US00D792490S

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

(10) **Patent No.: US D792,490 S**
(45) **Date of Patent: ** Jul. 18, 2017**

(54) **LINEAR ACTUATOR**

(71) Applicant: **TIMOTION TECHNOLOGY CO., LTD.**, New Taipei (TW)

(72) Inventors: **Yu-Chang Lin**, New Taipei (TW); **Bing-Sen Zhuang**, New Taipei (TW)

(73) Assignee: **TIMOTION TECHNOLOGY CO., LTD.**, New Taipei (TW)

(**) Term: **15 Years**

(21) Appl. No.: **29/577,368**

(22) Filed: **Sep. 13, 2016**

(51) **LOC (10) Cl.** **15-09**

(52) **U.S. Cl.**
USPC **D15/143**; D15/148

(58) **Field of Classification Search**
USPC D12/345; D13/118, 158, 162, 184; D15/1–5, 7, 9, 143, 148, 149, 199
CPC B66F 3/18; F16H 19/04; F16H 57/039; H01F 7/066
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D595,753	S	*	7/2009	Tseng	D15/143
D596,652	S	*	7/2009	Roither	D15/143
D632,321	S	*	2/2011	Wu	D15/143
D646,310	S	*	10/2011	Lan	D15/143
D686,648	S	*	7/2013	Wu	D15/143
D696,704	S	*	12/2013	Battistella	D15/143
D765,748	S	*	9/2016	Bogelund	D15/143
D776,728	S	*	1/2017	Wu	D15/143
D785,061	S	*	4/2017	Gong	D15/148
D785,062	S	*	4/2017	Gong	D15/148
2016/0223062	A1	*	8/2016	Pate	F16H 19/04

FOREIGN PATENT DOCUMENTS

CA	2685316	A1 *	11/2008	..... F16H 57/032
DE	9308430	U1 *	9/1993	..... F16H 57/028

OTHER PUBLICATIONS

TiMotion Electric Cylinder/orthagonal/DC, posted on directindustry.com, no posted date given, no production date given, [online], [site visited May 12, 2017], Available from Internet, <URL: http://www.directindustry.com/prod/timotion-technology-co-ltd/product-126233-1716532.html>.*

(Continued)

Primary Examiner — Melanie H Tung
Assistant Examiner — Fritzgerald Butac
(74) *Attorney, Agent, or Firm* — Chun-Ming Shih; HDLS IPR Services

(57) **CLAIM**

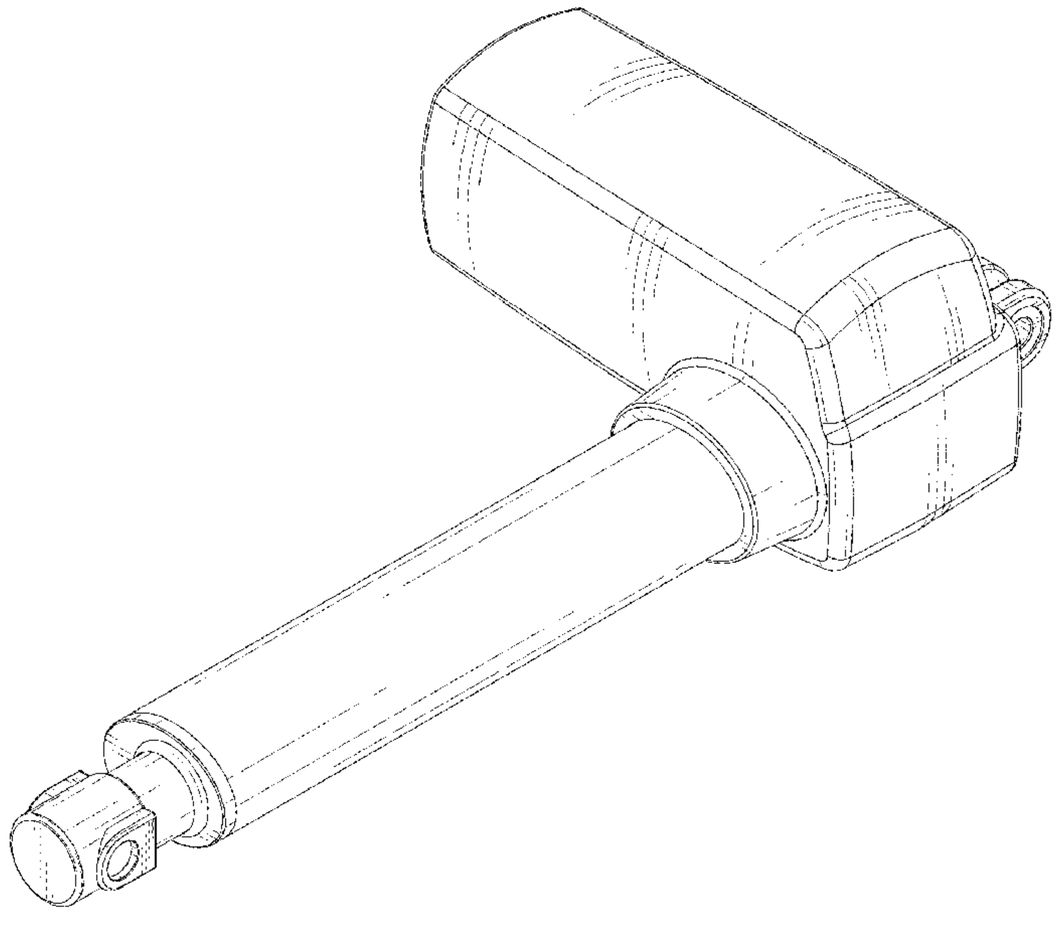
The ornamental design for a linear actuator, as shown and described.

