

US00D873389S

(12) **United States Design Patent**
Leung

(10) **Patent No.:** **US D873,389 S**
(45) **Date of Patent:** **** Jan. 21, 2020**

(54) **DOUBLE CONTAINMENT ELBOW FITTING**

- (71) Applicant: **IPEX TECHNOLOGIES INC.,**
Oakville (CA)
- (72) Inventor: **Martin Kwan Yu Leung,** Oakville
(CA)
- (73) Assignee: **IPEX TECHNOLOGIES INC.,**
Mississauga (CA)

- (**) Term: **15 Years**
- (21) Appl. No.: **29/632,197**
- (22) Filed: **Jan. 5, 2018**

(30) **Foreign Application Priority Data**

Nov. 6, 2017 (CA) 178056

(51) **LOC (12) Cl.** **23-01**

(52) **U.S. Cl.**
USPC **D23/263**

(58) **Field of Classification Search**
USPC D23/259, 262, 263, 265-266; 285/15,
285/16, 31, 33, 45, 53, 86, 104, 125.1,
285/179, 180, 285.1, 294.1, 294.3, 373,
285/417, 3, 39, 105, 113, 257, 305, 321,
285/323, 340, 423; 251/146-152;
138/99

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 316,967 A * 5/1885 Heber F17D 5/02
48/193
 - 1,649,752 A 11/1927 Stone
- (Continued)

FOREIGN PATENT DOCUMENTS

DE 3110243 A1 9/1982

OTHER PUBLICATIONS

IPEX Clear-Guard Double Containment Piping; Catalogue, p. 6, Copyright 2013; [Visited Online Jul. 22, 2019], <https://www.arcat.com/catalogs/ipexusa/clearguardcontainment-datasheet/html5/index.html?page=1> (Year: 2013).*

(Continued)

Primary Examiner — Amy C Wierenga

(57) **CLAIM**

I claim the ornamental design for a double containment elbow fitting, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of the double containment elbow fitting in its environment with a pipe inserted in one end;

FIG. 2 is a front and top perspective view of the double containment elbow fitting;

FIG. 3 is a side view of FIG. 2;

FIG. 4 is a front view of FIG. 2;

FIG. 5 is a top view of FIG. 2;

FIG. 6 is a rear view of FIG. 2;

FIG. 7 is a bottom view of FIG. 2;

FIG. 8 is an exploded view of Figure 2 in a disassembled configuration;

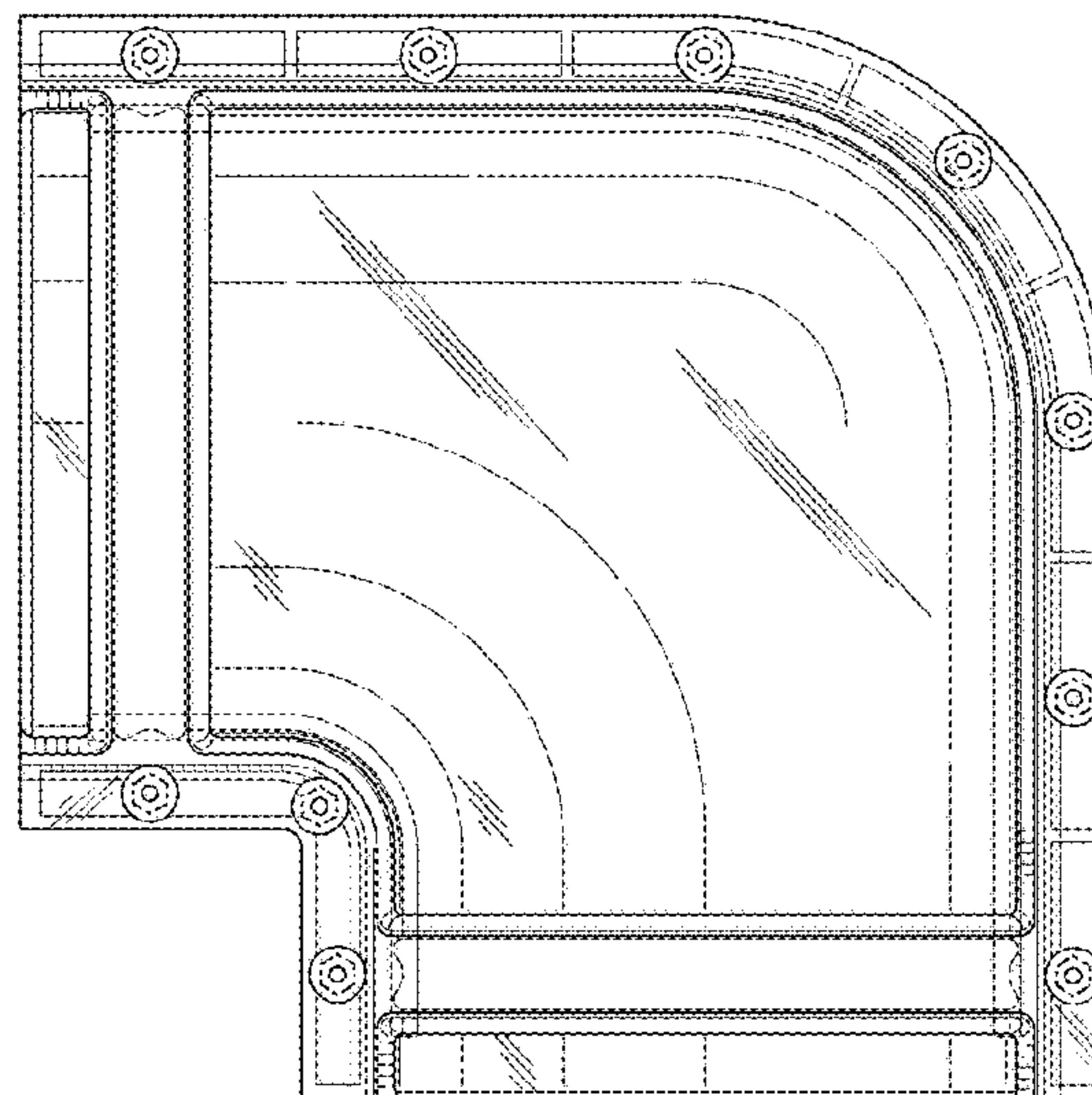
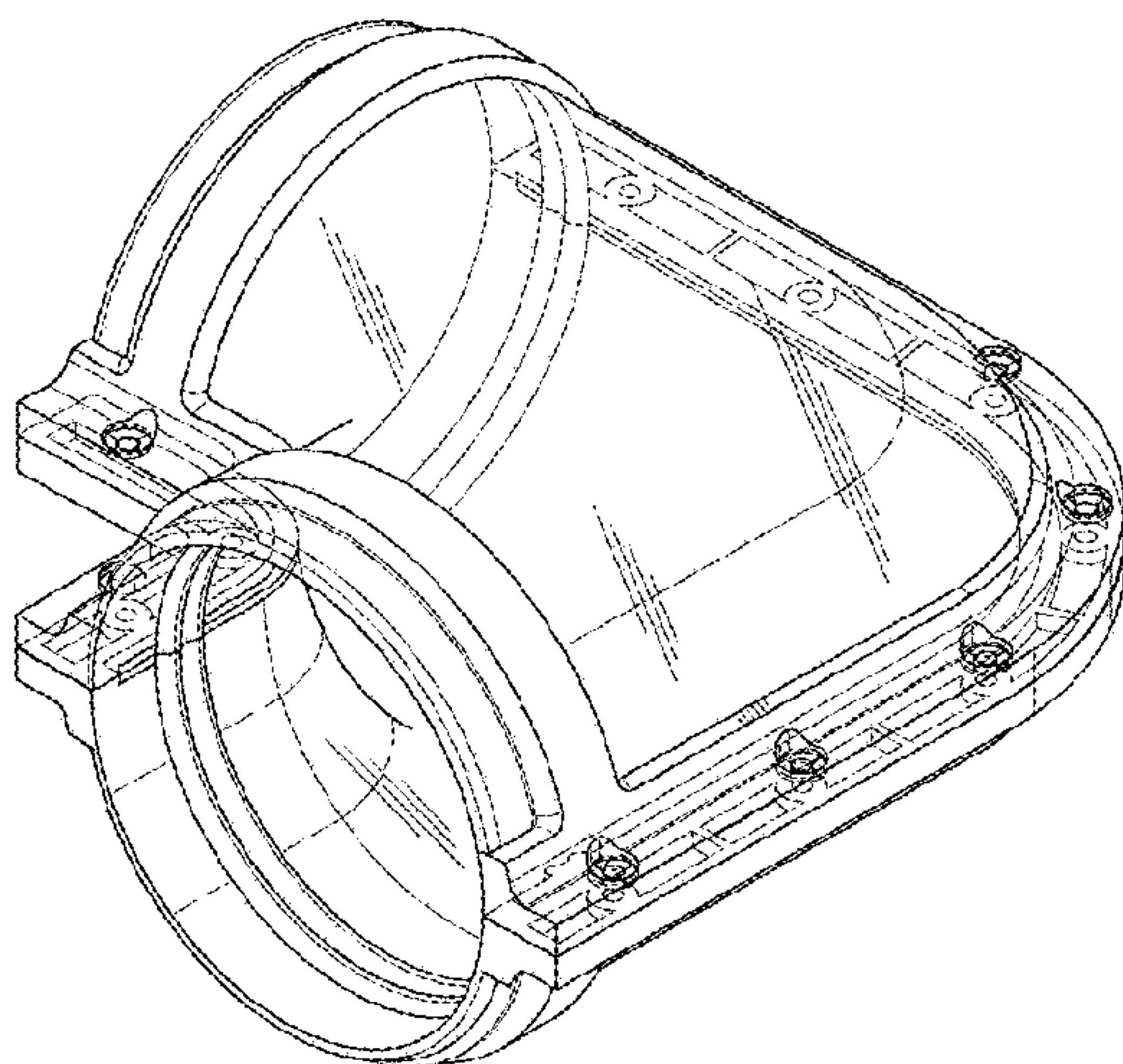
FIG. 9 is an enlarged detailed view of the disassembled corner 9 shown in FIG. 8;

