



US00D926839S

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

(10) **Patent No.:** **US D926,839 S**

(45) **Date of Patent:** **** Aug. 3, 2021**

(54) **CREASING RULE FOR PAPERBOARD
BLANKS**

OTHER PUBLICATIONS

Seaga Group, Creasing Rule, web site print out, 1 pg., Feb. 24, 2017.

(71) Applicant: **The C.W. Zumbiel Company**, Hebron, KY (US)

(Continued)

(72) Inventors: **Steven J. Block**, Amelia, OH (US);
Edward A. Zumbiel, Union, KY (US)

Primary Examiner — Khawaja Anwar
(74) *Attorney, Agent, or Firm* — Wood Herron & Evans LLP

(73) Assignee: **The C.W. Zumbiel Company**, Hebron, KY (US)

(57) **CLAIM**

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

The ornamental design for a creasing rule for paperboard blanks, as shown and described.

(21) Appl. No.: **29/654,282**

(22) Filed: **Jun. 22, 2018**

DESCRIPTION

Related U.S. Application Data

(62) Division of application No. 29/576,364, filed on Sep. 2, 2016, now abandoned.

FIG. 1 is a front elevation view of a first embodiment, showing our new design;

(51) **LOC (13) Cl.** **15-03**

FIG. 1A is a perspective view of the embodiment of FIG. 1 shown in a creasing assembly for environment;

(52) **U.S. Cl.**

FIG. 2 is a front elevation view of a second embodiment showing our new design;

USPC **D15/127**

FIG. 2A is a perspective view of the embodiment of FIG. 2 shown in a creasing assembly for environment;

(58) **Field of Classification Search**

USPC D15/127-129, 122, 138, 139-141;
D8/44, 51, 68; D19/32, 26-30, 49, 100;
D18/34.1-34.9, 50, 53, 99

FIG. 3 is a front elevation view of a third embodiment showing our new design;

(Continued)

FIG. 3A is a perspective view of the embodiment of FIG. 3 shown in a creasing assembly for environment;

(56) **References Cited**

U.S. PATENT DOCUMENTS

FIG. 4 is a front elevation view of a fourth embodiment showing our new design;

1,847,147 A * 3/1932 Thomas, Jr. H02G 3/06
174/68.3

FIG. 4A is a perspective view of the embodiment of FIG. 4 shown in a creasing assembly for environment;

2,250,156 A * 7/1941 Ferguson H01R 4/026
174/84 R

FIG. 5 is a front elevation view of a fifth embodiment showing our new design;

(Continued)

FIG. 5A is a perspective view of the embodiment of FIG. 5 shown in a creasing assembly for environment;

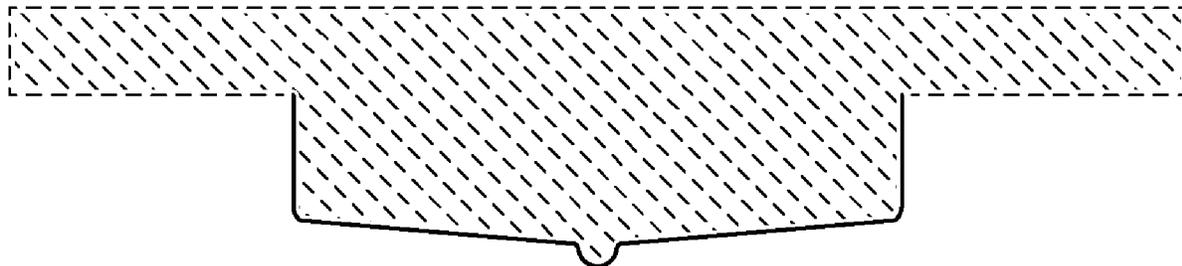
FOREIGN PATENT DOCUMENTS

GB 2530723 A 4/2016
JP H09300299 A 11/1997

FIG. 6 is a front elevation view of a sixth embodiment showing our new design; and,

FIG. 6A is a perspective view of the embodiment of FIG. 6 shown in a creasing assembly for environment.

