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

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- (54) **SWEEPER SWING ARM**
- (71) Applicant: **KUBOTA ENVIRONMENTAL SERVICE CO., LTD.**, Tokyo (JP)
- (72) Inventors: **Atsuhiko Shirai**, Kitakatsuragi-gun (JP); **Katsuya Shibata**, Osaka (JP)
- (73) Assignee: **KUBOTA ENVIRONMENTAL SERVICE CO., LTD.**, Tokyo (JP)

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(52) **U.S. Cl.**
USPC **D15/28**

(58) **Field of Classification Search**
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CPC B25J 17/025; B25J 17/024; B23B 5/161; A47B 96/06; A47F 5/0068; G09F 3/204
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- D262,603 S * 1/1982 Brolin D8/400
- D268,729 S * 4/1983 Brown D8/14
- 4,949,586 A * 8/1990 Akagawa B25J 17/0241
74/96
- 5,231,889 A * 8/1993 Lee B25J 17/025
74/479.01
- D413,842 S * 9/1999 Garven, Jr. D12/133

- D456,317 S * 4/2002 Nakazawa D12/117
- D621,688 S * 8/2010 Chenoweth D8/343
- D653,679 S * 2/2012 Attwood D15/21
- D665,826 S * 8/2012 Clarke D15/28
- D697,945 S * 1/2014 Healey D15/28
- D700,632 S * 3/2014 Luyendijk D15/28
- D702,738 S * 4/2014 Molnar D15/28
- D707,263 S * 6/2014 Renski D15/28
- D741,144 S * 10/2015 McCullough D8/349
- D741,374 S * 10/2015 McFarlane D15/28
- D744,556 S * 12/2015 Skrjanc B23B 5/161
D15/138
- D746,340 S * 12/2015 Flahive D15/28
- D746,878 S * 1/2016 Flahive D15/28
- D748,681 S * 2/2016 Renski D15/28
- D748,682 S * 2/2016 Renski D15/28
- D748,683 S * 2/2016 Renski D15/28
- D748,684 S * 2/2016 Renski D15/28
- D751,609 S * 3/2016 Meyer D15/28
- D752,114 S * 3/2016 van Gemert D15/28

(Continued)

