



US00D972945S

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

(10) **Patent No.:** **US D972,945 S**

(45) **Date of Patent:** **** Dec. 20, 2022**

(54) **METAL DETECTOR**

FOREIGN PATENT DOCUMENTS

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EP 2828689 B1 * 12/2020 G01V 3/104

* cited by examiner

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Primary Examiner — Katherine Glennon

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

(21) Appl. No.: **29/845,657**

(57) **CLAIM**

(22) Filed: **Jul. 8, 2022**

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

(51) **LOC (13) Cl.** **10-04**

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

DESCRIPTION

(58) **Field of Classification Search**
USPC D10/46, 47, 75, 78, 80
CPC ... G01V 3/00; G01V 3/02; G01V 3/17; G01V 3/108; G01V 11/00; G01V 3/10; G01V 3/104; G01V 3/107; G01V 3/15; G01V 3/105; G01V 3/08; G01V 3/165; G01V 9/00; G01V 3/12; G01V 3/081
See application file for complete search history.

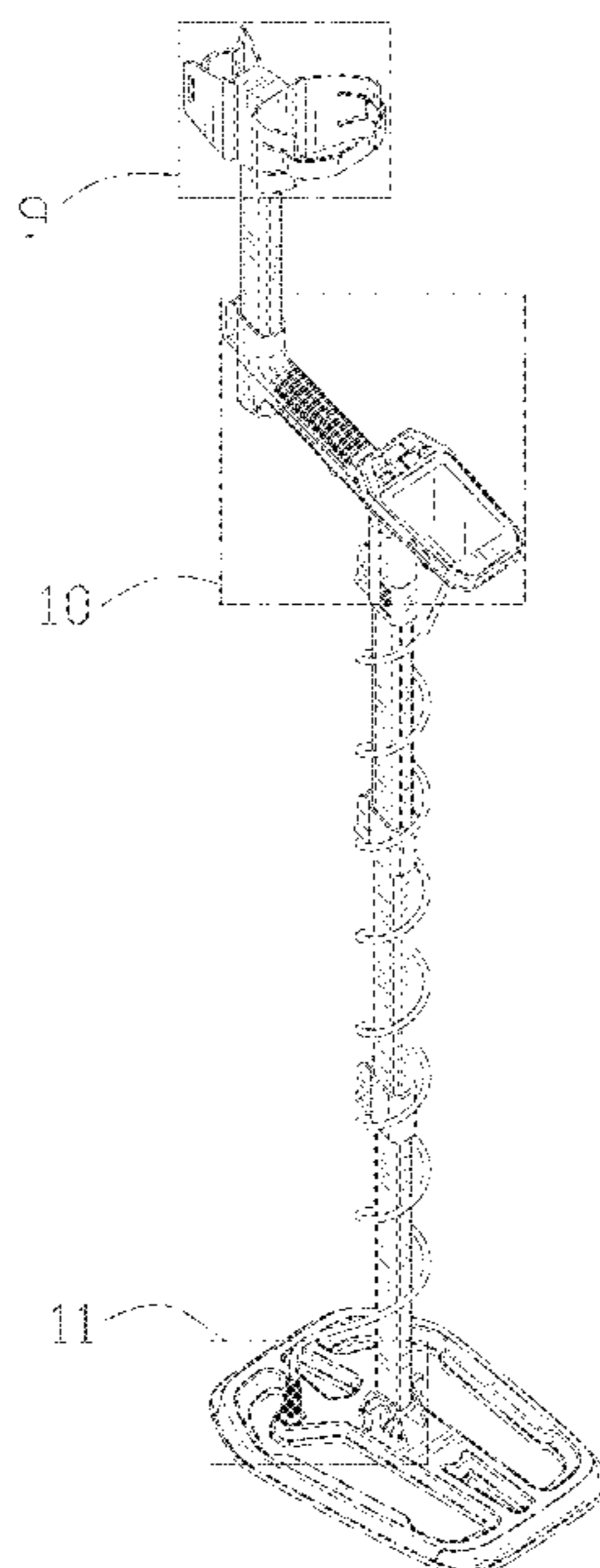
FIG. 1 is a front and top perspective view of a metal detector, showing my new design;
FIG. 2 is a rear and bottom perspective view thereof;
FIG. 3 is a front elevation view thereof;
FIG. 4 is a rear elevation view thereof;
FIG. 5 is a left side elevation view thereof;
FIG. 6 is a right side elevation 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 with numeric 9 in FIG. 1;
FIG. 10 is an enlarged view of a portion indicated with numeric 10 in FIG. 1;
FIG. 11 is an enlarged view of a portion indicated with numeric 11 in FIG. 1; and,
FIG. 12 is an enlarged view of a portion indicated with numeric 12 in FIG. 2.
The dashed lines, in the figures illustrate portions of the metal detector that form no part of the claimed design. The dash dot dash lines in FIGS. 1, 2, 9, 10, 11 and 12 are for the purpose of depicting the boundary lines of the enlarged views and form no part of the claimed design.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D694,130 S *	11/2013	Manneschi	.....	D10/47
D756,247 S *	5/2016	Pollock	.....	D10/47
D863,077 S *	10/2019	Shao	.....	D10/47
D881,727 S *	4/2020	Deng	.....	D10/47
D885,940 S *	6/2020	Huang	.....	D10/47
D885,941 S *	6/2020	Keevy	.....	D10/47
D888,587 S *	6/2020	Chen	.....	D10/47
D907,513 S *	1/2021	Qin	.....	D10/47
D918,062 S *	5/2021	Qin	.....	D10/47
D918,064 S	5/2021	Deng	.....
D918,065 S *	5/2021	Qin	.....	D10/47
D929,244 S *	8/2021	Deng	.....	D10/47
D945,282 S *	3/2022	Tran	.....	D10/47
2022/0206179 A1 *	6/2022	Gall	.....	F16B 7/14

