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

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(54) **EDGE RETAINER FOR A PRINTED CIRCUIT CARD**

(71) Applicant: **Mellanox Technologies Ltd., Yokneam (IL)**

(72) Inventor: **Andrey Blyahman, Haifa (IL)**

(73) Assignee: **MELLANOX TECHNOLOGIES, LTD., Yokneam (IL)**

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

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(51) **LOC (11) Cl.** **08-08**

(52) **U.S. Cl.**
USPC **D8/395**; D8/349; D8/394; D14/432

(58) **Field of Classification Search**
USPC D8/349, 354, 364, 382, 394, 395;
D14/432-461; 439/328, 325, 329;
D13/182
CPC .. H01R 13/6275; H01R 13/62; H01R 12/721;
H01R 2201/06
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

- 4,008,942 A * 2/1977 Grossi H05K 7/1405
361/690
- D251,124 S * 2/1979 Takeuchi D19/65
- D265,381 S * 7/1982 Borja D18/34.9
- D265,969 S * 8/1982 Koessler D8/354
- D310,020 S * 8/1990 Fujioka D8/382
- 4,989,822 A * 2/1991 Fannon E05B 79/12
248/60
- D339,110 S * 9/1993 Steen, Jr. D13/179
- D355,354 S * 2/1995 Sterling D8/382
- 5,389,000 A * 2/1995 DiViesti H01R 12/7005
439/157
- 5,423,691 A * 6/1995 Pickles H01R 12/7023
439/327

- 5,454,726 A * 10/1995 Lee H01R 13/6275
439/310
- 5,494,451 A * 2/1996 Bowers H05K 7/1405
439/328
- 5,573,408 A * 11/1996 Laub H01R 12/721
439/570
- D389,730 S * 1/1998 Nakamura D8/395
(Continued)

OTHER PUBLICATIONS

PCI Express, Card Electromechanical Specification, Revision 3.0, version 1.0, 194 pages, Mar. 6, 2012.

Primary Examiner — Mark Goodwin

(74) *Attorney, Agent, or Firm* — D. Kligler IP Services Ltd.

