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(12) **United States Design Patent** (10) **Patent No.:** **US D846,467 S**  
**Higgs** (45) **Date of Patent:** **\*\* Apr. 23, 2019**

(54) **TUBE DOOR**  
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(73) Assignee: **FAB FOURS INC.**, Lancaster, SC (US)  
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(52) **U.S. Cl.**  
USPC ..... **D12/196**  
(58) **Field of Classification Search**  
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CPC ..... E05B 81/56; E05B 81/80; E05B 65/00;  
E05B 65/06; E05B 65/10; E05B 65/12;  
E05B 79/06; B60J 5/04  
See application file for complete search history.

(56) **References Cited**  
U.S. PATENT DOCUMENTS  
4,728,143 A \* 3/1988 Tanino ..... B60J 5/04  
296/146.7  
5,902,004 A \* 5/1999 Waltz ..... B60J 5/0416  
296/146.9  
7,380,864 B2 \* 6/2008 Guanzon ..... E05B 79/06  
16/412  
7,530,610 B2 \* 5/2009 Tanimoto ..... E05B 79/06  
292/336.3  
7,938,472 B2 \* 5/2011 Stalhammar ..... B60J 5/0416  
296/146.5  
8,020,921 B2 \* 9/2011 Moberg ..... B60J 5/04  
296/146.7  
8,451,087 B2 \* 5/2013 Krishnan ..... B60J 5/04  
292/221  
8,579,339 B2 \* 11/2013 Abe ..... E05B 77/44  
292/216  
D715,204 S \* 10/2014 Peltola ..... D12/195

D716,210 S \* 10/2014 Ishikawa ..... D12/195  
D719,884 S \* 12/2014 Peltola ..... D12/195  
D722,933 S \* 2/2015 Ishikawa ..... D12/195  
9,290,971 B2 \* 3/2016 Amagai ..... E05B 79/20  
D758,269 S \* 6/2016 Ahn ..... D12/195  
D766,791 S \* 9/2016 Buffery ..... D12/195  
D766,792 S \* 9/2016 Shimizu ..... D12/195  
D768,042 S \* 10/2016 Lee ..... D12/195  
9,469,246 B1 \* 10/2016 Gold ..... B60J 5/04  
9,517,727 B2 \* 12/2016 Tiboni ..... B60R 13/0243  
D801,899 S \* 11/2017 Watkin ..... D12/195  
D807,267 S \* 1/2018 Higashimori ..... D12/195  
D816,571 S \* 5/2018 Wiedeman ..... D12/195  
D823,760 S \* 7/2018 Sato ..... D12/195  
D831,552 S \* 10/2018 Watkin ..... D12/195  
D835,555 S \* 12/2018 Ray ..... D12/195  
D835,556 S \* 12/2018 Ray ..... D12/195

