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

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(54) **VACUUM CLEANER**

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

(21) Appl. No.: **29/146,791**

(22) Filed: **Aug. 17, 2001**

(30) **Foreign Application Priority Data**

Feb. 22, 2001 (JP) 2001-004199

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

(52) **U.S. Cl.** **D32/22**

(58) **Field of Search** D32/21-22, 31,
D32/34; 15/320-321, 347, 350-353, 361,
410-411, 377, 323, DIG. 10; 174/46; 285/7;
439/191

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,571,772 A * 2/1986 Dyson 15/335
D309,203 S * 7/1990 Goodrich D32/22
5,101,532 A * 4/1992 Dyson et al. 15/320

5,145,499 A * 9/1992 Dyson 55/337
D343,707 S * 1/1994 Dyson D32/22
D435,945 S * 1/2001 Ikeno et al. D32/22
D439,379 S * 3/2001 Gammack et al. D32/22
6,341,404 B1 * 1/2002 Salo et al. 15/353

* cited by examiner

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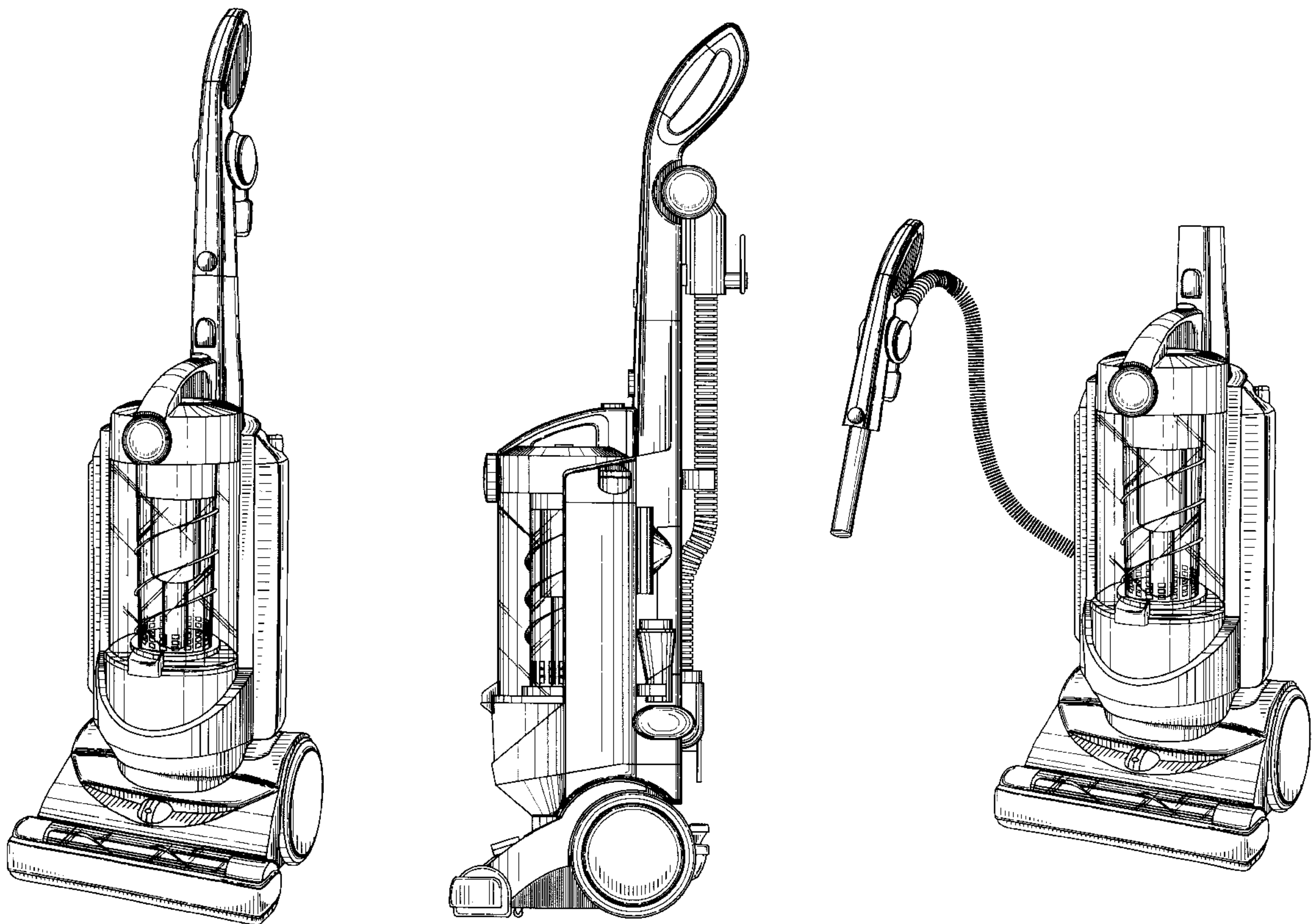
(57) **CLAIM**

