



US00D639323S

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

(10) **Patent No.:** **US D639,323 S**

(45) **Date of Patent:** **** *Jun. 7, 2011**

(54) **VACUUM TRANSFER ROBOT**

(75) Inventor: **Takahiro Yoshino**, Kanagawa (JP)

(73) Assignee: **Ulvac, Inc.**, Chigasaki-Shi, Kanagawa (JP)

(*) Notice: This patent is subject to a terminal disclaimer.

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

(21) Appl. No.: **29/361,139**

(22) Filed: **May 6, 2010**

(51) **LOC (9) Cl.** **15-09**

(52) **U.S. Cl.** **D15/199; D13/182**

(58) **Field of Classification Search** D13/182;
D15/199; 74/479.01, 490.01, 490.05; 134/110;
198/346.2; 361/234; 396/611; 414/217,
414/331.15, 411, 416.03, 744.1, 744.2, 744.3,
414/744.5, 935, 937, 939, 941; 438/14

See application file for complete search history.

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Primary Examiner — Patricia Palasik

(74) *Attorney, Agent, or Firm* — Harness, Dickey & Pierce, P.L.C.

(57) **CLAIM**

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

DESCRIPTION

FIG. 1 is a front, top and right side perspective view of a vacuum transfer robot showing our new design with all arms in a folded state;

FIG. 2 is a front elevational view thereof shown in FIG. 1;

FIG. 3 is a rear elevational view thereof shown in FIG. 1;

FIG. 4 is a top plan view thereof shown in FIG. 1;

FIG. 5 is a bottom plan view thereof shown in FIG. 1;

FIG. 6 is a right side elevational view thereof shown in FIG. 1;

FIG. 7 is a left side elevational view thereof shown in FIG. 1;

FIG. 8 is a front, top and right side perspective view of the vacuum transfer robot with the upper arms in an extended state;

FIG. 9 is a front elevational view thereof shown in FIG. 8;

FIG. 10 is a rear elevational view thereof shown in FIG. 8;

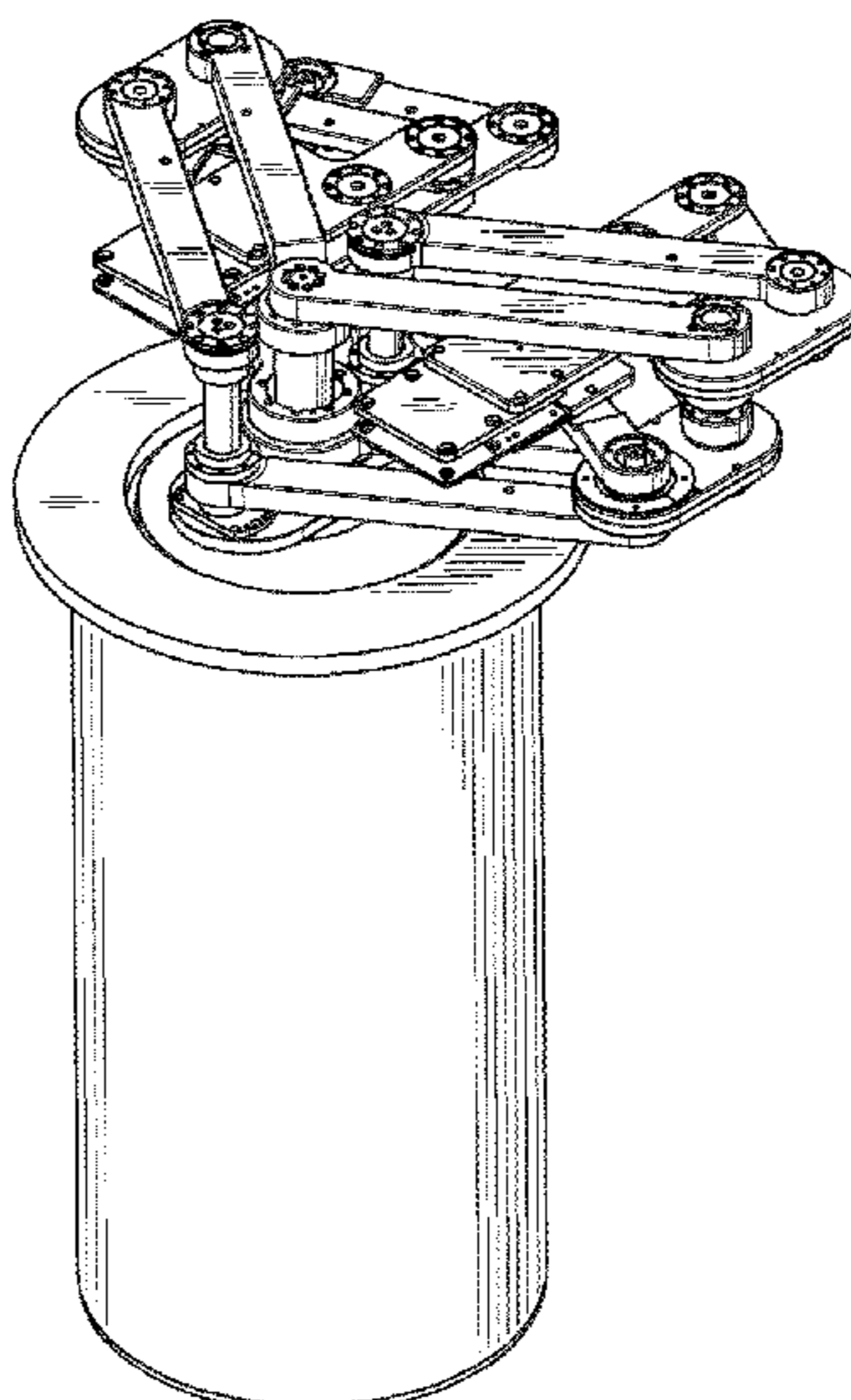
FIG. 11 is a top plan view thereof shown in FIG. 8;

FIG. 12 is a bottom plan view thereof shown in FIG. 8;

FIG. 13 is a right side elevational view thereof shown in FIG. 8; and,

FIG. 14 is a left side elevational view thereof shown in FIG. 8.

