



US00D881037S

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

(10) **Patent No.:** **US D881,037 S**
(45) **Date of Patent:** **** Apr. 14, 2020**

(54) **METAL DETECTOR**

(71) Applicant: **SHANGHAI TYMEX INTERNATIONAL TRADE CO., LTD.**, Shanghai (CN)

(72) Inventor: **Yueling Zhang**, Shanghai (CN)

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

(21) Appl. No.: **29/709,899**

(22) Filed: **Oct. 18, 2019**

(51) **LOC (12) Cl.** **10-04**

(52) **U.S. Cl.**
USPC **D10/47**

(58) **Field of Classification Search**
USPC D10/47
CPC ... G01V 3/00; G01V 3/02; G01V 3/04; G01V 3/06; G01V 3/08; G01V 3/081; G01V 3/082; G01V 3/083; G01V 2003/084; G01V 2003/085; G01V 2003/086; G01V 3/087; G01V 3/088; G01V 3/10; G01V 3/101; G01V 3/102; G01V 3/104; G01V 3/105; G01V 3/107; G01V 3/108; G01V 3/12; G01V 3/14; G01V 3/15; G01V 3/16; G01V 3/165; G01V 3/17; G01V 3/175; G01V 3/18; G01V 3/20; G01V 3/22; G01V 3/24; G01V 3/26; G01V 3/265; G01V 3/28; G01V 3/30; G01V 3/32; G01V 3/34; G01V 3/36; G01V 3/38; G01V 3/40

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

8,842,035 B2 * 9/2014 Duvoisin, III G01S 13/885
342/22
9,021,661 B2 * 5/2015 Andel G01V 3/15
16/429

D756,247 S * 5/2016 Pollock G01S 13/885
D10/47
9,664,809 B2 * 5/2017 Fry G01V 3/104
9,733,353 B1 * 8/2017 Carlson G01S 13/878
9,864,089 B2 * 1/2018 Andel F41H 11/136
D844,462 S * 4/2019 Griffin D10/47
D844,463 S * 4/2019 Zhang F41H 11/136
D10/47
D846,411 S * 4/2019 Zhang G01S 13/878
D10/47
D867,170 S * 11/2019 Deng D10/47