1 Claim, 6 Drawing Sheets



(58) **Field of Classification Search**

CPC B23P 19/04; B23P 15/28; B23P 15/34;
 B23P 6/00; B23Q 9/0042; B23Q 11/0046;
 B23Q 11/0057; B23Q 11/1069; B23Q
 17/2409; B23Q 3/1554; B23Q 7/001;
 B24D 18/00; B24D 3/00; B24D 3/06;
 B29C 64/386; B29C 2035/0822; B29C
 2035/0827; B29C 2035/0833; B29C
 2035/0838; B29C 2035/0844; B29C
 2071/022; B29C 2947/92695; B29C
 2947/92704; B29C 35/0805; B29C 35/16;
 B29C 47/0002; B29C 47/0004; B29C
 47/0009; B29C 47/0057; B29C 47/92;
 B29C 64/00; B29C 64/106; B29C 64/129;
 B29C 64/135; B29C 64/141; B29C
 64/165; B29C 64/20; B29C 64/223; B29C
 64/40; B29C 65/18; B29C 69/001; B29C
 70/16; B29C 70/28; B29C 70/38; B29C
 70/545; B29C 71/02

See application file for complete search history.

4,963,126 A 10/1990 Jesch
 5,203,482 A 4/1993 Puff
 D343,398 S 1/1994 Dunn
 6,441,338 B1 8/2002 Rabinovich
 D568,429 S * 5/2008 Takayama D21/778
 D616,317 S 5/2010 Yeh
 D660,365 S * 5/2012 Bengyak D20/33
 D680,182 S * 4/2013 Holliday D21/778
 D697,137 S * 1/2014 Bengyak D20/33
 D703,781 S * 4/2014 Durante D21/778
 D709,578 S * 7/2014 Field D21/778
 D778,353 S * 2/2017 Hamayde D18/34.1
 D795,344 S * 8/2017 Cenzano D19/32
 D818,787 S * 5/2018 Kitago D8/44
 D820,329 S * 6/2018 Kanada D15/139
 D867,506 S * 11/2019 Montanaro D21/778
 D884,251 S * 5/2020 Wurtz D26/94
 2005/0209075 A1 9/2005 Kocherga et al.
 2008/0108490 A1 5/2008 Kocherga et al.
 2010/0257987 A1 10/2010 Palm et al.
 2013/0029823 A1 1/2013 Zoeckler
 2014/0352509 A1 12/2014 Schroder

(56)

References Cited

U.S. PATENT DOCUMENTS

3,224,314 A * 12/1965 Wolnez B26D 7/22
 83/522.26
 3,653,304 A 4/1972 Lenoir
 D245,831 S 9/1977 West et al.
 4,299,575 A * 11/1981 Carrow B60Q 1/26
 362/543
 4,334,446 A * 6/1982 Field B23B 29/043
 407/40
 4,458,936 A * 7/1984 Mulholland B62D 35/001
 296/180.4
 D276,528 S 11/1984 Shaffer
 D277,864 S 3/1985 Hoffman, Jr. et al.
 4,693,535 A * 9/1987 Frode H01M 2/24
 429/160
 4,831,345 A * 5/1989 Schiavone H01P 5/12
 29/846

OTHER PUBLICATIONS

Advanced Die Supplies, Creasing Rule, web site printout, 3 pgs.,
 Feb. 24, 2017.
 HD Stahl-Steel-Acier, HD Creasing Rules, web site printout, 3 pgs.,
 Feb. 24, 2017.
 Ameri-Ken, Steel Rule—Creasing, web site printout, 3 pgs., Feb.
 24, 2017.
 Cito Group, Hinge Crease, web site printout, 5 pgs., Feb. 24, 2017.
 Rotalaser; Consumable Materials, web site printout, 3 pgs., Feb. 24,
 2017.
 Up Group, Creasing Rule, web site printout, 1 pg., Feb. 24, 2017.
 Fag Graphic Systems, Creasing, Scoring, Folding, Embossing,
 Manual, 53 pgs., Undated.
 Iggesund Paperboard, Die-culling and creasing, Manual, 24 pgs.,
 Feb. 24, 2017.
 International Searching Authority, PCT/US2017/064171; Search
 Report and Written Opinion, 12 pgs, dated Dec. 1, 2017.

