



US00D718110S

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

(10) **Patent No.:** **US D718,110 S**
(45) **Date of Patent:** **** Nov. 25, 2014**

(54) **SPRAY NOZZLE MAINTENANCE TOOL**
(71) Applicants: **William C. Hughes**, Woodstock, IL
(US); **Jason A. Pilman**, Crystal Lake, IL
(US)
(72) Inventors: **William C. Hughes**, Woodstock, IL
(US); **Jason A. Pilman**, Crystal Lake, IL
(US)

(73) Assignee: **Innoquest, Inc.**, Woodstock, IL (US)

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

(21) Appl. No.: **29/449,094**

(22) Filed: **Mar. 14, 2013**

(51) **LOC (10) Cl.** **08-05**

(52) **U.S. Cl.**
USPC **D8/105**

(58) **Field of Classification Search**
USPC D8/4, 5, 14, 16, 18, 19, 20–29, 33, 34,
D8/38–43, 51, 52, 55, 57, 75, 81–87, 98,
D8/99, 104–107, 354, 356, 358, 360.1;
7/107, 128, 151–166; 30/151, 359,
30/366; D3/24, 25, 207–208, 210, 228;
D10/46.2, 62; 362/119; 206/38, 232,
206/234; 81/3.09, 437, 440; D7/368, 665,
D7/669; D27/163, 167, 172, 181, 194,
D27/195; 15/22.2, 104.03, 104.001, 104.04,
15/104.05, 104.06, 104.066, 105, 111;
D4/116, 121, 138, 199
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

427,456	A *	5/1890	Bauer	.....	15/104.04
1,682,694	A *	8/1928	Losey	.....	7/146
D103,141	S *	2/1937	White	.....	D8/26
2,318,696	A *	5/1943	Linden	.....	15/104.05
2,696,627	A *	12/1954	Lewis	.....	15/104.04
2,728,096	A *	12/1955	Fahle	.....	15/104.04
D203,769	S *	2/1966	Rando	.....	D8/26

D210,093	S *	2/1968	Bliss	.....	D8/34
3,432,871	A *	3/1969	Caprioli	.....	15/104.04
3,629,883	A *	12/1971	Norman	.....	7/170
D240,497	S *	7/1976	Riba	.....	D8/18
D291,051	S *	7/1987	DiFede	.....	D8/40
D300,504	S *	4/1989	Tsuji	.....	D8/77
D311,482	S *	10/1990	Morton	.....	D8/51
D360,816	S *	8/1995	Brown	.....	D8/106
D382,453	S *	8/1997	Drinkwater	.....	D8/40

(Continued)

Primary Examiner — Susan Bennett Hattan

Assistant Examiner — Janice Hallmark

(74) *Attorney, Agent, or Firm* — Reinhart Boerner Van Deuren P.C.

(57) **CLAIM**

We claim the ornamental design for a spray nozzle maintenance tool, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the spray nozzle maintenance tool;

FIG. 2 is a front view thereof;

FIG. 3 is a side view thereof;

FIG. 4 is a back view thereof;

FIG. 6 is a side view thereof showing the side opposite that shown in FIG. 3;

FIG. 6 is a top view thereof;

FIG. 7 is a bottom view thereof;

FIG. 8 is a perspective view of the spray nozzle maintenance tool showing the toothpick extended;

FIG. 9 is a front view thereof;

FIG. 10 is a side view thereof;

FIG. 11 is a back view thereof;

