



US00D979049S

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

(10) **Patent No.:** **US D979,049 S**

(45) **Date of Patent:** **** Feb. 21, 2023**

(54) **IV TUBE CARRIAGE DEVICE**

(71) Applicant: **The Cleveland Clinic Foundation**,
Cleveland, OH (US)

(72) Inventors: **Jane Hartman**, Berea, OH (US);
Nathaniel Hartman, Bexley, OH (US);
Nancy Albert, Chesterland, OH (US)

(73) Assignee: **THE CLEVELAND CLINIC**
FOUNDATION, Cleveland, OH (US)

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

(21) Appl. No.: **29/769,246**

(22) Filed: **Feb. 4, 2021**

(51) **LOC (14) Cl.** **24-02**

(52) **U.S. Cl.**
USPC **D24/128; D8/382**

(58) **Field of Classification Search**
USPC D24/108, 127, 128, 129; D23/259, 262,
D23/249; D8/382, 394

(Continued)

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,696,920 A 10/1972 Lahay
4,666,111 A 5/1987 Schuler

(Continued)

FOREIGN PATENT DOCUMENTS

KR 301075300.0000 * 9/2020
KR 301133820.0000 * 11/2021

OTHER PUBLICATIONS

Medical IV Infusion Pinch Clamp Tubing Pinch Hose Plastic Slide
Robert Clamp Clips, CHi-Feng, Alibaba.com, [Postdate unknown],
[Site seen Aug. 24, 2022], Seen at URL: [https://www.alibaba.com/
product-detail/Medical-IV-Infusion-Pinch-Clamp-Tubing_62001522352.
html](https://www.alibaba.com/product-detail/Medical-IV-Infusion-Pinch-Clamp-Tubing_62001522352.html) (Year: 2022).*

(Continued)

Primary Examiner — Natasha Vujcic

Assistant Examiner — Gilbert B Ford

(74) *Attorney, Agent, or Firm* — Pearne & Gordon LLP

(57) **CLAIM**

We claim, the ornamental design for an IV tube carriage
device, as shown and described.

DESCRIPTION

FIGS. 1-8 are drawings of a first embodiment of the IV tube
carriage device, wherein:

FIG. 1 is a top perspective view of an IV-tube cradle of the
IV tube carriage device;

FIG. 2 is a bottom perspective view of the IV-tube cradle
thereof;

FIG. 3 is a left-side view of the IV-tube cradle;

FIG. 4 is a front view of the IV-tube cradle;

FIG. 5 is a right-side view of the IV-tube cradle;

FIG. 6 is a rear view of the IV-tube cradle;

FIG. 7 is a top view of the IV-tube cradle;

FIG. 8 is a bottom view of the IV-tube cradle; and

FIG. 9 is a perspective view of the first embodiment of the
IV tube carriage device illustrating the IV-tube cradle in a
position of use.

FIGS. 10-18 are drawings of a second embodiment of the IV
tube carriage device, wherein:

FIG. 10 is a top perspective view of an IV-tube cradle of the
IV tube carriage device;

FIG. 11 is a bottom perspective view of the IV-tube cradle
thereof;

FIG. 12 is a left-side view of the IV-tube cradle;

FIG. 13 is a front view of the IV-tube cradle;

FIG. 14 is a right-side view of the IV-tube cradle;

FIG. 15 is a rear view of the IV-tube cradle;

FIG. 16 is a top view of the IV-tube cradle;

FIG. 17 is a bottom view of the IV-tube cradle; and

FIG. 18 is a perspective view of the second embodiment of
the IV tube carriage device illustrating the IV-tube cradle in
a position of use.

FIGS. 19-27 are drawings of a third embodiment of the IV
tube carriage device, wherein:

FIG. 19 is a top perspective view of an IV-tube cradle of the
IV tube carriage device;

(Continued)

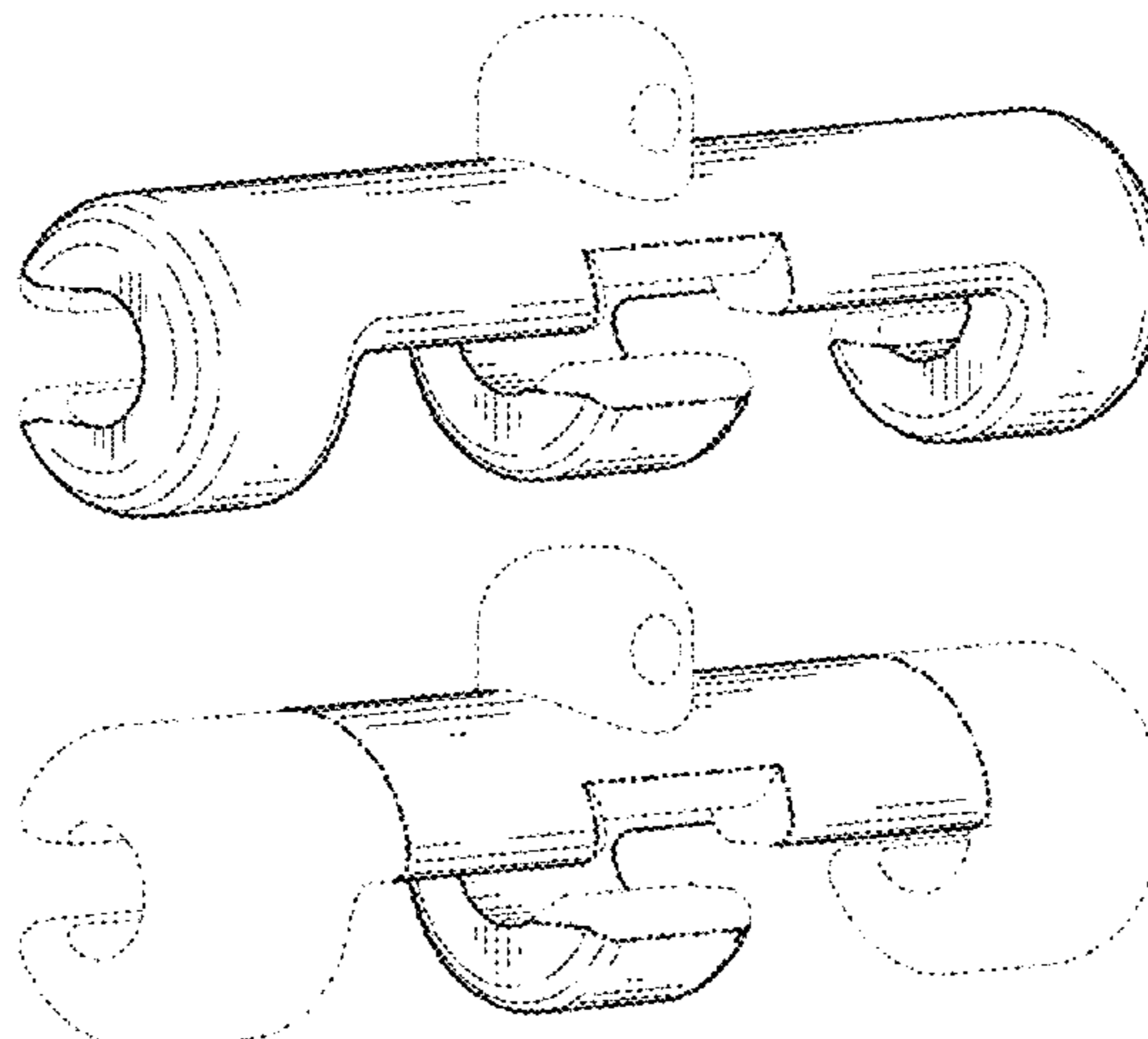


FIG. 20 is a bottom perspective view of the IV-tube cradle thereof;

FIG. 21 is a left-side view of the IV-tube cradle;

FIG. 22 is a front view of the IV-tube cradle;

FIG. 23 is a right-side view of the IV-tube cradle;

FIG. 24 is a rear view of the IV-tube cradle;

FIG. 25 is a top view of the IV-tube cradle;

FIG. 26 is a bottom view of the IV-tube cradle; and,

FIG. 27 is a perspective view of the third embodiment of the IV tube carriage device illustrating the IV-tube cradle in a position of use.

Uniform broken lines in the figures illustrate portions of the IV tube carriage device and its environment which form no part of the claimed design.

The dot-dash broken lines in the figures illustrate boundaries and form no part of the claimed design.

1 Claim, 9 Drawing Sheets

(58) **Field of Classification Search**

CPC E02D 5/02; E02D 5/04; E02D 5/06; E02D 5/08

See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,971,271	A	11/1990	Sularz	
5,728,047	A	3/1998	Edoga	
D424,921	S *	5/2000	Axelsson	D8/394
6,387,076	B1	5/2002	Landuyt	
D488,865	S *	4/2004	Todia	D24/128
7,487,791	B1	2/2009	Bradley	
D621,248	S *	8/2010	Heindl	D8/382
8,709,471	B2 *	4/2014	Browning	A61L 31/043 424/430

8,974,421	B1	3/2015	Khalaj	
D783,814	S *	4/2017	Hanuka	D24/129
D861,471	S *	10/2019	Ild	D8/394
D876,938	S *	3/2020	Spangler	D8/382
D887,824	S *	6/2020	Heindl	D8/382
D892,106	S *	8/2020	Ji	D8/382
D895,407	S *	9/2020	Heindl	D8/382
D915,184	S *	4/2021	Tuthill	D8/382
D915,873	S *	4/2021	Phy	D8/394
D938,810	S *	12/2021	Heindl	D8/382
D944,301	S *	2/2022	Li	D15/139
D947,015	S *	3/2022	Heindl	D8/382
D961,069	S *	8/2022	O'Dea	D24/128
2002/0130059	A1	9/2002	Armijo	
2006/0113432	A1	6/2006	Driskell	
2018/0207416	A1	7/2018	Roddy	
2019/0022303	A1	1/2019	Headlee	

OTHER PUBLICATIONS

TubeCaddy as described on <https://www.whitneymedical.com/med-surg-solutions/tubecaddy-0> downloaded Feb. 4, 2021.

Beata Clasp Tube Organizer as described on <https://www.medicus-health.com/beata-clasp-tube-organizer.html> downloaded Feb. 4, 2021.

Tubing Organizers as described on <https://surgecardiovascular.com/product/tubing-organizers/> downloaded Feb. 4, 2021.

NeoHug as described on <https://www.neotechproducts.com/product/nehug/> downloaded Feb. 4, 2021.

Hose Tubing Management Clip for CPAP & Oxygen Therapy as described on https://www.directhomemedical.com/cart/merchant.mvc?Screen=PROD&Product_Code=clip-for-cpap-tubes-and-bedding&Store_Code=DHM downloaded Feb. 4, 2021.

Wahah C-Pap Hose Holder as described on https://www.amazon.com/WAHAH-Wahah-CPAP-Hose-Holder/dp/B07TBQRTCW/ref=sr_1_81?dchild=1&keywords=tubing+holder+flexible&qid=1589902544&sr=8-81 downloaded on Feb. 4, 2021.

NeoGrip Tubing and Cable Holder. Downloaded Feb. 4, 2021. 2 pages.