FIG. 10 is a cross sectional view of FIG. 9 along line 10-10; and,

FIG. 11 is a top sectional view of the disassembled configuration shown in FIG. 8 along line 11-11.

The dash dot broken lines depict environmental subject matter that forms no part of the claim. The dot dash broken line indicates cutoff boundaries for the enlarged detail portion view designated in FIGS. 8 and 9 and form no part of the claim.

1 Claim, 10 Drawing Sheets



(58) **Field of Classification Search**
 CPC F16L 59/14; F16L 17/10
 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,994,361	A	3/1935	Johnson	
2,128,720	A *	8/1938	Tweedale	F16L 21/06 285/133.11
3,153,550	A *	10/1964	Hollett	F16L 17/04 285/179
3,425,456	A	2/1969	Schibig	
3,572,395	A *	3/1971	Burns, Jr.	F16L 59/11 138/162
4,002,358	A	1/1977	Streit	
4,111,234	A	9/1978	Wells et al.	
4,219,693	A	8/1980	French	
4,372,593	A	2/1983	Kesselman	
4,426,108	A	1/1984	Kesselman	
4,705,305	A	11/1987	Ghaly	
4,944,976	A	7/1990	Plummer	
5,022,685	A	6/1991	Stiskin et al.	
5,088,771	A *	2/1992	Hosseinian	B25B 27/10 285/382.2
5,368,338	A	11/1994	Greene et al.	
5,419,593	A	5/1995	Greene et al.	
5,449,204	A	9/1995	Greene et al.	
5,452,922	A *	9/1995	Ziu	F16L 39/005 285/123.1
5,735,551	A *	4/1998	Whitman	F16L 55/18 285/15
6,000,420	A *	12/1999	Nicholson	F16L 59/16 137/15.01
6,357,196	B1	3/2002	McCombs	
6,390,139	B1	5/2002	Kang et al.	
8,695,644	B2	4/2014	Rowan et al.	

8,820,795	B2 *	9/2014	Dole	F16L 17/04 285/179
D727,472	S *	4/2015	Bednarz	D23/263
9,182,058	B2 *	11/2015	Cygler, III	F16L 17/04
10,024,467	B2 *	7/2018	Bowman	F16L 21/005
2005/0109415	A1	5/2005	Snyder	
2010/0101677	A1	4/2010	Liebel et al.	
2012/0248761	A1	10/2012	Sixsmith et al.	
2013/0200609	A1 *	8/2013	Dole	F16L 17/04 285/132.1
2013/0207383	A1	8/2013	Sixsmith et al.	
2014/0110014	A1	4/2014	Rowan et al.	

OTHER PUBLICATIONS

Double Containment Piping Systems, Brochure Copyright Date 2014; [Visited Online Jul. 22, 2019], <http://www.ipexna.com/media/1263/double-containment-product-catalog.pdf> (Year: 2014).*

Commercial Industry Supply Website Posted Entry, What's the Deal with Clear PVC?, Posted Nov. 13, 2013, [Visited Online Jul. 22, 2019], <https://www.commercial-industrial-supply.com/resource-center/whats-the-deal-with-clear-pvc/> (Year: 2013).*

Harvel Clear 90 Degree Elbow; Grainger Website copyright dates 1994-2019; Visited Online 0/16/2019; <https://www.grainger.com/category/plumbing/pipe-tubing-and-fittings/pipe-fittings/pvc-pipe-fittings?brandName=HARVEL+CLEAR&filters=brandName> (Year: 1994).*

Harvel Clear PVC Pipe Spec Sheet Catalog; Effective date Apr. 28, 2010; Visited Online Oct. 16, 2019; <http://www.clearpvcpipe.com/media/additional/ClearPVCspecs.pdf> (Year: 2010).*

Formufit F01290-UV Elbow PVC Fitting, 90 Degree; Amazon Earliest Review Date Jan. 20, 2017; Visited Online Oct. 16, 2019; https://www.amazon.com/FORMUFIT-F01290E-UV-Fitting-Furniture-Degree/dp/B014OSHCPY/ref=sr_1_1?keywords=Clear+PVC+Elbow&qid=1571247256&s=industrial&sr=1-1 (Year: 2017).*