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

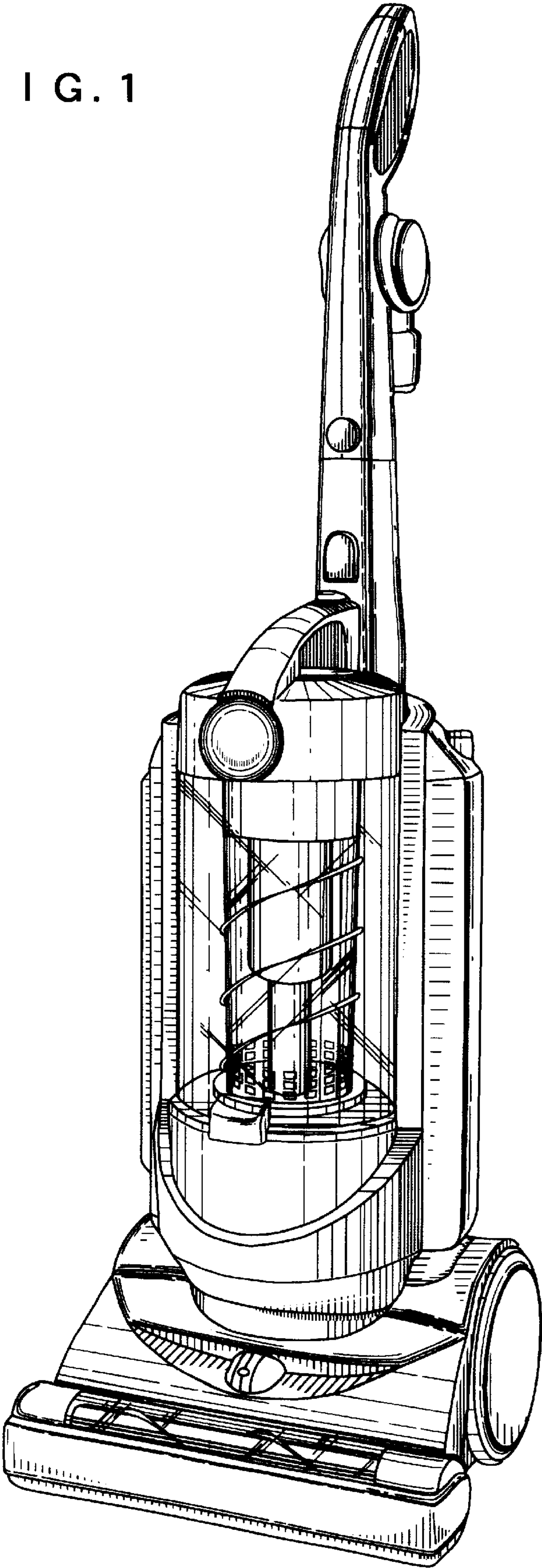
DESCRIPTION

FIG. 1 is a front, right and top perspective view of a vacuum cleaner showing our new design;
FIG. 2 is a front elevational view thereof;
FIG. 3 is a rear elevational view thereof;
FIG. 4 is a left side view thereof;
FIG. 5 is a right side view thereof;
FIG. 6 is a top plan view thereof;
FIG. 7 is a bottom plan view thereof; and,
FIG. 8 is a perspective view thereof, showing the handle detached in an operative position.