1 Claim, 14 Drawing Sheets



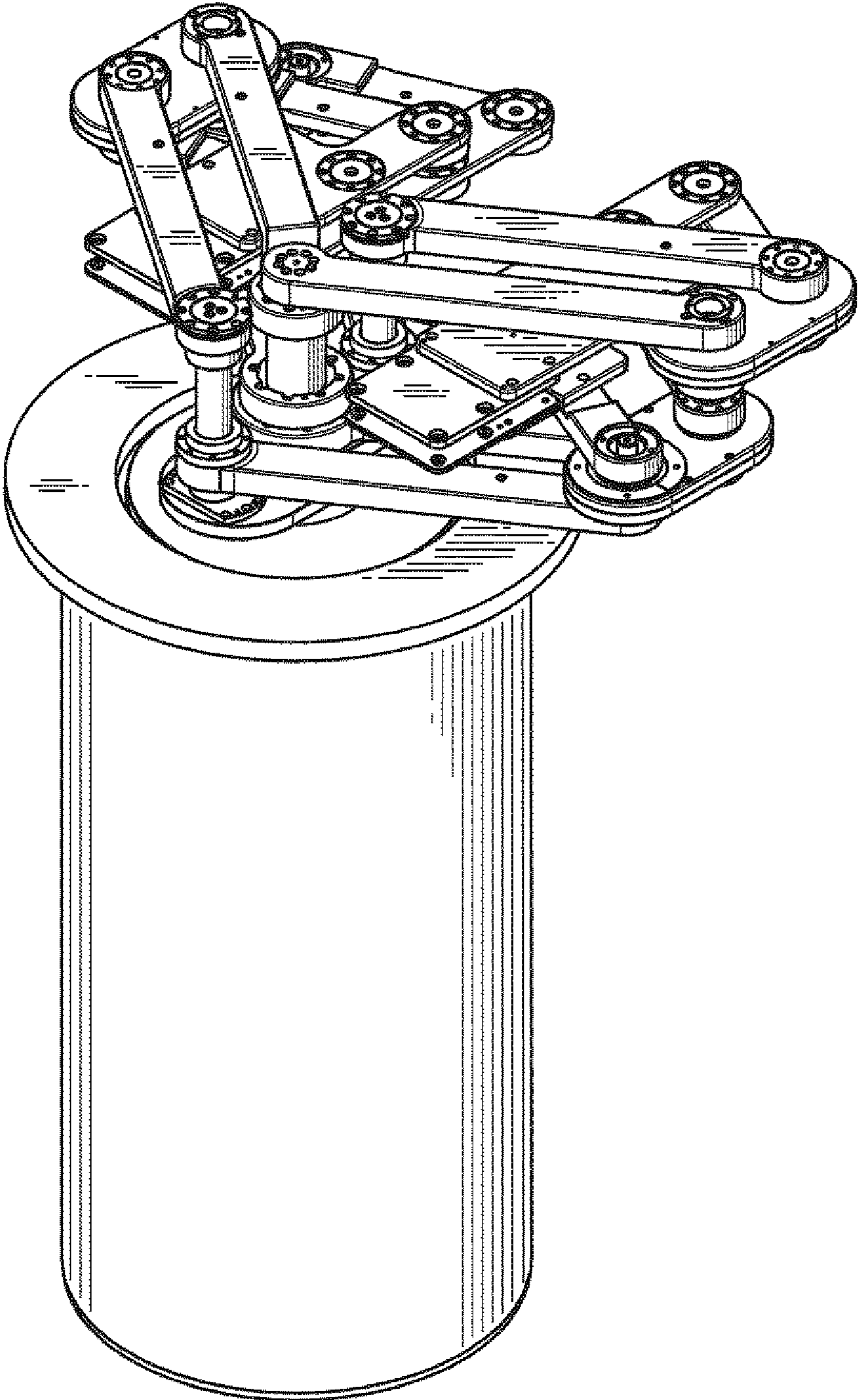


FIG. 1

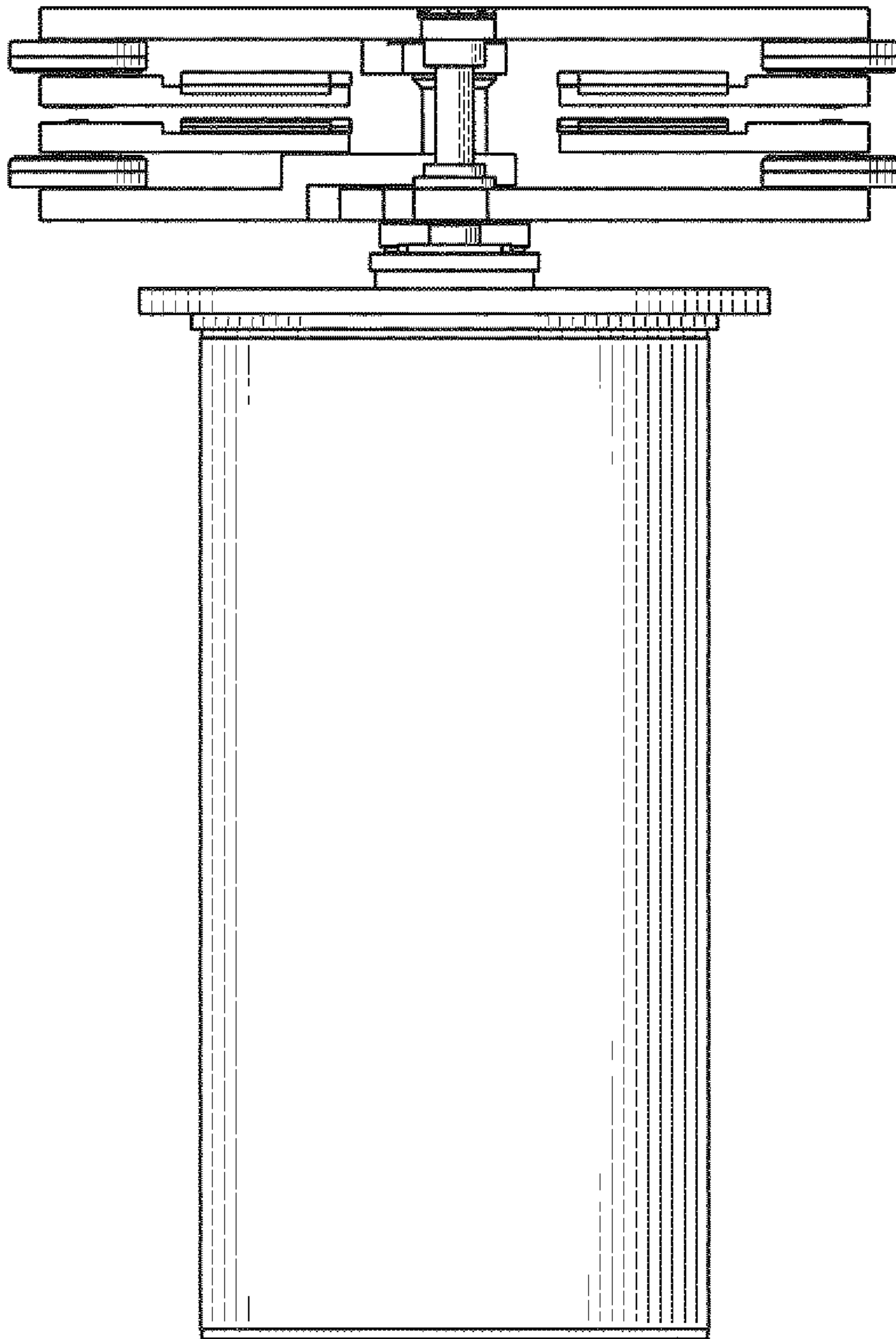