\* cited by examiner

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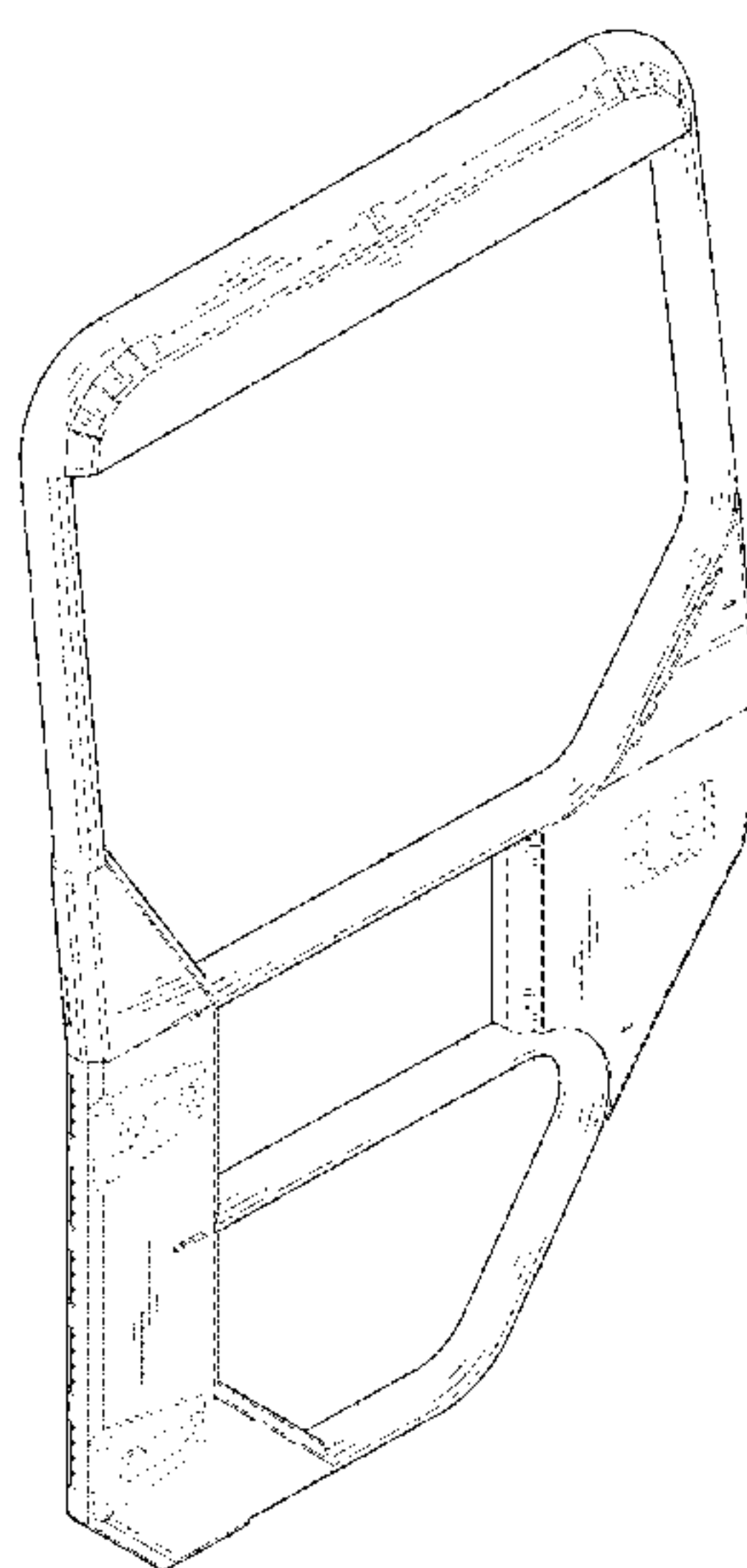
(57) **CLAIM**

The ornamental design for a tube door, as shown and described.

**DESCRIPTION**

FIG. 1 is a top, right-side, front perspective view of the tube door;  
FIG. 2 is a top plan view thereof;  
FIG. 3 is a right-side elevational view thereof;  
FIG. 4 is a rear elevational view thereof;  
FIG. 5 is a front elevational view thereof;  
FIG. 6 is a left-side elevational view thereof; and,  
FIG. 7 is a bottom plan view thereof.  
The broken lines depict unclaimed parts of the tube door, and thus form no part of the claimed design.