* cited by examiner

Primary Examiner — Antoine Duval Davis

(74) *Attorney, Agent, or Firm* — Jie Yang; ZanIP

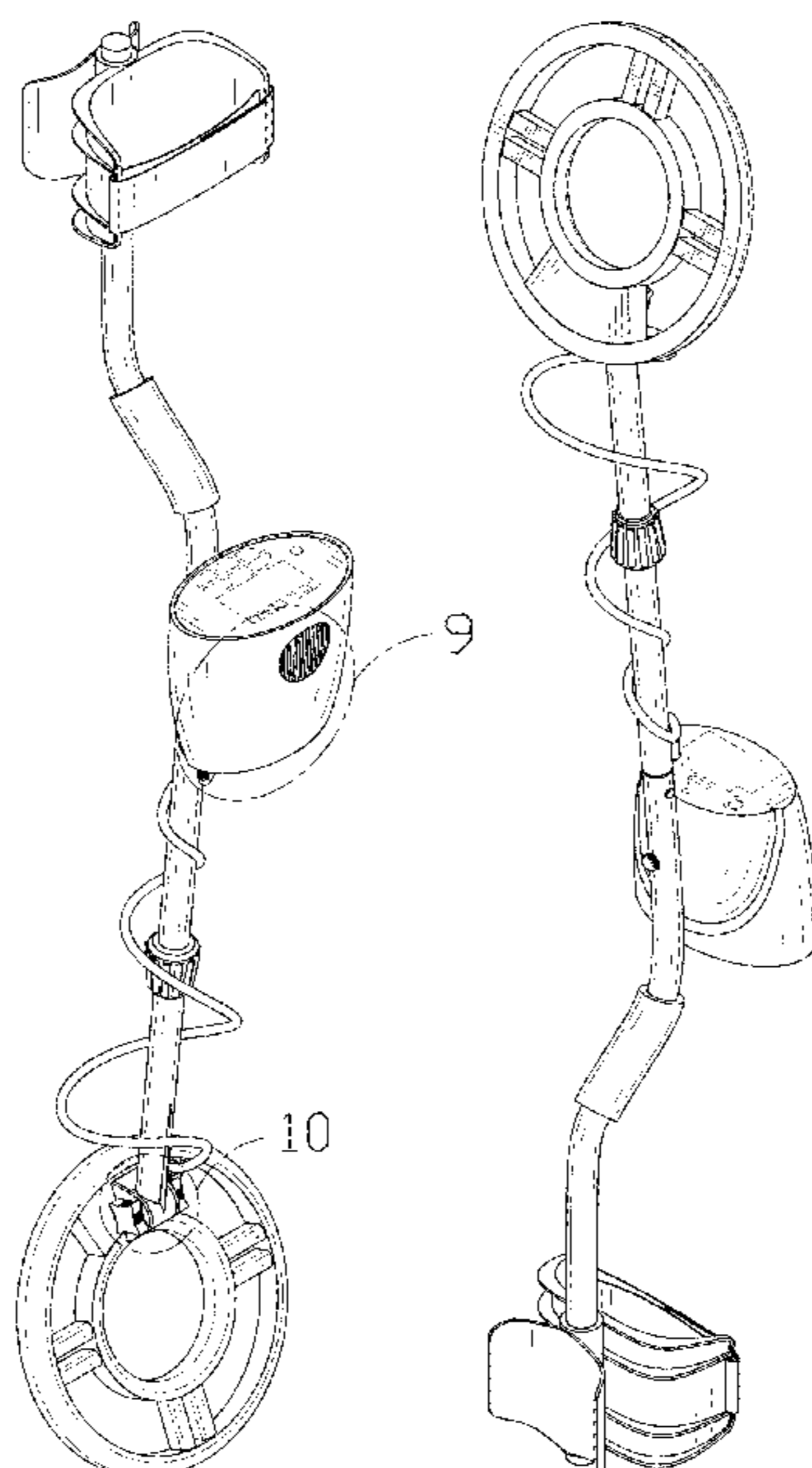
(57) **CLAIM**

The ornamental design for a metal detector, as shown and described.

DESCRIPTION

FIG. 1 is a front and top perspective view of a metal detector, showing my new design;
FIG. 2 is a rear and bottom perspective view thereof;
FIG. 3 is a front elevational view thereof;
FIG. 4 is a rear elevational view thereof;
FIG. 5 is a left side elevational view thereof;
FIG. 6 is a right side elevational view thereof;
FIG. 7 is a top plan view thereof;
FIG. 8 is a bottom plan view thereof;
FIG. 9 is an enlarged view of a portion indicated in FIG. 1;
FIG. 10 is an enlarged view of a portion indicated in FIG. 1; and,
FIG. 11 is an enlarged view of a portion indicated in FIG. 5.
The broken lines in the figures illustrate portions of the metal detector that form no part of the claimed design.