FIG. 2

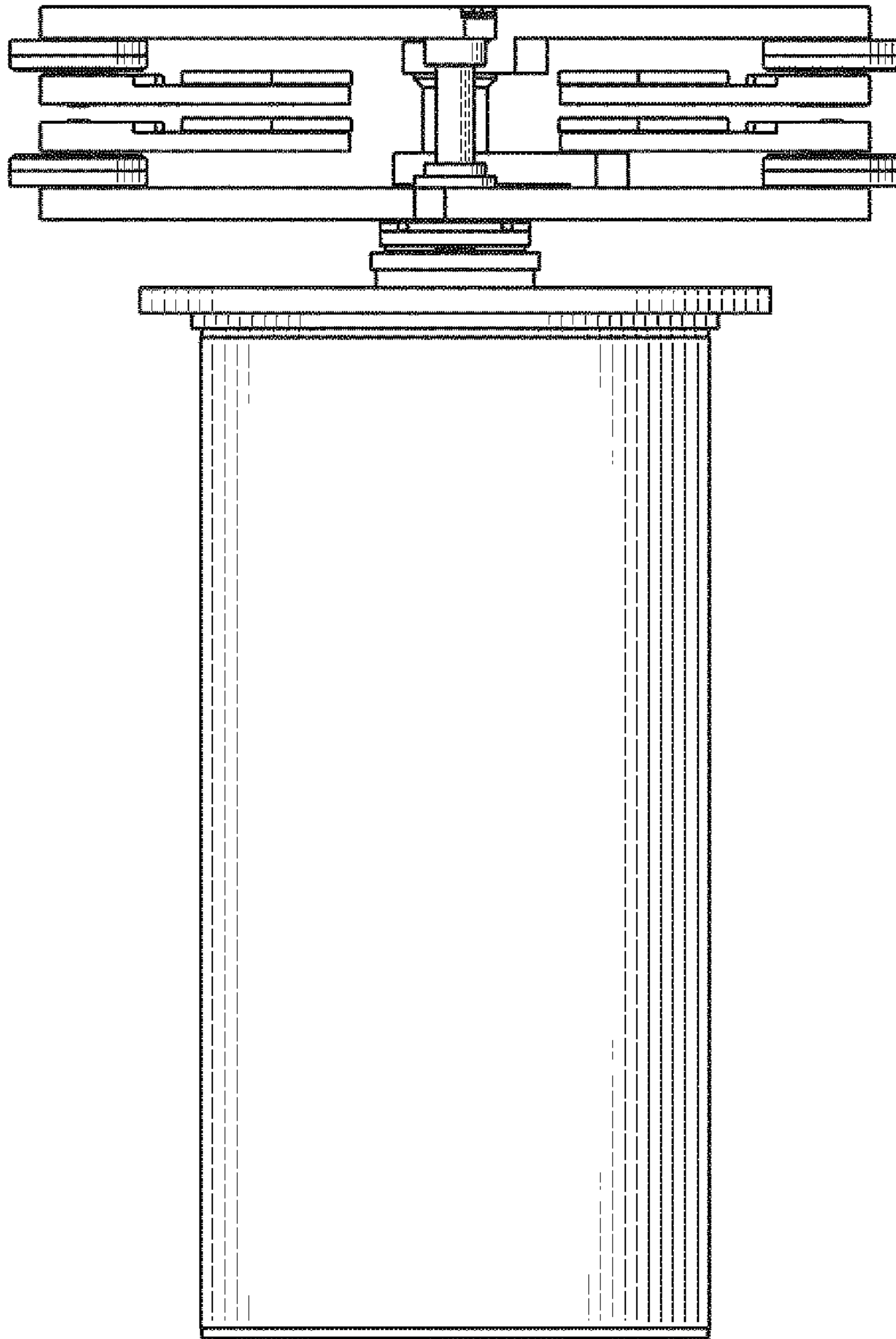


FIG. 3

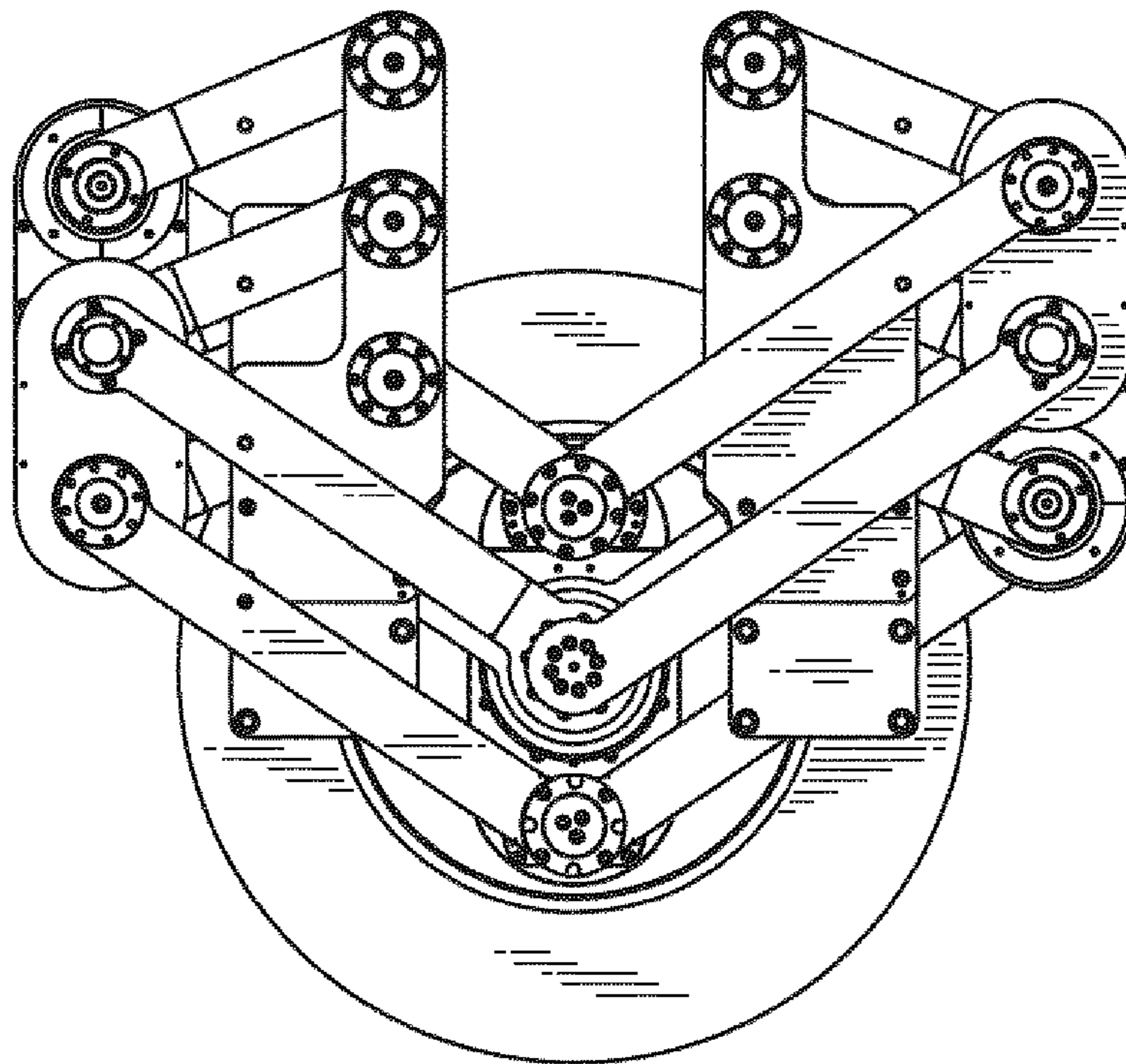


