



US00D885546S

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

(10) **Patent No.:** **US D885,546 S**

(45) **Date of Patent:** **** May 26, 2020**

(54) **FILTER CARTRIDGE**

(71) Applicant: **Donaldson Company, Inc.**,
Minneapolis, MN (US)

(72) Inventors: **Paul Gossez**, Hevillers (BE); **Mathijs Verstraete**, Tienen (BE)

(73) Assignee: **Donaldson Company, Inc.**,
Minneapolis, MN (US)

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

(21) Appl. No.: **29/613,360**

(22) Filed: **Aug. 9, 2017**

(51) **LOC (12) Cl.** **23-04**

(52) **U.S. Cl.**
USPC **D23/365**

(58) **Field of Classification Search**
USPC D23/209, 235, 341, 358, 363-365;
D15/5; D32/21-25, 31, 32
CPC F02M 35/04; F02M 35/10; F02M 35/024;
B01D 46/0002; B01D 46/10
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

5,487,767 A 1/1996 Brown
D437,402 S * 2/2001 Gieseke D23/365
6,190,432 B1 2/2001 Gieseke et al.

(Continued)

FOREIGN PATENT DOCUMENTS

DE 199 35 297 2/2001
JP 2004/136203 5/2004

(Continued)

OTHER PUBLICATIONS

U.S. Appl. No. 15/539,600.

(Continued)

Primary Examiner — Brandon M Rosati

Assistant Examiner — John A Voytek

(74) *Attorney, Agent, or Firm* — Mechant & Gould P.C.

(57) **CLAIM**

The ornamental design for filter cartridge, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a filter cartridge according to the present design; in FIG. 1 the perspective view being shown generally toward a seal end, and toward a media pack side.

FIG. 2 is a perspective view of the filter cartridge of FIG. 1 taken toward an opposite end to FIG. 1.

FIG. 3 is a first side elevational view of the filter cartridge of FIG. 1; the view of FIG. 3 generally being toward the side viewable in FIG. 1.

FIG. 4 is second side elevational of the filter cartridge of FIG. 1; the view of FIG. 4 being taken generally toward an opposite side to that viewable in FIG. 3.

FIG. 5 is a first end elevational view of the filter cartridge of FIG. 1.

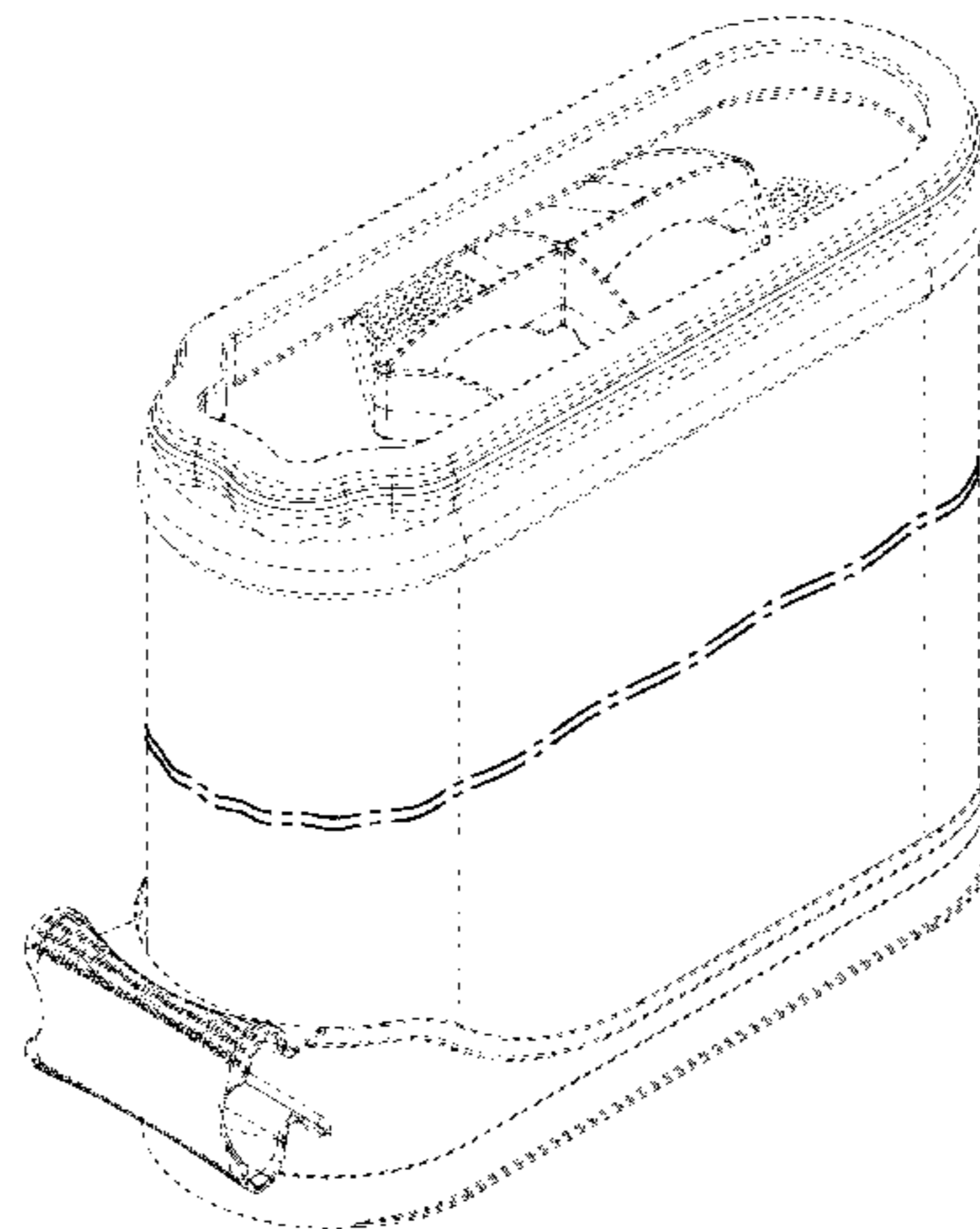
FIG. 6 is a second end elevational view of the filter cartridge of FIG. 1; the view of FIG. 6 being opposite the view of FIG. 5.

