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

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(54) **SLIDER**

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(52) **U.S. Cl.**  
USPC ..... **D11/221**

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24/385–387, 414–431, 4, 412; D2/641;  
294/3.6

CPC ..... A44B 19/00; A44B 19/02; A44B 19/04;  
A44B 19/10; A44B 19/24; A44B 19/26;  
A44B 19/30; A44B 19/06

See application file for complete search history.

(56) **References Cited**

**U.S. PATENT DOCUMENTS**

2,666,970 A \* 1/1954 Grant ..... A44B 19/28  
24/416  
3,798,715 A \* 3/1974 Moertel ..... A44B 19/306  
24/423  
4,055,876 A \* 11/1977 Ackermann ..... A44B 19/26  
24/421

5,255,418 A \* 10/1993 Chen ..... A44B 19/308  
24/419  
5,544,394 A \* 8/1996 Yaguramaki ..... A44B 19/308  
24/424  
D390,811 S \* 2/1998 Yaguramaki ..... D11/221  
D397,959 S \* 9/1998 Terasaki ..... D11/221  
D398,560 S \* 9/1998 Oda ..... D11/221

(Continued)

**FOREIGN PATENT DOCUMENTS**

CN 204930563 \* 1/2016 ..... A44B 19/04  
KR 200422205 \* 7/2006 ..... A44B 16/26

**OTHER PUBLICATIONS**

Metal Slider Auto Lock, IndiaMart.com, [online], [site visited Sep. 19, 2017]. URL: <https://www.indiamart.com/proddetail/metal-slider-auto-lock-15852506891.html> (Year: 2017).\*

(Continued)

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(57) **CLAIM**

The ornamental design for a slider, as shown.

**DESCRIPTION**

FIG. 1 is a front elevational view of a slider showing our new design;

FIG. 2 is a rear elevational view thereof;

FIG. 3 is a left side view thereof;

FIG. 4 is a right side view thereof;

FIG. 5 is a top plan view thereof;

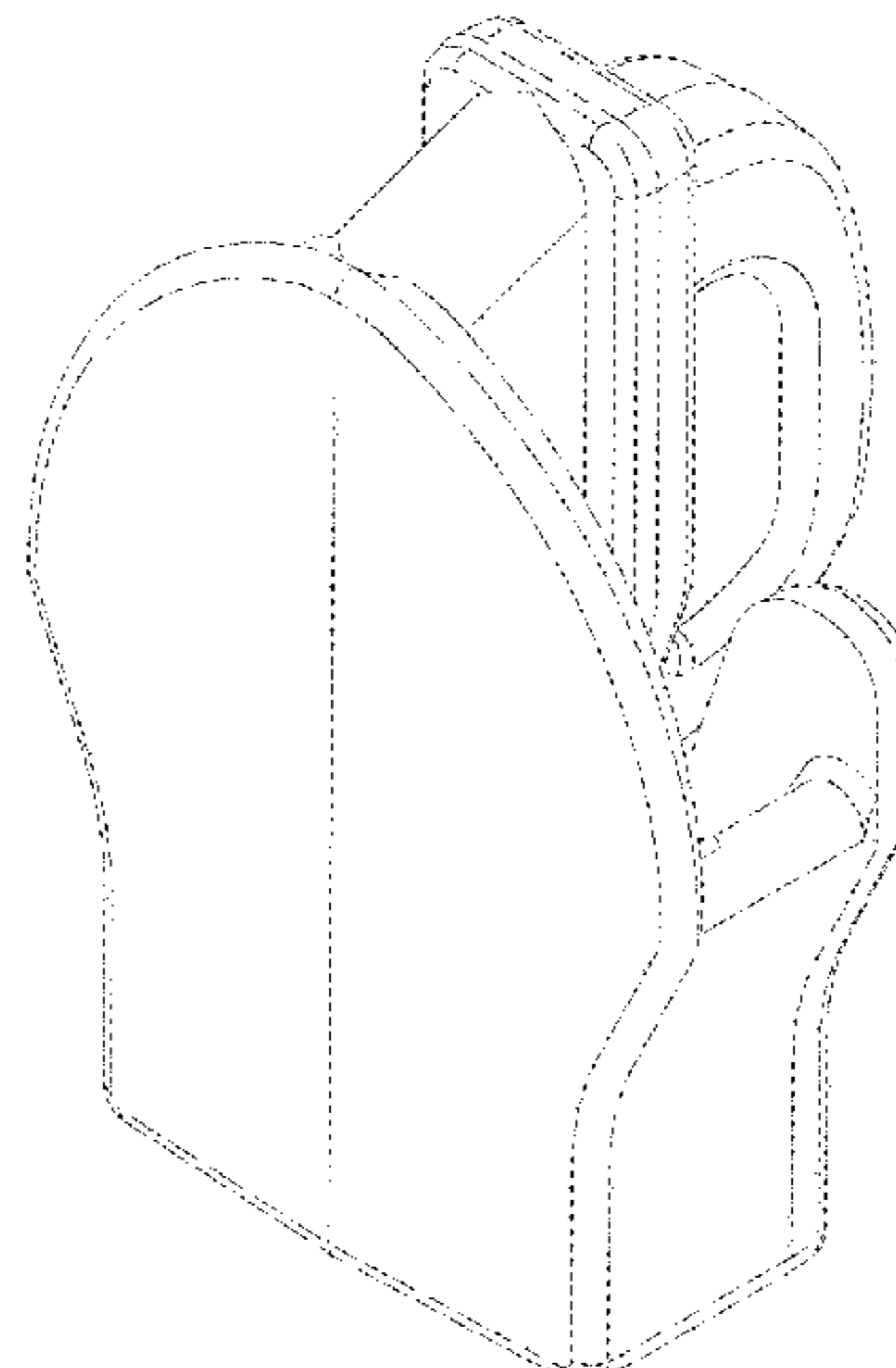
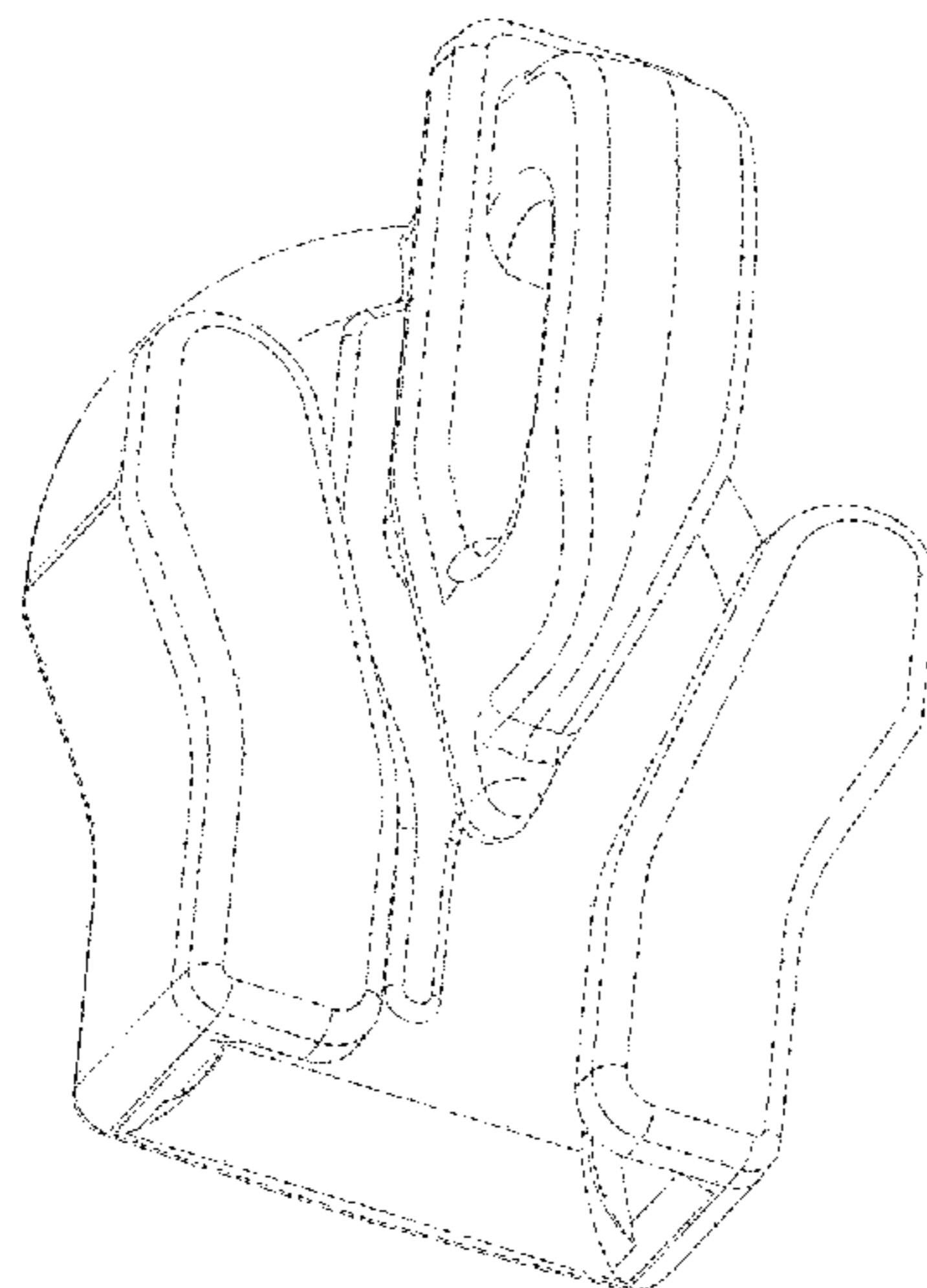
FIG. 6 is a bottom plan view thereof;