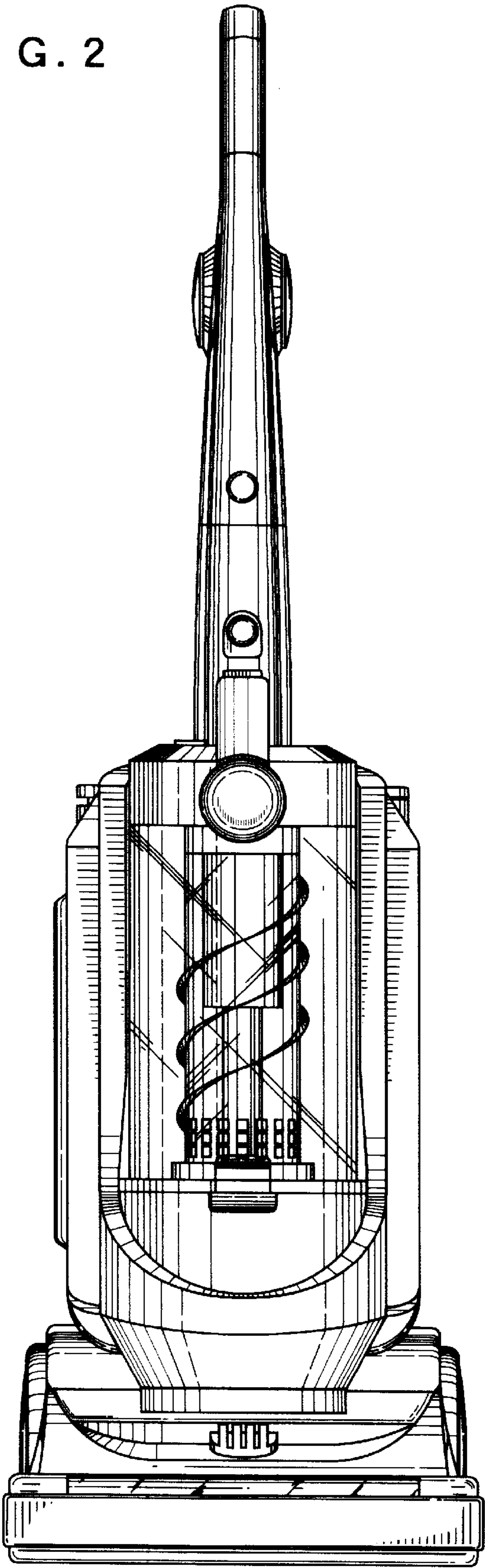
1 Claim, 7 Drawing Sheets



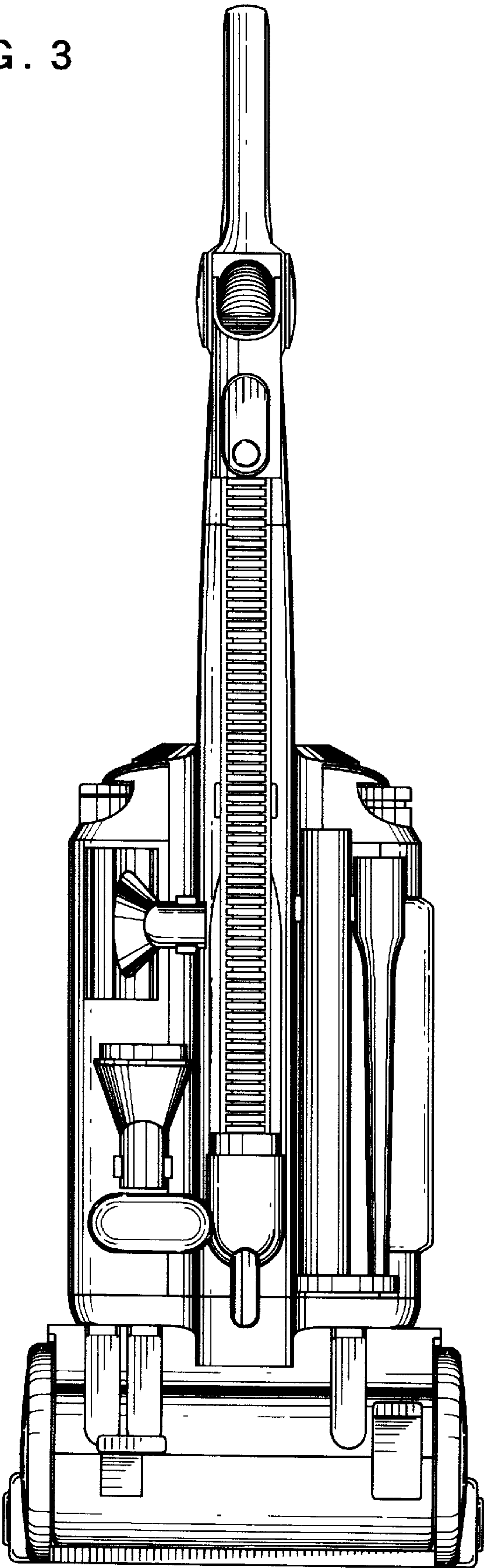
F I G . 1