1 Claim, 11 Drawing Sheets



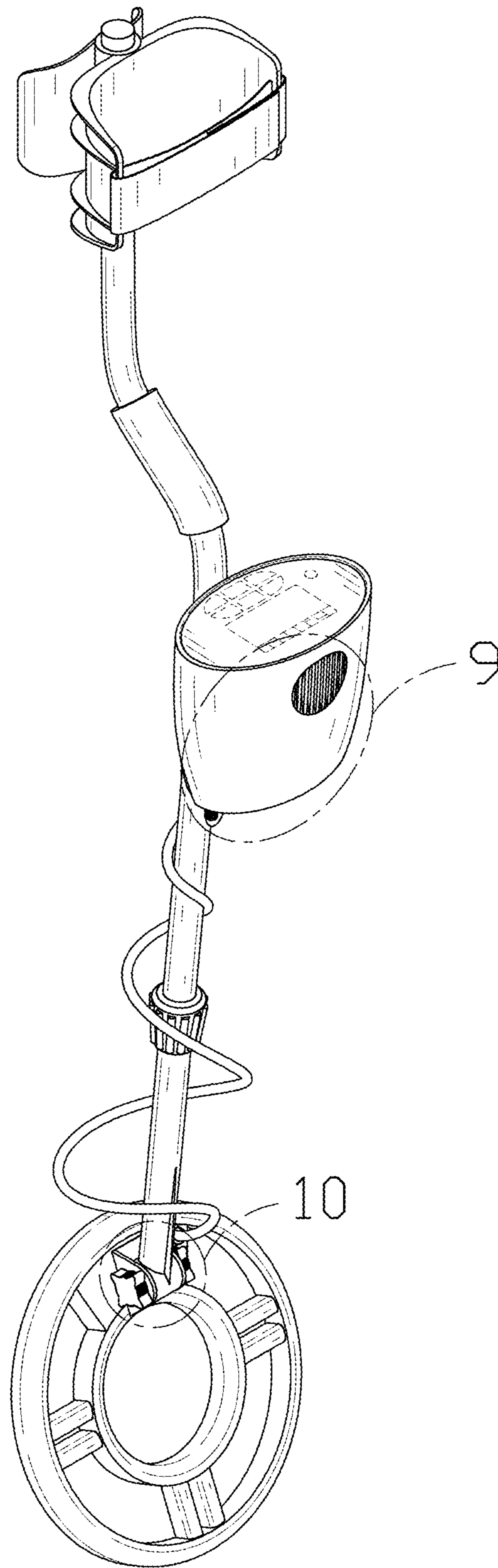


FIG. 1