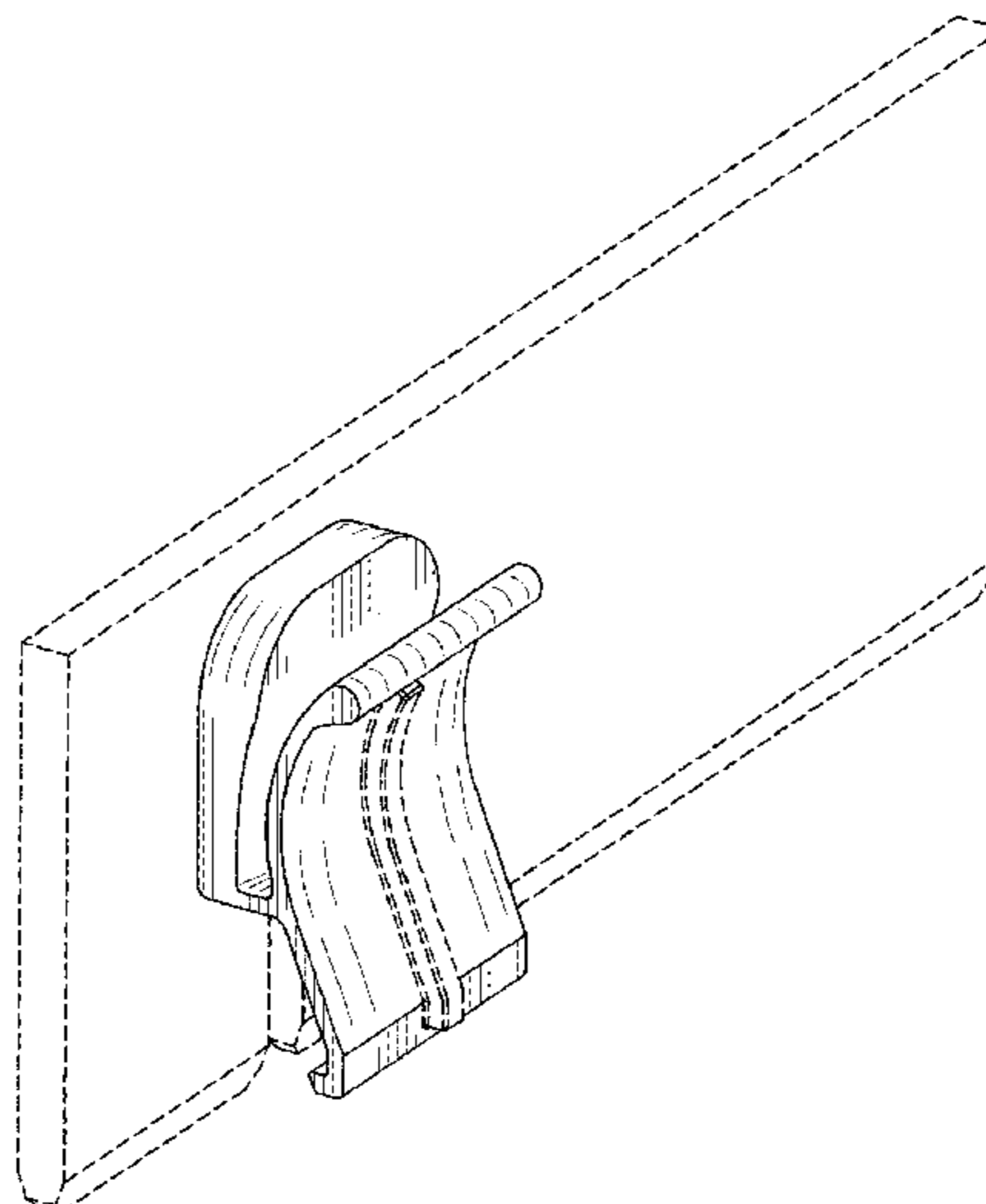
(57) **CLAIM**

The ornamental design for an edge retainer for a printed circuit card, as shown and described.

DESCRIPTION

FIG. 1 is a top, front, left-side perspective view of an edge retainer for a printed circuit card showing my new design; FIG. 2 is a bottom, front, left-side perspective view thereof; FIG. 3 is a front elevation view thereof; FIG. 4 is a rear elevation view thereof; FIG. 5 is a left side elevation view thereof; FIG. 6 is a right side elevation view thereof; FIG. 7 is a top plan view thereof; FIG. 8 is a bottom plan view thereof; FIG. 9 is a top, front, left-side perspective view of the edge retainer without the printed circuit card; and, FIG. 10 is a top, rear, left-side perspective view of the edge retainer without the printed circuit card. The broken lines in the drawing views are included to illustrate environment only and form no part of the claimed design.

1 Claim, 7 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

D411,979 S * 7/1999 Getz D12/223
 5,941,723 A * 8/1999 Yu H01R 12/83
 439/328
 D418,484 S * 1/2000 Kane D13/182
 6,183,284 B1 * 2/2001 Gill G06F 1/184
 211/41.17
 6,266,248 B1 * 7/2001 Hanas H05K 7/1409
 361/752
 6,327,160 B1 * 12/2001 Liao H05K 7/142
 24/563
 D453,294 S * 2/2002 Bitzer D8/395
 6,358,079 B1 * 3/2002 Noble H01R 12/7005
 439/326
 6,655,976 B1 * 12/2003 Shipe H05K 7/1405
 439/325
 D485,162 S * 1/2004 Wadsworth D34/10
 6,769,927 B2 * 8/2004 Brewer H01R 12/721
 439/328
 6,971,900 B2 * 12/2005 Liebenow H01R 12/7029
 439/327
 D530,192 S * 10/2006 Becerra D8/395
 7,145,085 B2 * 12/2006 Keating H05K 3/366
 174/520
 D547,170 S * 7/2007 Cox D8/395
 7,239,529 B1 * 7/2007 Chang H05K 7/1431
 174/520
 D552,462 S * 10/2007 Boyd D8/395
 D556,019 S * 11/2007 Symons D8/356
 D582,918 S * 12/2008 Scott D14/432

7,462,049 B2 * 12/2008 Chen H01R 12/7005
 439/160
 7,666,019 B2 * 2/2010 Jaramillo G06F 1/185
 439/327
 7,850,475 B1 12/2010 Feldman et al.
 D635,007 S * 3/2011 Takahara D8/349
 8,535,077 B2 * 9/2013 Shen H01R 12/737
 439/160
 8,900,001 B2 * 12/2014 Li H01R 12/7005
 439/157
 D721,949 S * 2/2015 Kim D8/395
 9,136,621 B1 * 9/2015 Jaskela H01R 12/7029
 9,252,528 B2 * 2/2016 Stock H05K 1/141
 D769,111 S * 10/2016 Kamiya D8/394
 9,537,236 B2 * 1/2017 Neu H01R 13/6335
 9,608,364 B2 * 3/2017 Stock H01R 13/533
 D783,391 S * 4/2017 Chiang D8/396
 D791,713 S * 7/2017 Papakos D13/154
 9,853,381 B1 * 12/2017 Stock H01R 13/58
 2006/0128200 A1 * 6/2006 McEwan H01R 13/639
 439/327
 2008/0080152 A1 * 4/2008 Duppong H05K 3/301
 361/760
 2008/0080157 A1 * 4/2008 Duppong H05K 3/366
 361/807
 2008/0081511 A1 * 4/2008 Lloyd H01R 13/6272
 439/552
 2008/0153336 A1 * 6/2008 McEwan H01R 13/639
 439/327
 2011/0176867 A1 * 7/2011 Mosier F16B 2/14
 403/409.1
 2011/0223809 A1 * 9/2011 Reed H01R 9/038
 439/626