* cited by examiner

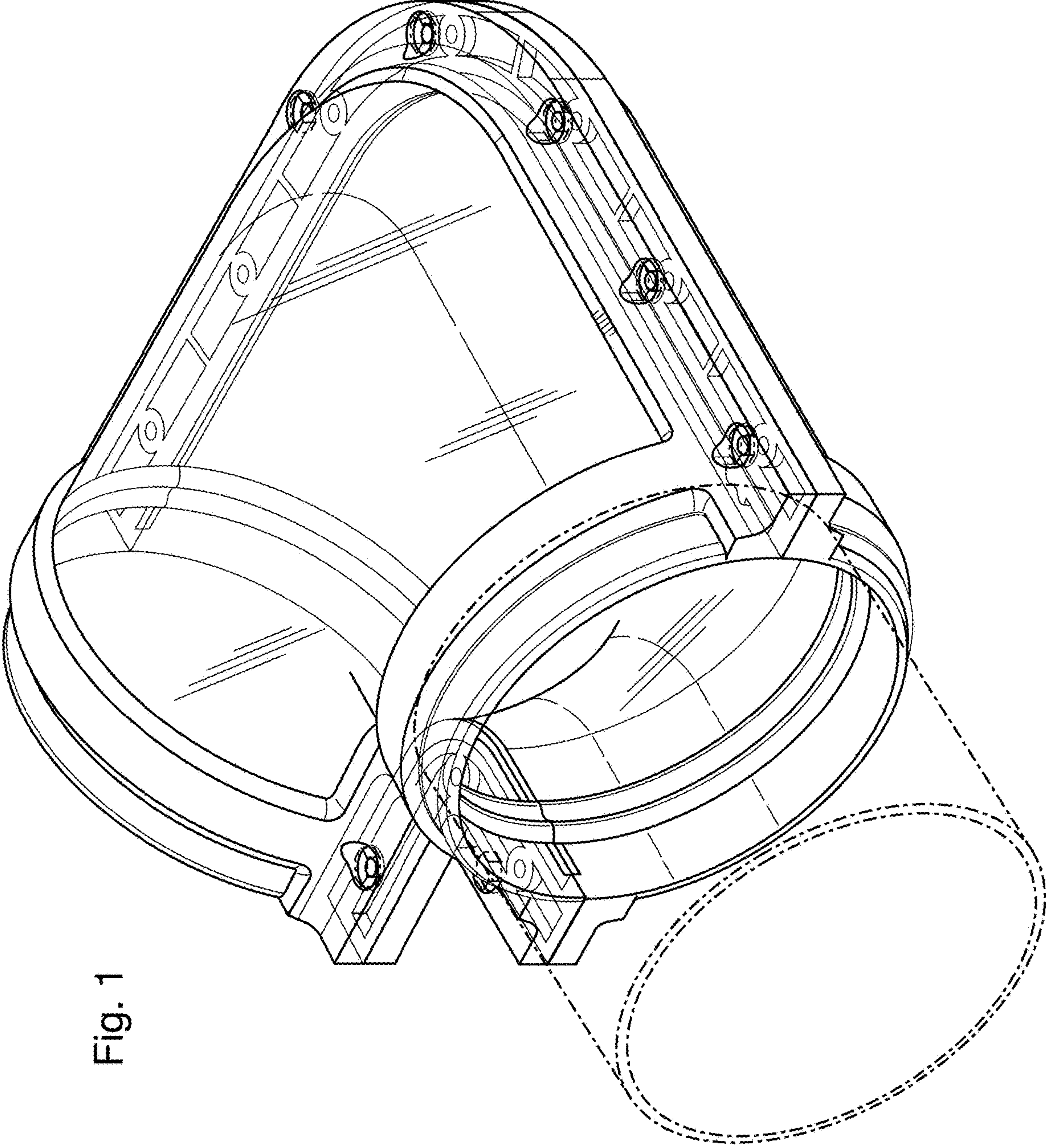


Fig. 1

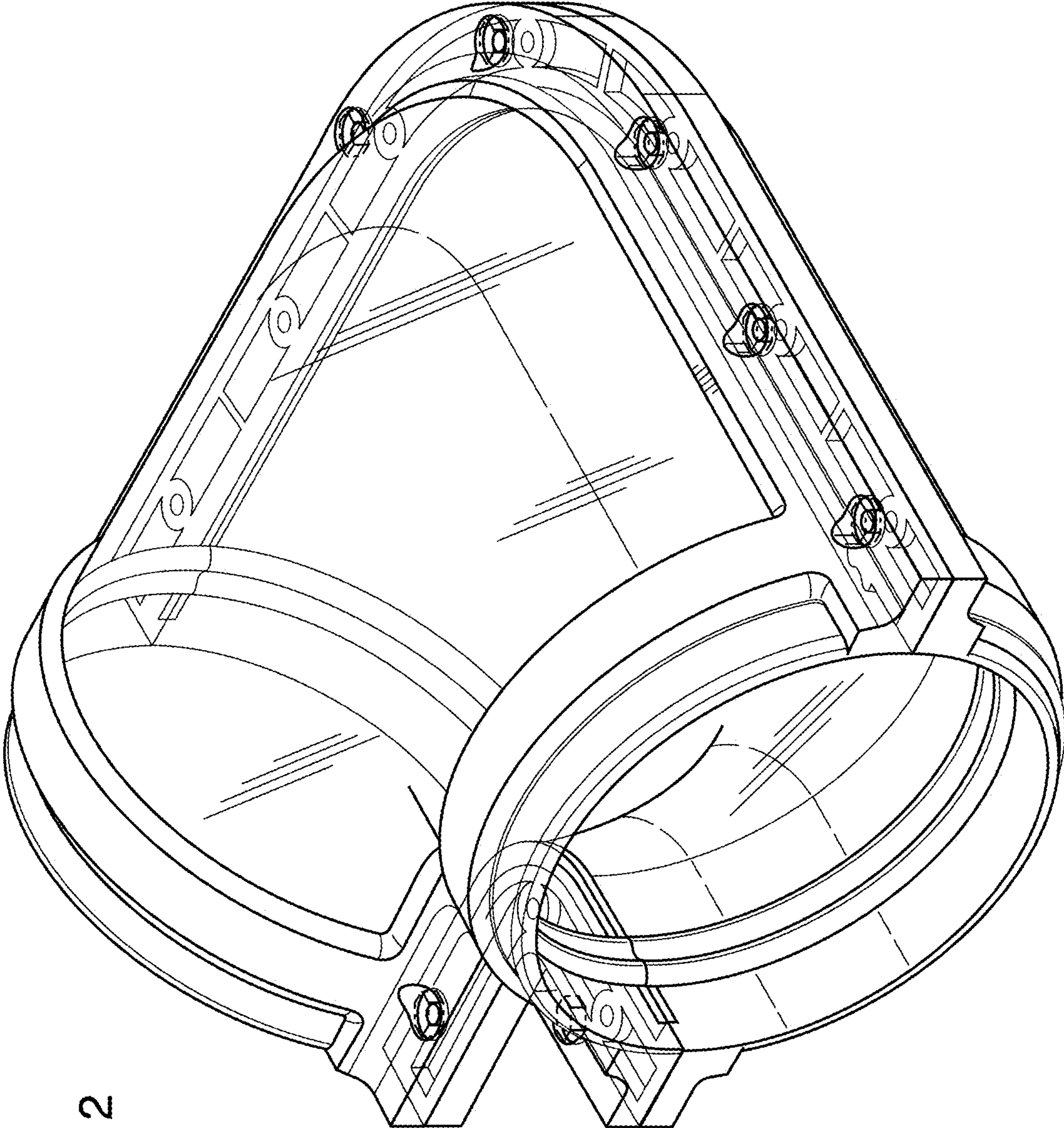


