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(12) **United States Design Patent** (10) **Patent No.:** **US D843,049 S**  
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(54) **HORTICULTURE GROW LIGHT**

FOREIGN PATENT DOCUMENTS

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CA 2034710 8/1991  
CA 1314529 3/1993

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(Continued)

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OTHER PUBLICATIONS

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

Apollo Horticulture GLRCTAC 6" Air Cool Tube Grow Light Deluxe Glass Cylinder with Hood Reflector, image post date Oct. 15, 2010, site visted Oct. 3, 2014, (online), <[http://www.amazon.com/apollo-horticulture-glrectac-cylinder-reflector/dp/b003qkvv04/ref=pd\\_sbs\\_lg\\_5?ie=utf8&refrid=1y9v9qhh4n5vnctjmfr](http://www.amazon.com/apollo-horticulture-glrectac-cylinder-reflector/dp/b003qkvv04/ref=pd_sbs_lg_5?ie=utf8&refrid=1y9v9qhh4n5vnctjmfr)>.

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(51) **LOC (11) Cl.** ..... **26-99**

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

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(58) **Field of Classification Search**

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8/04; F21V 29/004; F21V 21/02; F21V  
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See application file for complete search history.

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(57) **CLAIM**

The ornamental design for a horticulture grow light, as shown and described.

**DESCRIPTION**

FIG. 1 is a perspective view of a horticulture grow light, as viewed from below, showing my new design;  
FIG. 2 is a perspective view of the light shown in FIG. 1, as viewed from above;  
FIG. 3 is a left side view of the light shown in FIG. 1;  
FIG. 4 is a right side view of the light shown in FIG. 1;  
FIG. 5 is a front elevation view of the light shown in FIG. 1;  
FIG. 6 is a rear elevation view of the light shown in FIG. 1;  
FIG. 7 is a bottom plan view of the light shown in FIG. 1; and,  
FIG. 8 is a top plan view of the light shown in FIG. 1.  
The broken-line disclosure shown in the views is understood to represent portions of the article in which the claimed design is embodied, but which form no part of the claimed design.

