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(12) **United States Design Patent** (10) **Patent No.:** **US D1,024,752 S**
LeMahieu et al. (45) **Date of Patent:** **** Apr. 30, 2024**

(54) **TOILET SEAT HINGE**
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(**) Term: **15 Years**
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(51) **LOC (14) Cl.** **08-06**
(52) **U.S. Cl.**
USPC **D8/326**
(58) **Field of Classification Search**
USPC D8/349, 354, 380, 373, 323, 326;
D23/311

www.richelieu.com/us/en/category/hinges-slides-and-opening-systems/
opening-systems/1037042 (Year: 2015)*
(Continued)

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(57) **CLAIM**
We claim the ornamental design for a toilet seat hinge, as
shown and described.

DESCRIPTION

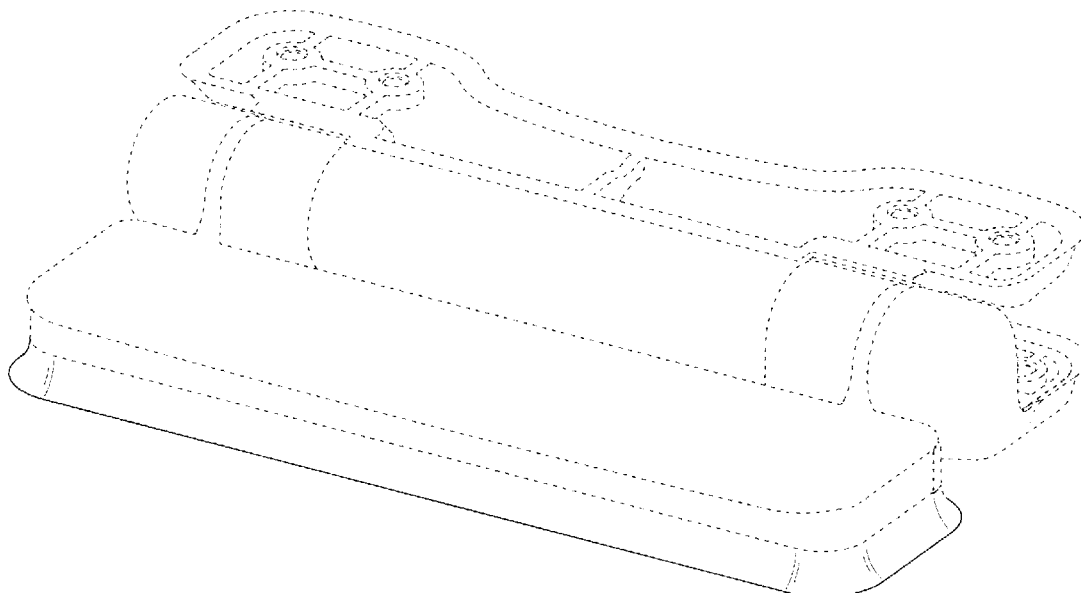
FIG. 1 is a first perspective view of a toilet seat hinge
according to one embodiment.
FIG. 2 is a second perspective view of the toilet seat hinge
of FIG. 1.
FIG. 3 is a third perspective view of the toilet seat hinge of
FIG. 1.
FIG. 4 is a fourth perspective view of the toilet seat hinge of
FIG. 1.
FIG. 5 is a first side view of the toilet seat hinge of FIG. 1.
FIG. 6 is a second side view of the toilet seat hinge of FIG.
1.
FIG. 7 is a third side view of the toilet seat hinge of FIG. 1.
FIG. 8 is a fourth side view of the toilet seat hinge of FIG.
1.
FIG. 9 is a top view of the toilet seat hinge of FIG. 1; and,
FIG. 10 is a bottom view of the toilet seat hinge of FIG. 1.
Portions of the toilet seat hinge shown in evenly-spaced
broken lines are included for the purpose of illustrating
environment and form no part of the claimed design.
Dash-dot broken lines are included for the purpose of
illustrating a boundary of the claimed design and form no
part of the claimed design.

