



US00D961990S

(12) **United States Design Patent**
Walter et al.

(10) **Patent No.:** **US D961,990 S**
(45) **Date of Patent:** **** Aug. 30, 2022**

(54) **SCREW SHAFT ELEMENT**

(71) Applicant: **Buss AG**, Pratteln (CH)

(72) Inventors: **Wolfgang Walter**, Aalen (DE); **Martin Schötzau**, Augst (CH)

(73) Assignee: **Buss AG**, Pratteln (CH)

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

(21) Appl. No.: **29/668,738**

(22) Filed: **Nov. 1, 2018**

(30) **Foreign Application Priority Data**

May 4, 2018 (EM) 005258472
May 4, 2018 (EM) 005258472-0001
May 4, 2018 (EM) 005258472-0002
May 4, 2018 (EM) 005258472-0003
May 4, 2018 (EM) 005258472-0006
May 4, 2018 (EM) 005258472-0008

(51) **LOC (13) Cl.** **31-00**

(52) **U.S. Cl.**
USPC **D7/376**

(58) **Field of Classification Search**
USPC D7/376, 368, 377, 379, 412, 387, 213;
D8/387; D24/220
CPC B29C 48/03; B29C 48/395; B29C 48/04;
B29C 48/67; B29C 48/45; B29C 48/565;
B29C 48/687; B01F 7/00416; B01F
7/086; B01F 2215/0049; B01F
2215/0422; B29B 7/421; B29B 7/423;
B29B 7/429; B29B 7/44

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

D23,336 S * 6/1894 Quimby D8/387
2,896,925 A * 7/1959 Place B01F 7/00475
416/201 R

3,189,324 A * 6/1965 Gubler B29C 48/605
366/90
5,158,434 A * 10/1992 Weetman B01F 7/00341
416/201 A
D696,070 S * 12/2013 Audette D7/412
(Continued)

FOREIGN PATENT DOCUMENTS

DE 1091841 B * 10/1960 B29C 48/56
EP 2952275 A1 * 12/2015 B29C 48/402
EP 2965889 A1 * 1/2016 B29B 7/482

Primary Examiner — Sheryl Lane

Assistant Examiner — Ieisha N Price

(74) *Attorney, Agent, or Firm* — Larson & Anderson,
LLC

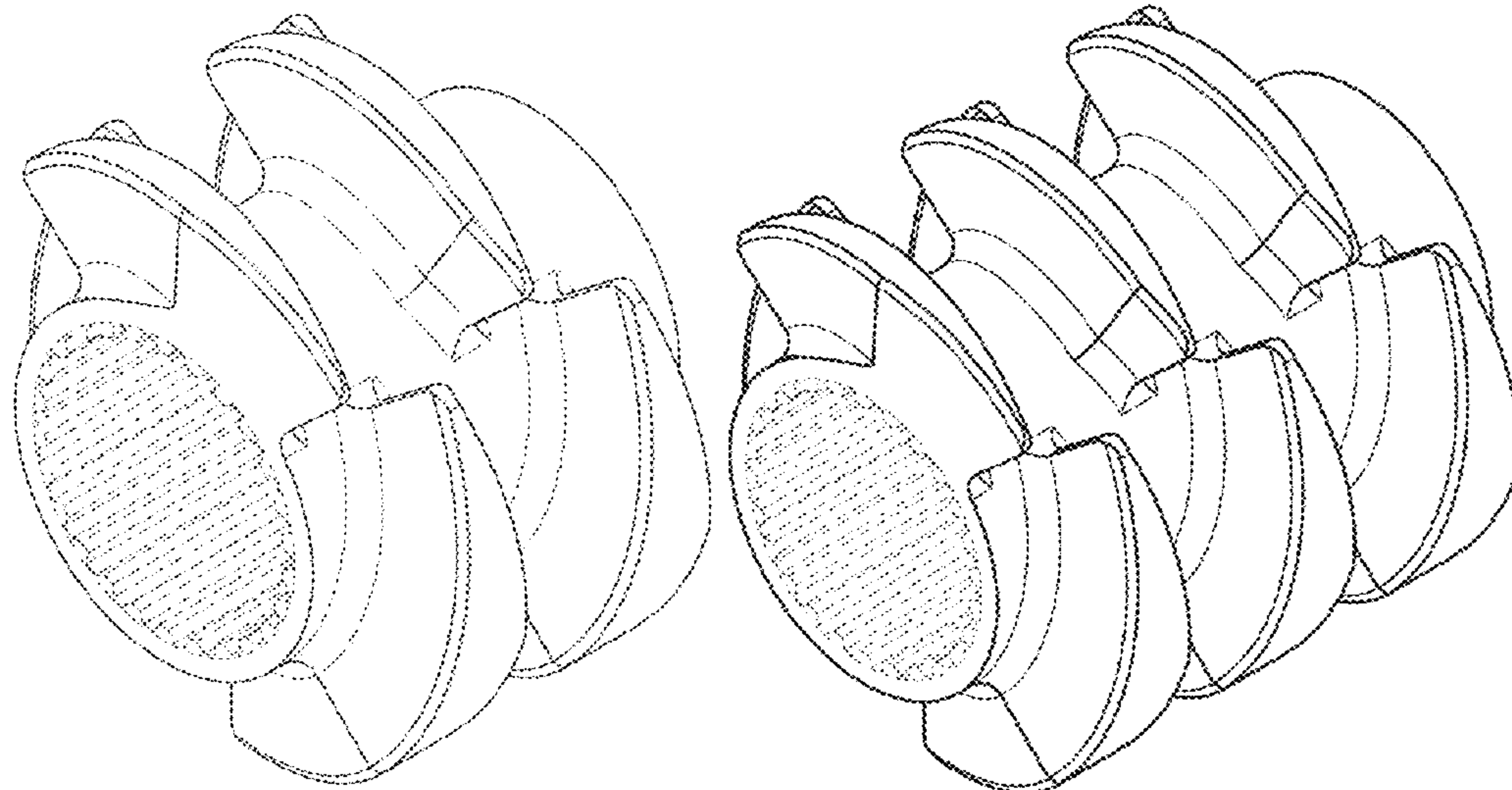
(57) **CLAIM**

The ornamental design for a screw shaft element, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the first embodiment of the screw shaft element showing our new design;
FIG. 2 is a front view thereof;
FIG. 3 is a back view thereof;
FIG. 4 is an enlarged left side view thereof;
FIG. 5 is an enlarged right side view thereof;
FIG. 6 is an enlarged top view thereof;
FIG. 7 is an enlarged bottom view thereof
FIG. 8 is a perspective view of the second embodiment of the screw shaft element showing of our new design;
FIG. 9 is a front view thereof.
FIG. 10 is a back view thereof.
FIG. 11 is a left side view thereof
FIG. 12 is a right side view thereof
FIG. 13 is an enlarged top view thereof; and,
FIG. 14 is an enlarged bottom view thereof.
The broken lines in the drawings illustrate portions of the screw shaft element and form no part of the claimed design.

