

US00D864038S

(12) **United States Design Patent** (10) **Patent No.:** **US D864,038 S**
Miller et al. (45) **Date of Patent:** **** Oct. 22, 2019**

(54) **TRAILER REAR IMPACT GUARD**

(71) Applicant: **STI Holdings, Inc.**, Stoughton, WI (US)

(72) Inventors: **Daniel Patrick Miller**, Madison, WI (US); **Francis Steven Smidler**, Stoughton, WI (US)

(73) Assignee: **STI Holdings, Inc.**, Stoughton, WI (US)

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

(21) Appl. No.: **29/607,993**

(22) Filed: **Jun. 19, 2017**

Related U.S. Application Data

(63) Continuation of application No. 29/529,050, filed on Jun. 3, 2015, now Pat. No. Des. 790,407.

(51) **LOC (12) Cl.** **12-16**

(52) **U.S. Cl.**
USPC **D12/106**

(58) **Field of Classification Search**
USPC D12/19, 129, 100-106, 111, 112, 162;
D21/425, 435; D34/21-26, 12, 16-19
CPC B62D 35/02; B62D 35/00; A62B 3/005;
B60P 3/1033; B60P 3/10
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

3,578,358 A	5/1971	Reynolds
3,698,609 A	10/1972	Lund
3,871,695 A	3/1975	Koenig
4,359,239 A	11/1982	Eggert
5,507,546 A	4/1996	Holley
5,632,518 A	5/1997	Kendall
5,673,953 A	10/1997	Spease
D386,129 S	11/1997	Jantz

6,520,469 B1	2/2003	DiMauro
6,523,872 B2	2/2003	Breed
D503,838 S	4/2005	Archambault
7,086,674 B2	8/2006	Goertz
7,407,204 B2	8/2008	Eriksson et al.
7,498,686 B2*	3/2009	Capenos B60Q 1/0088 307/10.1
7,967,349 B2	6/2011	Puppini et al.
D658,594 S	5/2012	Neumann
D703,106 S	4/2014	Deighton
8,720,924 B2	5/2014	Ruehl
D763,484 S *	8/2016	Salami, Jr. D12/106
D778,787 S *	2/2017	Hackett D12/106
D785,506 S *	5/2017	Studebaker, Jr. D12/101
D790,407 S *	6/2017	Miller D12/106

(Continued)

OTHER PUBLICATIONS

“Crash Test #3” downloaded from <http://www.fem.unicamp.br/~impact/crashcrm.htm>, publicly available prior to Jun. 3, 2015 (2 pages).

(Continued)

Primary Examiner — Katrina A Betton
(74) *Attorney, Agent, or Firm* — Michael Best & Friedrich LLP

