US00D866645S

(12) United States Design Patent

Kayano

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(45) Date of Patent: ** Nov. 12, 2019

(54) **PROJECTOR LENS UNIT FOR A PROJECTOR**

(71) Applicant: **FUJIFILM Corporation**, Tokyo (JP)

(72) Inventor: **Hironobu Kayano**, Saitama (JP)

(73) Assignee: **FUJIFILM Corporation**, Tokyo (JP)

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

(21) Appl. No.: **29/649,338**

(22) Filed: **May 29, 2018**

(30) **Foreign Application Priority Data**

Nov. 30, 2017 (JP) 2017-026754

(51) **LOC (12) Cl.** **16-02**

(52) **U.S. Cl.**
USPC **D16/235**

(58) **Field of Classification Search**
USPC D16/235, 221, 225, 245, 219, 134, 136; D21/514; 348/375; 396/529; 353/119, 353/100–101, 122
(Continued)

(56) **References Cited**

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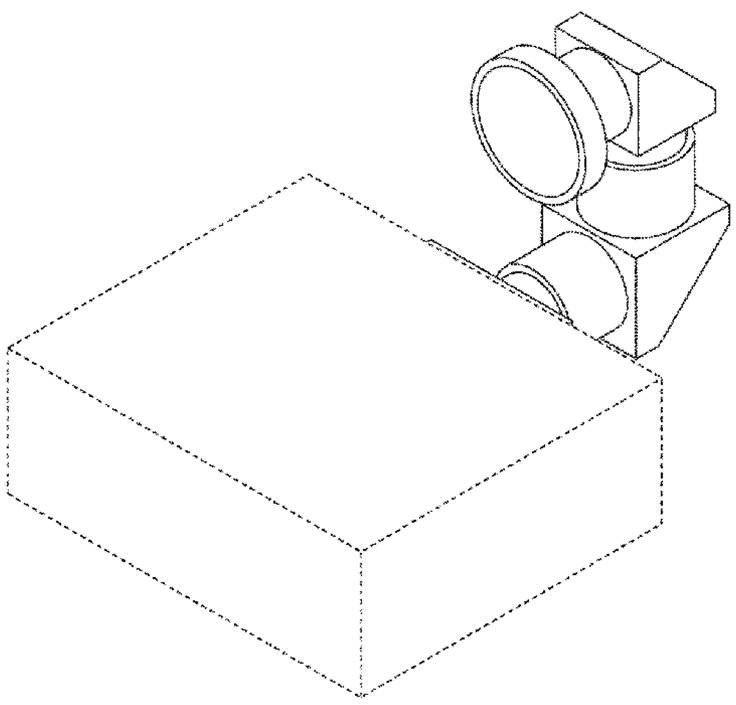
Primary Examiner — Wan Laymon
(74) *Attorney, Agent, or Firm* — Birch, Stewart, Kolasch & Birch, LLP

(57) **CLAIM**

The ornamental design for a projector lens unit for a projector, as shown and described.

DESCRIPTION

FIG. **1** is a perspective view of a projector lens unit for a projector, showing the new design;
FIG. **2** is a front view thereof;
FIG. **3** is a rear view thereof;
FIG. **4** is a top view thereof;
FIG. **5** is a bottom view thereof;
FIG. **6** is a right view thereof;
FIG. **7** is a left view thereof; and
FIG. **8** is a reference perspective view showing a usage state thereof.
FIG. **9** is a perspective view of the projector lens unit for a projector in a second state in which a lens is rotated 90 degrees about an upper lens tube;
FIG. **10** is a front view thereof;
FIG. **11** is a rear view thereof;
FIG. **12** is a top view thereof;
FIG. **13** is a bottom view thereof;
FIG. **14** is a right view thereof; and
FIG. **15** is a left view thereof.
FIG. **16** is a perspective view of the projector lens unit for a projector in a third state in which the lens is rotated 180 degrees about the upper lens tube;
FIG. **17** is a front view thereof;
FIG. **18** is a rear view thereof;
FIG. **19** is a top view thereof;
FIG. **20** is a bottom view thereof;
FIG. **21** is a right view thereof; and
FIG. **22** is a left view thereof.
FIG. **23** is a perspective view of the projector lens unit for a projector in a fourth state in which the lens is rotated 270 degrees about the upper lens tube;
FIG. **24** is a front view thereof;
FIG. **25** is a rear view thereof;
(Continued)



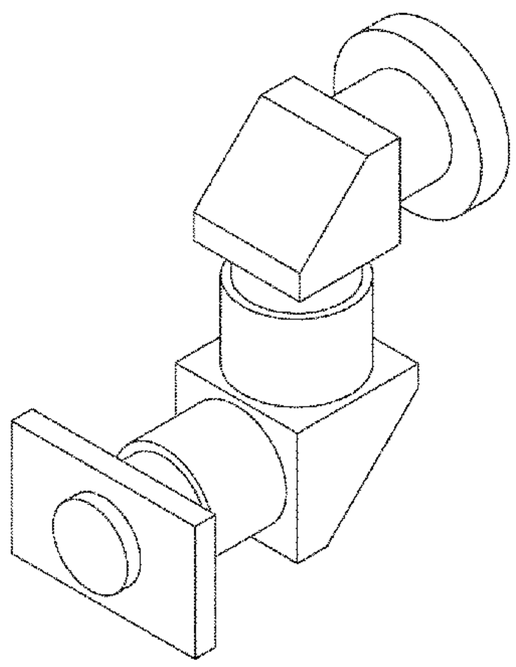


FIG. **26** is a top view thereof;
FIG. **27** is a bottom view thereof;
FIG. **28** is a right view thereof;
FIG. **29** is a left view thereof; and
FIG. **30** is a reference perspective view showing a usage state thereof.
FIG. **31** is a perspective view of the projector lens unit for a projector in a fifth state in which the lens is rotated 90 degrees about a lower lens tube;
FIG. **32** is a front view thereof;
FIG. **33** is a rear view thereof;
FIG. **34** is a top view thereof;
FIG. **35** is a bottom view thereof;
FIG. **36** is a right view thereof;
FIG. **37** is a left view thereof; and
FIG. **38** is a reference perspective view showing a usage state thereof.
FIG. **39** is a perspective view of the projector lens unit for a projector in a sixth state in which the upper lens tube is rotated 90 degrees and the lower lens tube is rotated 90 degrees;
FIG. **40** is a front view thereof;
FIG. **41** is a rear view thereof;
FIG. **42** is a top view thereof;
FIG. **43** is a bottom view thereof;
FIG. **44** is a right view thereof; and
FIG. **45** is a left view thereof.
FIG. **46** is a perspective view of the projector lens unit for a projector in a seventh state in which the upper lens tube is rotated 180 degrees and the lower lens tube is rotated 90 degrees;
FIG. **47** is a front view thereof;
FIG. **48** is a rear view thereof;
FIG. **49** is a top view thereof;
FIG. **50** is a bottom view thereof;
FIG. **51** is a right view thereof; and
FIG. **52** is a left view thereof.
FIG. **53** is a perspective view of the projector lens unit for a projector in a eighth state in which the upper lens tube is rotated 270 degrees and the lower lens tube is rotated 90 degrees;
FIG. **54** is a front view thereof;
FIG. **55** is a rear view thereof;
FIG. **56** is a top view thereof;
FIG. **57** is a bottom view thereof;
FIG. **58** is a right view thereof; and,
FIG. **59** is a left view thereof.
The broken lines showing of the projector is for the purpose of illustrating environmental structure and form no part of the claimed design.

1 Claim, 59 Drawing Sheets

(58) **Field of Classification Search**
CPC G03B 3/02; G03B 21/14; G03B 21/142; G03B 21/145; G03B 21/54; G02B 13/0025
See application file for complete search history.

