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(12) **United States Design Patent** (10) **Patent No.:** **US D869,542 S**
Okayasu et al. (45) **Date of Patent:** **** Dec. 10, 2019**

- (54) **VARIABLE FOCAL LENGTH LENS**
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- (**) Term: **15 Years**
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- (51) **LOC (12) Cl.** **16-05**
- (52) **U.S. Cl.**
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- (58) **Field of Classification Search**
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D16/235, 242; 348/373–376;
359/826–828; 396/529–532, 535,
396/539–541
CPC G03B 17/02; G03B 19/04; G03B 17/56;
G03B 17/04; G03B 15/03; G03B 17/14;
H04N 5/2251; H04N 5/2252; H04N
5/2253; H04N 5/2254; G02B 7/02; G02B
7/04; G02B 7/14
See application file for complete search history.

(56) **References Cited**
U.S. PATENT DOCUMENTS

- D428,618 S 7/2000 McBride
- D430,888 S 9/2000 Adachi et al.

- D493,186 S 7/2004 Moore et al.
- D541,326 S 4/2007 Ford et al.
- D665,005 S * 8/2012 Asano D16/219
- D695,809 S 12/2013 Katori et al.
- 8,717,413 B2 5/2014 Wilson et al.
- D783,078 S * 4/2017 Kim D16/219
- D783,700 S * 4/2017 Tagawa D16/219
- D810,169 S 2/2018 Bhattacharya
- D829,261 S 9/2018 Matsumiya et al.
- D837,927 S * 1/2019 Trulsson D22/109
- D846,691 S * 4/2019 Cheng D22/109
- D856,458 S * 8/2019 Cheng D22/109

(Continued)

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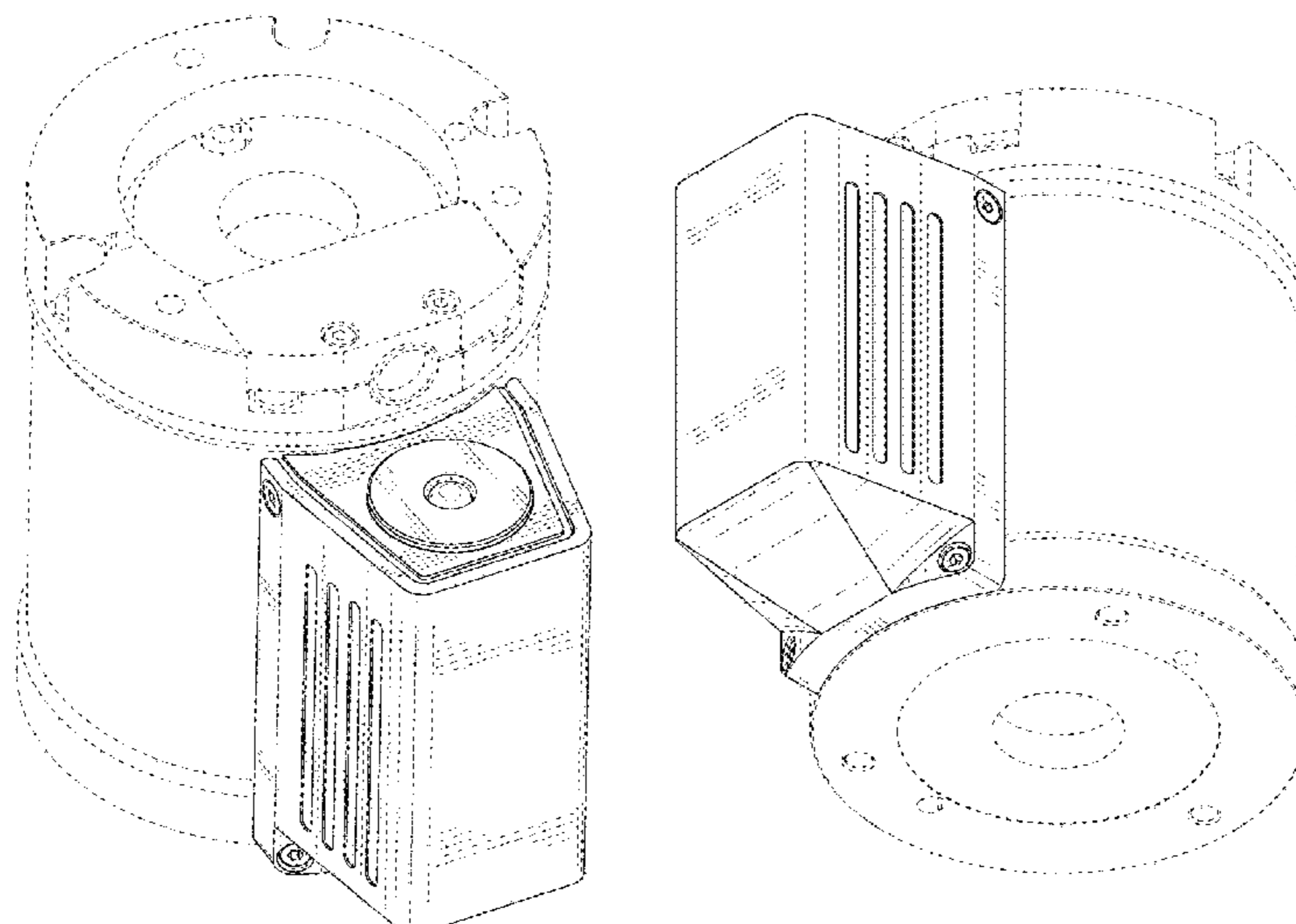
(57) **CLAIM**

The ornamental design for a variable focal length lens, as shown and described.

