



US00D809645S

(12) **United States Design Patent** (10) **Patent No.:** **US D809,645 S**
Poehlman et al. (45) **Date of Patent:** **** Feb. 6, 2018**

(54) **AIR INLET DAMPER**

(71) Applicant: **A. O. SMITH CORPORATION**,
Milwaukee, WI (US)
(72) Inventors: **Robert Frederick Poehlman**, Cudahy,
WI (US); **Janice Fitzgerald**, Mequon,
WI (US)
(73) Assignee: **A. O. SMITH CORPORATION**,
Milwaukee, WI (US)

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

(21) Appl. No.: **29/589,962**

(22) Filed: **Jan. 5, 2017**

Related U.S. Application Data

(62) Division of application No. 29/535,592, filed on Aug.
7, 2015, now Pat. No. Des. 779,650.

(51) **LOC (11) Cl.** **23-04**

(52) **U.S. Cl.**
USPC **D23/393**

(58) **Field of Classification Search**
USPC D13/139.2, 180; D23/323, 328, 333,
D23/335, 336, 337, 341, 352, 357, 370,
D23/385, 386, 388, 392, 393, 397, 399,
D23/400, 406, 411, 412, 413, 499
CPC E04F 17/08; F16L 3/26; F16L 9/22; F16K
1/221; F16K 1/443; F16K 31/122; F23L
11/005; F24H 1/205; F24H 9/0026; F24H
9/0031; F24H 9/2035; F23N 2025/22;
F23N 2035/18; F23N 2035/20
See application file for complete search history.

(56) **References Cited**

U.S. PATENT DOCUMENTS

1,173,484 A 2/1916 Clay
1,198,675 A 9/1916 Smythe
1,488,694 A 2/1923 Marks
1,720,789 A 7/1929 Heusser

(Continued)

OTHER PUBLICATIONS

Louvre Dampers, image post date Mar. 2010, site visited Jun. 11,
2016, (online), <<http://pumps.kerrpump.com/Asset/Damper.pdf>>.*
(Continued)

Primary Examiner — Kevin Rudzinski

Assistant Examiner — Sean D Lough

(74) *Attorney, Agent, or Firm* — Michael Best &
Friedrich LLP

(57) **CLAIM**

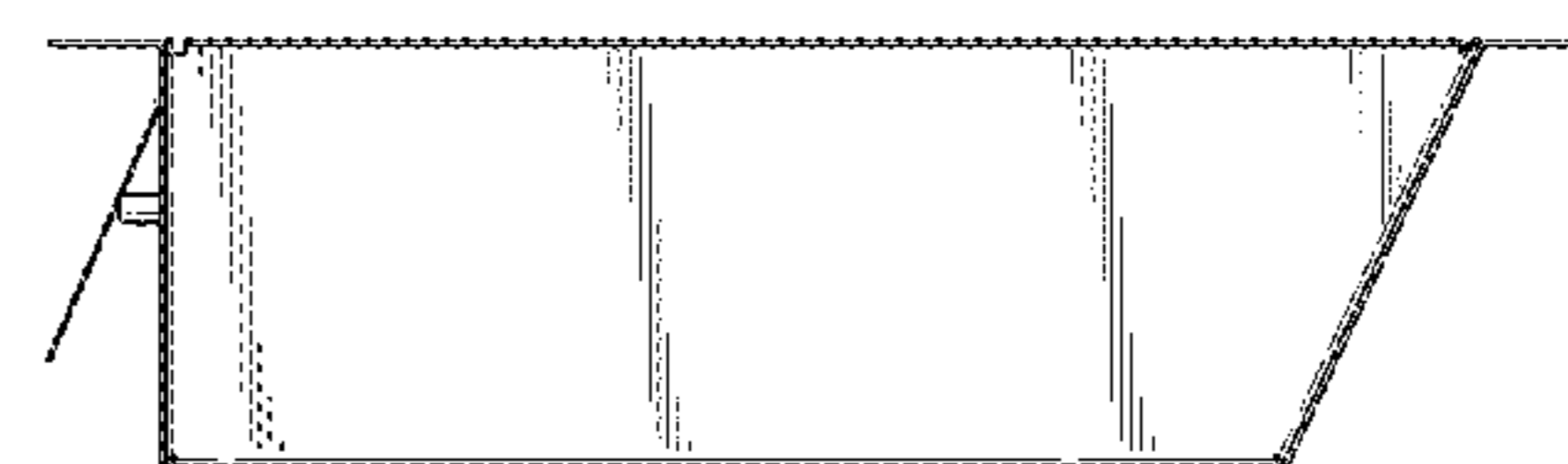
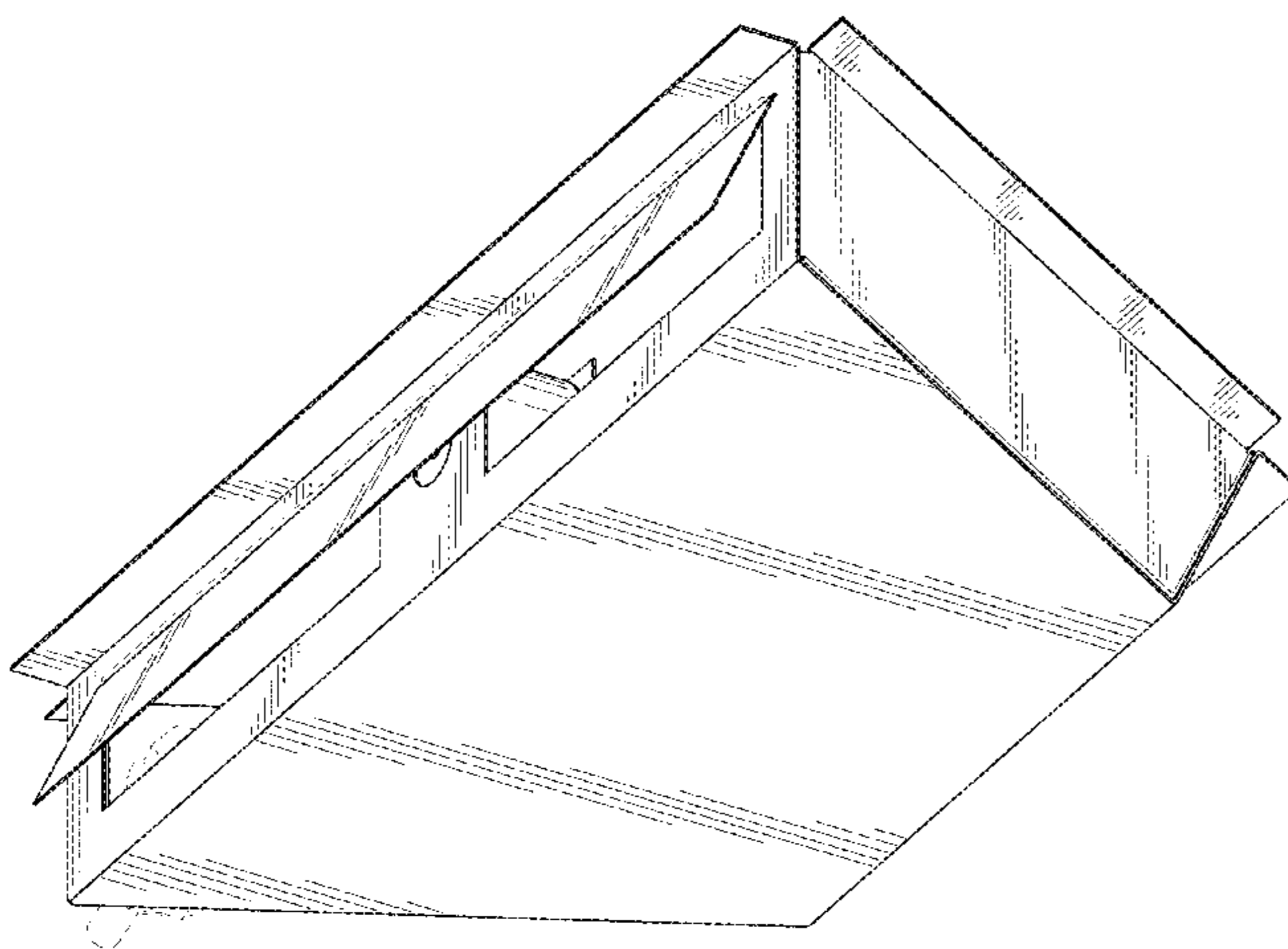
We claim the ornamental design for an air inlet damper, as
shown and described.