* cited by examiner

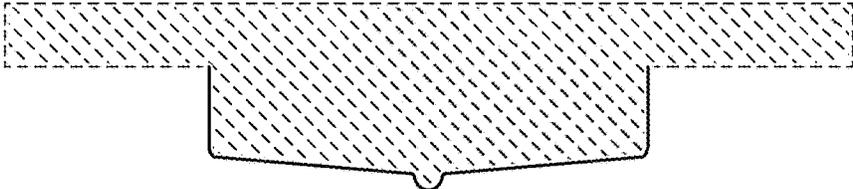


FIG. 1

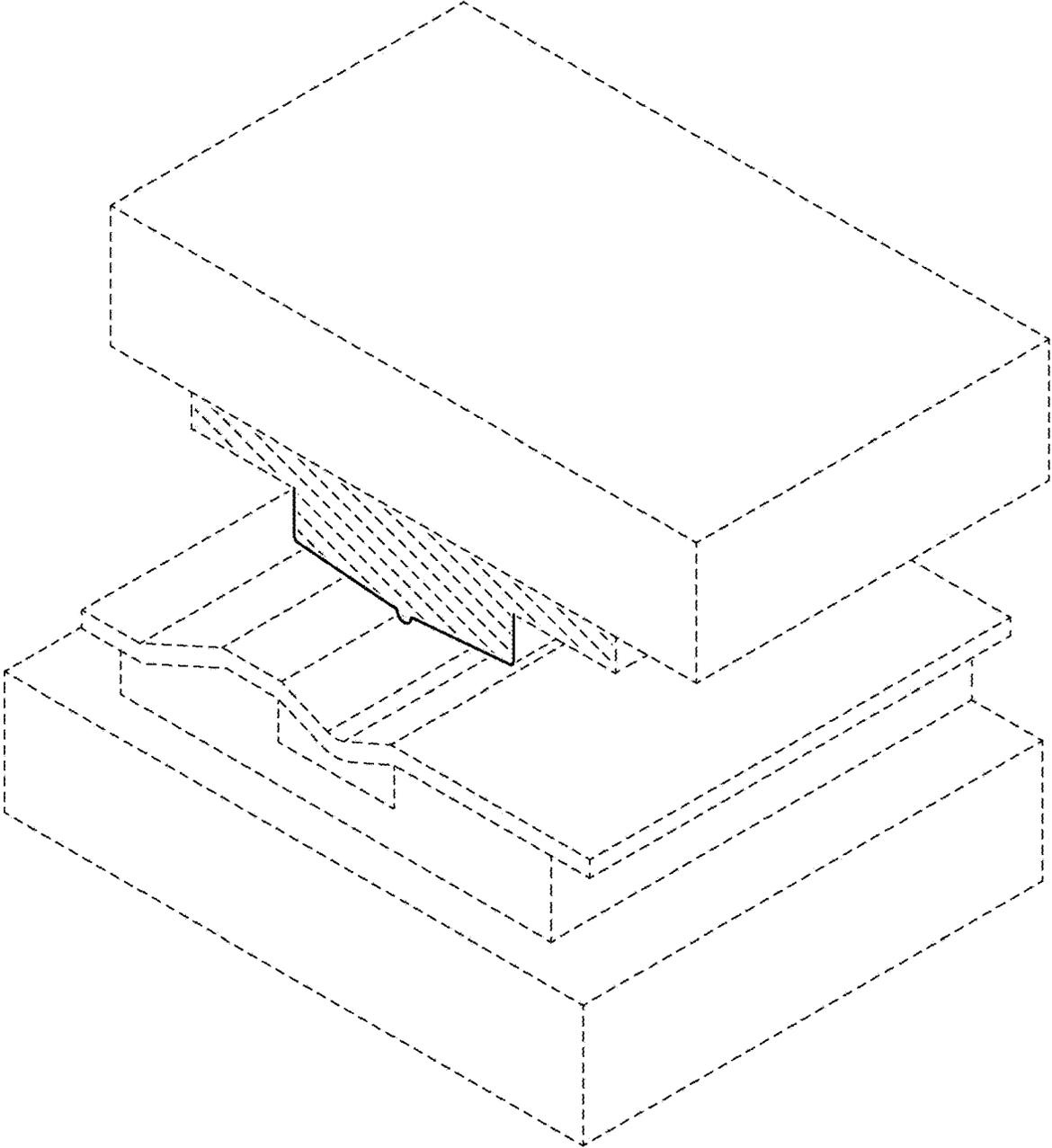