FIG. 4

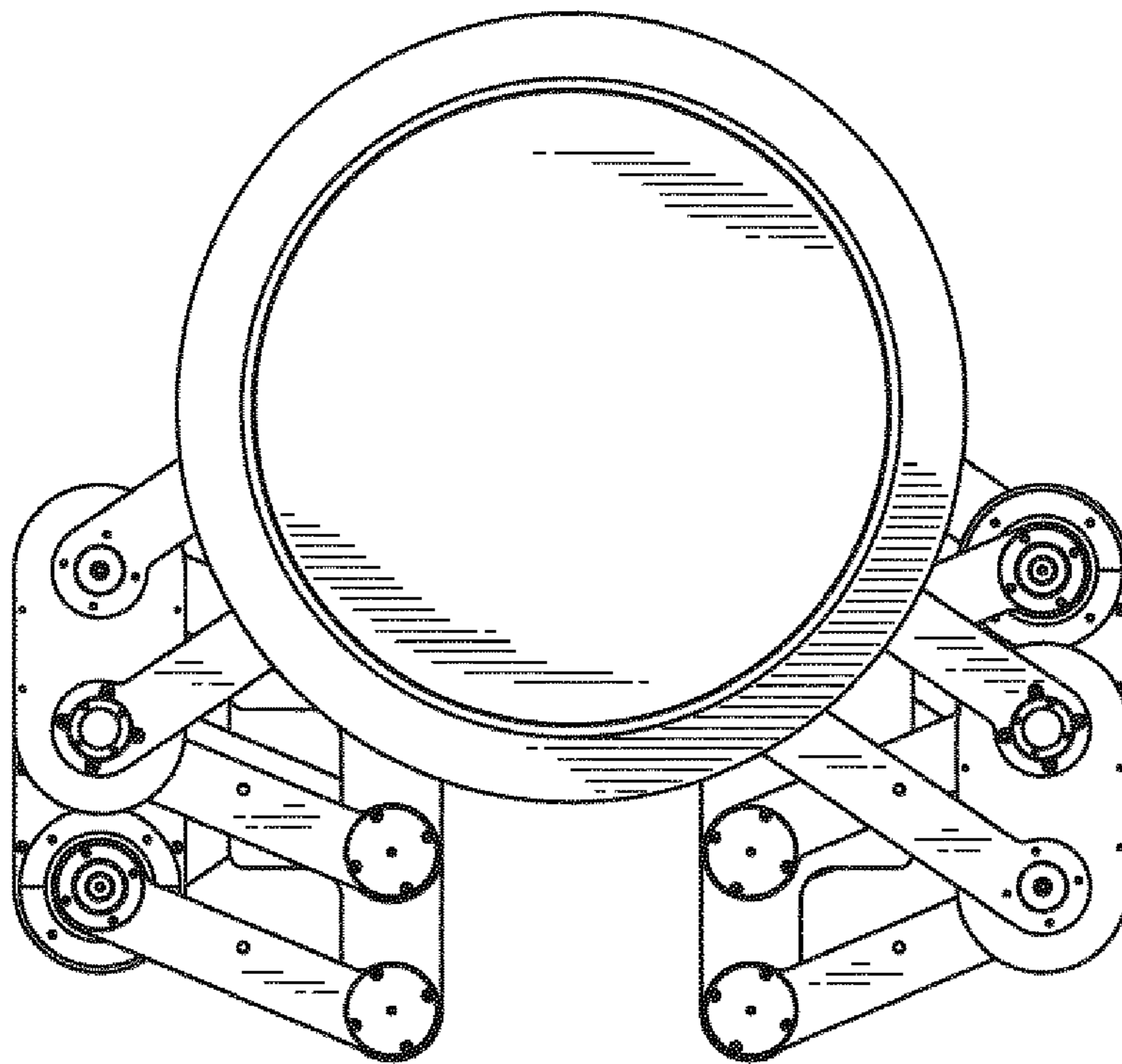


FIG. 5

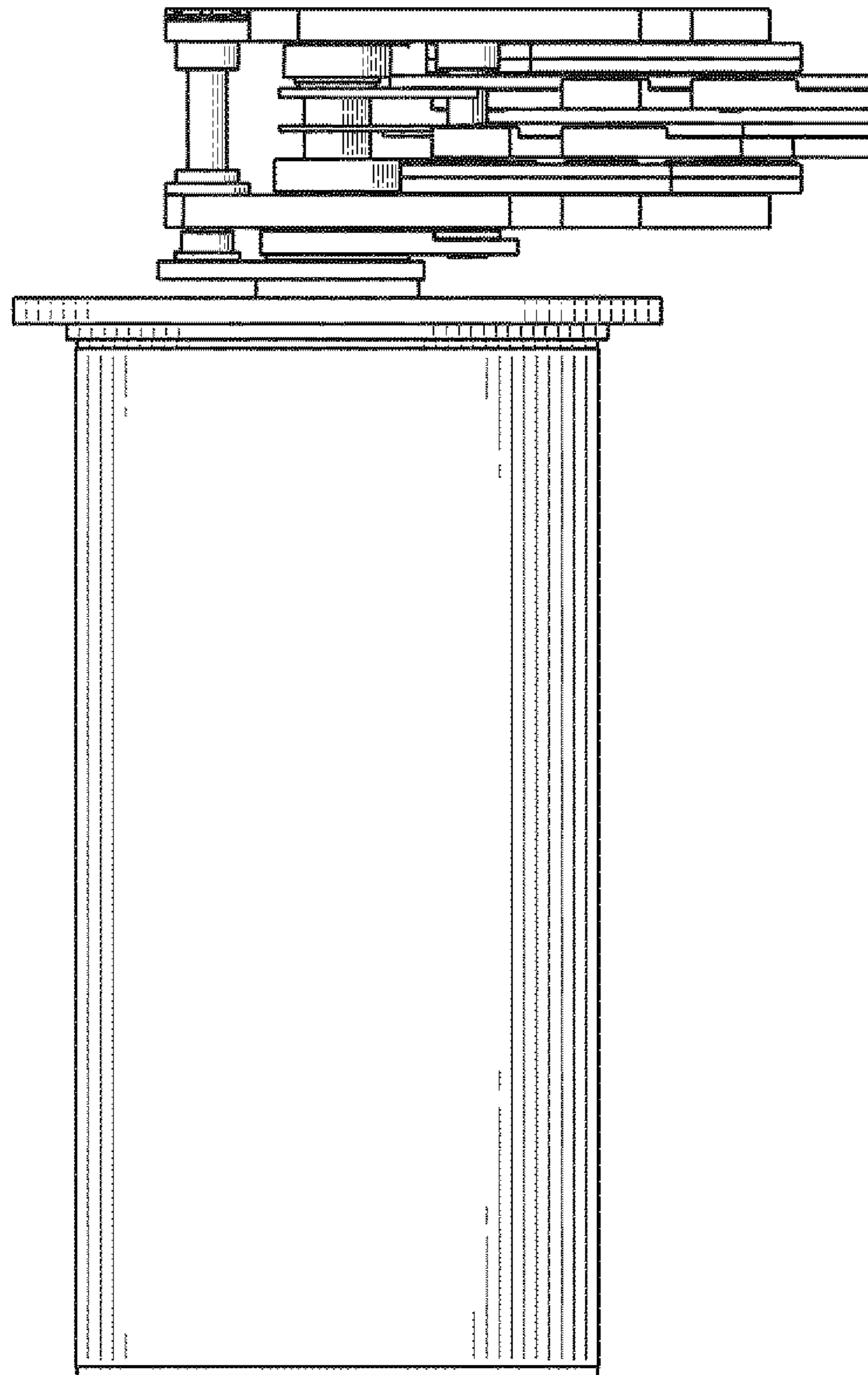