FIG. 7 is a perspective view thereof;

FIG. 8 is a second perspective view thereof; and,

FIG. 9 is a third perspective view thereof.

**1 Claim, 8 Drawing Sheets**



(56)

References Cited

U.S. PATENT DOCUMENTS

5,809,622 A \* 9/1998 Yaguramaki ..... A44B 19/308  
24/419  
5,956,819 A \* 9/1999 Terasaki ..... A44B 19/26  
24/419  
D512,340 S \* 12/2005 Keyaki ..... D11/221  
D527,311 S \* 8/2006 Yamagishi ..... D11/221  
D556,087 S \* 11/2007 Lin ..... D11/221  
D612,292 S \* 3/2010 Miyazaki ..... D11/221  
D643,336 S \* 8/2011 Di Girolami ..... D11/221  
D643,779 S \* 8/2011 Di Girolami ..... D11/221  
D651,939 S \* 1/2012 Keyaki ..... D11/221  
D705,124 S \* 5/2014 Wang ..... D11/221  
D706,676 S \* 6/2014 Ohgaku ..... D11/221  
D709,405 S \* 7/2014 Keyaki ..... D11/221  
D721,616 S \* 1/2015 Yamashita ..... D11/221  
9,125,459 B1 \* 9/2015 Lin ..... A44B 19/26  
9,226,550 B1 \* 1/2016 Lin ..... A44B 19/262  
2002/0133917 A1 \* 9/2002 Chu ..... A44B 19/262  
24/429  
2006/0075611 A1 \* 4/2006 Yamagishi ..... A44B 19/306

2009/0106952 A1 \* 4/2009 Lin ..... A44B 19/308  
24/418  
2009/0113676 A1 \* 5/2009 Chung ..... A44B 19/06  
24/406  
2009/0313793 A1 \* 12/2009 Lin ..... A44B 19/26  
24/429  
2012/0186049 A1 \* 7/2012 Wang ..... A44B 19/26  
24/430  
2014/0338158 A1 \* 11/2014 Lin ..... A44B 19/26  
24/431  
2015/0189954 A1 \* 7/2015 Yoneoka ..... A44B 19/26  
24/428  
2015/0223572 A1 \* 8/2015 Wang ..... A44B 19/26  
24/428  
2017/0035154 A1 \* 2/2017 Lin ..... A44B 19/308