* cited by examiner

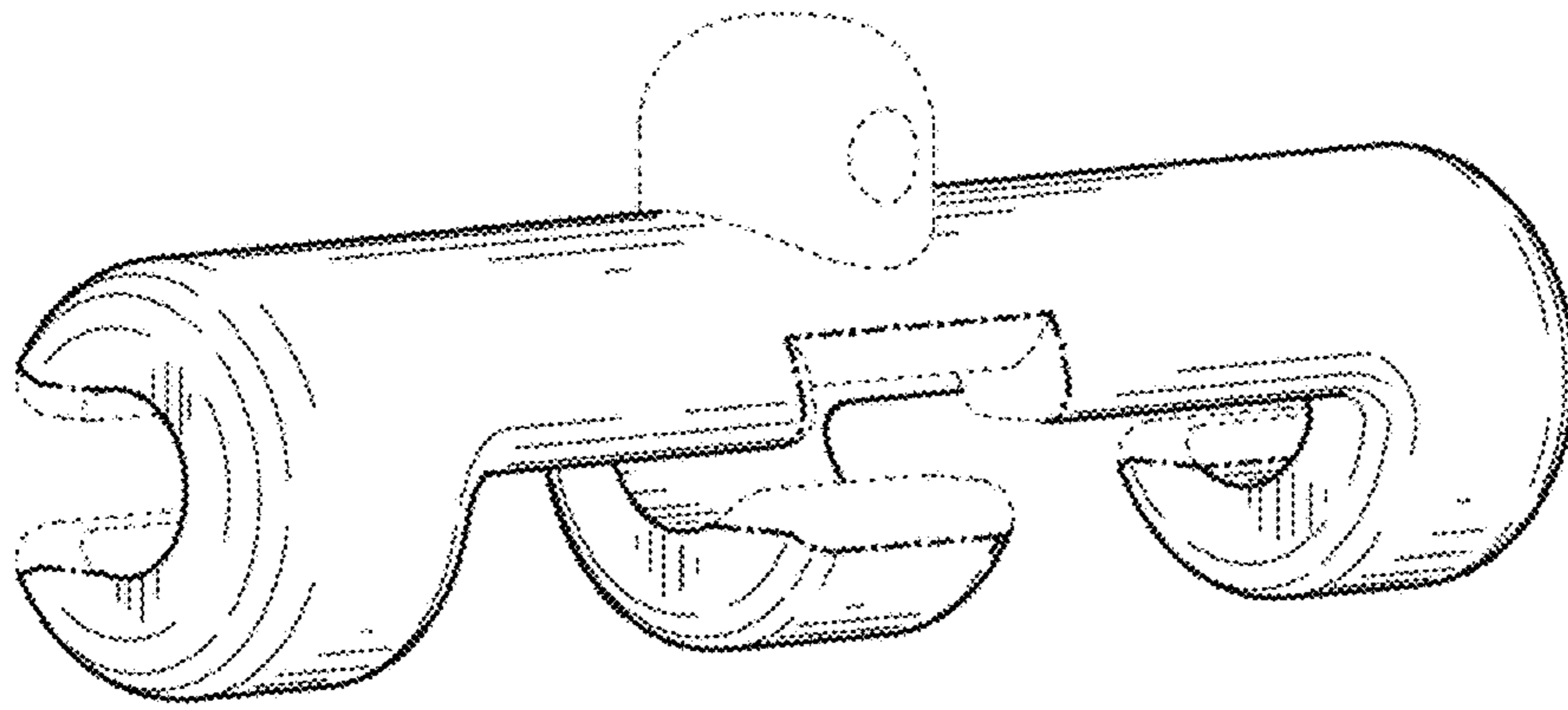


Fig. 1

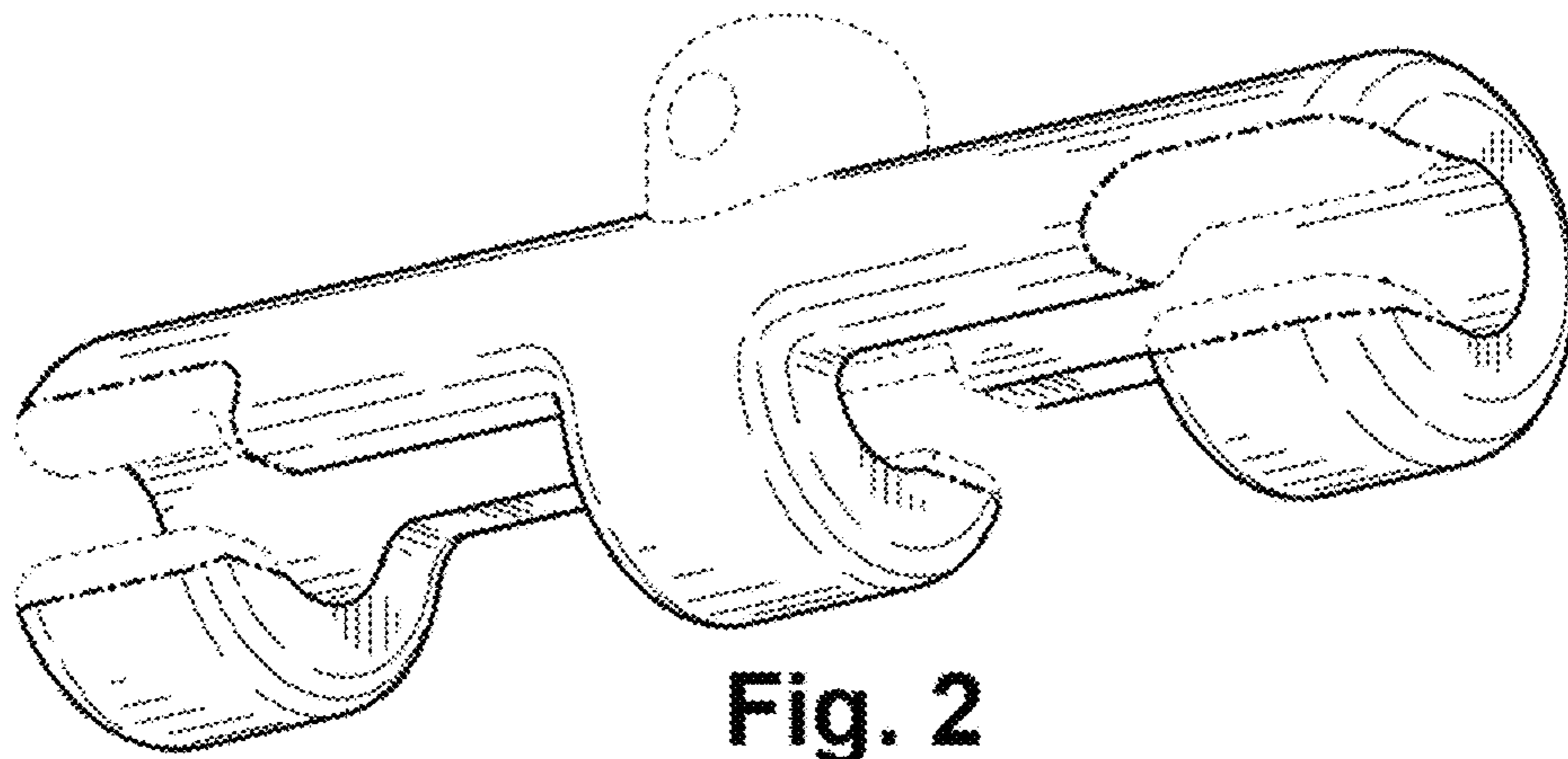


Fig. 2

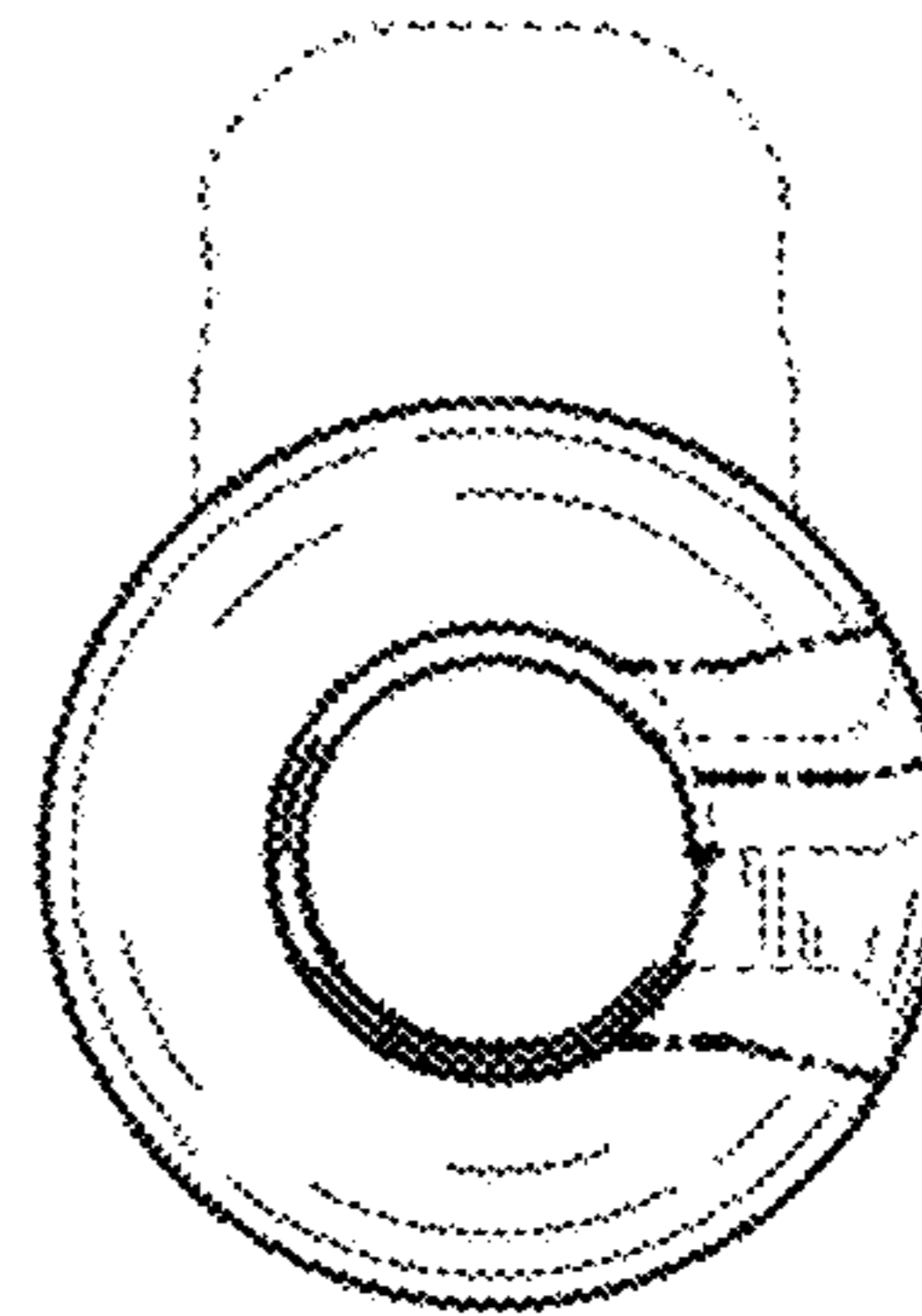


Fig. 3

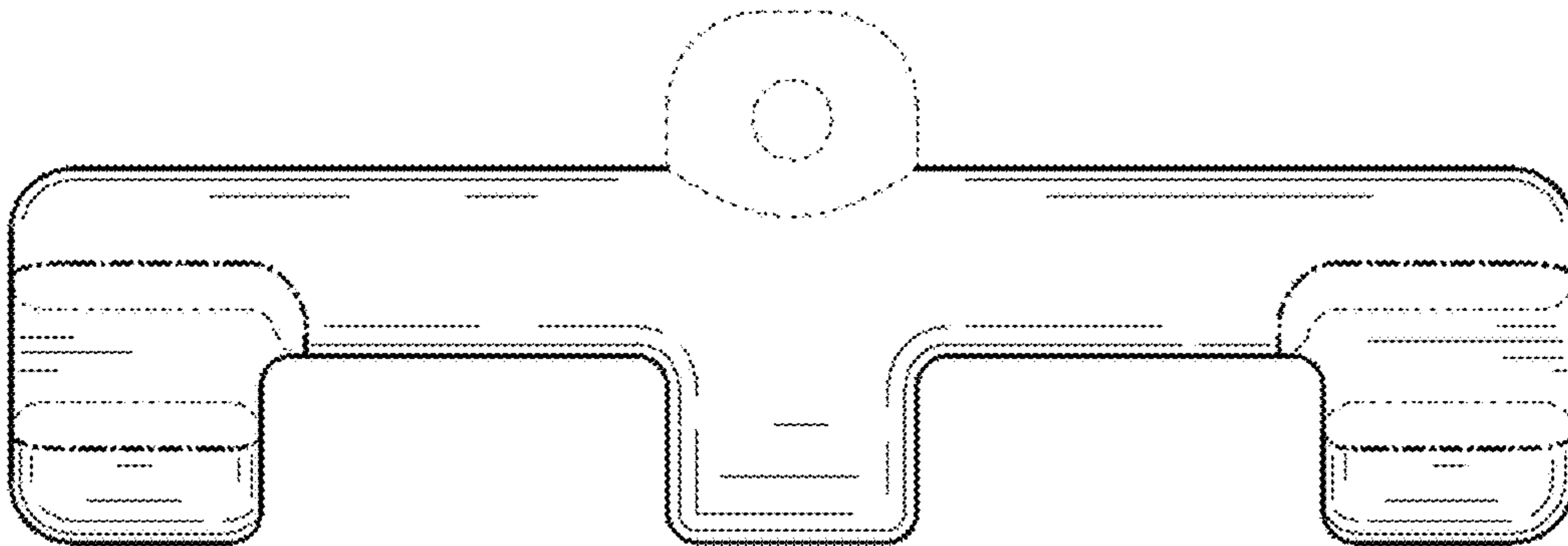


