



US0D1089321S

(12) **United States Design Patent** (10) **Patent No.:** **US D1,089,321 S**
Liu (45) **Date of Patent:** **** Aug. 19, 2025**

(54) **AIR PUMP SET**(71) Applicant: **Zhongshan Hengyi Sports Equipment Co., Ltd.**, Guangdong (CN)(72) Inventor: **Changsong Liu**, Guangdong (CN)(**) Term: **15 Years**(21) Appl. No.: **29/918,237**(22) Filed: **Nov. 27, 2023**(51) **LOC (15) Cl.** **15-02**(52) **U.S. Cl.** **D15/7**
USPC **D15/7**(58) **Field of Classification Search**
USPC D15/3, 5, 7, 9, 199
(Continued)(56) **References Cited****U.S. PATENT DOCUMENTS**D701,536 S * 3/2014 Shakal D15/7
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(Continued)

Primary Examiner — Eric L Goodman*Assistant Examiner* — Vincent T Andrews(74) *Attorney, Agent, or Firm* — Hawaii Patent Services;
Nathaniel K. Fedde; Kenton N. Fedde(57) **CLAIM**

The ornamental design for an air pump set, as shown and described.

DESCRIPTION

FIG. 1 is a front, left, top perspective view of the first embodiment of an air pump set, showing my new design; FIG. 2 is a rear, right, bottom perspective view thereof; FIG. 3 is a front, left, top perspective view of the piece A of the air pump set; FIG. 4 is a rear, right, bottom perspective view thereof; FIG. 5 is a front elevational view thereof; FIG. 6 is a rear elevational view thereof; FIG. 7 is a left side view thereof; FIG. 8 is a right side view thereof; FIG. 9 is a top plan view thereof; FIG. 10 is a bottom plan view thereof; FIG. 11 is a front, left, top perspective view of the piece C of the air pump set; FIG. 12 is a rear, right, bottom perspective view thereof; FIG. 13 is a front elevational view thereof; FIG. 14 is a rear elevational view thereof; FIG. 15 is a left side view thereof; FIG. 16 is a right side view thereof; FIG. 17 is a top plan view thereof; FIG. 18 is a bottom plan view thereof; FIG. 19 is a front, left, top perspective view of the piece D of the air pump set; FIG. 20 is a rear, right, bottom perspective view thereof; FIG. 21 is a front elevational view thereof; FIG. 22 is a rear elevational view thereof; FIG. 23 is a left side view thereof; FIG. 24 is a right side view thereof; FIG. 25 is a top plan view thereof; FIG. 26 is a bottom plan view thereof; FIG. 27 is an enlarged view of detail 27 in FIG. 3; FIG. 28 is an enlarged view of detail 28 in FIG. 3; FIG. 29 is an enlarged view of detail 29 in FIG. 7; FIG. 30 is an enlarged view of detail 30 in FIG. 7; FIG. 31 is an enlarged view of detail 31 in FIG. 7; FIG. 32 is an enlarged view of detail 32 in FIG. 8; FIG. 33 is an enlarged view of detail 33 in FIG. 9;

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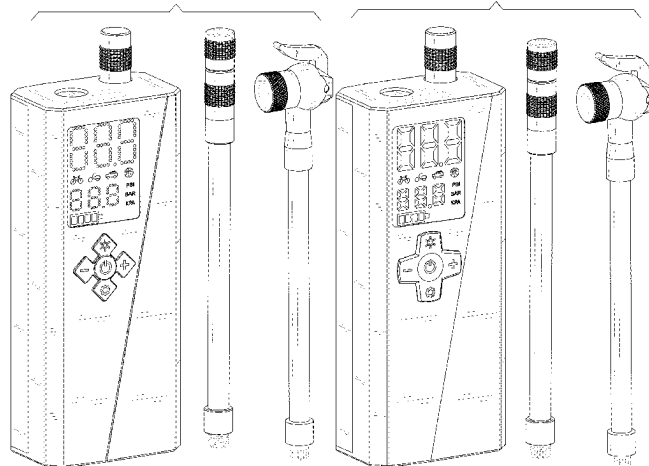


FIG. 34 is an enlarged view of detail 34 in FIG. 10;
 FIG. 35 is an enlarged view of detail 35 in FIG. 11;
 FIG. 36 is an enlarged view of detail 36 in FIG. 15;
 FIG. 37 is an enlarged view of detail 37 in FIG. 19;
 FIG. 38 is a front, left, top perspective view of piece A and piece C in the first combined state;
 FIG. 39 is a front, left, top perspective view of piece A and piece D in the first combined state;
 FIG. 40 is a front, left, top perspective view of piece A and piece C in the second combined state;
 FIG. 41 is a front, left, top perspective view of piece A and piece D in the second combined state;
 FIG. 42 is a front, left, top perspective view of the second embodiment of the air pump set, showing my new design;
 FIG. 43 is a rear, right, bottom perspective view thereof;
 FIG. 44 is a front, left, top perspective view of the piece B of the air pump set;
 FIG. 45 is a rear, right, bottom perspective view thereof;
 FIG. 46 is a front elevational view thereof;
 FIG. 47 is a rear elevational view thereof;
 FIG. 48 is a left side view thereof;
 FIG. 49 is a right side view thereof;
 FIG. 50 is a top plan view thereof;
 FIG. 51 is a bottom plan view thereof;
 FIG. 52 is a front, left, top perspective view of the piece C of the air pump set;
 FIG. 53 is a rear, right, bottom perspective view thereof;
 FIG. 54 is a front elevational view thereof;
 FIG. 55 is a rear elevational view thereof;
 FIG. 56 is a left side view thereof;
 FIG. 57 is a right side view thereof;
 FIG. 58 is a top plan view thereof;
 FIG. 59 is a bottom plan view thereof;
 FIG. 60 is a front, left, top perspective view of the piece D of the air pump set;
 FIG. 61 is a rear, right, bottom perspective view thereof;
 FIG. 62 is a front elevational view thereof;
 FIG. 63 is a rear elevational view thereof;
 FIG. 64 is a left side view thereof;
 FIG. 65 is a right side view thereof;
 FIG. 66 is a top plan view thereof;
 FIG. 67 is a bottom plan view thereof;
 FIG. 68 is an enlarged view of detail 68 in FIG. 44;
 FIG. 69 is an enlarged view of detail 69 in FIG. 44;
 FIG. 70 is an enlarged view of detail 70 in FIG. 48;
 FIG. 71 is an enlarged view of detail 71 in FIG. 48;
 FIG. 72 is an enlarged view of detail 72 in FIG. 49;
 FIG. 73 is an enlarged view of detail 73 in FIG. 50;
 FIG. 74 is an enlarged view of detail 74 in FIG. 51;
 FIG. 75 is an enlarged view of detail 75 in FIG. 52;
 FIG. 76 is an enlarged view of detail 76 in FIG. 56;
 FIG. 77 is an enlarged view of detail 77 in FIG. 60;

FIG. 78 is a front, left, top perspective view of piece B and piece C in the first combined state;
 FIG. 79 is a front, left, top perspective view of piece B and piece D in the first combined state;
 FIG. 80 is a front, left, top perspective view of piece B and piece C in the second combined state; and,
 FIG. 81 is a front, left, top perspective view of piece B and piece D in the second combined state.
 The dashed broken lines in the figures are for the purposes of illustrating portions of the air pump set that form no part of the claimed design.
 The dash-dot-dash broken lines are for notating enlarged views and form no part of the claimed design.
 The claim is directed to the first and second embodiments in the alternative. The first embodiment is the collective appearance of the articles shown in FIGS. 1-41. The second embodiment is the collective appearance of the articles shown in FIGS. 42-77.

1 Claim, 57 Drawing Sheets

(58) Field of Classification Search

CPC F04B 39/121; F04B 35/04; F04B 33/00;
 F04B 43/08; F04B 43/09; F04B 49/00;
 F04D 13/06

See application file for complete search history.

(56)

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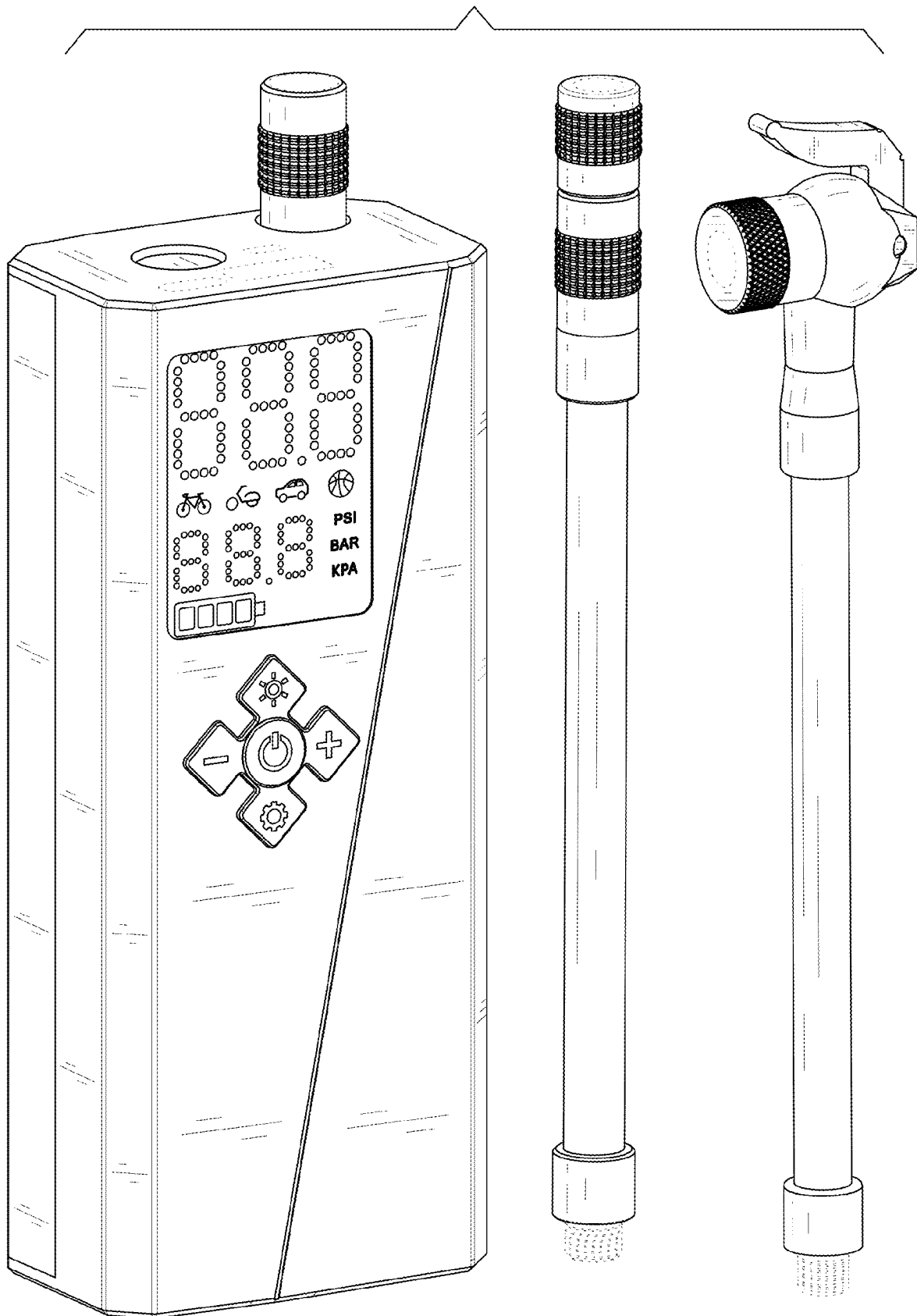
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D1,030,808	S	*	6/2024	Mao	D15/7
D1,051,948	S	*	11/2024	Jiang	D15/7
D1,054,455	S	*	12/2024	Liu	D15/7
D1,055,105	S	*	12/2024	Zhang	D15/7
D1,055,107	S	*	12/2024	Zhu	D15/7
D1,055,108	S	*	12/2024	Zhu	D15/7
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* cited by examiner

