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(12) **United States Design Patent** (10) **Patent No.:** **US D972,356 S**  
**Zhou** (45) **Date of Patent:** **\*\* Dec. 13, 2022**

(54) **LIQUID FILLING MACHINE**

FOREIGN PATENT DOCUMENTS

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CN 300825159 \* 9/2008  
CN 300844198 \* 10/2008

(Continued)

(72) Inventor: **Baowang Zhou, Wenzhou (CN)**

OTHER PUBLICATIONS

(\* ) Notice: Patent file contains an affidavit/declaration under 37 CFR 1.130(b).

Vevor US, "Newest Design BSC-A03 Series 5-50ml Manual Liquid Filling Machine," Reviewed Sep. 10, 2020, Vevor US, www.vevor.com/liquid-filling-machine-c\_10468/5-50ml-manual-liquid-paste-filling-machine-304-stainless-cream-cosmetic-filler-p\_010937221674 (Year: 2020).\*

(Continued)

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

(21) Appl. No.: **29/803,316**

(22) Filed: **Aug. 12, 2021**

(51) **LOC (13) Cl.** ..... **15-10**

(52) **U.S. Cl.**  
USPC ..... **D7/306; D10/101; D15/199**

(58) **Field of Classification Search**  
USPC ..... D7/306, 308, 310-313, 368, 372, 381, D7/700; D8/51, 105, 499; D10/46.2, D10/46.3, 96, 97, 101; D15/122-125, D15/132, 145, 199

CPC .... B65B 1/04; B65B 1/06; B65B 1/16; B65B 1/18; B65B 1/20; B65B 1/26; B65B 1/30; B65B 1/36; B65B 39/007; B67C 3/02  
See application file for complete search history.

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(57) **CLAIM**

The ornamental design for a liquid filling machine, as shown and described.

**DESCRIPTION**

FIG. 1 is a front elevational view of a liquid filling machine showing my new design;  
FIG. 2 is a rear elevational view thereof;  
FIG. 3 is a left side view thereof;  
FIG. 4 is a right side view thereof;  
FIG. 5 is a top plan view thereof;  
FIG. 6 is a bottom plan view thereof;  
FIG. 7 is a perspective view thereof;  
FIG. 8 is a second perspective view thereof;  
FIG. 9 is a third perspective view thereof; and,  
FIG. 10 is a partial enlarged view of the portion indicated in FIG. 8.

The even broken lines in the figures are for the purposes of illustrating portions of the liquid filling machine which form no part of the claimed design. The dot-dash broken lines surround the enlarged partial view and form no part of the claimed design.

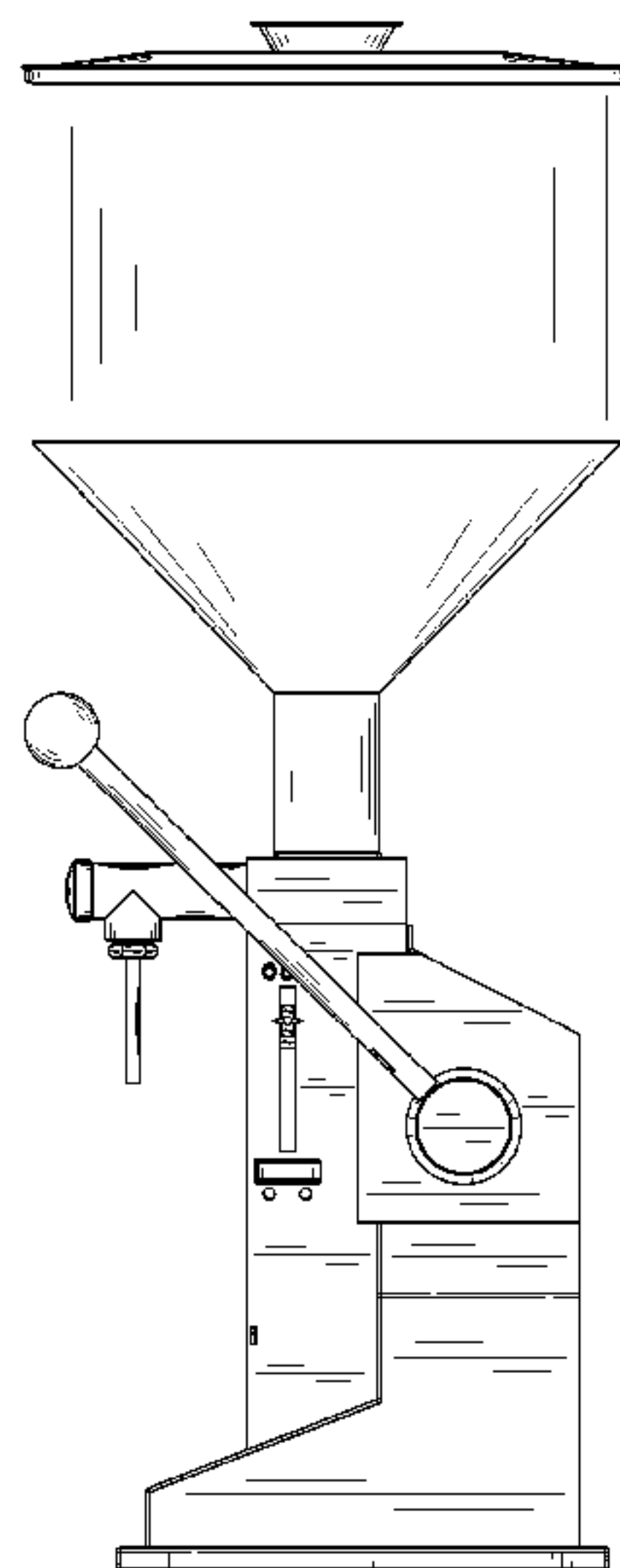
(56) **References Cited**

U.S. PATENT DOCUMENTS

1,083,183 A \* 12/1913 Bednarowicz ..... B67D 7/54  
141/285  
1,979,483 A \* 11/1934 Marsh ..... B65B 1/18  
198/547  
D138,363 S \* 7/1944 Giuriati ..... D7/308  
2,801,545 A \* 8/1957 Schottle ..... A47J 44/02  
366/314  
D205,678 S \* 9/1966 Williams ..... D7/700  
D220,211 S \* 3/1971 Edstrom ..... D15/127  
D242,079 S \* 10/1976 Twichell ..... G01S 13/32  
D15/122