FIG. 7 is a flow end plan view of the filter cartridge of FIG. 1; the end viewable being that viewable in FIG. 1; and, FIG. 8 is opposite flow end plan view of the filter cartridge of FIG. 1; the view of FIG. 8 being taken generally opposite the view of FIG. 7.

The broken-lines in the drawings show portions of the filter cartridge that forms no part of the claim.

The filter cartridge is shown with a symbolic break in its length. The appearance of any portion of the article between the dash-dot-dash break lines forms no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

6,235,195 B1 5/2001 Tokar
 D450,828 S 11/2001 Tokar
 6,348,084 B1 2/2002 Gieseke et al.
 6,350,291 B1 2/2002 Gieseke et al.
 D455,483 S 4/2002 Gieseke
 D461,003 S 7/2002 Gieseke et al.
 D483,459 S * 12/2003 DeWit et al. D23/365
 D484,584 S 12/2003 Anderson
 D497,202 S 10/2004 Carter
 D506,539 S 6/2005 Bishop
 6,966,940 B2 11/2005 Krisko et al.
 7,247,183 B2 7/2007 Connor et al.
 7,282,077 B2 10/2007 Honisch
 7,396,375 B2 7/2008 Nepsund et al.
 7,396,376 B2 7/2008 Schrage et al.
 7,481,863 B2 * 1/2009 Oelpke B01D 46/0098
 55/521
 7,520,913 B2 4/2009 Mills et al.
 7,625,419 B2 12/2009 Nelson et al.
 7,674,308 B2 3/2010 Krisko et al.
 7,713,321 B2 5/2010 Kuempel et al.
 7,736,410 B2 6/2010 Kuempel et al.
 7,905,936 B2 3/2011 Coulonvaux et al.
 7,967,886 B2 6/2011 Schrage
 7,972,404 B2 7/2011 Kuempel et al.
 8,016,903 B2 9/2011 Nelson et al.
 8,066,791 B2 11/2011 Baseotto et al.
 8,128,724 B2 3/2012 Mills
 8,409,316 B2 4/2013 Nelson et al.
 D690,407 S 9/2013 Williams
 8,728,193 B2 5/2014 Flagstad et al.
 8,741,017 B2 6/2014 Nelson
 8,747,512 B2 6/2014 Mills et al.
 D709,919 S 7/2014 Fairchild
 8,864,866 B2 10/2014 Osendorf et al.
 8,920,528 B2 12/2014 Dewit et al.
 D736,263 S * 8/2015 Schultz D15/5
 9,242,199 B2 1/2016 Nelson et al.
 9,320,997 B2 4/2016 Campbell et al.
 9,387,425 B2 7/2016 Osendorf et al.
 9,463,404 B2 10/2016 Rieger et al.
 9,610,529 B2 4/2017 Mills

9,636,615 B2 5/2017 Osendorf et al.
 D793,453 S 8/2017 Krull
 D794,082 S 8/2017 Krull
 D819,698 S * 6/2018 Krull D15/5
 D819,699 S * 6/2018 Krull D15/5
 10,046,260 B2 8/2018 Campbell et al.
 10,118,120 B2 11/2018 Movia et al.
 D875,630 S * 2/2020 Kana D12/194
 2005/0166561 A1 * 8/2005 Schrage B01D 46/0001
 55/498
 2005/0193695 A1 9/2005 Holmes et al.
 2006/0174598 A1 8/2006 Mills et al.
 2007/0193236 A1 * 8/2007 Merritt B01D 46/0004
 55/498
 2008/0016832 A1 * 1/2008 Krisko B01D 46/527
 55/342
 2008/0110142 A1 * 5/2008 Nelson B01D 46/4227
 55/357
 2010/0064646 A1 3/2010 Smith et al.
 2010/0252495 A1 * 10/2010 Reid B01D 29/012
 210/339
 2010/0258493 A1 10/2010 Kindkeppel et al.
 2016/0045848 A1 * 2/2016 Campbell B01D 46/525
 55/357