**FIG. 1**

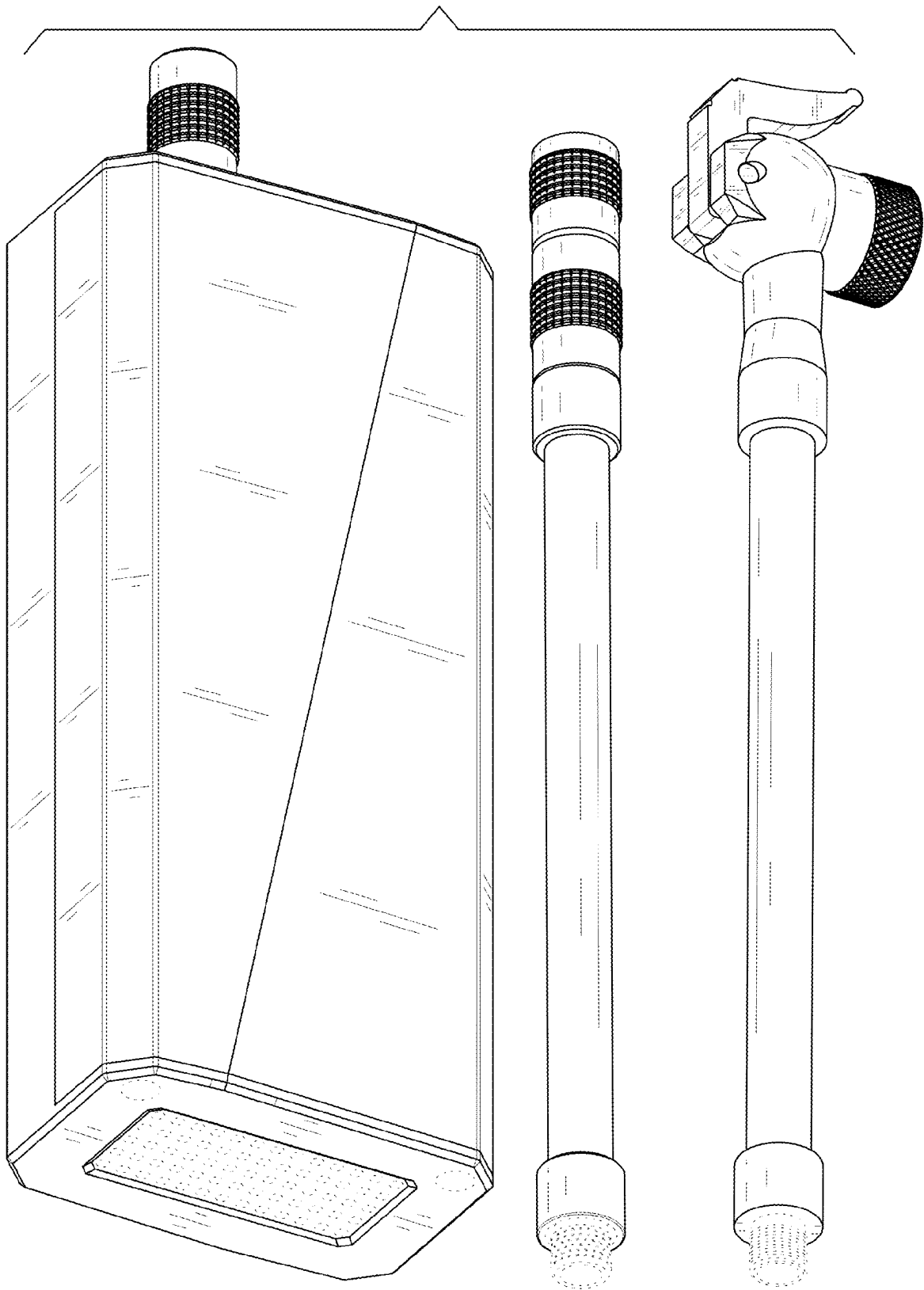


FIG. 2

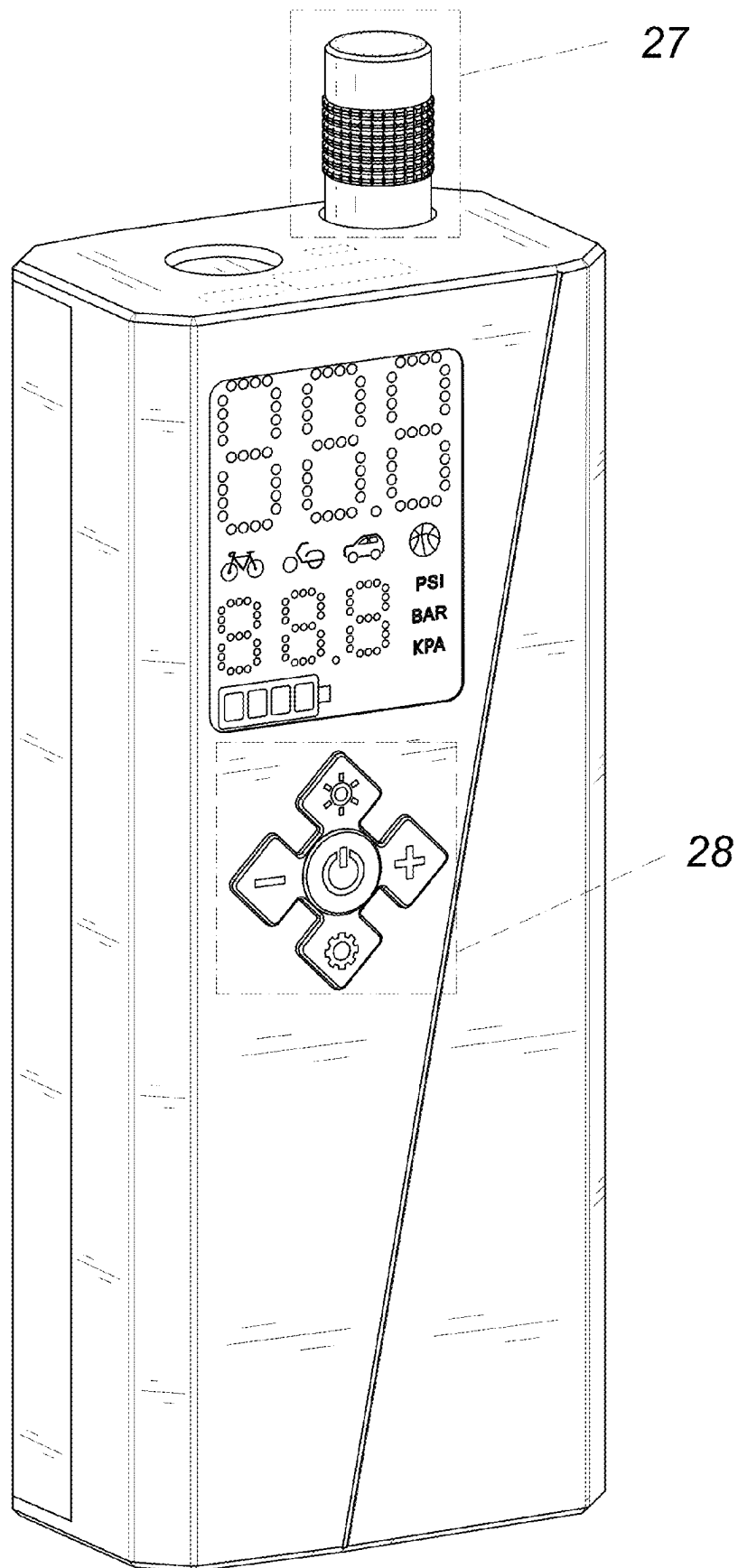


FIG. 3

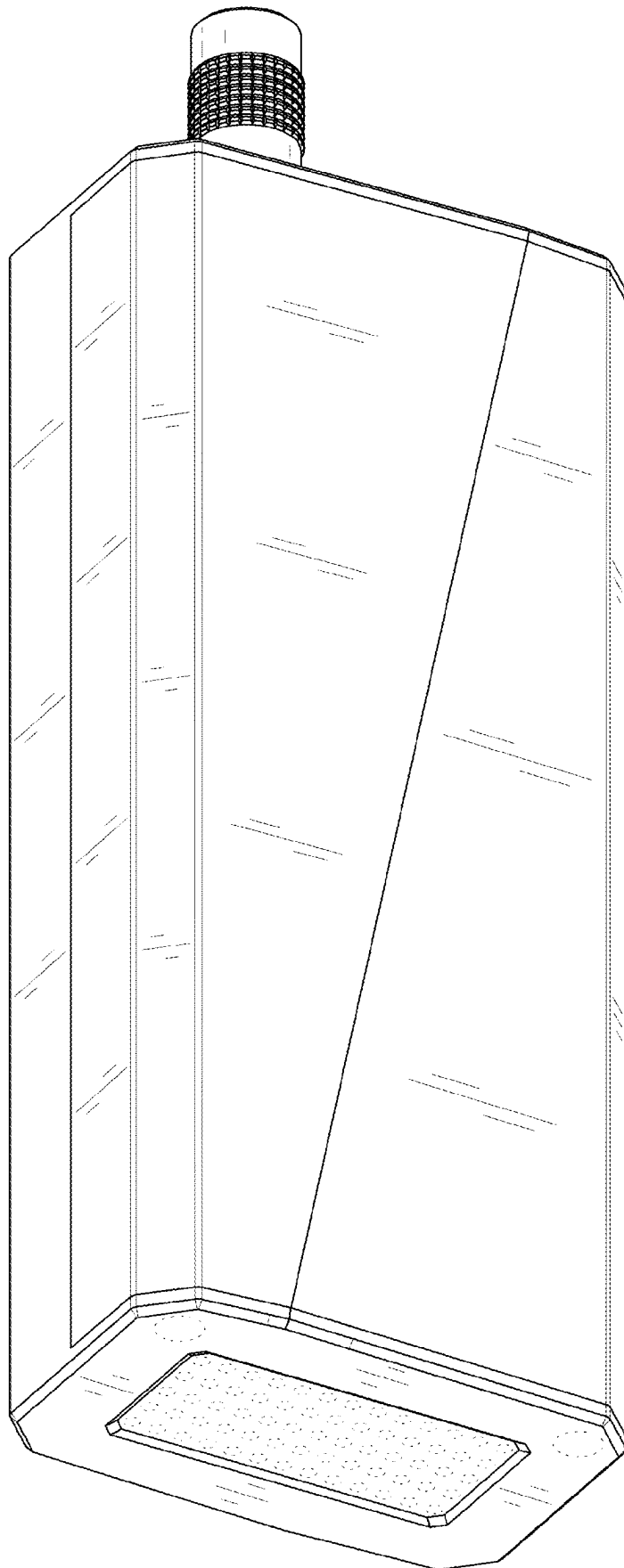
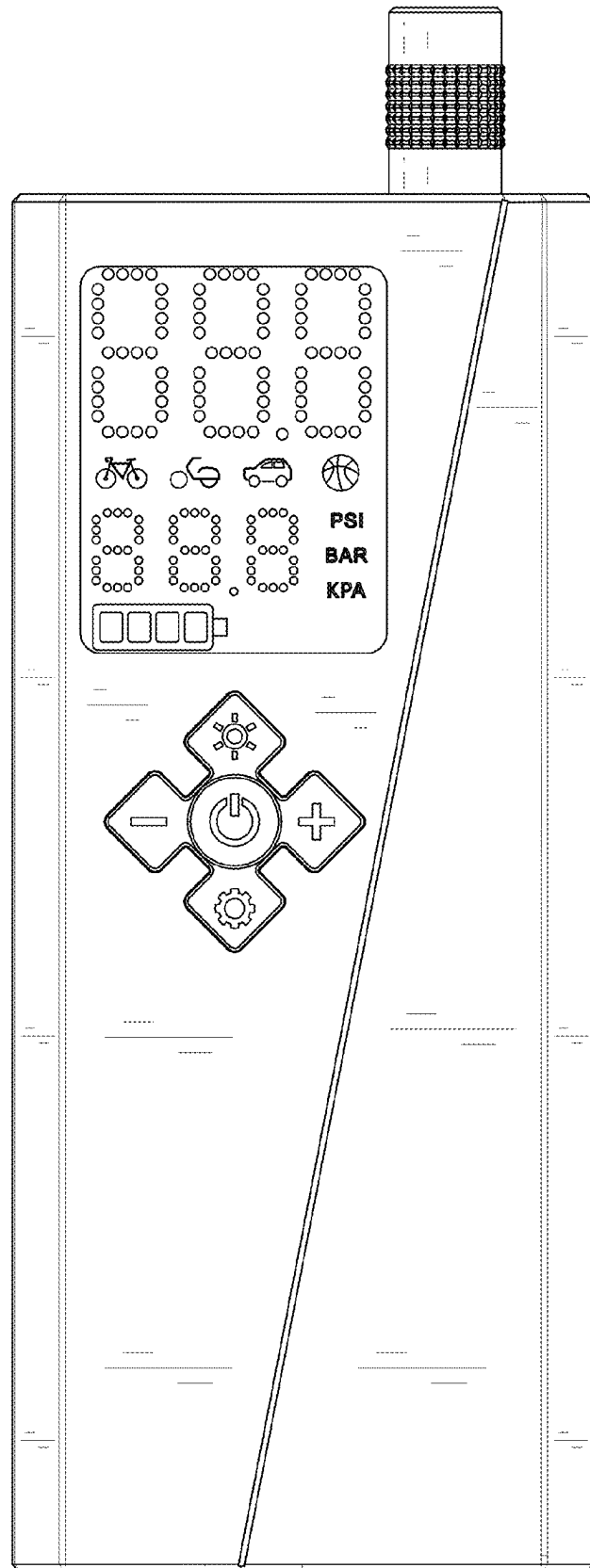


FIG. 4

*FIG. 5*

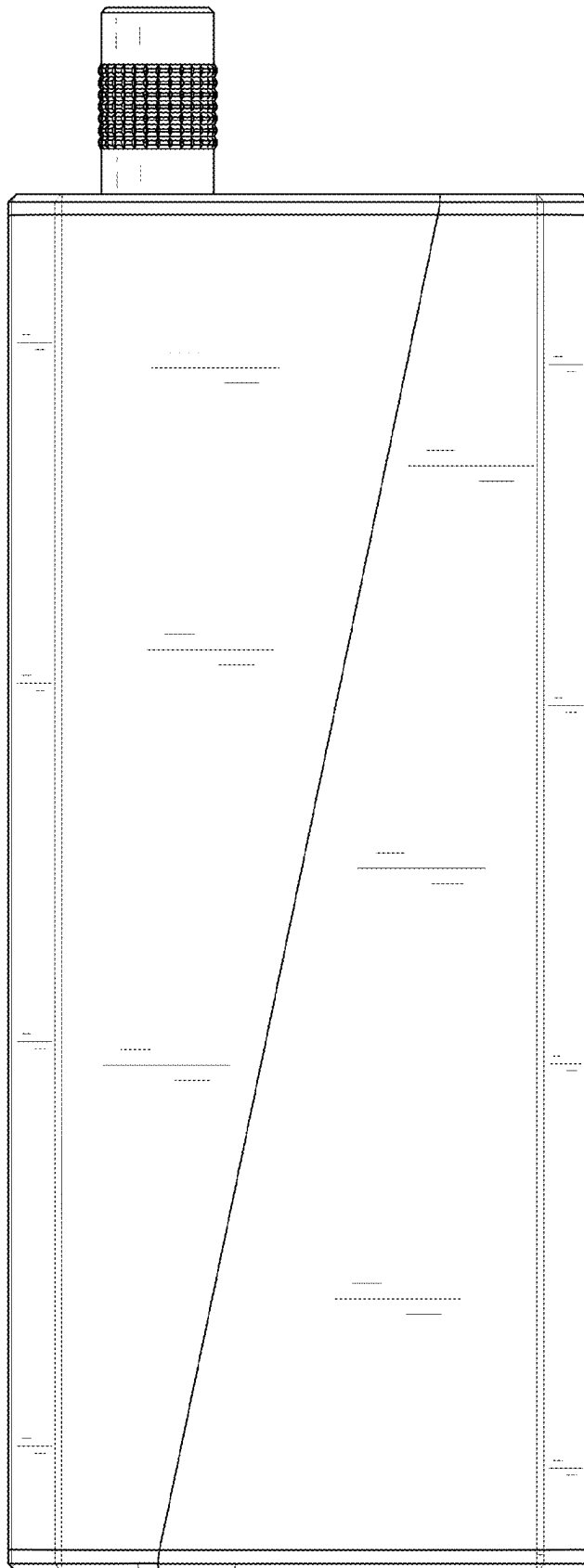


FIG. 6

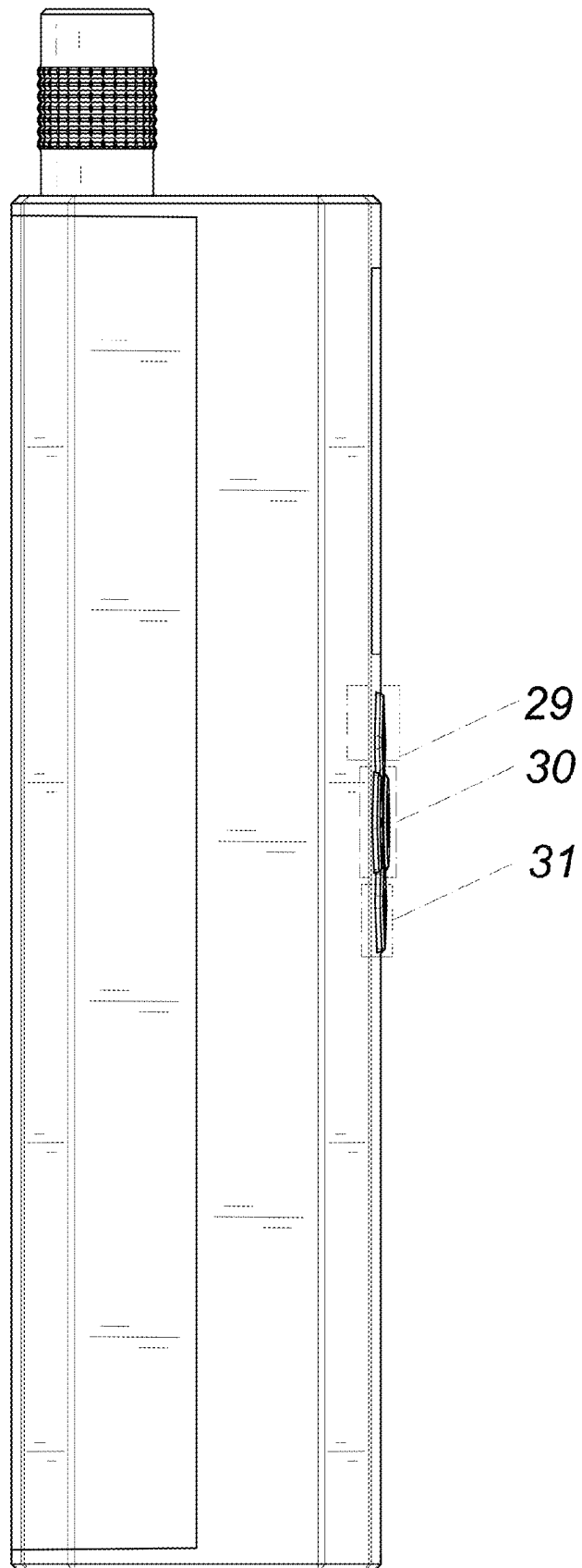


FIG. 7

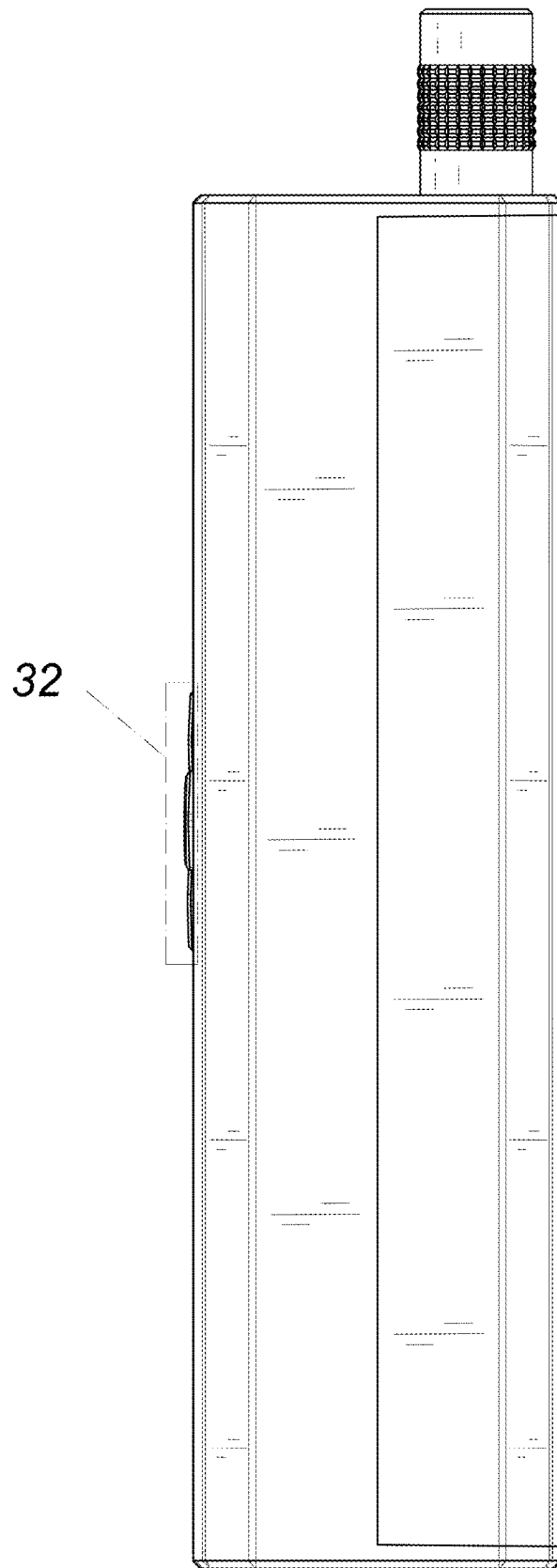
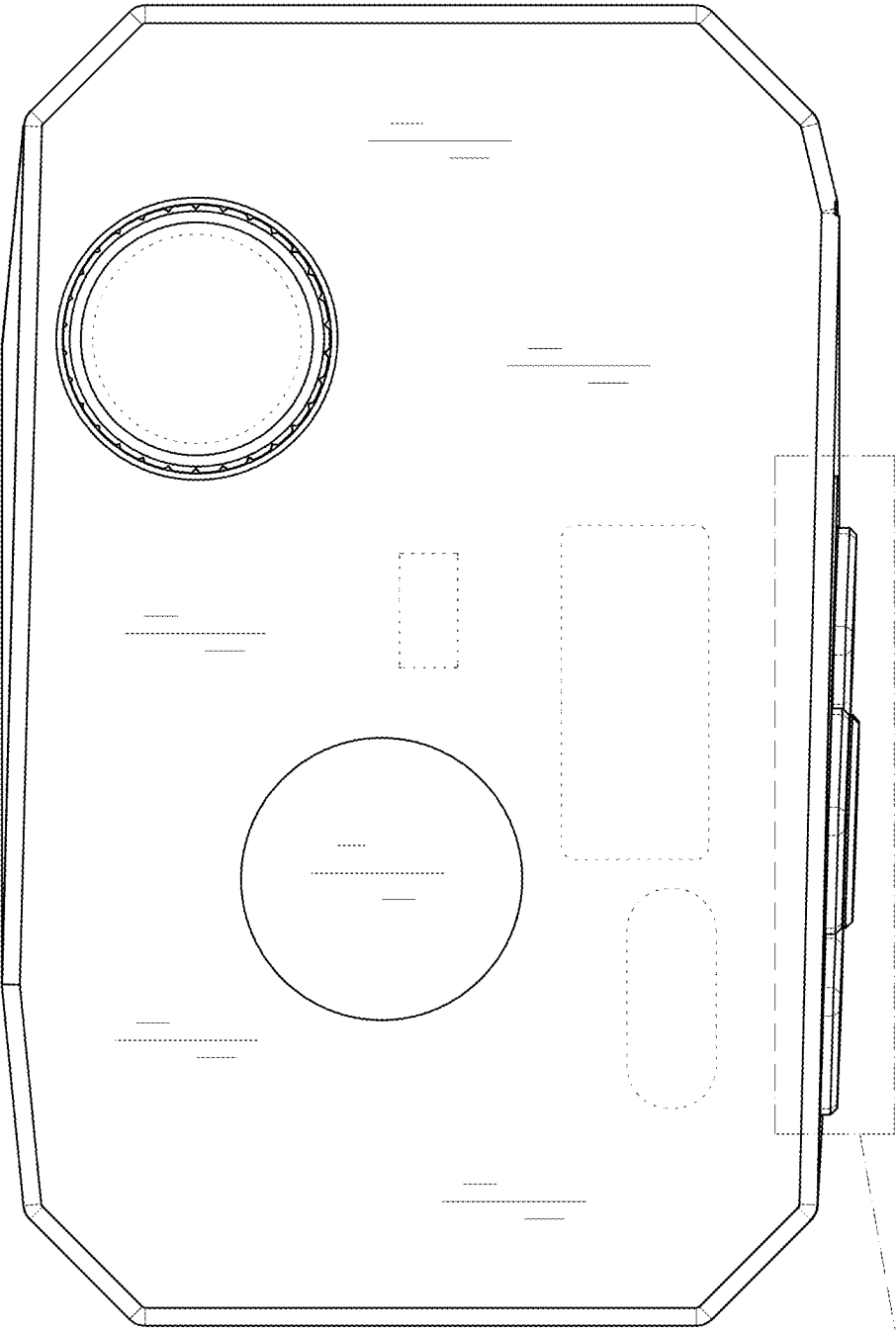