Primary Examiner — Michael A. Pratt

Assistant Examiner — Michelle E Wilson

(74) *Attorney, Agent, or Firm* — Oliff PLC

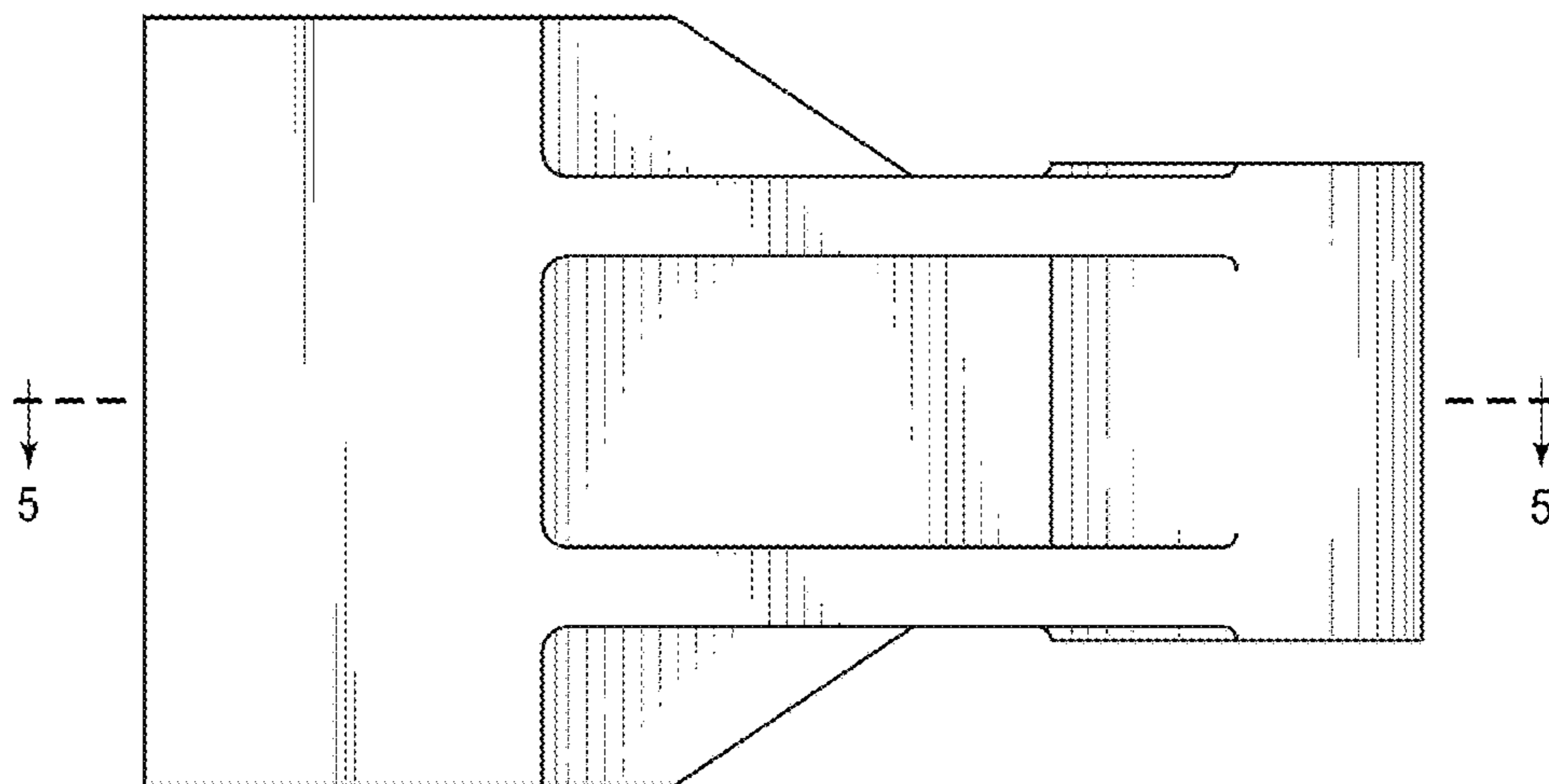
(57) **CLAIM**

The ornamental design for a sweeper swing arm, as shown and described.

DESCRIPTION

FIG. 1 is a front elevational view of the sweeper swing arm, the rear elevational view being a mirror image thereof; FIG. 2 is a top plan view thereof, the bottom plan view being identical thereto; FIG. 3 is a right-side elevational view thereof; FIG. 4 is a left-side elevational view thereof; FIG. 5 is a cross-sectional view thereof taken along line 5-5 in FIG. 1; and, FIG. 6 is a cross-sectional view thereof taken along line 6-6 in FIG. 2.

1 Claim, 3 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D757,124 S *	5/2016	Stanley	D15/28
D760,811 S *	7/2016	Uchijima	D15/28
D761,882 S *	7/2016	Meyer	D15/28
D769,333 S *	10/2016	Knobloch	D15/28
D774,567 S *	12/2016	Balan	D15/28
D775,243 S *	12/2016	Serrurier	D15/28
D775,673 S *	1/2017	Balan	D15/28
D779,477 S *	2/2017	Carnevali	D14/253
D782,545 S *	3/2017	Forth	D15/28
D786,944 S *	5/2017	Okuyama	D15/28
D790,599 S *	6/2017	Knobloch	D15/28
D790,605 S *	6/2017	Balan	D15/28
D791,195 S *	7/2017	Stanley	D15/28
D797,157 S *	9/2017	Launder	D15/28

