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(12) **United States Design Patent** (10) **Patent No.:** **US D978,843 S**  
**Hu** (45) **Date of Patent:** **\*\* Feb. 21, 2023**

(54) **BROADBAND HORN ANTENNA**

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(71) Applicant: **Nan Hu**, Irvine, CA (US)

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(72) Inventor: **Nan Hu**, Irvine, CA (US)

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

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(21) Appl. No.: **29/762,957**

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(52) **U.S. Cl.**  
USPC ..... **D14/230**

(58) **Field of Classification Search**  
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D13/184, 199, 101, 117, 18, 154, 155  
CPC .. G01S 13/4409; G01S 13/4481; H01P 1/161;  
H01Q 13/0208; H01Q 13/10; H01Q  
13/00; H01Q 13/02; H01Q 13/0241;  
H01Q 19/13; H01Q 3/08  
See application file for complete search history.

*Primary Examiner* — Daniel J Domino  
*Assistant Examiner* — Samina Vieth

(57) **CLAIM**

The ornamental design for a broadband horn antenna, as shown and described.

(56) **References Cited**

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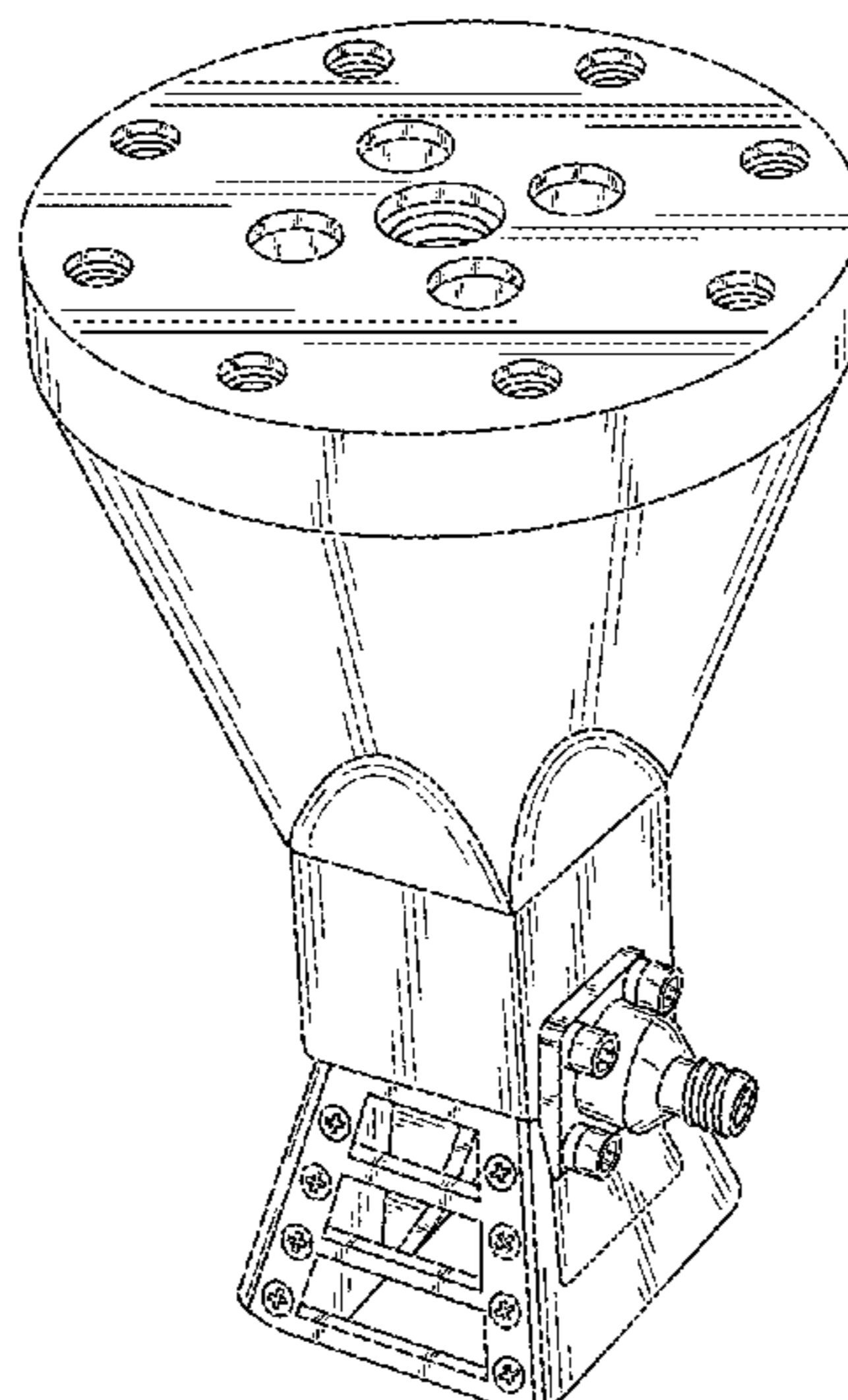
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**DESCRIPTION**