FIG. 8



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FIG. 9

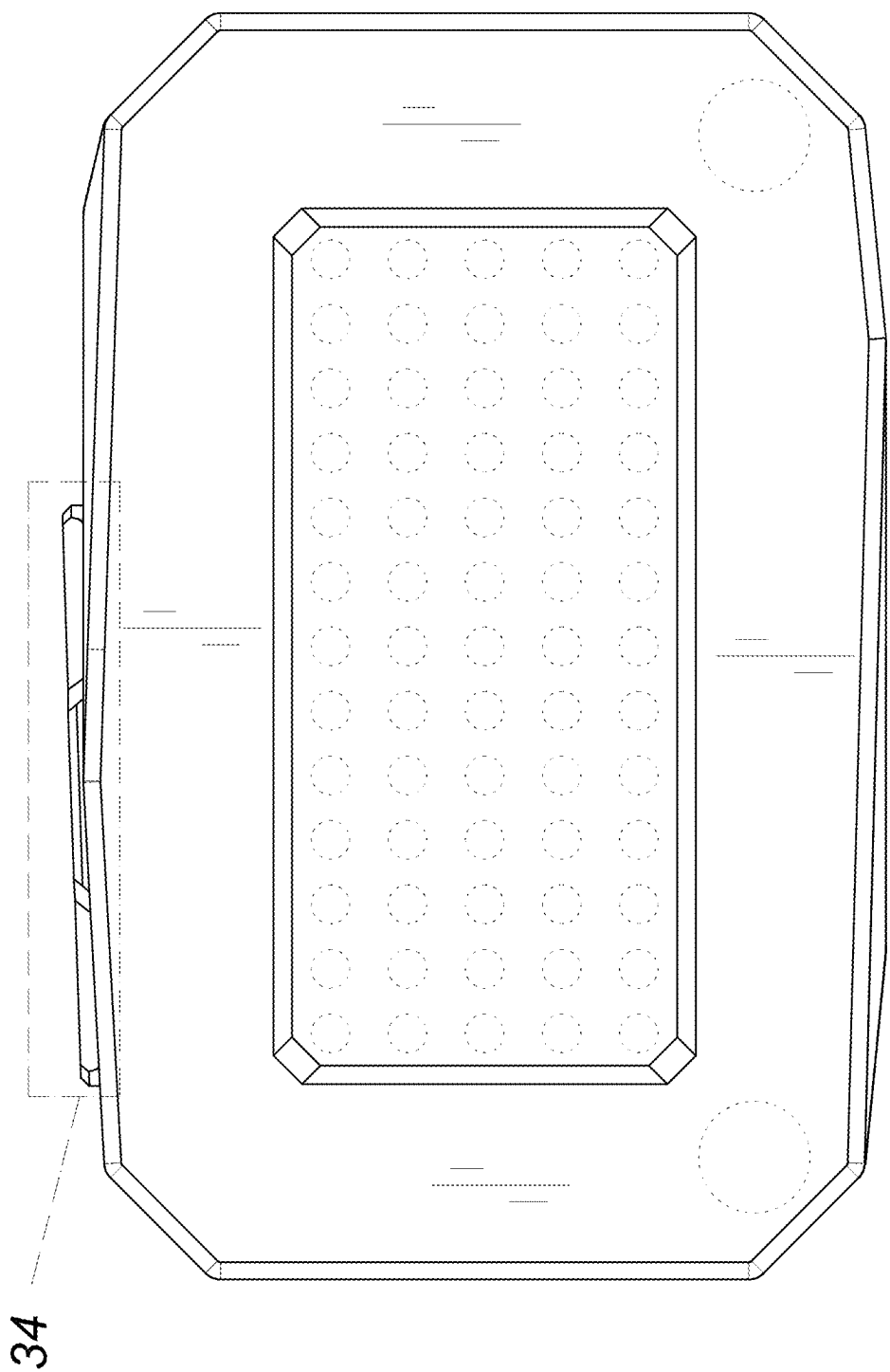


FIG. 10

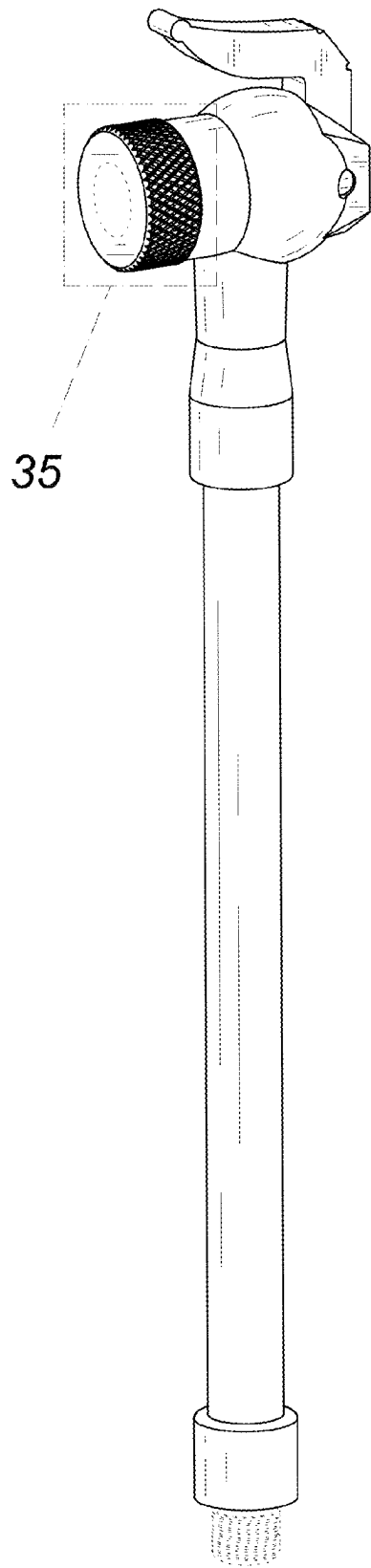


FIG. 11

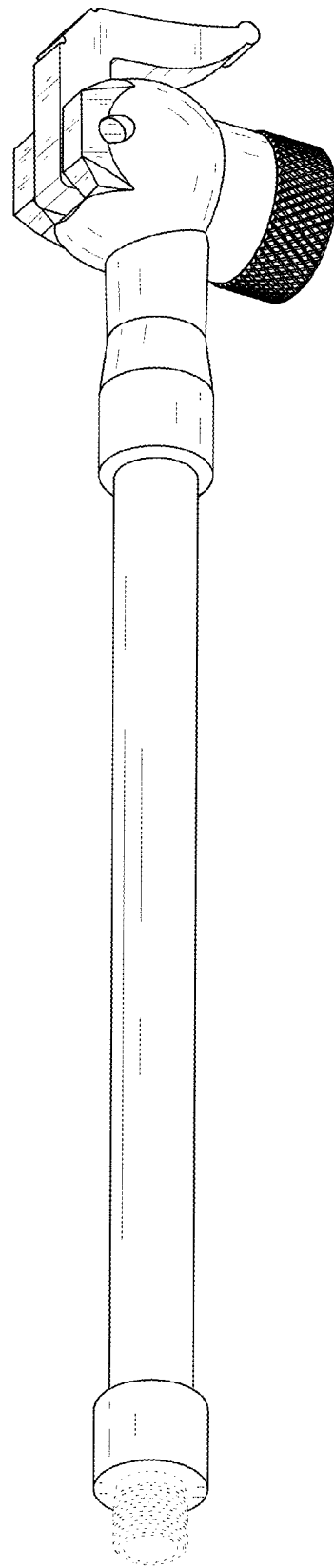


FIG. 12

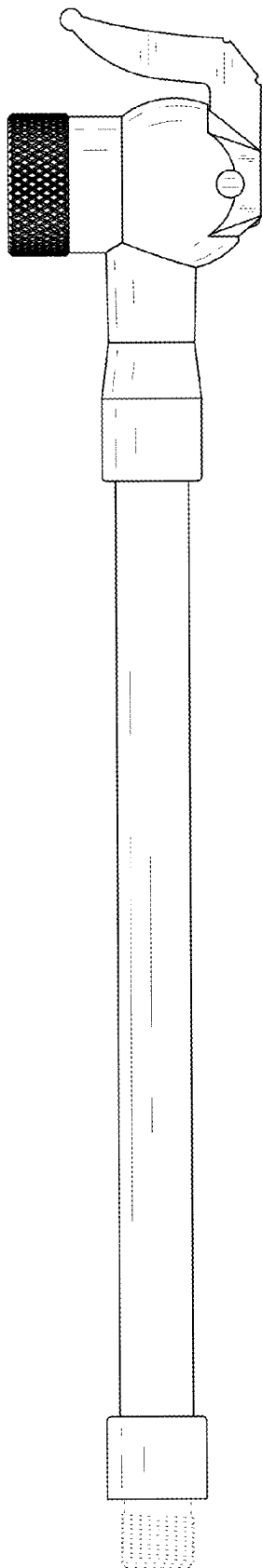


FIG. 13

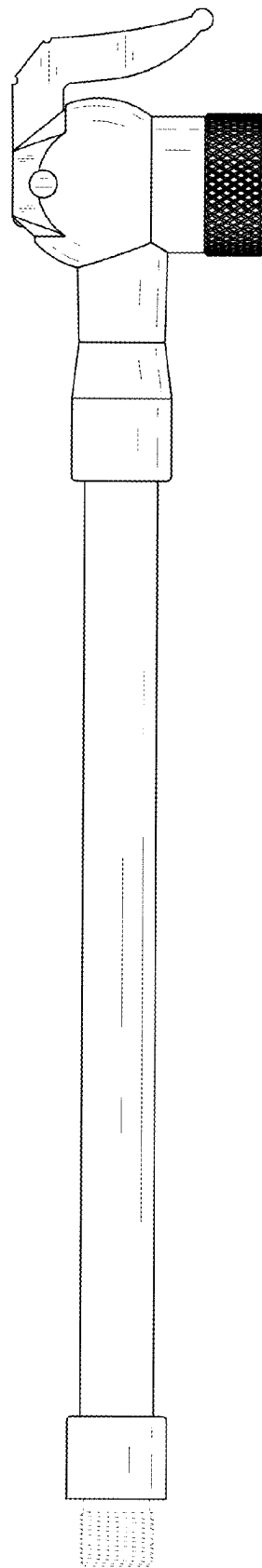


FIG. 14

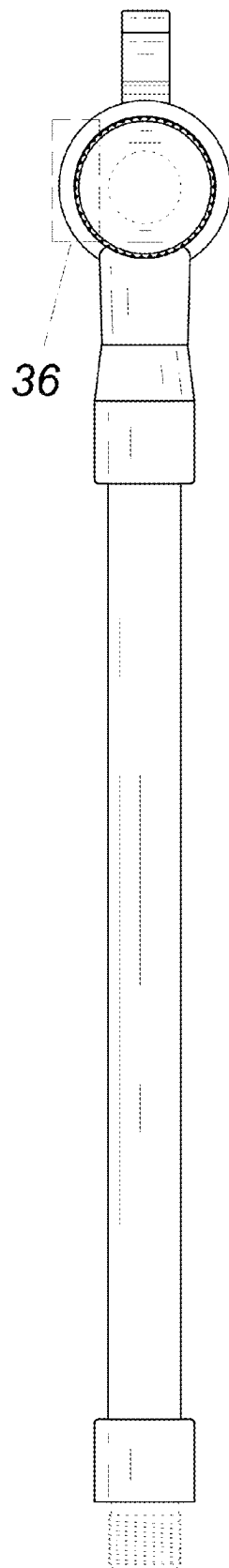


FIG. 15

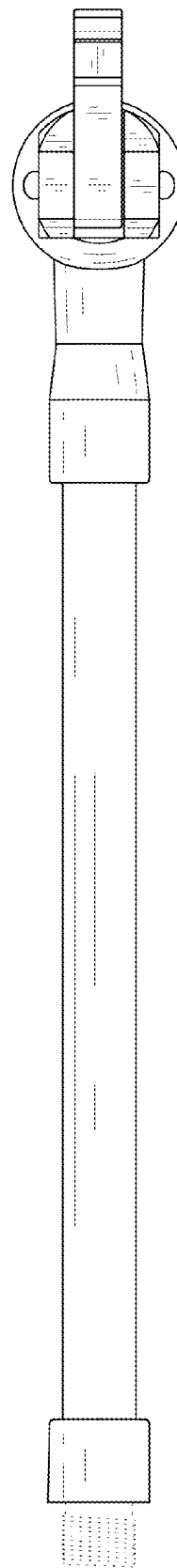


FIG. 16

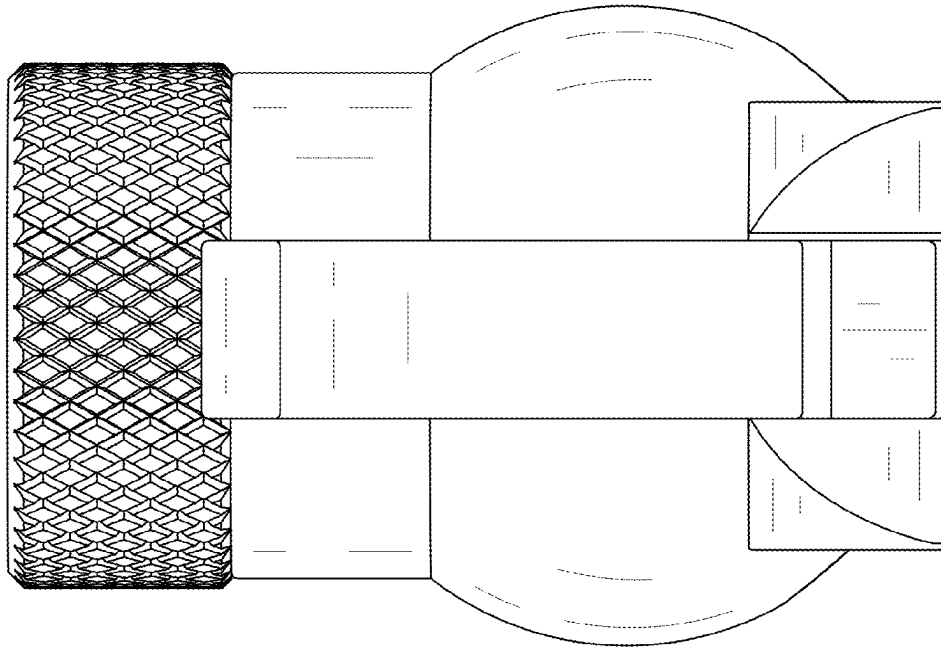


FIG. 17

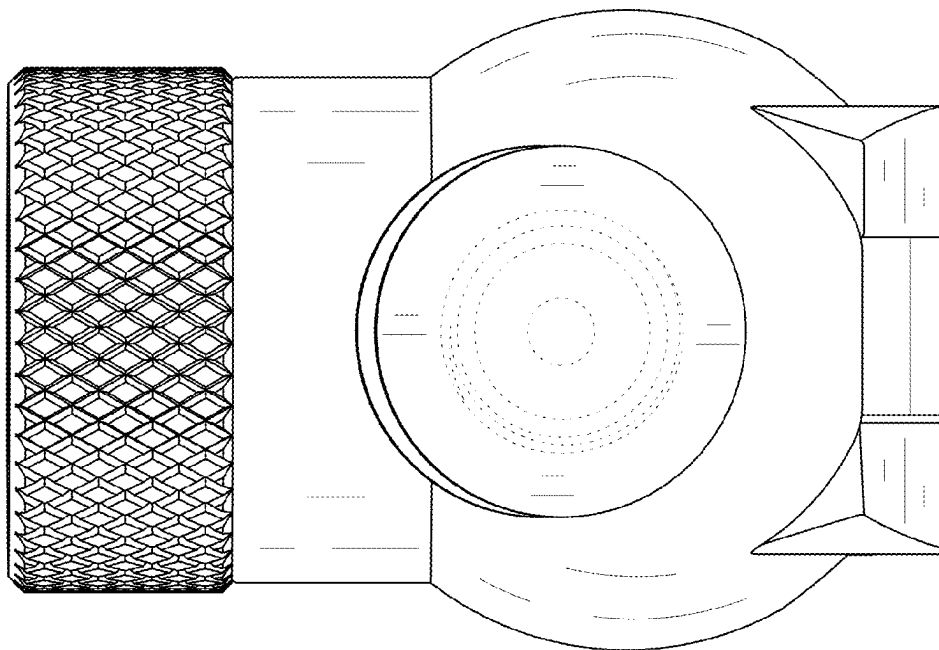


FIG. 18

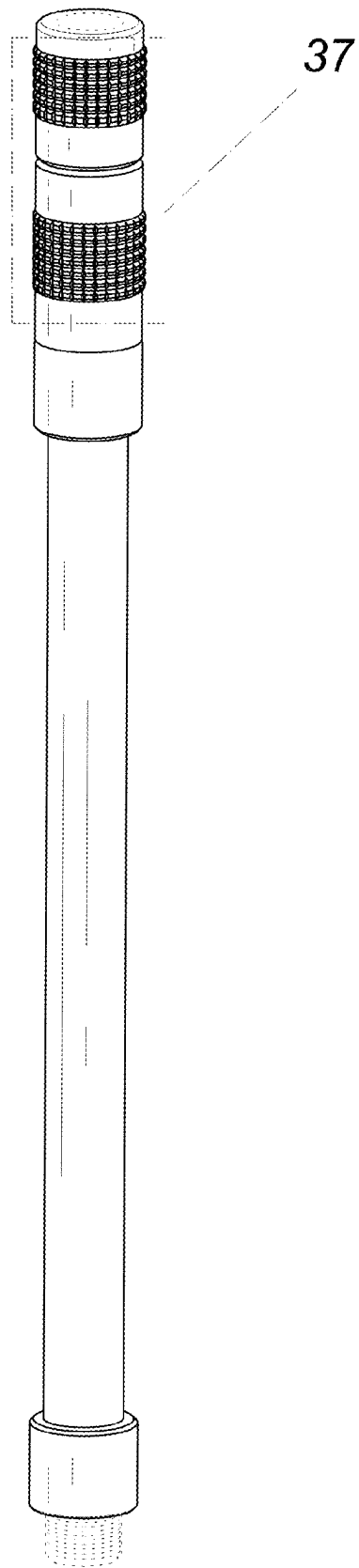


FIG. 19

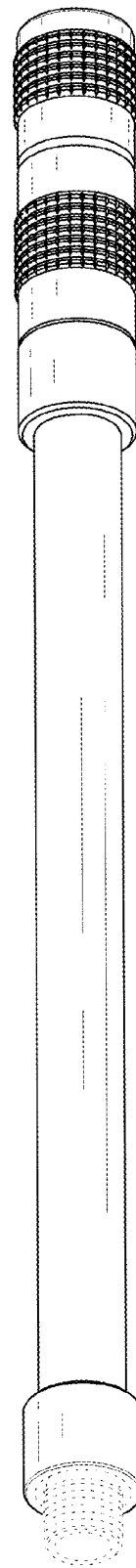