Fig. 2

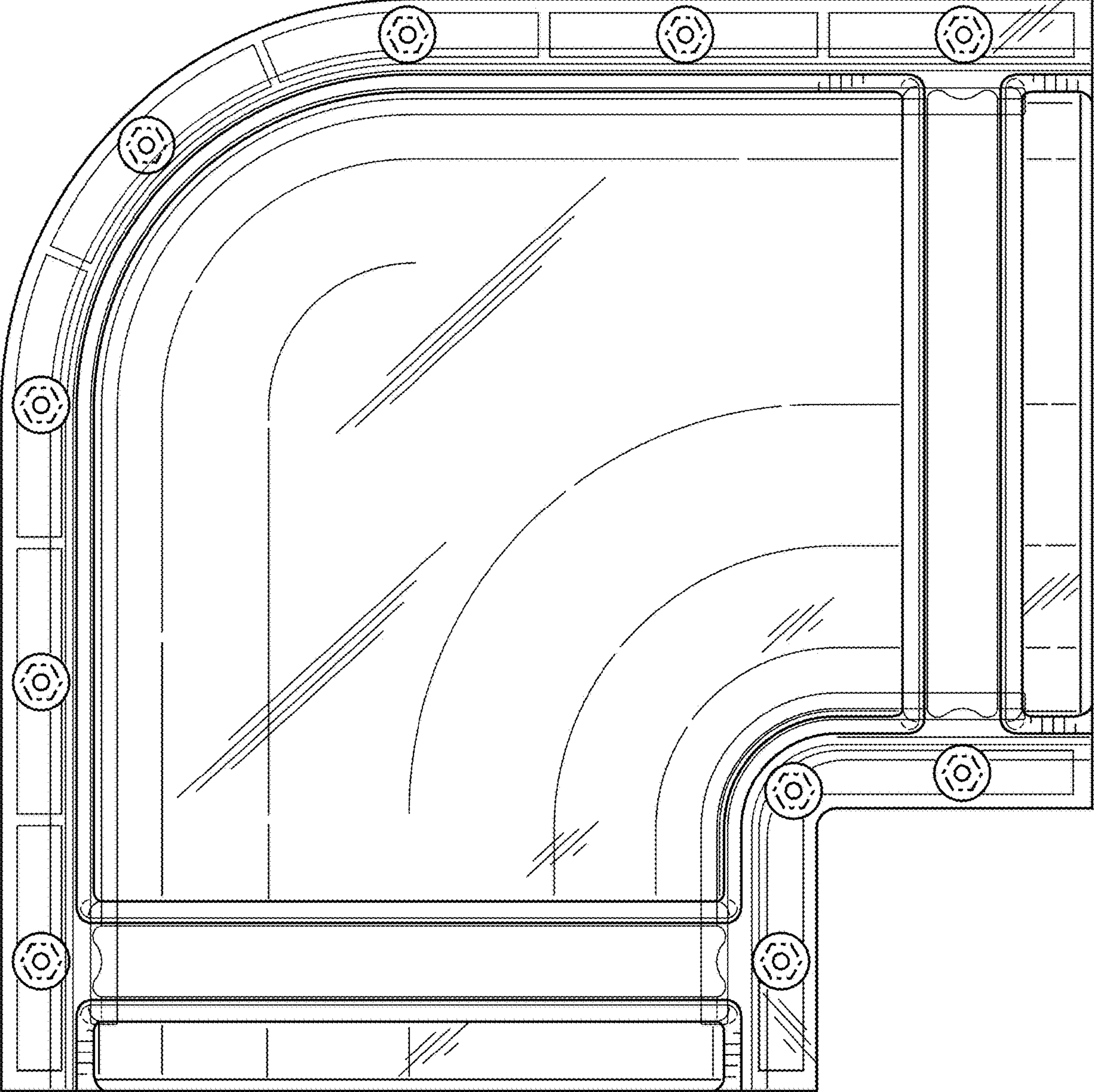


Fig. 3

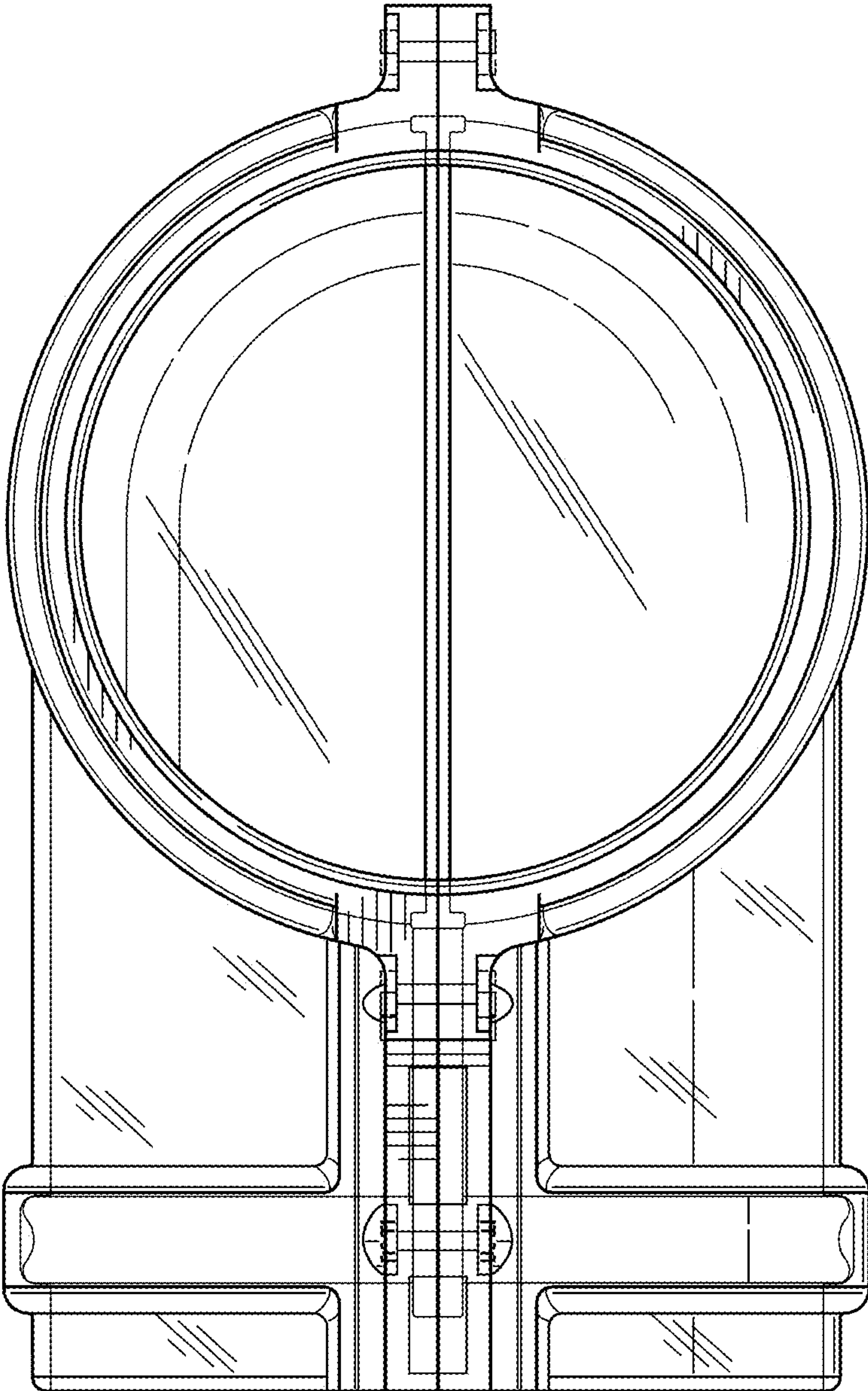