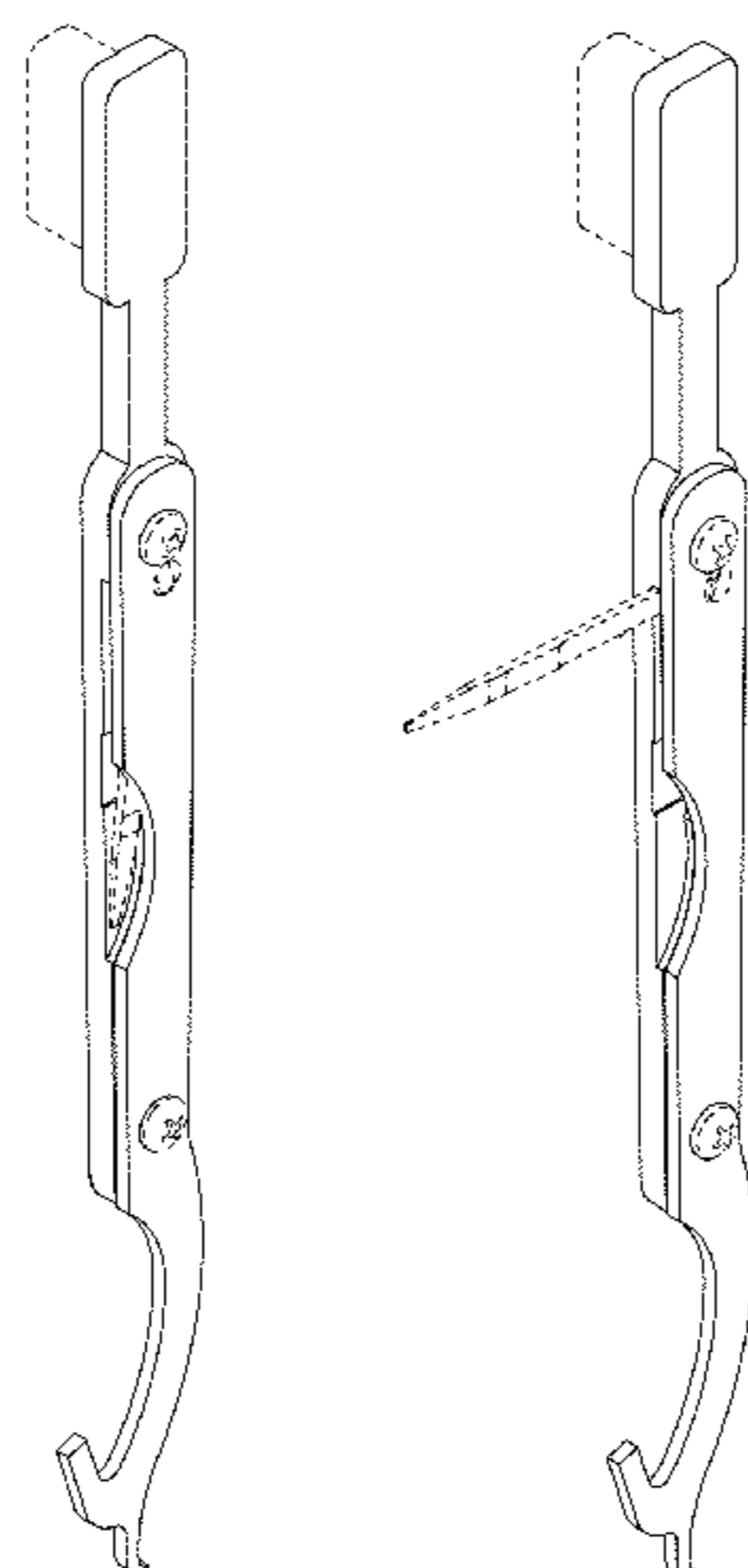
FIG. 12 is a side view thereof showing the side opposite that shown in FIG. 10;

FIG. 13 is a top view thereof; and,

FIG. 14 is a bottom view thereof.

The broken lines showing various features of the spray nozzle maintenance tool are for illustrative purposes only and form no part of the claimed design.

1 Claim, 4 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D413,781 S *	9/1999	Wong	.....	D8/81	7,100,230 B2 *	9/2006	Hillenbrand	.....	7/156
D429,987 S *	8/2000	Hung	.....	D8/105	D566,509 S *	4/2008	Vanderbeek	.....	D8/75
6,131,231 A *	10/2000	Huang	.....	15/105	D567,040 S *	4/2008	Mueller et al.	.....	D8/20
D448,572 S *	10/2001	Gravlee	.....	D4/116	D596,011 S *	7/2009	Almayda	.....	D8/105
D451,357 S *	12/2001	Tseng	.....	D8/105	D639,131 S *	6/2011	Winsor	.....	D8/105
D520,568 S *	5/2006	DeBoer et al.	.....	D8/75	D666,883 S *	9/2012	Howard et al.	.....	D8/19
D521,825 S *	5/2006	Johnson	.....	D8/26	D687,690 S *	8/2013	Chen	.....	D8/26
					2006/0207042 A1 *	9/2006	Di Paolo	.....	15/111
					2009/0235474 A1 *	9/2009	Seigel	.....	15/111

