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

(10) **Patent No.:** **US D800,539 S**

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- (54) **AERIAL SUPPORT TIE**
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- 4,191,334 A 3/1980 Bulanda
- 4,272,870 A 6/1981 McCormick
- 4,287,644 A * 9/1981 Durand F16L 3/2334
24/16 PB
- 4,347,648 A * 9/1982 Dekkers B65D 63/1063
24/16 PB
- 4,397,435 A 8/1983 Fisher
(Continued)

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OTHER PUBLICATIONS

Thomas & Betts, Deltec Cable Tie, <http://www-public.tnb.com/ps/fulltilt/index.cgi?check=Y&part=TYD5135M>, dated Jul. 23, 2013, 2 pages.

(Continued)

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

Primary Examiner — Cynthia Underwood

- (21) Appl. No.: **29/539,760**

(74) *Attorney, Agent, or Firm* — Robert J. Myers

- (22) Filed: **Sep. 17, 2015**

Related U.S. Application Data

- (62) Division of application No. 29/482,670, filed on Feb. 20, 2014, now Pat. No. Des. 739,714.

(57) **CLAIM**

The ornamental design for an aerial support tie, as shown and described.

- (51) **LOC (10) Cl.** **09-06**

DESCRIPTION

- (52) **U.S. Cl.**

- USPC **D8/356**

- (58) **Field of Classification Search**

USPC D8/356, 354, 349; 381/384
 CPC E02D 5/803; B63B 21/045; B63B 59/02;
 B60D 1/18; B60P 7/0823; A44B 13/0029;
 Y10T 24/3918

See application file for complete search history.

FIG. 1 is a perspective view of a tie head according to the present invention.

FIG. 2 is a left side elevation view of the embodiment of FIG. 1.

FIG. 3 is a right side elevation view of the embodiment of FIG. 1.

FIG. 4 is a top plan view of the embodiment of FIG. 1.

FIG. 5 is a bottom plan view of the embodiment of FIG. 1.

FIG. 6 is a front elevation view of the embodiment of FIG. 1; and,

FIG. 7 is a rear elevation view of the embodiment of FIG. 1.

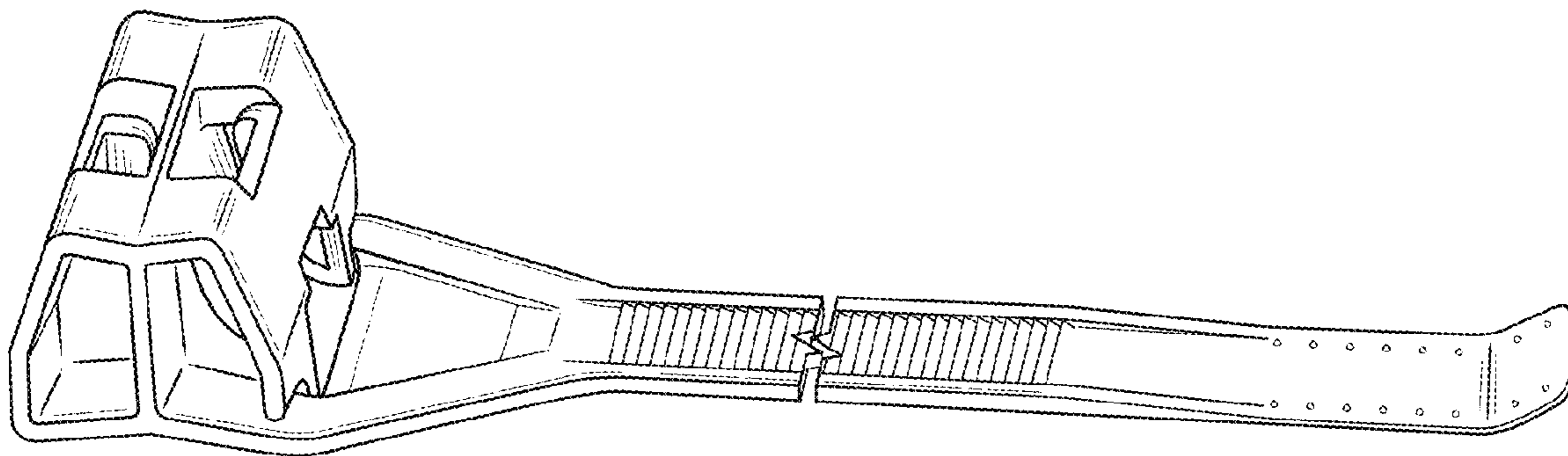
The aerial support tie is shown with a symbolic break in its length. The appearance of any portion of the article between the break lines forms no part of the claim.