FIG. 6

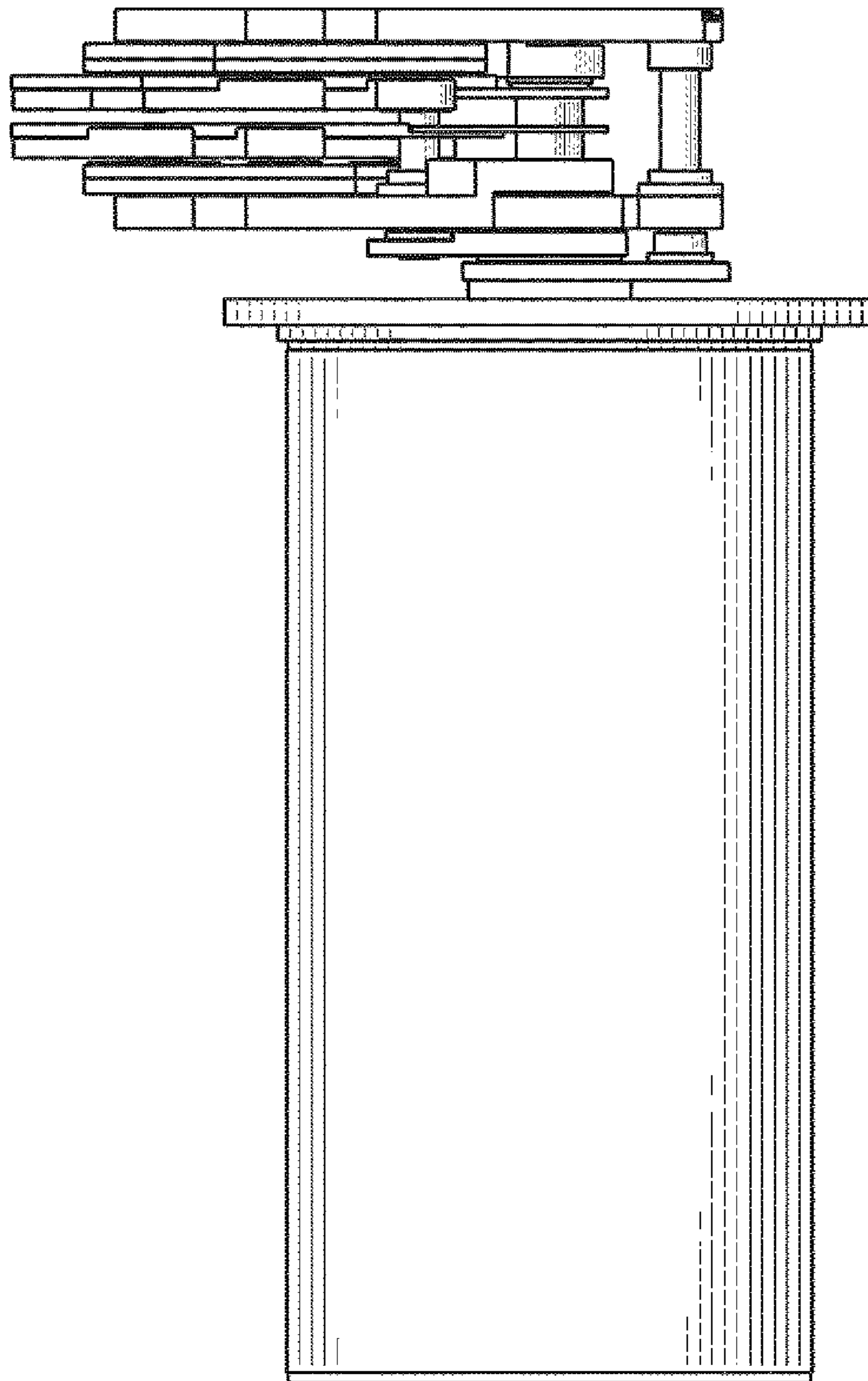


FIG. 7

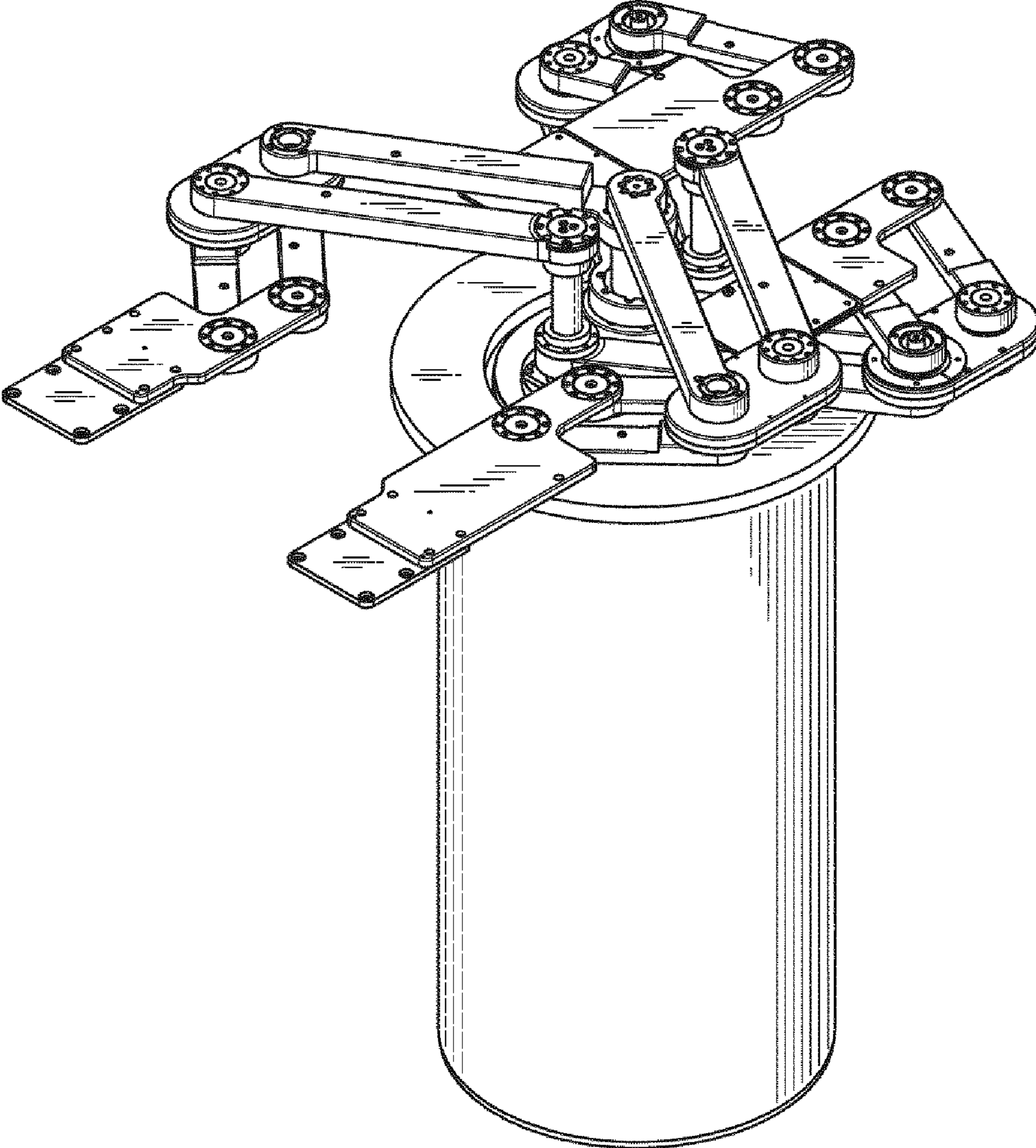