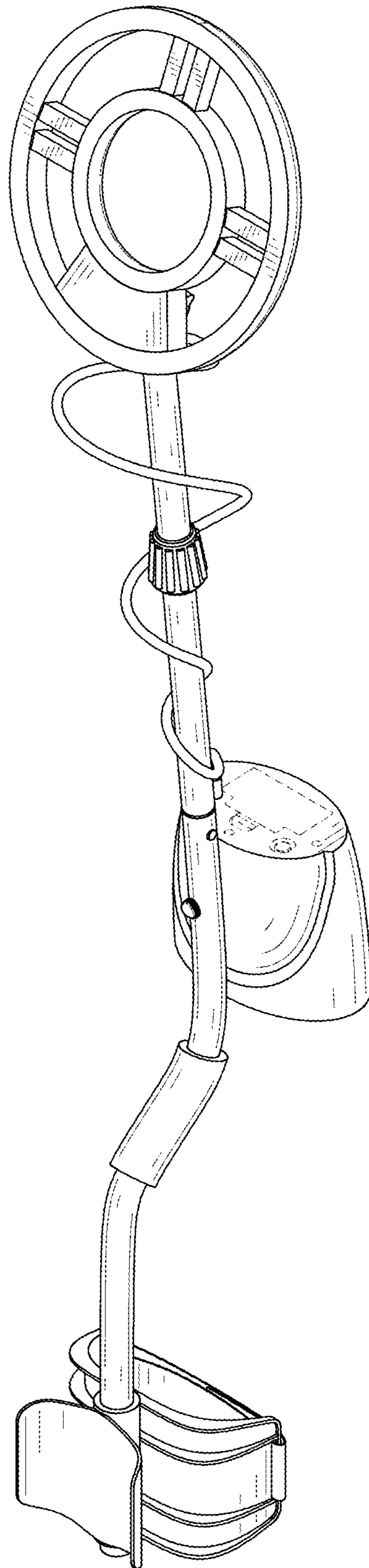


FIG. 2

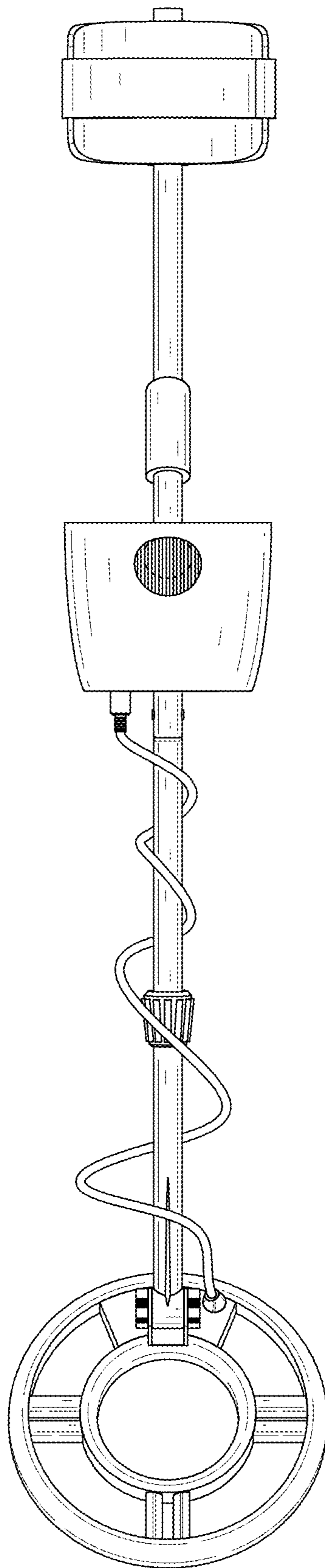


FIG. 3

