



US00D415324S

# United States Patent [19]

Wang et al.

[11] Patent Number: Des. 415,324

[45] Date of Patent: \*\* Oct. 12, 1999

[54] VACUUM CLEANER

[75] Inventors: Chieh-Chun Wang; Chia-Ming Lin,  
both of Taichung, Taiwan

[73] Assignee: Kinergy Industrial Co., Ltd.,  
Taichung, Taiwan

[\*\*] Term: 14 Years

[21] Appl. No.: 29/085,268

[22] Filed: Mar. 19, 1998

[51] LOC (6) Cl. .... 15-05

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

[58] Field of Search ..... D32/21, 22, 50,  
D32/51; D4/100; 15/350, 344, 329, 320-321,  
144.4, 398, 410, 246, 400

### [56] References Cited

#### U.S. PATENT DOCUMENTS

D. 307,658 5/1990 Ikeda et al. .... D32/22

D. 314,072	1/1991	Shinozaki et al. ....	D32/22
D. 315,042	2/1991	Ikeda .....	D32/22
D. 342,591	12/1993	Shoji et al. ....	D32/22
D. 347,500	5/1994	Abe et al. ....	D32/22
D. 354,379	1/1995	Shinozaki .....	D32/22
D. 403,477	12/1998	Tsujimoto et al. ....	D32/22
D. 403,480	12/1998	Diebel .....	D32/22