1 Claim, 14 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D782,059 S * 3/2017 Osada D24/220
9,587,662 B2 * 3/2017 Glass F16B 13/128
D910,834 S * 2/2021 Wang F04D 29/384
D23/413
D929,799 S * 9/2021 Walter D7/376
2009/0134173 A1 * 5/2009 Liang B01F 7/22
220/563
2011/0026360 A1 * 2/2011 Greller B01F 7/00691
366/308
2020/0116159 A1 * 4/2020 Yang F04D 29/384

* cited by examiner

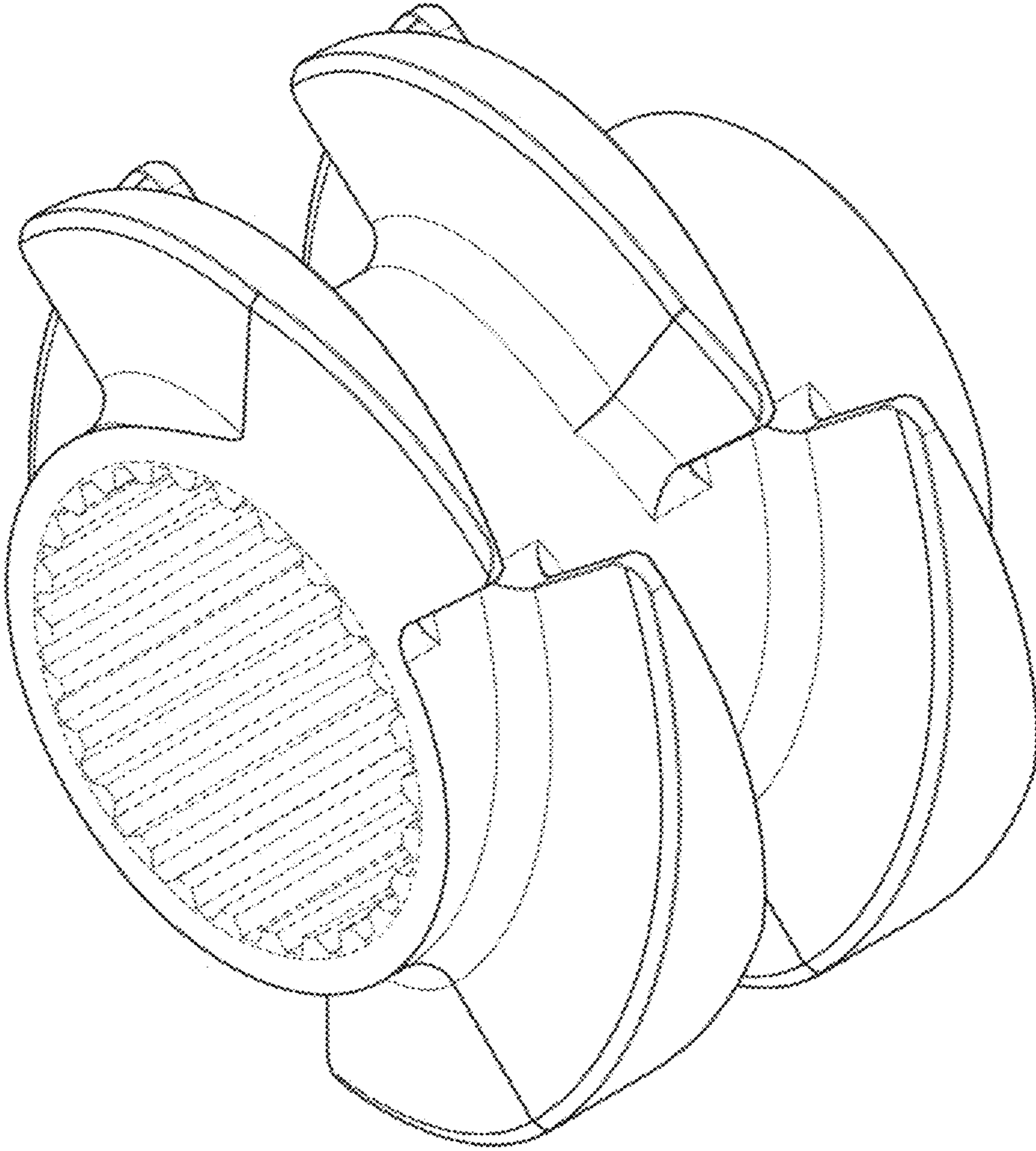


Fig. 1

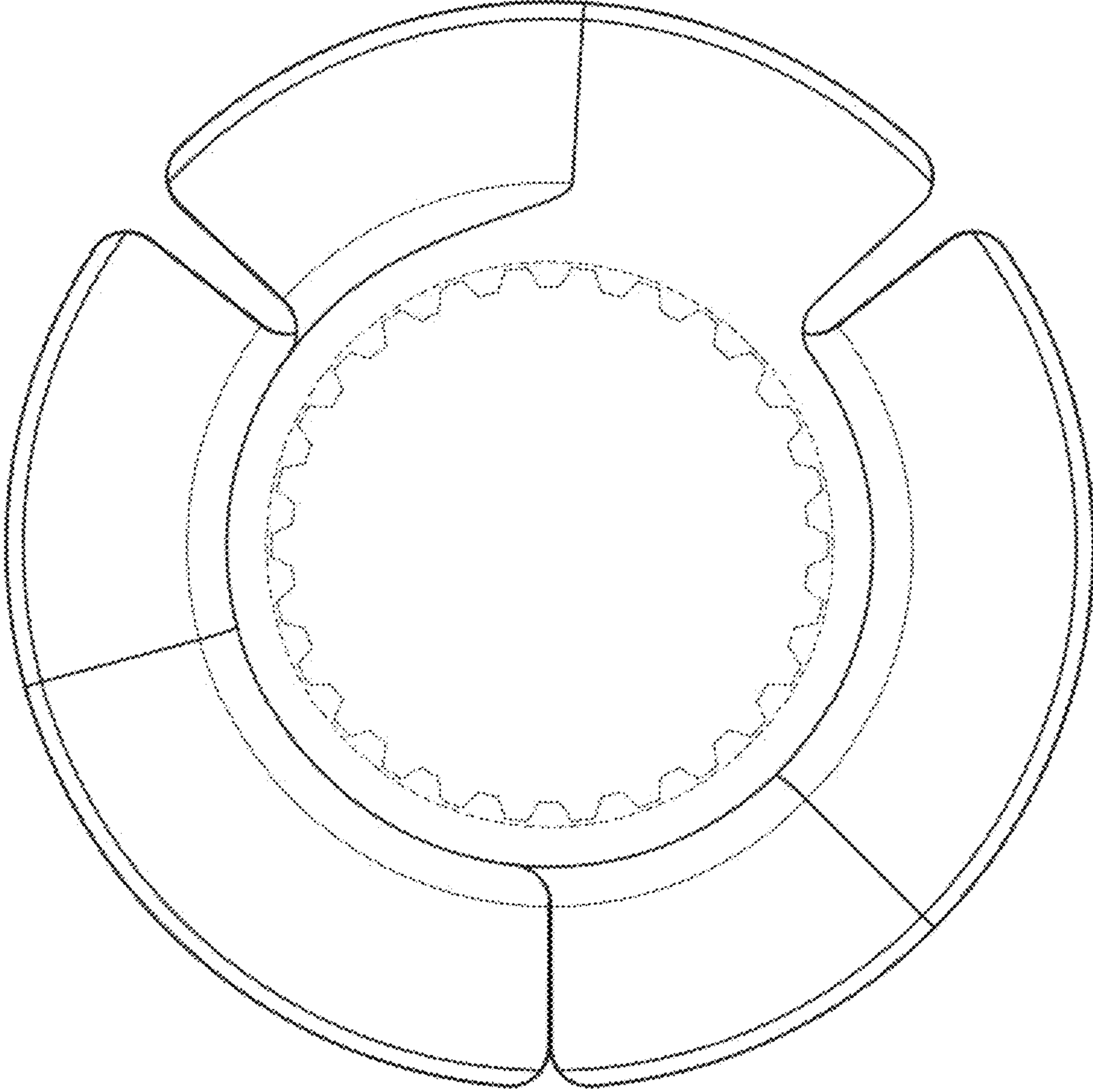


