



US00D933616S

(12) **United States Design Patent** (10) **Patent No.:** **US D933,616 S**
Ohta et al. (45) **Date of Patent:** ** Oct. 19, 2021

(54) **VIBRATION ELEMENT**(71) Applicant: **TDK CORPORATION**, Tokyo (JP)(72) Inventors: **Yoshiki Ohta**, Tokyo (JP); **Yoshikazu Shimura**, Tokyo (JP); **Ryuhei Sasaki**, Tokyo (JP); **Kazushi Tachimoto**, Tokyo (JP); **Hideya Sakamoto**, Tokyo (JP); **Tetsuyuki Taniguchi**, Tokyo (JP); **Akihiro Takeda**, Tokyo (JP)(73) Assignee: **TDK CORPORATION**, Tokyo (JP)(**) Term: **15 Years**(21) Appl. No.: **29/646,334**(22) Filed: **May 3, 2018**(30) **Foreign Application Priority Data**

Nov. 6, 2017 (JP) 2017-024708
Nov. 6, 2017 (JP) 2017-024709

(51) **LOC (13) Cl.** **13-03**(52) **U.S. Cl.**USPC **D13/174**(58) **Field of Classification Search**USPC D10/75, 85; D15/147; D13/21, 121,
D13/122, 171–175, 199

(Continued)

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(Continued)

Primary Examiner — Michael C Stout*Assistant Examiner* — Fitzgerald L Butac(74) *Attorney, Agent, or Firm* — Oliff PLC(57) **CLAIM**

The ornamental design for a vibration element, as shown and described.

DESCRIPTION

FIG. 1 is a front view of a vibration element of the present invention.

FIG. 2 is a rear view thereof.

FIG. 3 is a top plan view thereof.

FIG. 4 is a bottom view thereof.

FIG. 5 is a right side view thereof.

FIG. 6 is a left side view thereof.

FIG. 7 is a perspective view thereof.

FIG. 8 is an enlarged view of the portion indicated by arrows **8-8** of the vibration element of FIG. 4.

FIG. 9 is an enlarged view of the portion indicated by arrows **9-9** of the vibration element of FIG. 4.

FIG. 10 is an enlarged view of the portion indicated by arrows **10-10** of the vibration element of FIG. 5.

FIG. 11 is an enlarged view of the portion indicated by arrows **11-11** of the vibration element of FIG. 6.

FIG. 12 is an enlarged sectional view of the vibration element taken along section line **12-12** of FIG. 1 and FIG. 4.

FIG. 13 is an enlarged sectional view of the vibration element taken along section line **13-13** of FIG. 1 and FIG. 4.

FIG. 14 is a front view of another vibration element of the present invention.

FIG. 15 is a rear view thereof.

FIG. 16 is a top plan view thereof.

FIG. 17 is a bottom view thereof.

FIG. 18 is a right side view thereof.

FIG. 19 is a left side view thereof.

FIG. 20 is a perspective view thereof.

FIG. 21 is an enlarged view of the portion indicated by arrows **21-21** of the vibration element of FIG. 17.

FIG. 22 is an enlarged view of the portion indicated by arrows **22-22** of the vibration element of FIG. 17.

FIG. 23 is an enlarged view of the portion indicated by arrows **23-23** of the vibration element of FIG. 18.

FIG. 24 is an enlarged view of the portion indicated by arrows **24-24** of the vibration element of FIG. 19.