- (56) **References Cited**

U.S. PATENT DOCUMENTS

- 3,257,694 A 6/1966 Litwin
- 3,463,427 A 8/1969 Fisher
- 3,654,669 A 4/1972 Fulton
- 3,747,164 A 7/1973 Fortsch
- 3,816,878 A 6/1974 Fulton
- 3,981,048 A 9/1976 Moody
- 4,001,898 A 1/1977 Caveney

1 Claim, 2 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D273,361 S 4/1984 Suzuki
 RE31,689 E 10/1984 Bulanda
 4,498,507 A 2/1985 Thompson
 D281,301 S 11/1985 Spolar
 4,557,023 A 12/1985 Six
 4,562,982 A 1/1986 McSherry
 4,574,434 A 3/1986 Shupe
 4,665,588 A 5/1987 Nakano
 4,754,529 A * 7/1988 Paradis B29C 45/0055
 24/16 PB
 4,788,751 A * 12/1988 Shely B65D 63/1072
 24/16 PB
 4,819,897 A 4/1989 Gooding
 4,860,979 A 8/1989 Camenisch
 D305,099 S 12/1989 Naruse et al.
 D305,977 S 2/1990 Ono
 4,909,051 A 3/1990 Lee
 4,993,669 A 2/1991 Dyer
 5,083,346 A 1/1992 Orton
 5,088,158 A 2/1992 Burkholder
 5,102,075 A 4/1992 Dyer
 5,117,575 A 6/1992 Desmond
 5,131,613 A 7/1992 Kamiya et al.
 D334,337 S 3/1993 Ito et al.
 5,267,967 A 12/1993 Schneider
 D347,156 S 5/1994 Starrett
 5,377,387 A 1/1995 Freed
 5,398,383 A 3/1995 Bingold
 5,416,955 A 5/1995 Katsma
 D363,212 S 10/1995 Hill
 D368,853 S 4/1996 Liu et al.
 5,538,208 A 7/1996 Cordes
 5,584,452 A 12/1996 Koike
 5,628,348 A * 5/1997 Scott B65B 13/027
 140/123.5
 5,836,053 A * 11/1998 Davignon F16L 3/233
 24/16 PB
 5,884,367 A 3/1999 Teagno et al.
 5,911,368 A 6/1999 Davignon
 5,954,302 A 9/1999 Robertson
 5,956,813 A 9/1999 Cooper
 5,966,781 A 10/1999 Geiger
 D417,387 S 12/1999 Kim
 D417,838 S 12/1999 Kim
 D424,923 S 5/2000 Lodi
 6,079,657 A * 6/2000 Hwang B65H 75/406
 191/12.4
 6,105,210 A * 8/2000 Benoit B65D 63/1063
 24/16 PB
 6,105,908 A 8/2000 Kraus
 6,119,314 A 9/2000 Freed
 6,129,317 A 10/2000 Rodrigues
 6,151,761 A 11/2000 Thompson
 D435,438 S 12/2000 West
 6,196,033 B1 3/2001 Dowdle
 D442,851 S 5/2001 Wilson
 6,240,602 B1 6/2001 Geiger
 6,330,989 B1 12/2001 Okamoto
 6,363,244 B1 3/2002 McGhee
 6,364,257 B1 4/2002 Holder
 6,430,783 B1 * 8/2002 Benoit B65D 63/1063
 24/16 PB
 6,484,366 B1 11/2002 Deschenes
 6,497,258 B1 * 12/2002 Flannery B65D 63/1063
 140/123.6
 6,532,631 B2 3/2003 Rohaly