Fig. 2

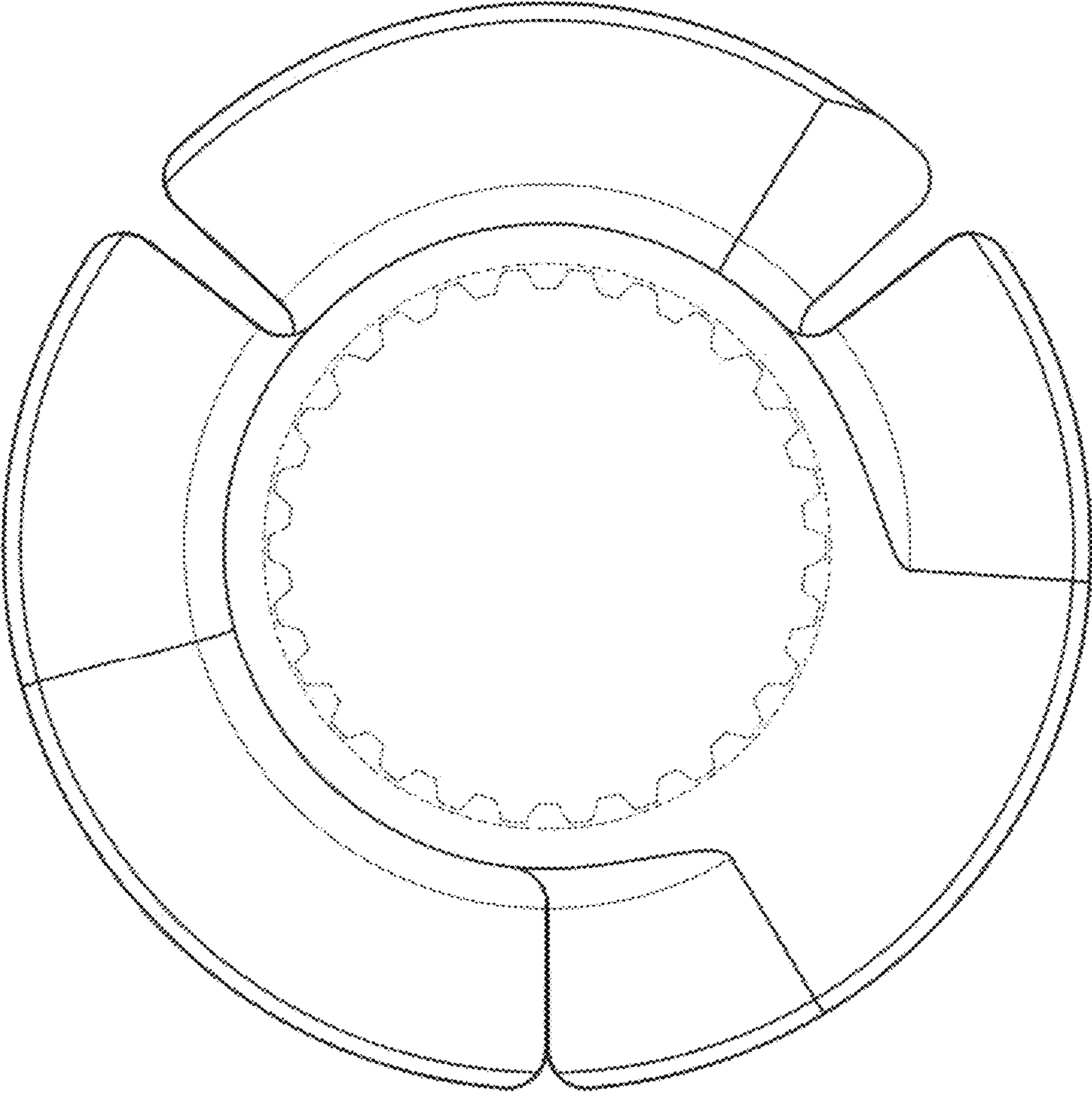


Fig. 3

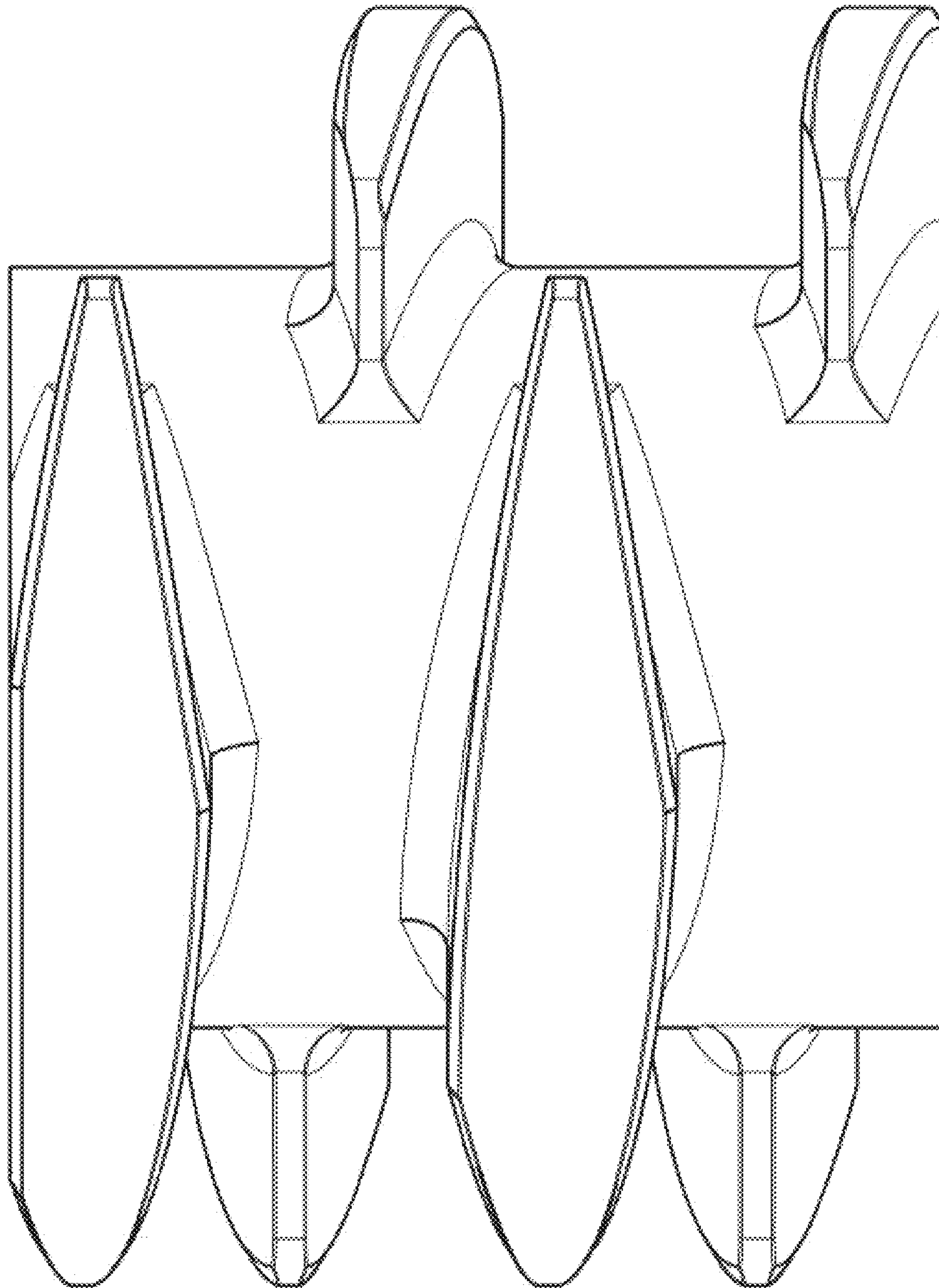


Fig. 4

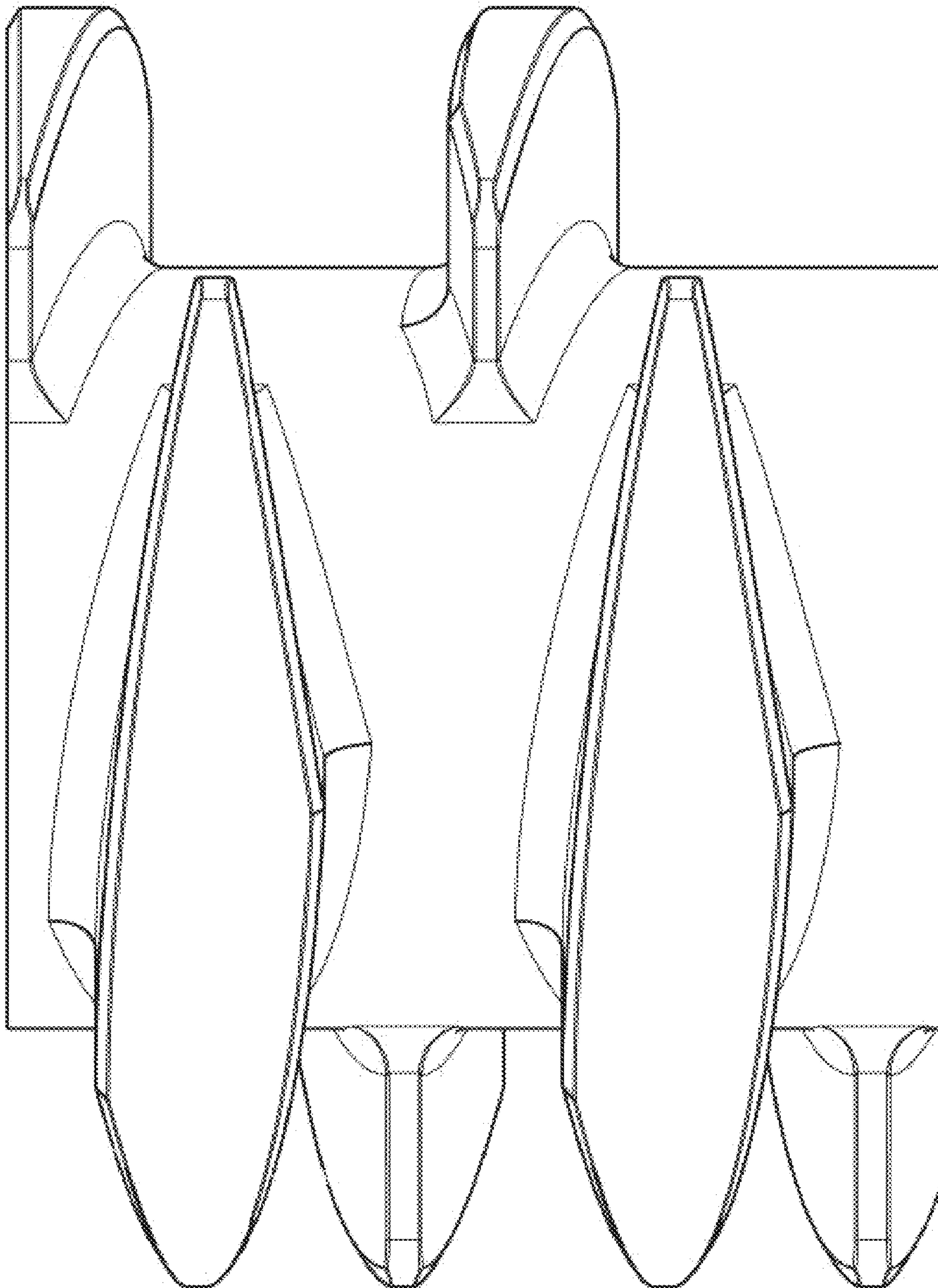