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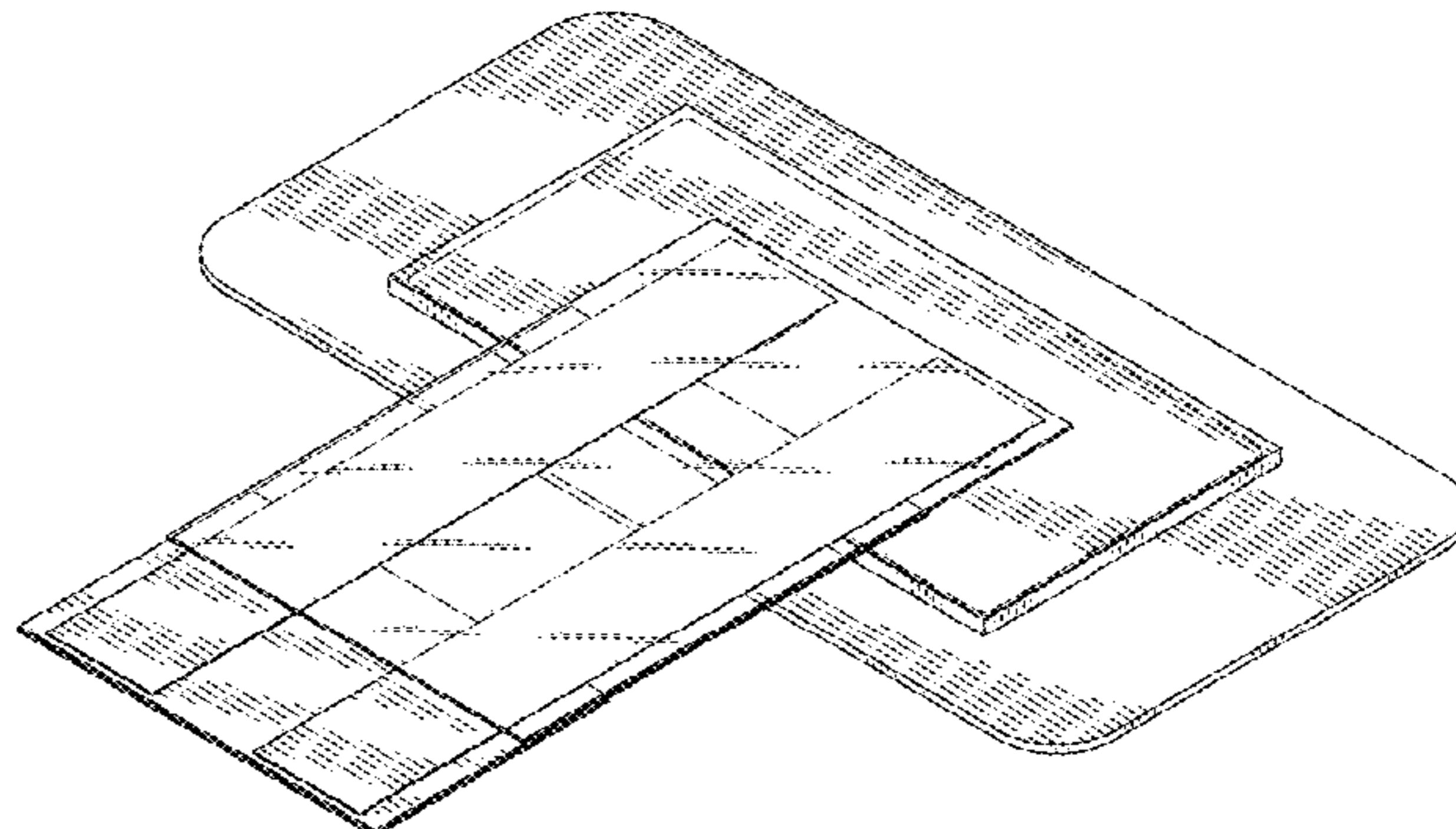
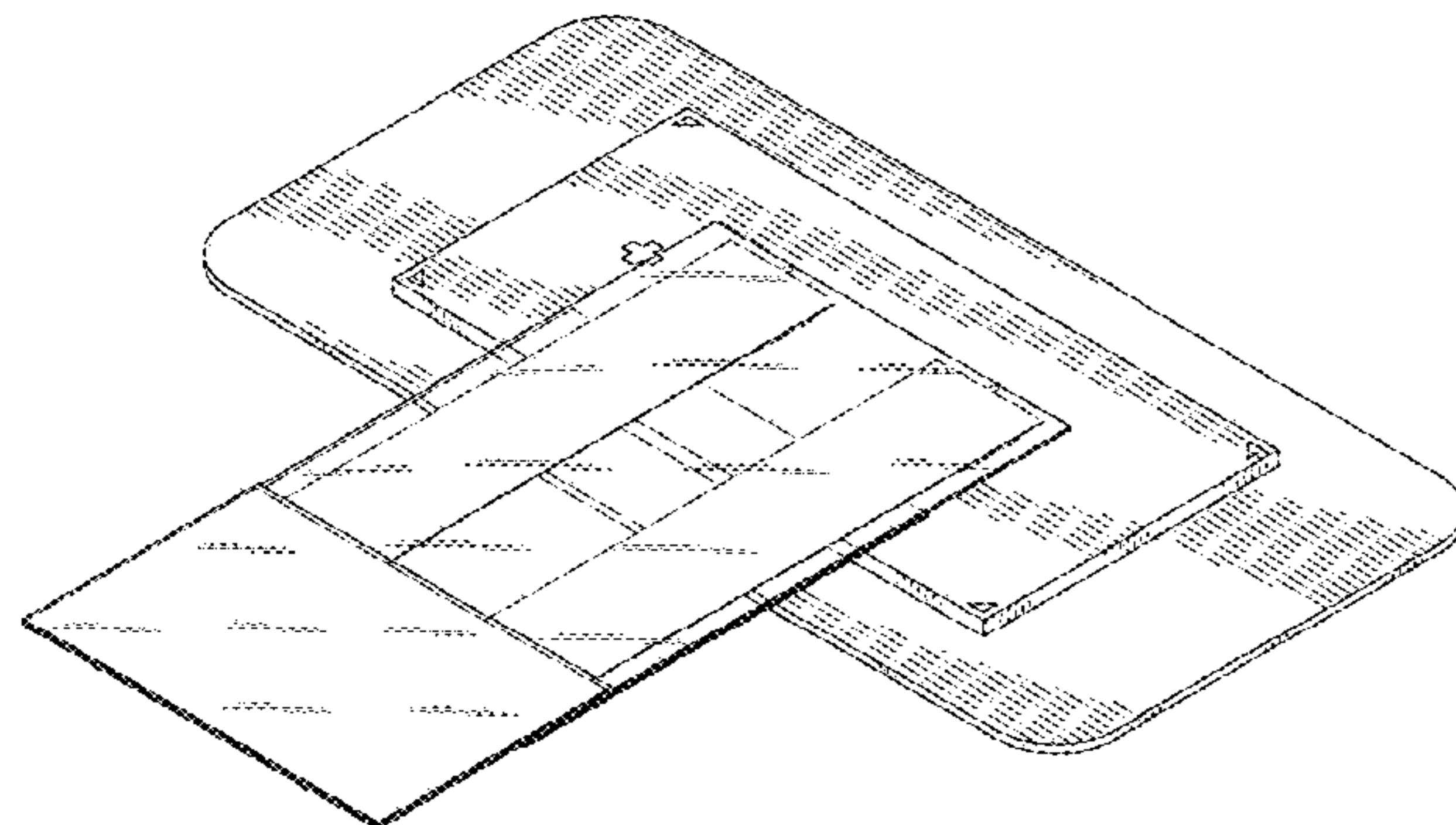


FIG. 25 is an enlarged sectional view of the vibration element taken along section line 25-25 of FIG. 14 and FIG. 17; and,

FIG. 26 is an enlarged sectional view of the vibration element taken along section line 26-26 of FIG. 14 and FIG. 17.

