



(12) **United States Design Patent** (10) **Patent No.:** **US D846,011 S**  
**Ishikawa et al.** (45) **Date of Patent:** **\*\* Apr. 16, 2019**

(54) **ELECTRIC ROTARY ACTUATOR**  
 (71) Applicant: **SMC CORPORATION**, Chiyoda-ku (JP)  
 (72) Inventors: **Shintaro Ishikawa**, Kasukabe (JP);  
**Atsushi Otani**, Adachi-ku (JP)  
 (73) Assignee: **SMC CORPORATION**, Chiyoda-ku (JP)  
 (\*\*) Term: **15 Years**

(21) Appl. No.: **29/638,899**  
 (22) Filed: **Mar. 1, 2018**

(30) **Foreign Application Priority Data**  
 Sep. 7, 2017 (JP) ..... 2017-019401  
 (51) **LOC (11) Cl.** ..... **15-09**  
 (52) **U.S. Cl.**  
 USPC ..... **D15/149**; D13/158  
 (58) **Field of Classification Search**  
 USPC ..... D13/107, 112, 118, 123, 158–160, 162,  
 D13/173, 174, 184, 199; D15/143, 148,  
 D15/199  
 CPC .... F15B 11/076; F15B 11/0413; F15B 15/24;  
 F15B 15/065; F15B 15/149; F15B  
 15/1433; F16H 19/04  
 See application file for complete search history.

(56) **References Cited**  
 U.S. PATENT DOCUMENTS  
 5,094,143 A \* 3/1992 Andersen, Jr. .... F15B 15/1433  
 137/884  
 5,477,774 A \* 12/1995 Ikumi ..... F15B 15/1428  
 92/161  
 6,029,561 A \* 2/2000 Naslund ..... F15B 15/1433  
 91/394  
 6,276,257 B1 \* 8/2001 Hellemann ..... F15B 11/08  
 91/442  
 D480,405 S \* 10/2003 Kleffmann ..... D15/143

7,032,501 B2 \* 4/2006 Boertje ..... F15B 15/20  
 92/161  
 D534,864 S \* 1/2007 Hu ..... D13/133  
 D572,282 S \* 7/2008 Yaegashi ..... D15/143  
 D573,091 S \* 7/2008 Shih ..... D13/112  
 D609,546 S \* 2/2010 Fukano ..... D8/72  
 D660,333 S \* 5/2012 Takeuchi ..... D15/143  
 D668,321 S \* 10/2012 Senba ..... D23/233  
 D758,310 S \* 6/2016 Veeh ..... D13/112  
 D819,101 S \* 5/2018 Ishikawa ..... D15/148  
 D819,700 S \* 6/2018 Kudo ..... D15/7  
 D821,472 S \* 6/2018 Ishikawa ..... D15/149  
 2004/0094032 A1 \* 5/2004 Doleschel ..... F15B 15/082  
 92/88

\* cited by examiner

*Primary Examiner* — Angela J Lee  
*Assistant Examiner* — Shawn T Gingrich  
 (74) *Attorney, Agent, or Firm* — Oblon, McClelland,  
 Maier & Neustadt, L.L.P.

