



US00D632306S

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

(10) **Patent No.:** **US D632,306 S**

(45) **Date of Patent:** **\*\* Feb. 8, 2011**

(54) **HAND OPERATED AIR PUMP**

7,789,638 B2 \* 9/2010 Chuang ..... 417/429

(76) Inventor: **Wei-Chi Wang**, 17-1 Fl., No. 457,  
Cheng-Kung Rd., Tainan City (TW)

\* cited by examiner

*Primary Examiner*—Ralf Seifert  
(74) *Attorney, Agent, or Firm*—Rabin & Berdo, P.C.

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

(21) Appl. No.: **29/366,099**

(57) **CLAIM**

(22) Filed: **Jul. 20, 2010**

The ornamental design for a hand operated air pump, as shown and described.

(51) **LOC (9) Cl.** ..... **15-02**

(52) **U.S. Cl.** ..... **D15/7**

(58) **Field of Classification Search** ..... D15/7-9;  
D23/231, 232, 225, 213; 417/410.1, 359,  
417/415-416, 234, 321, 265, 405, 429  
See application file for complete search history.

**DESCRIPTION**

FIG. 1 is a perspective view of a hand operated air pump, 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 rear perspective view thereof; and,

FIG. 8 is a bottom perspective view thereof.

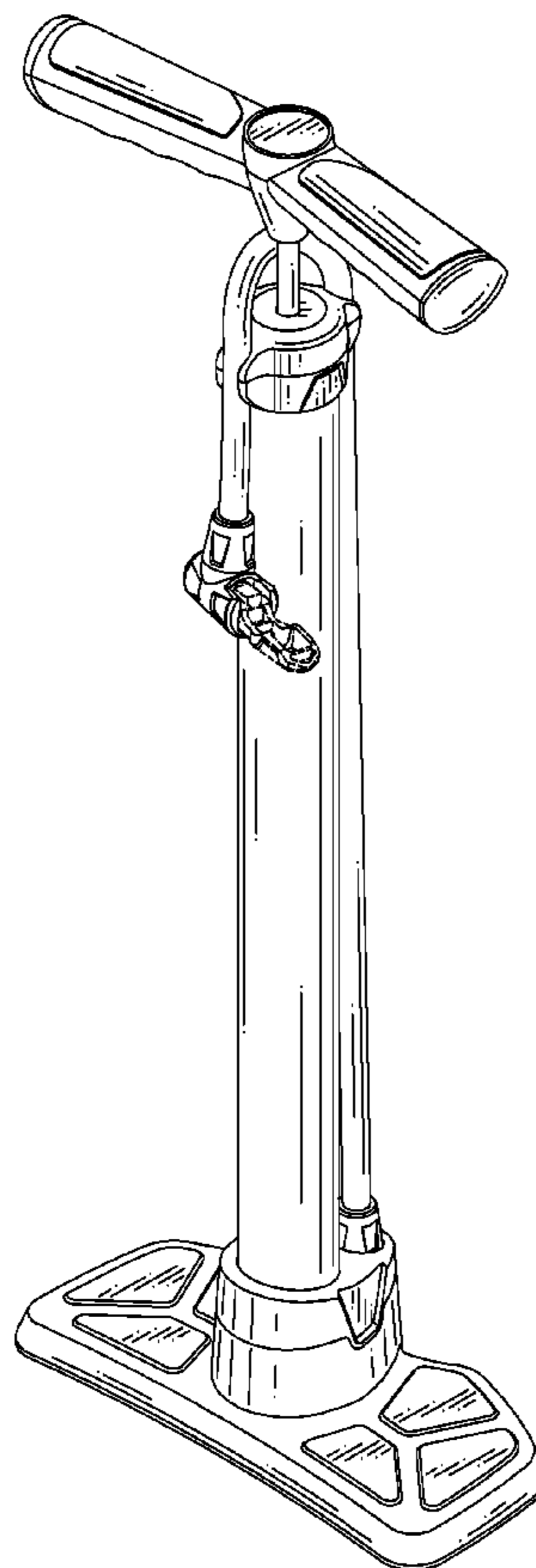
The broken lines on the drawings are shown for illustrative purposes only and form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,786,730	A *	1/1974	Linderholm	.....	92/169.1
D323,876	S *	2/1992	Furusawa	.....	D23/231
D343,397	S *	1/1994	Wang	.....	D15/7
D351,896	S *	10/1994	Sundheim et al.	.....	D23/231
D452,726	S *	1/2002	Tsai	.....	D23/231
6,814,552	B2 *	11/2004	Wu	.....	417/440
7,040,355	B2 *	5/2006	Wu	.....	141/38
7,331,768	B2 *	2/2008	Wu	.....	417/63
D596,202	S *	7/2009	van der Blom	.....	D15/7