**1 Claim, 4 Drawing Sheets**



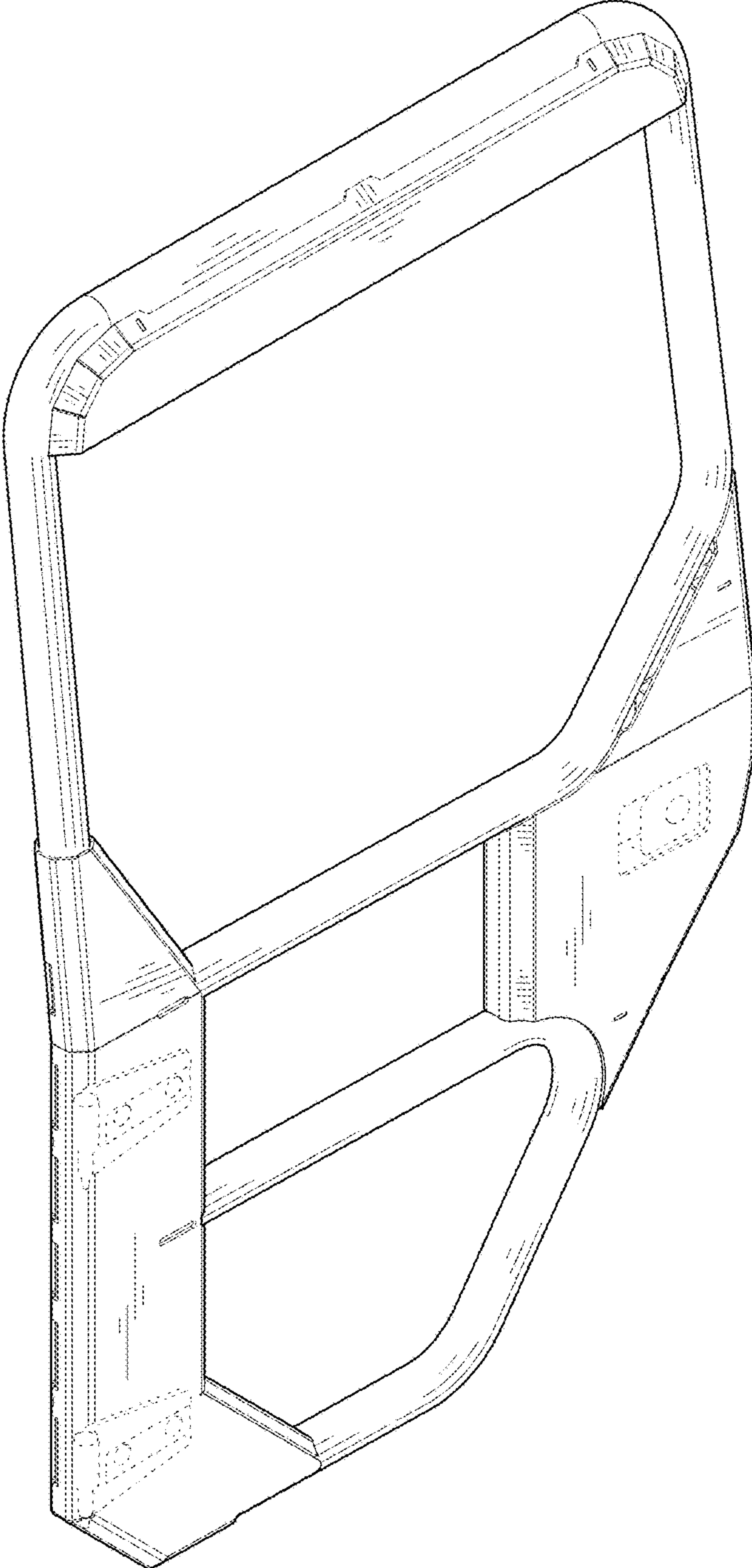


FIG. 1