DESCRIPTION

FIG. 1 is a bottom perspective view of an air inlet damper
in an opened configuration showing the new design in a
position of use;
FIG. 2 is a right side view thereof;
FIG. 3 is a left side view thereof,
FIG. 4 is a rear view thereof;
FIG. 5 is a front view thereof;
FIG. 6 is a top view thereof;
FIG. 7 is a bottom view thereof;
FIG. 8 is a bottom perspective view of the air inlet damper
of FIG. 1 in a closed configuration showing the new design
in a second position of use;
FIG. 9 is a right side view thereof;
FIG. 10 is a left side view thereof,
FIG. 11 is a rear view thereof;
FIG. 12 is a front view thereof;
FIG. 13 is a top view thereof; and,
FIG. 14 is a bottom view thereof.

The broken lines present in all FIG. views illustrate portions
of the air inlet damper that are environment and form no part
of the claimed design.

1 Claim, 10 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

1,790,454 A	1/1931	Arrowsmith	6,041,771 A	3/2000	Hayes
1,991,557 A	2/1935	Johnson	D425,612 S	5/2000	Andersen
2,080,726 A	5/1937	Lowinger	6,118,108 A	9/2000	Ufford
2,229,388 A	1/1941	Postlewait	6,155,008 A	12/2000	McKee
D132,821 S	6/1942	Leslie	D436,163 S	1/2001	Peterson et al.
2,364,791 A	12/1944	Horne	D442,273 S	5/2001	Pestell
2,628,551 A	2/1953	Leigh	6,284,011 B1 *	9/2001	Chiang B01D 46/0005 55/471
2,834,622 A	5/1958	Reeves	6,293,862 B1	9/2001	Jafine et al.
3,083,633 A *	4/1963	Hochberg F24F 7/02 454/366	D451,214 S	11/2001	Gollob et al.
3,093,059 A *	6/1963	Metz E04D 13/0325 454/358	6,346,042 B1 *	2/2002	Parker F24F 7/02 454/233
3,732,800 A *	5/1973	Goettel F24F 13/08 454/281	6,481,361 B1	11/2002	Schindler et al.
3,733,812 A	5/1973	Lawrence	6,514,135 B1	2/2003	Kelly
3,835,986 A	9/1974	Le Beau	6,523,575 B1	2/2003	Mrsny
D245,620 S	8/1977	Berry	D478,977 S	8/2003	Snyder
4,046,318 A	9/1977	Ripley	D482,813 S	11/2003	Waldmann
4,076,171 A	2/1978	Swenson	D490,506 S	5/2004	Snyder
4,182,483 A	1/1980	Swenson	D490,553 S	5/2004	Waldmann
4,193,339 A *	3/1980	Giles B60H 1/262 454/136	6,733,381 B1 *	5/2004	Ploeger F24F 13/082 454/366
4,234,012 A	11/1980	Schupback	D493,881 S *	8/2004	Lin D23/392
4,261,824 A	4/1981	Cuschera	6,854,428 B1	2/2005	Hotton et al.
D259,138 S *	5/1981	Giles D23/373	D505,195 S *	5/2005	Snyder D23/393
4,266,929 A	5/1981	Swenson	7,004,832 B2	2/2006	Thomas
4,297,818 A *	11/1981	Anderson E04D 13/17 454/366	D517,006 S	3/2006	Bessmertny
4,368,663 A	1/1983	Tabacco	7,013,841 B1	3/2006	Boros et al.
4,396,371 A	8/1983	Lorenz et al.	7,032,543 B1	4/2006	Akkala et al.
4,479,733 A	10/1984	Segal	7,055,465 B1	6/2006	Huang et al.
D277,027 S	1/1985	Waltz et al.	D528,644 S	9/2006	Schwamkrug
D277,028 S *	1/1985	Waltz D23/373	D534,450 S	1/2007	Müller
4,509,913 A	4/1985	Lorenz et al.	D535,009 S	1/2007	Sinur et al.
4,592,269 A	6/1986	Lamparter	D536,778 S	2/2007	O'Hagin
D285,546 S	9/1986	Hayslette	D537,570 S	2/2007	Sanders
4,615,263 A	10/1986	Titterud	D549,316 S	8/2007	O'Hagin
D296,466 S *	6/1988	Gratton D23/324	D556,314 S *	11/2007	Daniels, II D23/393
D296,584 S *	7/1988	Hilton D23/370	D556,877 S *	12/2007	Corry D23/314
4,790,289 A	12/1988	Barrett	D562,767 S *	2/2008	Grolmes D13/110
D300,655 S	4/1989	Buehler	D569,491 S	5/2008	DeForte
4,817,564 A	4/1989	Akkala et al.	D571,450 S	6/2008	Brown
4,819,689 A	4/1989	Owsley et al.	D576,264 S	9/2008	Grobleben
4,875,465 A	10/1989	Kramer	D587,797 S	3/2009	Blanchard
4,878,482 A	11/1989	Pfeffer	7,508,103 B2	3/2009	Watkins et al.
4,879,801 A	11/1989	Stubbe et al.	7,513,221 B2	4/2009	Akkala et al.
4,907,569 A	3/1990	Lemense	D597,239 S	7/2009	Hodgson
4,909,385 A	3/1990	Blymiller	D598,959 S	8/2009	Kiddoo
D321,743 S	11/1991	Logue et al.	7,651,390 B1	1/2010	Profeta et al.
D325,049 S *	3/1992	Cordell D13/162	D612,040 S	3/2010	Daniels
D327,317 S	6/1992	Courchesne	D618,332 S *	6/2010	Kimura D23/388
D332,139 S	12/1992	Courchesne	D618,780 S *	6/2010	Williams, Sr. D23/373
D333,830 S	3/1993	Lampe	D620,585 S *	7/2010	Adair D23/387
D335,123 S	4/1993	Smiley	D623,189 S *	9/2010	Son D14/434
5,402,611 A *	4/1995	Vagedes E04D 13/17 454/366	D624,639 S *	9/2010	Dilorenzo D23/365
5,487,219 A	1/1996	Ruehl et al.	D625,800 S *	10/2010	Daniels D23/373
5,501,634 A	3/1996	Wilder	D628,718 S	12/2010	Grubka et al.
5,503,181 A	4/1996	Kennedy	D629,093 S	12/2010	Polston
5,531,214 A	7/1996	Cheek	D629,882 S	12/2010	Nguyen
5,591,080 A *	1/1997	Ward F24F 7/02 454/359	D631,431 S	1/2011	DeFelice
D378,578 S	3/1997	Eberhardt	D634,419 S	3/2011	Lambertson
D379,501 S *	5/1997	Airosa D23/371	D641,462 S	7/2011	Rafi
D381,412 S	7/1997	Rimback	8,001,643 B1	8/2011	James
5,662,522 A	9/1997	Waltz	D649,377 S *	11/2011	Manalang D6/670
5,672,101 A	9/1997	Thomas	D652,498 S	1/2012	Rafi
D392,615 S *	3/1998	Basile D13/123	D653,745 S	2/2012	Gregg et al.
D393,707 S	4/1998	Kelly	8,113,823 B2	2/2012	Guzorek
5,735,086 A	4/1998	Fordahl	D656,601 S	3/2012	Roderique et al.
5,756,933 A	5/1998	Pitchford et al.	D659,460 S	5/2012	Boone
D394,901 S	6/1998	Governale et al.	D659,658 S *	5/2012	Gaines D13/199
5,792,230 A	8/1998	Moore et al.	8,196,552 B2	6/2012	Whitford et al.
5,947,815 A	9/1999	Danforth	8,205,401 B2	6/2012	Ward
			D662,870 S	7/2012	Russ
			D663,848 S *	7/2012	Kagawa D24/177
			D665,210 S	8/2012	Hughes
			D665,363 S *	8/2012	Lin D13/102
			D666,285 S	8/2012	Schrad et al.
			D666,707 S	9/2012	Eikhoff et al.
			RE43,717 E	10/2012	DeForte et al.
			D670,245 S *	11/2012	Du D13/110
			D672,342 S *	12/2012	Herreid, II D14/308