6,828,509 B2 12/2004 Ito et al.
 D530,600 S 10/2006 Krisel
 7,131,168 B2 11/2006 Pangallo
 D537,333 S 2/2007 Jowsey
 7,229,052 B2 6/2007 Takeuchi
 7,316,375 B2 1/2008 Wakabayashi
 7,334,299 B2 2/2008 Assarsson
 D565,401 S 4/2008 Grady et al.
 D570,673 S 6/2008 Geiger et al.
 7,661,633 B2 2/2010 Igarashi
 D614,941 S * 5/2010 Murphy D8/387
 D619,887 S * 7/2010 Colton D8/396
 7,753,320 B2 7/2010 Geiger et al.
 7,753,321 B2 7/2010 Geiger
 7,774,905 B2 8/2010 Geiger
 7,775,484 B2 8/2010 Gunzburger
 7,789,414 B2 9/2010 Blackburn
 D631,731 S 2/2011 Chen
 D634,187 S 3/2011 Kozel
 8,033,966 B2 10/2011 Ayoub
 8,282,047 B2 10/2012 Franks
 D670,154 S 11/2012 Kelleghan
 8,474,104 B2 7/2013 Watson
 8,559,782 B2 10/2013 Cleofe et al.
 D698,632 S * 2/2014 Wang D8/383
 D700,826 S * 3/2014 Qin D8/367
 8,739,387 B1 * 6/2014 Frishberg F16L 3/2332
 140/93 A
 8,978,210 B2 3/2015 Arjomand
 8,978,211 B2 3/2015 Arjomand
 D728,351 S * 5/2015 Martinson D8/373
 D728,352 S * 5/2015 Martinson D8/373
 9,067,717 B2 6/2015 DeMik
 D741,691 S 10/2015 Adams
 D741,701 S 10/2015 McNeil
 D749,409 S * 2/2016 Martinson D8/396
 D751,888 S 3/2016 Sakamoto
 D769,704 S * 10/2016 Nitta D8/387
 2003/0106190 A1 6/2003 Christianson
 2006/0265840 A1 11/2006 Thompson
 2007/0057124 A1 3/2007 Kwilosz
 2008/0185409 A1 8/2008 Kellenberger
 2009/0276983 A1 11/2009 Chan
 2010/0071169 A1 3/2010 Williams et al.
 2010/0096511 A1 4/2010 Olver
 2010/0306967 A1 12/2010 Geiger
 2012/0291231 A1 11/2012 Ku
 2015/0033509 A1 2/2015 Dietrich
 2015/0210453 A1 7/2015 Liang
 2016/0009469 A1 1/2016 Schneider De Oliveira

OTHER PUBLICATIONS

Panduit, Aerial Support Ties. www.panduit.com/wcs/Satellite?c=Page&childpagename=Panduit_Global%2FPG_Lay-out&cid=1345565612156&packedargs=classification_id%3D199, Jul. 23, 2013.
 Panduit product page, Aerial Support Ties, www.panduit.com/heiler/CatalogCutSheets/AST10-5-C100%20Product%20Page.pdf, date unknown, 1 page.
 Panduit product page., Sta-Strap Bow-Ty Cable Ties, <http://www.panduit.com/heiler/CatalogCutSheets/SSB2S-C%20Product%20Page.pdf>, date unknown, 1 page.
 HellermannTyton Catalog page, http://wpc.ac62.edgecastcdn.net/00AC62/documents/catalogs/LITPDCMIS_US_CAT.pdf, p. 66, date unknown, 1 page.

