



US00D576228S

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

(10) **Patent No.:** **US D576,228 S**
(45) **Date of Patent:** **** Sep. 2, 2008**

(54) **STEPPER WITH WAVE TYPE VIBRATOR**

(76) Inventor: **Sang-Won Hahn**, Rm. 301, Euntap
Villa, Nonhyeon-dong, Gangnam-gu,
Seoul (KR) 135-010

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

(21) Appl. No.: **29/278,165**

(22) Filed: **Mar. 21, 2007**

(51) **LOC (8) Cl.** **21-02**

(52) **U.S. Cl.** **D21/668; D21/690; D21/662**

(58) **Field of Classification Search** **D21/662,**
D21/671, 670, 686, 688, 689; 601/23, 49,
601/70

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,921,899	A *	7/1999	Rose	.....	482/112
D460,506	S *	7/2002	Tamminga et al.	.....	D21/686
D500,100	S *	12/2004	van der Meer	.....	D21/662
D518,533	S *	4/2006	van der Meer	.....	D21/662
D522,074	S *	5/2006	Dummel	.....	D21/662
D538,358	S *	3/2007	Glier	.....	D21/662
D548,291	S *	8/2007	Chiang	.....	D21/662

7,278,976	B1 *	10/2007	Chen	.....	601/30
D559,924	S *	1/2008	Wu	.....	D21/661
D561,273	S *	2/2008	Wu	.....	D21/662
2005/0131319	A1 *	6/2005	der Meer	.....	601/49
2005/0165332	A1 *	7/2005	Talish et al.	.....	601/23

* cited by examiner

Primary Examiner—Philip S Hyder

(74) *Attorney, Agent, or Firm*—Booth Udall, PLC

(57) **CLAIM**

The ornamental design for a stepper with wave type vibrator, as shown.

DESCRIPTION

FIG. 1 is a perspective view of a stepper with wave type vibrator showing this design invention;

FIG. 2 is a front view of a stepper with wave type vibrator;

FIG. 3 is a rear view of a stepper with wave type vibrator;

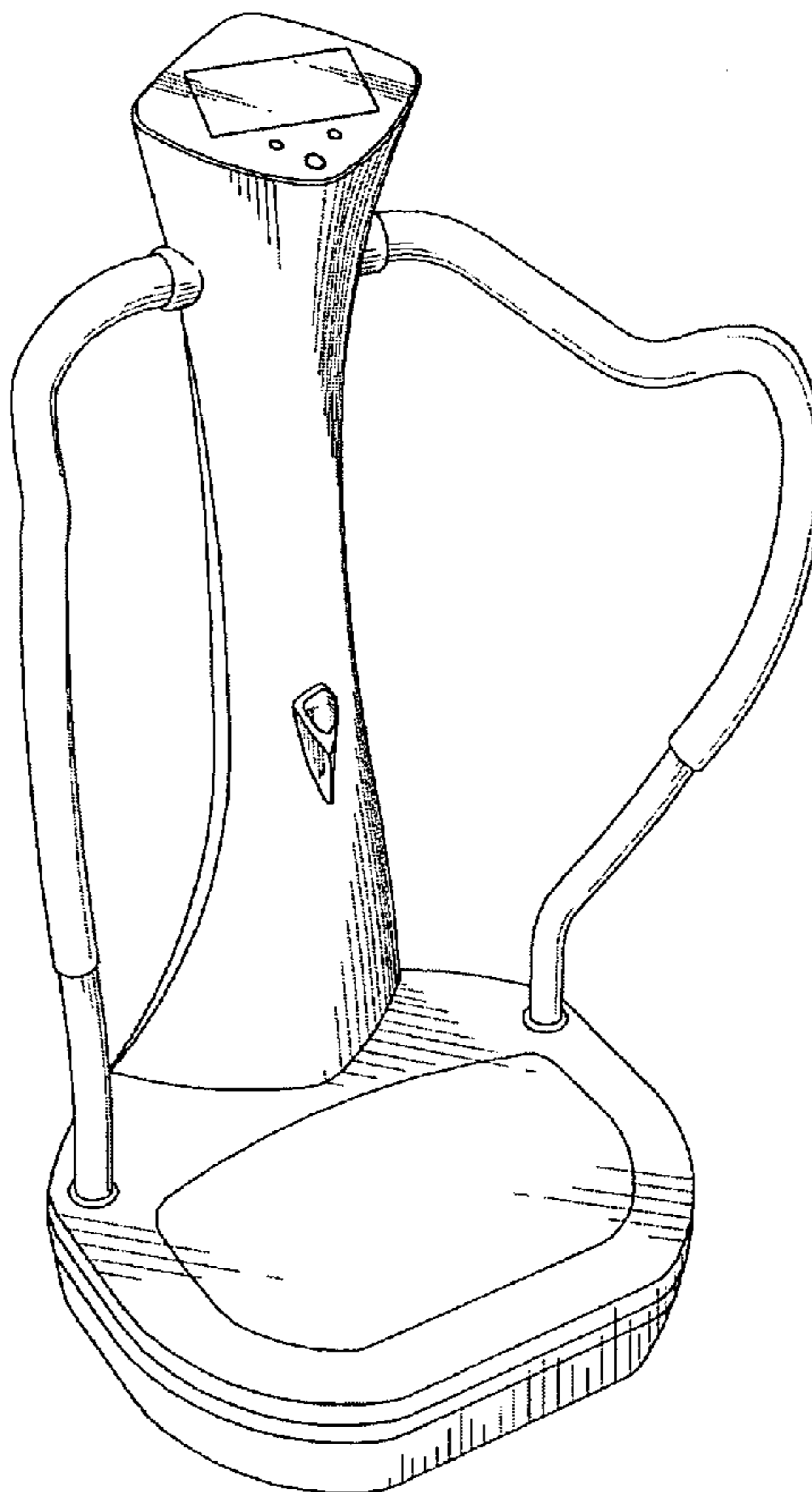
FIG. 4 is a left view of a stepper with wave type vibrator;