Fig. 4

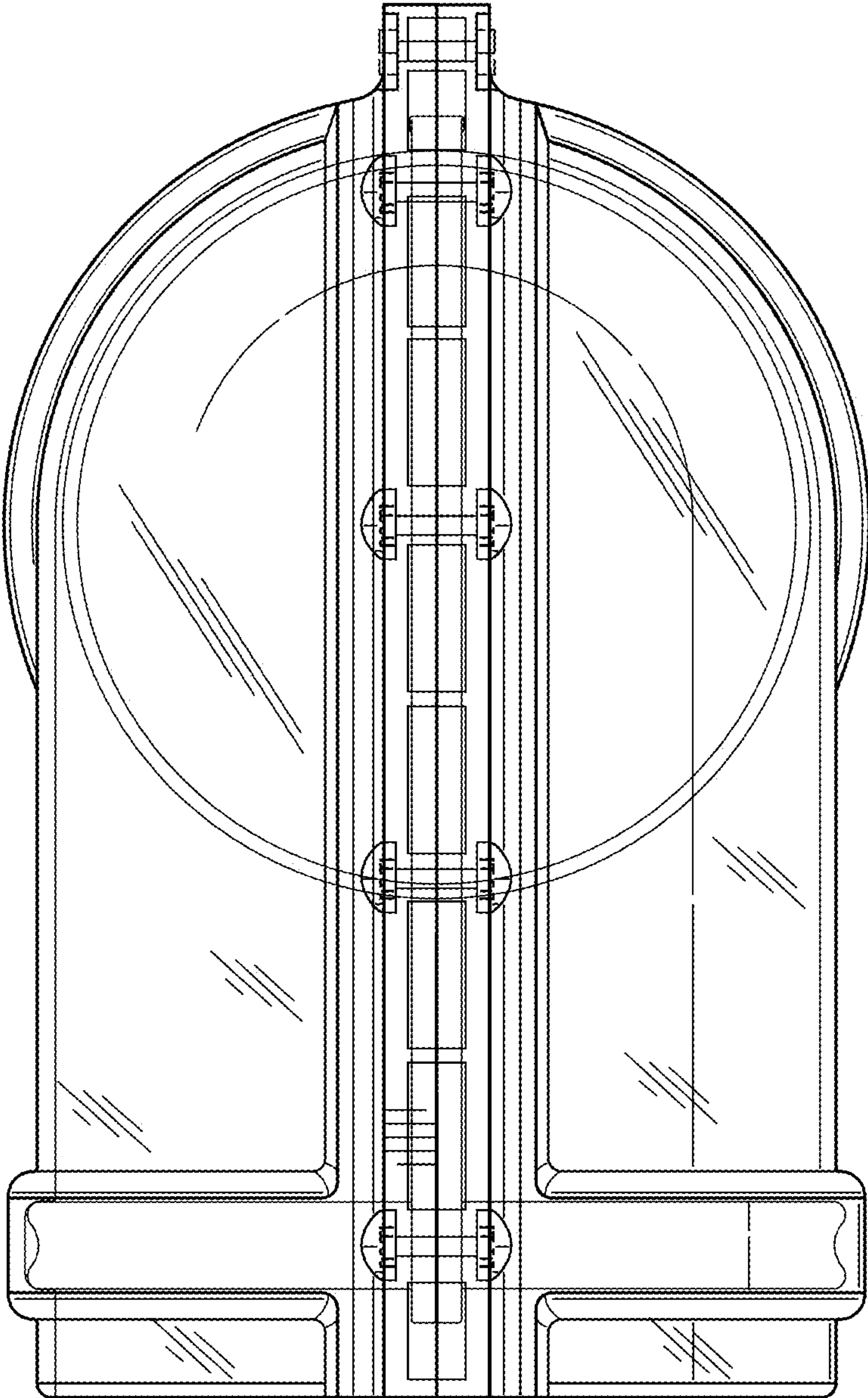


Fig. 5

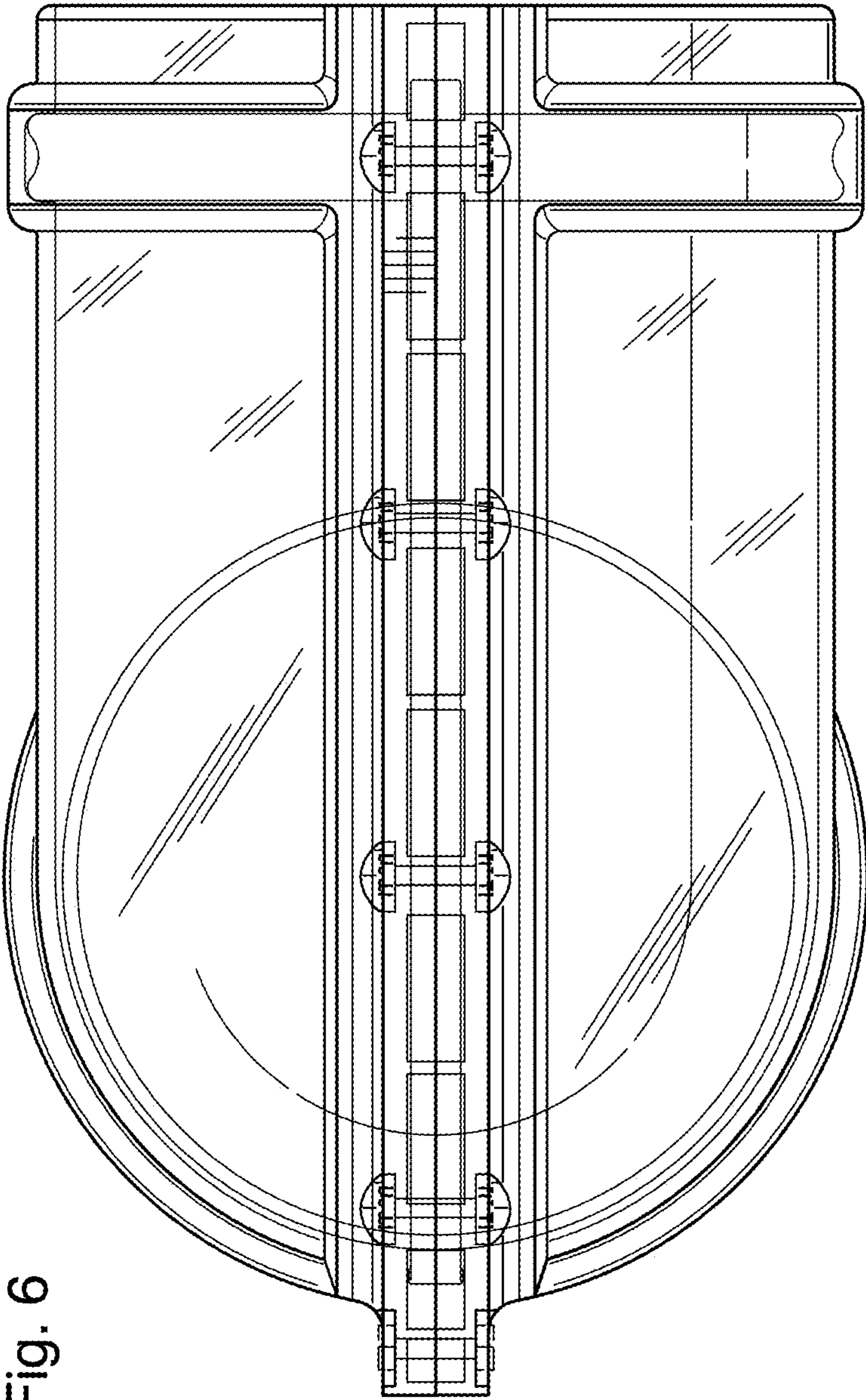