Fig. 4

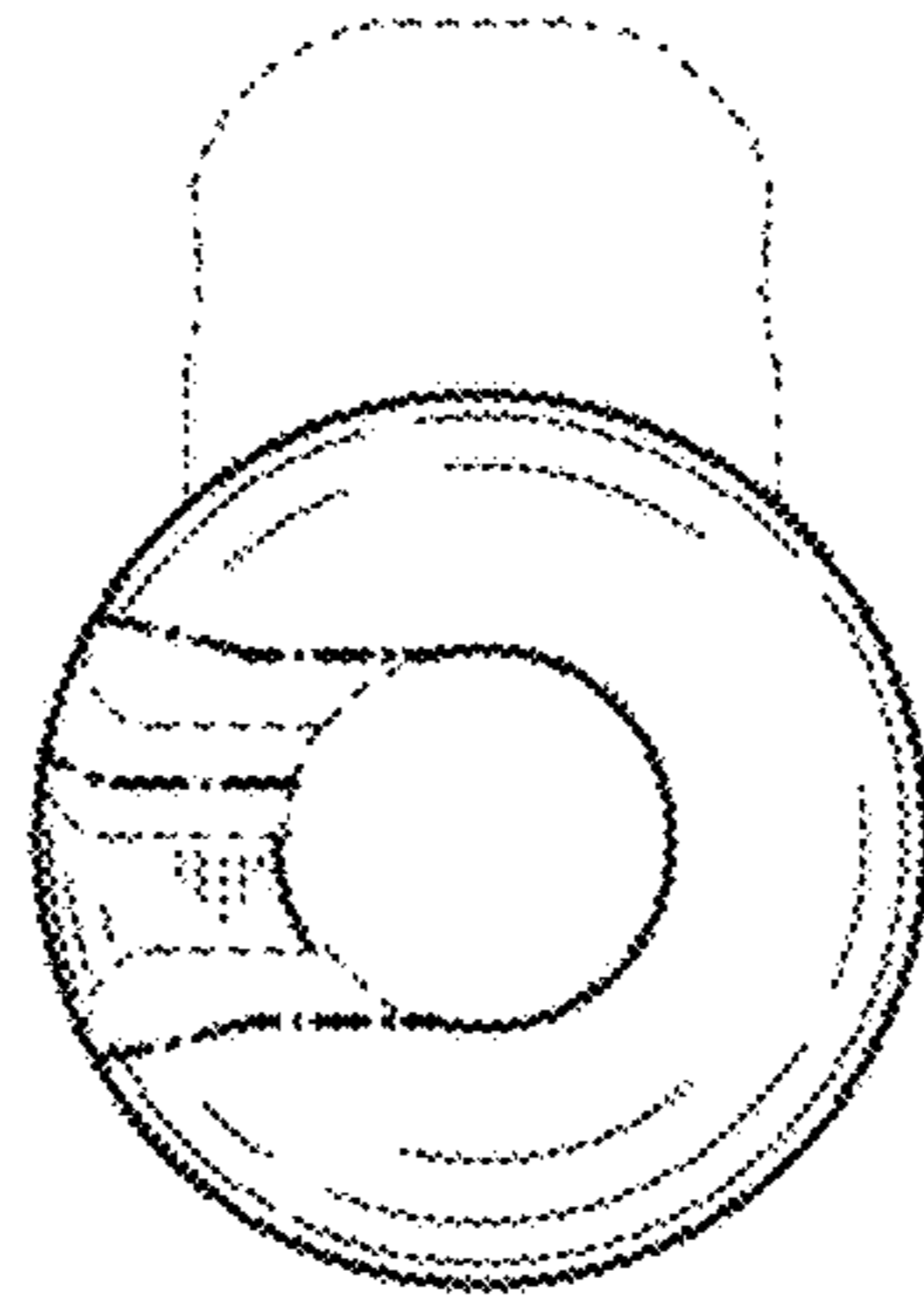


Fig. 5

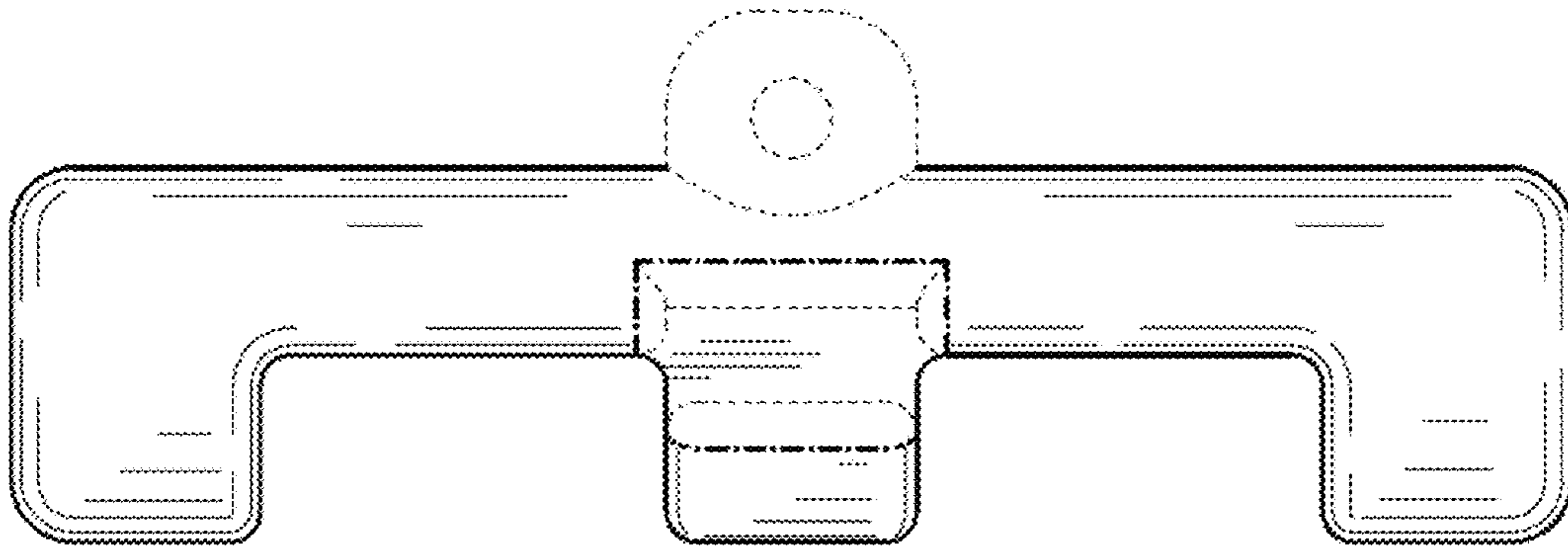


Fig. 6

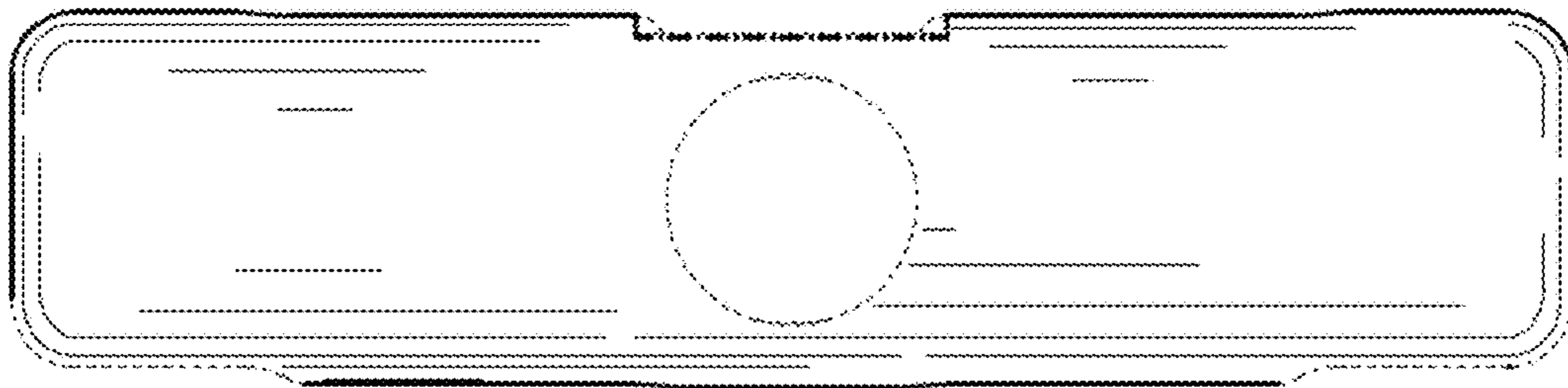


Fig. 7

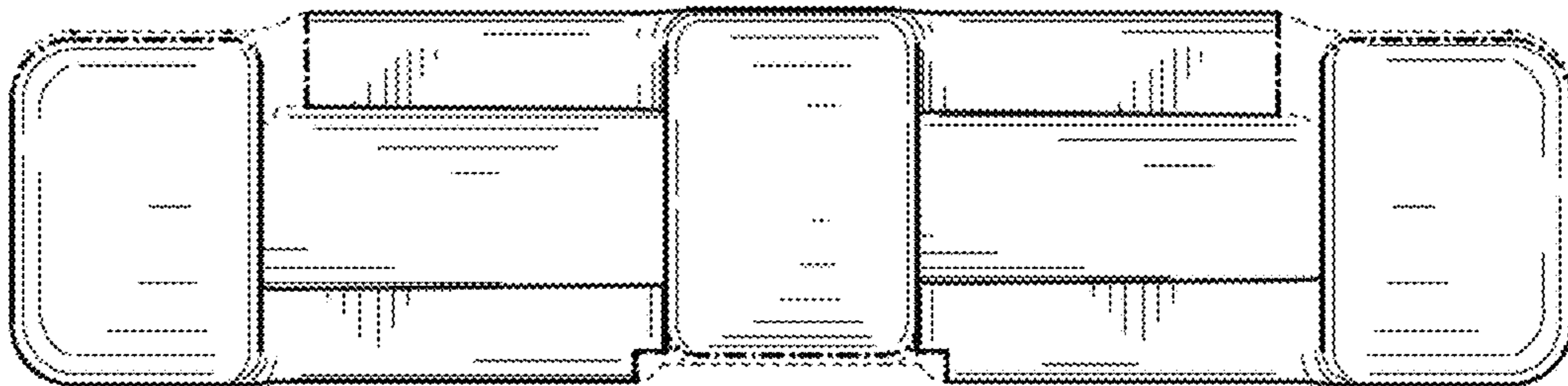