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* cited by examiner

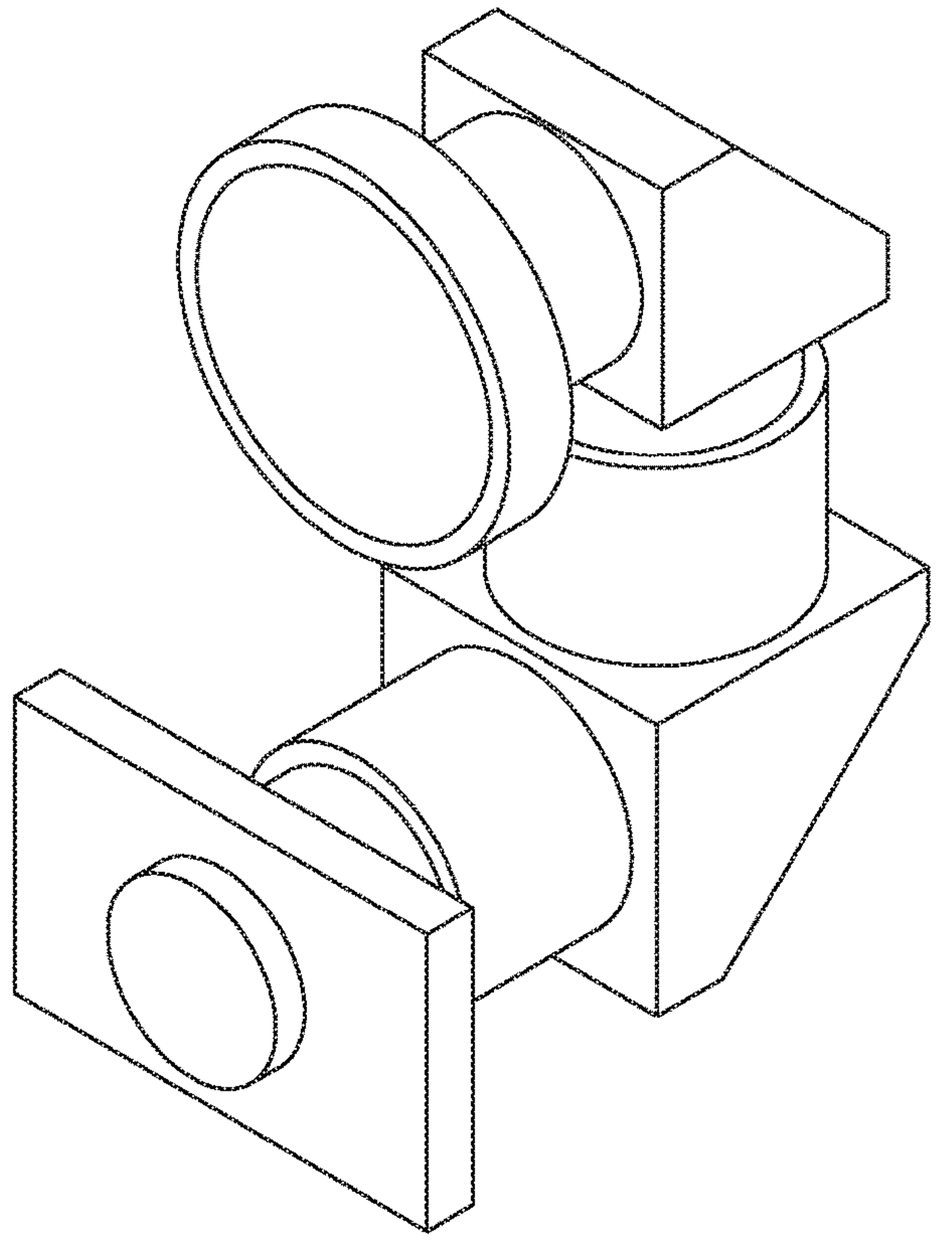


FIG.1

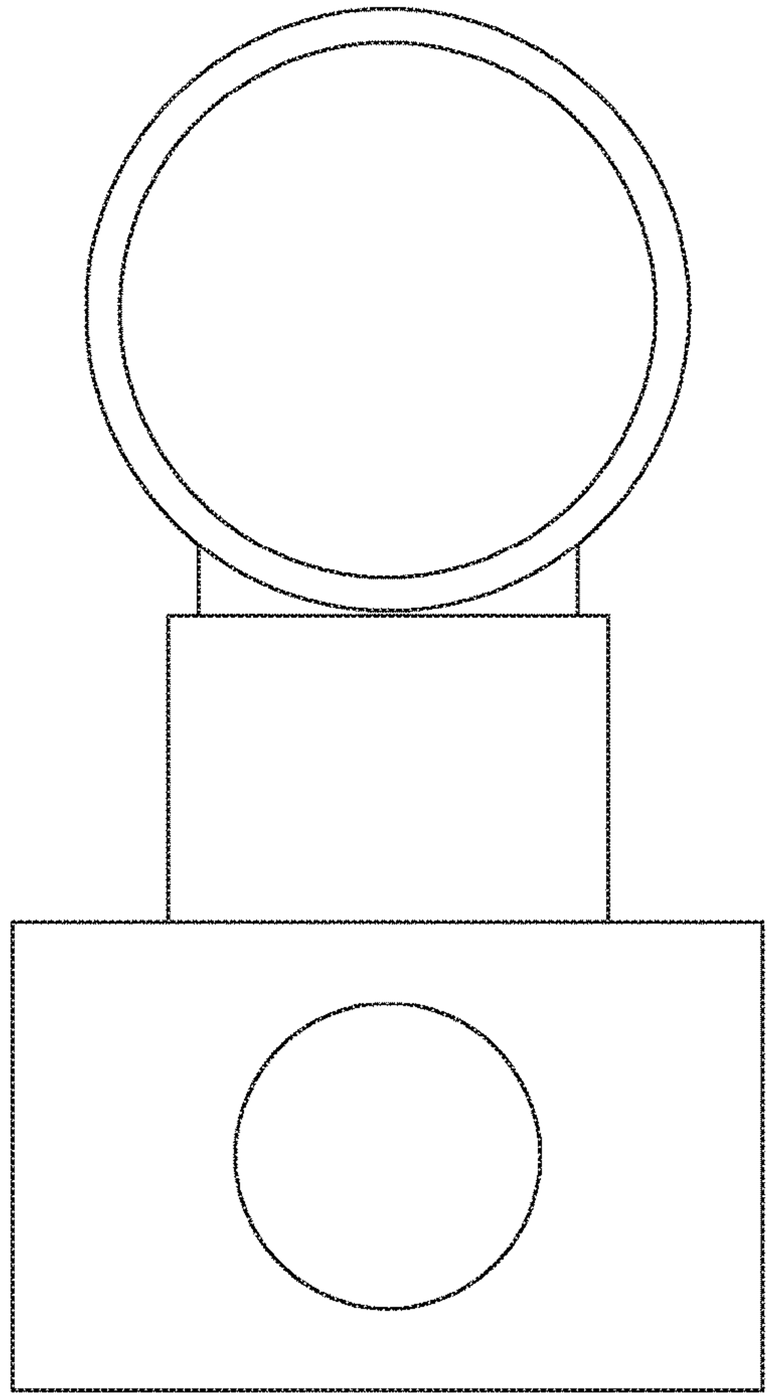


FIG.2

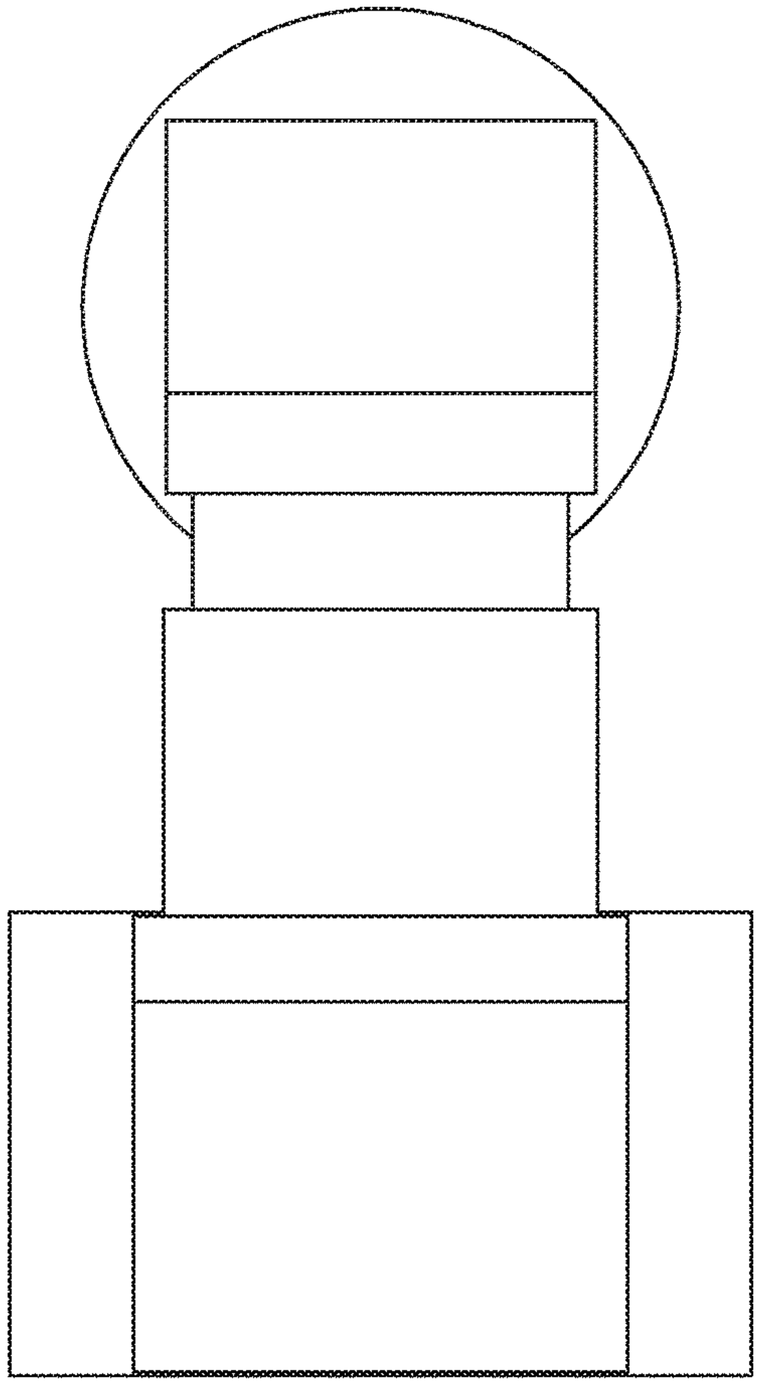


FIG.3

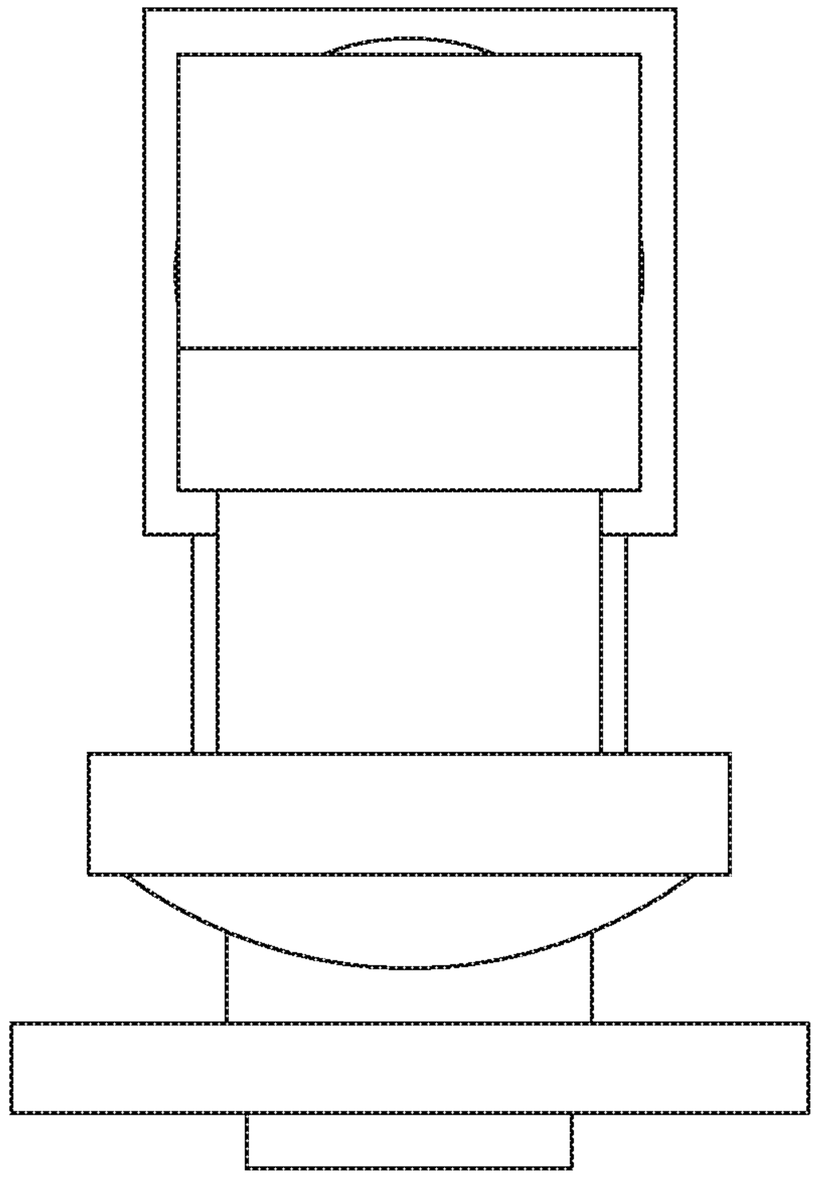


FIG.4

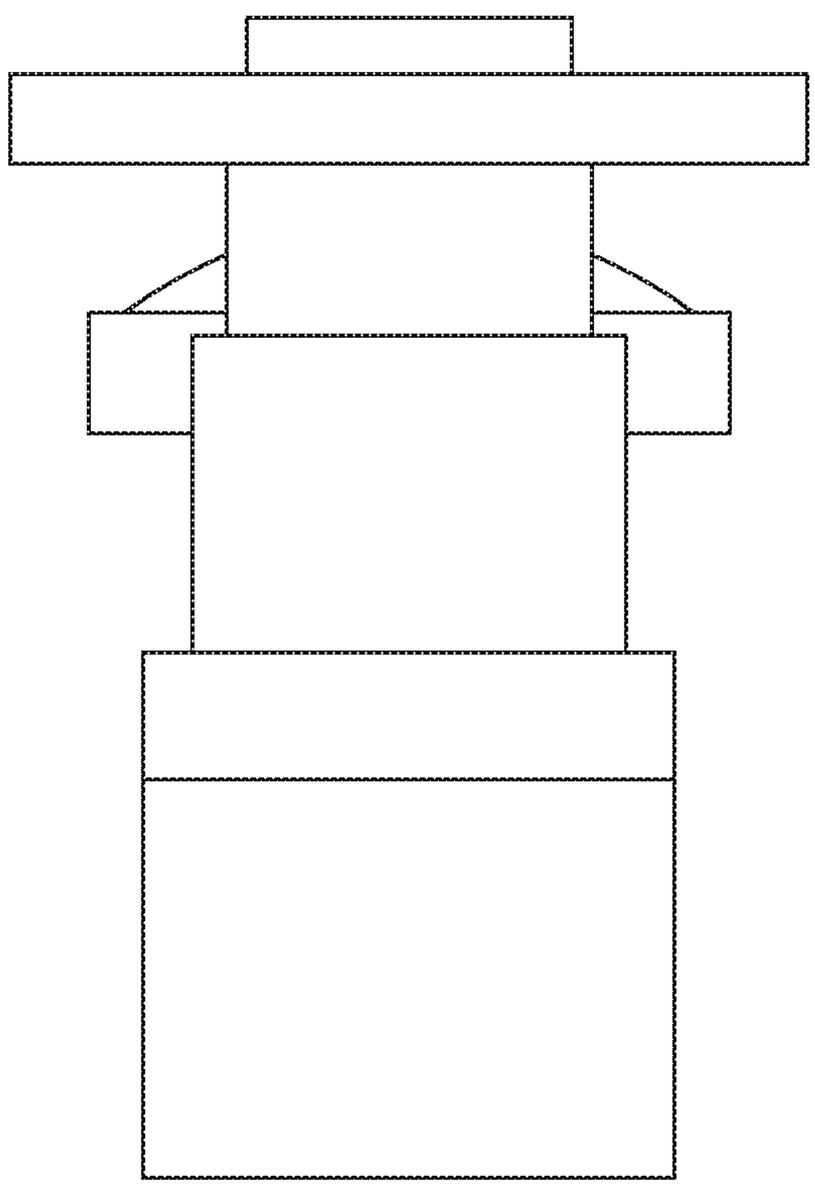


FIG.5

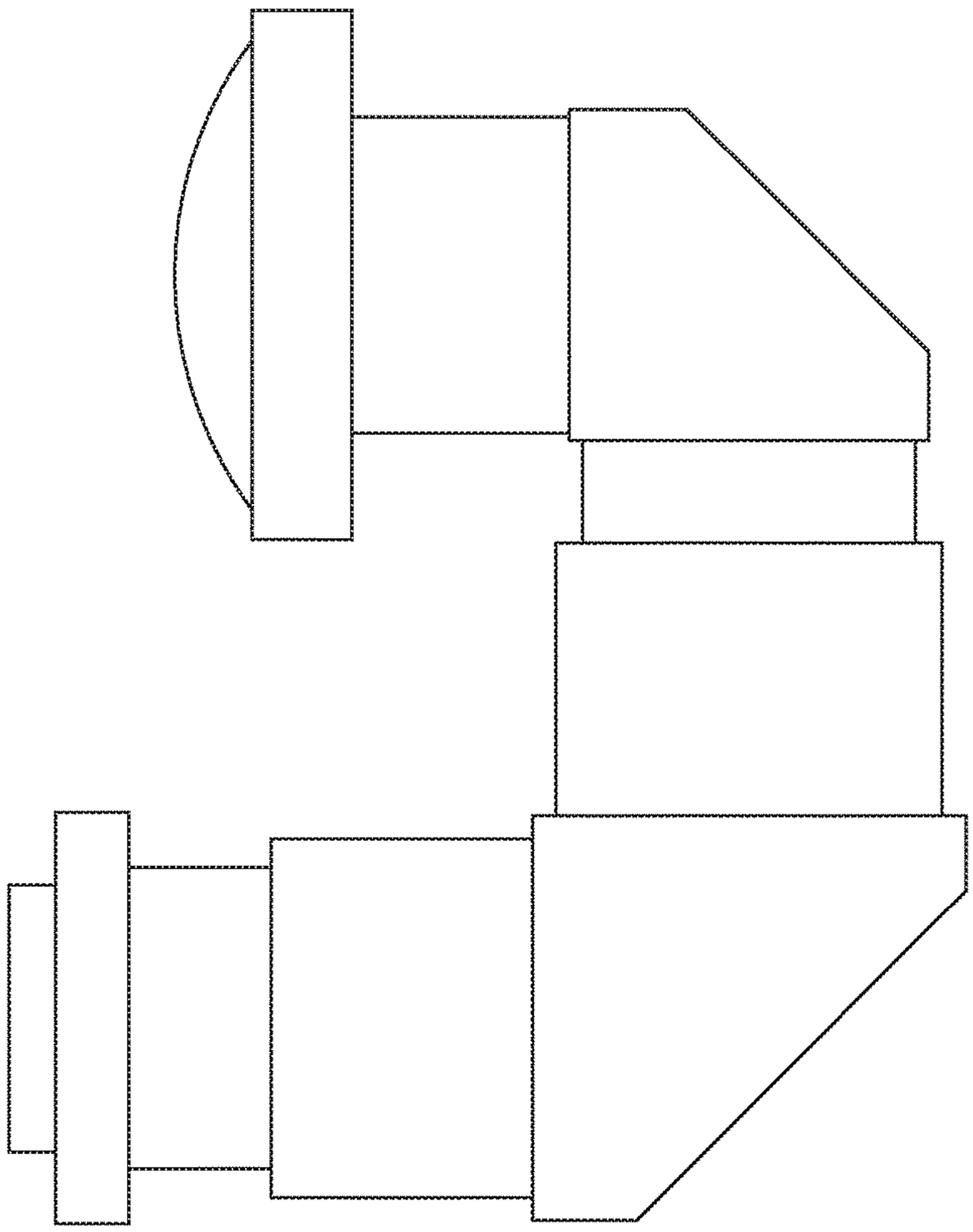


FIG.6

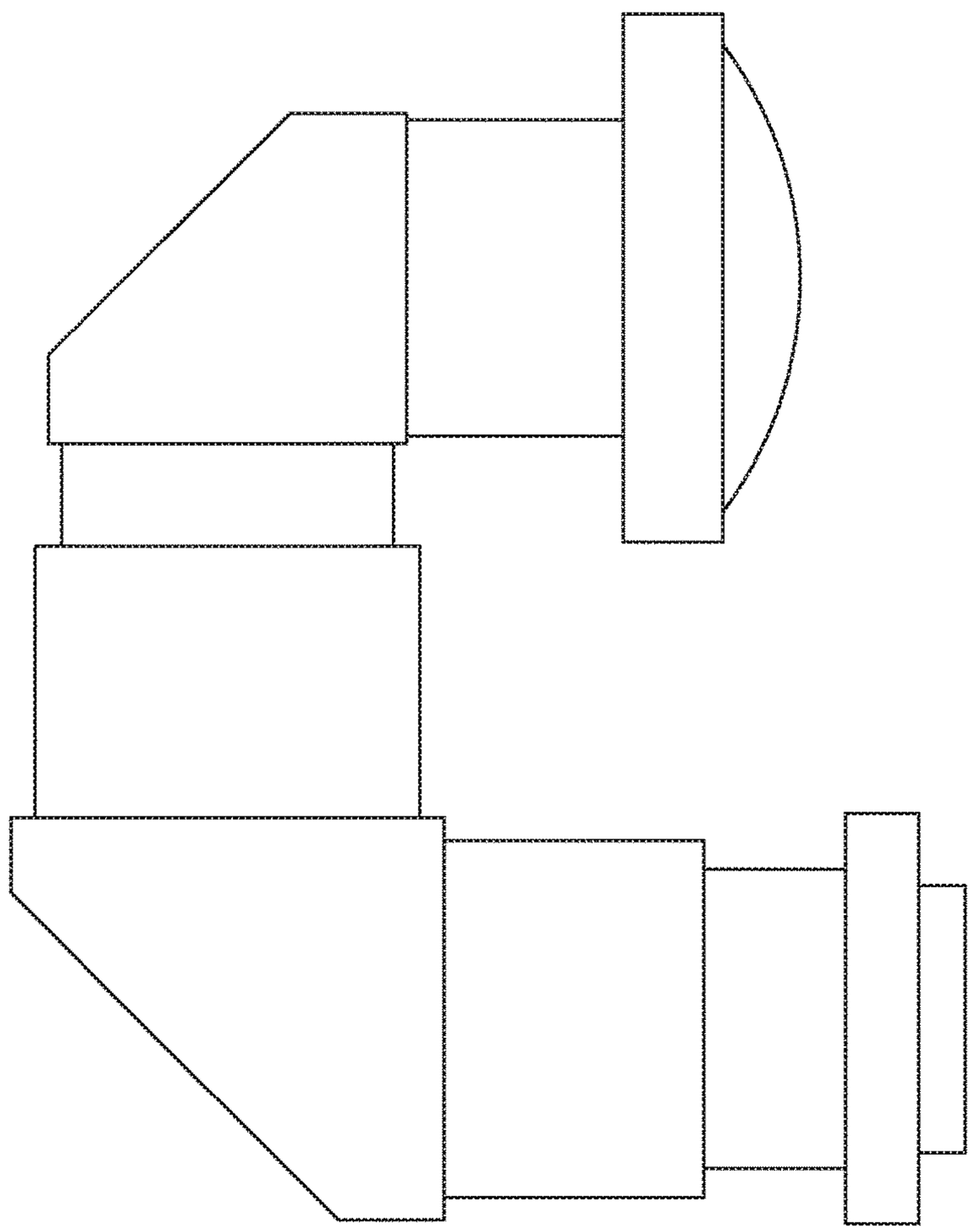


FIG.7

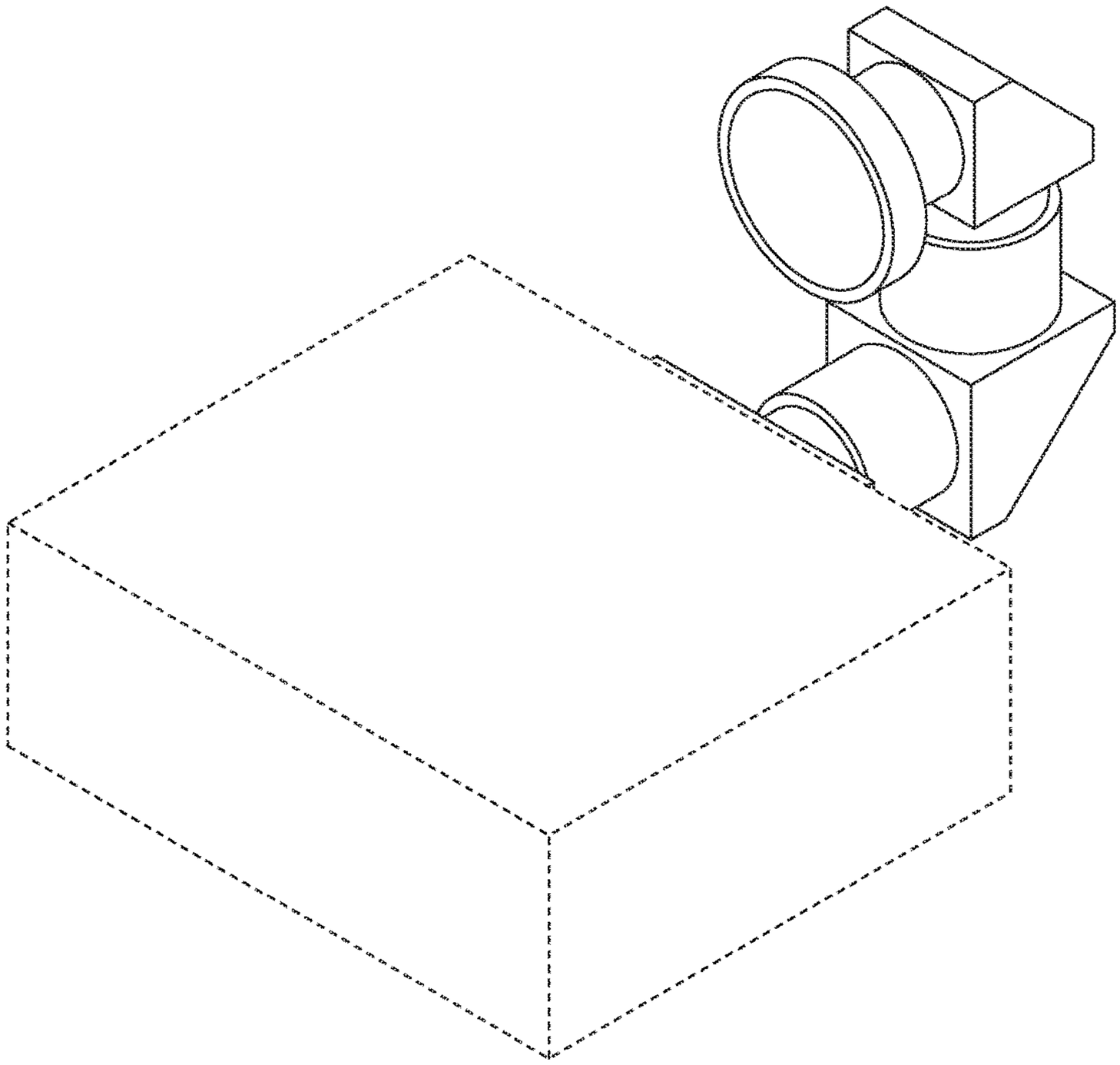