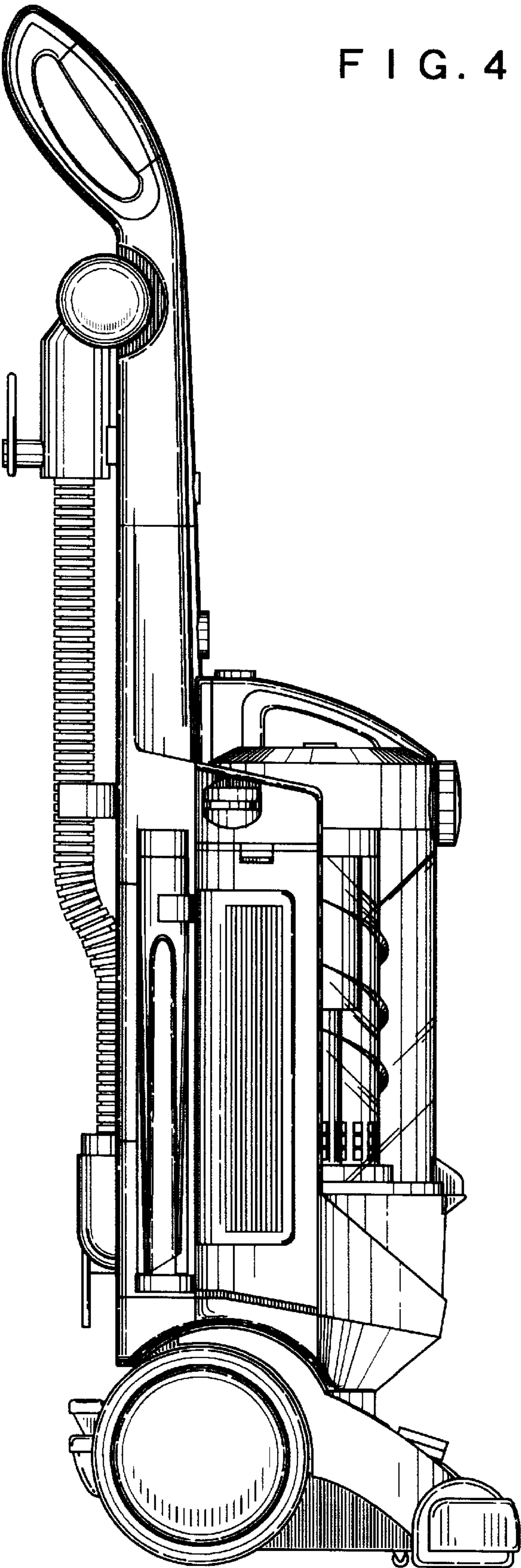
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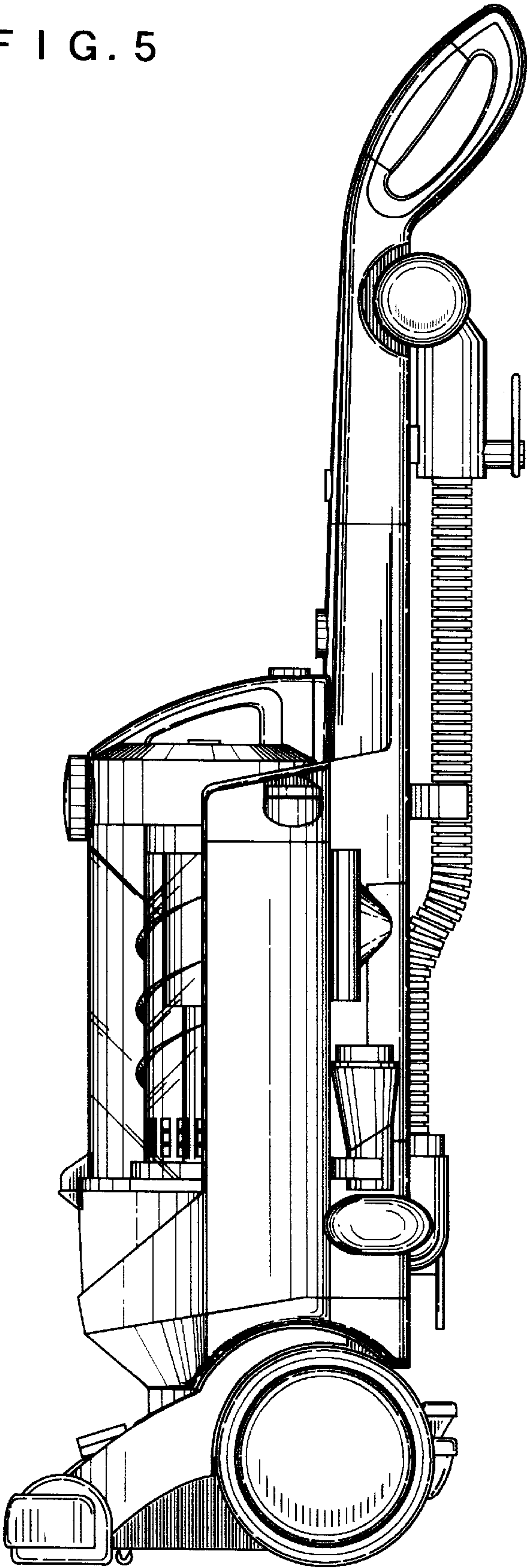