* cited by examiner

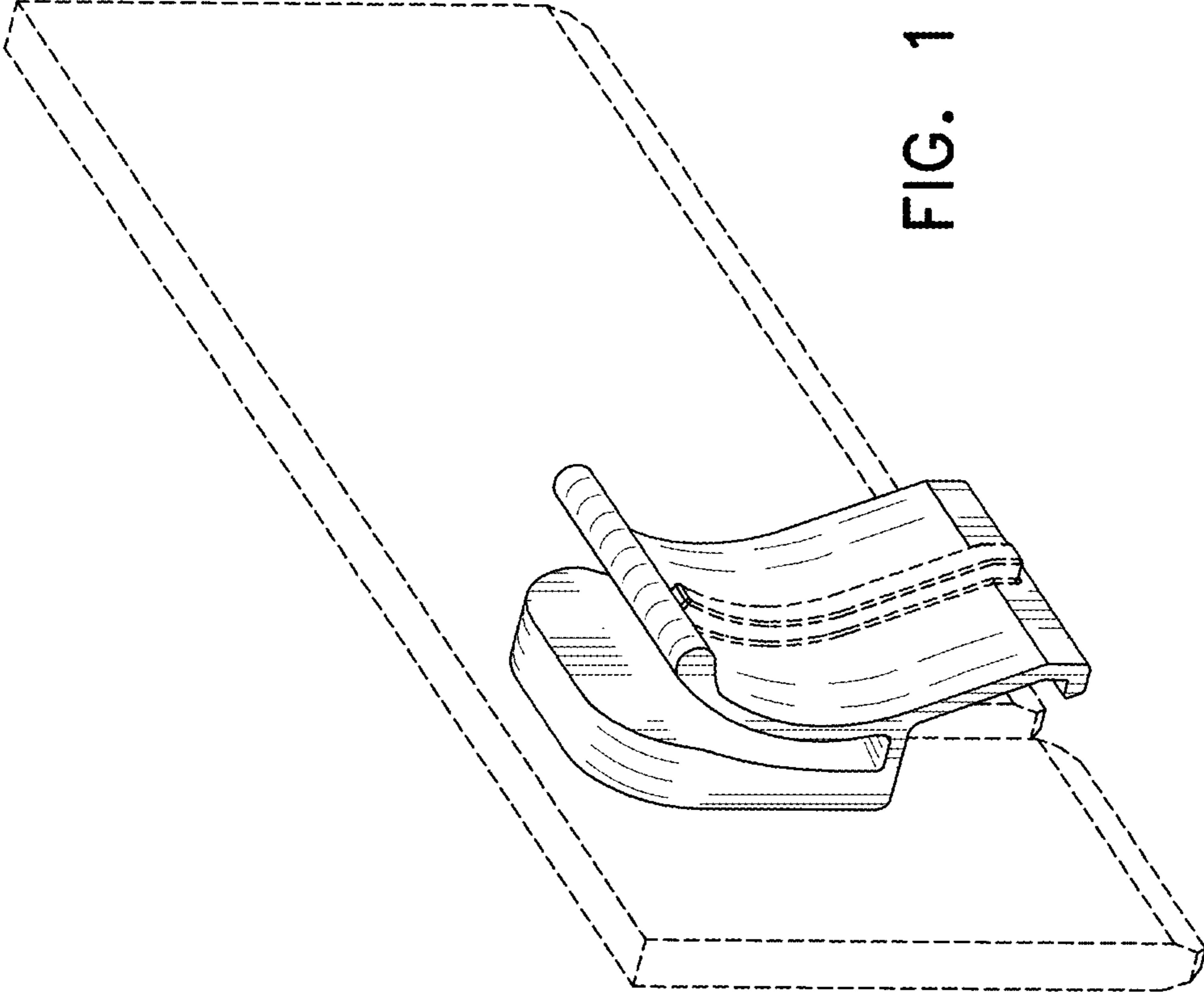


FIG. 1