FIG.8

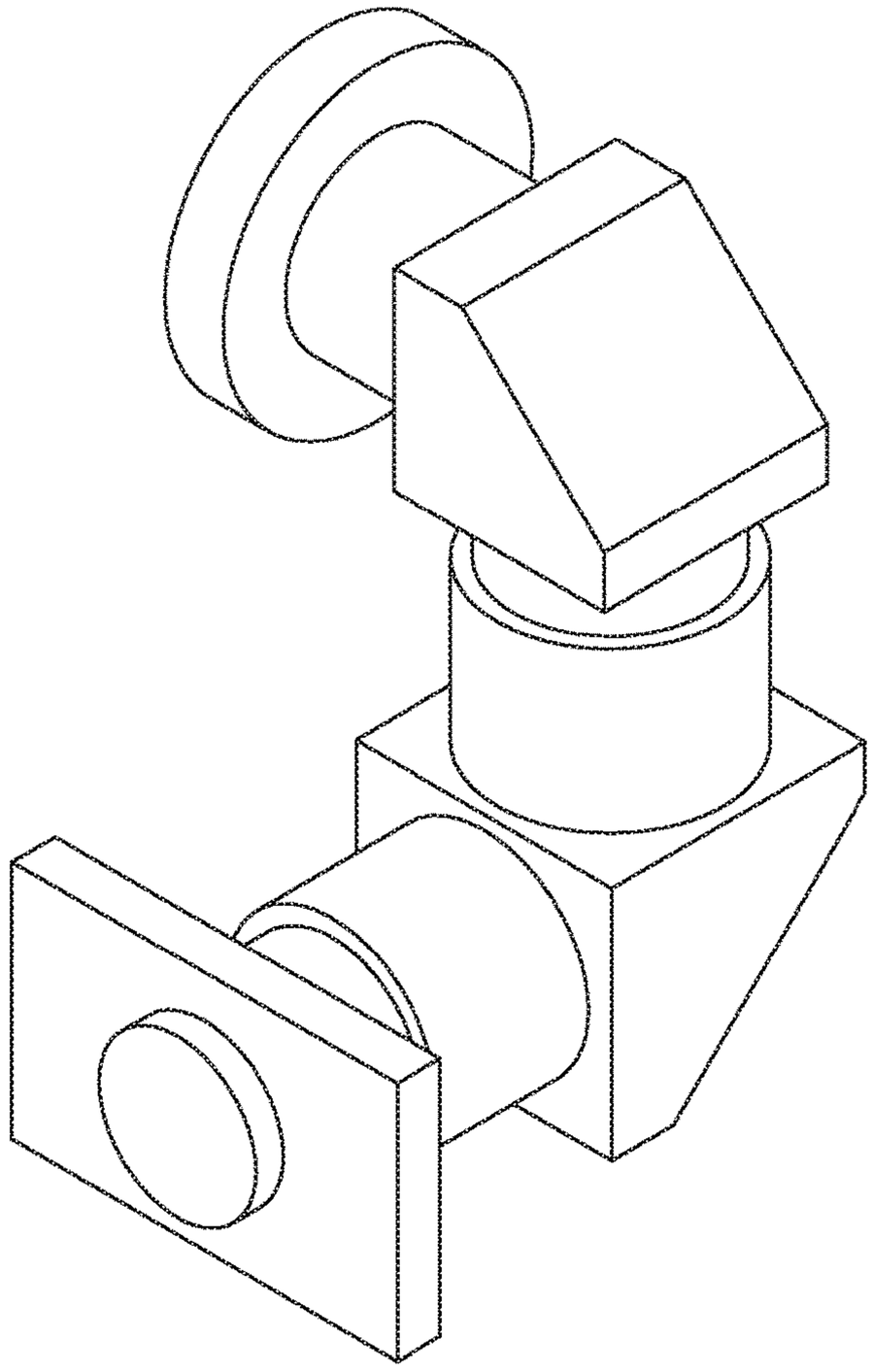


FIG.9

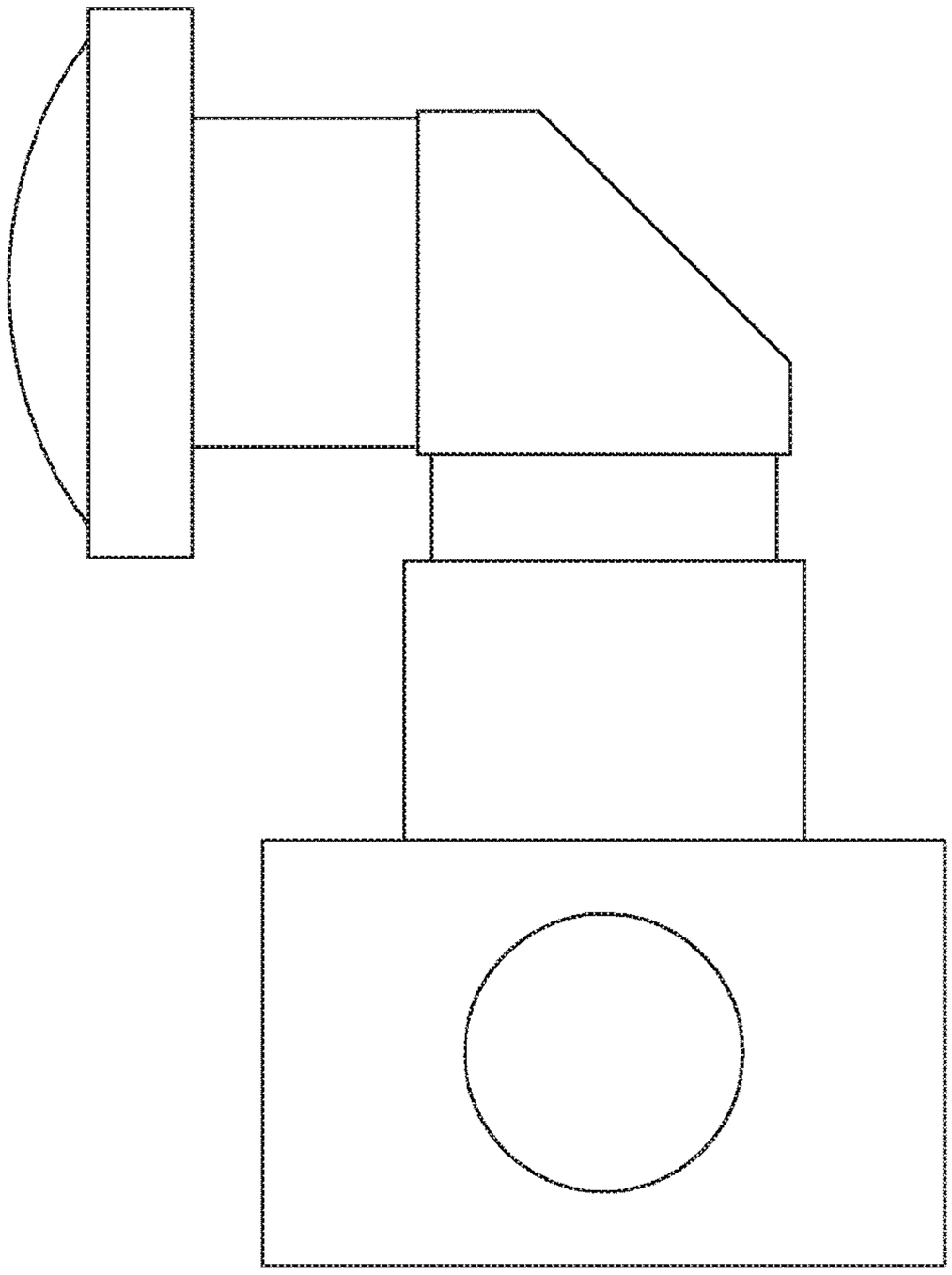


FIG.10

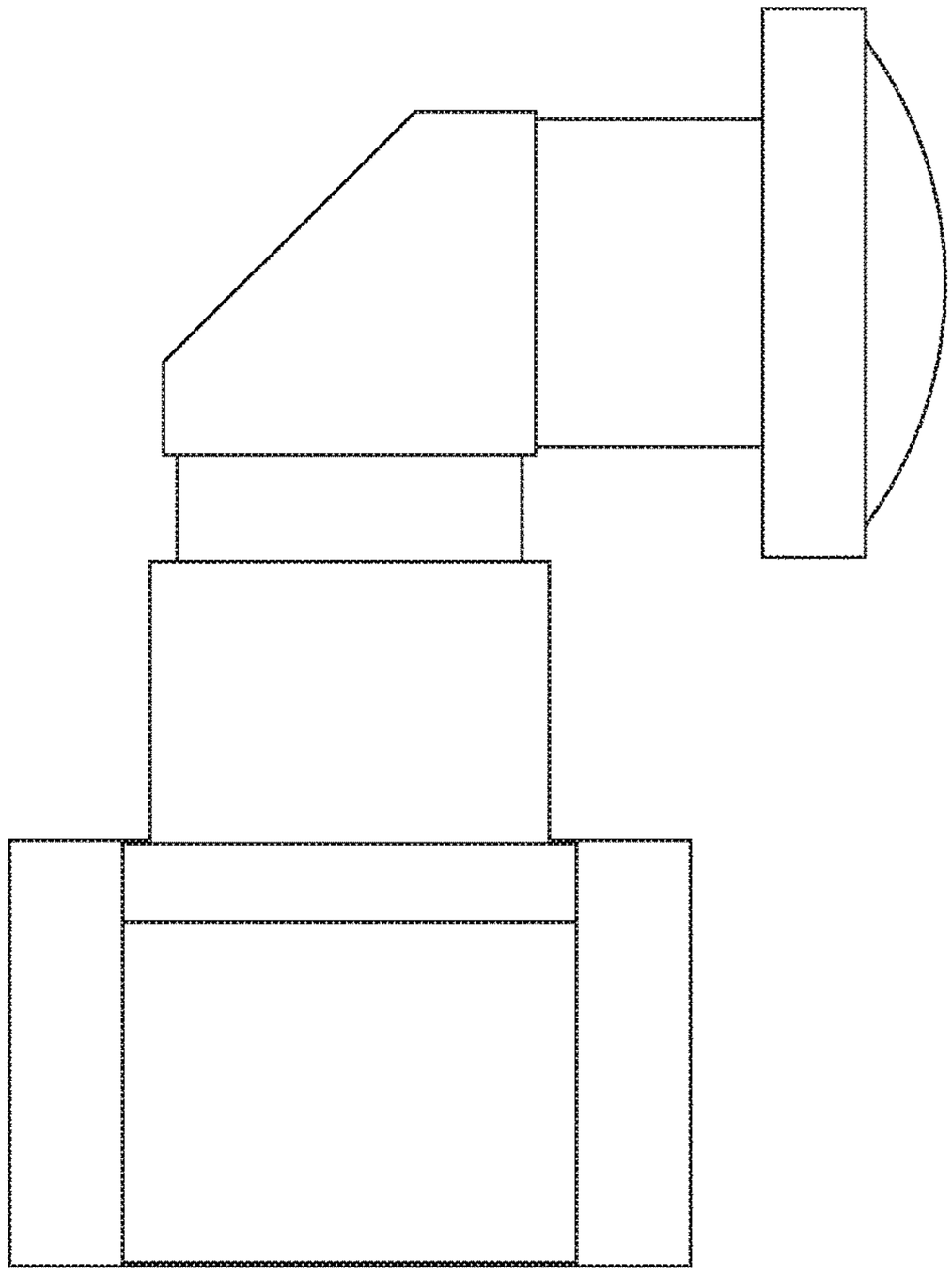


FIG. 11

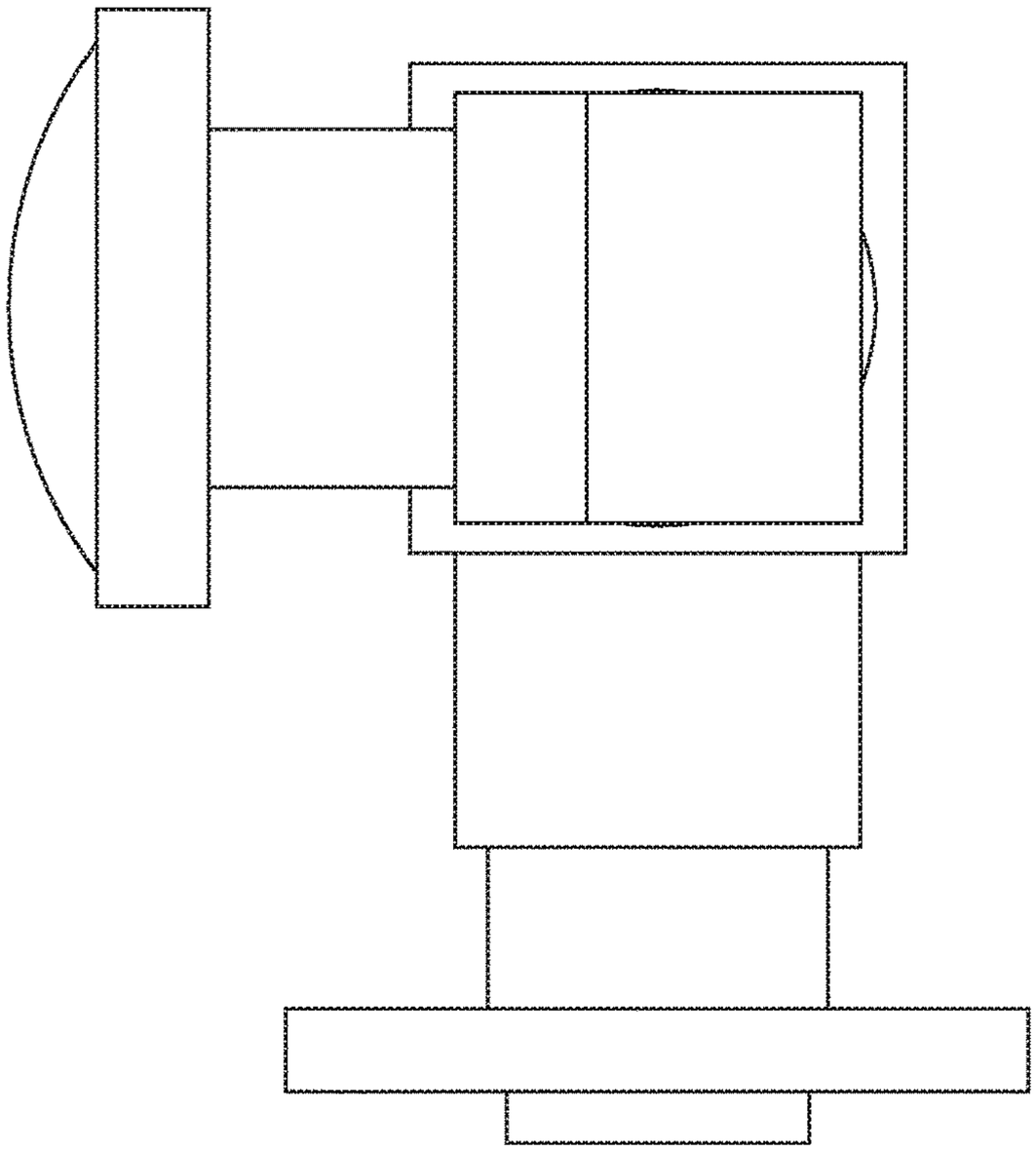


FIG.12

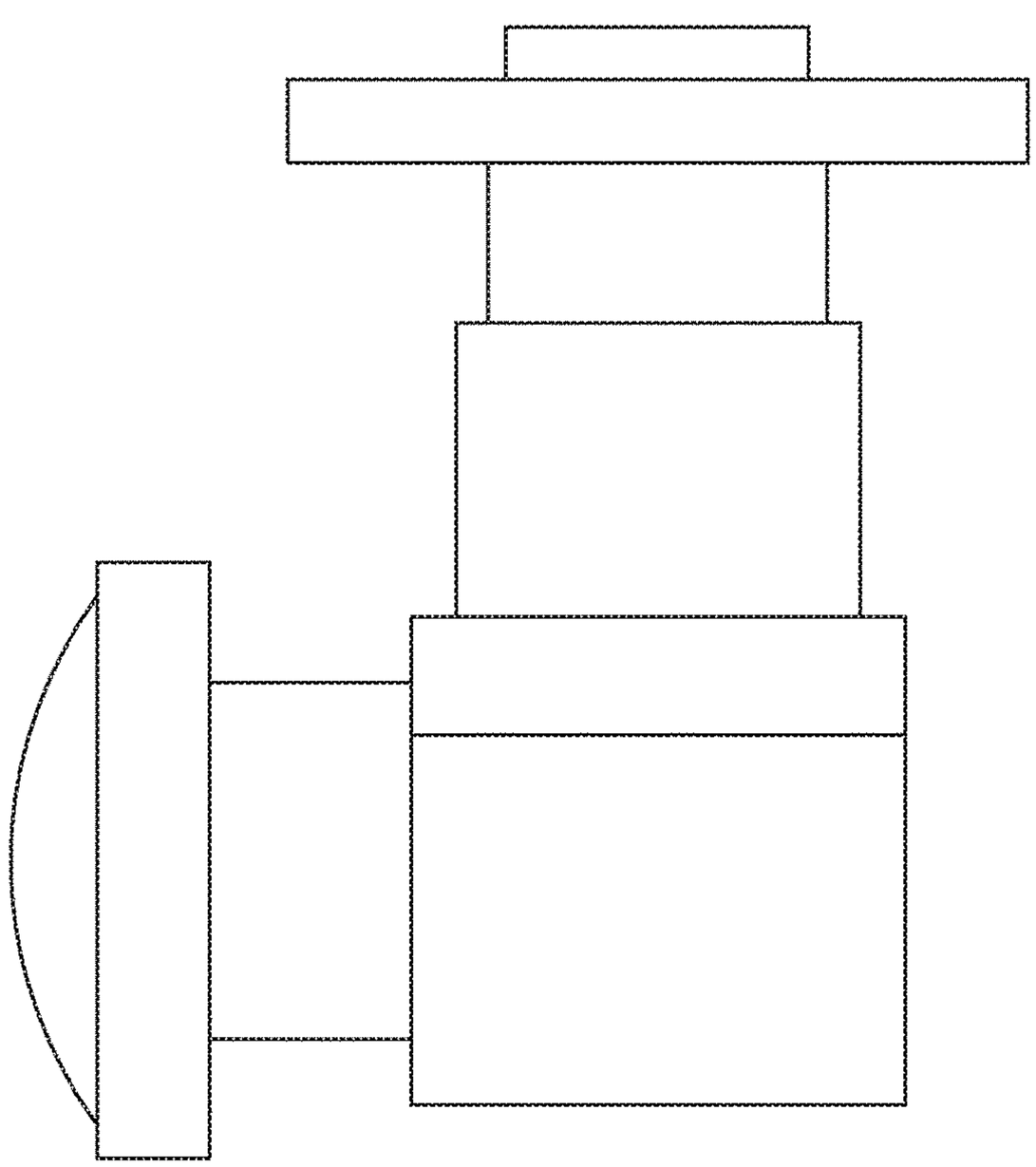


FIG.13

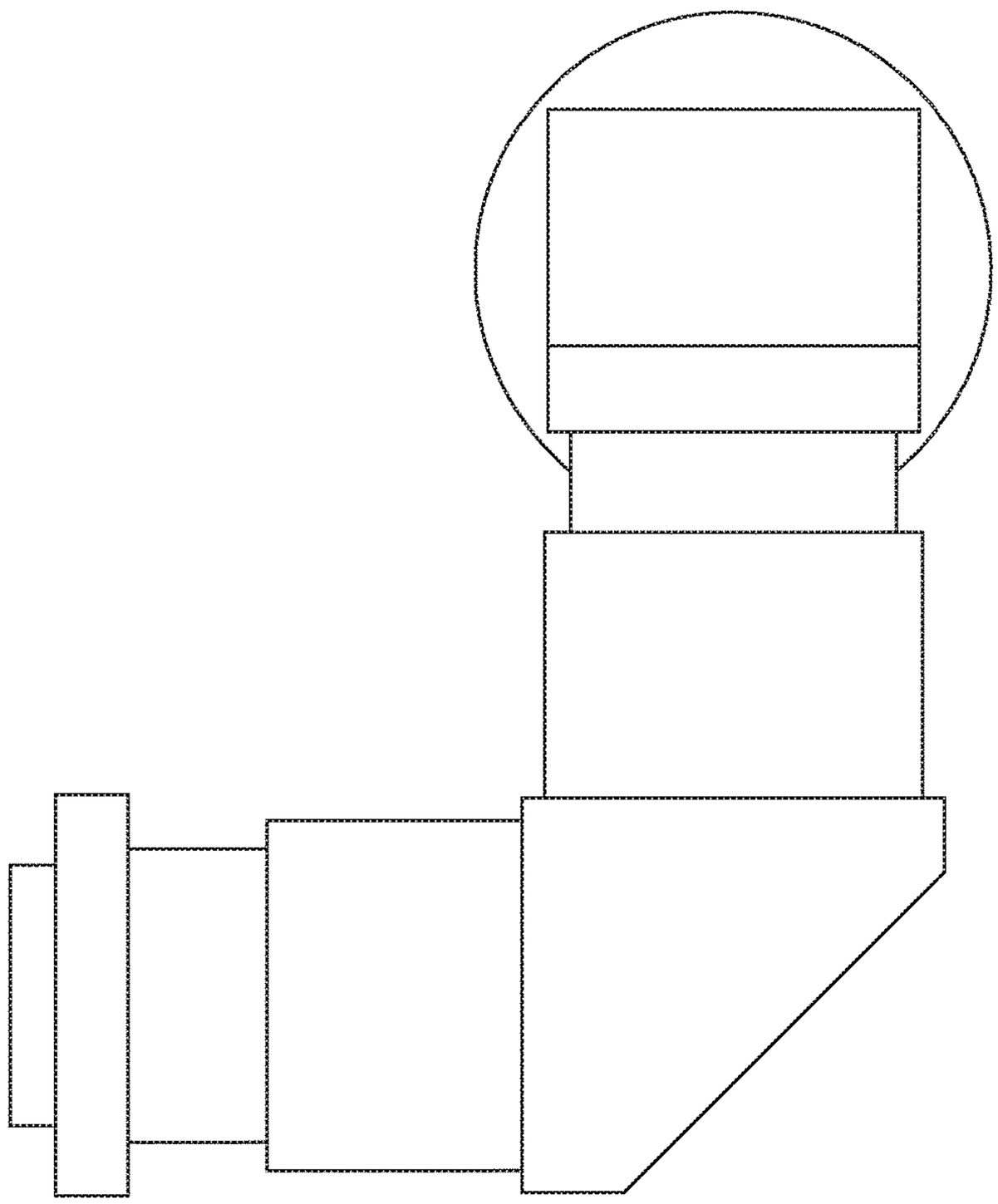
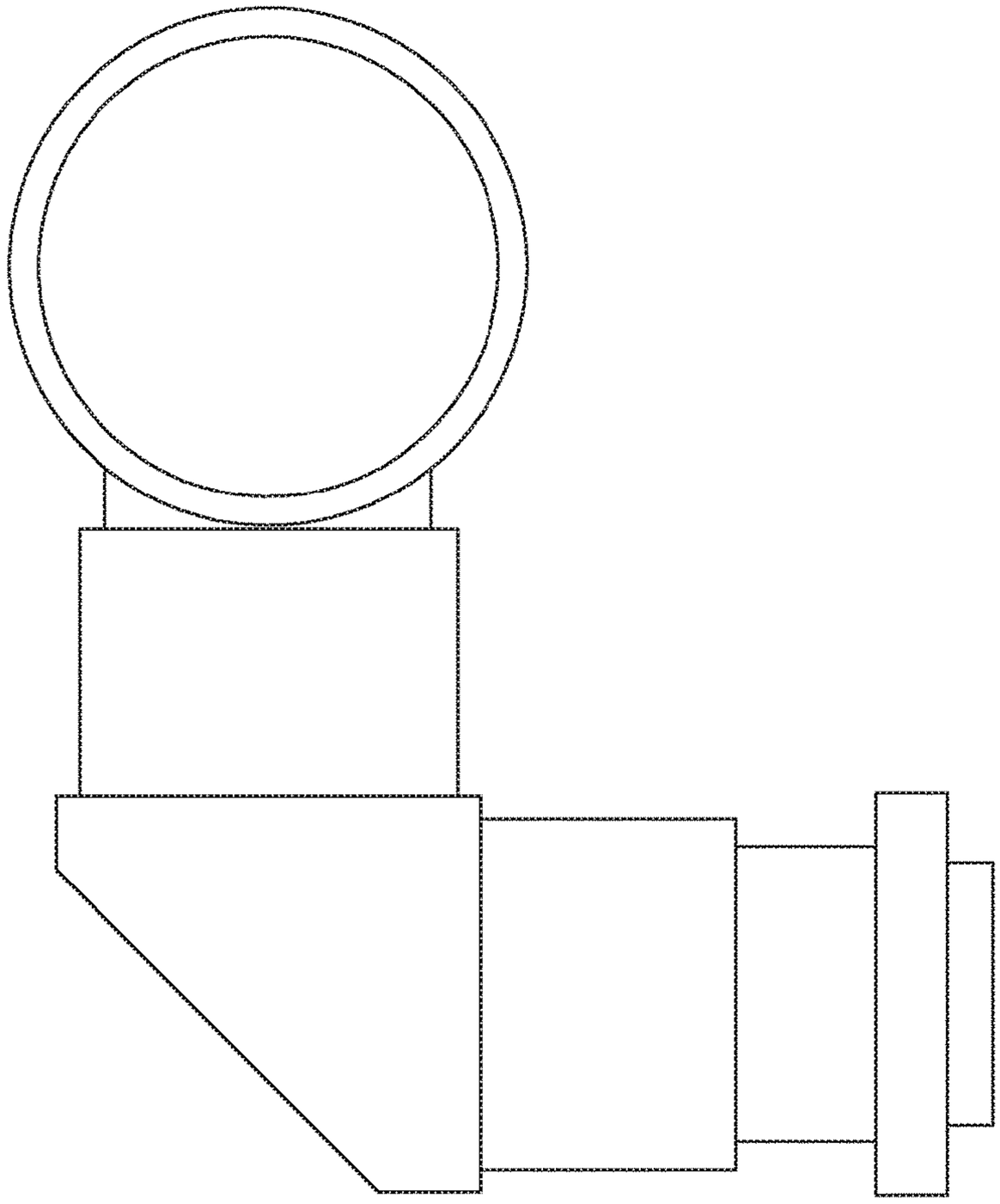


FIG.14



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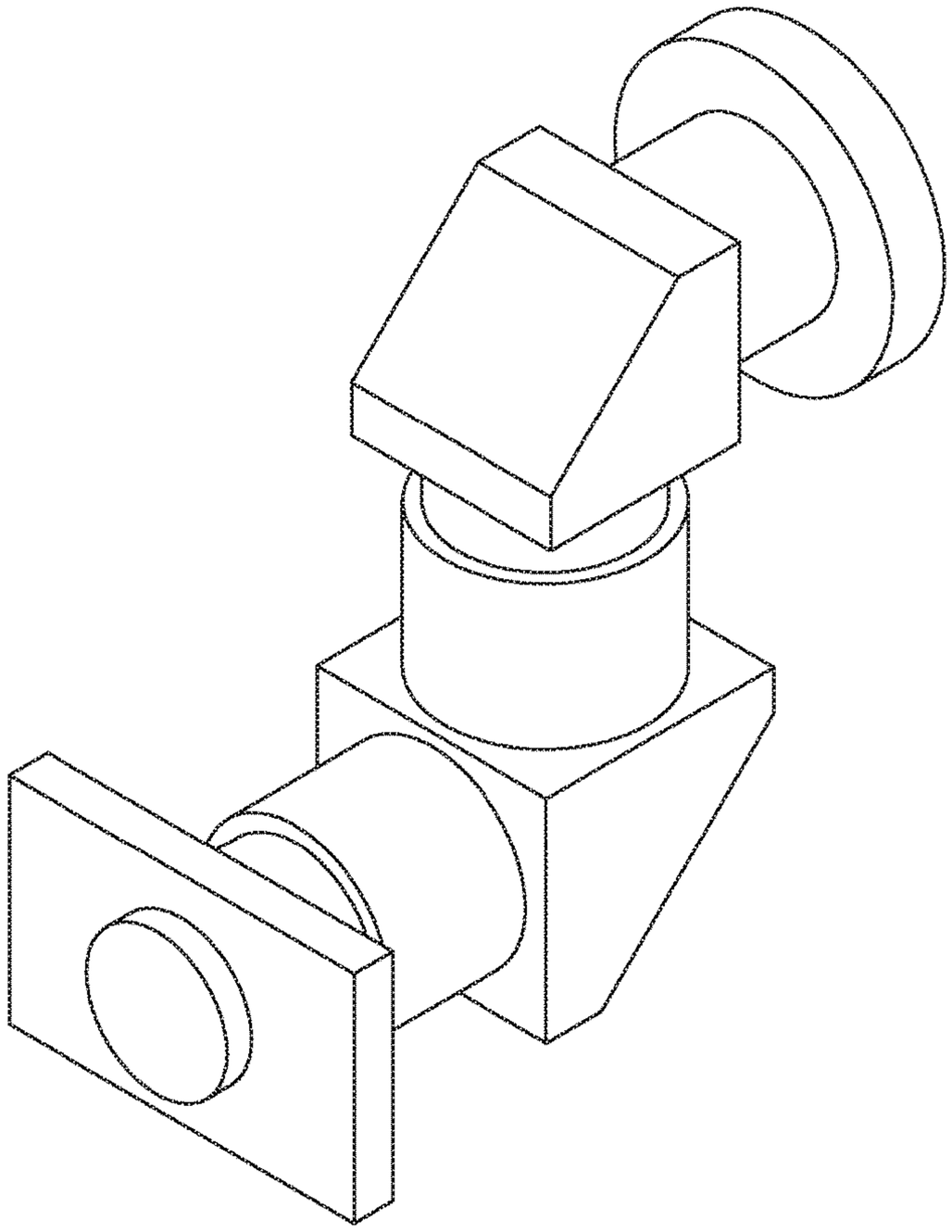