FIG. 1A

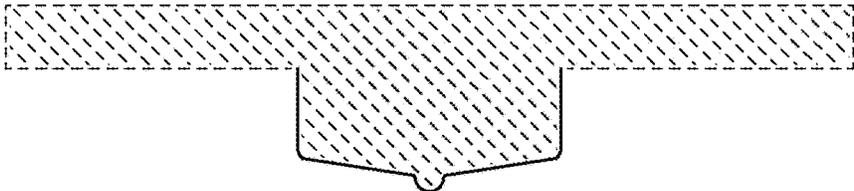


FIG. 2

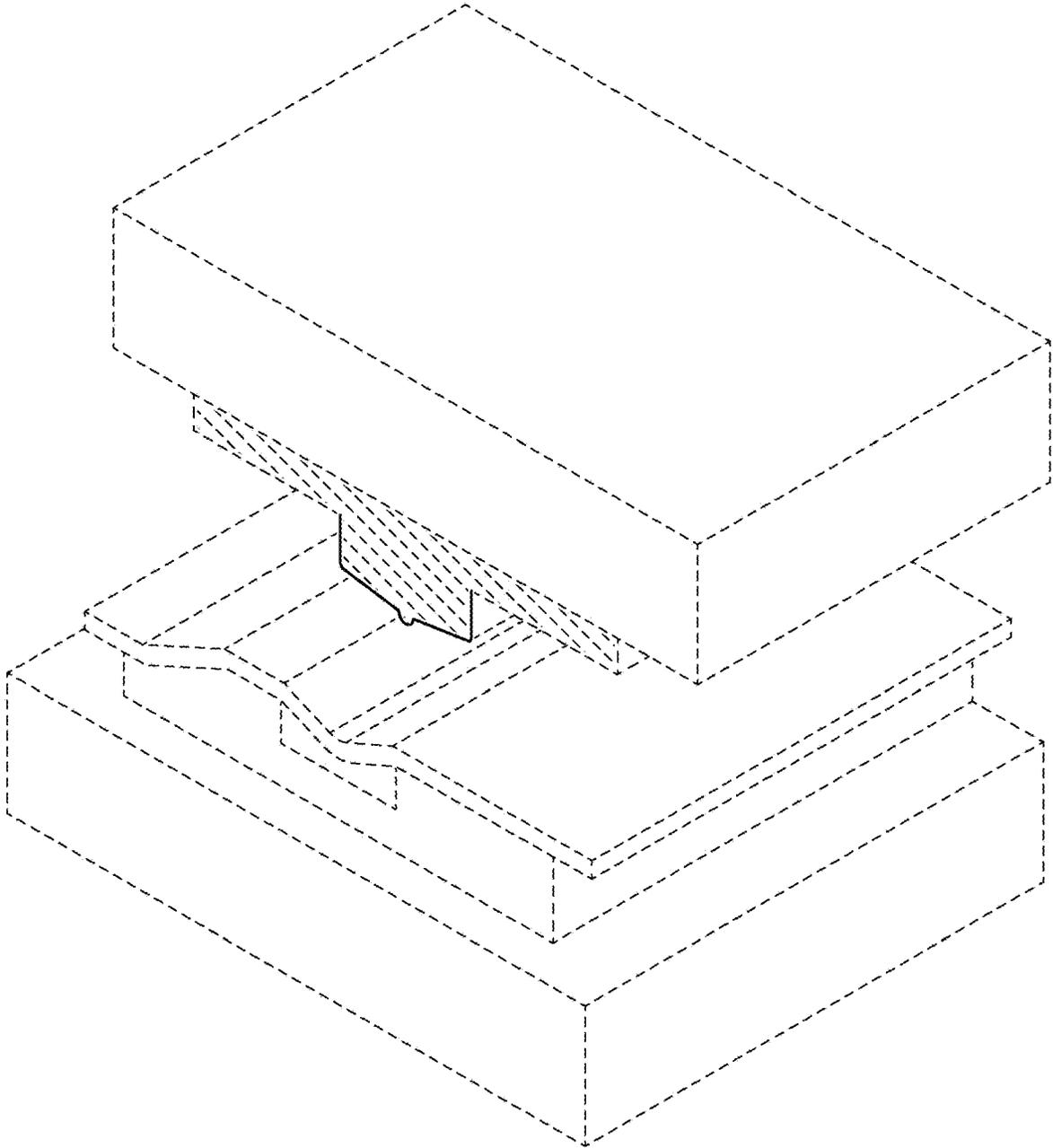