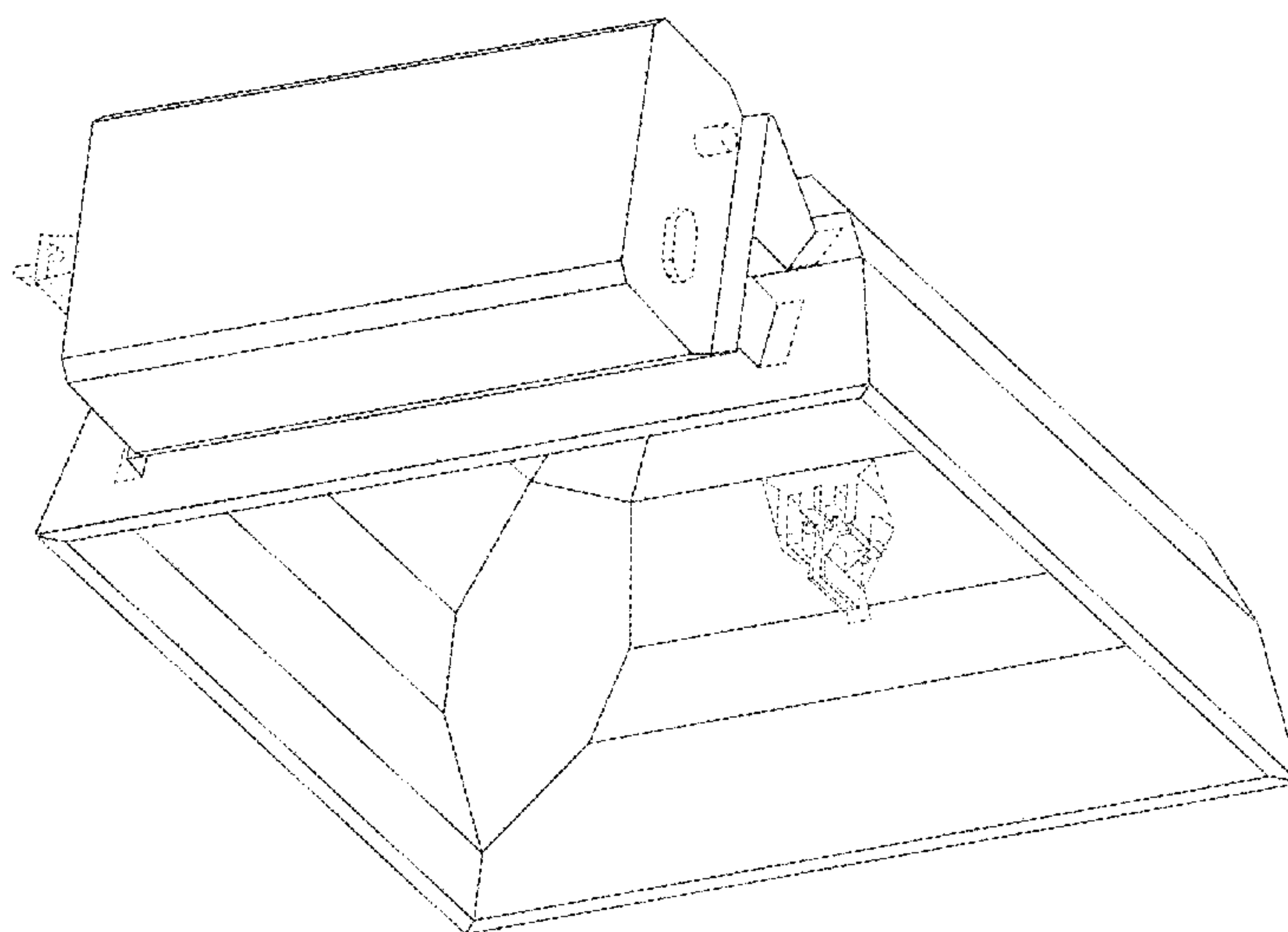
(56) **References Cited**

U.S. PATENT DOCUMENTS

32,722 A 7/1861 Schmidlin  
D46,253 S 8/1914 Kopp  
1,410,945 A 3/1922 Mayfield  
1,547,026 A 7/1925 Canney  
1,798,567 A 3/1931 Wagenhorst  
D85,049 S 9/1931 Kopp  
D85,382 S 10/1931 Guth  
1,848,734 A 3/1932 Luce  
1,873,310 A 8/1932 Doane  
1,930,070 A 10/1933 Zecher

(Continued)

**1 Claim, 8 Drawing Sheets**



(56)