FIG.16

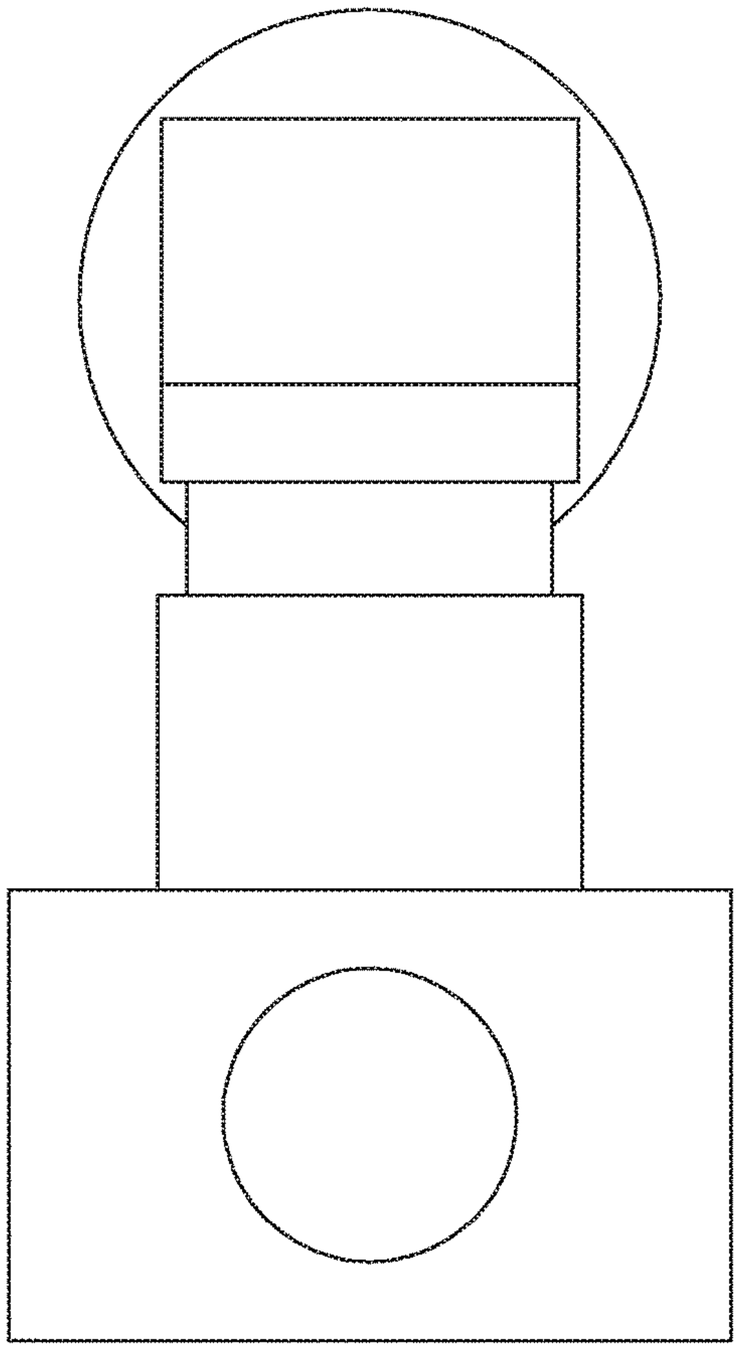


FIG.17

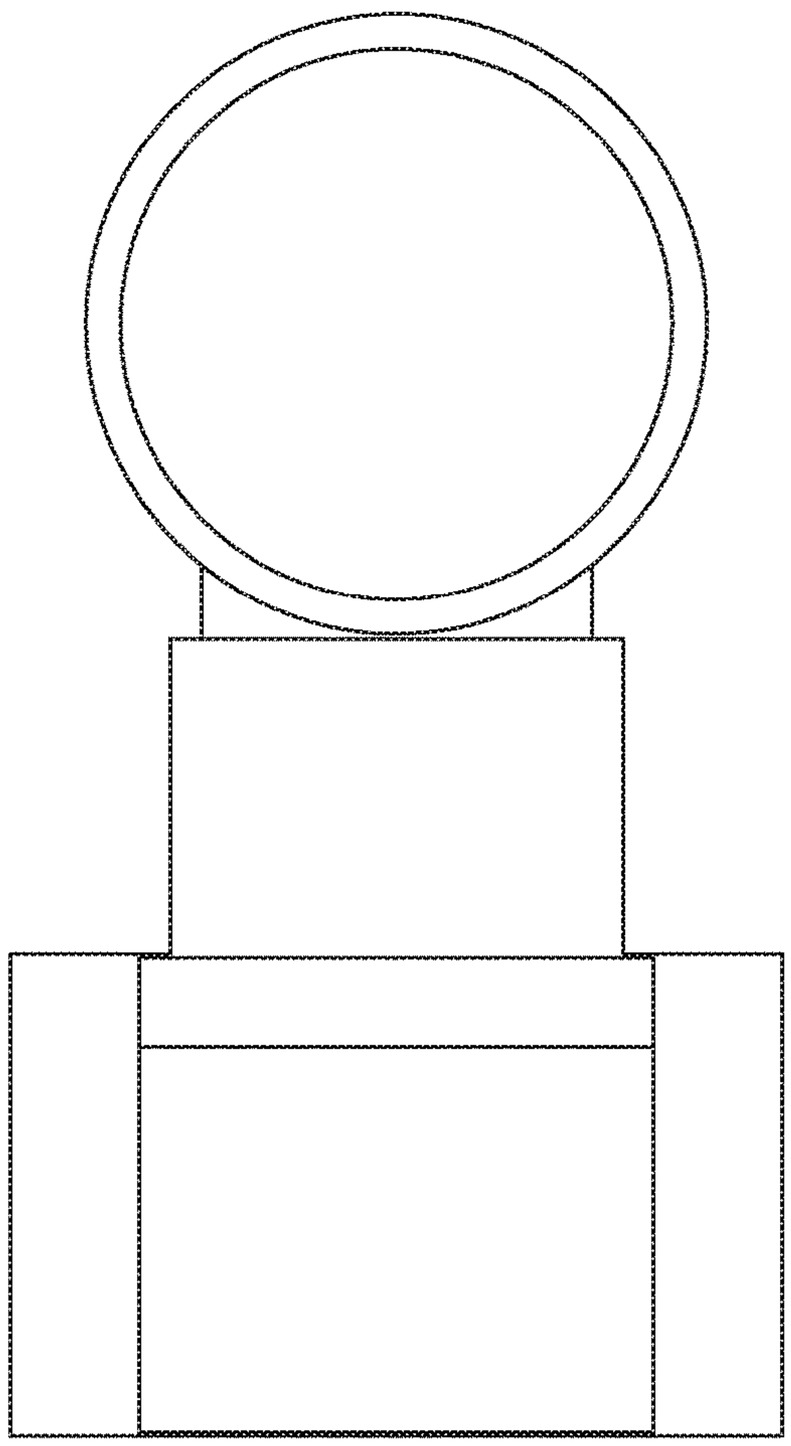


FIG. 18

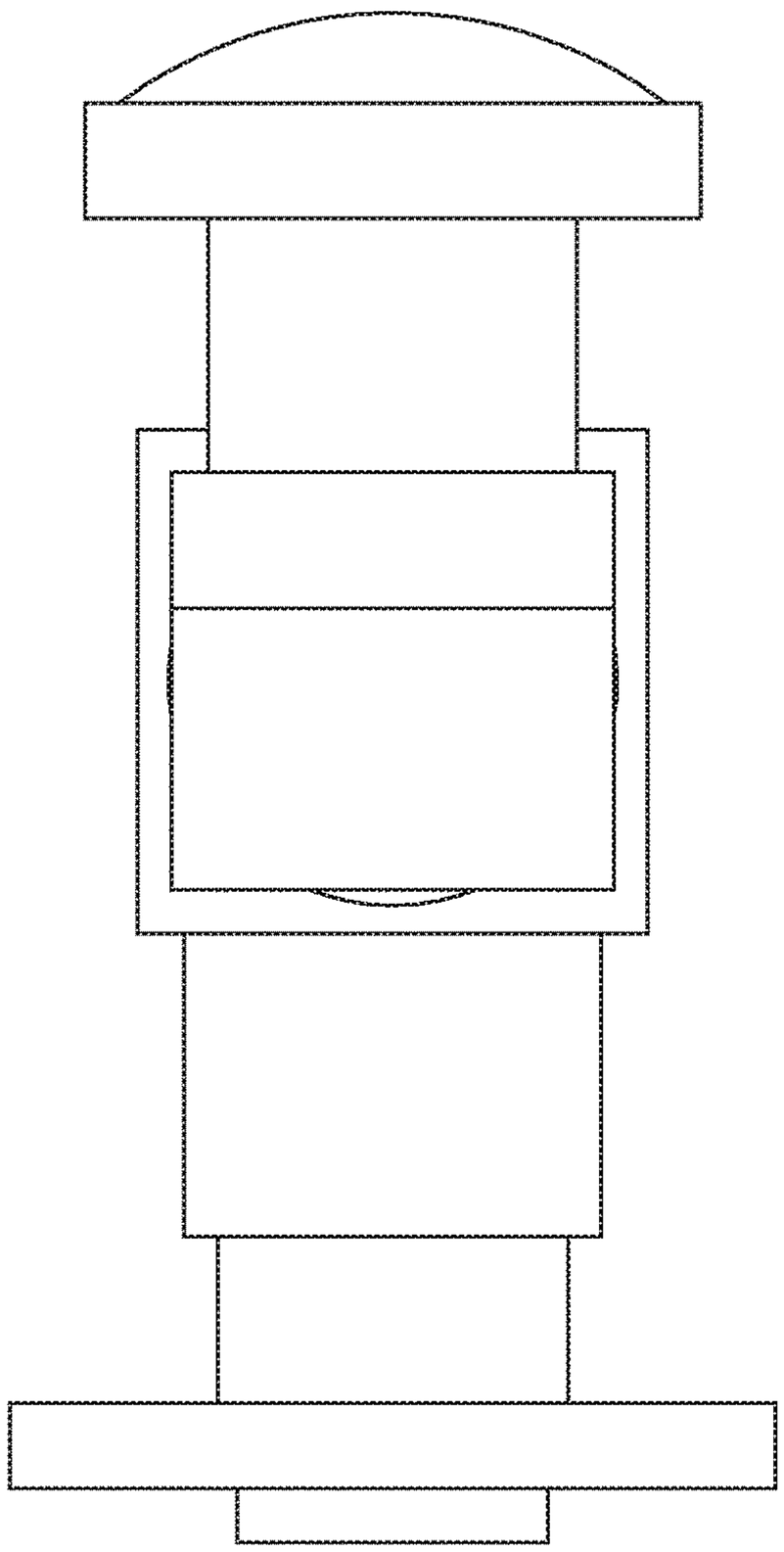


FIG.19

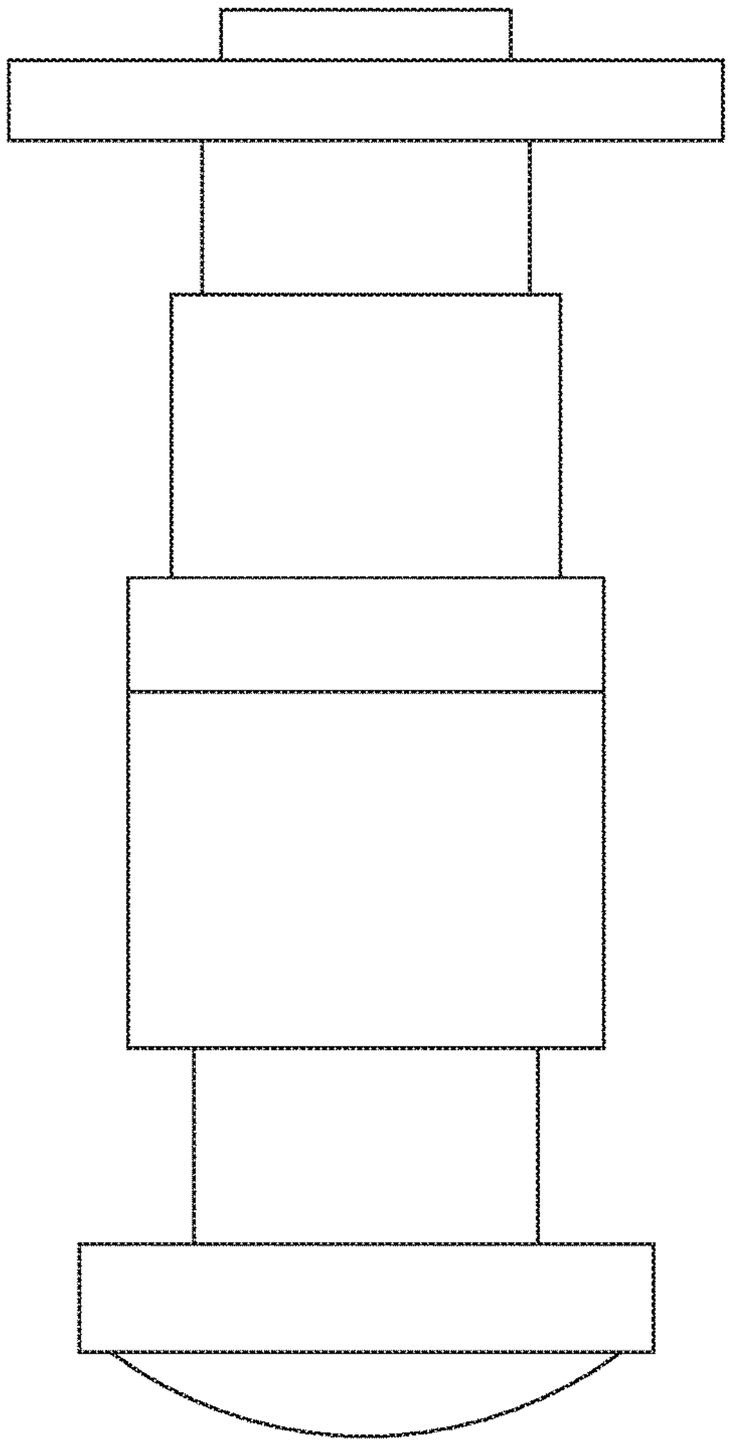


FIG.20

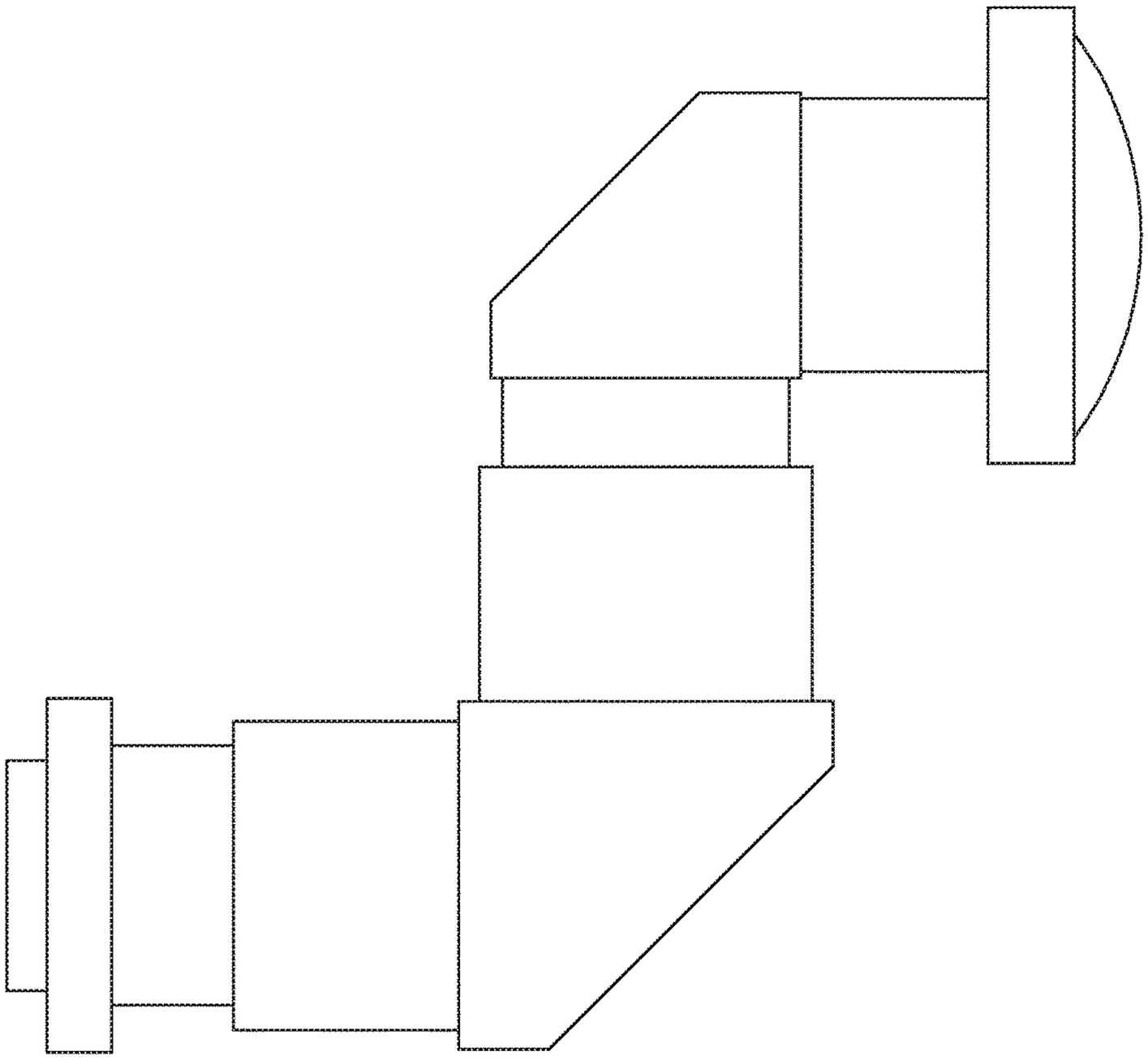


FIG.21

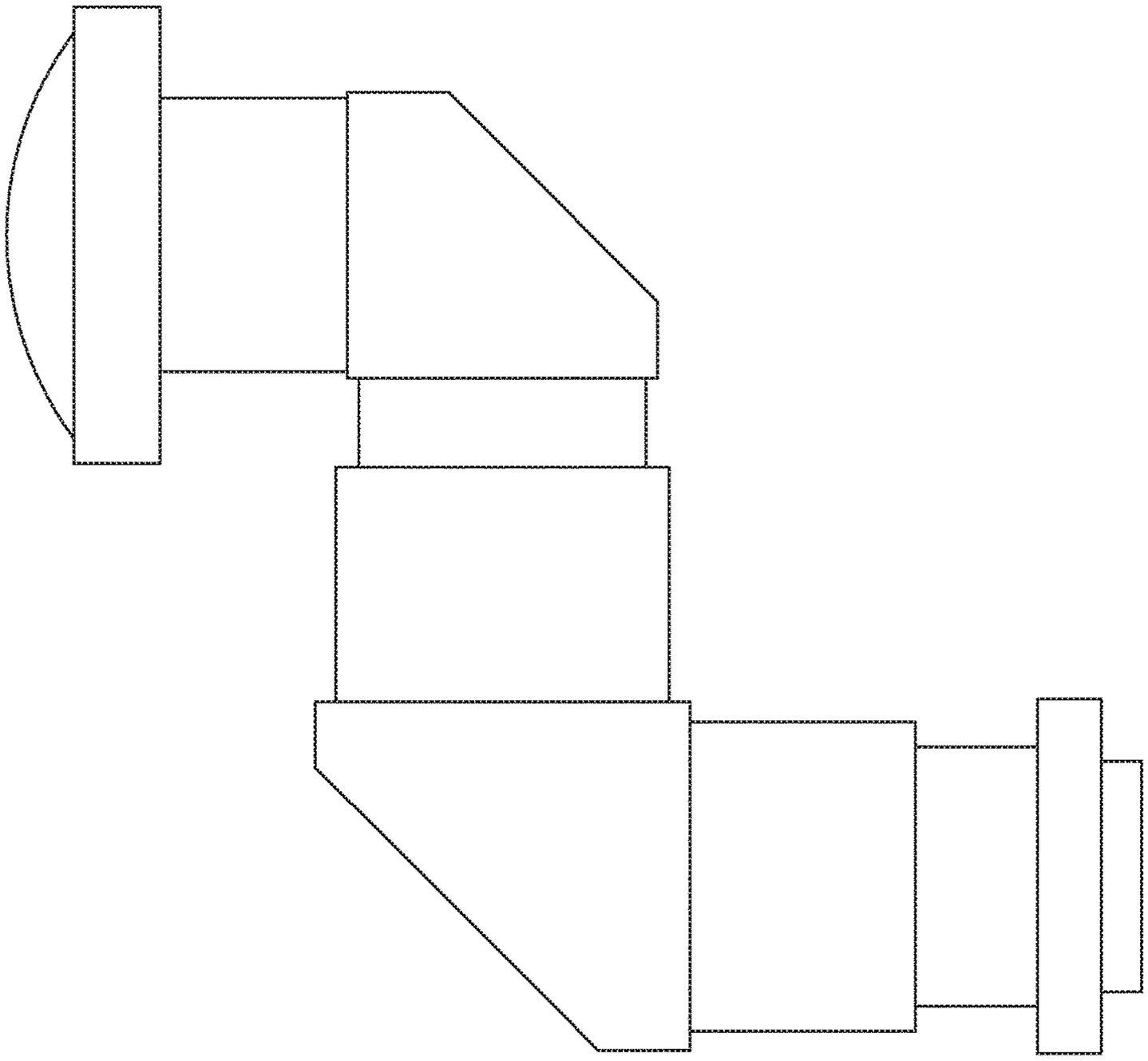


FIG.22

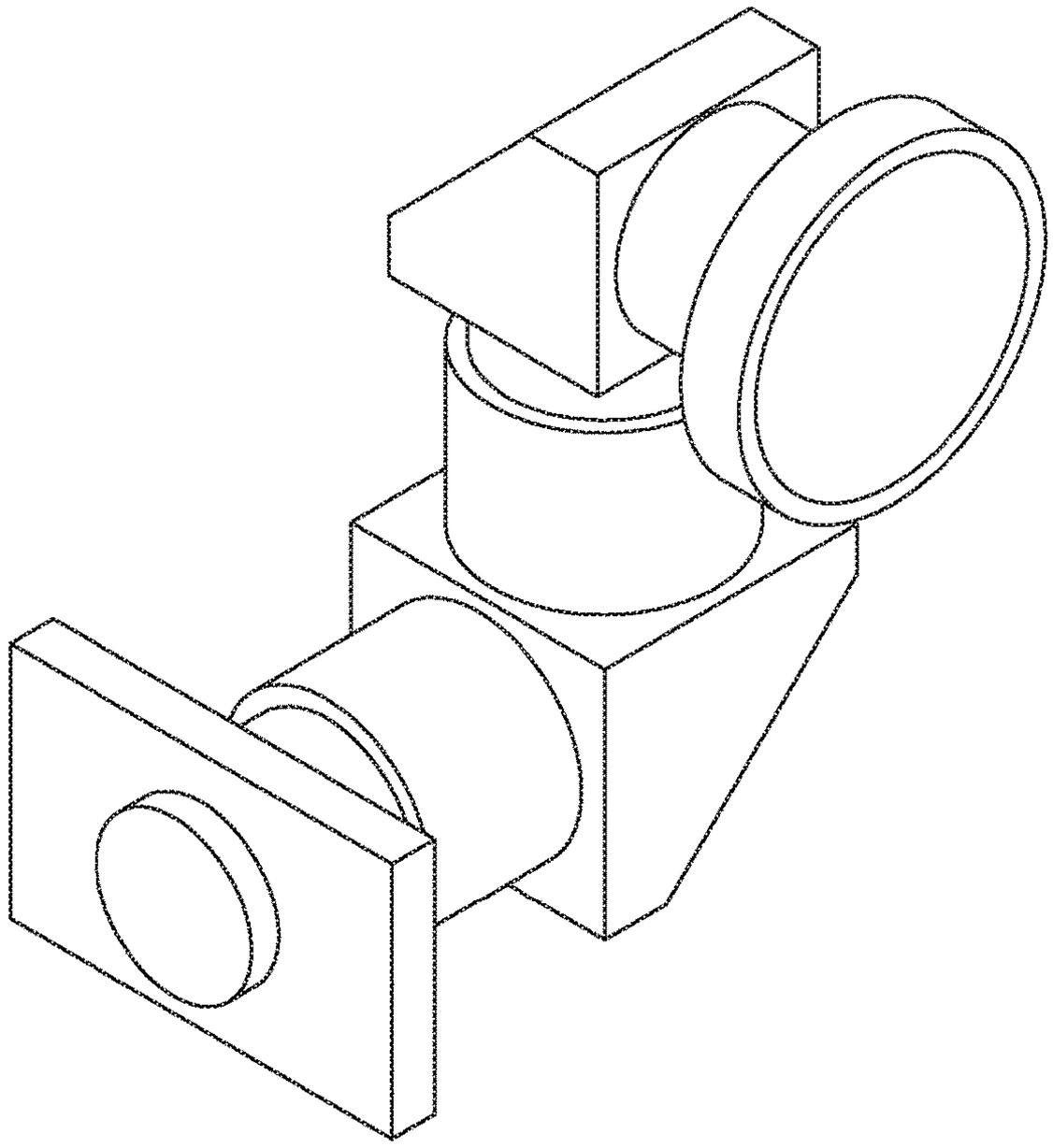


FIG.23

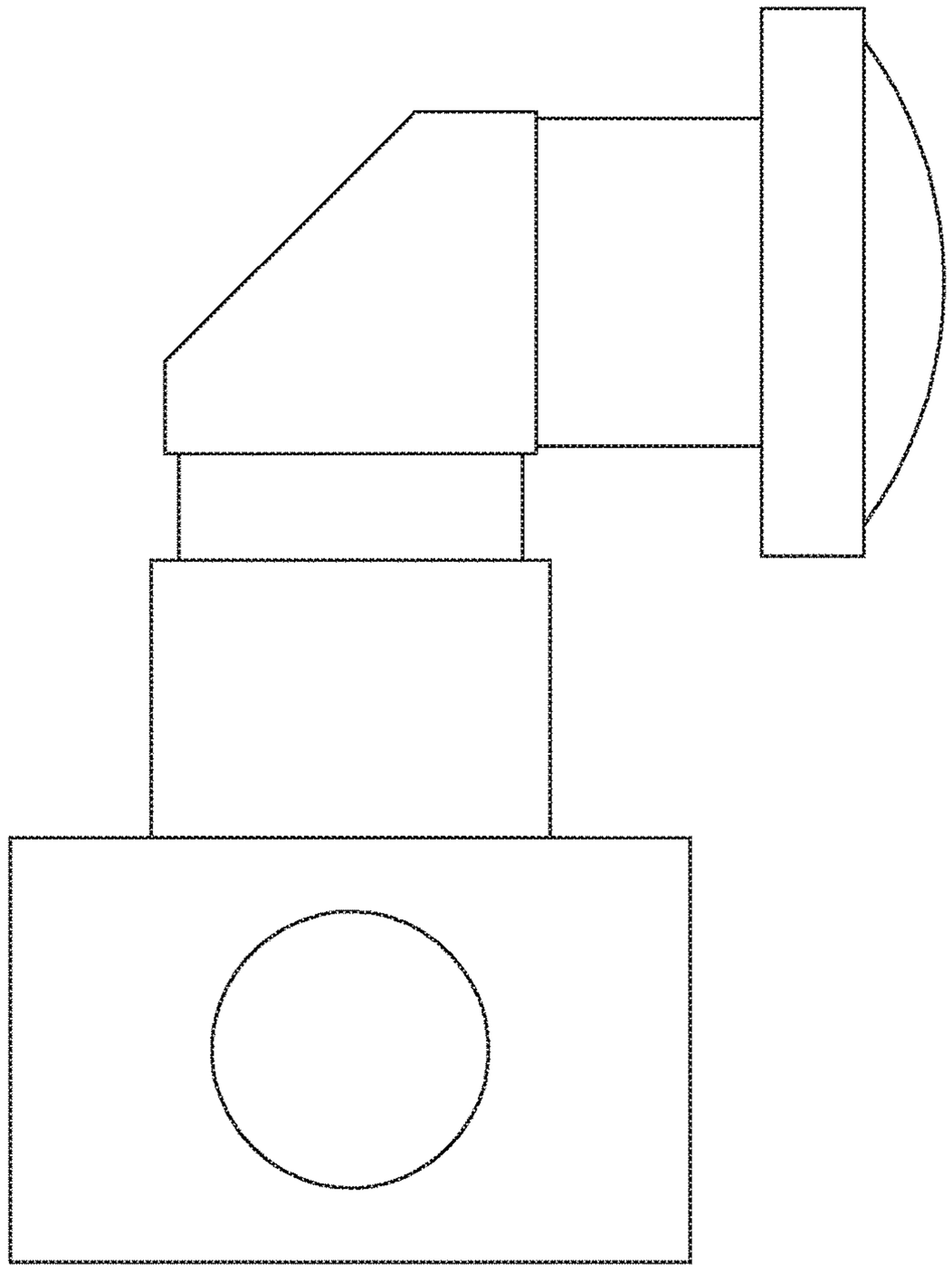


FIG.24

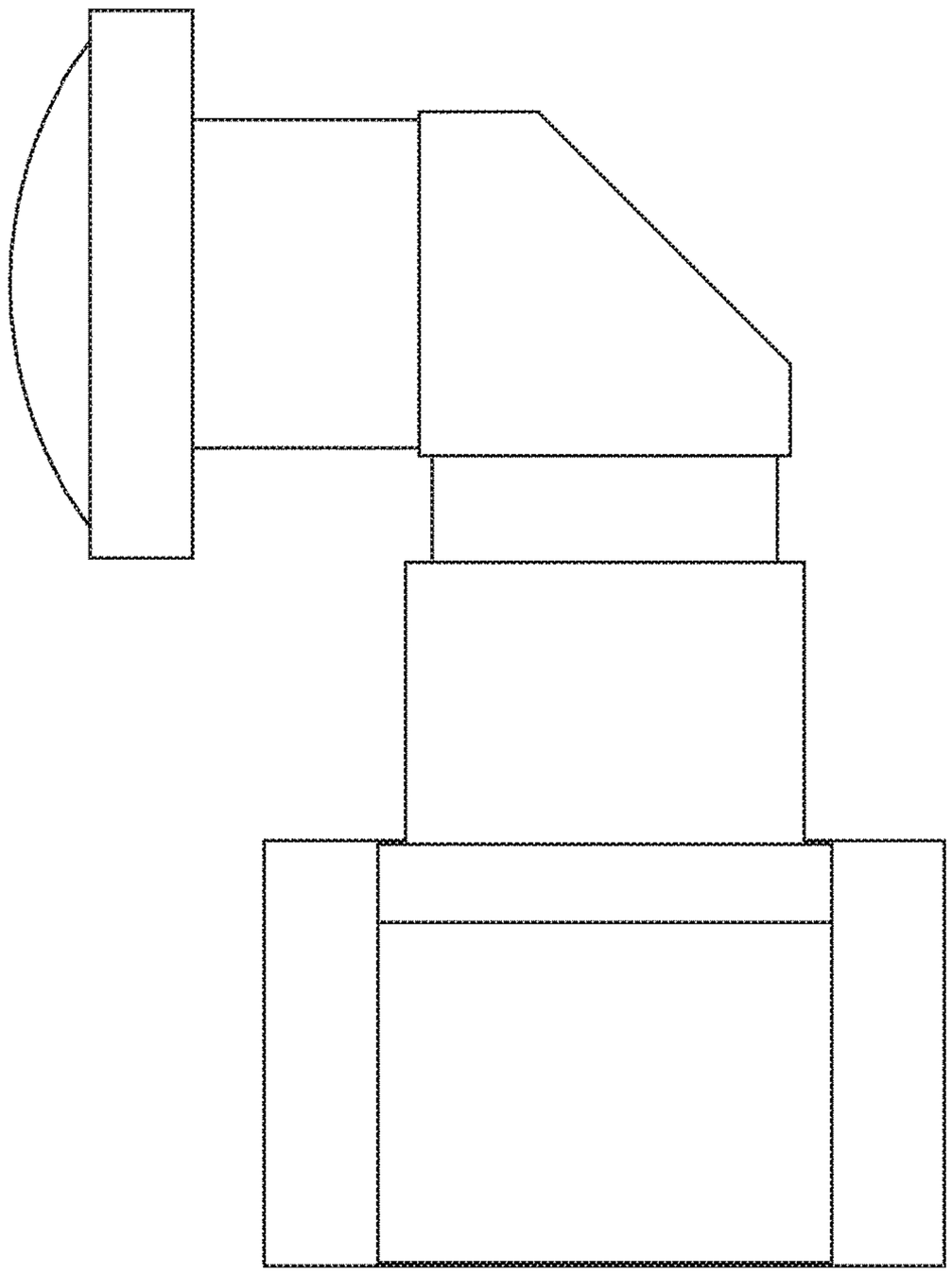


FIG.25

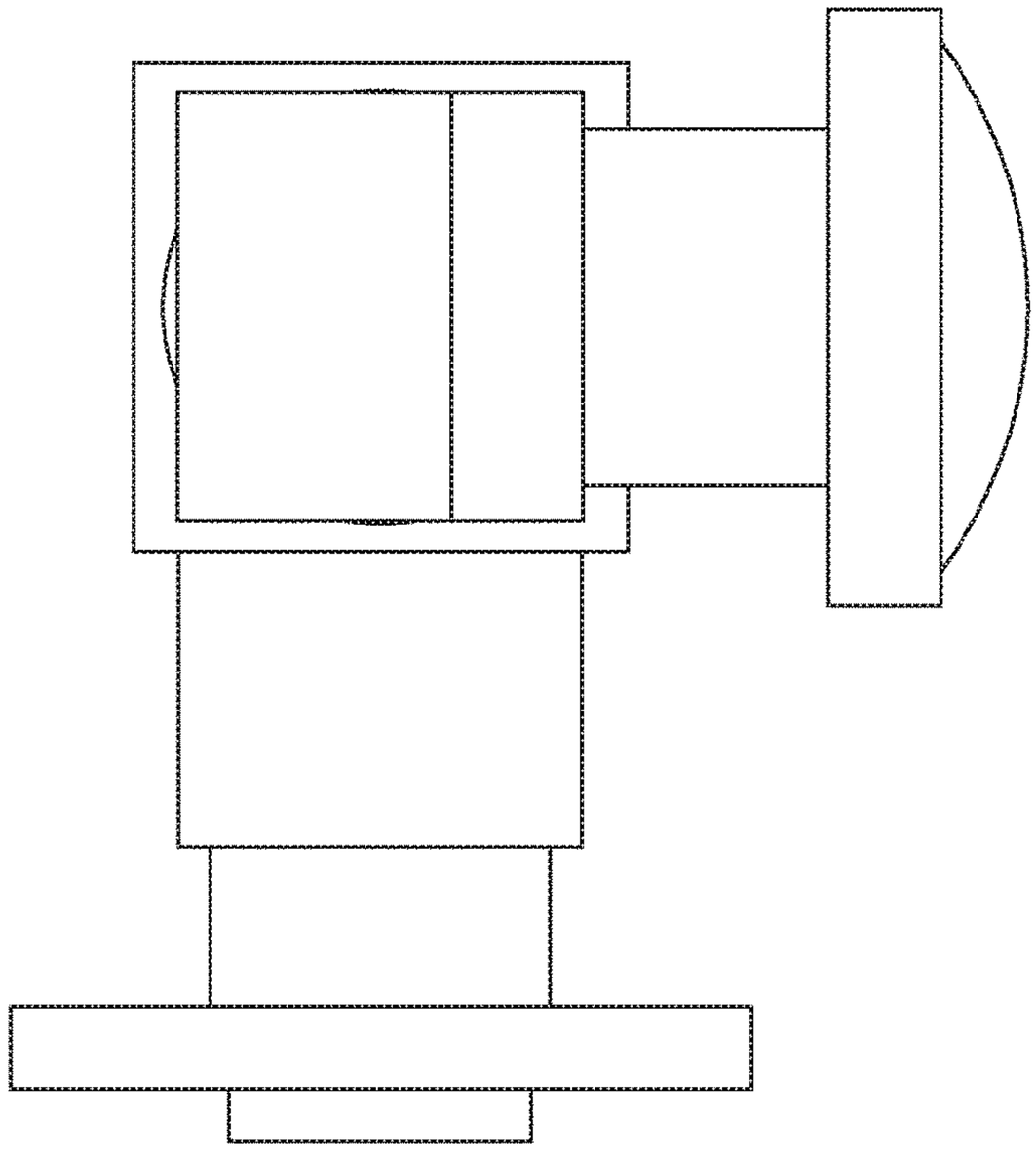


FIG.26

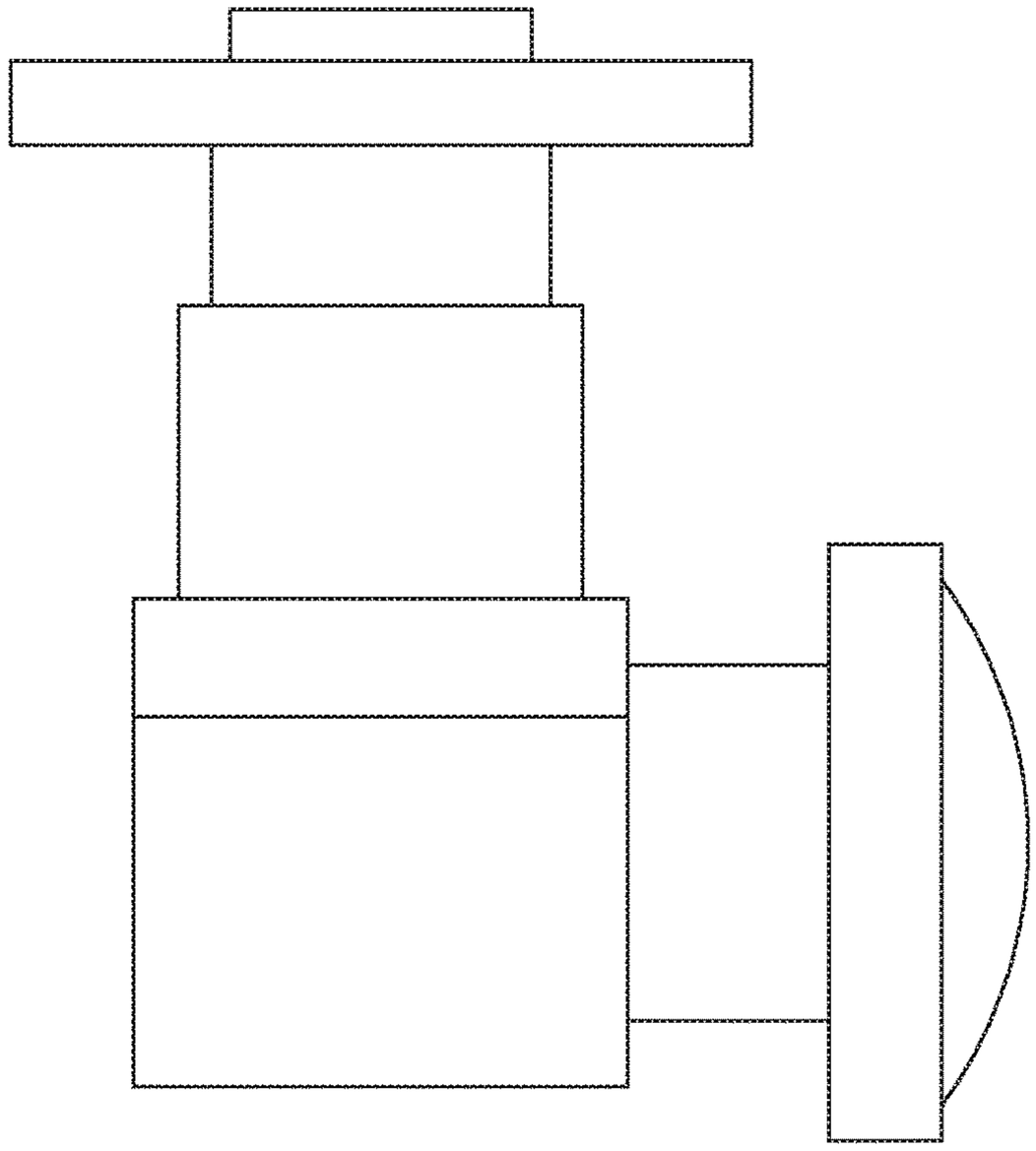


FIG.27

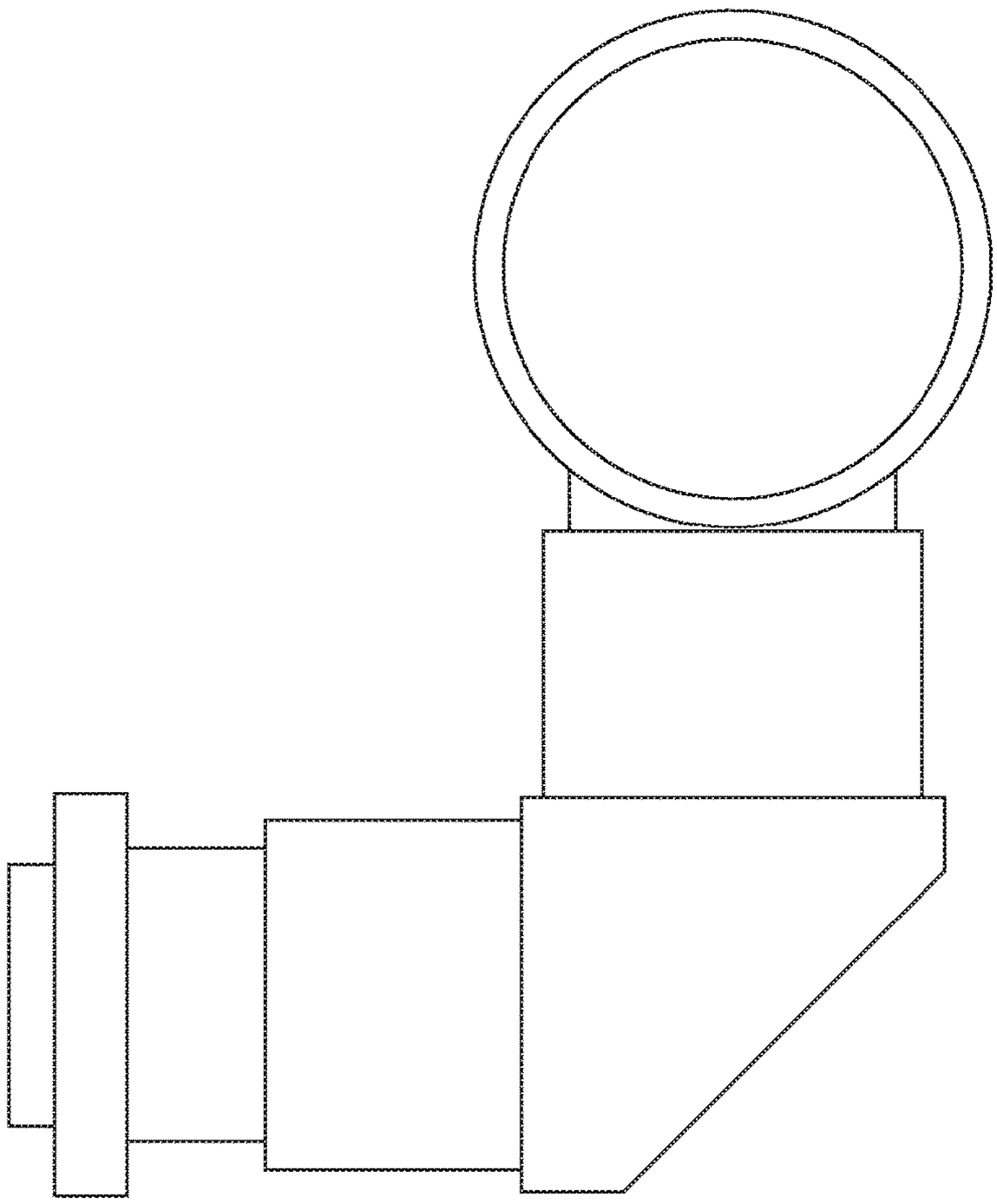