Fig. 5

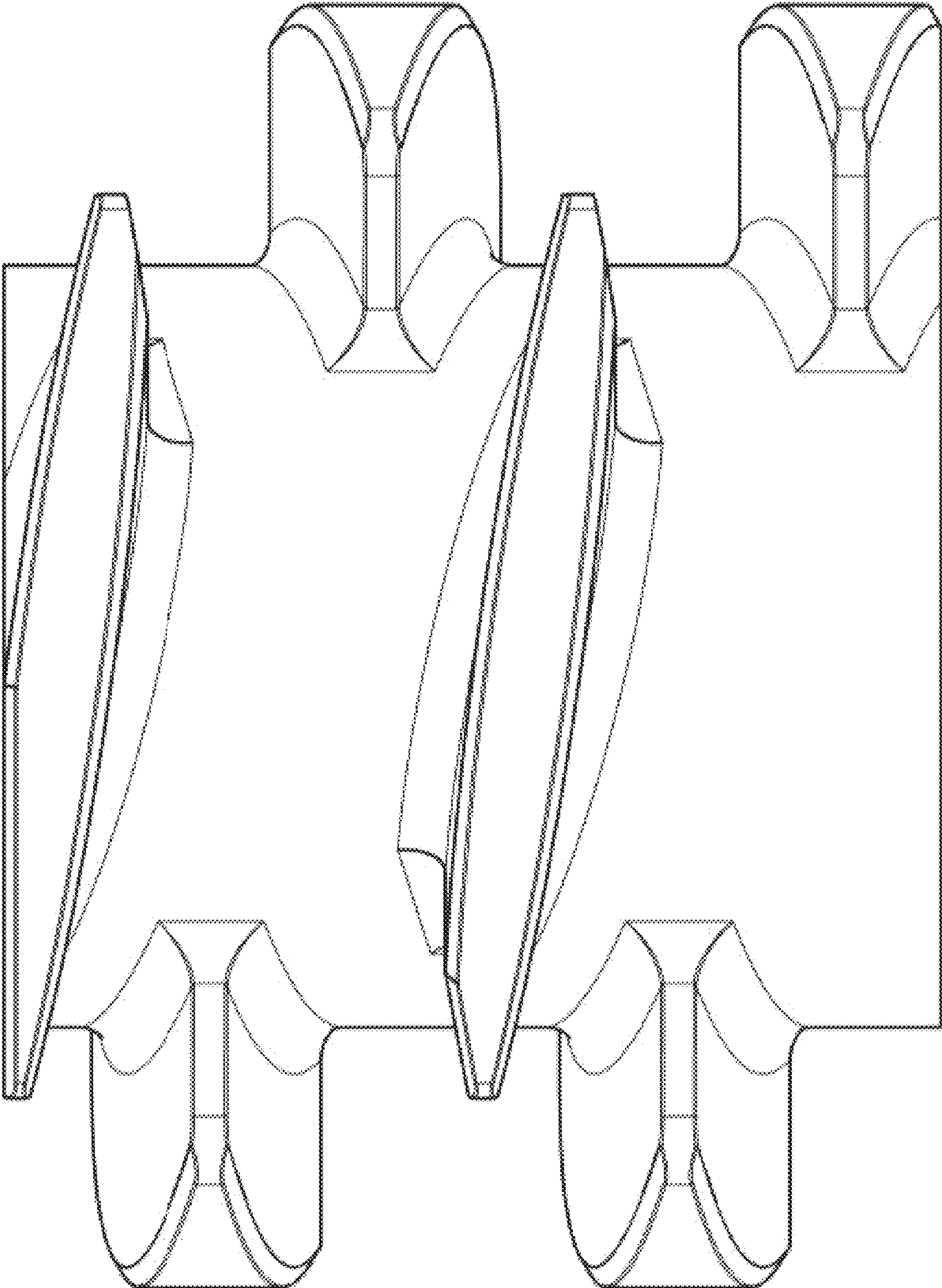


Fig. 6

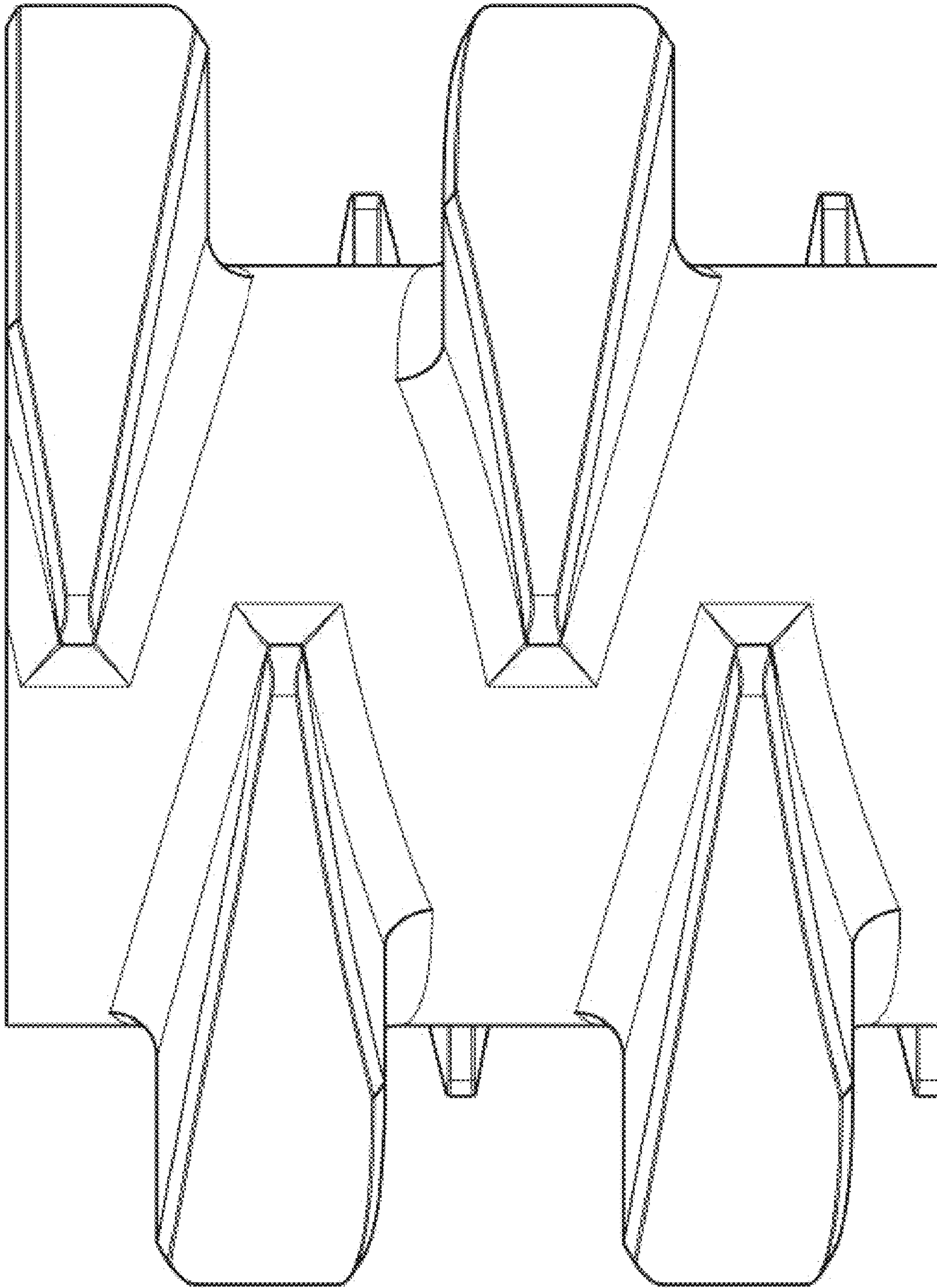


Fig. 7

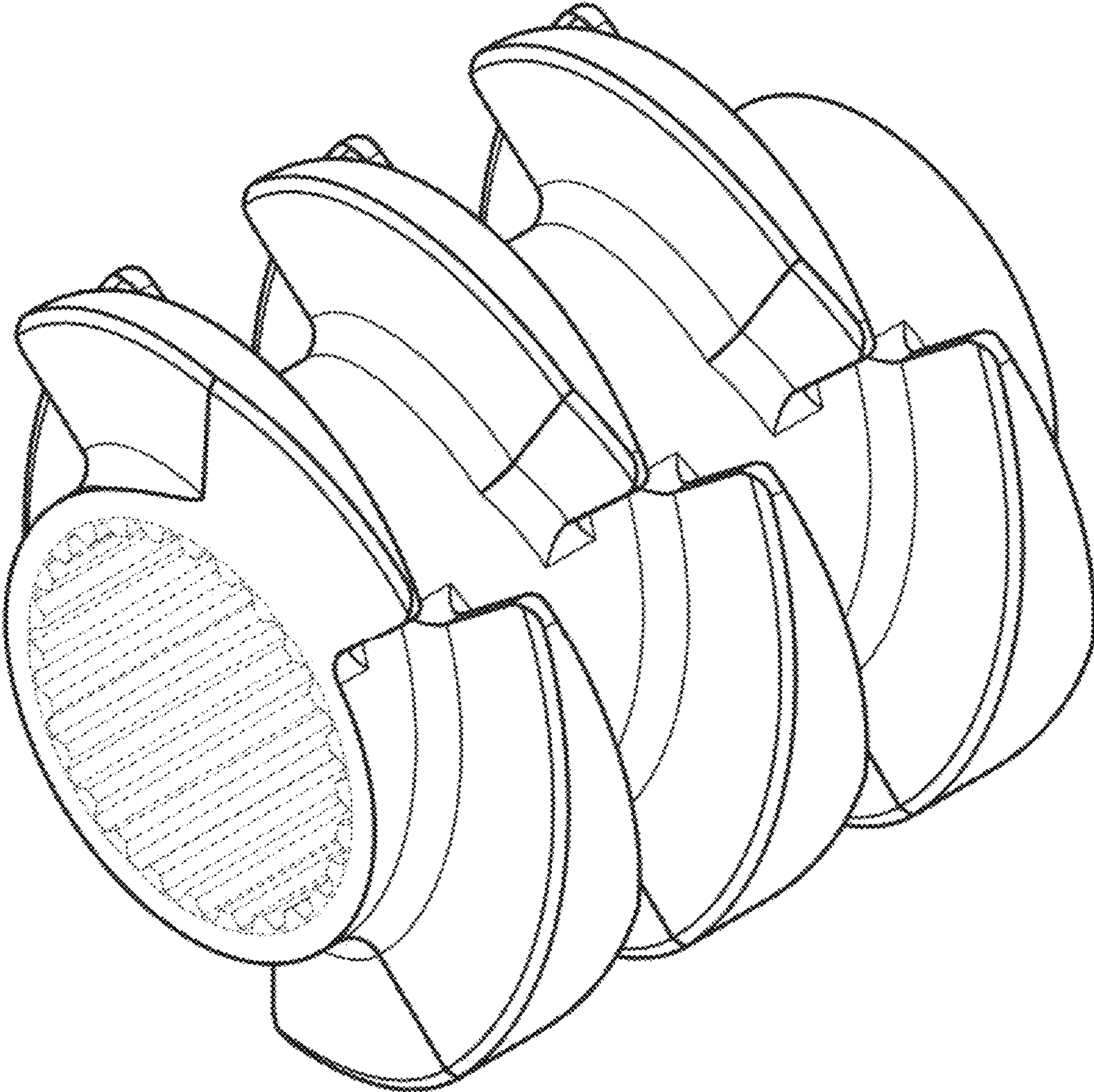