(Continued)

**1 Claim, 10 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

D294,448 S \* 3/1988 Otto ..... A22C 11/0245  
 D7/381  
 D363,411 S \* 10/1995 Mock ..... D7/372  
 6,132,302 A \* 10/2000 Hiller ..... A22C 11/0245  
 452/45  
 D651,445 S \* 1/2012 Dal Gallo ..... D7/311  
 D708,921 S \* 7/2014 Hoare ..... D8/62  
 8,899,117 B2 \* 12/2014 Maile ..... A22C 11/08  
 73/862.541  
 8,910,672 B2 \* 12/2014 El Cheikh ..... A47J 43/27  
 141/391  
 8,985,400 B2 \* 3/2015 Swan ..... B65D 88/66  
 222/196  
 D737,090 S 8/2015 Long  
 D753,428 S 4/2016 Shao  
 D755,629 S \* 5/2016 Marraccini ..... D9/447  
 D814,841 S 4/2018 Sluijter  
 D815,481 S 4/2018 Wendt  
 D826,999 S \* 8/2018 Yan ..... D15/123  
 D876,865 S 3/2020 Ellington  
 D878,130 S 3/2020 Knoll  
 D888,486 S 6/2020 Yang  
 D891,845 S 8/2020 Rummel  
 D892,529 S 8/2020 Fei

D898,500 S 10/2020 Leeds  
 2017/0088295 A1 \* 3/2017 Staudenrausch ..... G01S 13/32  
 2019/0365140 A1 \* 12/2019 Wallis ..... B65B 1/36

FOREIGN PATENT DOCUMENTS

CN 306562487 \* 5/2021  
 CN 306832537 \* 9/2021  
 CN 306832539 \* 9/2021  
 CN 306942751 \* 11/2021

OTHER PUBLICATIONS

VTOPS-P1, "Semi Automatic Powder Filling Machine," Aug. 28, 2020, VTOPS, [www.powder-fillers.com/product-detail/semi-automatic-powder-filler-machine/](http://www.powder-fillers.com/product-detail/semi-automatic-powder-filler-machine/) (Year: 2020).  
 Kimtem, "Kimtem Liquid Filling Machine," Oct. 9, 2020, Amazon.com, [www.amazon.com/dp/B08KY786G7](https://www.amazon.com/dp/B08KY786G7) (Year: 2020).  
 Kimtem, "Kimtem Liquid Filling Machine," Apr. 12, 2021, Ubuy, [www.u-buy.be/en/product/10QD6X4l-kimtem-manual-sausage-clipper-clipping-machine-u-shape-sausage-sealing-machine-tying-machine-for-sup](https://www.u-buy.be/en/product/10QD6X4l-kimtem-manual-sausage-clipper-clipping-machine-u-shape-sausage-sealing-machine-tying-machine-for-sup) (Year: 2021).  
 Kimtem Liquid Filling Machine, Bottle filling Machine, A03 Pro Manual Filling machine For Liquid Paste Cosmetic Dream, Amazon.com, Oct. 9, 2020, Kimtem, <https://www.amazon.com/gp/product/B08KY786G7> (Last accessed Oct. 7, 2022).