1 Claim, 12 Drawing Sheets



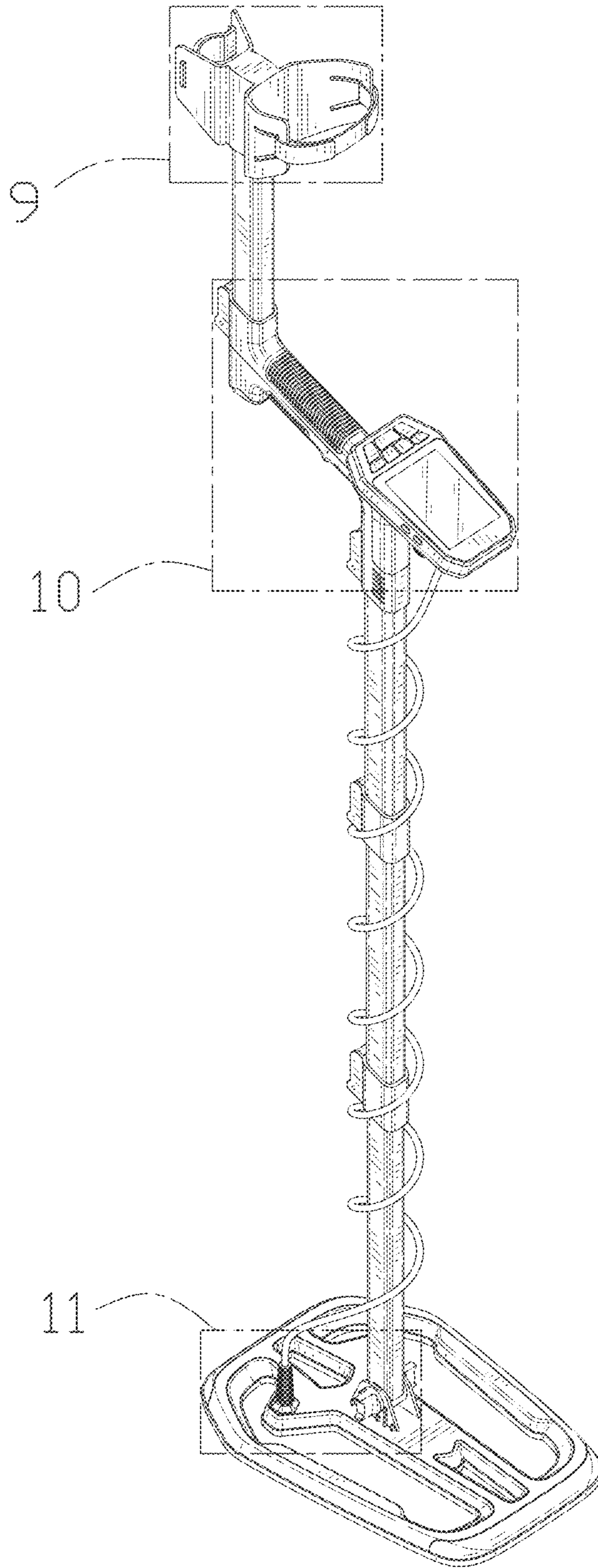


FIG. 1