* cited by examiner

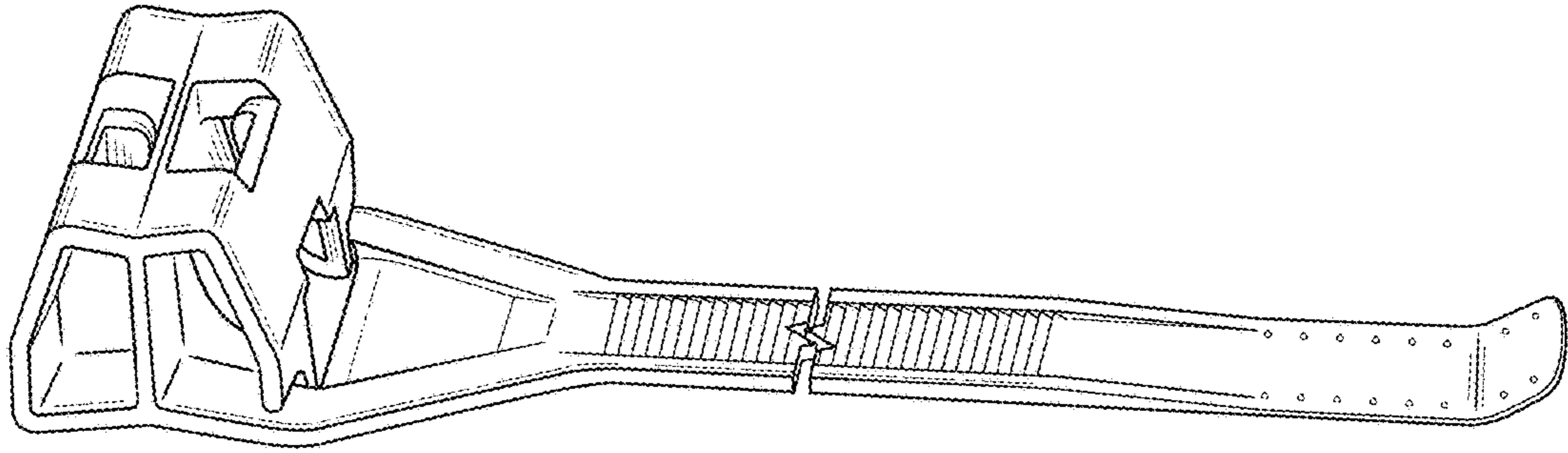


Fig. 1

