



US00D977218S

(12) **United States Design Patent** (10) **Patent No.:** **US D977,218 S**
Cody et al. (45) **Date of Patent:** **** Feb. 7, 2023**

(54) **BUTTER STICK**

(71) Applicant: **Land O'Lakes, Inc.**, Arden Hills, MN (US)

(72) Inventors: **Sharon K. Cody**, Maple Grove, MN (US); **Joseph V. Burger**, Apple Valley, MN (US); **Jonathan Anderson**, Minneapolis, MN (US); **Lisa Ryan**, Lakeville, MN (US)

(73) Assignee: **LAND O'LAKES, INC.**, Arden Hills, MN (US)

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

(21) Appl. No.: **29/779,850**

(22) Filed: **Apr. 21, 2021**

Related U.S. Application Data

(62) Division of application No. 29/712,908, filed on Nov. 12, 2019, now Pat. No. Des. 918,526.

(51) **LOC (14) Cl.** **01-01**

(52) **U.S. Cl.**
USPC **D1/100**

(58) **Field of Classification Search**
USPC D1/100-130, 199; 426/104, 108, 138, 426/391, 549, 808, 94, 143, 559, 560; D24/101-104; D28/8.1, 8.2, 63; D6/601; D32/40, 43; D9/707, 756; D30/160; D18/56; D25/113, 115; D23/366; D7/502
CPC A23G 3/50; A23G 3/54; A23J 3/26; A23L 1/0067; B41J 2/17593
See application file for complete search history.

References Cited

U.S. PATENT DOCUMENTS

44,342 A * 9/1864 Sawyer C10F 7/06 44/491

147,877 A 2/1874 Spratt

547,721 A * 10/1895 Hazel 52/437

1,807,458 A 5/1931 Weland

1,855,145 A 4/1932 Bartlett

1,855,987 A 4/1932 Rammer

1,952,698 A 3/1934 Willem

D99,590 S 5/1936 Torongo

D103,190 S * 2/1937 Stanley D28/8.1

D127,285 S 5/1941 Siemund

D131,278 S 2/1942 Voorhis

2,481,691 A 9/1949 Schaub

3,017,275 A 1/1962 Coulter

3,071,476 A 1/1963 Werft et al.

3,267,512 A 8/1966 Wiley

D206,036 S 10/1966 Meeker

D206,429 S 12/1966 Eckelman et al.

3,324,551 A 6/1967 Reinhold et al.

3,410,699 A 11/1968 Leo

D213,074 S 12/1968 Griffith et al.

3,458,268 A 7/1969 Wozab et al.

D224,077 S 7/1972 Duvall

3,939,522 A 2/1976 Shimizu

D239,215 S 3/1976 Miller

3,976,796 A 8/1976 Peters

4,149,815 A 4/1979 Kawam

4,215,104 A 7/1980 David et al.

4,353,887 A 10/1982 Hess et al.

D296,193 S * 6/1988 Keeler D9/435

4,866,806 A 9/1989 Bedford

D303,895 S 10/1989 Baus

D310,130 S 8/1990 Van Kooten

D320,494 S 10/1991 Cederroth et al.

5,088,136 A * 2/1992 Stryker A47C 27/146 5/81.1 R

D330,149 S 10/1992 Weimer

5,312,197 A 5/1994 Abramson

D361,077 S 8/1995 Jamison

D366,380 S * 1/1996 Kelly D6/596

D372,486 S 8/1996 Morris

D375,181 S 11/1996 Tourney et al.

5,776,533 A 7/1998 Okamoto et al.

5,855,937 A 1/1999 Okamoto et al.

D411,111 S 6/1999 Damion et al.