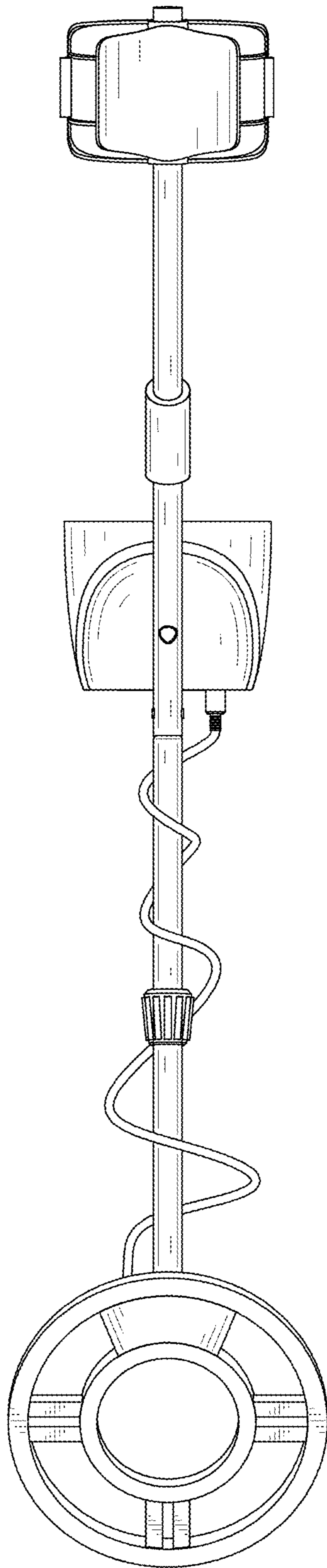


FIG. 4

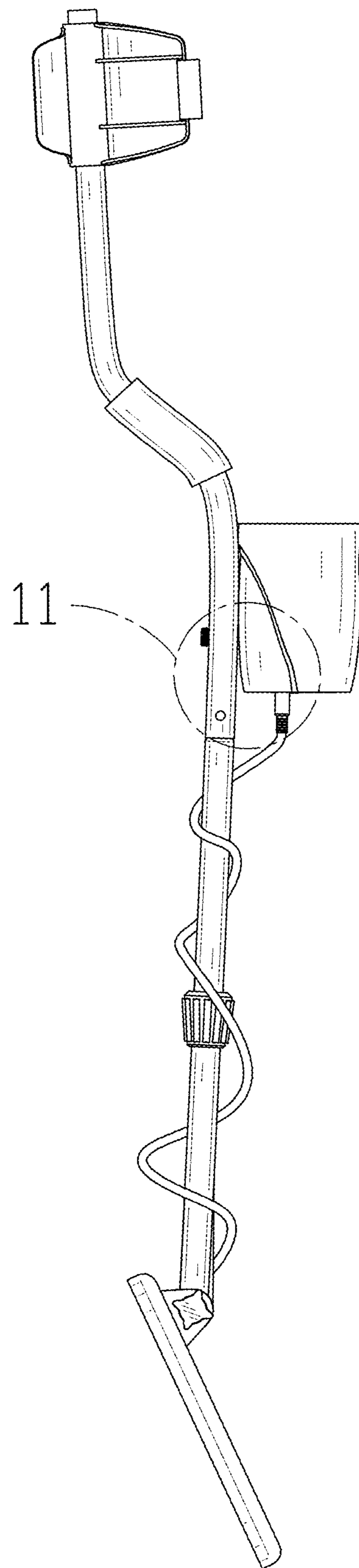


FIG. 5