(56) **References Cited**
U.S. PATENT DOCUMENTS
1,882,274 A * 10/1932 Campus A47K 13/26
4/236
3,261,029 A * 7/1966 Beneke, Jr. A47K 13/12
16/229
(Continued)

FOREIGN PATENT DOCUMENTS
EP 2189092 A1 5/2010
FR 2297026 A1 8/1976
WO 2008136914 A2 11/2008

OTHER PUBLICATIONS
Cabinet mounting plate for Aventos HK-XS, posted Mar. 15, 2017
[online], [retrieved Nov. 20, 2023]. Retrieved from internet, https://

1 Claim, 10 Drawing Sheets



(58) **Field of Classification Search**
 CPC A47K 13/12; A47K 13/26
 See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,447,169 A * 6/1969 Watson A47K 13/12
 4/240
 3,506,983 A 4/1970 Coggins
 D237,969 S * 12/1975 Firdmann D23/311
 4,133,061 A 1/1979 Hurd
 D261,800 S * 11/1981 Deconinck D23/311
 4,319,365 A 3/1982 Bemis et al.
 D291,348 S * 8/1987 Harrison D23/311
 4,729,134 A 3/1988 Hillebrand et al.
 5,193,228 A 3/1993 Murasawa et al.
 D342,566 S * 12/1993 Adamowski D23/311
 D363,116 S * 10/1995 Skoda D23/311
 5,933,875 A 8/1999 Hulsebus et al.
 6,070,295 A 6/2000 Hulsebus
 6,243,884 B1 6/2001 Simonson
 6,381,762 B1 5/2002 Moser
 D472,621 S * 4/2003 Jamshasb D23/311
 D534,256 S * 12/2006 Lomeli D23/309
 7,203,975 B2 4/2007 Vierkant, III
 D558,316 S * 12/2007 Pontipiedra D23/311
 7,389,549 B2 6/2008 Vierkant, III
 7,647,652 B1 * 1/2010 Baker A47K 13/12
 4/236
 8,122,523 B2 2/2012 Li
 8,205,274 B2 6/2012 Lin et al.
 8,214,931 B2 7/2012 Bemis et al.
 8,214,932 B2 7/2012 Shannon
 8,763,168 B2 7/2014 Zhou
 8,943,618 B2 2/2015 Dundas et al.
 9,107,548 B2 8/2015 Hand et al.
 9,635,987 B2 5/2017 Hand et al.
 9,976,293 B2 5/2018 Bickerstaffe et al.
 9,986,878 B2 6/2018 Stelter et al.
 10,064,524 B2 9/2018 Eilmus et al.
 10,106,969 B2 10/2018 Halloran et al.
 10,125,894 B2 11/2018 Ji et al.
 10,188,246 B1 * 1/2019 Ciotic A47K 13/307
 10,194,777 B2 2/2019 Laundre
 10,299,639 B2 5/2019 Stevenson et al.
 D850,965 S * 6/2019 Laurans D10/121
 D853,540 S * 7/2019 Snyder D23/311
 10,337,223 B2 7/2019 Murphy
 10,352,031 B2 7/2019 Muellenbach
 10,414,540 B2 9/2019 Meicher et al.
 10,448,762 B2 10/2019 Murphy et al.
 10,450,733 B2 10/2019 Luetzgen et al.
 10,463,209 B1 11/2019 Laundre
 10,487,490 B2 11/2019 Laundre et al.
 10,544,574 B2 1/2020 Kuru et al.
 10,575,685 B2 3/2020 Szemetylo et al.
 10,582,817 B2 3/2020 Laundre
 10,610,068 B2 4/2020 Laundre et al.
 10,610,069 B2 4/2020 Laundre
 10,663,938 B2 5/2020 Rexach et al.