**1 Claim, 8 Drawing Sheets**



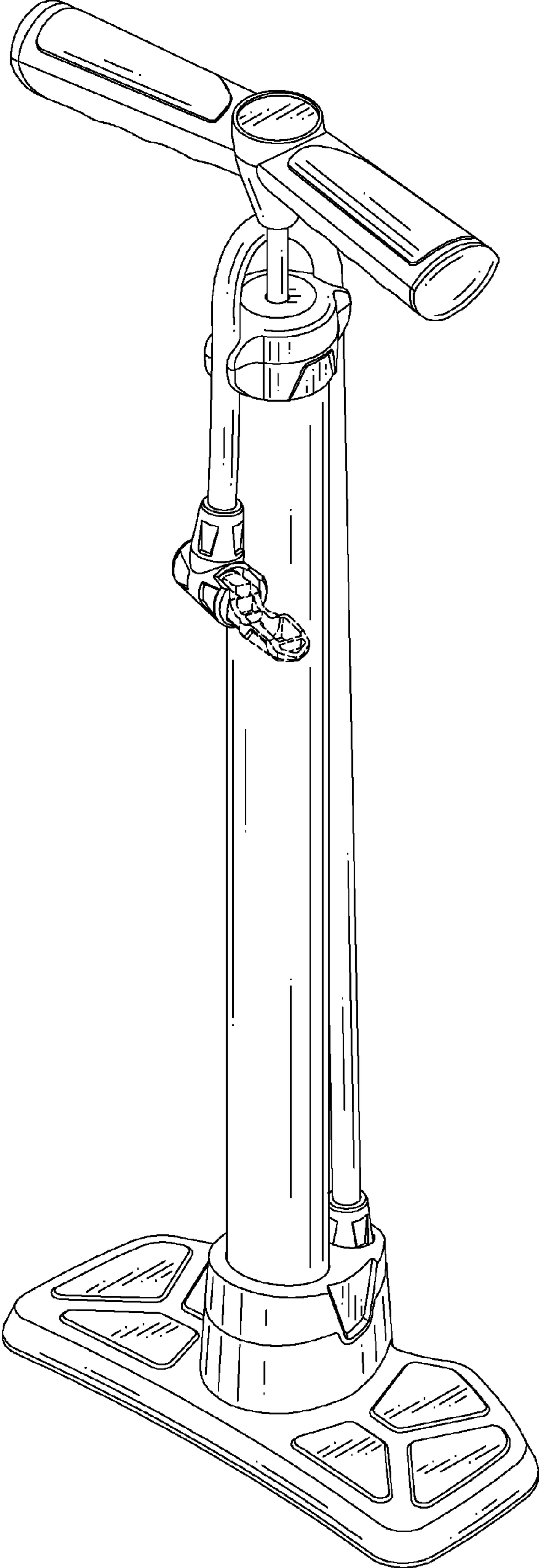


FIG.1