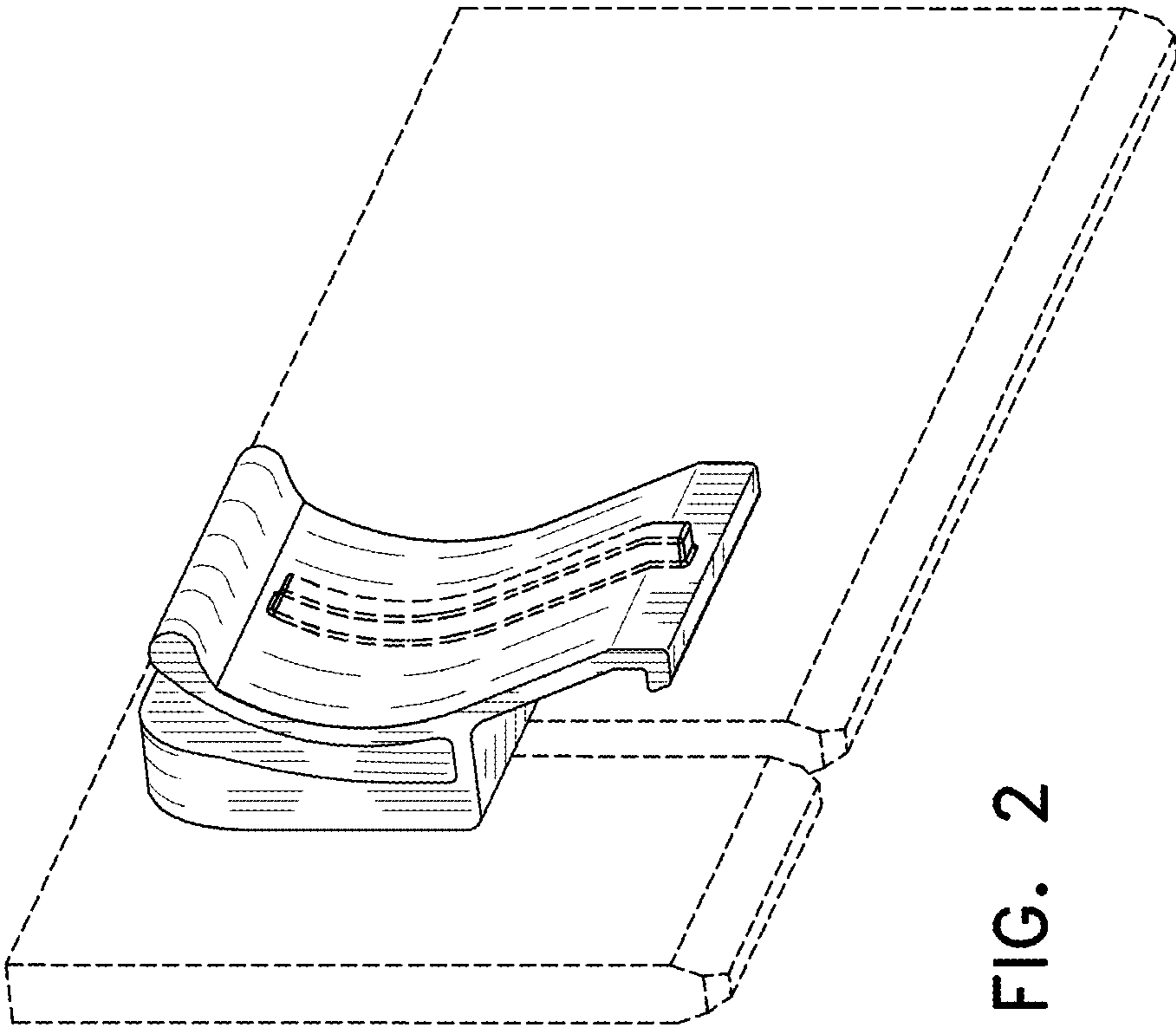


FIG. 2

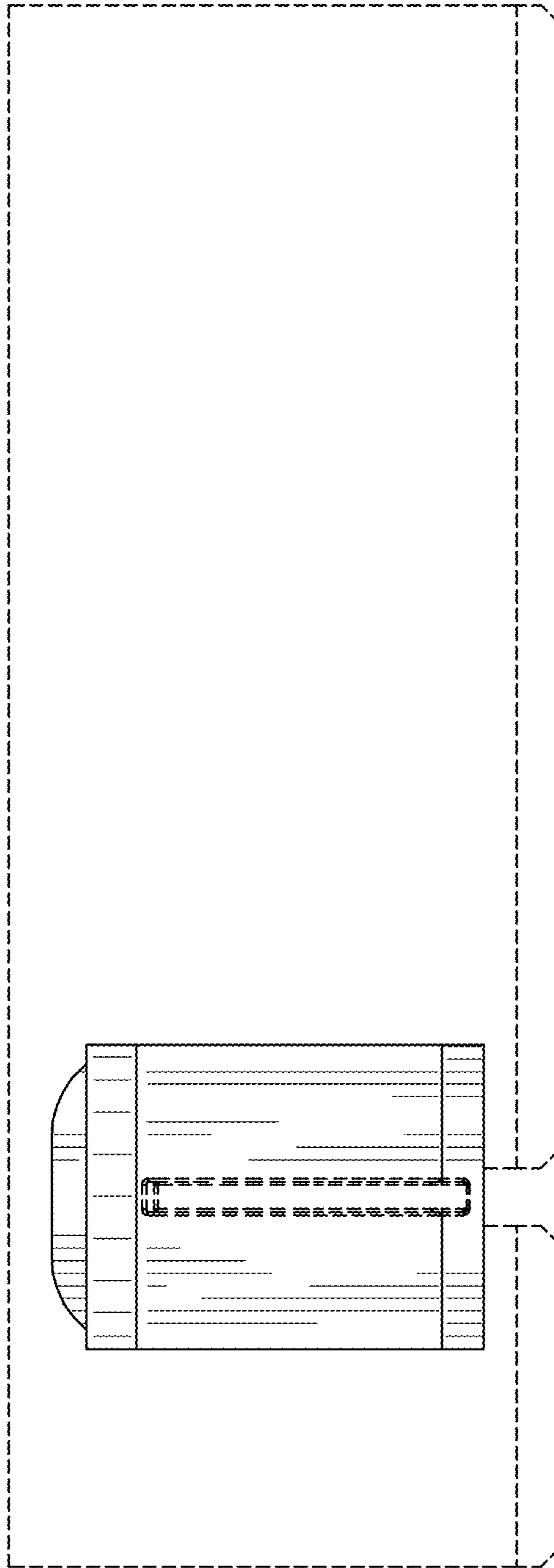


FIG. 3