FOREIGN PATENT DOCUMENTS

RU 2417819 8/2005
 WO 2006/084094 8/2006
 WO 2007/009039 1/2007
 WO 2007/009040 1/2007
 WO 2009/047196 4/2009

OTHER PUBLICATIONS

U.S. Appl. No. 29/613,357, filed Aug. 2017, Gossez et al.
 U.S. Appl. No. 16/058,472, filed Aug. 2018, Gieseke et al.
 Pending Claims of U.S. Appl. No. 15/582,995 dated Dec. 18, 2018.
 Allowed Claims of U.S. Appl. No. 15/204,104 dated Dec. 18, 2018.
 Pending Claims of U.S. Appl. No. 16/176,134, dated Dec. 18, 2018.
 Pending claims of U.S. Appl. No. 15/477,235 dated Dec. 18, 2018.
 Pending drawings of U.S. Appl. No. 29/613,357 dated Dec. 18, 2018.

* cited by examiner

FIG. 1

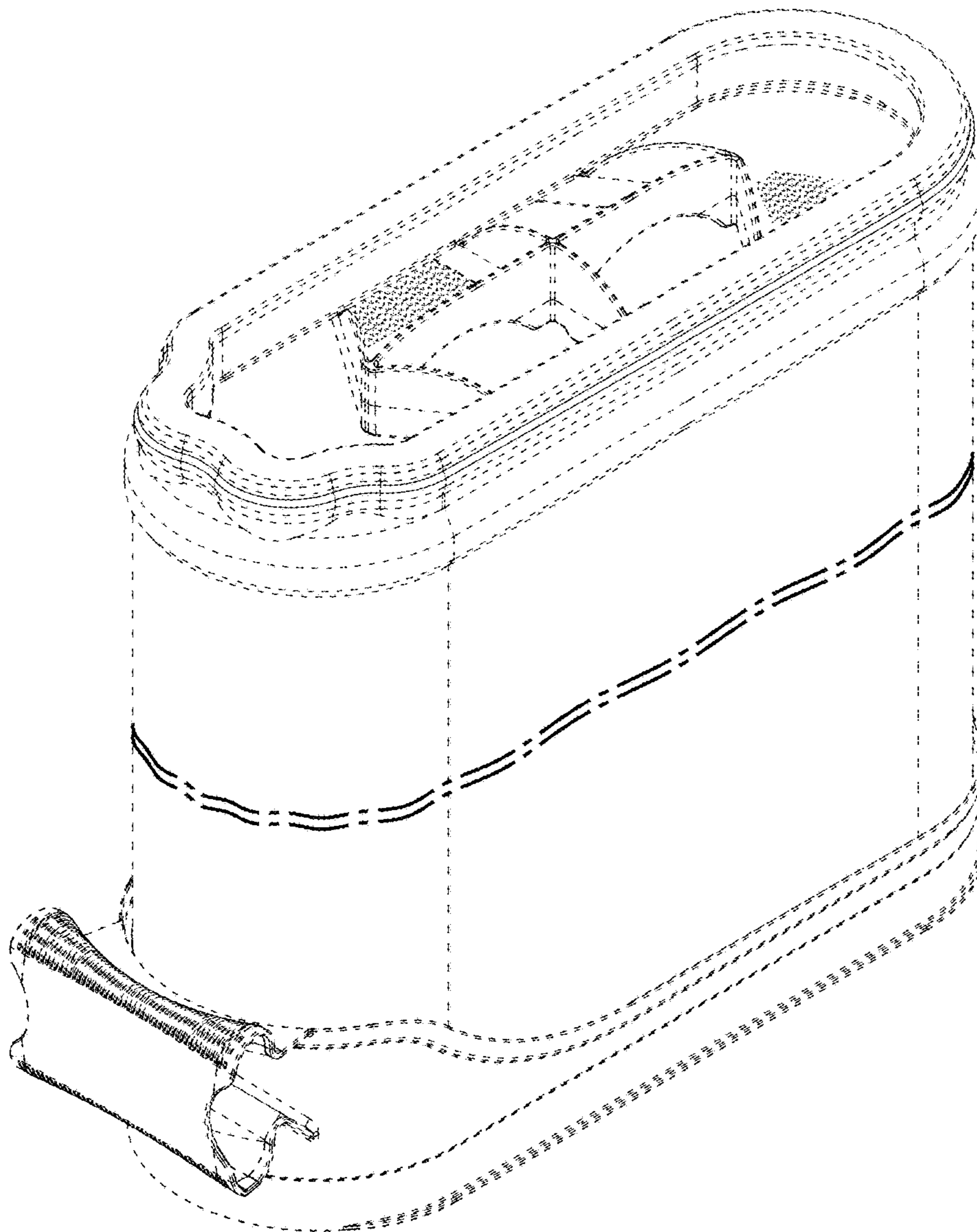


FIG. 2

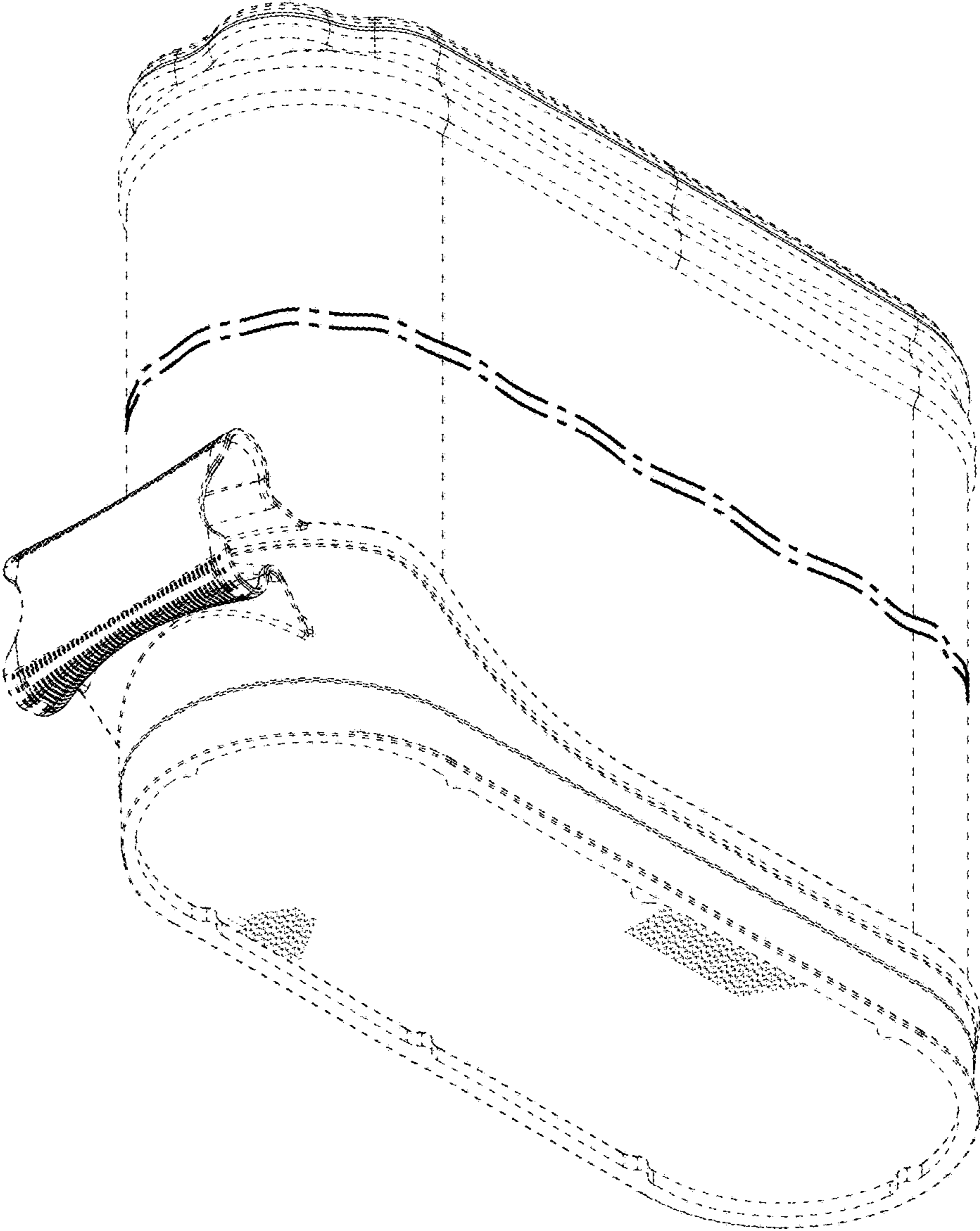


FIG. 3

