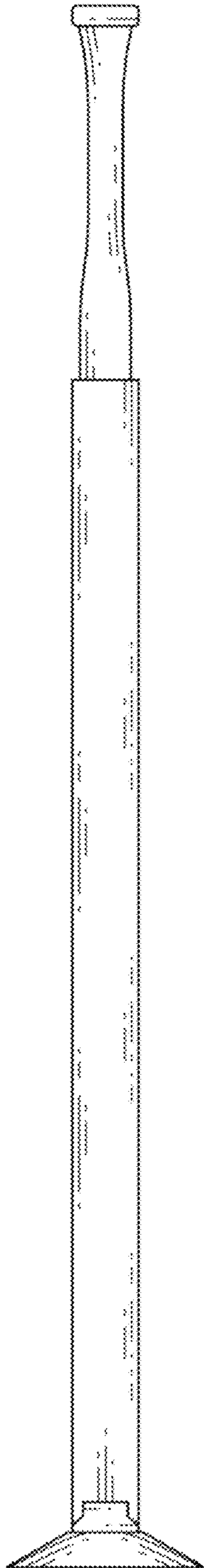
D680,286	S *	4/2013	Gray	.....	D32/22
D728,176	S *	4/2015	Yu	.....	D32/22
D743,124	S *	11/2015	Gray	.....	D32/22
D759,920	S *	6/2016	Gray	.....	D32/31
D767,222	S *	9/2016	Houghton	.....	D32/31
D776,888	S *	1/2017	Gu	.....	D32/22
D781,513	S *	3/2017	Fudetani	.....	D32/22
D784,635	S *	4/2017	Xiao	.....	D32/22
D794,268	S *	8/2017	Minamide	.....	D32/22
D796,129	S *	8/2017	Jang	.....	D32/22
D804,117	S *	11/2017	Kim	.....	D32/22
2007/0136984	A1 *	6/2007	Hsu	.....	A47L 5/225 15/339
2007/0271724	A1 *	11/2007	Hakan	.....	A47L 5/225 15/329
2015/0067981	A1 *	3/2015	Faremo	.....	A47L 5/28 15/354