The broken lines depict unclaimed portions of the vibration element, and thus form no part of the claimed design.

1 Claim, 26 Drawing Sheets

(58) Field of Classification Search

CPC H03H 9/0595; H03H 9/131; H03H 9/178;
H03H 9/205

See application file for complete search history.

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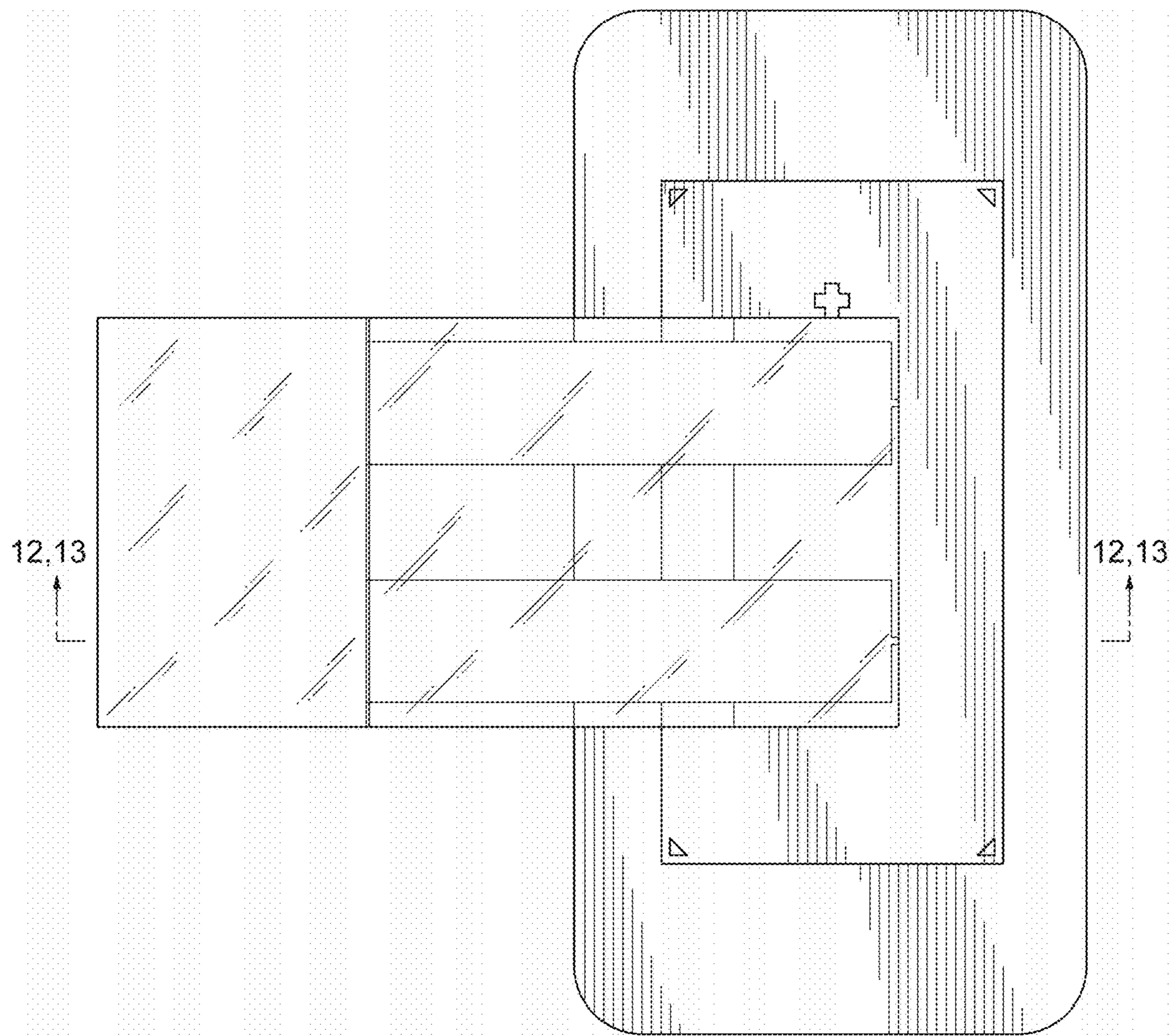