Primary Examiner—Ruth McInroy

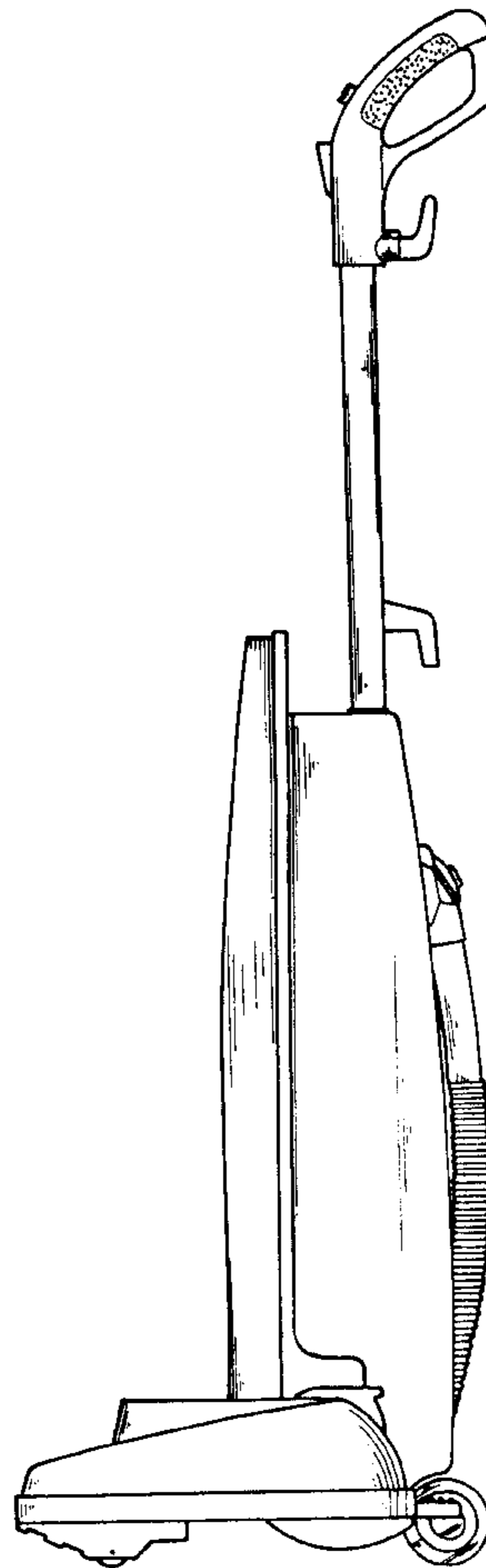
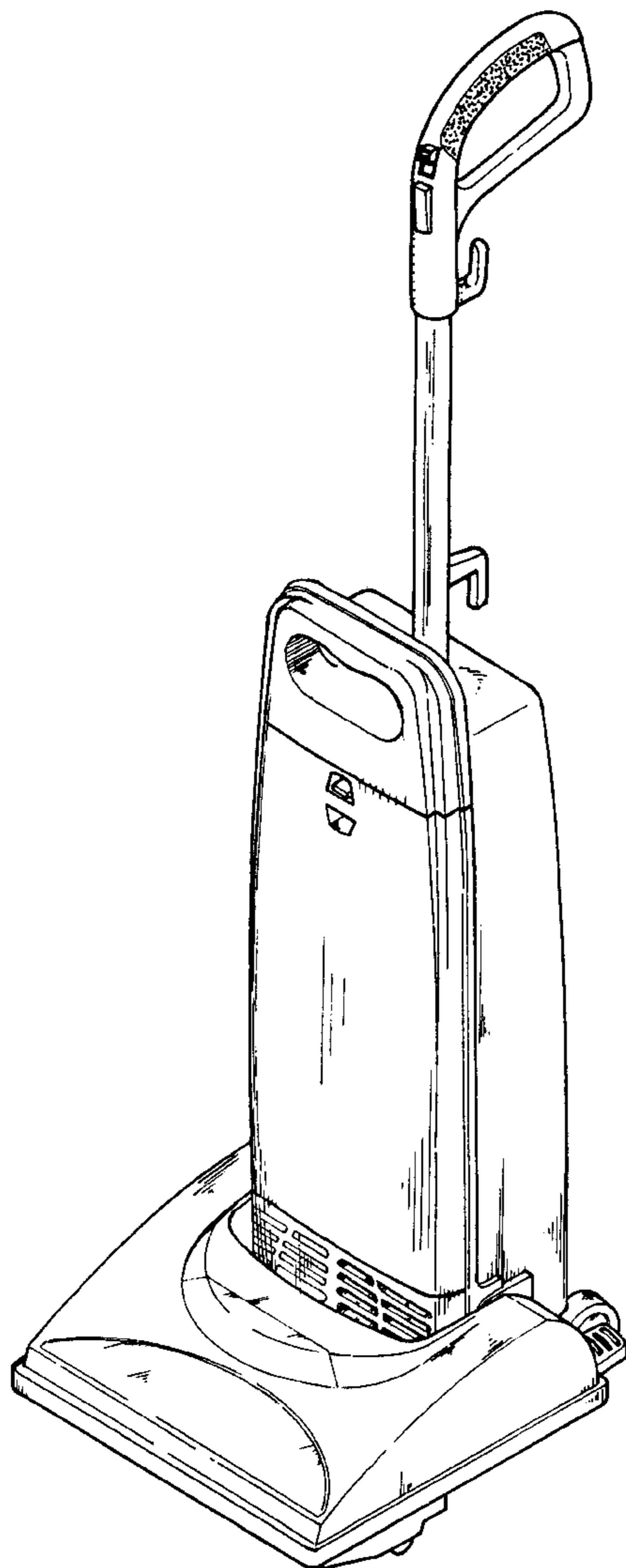
### [57] CLAIM

The ornamental design for a vacuum cleaner, as shown.