DESCRIPTION

FIG. **1** is a perspective view of a linear actuator showing my new design;
FIG. **2** is a front 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;
FIG. **7** is a bottom view thereof;
FIG. **8** is second perspective view thereof; and,
FIG. **9** is a perspective view showing the linear actuator in use.

The broken lines in FIG. **9** showing a linear actuator in use is for the purpose of illustrating environmental structure and forms no part of the claimed design.

1 Claim, 9 Drawing Sheets



(56) **References Cited**

OTHER PUBLICATIONS

TiMotion TA10 Series Linear Actuators, posted on timotion.com, no posted date given, no production date given, [online], [site visited May 12, 2017], Available from Internet, <URL: http://www.timotion.com/product.php?ProductID=10>.*

LAM3 Series Linear Actuator, posted on hiwin.com, no posted date given, no production date given, [online], [site visited May 12, 2017], Available from Internet, <URL: http://www.hiwin.com/linear-actuators.html#series>.*

* cited by examiner

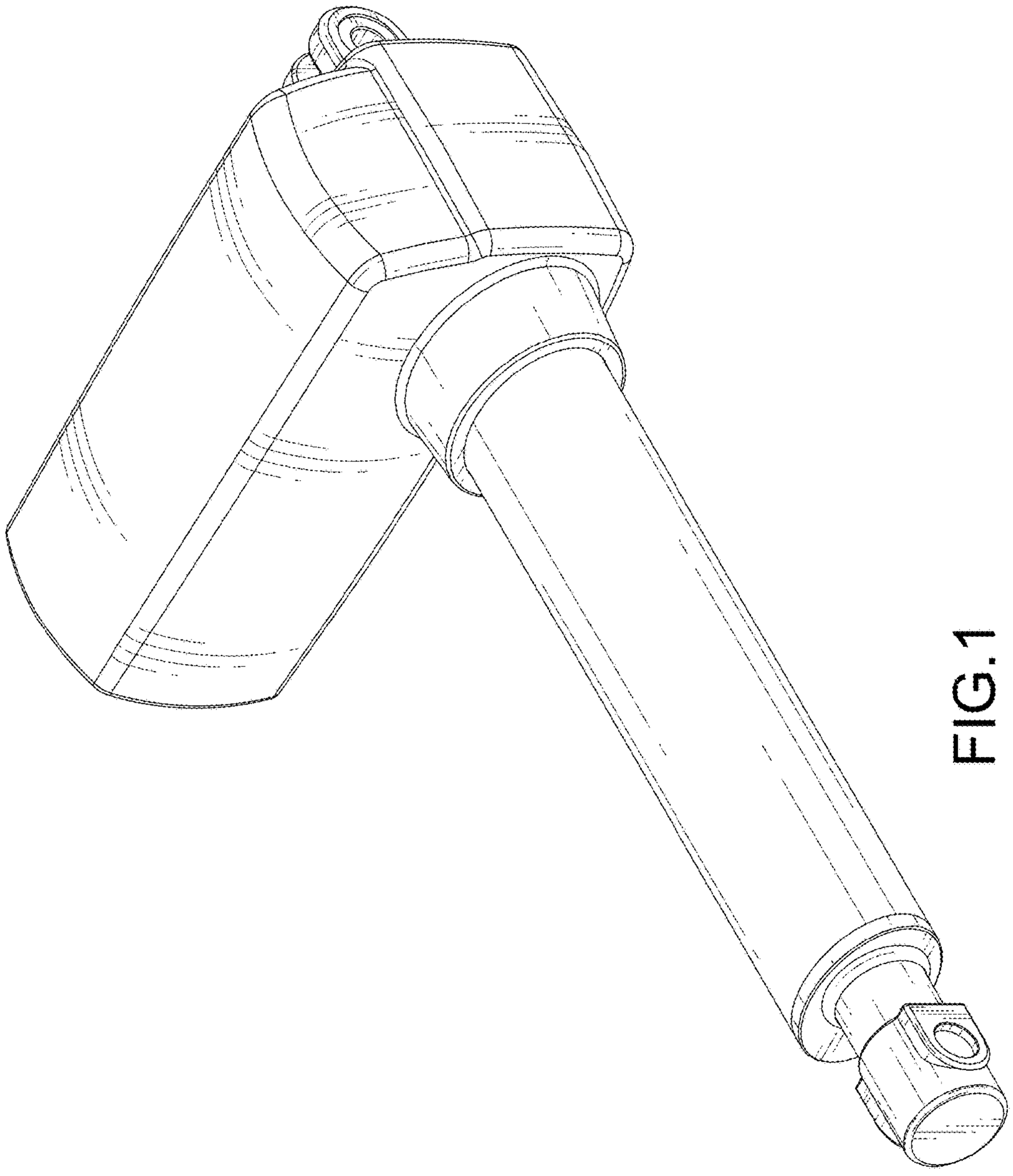