## References Cited

## U.S. PATENT DOCUMENTS

1,987,705 A	1/1935	Pedersen	D365,159 S	12/1995	Tinen
D106,614 S	10/1937	Waterbury	5,486,737 A	1/1996	Hrubowchak
2,194,841 A	3/1940	Welch	5,510,676 A	4/1996	Cottaar
D119,800 S	4/1940	Carter	D373,000 S	8/1996	Brady
D123,768 S	12/1940	Scribner	5,555,162 A	9/1996	Shemitz
D125,559 S	3/1941	Biller	D374,301 S	10/1996	Kleffman
2,242,590 A	5/1941	Marcel	D376,437 S	10/1996	Karlo
D128,049 S	7/1941	Kurtz	5,568,680 A	10/1996	Parker
D135,375 S	3/1943	Biller	5,570,947 A	11/1996	Felland
2,339,100 A	1/1944	Netting	D377,993 S	2/1997	Herst
2,348,617 A	5/1944	Furedy	5,621,267 A	4/1997	Shaffner
D156,014 S	11/1949	Lazerson	D383,243 S	9/1997	Fry
2,492,946 A	1/1950	Barber	5,698,947 A	12/1997	Choi
D174,221 S	3/1955	Hatch	5,702,179 A	12/1997	Sidwell
2,740,883 A	4/1956	Kruger	D391,632 S	3/1998	Thomas
2,741,694 A	4/1956	Wiig	D396,319 S	7/1998	Sutton
2,998,511 A	8/1961	Chan	D397,481 S	8/1998	Schafer
3,025,391 A	3/1962	Golko	D399,328 S	10/1998	Compton
D193,802 S	10/1962	Thomsen	D399,329 S	10/1998	Compton
D195,012 S	4/1963	Hoyle	D399,587 S	10/1998	Compton
3,125,301 A	3/1964	Stotter	D400,289 S	10/1998	Wardenburg
3,263,071 A	7/1966	Fabbri	5,816,694 A	10/1998	Ideker
3,272,978 A	9/1966	Jackson	D401,006 S	11/1998	Edwards
3,322,946 A	5/1967	Cooper	D405,976 S	2/1999	Beall
3,420,995 A	1/1969	Dunckel	5,896,004 A	4/1999	Feldman
D213,391 S	2/1969	Bruno	5,924,789 A	7/1999	Thornton
3,433,941 A	3/1969	Hall	5,932,955 A	8/1999	Berger
3,675,008 A	7/1972	Hill	5,938,317 A	8/1999	Thornton
3,684,883 A	8/1972	Entwistle	D415,304 S	10/1999	Brown
3,701,898 A	10/1972	McNamara, Jr.	5,983,564 A	11/1999	Stragnola
3,755,667 A	8/1973	Price	5,987,697 A	11/1999	Song
3,829,677 A	8/1974	DeLlano	5,999,943 A	12/1999	Nori
3,902,059 A	8/1975	McNamara, Jr.	D418,626 S	1/2000	Herst
3,911,265 A	10/1975	Landrum	D419,248 S	1/2000	Lyons
4,028,542 A	6/1977	McReynolds, Jr.	6,024,468 A	2/2000	Kassay
D245,016 S	7/1977	Barr	6,042,250 A	3/2000	Stragnola
4,037,096 A	7/1977	Brengord	6,051,927 A	4/2000	Graser
4,078,169 A	3/1978	Armstrong	6,053,624 A	4/2000	Cronk
4,175,360 A	11/1979	Mulvey	D425,237 S	5/2000	Scott
4,229,782 A	10/1980	Ruud	D425,652 S	5/2000	Brok
D259,738 S	6/1981	Boschetti	D426,010 S	5/2000	Compton
4,308,473 A	12/1981	McNamara, Jr.	6,061,690 A	5/2000	Nori
D262,659 S	1/1982	Laltta	6,065,849 A	5/2000	Chen
D266,578 S	10/1982	Moshier	6,070,173 A	5/2000	Huber
D268,287 S	3/1983	Boschetti	6,076,944 A	6/2000	Maranon
D270,577 S	9/1983	DeVos	6,079,851 A	6/2000	Altman
4,446,506 A	5/1984	Larson	D428,516 S	7/2000	Reo
4,531,180 A	7/1985	Hernandez	6,094,919 A	8/2000	Bhatia
4,616,293 A	10/1986	Baliozian	6,111,739 A	8/2000	Wu
4,669,033 A	5/1987	Lee	6,152,579 A	11/2000	Reed
D290,662 S	7/1987	Basil	D439,008 S	3/2001	Kim
D300,877 S	4/1989	Cyr	D440,289 S	4/2001	Olson et al.
4,855,884 A	8/1989	Richardson	6,210,025 B1	4/2001	Schmidt
4,893,221 A	1/1990	Friedman	6,230,497 B1	5/2001	Morris
4,933,821 A	6/1990	Anderson	D443,198 S	6/2001	Snyder
4,939,629 A	7/1990	Glanton	D443,949 S	6/2001	Dimonte
D311,597 S	10/1990	Poot	6,247,830 B1	6/2001	Winnett
4,970,428 A	11/1990	Hayakawa	D445,943 S	7/2001	Littman
4,980,809 A	12/1990	Baldwin	6,257,735 B1	7/2001	Baar
D316,301 S	4/1991	Michael	6,267,483 B1	7/2001	Hembery
5,006,752 A	4/1991	Eggink	D447,272 S	8/2001	Smith
5,065,294 A	11/1991	Poot	6,279,012 B1	8/2001	Sexton
5,072,349 A	12/1991	Waniga	6,299,327 B1	10/2001	Camarota
D323,897 S	2/1992	Compton	D452,559 S	12/2001	Schonberger
5,088,015 A	2/1992	Baggio	6,343,984 B1	2/2002	Langdon
D329,104 S	9/1992	Dieperink	6,371,630 B1	4/2002	Unger
D330,438 S	10/1992	Herst	D456,927 S	5/2002	Russello
5,192,129 A	3/1993	Figueroa	D456,928 S	5/2002	Russello
5,199,784 A	4/1993	Hempleman	D456,938 S	5/2002	Wardenburg
5,253,152 A	10/1993	Yang	D457,450 S	5/2002	Lamond et al.
D349,358 S	4/1994	Herst	D459,825 S	7/2002	Field
5,353,746 A	10/1994	Del Rosario	6,488,387 B2	12/2002	Wardenburg
D352,126 S	11/1994	Ruud	D469,564 S	1/2003	Brok
5,440,470 A	8/1995	Ly	6,527,422 B1	3/2003	Hutchison
5,461,554 A	10/1995	Leonetti	6,548,948 B1	4/2003	Muessli
			6,595,662 B2	7/2003	Wardenburg
			6,601,972 B2	8/2003	Sei
			6,658,652 B1	12/2003	Alexander
			6,679,619 B2	1/2004	Saieva