* cited by examiner

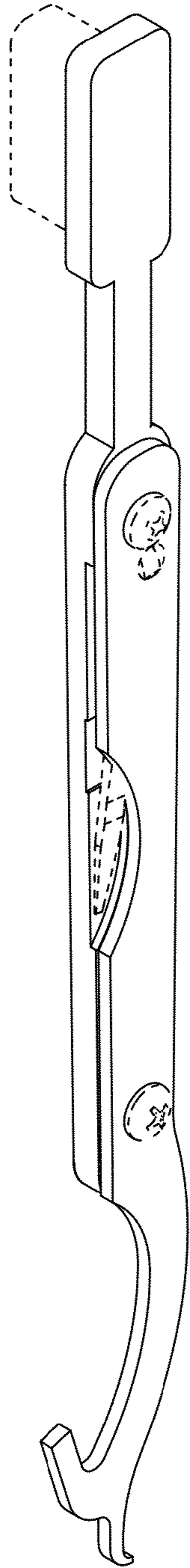


FIG 1

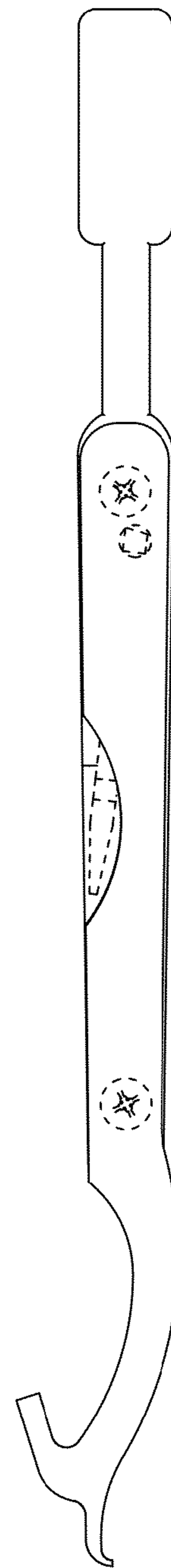


FIG 2

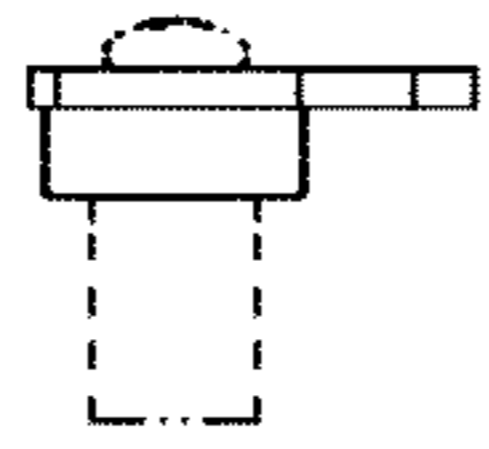


FIG 6