DESCRIPTION

FIG. 1 is a top front perspective view of a variable focal length lens;
 FIG. 2 is a bottom rear perspective view thereof;
 FIG. 3 is a front view thereof;
 FIG. 4 is a rear view thereof;
 FIG. 5 is a right-side view thereof;
 FIG. 6 is a left-side view thereof;
 FIG. 7 is a top view thereof;
 FIG. 8 is a bottom view thereof; and,
 FIG. 9 is a top rear perspective view thereof, shown in condition of use with an image pickup device and a microscope disclosed in broken lines to illustrate an environment. The broken lines depict portions of the variable focal length lens in which the design is embodied that form no part of the claimed design. The broken lines showing an image pickup device and a microscope in FIG. 9 represent environmental structure and form no part of the claimed design.

1 Claim, 9 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D856,459 S * 8/2019 Hamilton D22/109
2002/0159146 A1 10/2002 Leimbach et al.
2014/0268361 A1 9/2014 Nunnink et al.
2015/0301303 A1 10/2015 Kim et al.

* cited by examiner

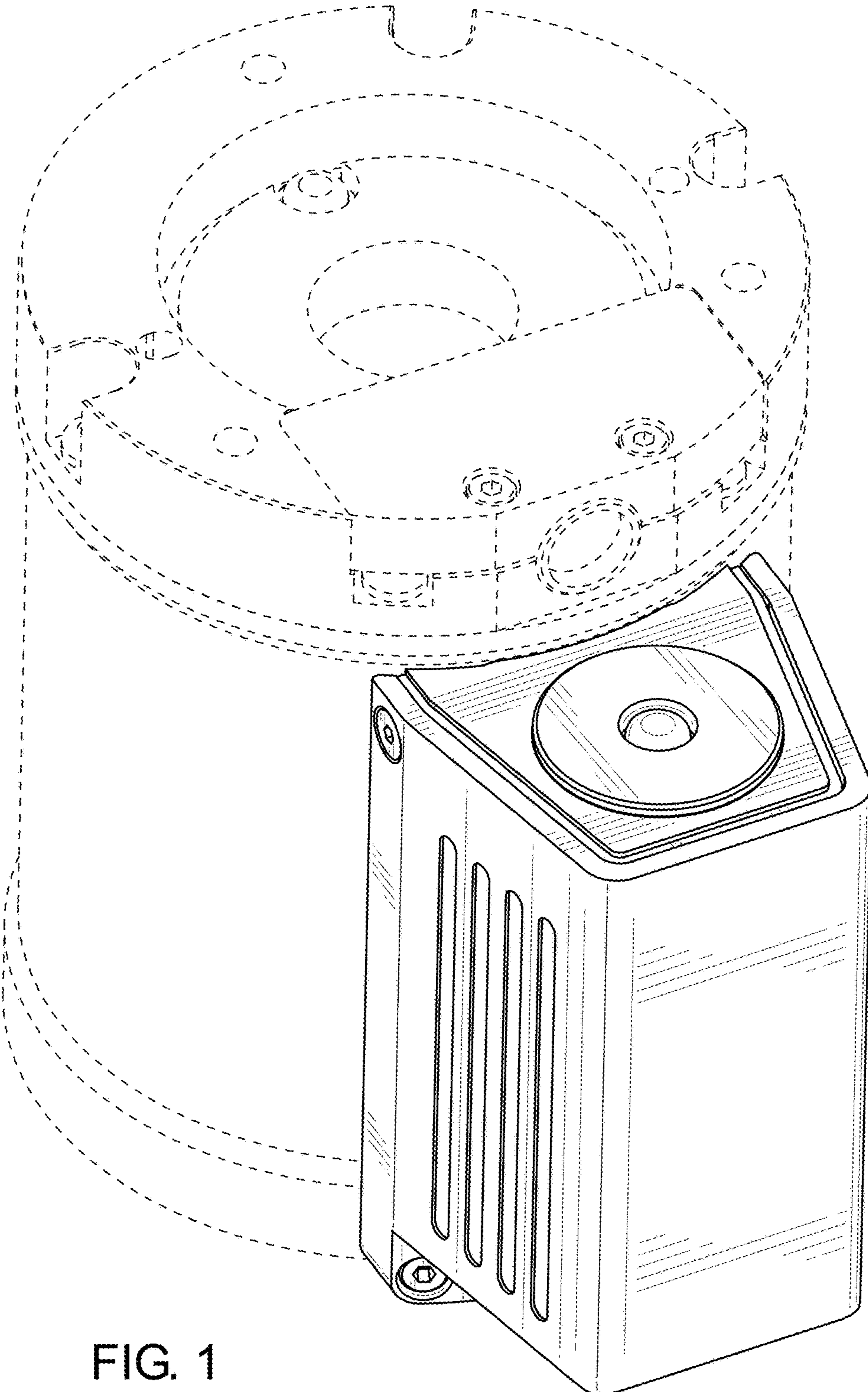