FIG. 1 is a perspective view of a broadband horn antenna design showing the new design.  
FIG. 2 is another perspective view of a broadband horn antenna.  
FIG. 3 is a front view of a broadband horn antenna.  
FIG. 4 is a rear view of a broadband horn antenna.  
FIG. 5 is a right side view of a broadband horn antenna.  
FIG. 6 is a left side view of a broadband horn antenna.  
FIG. 7 is a top view of a broadband horn antenna; and, FIG. 8 is a bottom view of a broadband horn antenna.  
Any shading and cross-hatching are not features of the design but are utilized to illustrate the surface contours of the broadband horn antenna design in the drawings.  
The broken lines depict portions of the broadband horn antenna that form no part of the claimed design.

**1 Claim, 8 Drawing Sheets**



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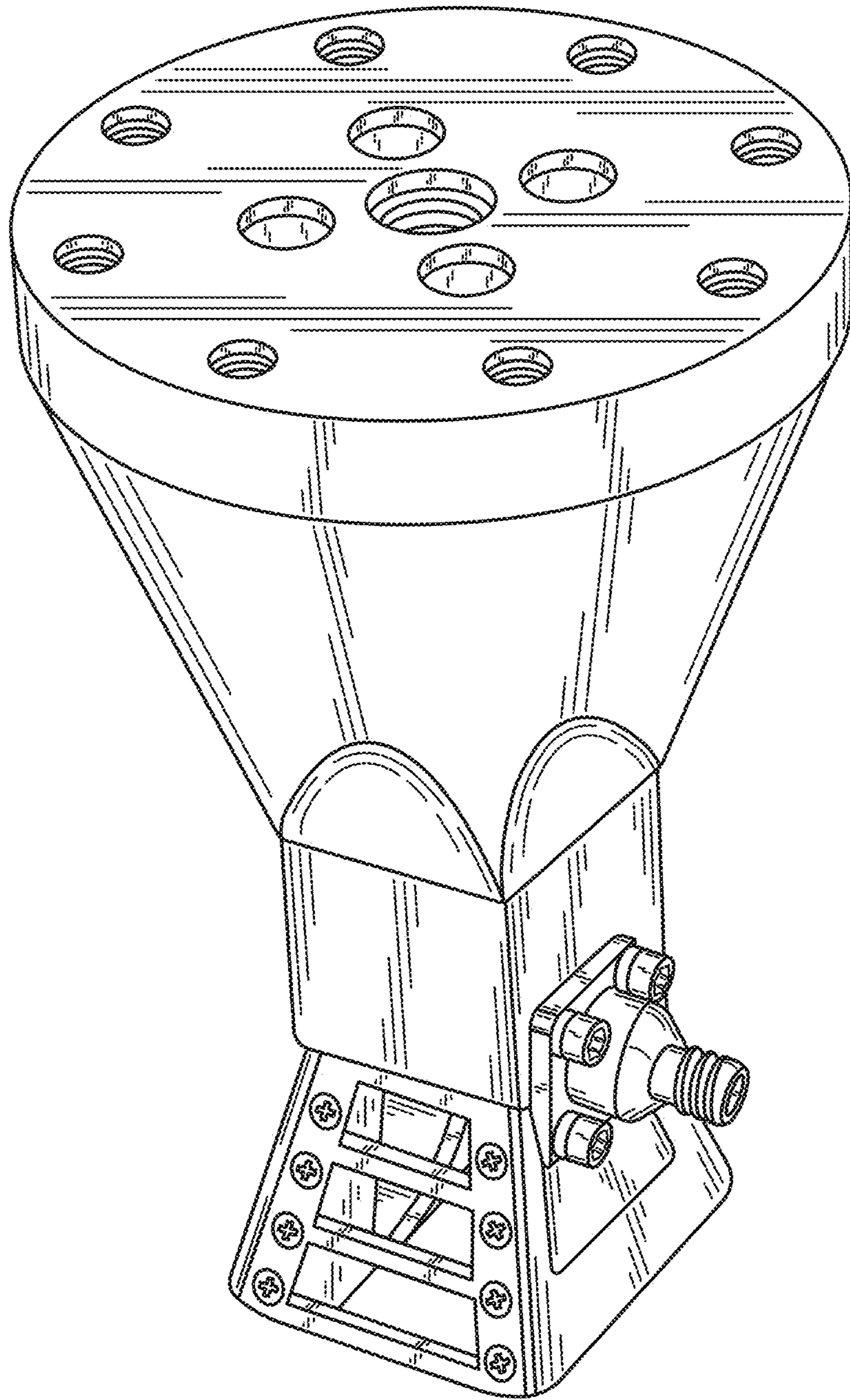