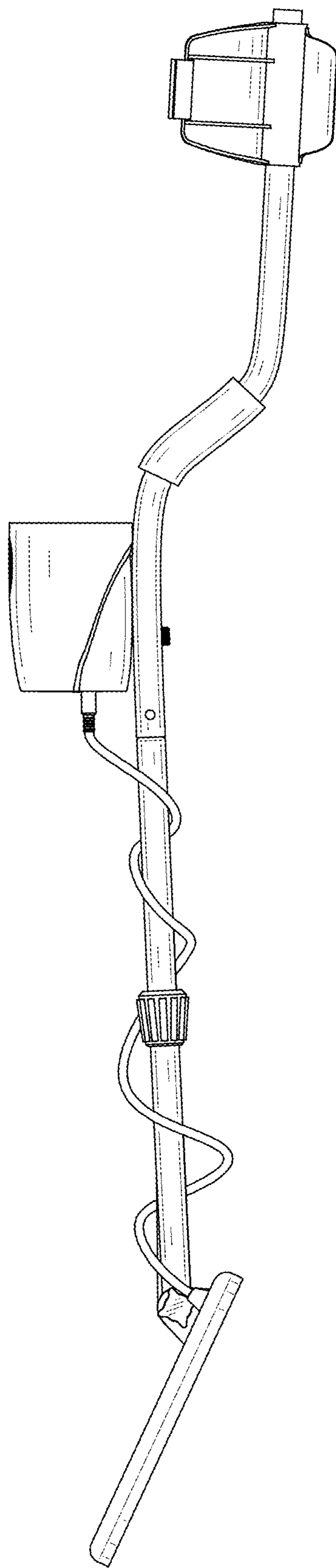


FIG. 6

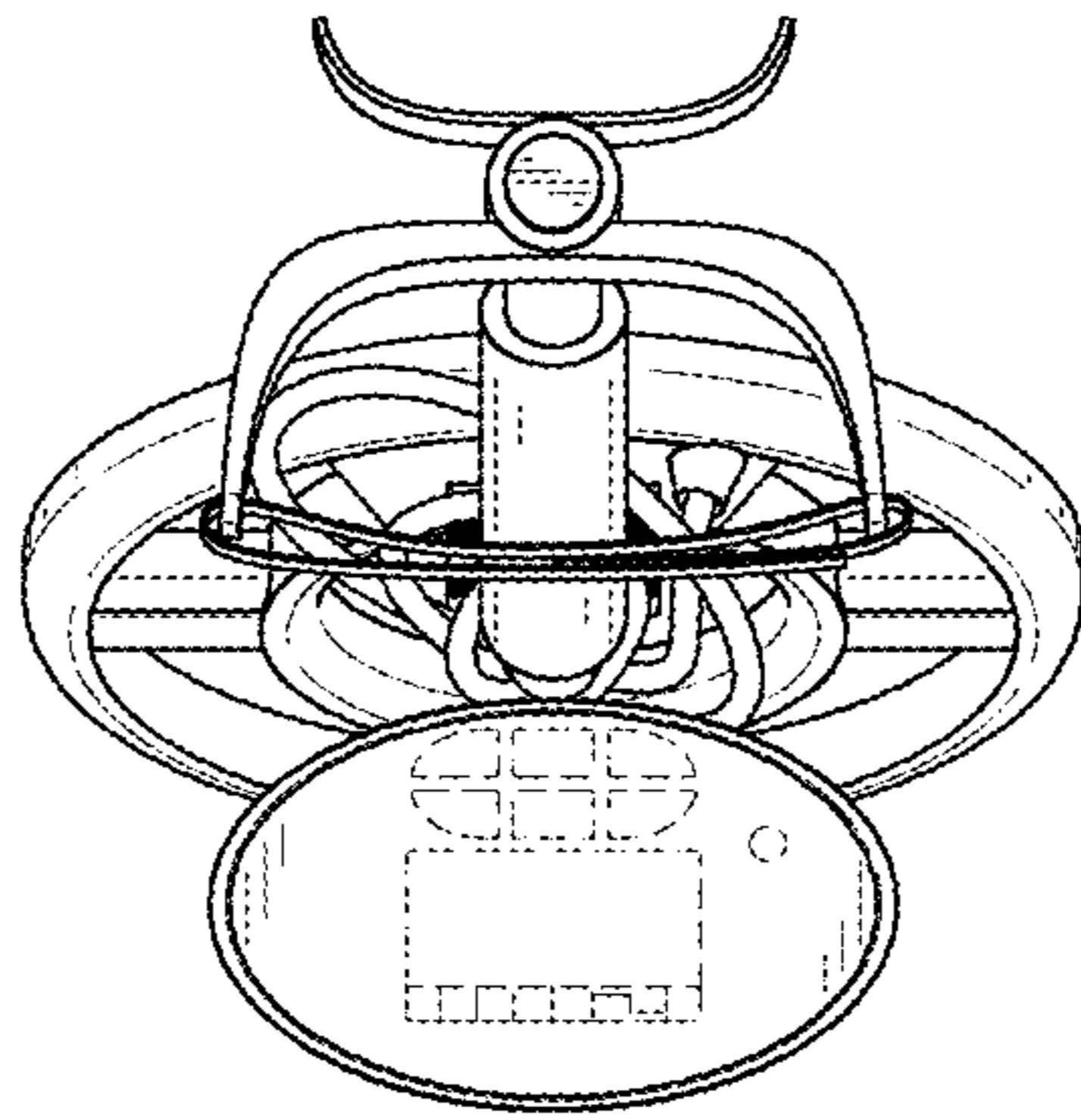


FIG. 7