Fig. 6

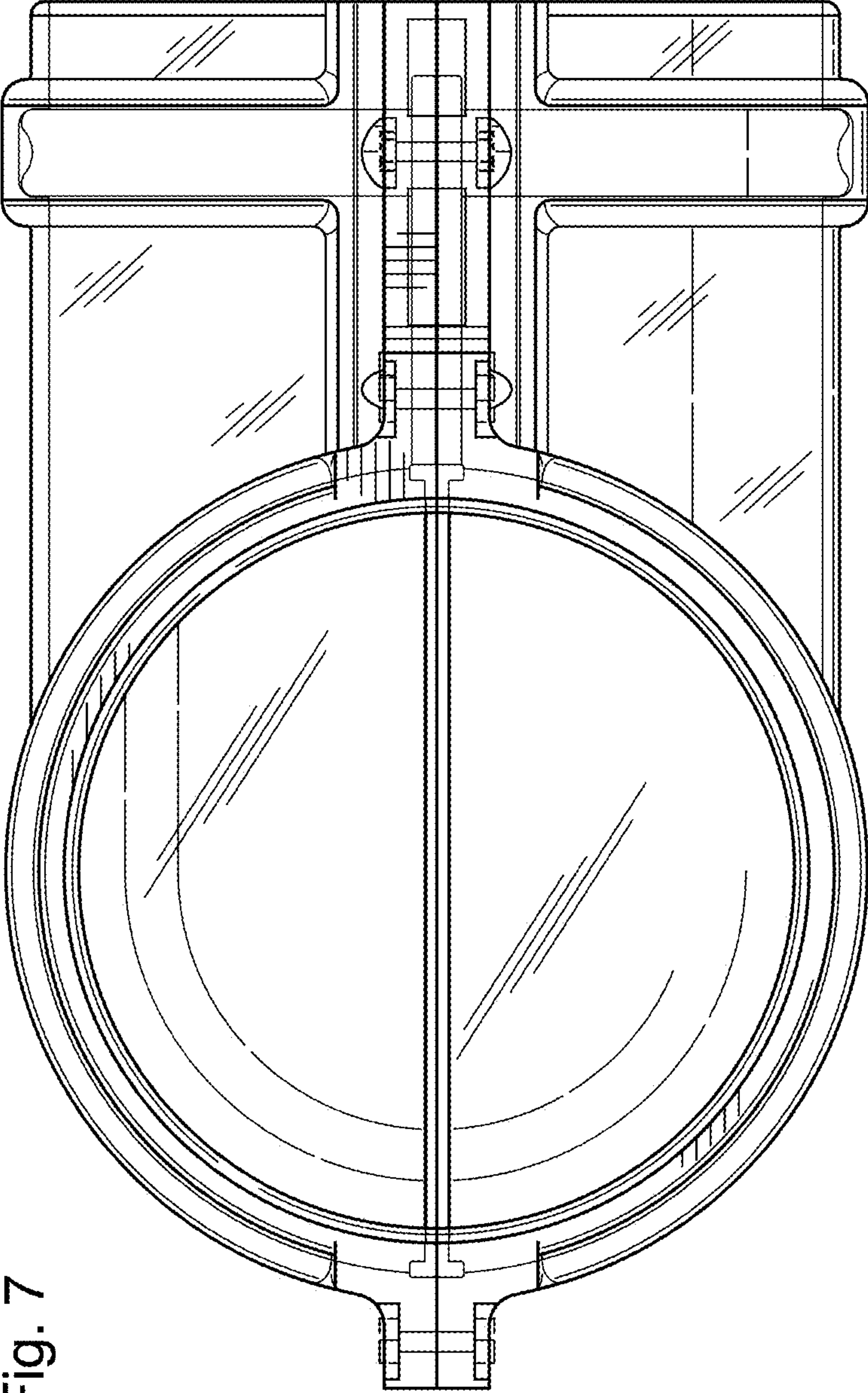


Fig. 7

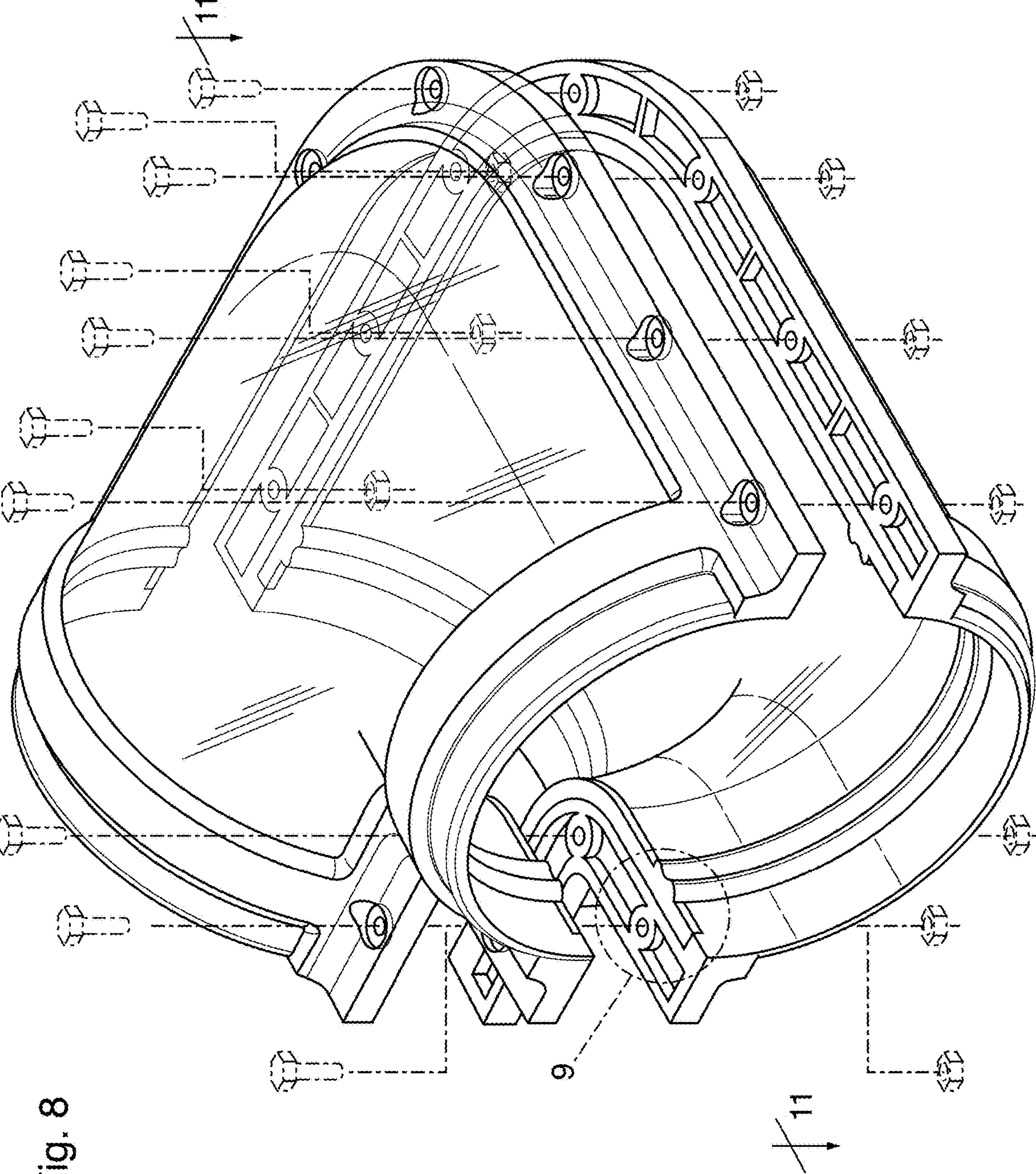