6,168,434 B1 1/2001 Boehm-Van

D485,942 S 1/2004 Mcleish

D506,587 S 6/2005 Armaly

D540,182 S 4/2007 Weaver

D545,844 S * 7/2007 Kroeker D15/5

D551,825 S 9/2007 Nutting

D639,929 S 6/2011 Barford

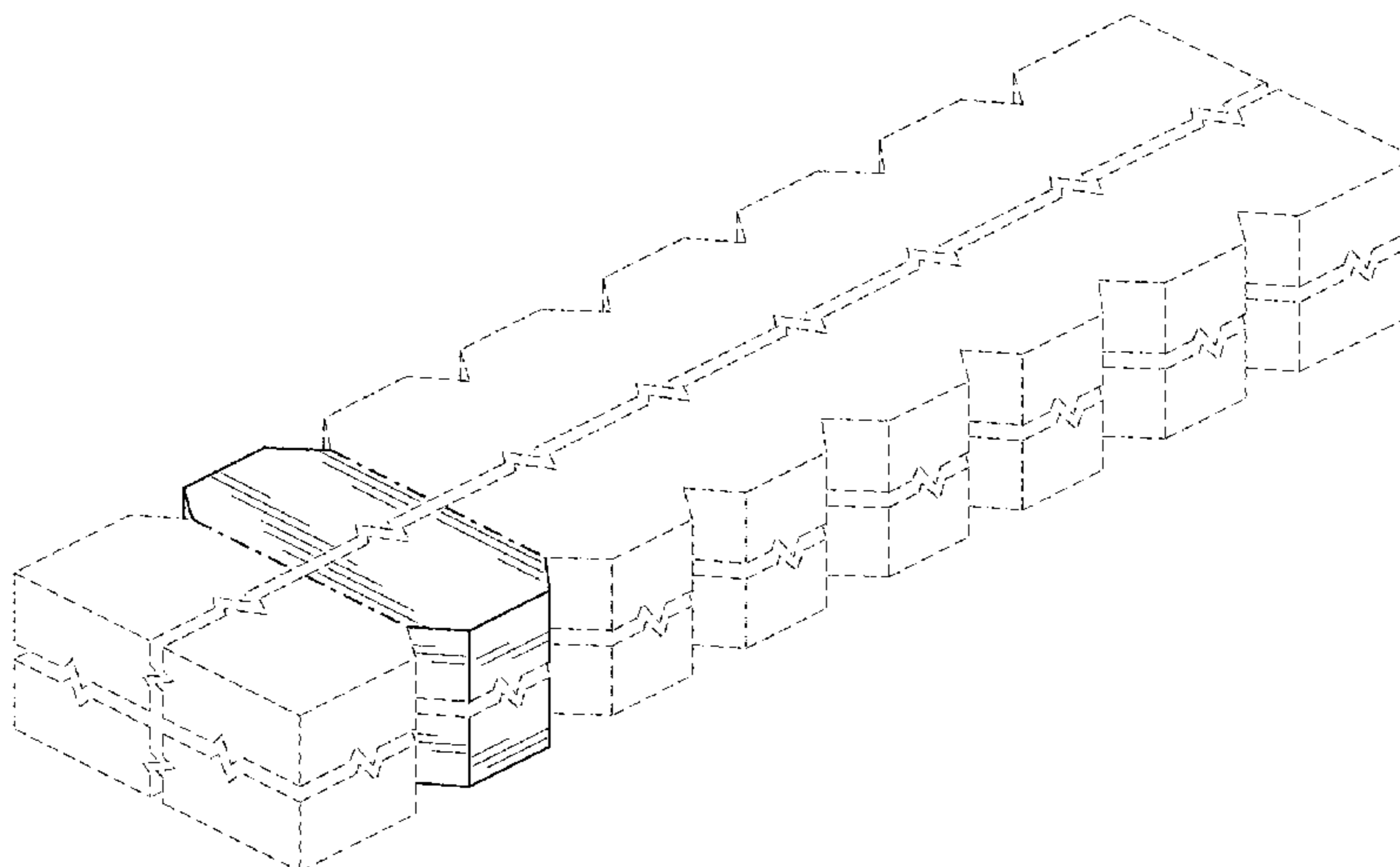
D659,470 S 5/2012 Narwankar et al.

D666,286 S 8/2012 Chery

8,273,399 B2 9/2012 Bartkowska et al.

8,584,686 B2 11/2013 Polanish

8,776,729 B2 7/2014 Koo et al.