FIG. 1

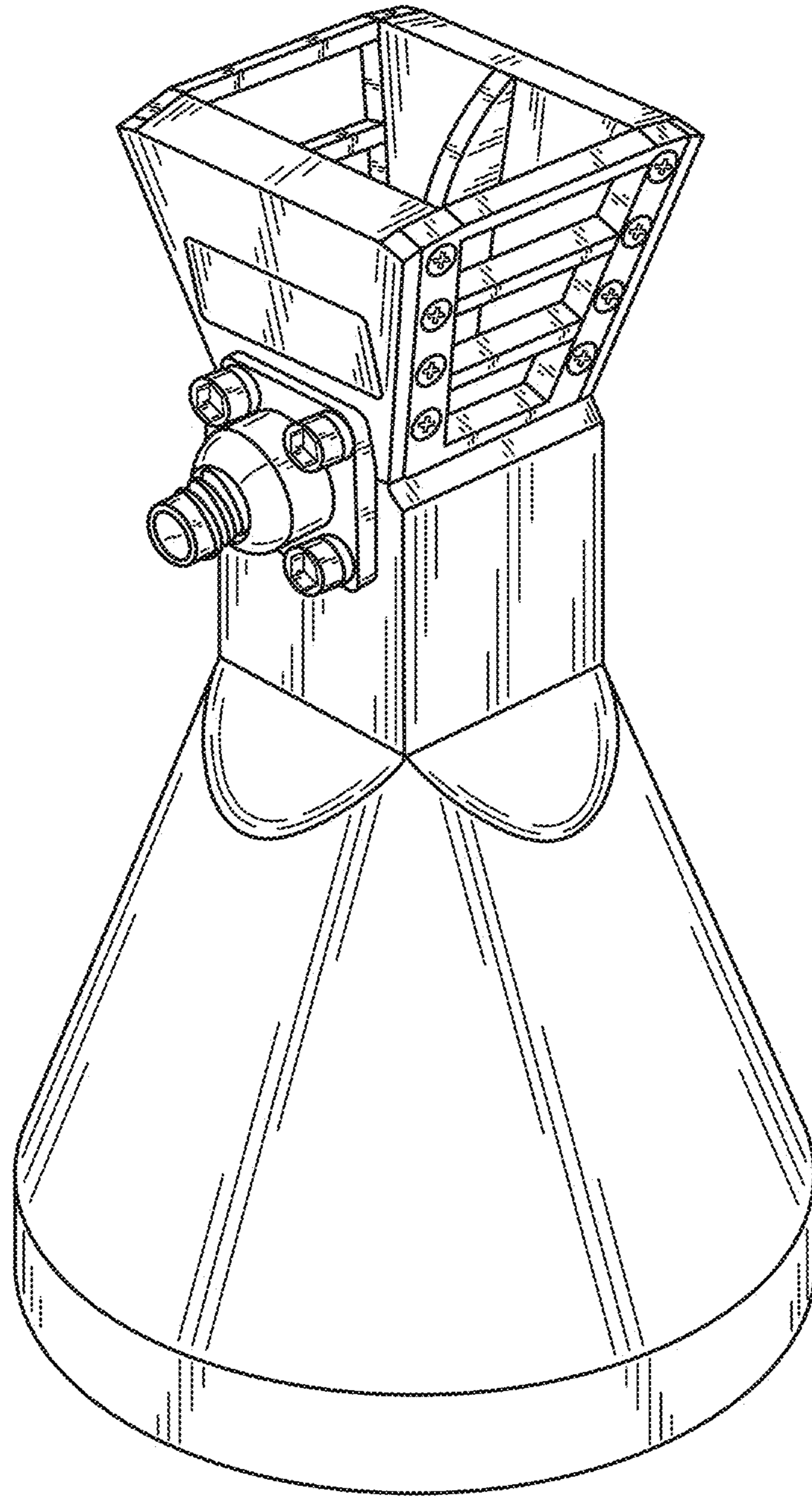


FIG. 2