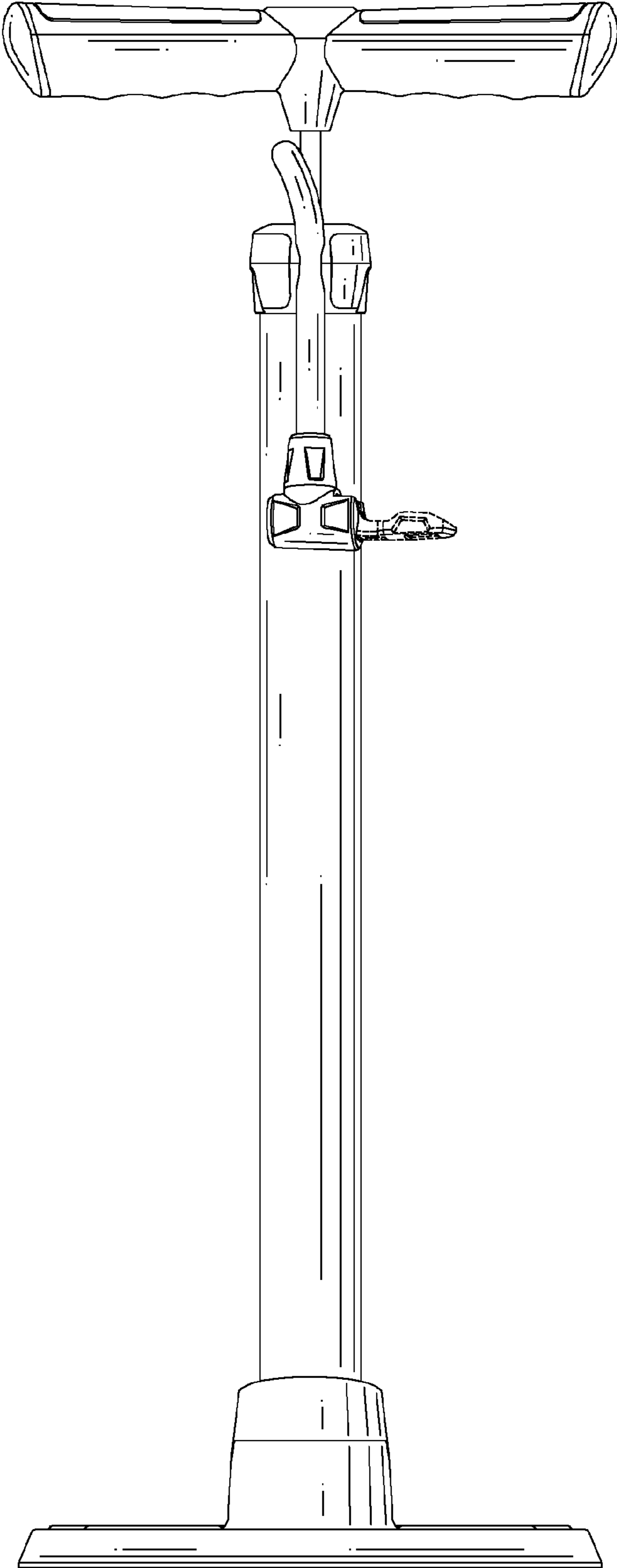


FIG.2

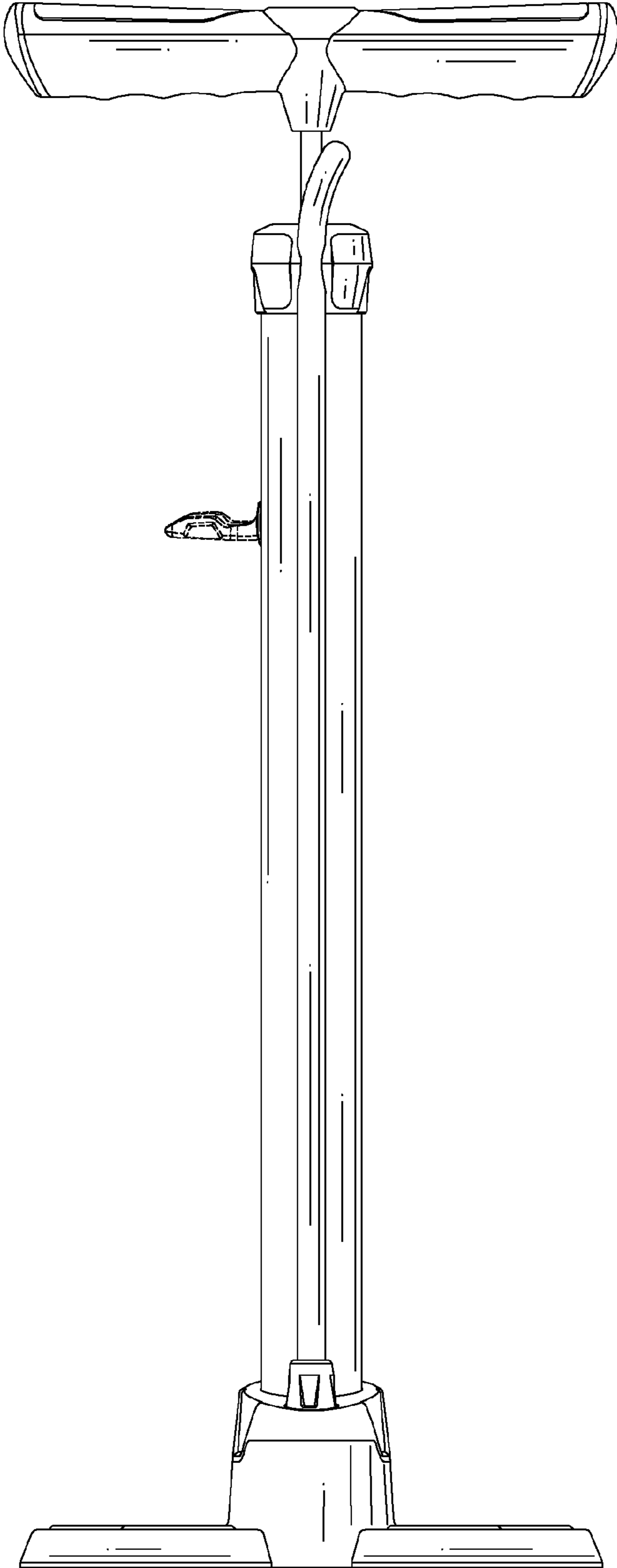