FIG. 2A

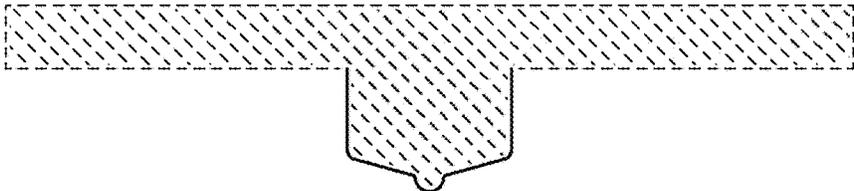


FIG. 3

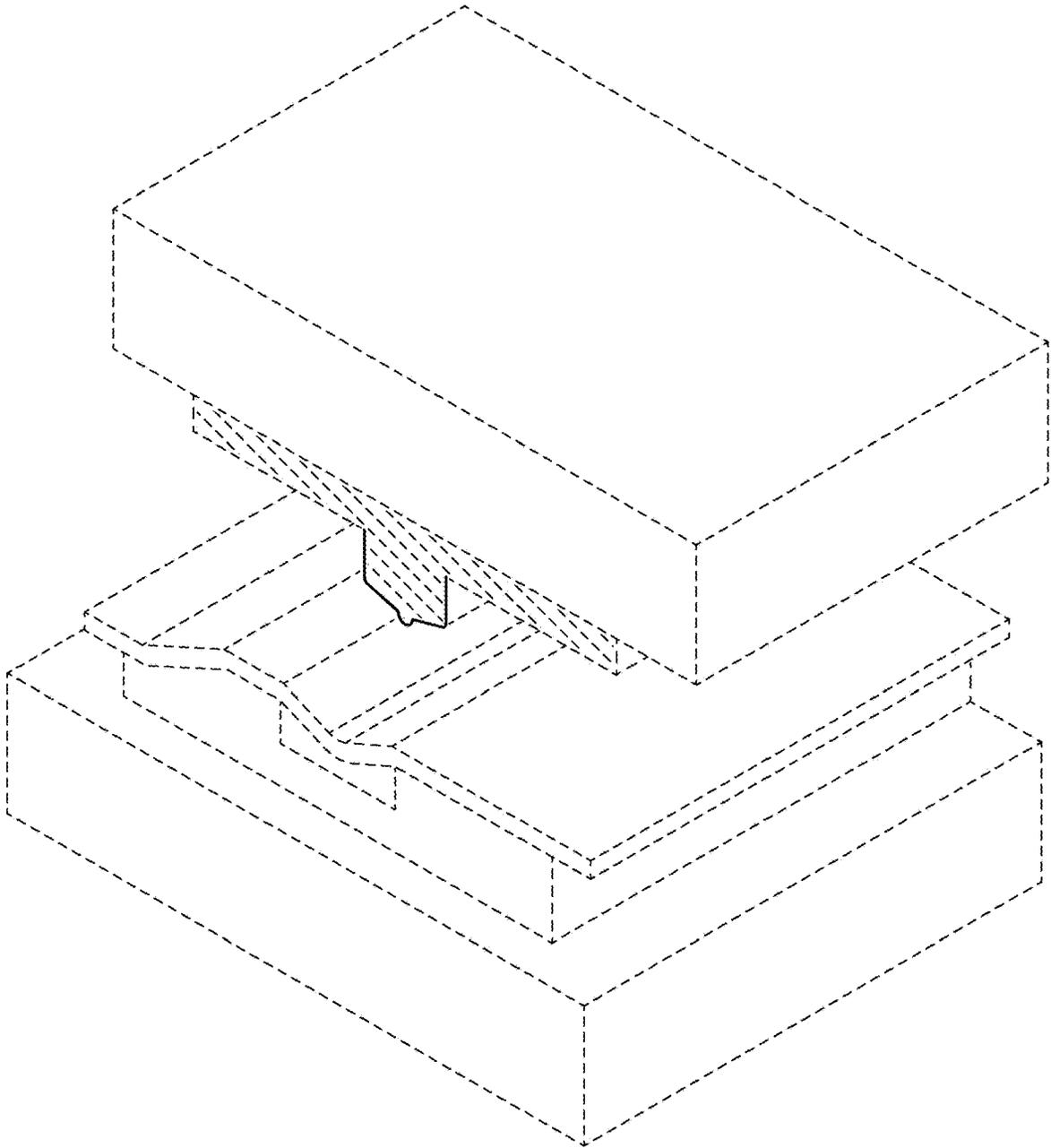