FIG. 1

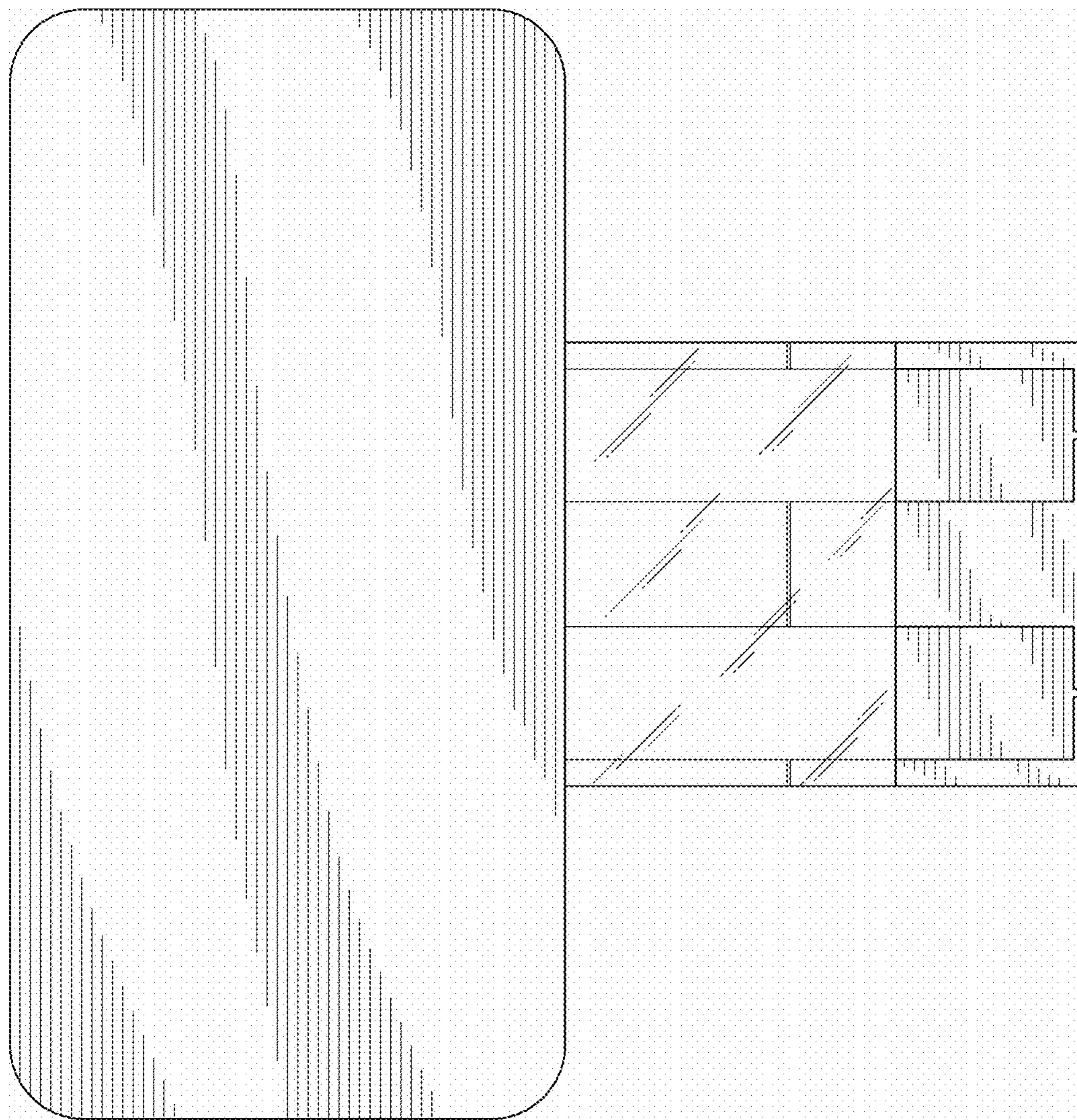


FIG. 2



FIG. 3

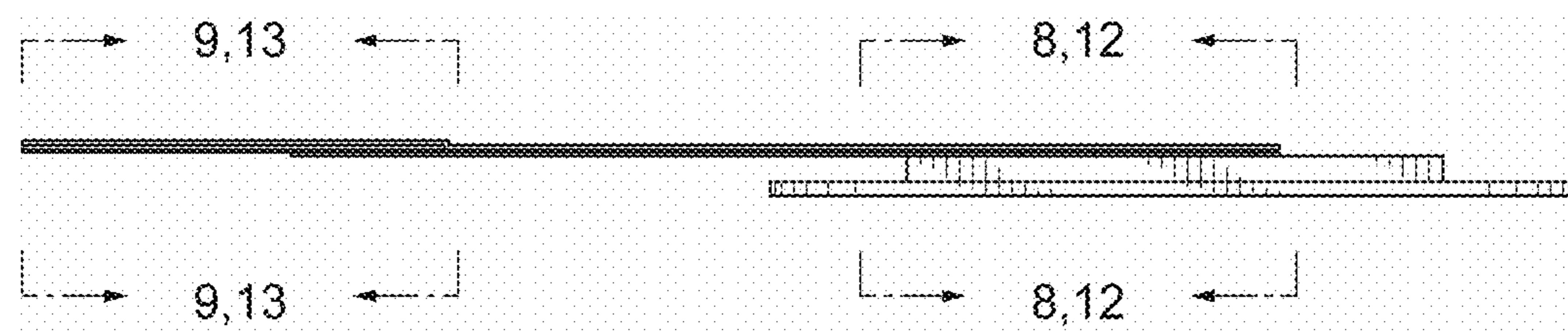


FIG. 4

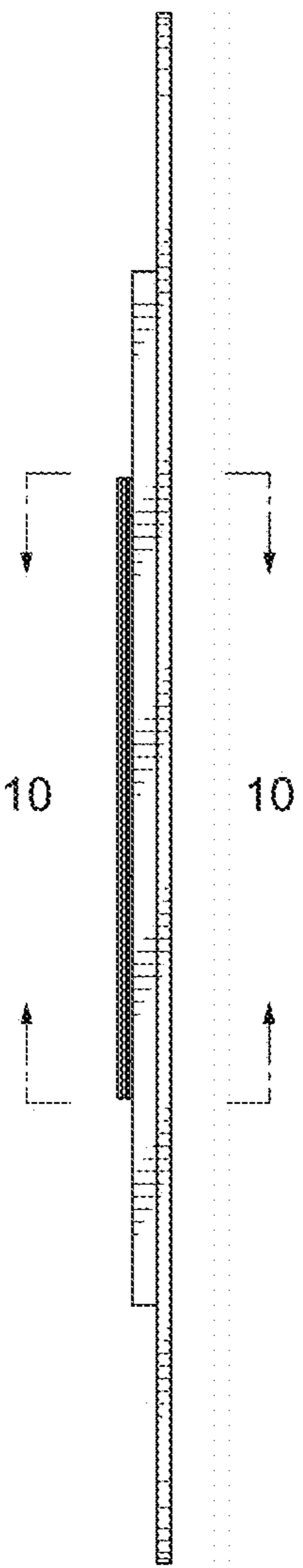


FIG. 5

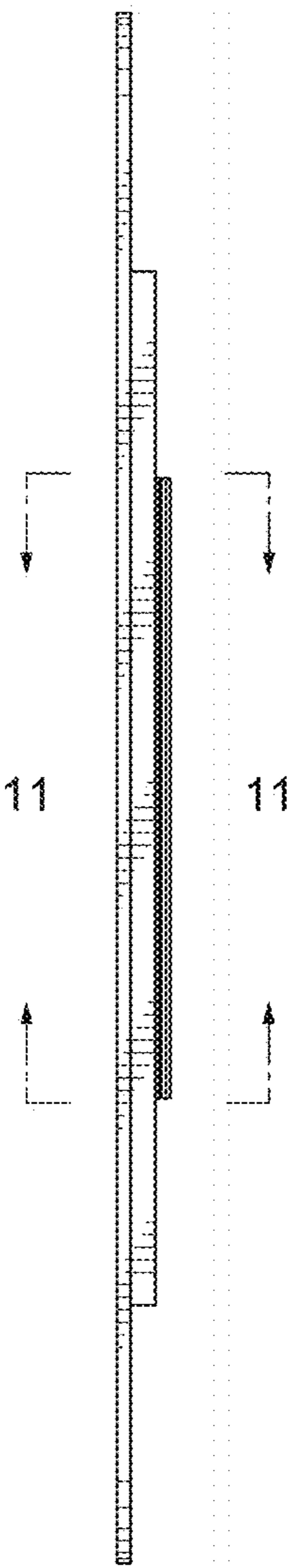


FIG. 6

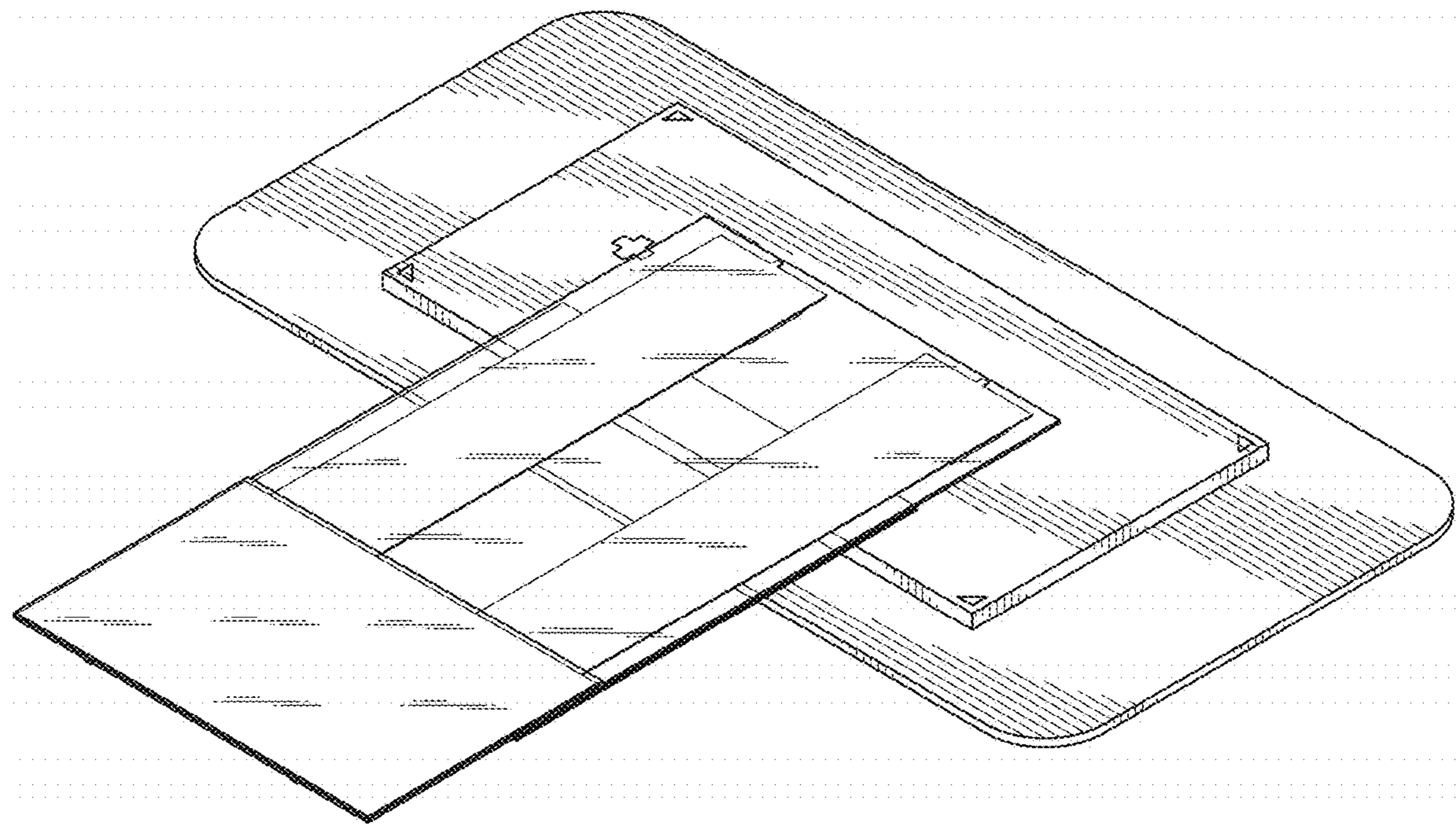