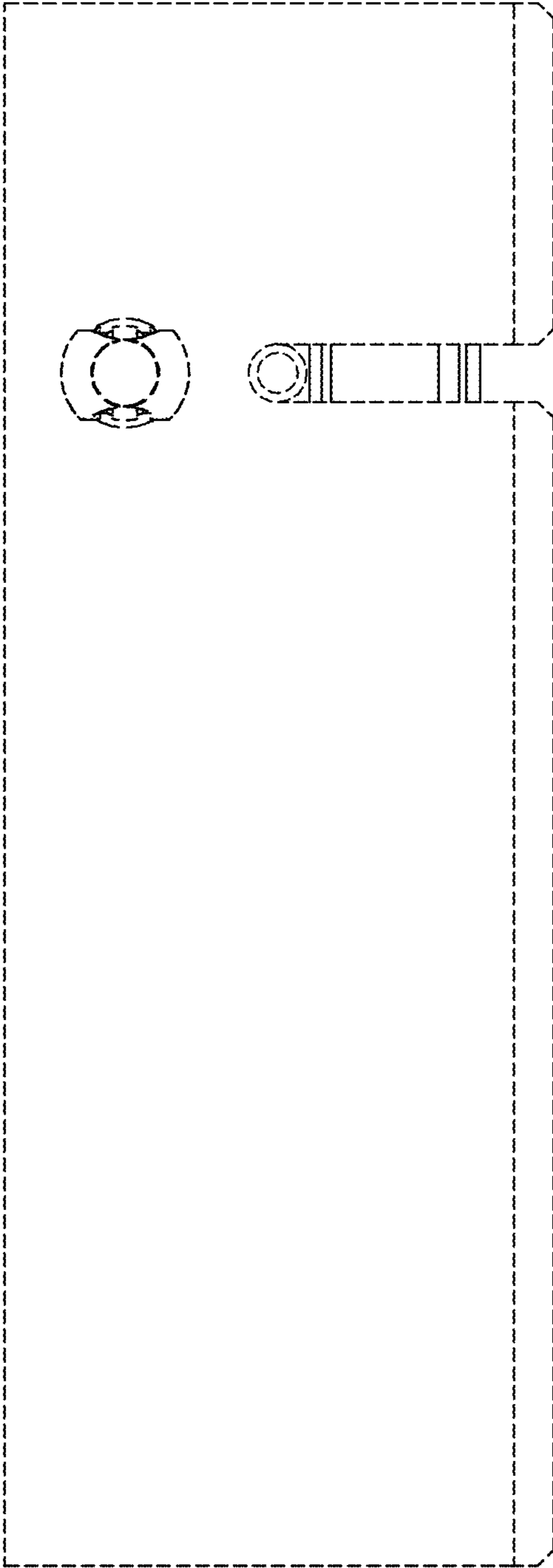


FIG. 4

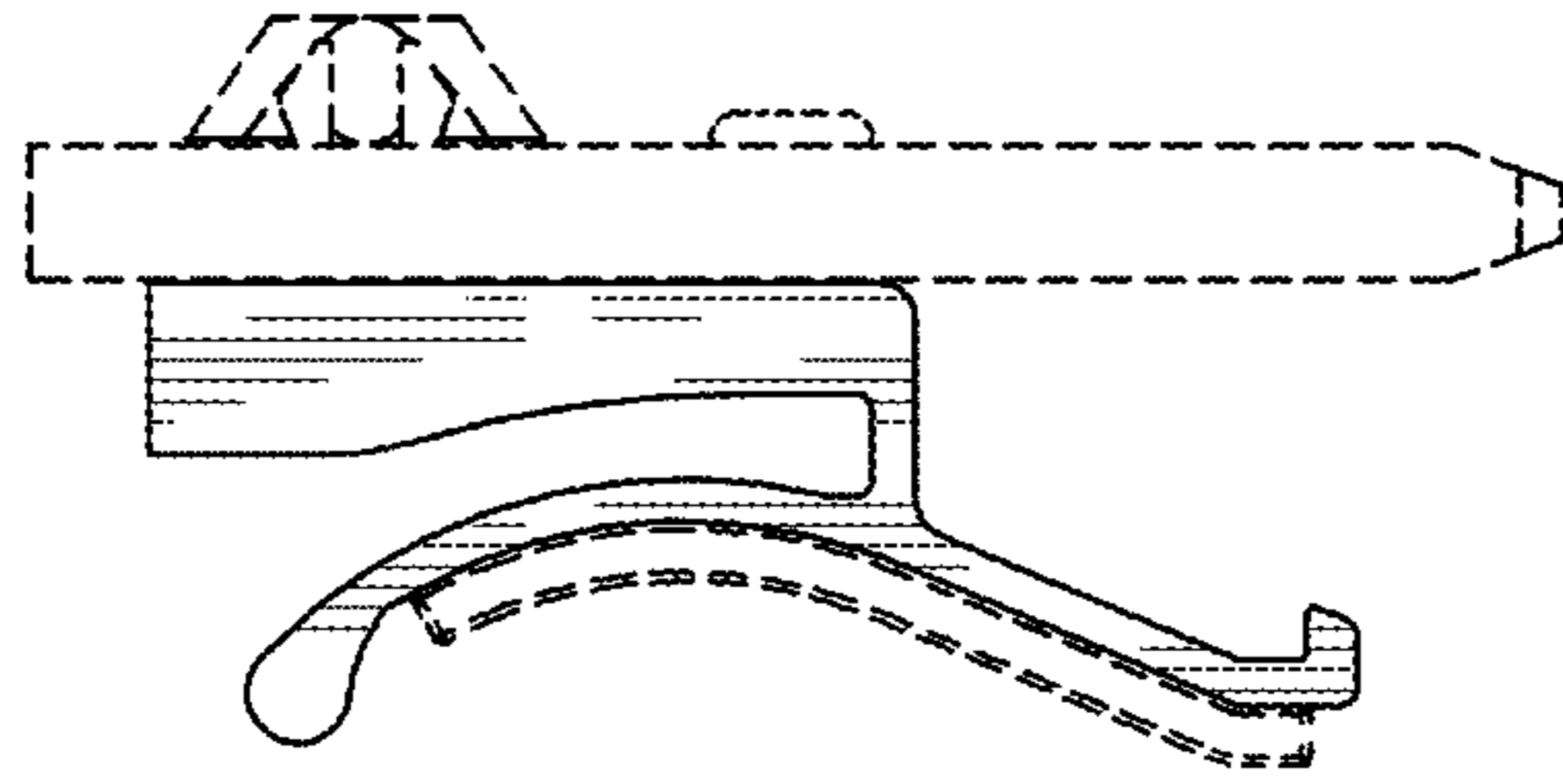