* cited by examiner

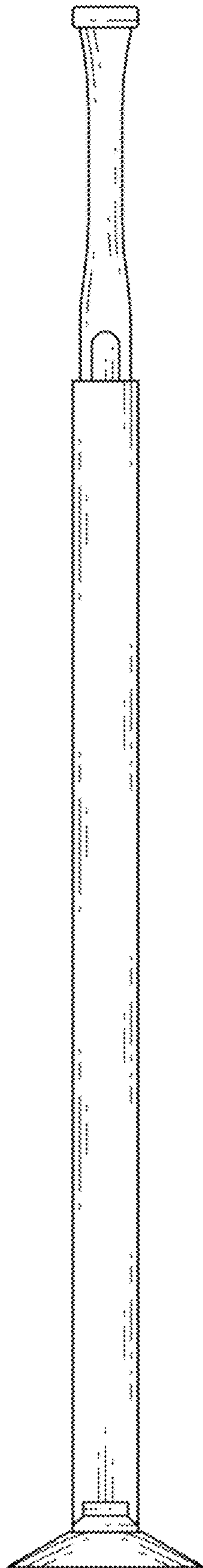
1.1



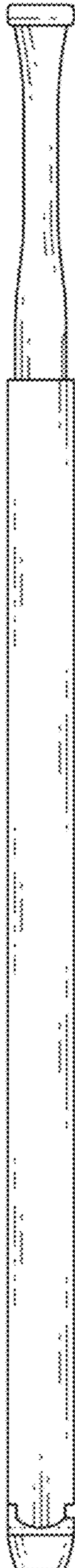
1.2



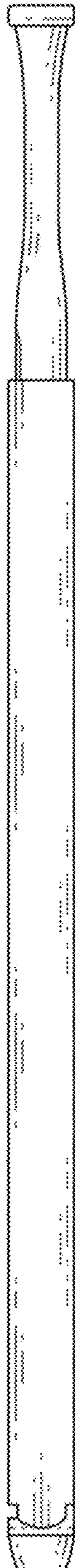
1.3



1.4



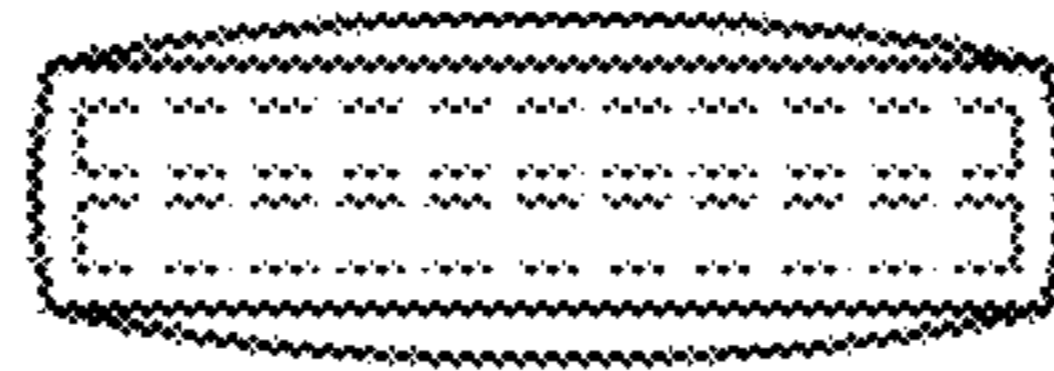
1.5



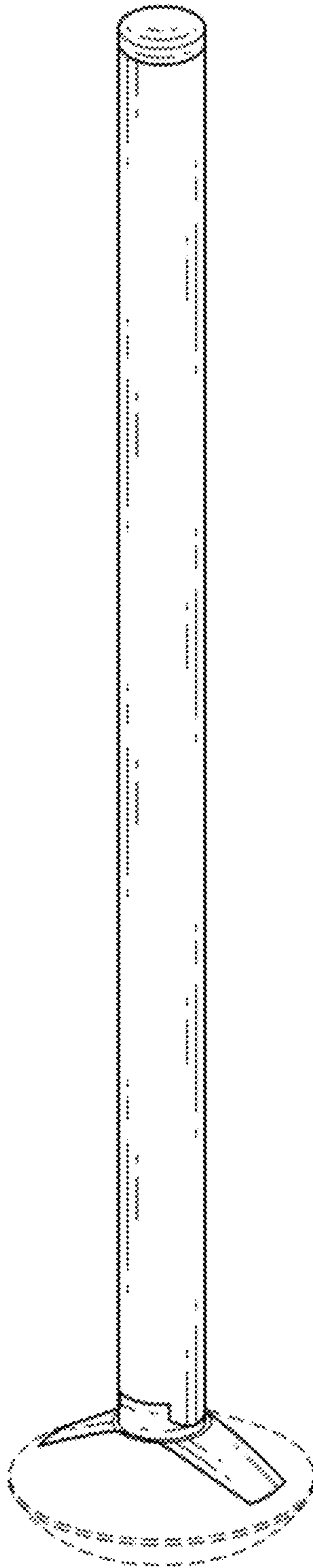
1.6



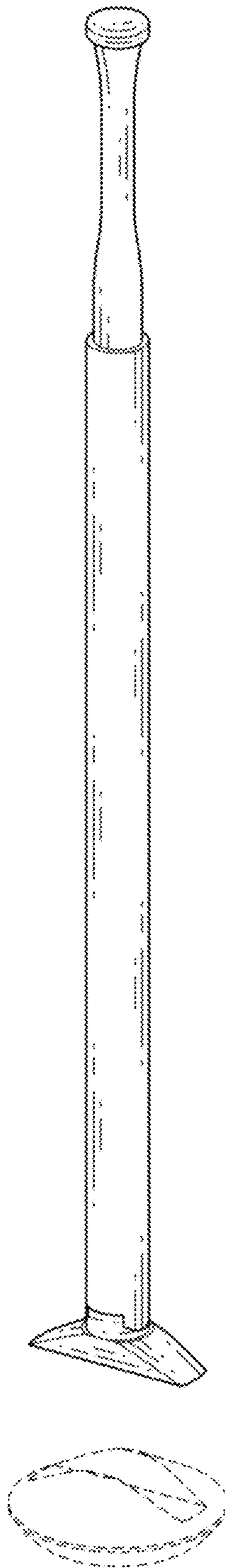
1.7



1.8



1.9



1.10