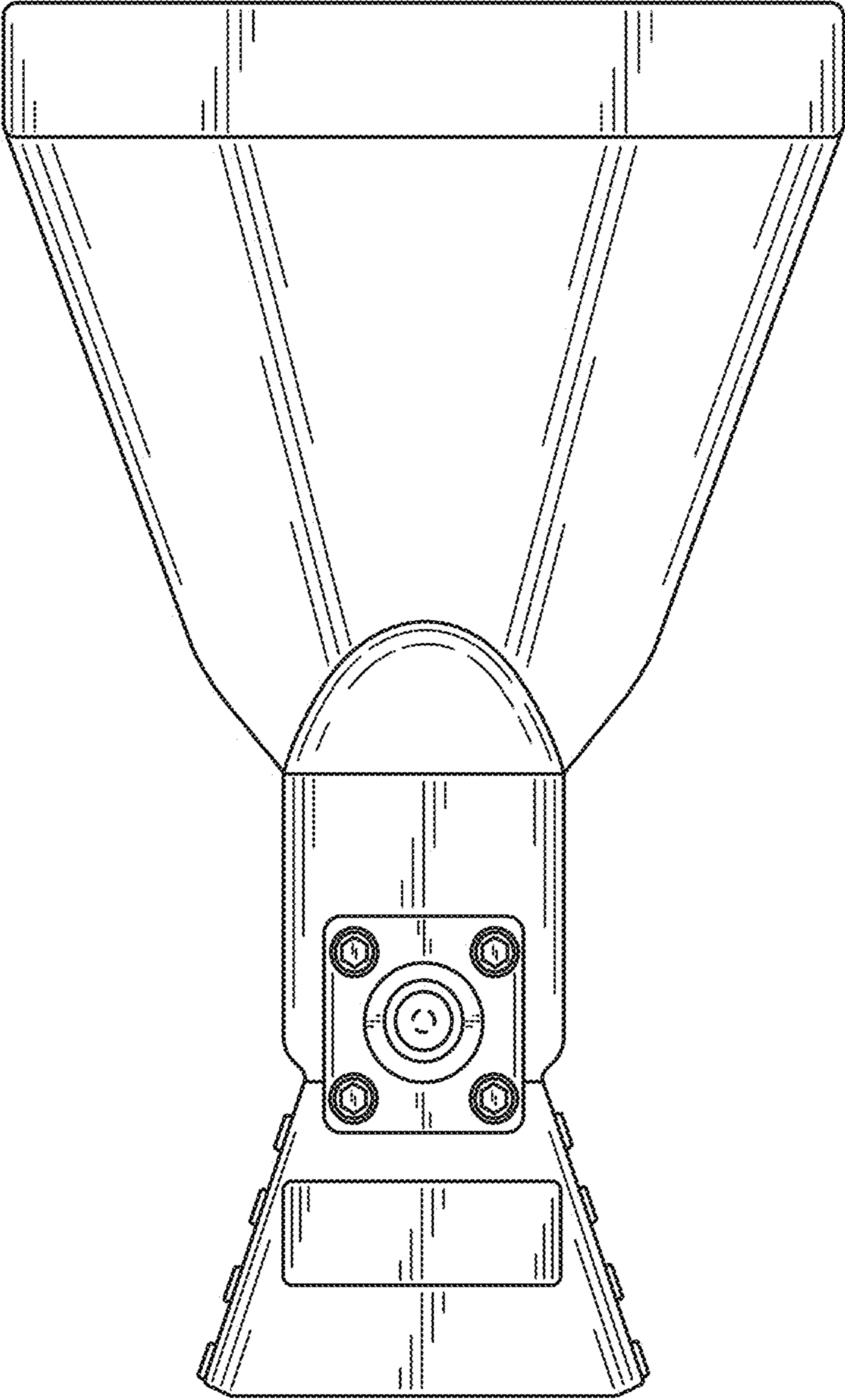


FIG. 3