FIG. 6

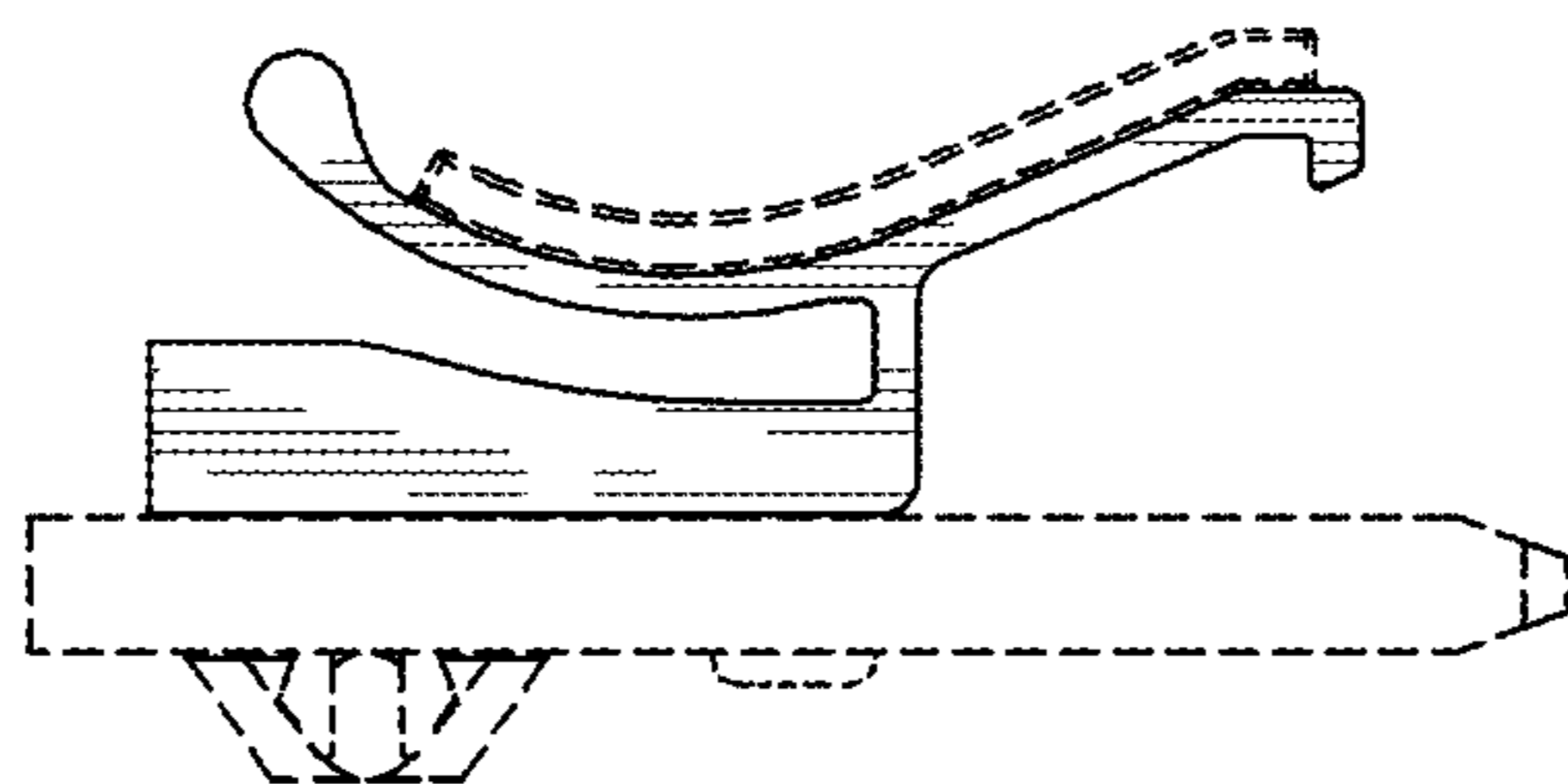


FIG. 5

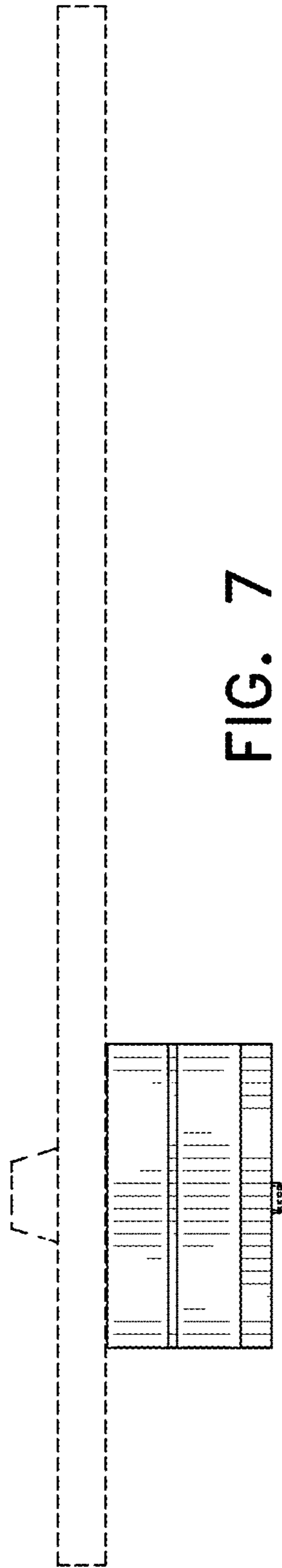