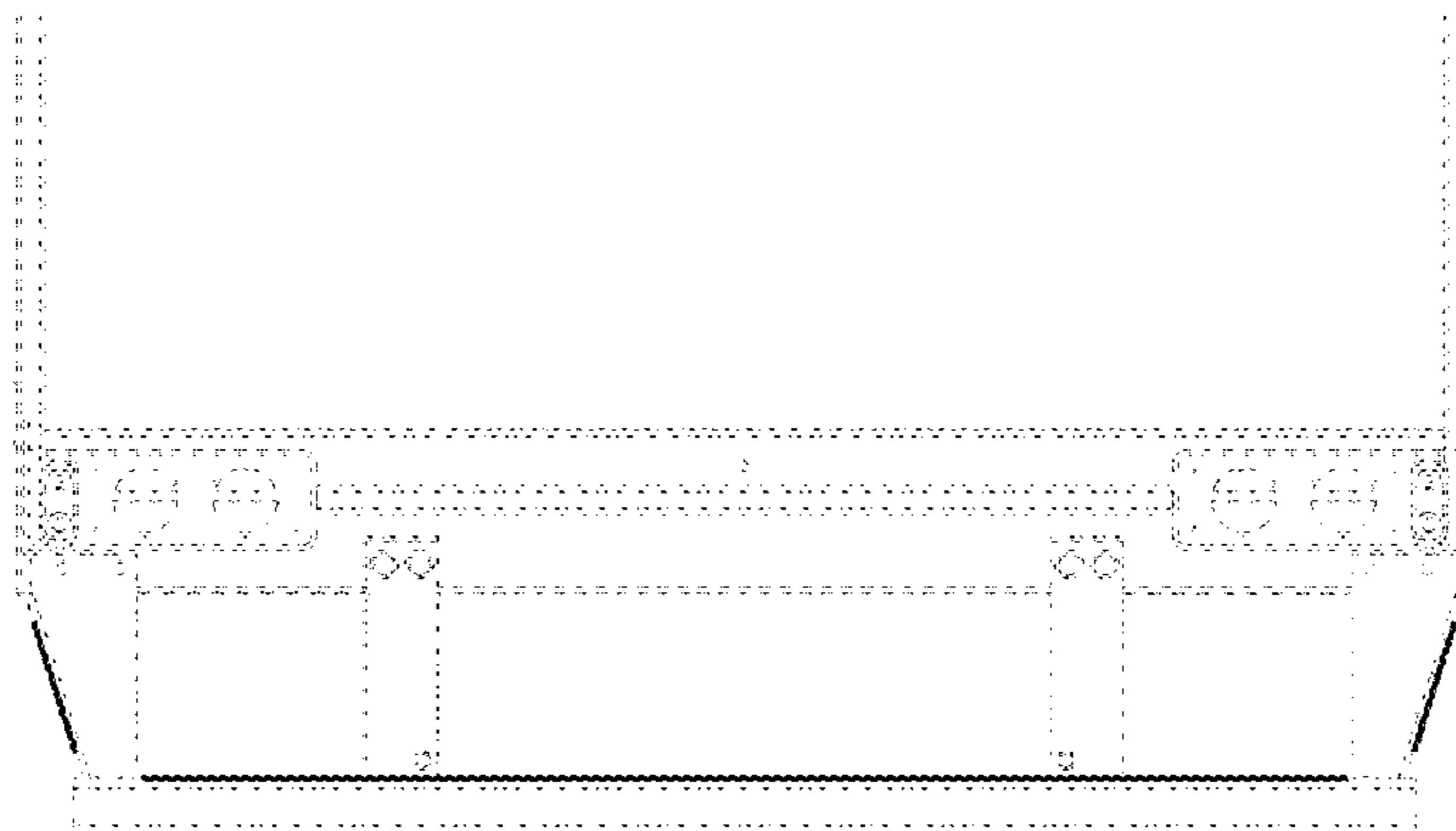
(57) **CLAIM**

We claim the ornamental design for a trailer rear impact guard, as shown and described.

DESCRIPTION

FIG. 1 is a perspective view of a trailer rear impact guard, embodying aspects of the invention; and, FIG. 2 is a rear view of the trailer rear impact guard of FIG. 1. The portions of the design shown in broken lines disclose environmental structure and form no part of the claimed design.

1 Claim, 2 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

9,771,040 B2* 9/2017 Miller B60R 19/24
 10,179,559 B2* 1/2019 Ghannam B62D 21/02
 2017/0050596 A1* 2/2017 Miller B60R 19/24

OTHER PUBLICATIONS

“Crash Test #2” downloaded from <http://www.fem.unicamp.br/~impact/articul.htm>, publicly available prior to Jun. 3, 2015 (2 pages).

“Crash Test #4” downloaded from <http://www.fem.unicamp.br/~impact/Intelligentunderrideguard.htm>, publicly available prior to Jun. 3, 2015 (2 pages).

“On guard: Safety gear on the back of truck trailers is improving,” downloaded from www.iihs.org/iihs/sr/statusreport/article/49/7/1, vol. 49, No. 7, Oct. 9, 2014 (3 pages).

“Refrigerated Boxes,” downloaded from <http://dynamictruck.com/fr/?page=products3>, publicly available prior to Jun. 3, 2015 (2 pages).

“Not good enough: Underride guards on big rigs can be lifesavers, but most leave passenger vehicle occupants at risk in certain crashes,” downloaded from <http://www.iihs.org/iihs/sr/statusreport/article/48/2/1>, vol. 48, No. 2, dated Mar. 14, 2013 (6 pages).

Auto Safety Expert, “Truck Underride Hazards,” downloaded from http://www.autosafetyexpert.com/defect_truckunderride.php, publicly available prior to Jun. 3, 2015 (2 pages).

Image downloaded from http://www.awjlaw.com/images/shutterstock_35651434.jpg, available Jun. 16, 2015.

AnnaLeah & Mary, Truck Safety, “The Future of Trucking; Who pays for the costs of safer roads?” downloaded from <http://annaleachmary.com/tag/underride-guards/> Jun. 5, 2015 (4 pages).

AnnaLeah & Mary, Truck Safety, “Truck Drivers: Please make sure your underride (rear impact) guards are in good shape!” downloaded from <http://annaleachmary.com/tag/underride-guards/> Jun. 2, 2015 (6 pages).

AnnaLeah & Mary, Truck Safety, “Underride Conversation with David Friedman, NHTSA Deputy Administrator,” downloaded from <http://annaleachmary.com/tag/underride-guards/> May 15, 2015 (3 pages).