### DESCRIPTION

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

1 Claim, 4 Drawing Sheets



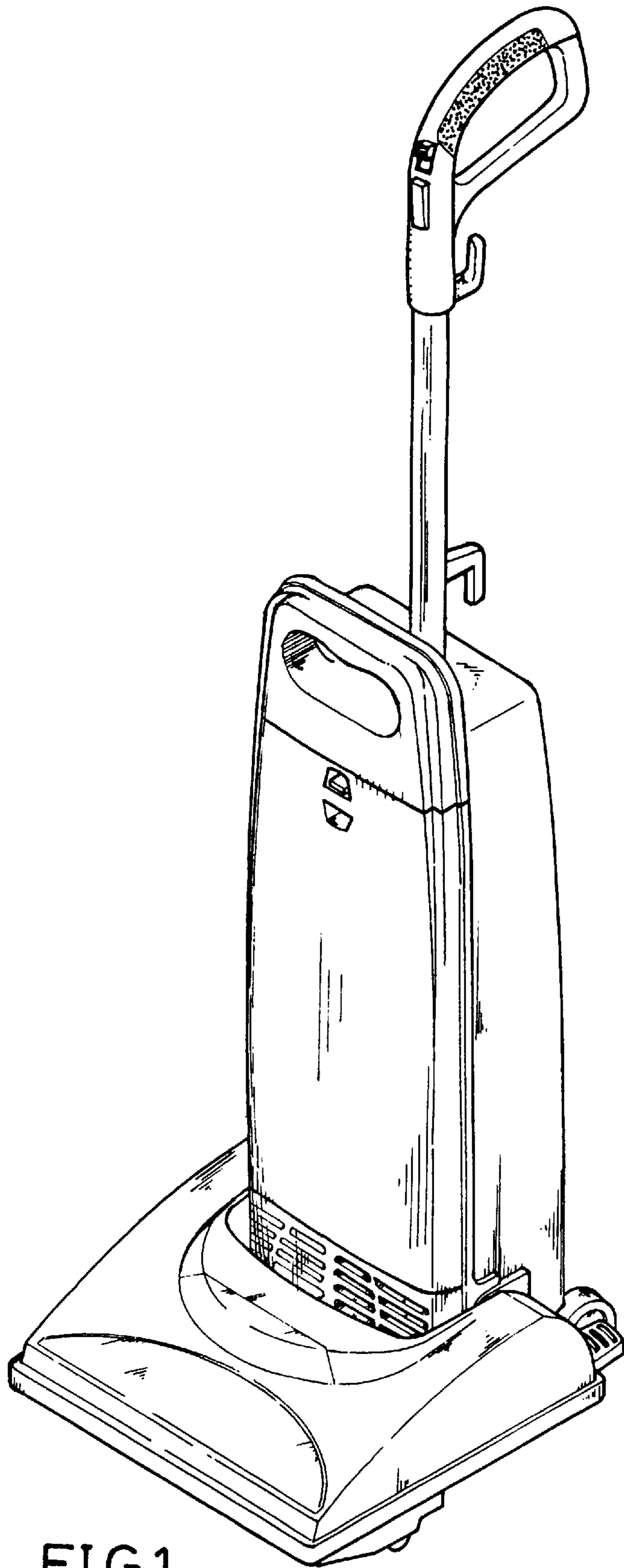


FIG.1

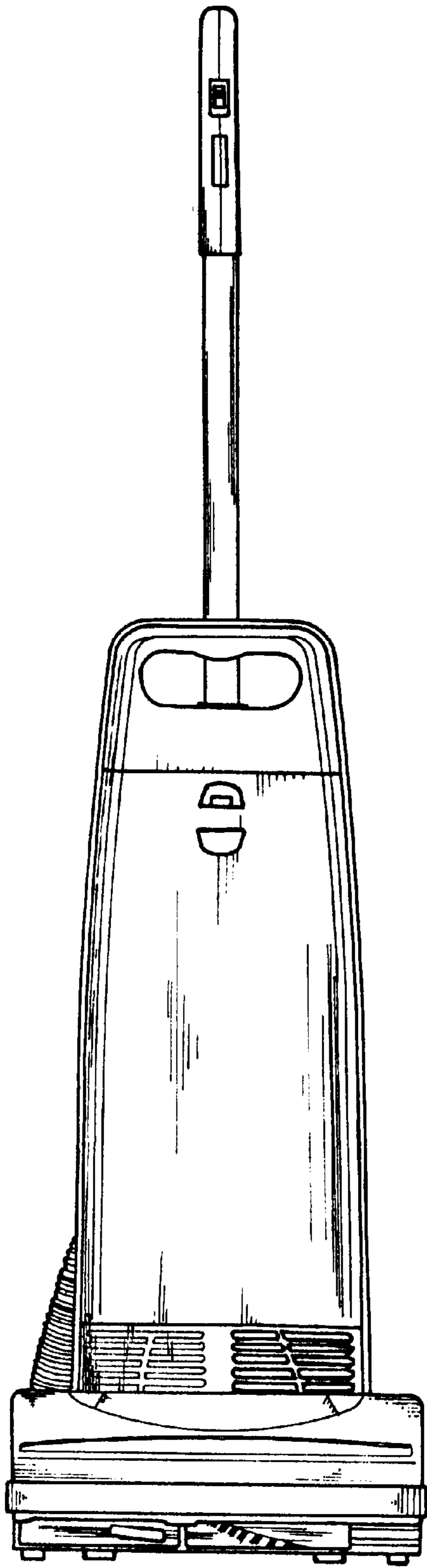