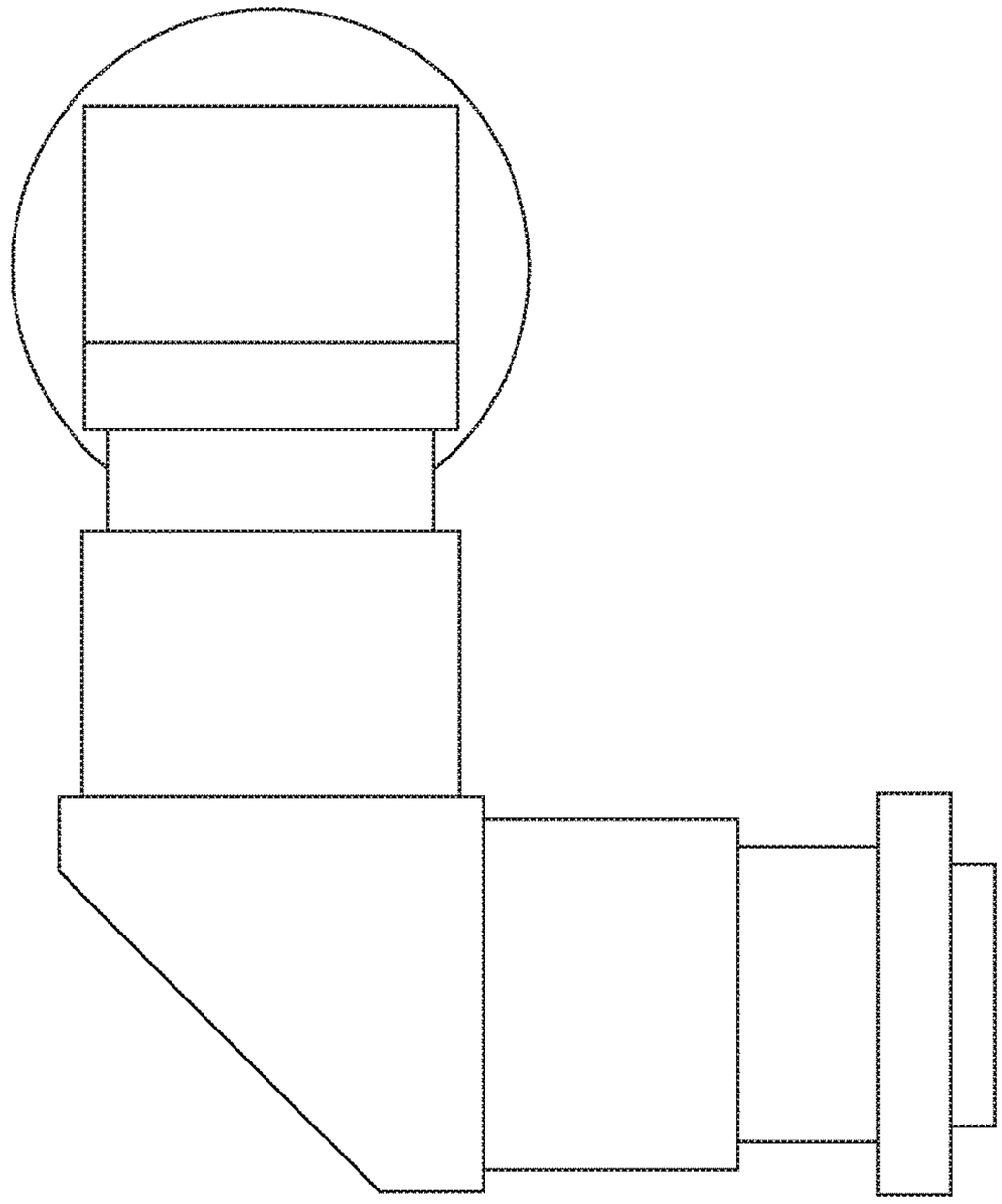


FIG.28



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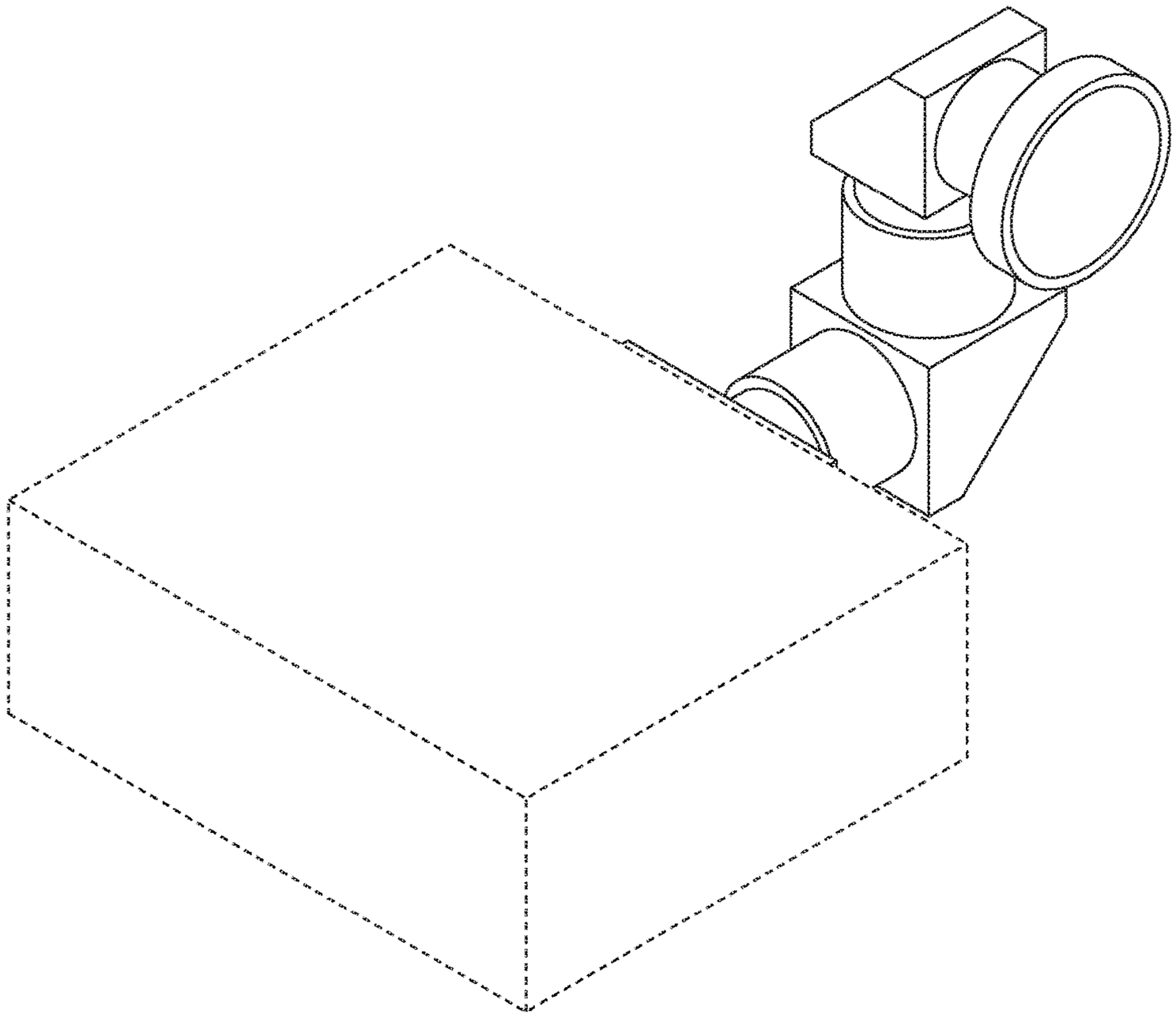

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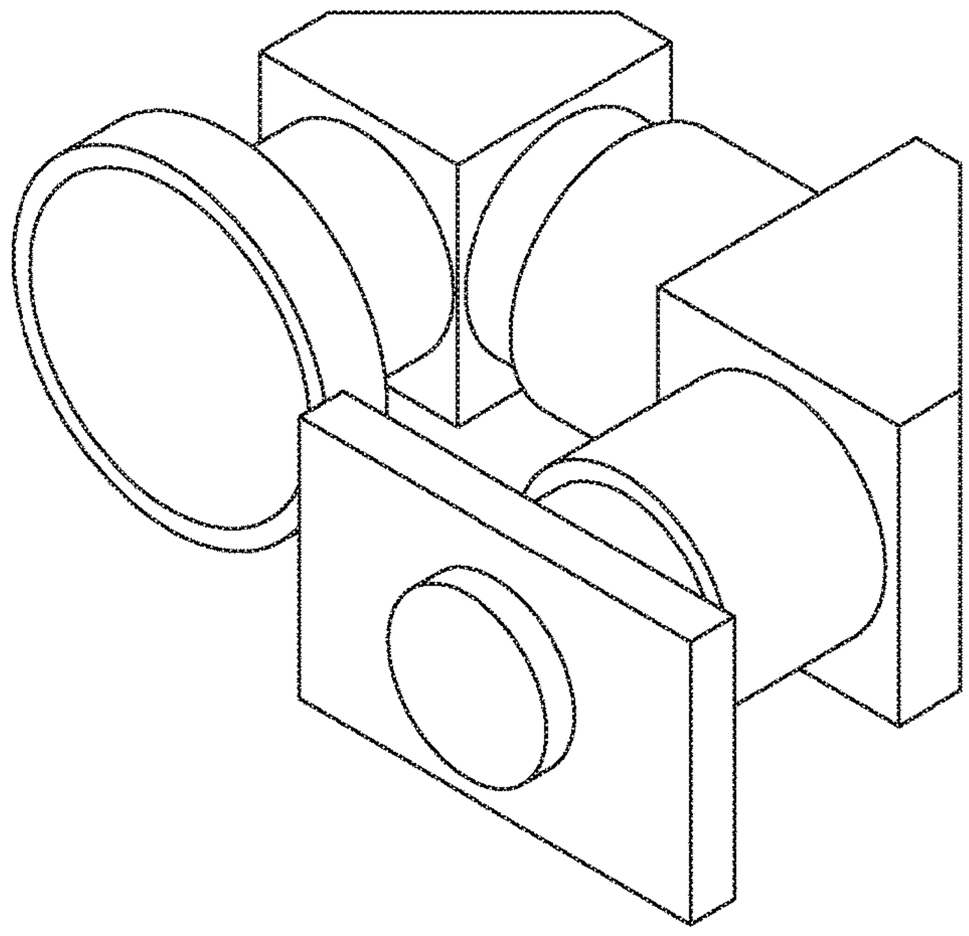

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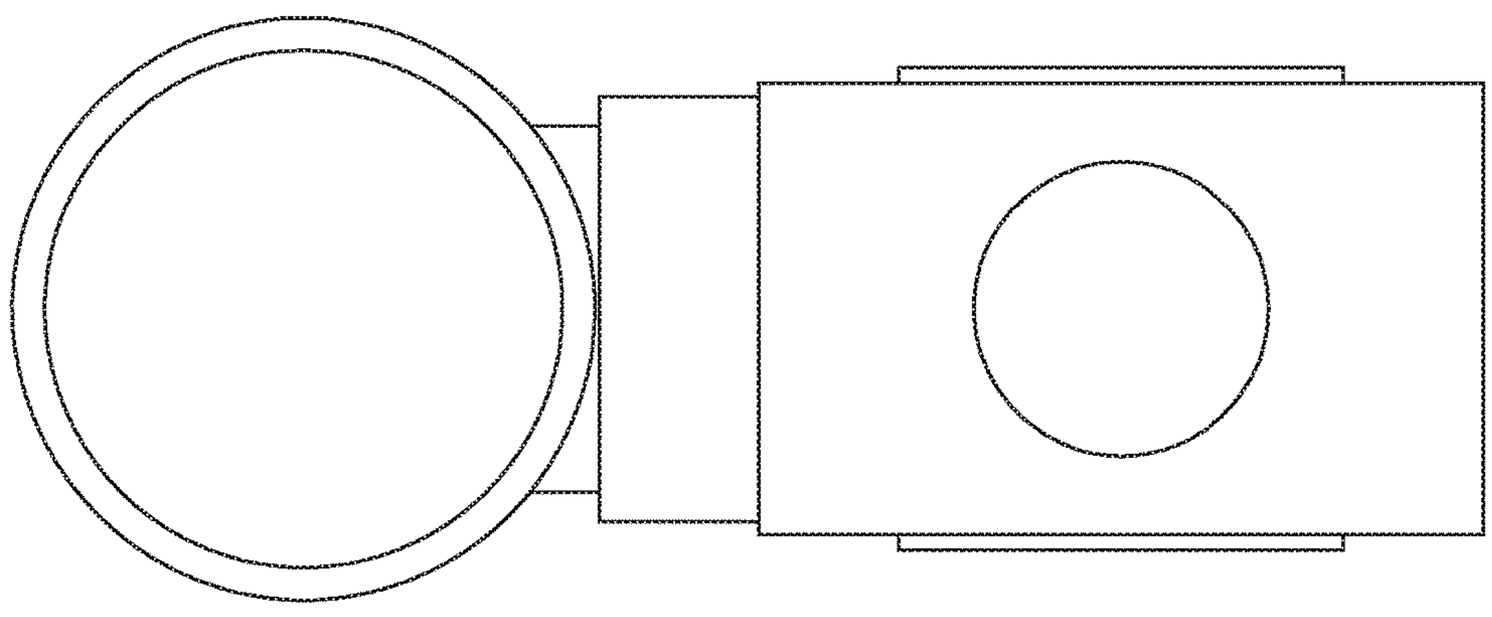

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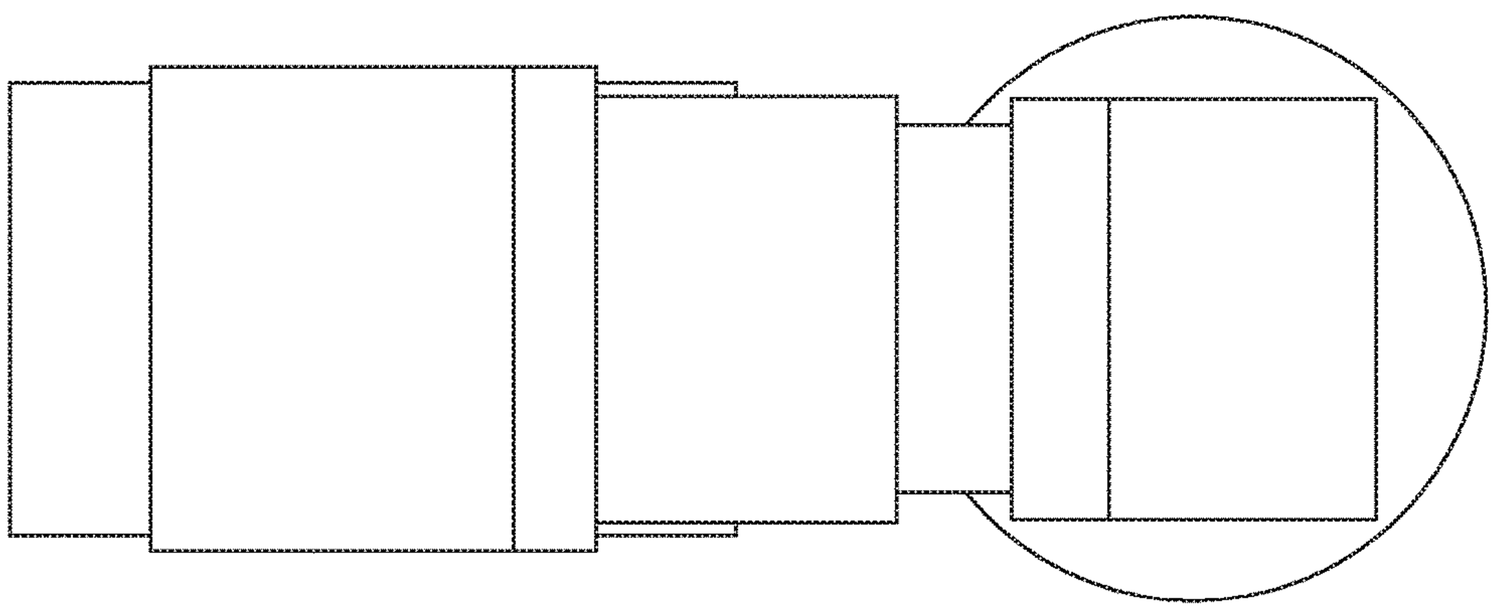

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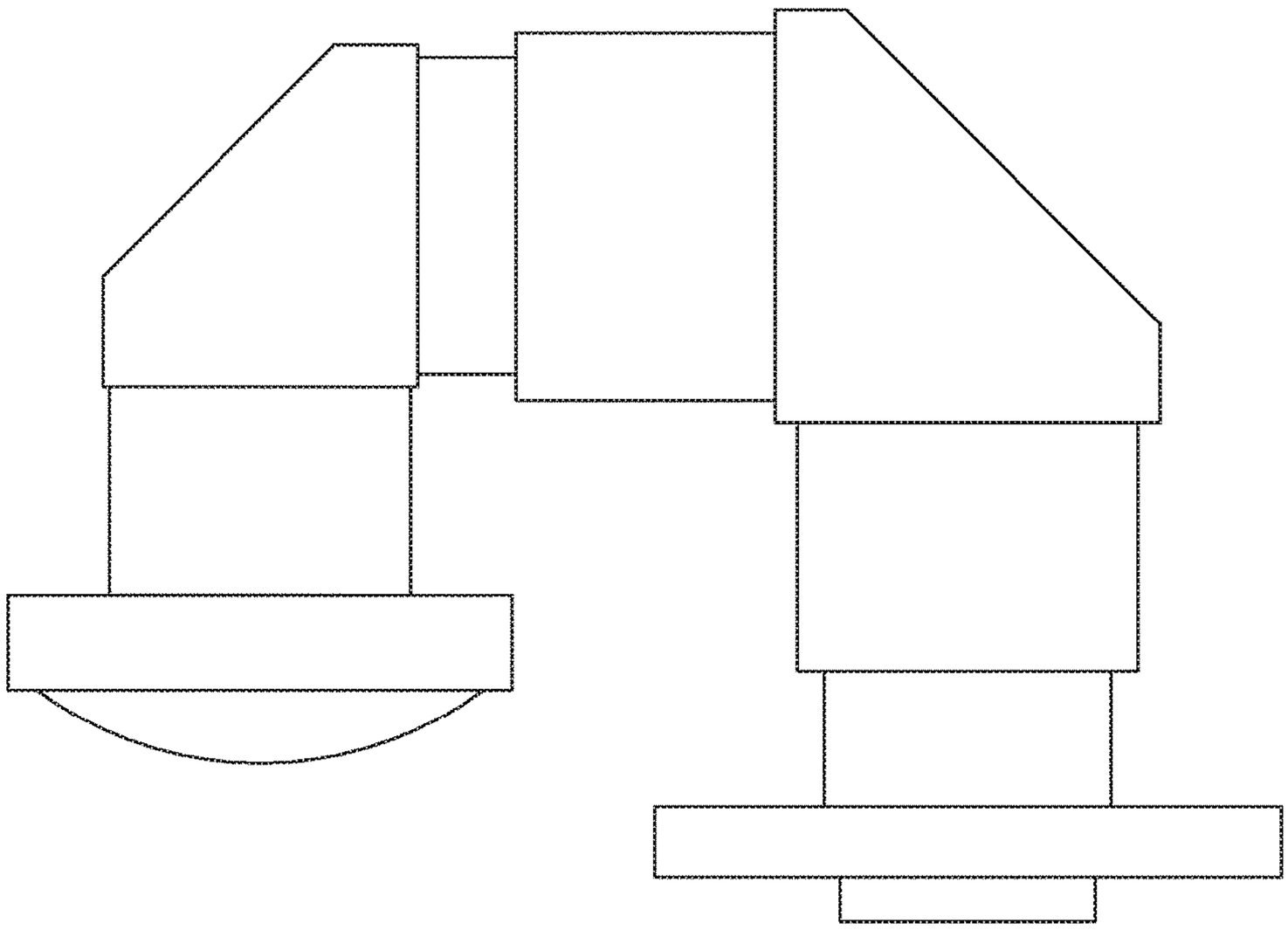

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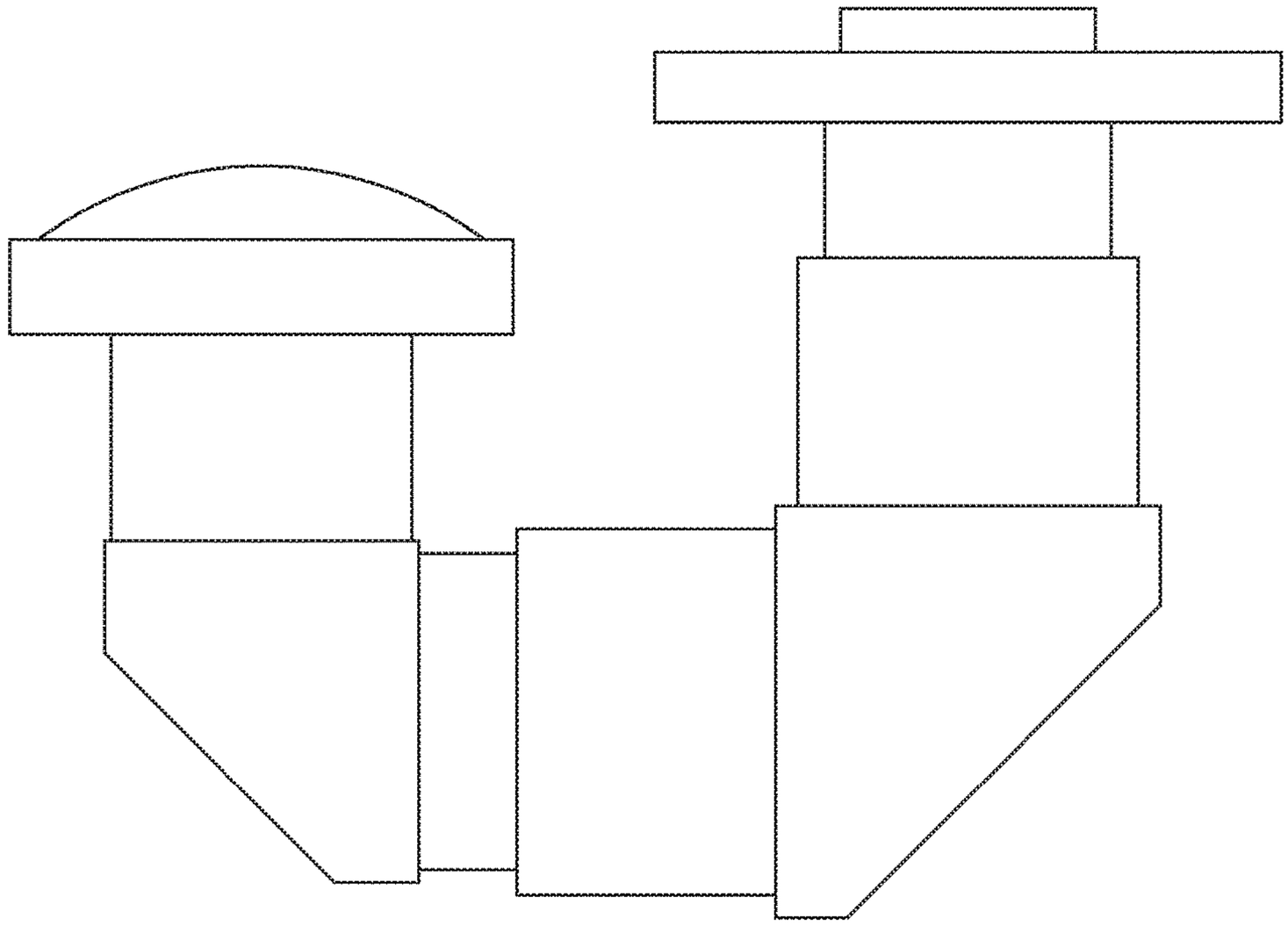