OTHER PUBLICATIONS

5CC DA5, YKKfasting.com, [online], [site visited Sep. 19, 2017].  
URL: [http://www.ykkfastening.com/products/zipper/slider/zipper\\_type/coil\\_zipper/5cc/5cc\\_da5.html](http://www.ykkfastening.com/products/zipper/slider/zipper_type/coil_zipper/5cc/5cc_da5.html) (Year: 2017).\*

\* cited by examiner

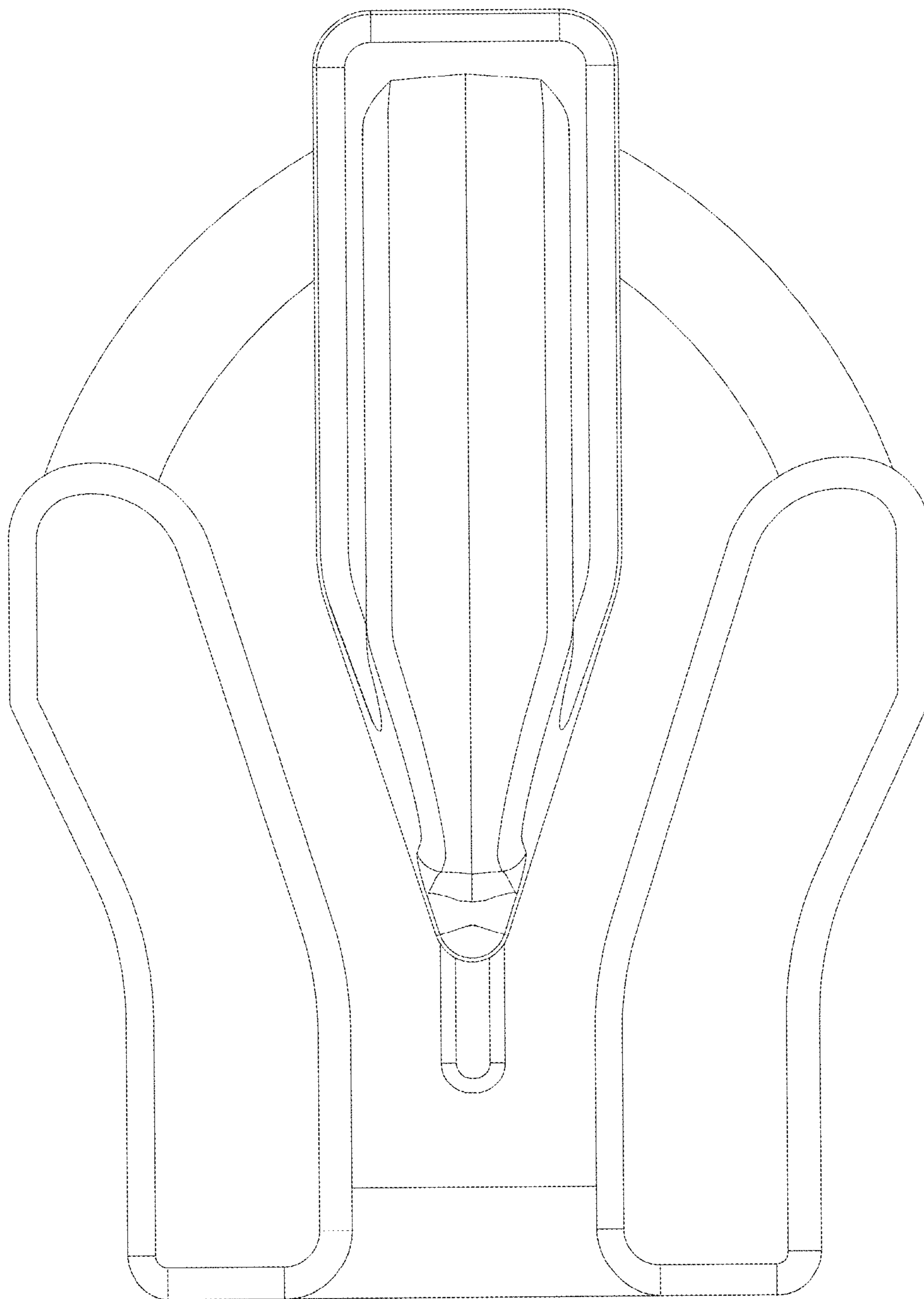


FIG. 1