FIG. 5 is a right view of a stepper with wave type vibrator;

FIG. 6 is a top view of a stepper with wave type vibrator; and,

FIG. 7 is a bottom view of a stepper with wave type vibrator.

1 Claim, 6 Drawing Sheets



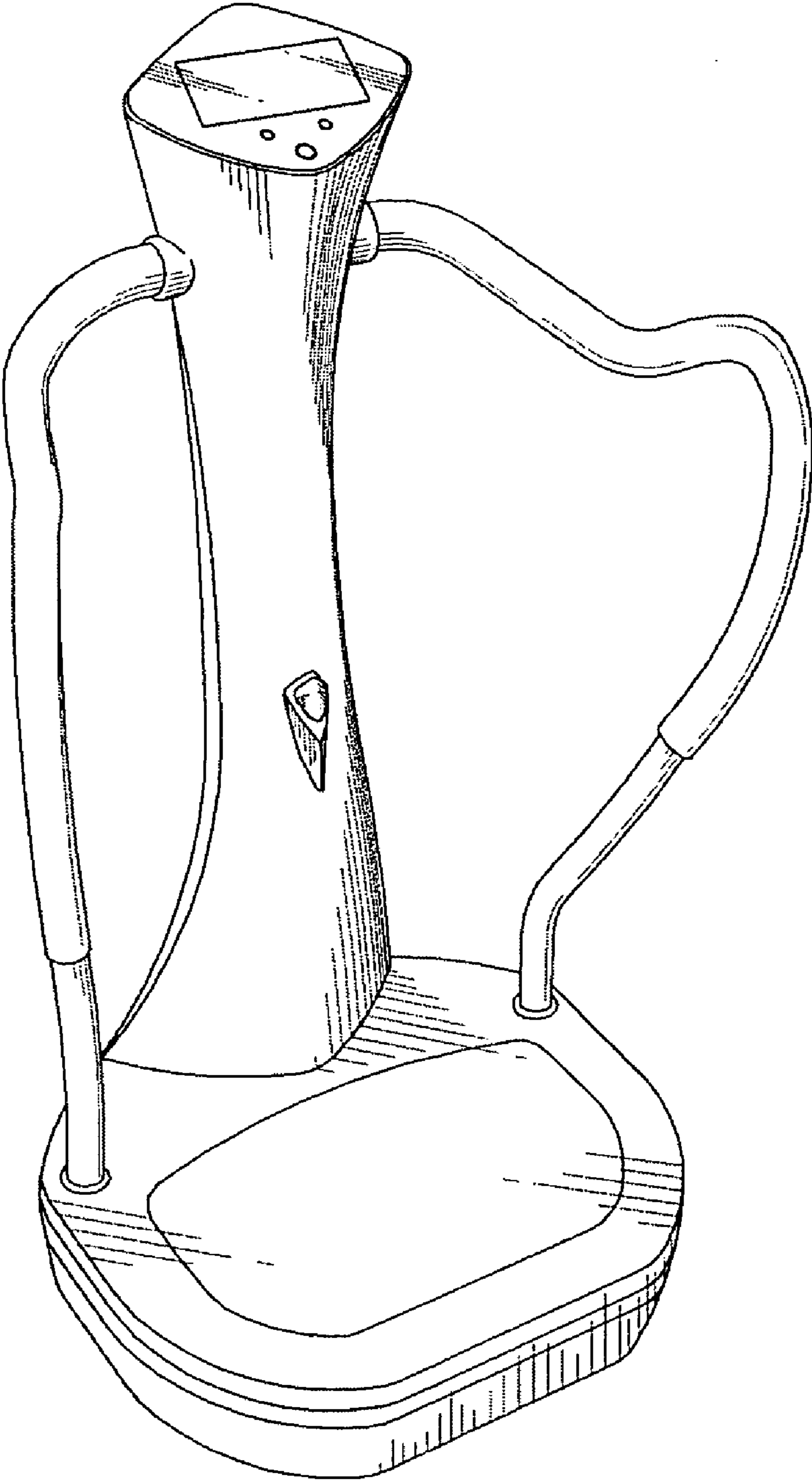


FIG. 1