FIG. 7

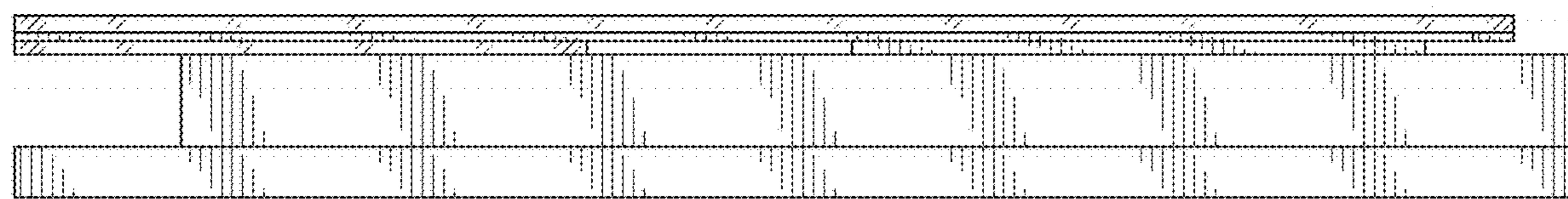


FIG. 8

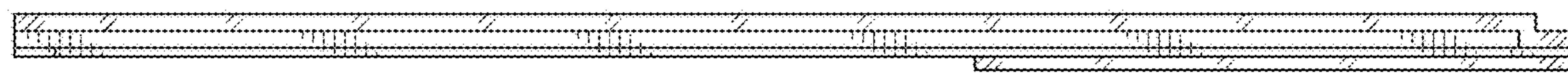


FIG. 9

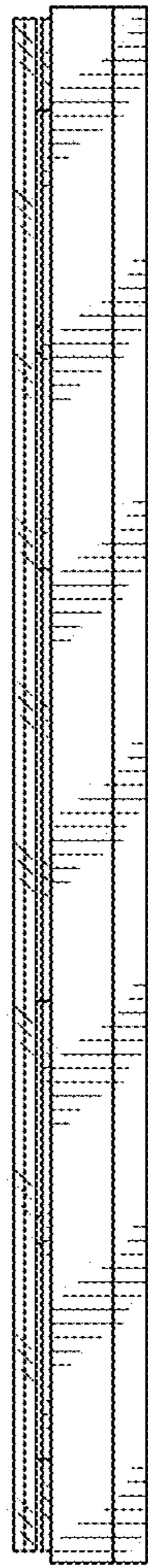


FIG. 10

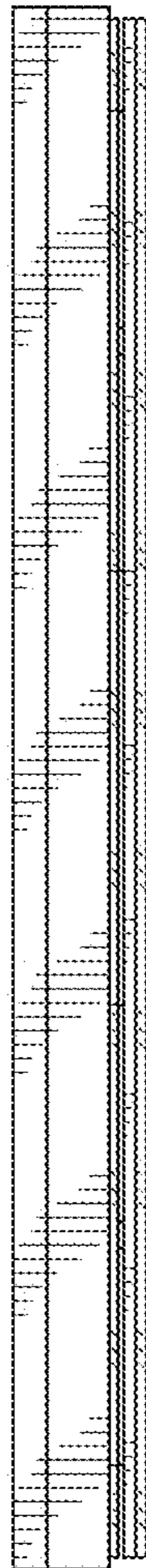


FIG. 11

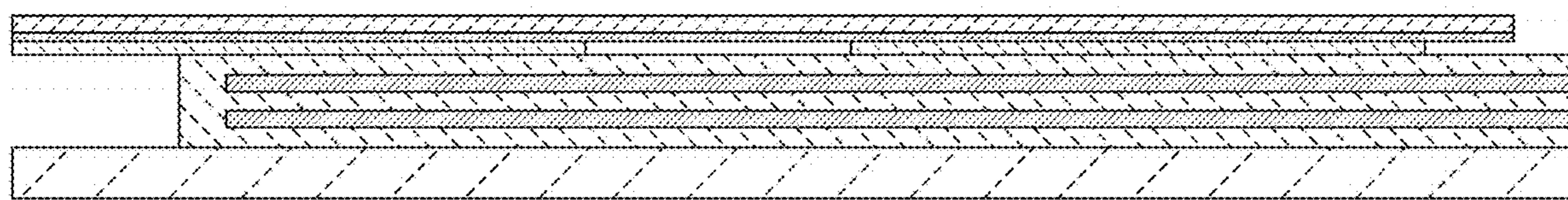