AnnaLeah & Mary, Truck Safety, “Be a part of our team to promote safety & save lives,” downloaded from <http://annaleachmary.com/tag/underride-guards/> Apr. 30, 2015 (3 pages).

AnnaLeah & Mary, Truck Safety, “What Came After The AnnaLeah & Mary Stand Up for Truck Safety Petition?” downloaded from <http://annaleachmary.com/tag/underride-guards/> Mar. 8, 2015 (6 pages).

AnnaLeah & Mary, Truck Safety, “Help Us Design the Best Possible Underride Guard,” downloaded from <http://annaleachmary.com/tag/underride-guards/> Dec. 22, 2014 (5 pages).

AnnaLeah & Mary, Truck Safety, “The Passion of This Safety Advocate,” downloaded from <http://annaleachmary.com/tag/underride-guards/> Dec. 20, 2014 (2 pages).

AnnaLeah & Mary, Truck Safety, “Underride Guards; Let’s Move Forward in 2015” downloaded from <http://annaleachmary.com/tag/underride-guards/> Dec. 20, 2014 (2 pages).

AnnaLeah & Mary, Truck Safety, “IIHS Reports on New Crash Testing for Improved Underride Guards,” downloaded from <http://annaleachmary.com/tag/underride-guards/> Oct. 9, 2014 (2 pages).