FIG. 1

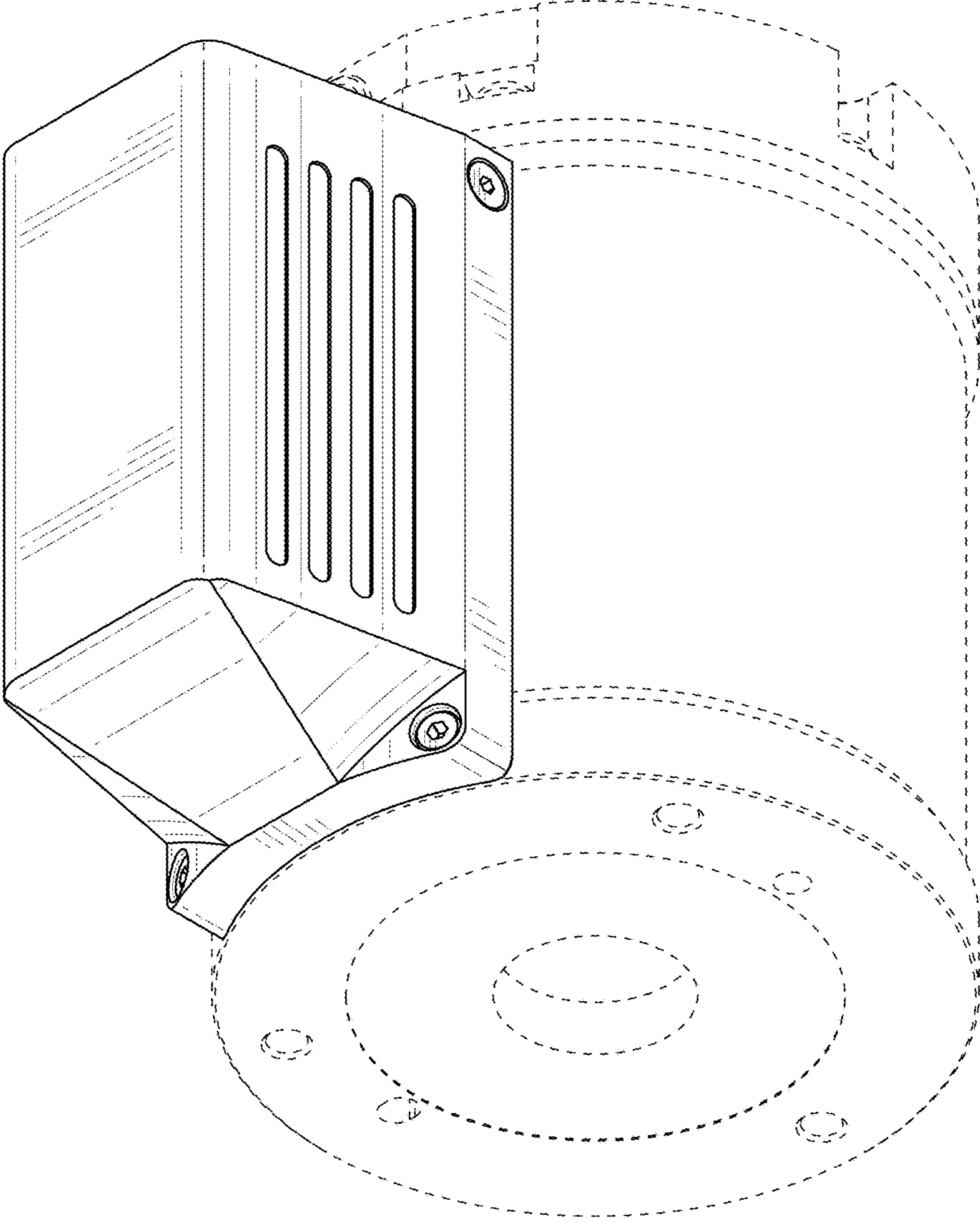


FIG. 2

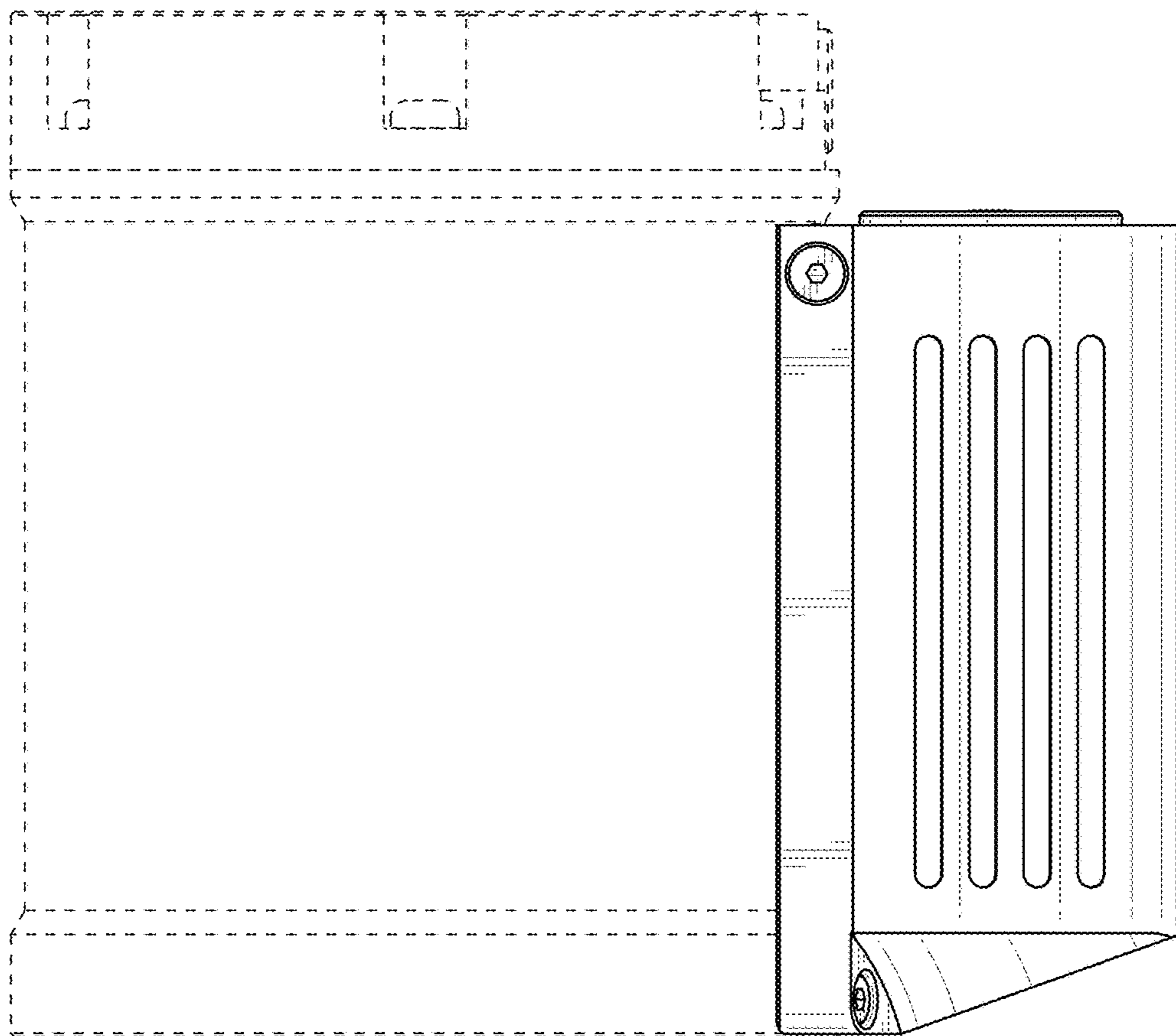


FIG. 3

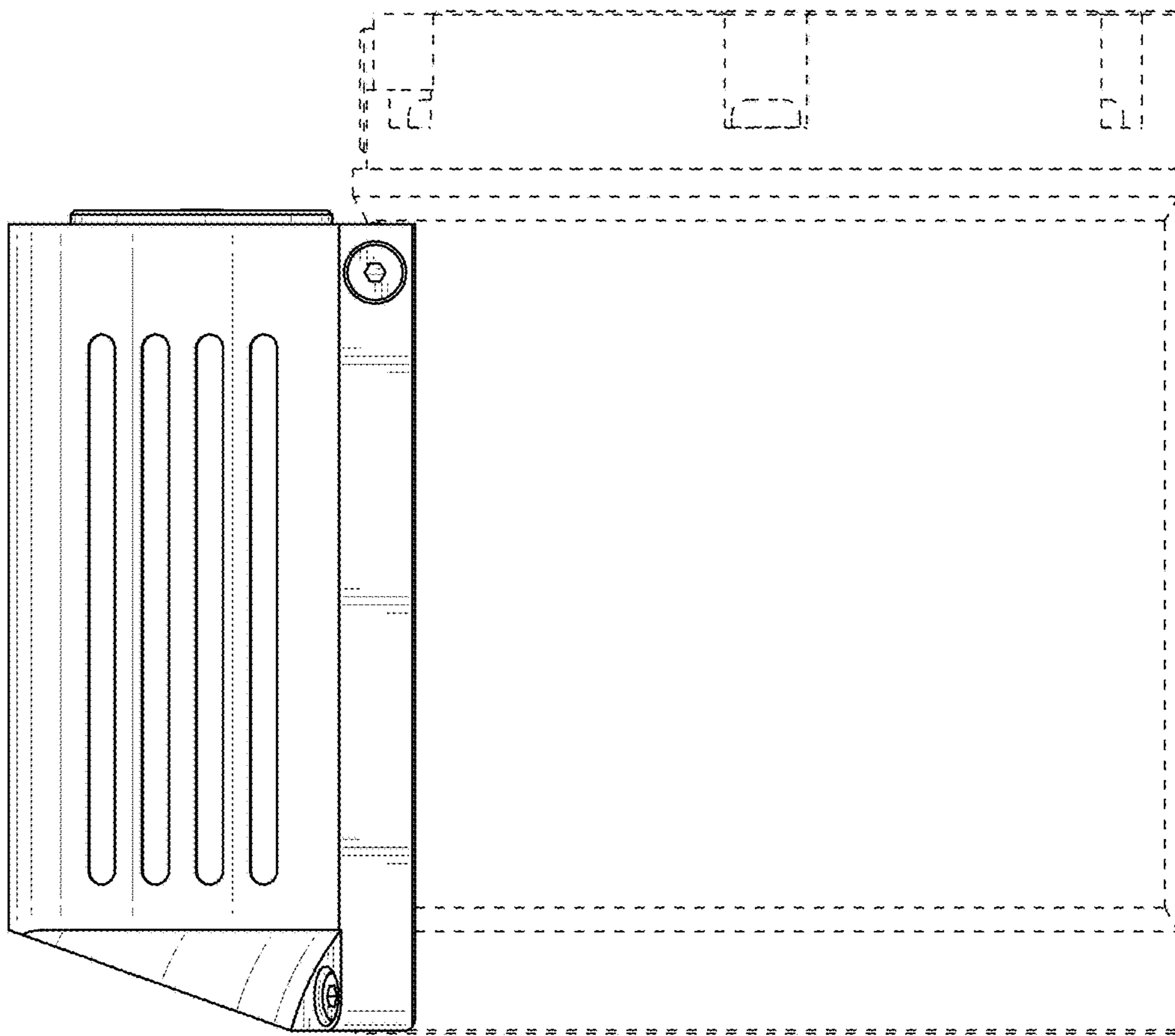


FIG. 4

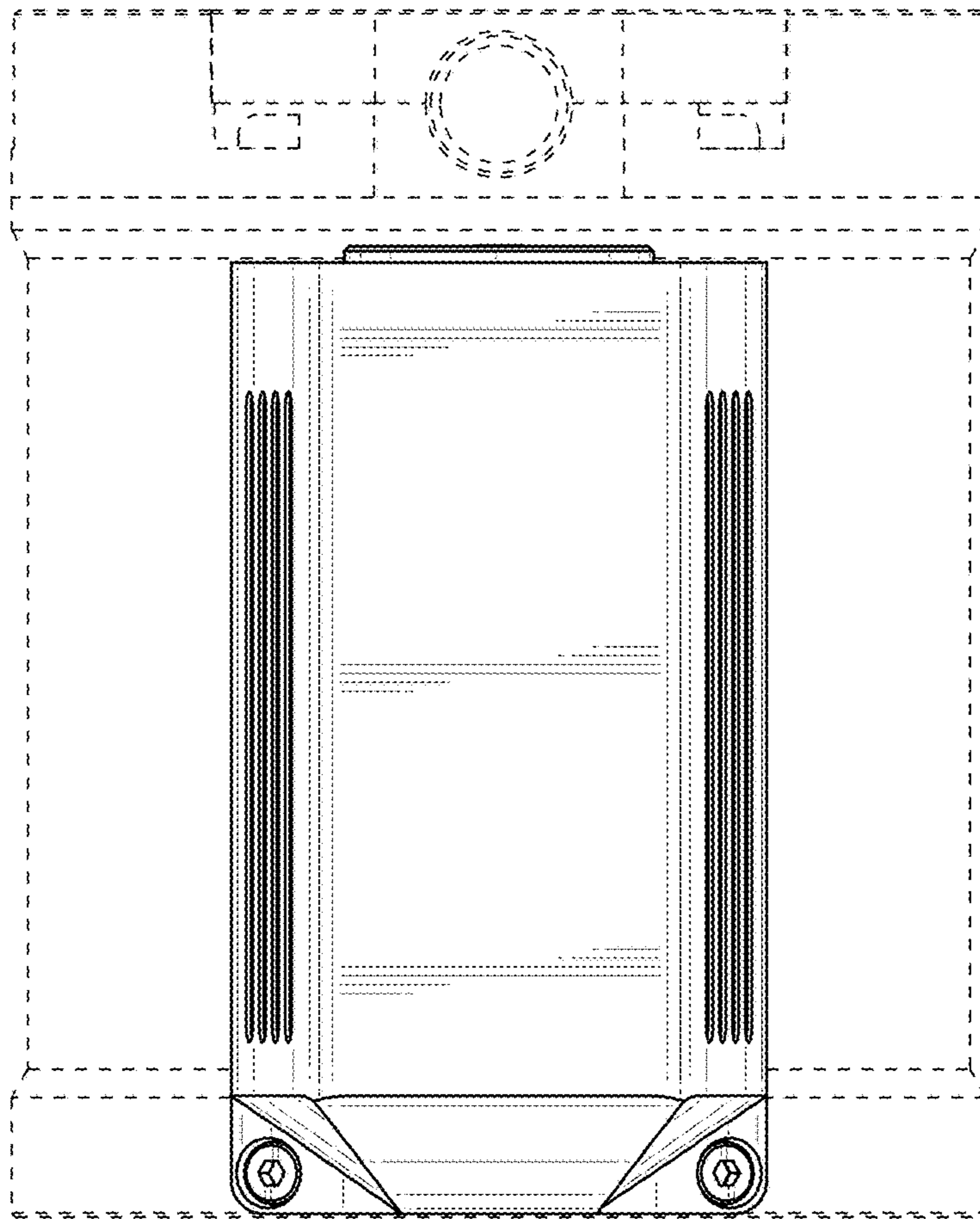