FIG. 3A

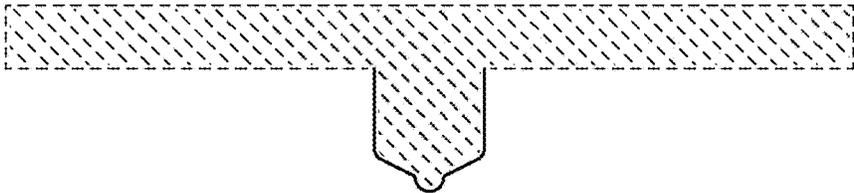


FIG. 4

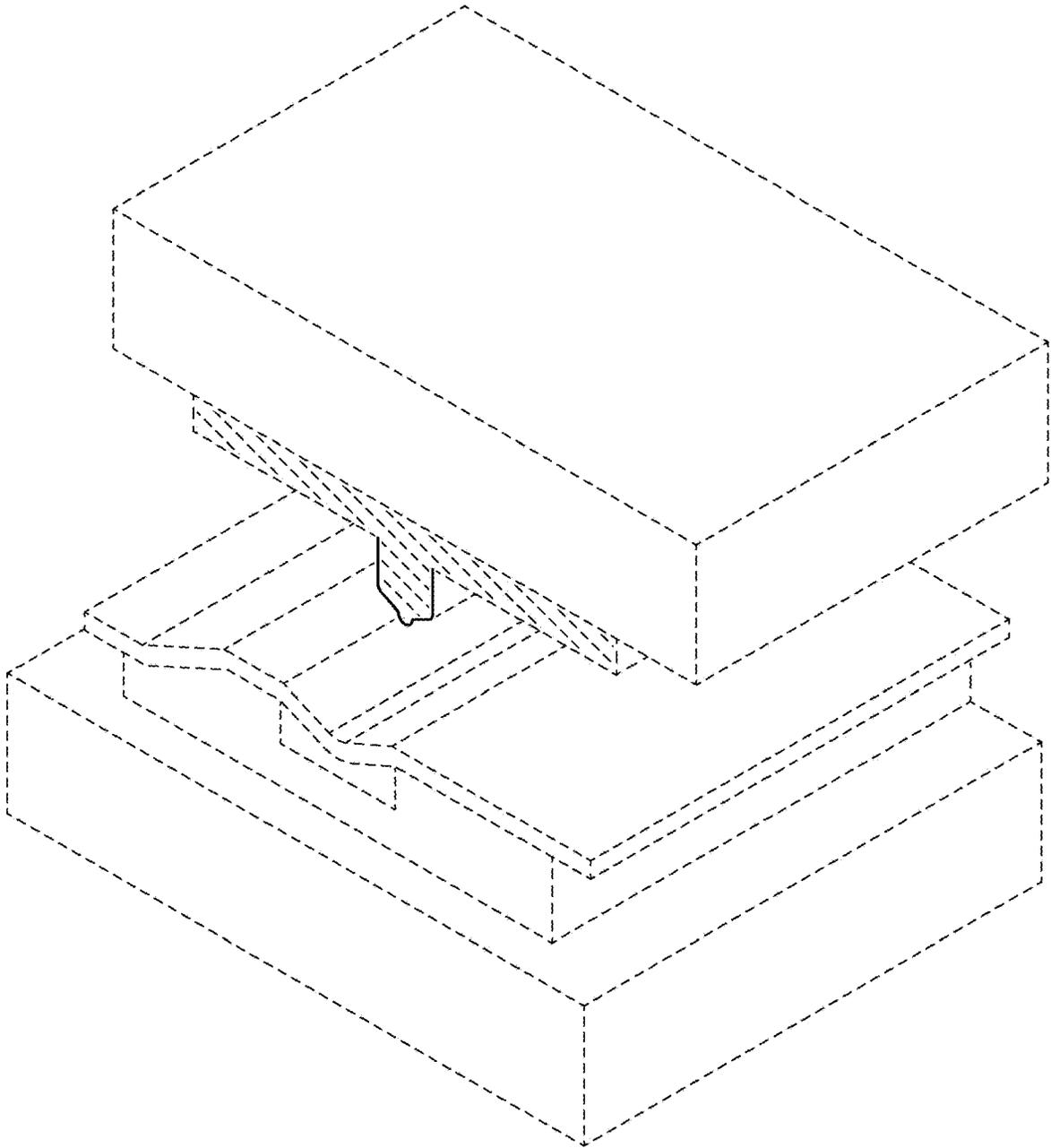