Fig. 8

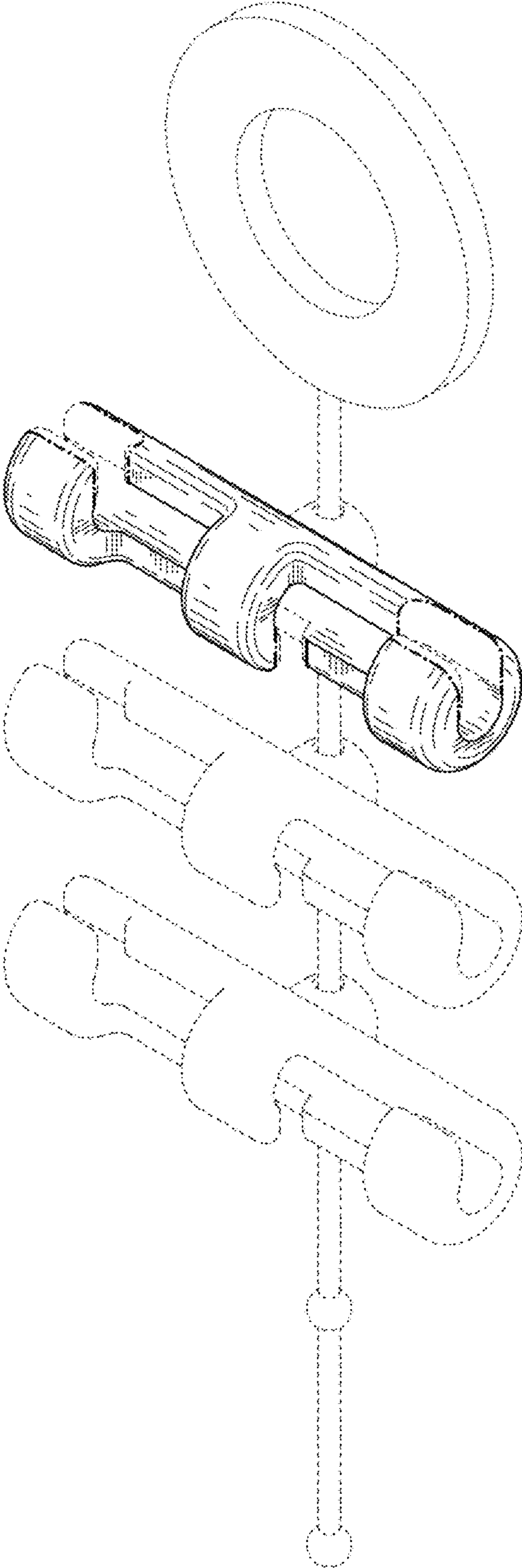


Fig. 9

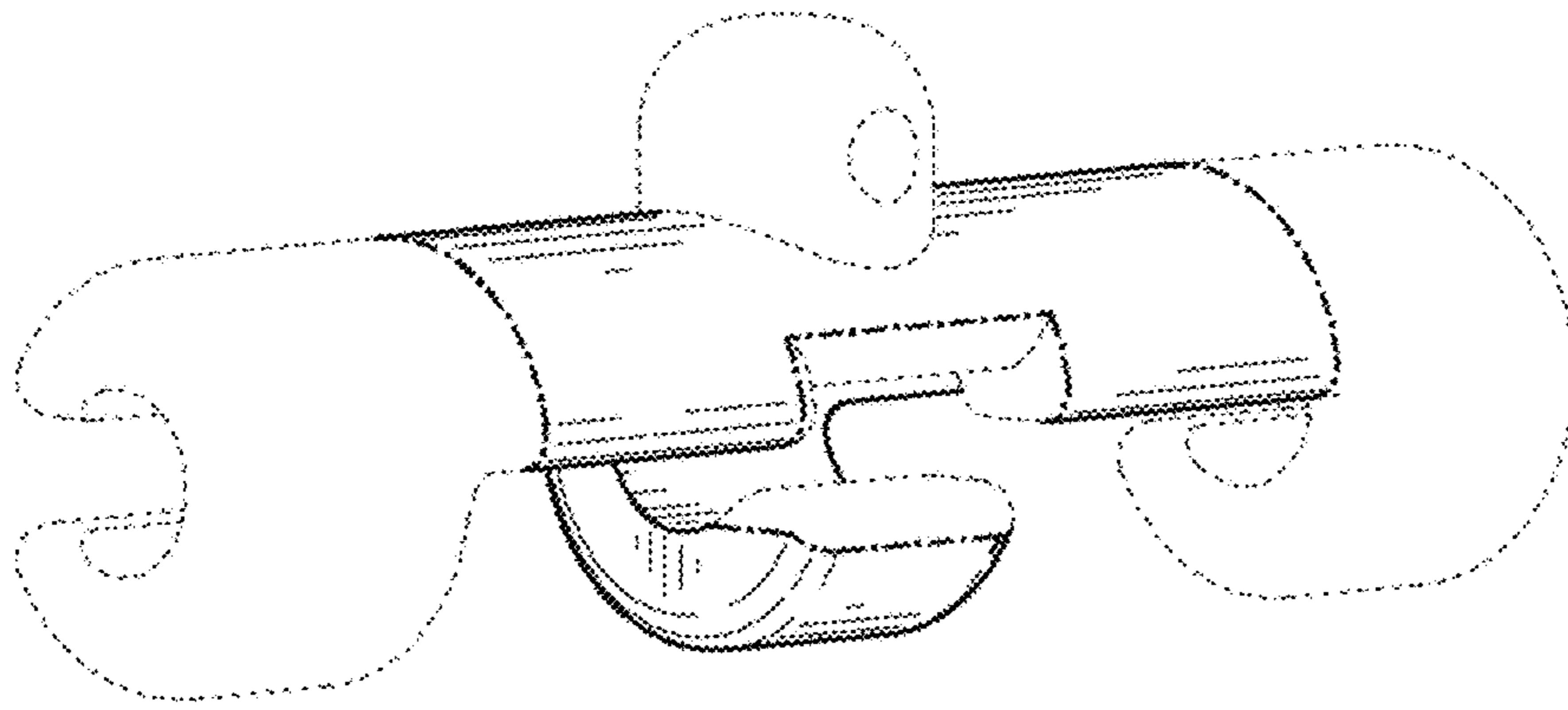


Fig. 10

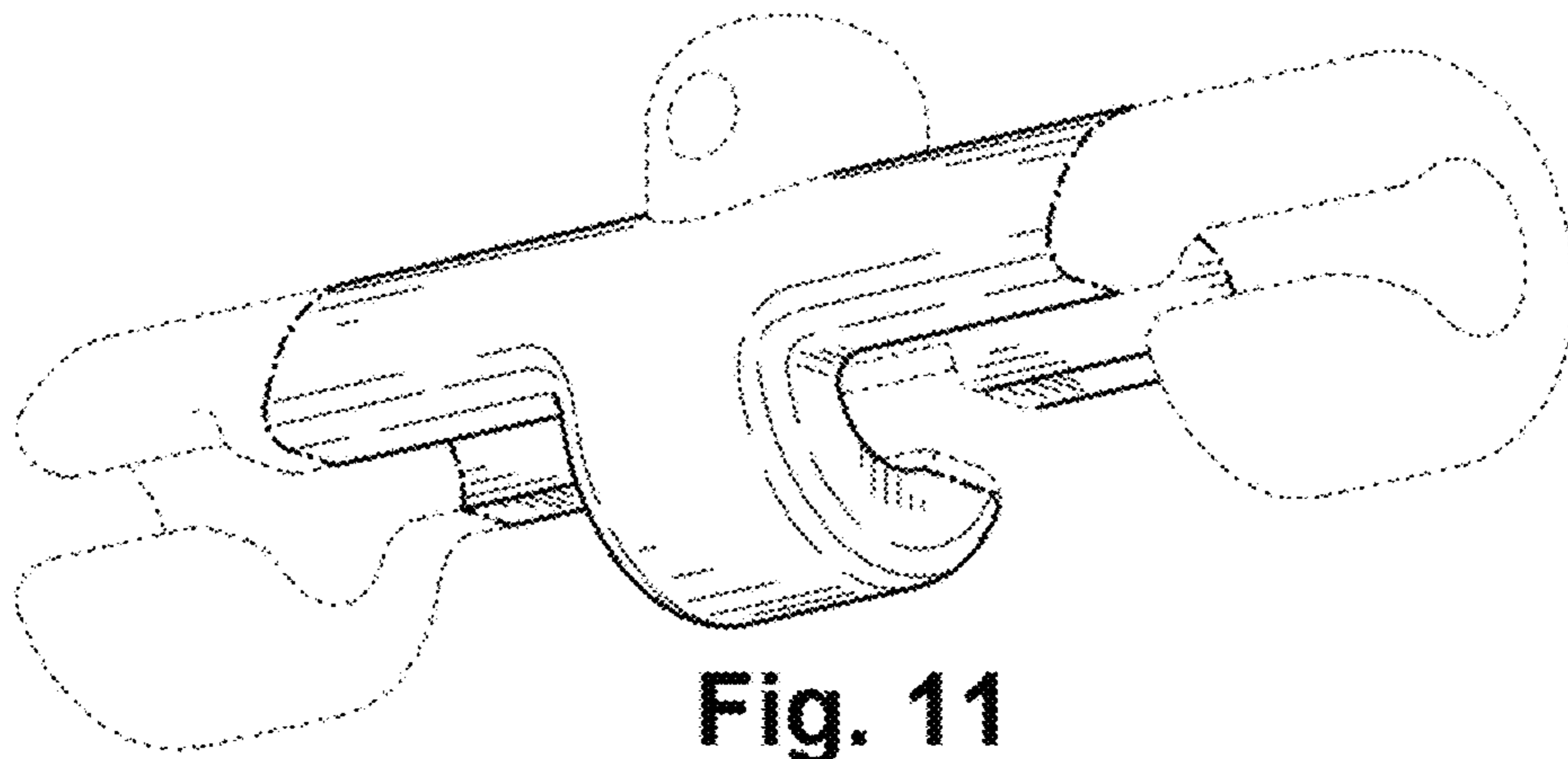


Fig. 11

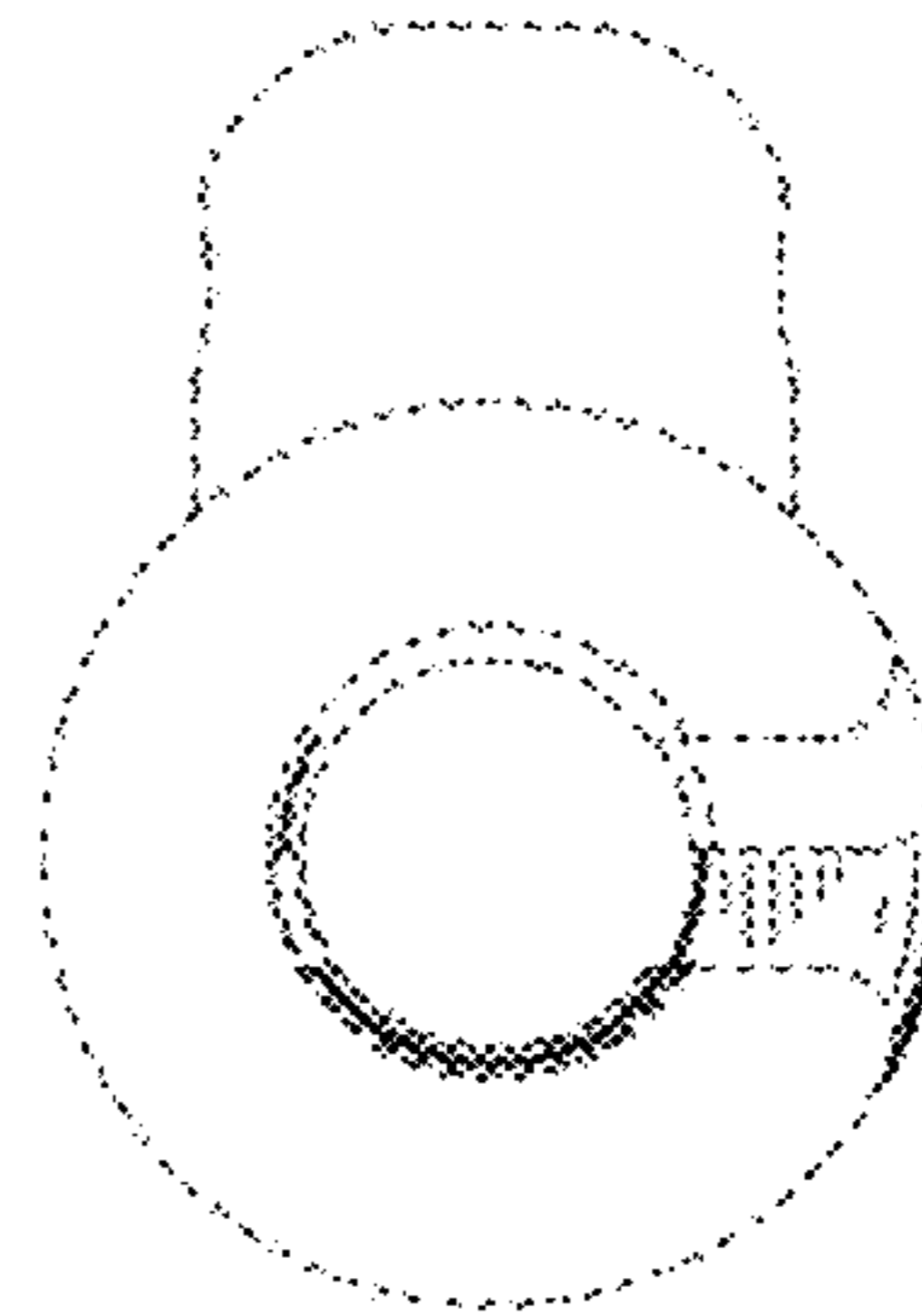