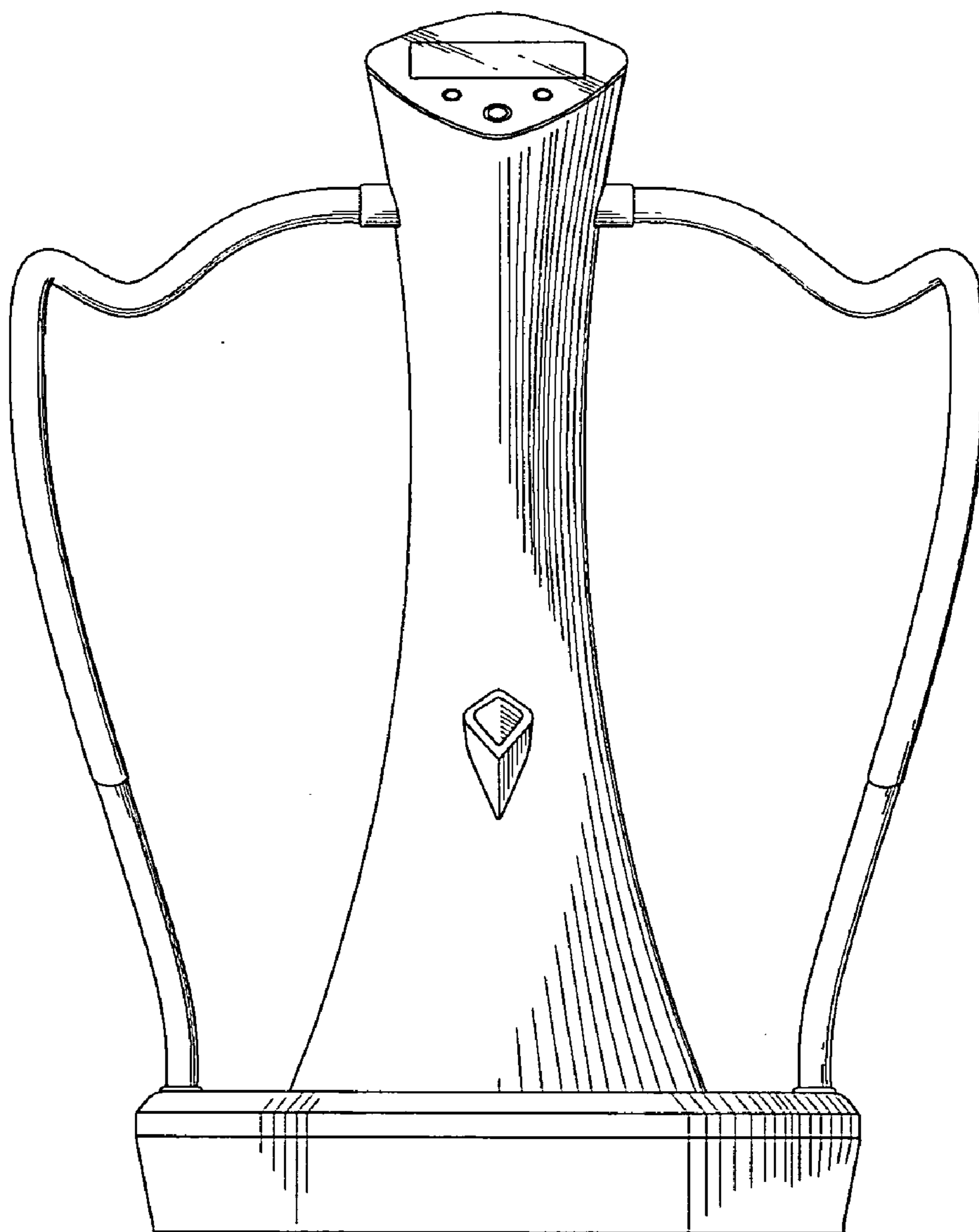


FIG. 2

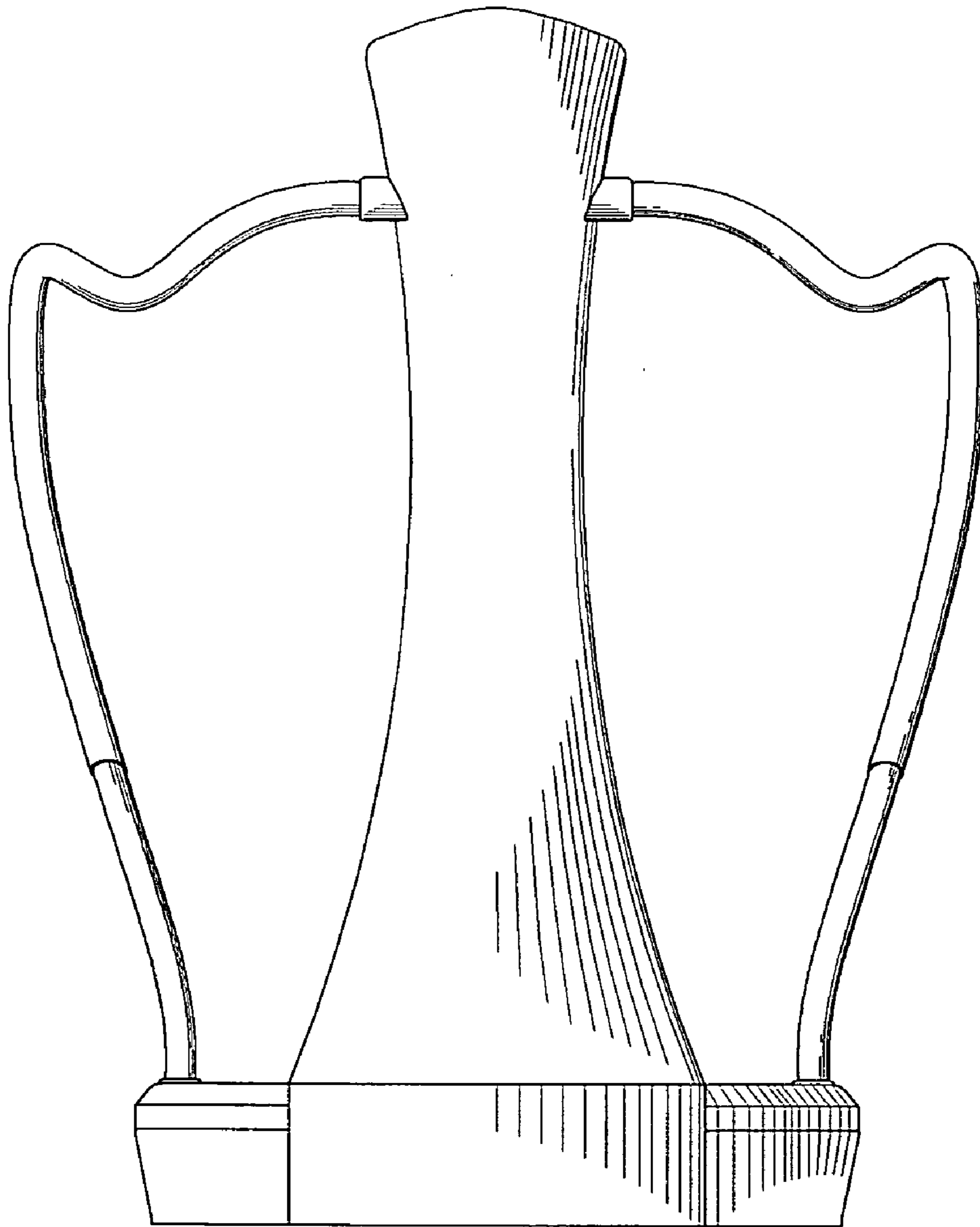


