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

(10) **Patent No.:** **US D978,072 S**  
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(54) **LIGHTWEIGHT SOLAR PANEL**  
(71) Applicant: **Shenzhen Lianli Solar Energy Co., Ltd.**, Shenzhen (CN)  
(72) Inventor: **Liyou Wen**, Wuhua (CN)  
(\*\*) Term: **15 Years**  
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(22) Filed: **Aug. 19, 2022**  
(30) **Foreign Application Priority Data**

Jul. 20, 2022 (CN) ..... 202230465083.7

(51) **LOC (14) Cl.** ..... **13-02**  
(52) **U.S. Cl.**  
USPC ..... **D13/102**  
(58) **Field of Classification Search**  
USPC ..... D13/102, 101, 103, 107, 108, 110, 118, D13/184, 199  
CPC ..... H01L 31/00; H01L 31/18; H01L 31/042; H01L 31/045; H01L 31/048; H01L 31/052; H01L 31/054; H01L 31/0475; H01L 31/0485; H01M 10/052; H01M 10/465; H02S 30/10; H02S 30/20; H02S 20/30; H02S 40/10; H02S 40/42; Y02E 10/50; Y02E 10/52; Y02E 10/56; Y10S 136/291; Y10S 136/293; H02J 7/35; H02J 7/355; G06F 1/1628; F21S 8/006; F21V 21/06; F21V 21/12  
See application file for complete search history.

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(Continued)

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(57) **CLAIM**

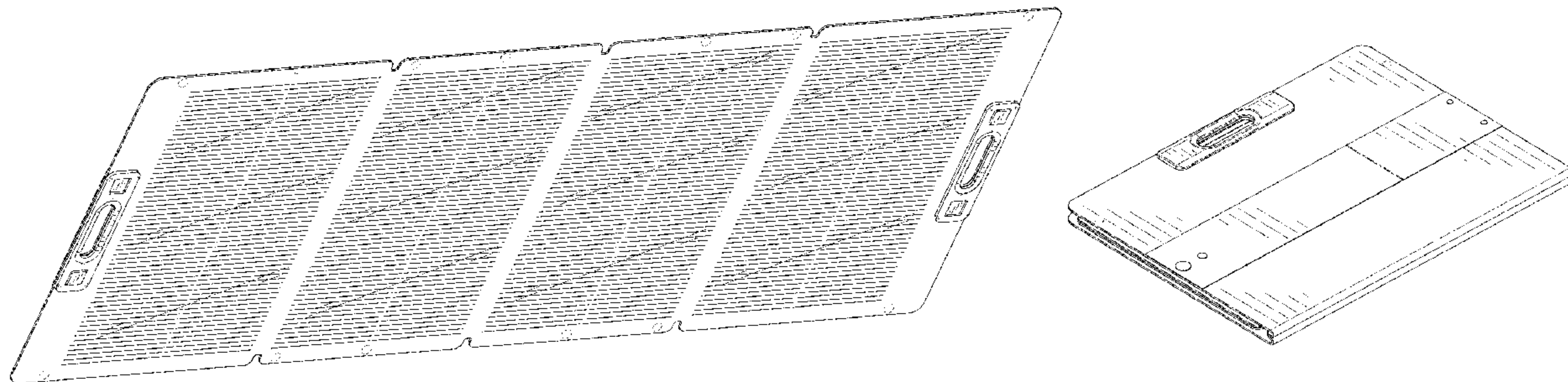
The ornamental design for a lightweight solar panel, as shown and described.

**DESCRIPTION**

FIG. 1 is a first perspective view of a lightweight solar panel showing my new design;  
FIG. 2 is a second perspective view thereof;  
FIG. 3 is a front view thereof;  
FIG. 4 is a back view thereof;  
FIG. 5 is a left side view thereof;  
FIG. 6 is a right side view thereof;  
FIG. 7 is a top view thereof;  
FIG. 8 is a bottom view thereof;  
FIG. 9 is a perspective view of another state of the lightweight solar panel thereof;  
FIG. 10 is a perspective view of another state of the lightweight solar panel thereof;  
FIG. 11 is an enlarged view of the selected portion 11 in FIG. 5;  
FIG. 12 is an enlarged view of the selected portion 12 in FIG. 6;  
FIG. 13 is an enlarged view of the selected portion 13 in FIG. 7; and,  
FIG. 14 is an enlarged view of the selected portion 14 in FIG. 8.

The broken lines shown in the drawings depict portions of the lightweight solar panel that form no part of the claimed design.