FIG. 2

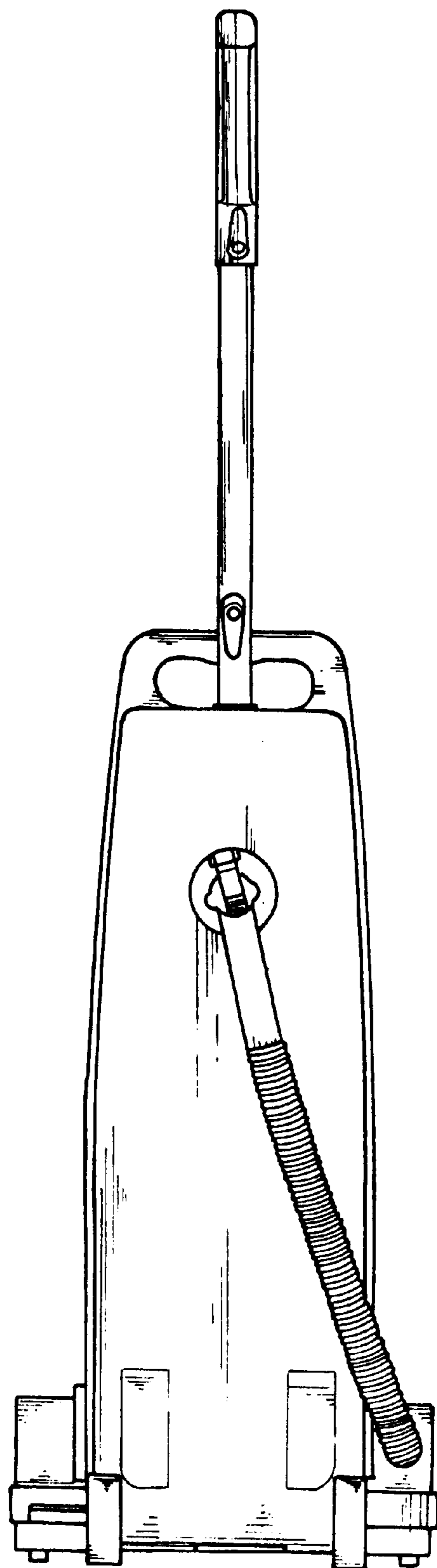


FIG. 3