Fig. 12

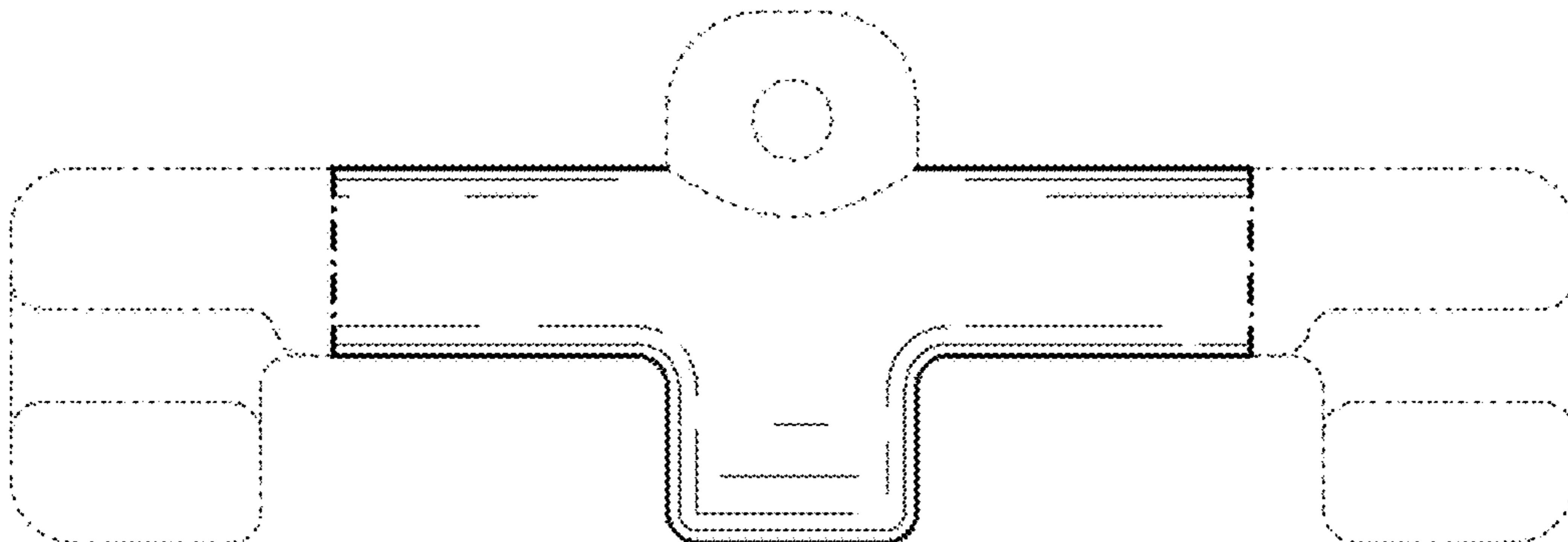


Fig. 13

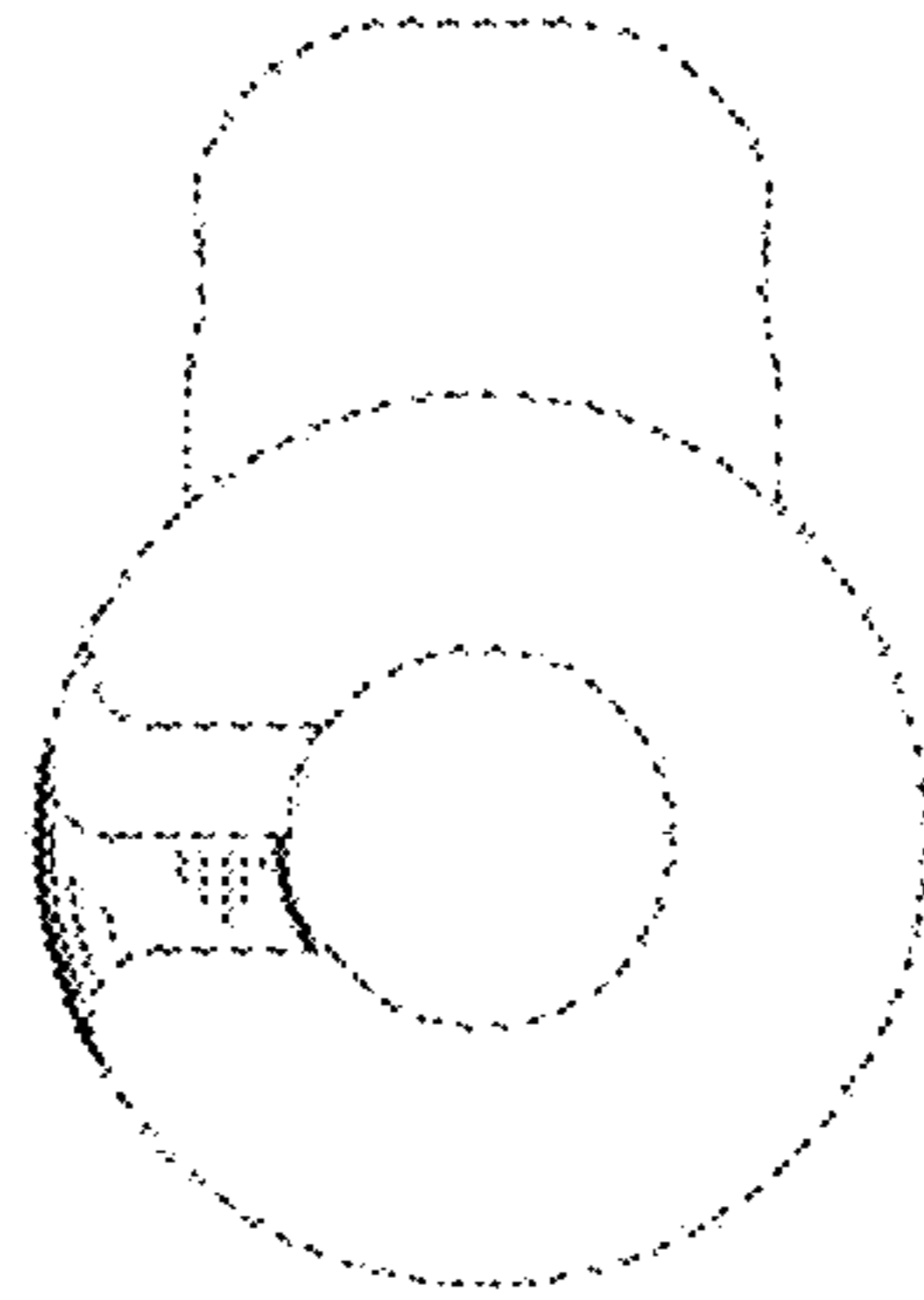


Fig. 14

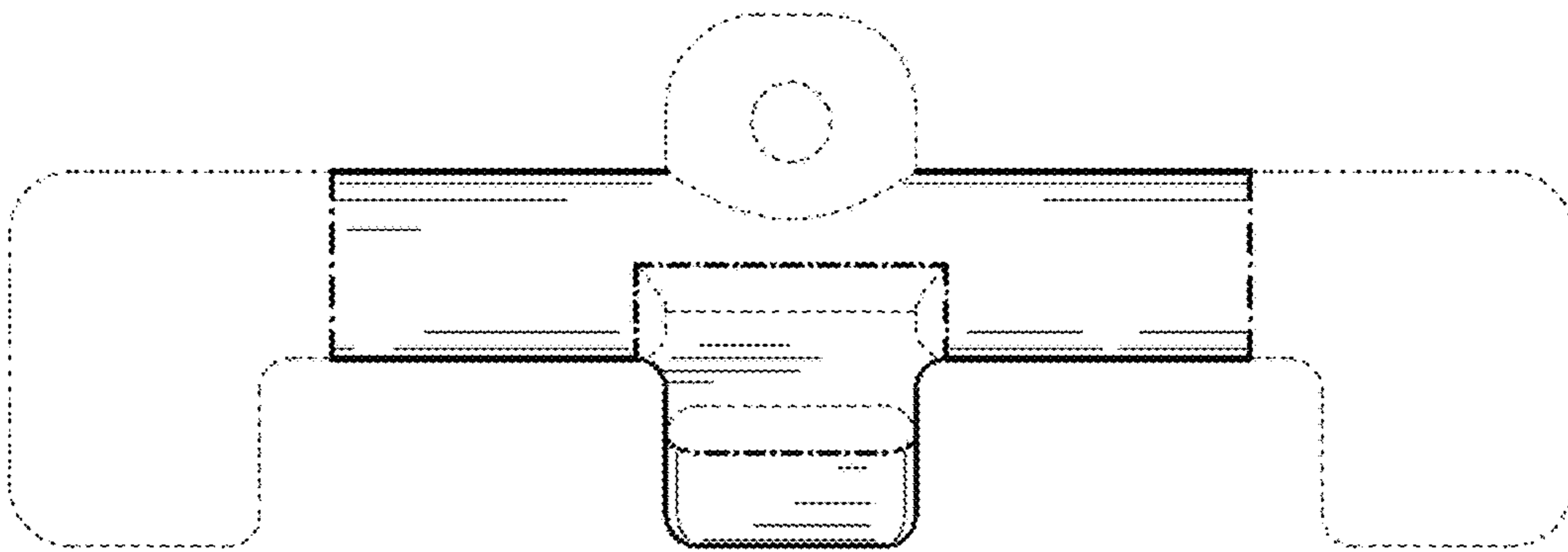


Fig. 15