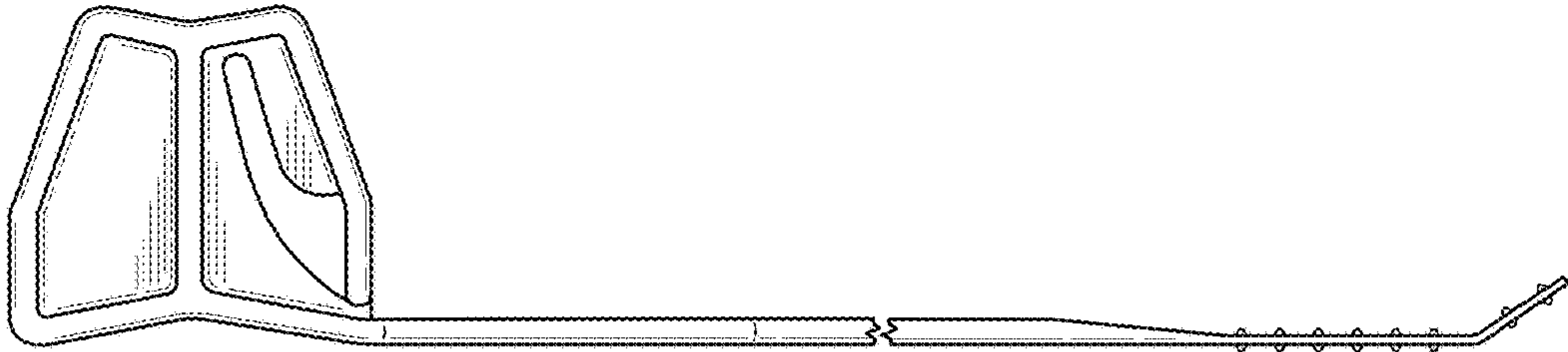


Fig. 2

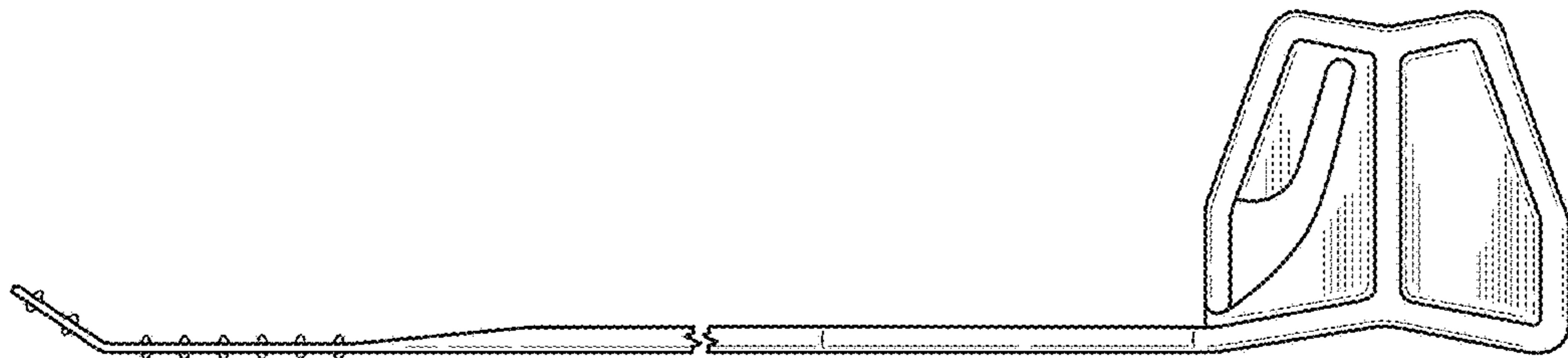