**1 Claim, 14 Drawing Sheets**



(56)

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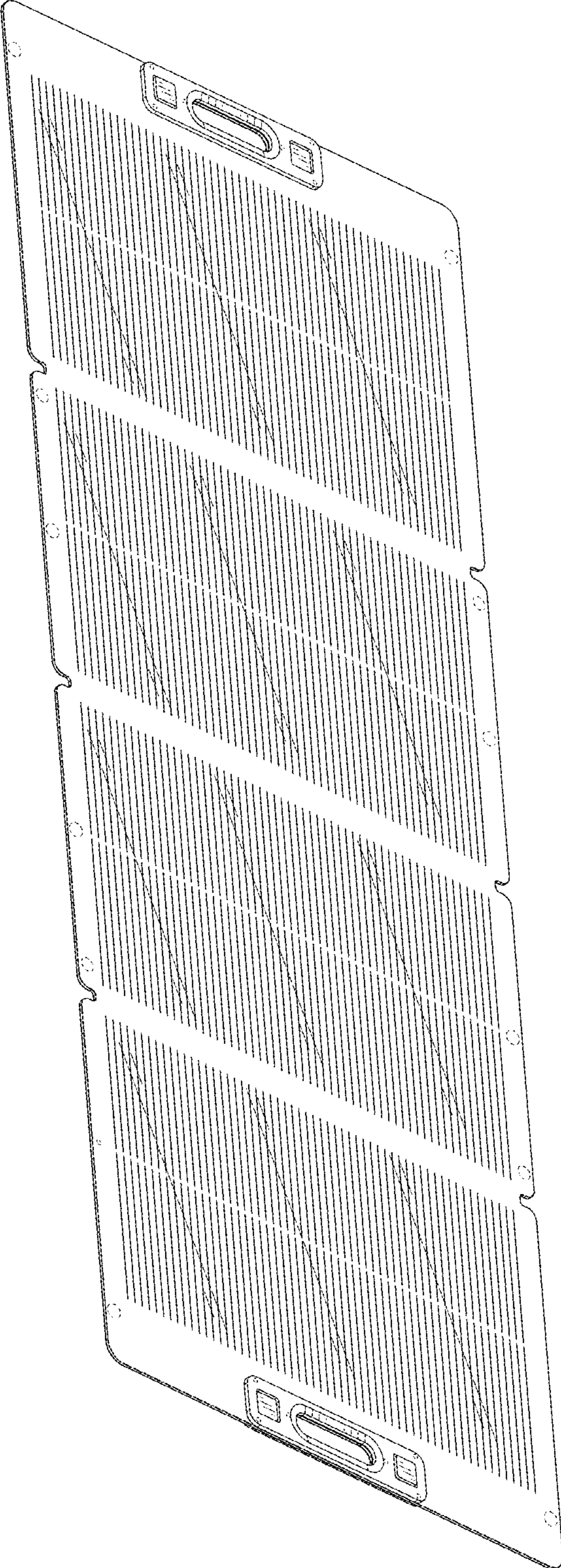