(56)

## References Cited

## U.S. PATENT DOCUMENTS

D486,593	S	2/2004	Griffin	D637,162	S	5/2011	Bridgman
6,688,759	B1	2/2004	Hadjimichael	D637,341	S	5/2011	Wardenburg
6,709,131	B1	3/2004	Herst	D637,752	S	5/2011	Mekhtarian
6,729,383	B1	5/2004	Cannell	D640,404	S	6/2011	Chipperfield
6,783,263	B1	8/2004	Cronk	7,959,331	B2	6/2011	Ho
D496,121	S	9/2004	Santoro	D641,100	S	7/2011	Li
D499,504	S	12/2004	Meyer	7,972,044	B2	7/2011	Burkhauser
D499,505	S	12/2004	Benensohn	D644,185	S	8/2011	Hargreaves
D504,343	S	4/2005	Ek	7,987,632	B2	8/2011	May
6,885,134	B2	4/2005	Kurashima	8,018,630	B2	9/2011	Herloski
6,908,212	B2	6/2005	Schultz	8,038,318	B2	10/2011	Plunk
7,011,424	B1	3/2006	Poulson	D648,652	S	11/2011	Hawkins
7,083,309	B2	8/2006	Chan	D649,685	S	11/2011	Trzesniowski
7,101,060	B2	9/2006	Oppenheimer	D650,515	S	12/2011	Bradley
7,131,753	B1	11/2006	Edwards, Jr.	D650,935	S	12/2011	Beghelli
7,156,539	B2	1/2007	Cronk	D653,376	S	1/2012	Kong
7,175,309	B2	2/2007	Craw	8,113,696	B2	2/2012	Striebel
D542,460	S	5/2007	Hargreaves	D655,403	S	3/2012	Zakula
D543,652	S	5/2007	Hargreaves	D657,748	S	4/2012	Hargreaves
D543,654	S	5/2007	Hargreaves	D660,252	S	5/2012	Hargreaves
D543,655	S	5/2007	Hargreaves	D661,370	S	6/2012	Imajo
D544,982	S	5/2007	Hargreaves	D661,833	S	6/2012	Imajo
7,213,948	B2	5/2007	Hein	8,209,912	B2	7/2012	Hargreaves
D544,136	S	6/2007	Hargreaves	8,215,799	B2	7/2012	Vanden Eynden
D544,138	S	6/2007	Hargreaves	D667,584	S	9/2012	Beghelli
D544,139	S	6/2007	Hargreaves	D668,370	S	10/2012	Guercio
D544,626	S	6/2007	Hargreaves	D671,259	S	11/2012	Chen
D544,980	S	6/2007	Hargreaves	D672,908	S	12/2012	Wilcox
D544,981	S	6/2007	Hargreaves	D672,911	S	12/2012	Mayfield, III
D544,983	S	6/2007	Hargreaves	D673,324	S	12/2012	Mayfield
D544,984	S	6/2007	Hargreaves	8,334,640	B2	12/2012	Reed
D544,985	S	6/2007	Hargreaves	D675,369	S	1/2013	Michaud
D544,987	S	6/2007	Hargreaves	8,348,481	B2	1/2013	Chang
D544,994	S	6/2007	Hargreaves	D675,772	S	2/2013	Tran
D544,995	S	6/2007	Hargreaves	8,371,726	B2	2/2013	Collins
D545,460	S	6/2007	Mason, II	D678,597	S	3/2013	Lehman
D545,484	S	6/2007	Hargreaves	D678,599	S	3/2013	Boyer