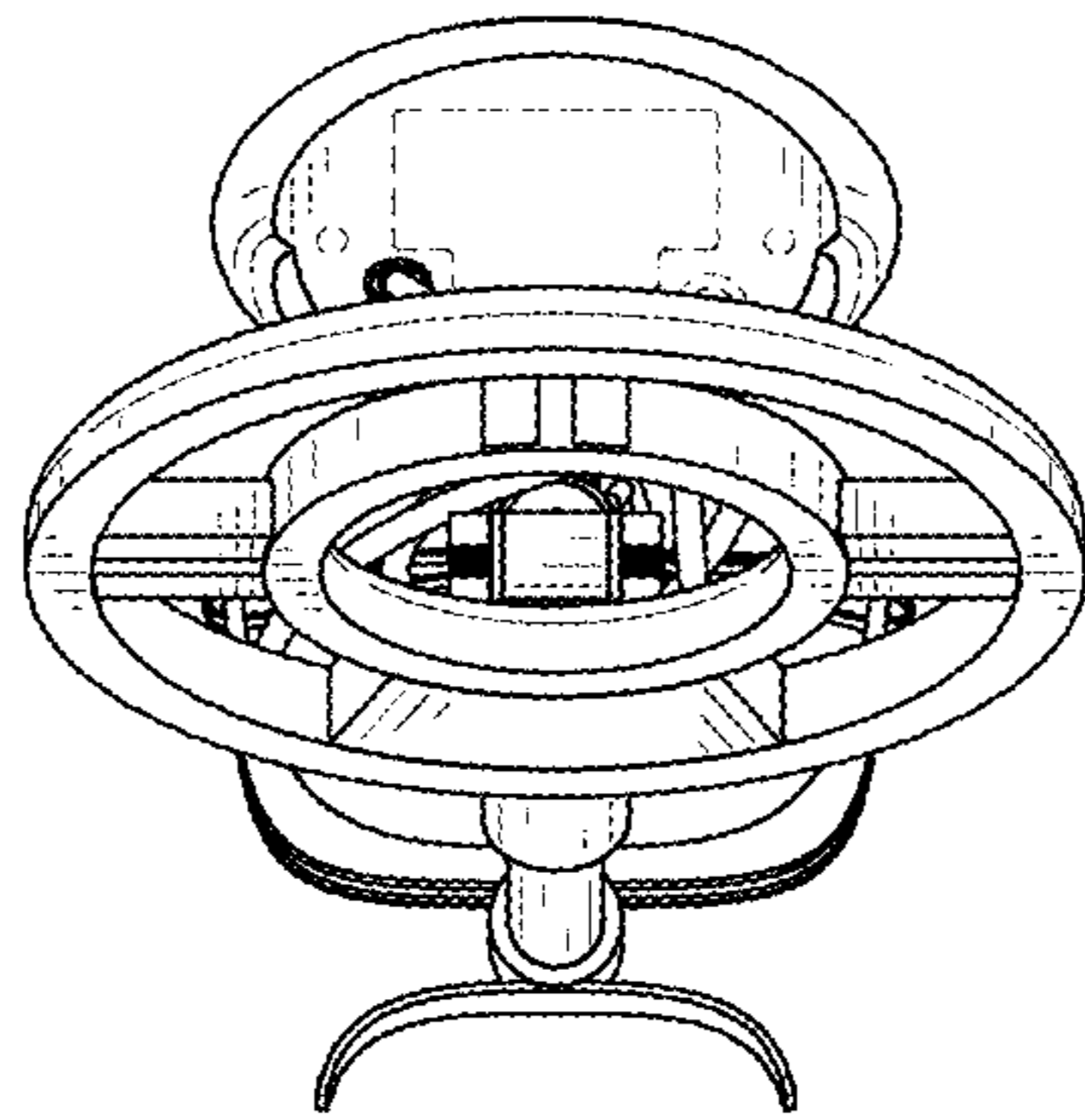


FIG. 8

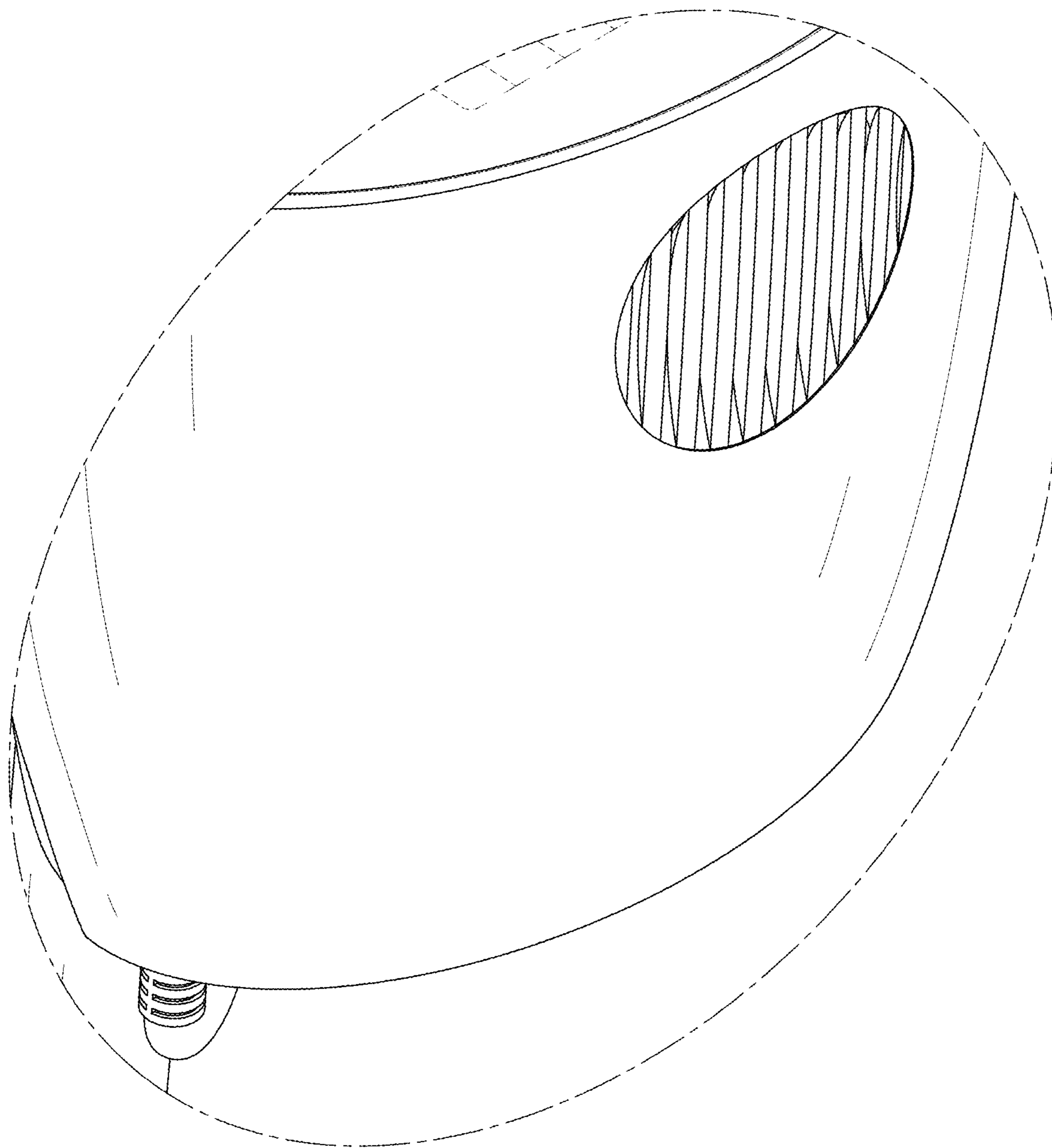


FIG. 9