FIG. 1

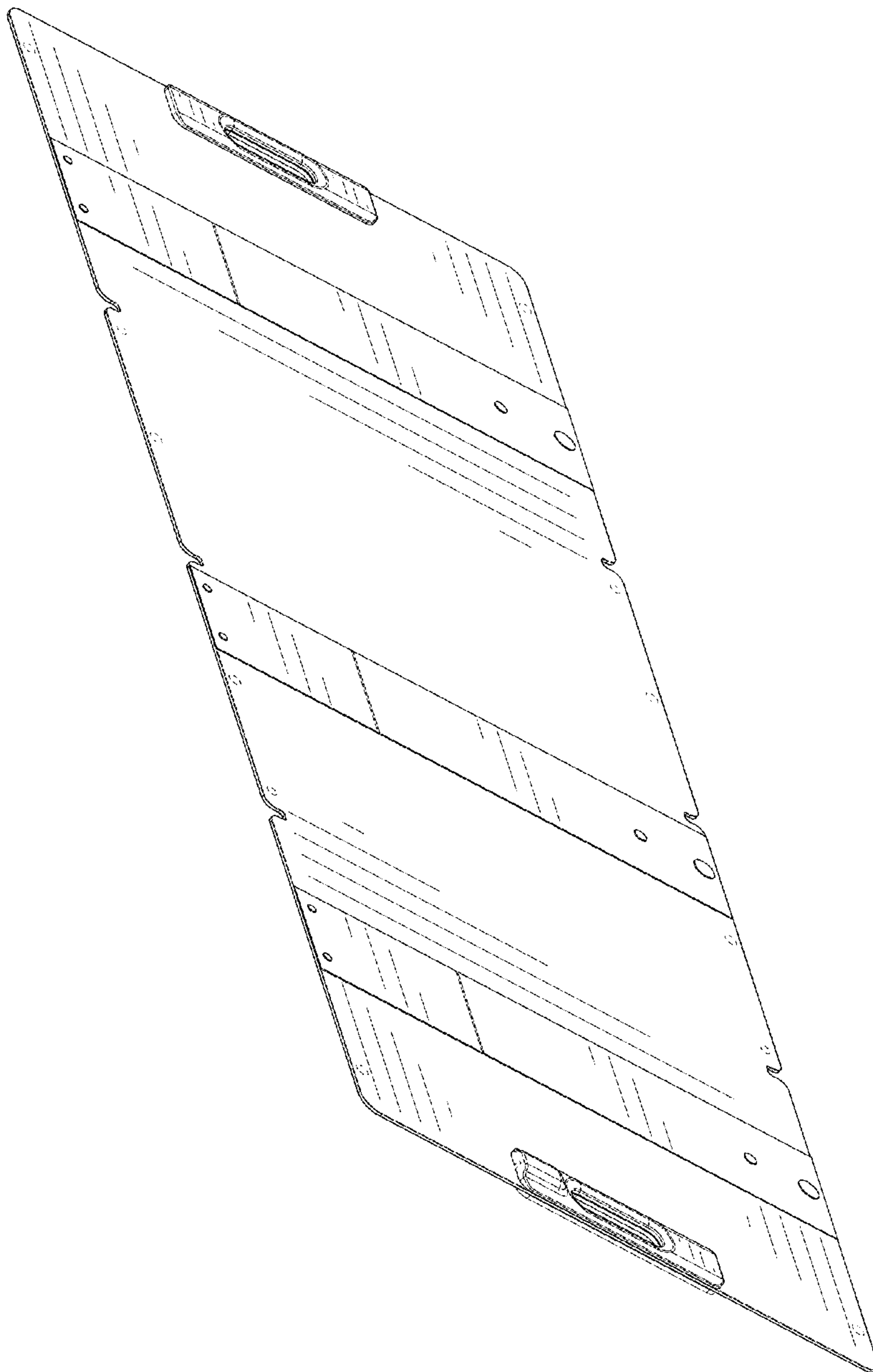


FIG. 2



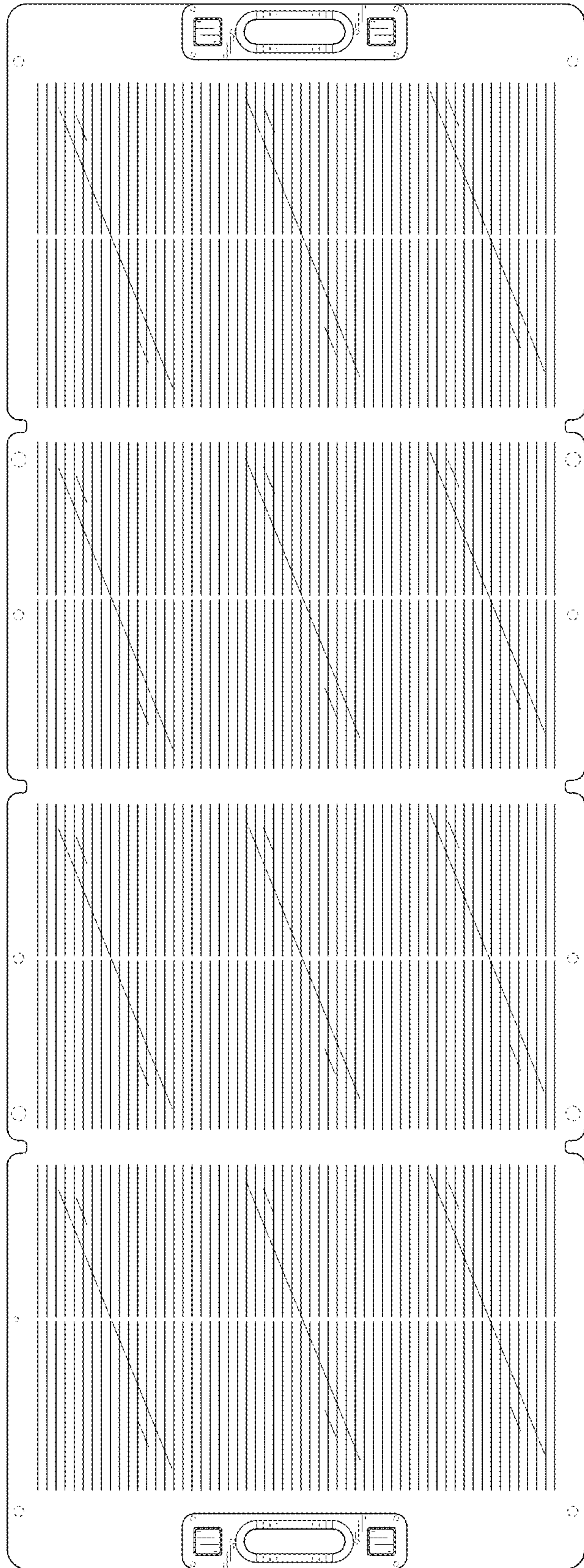


FIG. 3