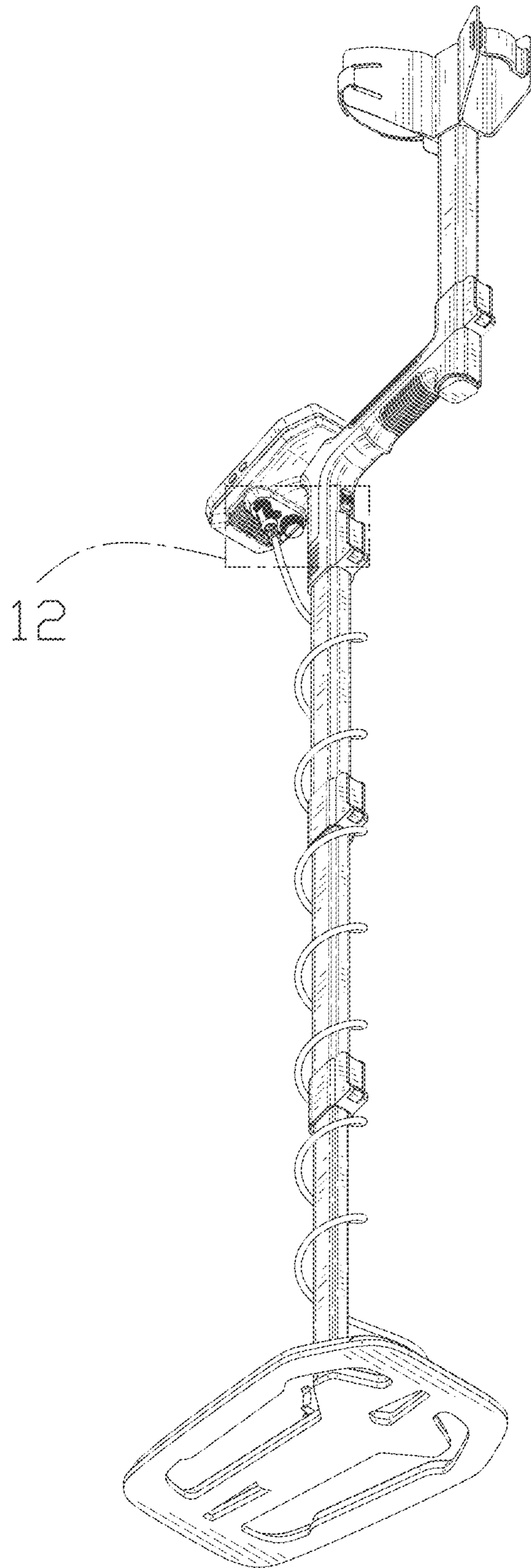


FIG. 2

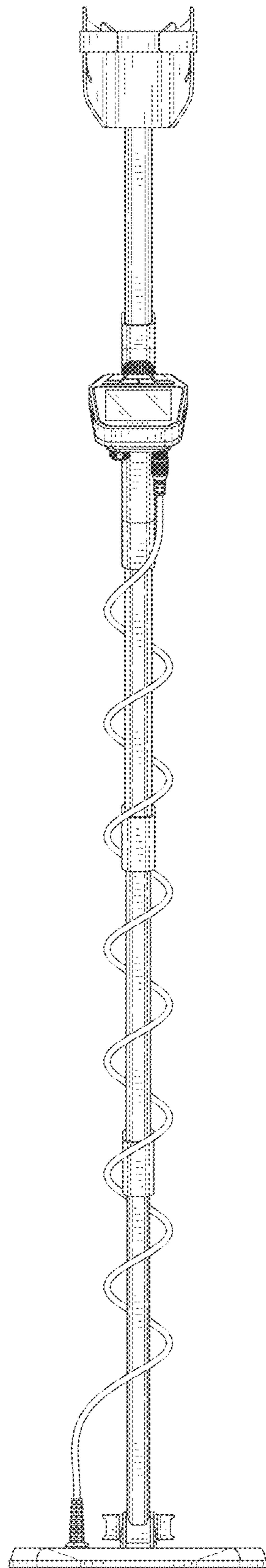


FIG. 3