FIG. 20

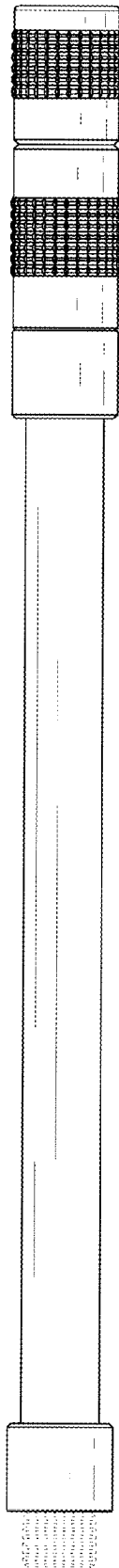


FIG. 21

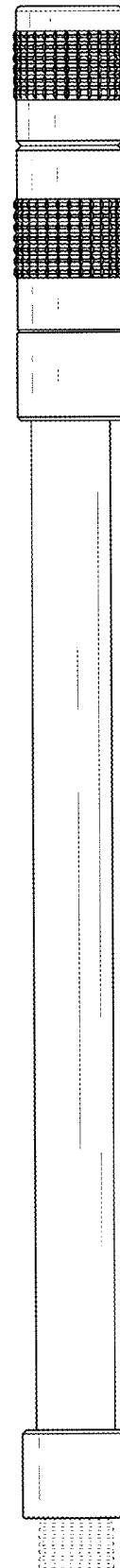


FIG. 22

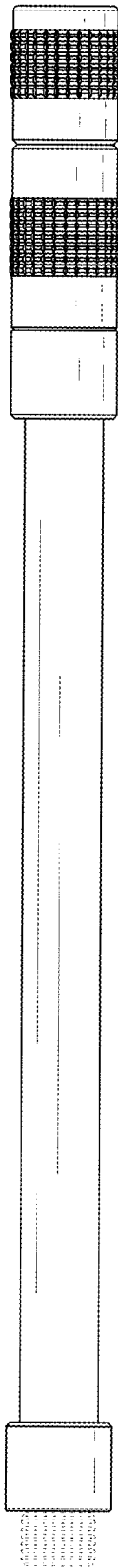


FIG. 23



FIG. 24

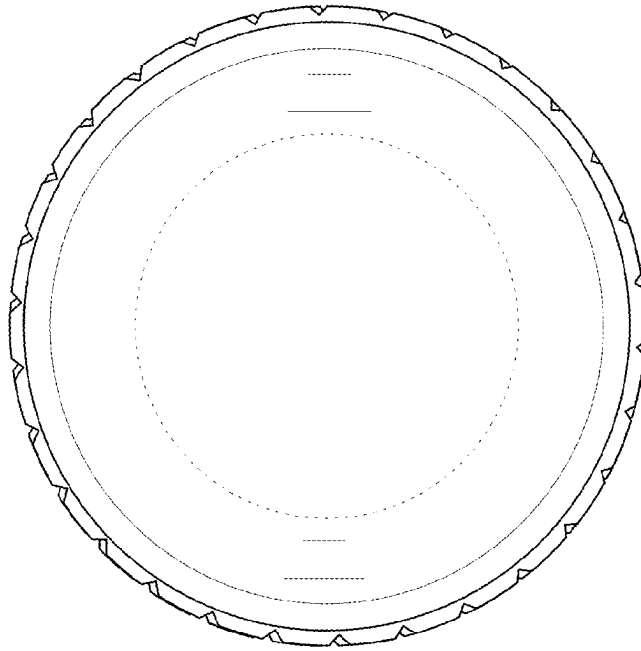


FIG. 25

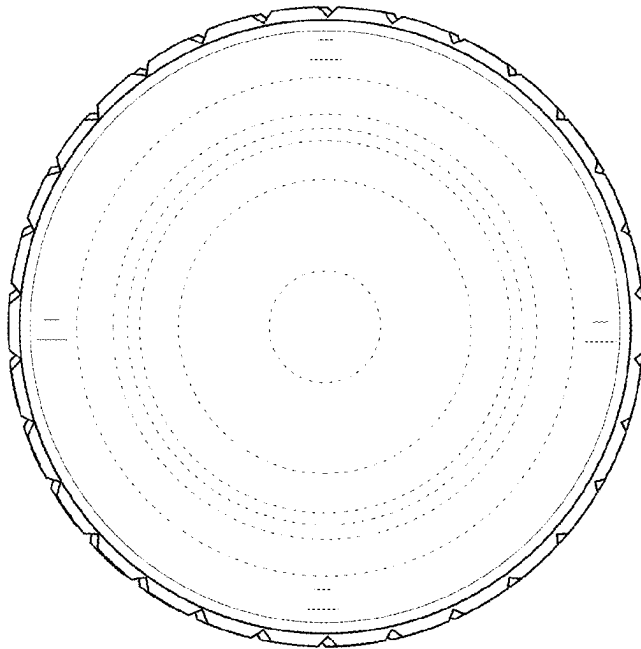


FIG. 26

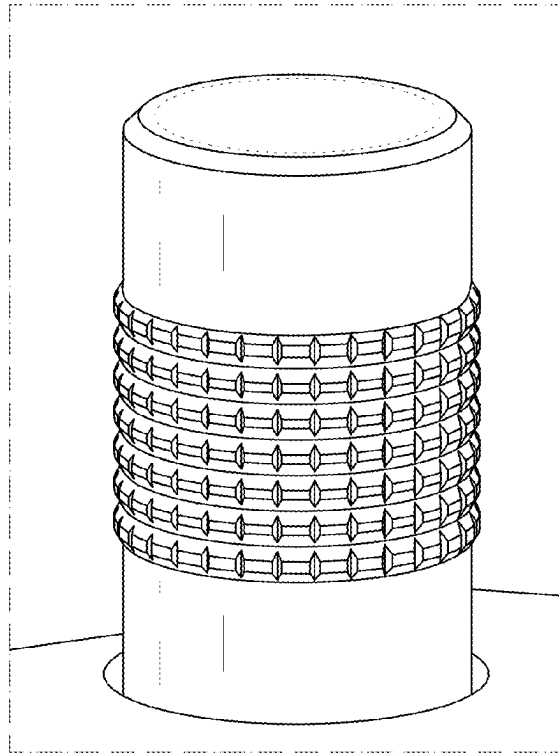


FIG. 27

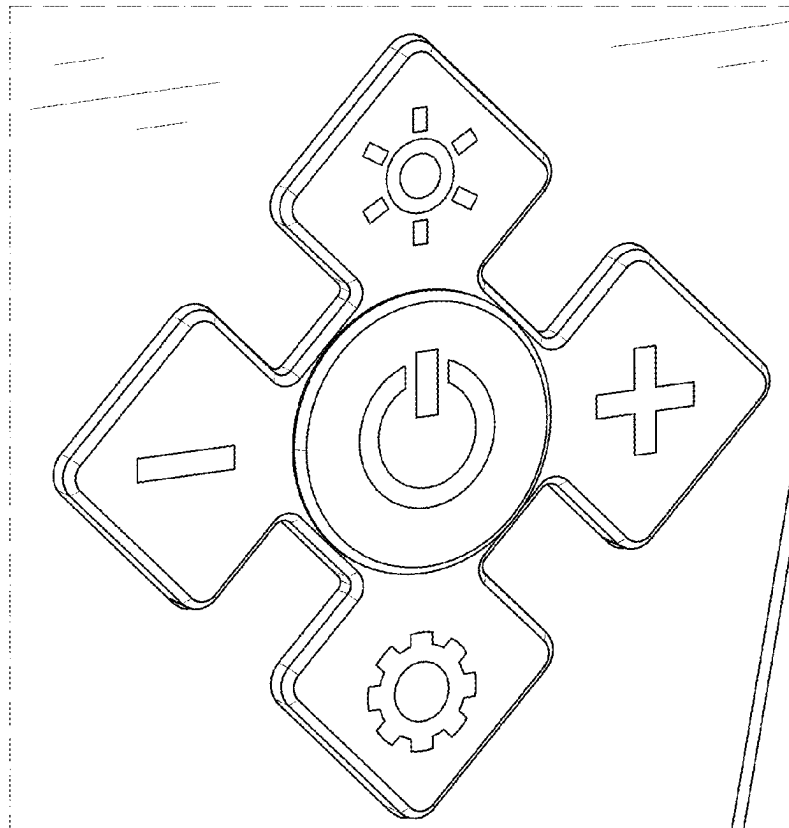


FIG. 28

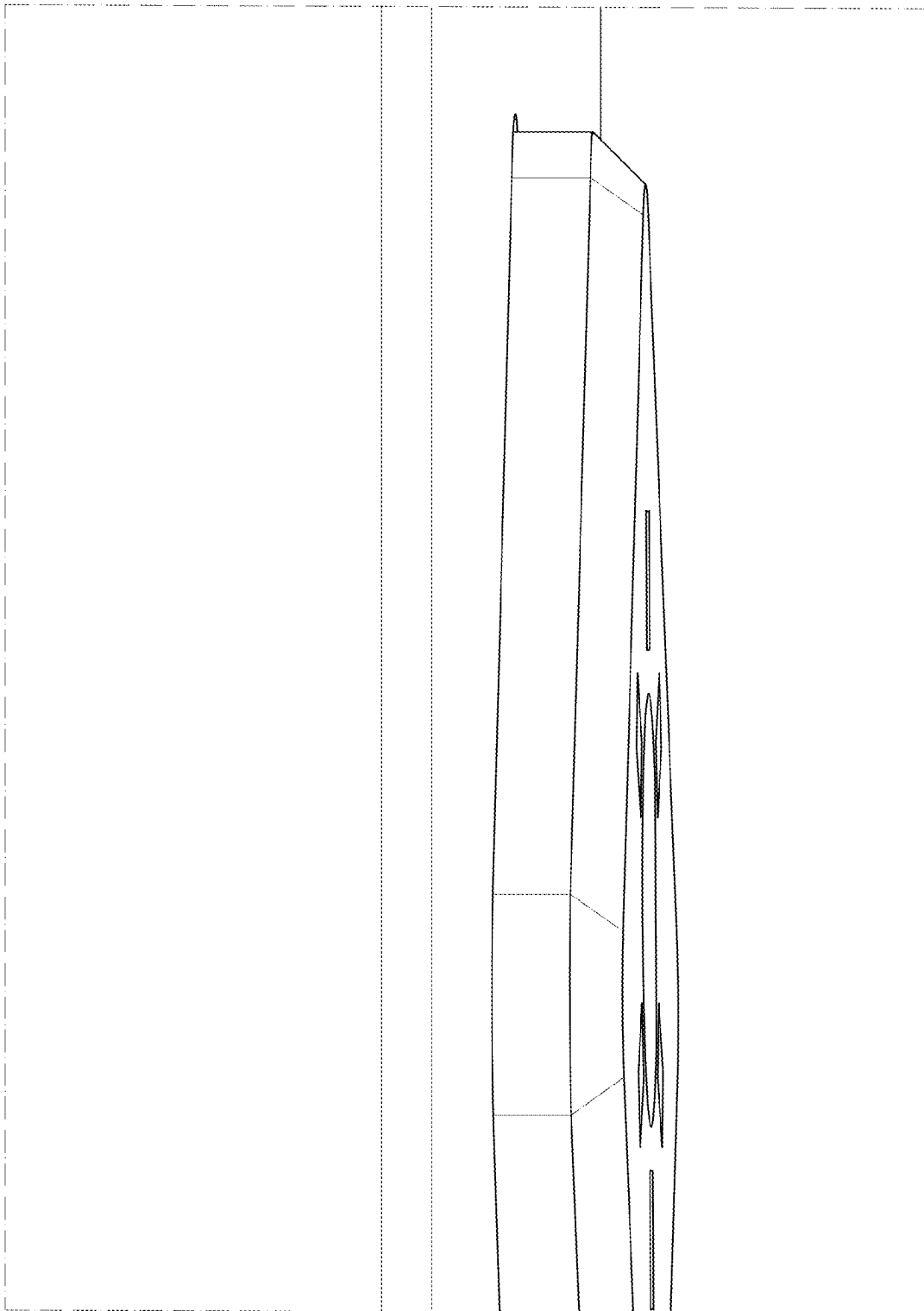


FIG. 29

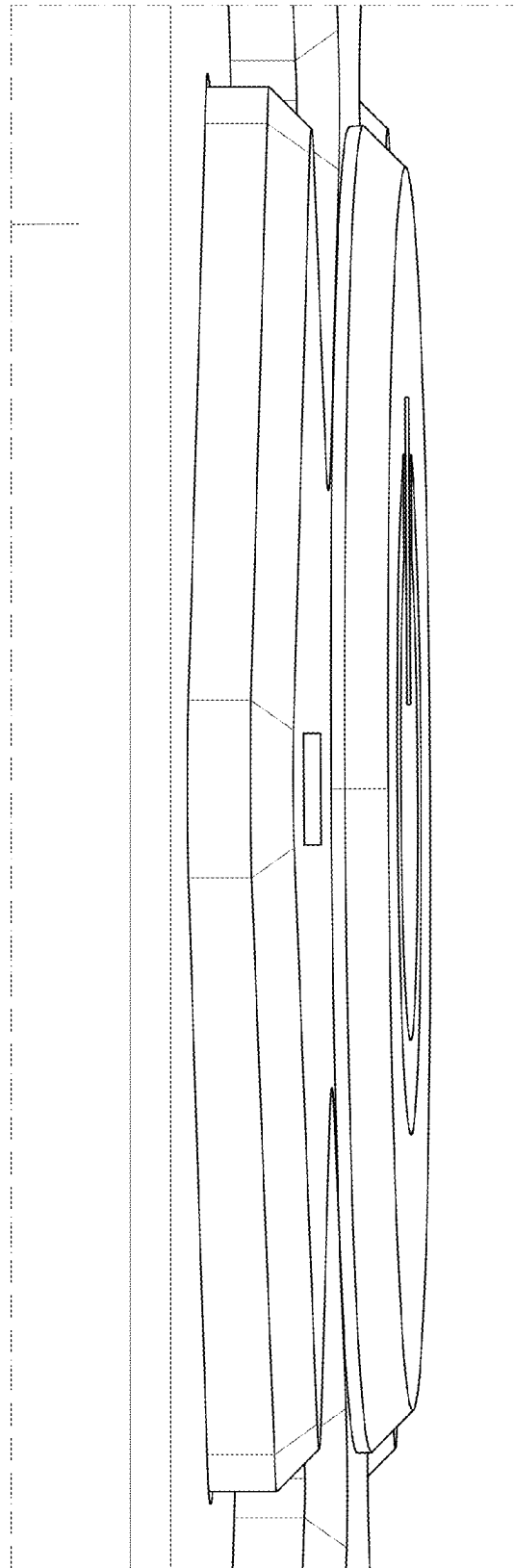


FIG. 30

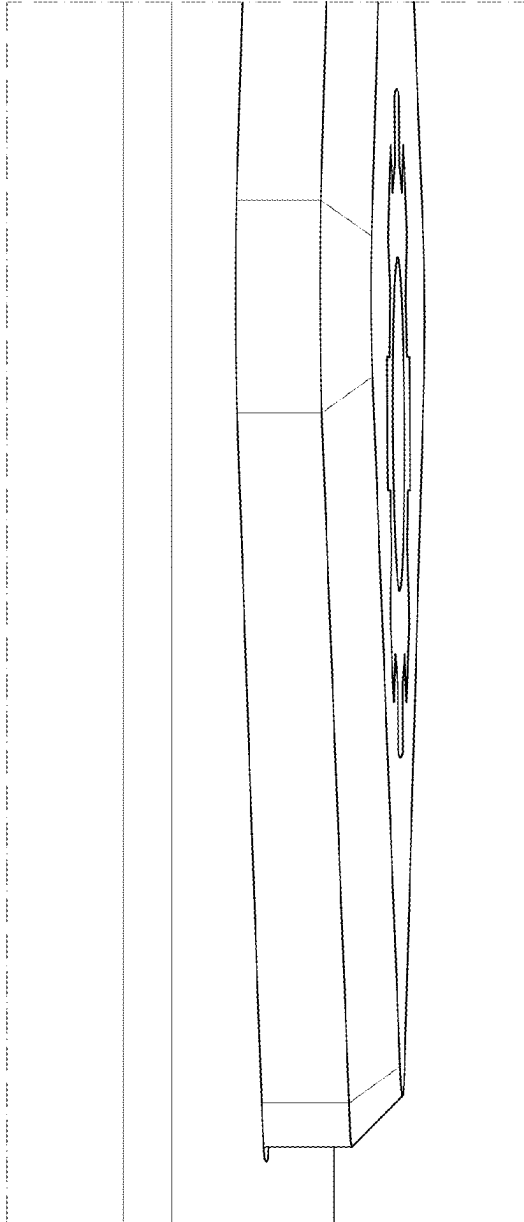


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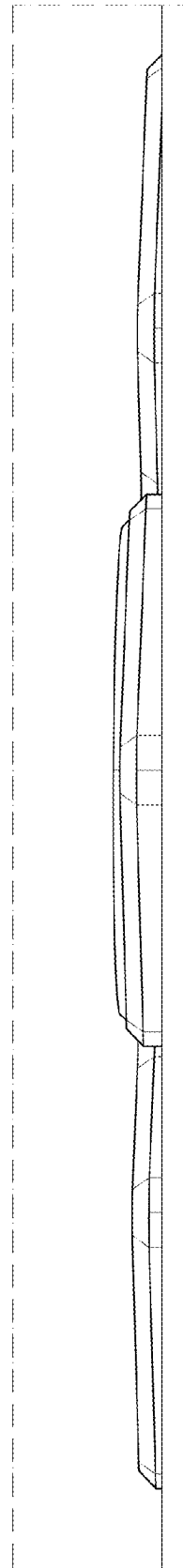