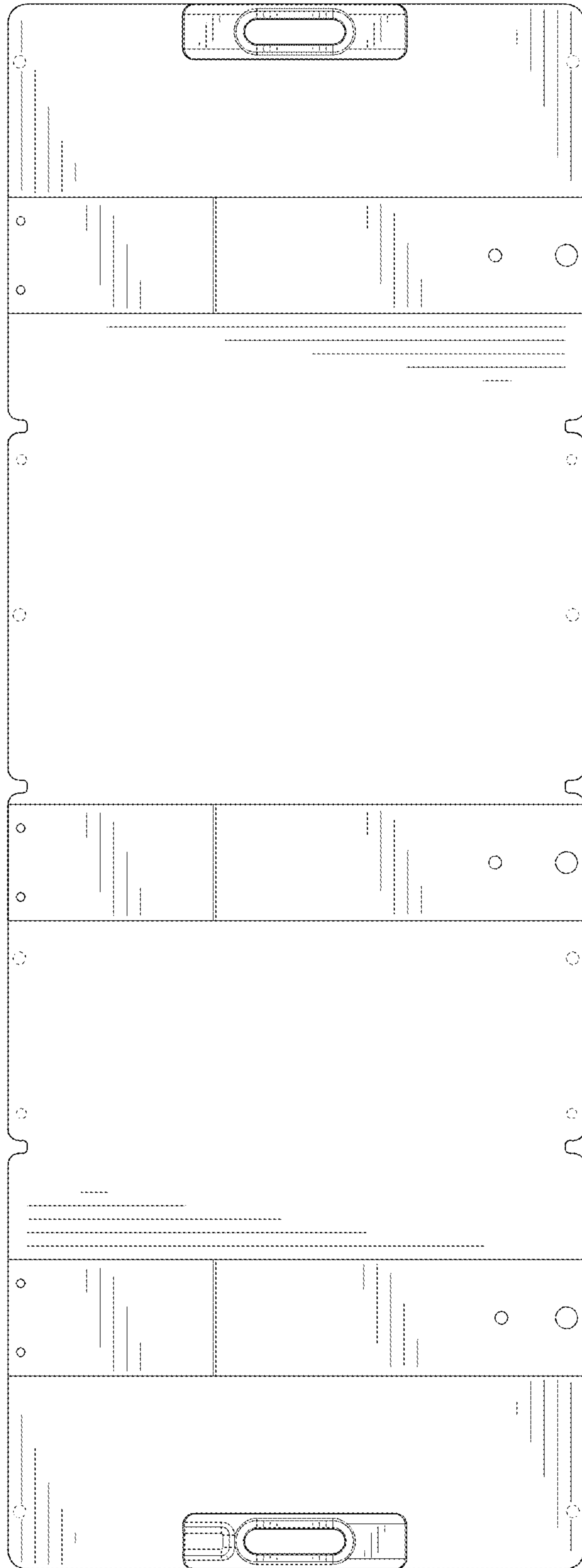


FIG. 4

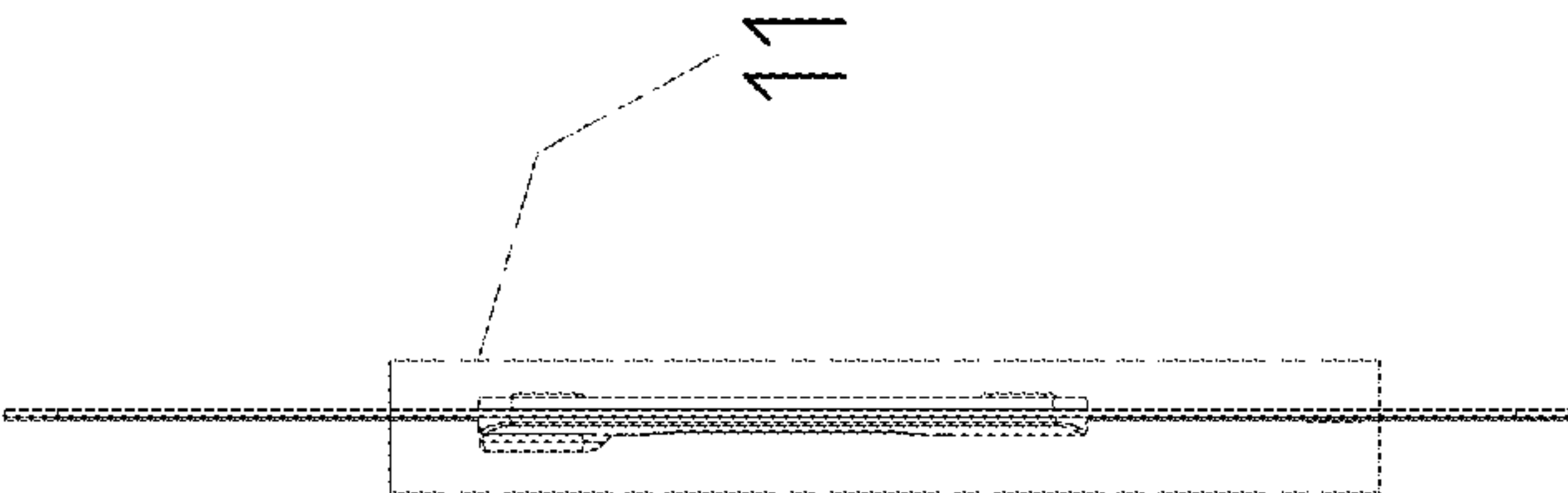


FIG. 5