Fig. 8

Fig. 9

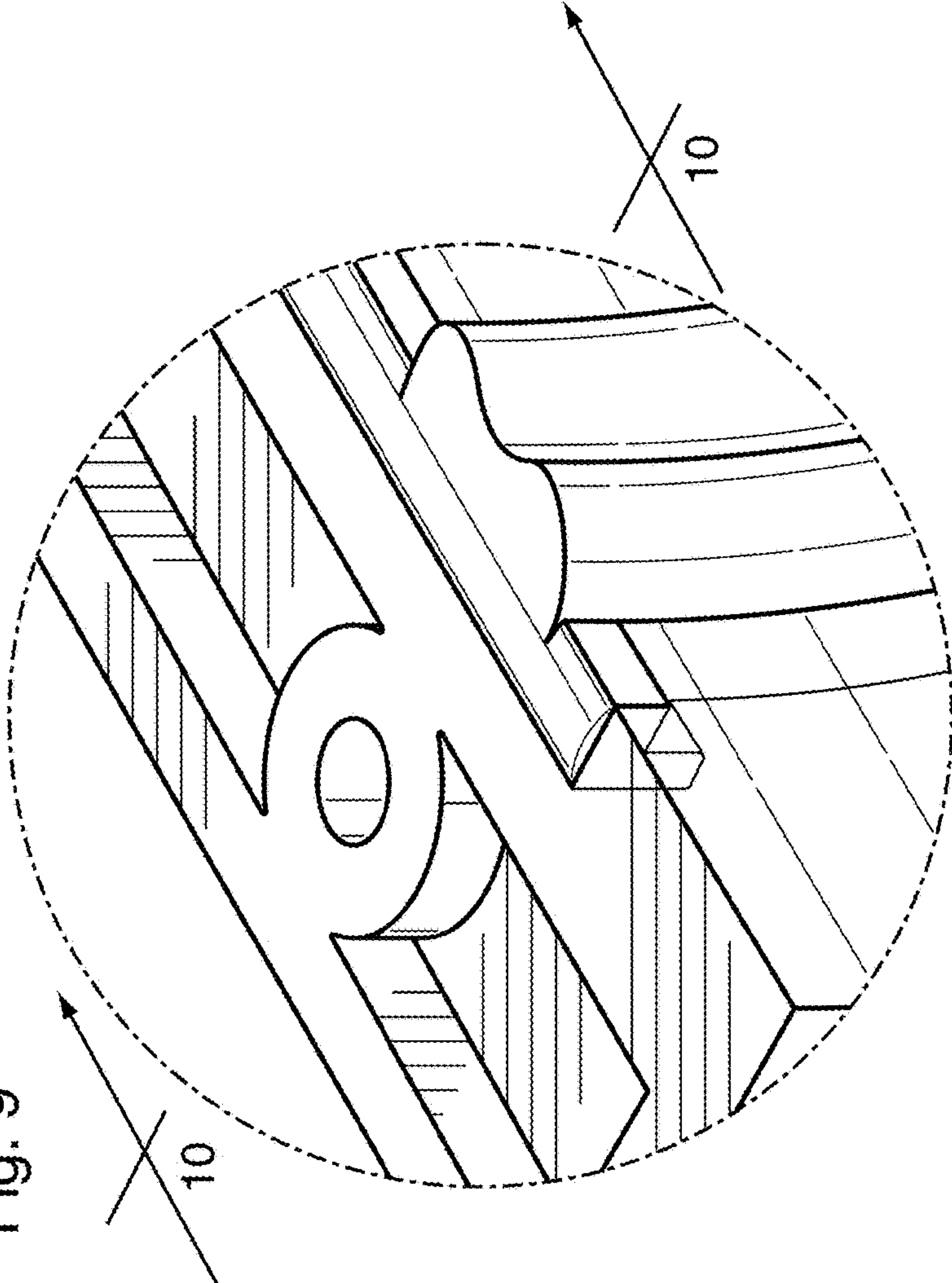
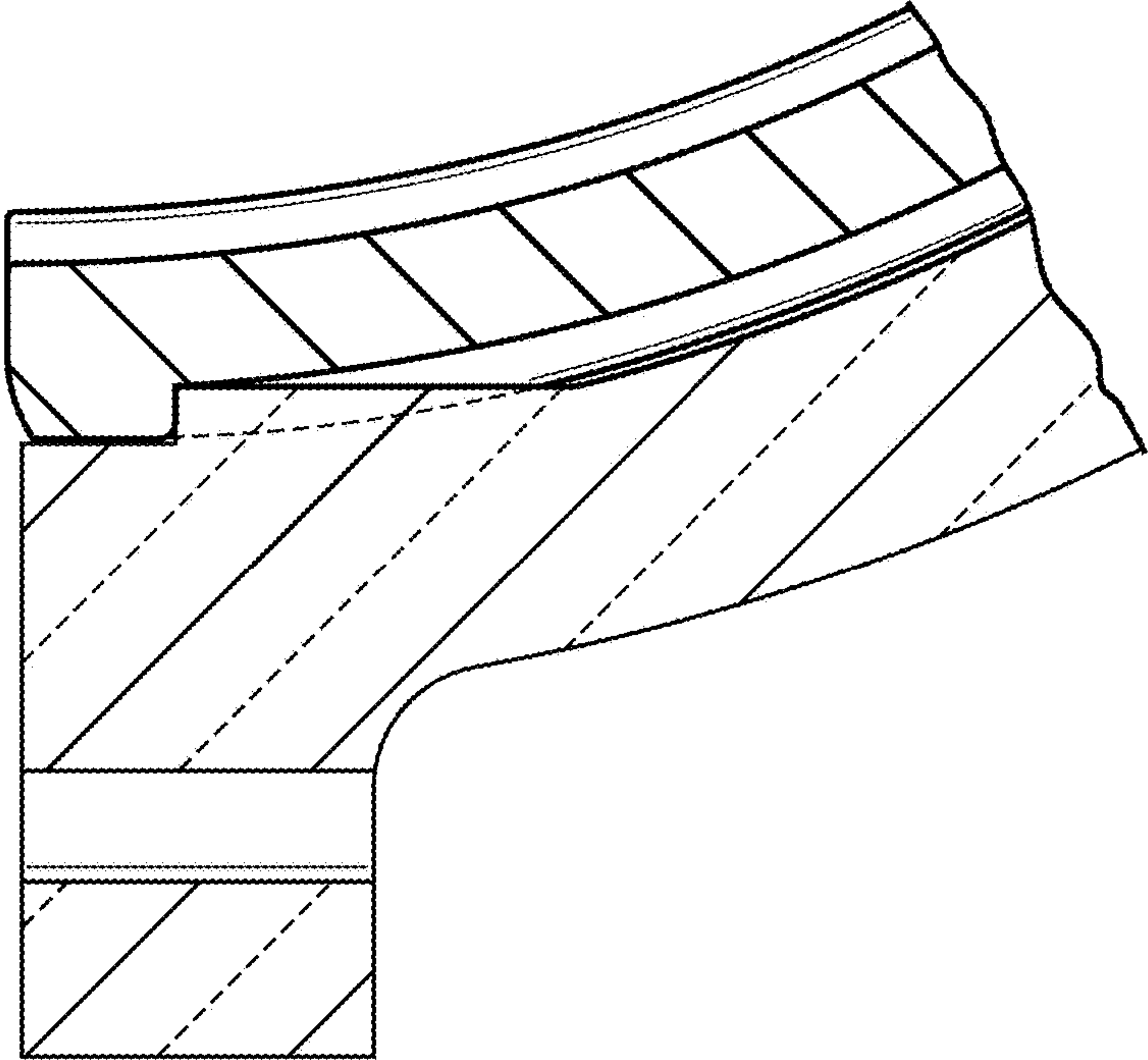