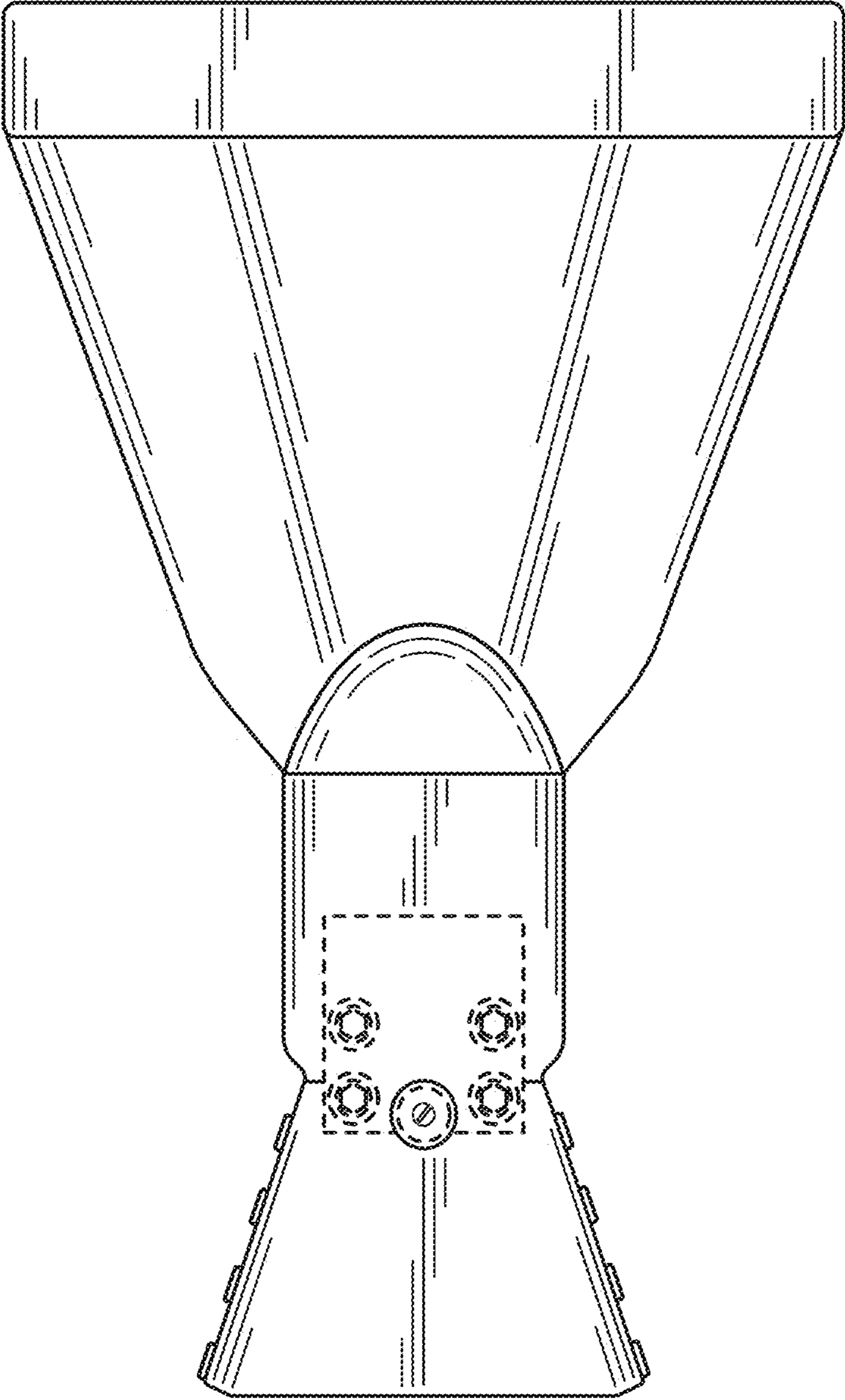


FIG. 4

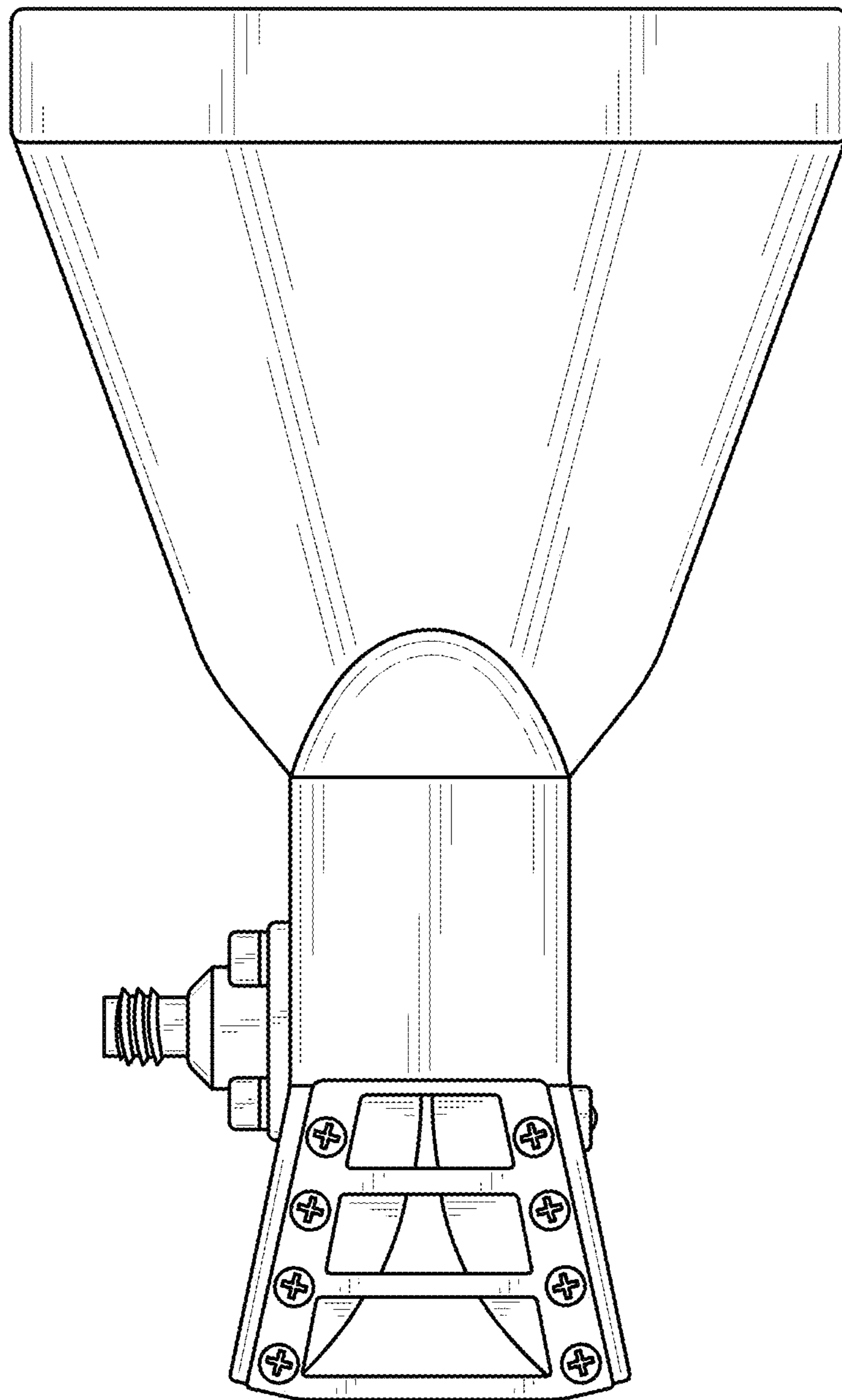