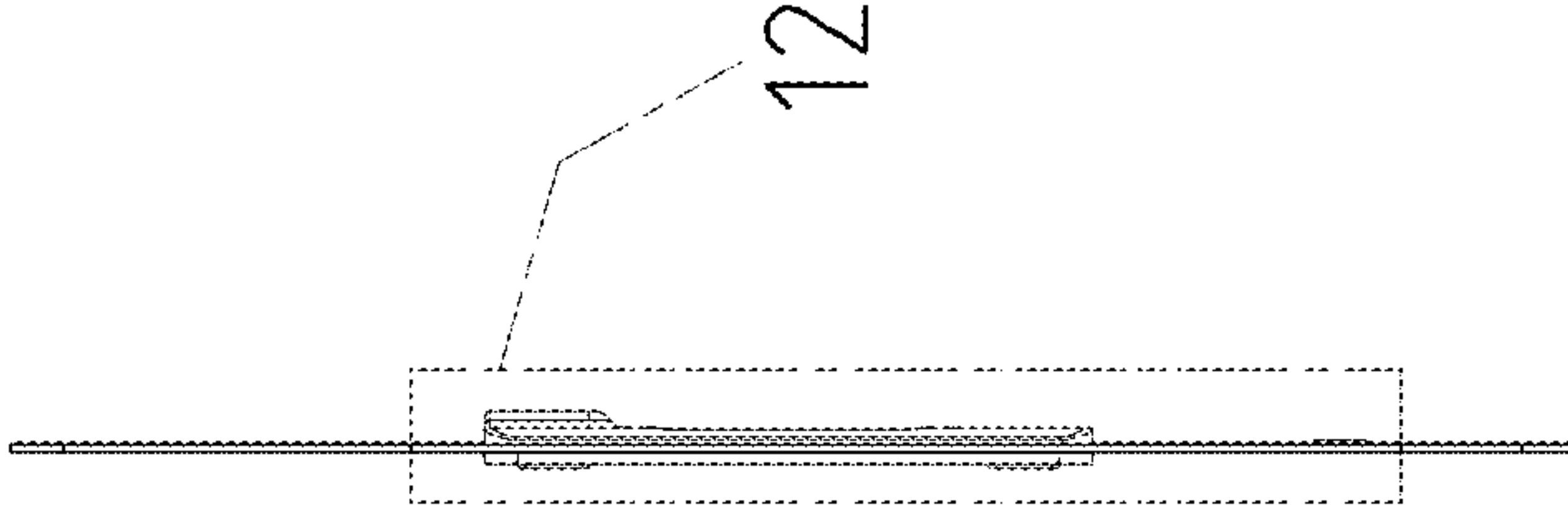


FIG. 6



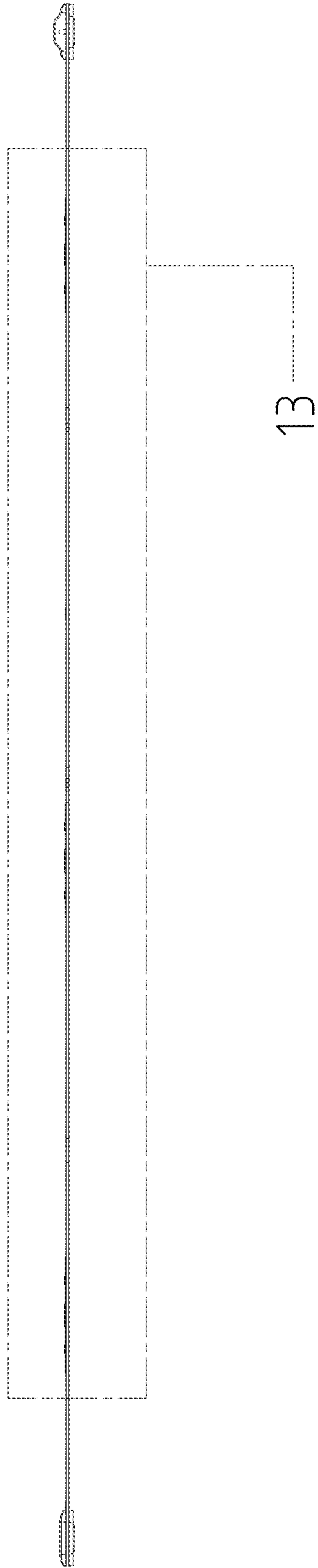


FIG. 7

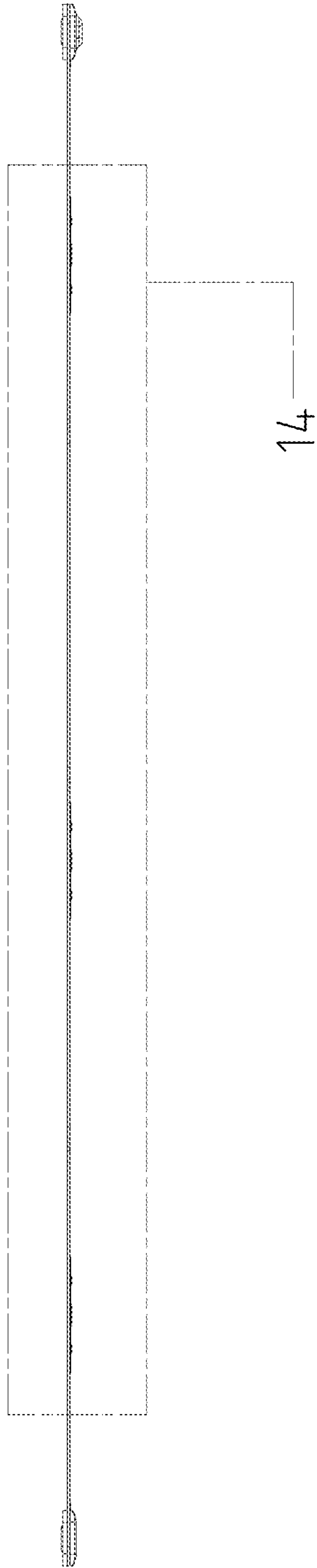