(56)

References Cited

U.S. PATENT DOCUMENTS

D672,450 S * 12/2012 Milks D23/387
 D680,253 S * 4/2013 Herberholt D26/60
 D688,289 S 8/2013 Hodgson
 D690,065 S 9/2013 Schoenster
 D690,457 S 9/2013 Lu
 8,528,271 B1 * 9/2013 Hemmer E04D 13/004
 52/101
 D693,493 S 11/2013 Kim
 8,607,719 B1 12/2013 Kuzni
 D697,195 S * 1/2014 Gibb D23/499
 D698,962 S 2/2014 Waldmann
 D701,095 S 3/2014 Arvan
 D702,817 S 4/2014 Ryu
 D703,305 S 4/2014 Stollenwerk O'Hagin
 D703,307 S 4/2014 Little et al.
 D704,815 S * 5/2014 Butler D23/373
 D704,816 S * 5/2014 Butler D23/373
 D704,817 S * 5/2014 Butler D23/373
 D705,420 S 5/2014 Eichelberg
 D708,779 S 7/2014 Cha et al.
 8,794,228 B2 8/2014 Richter et al.
 D714,928 S 10/2014 Urano
 D720,437 S 12/2014 Togawa et al.
 D722,976 S * 2/2015 Okado D13/152
 D723,022 S * 2/2015 Miles D14/253
 D724,715 S 3/2015 Isshiki
 D727,486 S 4/2015 Sebert et al.
 D727,489 S 4/2015 Rohskopf et al.
 D730,351 S * 5/2015 Lee D14/240
 D730,354 S * 5/2015 Daniel D14/385
 D731,047 S * 6/2015 Leonard D23/373
 D732,708 S 6/2015 Stauffer et al.
 D734,861 S 7/2015 Johnson et al.
 D736,198 S * 8/2015 Merbeth D14/300
 D736,365 S 8/2015 Breneman et al.
 D737,421 S 8/2015 Jannello et al.
 D738,027 S 9/2015 Wang et al.
 9,134,014 B2 * 9/2015 Lyu F21V 21/04
 D743,520 S * 11/2015 Sinur D23/372
 D744,632 S 12/2015 Ehlert et al.
 D748,239 S 1/2016 Daniels
 D749,204 S 2/2016 Breneman et al.
 D749,342 S 2/2016 Escandon
 D750,314 S 2/2016 Hobson et al.
 D750,564 S 3/2016 Weagle
 D751,475 S * 3/2016 Suzuki D12/174
 D752,770 S 3/2016 Kuhn et al.
 D753,312 S * 4/2016 Long D24/186
 D754,304 S 4/2016 Morris et al.
 D754,835 S 4/2016 Uehara et al.
 D754,838 S * 4/2016 Penlesky D23/393
 D755,349 S 5/2016 Murphey et al.
 D755,362 S * 5/2016 Chen D23/372
 D755,944 S 5/2016 Daniels
 D756,499 S * 5/2016 Vargas Cervantes D23/366
 D757,237 S 5/2016 Gonzalez
 D757,924 S * 5/2016 Briggs D23/386
 D757,984 S * 5/2016 Breedlove, Sr. D26/67
 D758,107 S 6/2016 Hamilton
 D758,680 S 6/2016 Hoffman et al.
 D771,233 S * 11/2016 Smith D23/393
 D771,791 S * 11/2016 Smith D23/393
 D771,793 S * 11/2016 Smith D23/393
 D772,067 S * 11/2016 Mondelli D9/435
 D776,350 S * 1/2017 Gammack D28/54.1
 D776,351 S * 1/2017 Gammack D28/54.1
 D779,650 S * 2/2017 Poehlman D23/393
 D780,697 S * 3/2017 Broere D13/156
 D783,208 S * 4/2017 Evans D29/125
 D785,632 S * 5/2017 VanDuyn D14/433
 D785,777 S * 5/2017 Puffer D23/370
 D786,198 S * 5/2017 Suenaga D13/156
 D786,417 S * 5/2017 Hirano D23/370
 D787,315 S * 5/2017 Sill D9/418

2001/0049261 A1 12/2001 McKee et al.
 2002/0171059 A1 11/2002 Sakurai et al.
 2003/0054754 A1 3/2003 McKee
 2003/0079905 A1 5/2003 Higgs
 2003/0116213 A1 6/2003 DiMarco
 2003/0153262 A1 * 8/2003 Mantyla E04D 13/17
 454/367
 2003/0161742 A1 8/2003 Lin et al.
 2004/0177871 A1 9/2004 Harbaugh
 2004/0195923 A1 10/2004 Staigl, III et al.
 2004/0238651 A1 12/2004 Juntunen et al.
 2005/0184268 A1 8/2005 Narayanaswamy et al.
 2005/0233691 A1 * 10/2005 Horton F24F 7/02
 454/366
 2005/0284988 A1 12/2005 Lawver, Jr.
 2006/0005809 A1 1/2006 Kado et al.
 2006/0042239 A1 3/2006 Gerards et al.
 2006/0065211 A1 3/2006 Hasbargen et al.
 2006/0157092 A1 7/2006 Kramer
 2006/0249141 A1 11/2006 Sinur et al.
 2007/0045473 A1 3/2007 Clegg et al.
 2007/0101689 A1 5/2007 Gaskins
 2007/0173191 A1 * 7/2007 Daniels, II F24F 7/02
 454/250
 2007/0241629 A1 10/2007 Ionel et al.
 2008/0029243 A1 2/2008 O'Donnell et al.
 2008/0120930 A1 * 5/2008 Jacobsen E04D 13/033
 52/204.55
 2008/0134843 A1 6/2008 Smith
 2008/0210783 A1 9/2008 Bissonnette
 2008/0272667 A1 11/2008 Ionel et al.
 2008/0302352 A1 12/2008 Pearce et al.
 2008/0308689 A1 12/2008 Syler
 2009/0084328 A1 4/2009 Lyons et al.
 2009/0191493 A1 7/2009 Guzorek
 2010/0012048 A1 1/2010 Whitford et al.
 2010/0015559 A1 1/2010 Whitford et al.
 2010/0118463 A1 5/2010 Smith
 2010/0126431 A1 5/2010 Kanda et al.
 2010/0184366 A1 7/2010 Hassenstab
 2010/0300377 A1 12/2010 Buescher et al.
 2011/0168284 A1 7/2011 Whitford et al.
 2011/0294412 A1 12/2011 Vagedes
 2012/0212883 A1 8/2012 Hargreaves et al.
 2012/0255267 A1 10/2012 Ehrensberger et al.
 2013/0078903 A1 3/2013 Mantyla et al.
 2013/0115871 A1 5/2013 Bourque et al.
 2014/0144395 A1 5/2014 Blessing et al.
 2015/0053151 A1 2/2015 Graff
 2015/0219363 A1 8/2015 Bridegum
 2015/0220091 A1 8/2015 Koopman
 2016/0348875 A1 * 12/2016 Zampini F21V 7/0008
 2016/0356430 A1 * 12/2016 Stratas F21S 8/04
 2017/0101189 A1 * 4/2017 Horner B64D 13/02
 2017/0122609 A1 * 5/2017 Mantyla F24F 7/025
 2017/0130938 A1 * 5/2017 Seward F21V 17/002