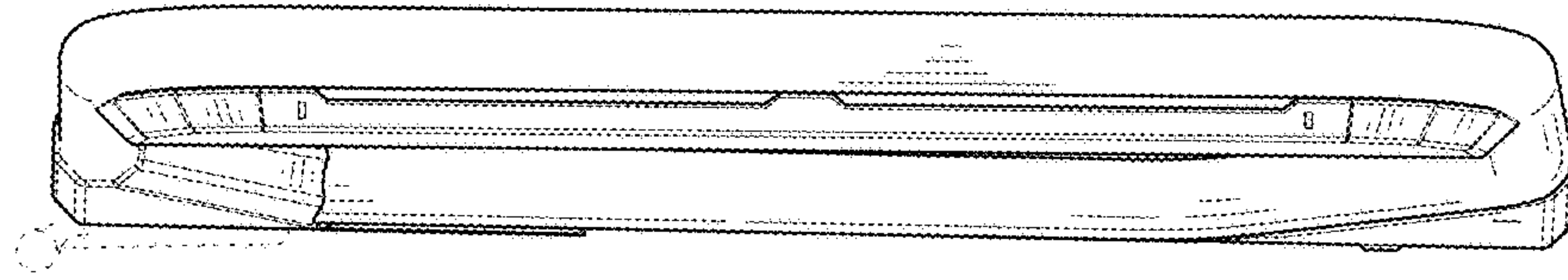
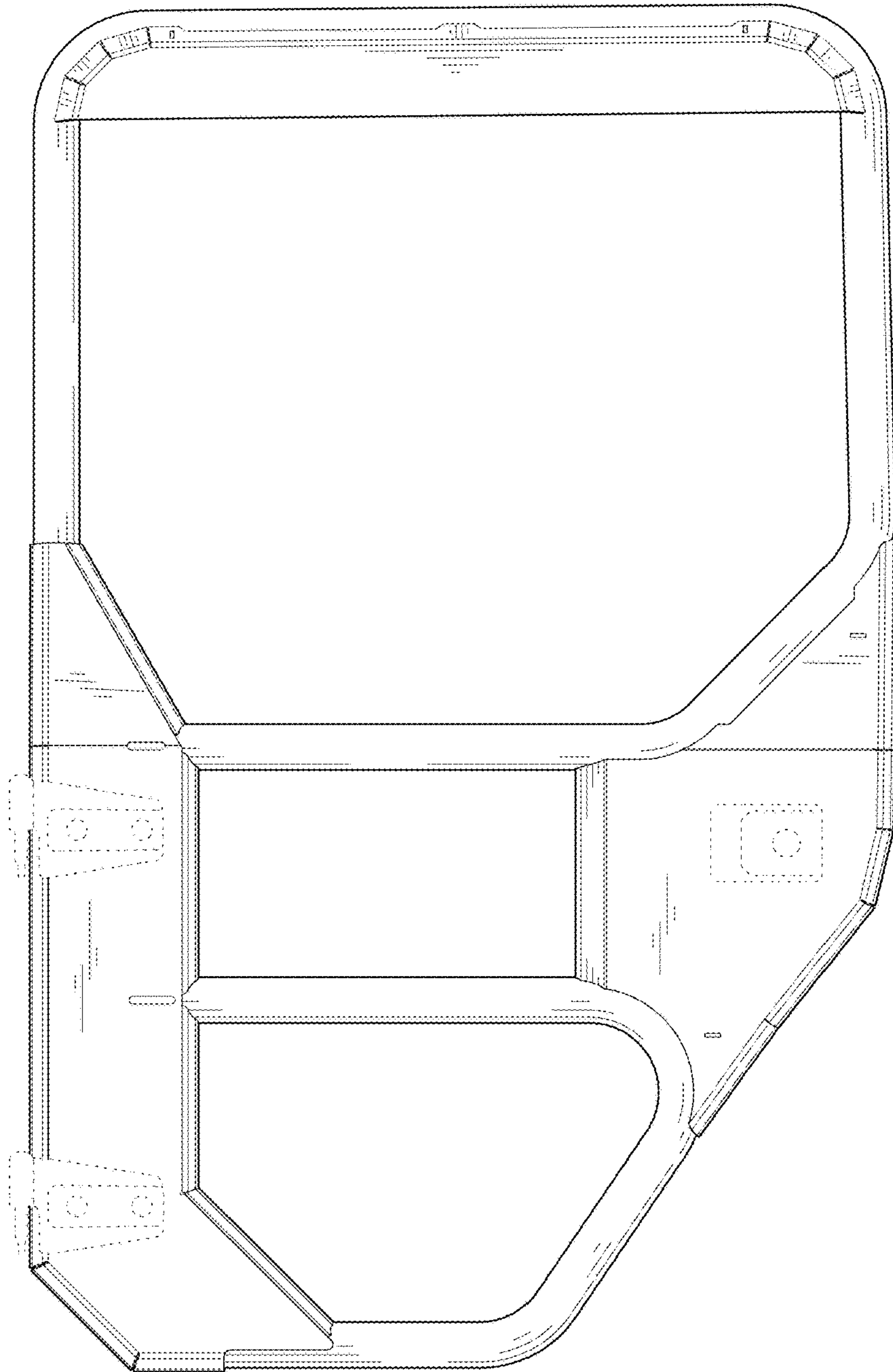