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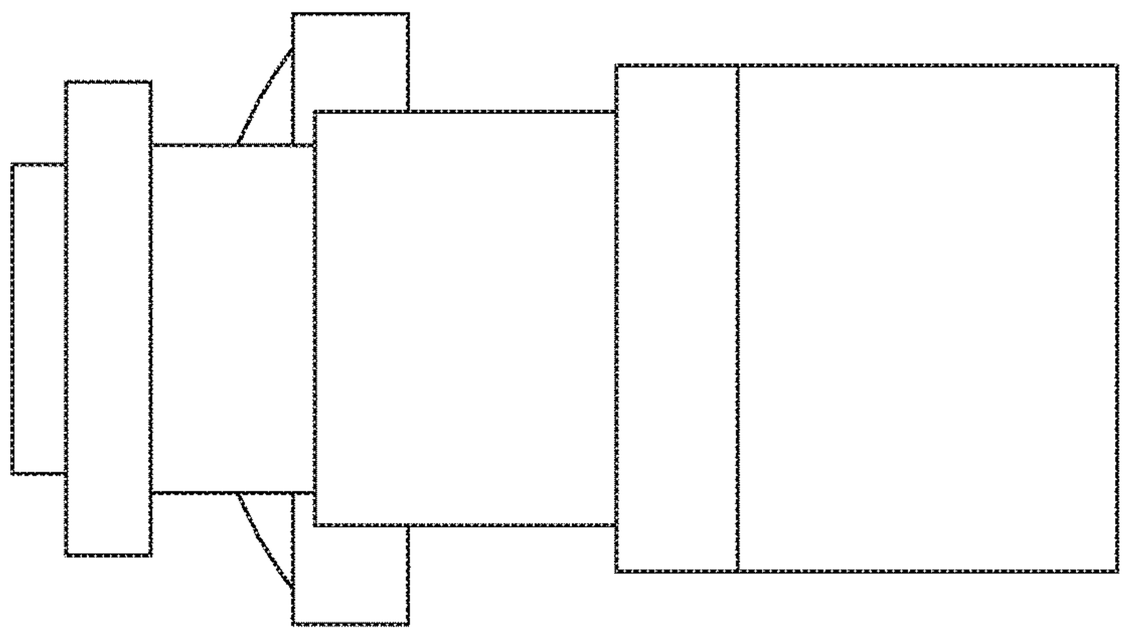
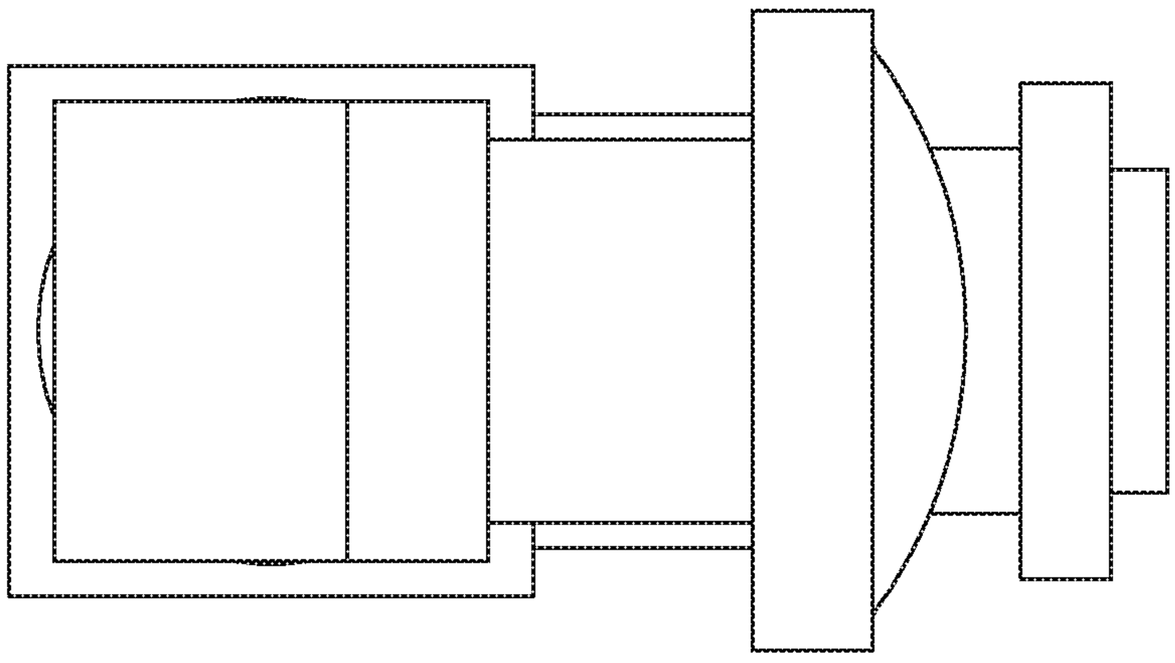


FIG.36



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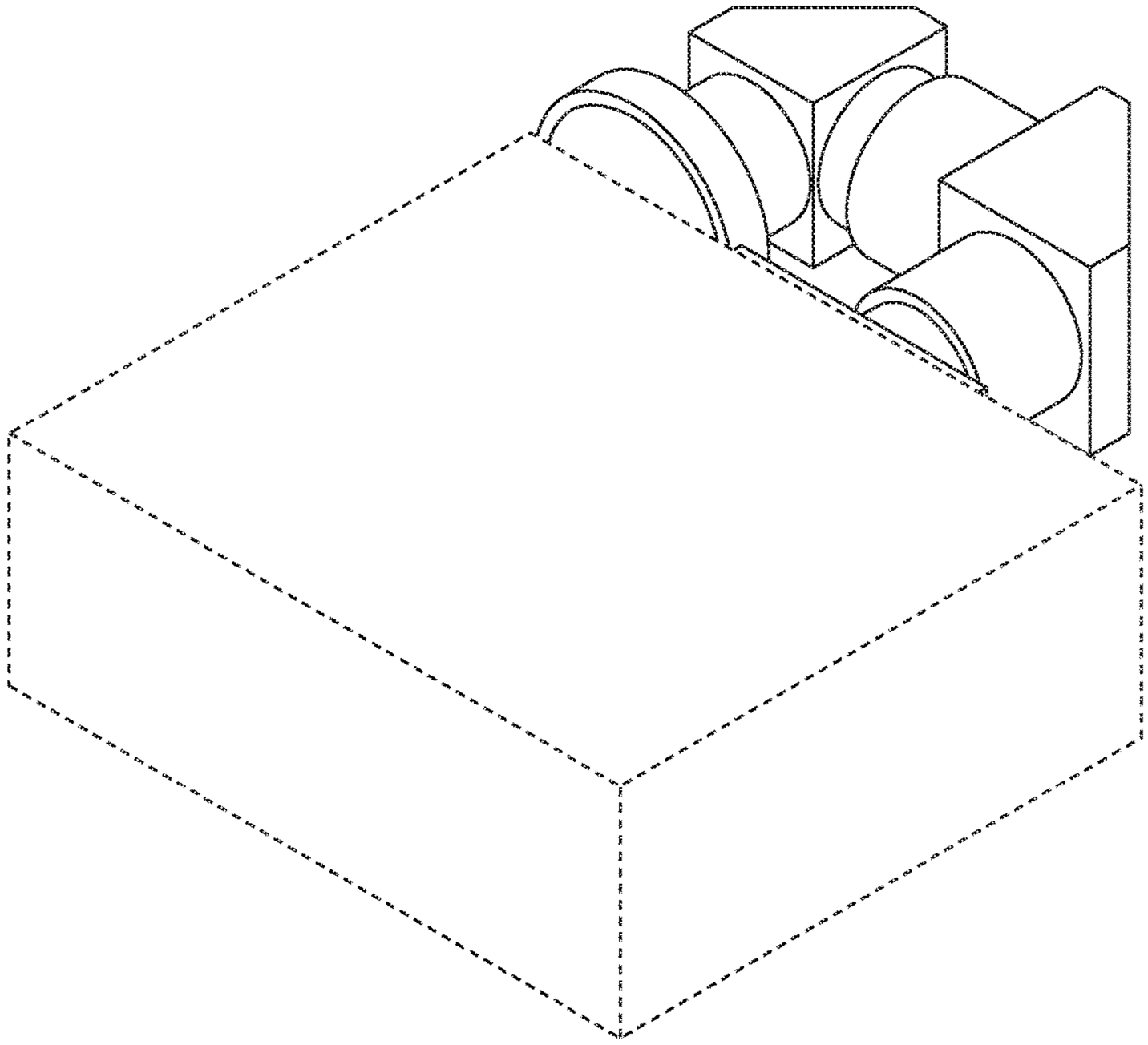