FIG. 8

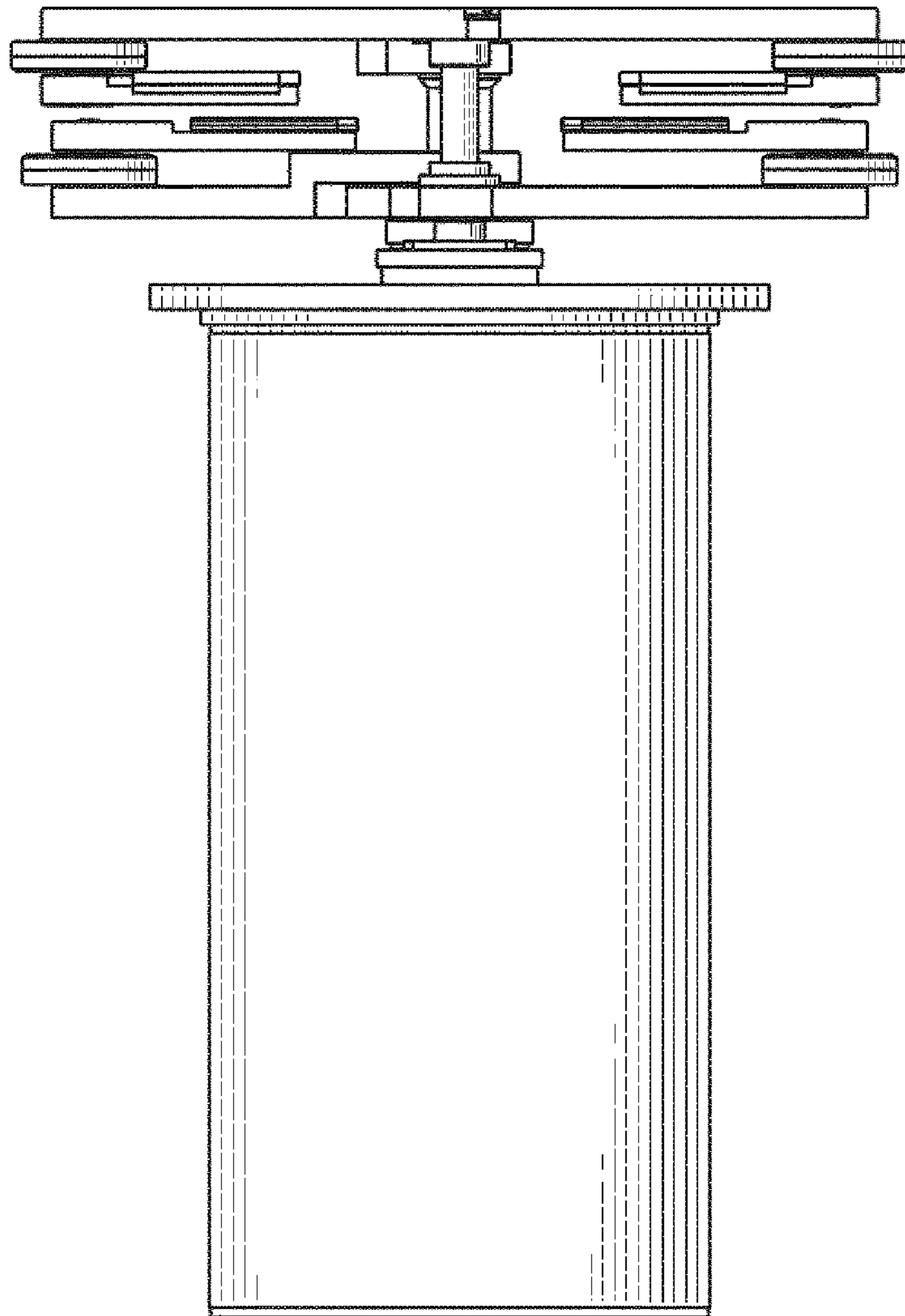


FIG. 9

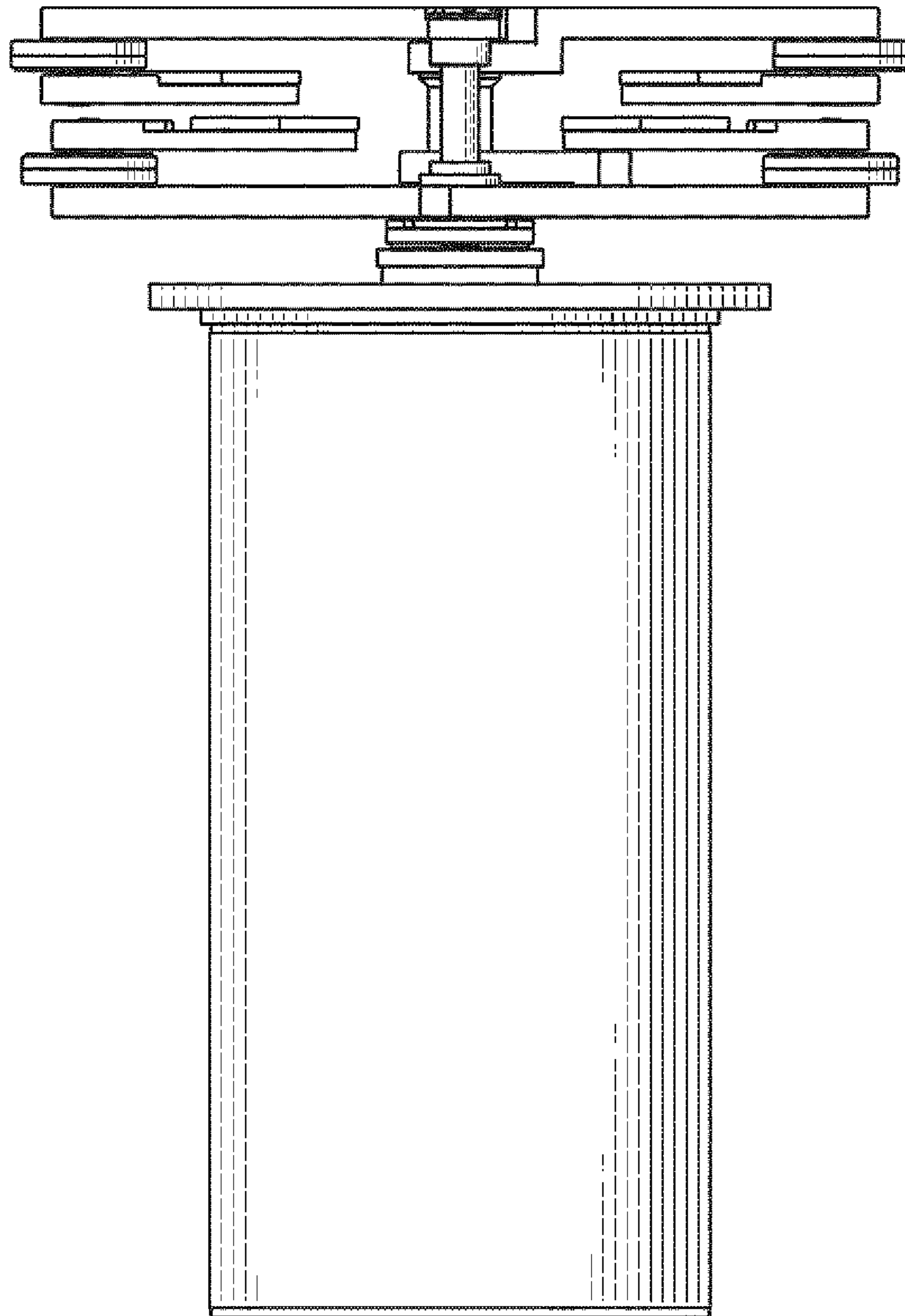