10,738,448 B2 8/2020 Swart et al.
 10,745,898 B2 8/2020 Halloran et al.
 10,851,532 B2 12/2020 Denzin et al.
 10,887,125 B2 1/2021 Rexach et al.
 10,912,431 B2 2/2021 Grin et al.
 11,202,537 B1 * 12/2021 Wang A47K 13/10
 2004/0064876 A1 * 4/2004 Lu A47K 13/12
 4/234
 2006/0064808 A1 3/2006 Vierkant, III
 2006/0156458 A1 7/2006 Myers
 2006/0218710 A1 10/2006 Furukawa et al.
 2007/0017013 A1 1/2007 Pronovost
 2007/0250996 A1 11/2007 Li
 2008/0271230 A1 * 11/2008 Laundre A47K 13/26
 4/234
 2010/0223718 A1 9/2010 Andersen
 2013/0067647 A1 3/2013 Stelter et al.
 2016/0037982 A1 2/2016 Zhou
 2017/0058500 A1 3/2017 Garrels et al.
 2018/0042434 A1 * 2/2018 Fielding, Jr. A47K 13/10
 2018/0064300 A1 * 3/2018 Chen A47K 13/12
 2019/0045984 A1 2/2019 Murphy
 2019/0086890 A1 3/2019 Bradley et al.
 2019/0087510 A1 3/2019 Rexach et al.
 2019/0120809 A1 4/2019 Rexach et al.
 2019/0146438 A1 5/2019 Rexach et al.
 2019/0257065 A1 8/2019 Schibur et al.
 2019/0313863 A1 10/2019 Laundre
 2019/0323222 A1 10/2019 Muellenbach
 2019/0335963 A1 11/2019 Delaney
 2019/0373152 A1 12/2019 Tan et al.
 2020/0002930 A1 1/2020 Luetzgen et al.
 2020/0107681 A1 4/2020 Laundre
 2020/0157792 A1 5/2020 Kuru et al.
 2020/0187723 A1 6/2020 Szemetylo et al.
 2020/0224399 A1 7/2020 Garrels et al.
 2020/0253432 A1 8/2020 Slothower et al.
 2020/0407962 A1 12/2020 Luetzgen et al.
 2021/0054608 A1 2/2021 Denzin et al.
 2021/0106191 A1 4/2021 Chung et al.
 2021/0321838 A1 10/2021 Slothower et al.
 2021/0378464 A1 12/2021 Laundre
 2023/0218129 A1 * 7/2023 LeMahieu A47K 13/12

OTHER PUBLICATIONS

Mexican Office Action for Application No. MX/F/2022/001906, dated Sep. 13, 2023 (6 pages).
 International Search Report and Written Opinion for Application No. PCT/US2023/010164 dated Jun. 23, 2023 (13 pages).
 Kohler, "Kohler Replacement Hinge Assembly," <https://www.build.com/product/summary/57530?uid=1845618&jmtest=gg-gbav2_1845618&inv2=1&&source=gg-gba-pla_1845618!c6970301186!a77305318222!dc!ng&gclid=EAlaQobChMIrLDF37L19QIVshbUAR3S6wDkEAKYCSABEgLPYvD_BwE&gclid=aw.ds> web page visited Feb. 10, 2022.
 Kohler, "K-1109093-0 Hinge Assembly," <<https://www.us.kohler.com/us//productDetail/servicepasrt:621237/621237.htm>> web page visited Feb. 10, 2022.