Fig. 10



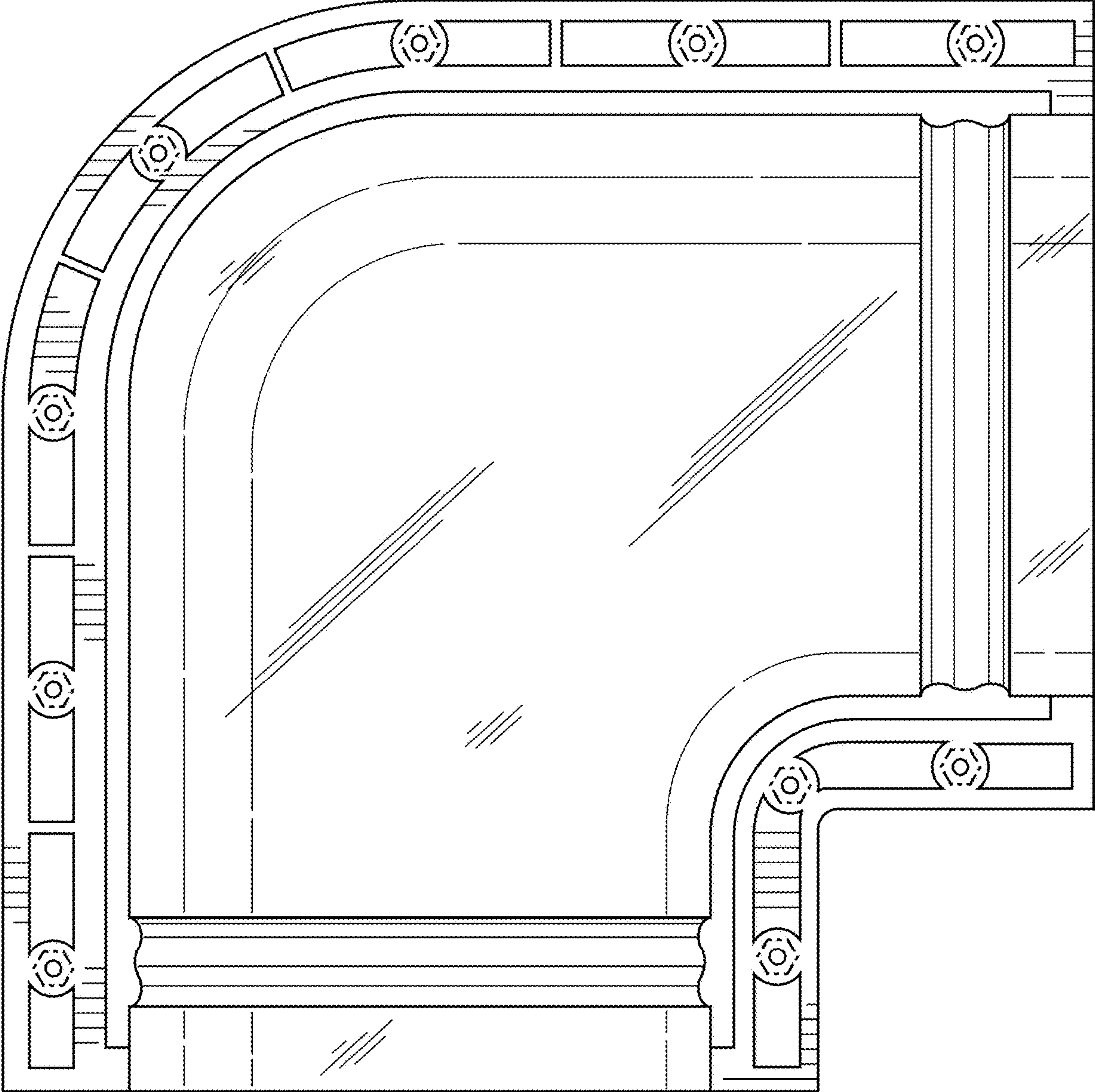


Fig. 11