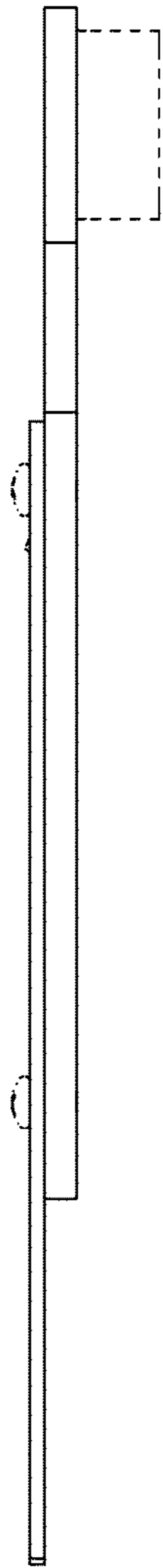


FIG 3

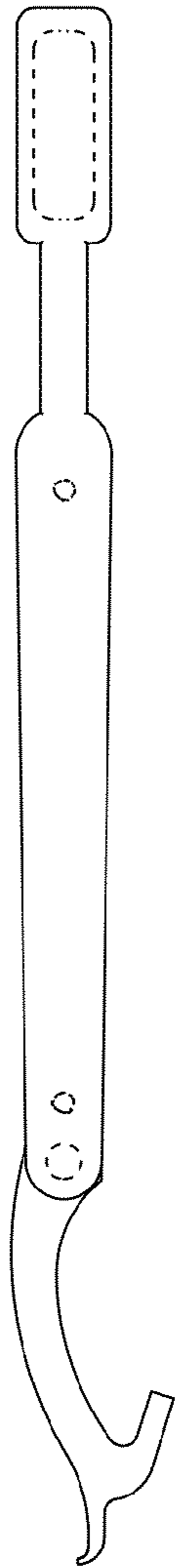


FIG 4

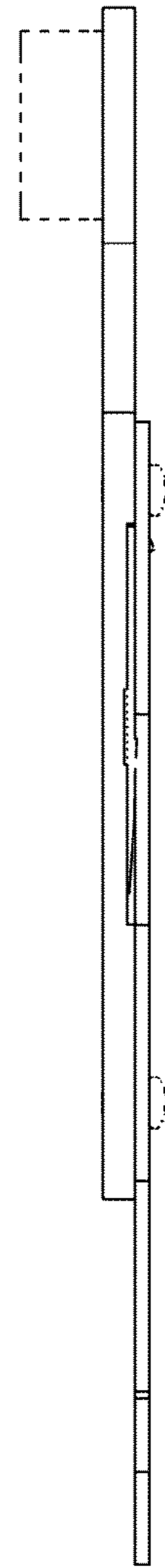


FIG 5

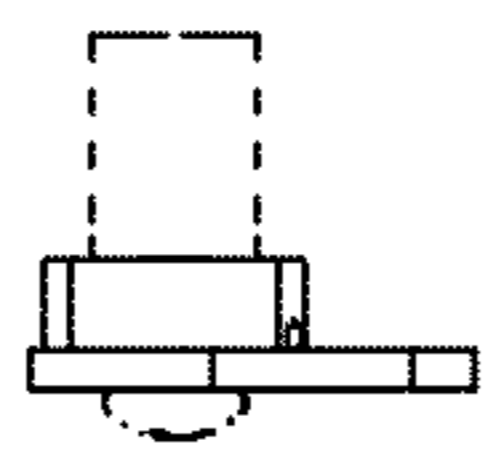