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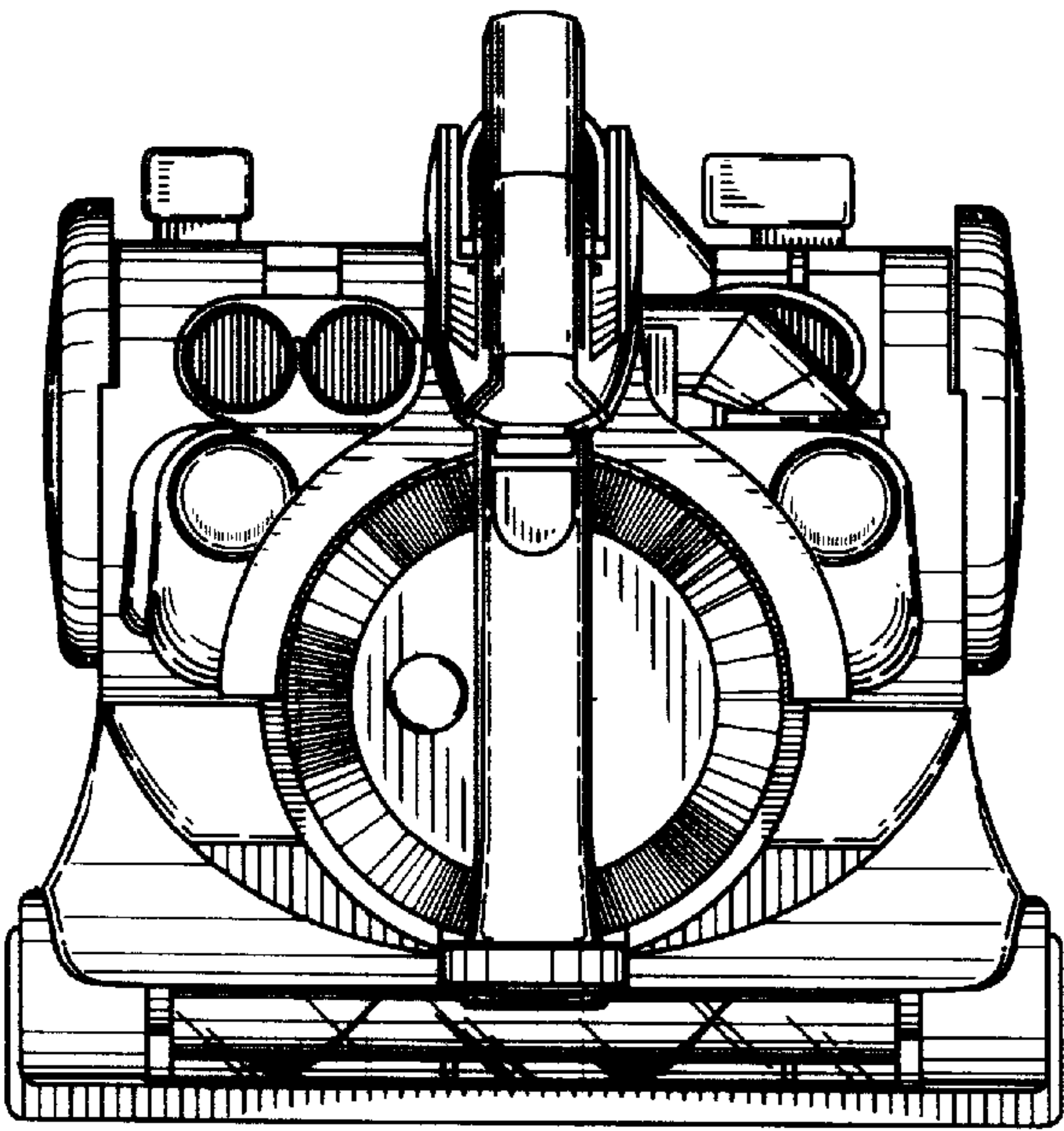
F I G . 4