FIG. 5

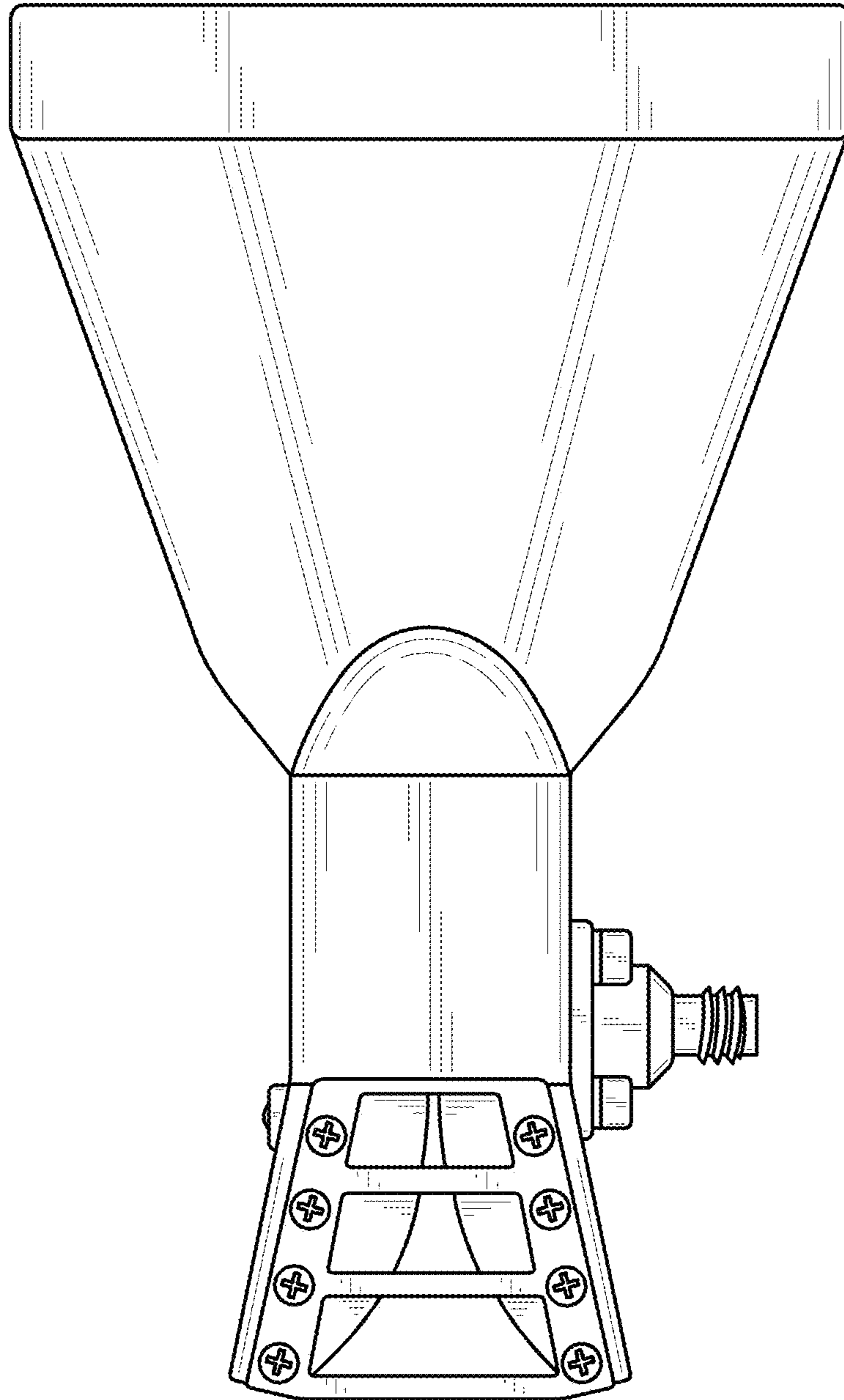