FIG. 7

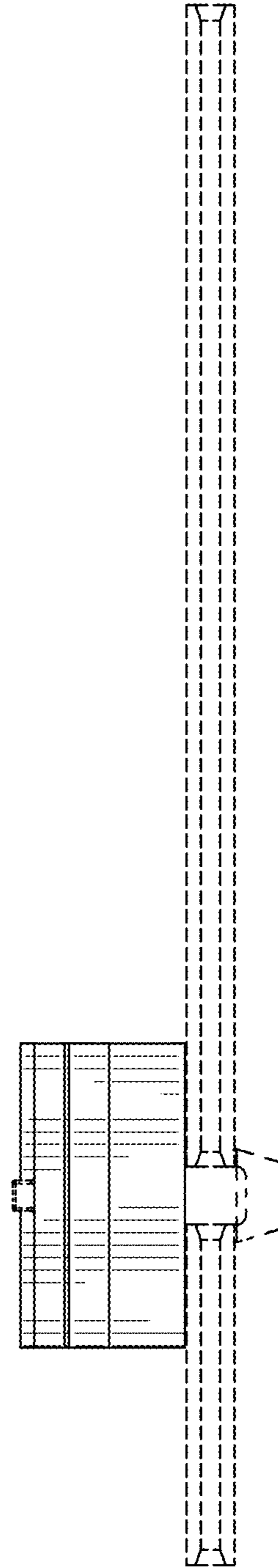


FIG. 8