FIG. 32

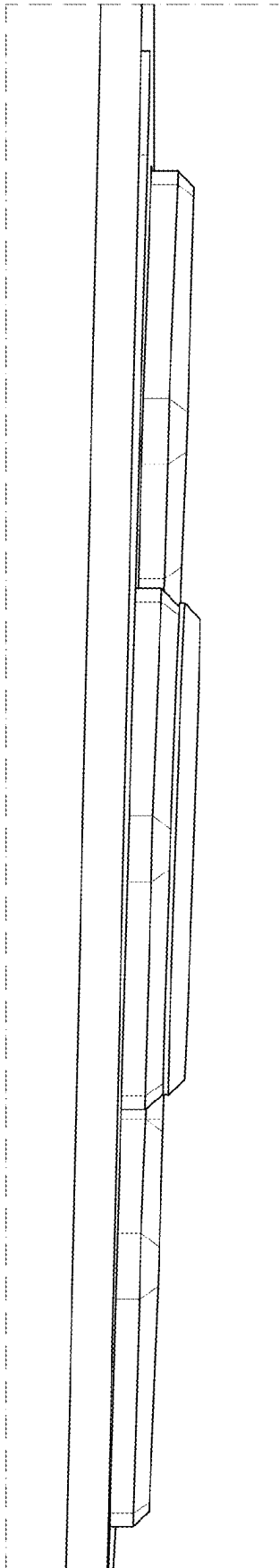


FIG. 33

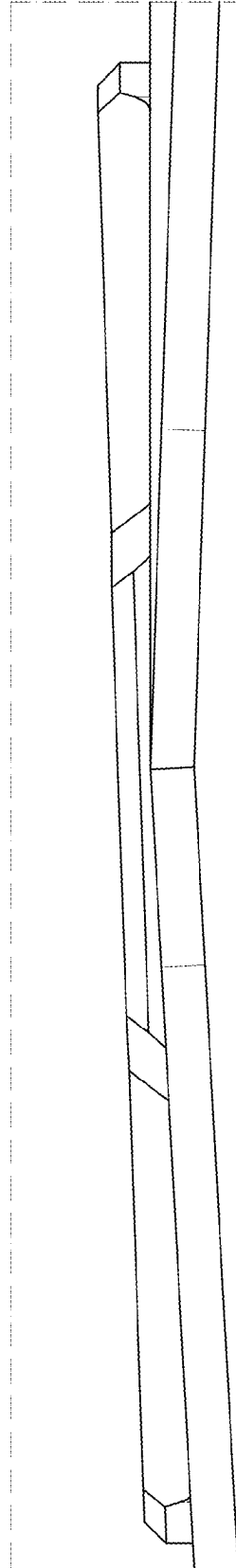


FIG. 34

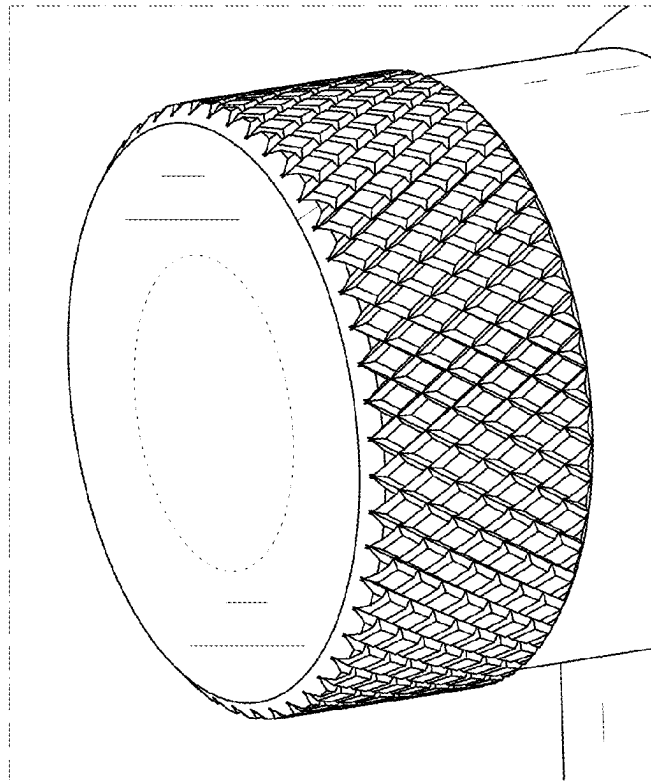


FIG. 35

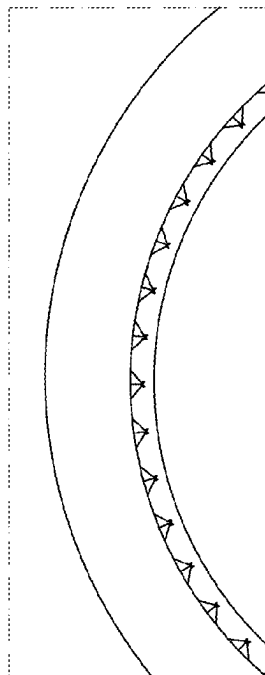


FIG. 36

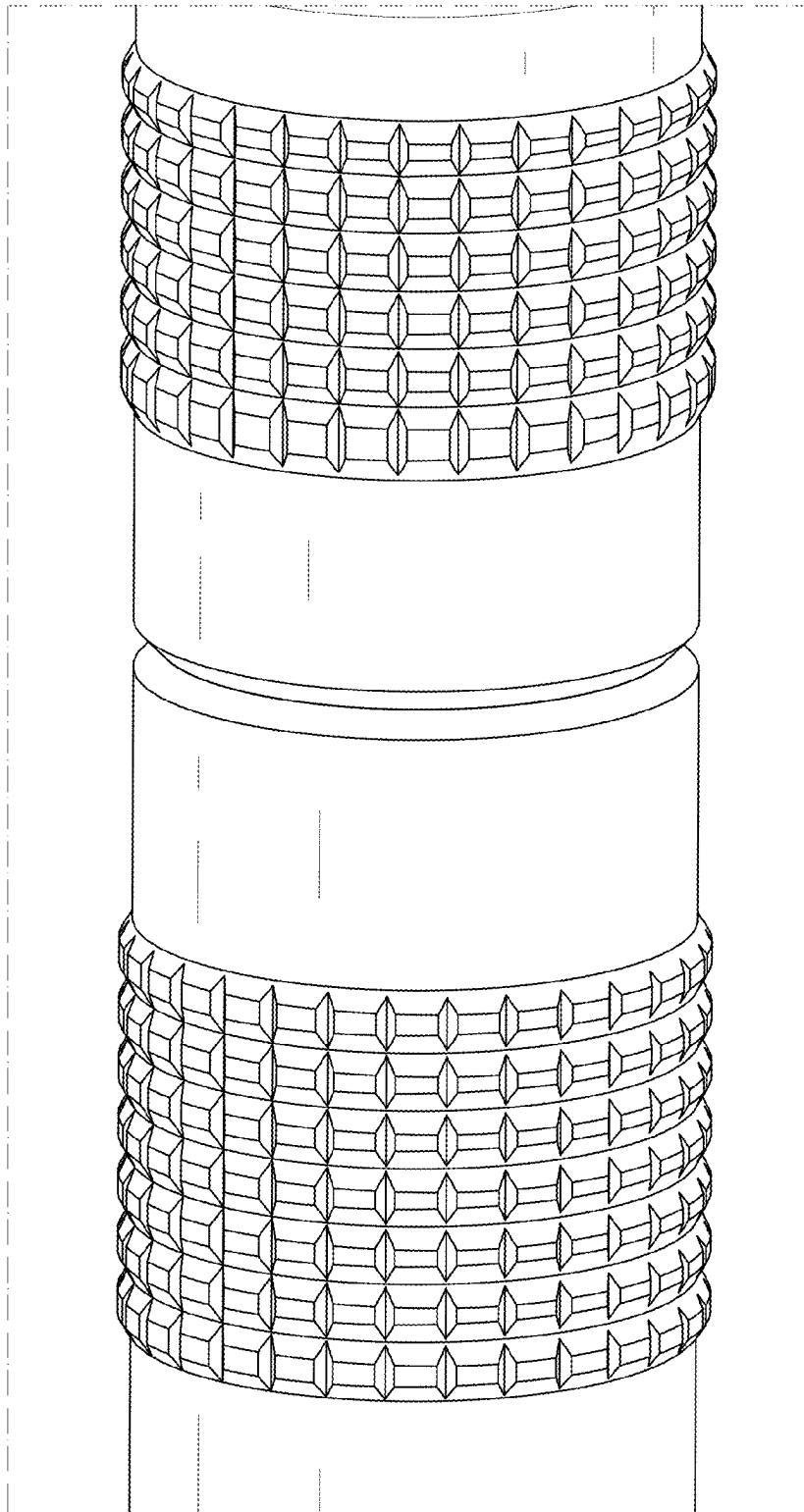


FIG.37

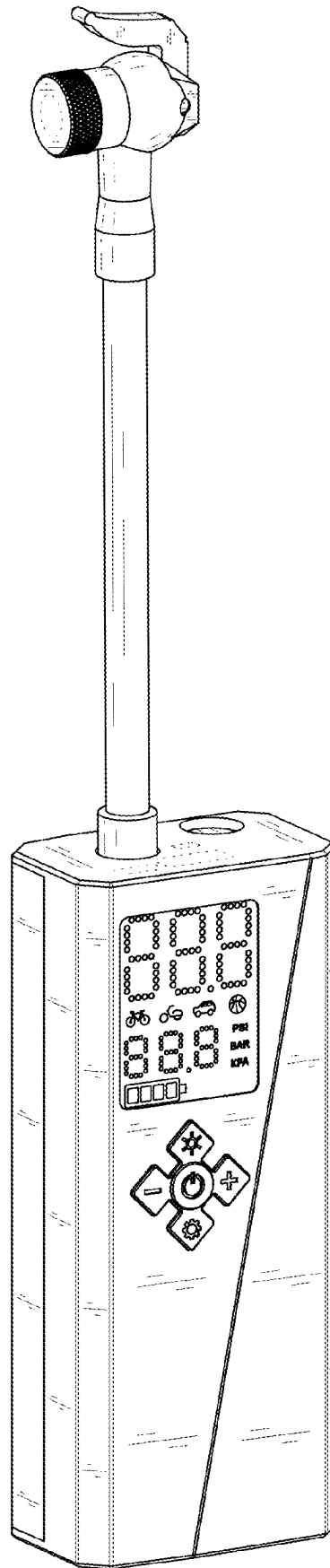


FIG.38

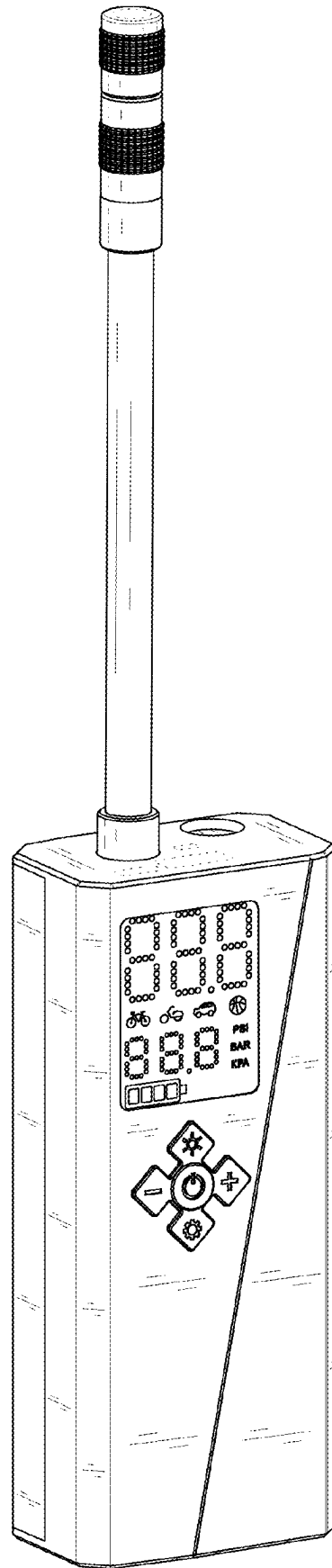
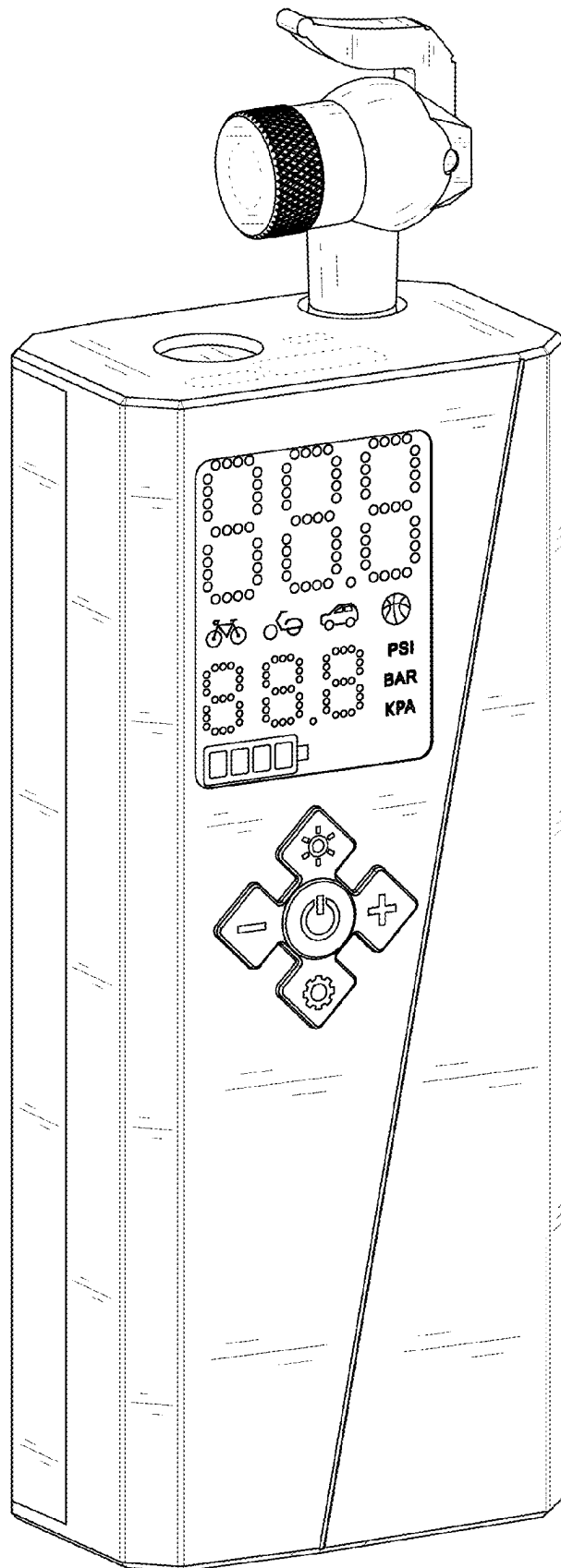
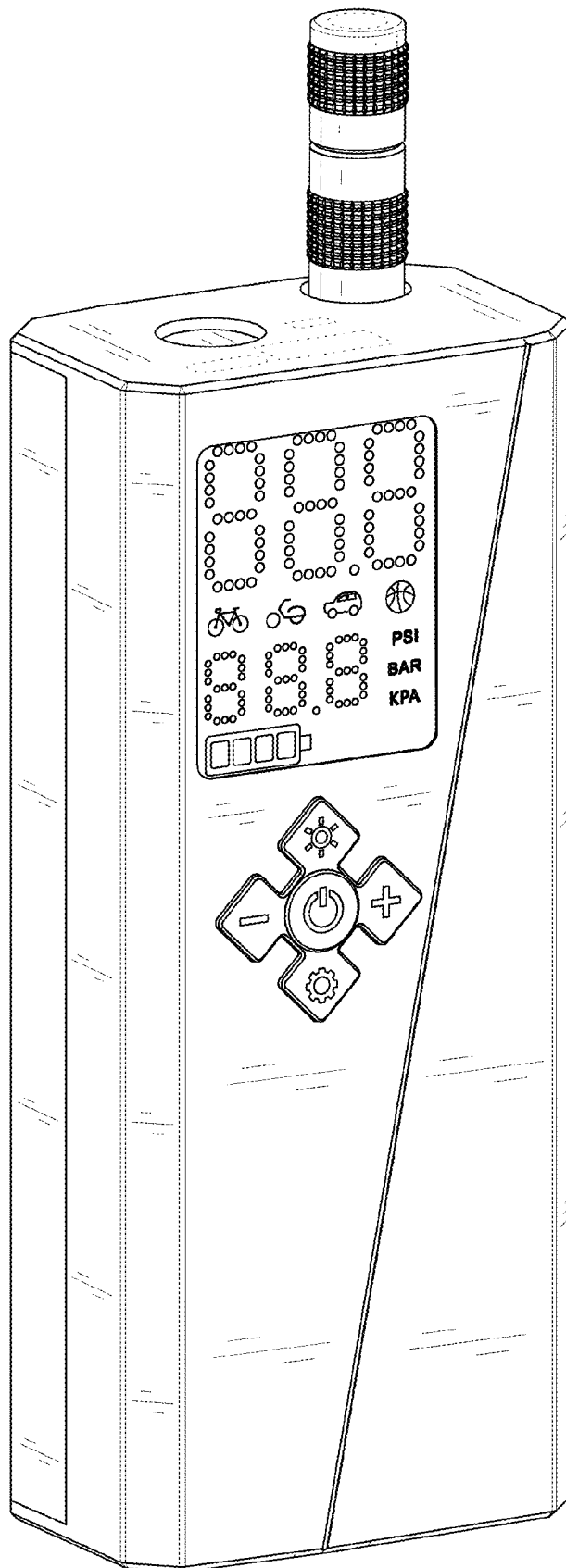


FIG.39

*FIG. 40*

*FIG. 41*

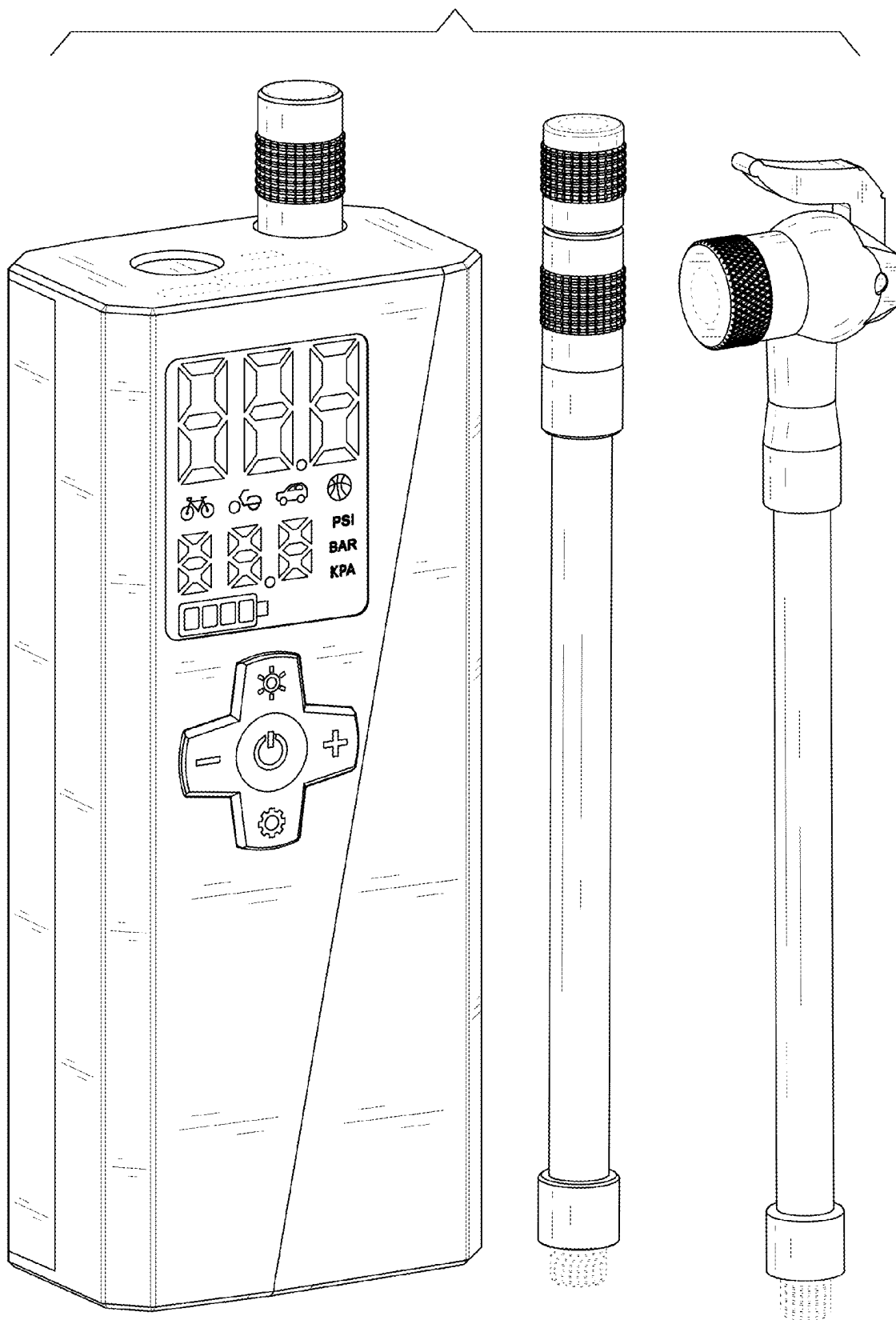


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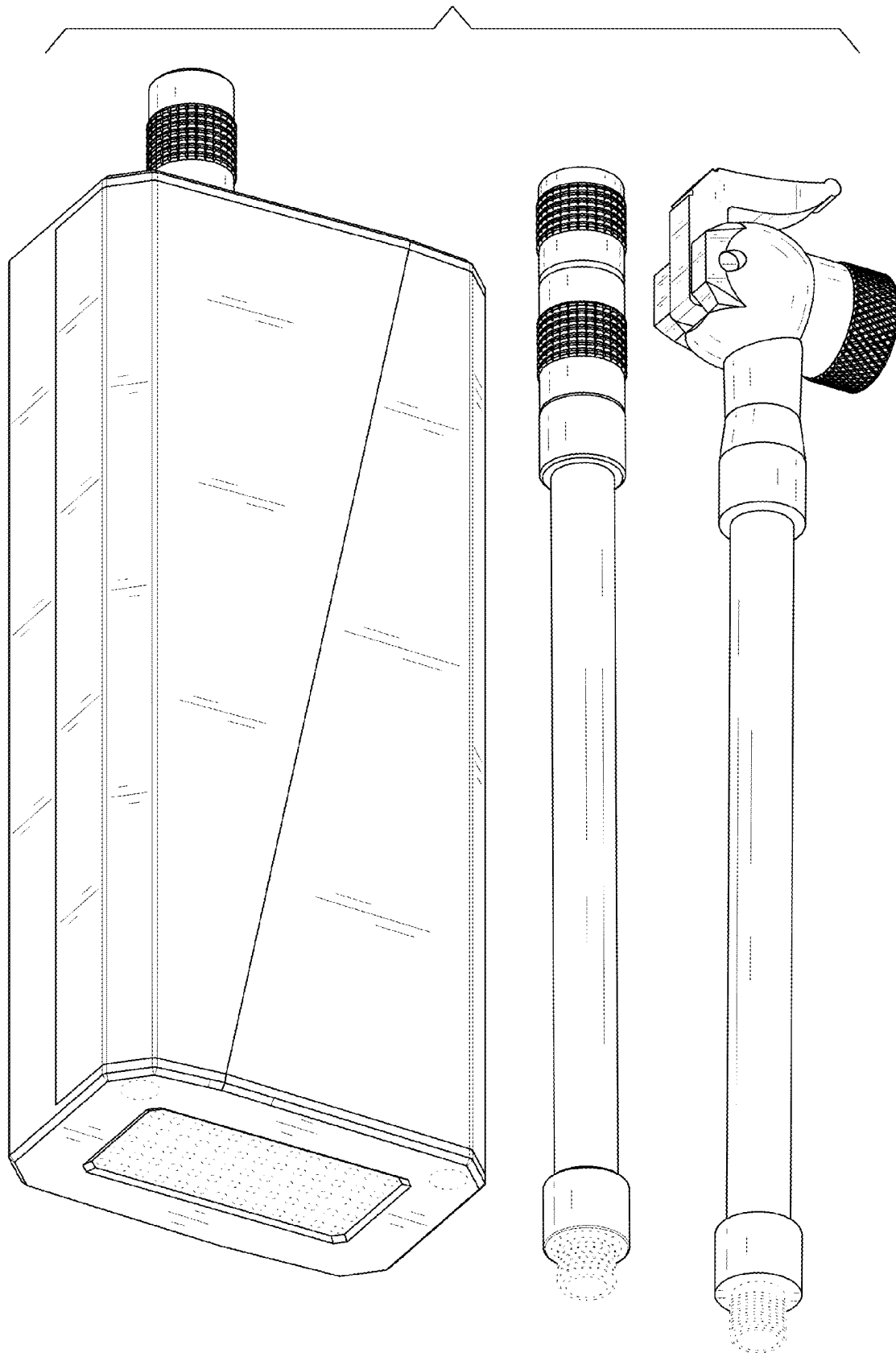
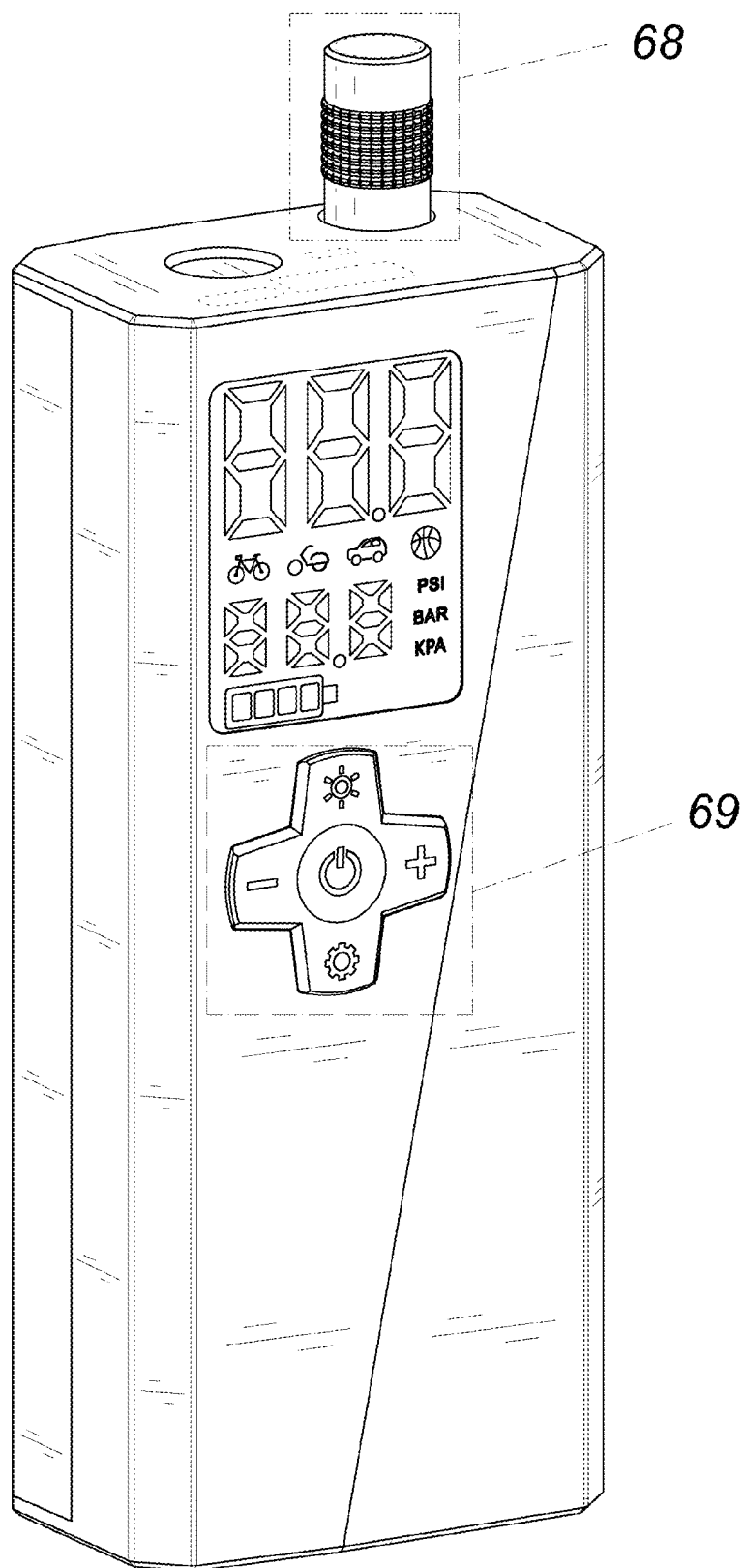