OTHER PUBLICATIONS

Dampers—Air Measuring Products—Access Doors, image post date Apr. 18, 2005-Nov. 18, 2014, site visited Jun. 11, 2016, (online), <<http://www.deicontrols.com/dampers/>>.*
 Control Damper—Model 612, image post date 1955, site visited Jun. 11, 2016, (online), <<http://www.safeair-dowco.com/product/612.pdf>>.*
 Balancing Damper Damper—Model BDD, image post date 1955, site visited Jun. 11, 2016, (online), <<http://www.safeair-dowco.com/product/BDD.pdf>>.*
 Yamaha R6 OEM ECU CDI Engine Control Unit Module Computer YZF-R6, image post date 2008, site visited Jun. 22, 2016, (online), <http://www.ebay.co.uk/itm/272262109754?clk_rvr_id=1050641016140&rmvSB=true>.*
 Vittetoe Inlets, image post date 2012, site visited May 27, 2017, (online), <<http://www.vittetoe.com/inlets>>.*

* cited by examiner

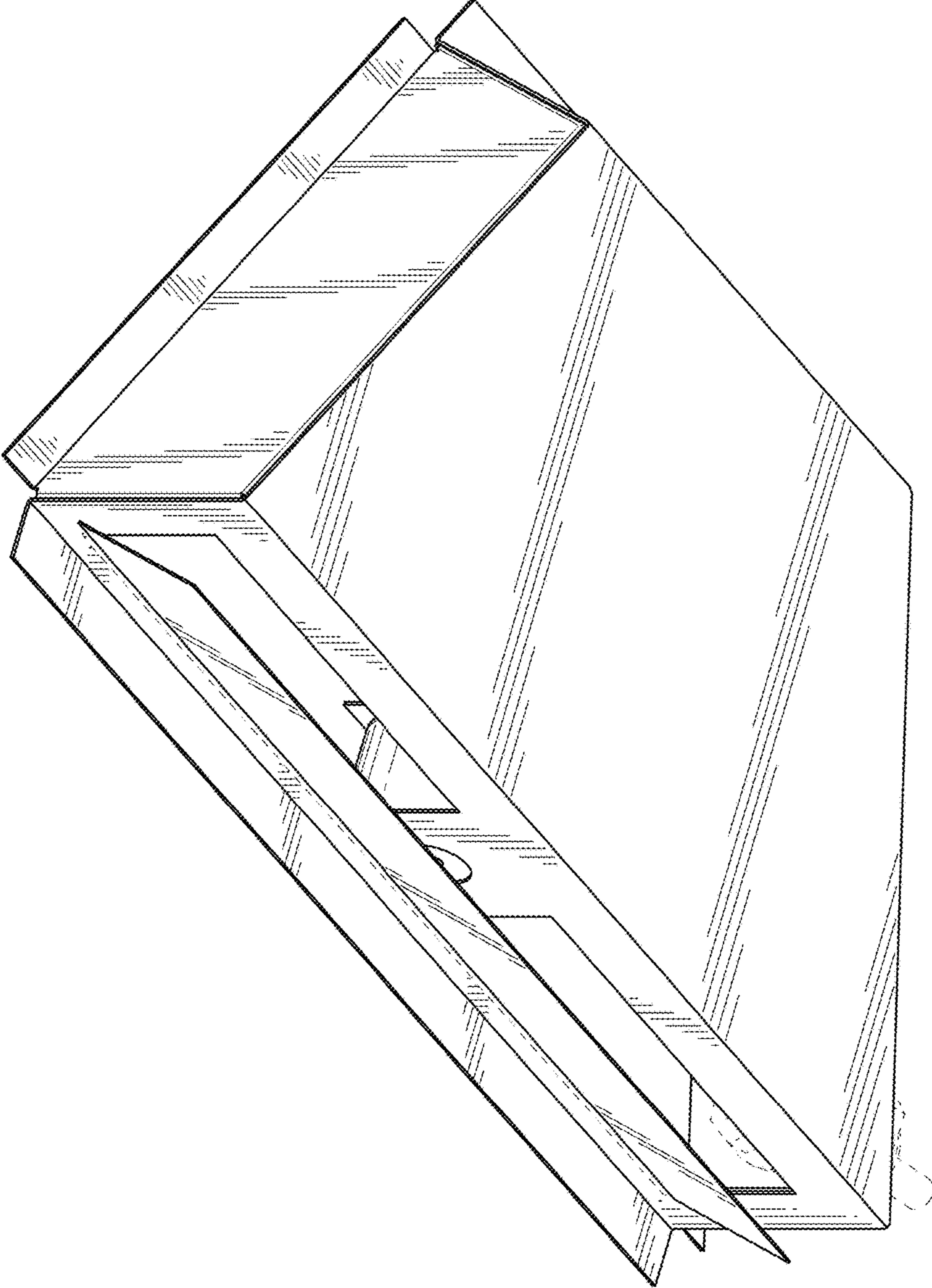


FIG. 1

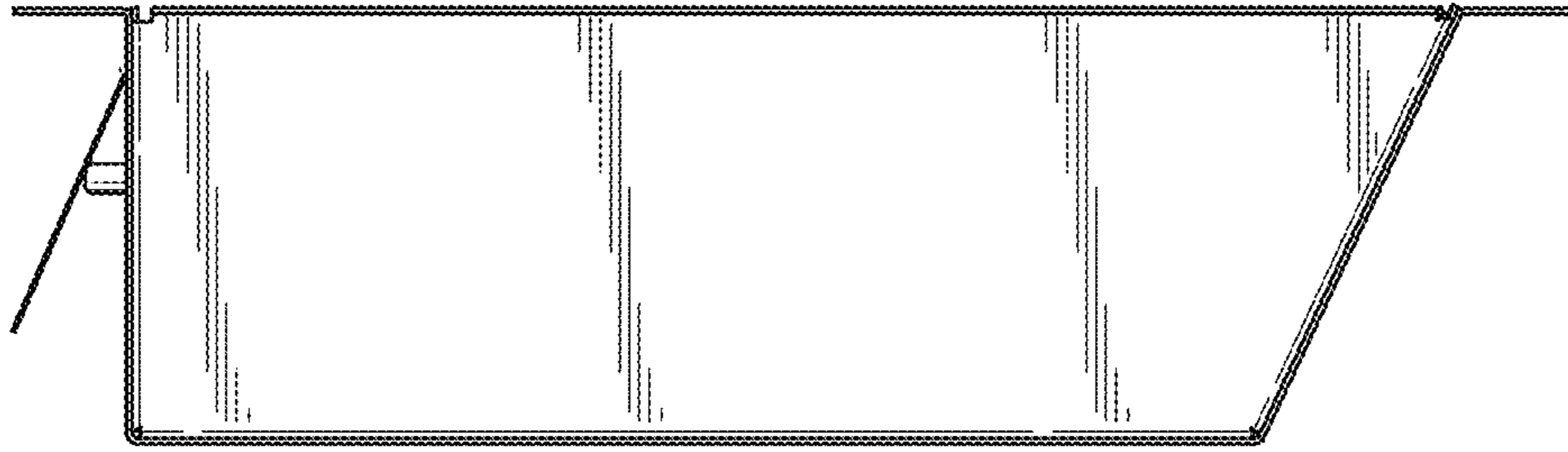


FIG. 2