FIG. 8

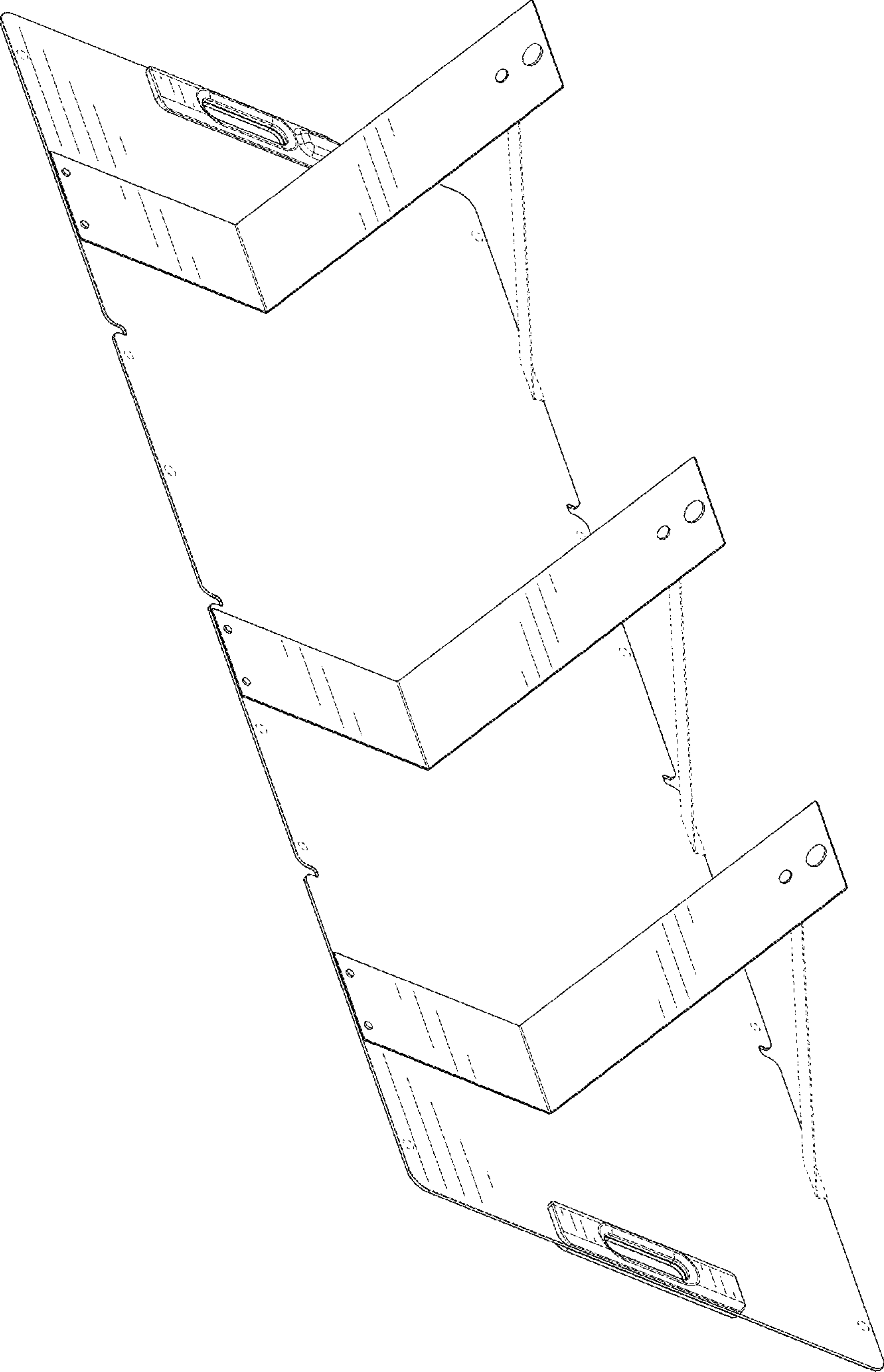


FIG. 9

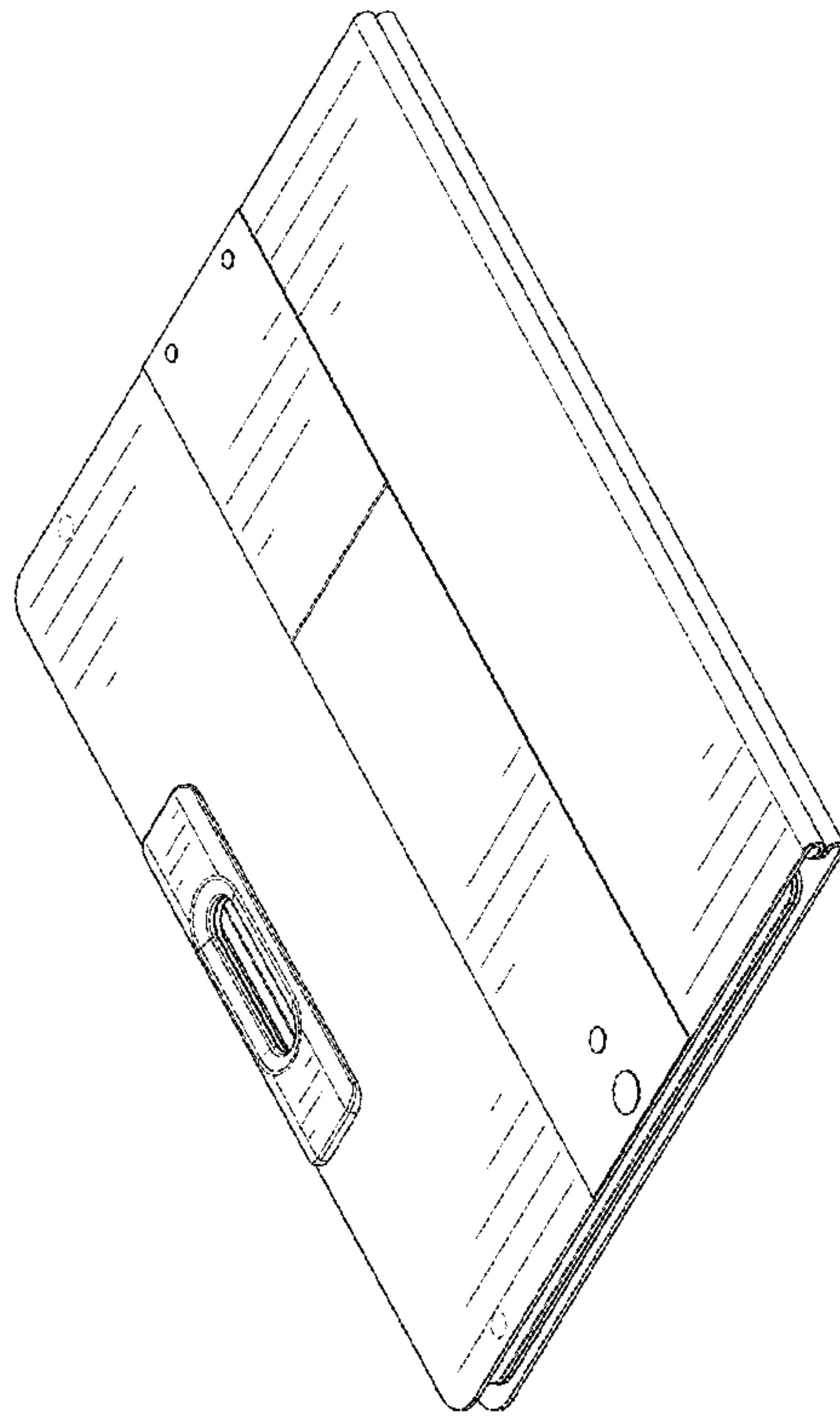