* cited by examiner

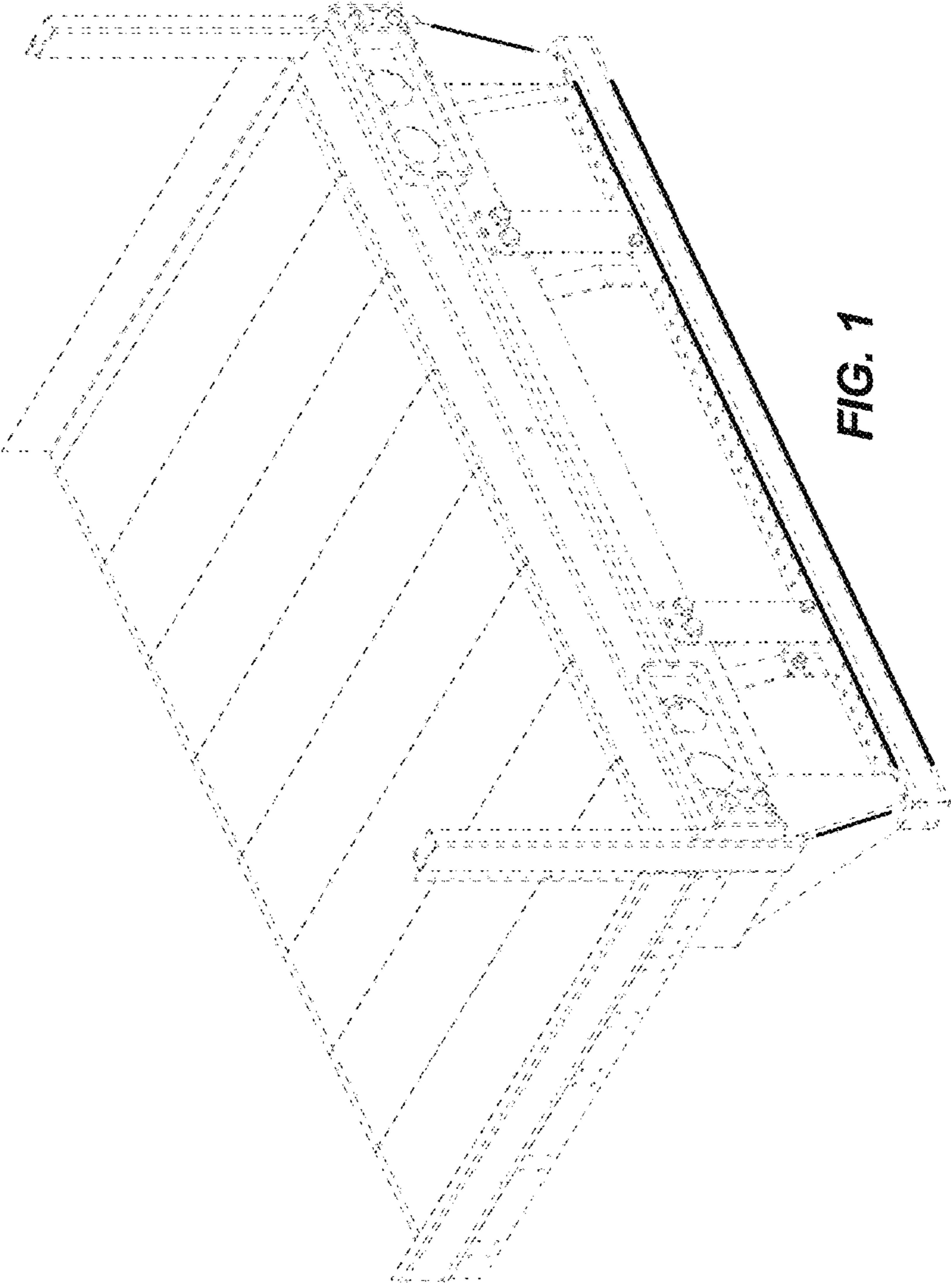


FIG. 1

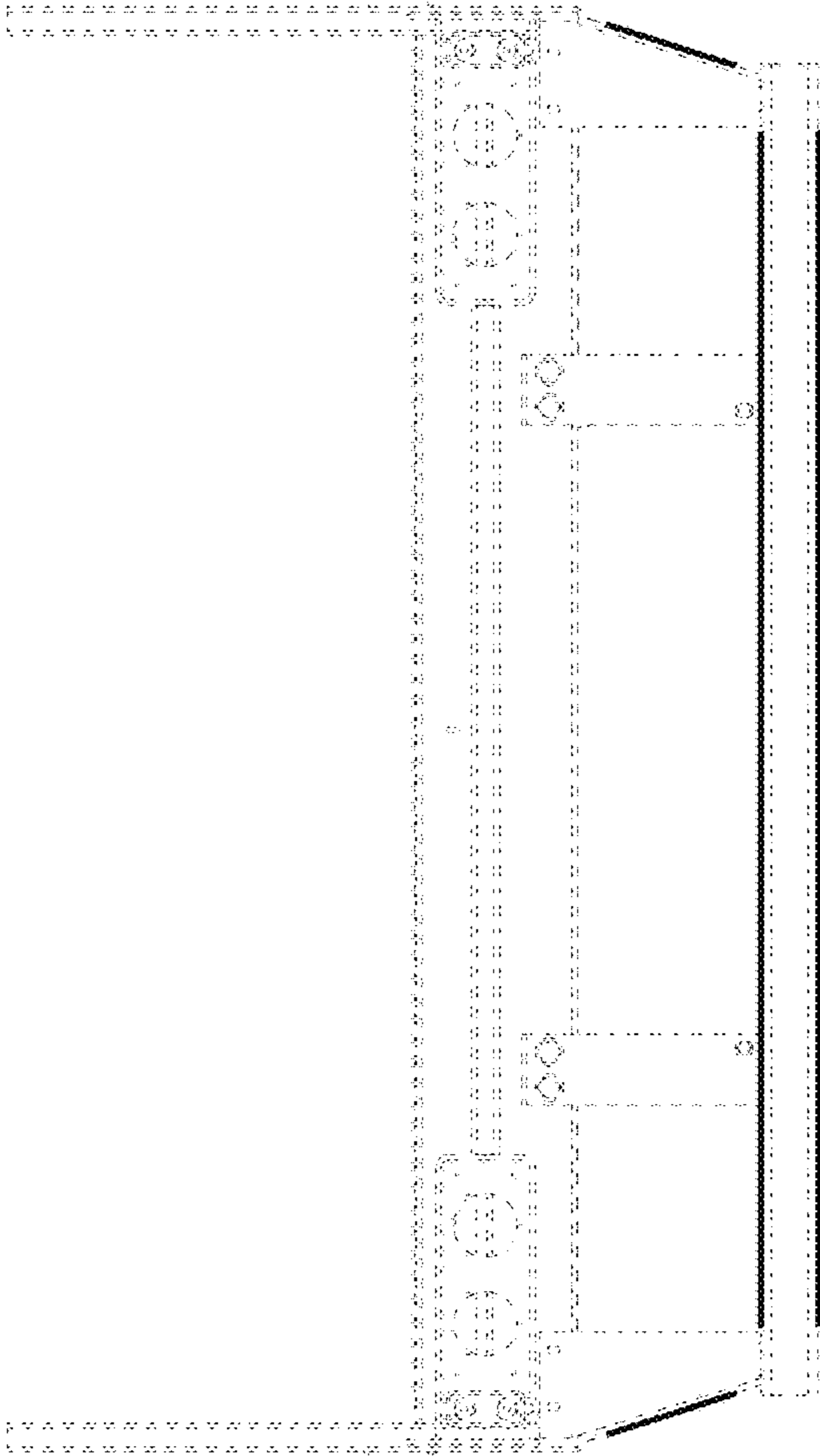


FIG. 2