* cited by examiner

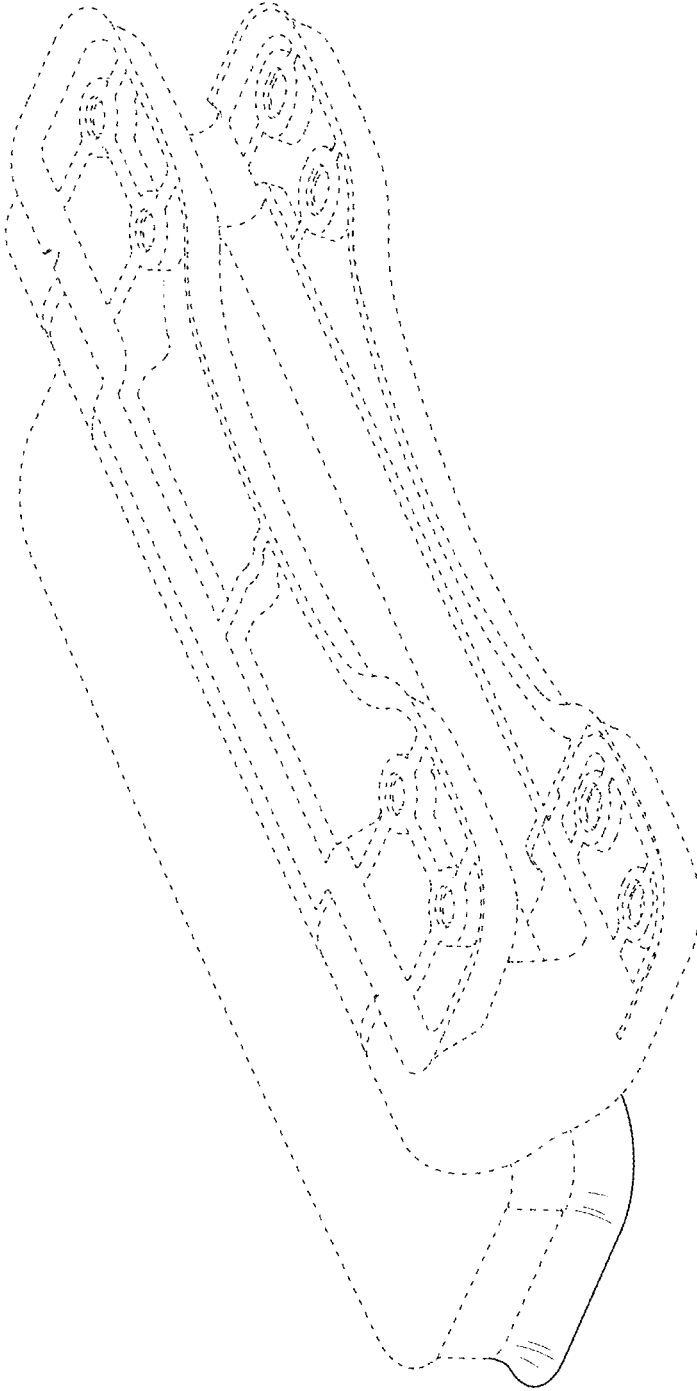


FIG. 1

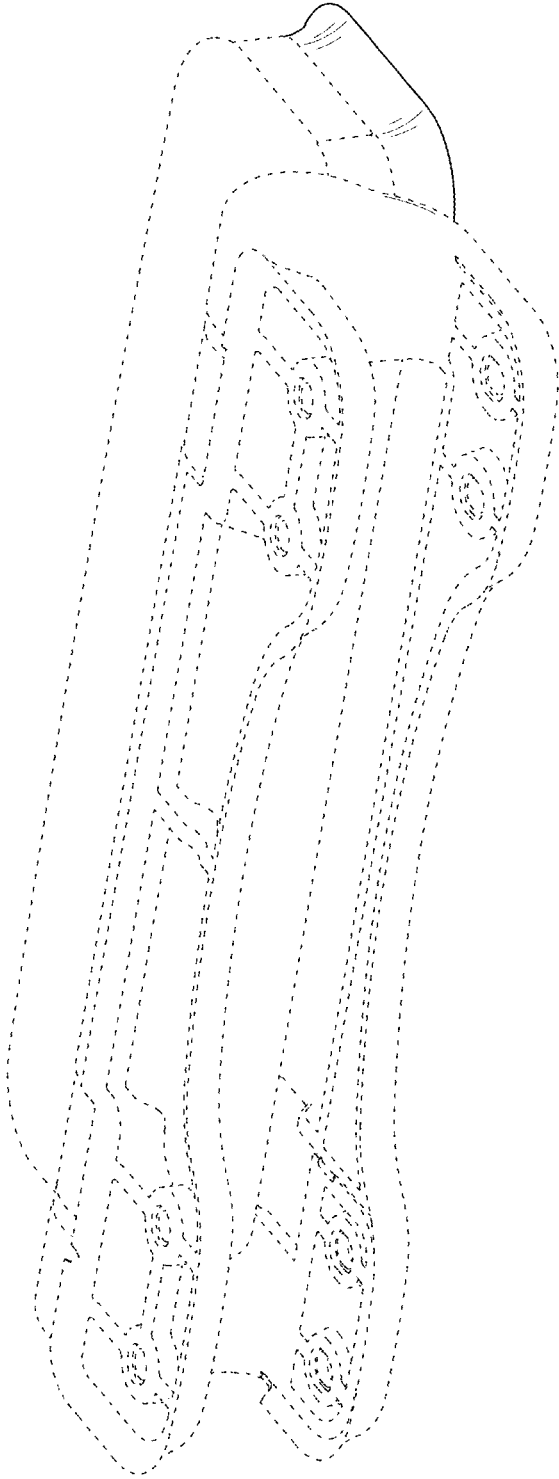