FIG.3

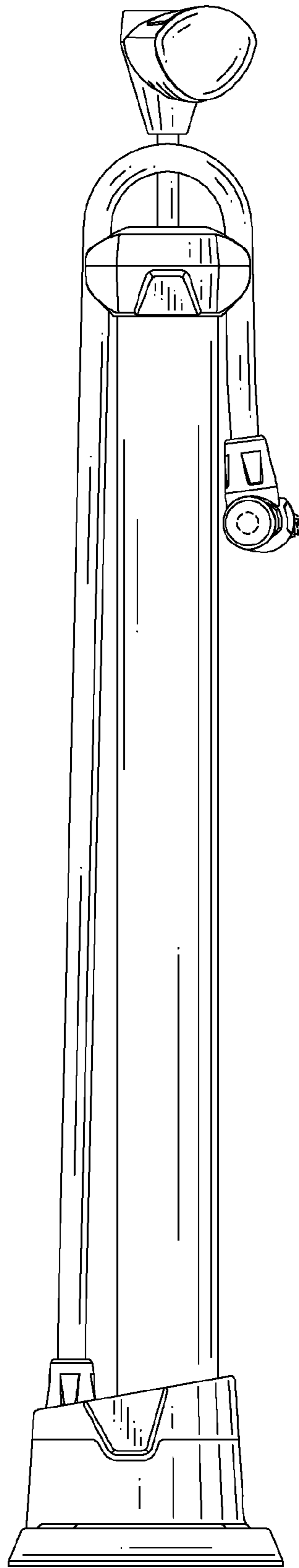


FIG.4

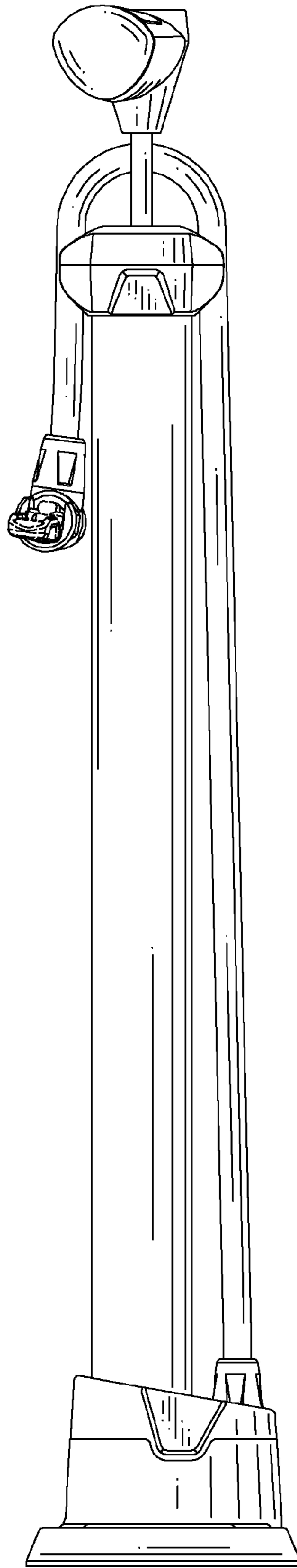