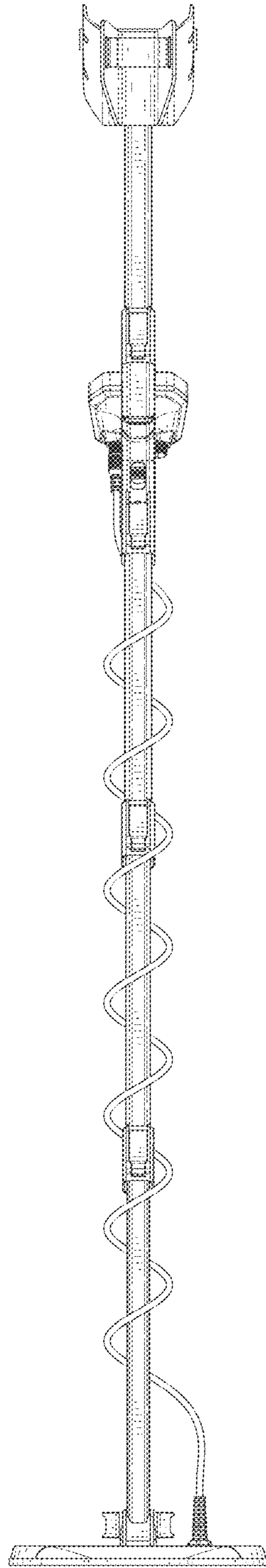


FIG. 4

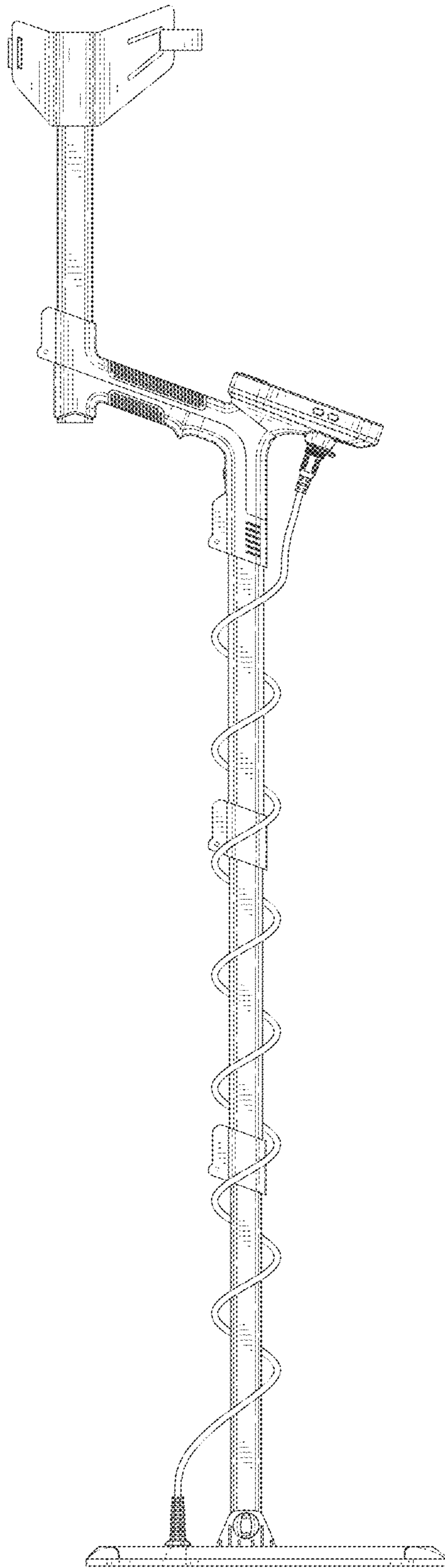