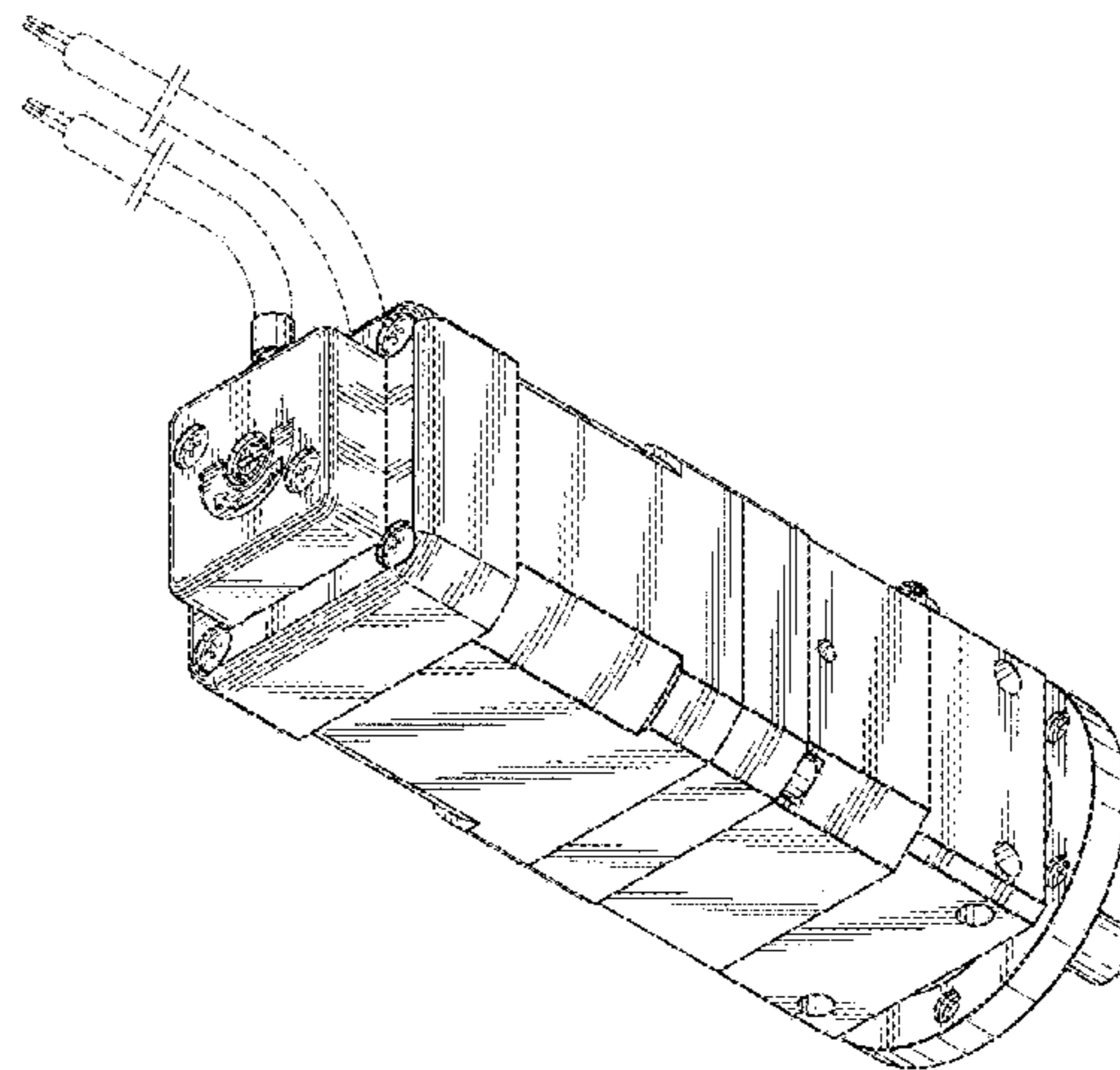
