



US00D429392S

# United States Patent [19]

Maruyama et al.

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[45] Date of Patent: **\*\* Aug. 8, 2000**

[54] **VACUUM CLEANER**

[75] Inventors: **Kaname Maruyama; Takashi Honda,**  
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[73] Assignee: **Twinbird Corporation,** Japan

[\*\*] Term: **14 Years**

[21] Appl. No.: **29/111,107**

[22] Filed: **Sep. 20, 1999**

[30] **Foreign Application Priority Data**

Jun. 28, 1999 [JP] Japan ..... 11-17115

[51] **LOC (7) Cl.** ..... **15-05**

[52] **U.S. Cl.** ..... **D32/22**

[58] **Field of Search** ..... D32/17-18, 21-22,  
D32/25, 30-34, 38, 51; 15/320-321, 323-334,  
344, 347, 349, 350-353, 410, 412

[56] **References Cited**

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*Attorney, Agent, or Firm*—Quarles & Brady LLP

[57] **CLAIM**

The ornamental design for a vacuum cleaner, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view from above of a vacuum cleaner, showing our new design;  
FIG. 2 is a front elevation view thereof;  
FIG. 3 is a left-side elevation view thereof;  
FIG. 4 is a right-side elevation view thereof;  
FIG. 5 is a rear elevation view thereof;  
FIG. 6 is a top plan view thereof; and,  
FIG. 7 is a bottom plan view thereof.

**1 Claim, 4 Drawing Sheets**

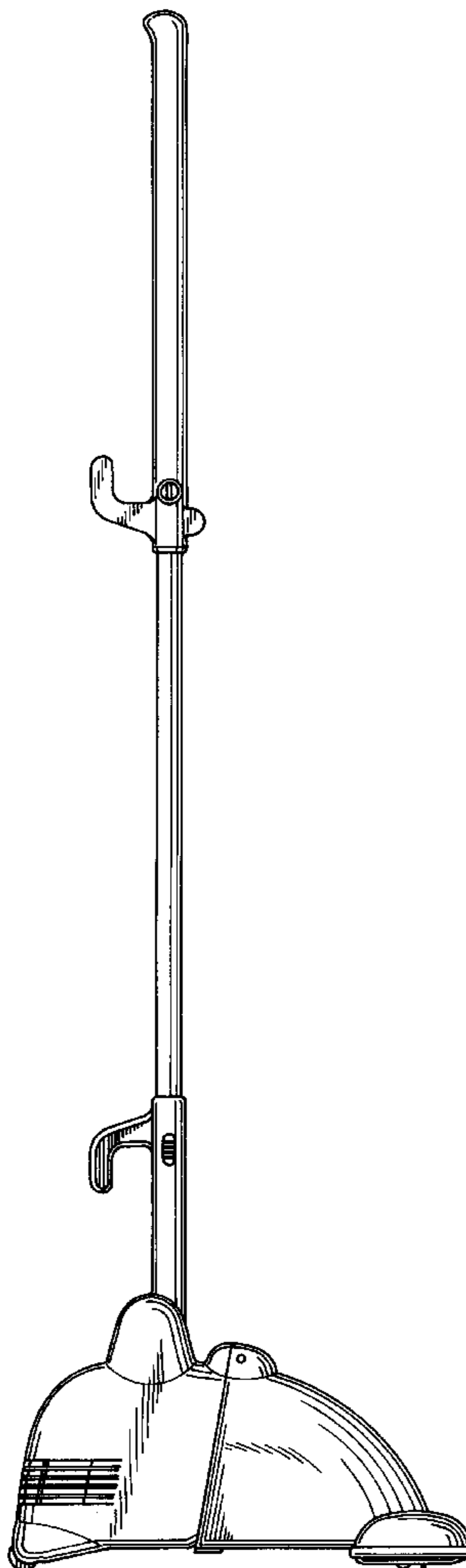
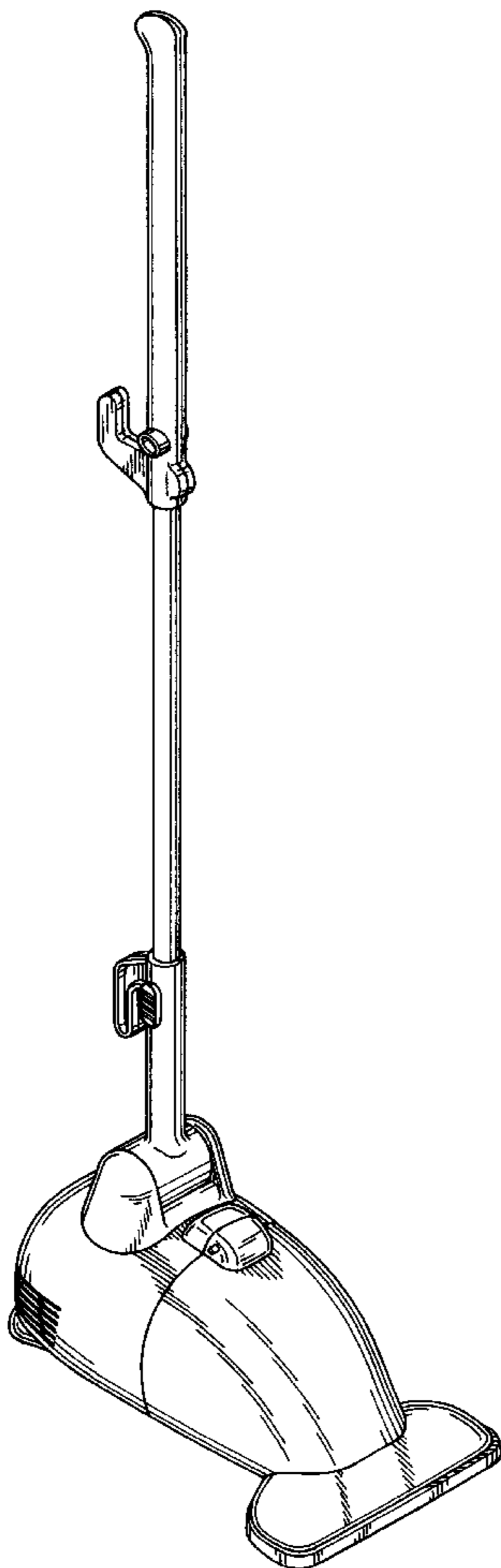