\* cited by examiner

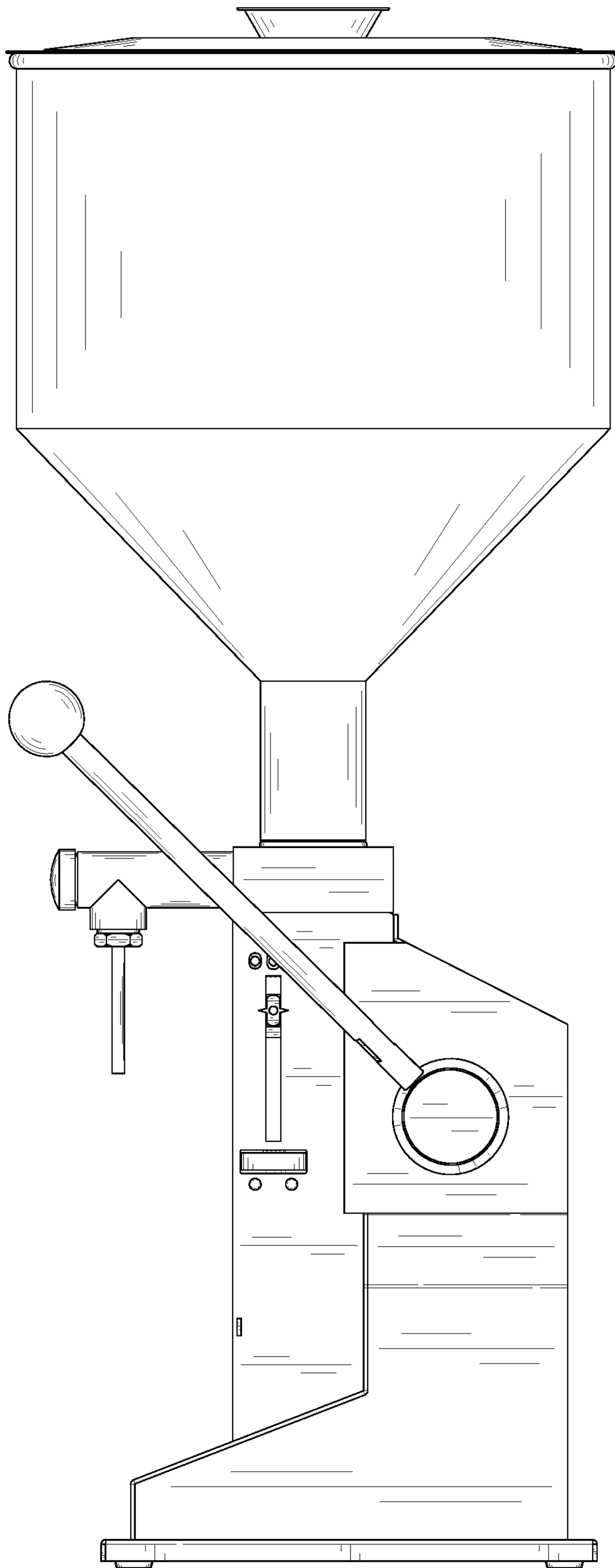


FIG. 1