D545,485	S	6/2007	Hargreaves	D679,848	S	4/2013	Pickard
D545,990	S	7/2007	Hargreaves	D683,064	S	5/2013	Tuck
D545,994	S	7/2007	Hargreaves	8,505,224	B2	8/2013	Huang
D545,996	S	7/2007	Hargreaves	D689,238	S	9/2013	Halsey
D549,869	S	8/2007	Ward	D689,986	S	9/2013	Lord
D553,781	S	10/2007	Pickard	D690,875	S	10/2013	McKenzie
7,296,914	B1	11/2007	Russello	D693,959	S	11/2013	Boyer
7,360,927	B2	4/2008	Oka	D697,663	S	1/2014	Speier
D569,024	S	5/2008	Redfern	D698,074	S	1/2014	Hargreaves
D572,858	S	7/2008	Santoro	D698,075	S	1/2014	Klus
7,445,363	B2	11/2008	Vanden Eynden	D698,986	S	2/2014	Reynolds
7,524,090	B2	4/2009	Hargreaves	D698,987	S	2/2014	Stanley
7,534,011	B2	5/2009	Townsley	D699,386	S	2/2014	Park
D595,894	S	7/2009	Verfuertth	D702,827	S	4/2014	Mase
D602,625	S	10/2009	Santoro	8,702,283	B2	4/2014	Bradley, Jr.
D603,087	S	10/2009	Mo	D705,474	S	5/2014	Philips
7,617,057	B2	11/2009	May	D705,974	S	5/2014	Blessitt
D605,342	S	12/2009	Chung	8,723,086	B2	5/2014	McMahan
D608,490	S	1/2010	Chung	D707,385	S	6/2014	Wardenburg
7,641,367	B2	1/2010	Hargreaves	D708,390	S	7/2014	Roos
7,654,702	B1	2/2010	Ding	D710,528	S	8/2014	Wardenburg
D611,183	S	3/2010	Duarte	8,801,235	B2	8/2014	Yurich
D613,900	S	4/2010	Hargreaves	D713,953	S	9/2014	Jepson
D614,801	S	4/2010	Collins	D714,988	S	10/2014	Park
7,722,228	B2	5/2010	Broer	D715,994	S	10/2014	Klus
D617,028	S	6/2010	Verfuertth	D716,995	S	11/2014	Zhu
D620,190	S	7/2010	Chung	D717,487	S	11/2014	Guzzini
D621,993	S	8/2010	Jong	D717,636	S	11/2014	Stanley
7,771,086	B2	8/2010	Goverde	D720,488	S	12/2014	Toyohisa
D628,335	S	11/2010	Hyland	D720,505	S	12/2014	Kersten
7,854,534	B2	12/2010	Liu	8,905,575	B2	12/2014	Durkee
D632,419	S	2/2011	Ng	D720,876	S	1/2015	Haverfield
D633,247	S	2/2011	Kong	D721,844	S	1/2015	Lay
D633,640	S	3/2011	Wauters	D722,654	S	2/2015	Martone
D634,060	S	3/2011	Wardenburg	D725,820	S	3/2015	Hargreaves
D634,240	S	3/2011	Junkeer	8,967,821	B2	3/2015	Pickard
D634,468	S	3/2011	Hargreaves	D726,359	S	4/2015	Grigore
D634,469	S	3/2011	Hargreaves	8,998,473	B1	4/2015	Anderson
				9,016,892	B1	4/2015	Scribante
				9,016,907	B2	4/2015	Stanley
				D728,848	S	5/2015	Reyes
				D729,435	S	5/2015	Arndt



(56)