FIG. 1

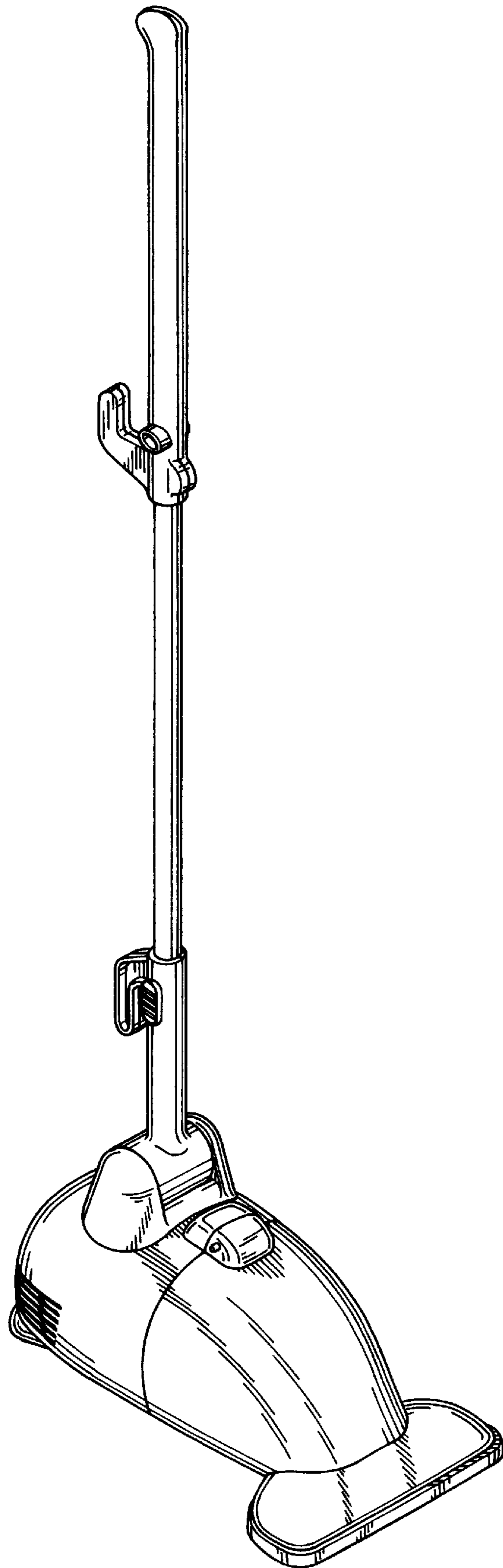


FIG. 2

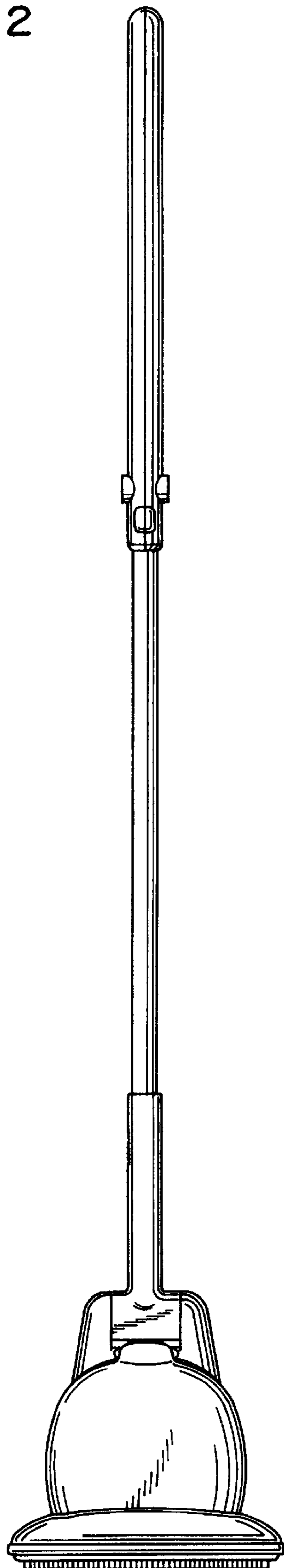