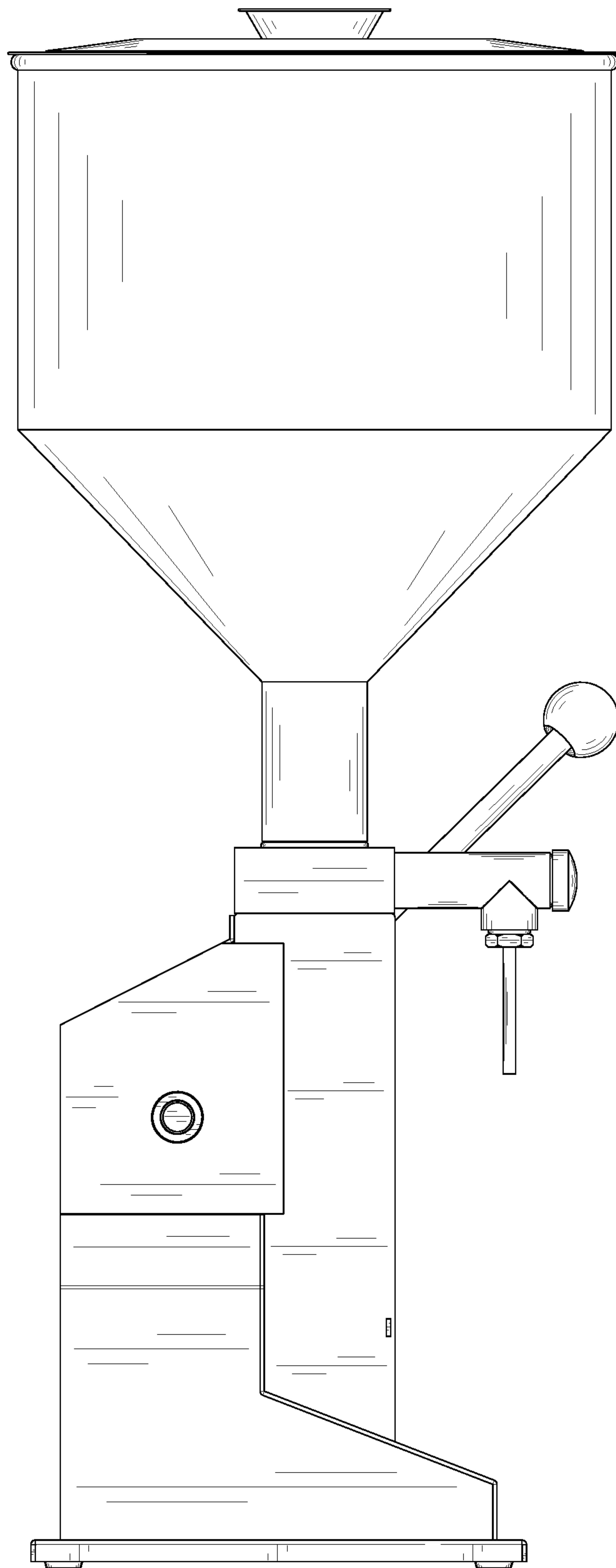


FIG. 2

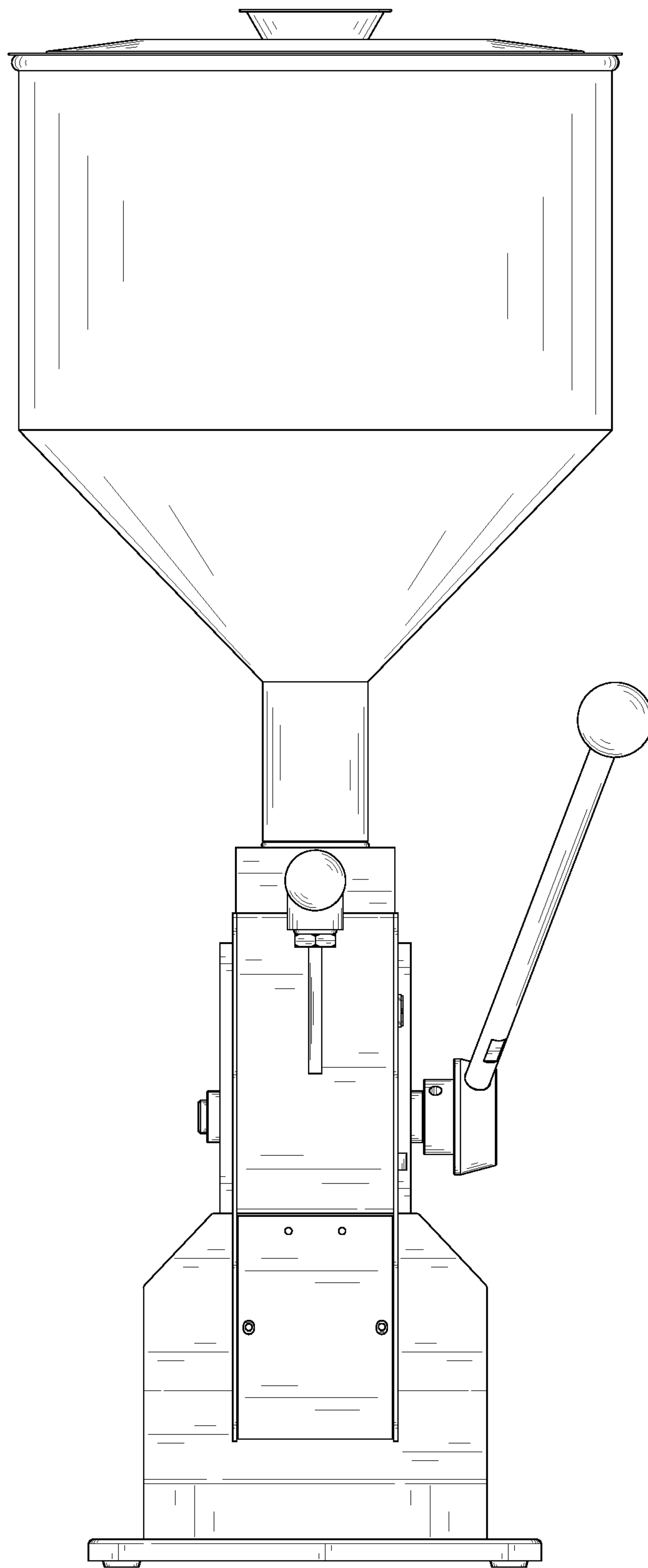


FIG. 3