FIG. 10

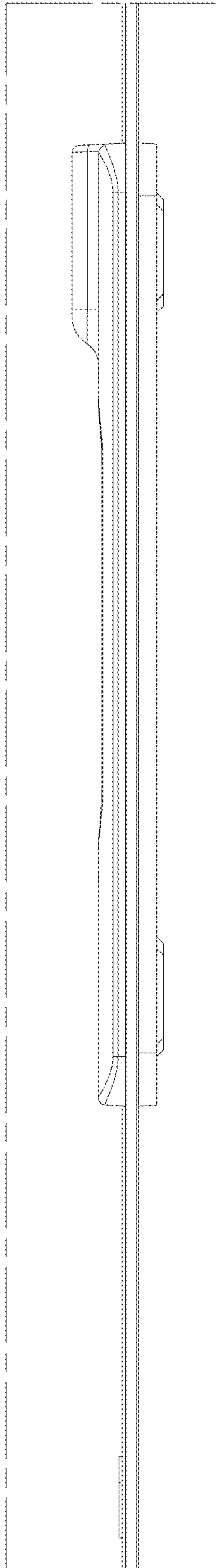


FIG. 11



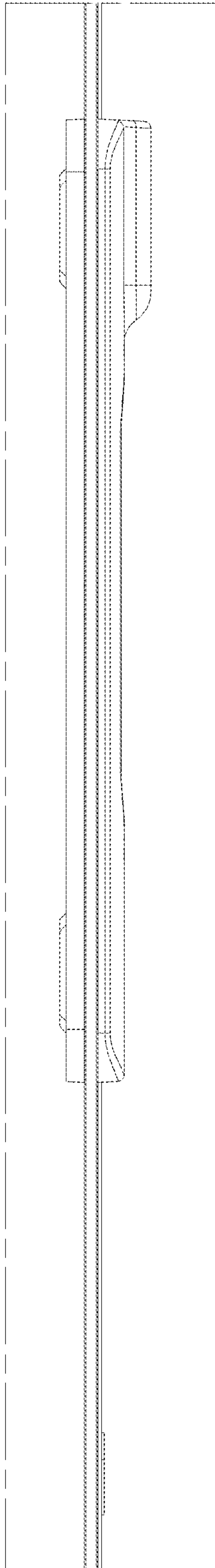