FIG. 5

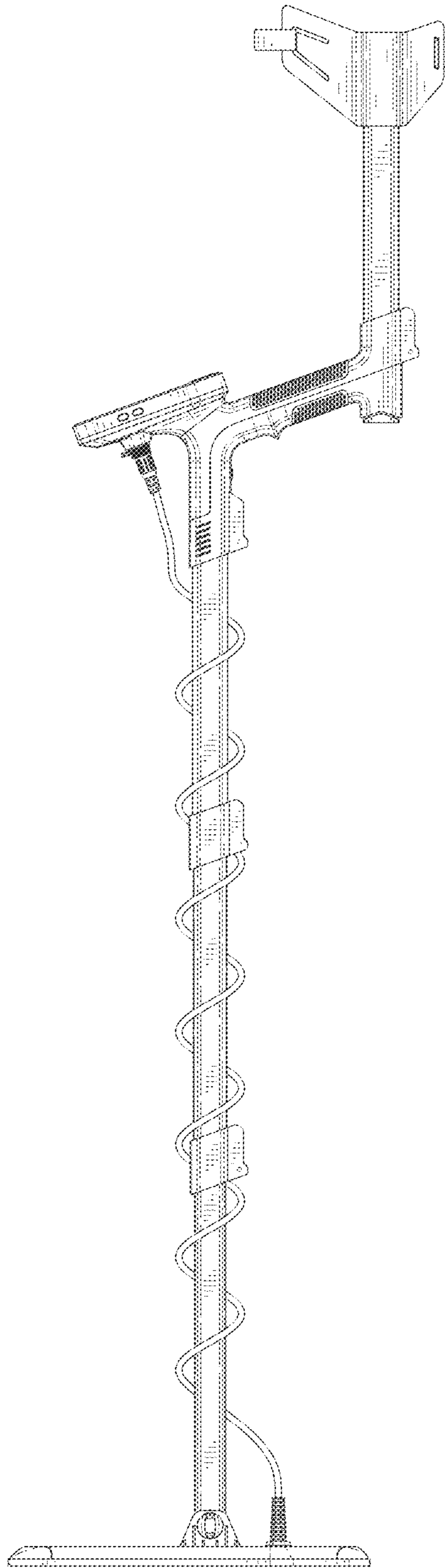


FIG. 6

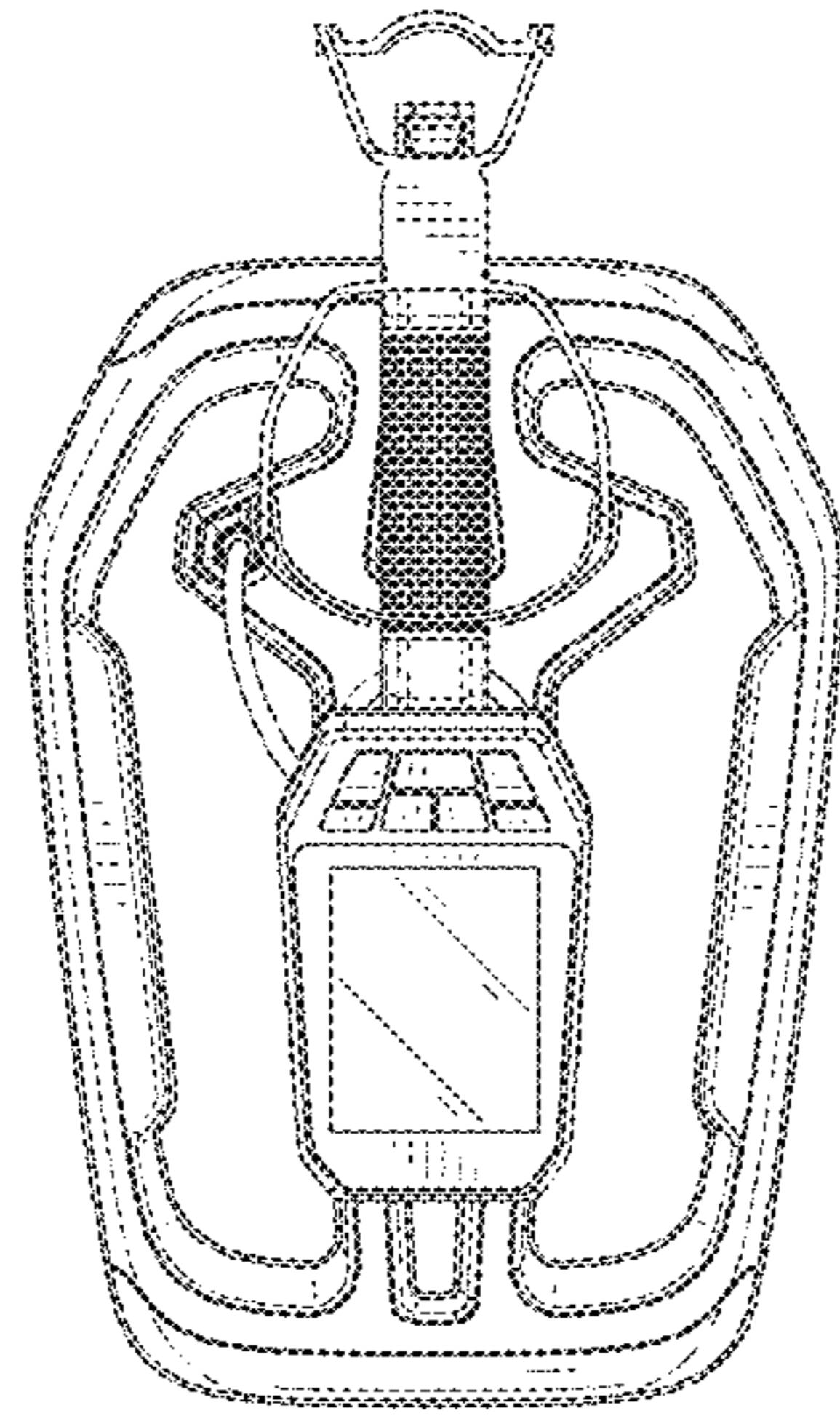