FIG. 5

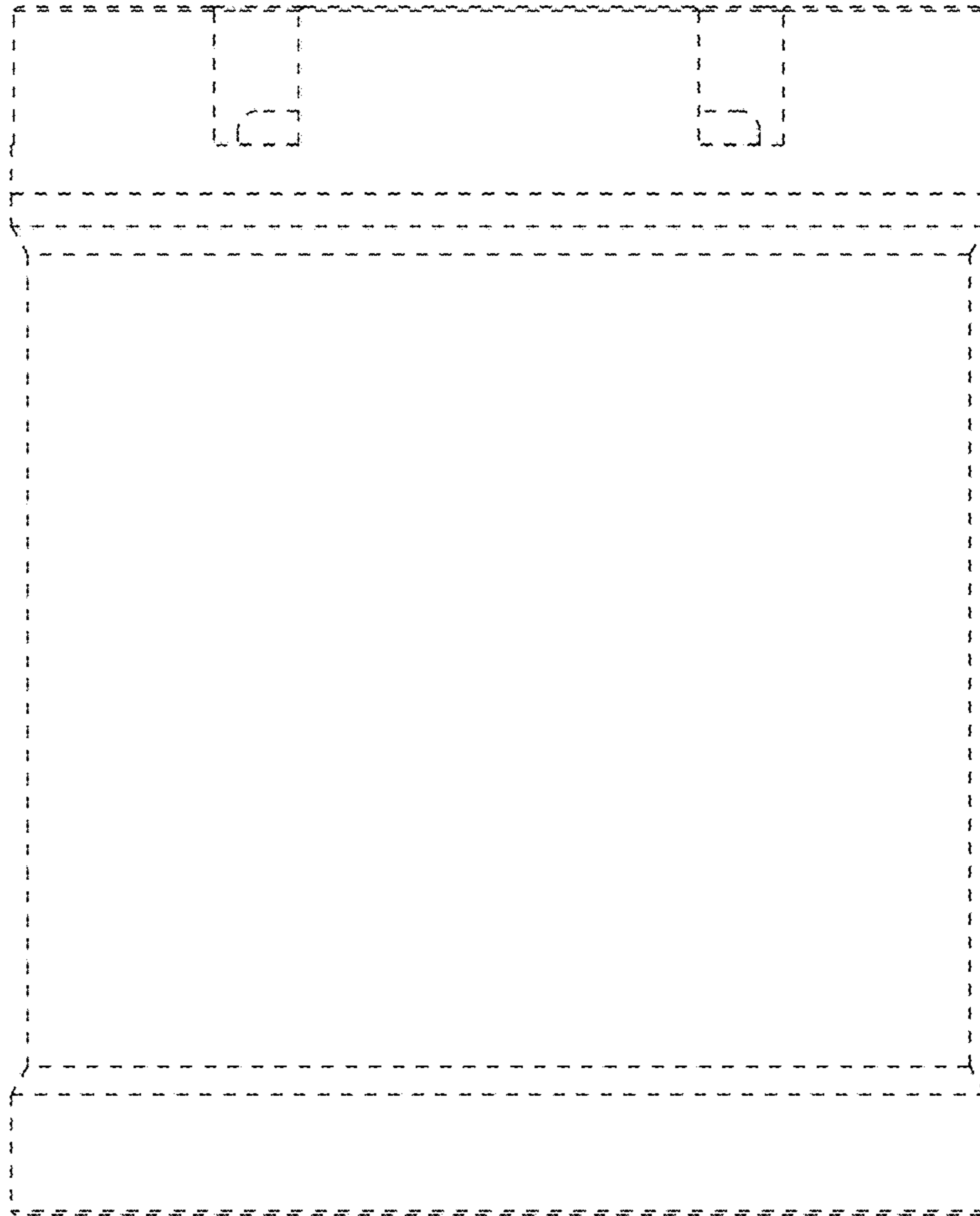


FIG. 6

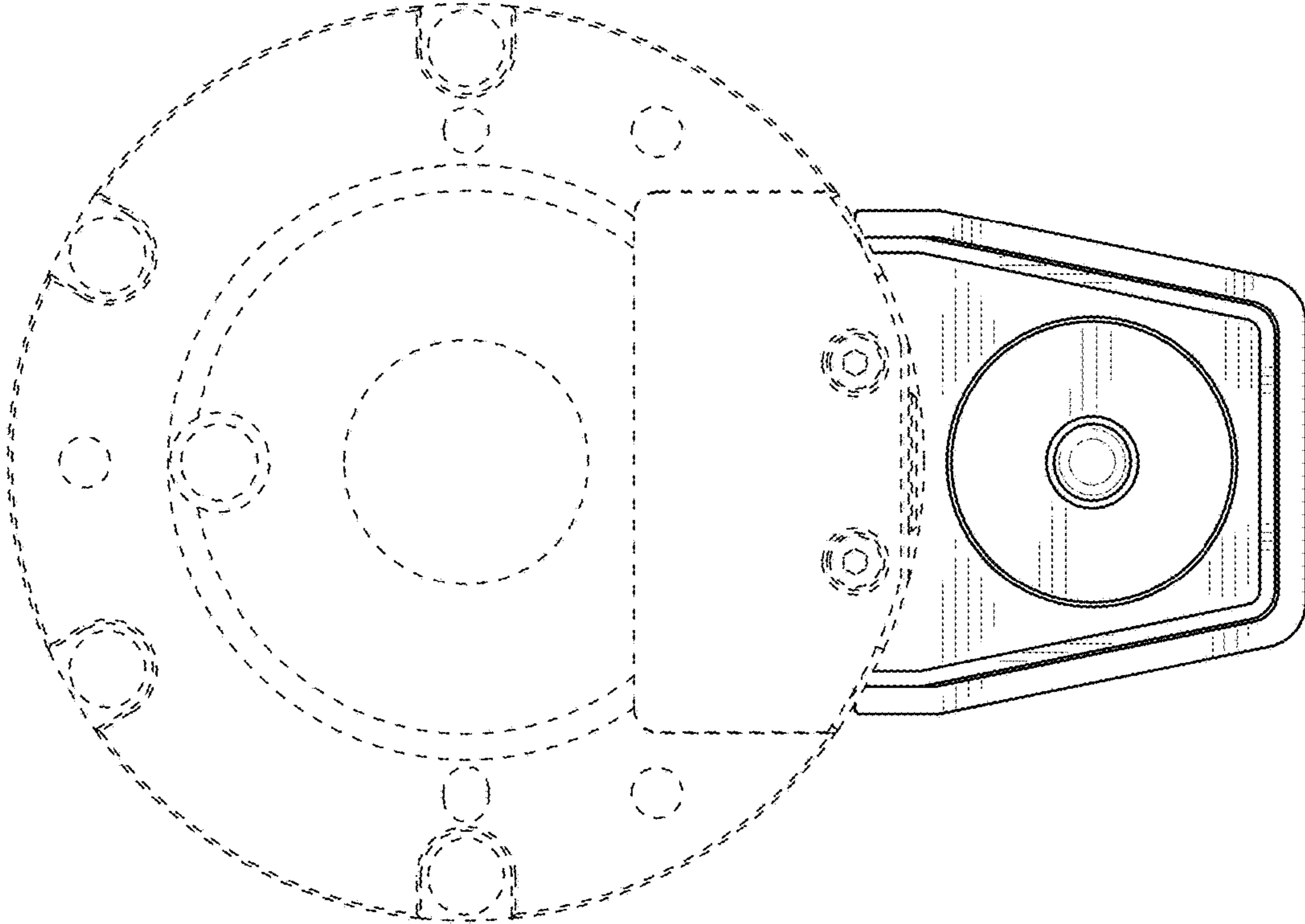


FIG. 7

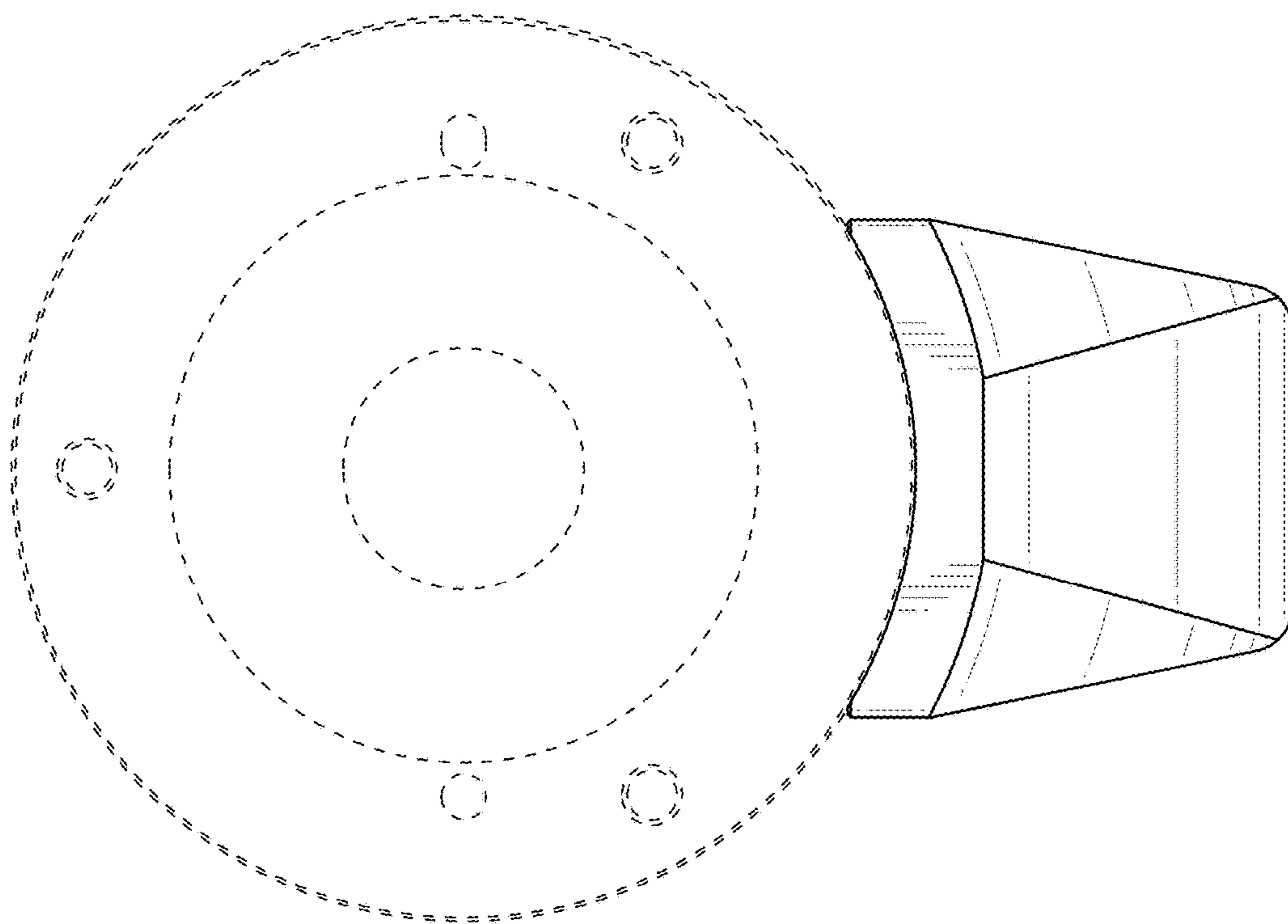


FIG. 8

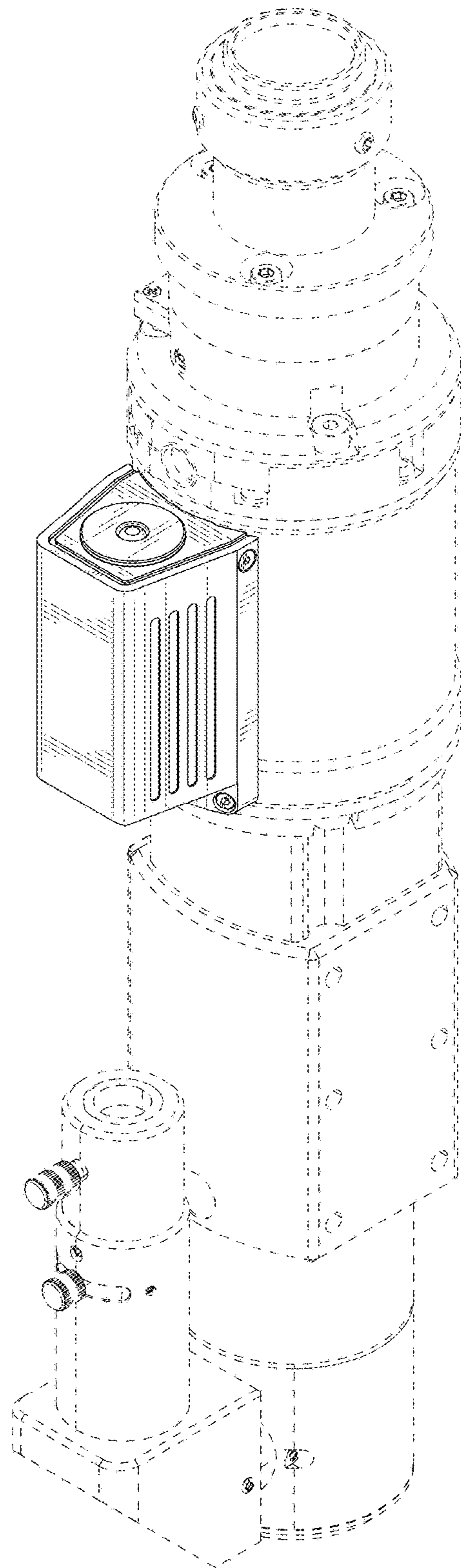


FIG. 9