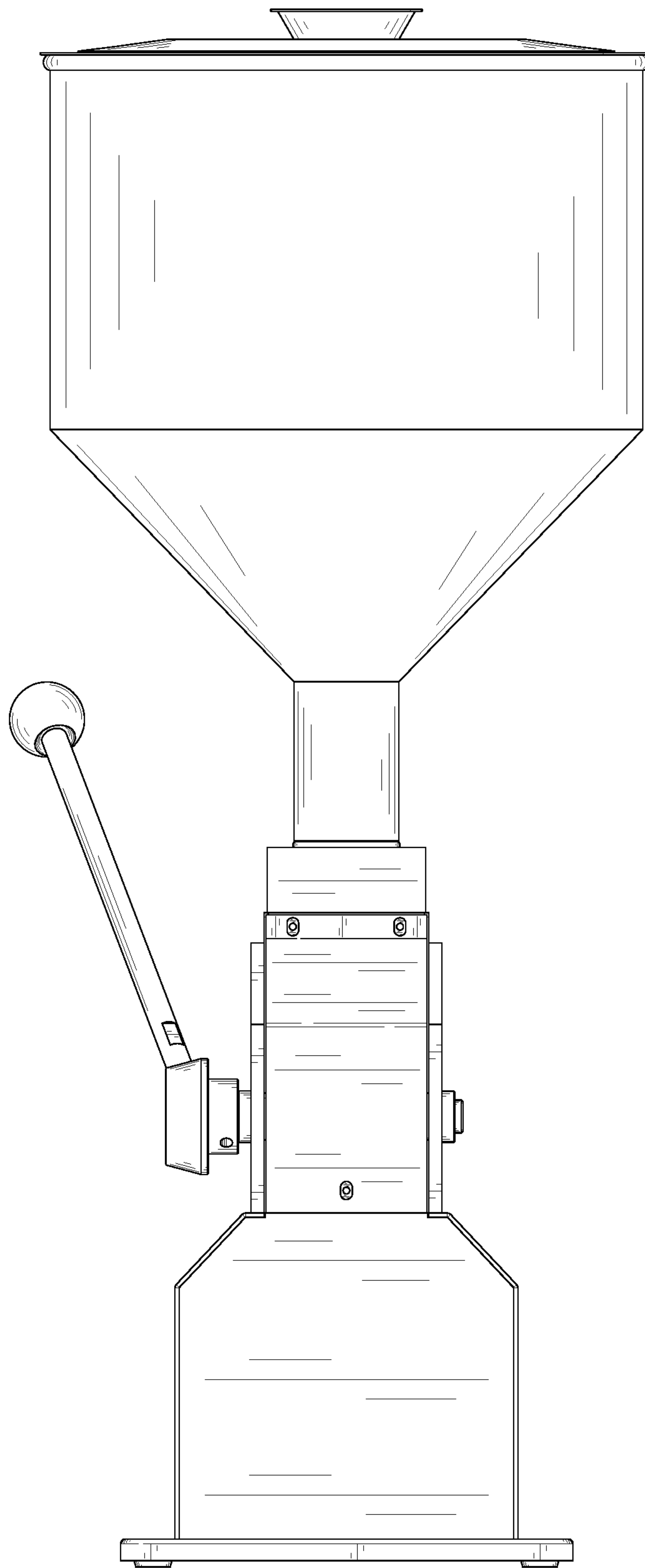


FIG. 4



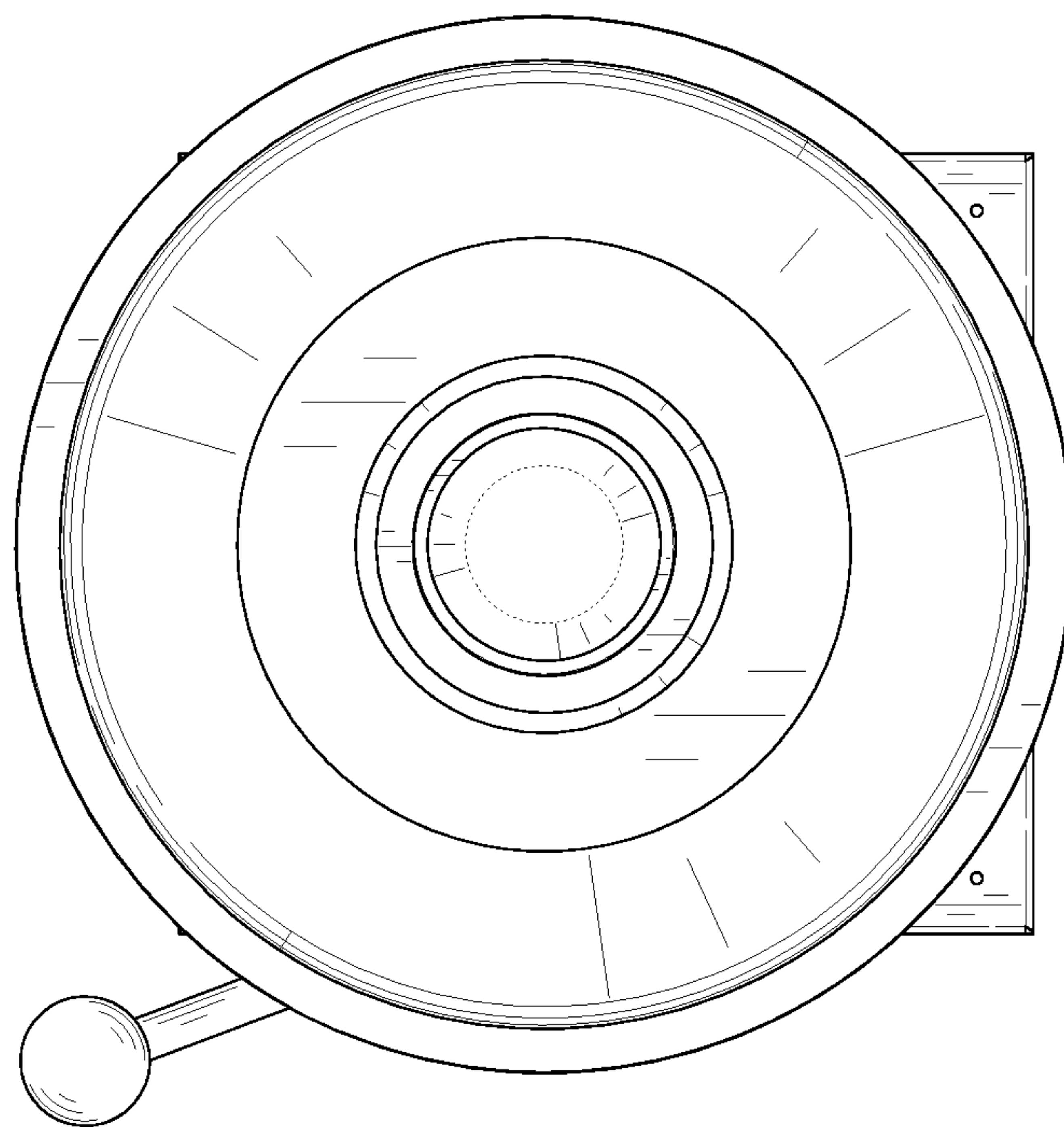