Fig. 8

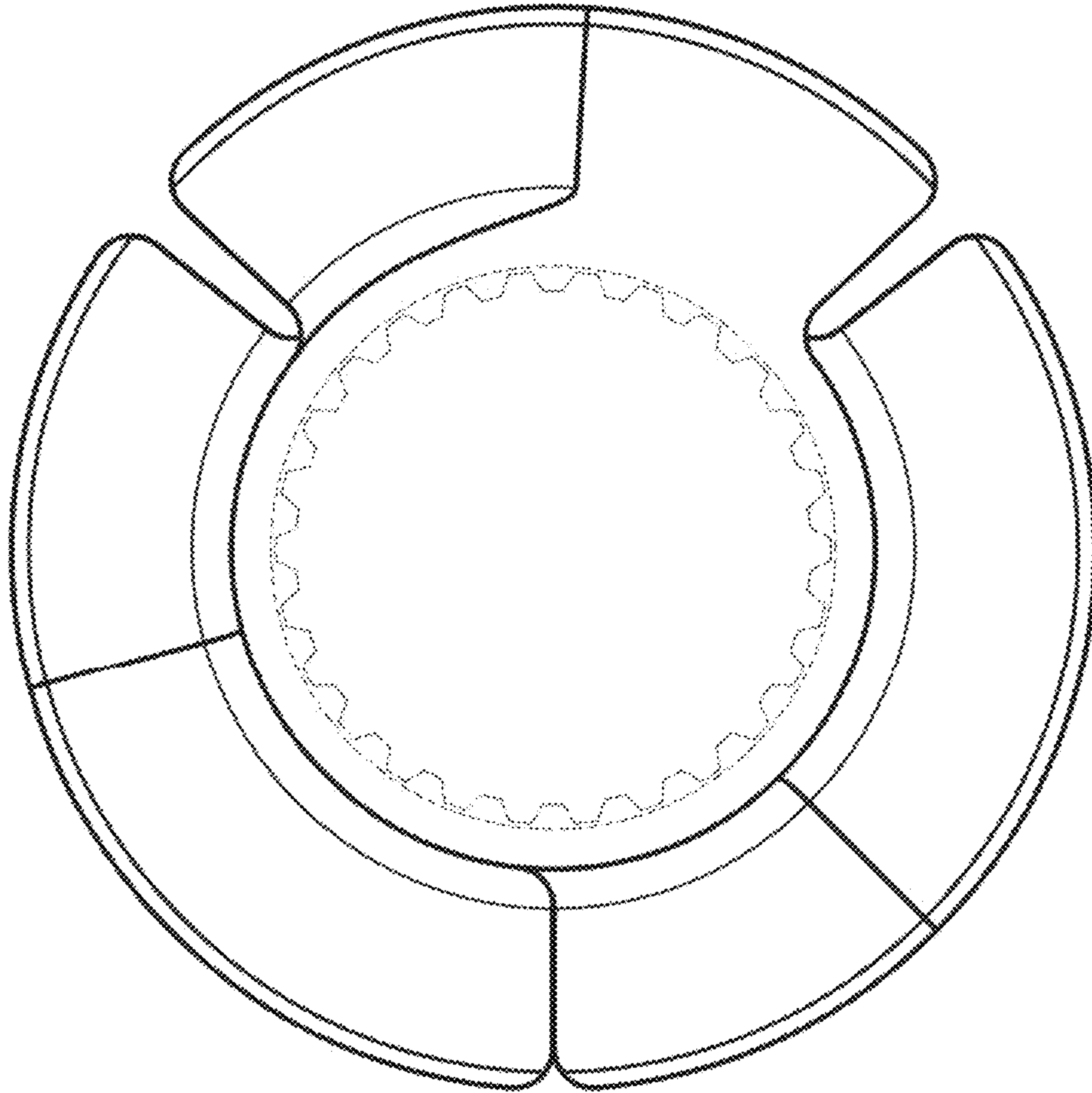


Fig. 9

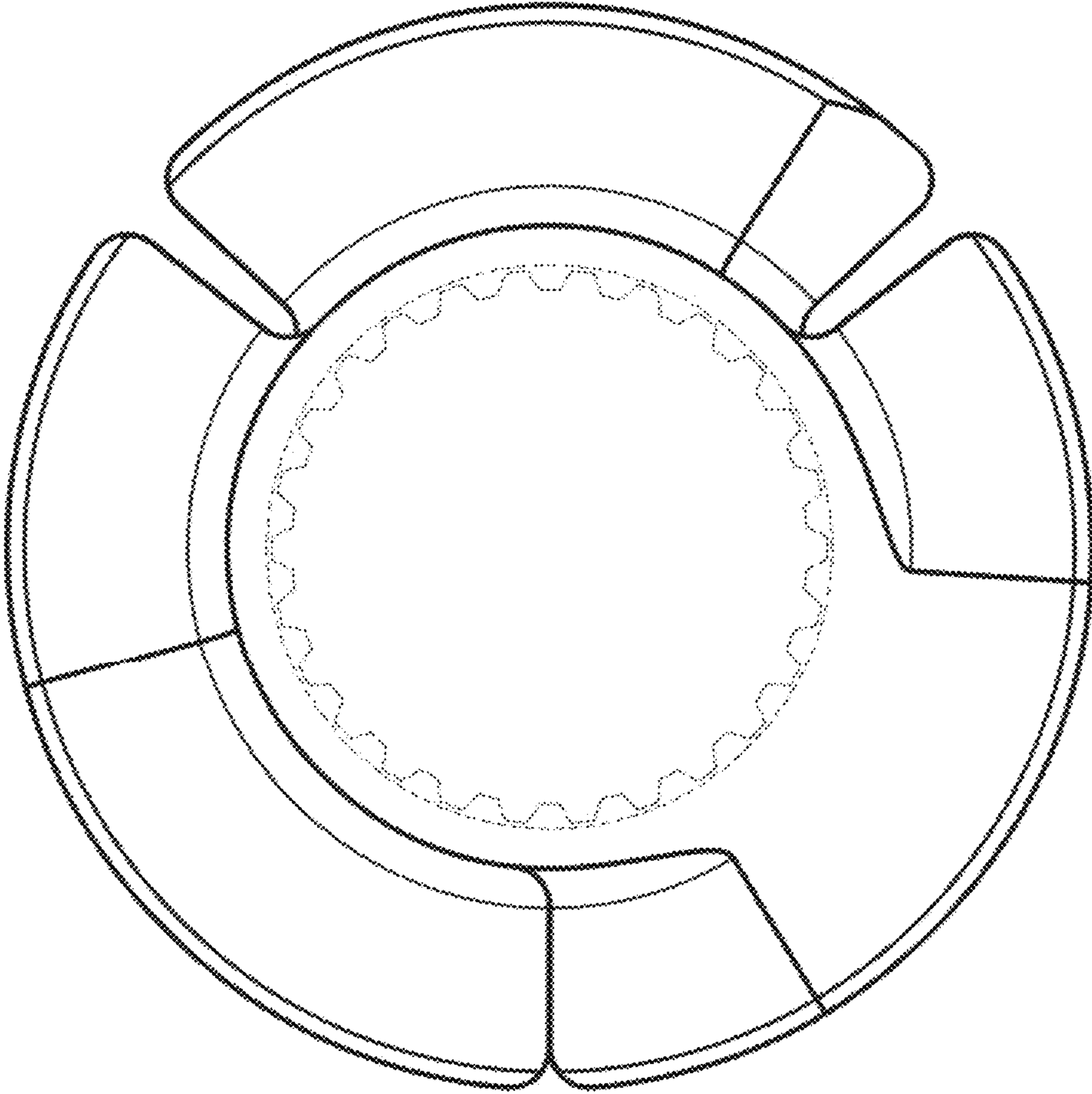


Fig. 10

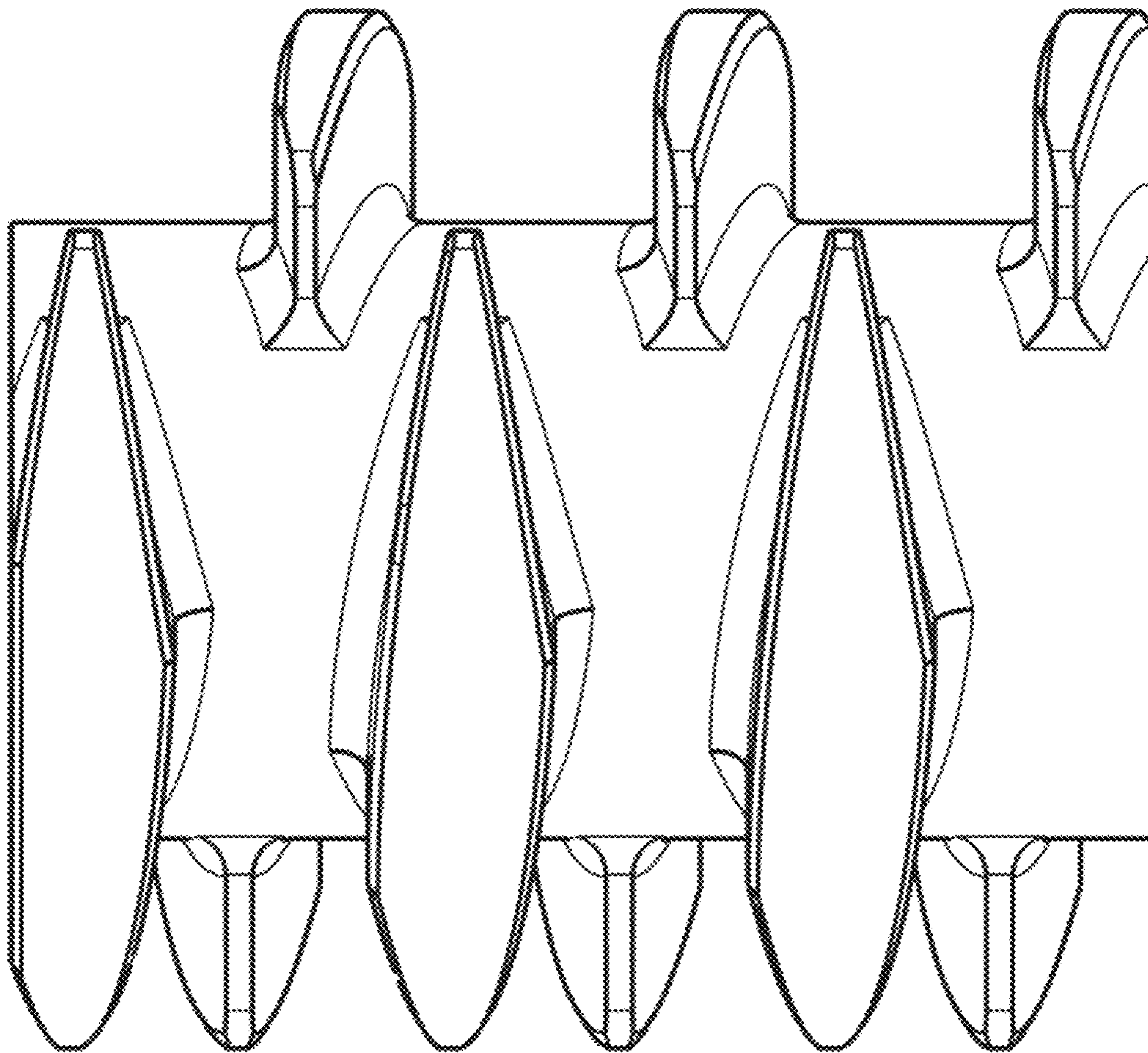


Fig. 11