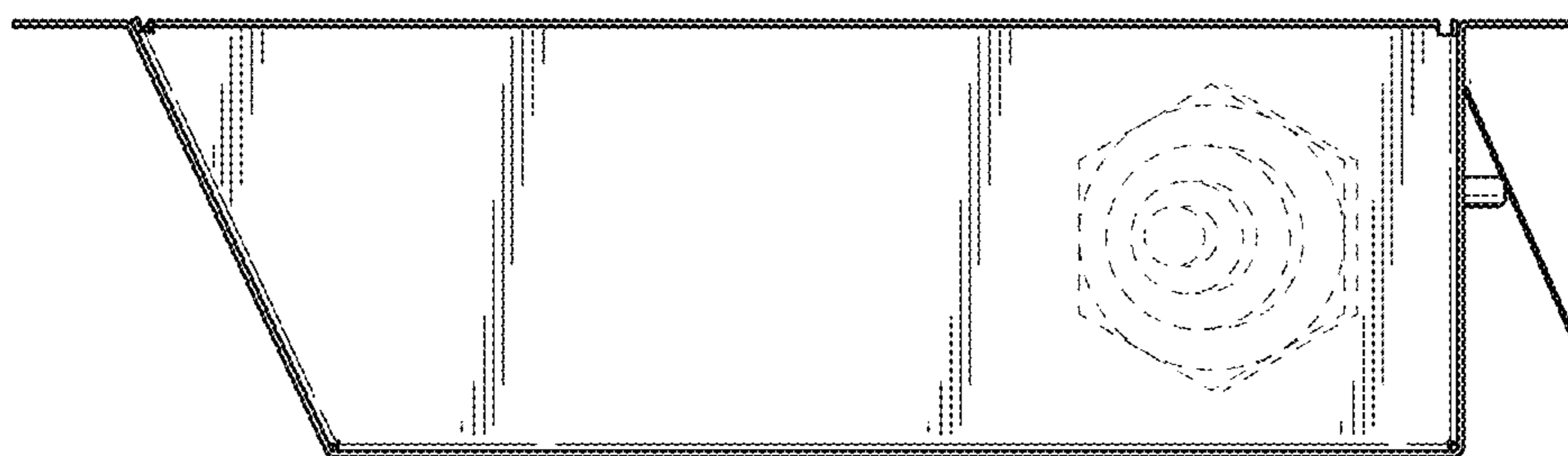


FIG. 3

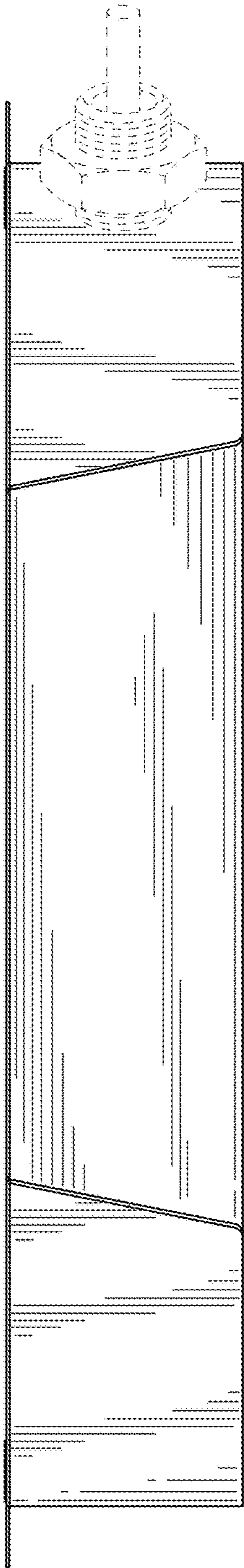


FIG. 4

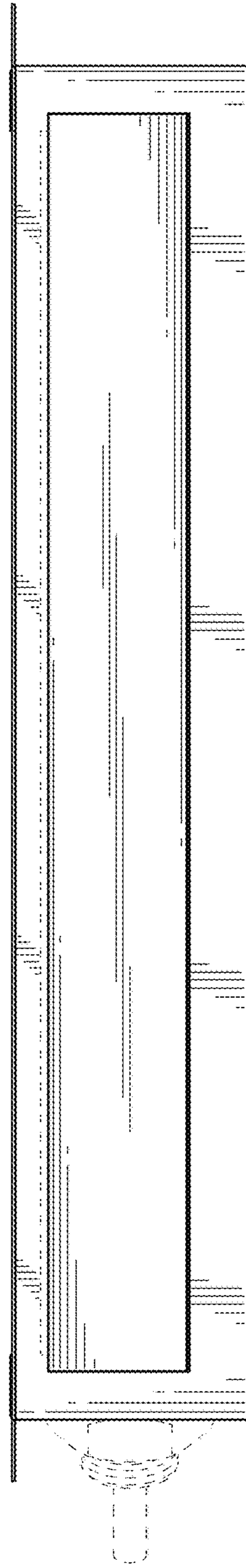


FIG. 5

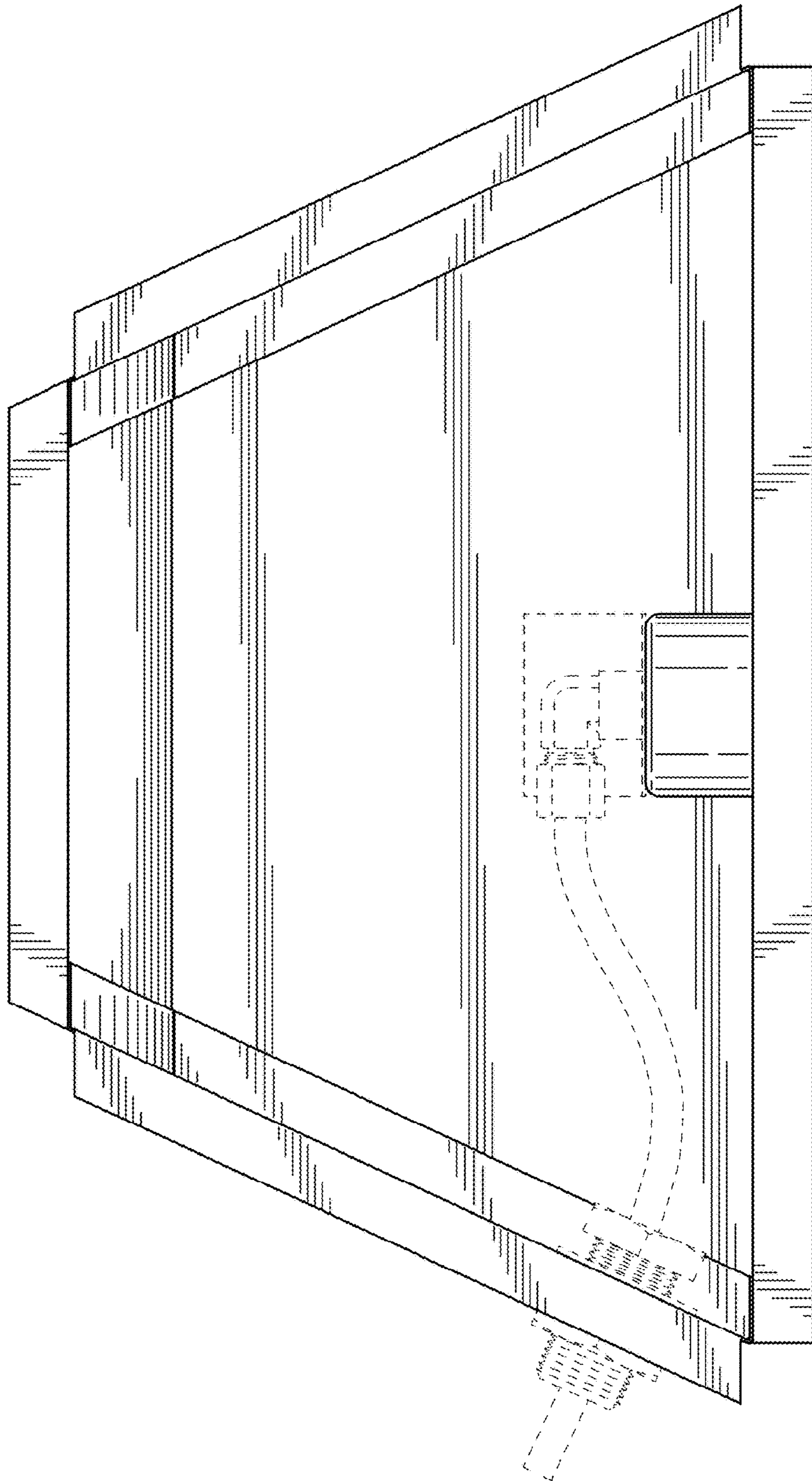


FIG. 6

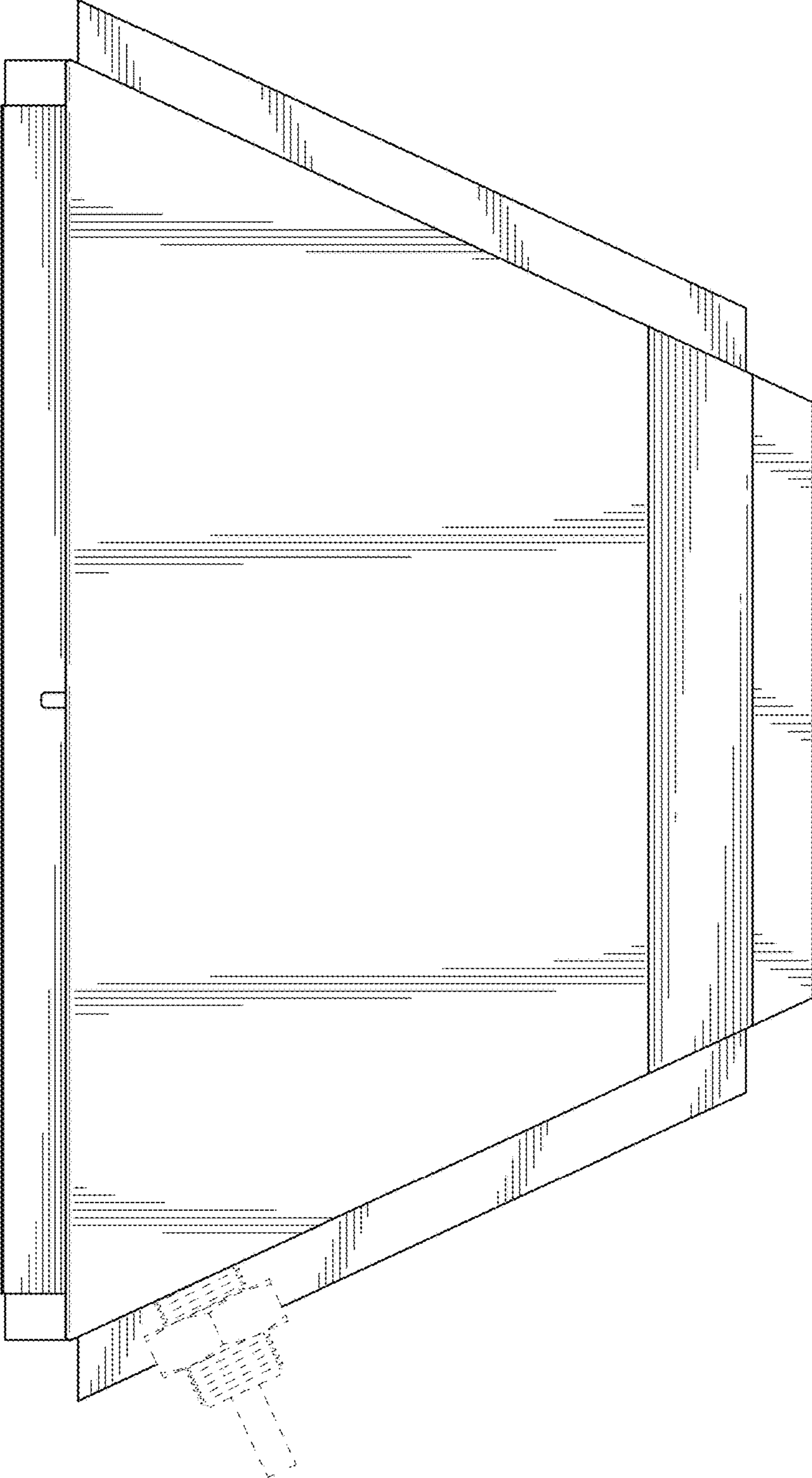


FIG. 7

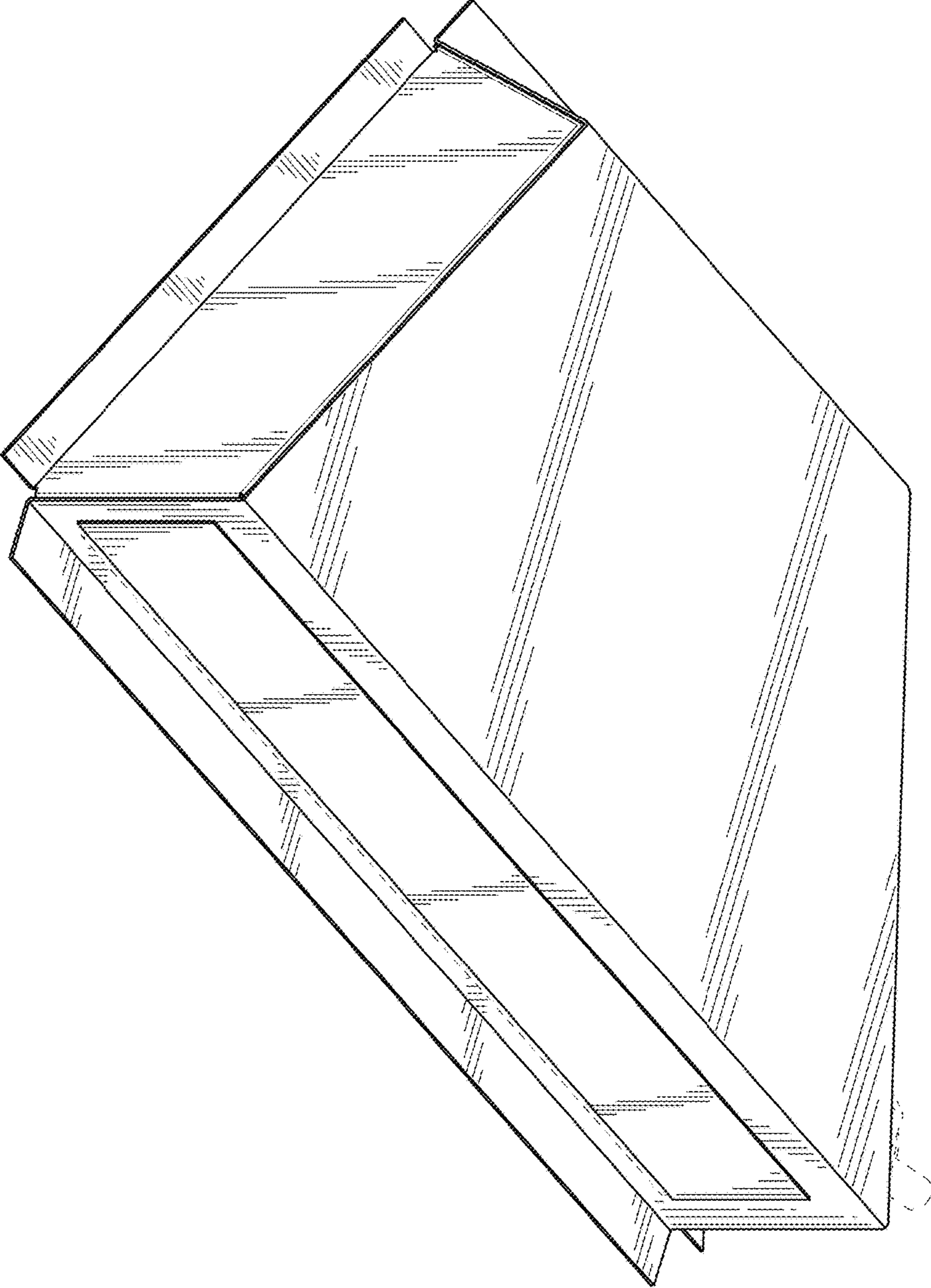


FIG. 8