FIG. 12

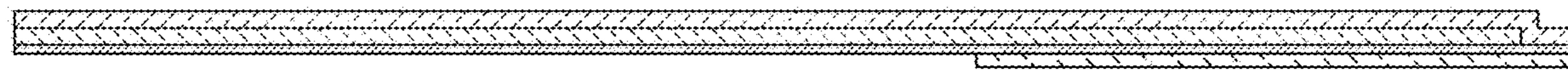


FIG. 13

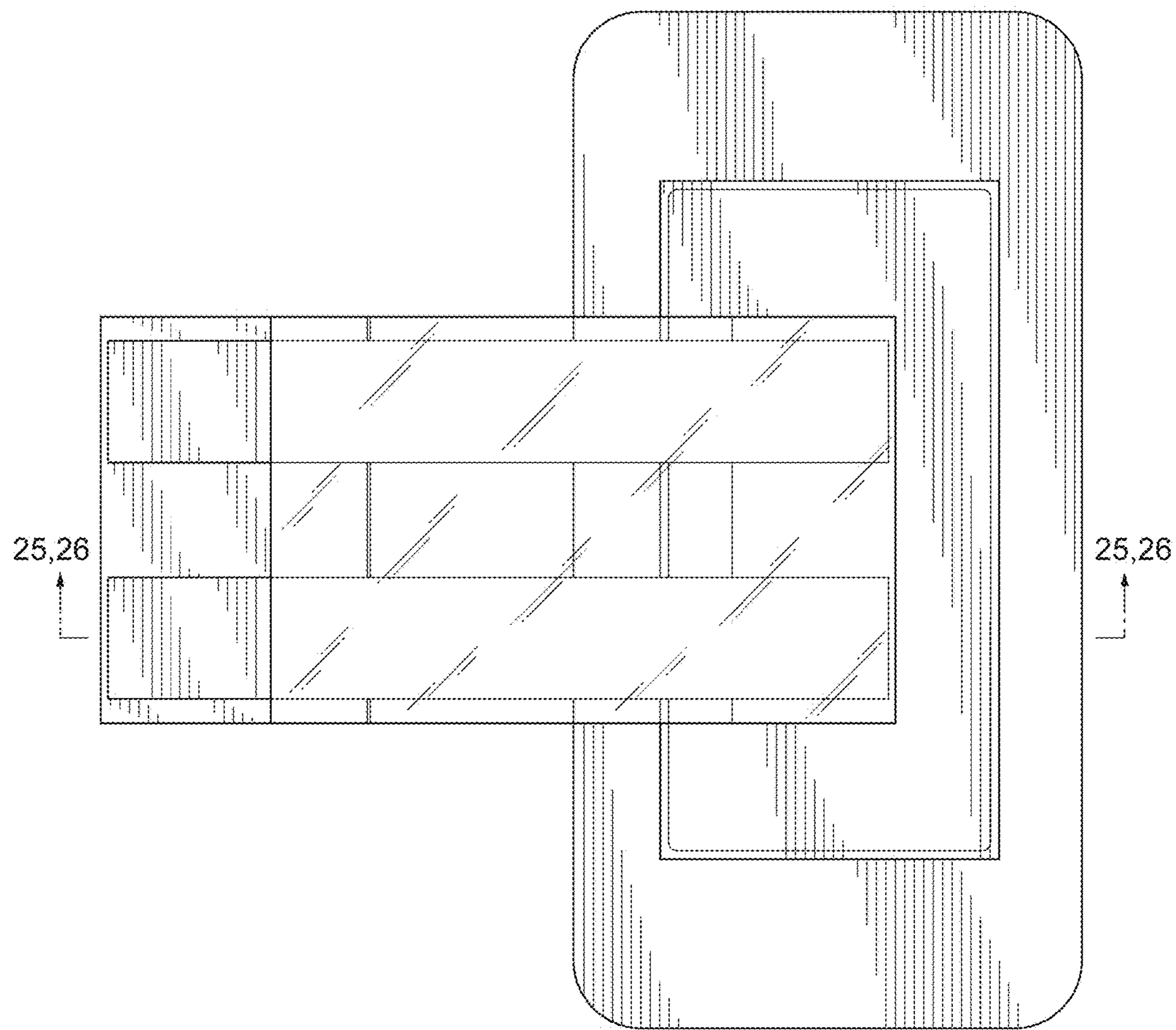


FIG. 14

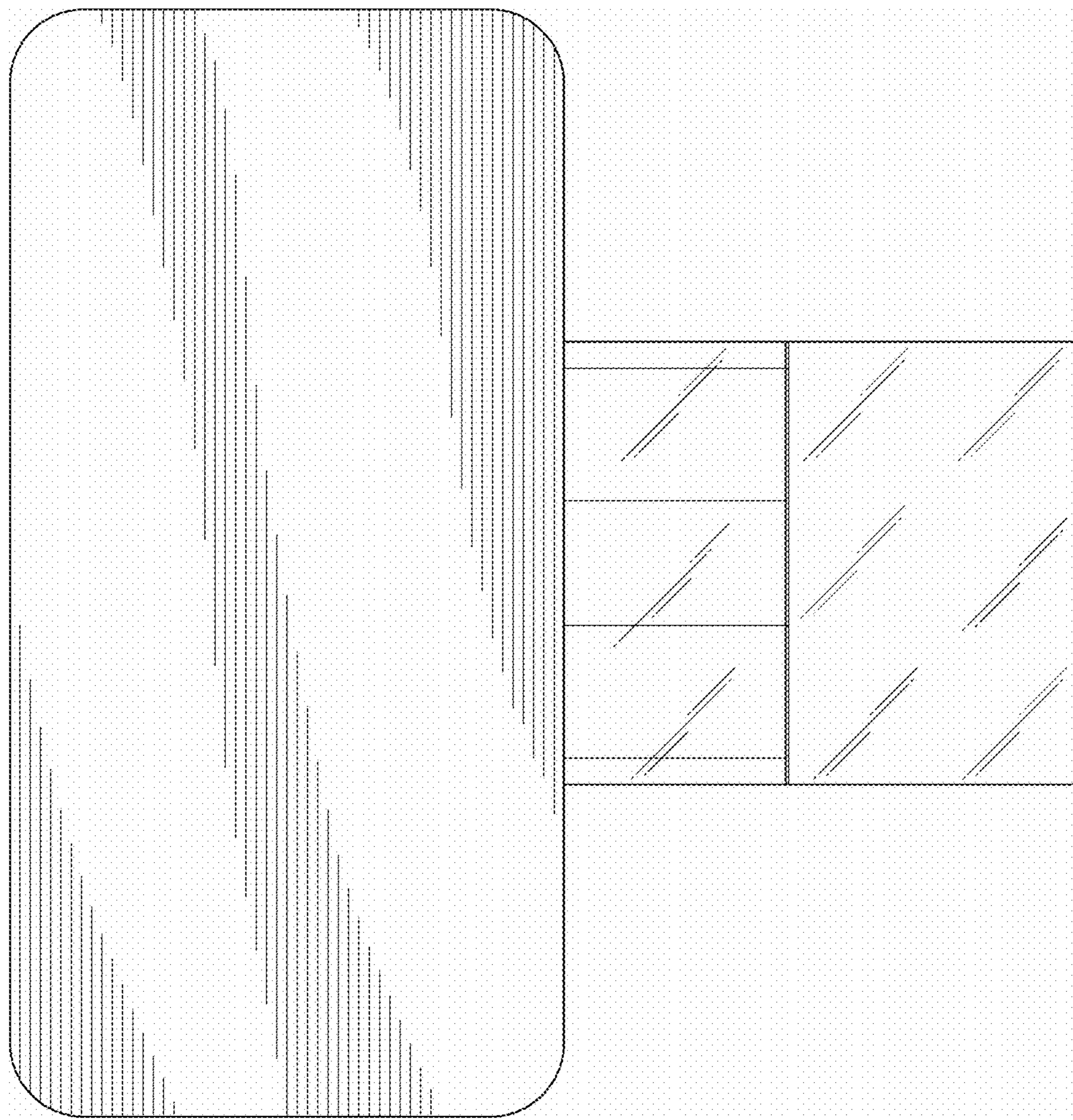


FIG. 15

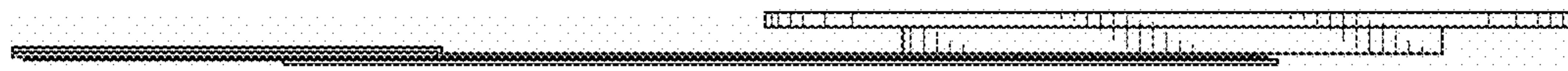


FIG. 16