D713,741 S * 9/2014 Wilmers D9/761
 D742,491 S 11/2015 Yamaguchi
 D742,497 S 11/2015 D'Amico et al.
 D748,770 S 2/2016 Hanna
 D749,203 S 2/2016 D'Amico et al.
 D760,886 S 7/2016 Peterson et al.
 D762,294 S 7/2016 Hanna
 D768,946 S 10/2016 Anderson
 D784,651 S 4/2017 Loacker
 D785,466 S 5/2017 Son et al.
 D792,193 S 7/2017 Ullbors
 D793,868 S * 8/2017 Kim D9/756
 D801,623 S 11/2017 Wang
 D813,321 S * 3/2018 Zaki D21/662
 D814,727 S 4/2018 Wehrle
 D815,461 S * 4/2018 Christmas D6/605
 D836,881 S 1/2019 Raub
 D845,089 S 4/2019 Williams
 D866,623 S 11/2019 Fenske
 D869,116 S 12/2019 Burger et al.
 D869,117 S * 12/2019 Cody D1/100
 D871,016 S 12/2019 Burger et al.
 D899,726 S 10/2020 Burger et al.
 D902,939 S * 11/2020 Chu D14/458
 D918,526 S 5/2021 Cody et al.
 2003/0017248 A1 1/2003 Gray
 2003/0126831 A1 7/2003 Altvater et al.
 2005/0123663 A1 6/2005 White et al.
 2008/0306598 A1 12/2008 Hansen et al.
 2009/0190866 A1 7/2009 Hughes
 2012/0024887 A1 2/2012 Heinze
 2012/0040078 A1 2/2012 Narwankar et al.
 2012/0294663 A1 11/2012 Papavero et al.
 2015/0274409 A1 10/2015 Nachbagauer et al.
 2015/0320072 A1 11/2015 Button et al.
 2017/0238572 A1 8/2017 Danenberg et al.
 2020/0060218 A1 2/2020 Burger et al.

FOREIGN PATENT DOCUMENTS

CN 301699053 10/2011
 EP 0206674 A2 12/1986
 EP 1114580 A2 7/2001
 EP 2782441 B1 3/2017
 FR 2690310 A1 10/1993
 GB 190411615 A 4/1905
 GB 190609218 A 6/1907
 GB 514618 A 11/1939
 WO 2013190265 A1 12/2013

OTHER PUBLICATIONS

International Preliminary Report on Patentability received for International Application No. PCT/US2019/047534, dated Mar. 4, 2021.
 Adekola, "Influence of Food Extruder Die Dimensions on Extruded Products Expansion", Journal of Advances in Agricultural Science and Technology; <<http://watchpub.org/jaast/issues/2014/october/pdf/Adekola.pdf>>, Oct. 29, 2014, pp. 052-058.
 BOC—A Member of the Linde Grp., "Beacuse we love good food. Frezihng and cooling technology for the food industry.", <https://www.boc-gas.com.au/en/images/BOC%20Freezing%20and%20Cooling%20brochure_tcm351-68091.pdf>, 2011, 8 pages.
 Clay King, "North Star Dies", www.clay-king.com/clay_extruders/north_star_dies.html, Apr. 1, 2013, 1 page.

Clextral, "Dies", www.clextral.com/technologies-and-lines/equipment/the-die/, Oct. 29, 2013, 1 page.
 Fennema, "Cryogenic Freezing of Foods", University of Wisconsin at Madison, Madison, Wisconsin; Plenum Press; Retrieved from Internet URL: <https://link.springer.com/content/pdf/10.1007/978-1-4613-4039-3_89.pdf>, 1978, 9 pages.
 Japan, "Butter Stick", Jun. 28, 2018, 1 page.
 Jeremiah, Lester E. "Freezing Effects on Food Quality—Chapter 8—Freezing of Dairy Products", Boca Raton: CRC Press, <https://doi.org/10.1201/9780203755495>, 1996, 37 pages.
 Krause, et al., "The Effect of Refrigerated and Frozen Storage on Butter Flavor and Texture", J. Dairy Sci. vol. 91 No. 2, 2008, pp. 455-465.
 Marjon Ceramics, "Extruder", www.marjonceramics.com/pages/Product/EXTRUDERS.html, Oct. 6, 2011, 1 page.
 Nahid, et al., "Modelling the Freezing of Butter", International Journal of Refrigeration. vol. 31, Issue 1, Retrieved from Internet URL: <<https://www.sciencedirect.com/science/article/pii/S0140700707001491>>, Jan. 2008, pp. 152-160.
 PCT, "International Search Report and Written Opinion", App. No. PCT/US2019/047534, dated Dec. 23, 2019, 10 pages.
 Quora, "What is the Standard Weight of a Stick of Butter in the United States?", <<https://www.quora.com/What-is-the-standard-weight-of-a-stick-of-butter-in-the-United-States>>, Jun. 11, 2012, 4 pages.
 Rahman, "Handbook of Food Preservation", Second Edition; CRC Press; <http://www.cold.org.gr/library/downloads/Docs/Handbook%20of%20Food%20Preservation.PDF>, 2007, 33 pages.
 SPX, "Cold Extrusion of Butter", Gerstenberg Schroder; <http://www.spxflow.com/en/assets/pdf/GS_cold_extrusion_of_butter_07_12_gb.pdf>, Jul. 2012, 2 pages.