FIG. 43

**FIG. 44**

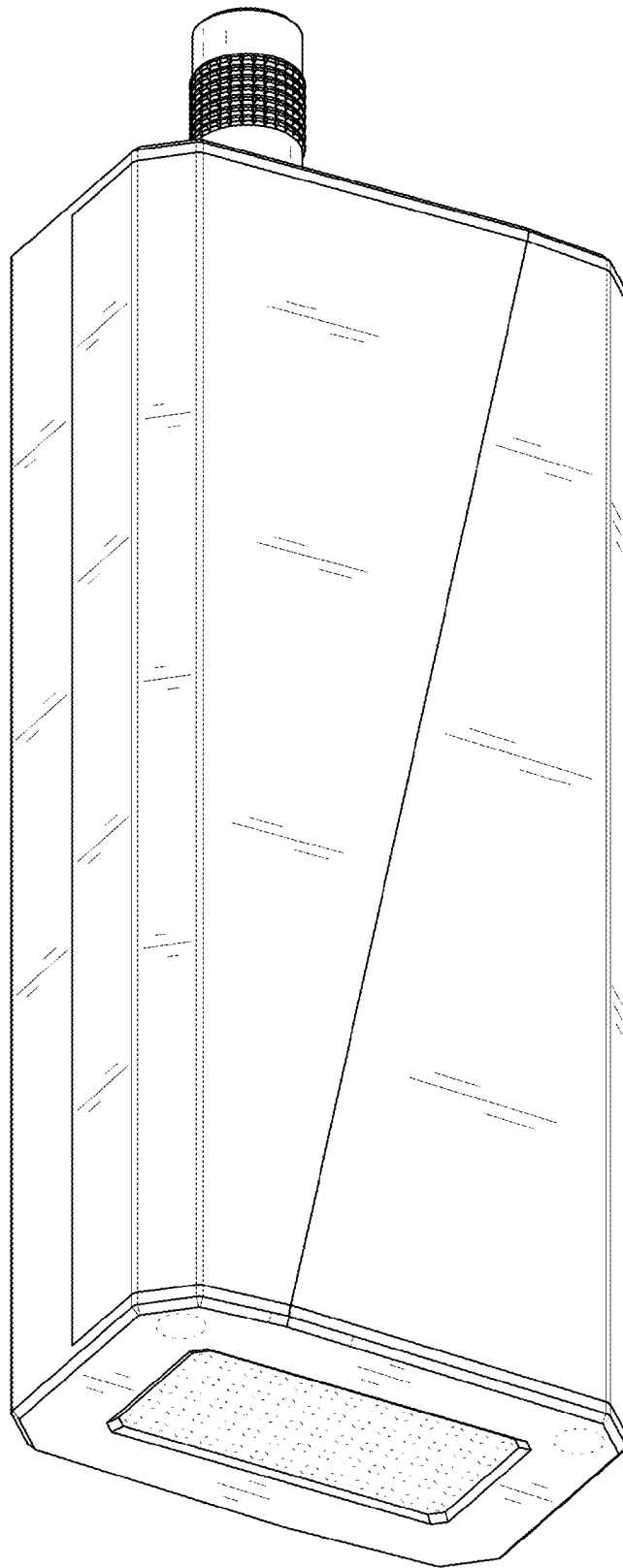


FIG.45

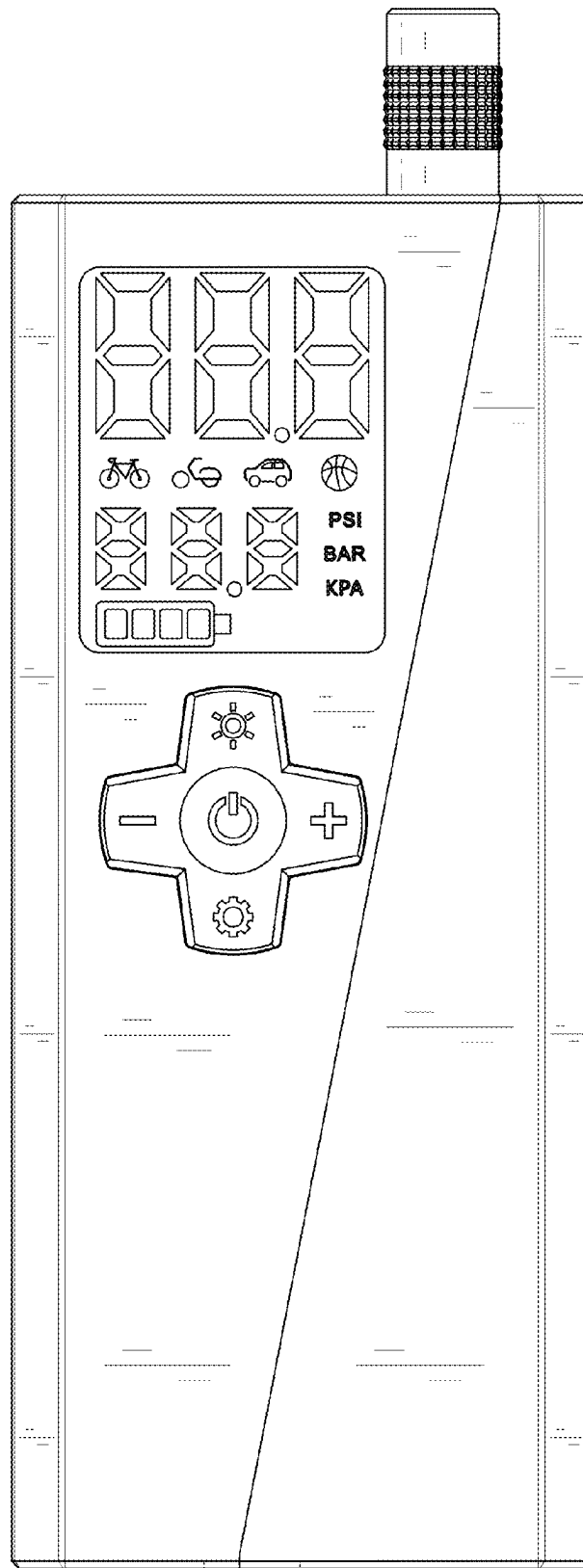


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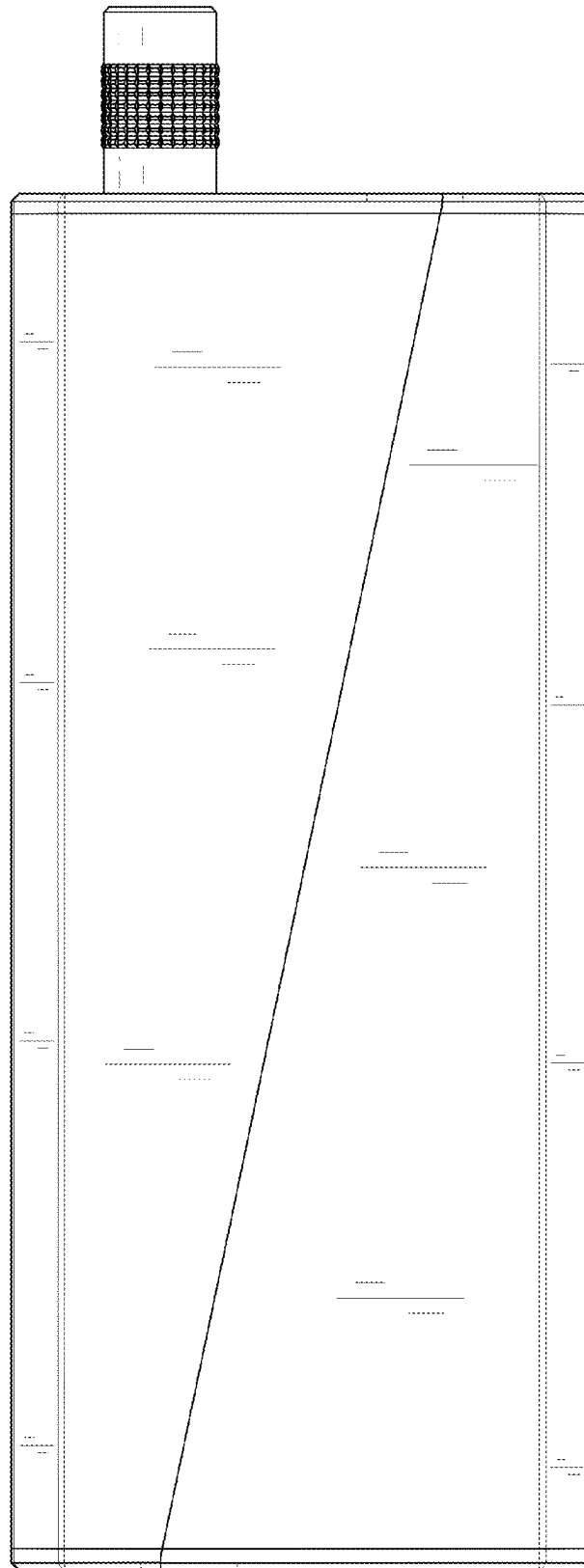


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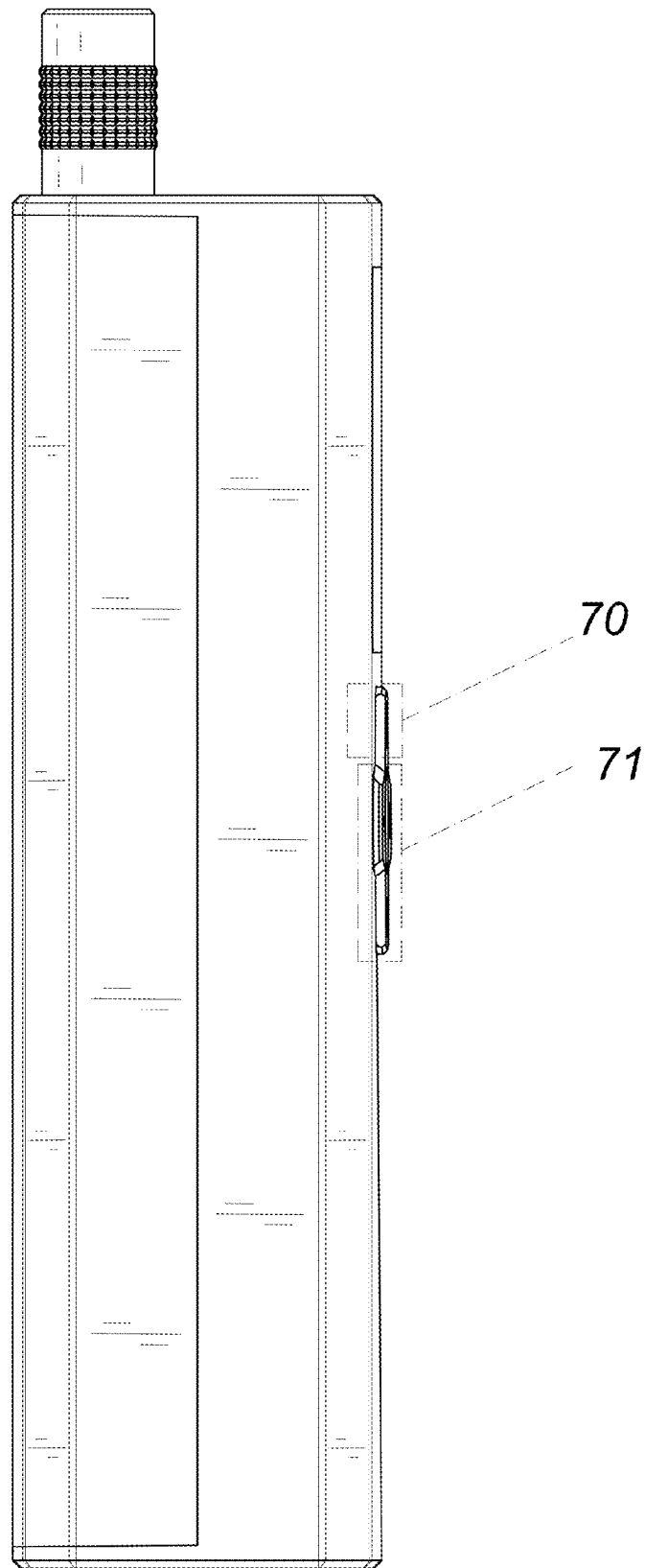


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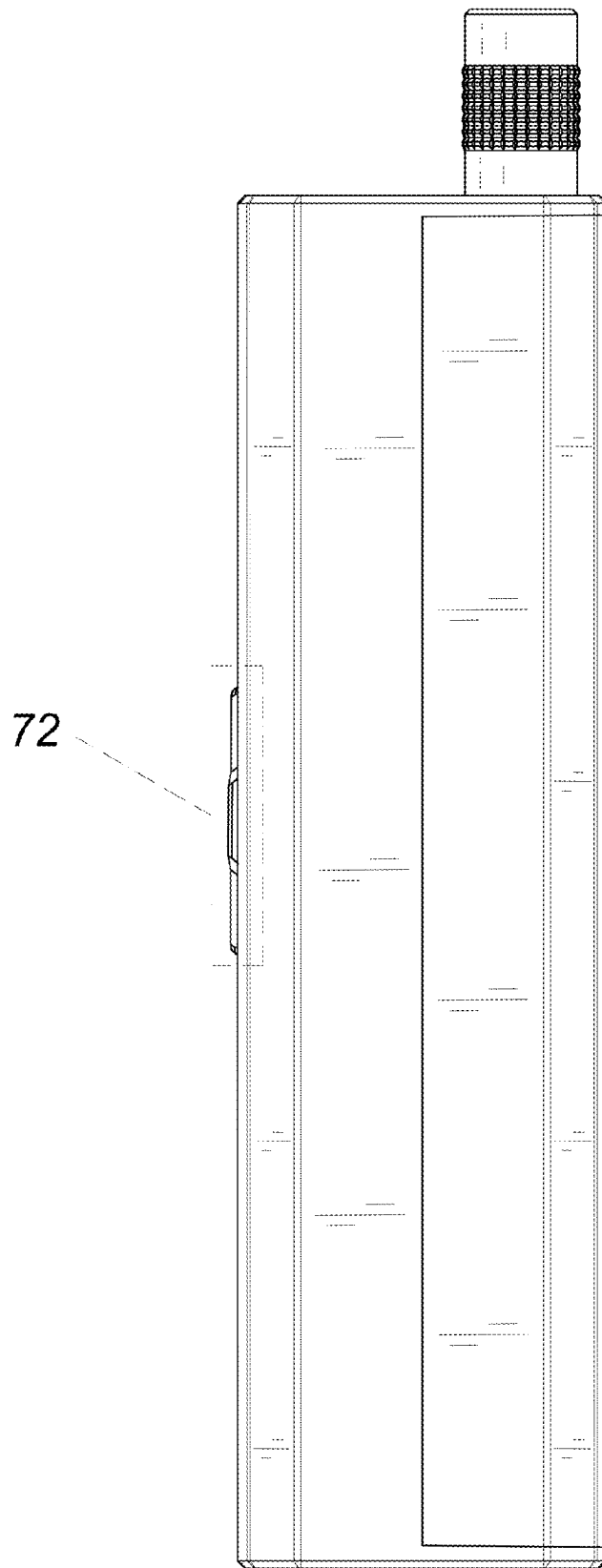


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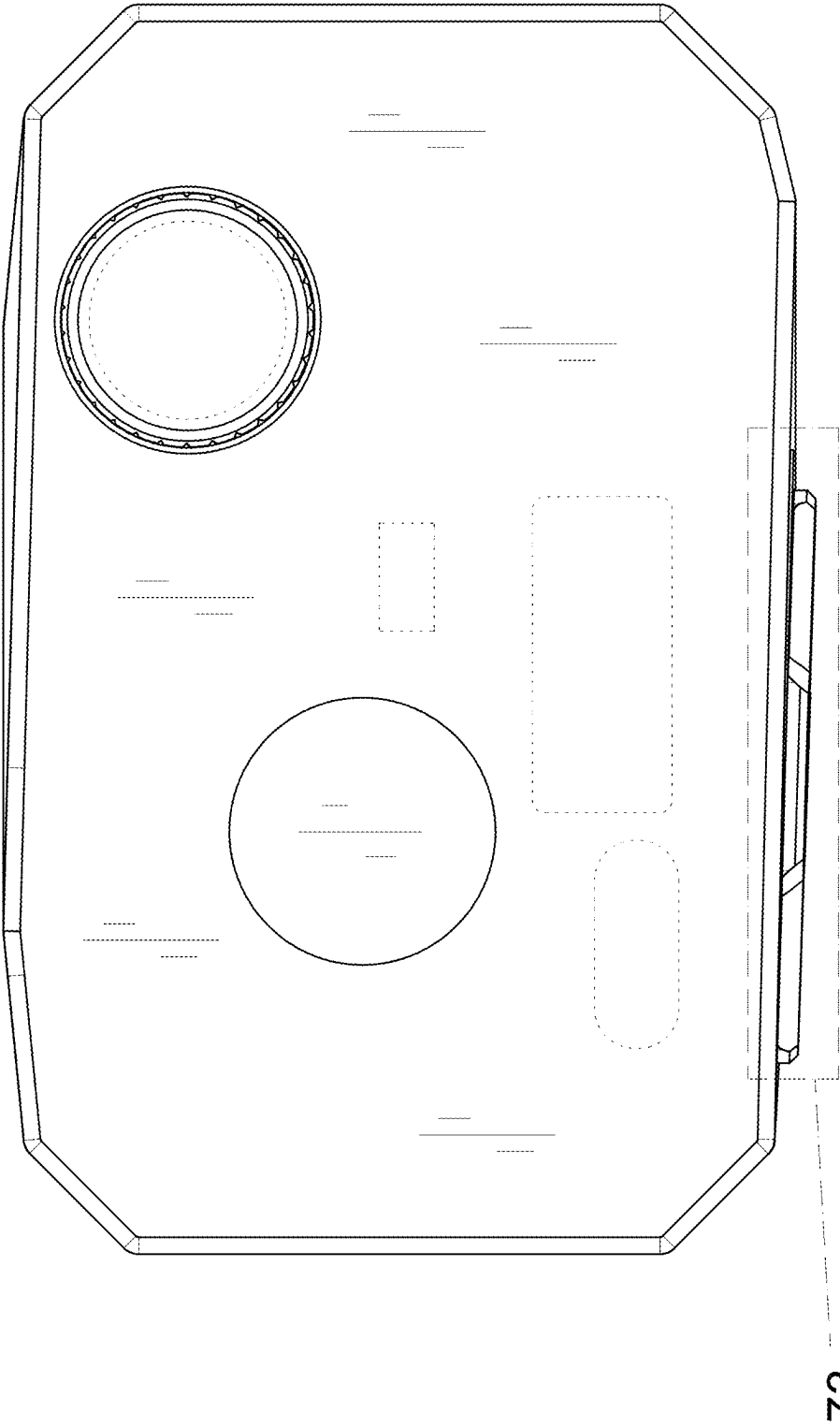