* cited by examiner

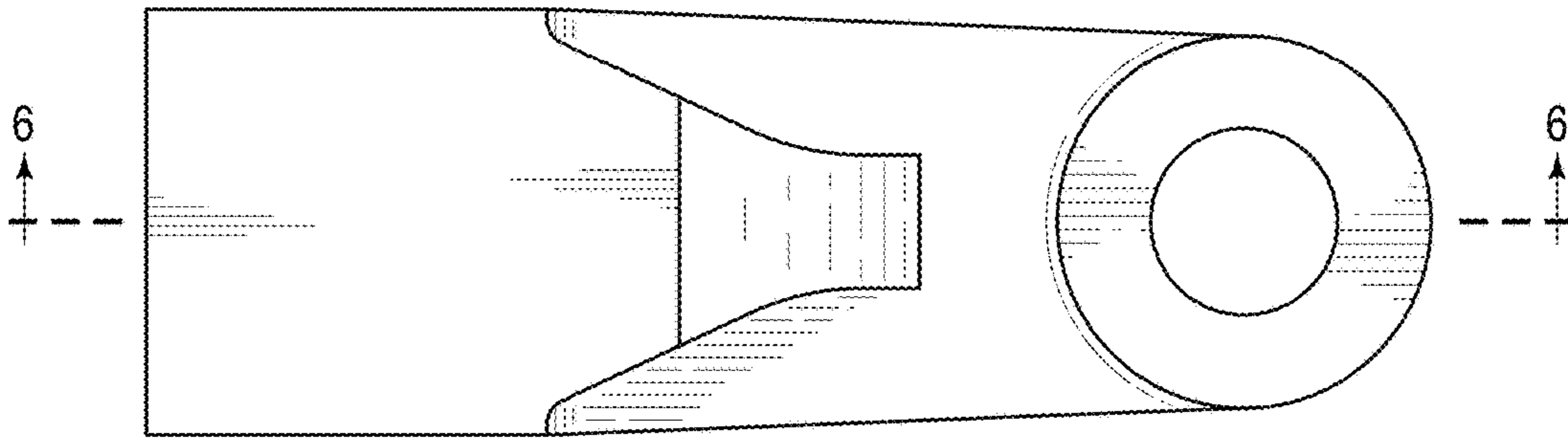