FIG.1

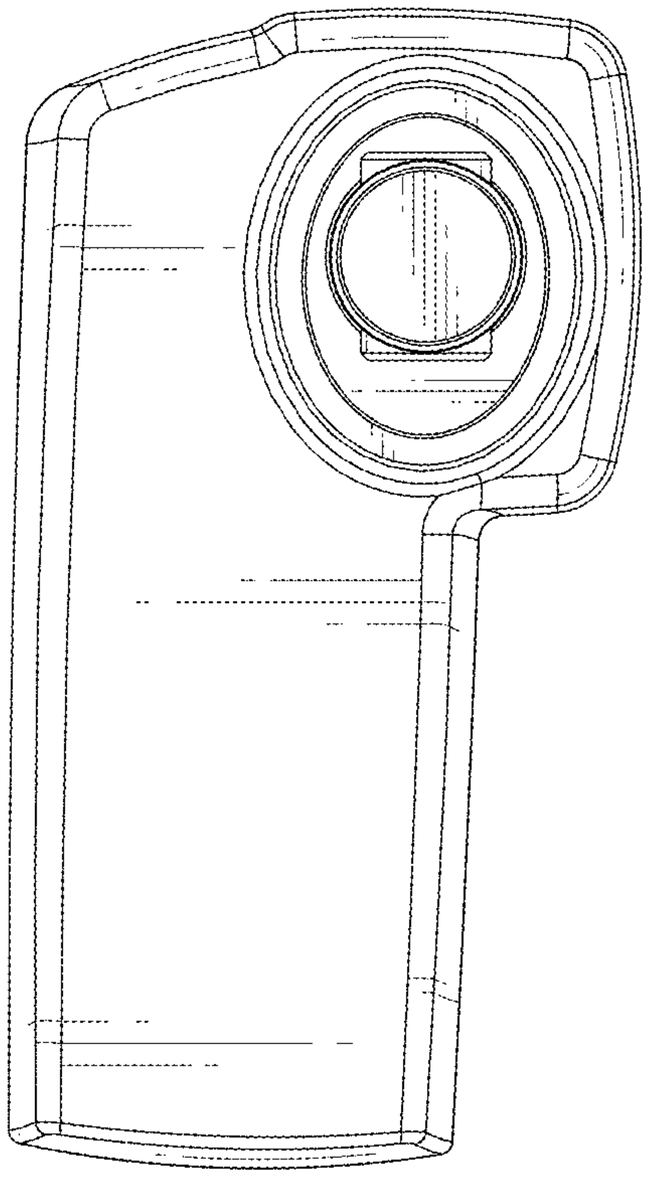


FIG.2

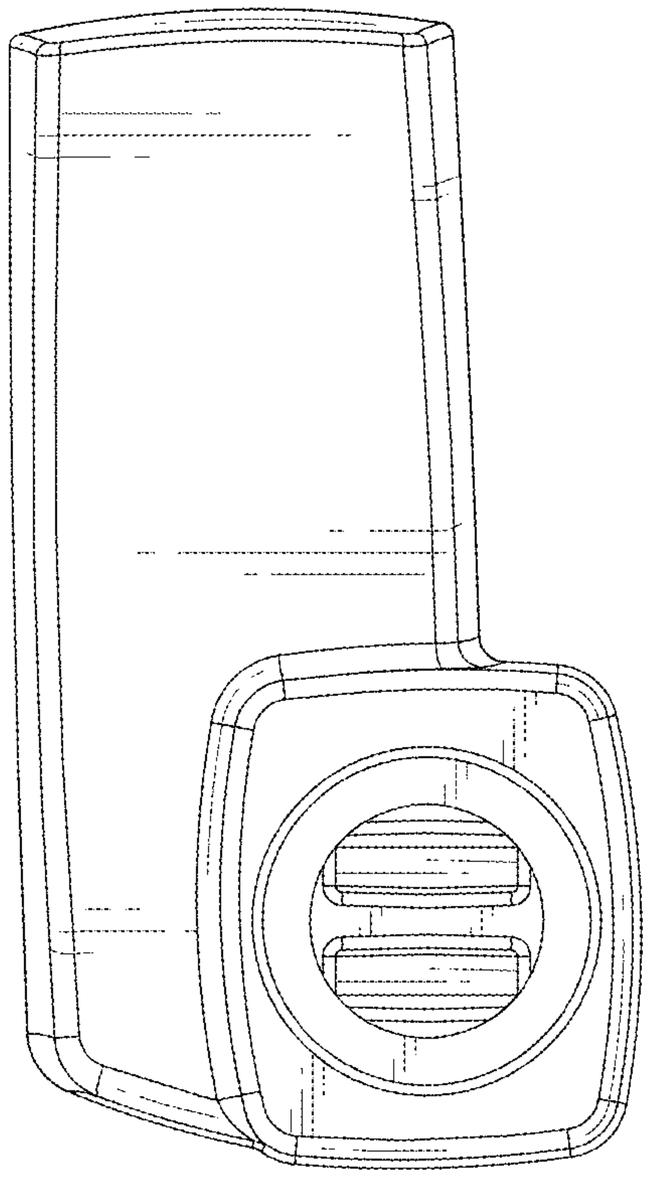


FIG.3

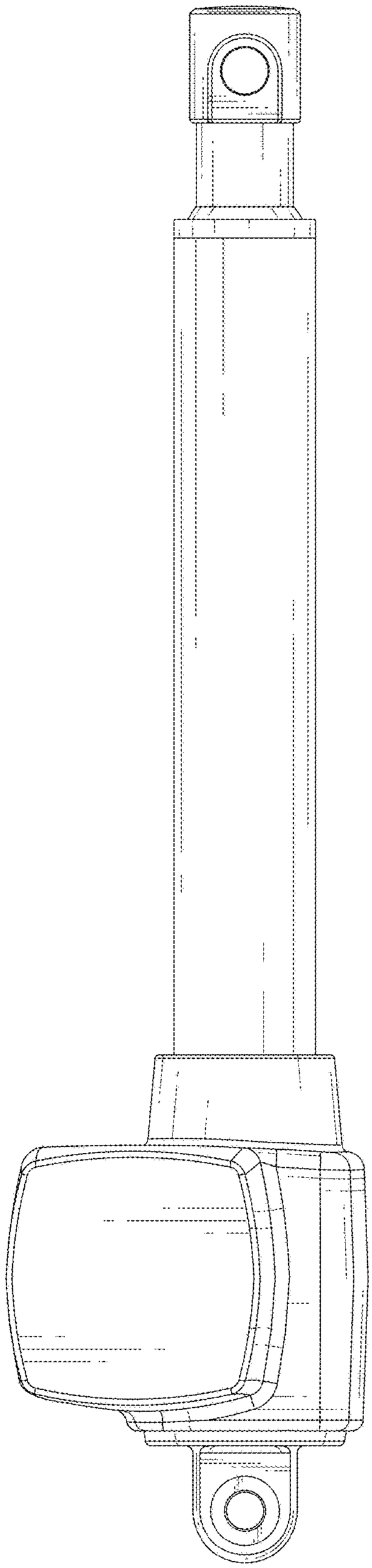


FIG.4

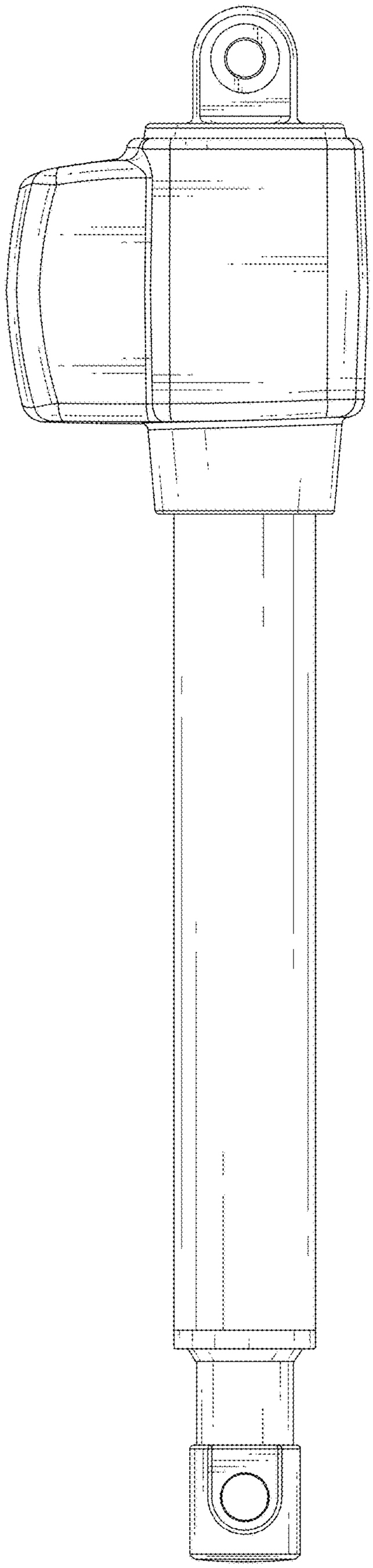