FIG. 7

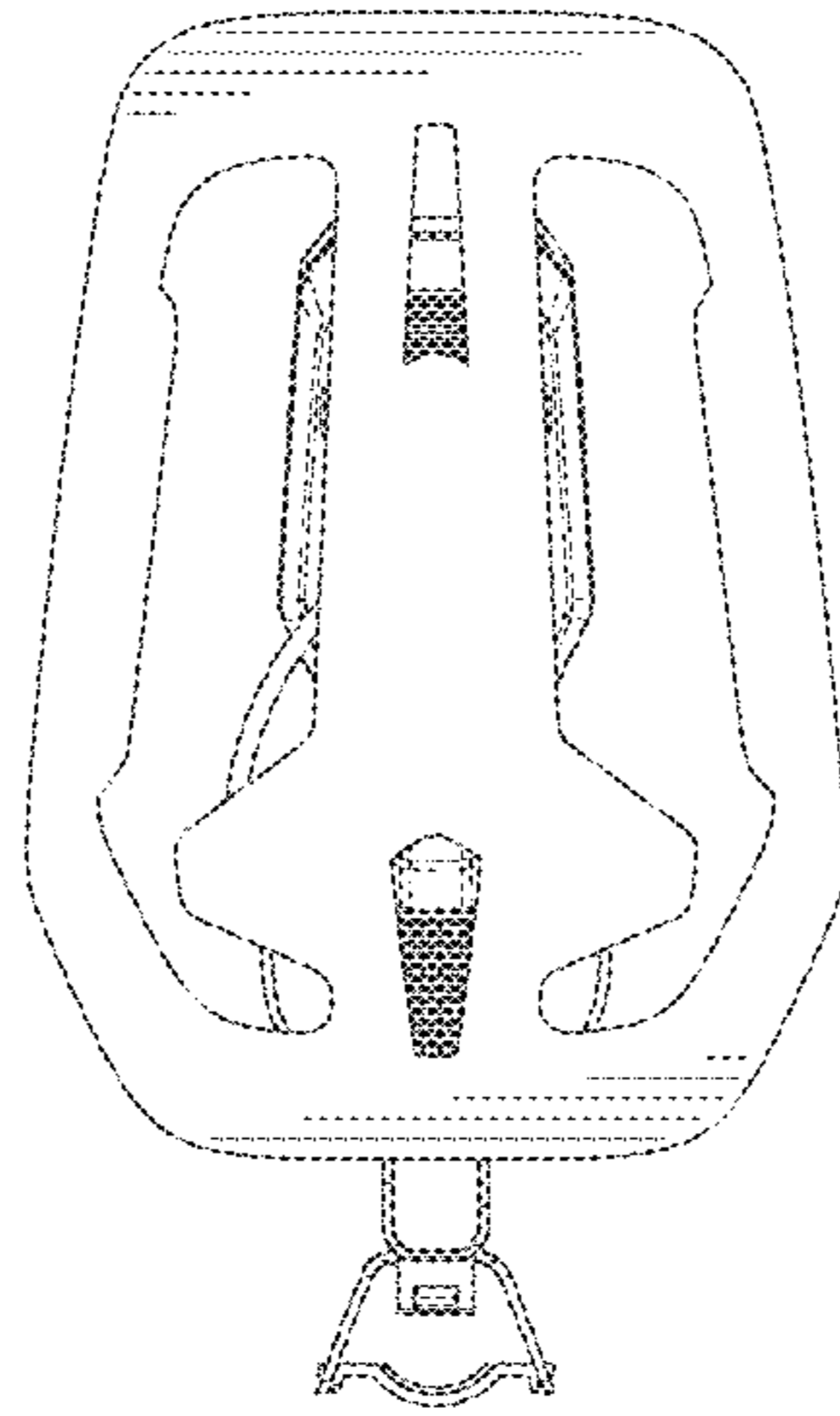


FIG. 8

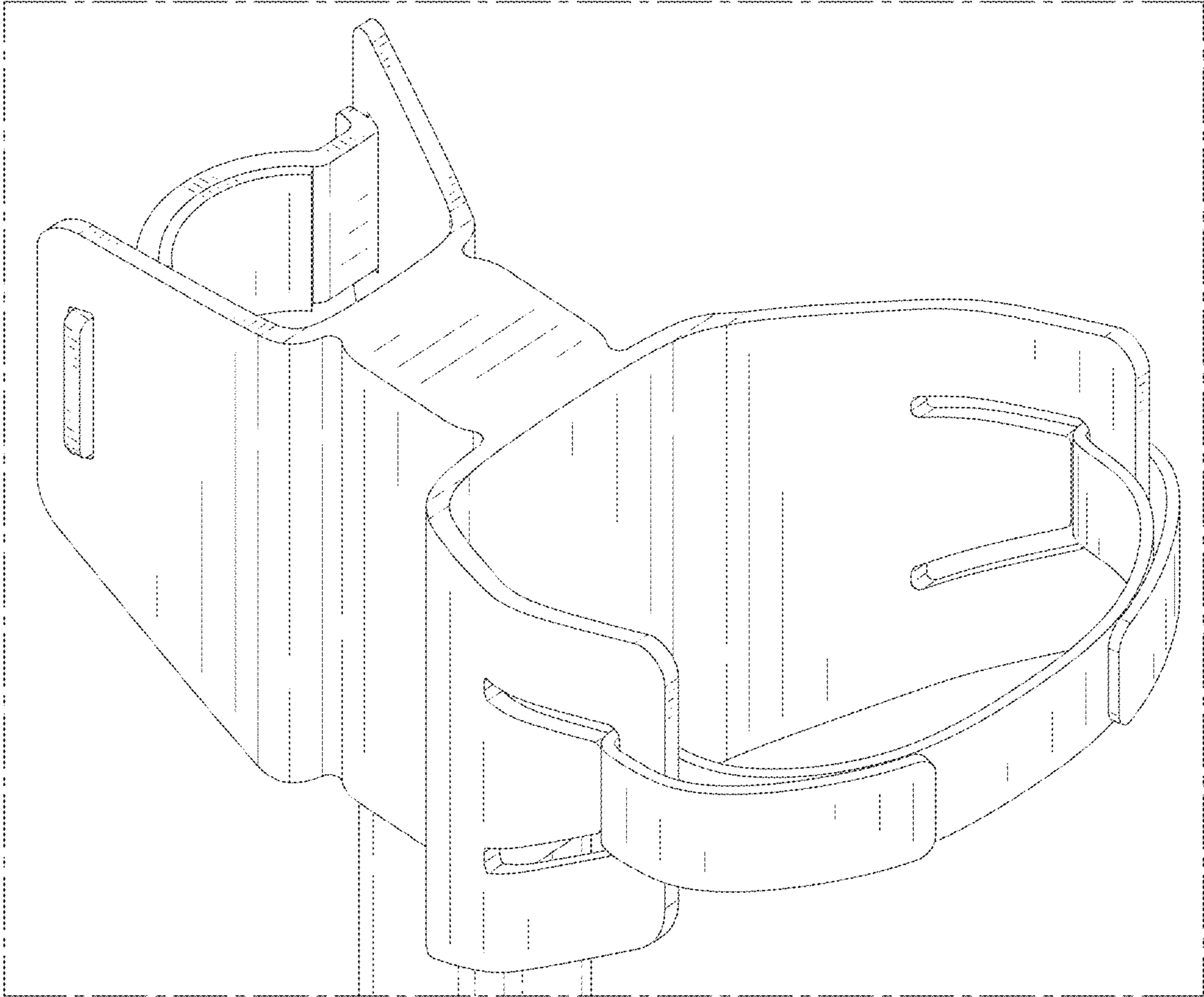