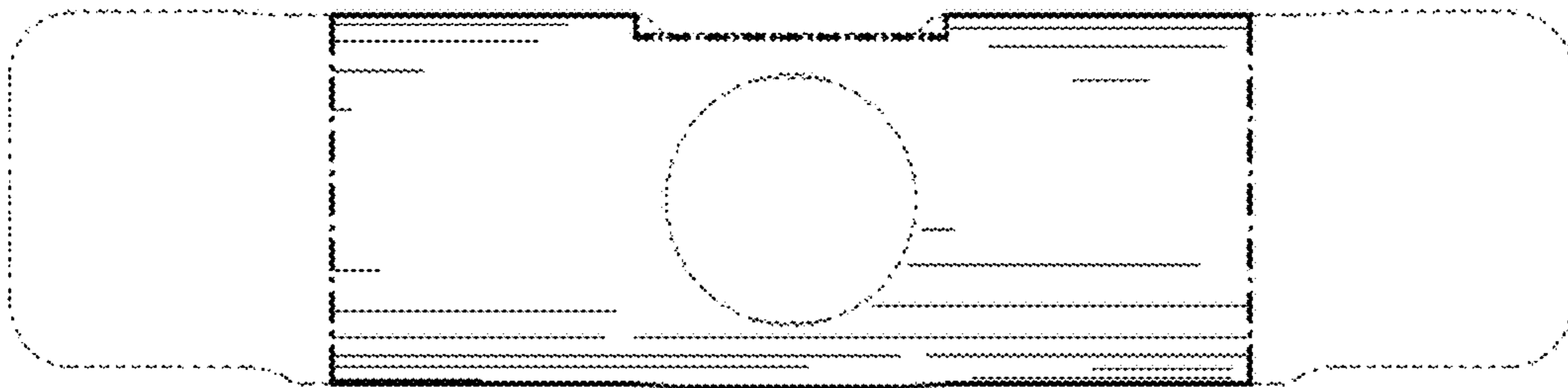


Fig. 16

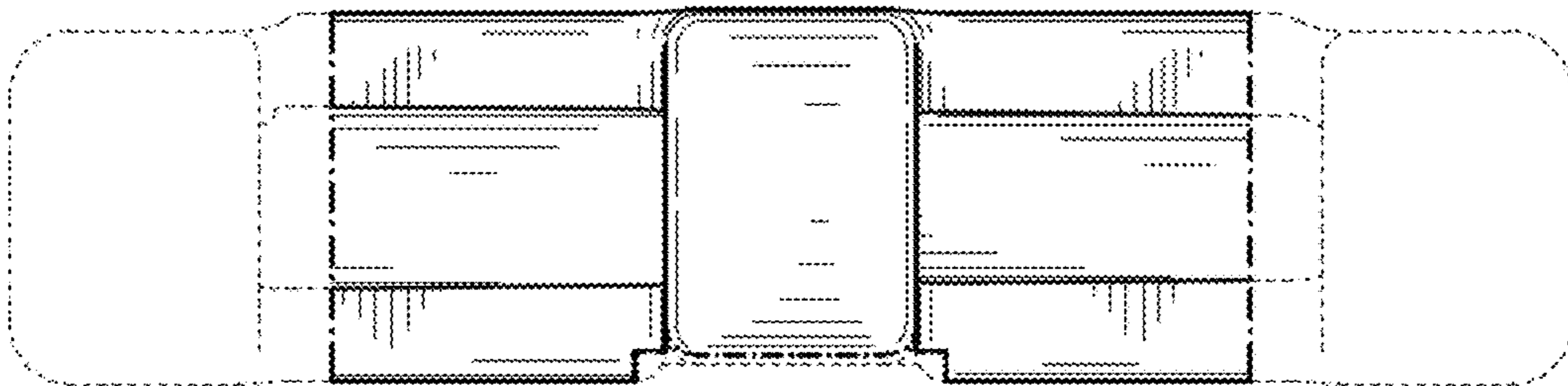


Fig. 17

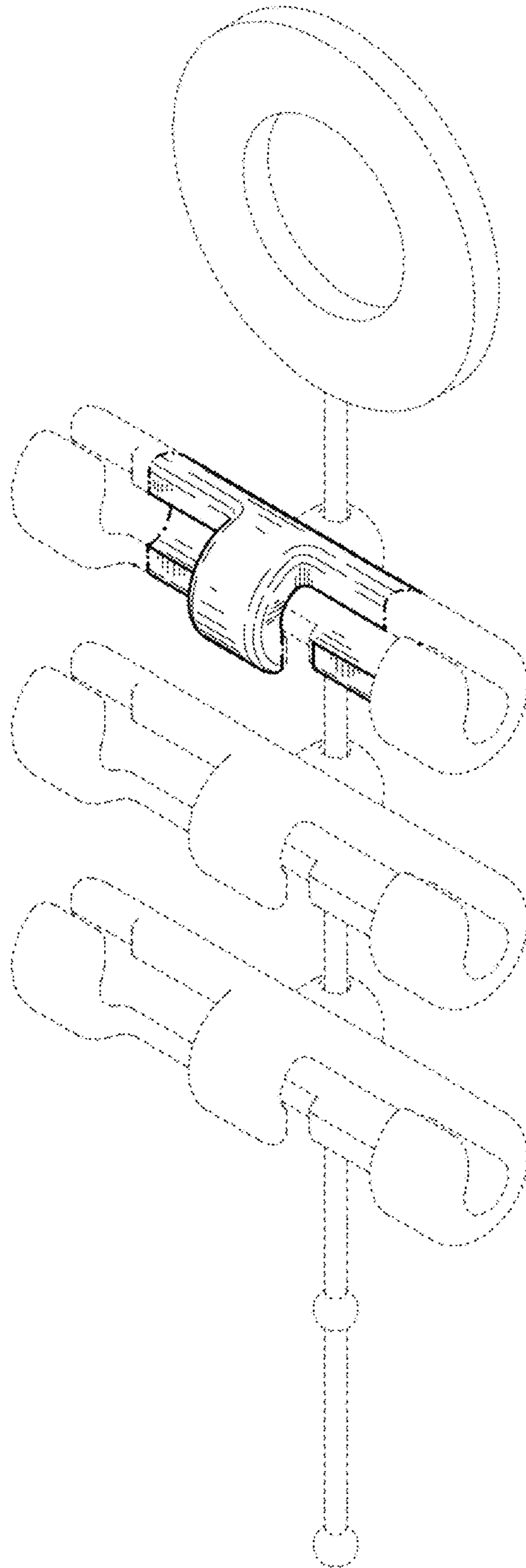


Fig. 18

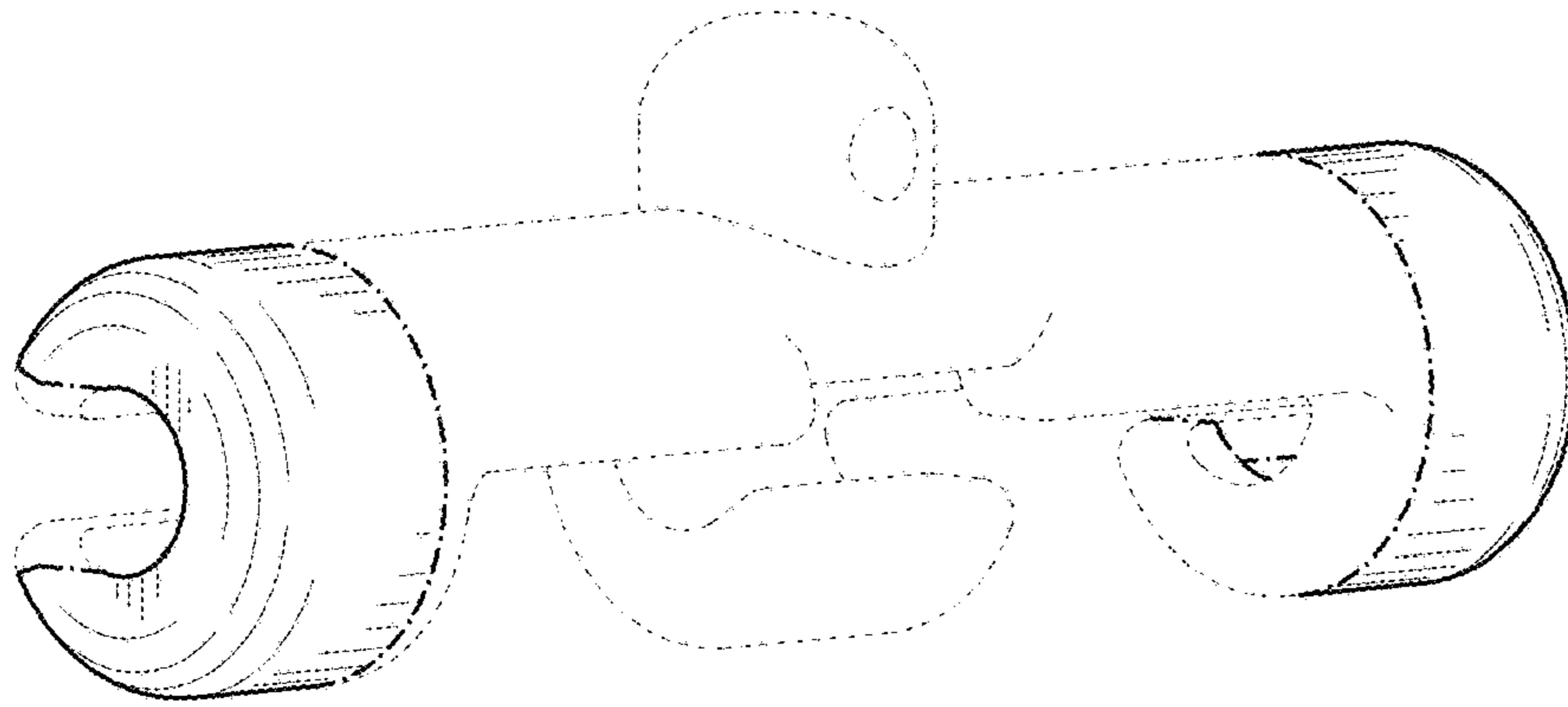


Fig. 19