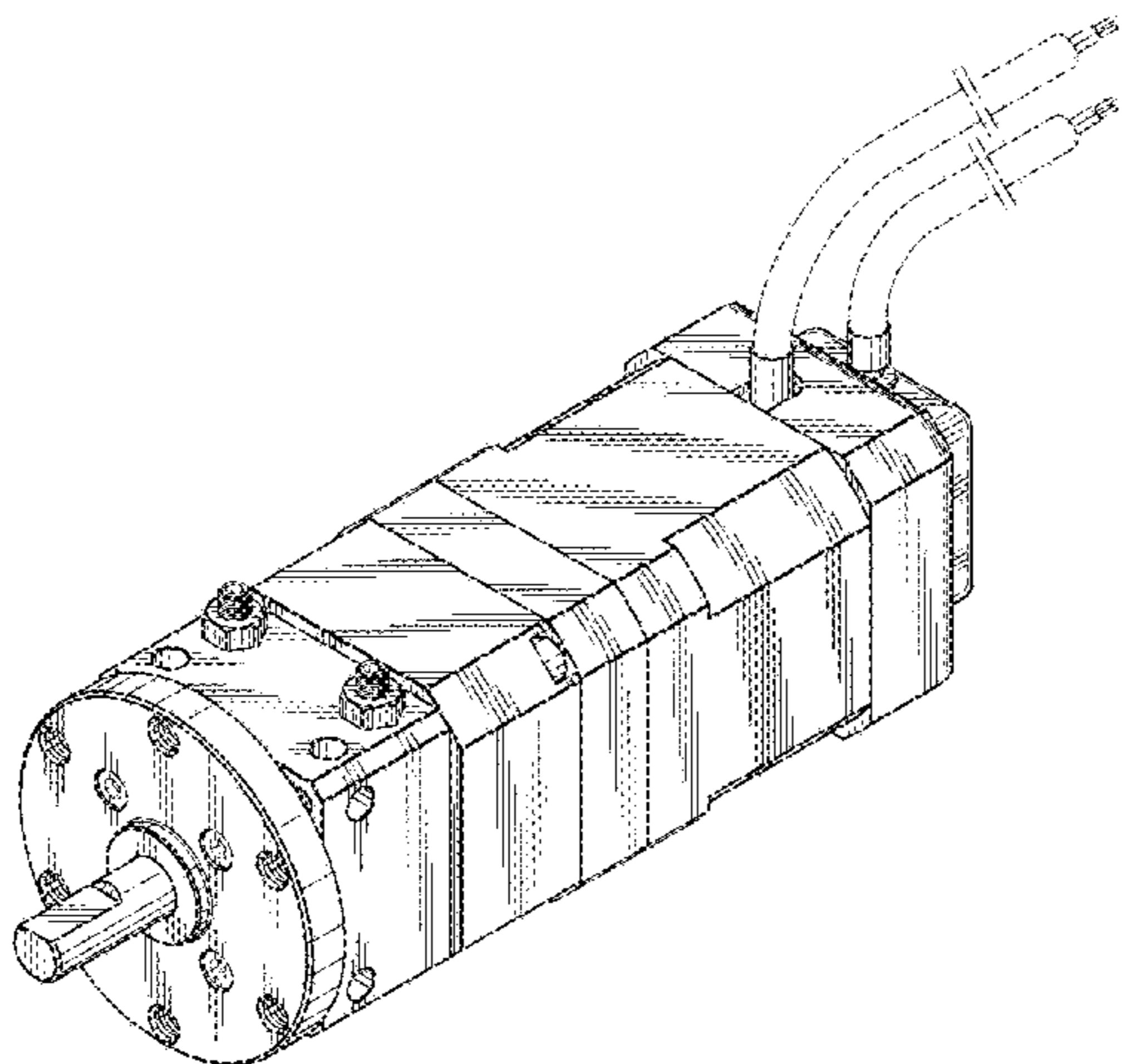
(57) **CLAIM**