FIG. 2

FIG. 3



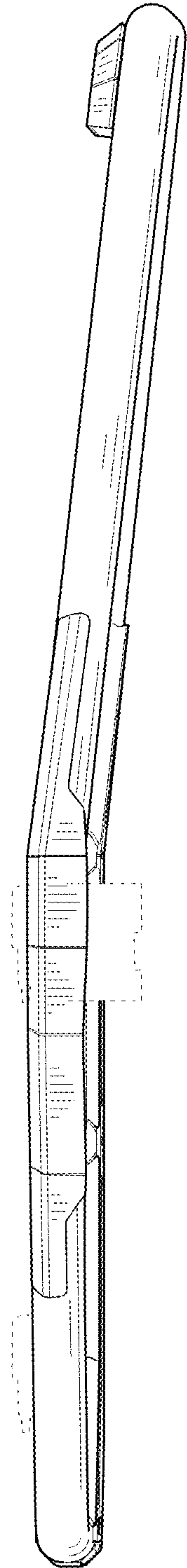


FIG. 4

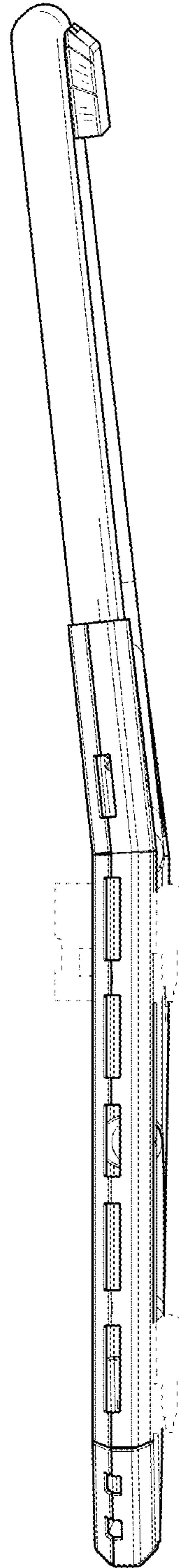