FIG. 2

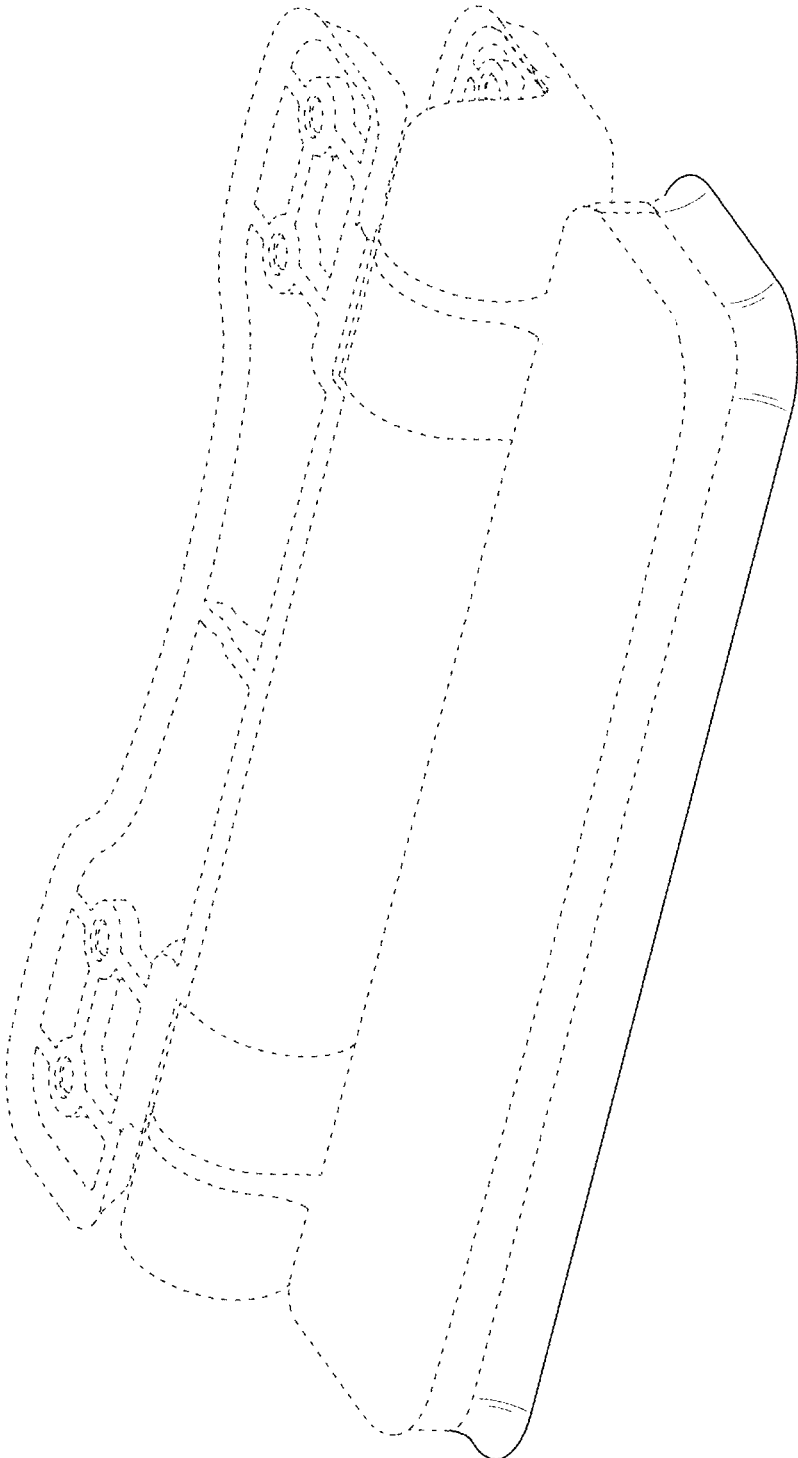


FIG. 3

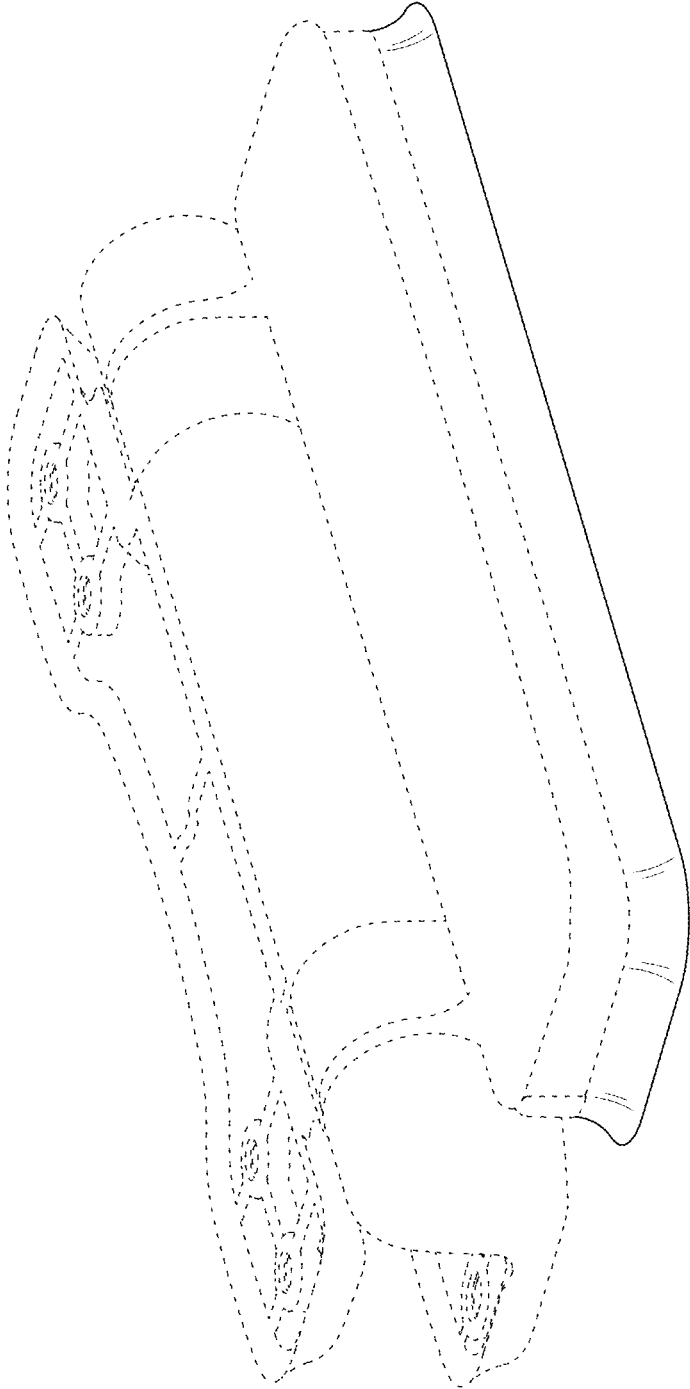