FIG. 6



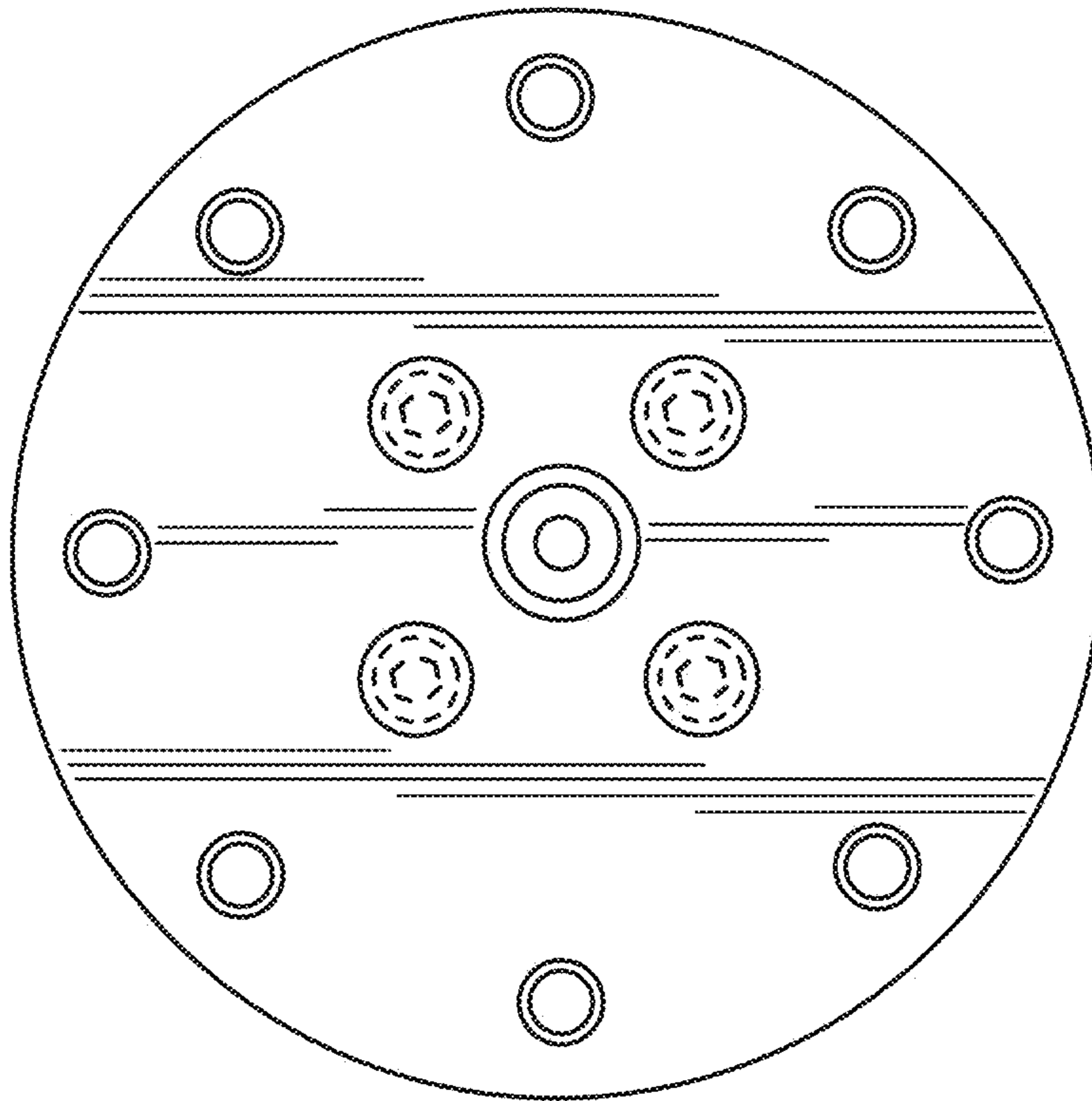