The ornamental design for an electric rotary actuator, as shown and described.

**DESCRIPTION**

FIG. 1 is a front, top, and left side perspective view of an electric rotary actuator;  
 FIG. 2 is a rear, bottom, and right side perspective view thereof;  
 FIG. 3 is a front elevational view thereof;  
 FIG. 4 is a rear elevational view thereof;  
 FIG. 5 is a top plan view thereof;  
 FIG. 6 is a bottom plan view thereof;  
 FIG. 7 is a left side elevational view thereof; and,  
 FIG. 8 is a right side elevational view thereof.  
 The broken lines in the drawings illustrate portions of the electric rotary actuator that form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**



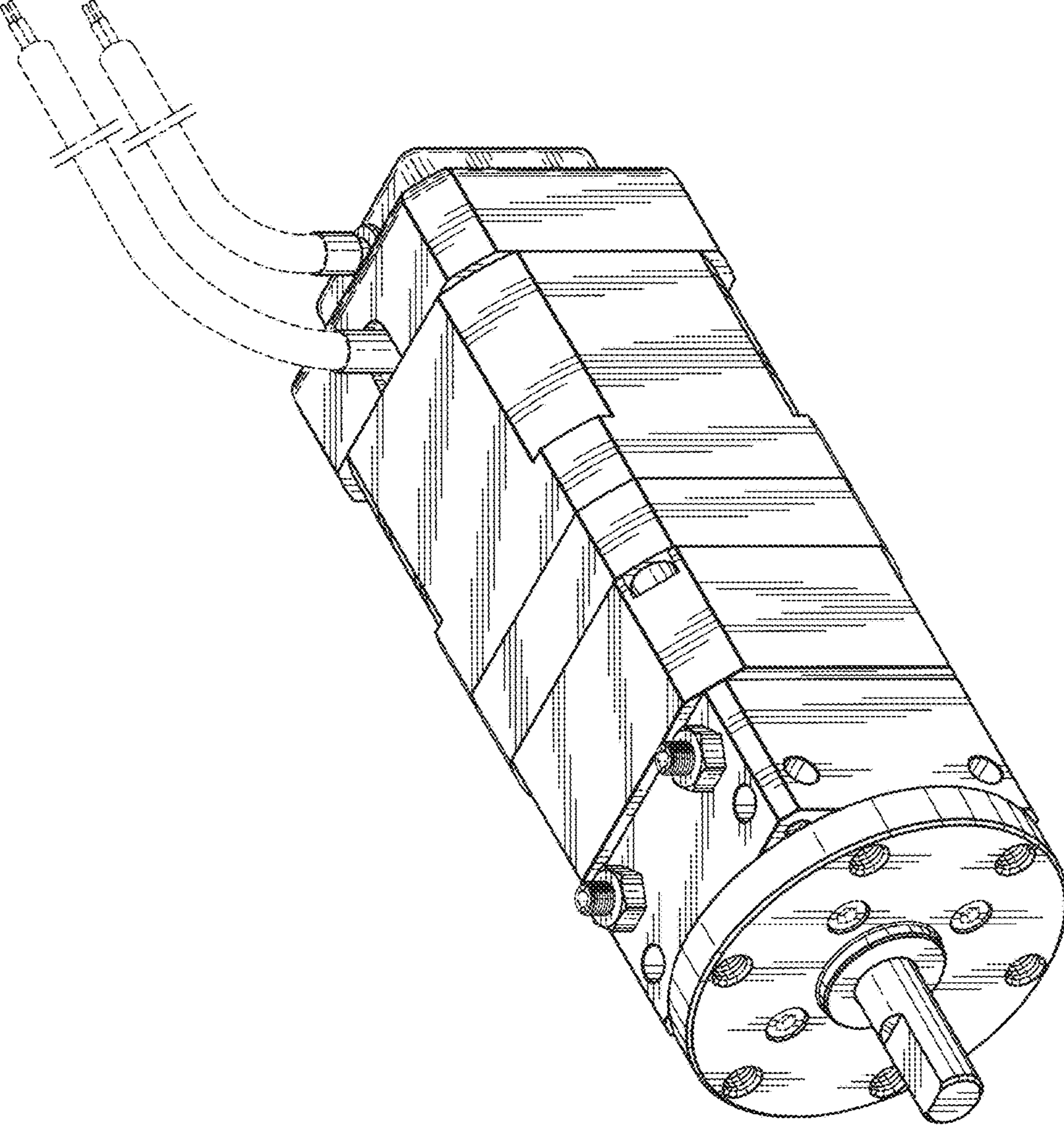


FIG.1

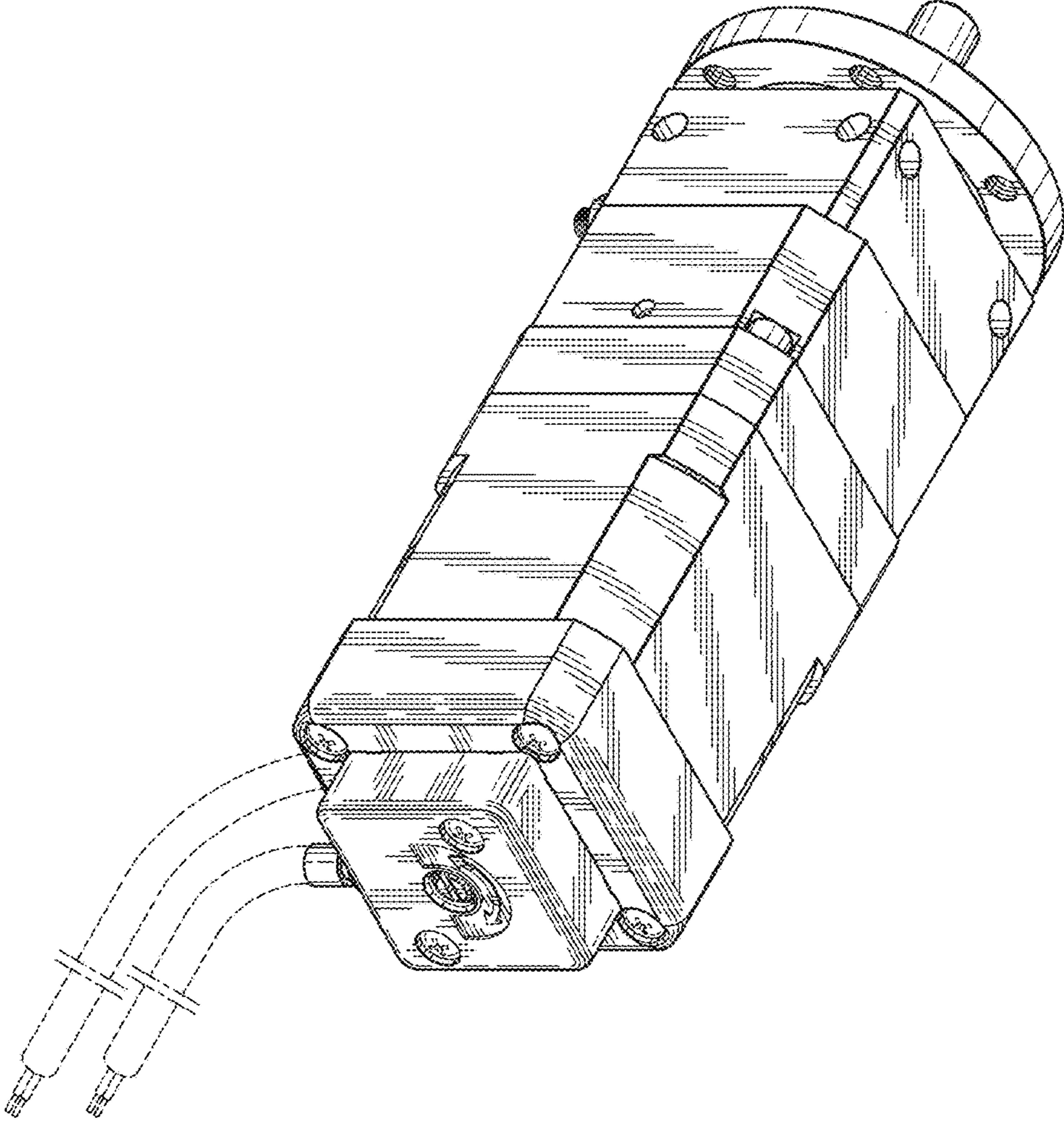


FIG. 2

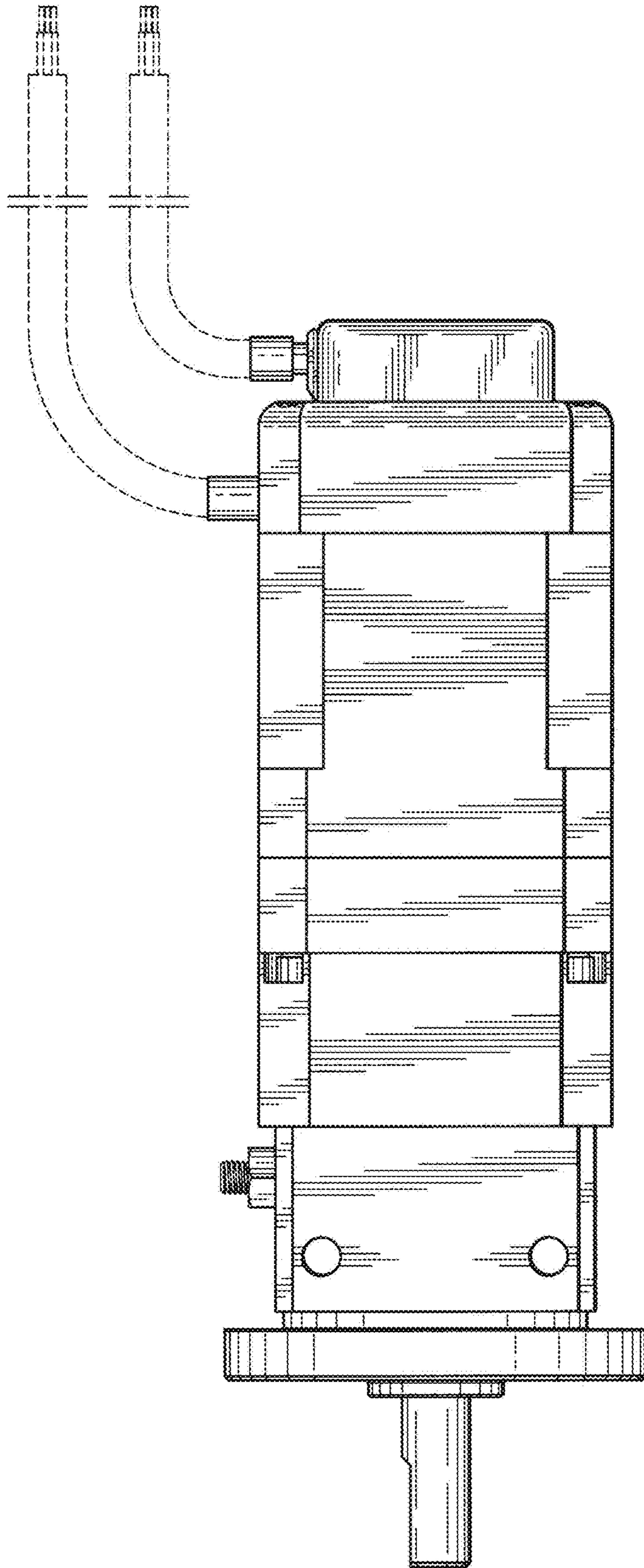


FIG. 3