FIG. 2

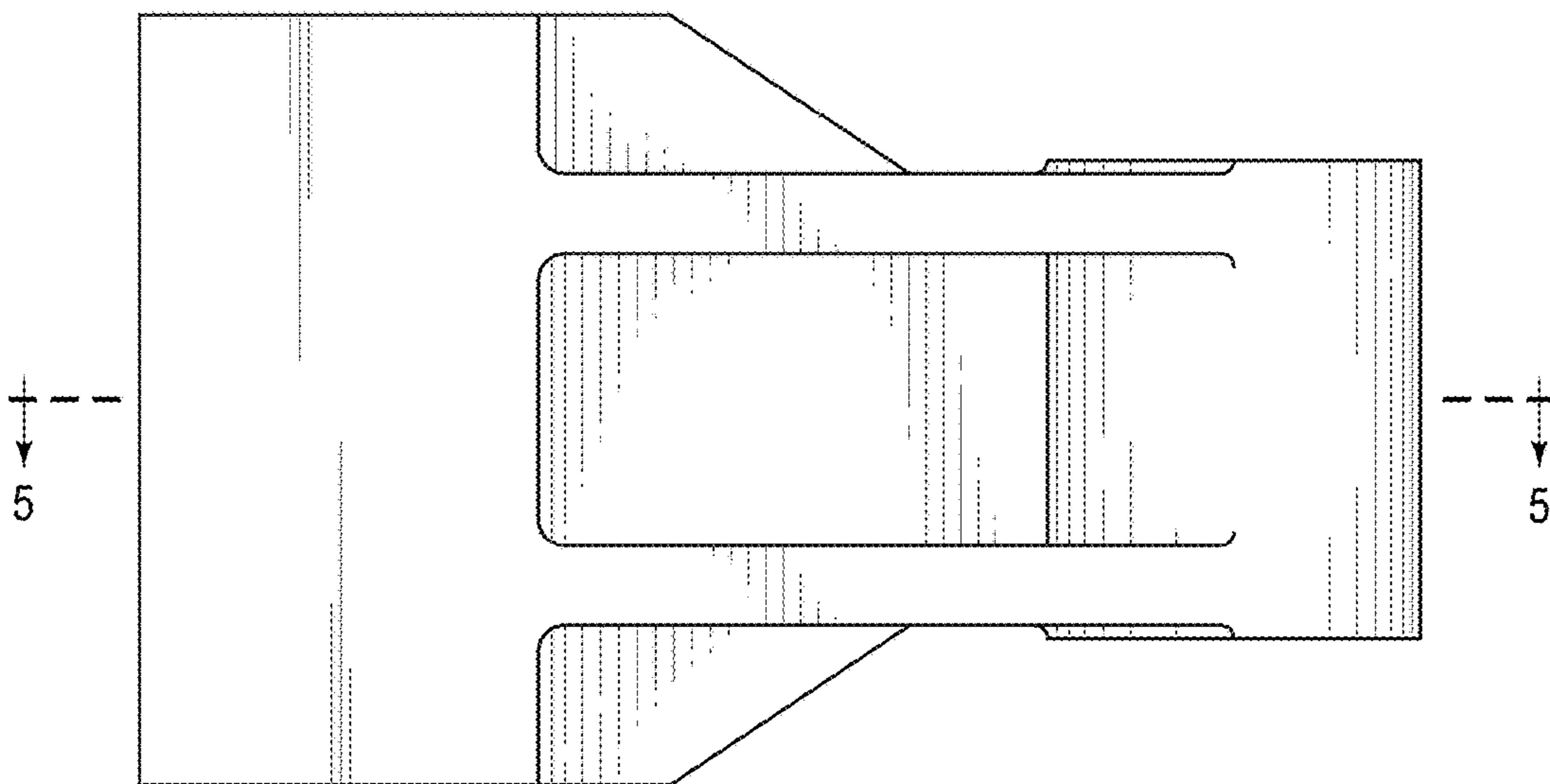


FIG. 1