Fig. 3

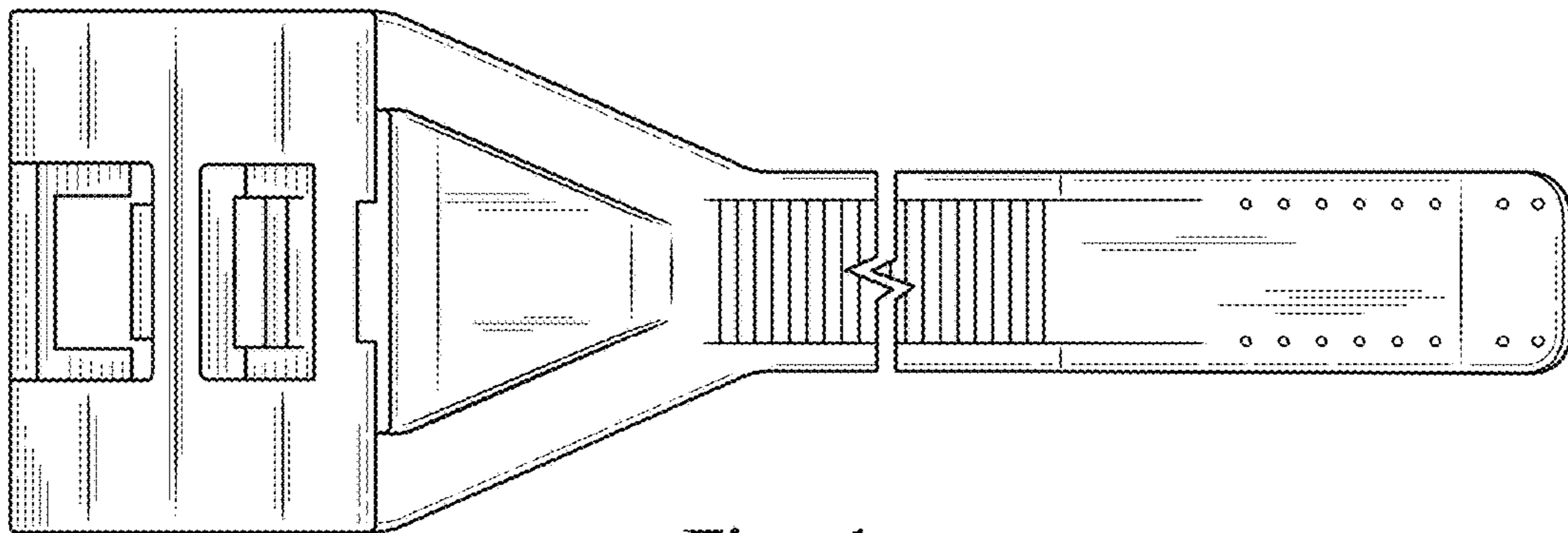


Fig. 4