FIG. 9

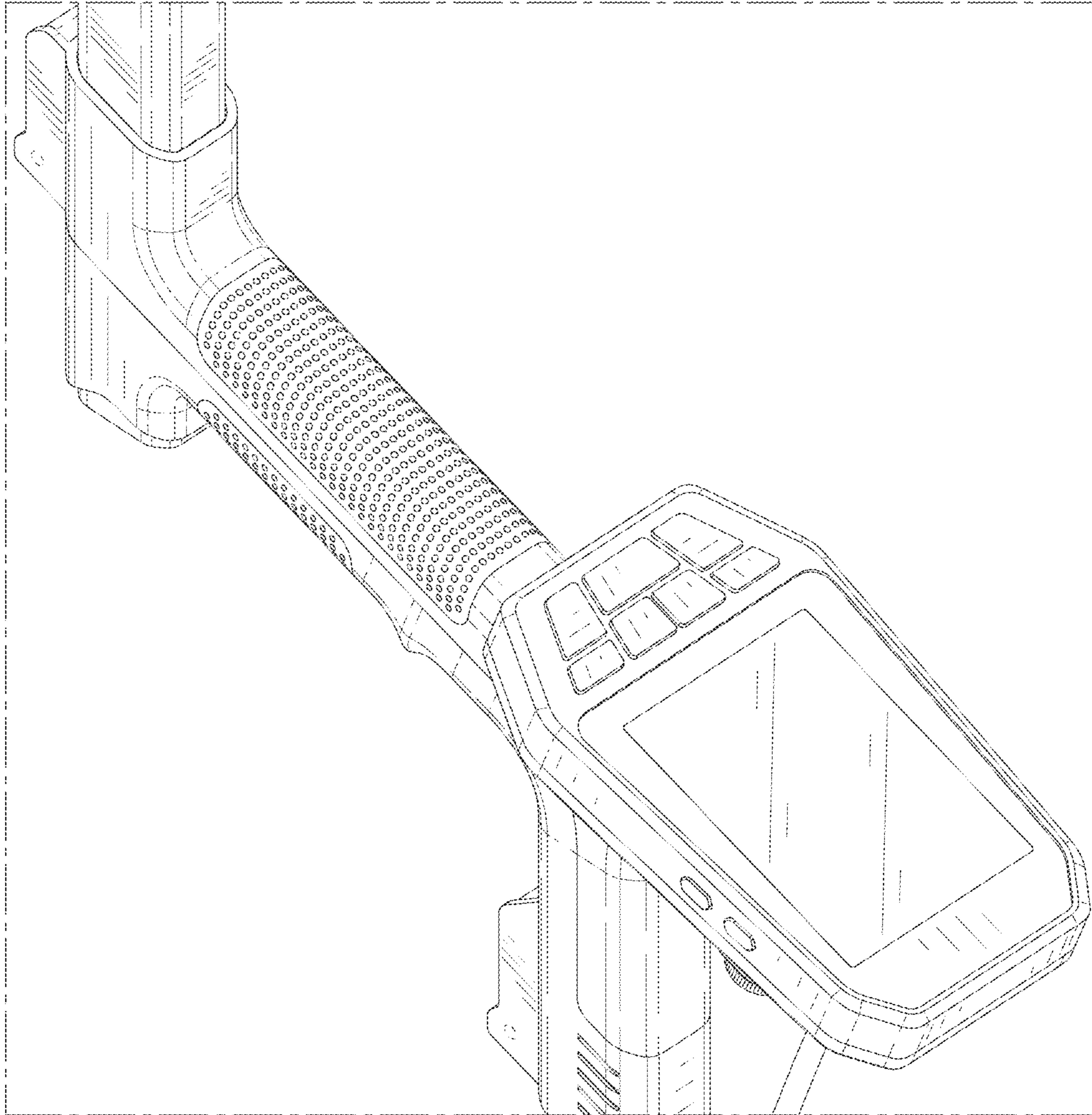


FIG. 10