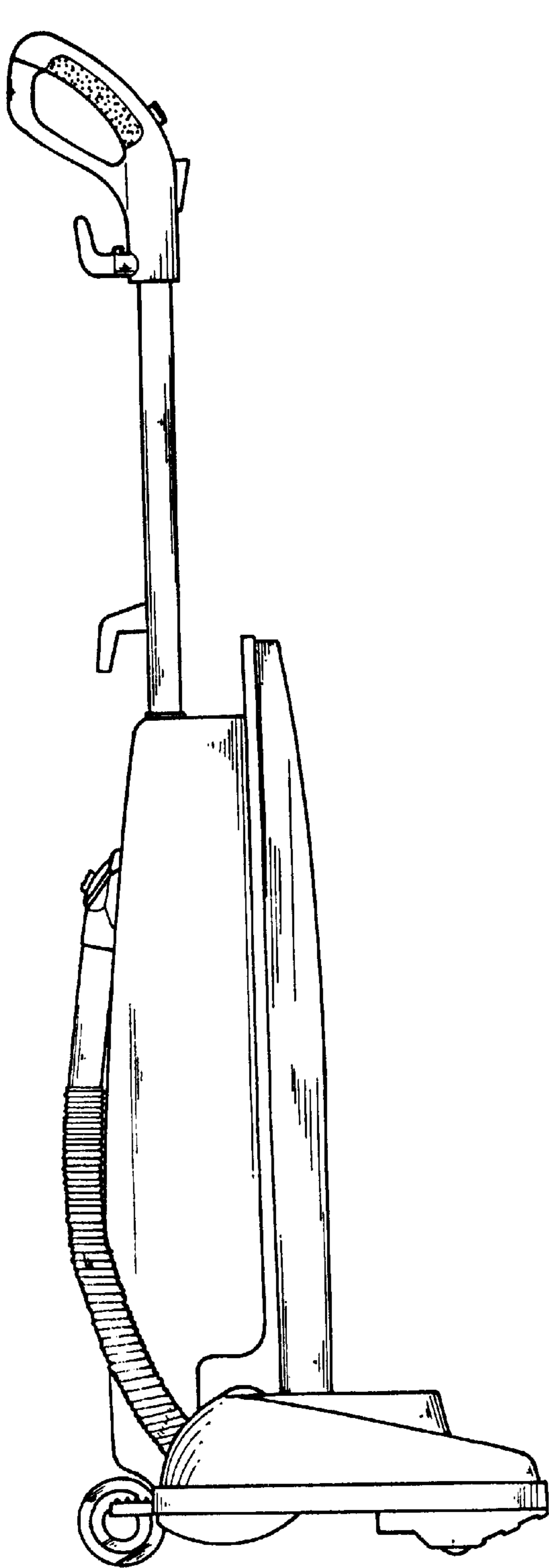


FIG.4

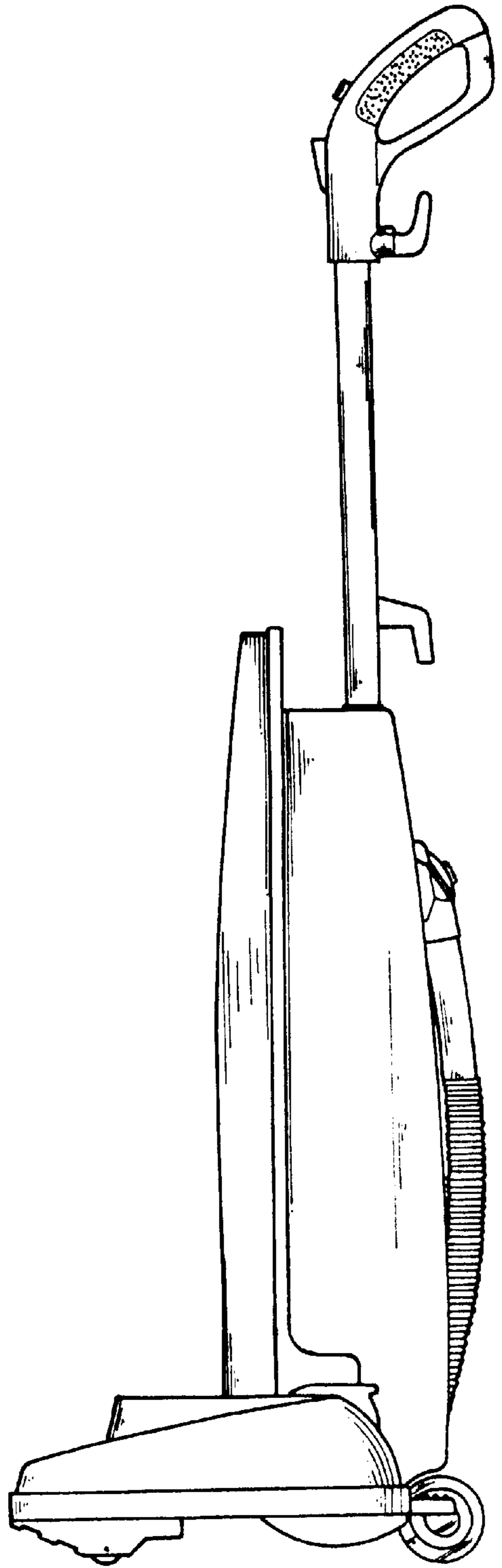


FIG.5