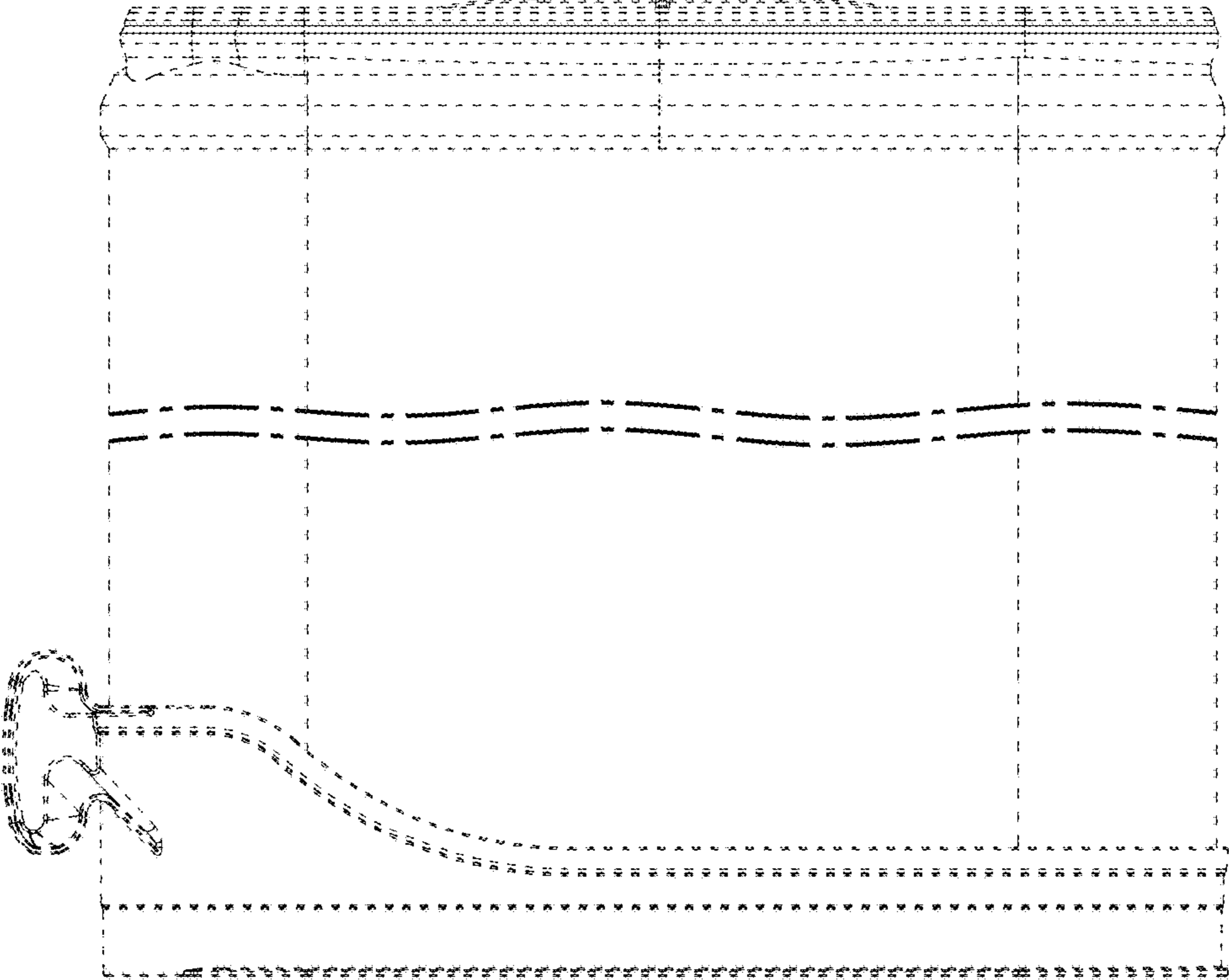


FIG. 4

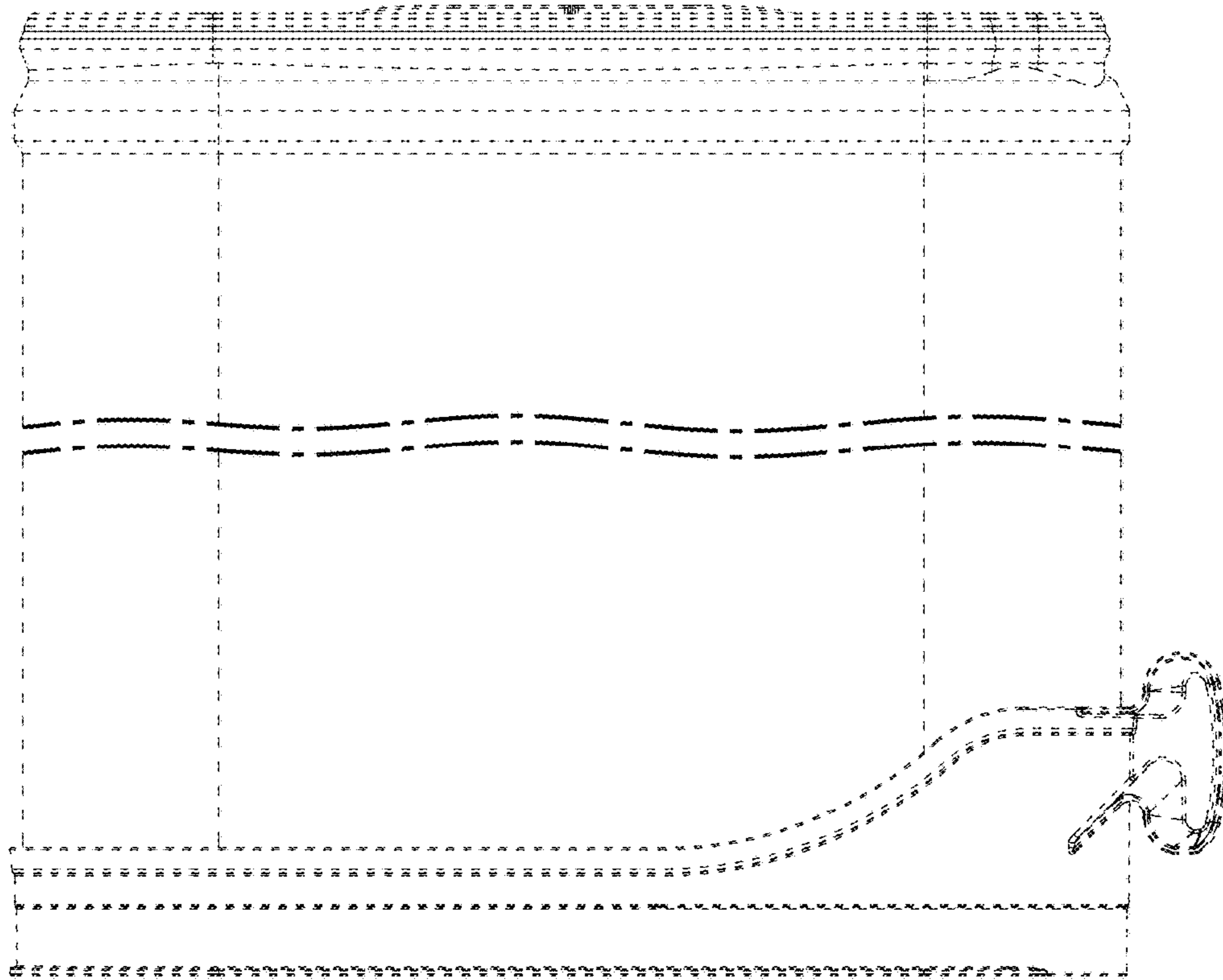


FIG. 6

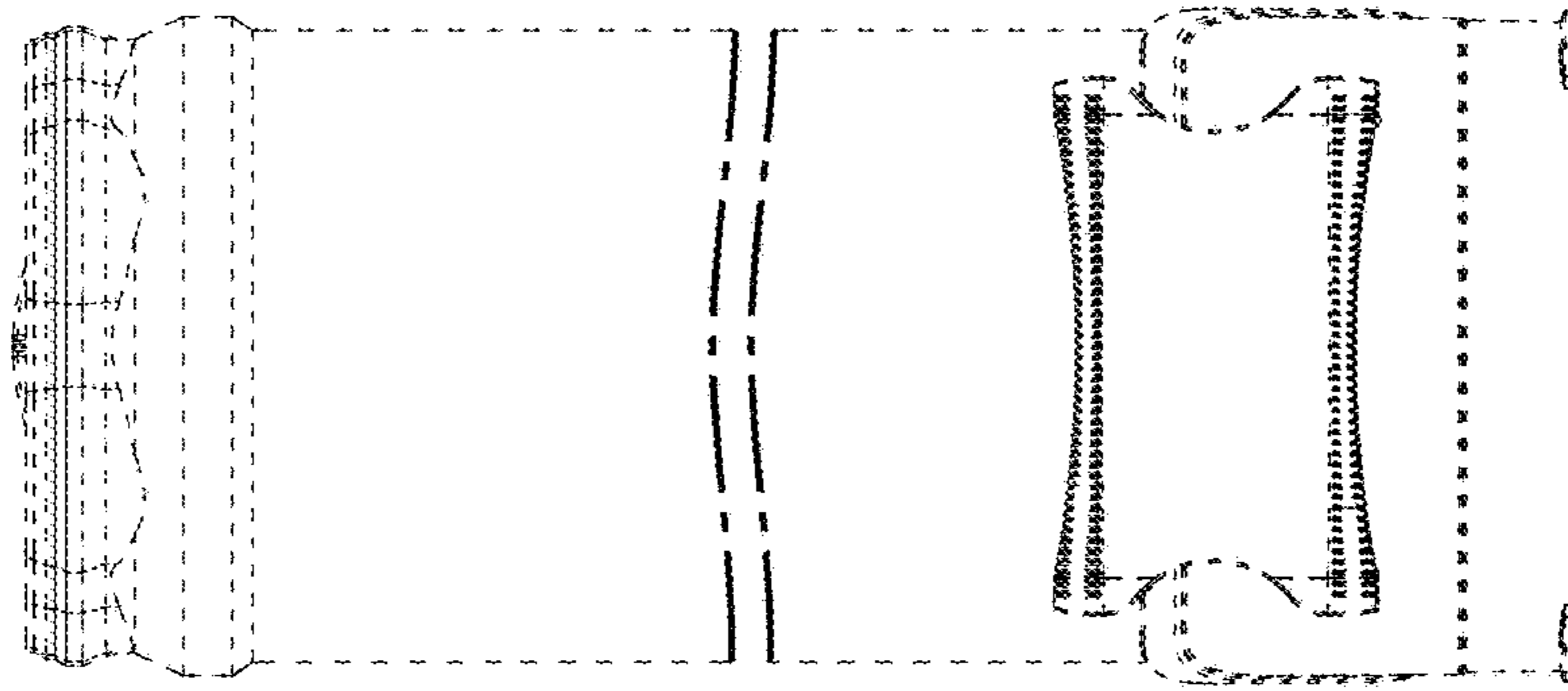
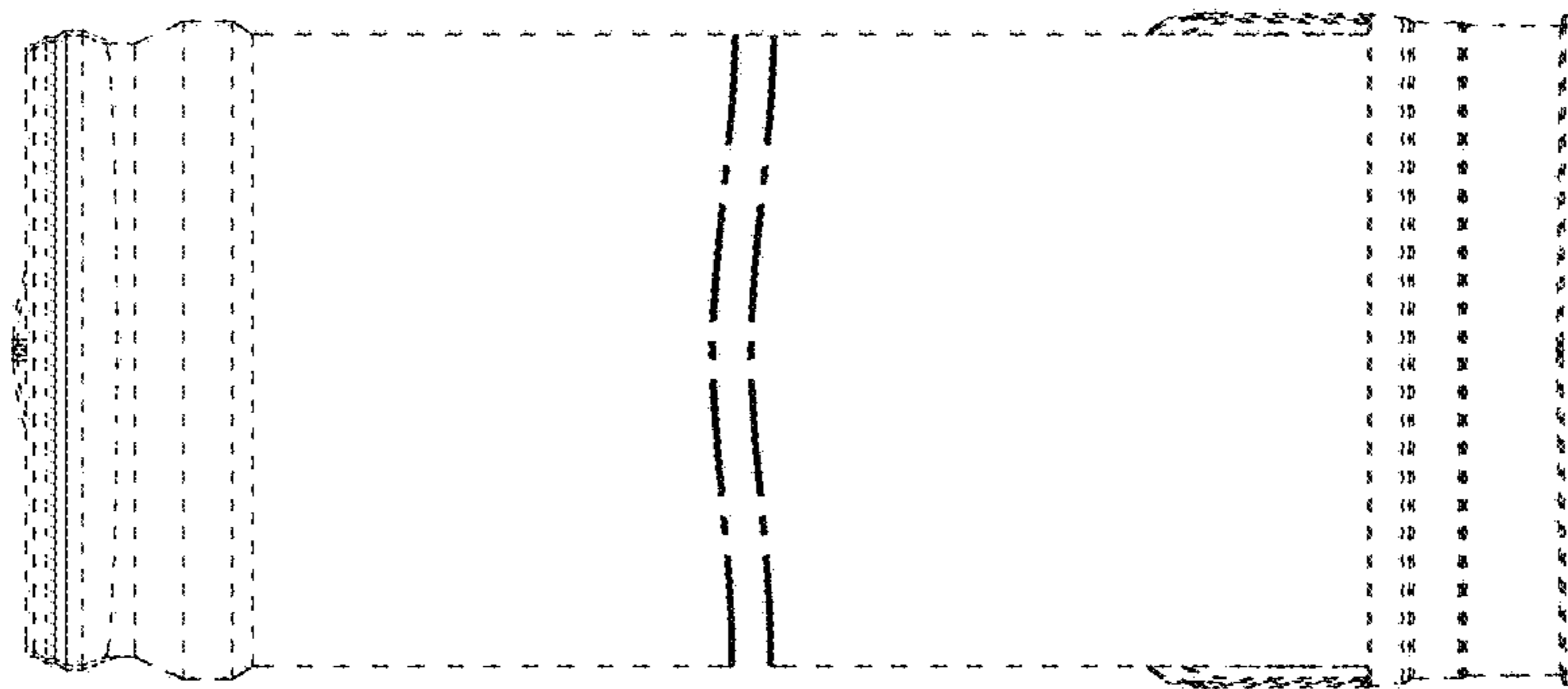