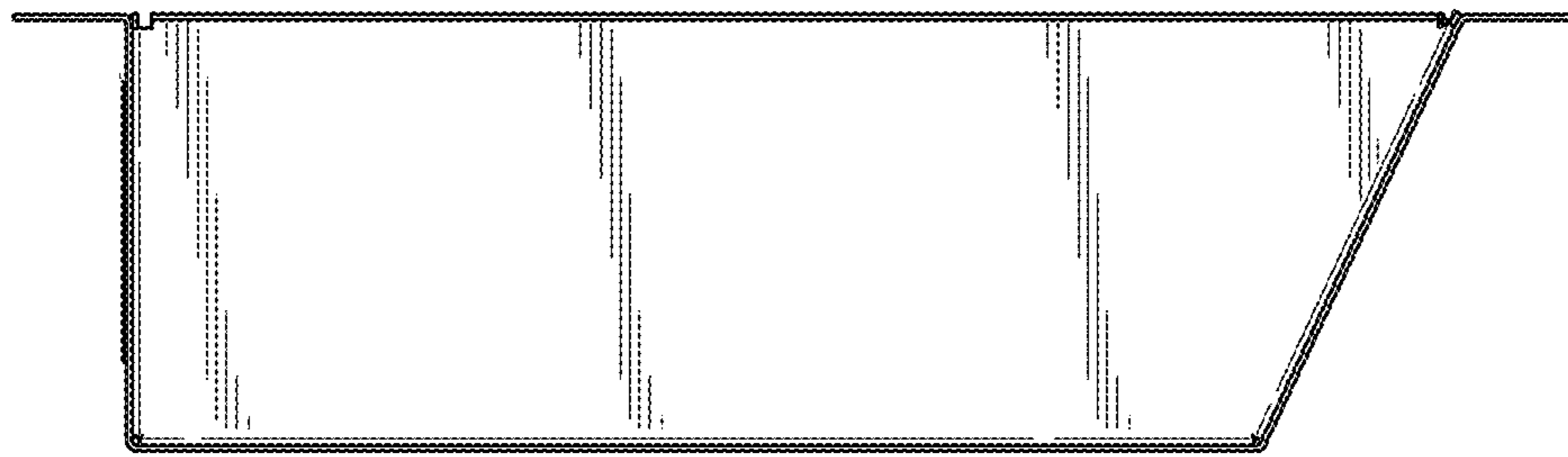


FIG. 9

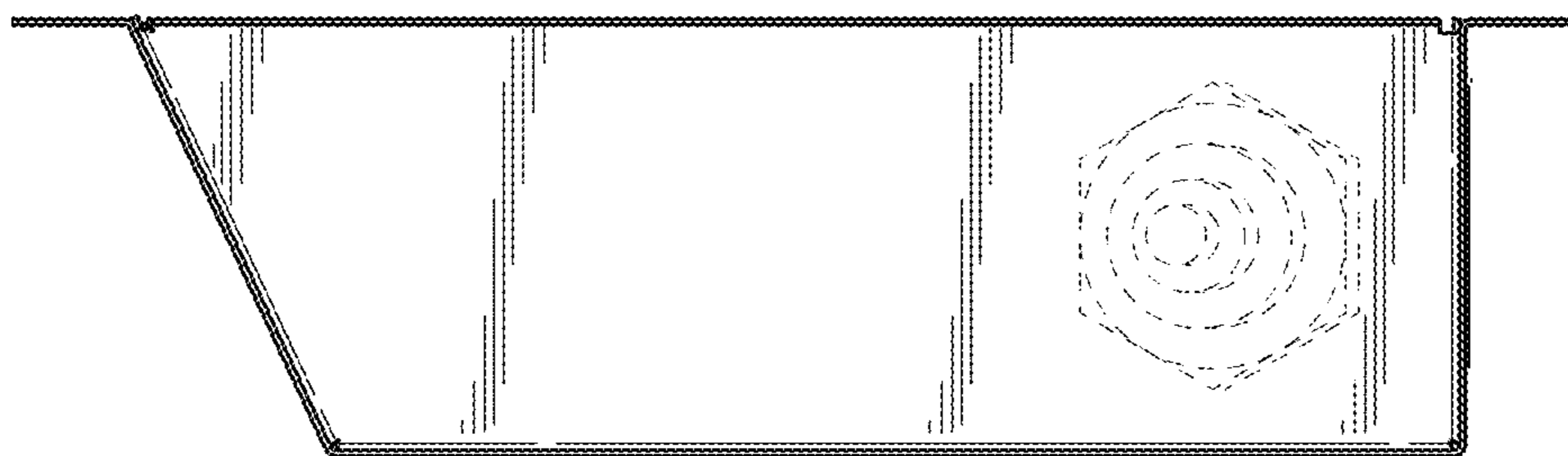


FIG. 10

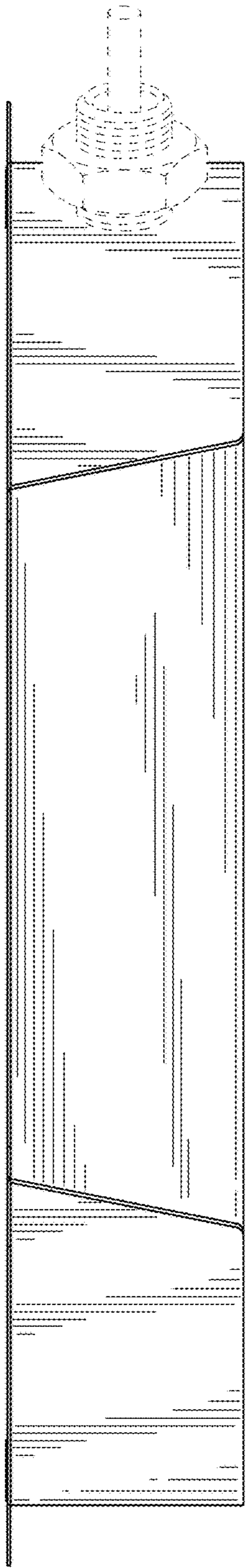


FIG. 11

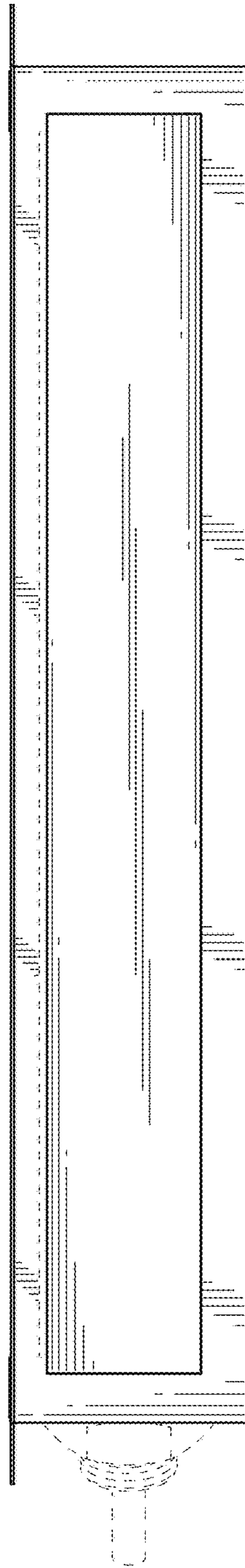


FIG. 12

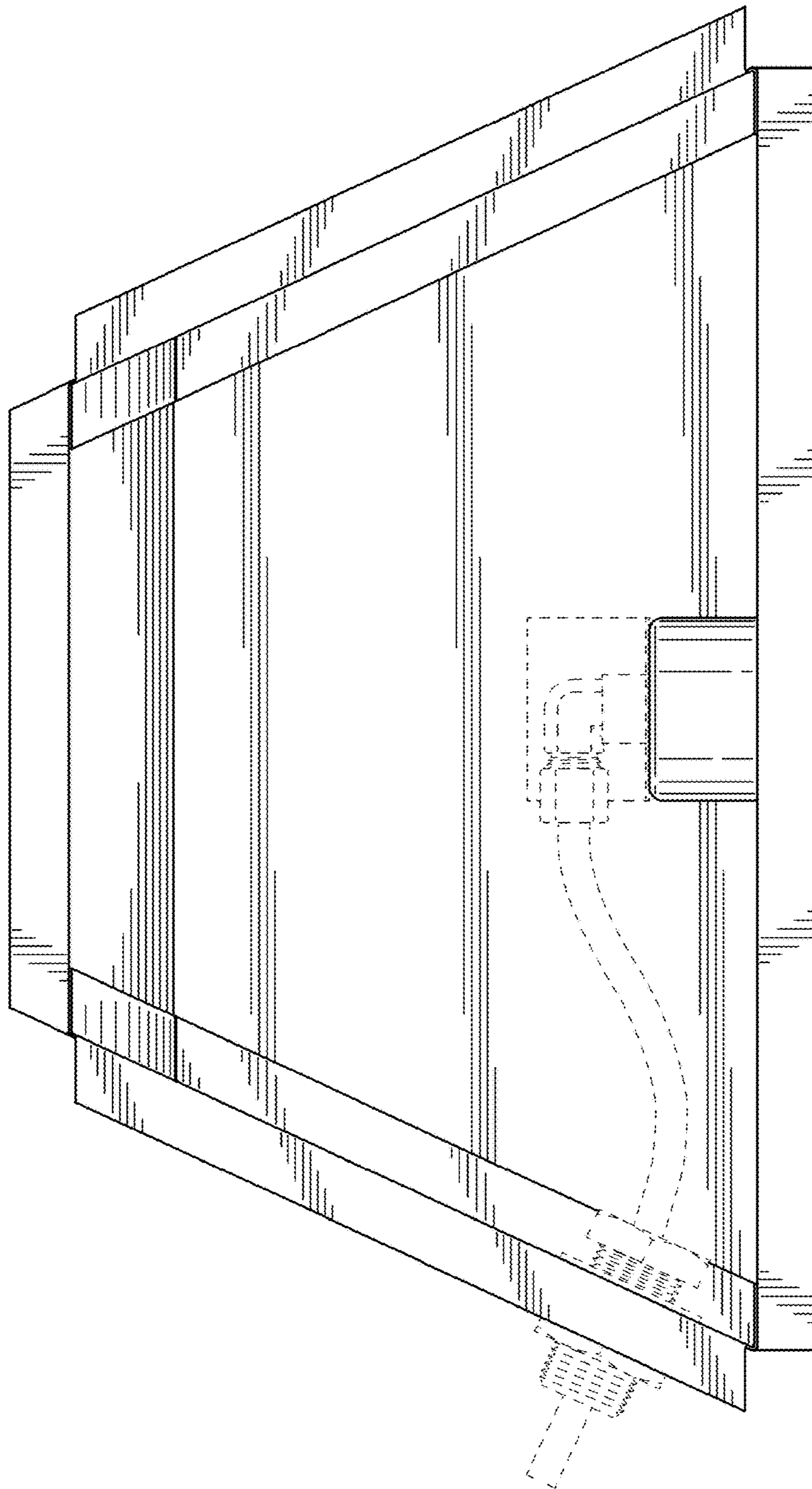


FIG. 13

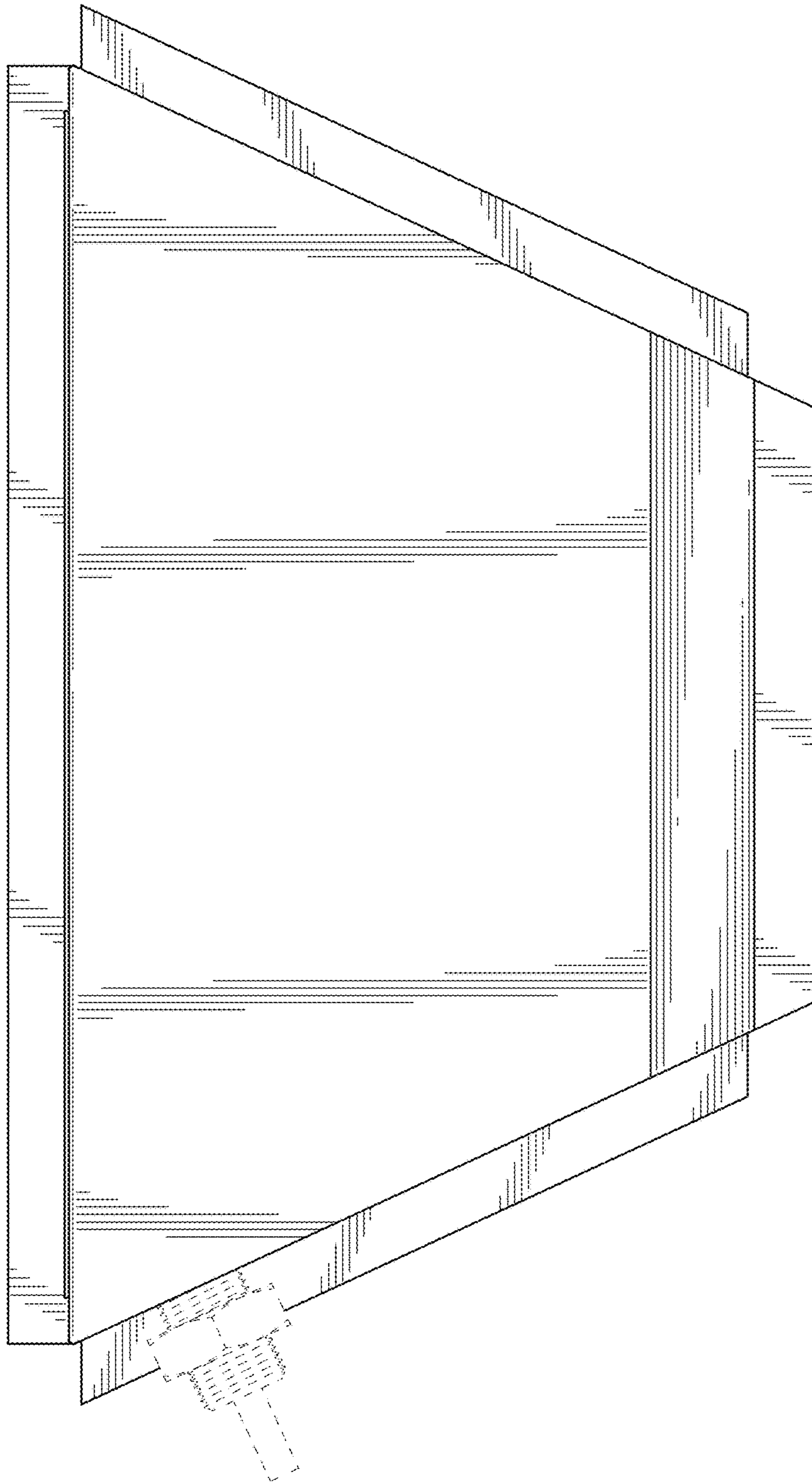


FIG. 14