FIG. 3

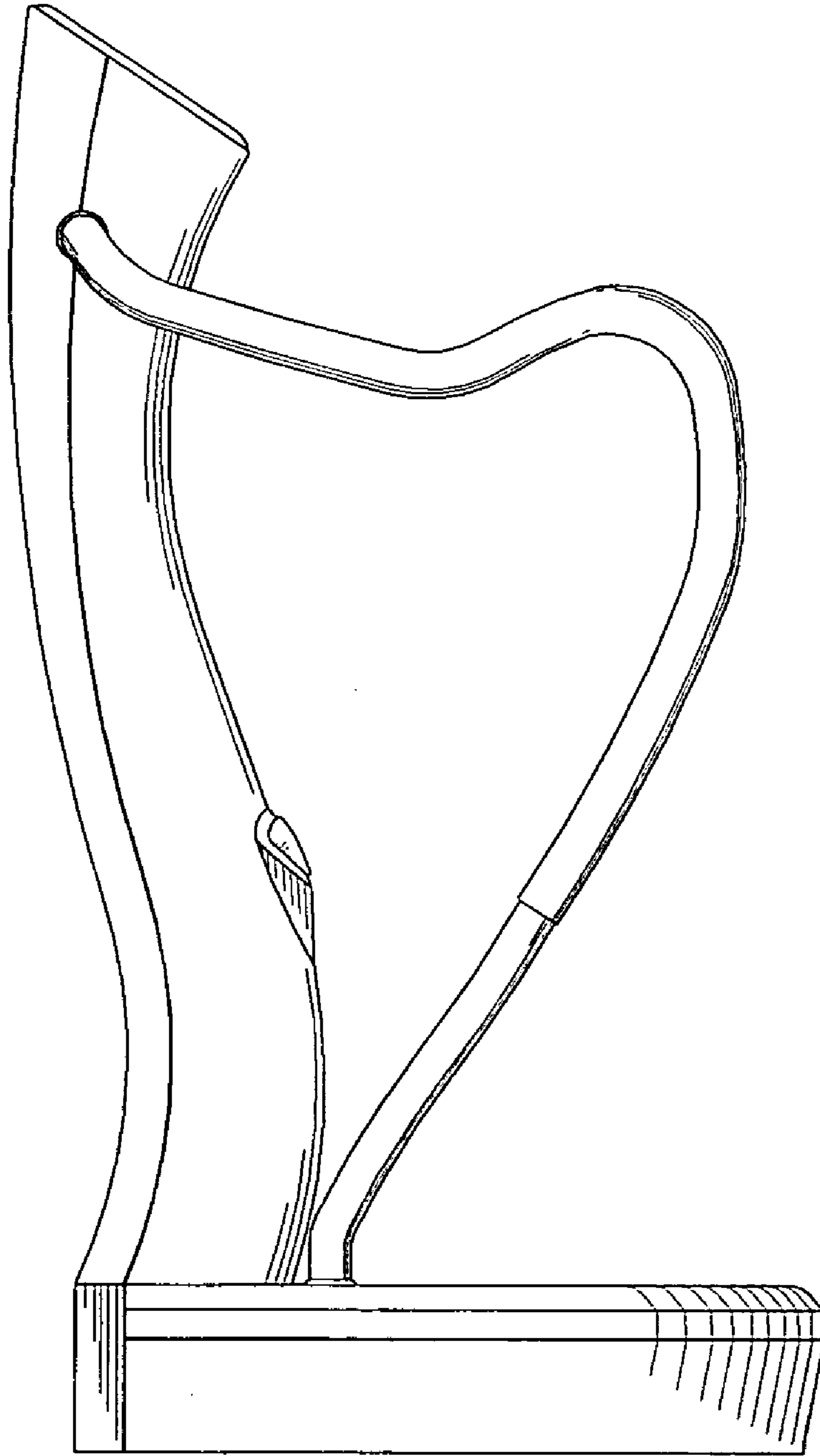


FIG. 4

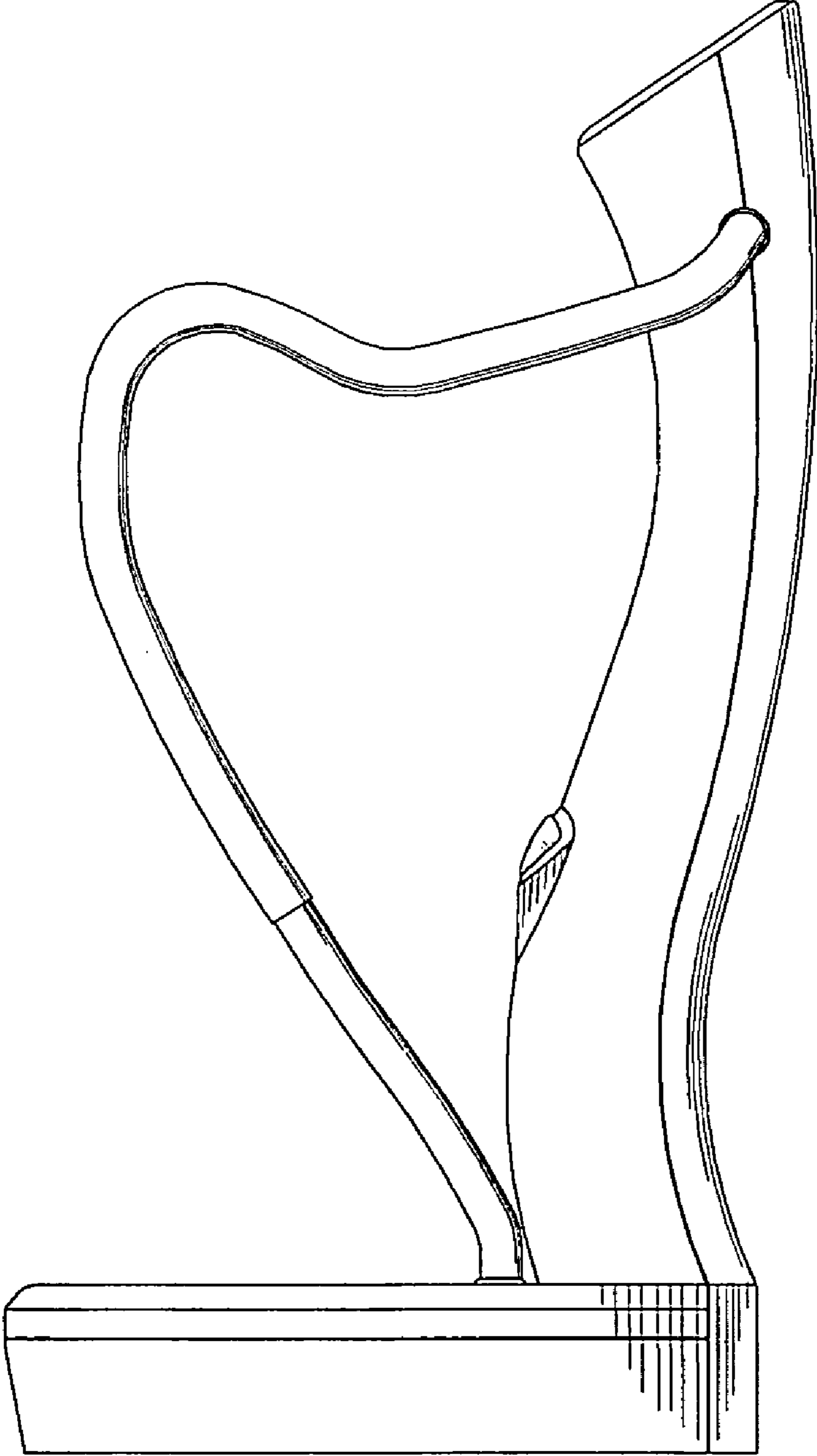