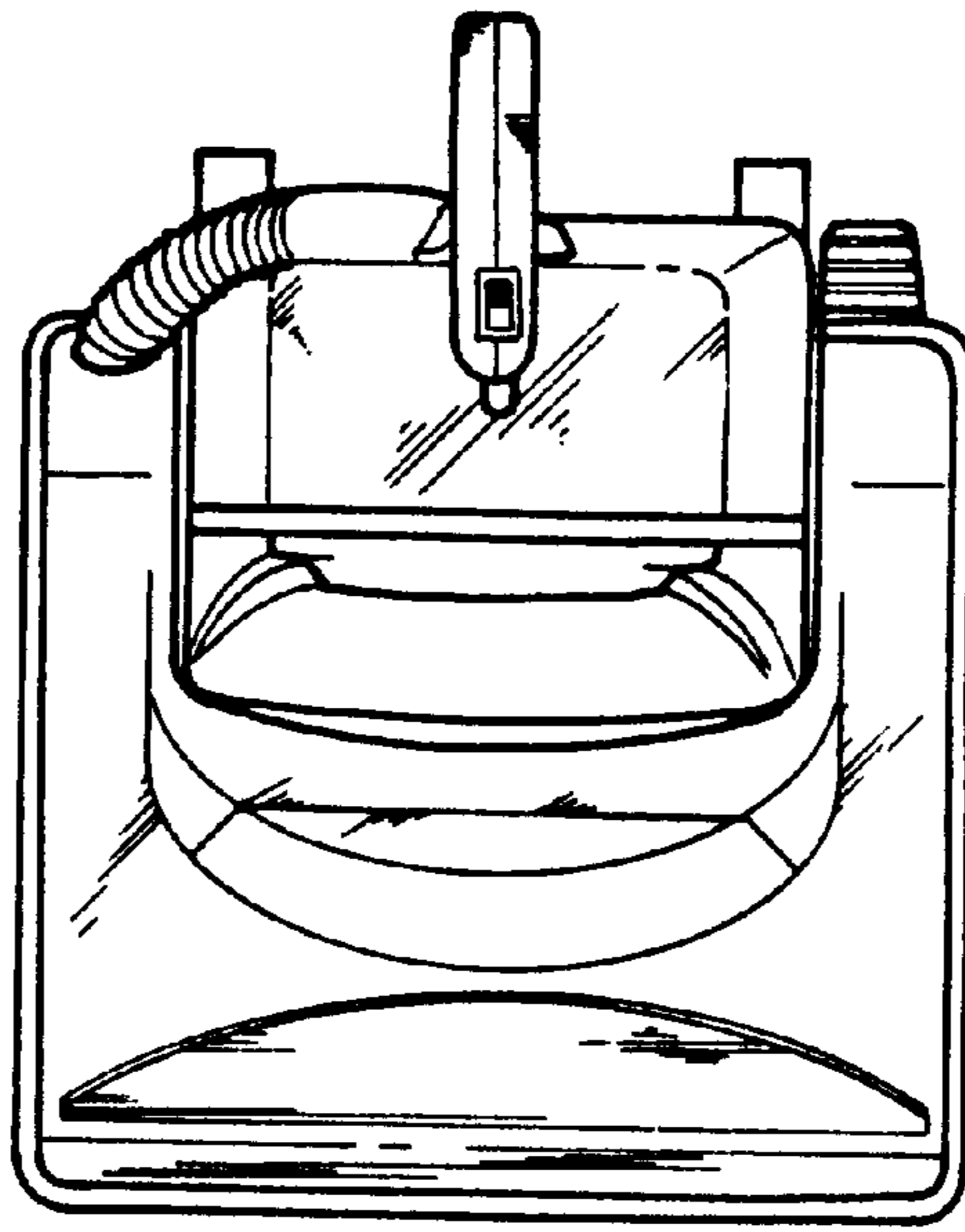


FIG. 6

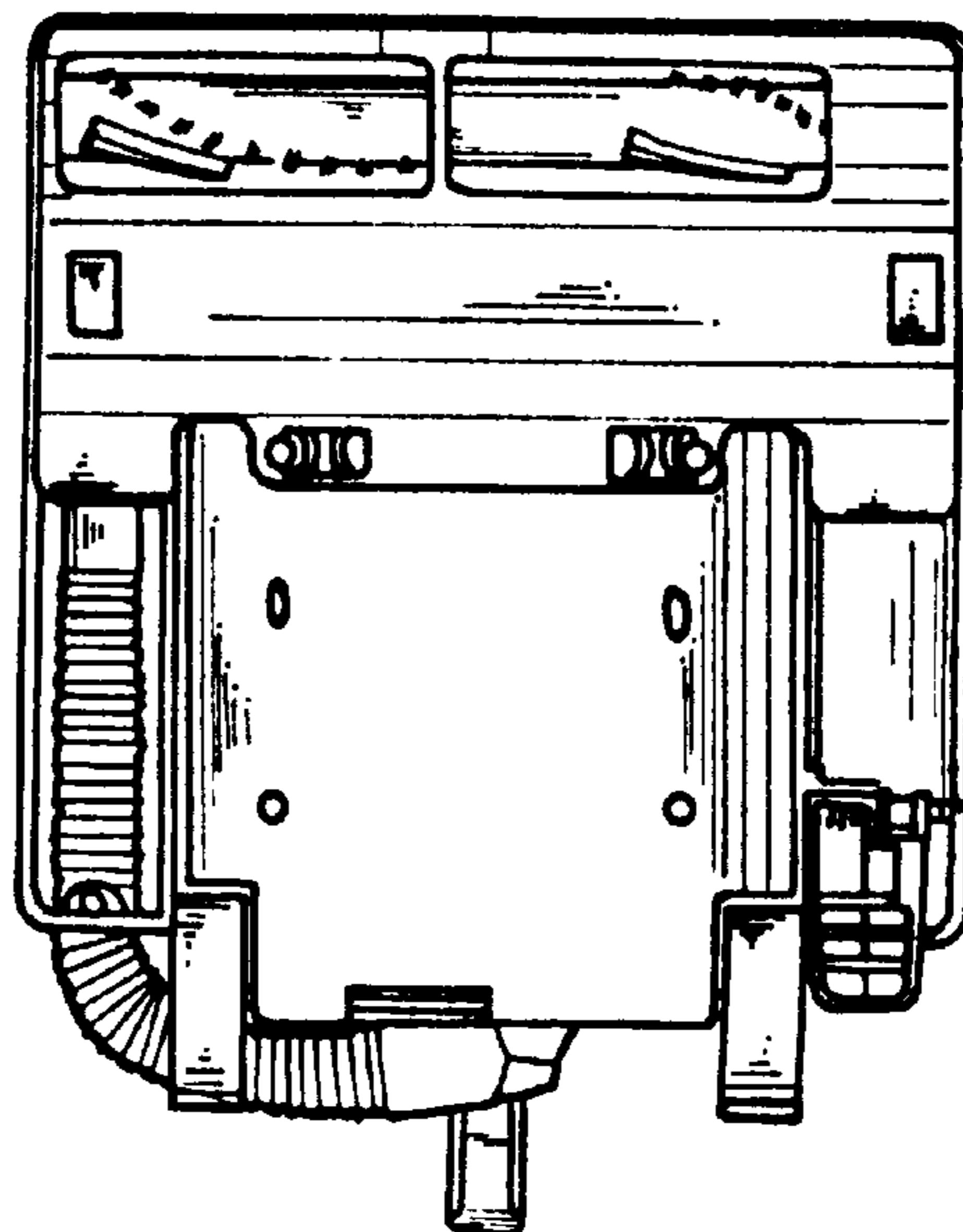


FIG. 7