FIG. 4

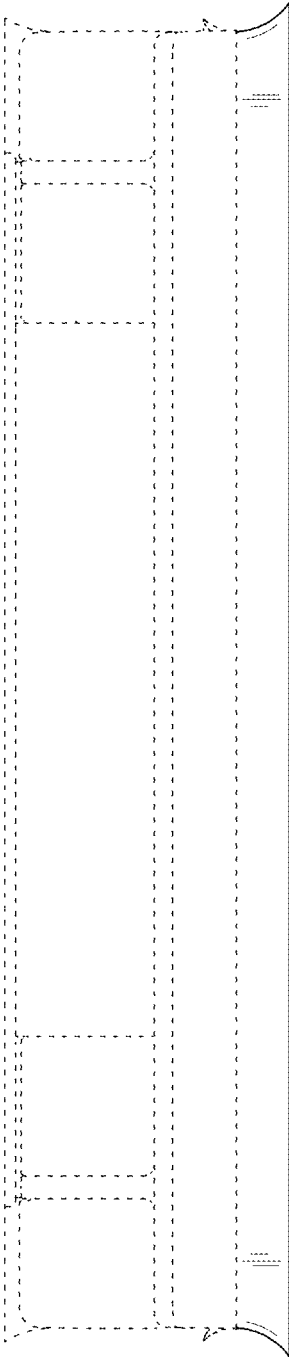


FIG. 5

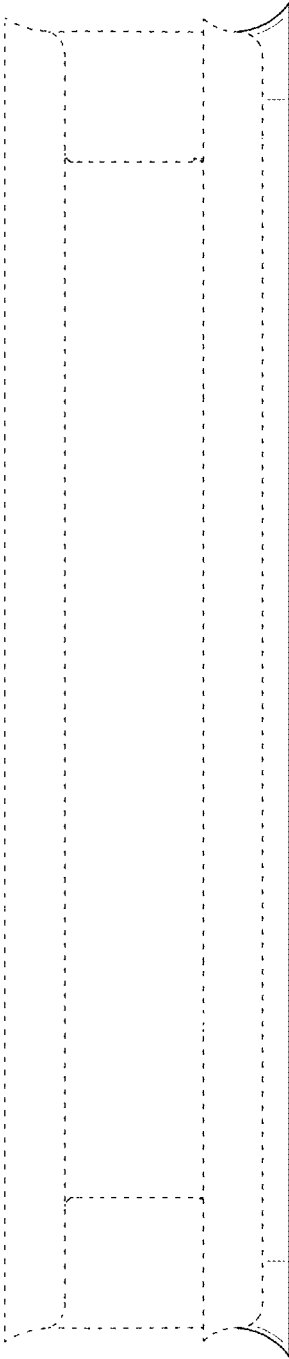