FIG.5

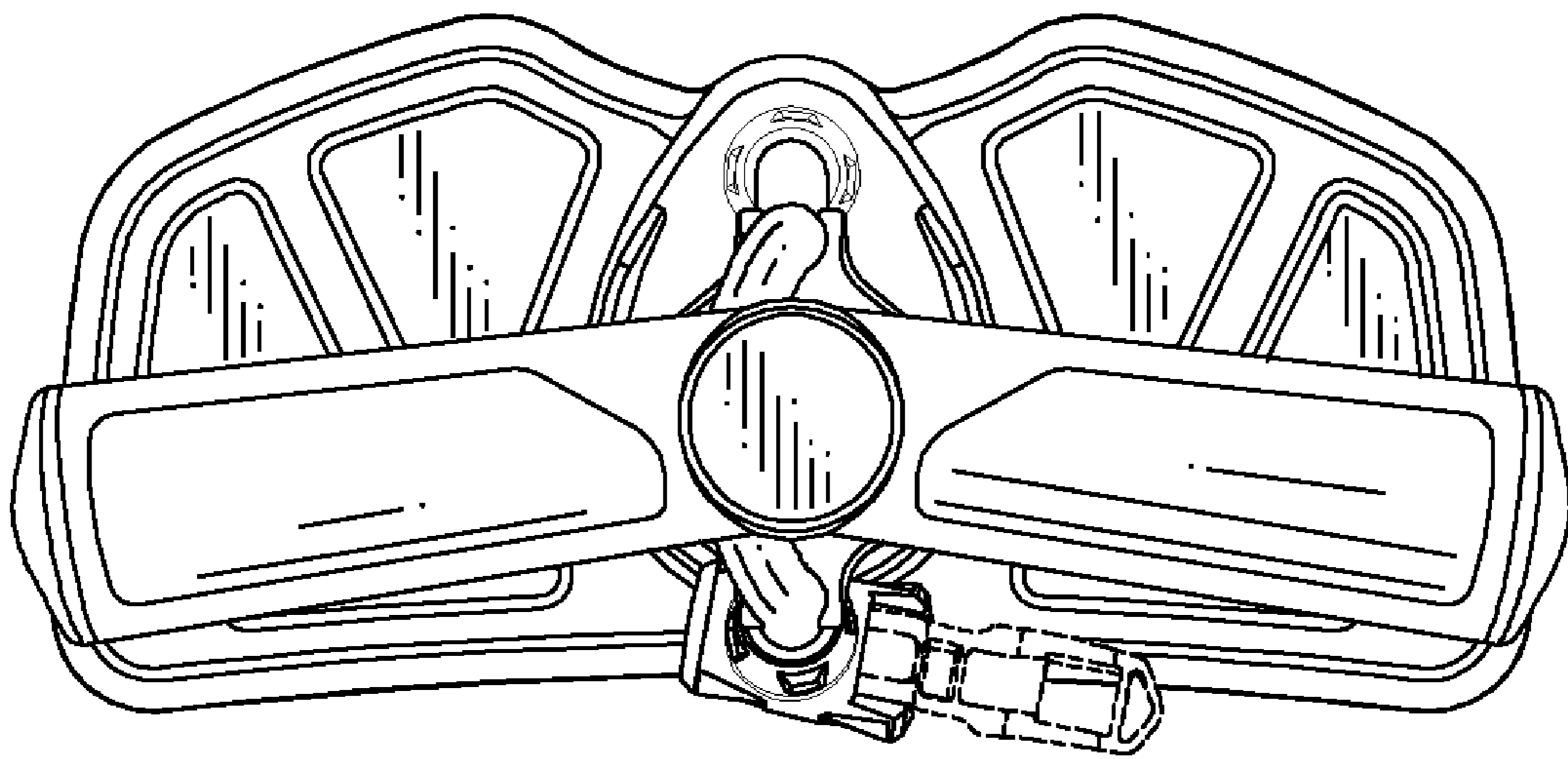


FIG.6