FIG. 4A

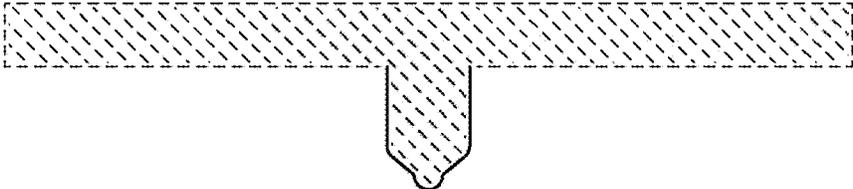


FIG. 5

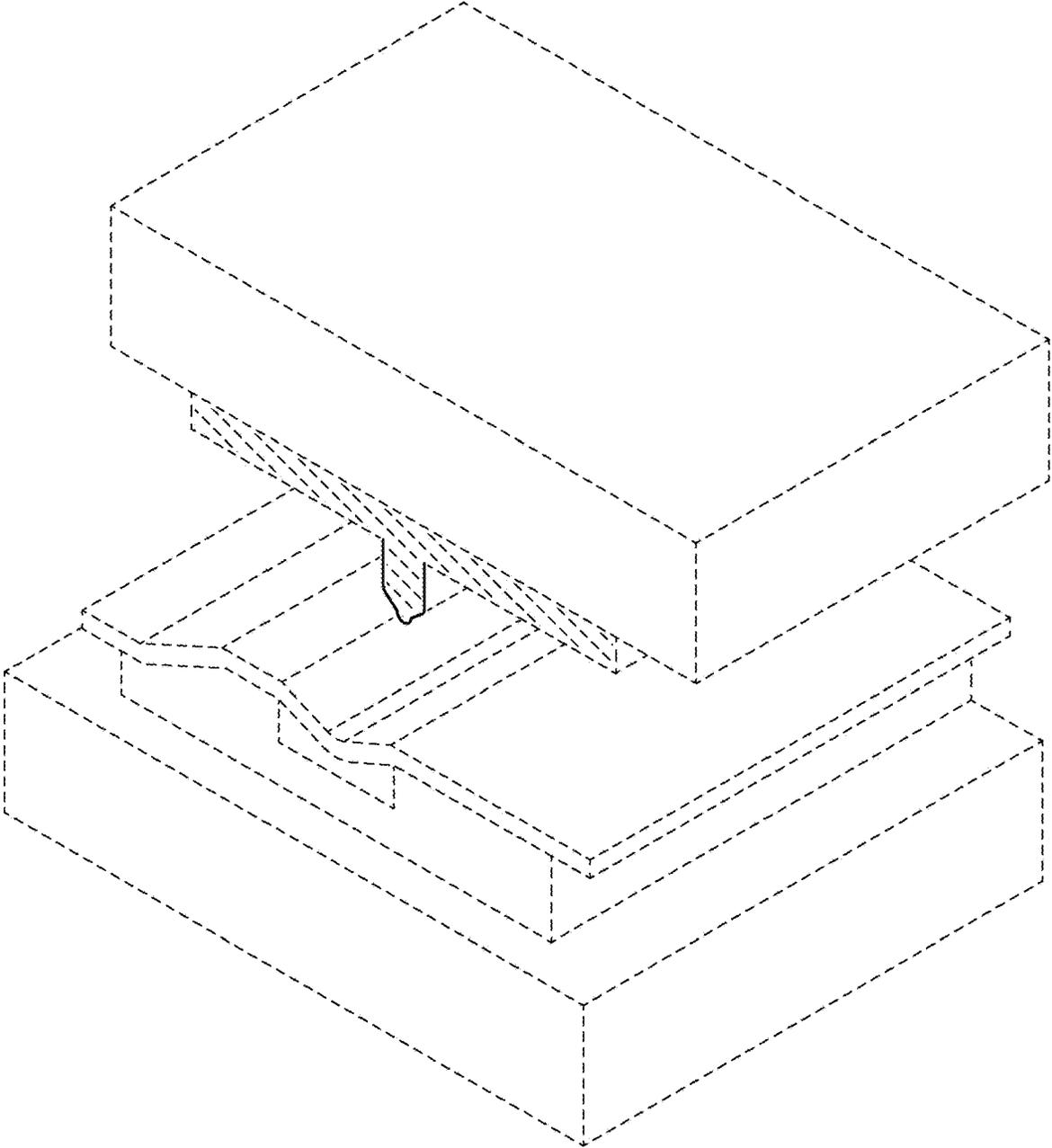