References Cited

U.S. PATENT DOCUMENTS

D730,556 S	5/2015	Toyohisa	D781,492 S	3/2017	Reynolds
D725,819 S	6/2015	Reynolds	D783,887 S	4/2017	Stanley
D731,103 S	6/2015	Wilke	D783,888 S *	4/2017	Reynolds ..... D26/118
D731,109 S	6/2015	Wardenburg	D786,477 S	5/2017	Laurderdale
D731,701 S	6/2015	Hargreaves	D786,488 S	5/2017	Reynolds
D732,233 S	6/2015	Reynolds	D786,489 S	5/2017	Stanley
D732,234 S	6/2015	Rashidi Doust	D786,490 S	5/2017	Stanley
D732,235 S	6/2015	Reynolds	D786,491 S *	5/2017	Reynolds ..... D26/118
D732,236 S	6/2015	Reynolds	D792,635 S	7/2017	Reynolds
D733,347 S	6/2015	Dungan	D793,616 S	8/2017	Reynolds
9,052,075 B2	6/2015	Demuynck	D796,727 S *	9/2017	Reynolds ..... D26/118
D733,952 S	7/2015	Lay	D796,728 S	9/2017	Reynolds
D733,960 S	7/2015	Howe	D797,350 S	9/2017	Reynolds
D734,534 S	7/2015	Howe	D797,353 S *	9/2017	Stanley ..... D26/118
D735,391 S	7/2015	Blessitt	9,750,199 B2	9/2017	Stanley
D735,401 S	7/2015	Clements	9,752,766 B2	9/2017	Stanley
D736,450 S	8/2015	Reynolds	D802,826 S	11/2017	Stanley
D737,498 S	8/2015	Stanley	D802,828 S	11/2017	Stanley
9,110,209 B2	8/2015	Blessitt	D802,829 S	11/2017	Stanley
D738,031 S	9/2015	Martins	D802,830 S	11/2017	Stanley
D739,595 S	9/2015	Reynolds	D802,831 S *	11/2017	Reynolds ..... D26/118
9,127,826 B2	9/2015	Boyer	D804,709 S *	12/2017	Reynolds ..... D26/118
D740,486 S	10/2015	Reynolds	D825,096 S *	8/2018	Reynolds ..... D26/118
D740,996 S	10/2015	Tragatschnig	D826,468 S *	8/2018	Stanley ..... D26/118
D745,993 S *	12/2015	Reynolds ..... D26/118	2002/0073285 A1	6/2002	Butterworth
D747,029 S	1/2016	Reynolds	2002/0141195 A1	10/2002	Wardenburg
D747,538 S	1/2016	Reynolds	2003/0031011 A1	2/2003	Miller
D747,825 S	1/2016	Reynolds	2003/0191783 A1	10/2003	Wolczko
D747,849 S	1/2016	Reynolds	2004/0240214 A1	12/2004	Whitlow
D747,923 S	1/2016	Cornu	2005/0117333 A1	6/2005	Yoshida
D748,319 S	1/2016	Johnson	2005/0160481 A1	7/2005	Todd
D748,320 S	1/2016	Johnson	2005/0233691 A1	10/2005	Horton
D748,847 S	1/2016	Johnson	2006/0231081 A1	10/2006	Kirakosyan
D748,850 S	1/2016	Johnson	2006/0232984 A1	10/2006	Schuknecht
D748,849 S	2/2016	Stanley	2006/0282457 A1	12/2006	Williams
D749,773 S	2/2016	Waible	2007/0051321 A1	3/2007	Chang
D750,312 S	2/2016	Reynolds	2007/0070633 A1	3/2007	Eynden
D750,313 S	2/2016	Reynolds	2007/0228993 A1	10/2007	Stuer
D750,316 S	2/2016	Reynolds	2007/0246631 A1	10/2007	Brown
9,255,690 B2	2/2016	Dimitriadis	2007/0282806 A1	12/2007	Hoffman
D750,831 S	3/2016	Clements	2008/0059799 A1	3/2008	Scarlata
D751,244 S	3/2016	Reynolds	2008/0117617 A1	5/2008	Hargreaves
D751,245 S	3/2016	Stanley	2008/0130304 A1	6/2008	Rash
D751,247 S	3/2016	Reynolds	2008/0205030 A1	8/2008	Hargreaves
9,279,553 B1	3/2016	Scribante	2008/0205071 A1	8/2008	Townsley