FIG. 5



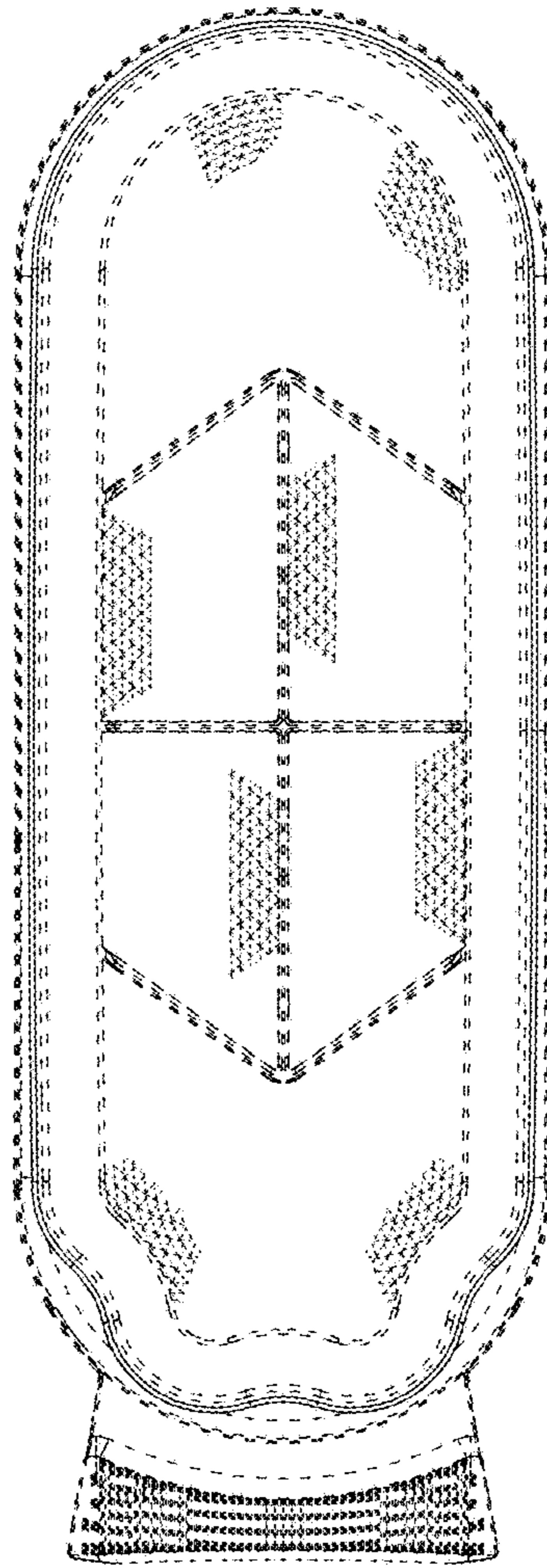


FIG. 7

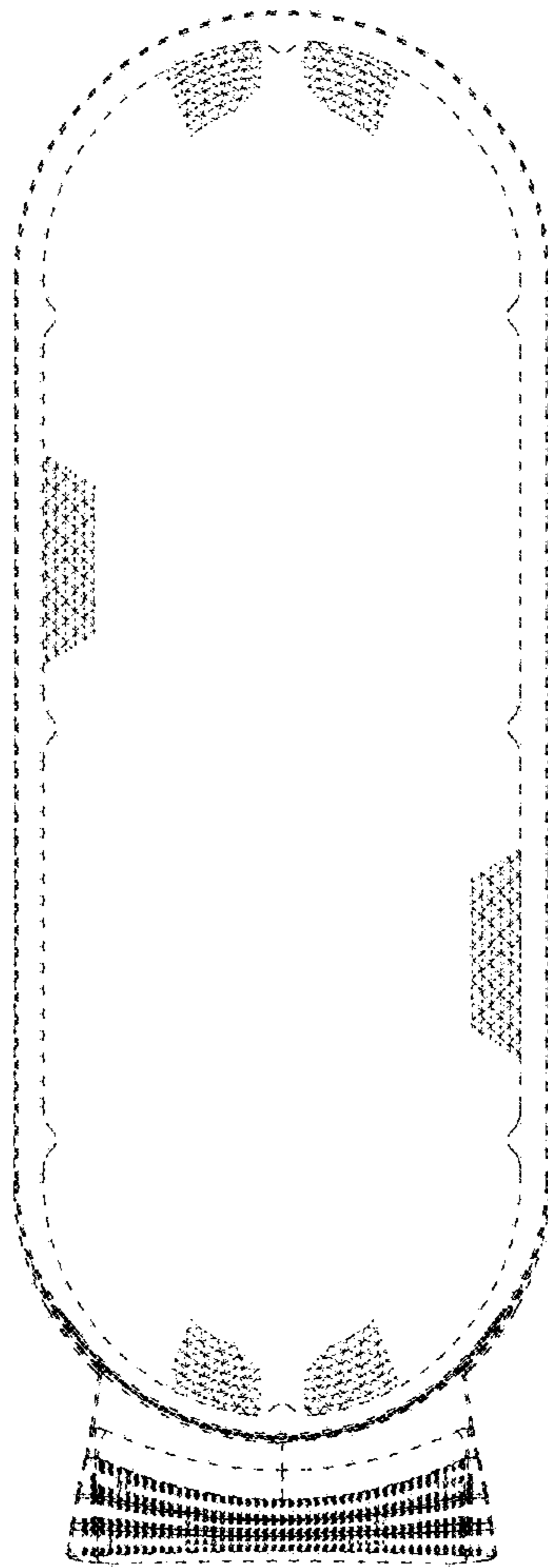


FIG. 8