FIG. 5

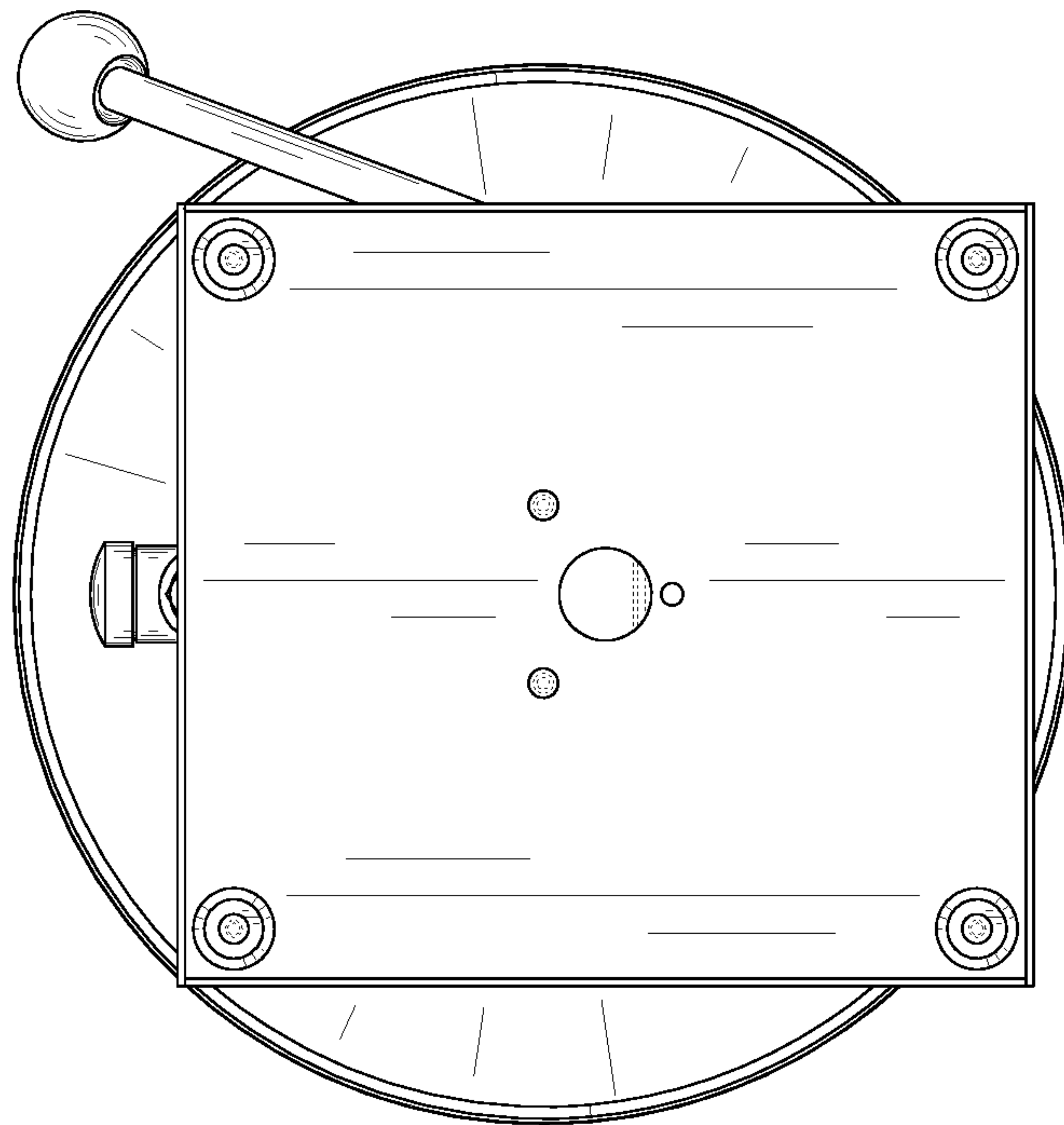


FIG. 6



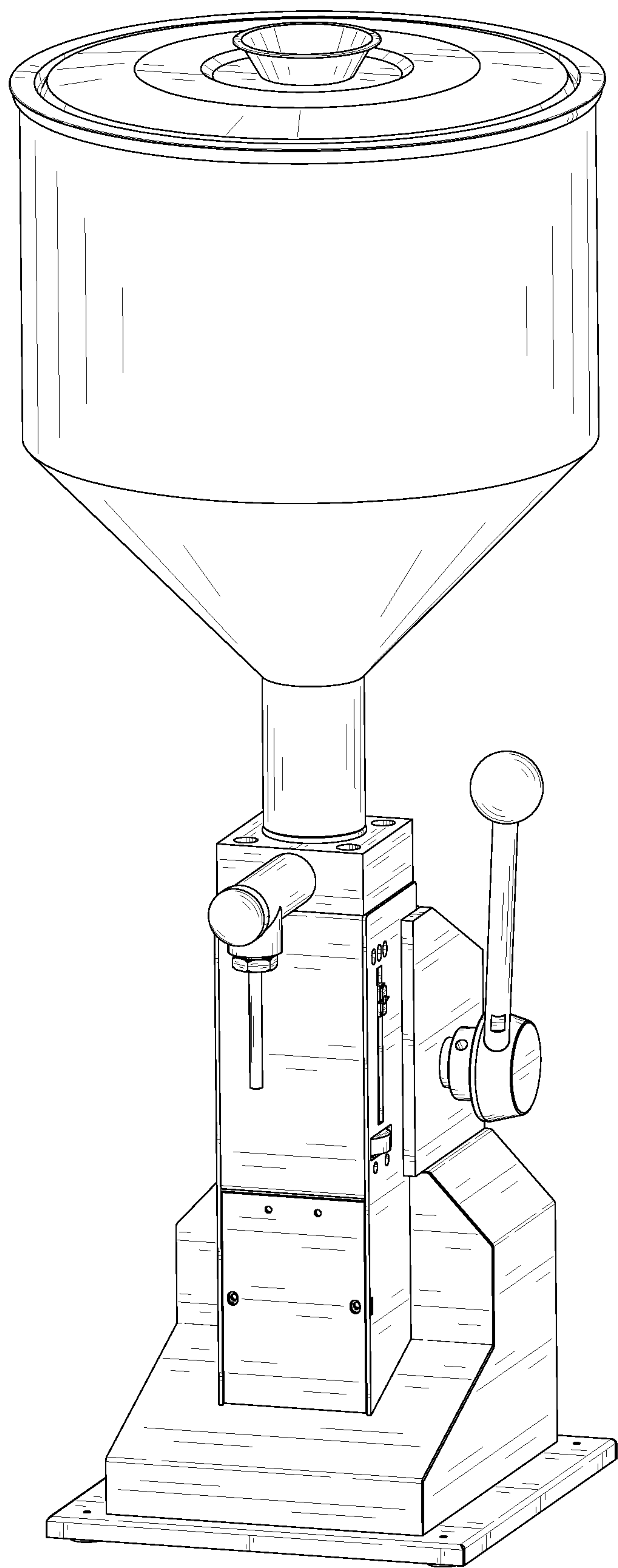