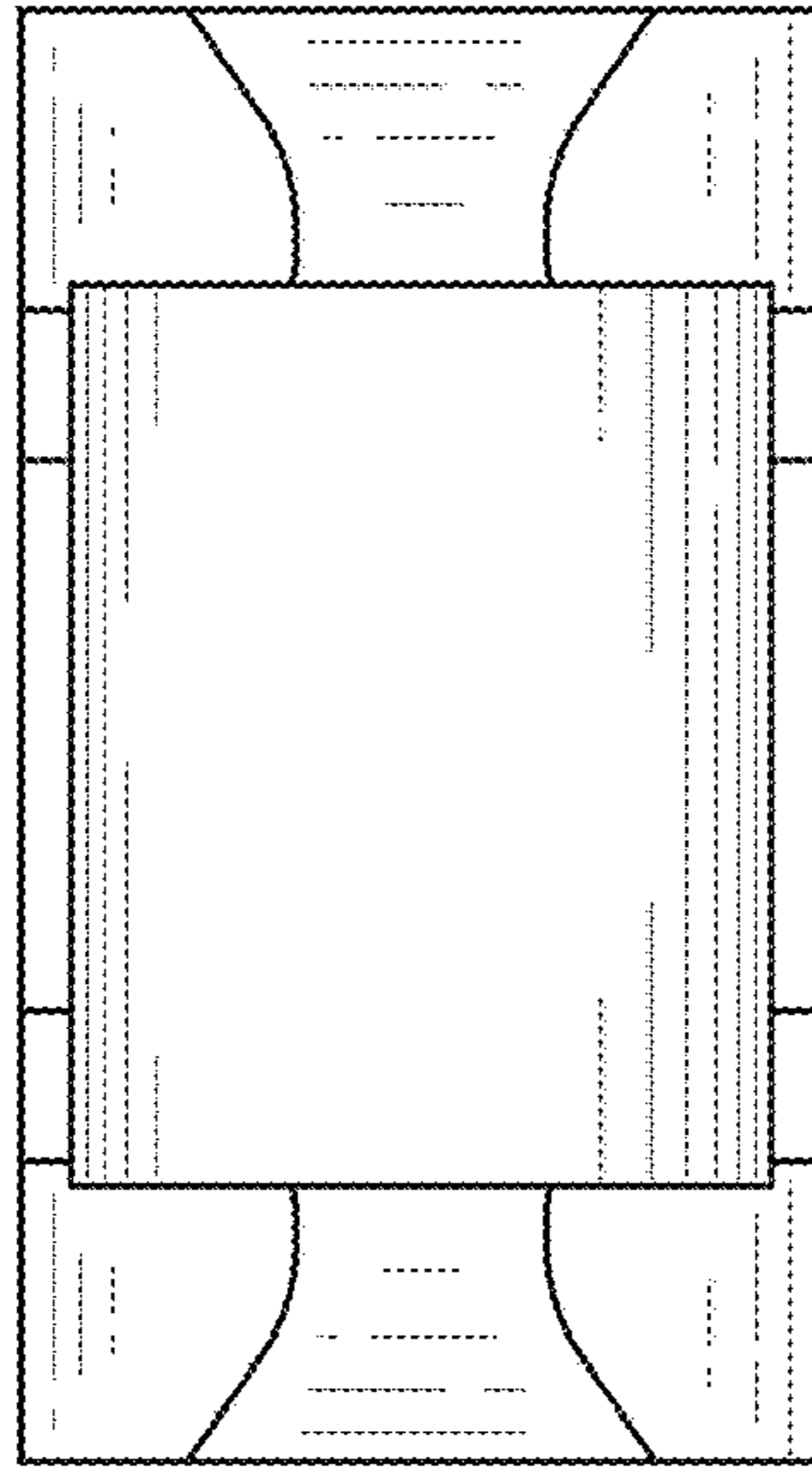


FIG. 3

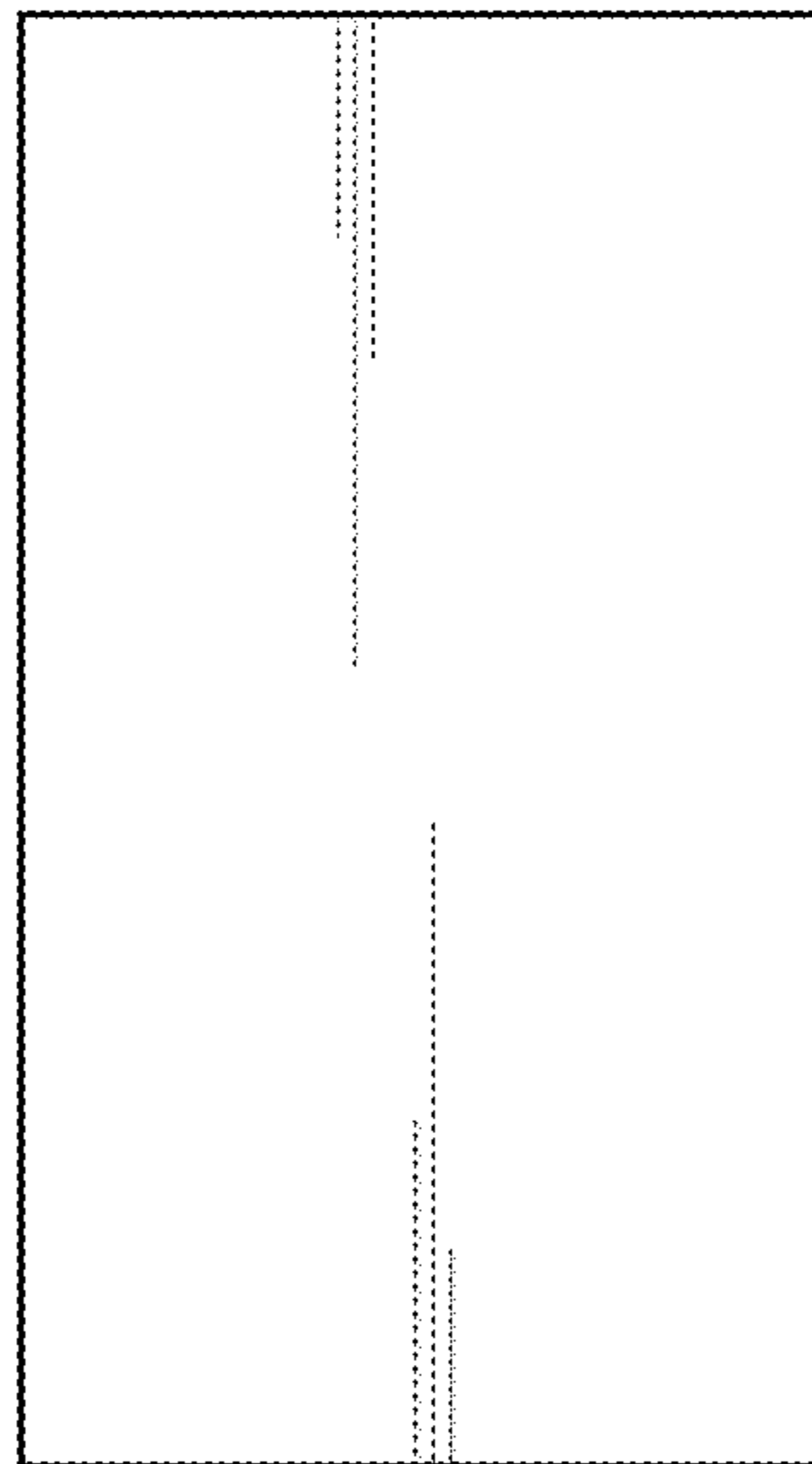