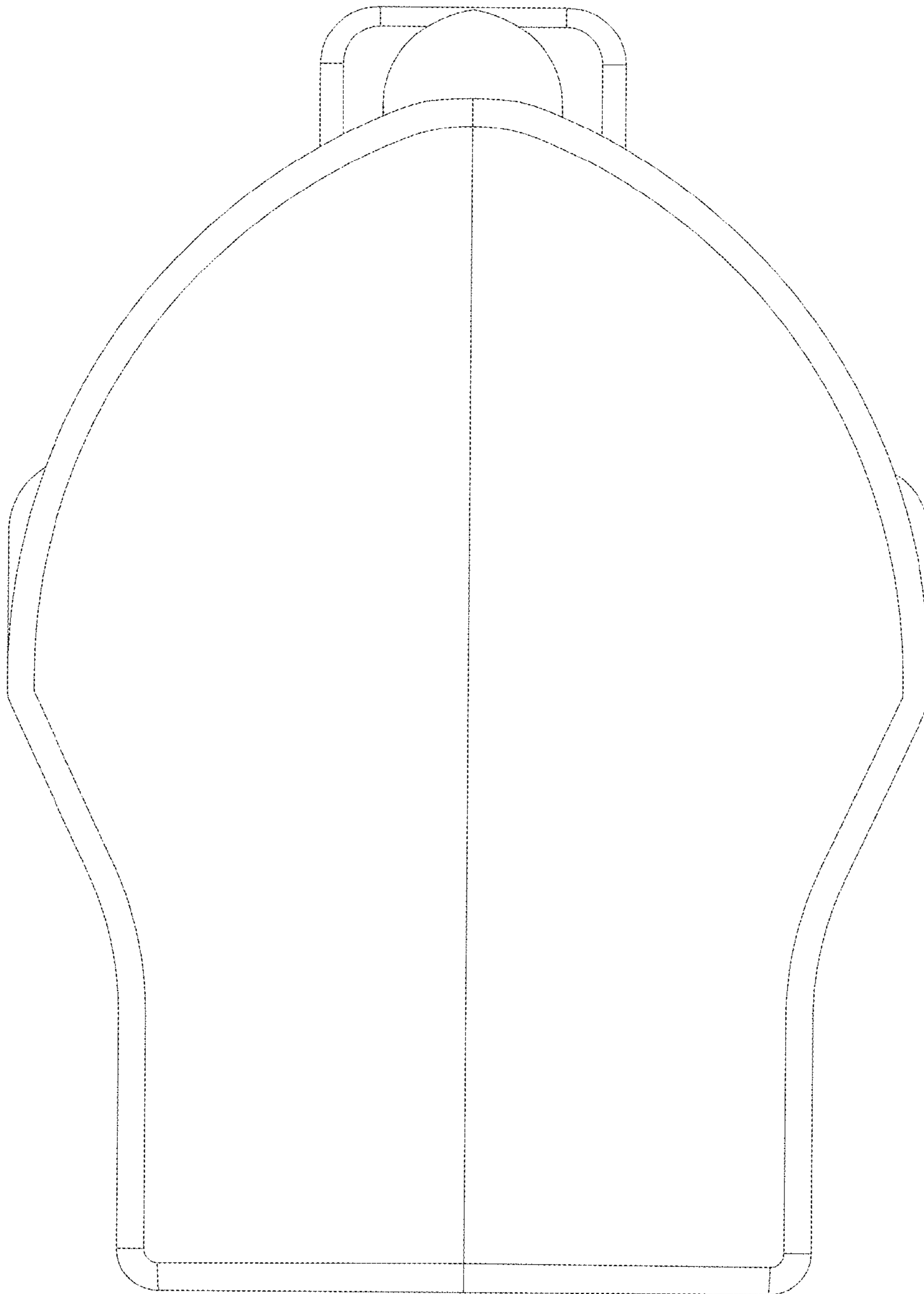


FIG. 2

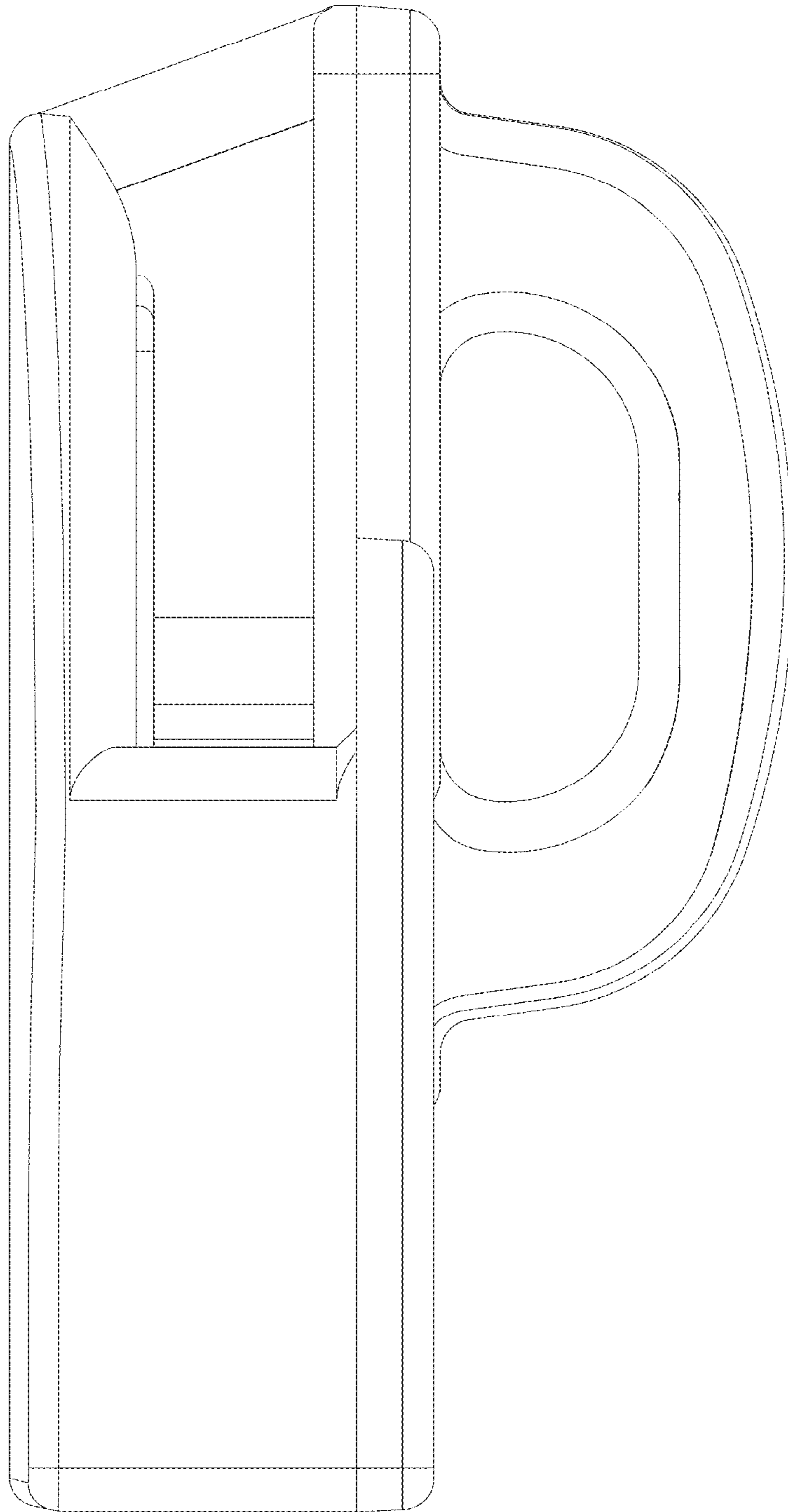


FIG. 3

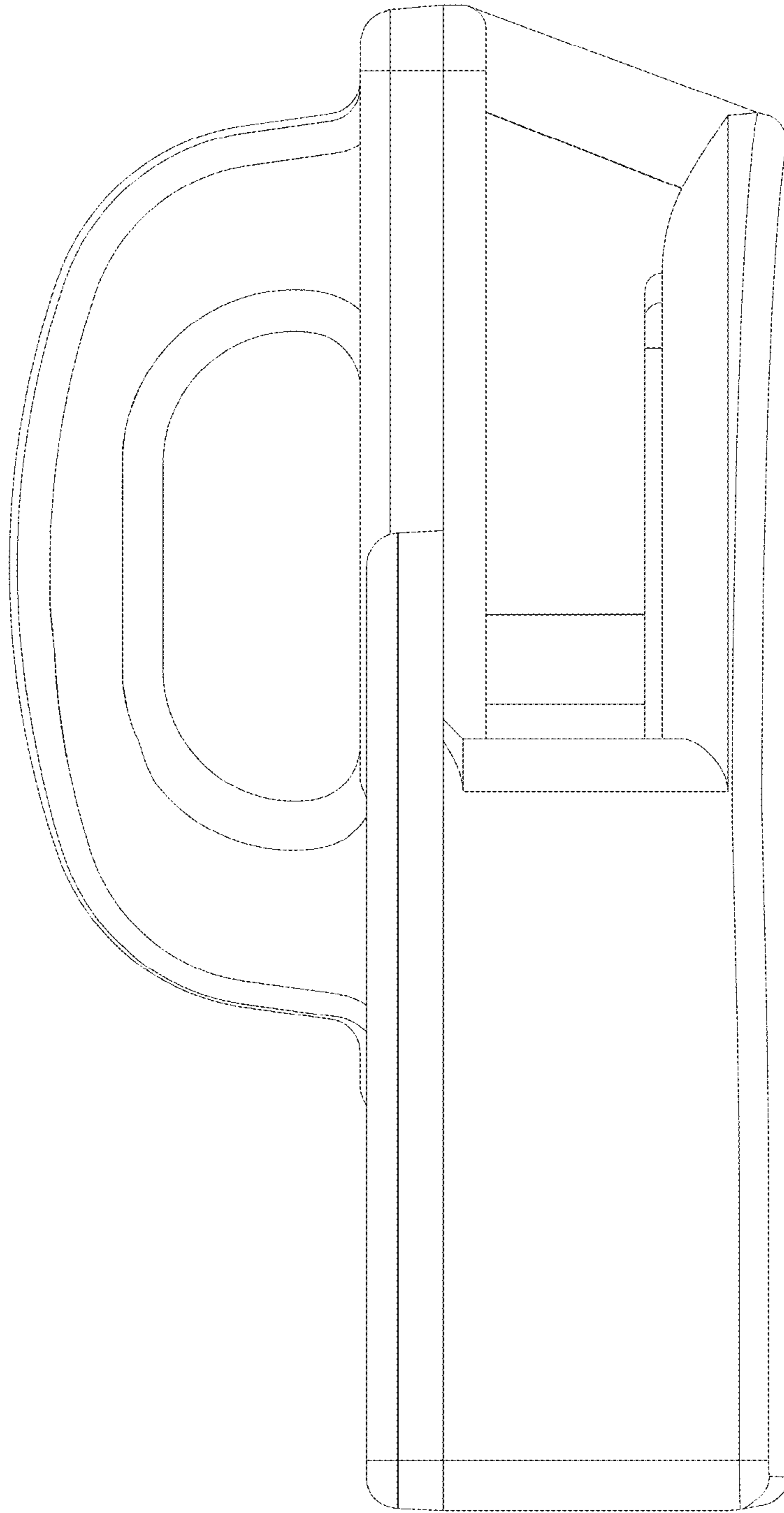