FIG. 10

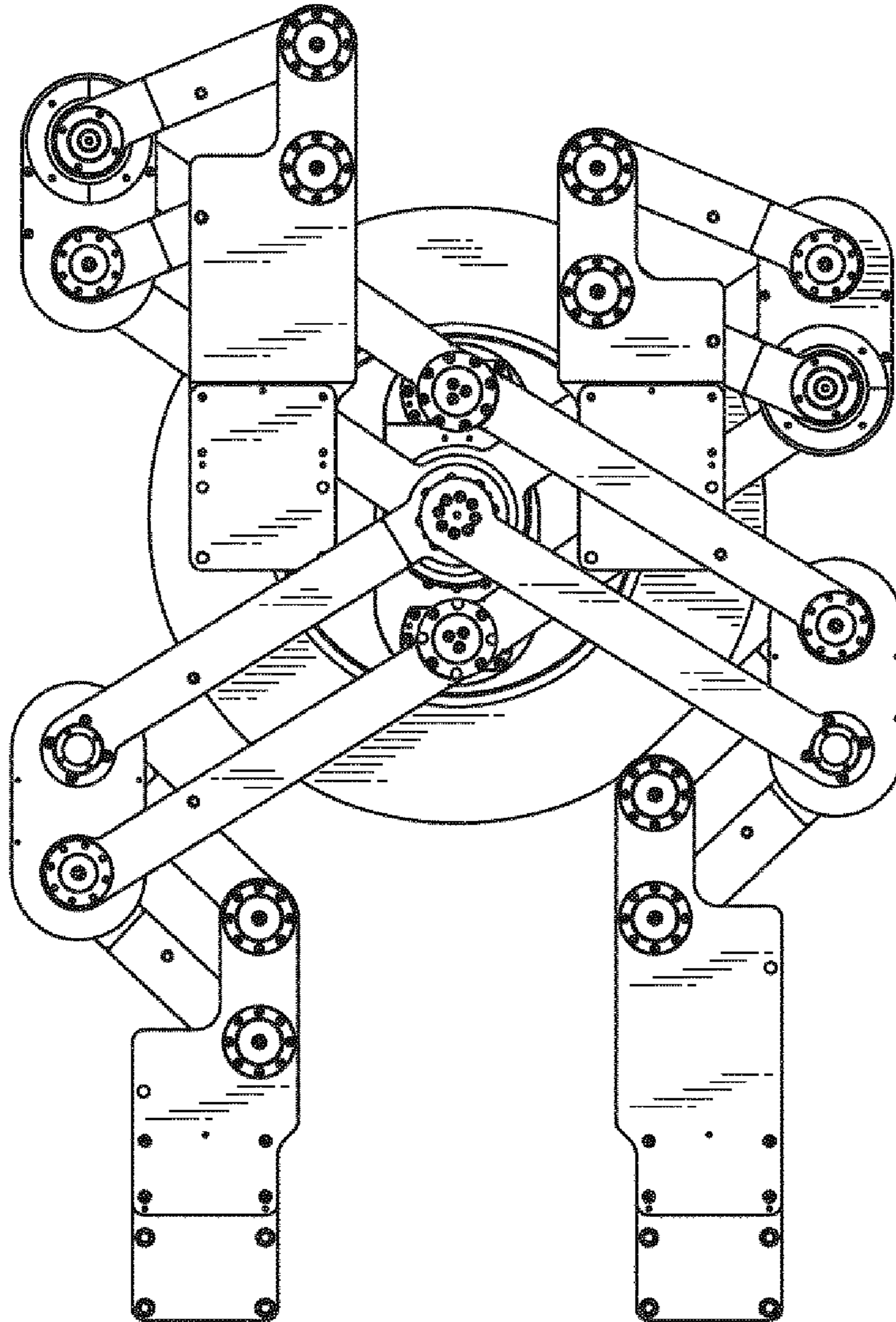


FIG. 11

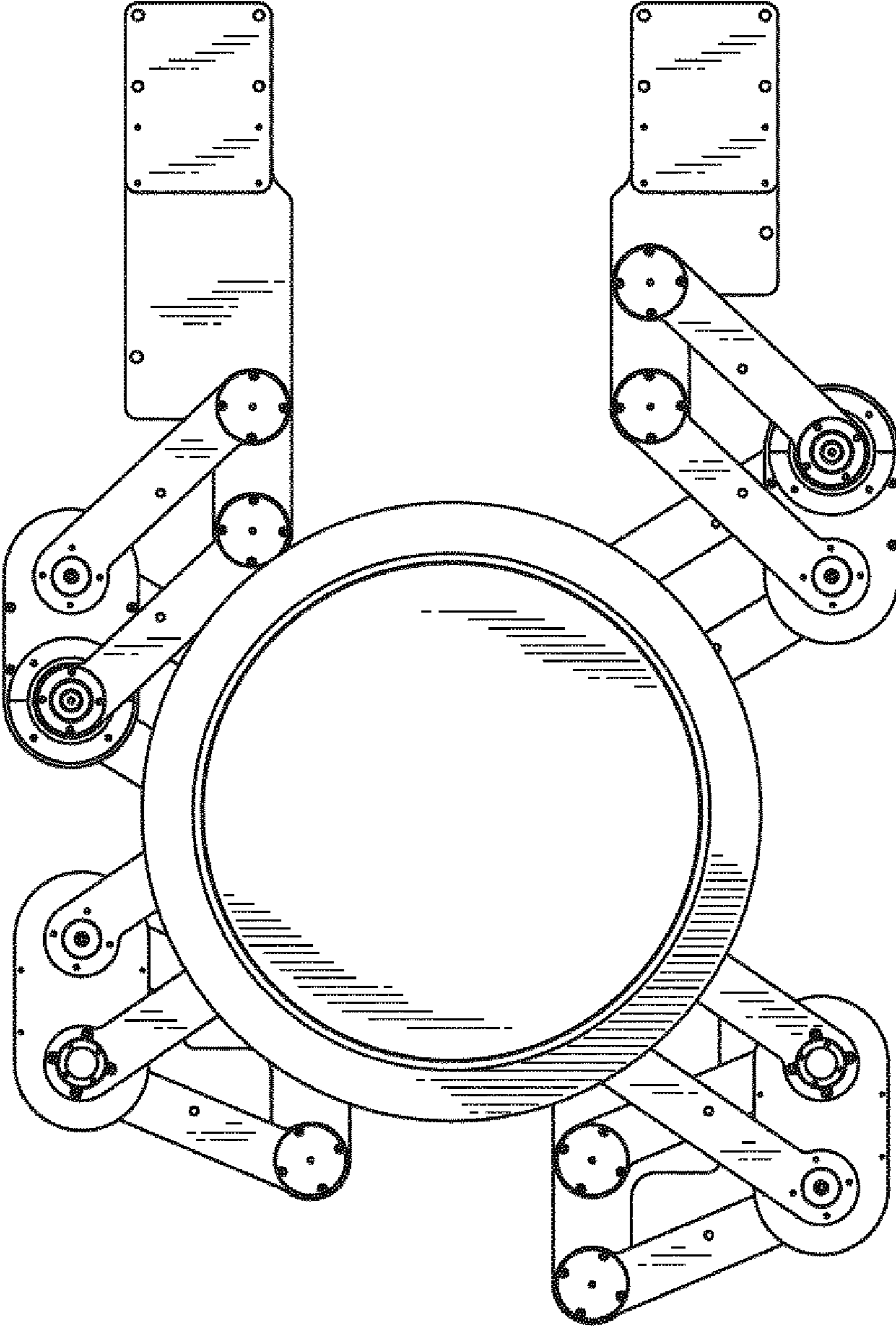