FIG. 4

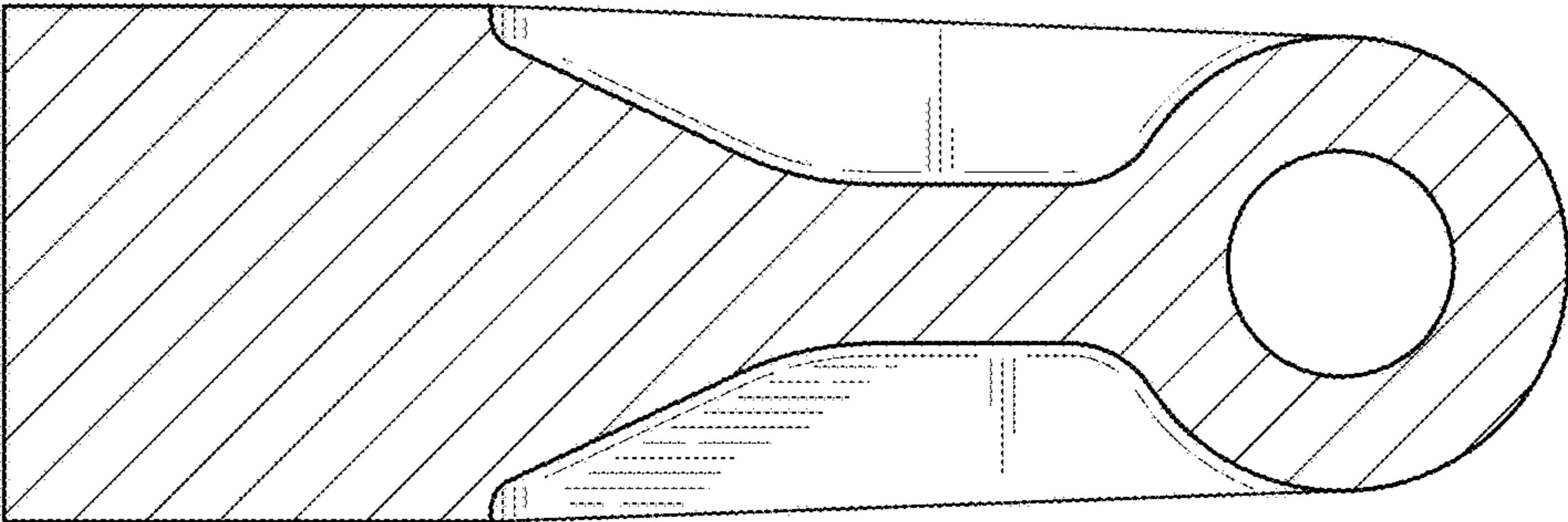