FIG. 4

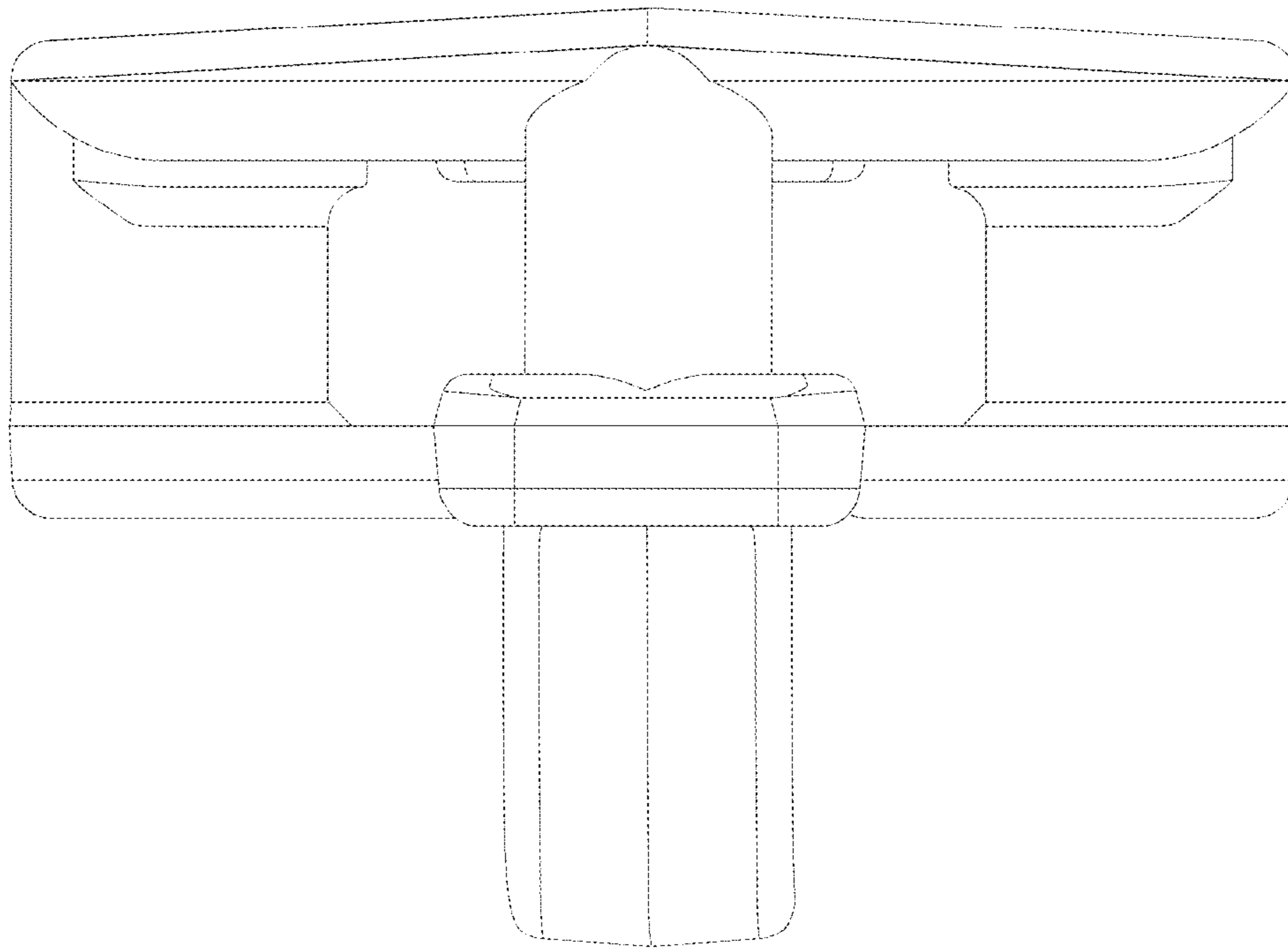


FIG. 5

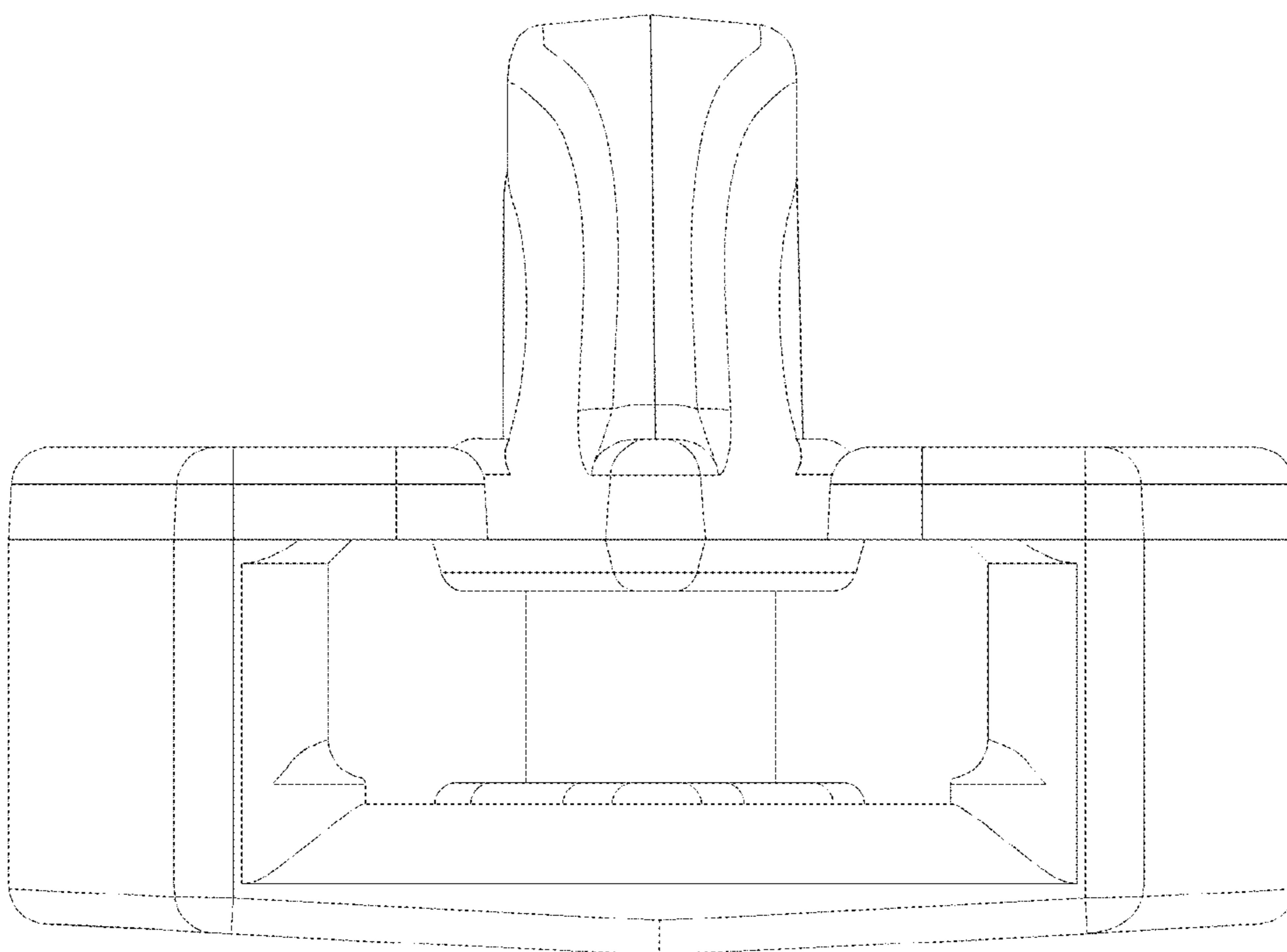


FIG. 6

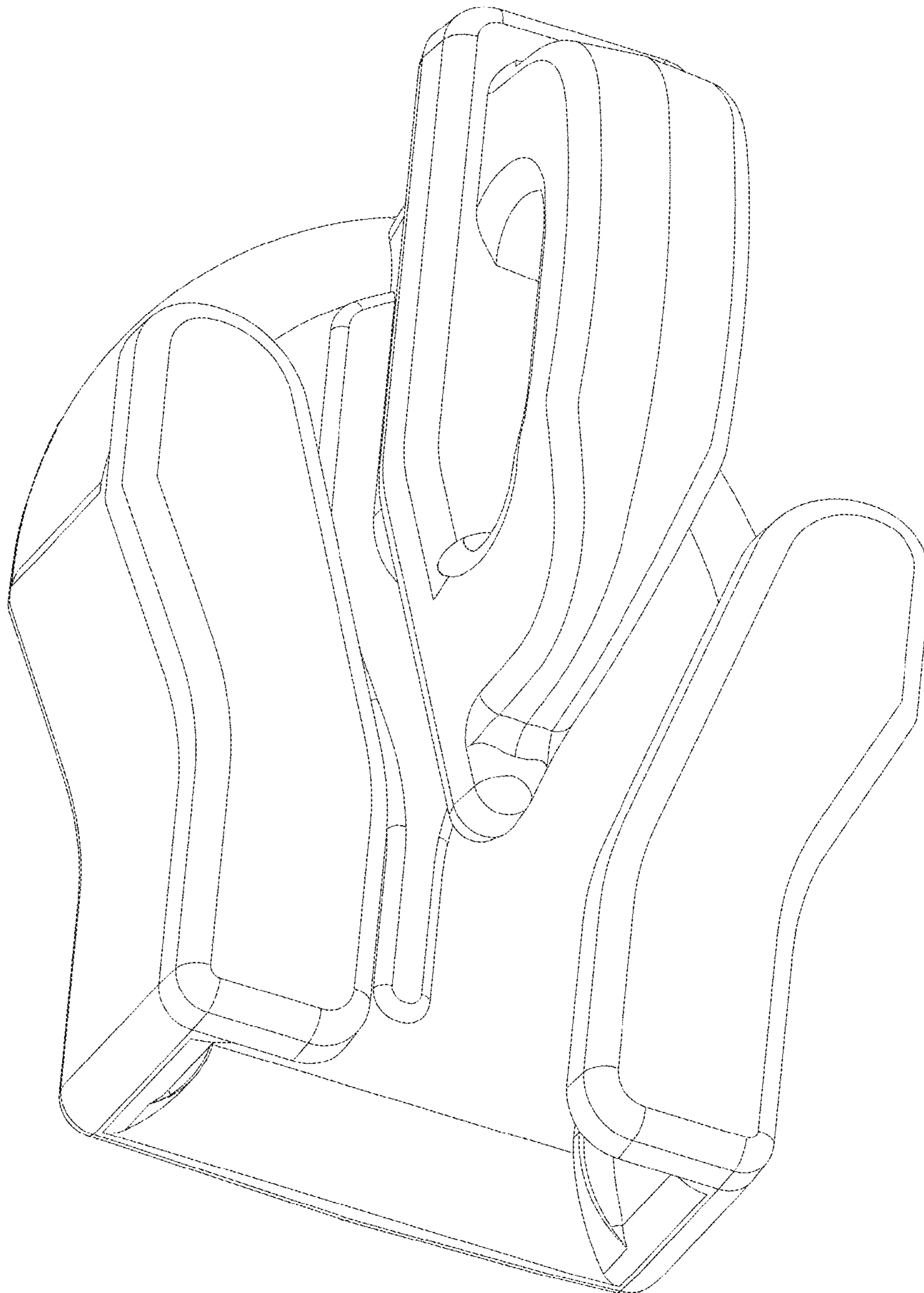