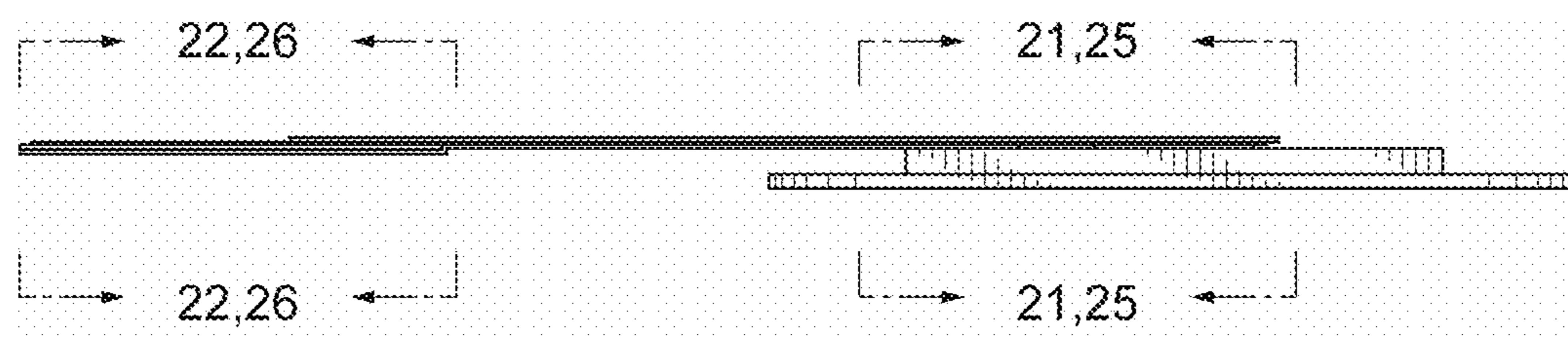


FIG. 17

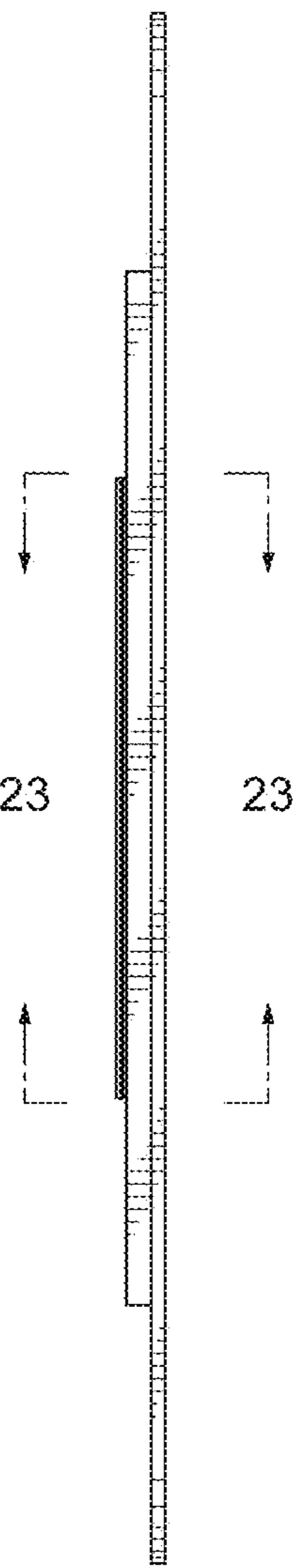


FIG. 18

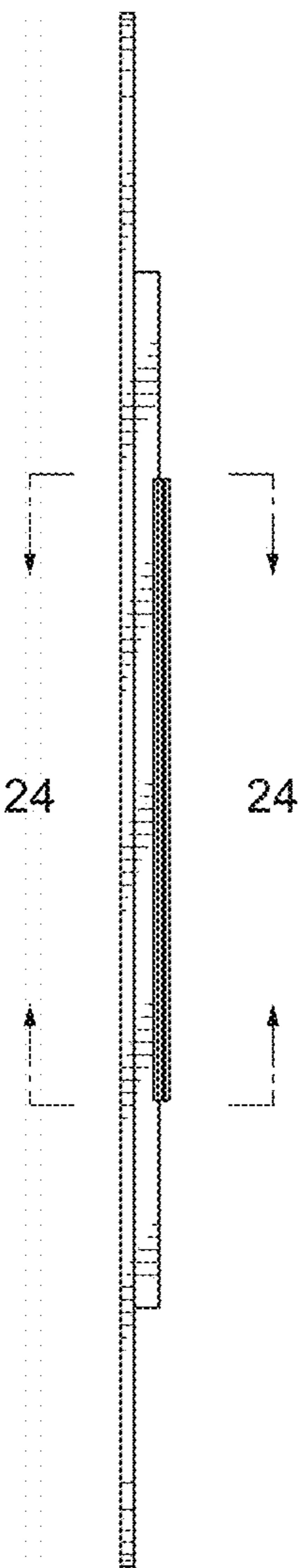


FIG. 19

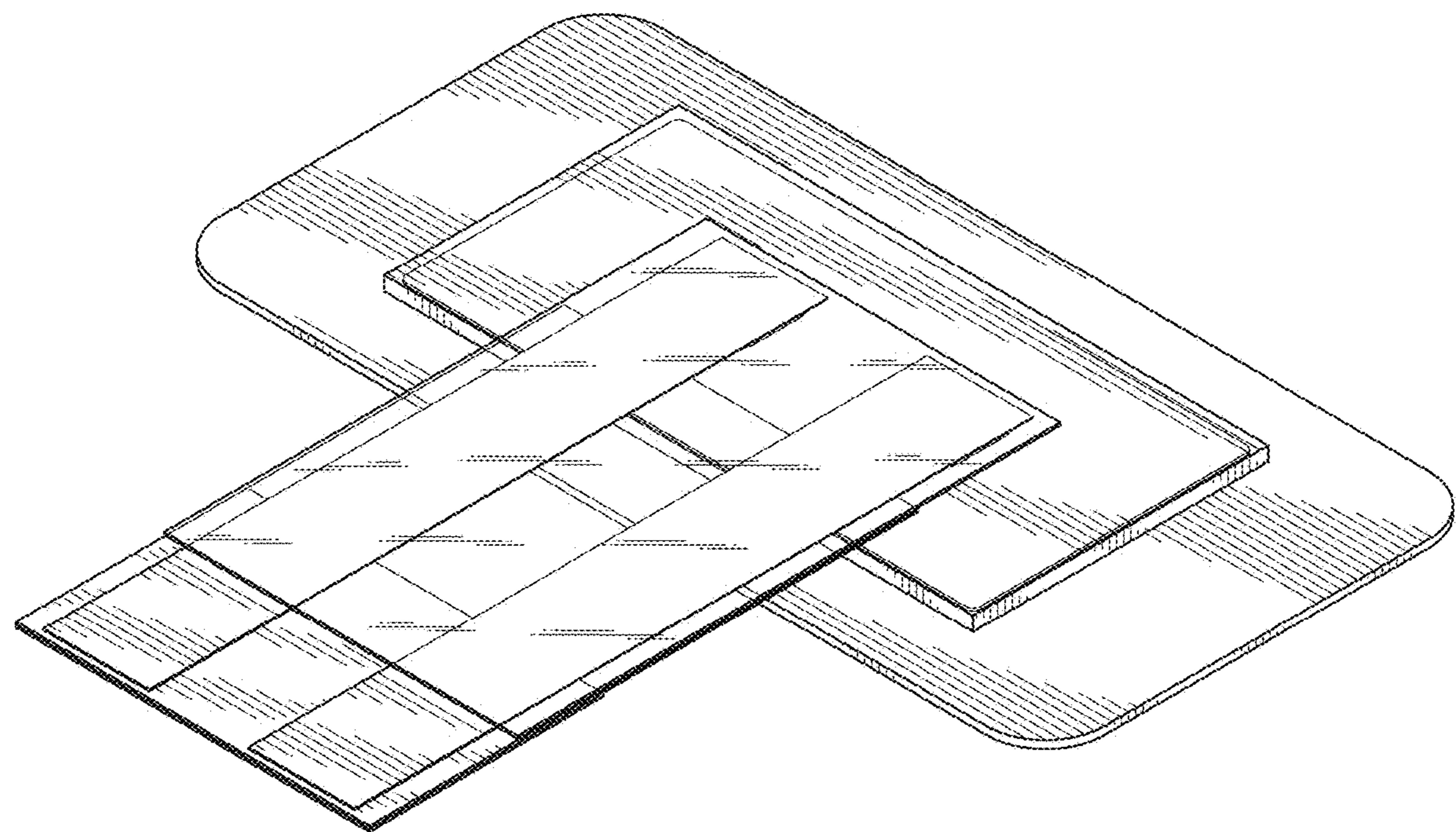


FIG. 20

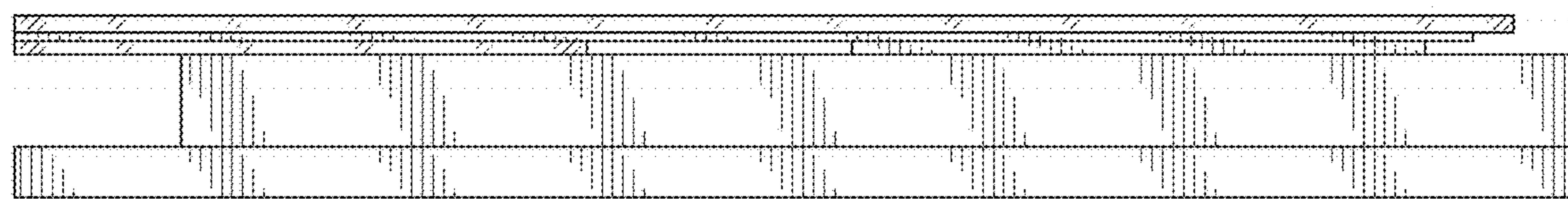


FIG. 21