FIG. 12

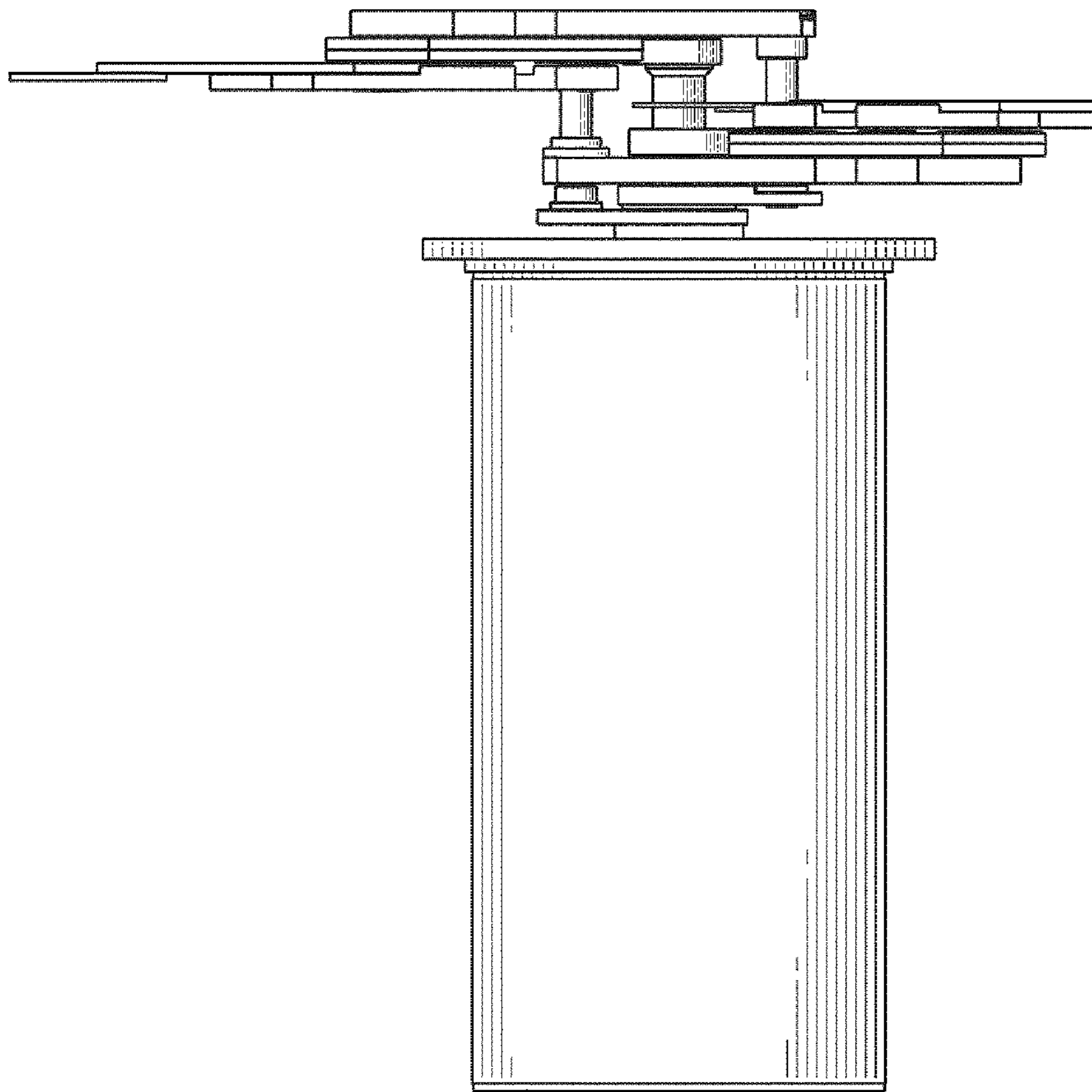


FIG. 13

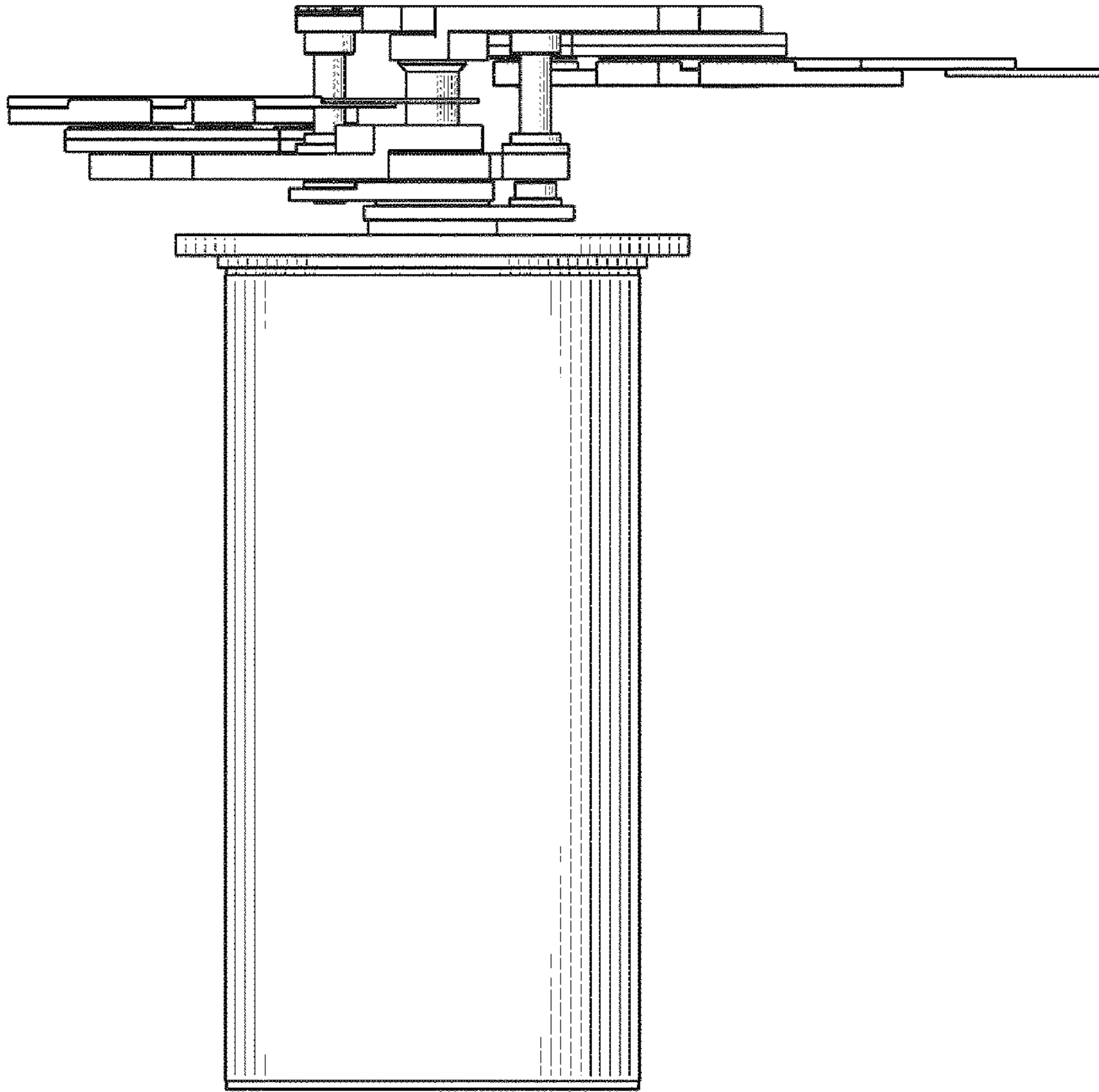


FIG. 14