FIG. 5

FIG. 6

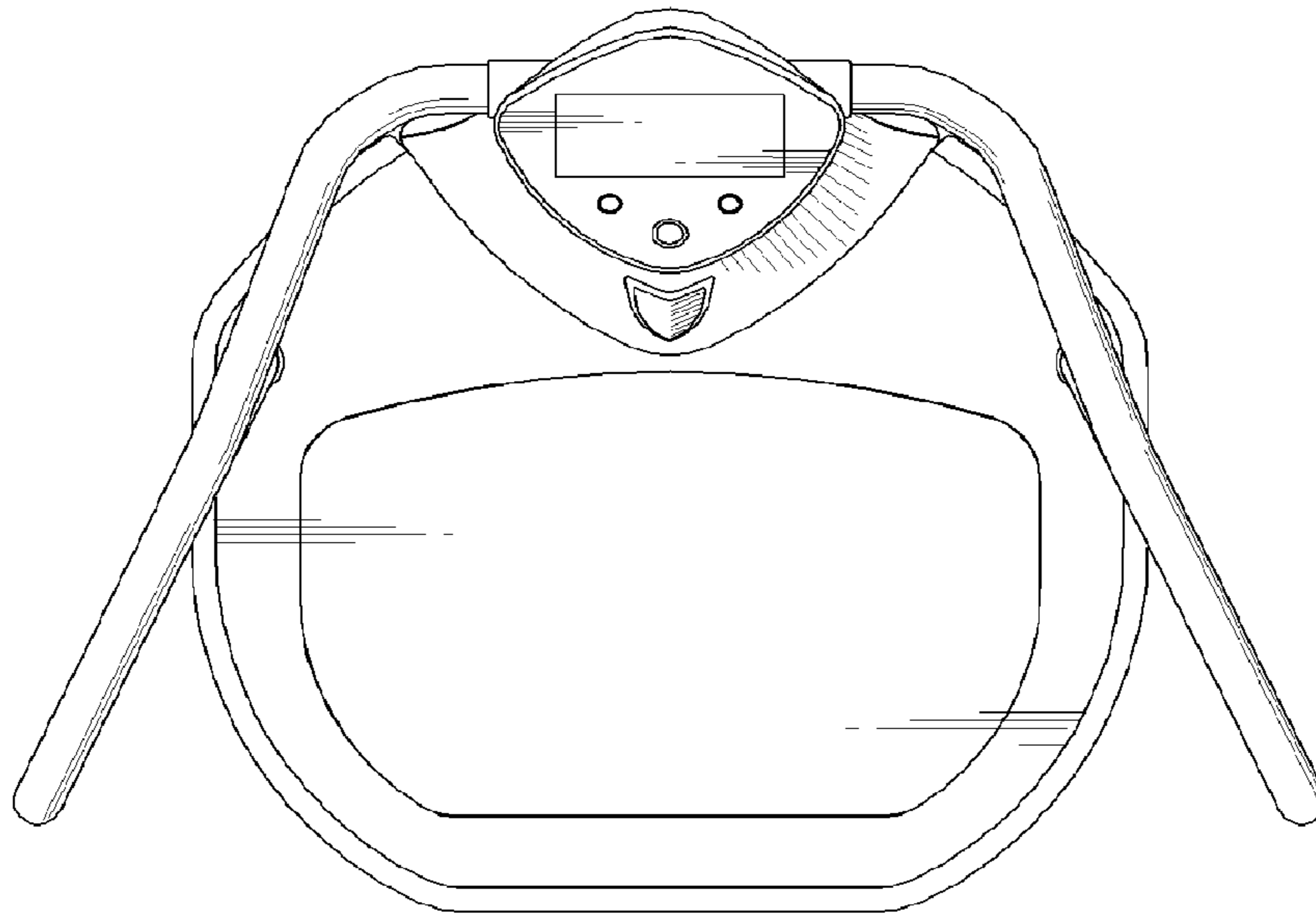


FIG. 7