* cited by examiner

Primary Examiner — Katie Jane Stoffko

(74) Attorney, Agent, or Firm — Dorsey & Whitney LLP

(57) CLAIM

The ornamental design for a butter stick, as shown and described.

DESCRIPTION

FIG. 1 is a top, front and left side perspective view of a butter stick;
 FIG. 2 is a top plan view thereof, the bottom plan view being a mirror image thereof;
 FIG. 3 is a front elevation view thereof, the bottom plan view being a mirror image thereof; and,
 FIG. 4 is a left side elevation view, the right side elevation view being a mirror image thereof.
 The evenly-spaced broken lines in FIGS. 1-4 illustrate portions of the butter stick that form no part of the claimed design. The dot-dash broken lines in FIGS. 1-3 illustrate the boundary of the claimed design which forms no part thereof. Any portion of the article between those breaks forms no part of the claimed design.

1 Claim, 3 Drawing Sheets

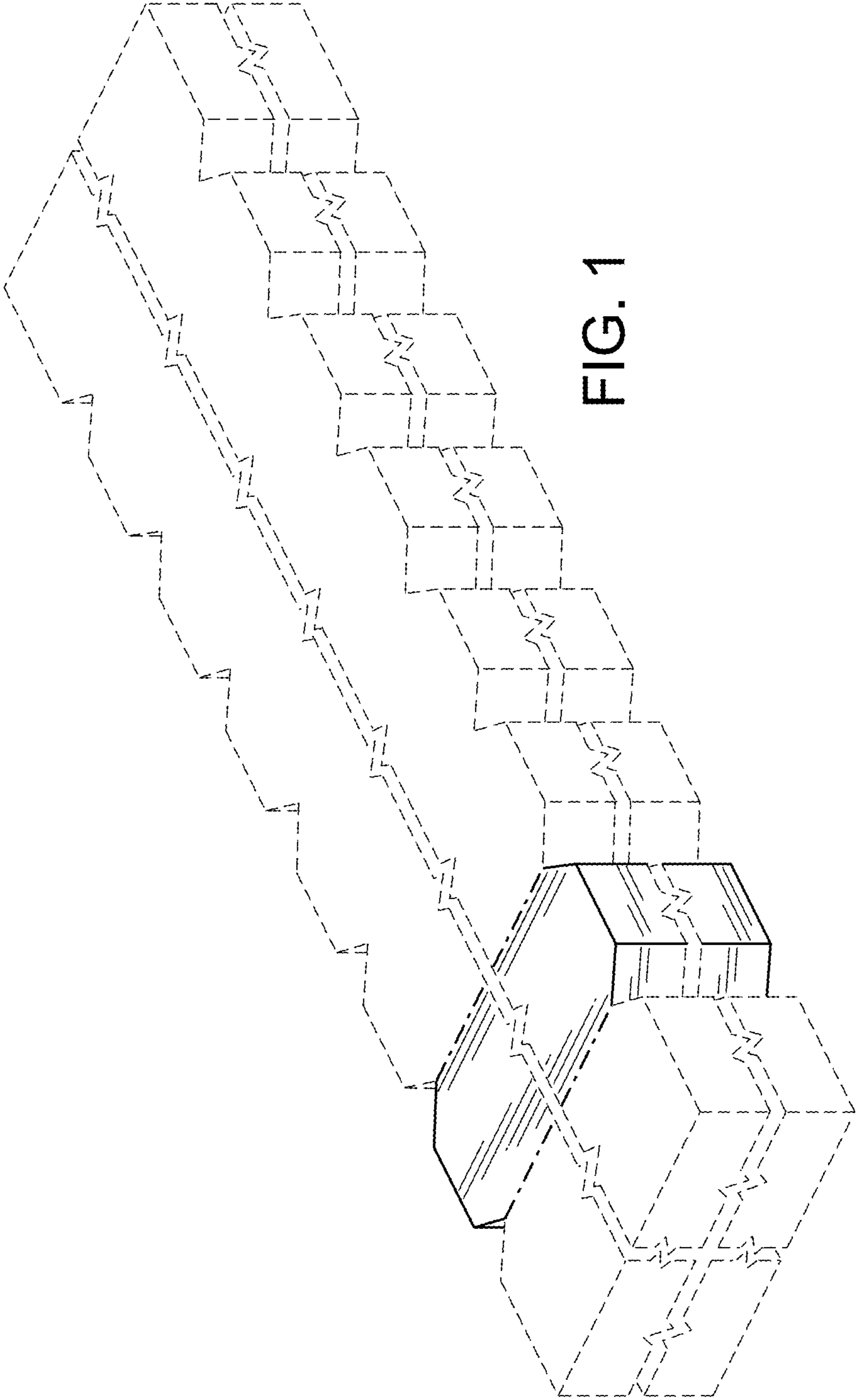


FIG. 1

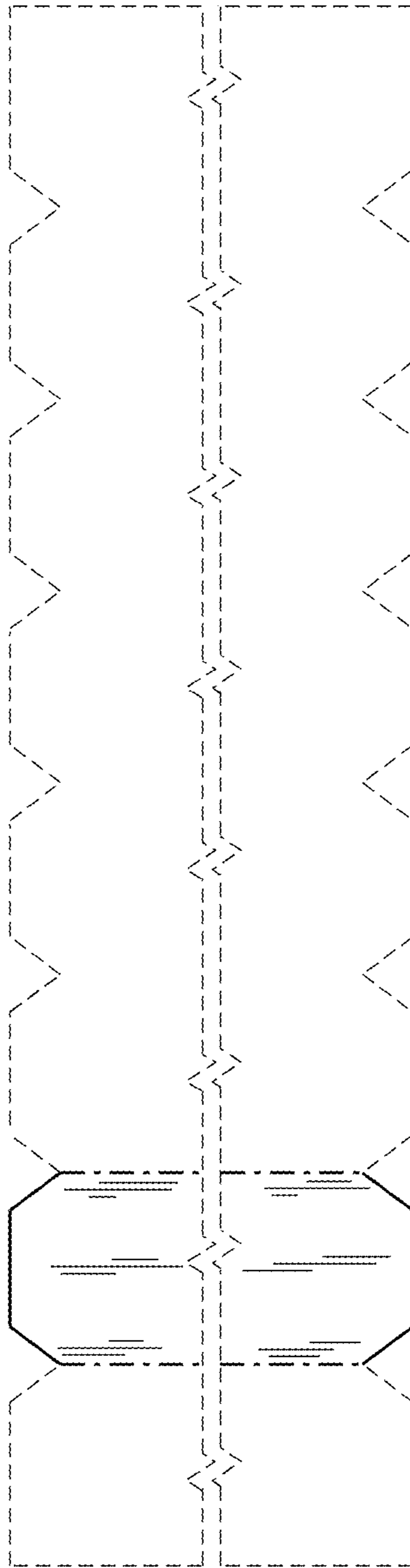


FIG. 2

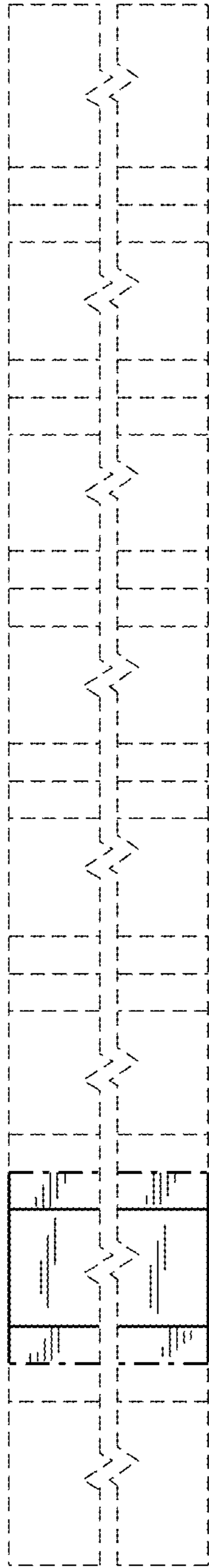


FIG. 3

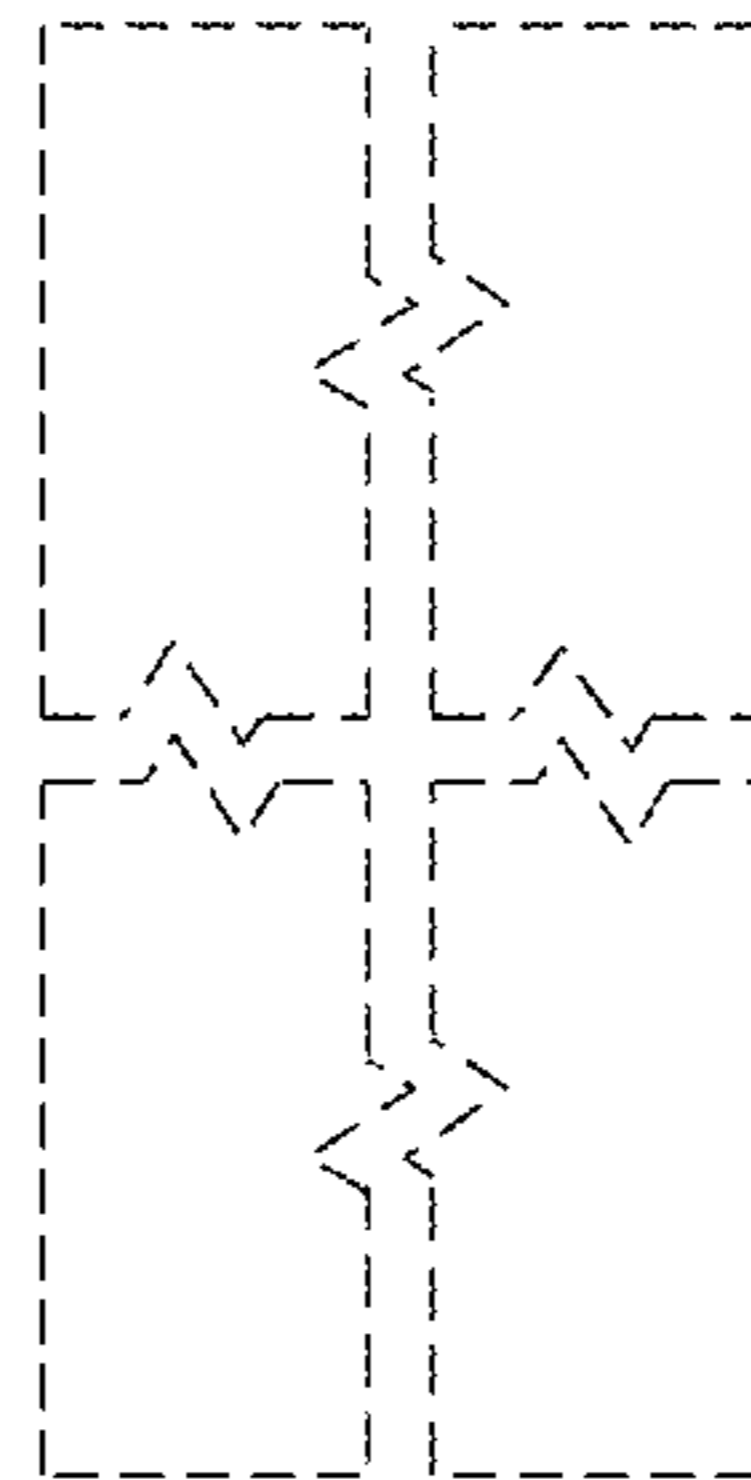


FIG. 4