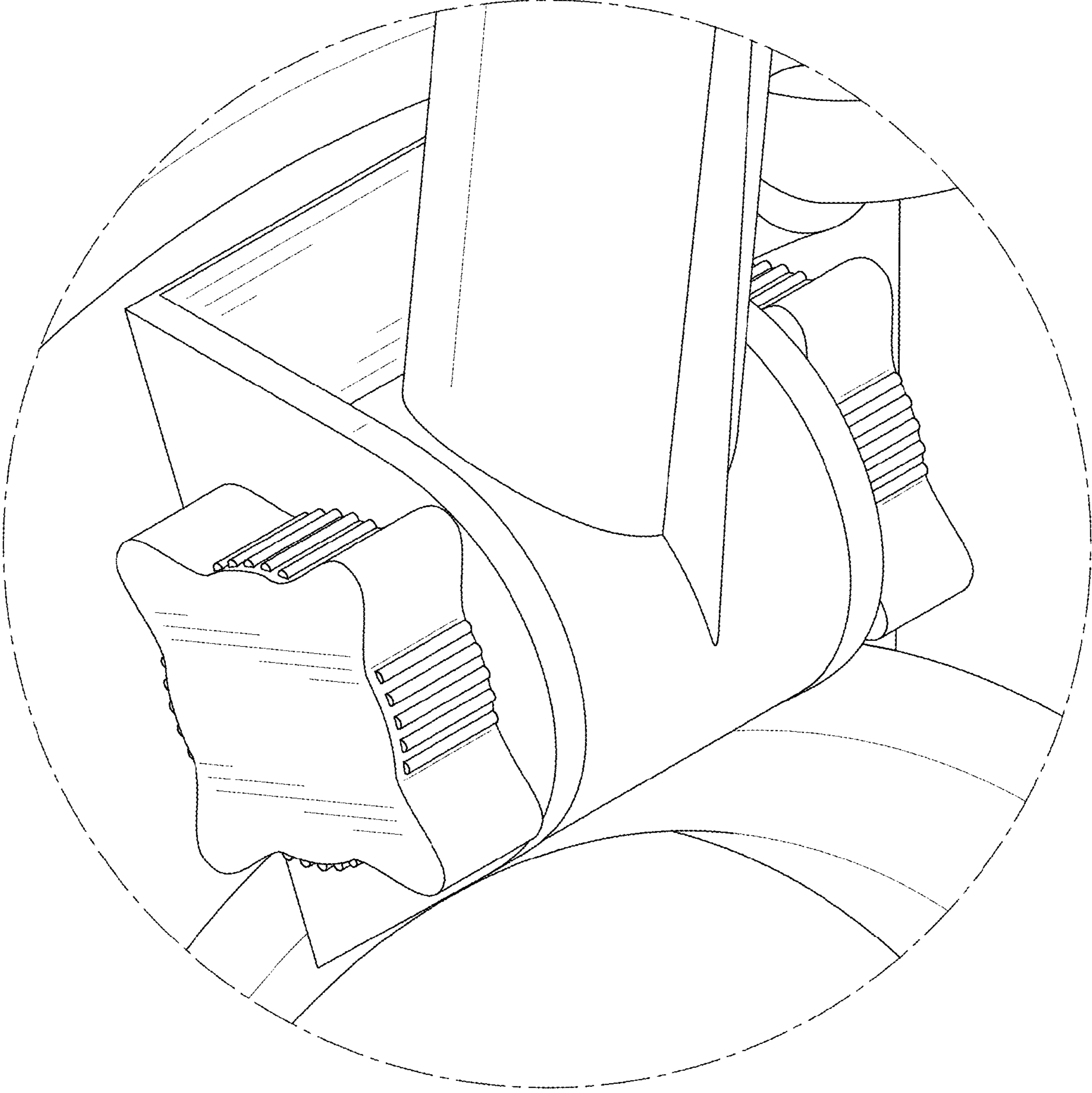


FIG. 10

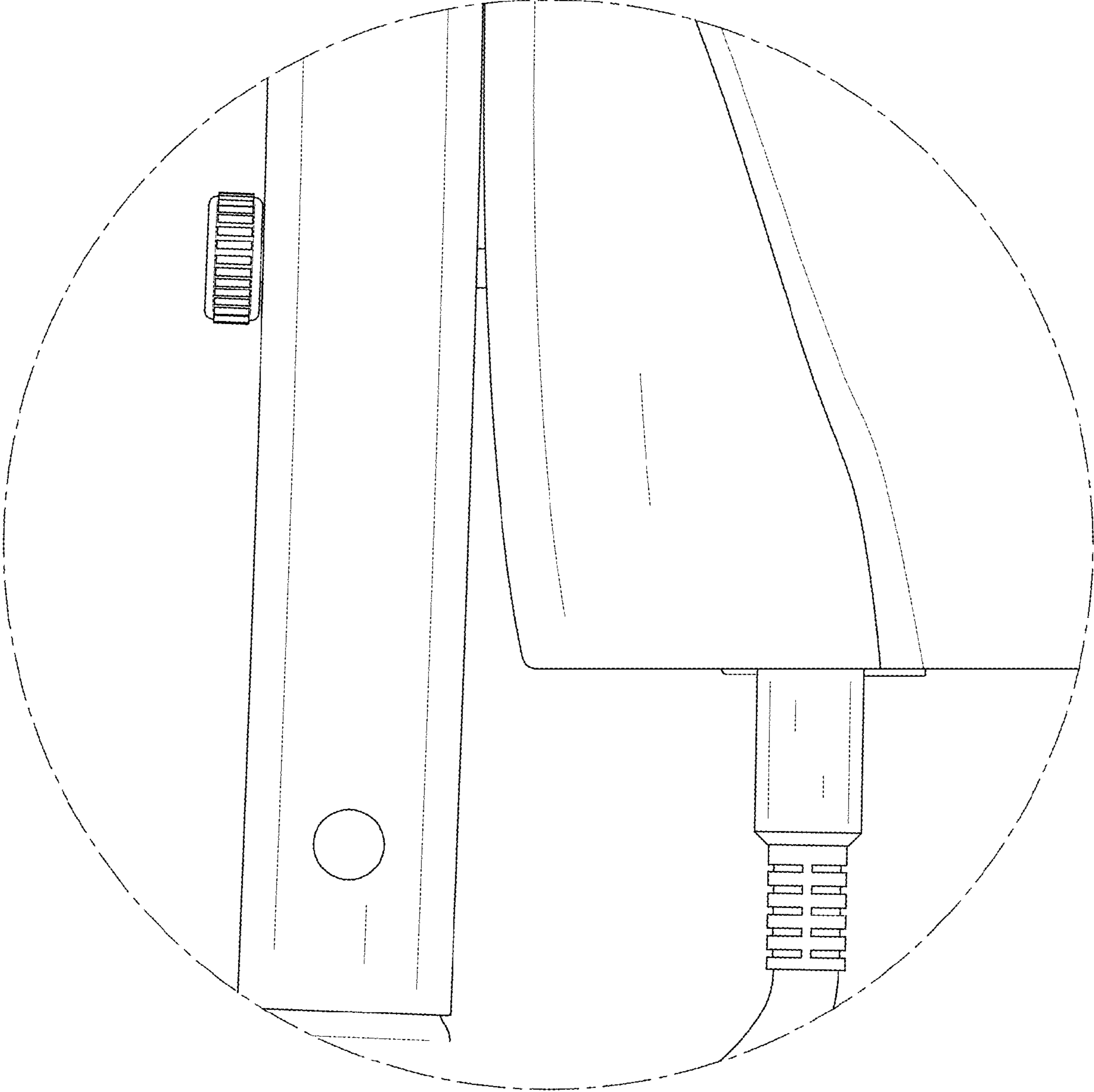


FIG. 11