FIG. 7

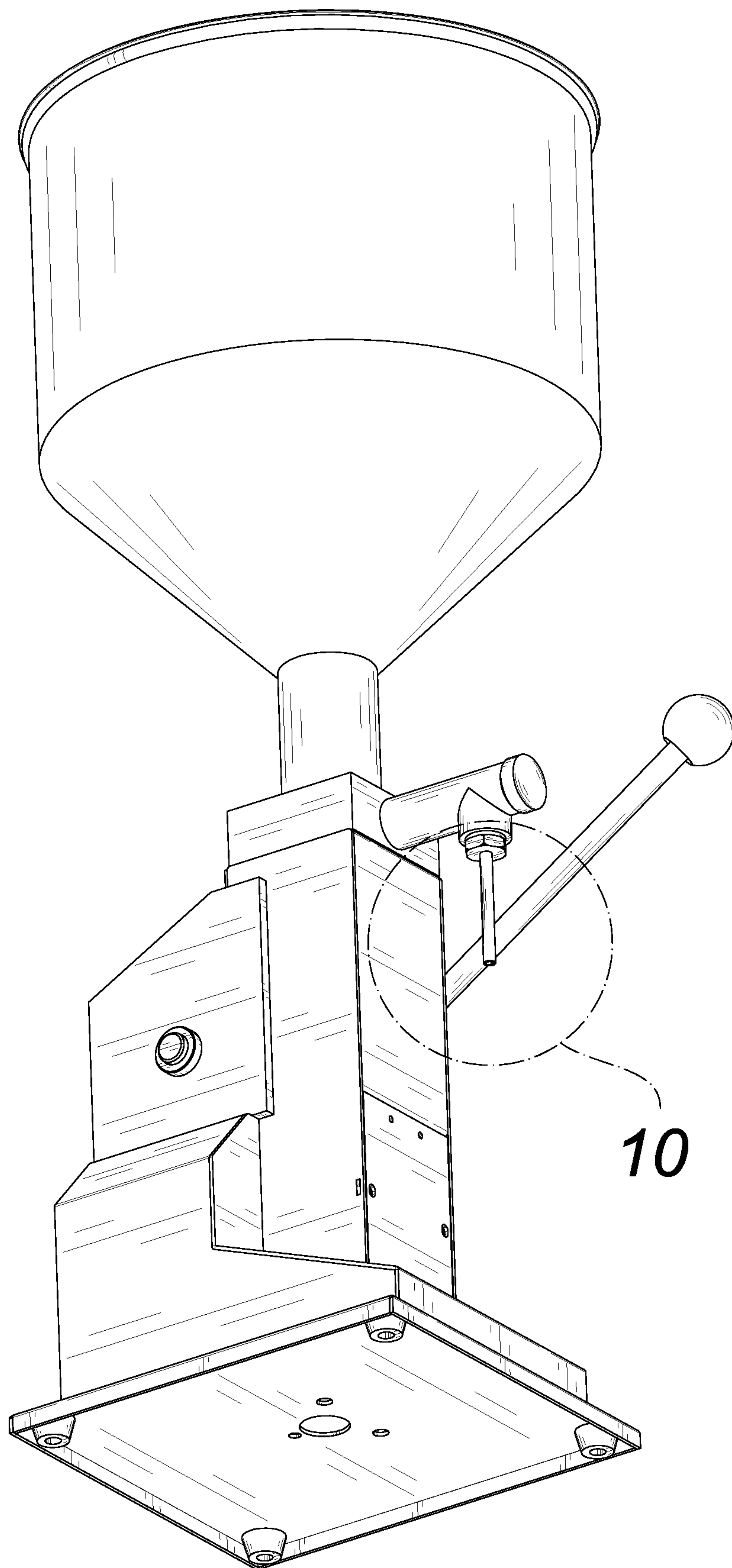


FIG. 8