FIG 7

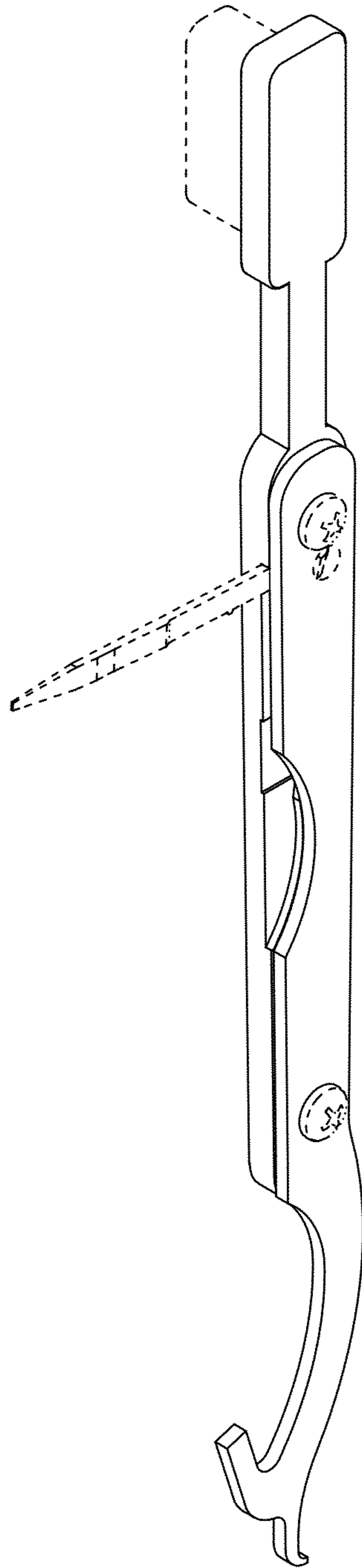


FIG 8

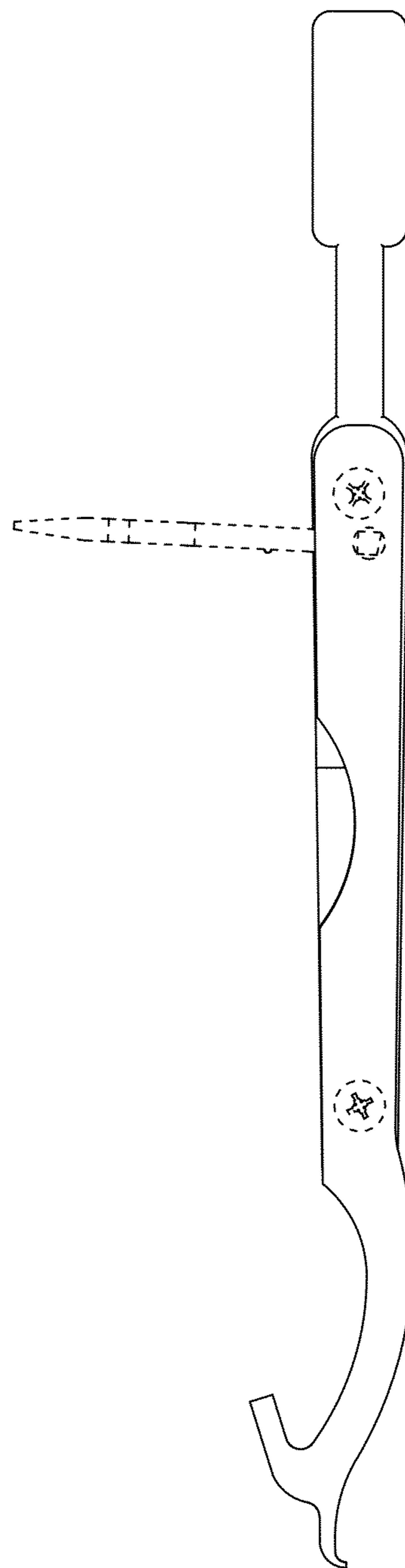


FIG 9

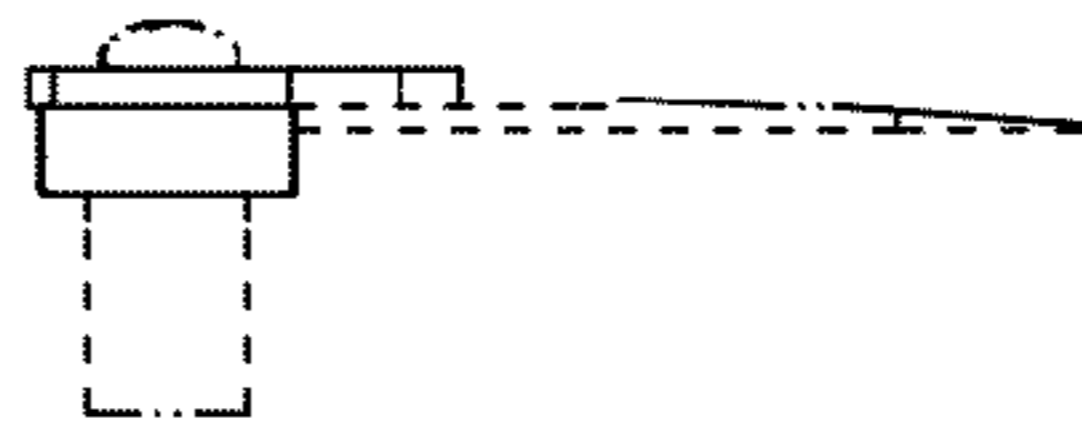


FIG 13