FIG. 7

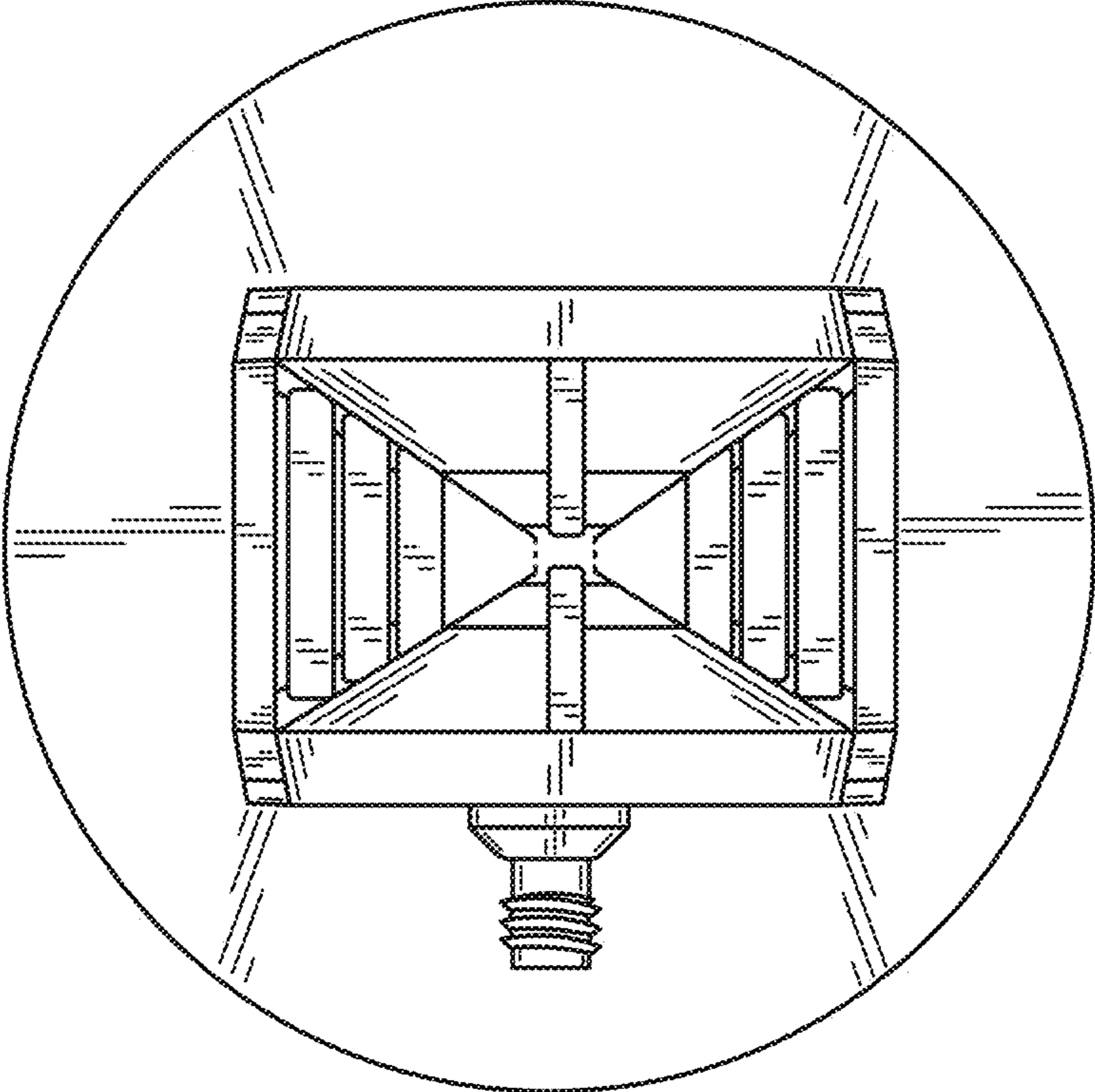


FIG. 8