FIG. 50

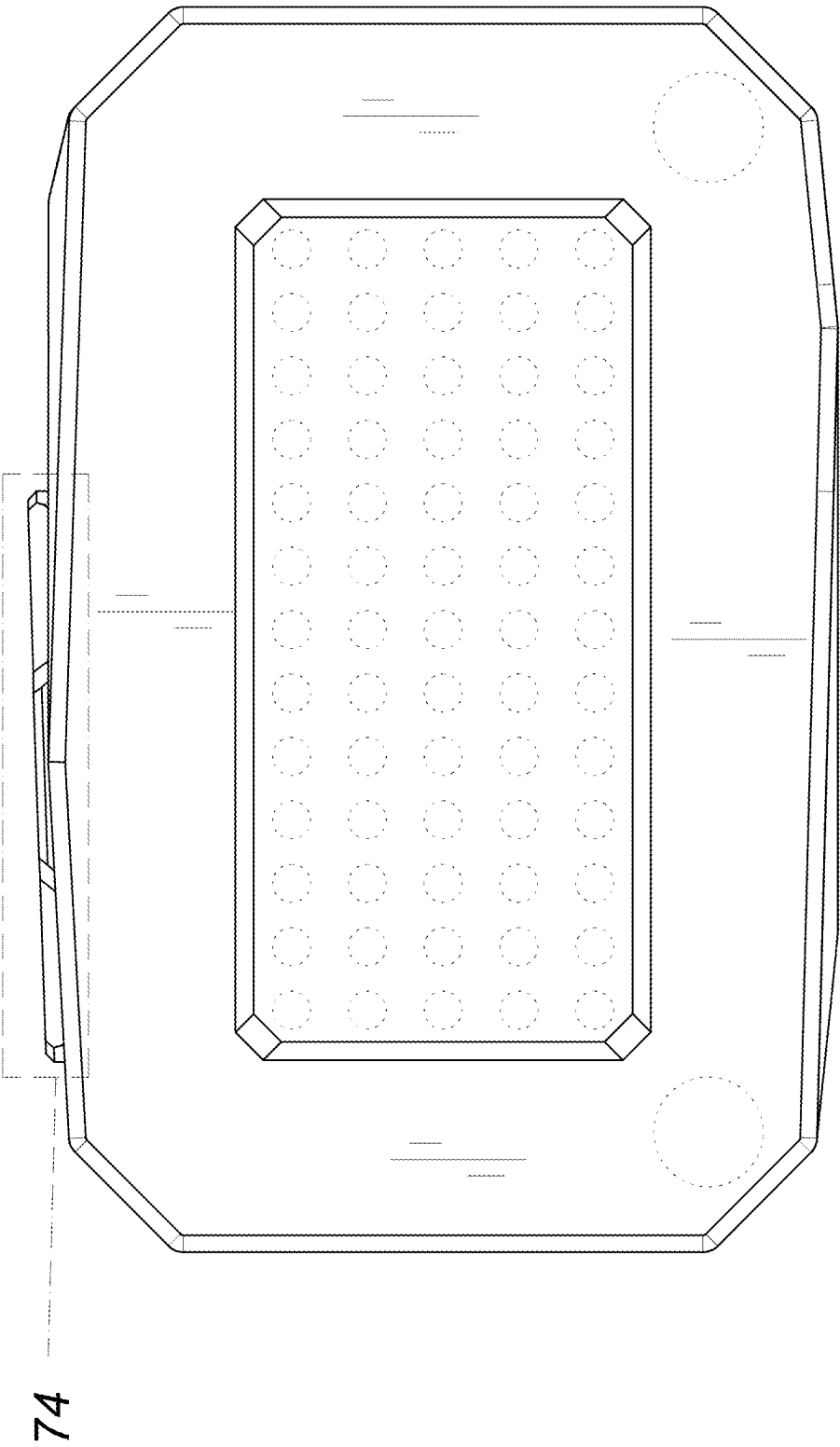


FIG. 51

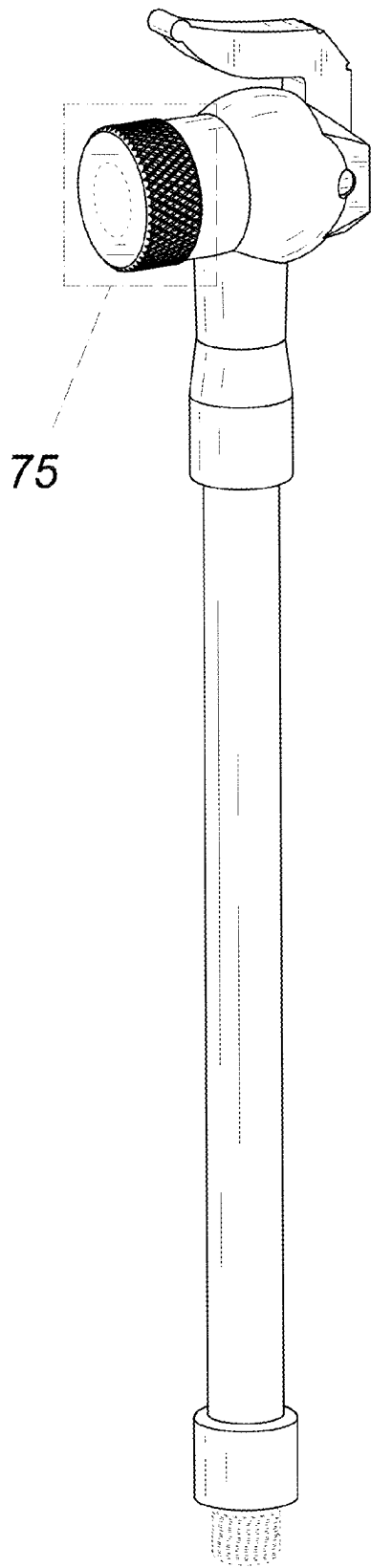


FIG. 52

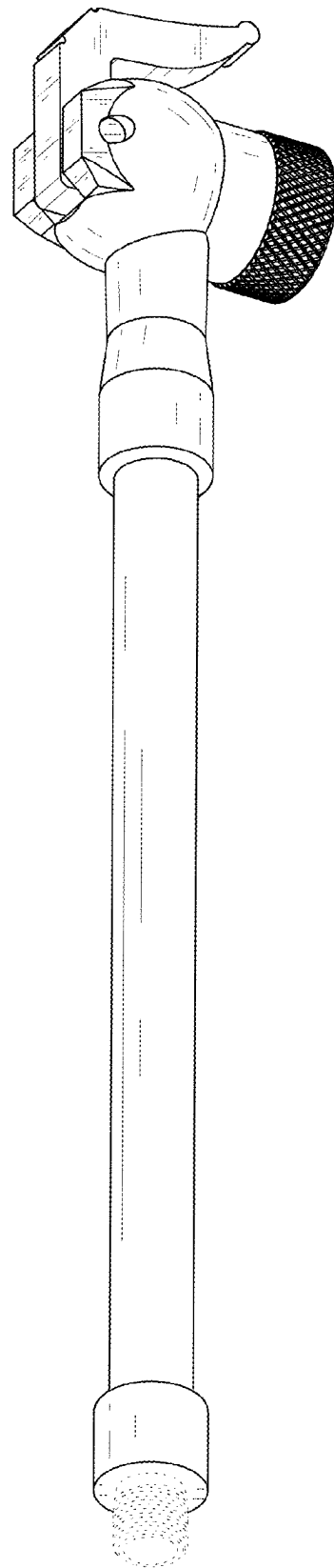


FIG. 53

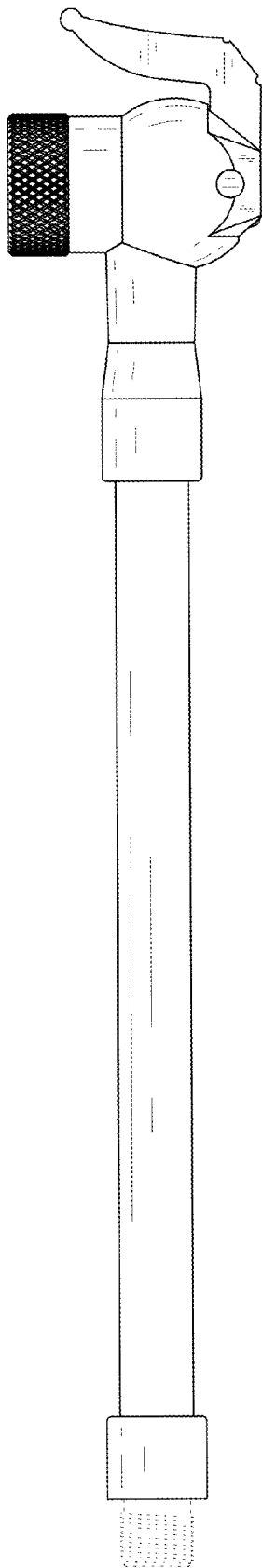


FIG. 54

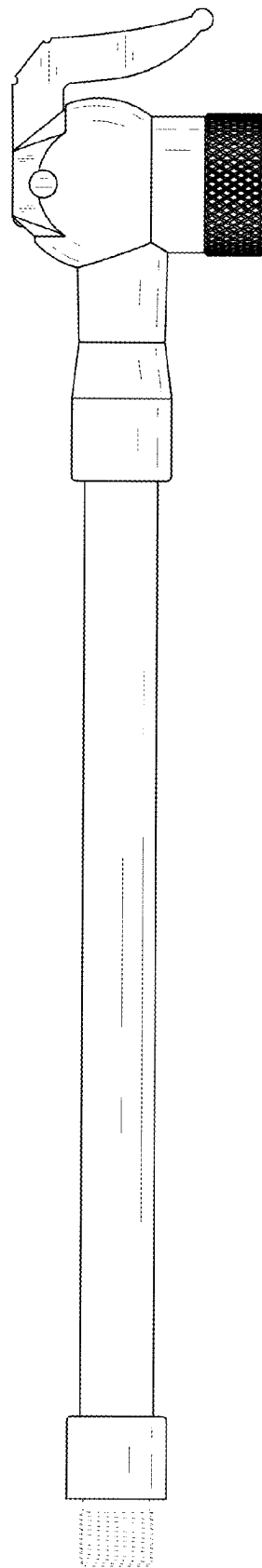


FIG. 55

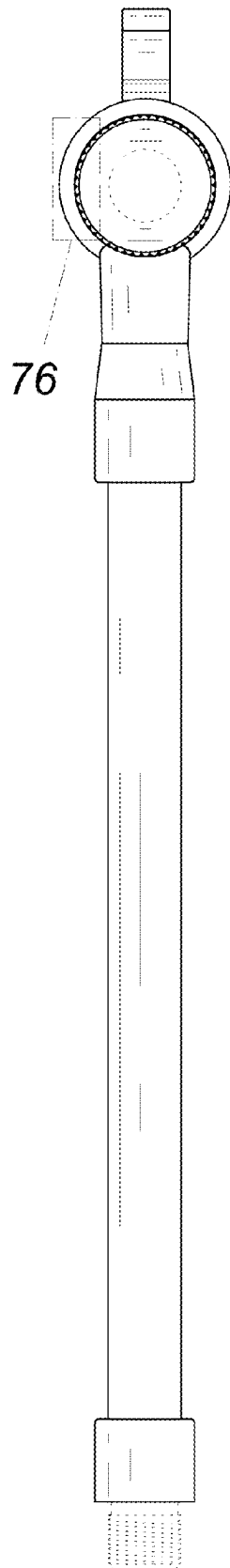


FIG. 56

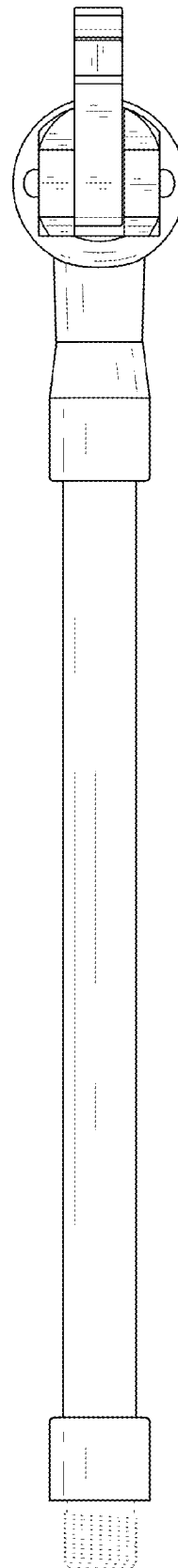


FIG. 57

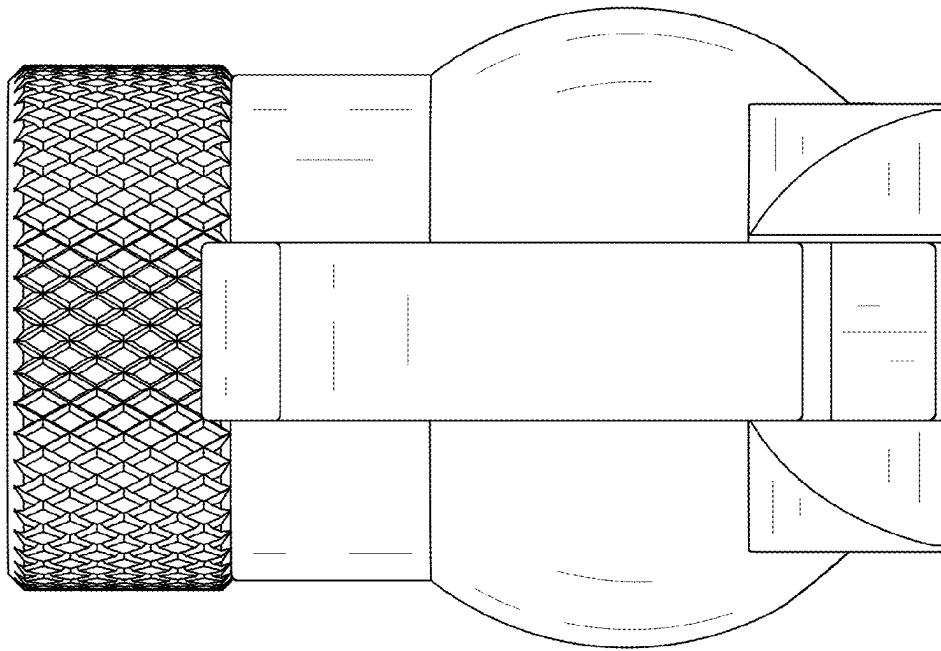


FIG. 58

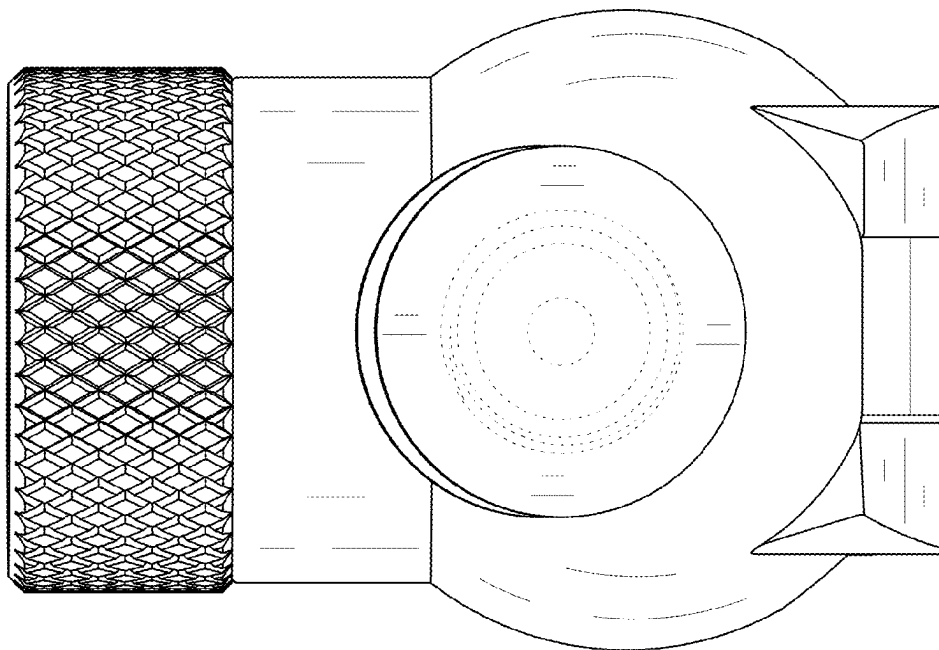


FIG. 59

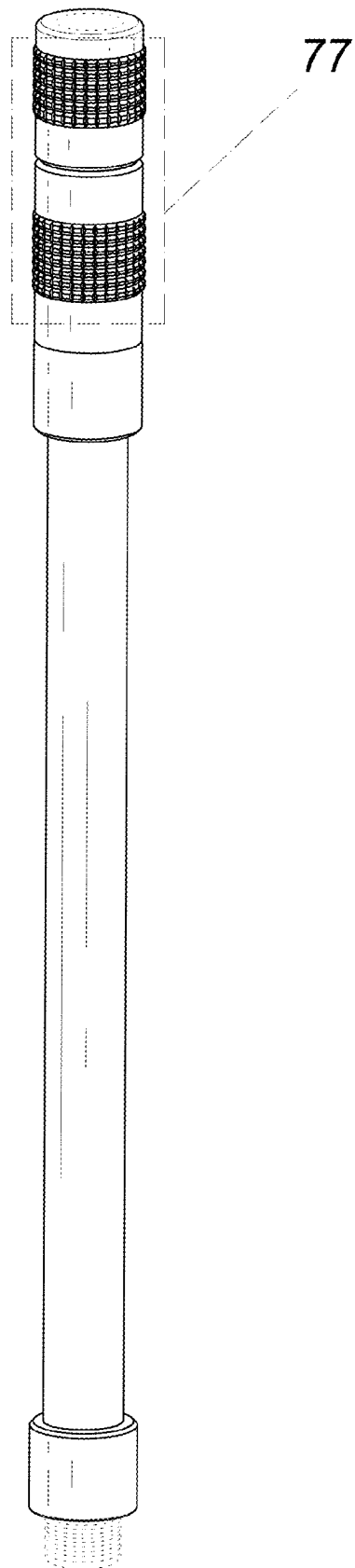


FIG. 60

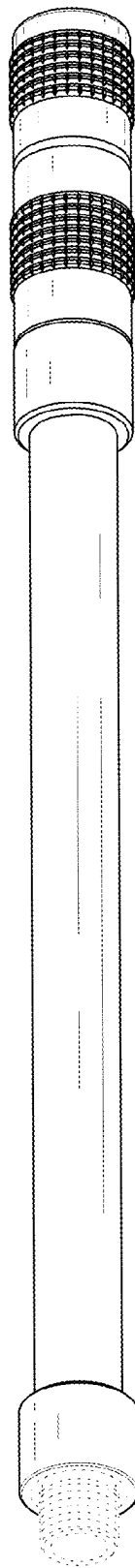


FIG. 61

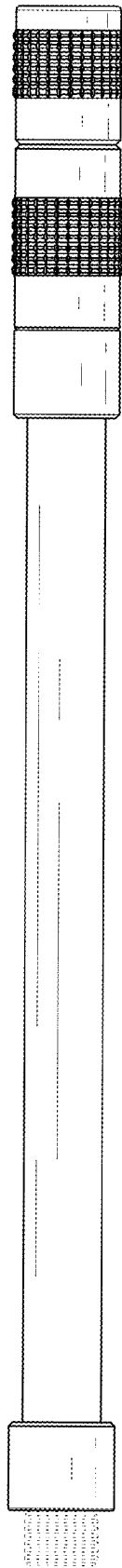


FIG. 62

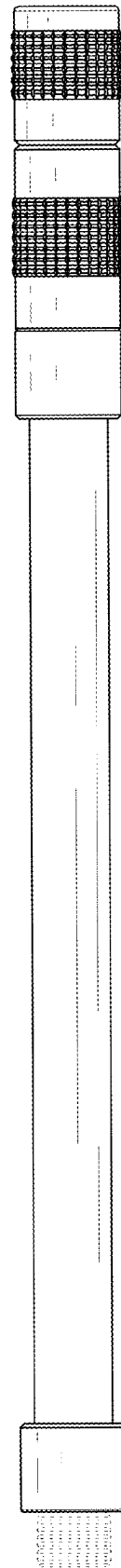


FIG. 63

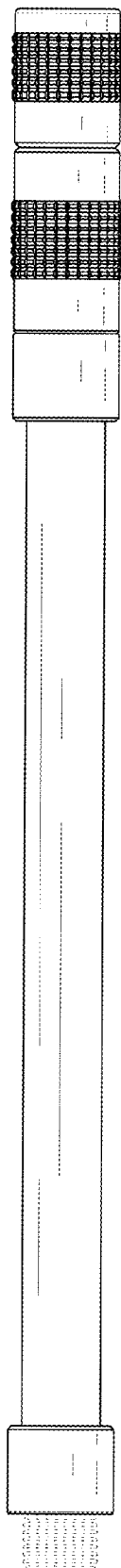


FIG. 64

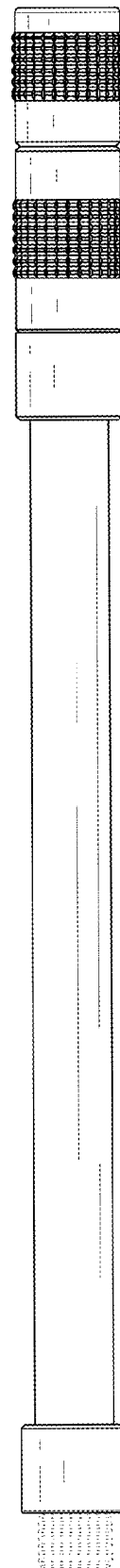


FIG. 65