FIG.5

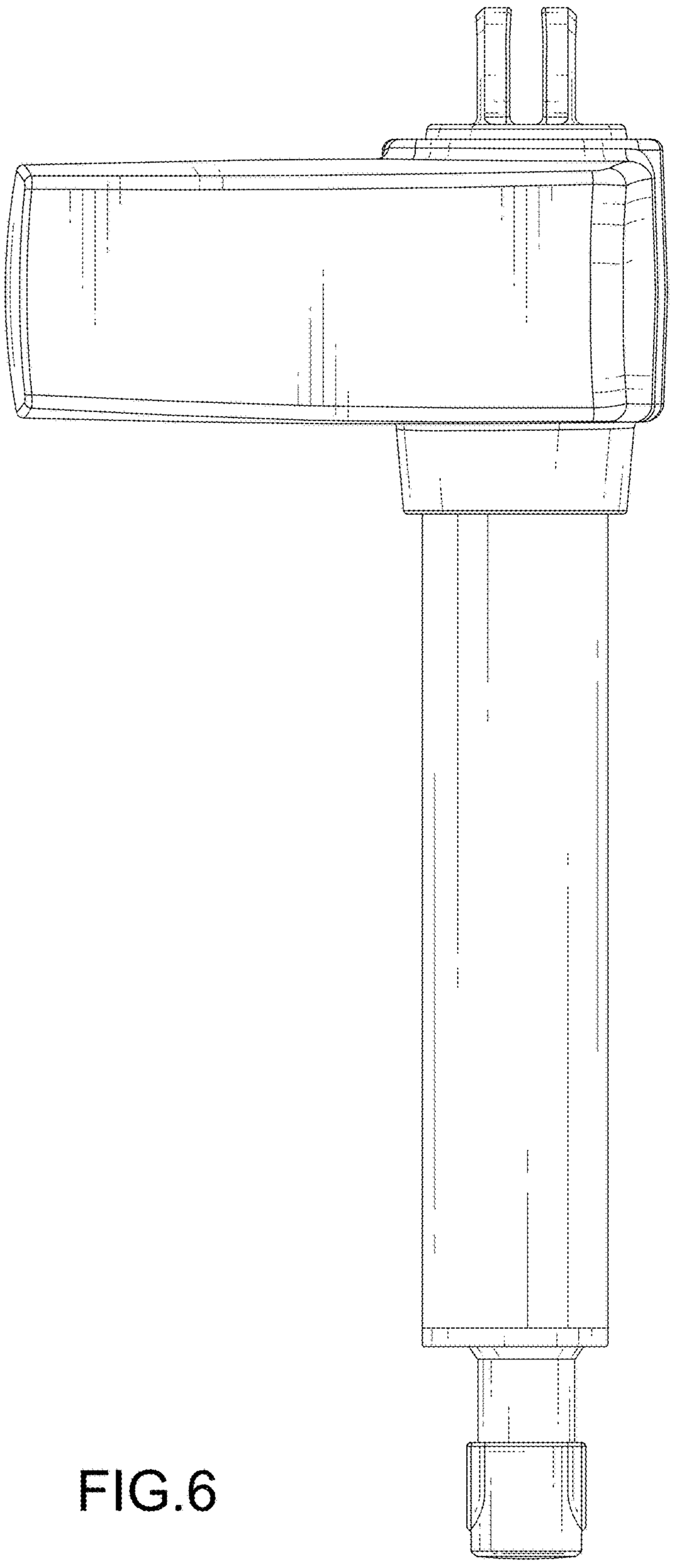


FIG.6

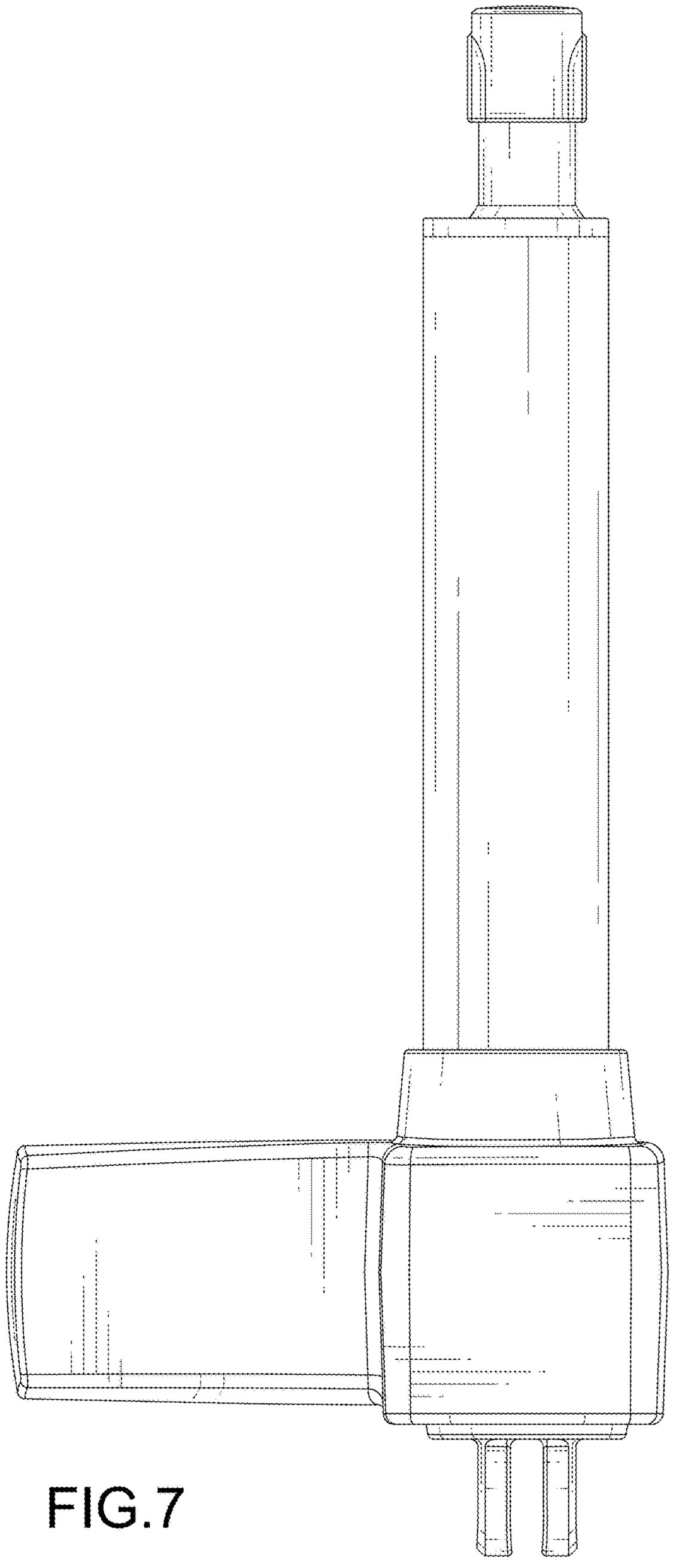


FIG.7

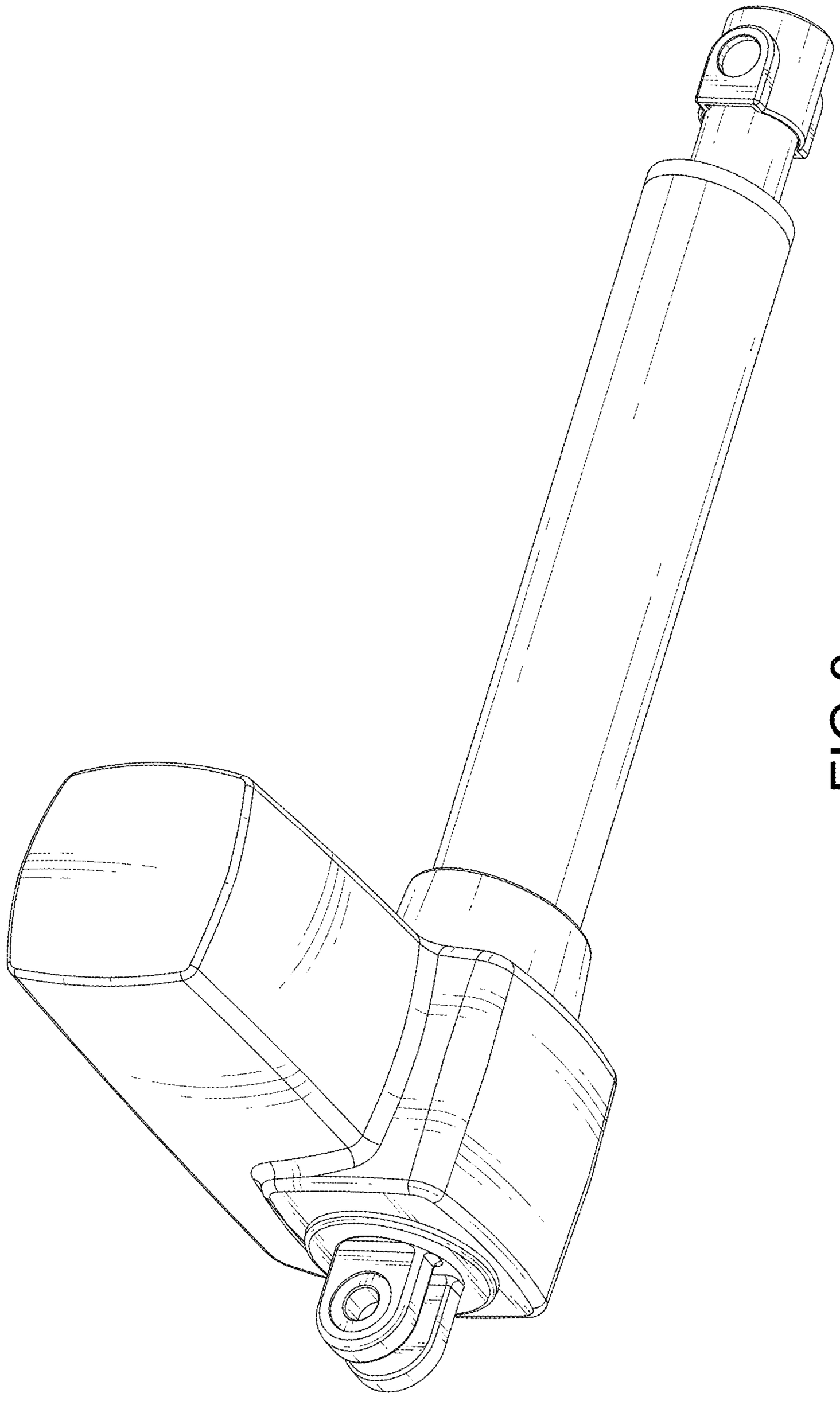


FIG.8

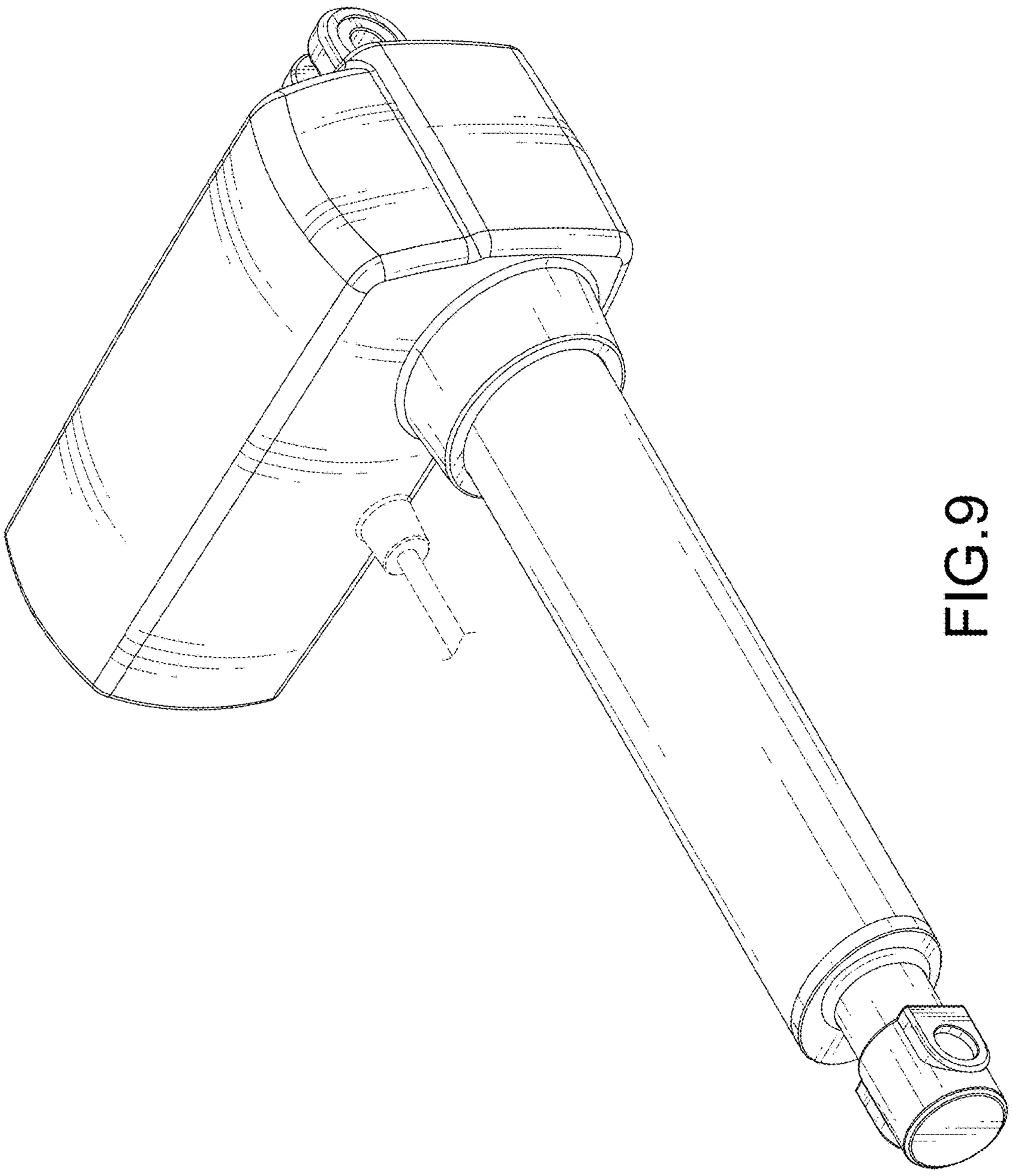


FIG.9