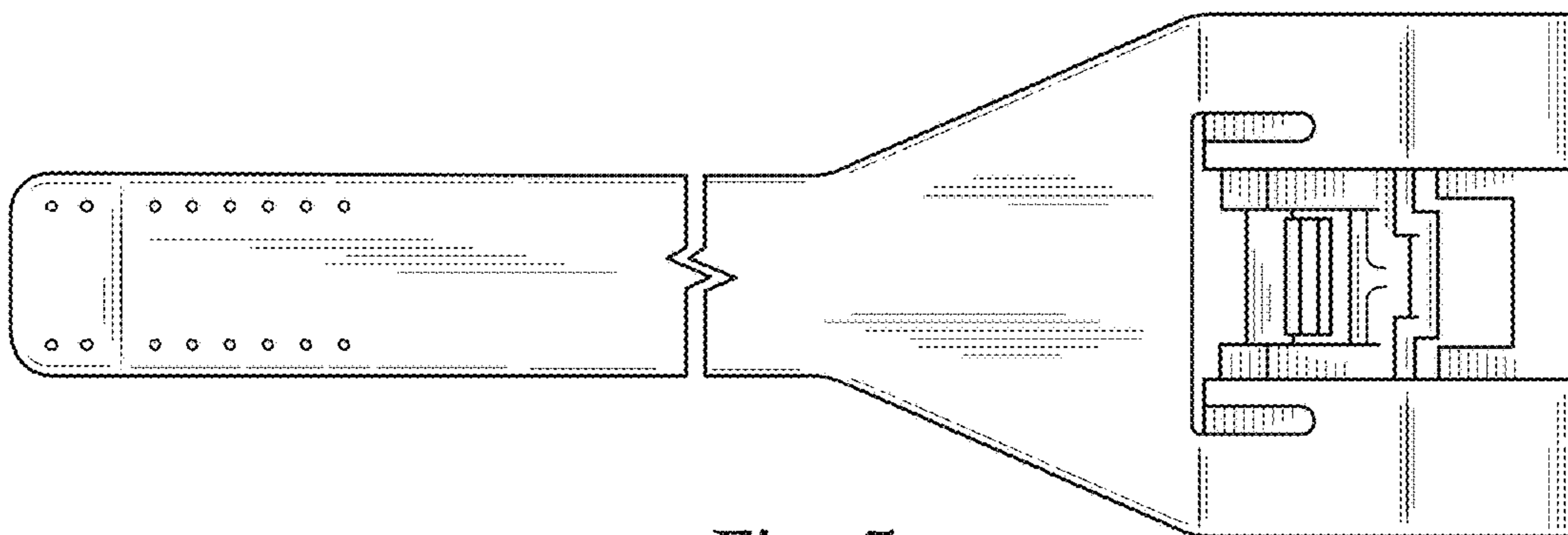


Fig. 5

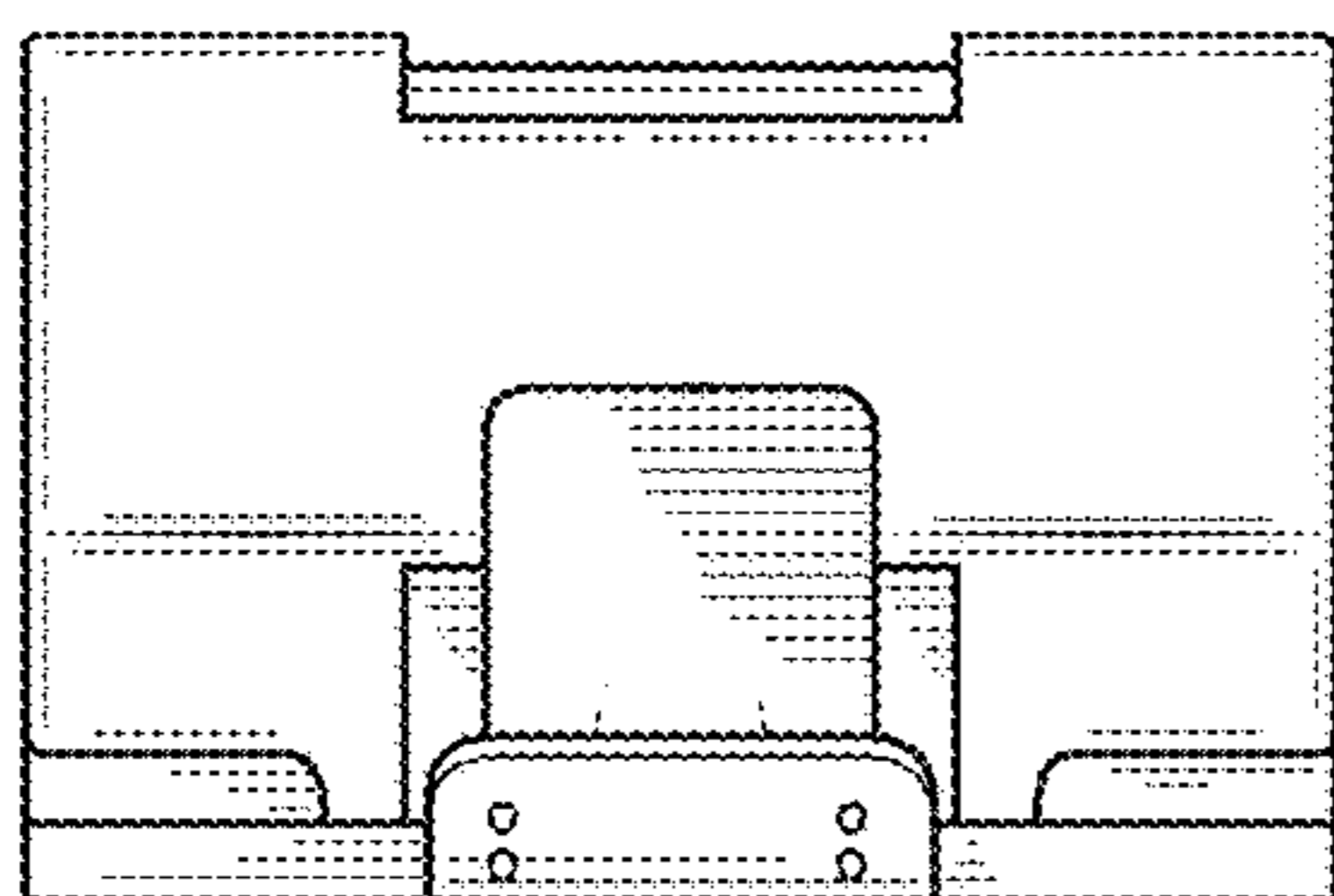