FIG. 3

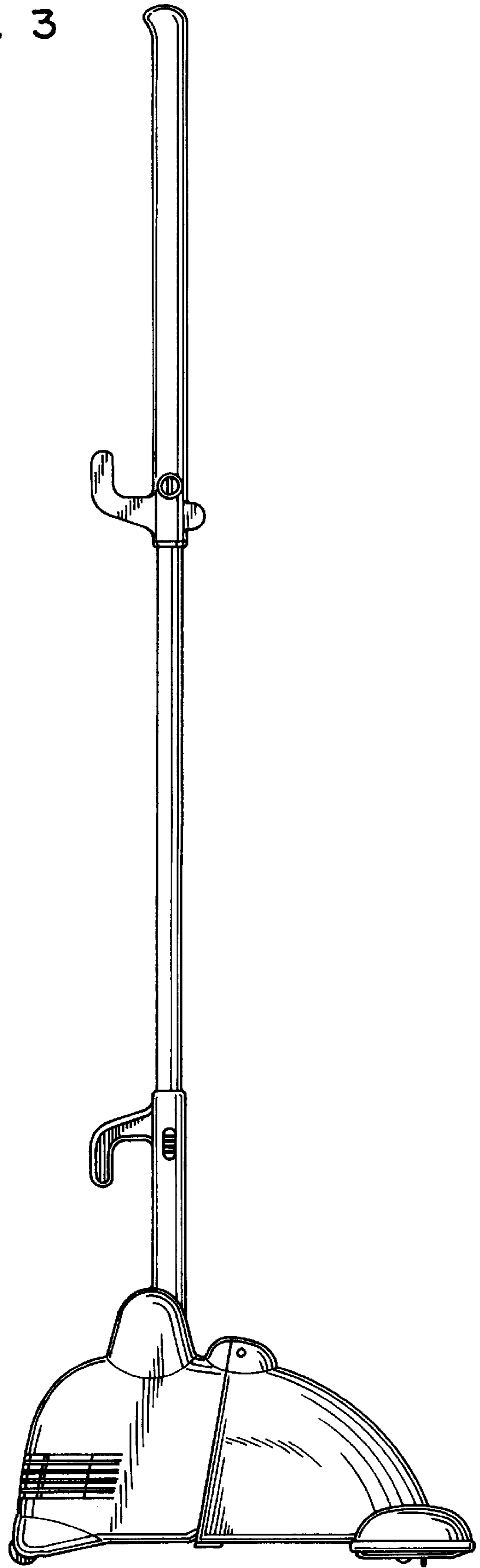


FIG. 4

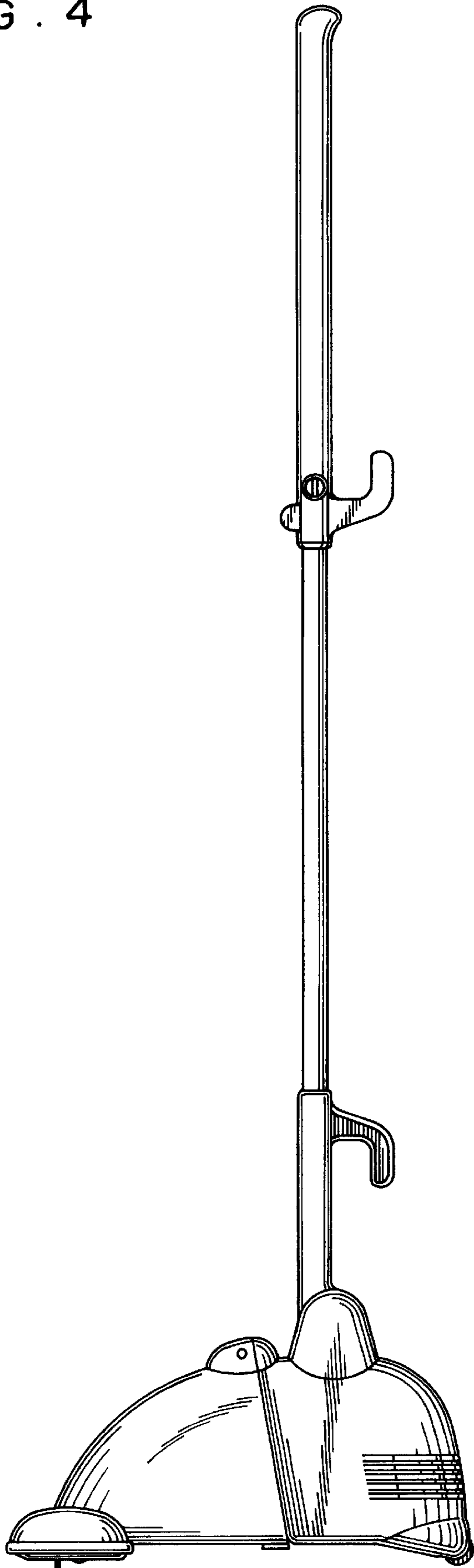


FIG. 5