FIG.38

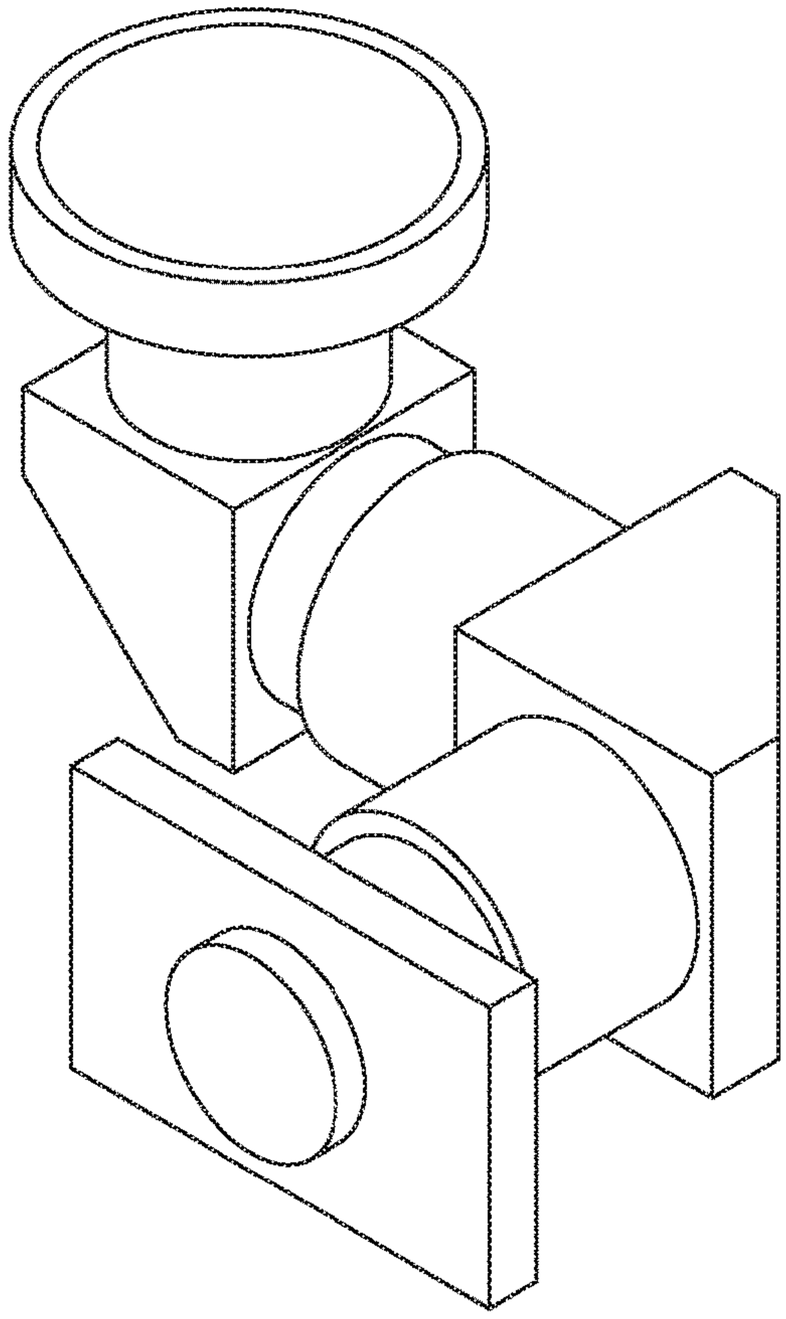

FIG.39

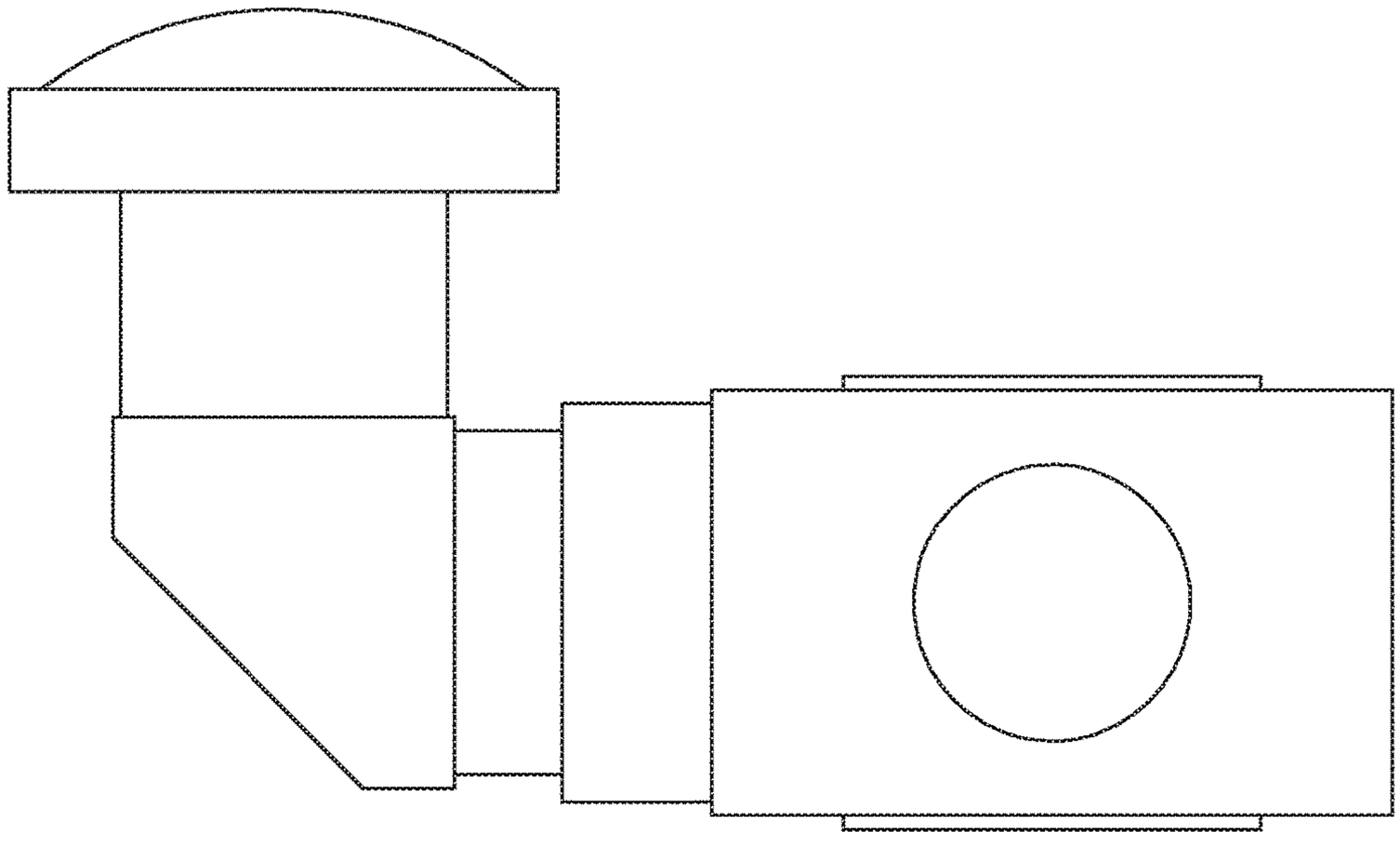

FIG.40

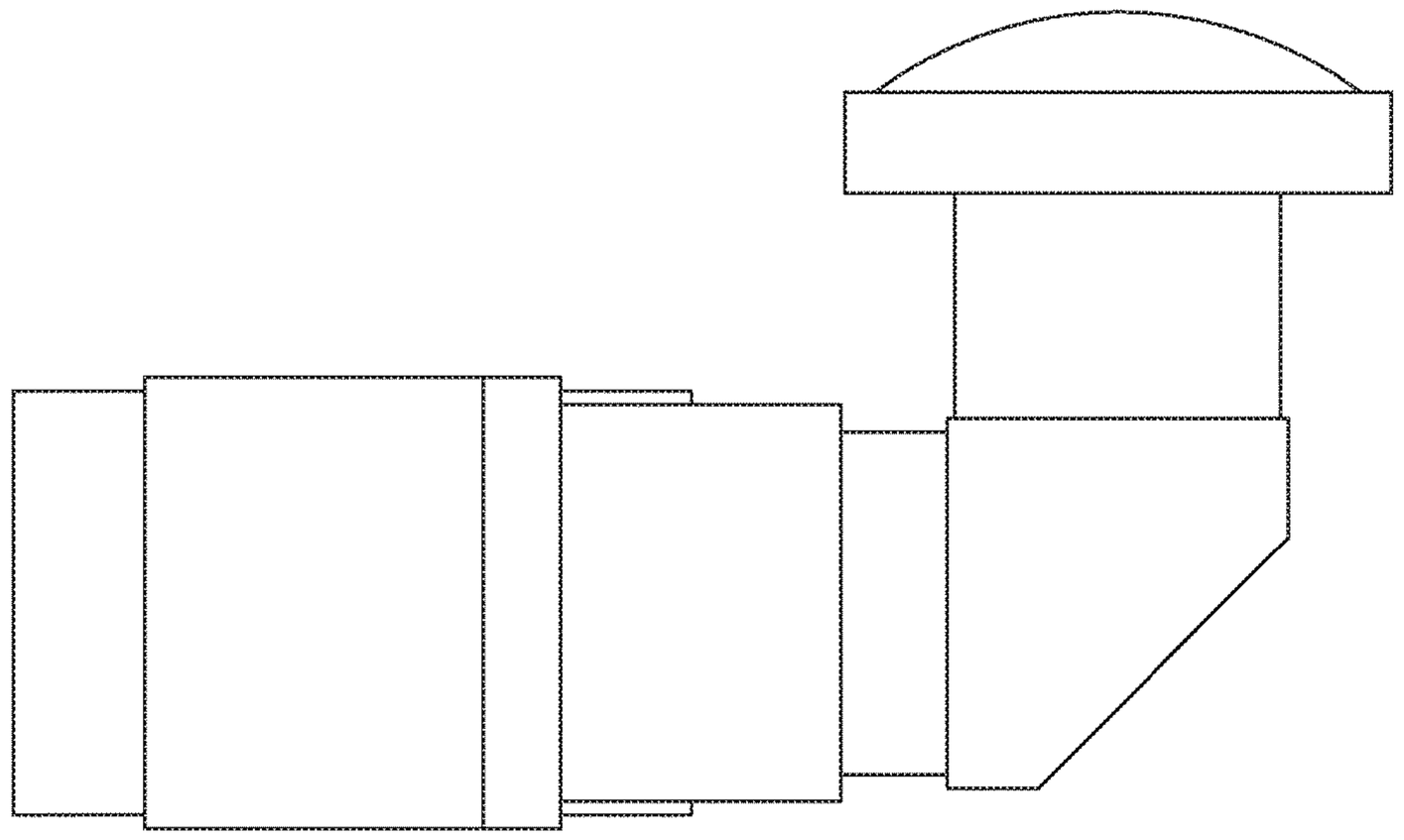

FIG.41

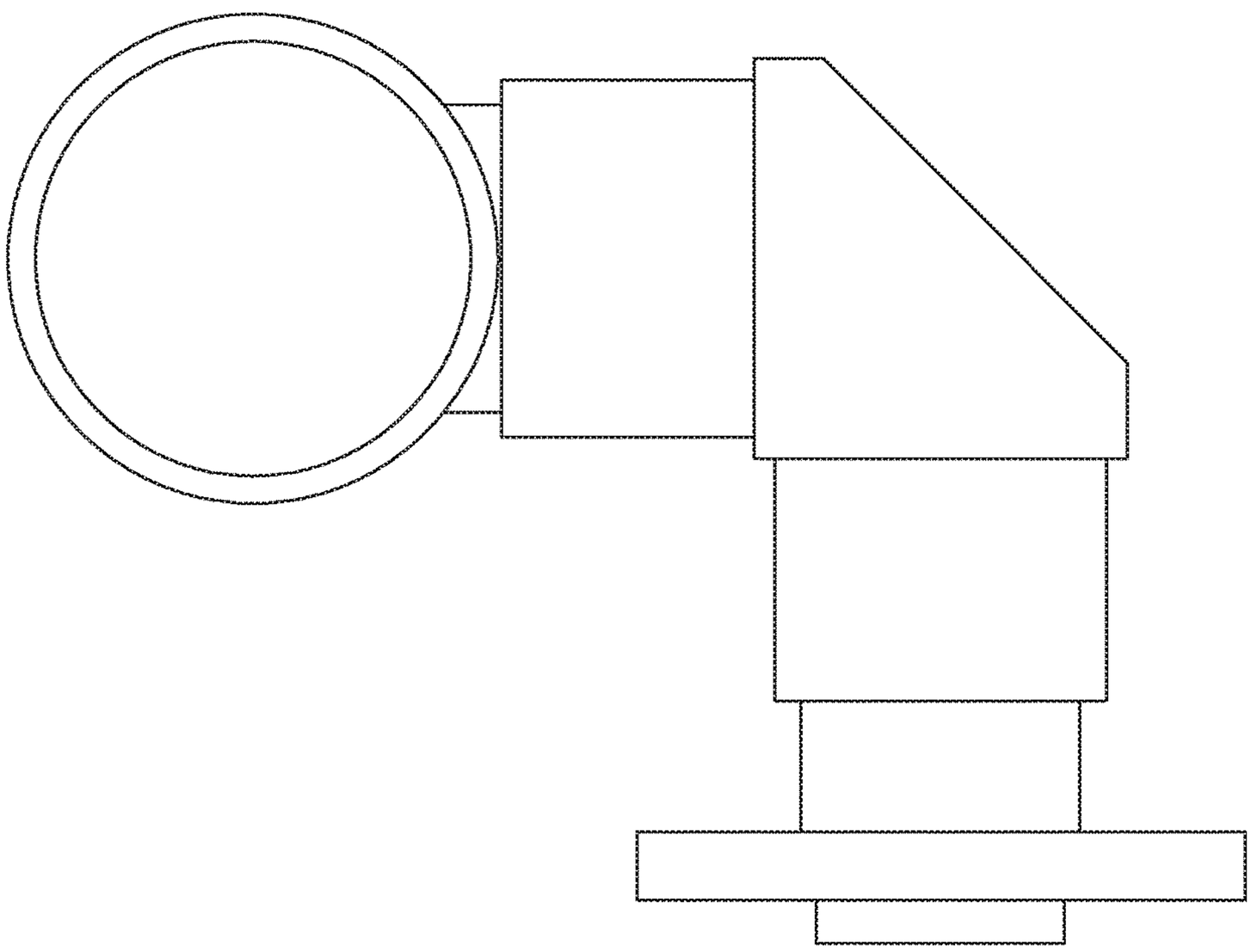

FIG.42

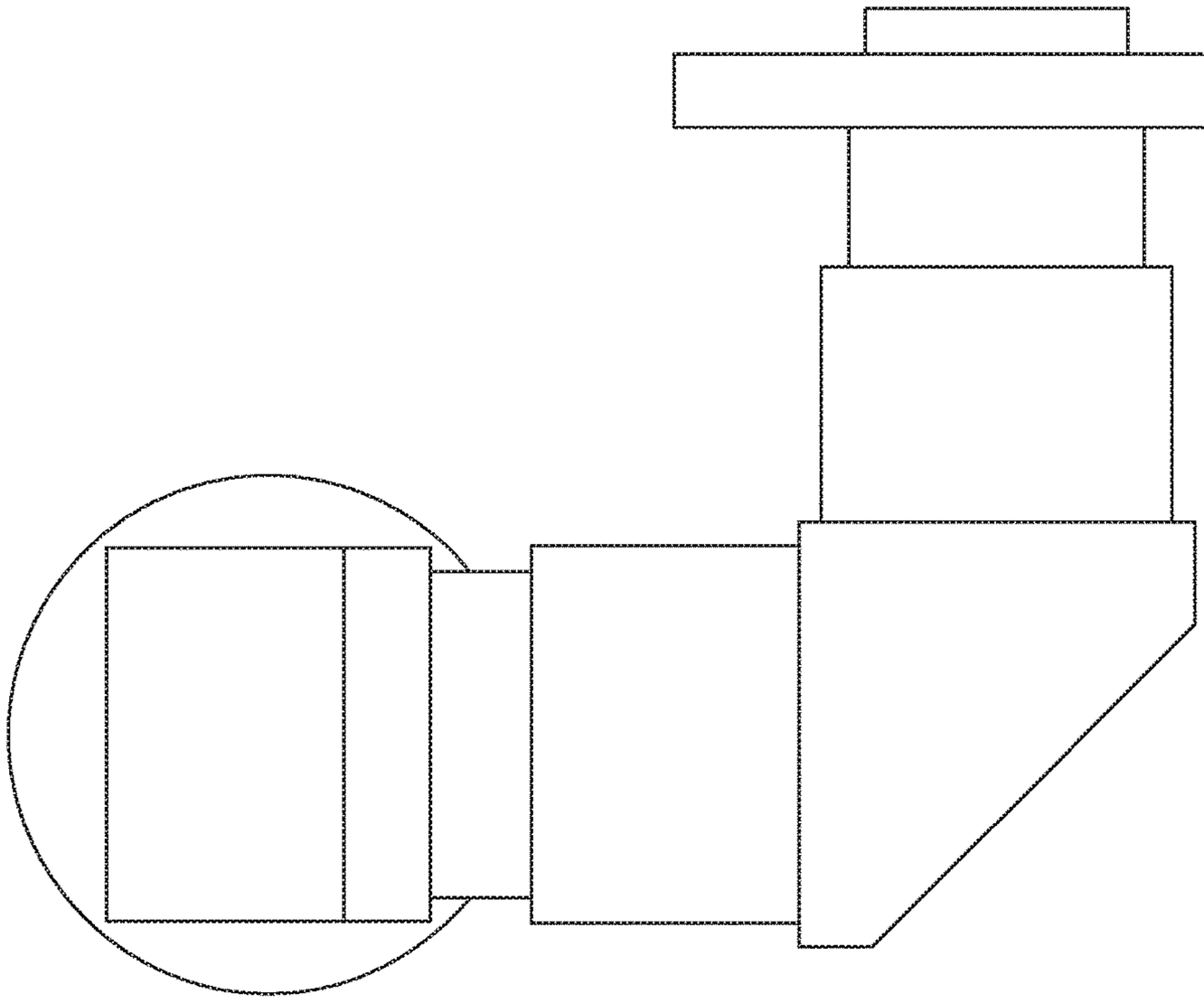

FIG.43

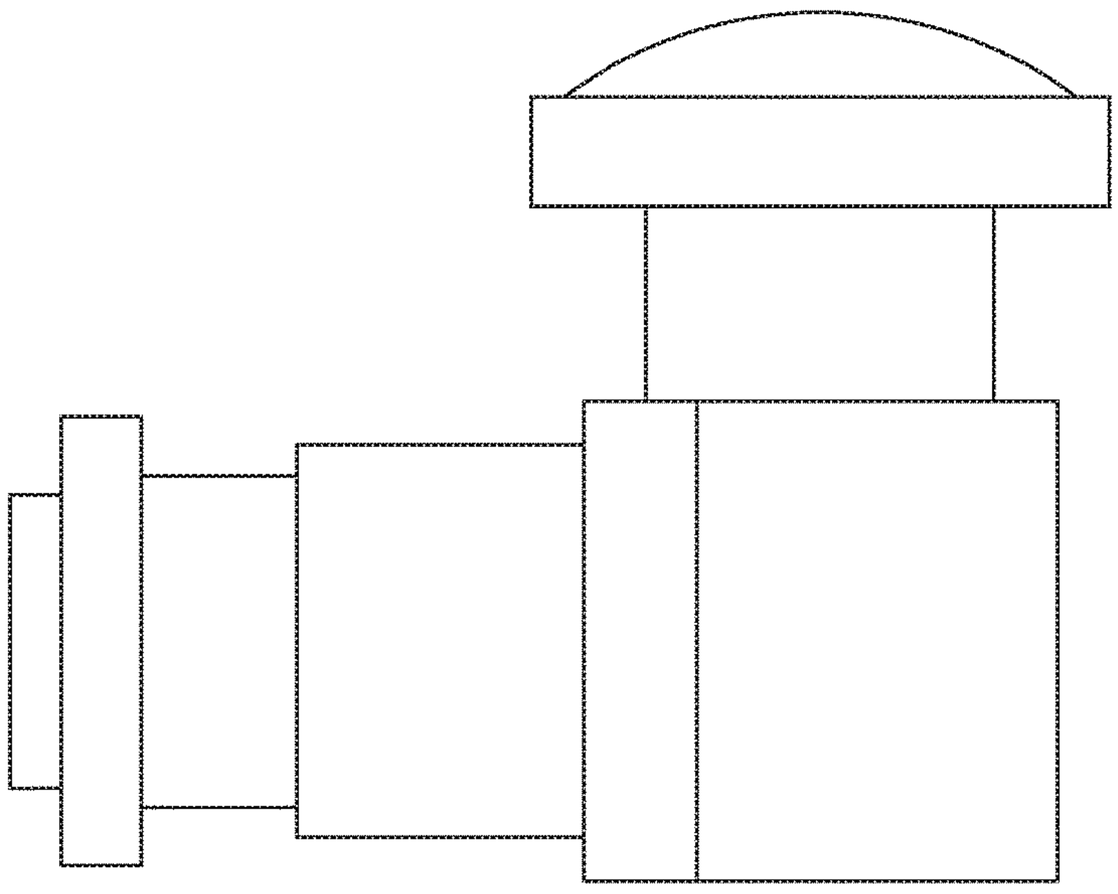

FIG.44

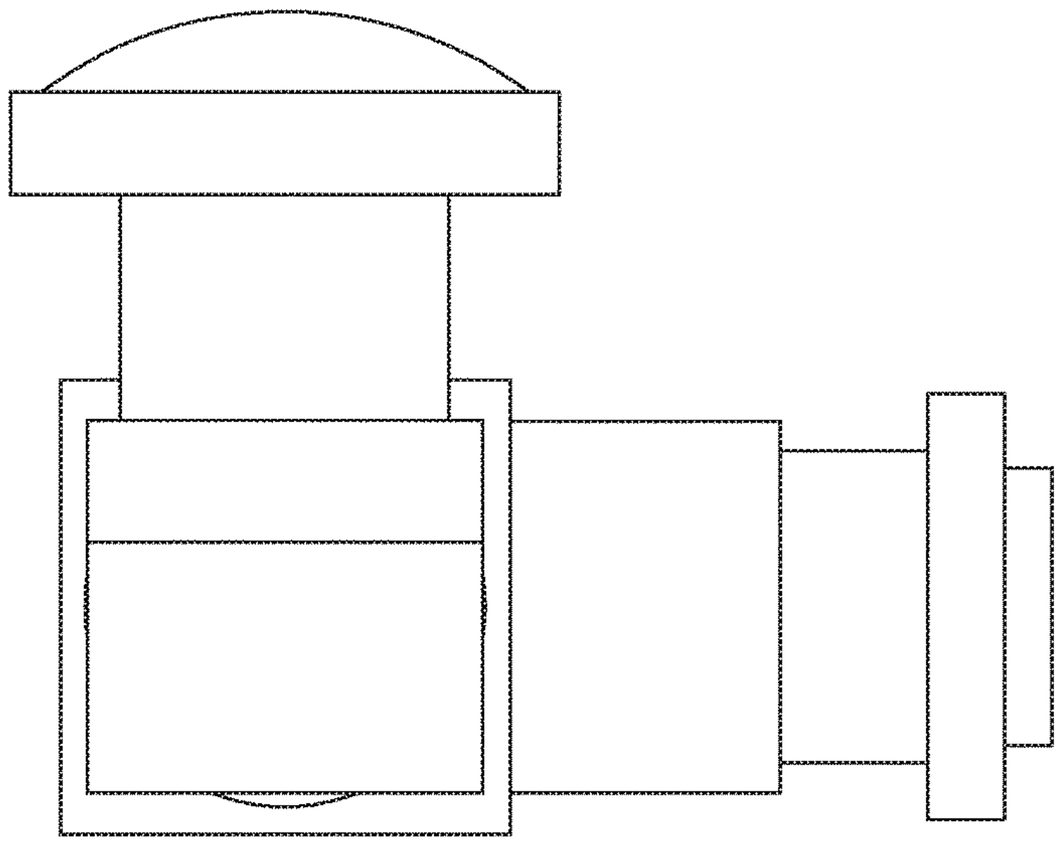

FIG.45

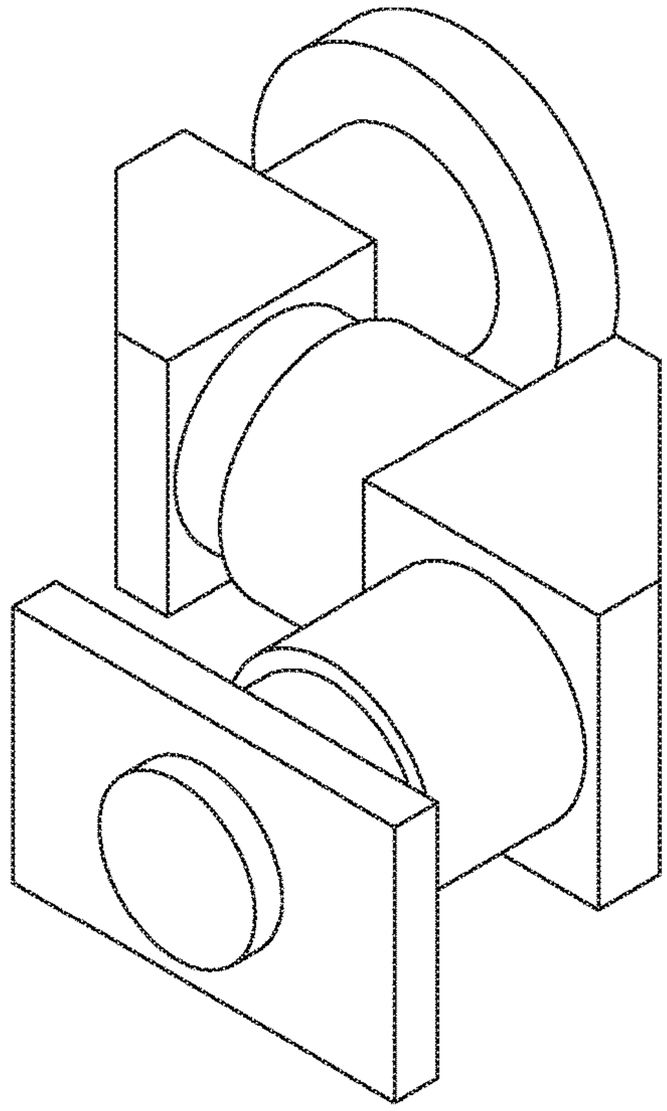

FIG.46

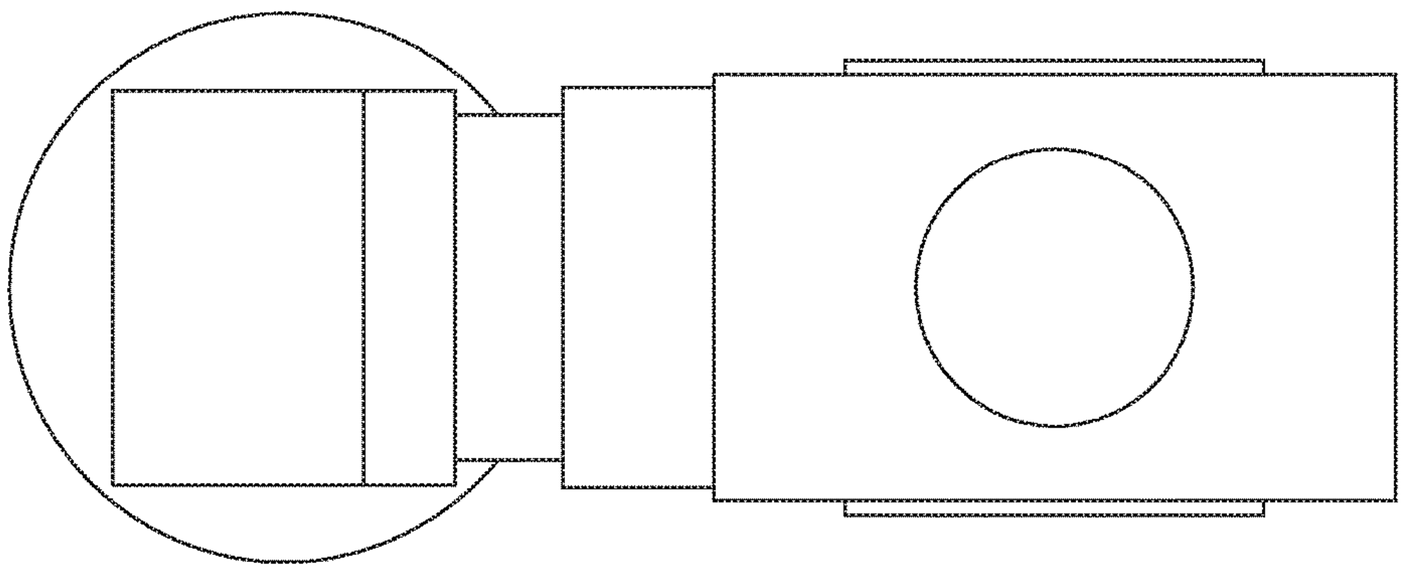

FIG.47

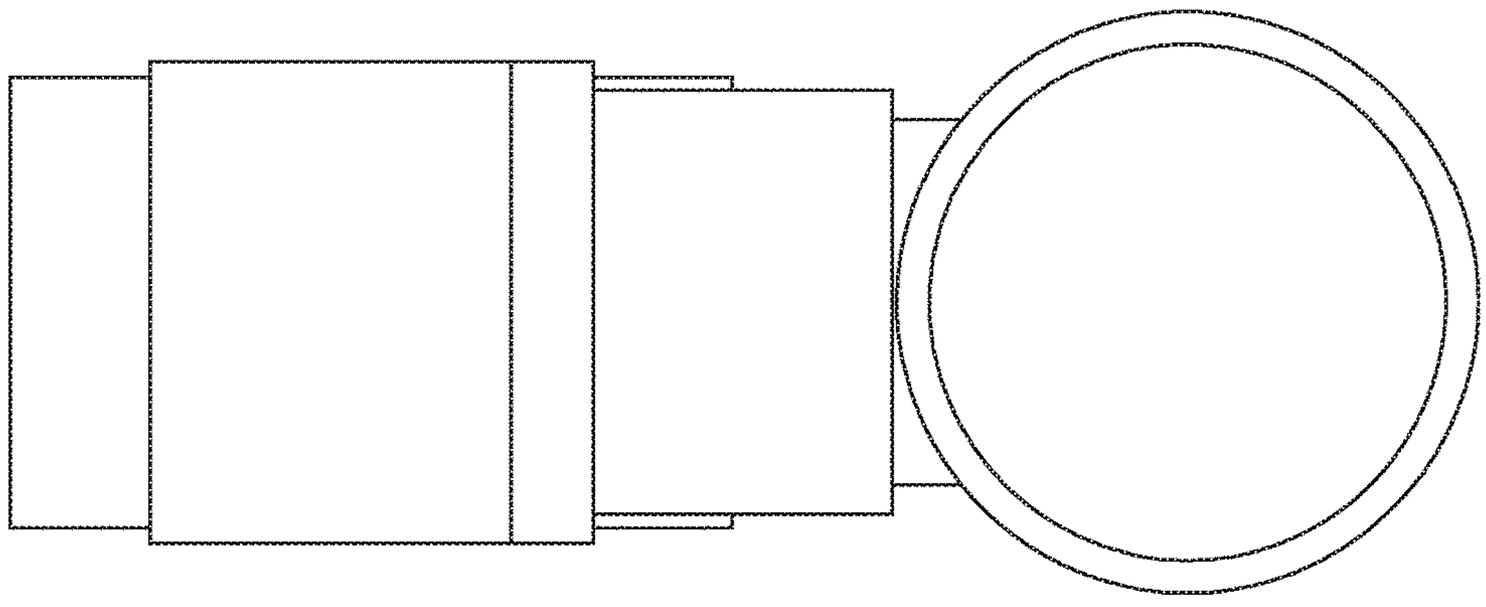

FIG.48