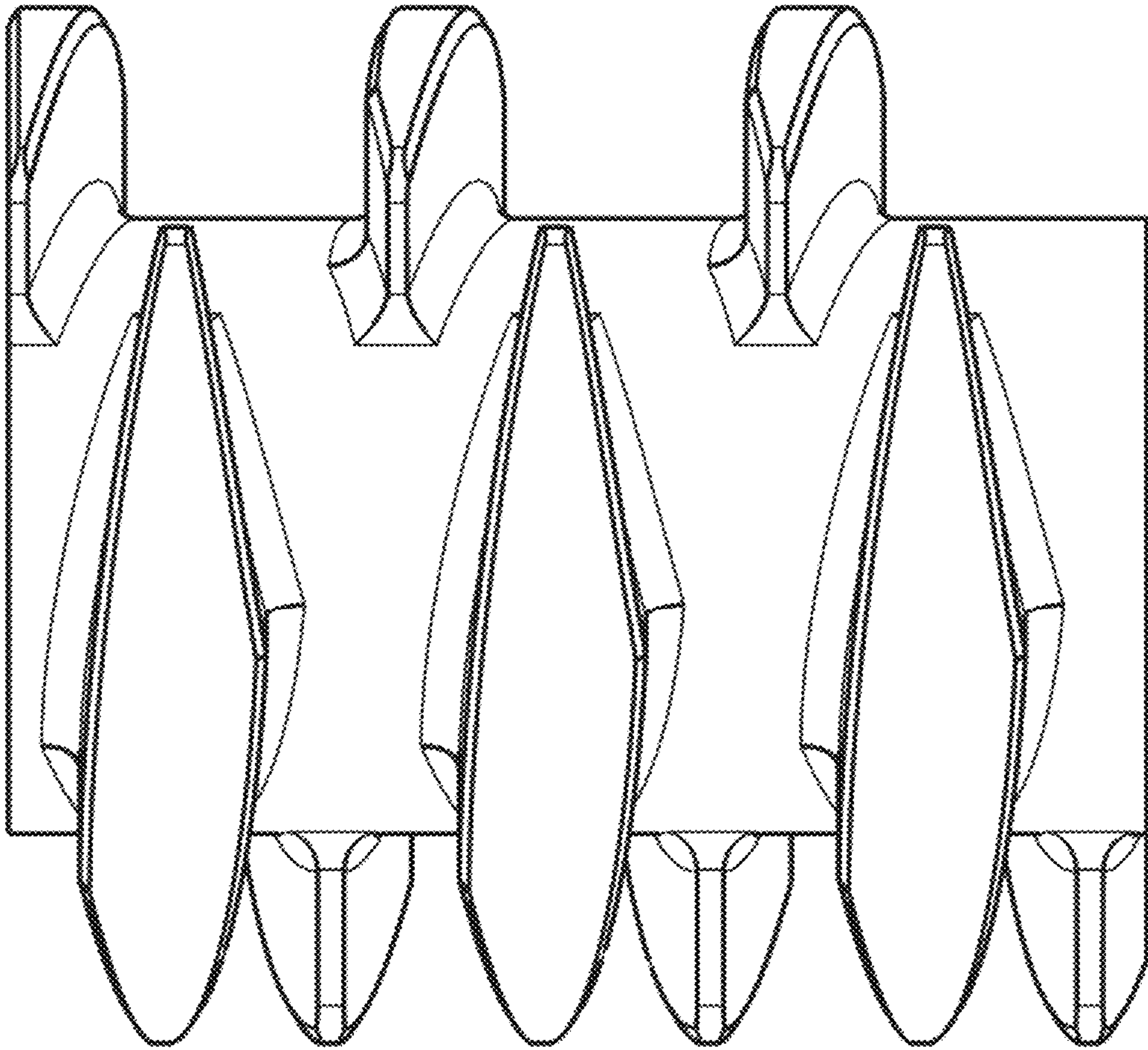


Fig. 12

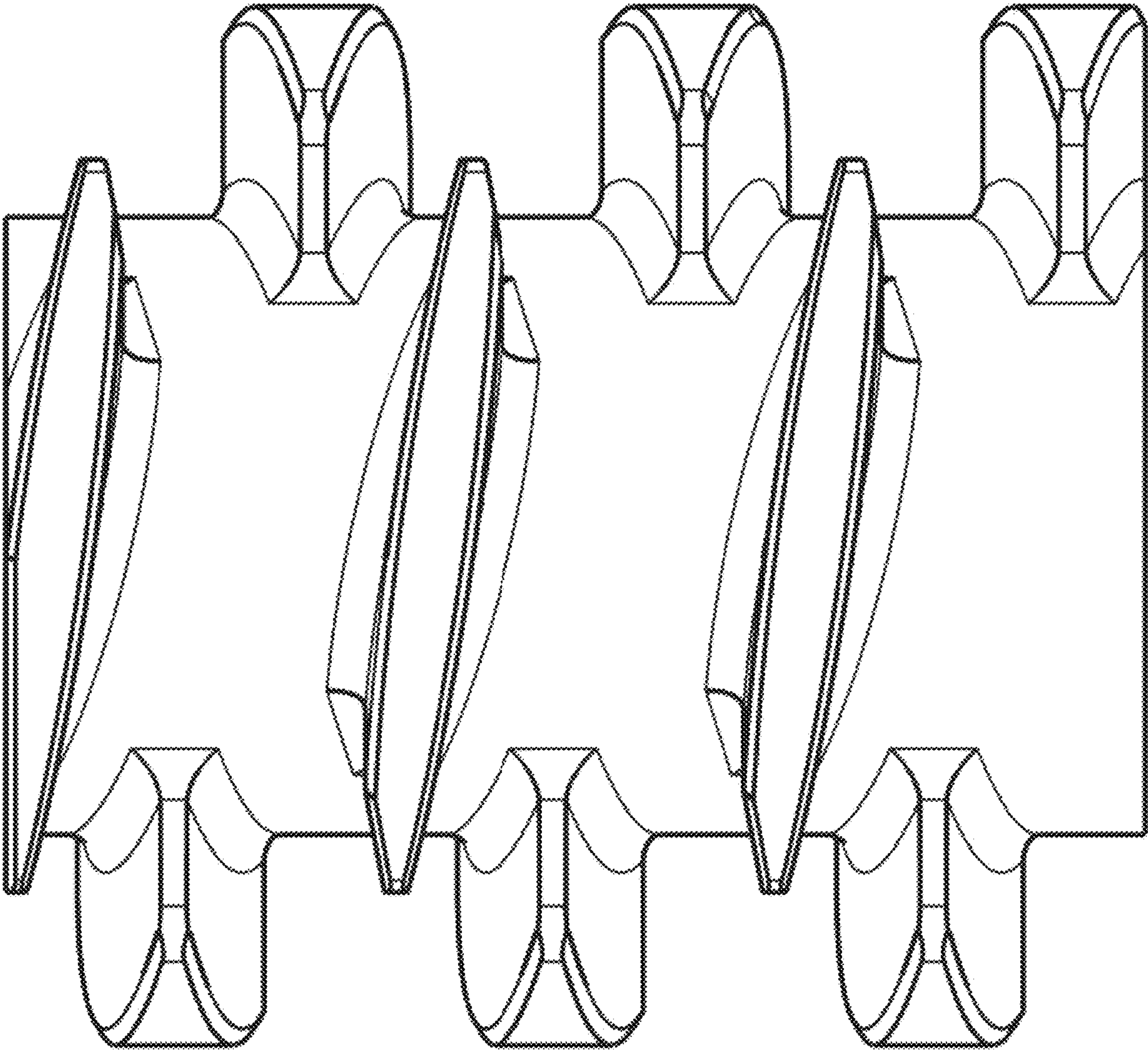


Fig. 13

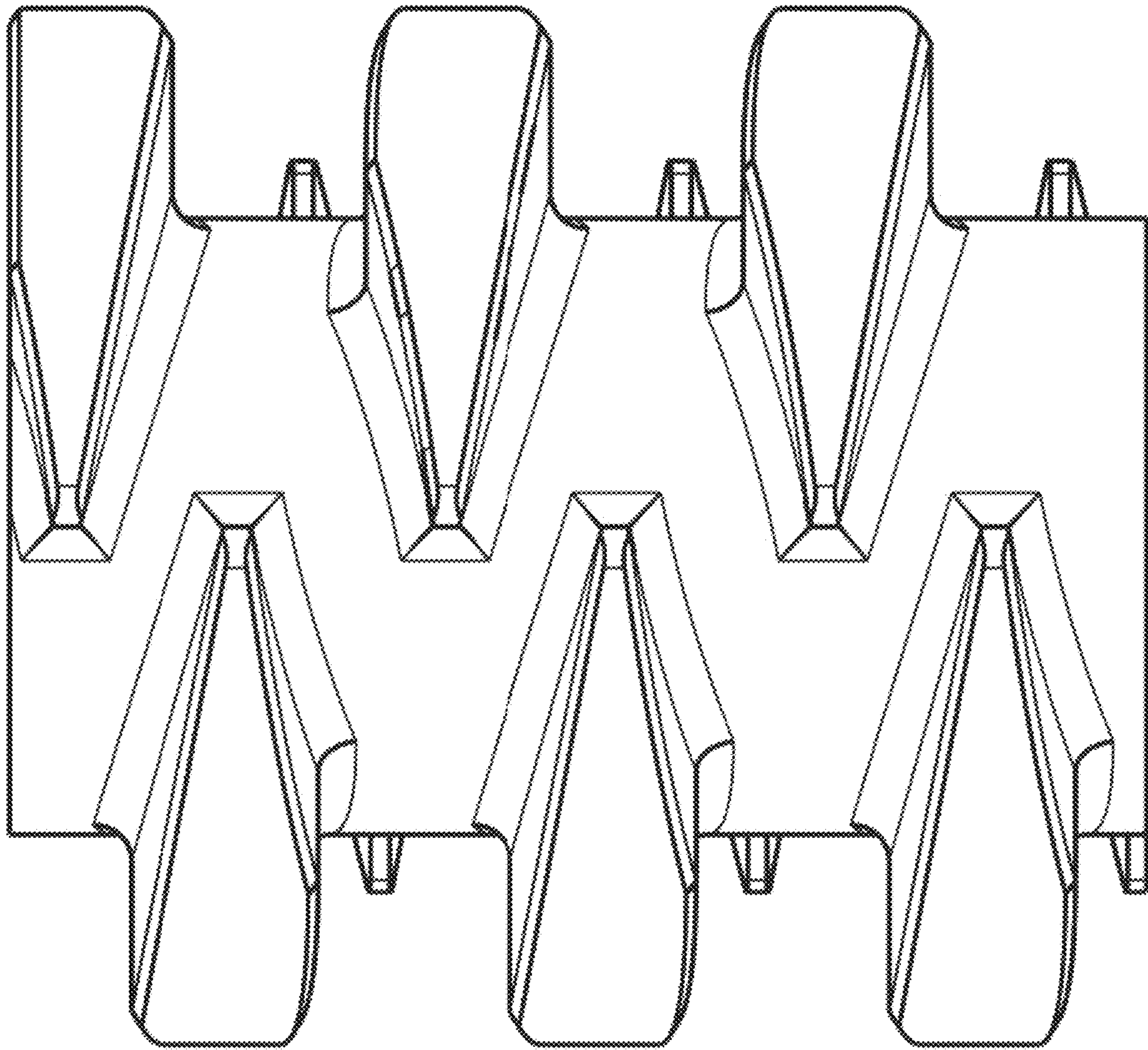


Fig. 14