FIG. 6

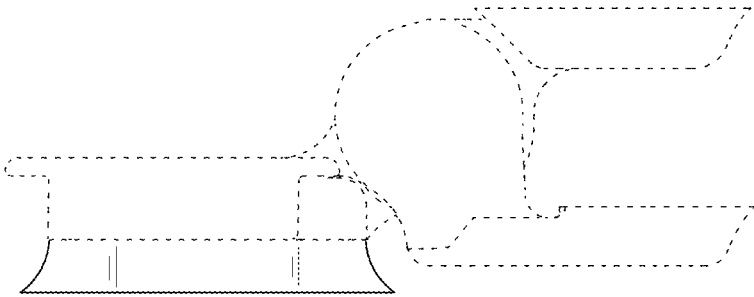


FIG. 7

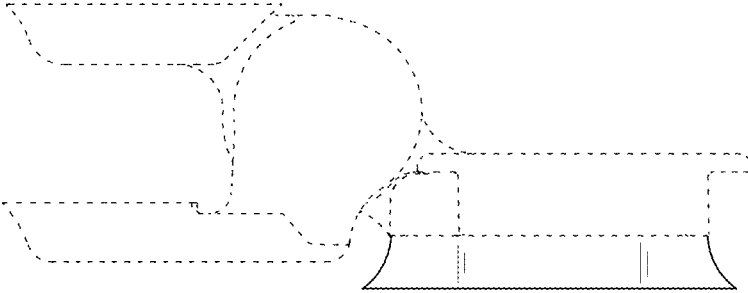