FIG. 5

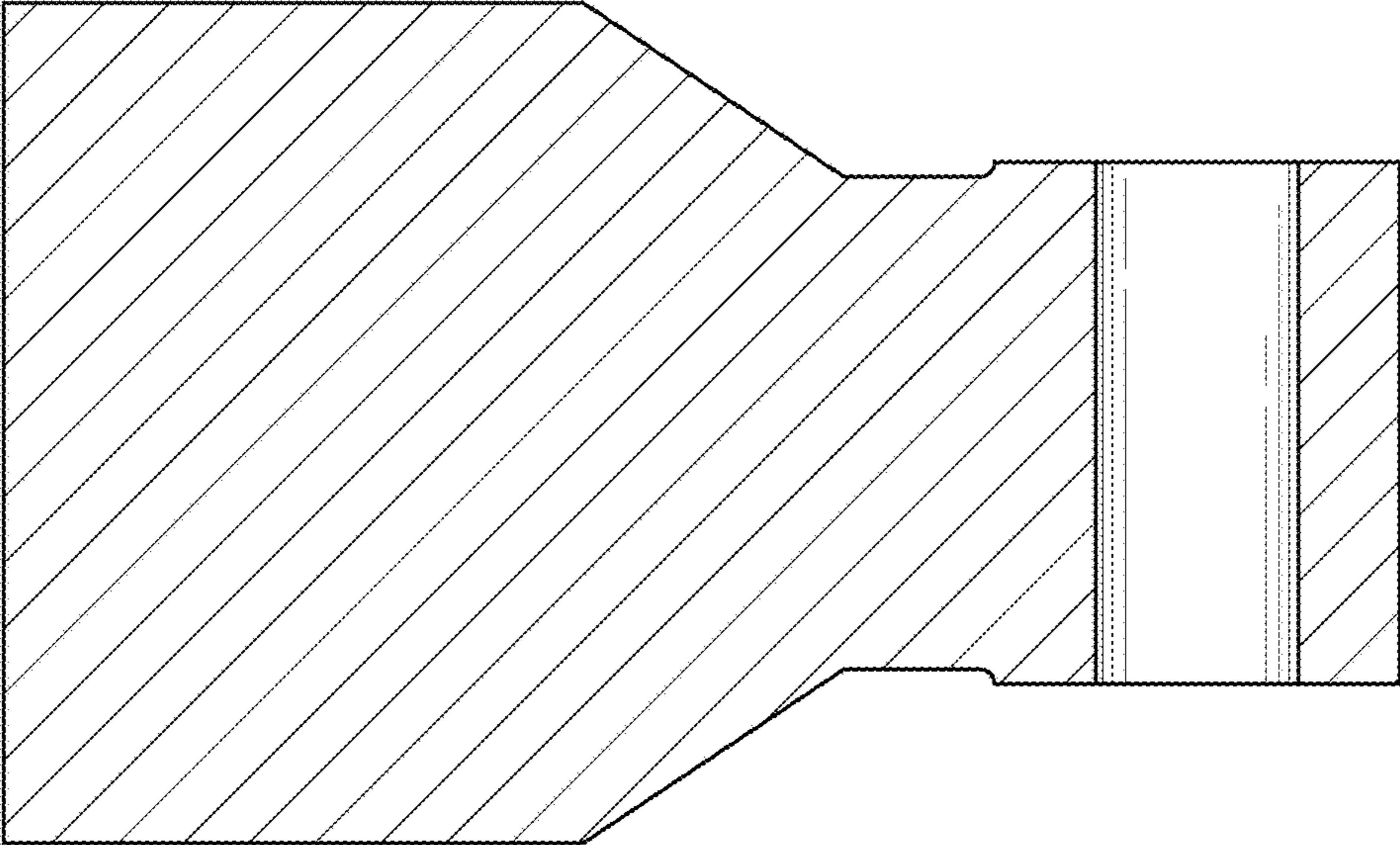


FIG. 6