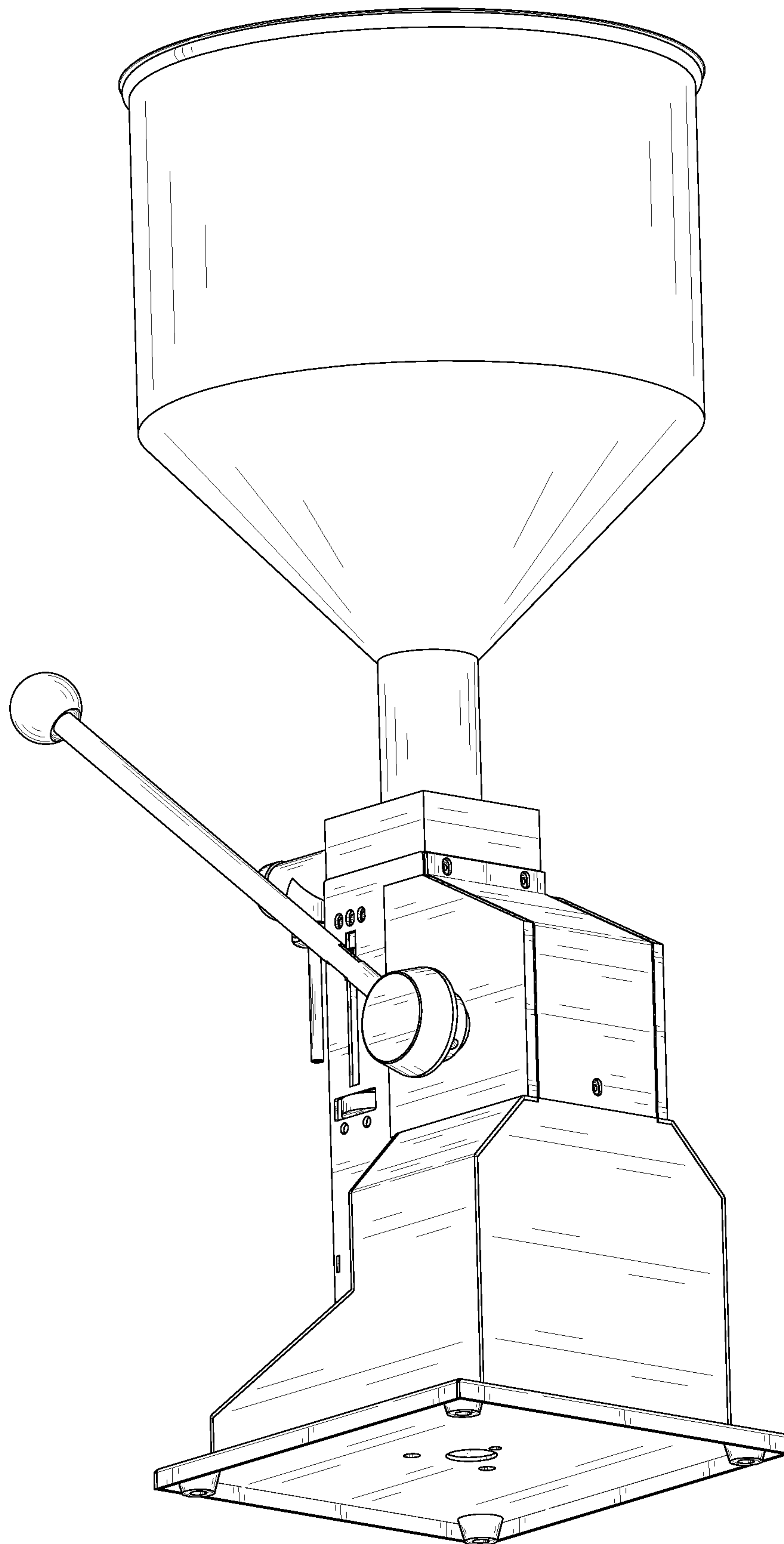


FIG. 9

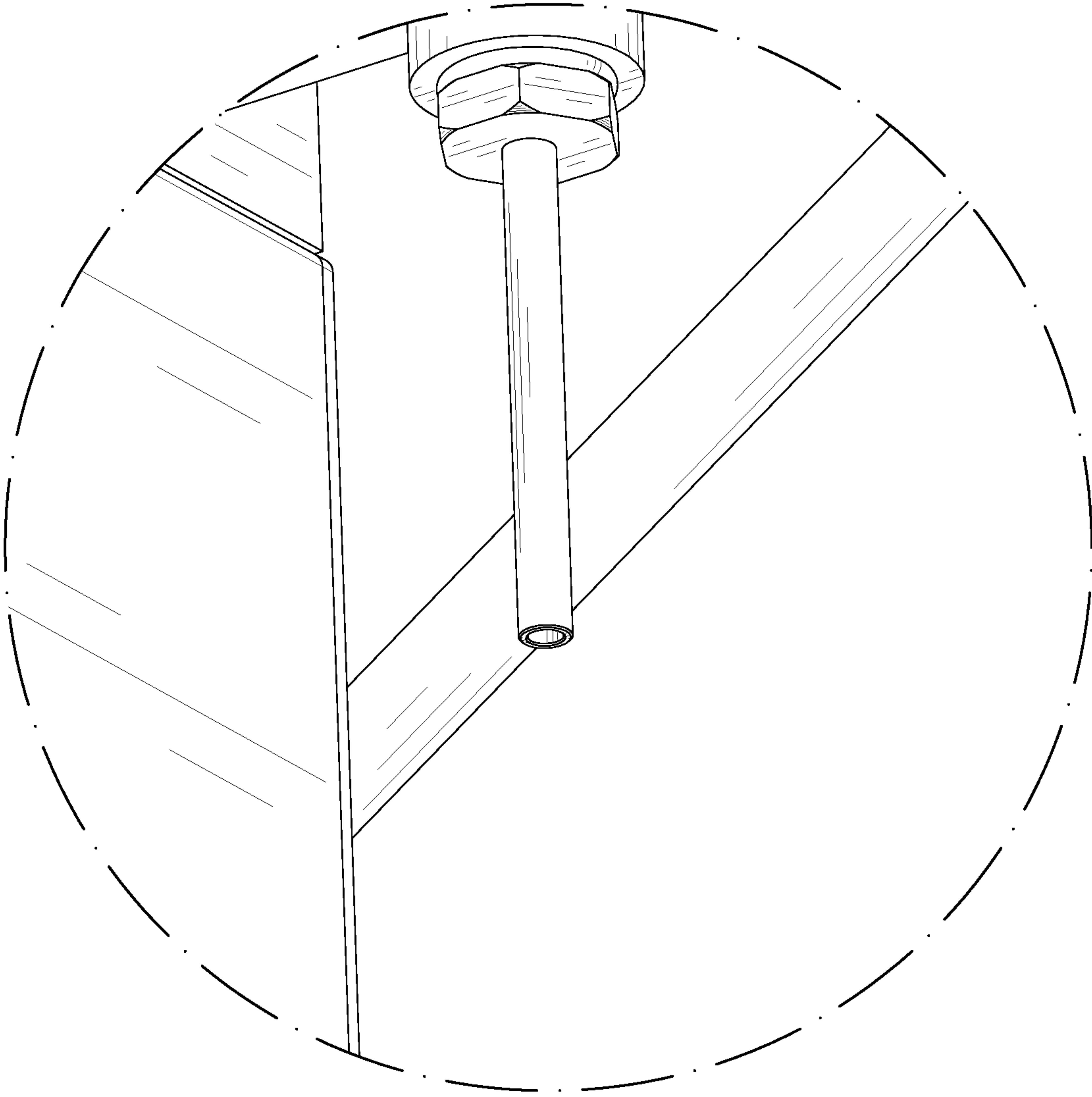


FIG. 10