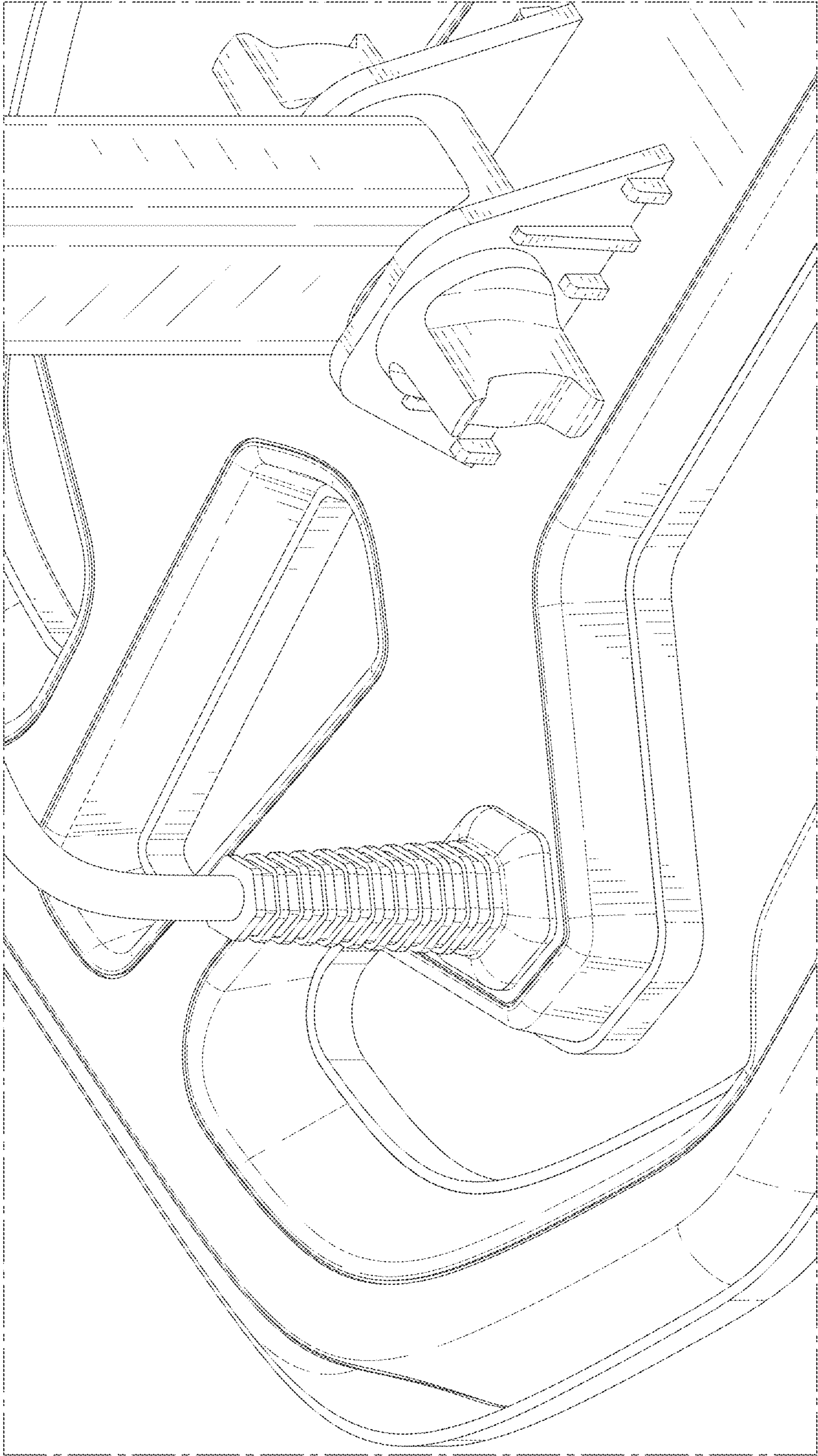


FIG. 11

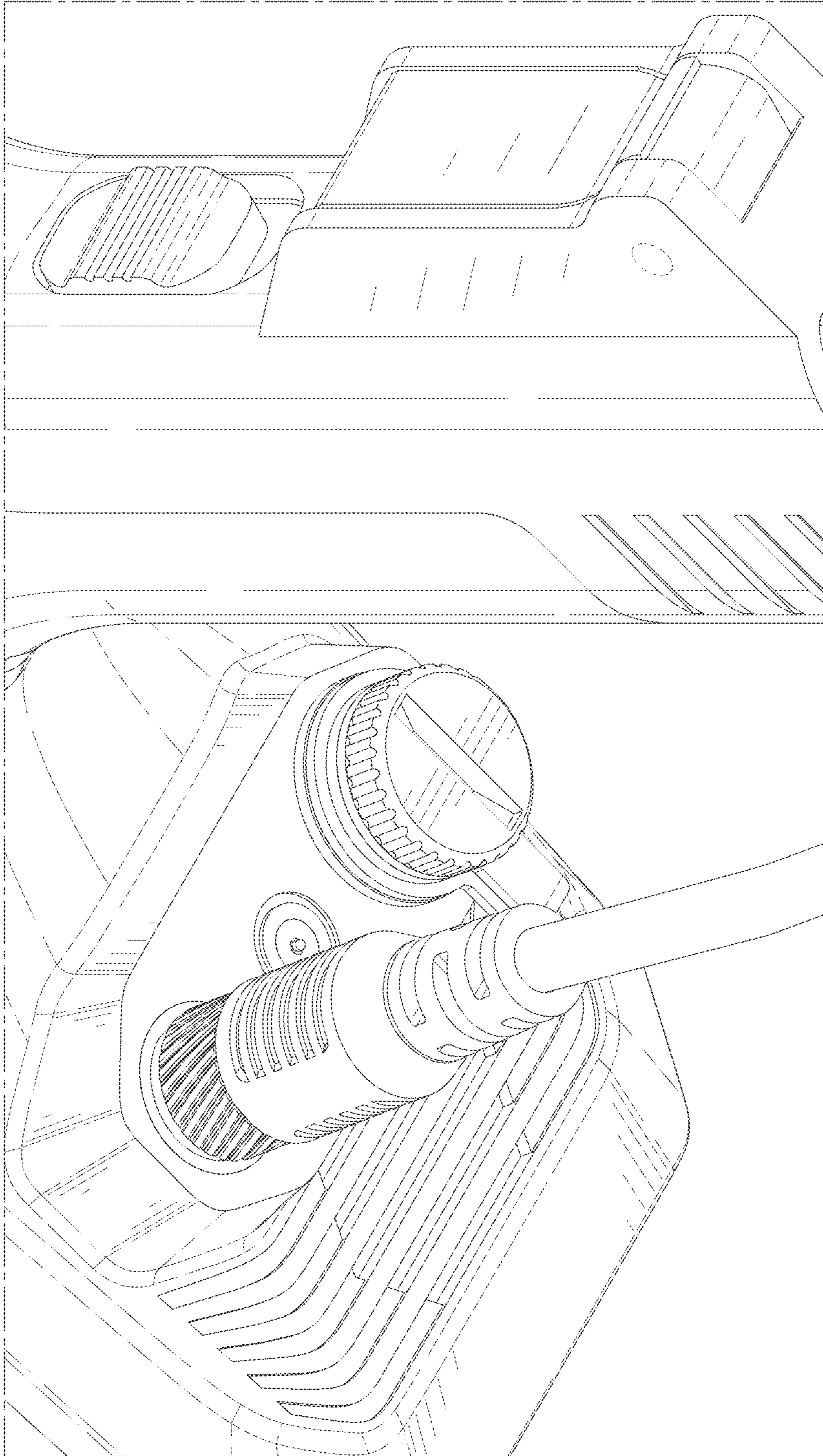


FIG. 12