FIG. 5A

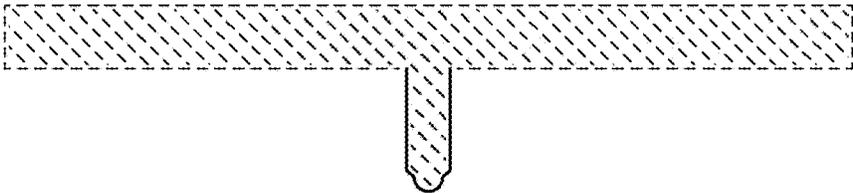


FIG. 6

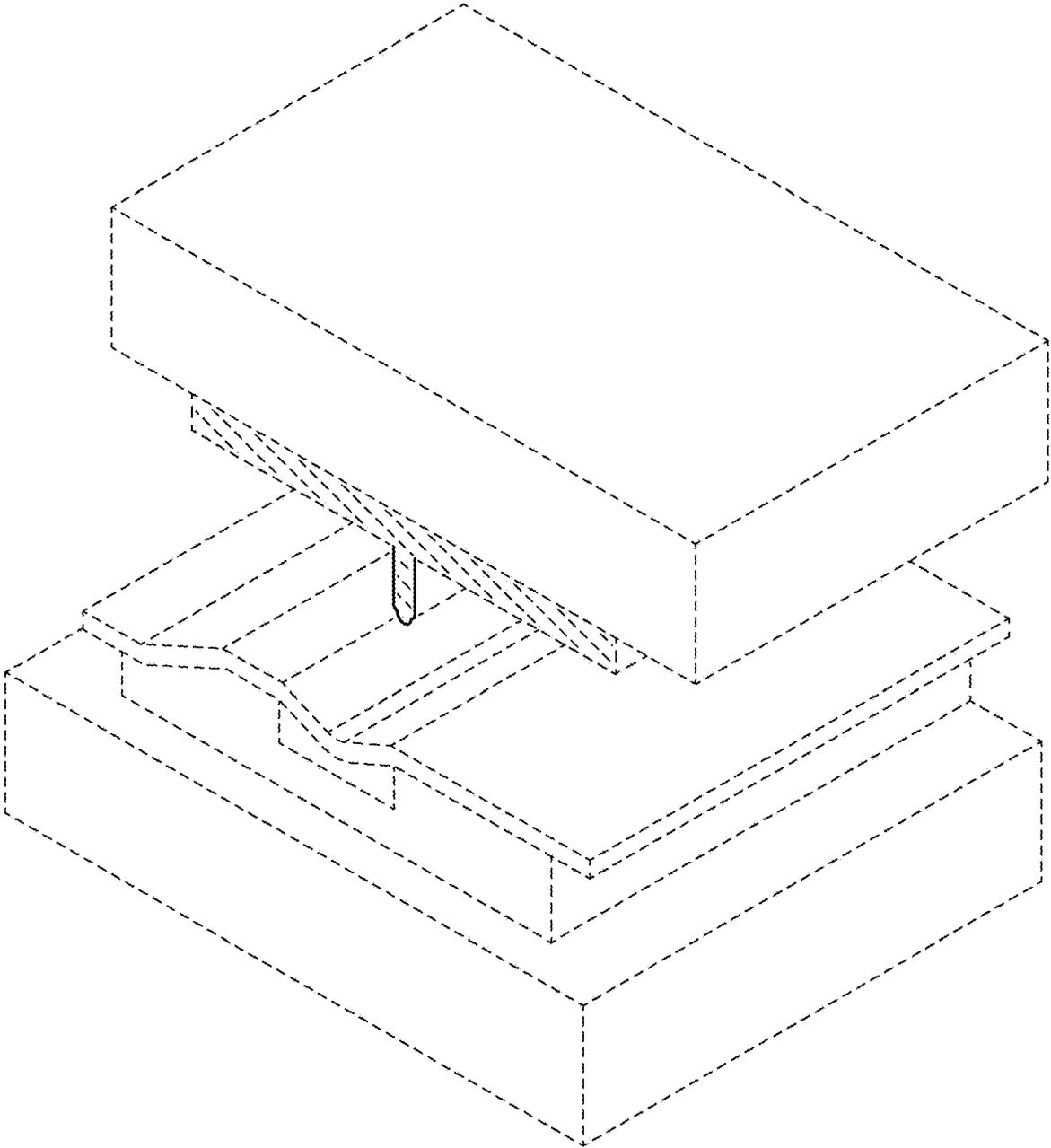


FIG. 6A