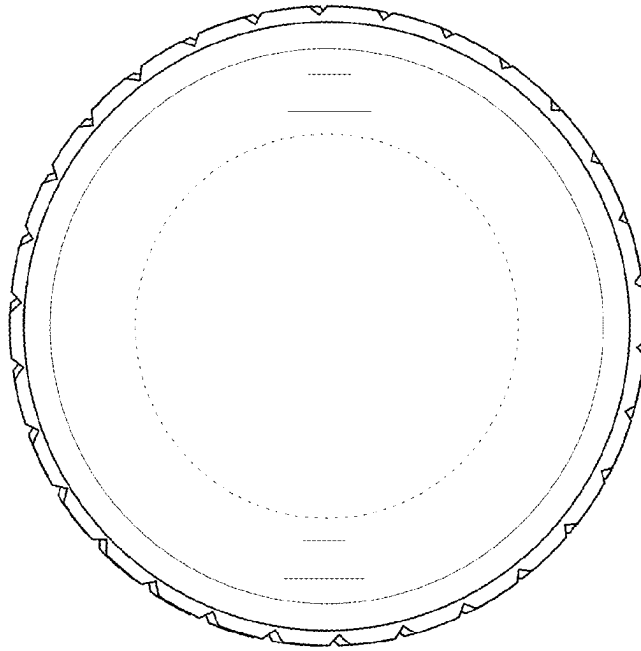


FIG. 66

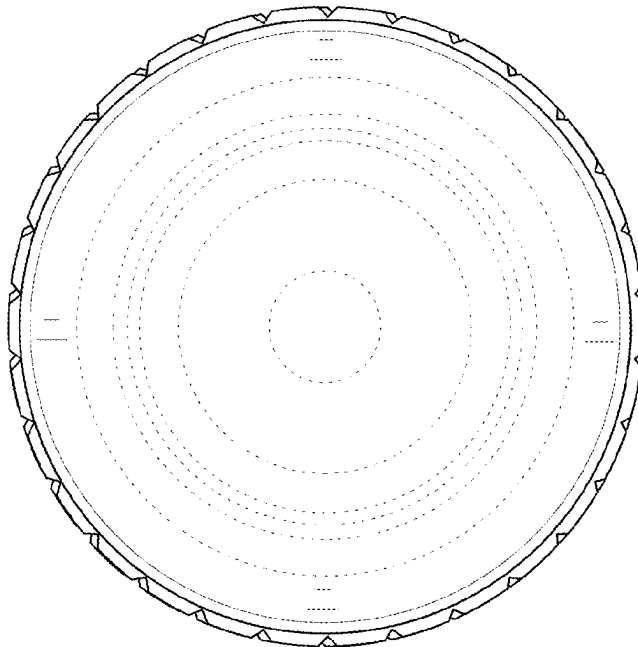


FIG. 67

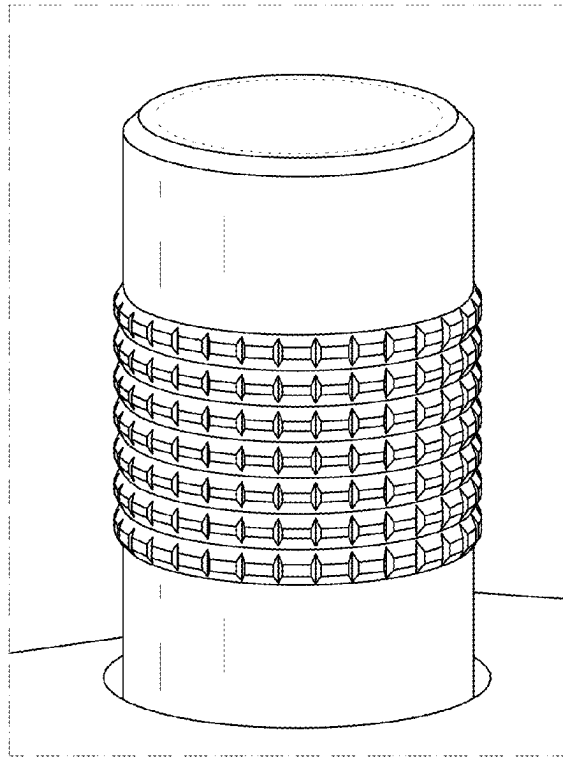


FIG. 68

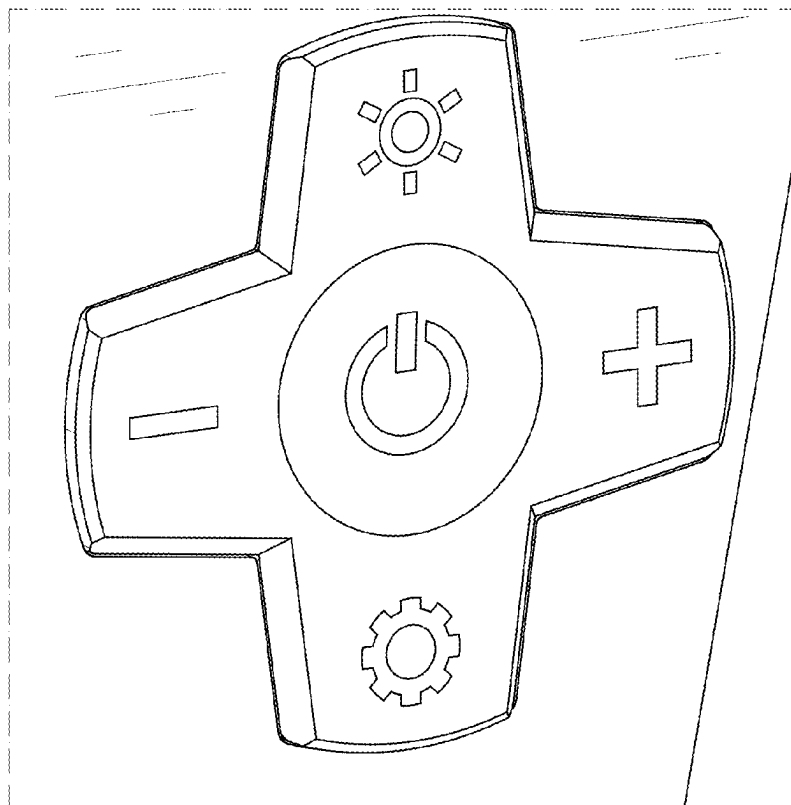


FIG. 69

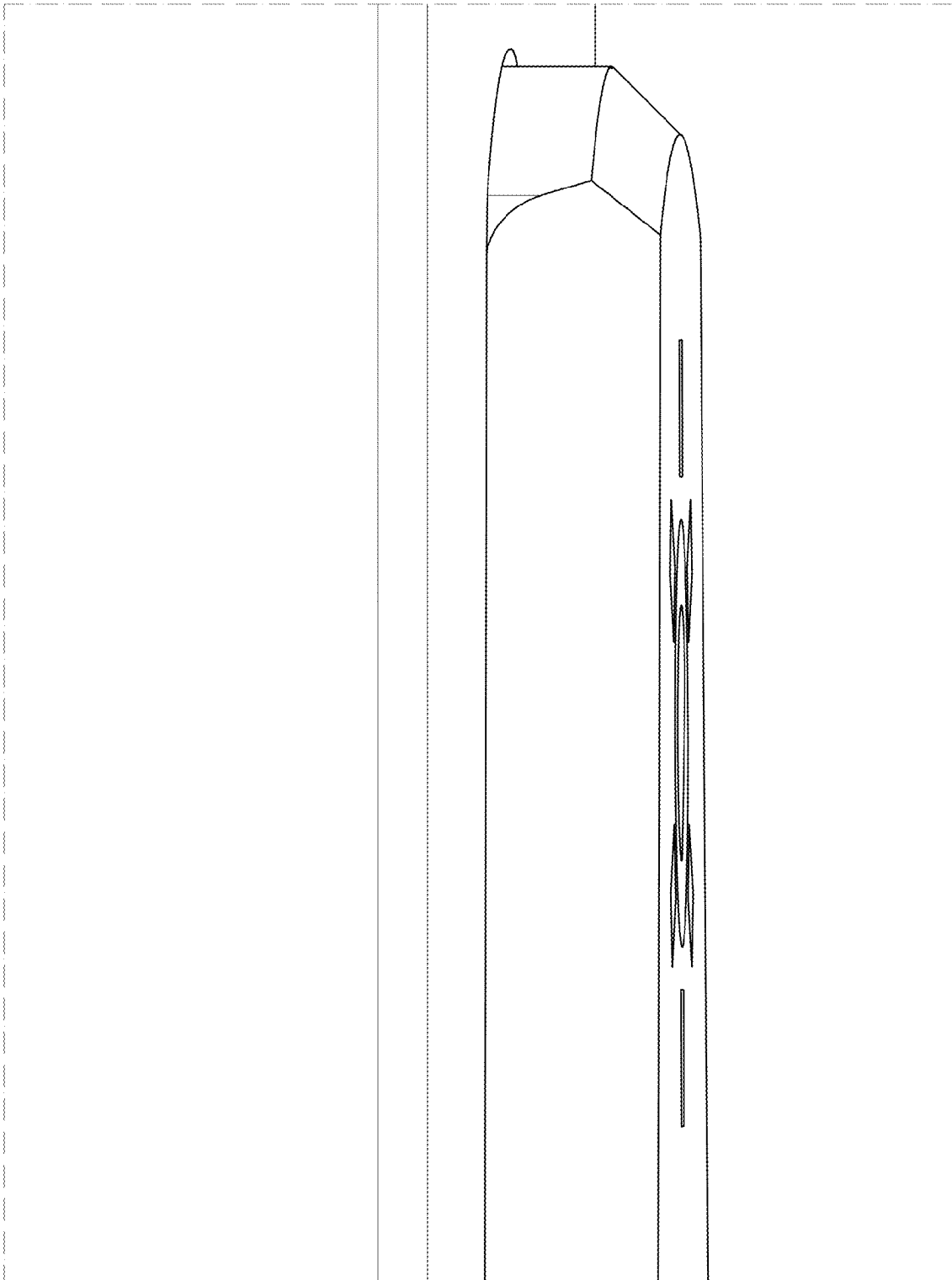


FIG. 70

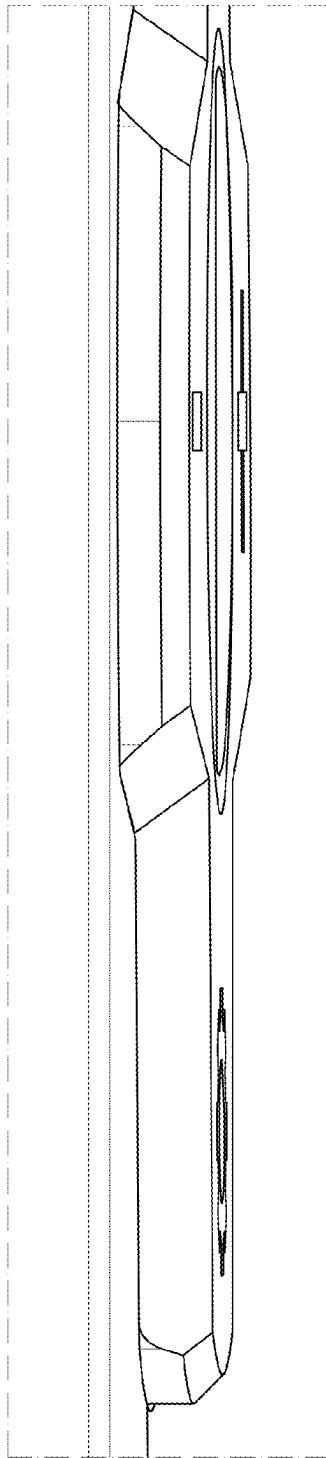


FIG. 71

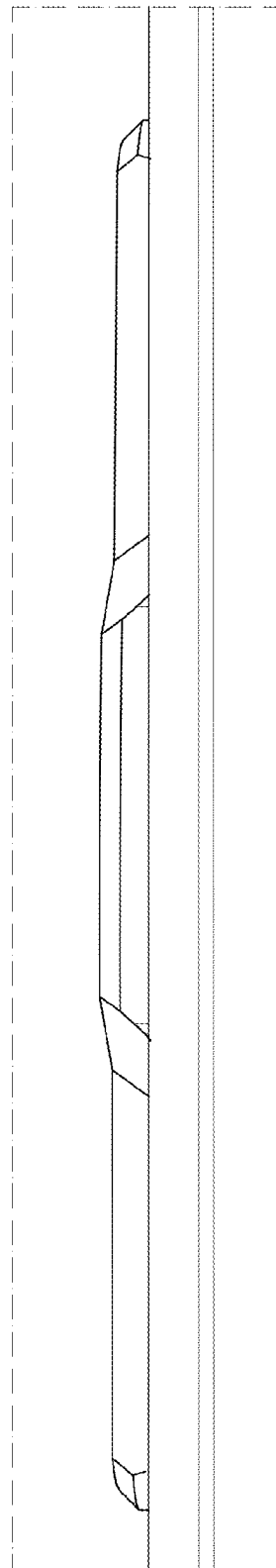


FIG. 72

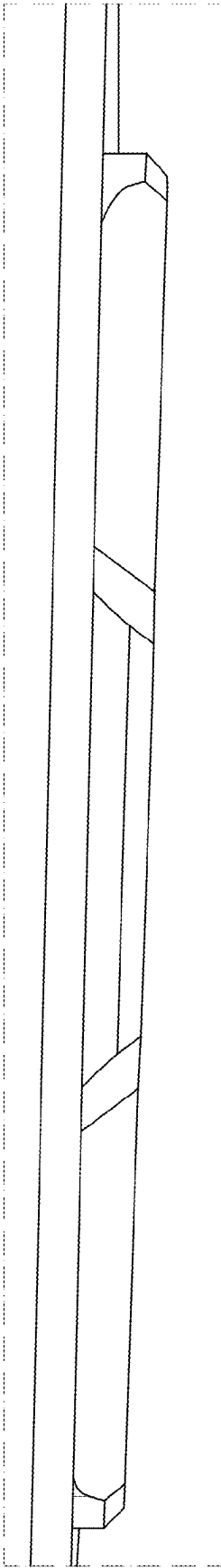


FIG. 73

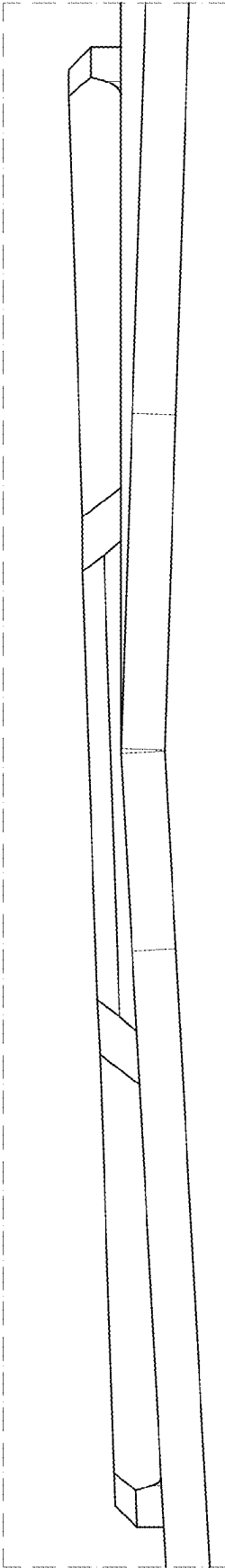


FIG. 74

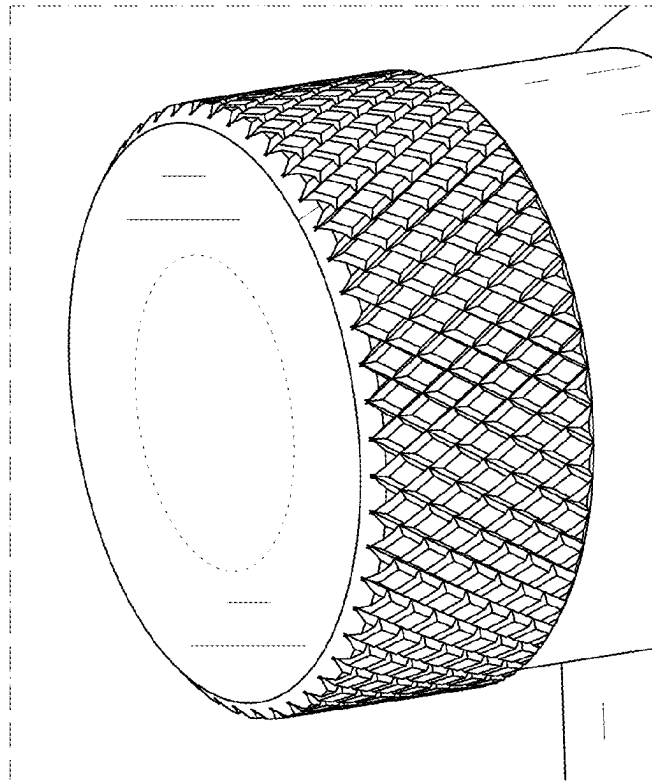


FIG. 75

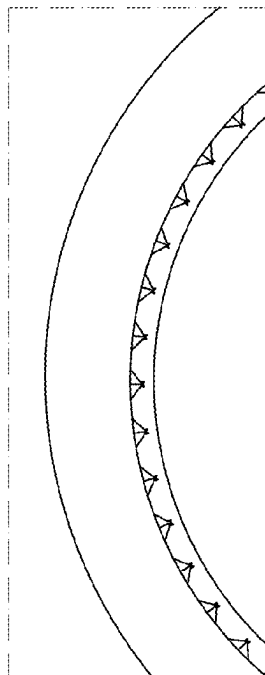


FIG. 76

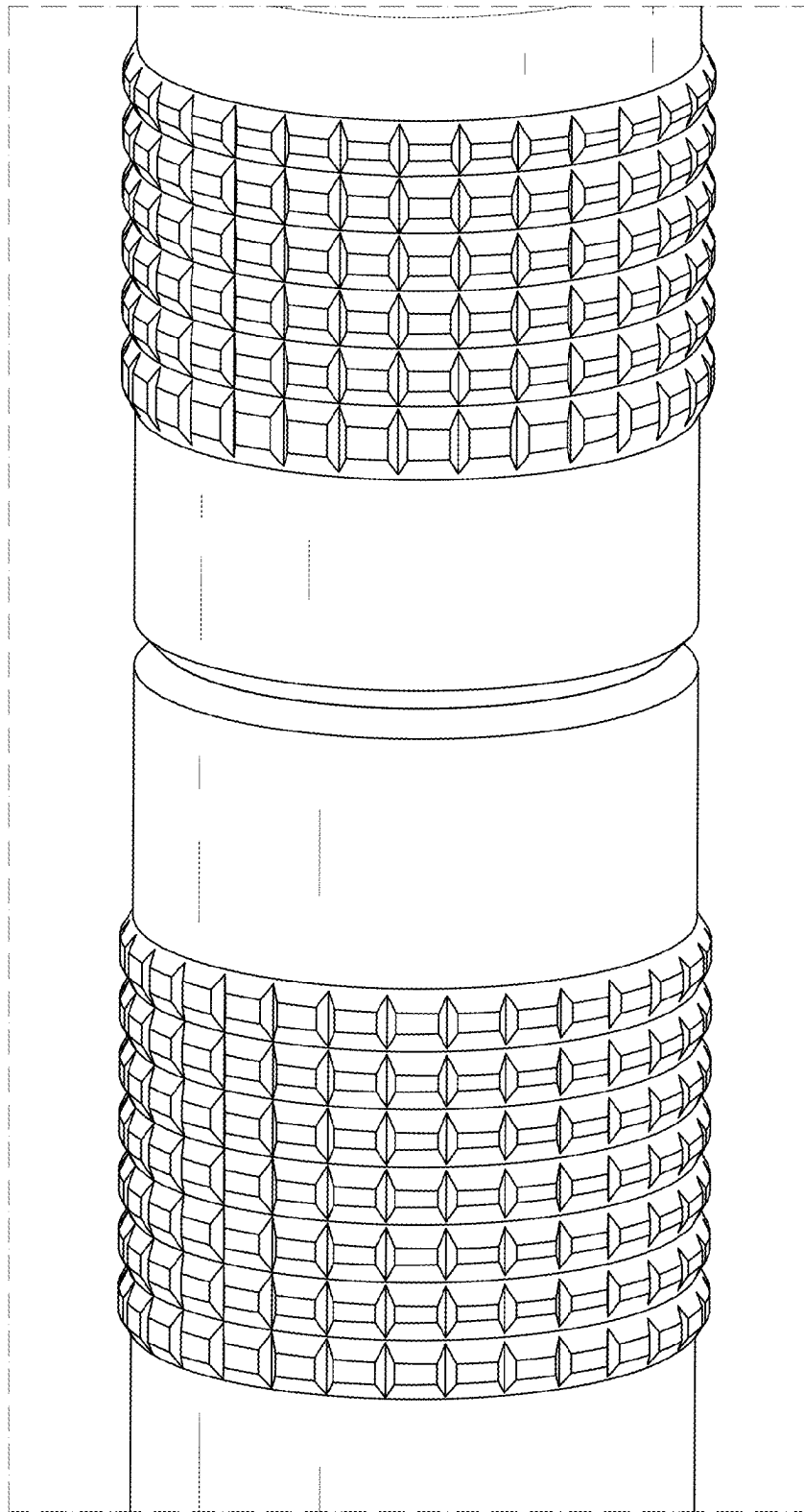


FIG.77

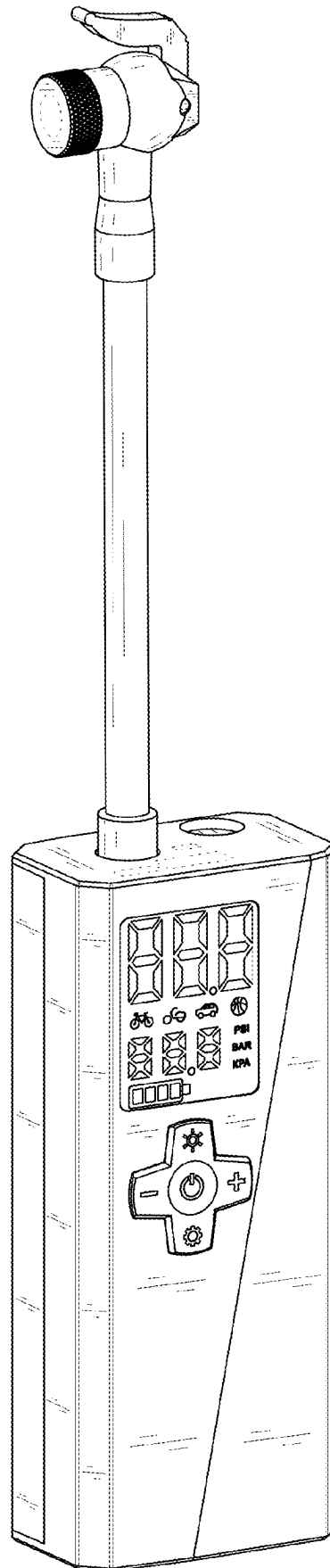


FIG.78

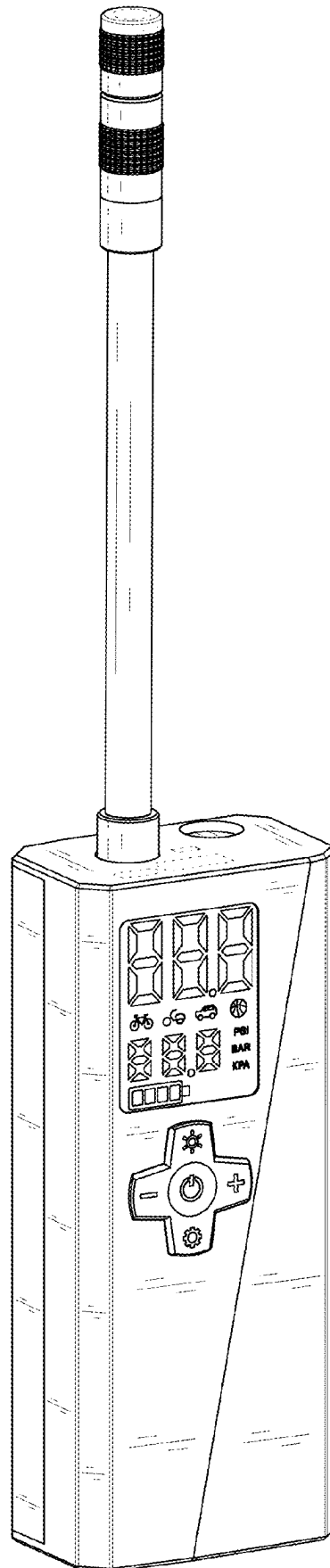
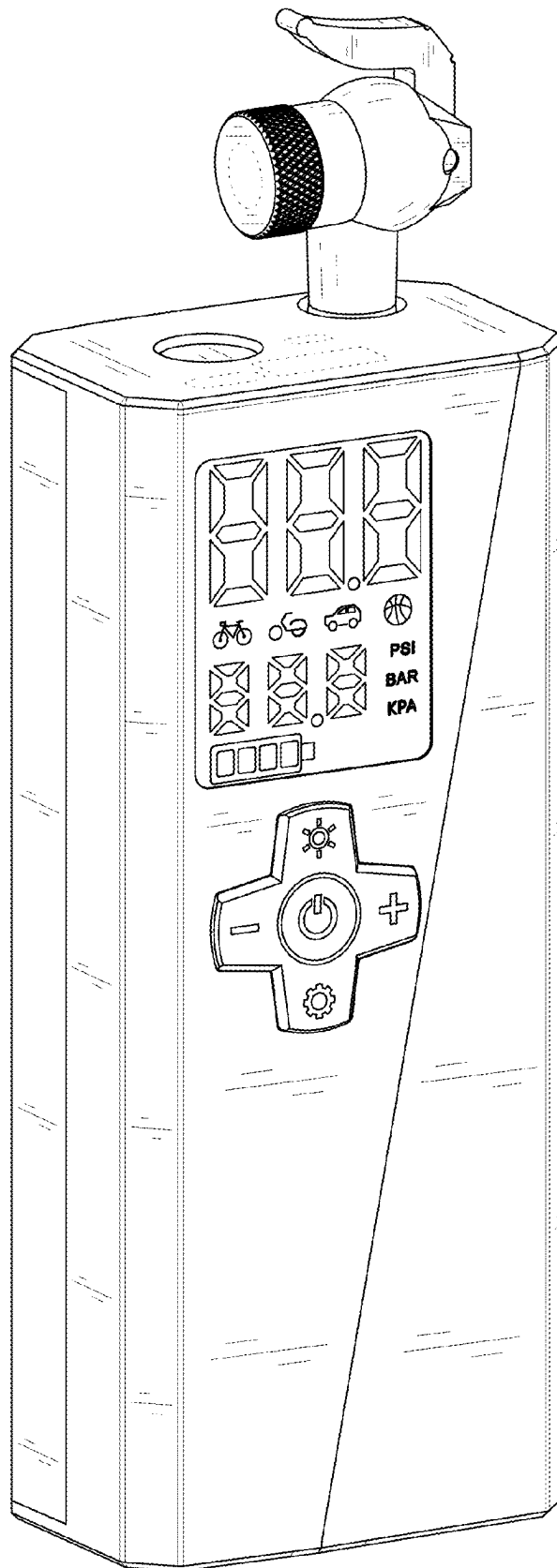


FIG.79

*FIG. 80*

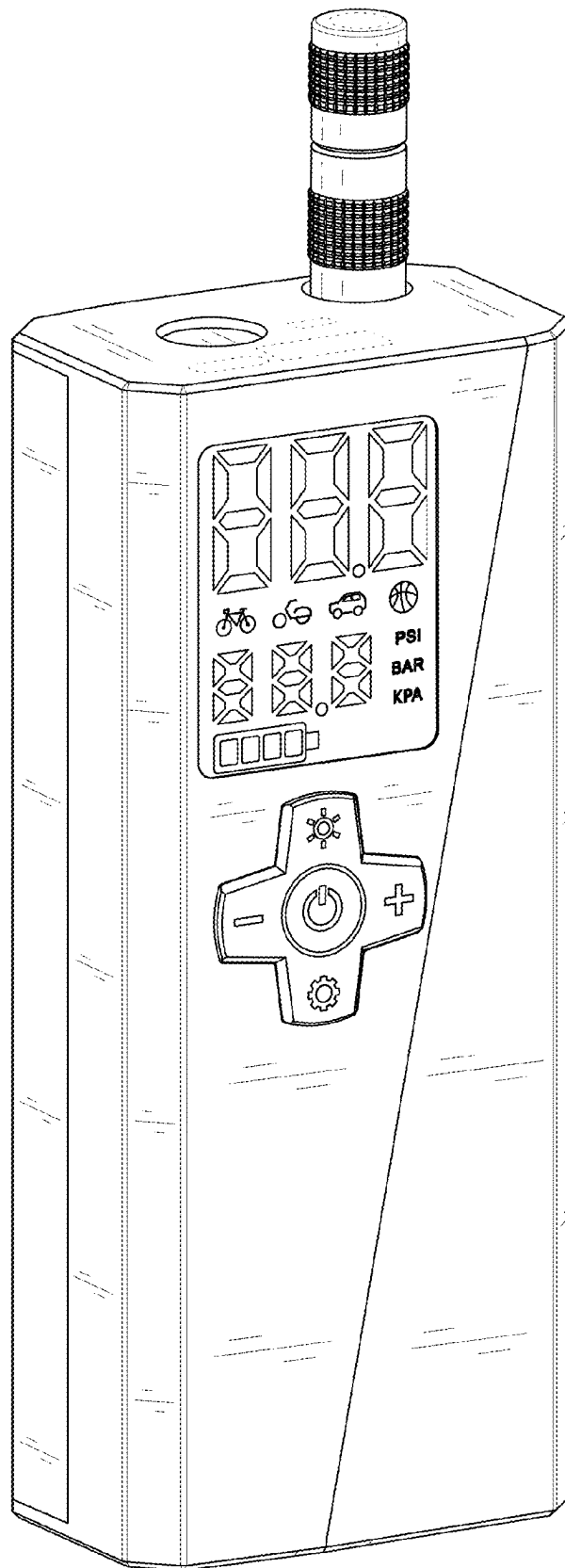


FIG. 81