Fig. 6

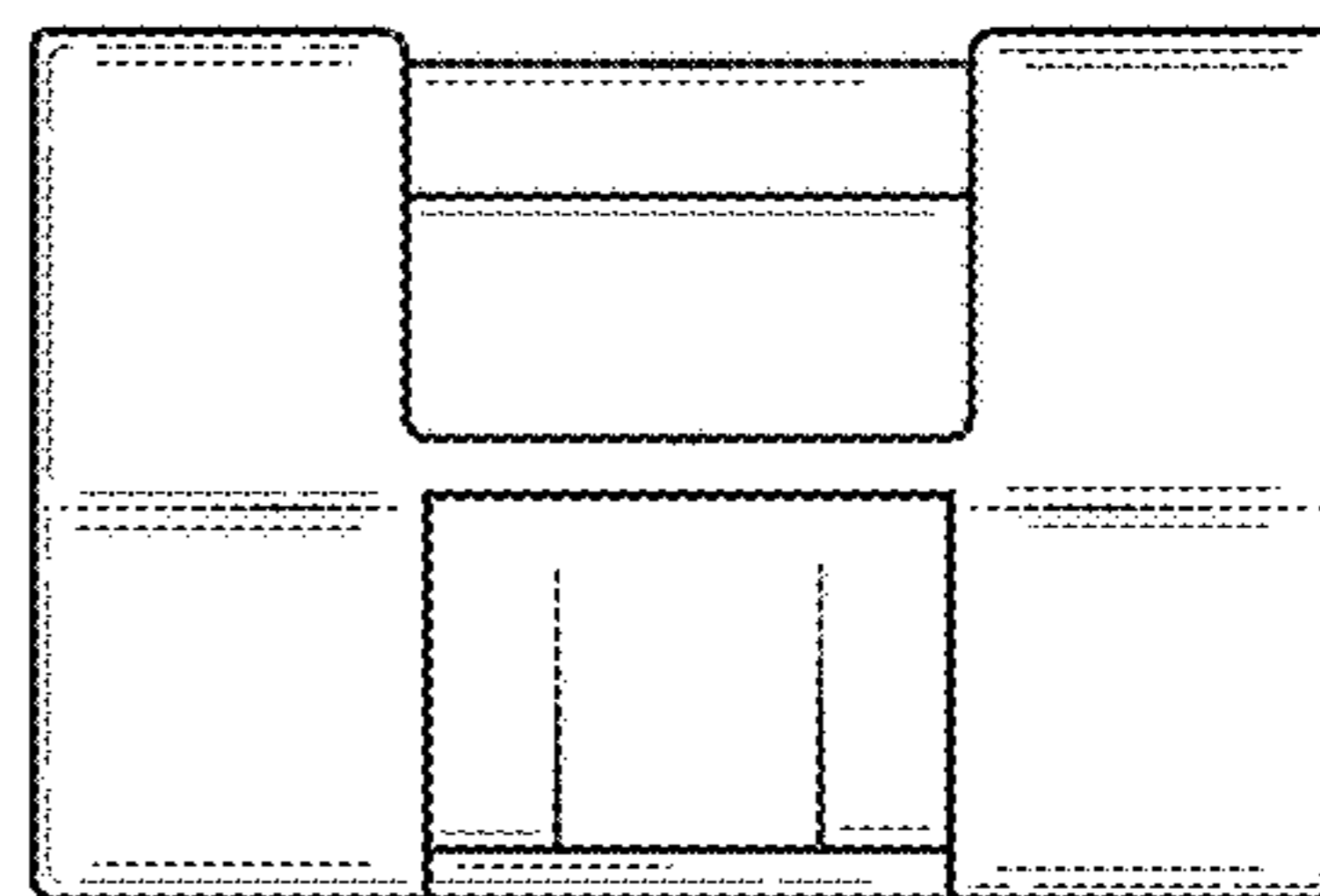


Fig. 7