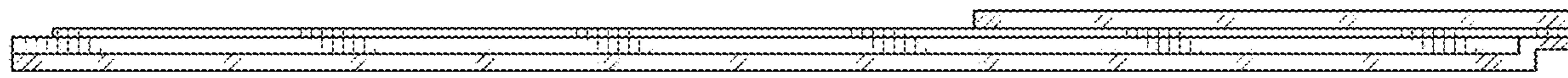


FIG. 22

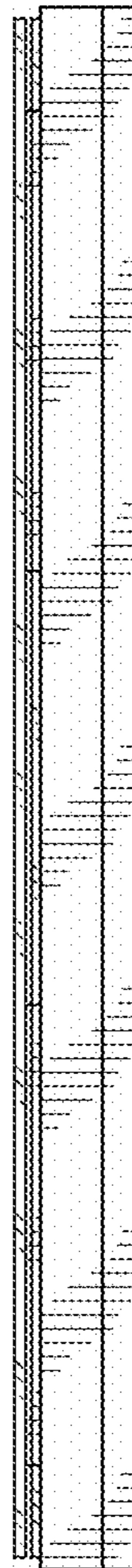


FIG. 23

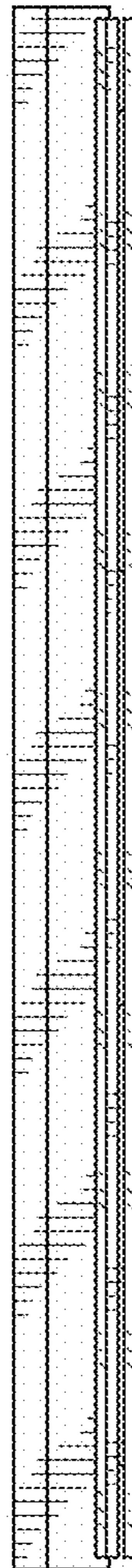


FIG. 24

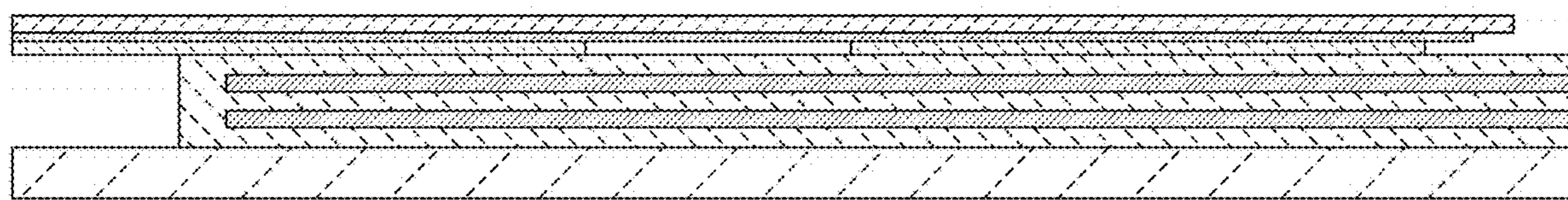


FIG. 25

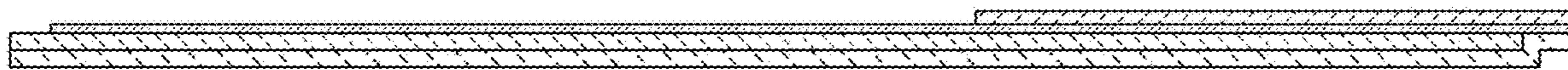


FIG. 26