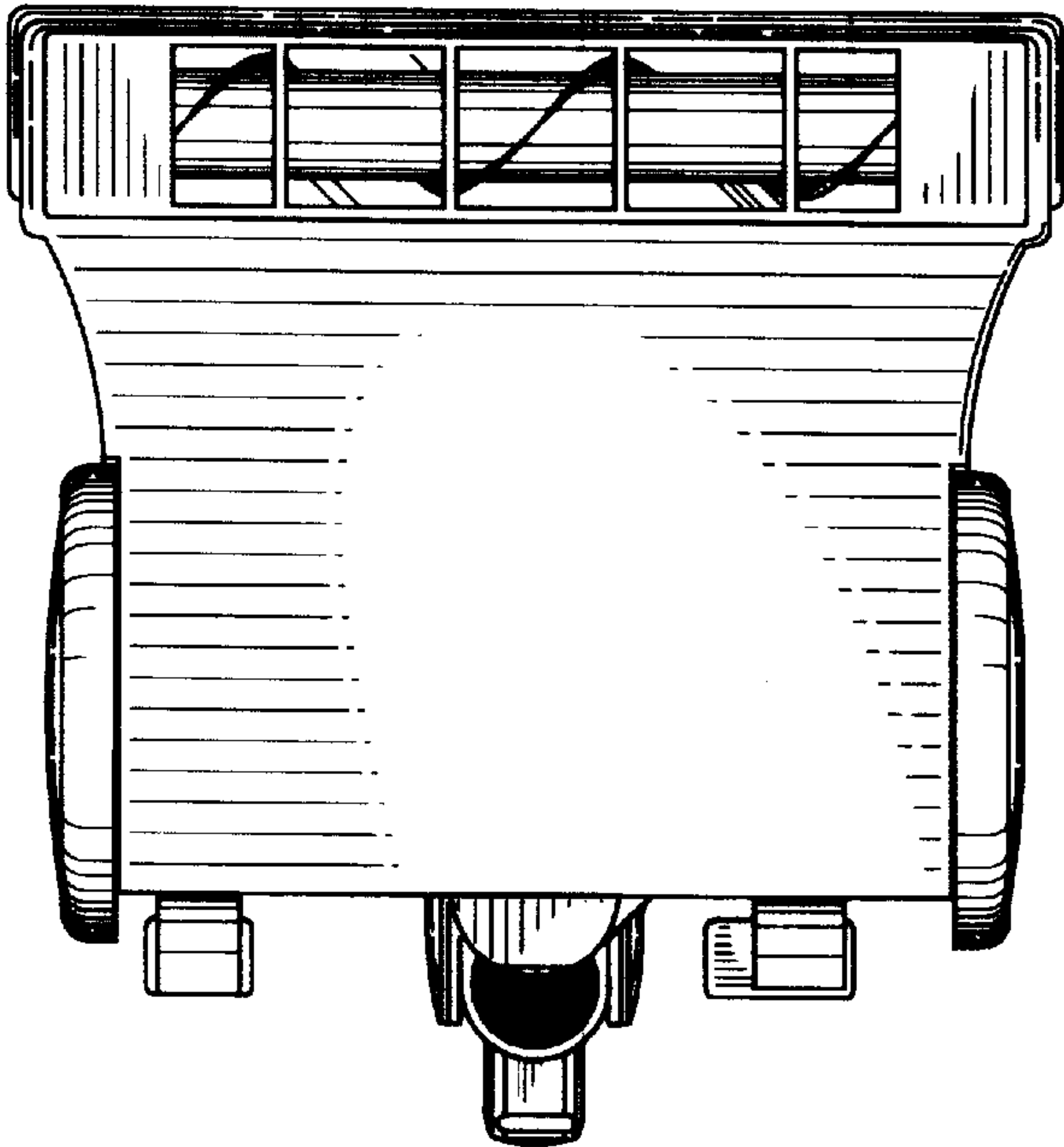
F I G . 5



F I G . 6



F I G . 7



F I G . 8