FIG. 7



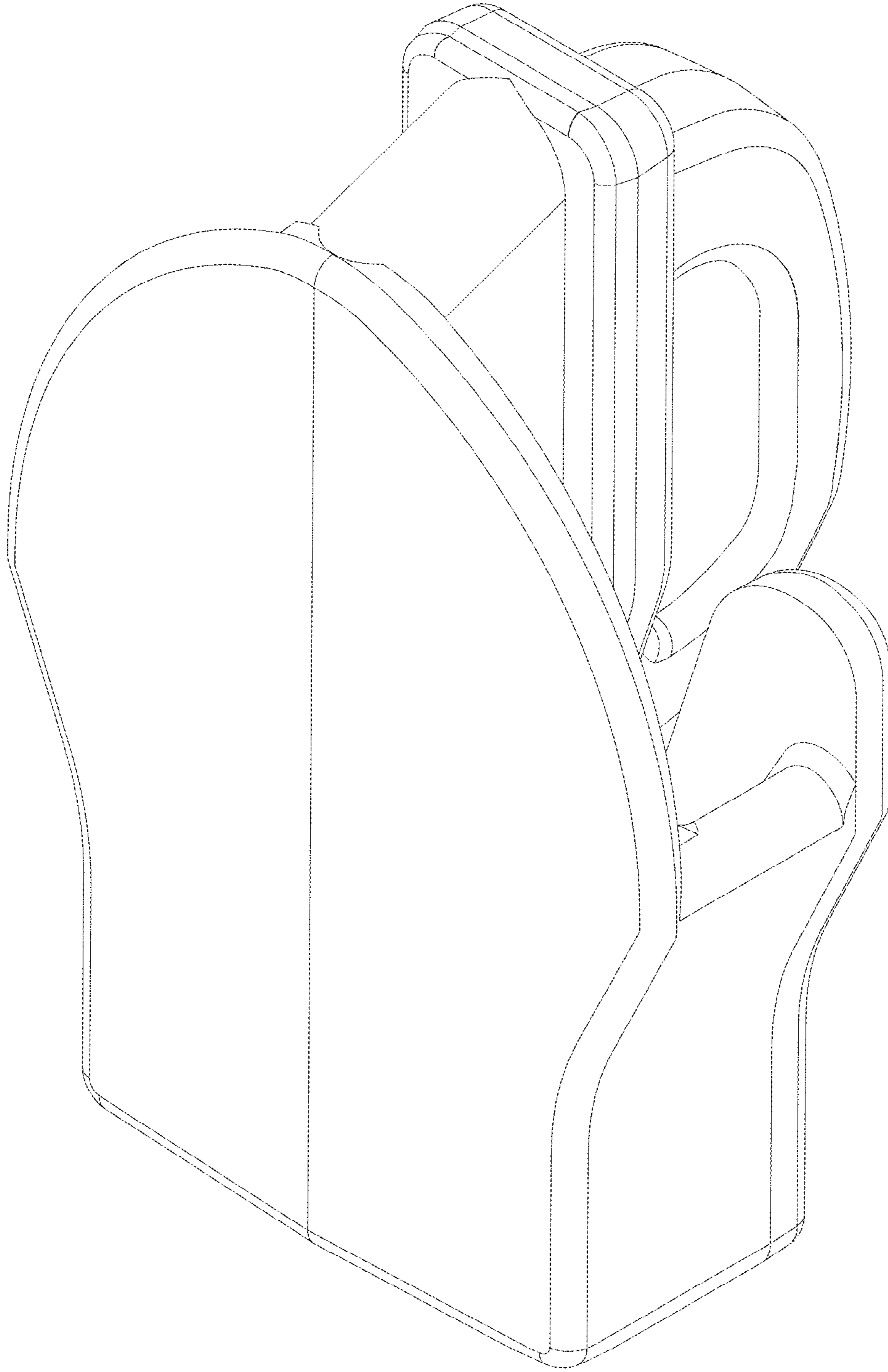


FIG. 8

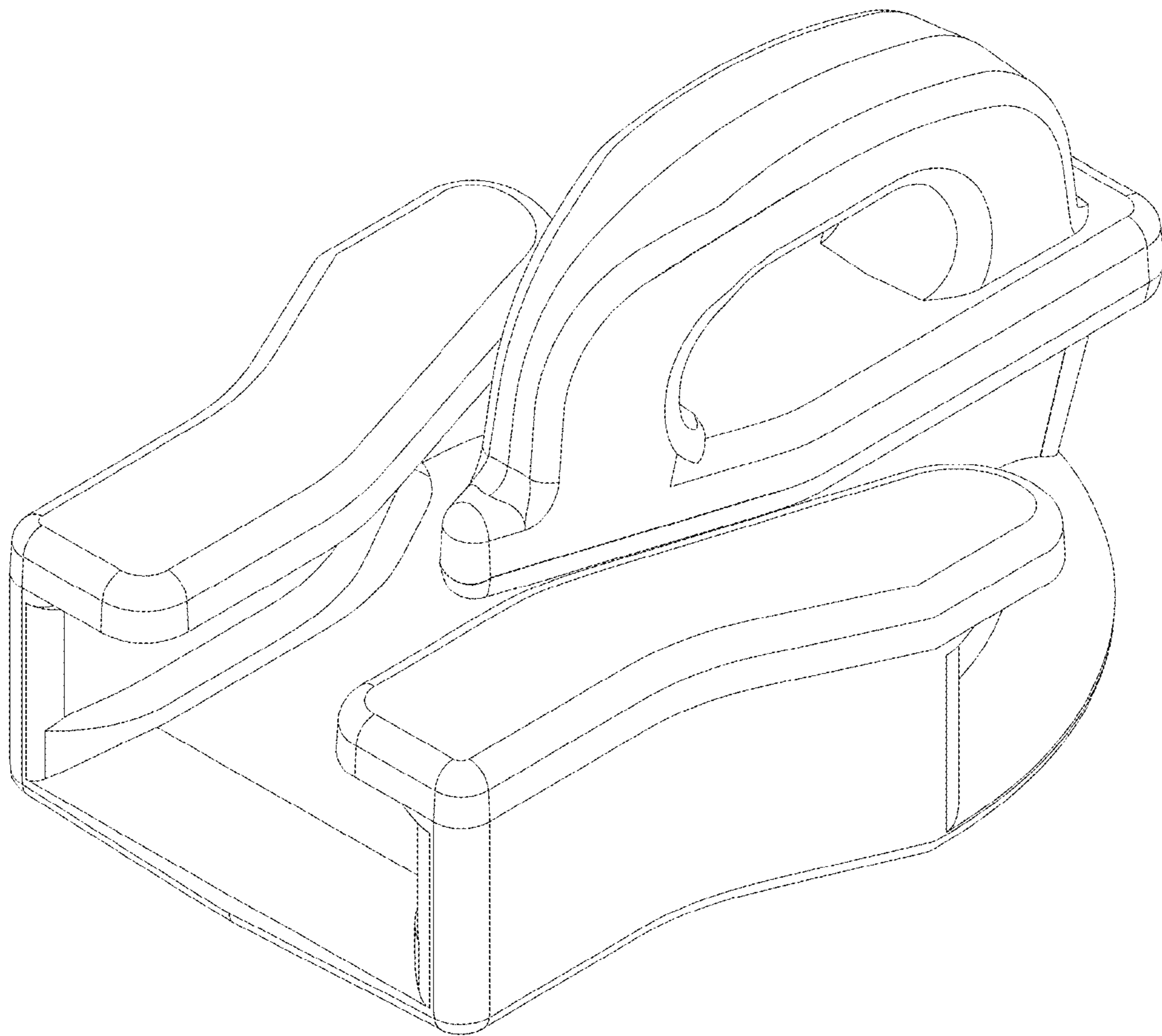


FIG. 9