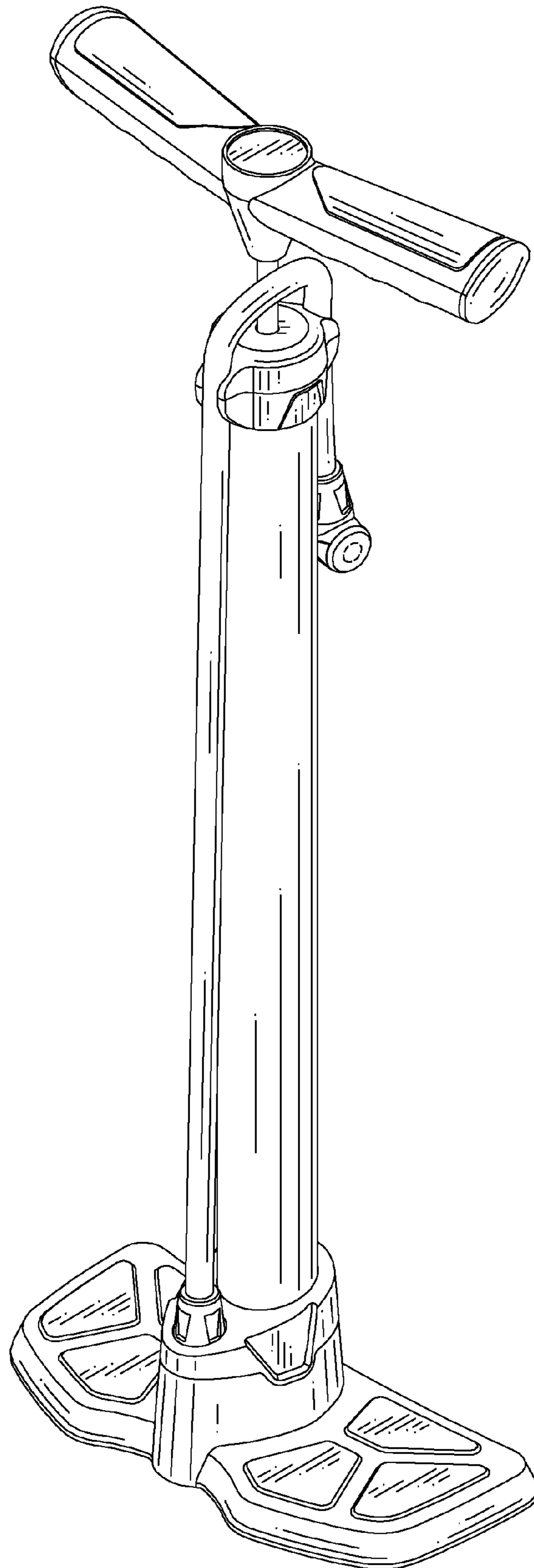


FIG.7



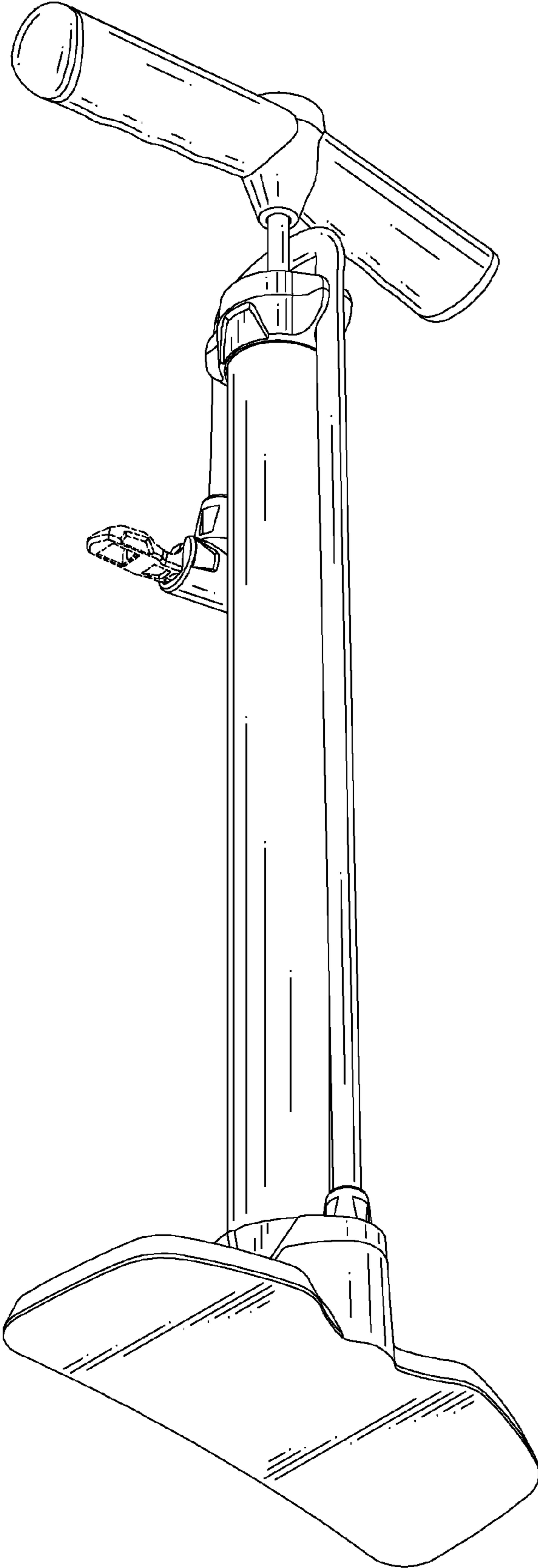


FIG.8