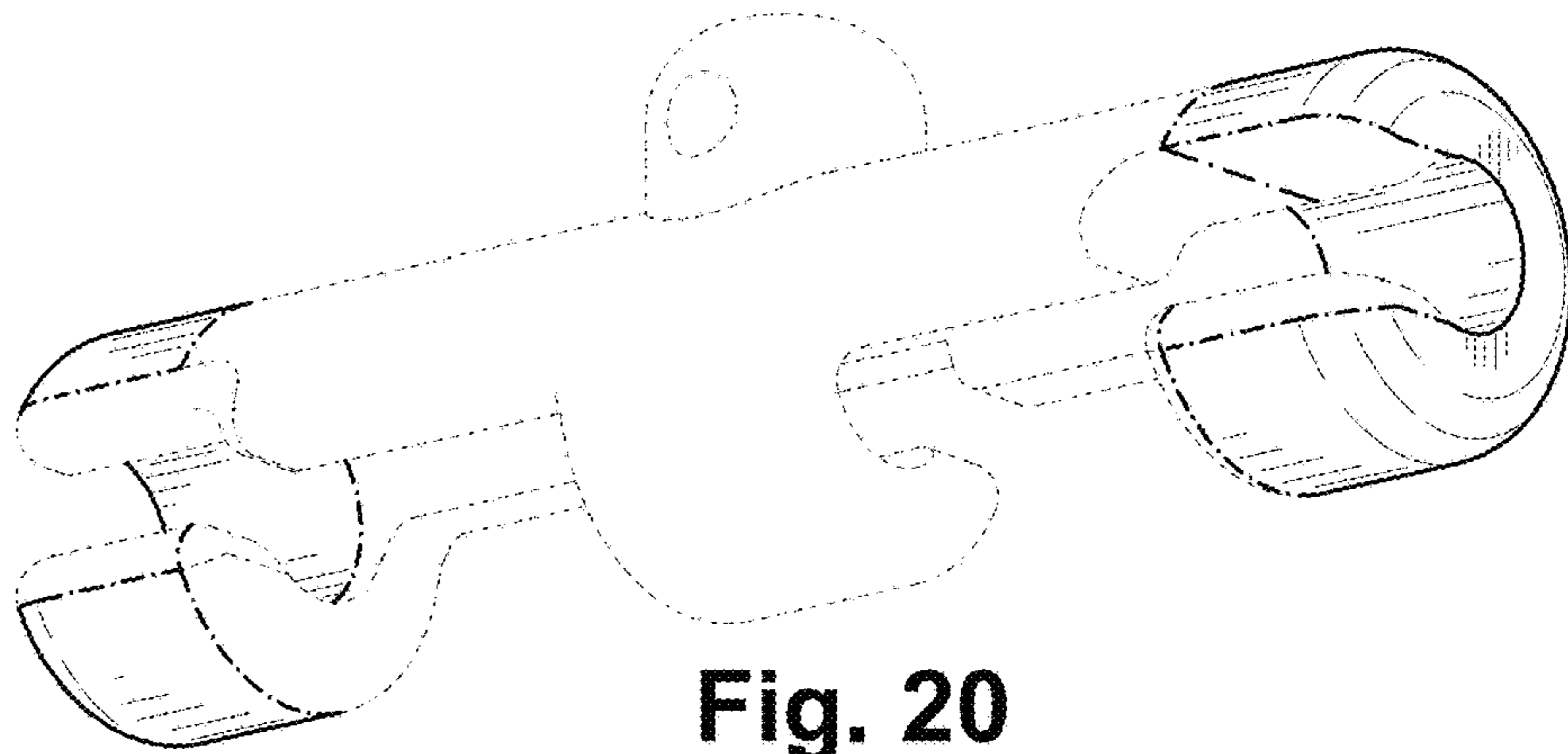


Fig. 20

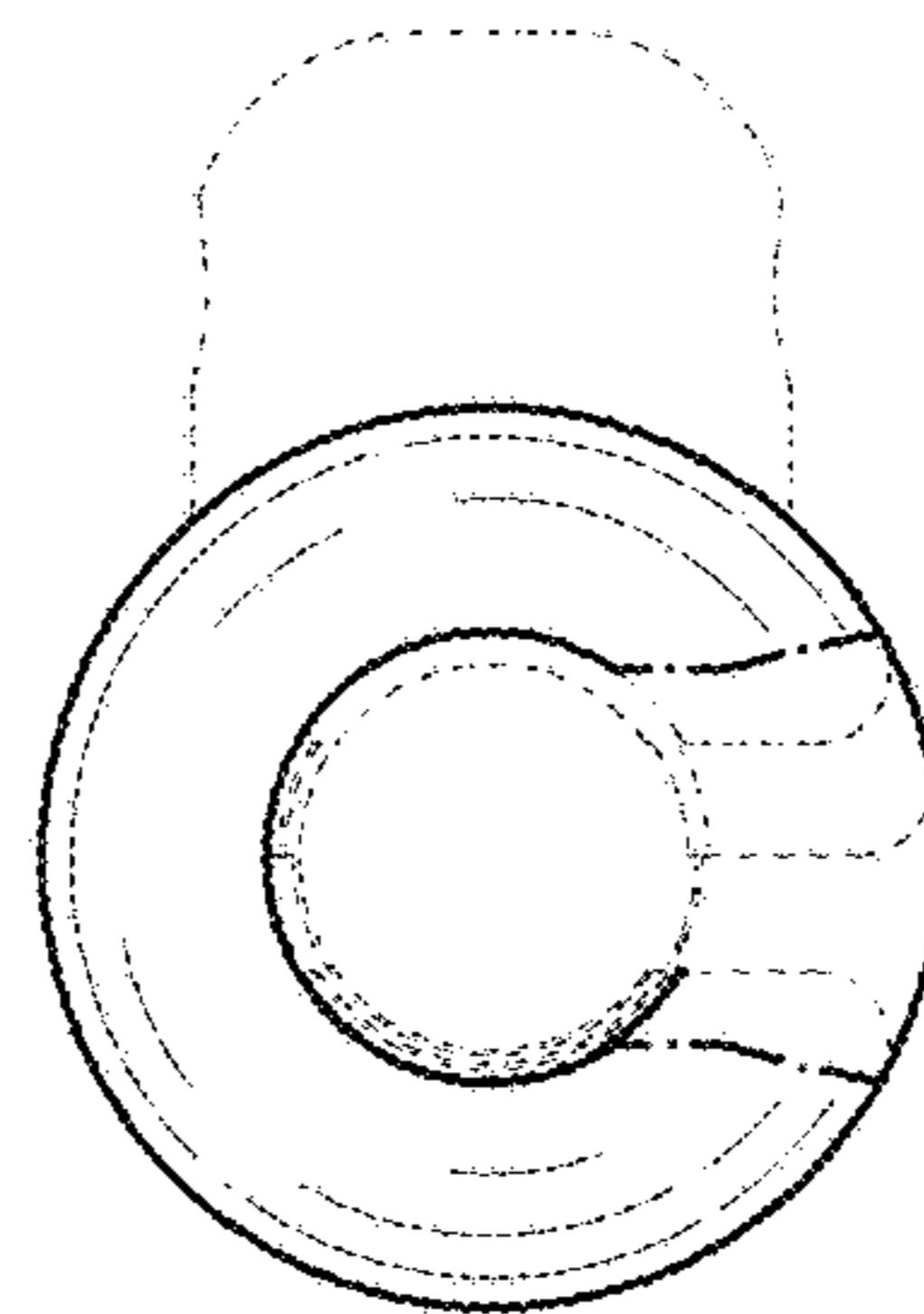


Fig. 21

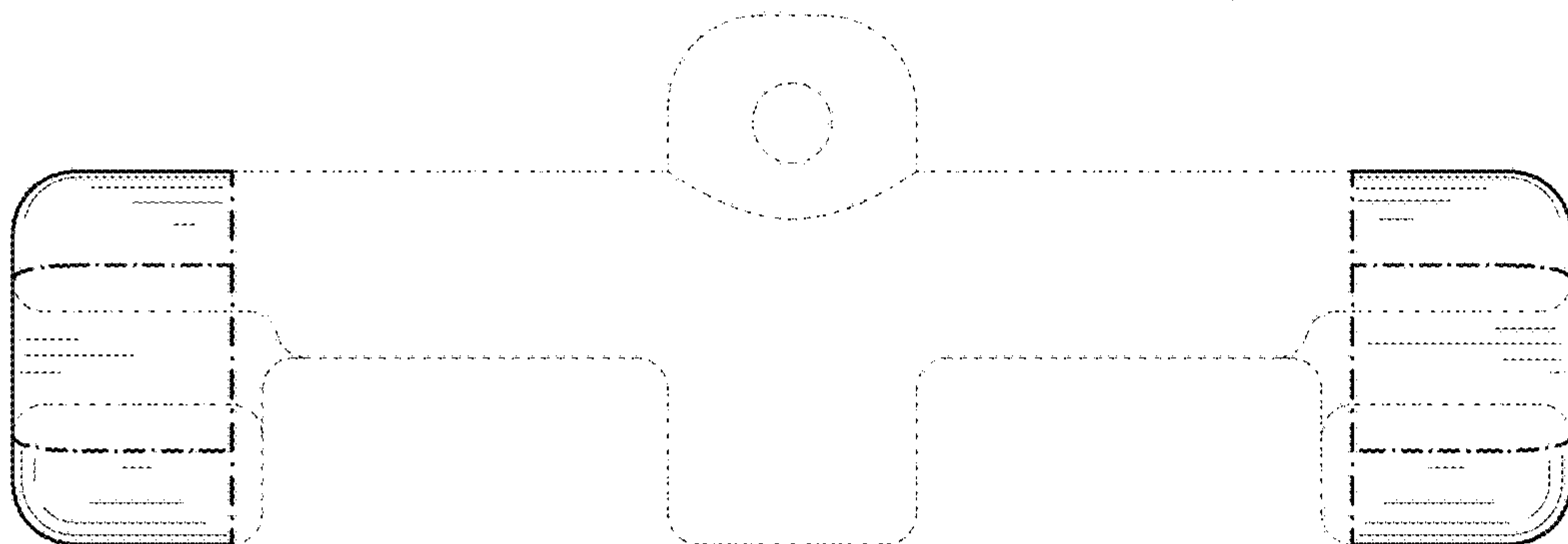


Fig. 22

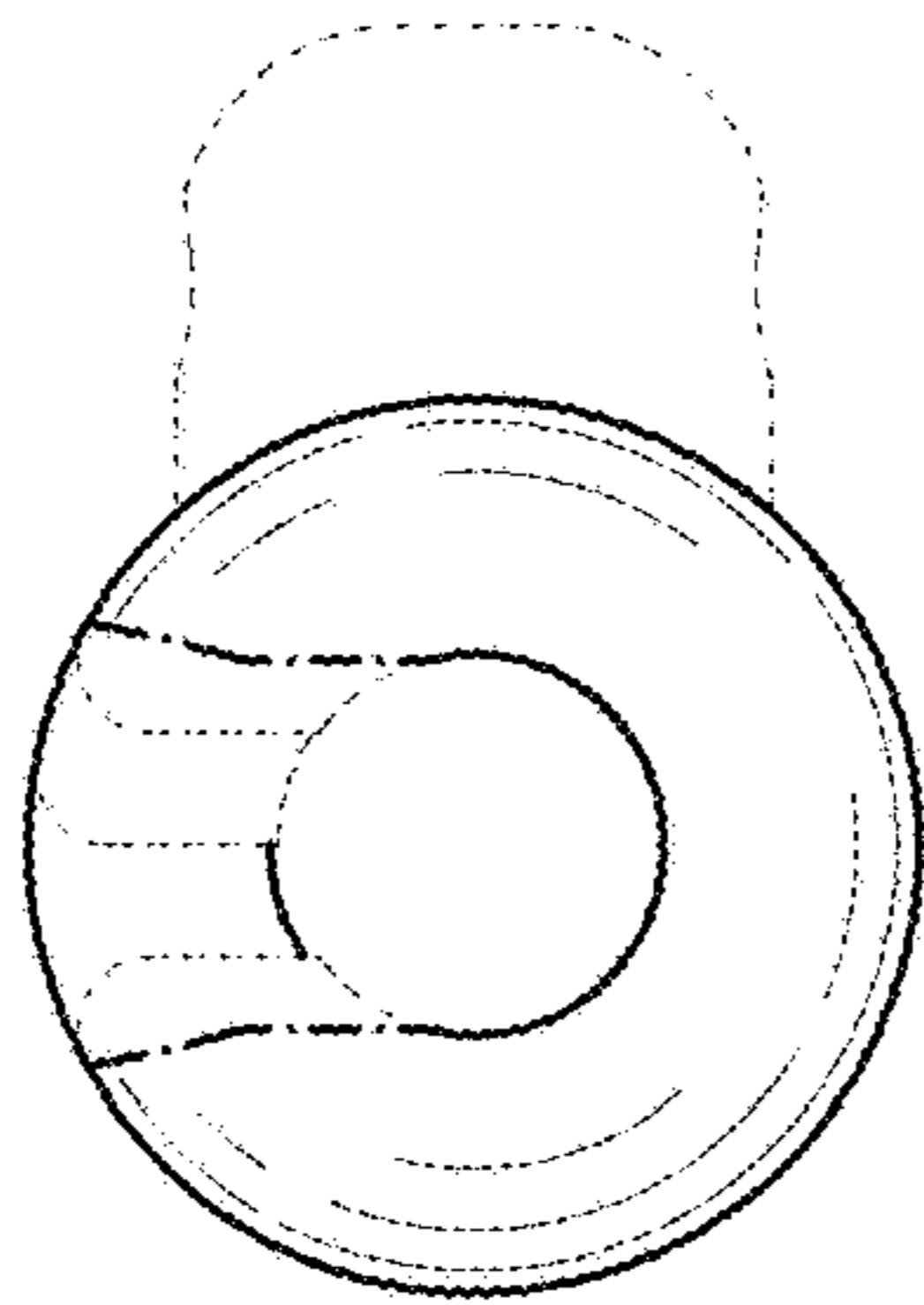


Fig. 23