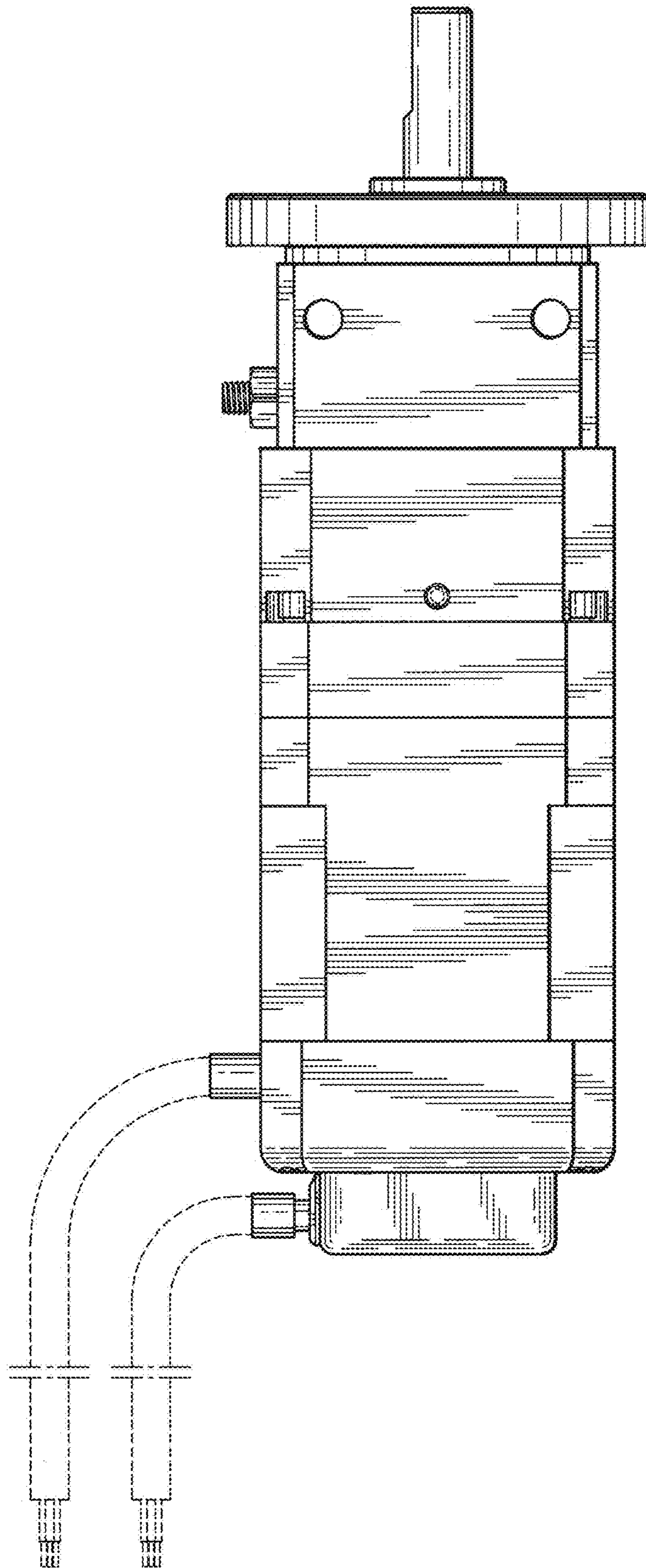


FIG. 4

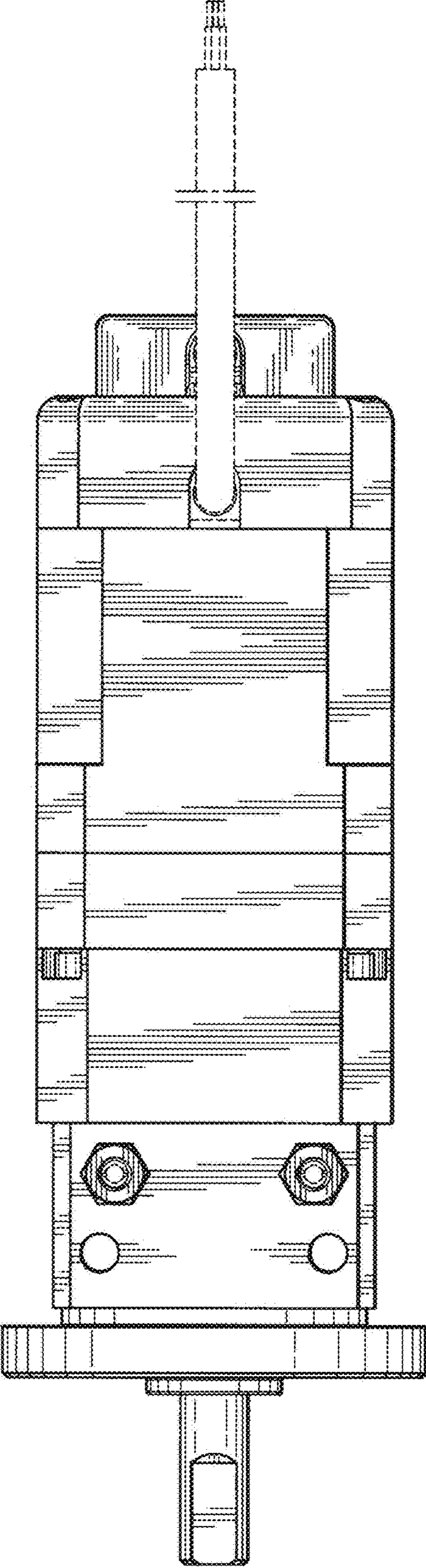


FIG. 5

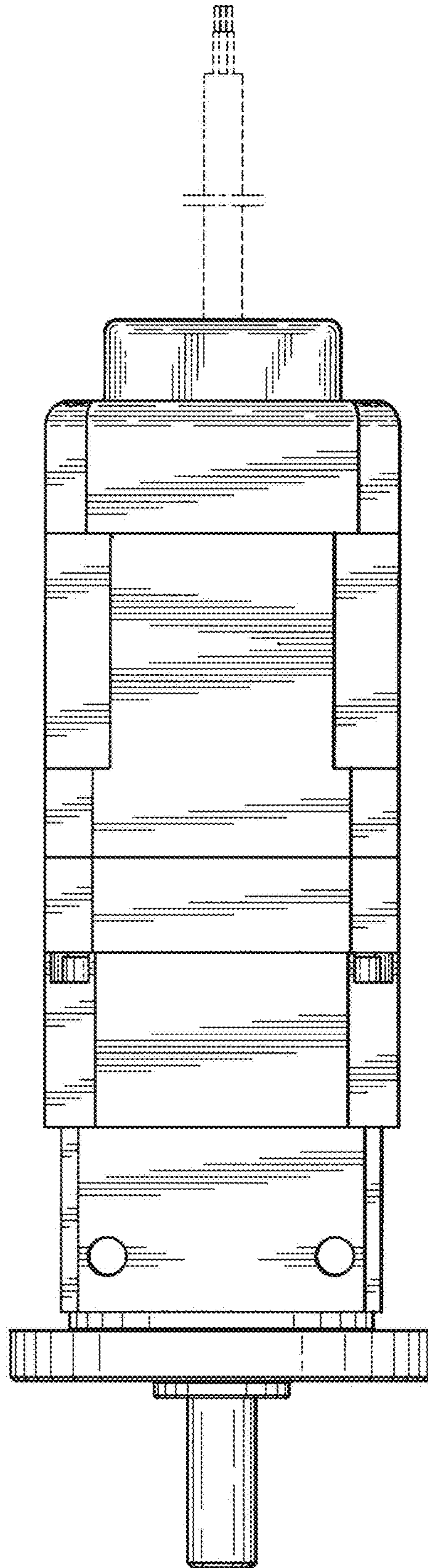


FIG. 6

FIG. 7

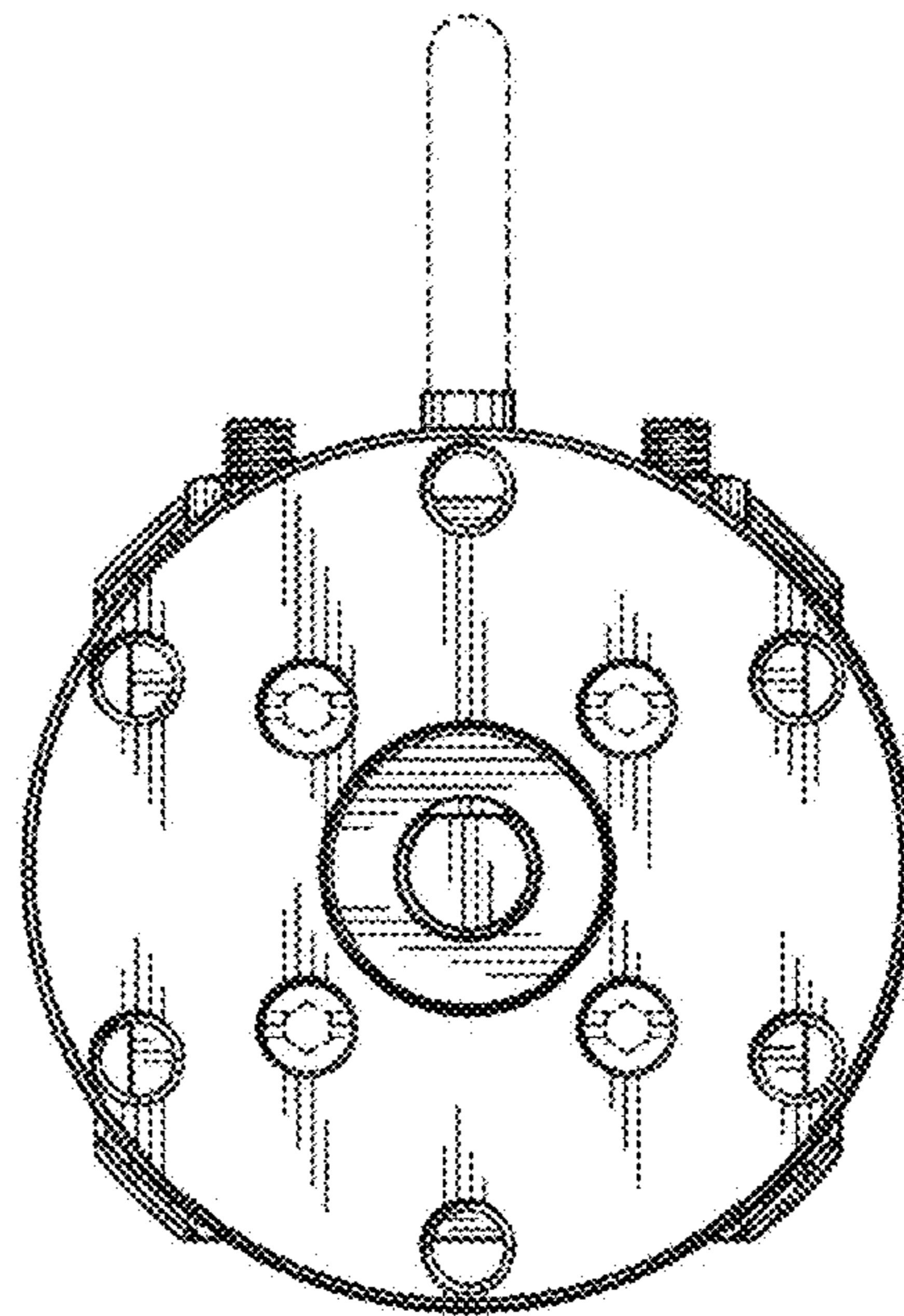




FIG. 8