FIG. 8

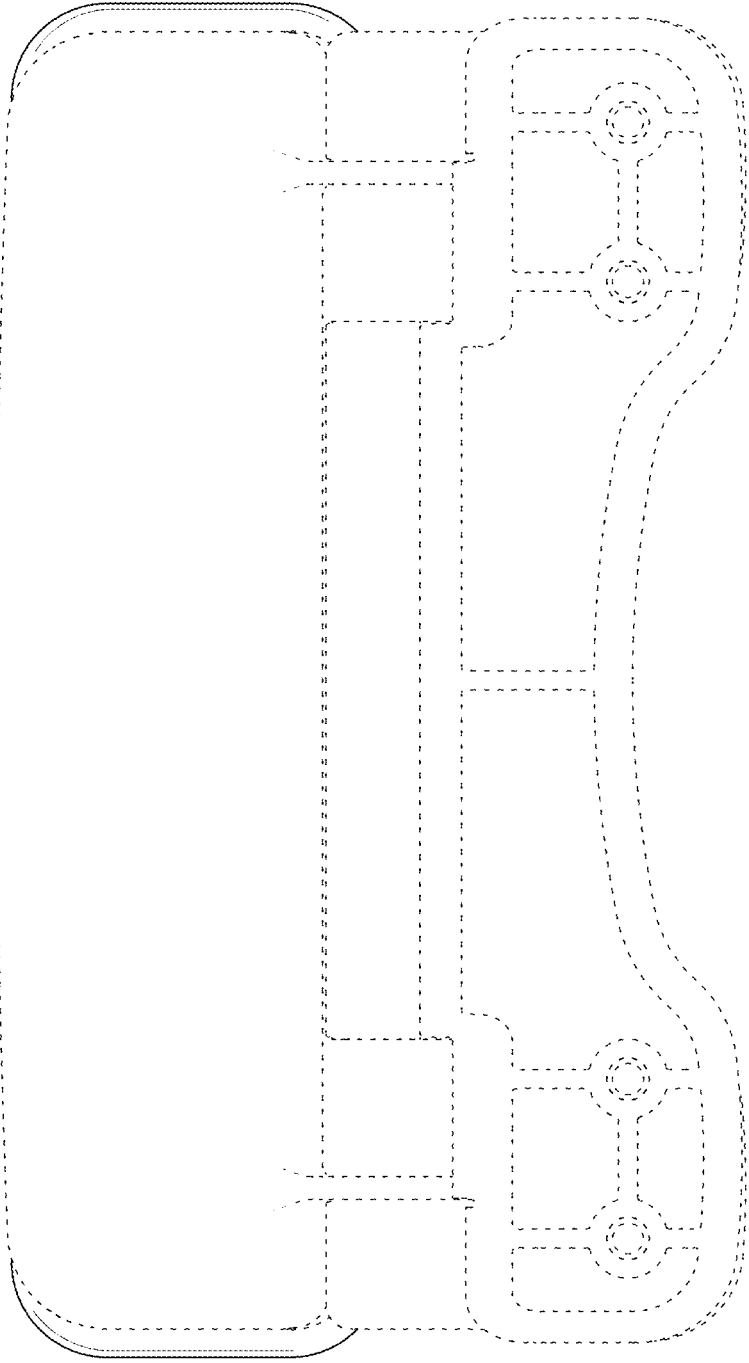


FIG. 9

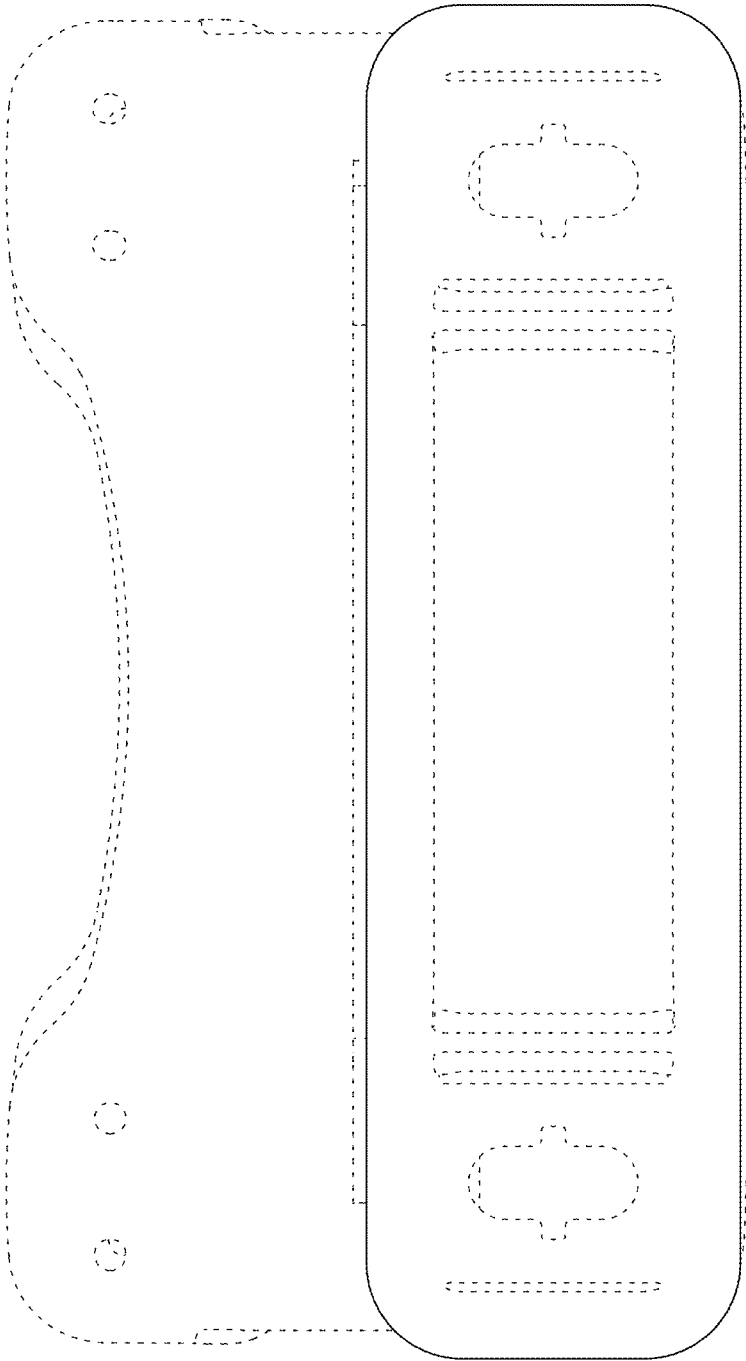


FIG. 10