FIG. 5



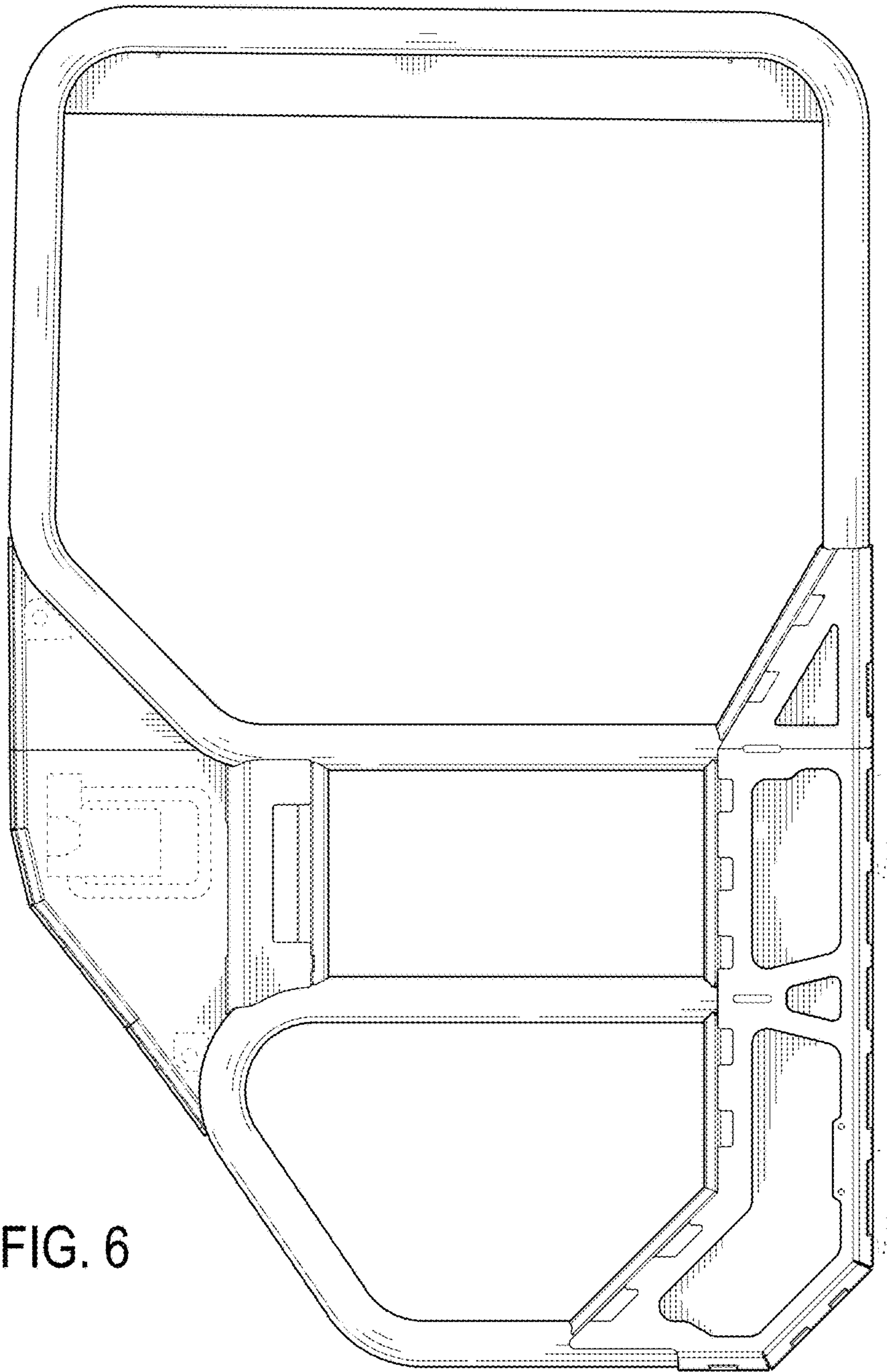


FIG. 6

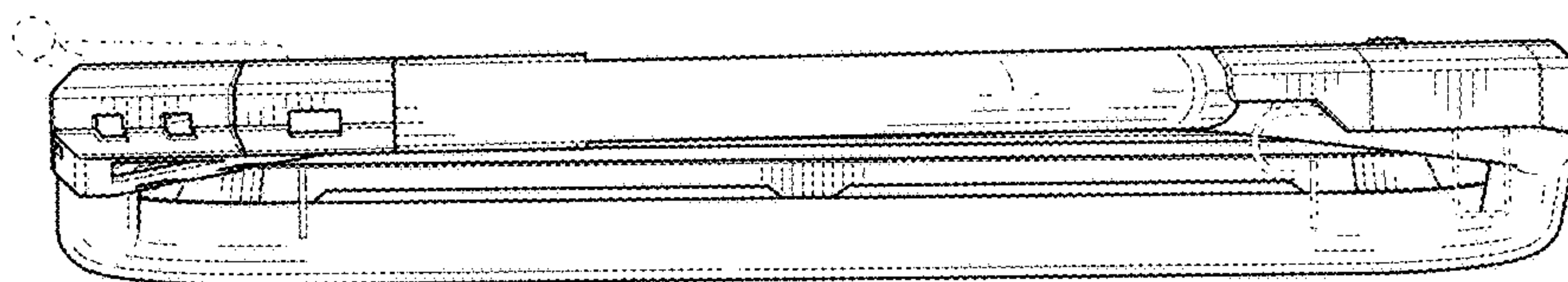


FIG. 7