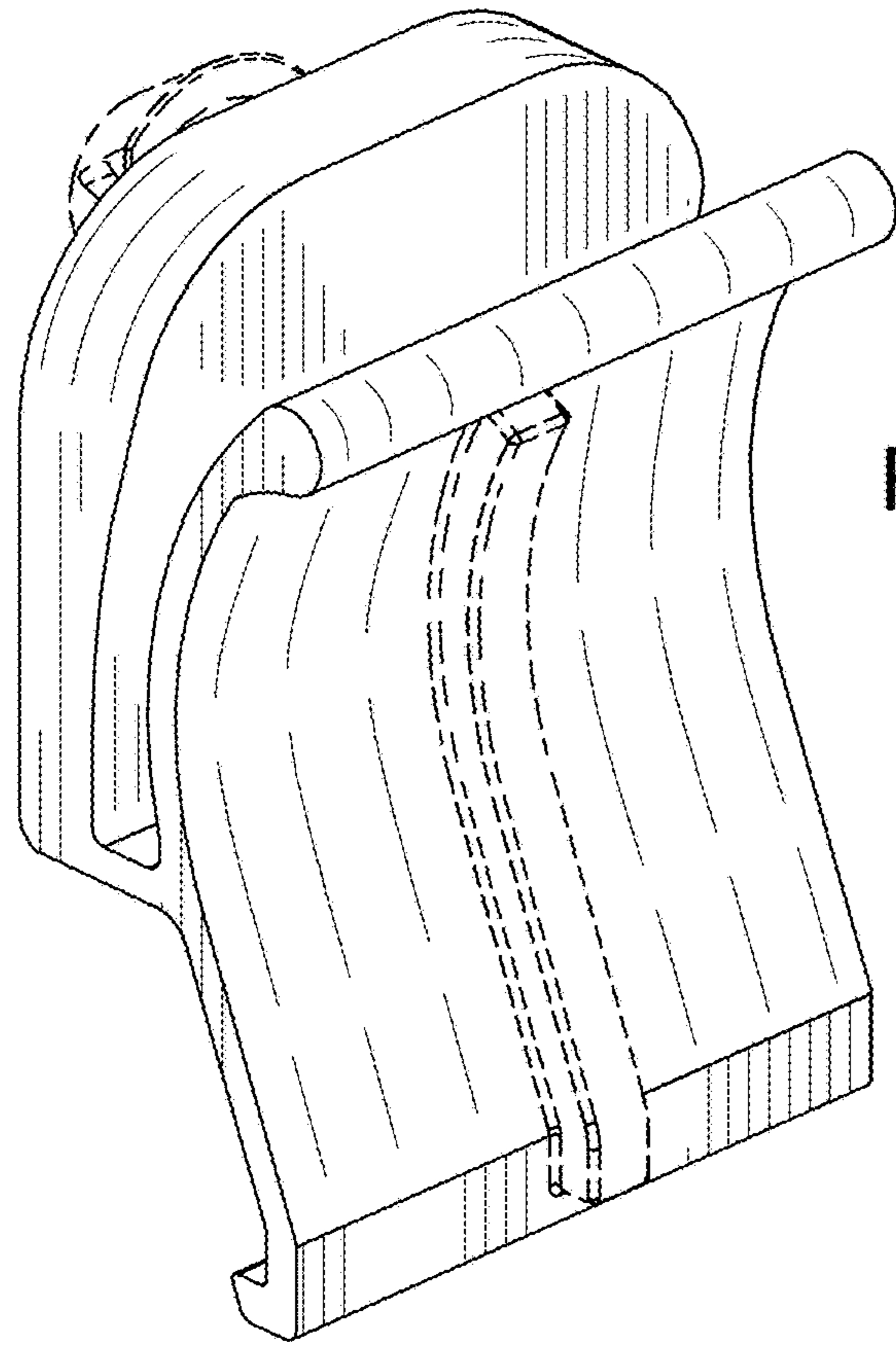


FIG. 9

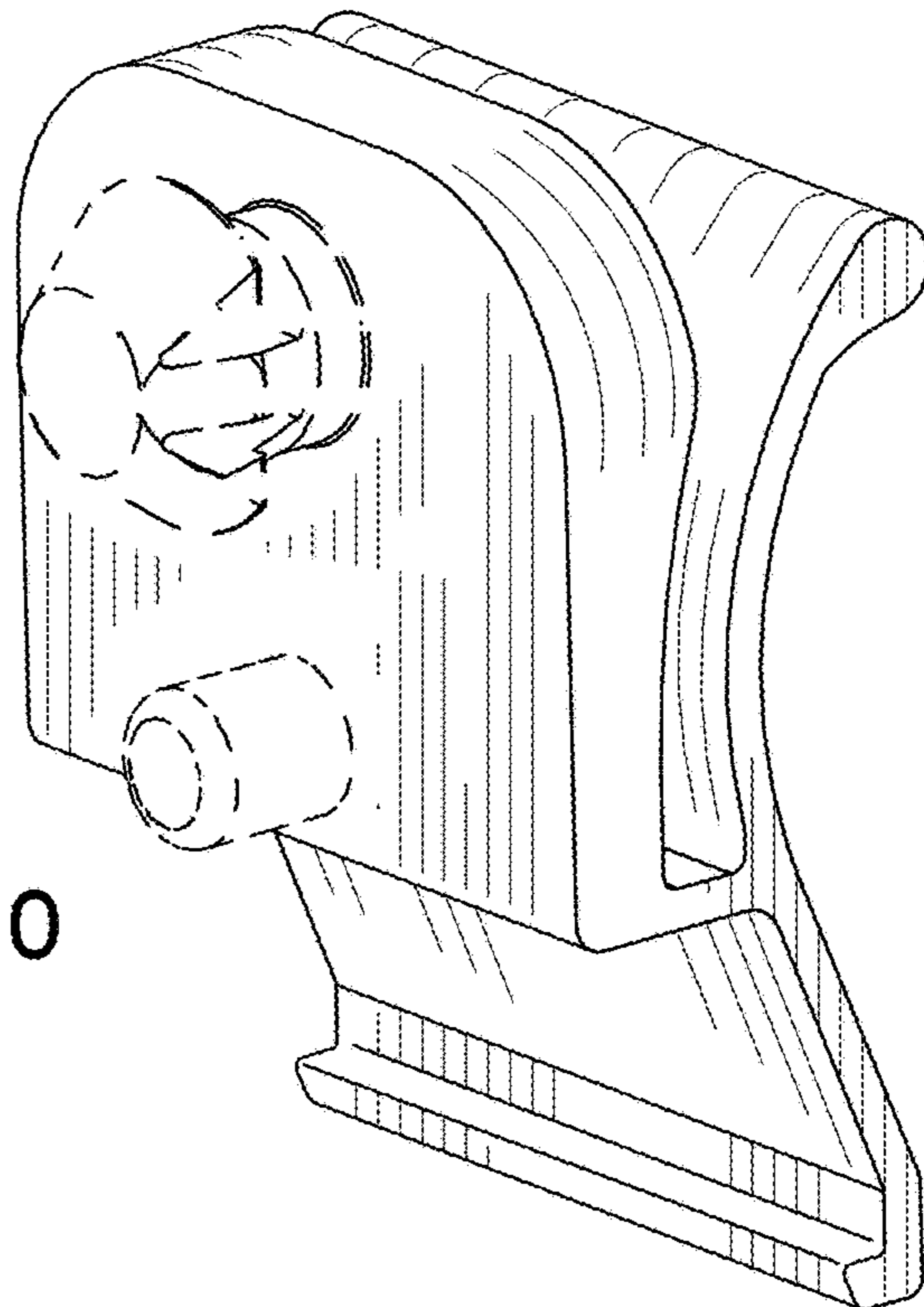


FIG. 10