FIG. 12

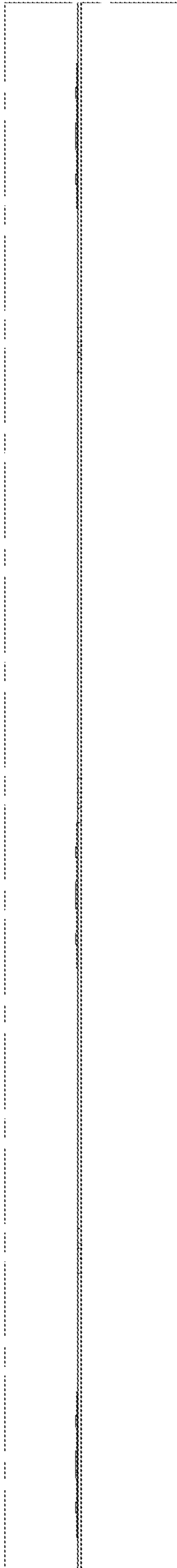


FIG. 13

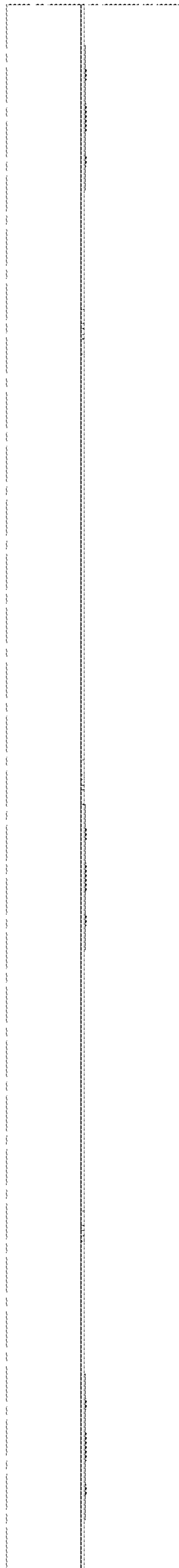


FIG. 14