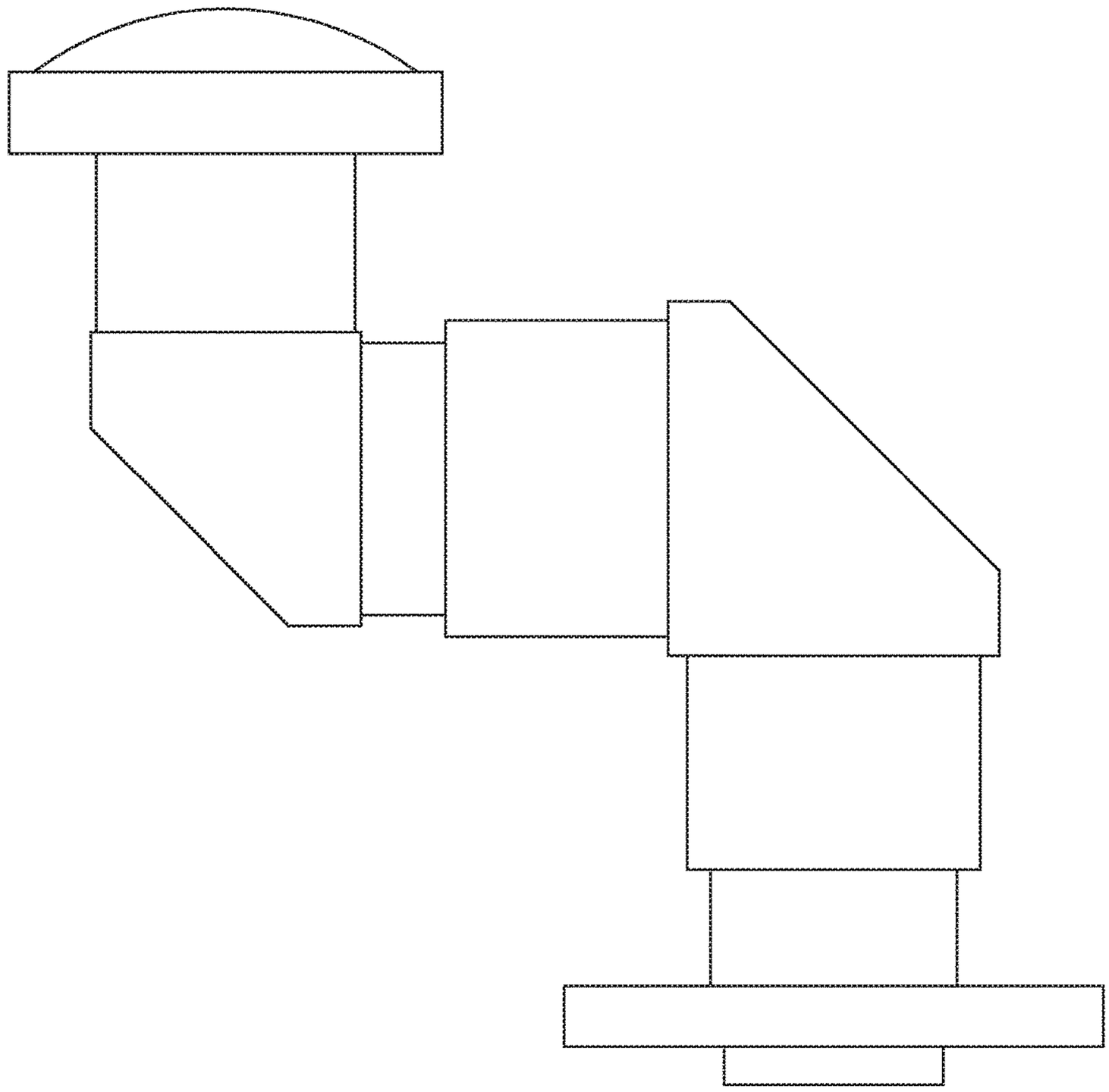

FIG.49

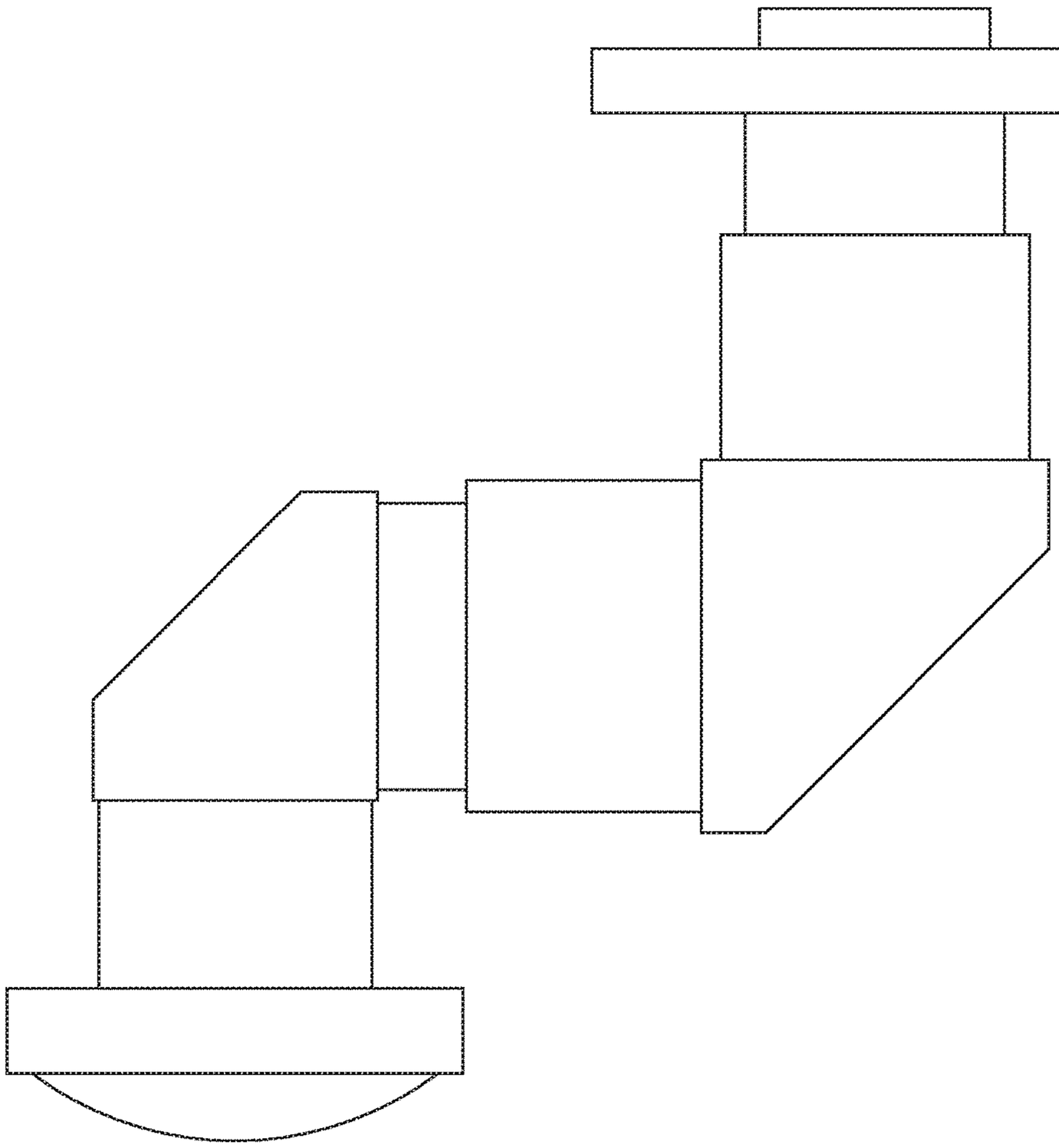

FIG.50

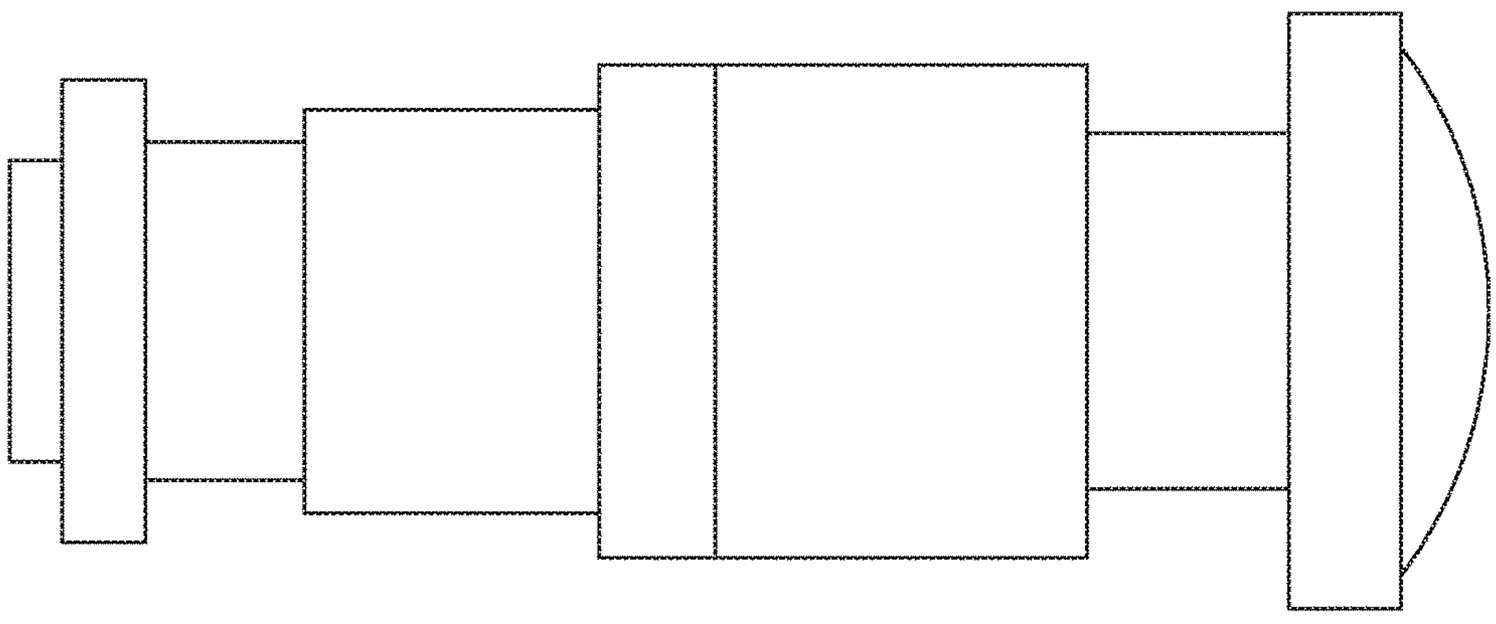

FIG.51

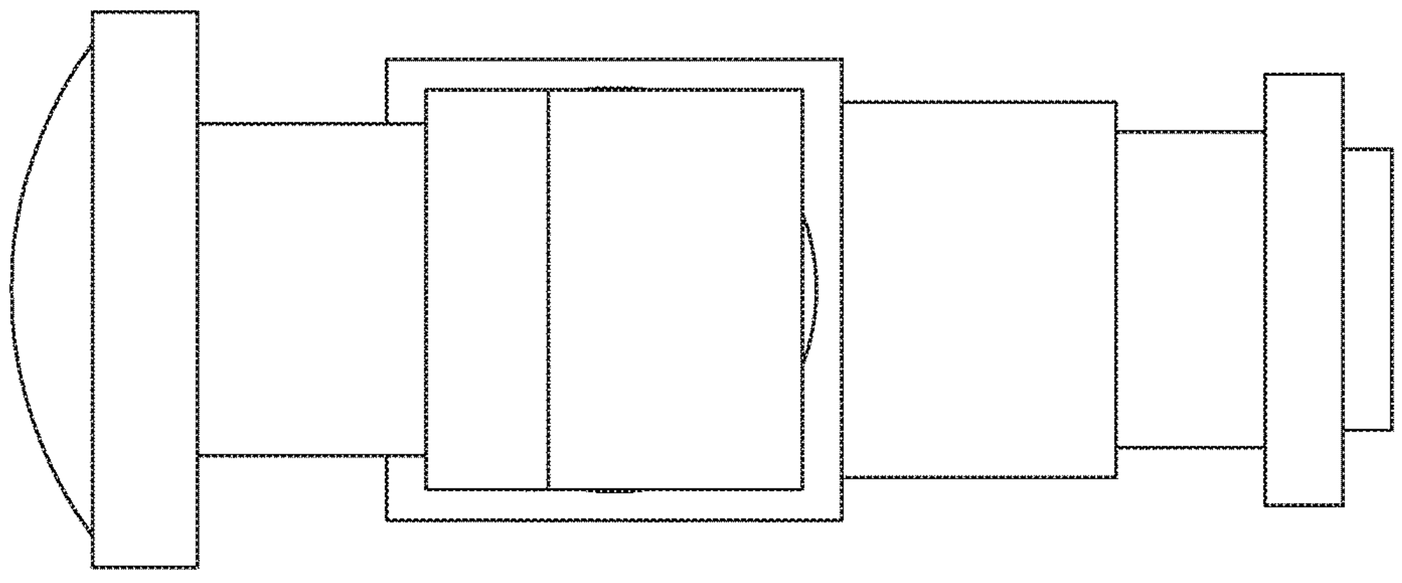

FIG.52

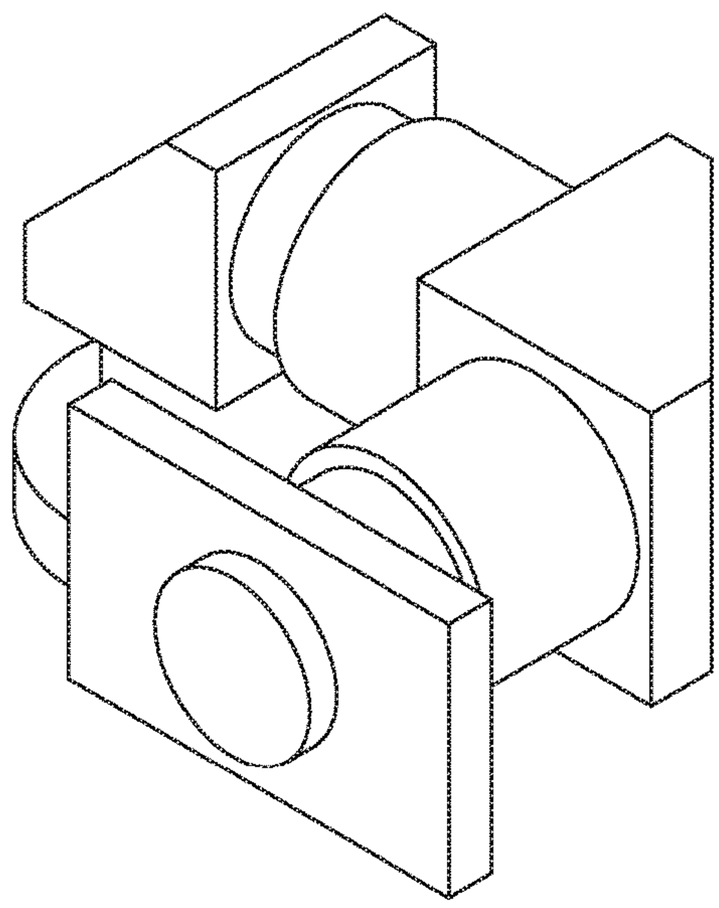

FIG.53

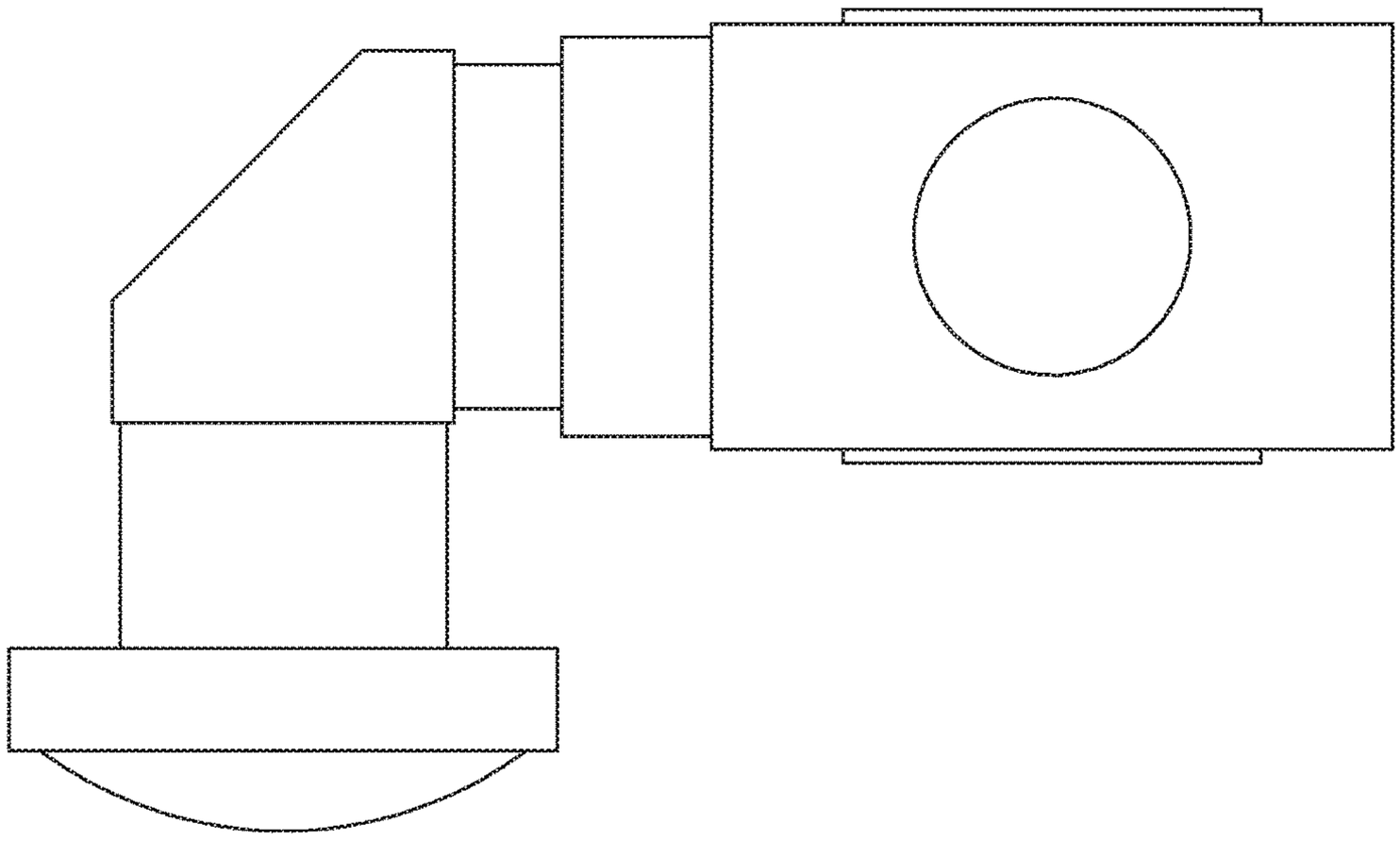

FIG.54

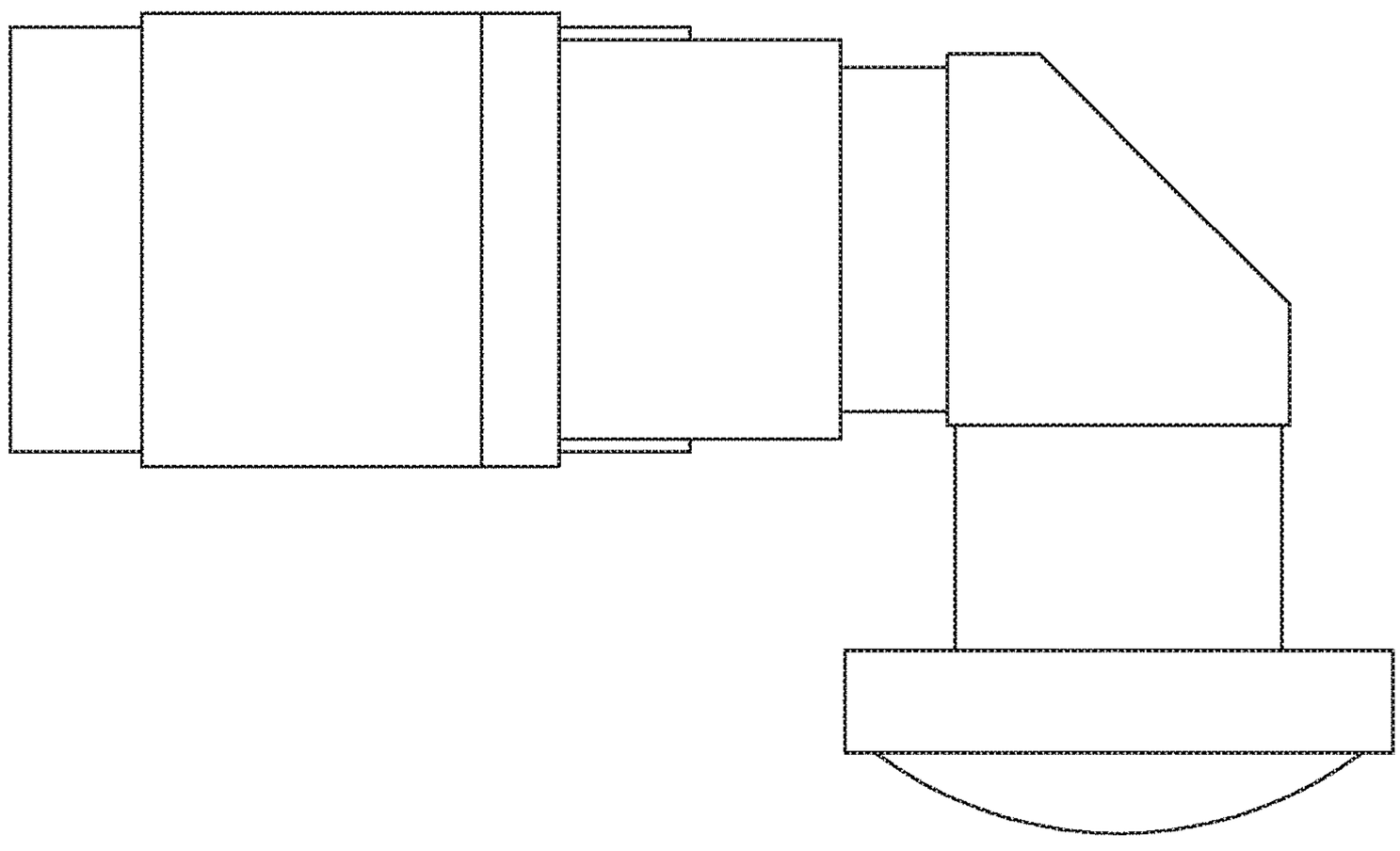

FIG.55

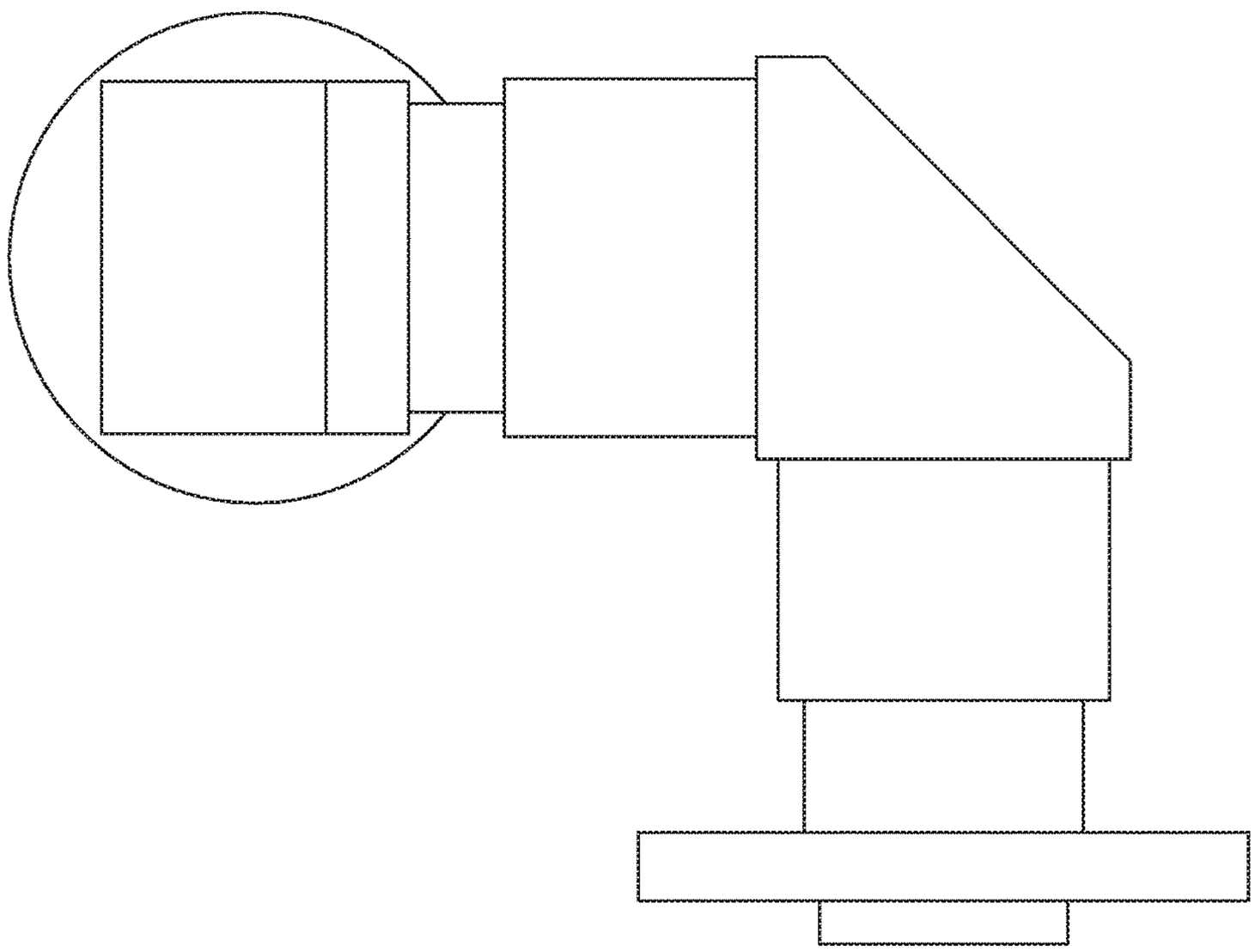

FIG.56

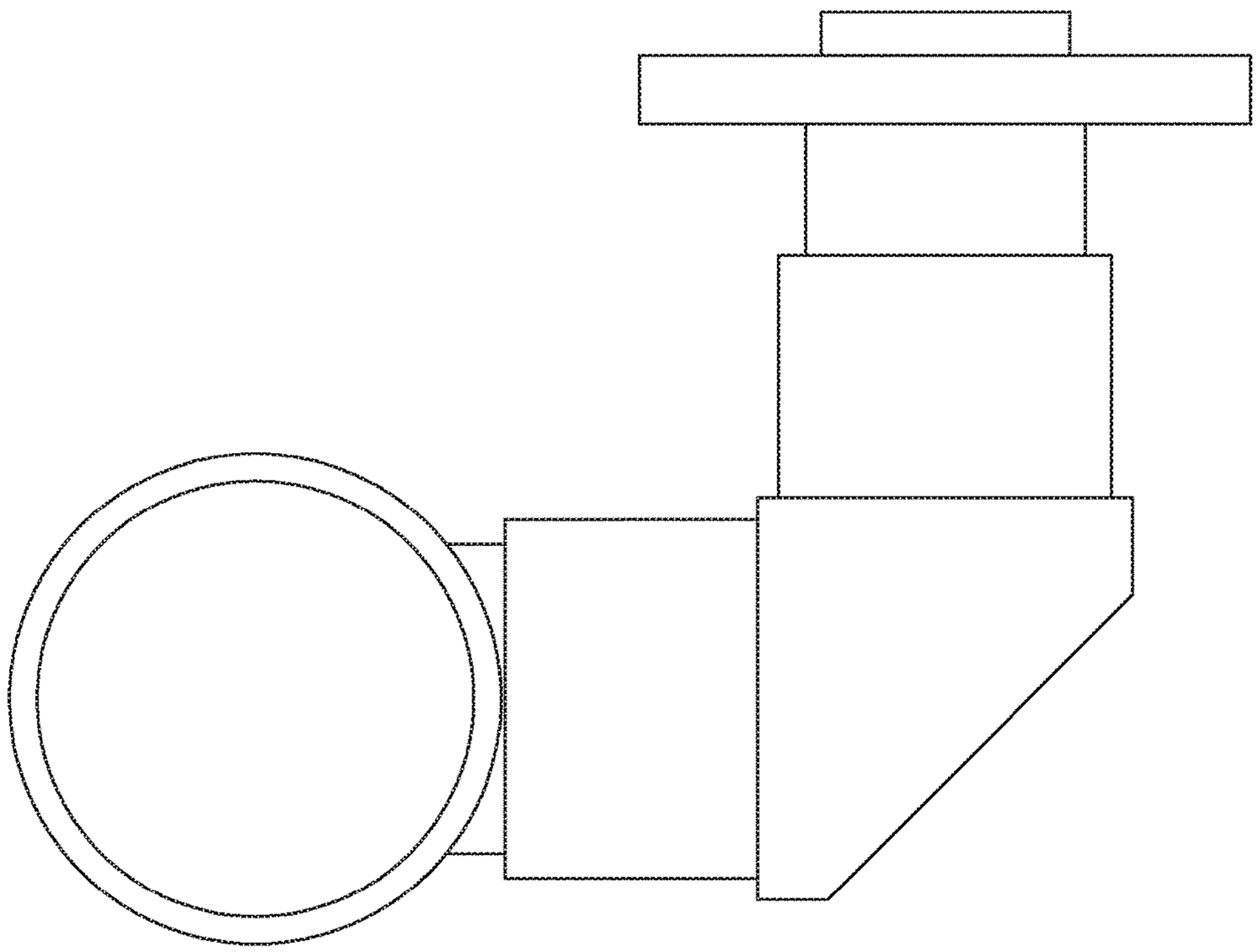

FIG.57

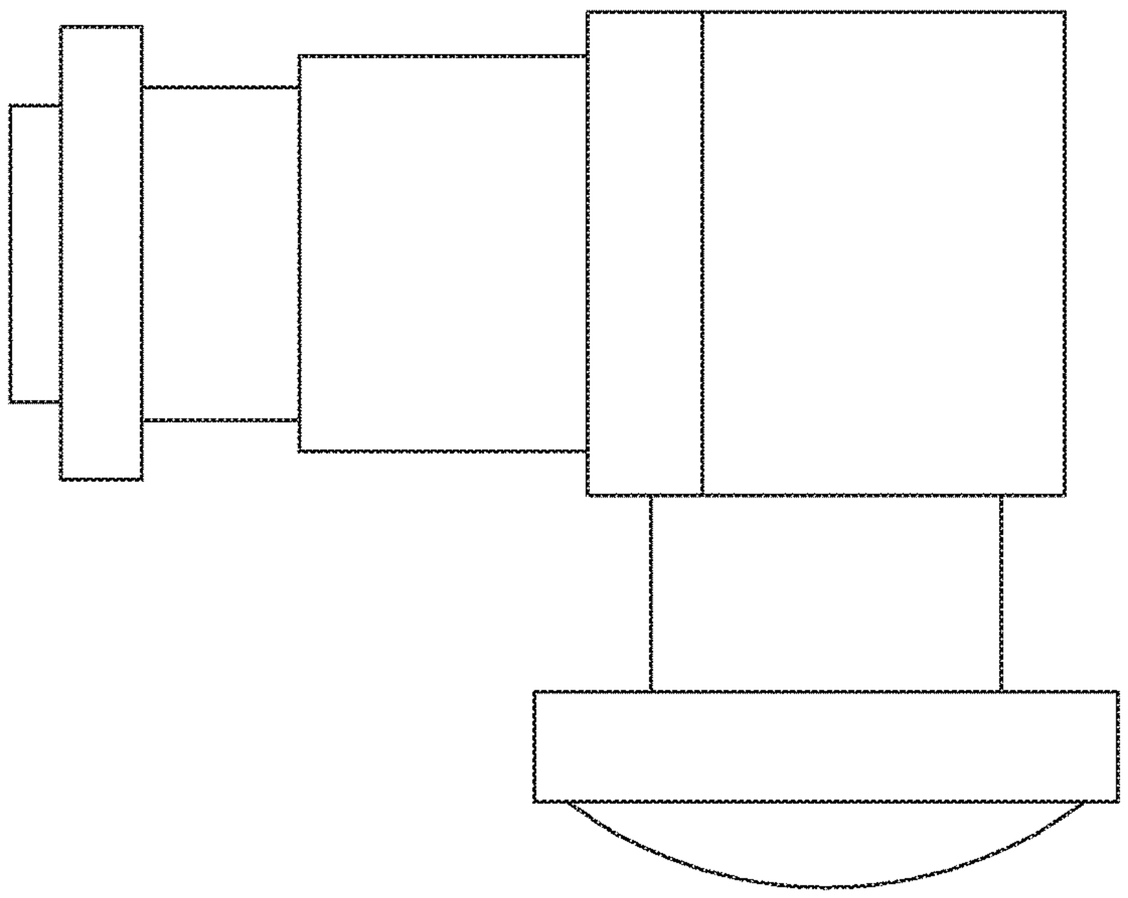

FIG.58

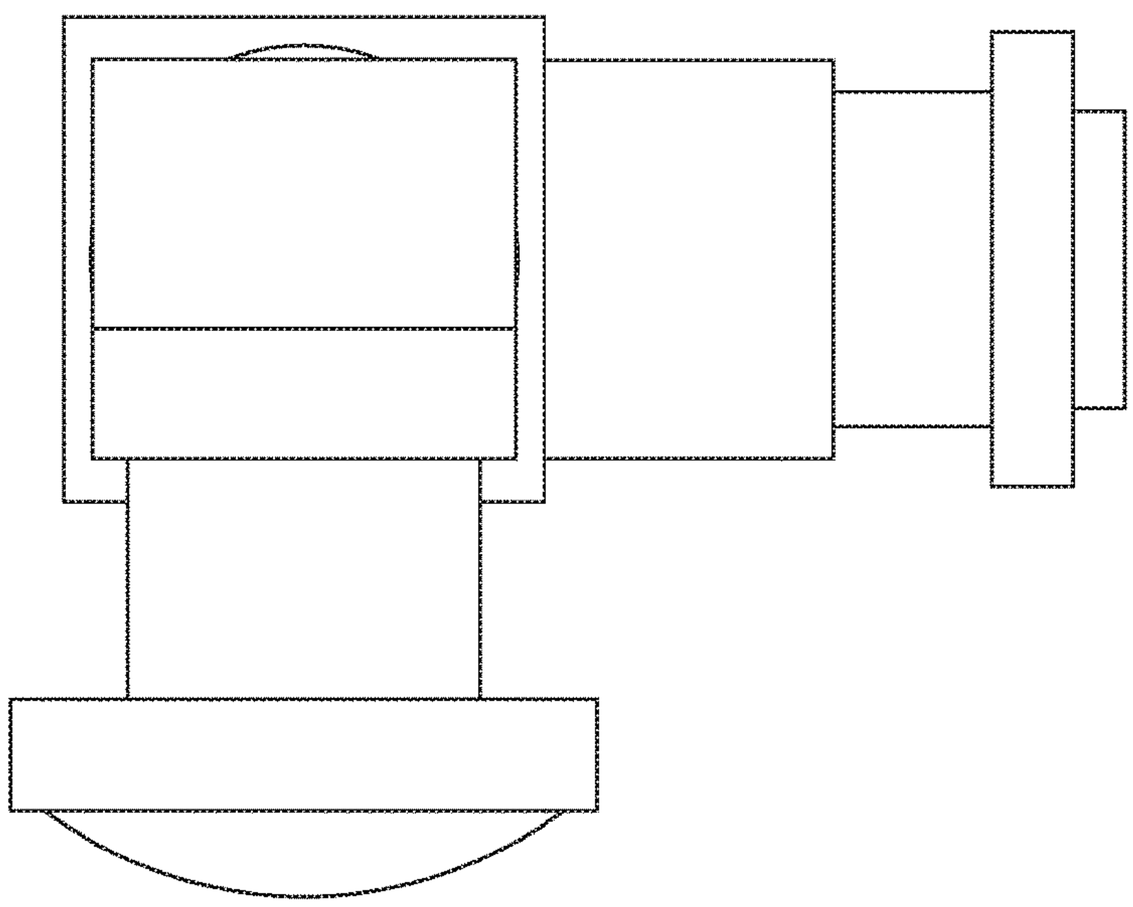

FIG.59