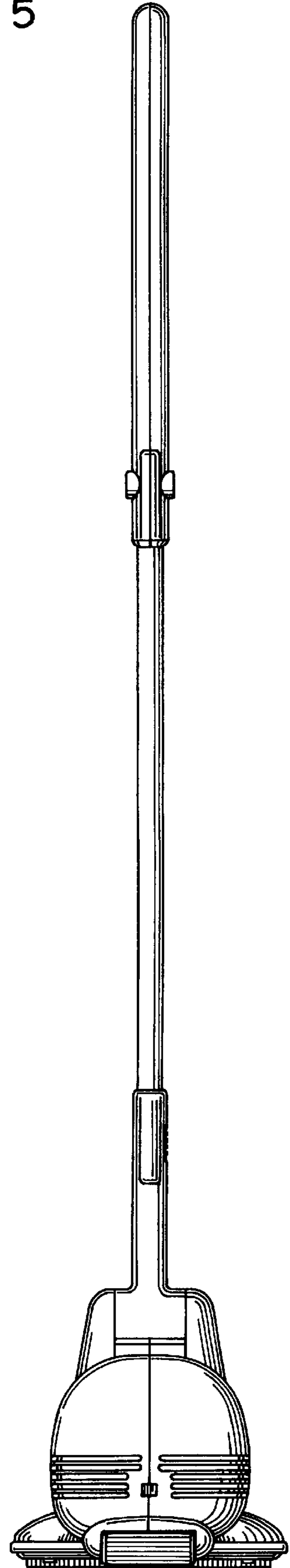


FIG. 6

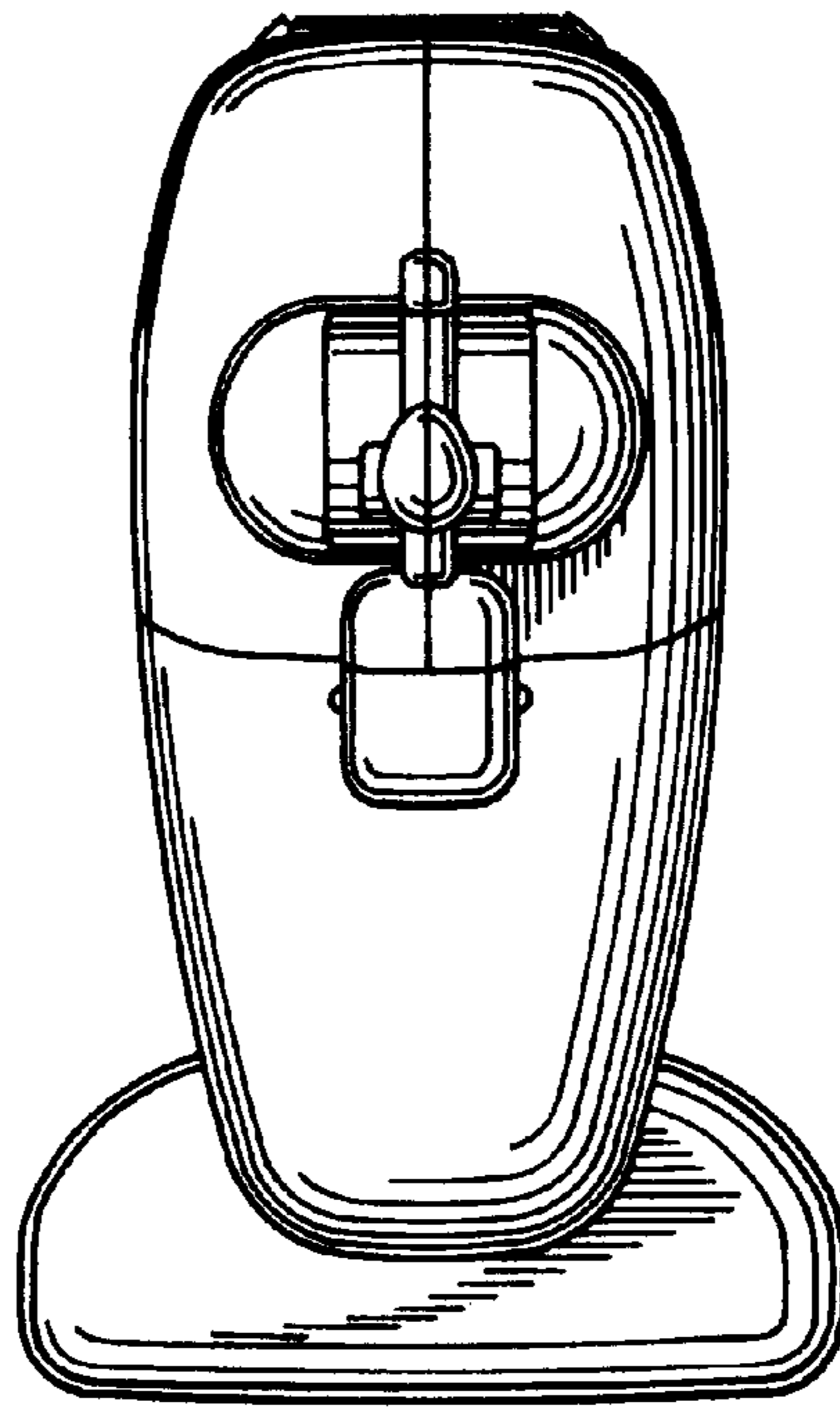


FIG. 7