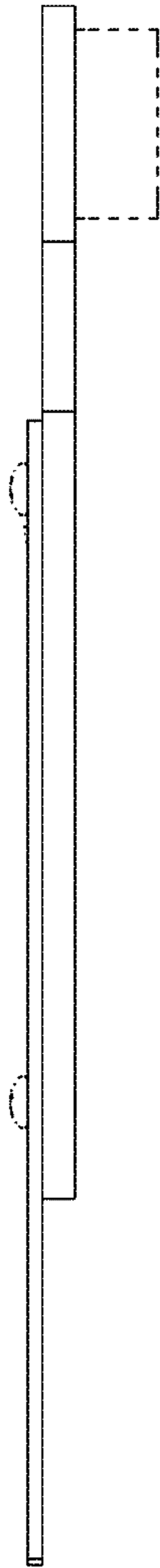


FIG 10

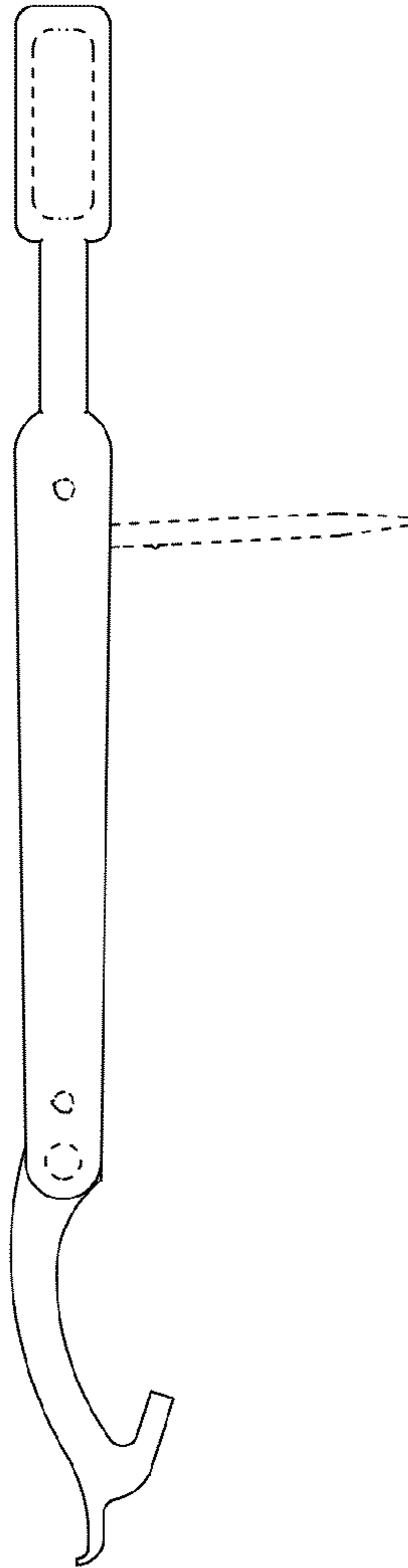


FIG 11

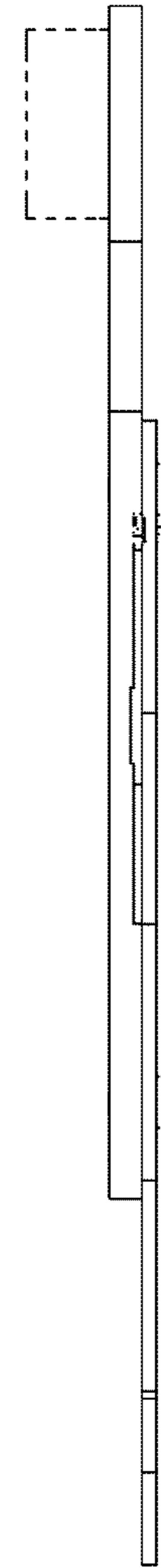


FIG 12

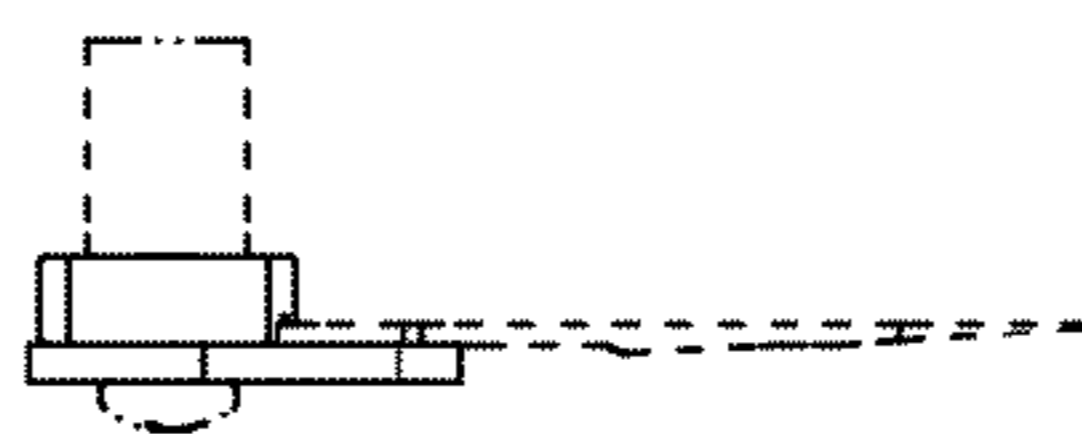


FIG 14