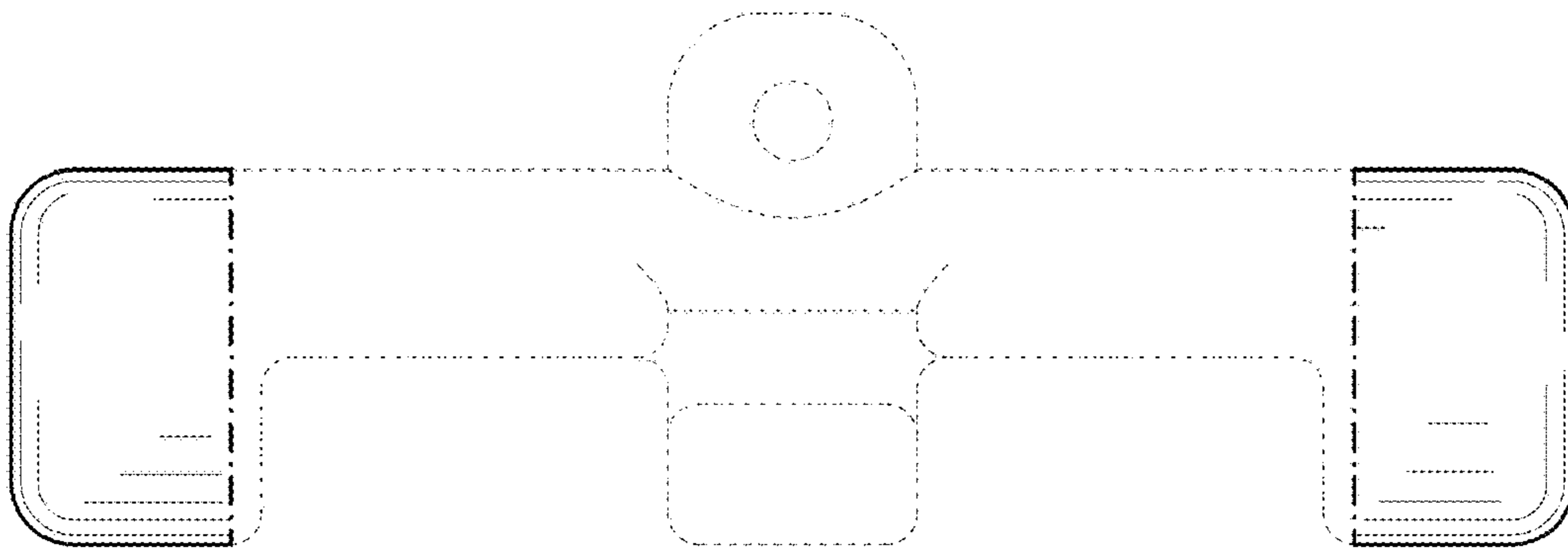


Fig. 24

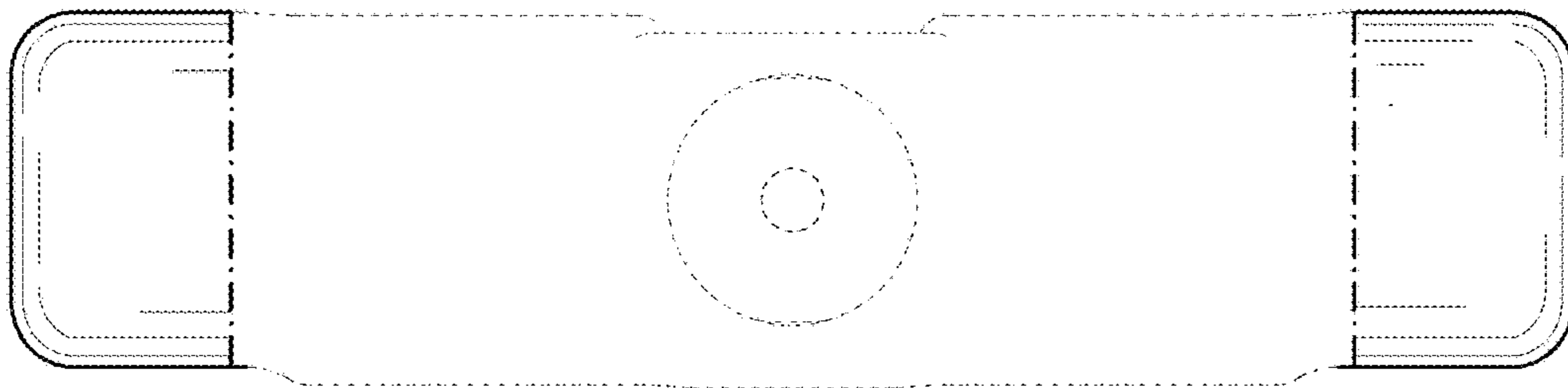


Fig. 25

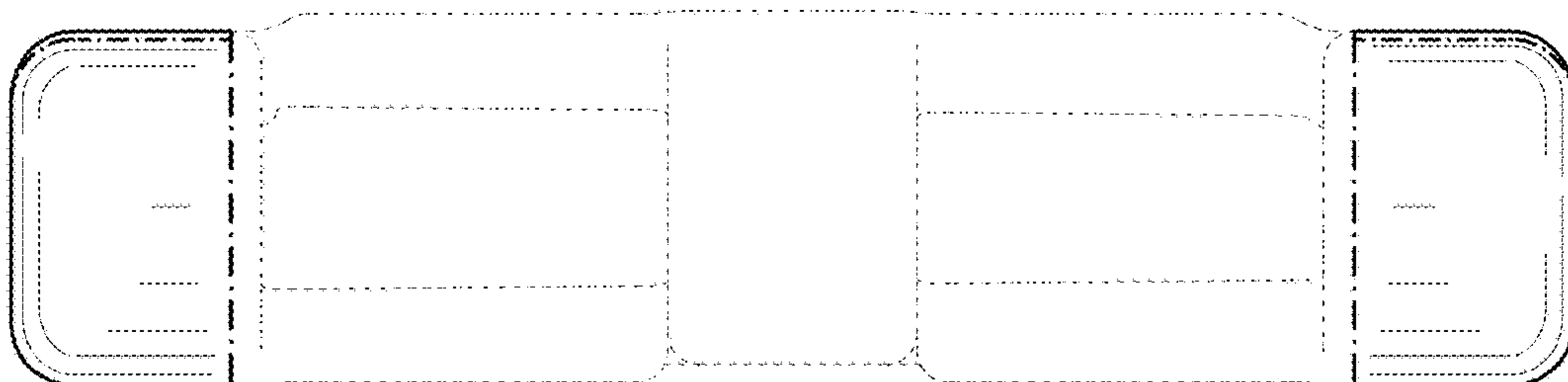


Fig. 26

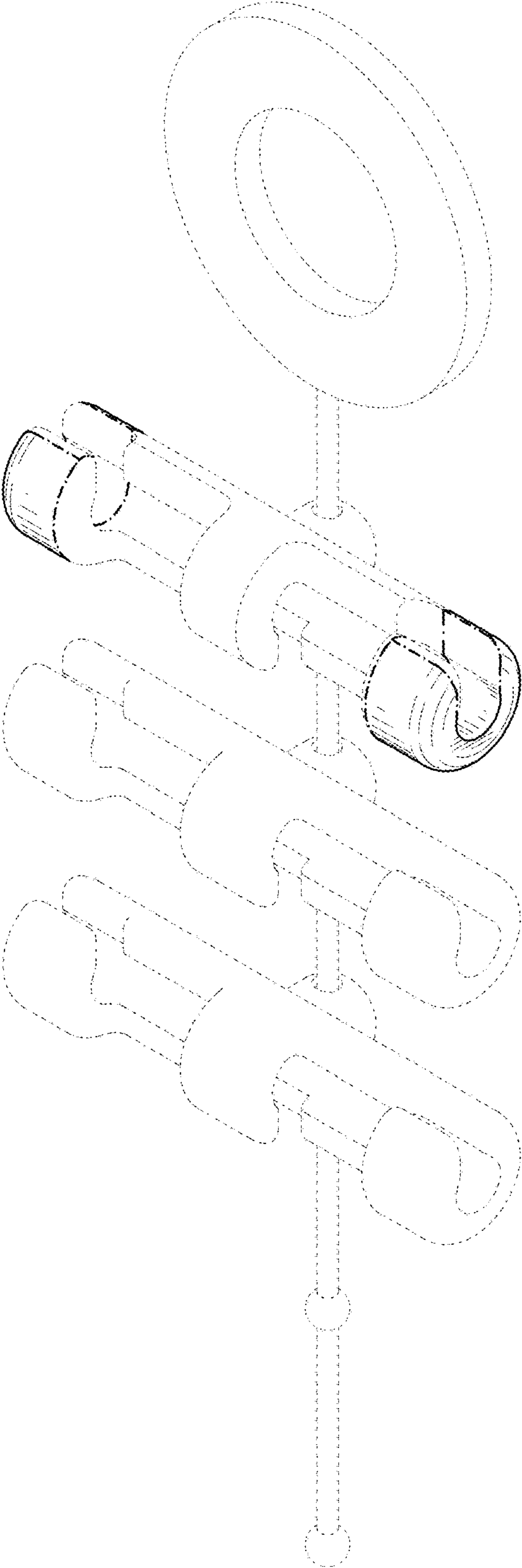


Fig. 27