D753,654 S	4/2016	Eastwood	2008/0212326 A1	9/2008	Chon
9,310,037 B2	4/2016	Cercone	2008/0178957 A1	11/2008	Pickard
D756,016 S	5/2016	Hargreaves	2008/0278950 A1	11/2008	Pickard
D756,023 S	5/2016	Hoffer	2009/0166250 A1	5/2009	Hargreaves
D756,026 S	5/2016	Reynolds	2009/0231840 A1	9/2009	Boehme
D757,323 S	5/2016	Reynolds	2009/0262540 A1	10/2009	Hargreaves
D757,326 S	5/2016	Reynolds	2009/0276478 A1	11/2009	Soman
D757,346 S	5/2016	Stanley	2009/0310373 A1	12/2009	Burkhauser
9,335,038 B2	5/2016	Stanley	2009/0316404 A1	12/2009	Mo
9,366,947 B2	6/2016	Miyata	2009/0323335 A1	12/2009	Yang
D762,320 S	7/2016	Reynolds	2010/0214789 A1	8/2010	Hawkes
D765,306 S	8/2016	Wardenburg	2010/0238661 A1	9/2010	Pfund
D766,756 S	9/2016	Franc	2010/0277908 A1	11/2010	Hu
9,451,743 B2	9/2016	Koemer	2010/0277929 A1	11/2010	Hargreaves
D769,513 S	10/2016	Reynolds	2010/0295468 A1	11/2010	Pedersen
D769,514 S	10/2016	Reynolds	2010/0302768 A1	12/2010	Collins
D770,079 S	10/2016	Stanley	2011/0169412 A1	7/2011	Yurich
D770,082 S	10/2016	Reynolds	2011/0203096 A1	8/2011	Hargreaves
D770,670 S	11/2016	Reynolds	2011/0259665 A1	10/2011	Morgan
D770,671 S *	11/2016	Reynolds ..... D26/118	2012/0051041 A1	3/2012	Edmond
D771,301 S	11/2016	Stanley	2012/0092859 A1	4/2012	Gregoris
D771,304 S	11/2016	Goltche	2012/0145699 A1	6/2012	McMahan
D773,107 S	11/2016	Stanley	2012/0212883 A1	8/2012	Hargreaves
D774,234 S	12/2016	Plourde	2012/0230035 A1	9/2012	Bradley, Jr.
D775,405 S *	12/2016	Stanley ..... D26/118	2012/0302768 A1	11/2012	Janka et al.
D775,406 S	12/2016	Hargreaves	2013/0083539 A1	1/2013	Dimitriadis
D775,760 S	1/2017	Reynolds	2013/0077329 A1	3/2013	Hessling
9,551,482 B2	1/2017	Seward	2013/0155685 A1	6/2013	Stanley
D780,985 S	3/2017	Stanley	2013/0242573 A1	9/2013	Petrsoiki
D780,986 S	3/2017	Reynolds	2013/0250567 A1	9/2013	Edmond
			2014/0378283 A1	12/2014	Qiu
			2015/0023022 A1	1/2015	Stanley
			2015/0098215 A1	4/2015	Torabifard
			2015/0252992 A1	9/2015	Stanley



(56)

**References Cited**

## U.S. PATENT DOCUMENTS

2015/0252993 A1 9/2015 Stanley  
 2015/0252994 A1 9/2015 Stanley  
 2015/0260381 A1 9/2015 Verfuert  
 2017/0211801 A1 7/2017 Stanley

## FOREIGN PATENT DOCUMENTS

EP 0325003 7/1989  
 EP 0440274 8/1991  
 WO 2002063210 8/2002  
 WO 2003060379 7/2003  
 WO 2008018000 2/2008  
 WO 2009096775 8/2009  
 WO 2011119451 9/2011

## OTHER PUBLICATIONS

Apollo Horticulture GLRLS24 6" Air Cooled Hydroponic Grow Light Glass Reflector Hood, image post date Oct. 15, 2010, site visited Oct. 3, 2014, (online), <[http://www.amazon.com/apollo-horticulture-GLRLS24-hydroponic-reflector/dp/B00BMVK8HG/ref=cm\\_cd\\_ql\\_qh\\_dp\\_i](http://www.amazon.com/apollo-horticulture-GLRLS24-hydroponic-reflector/dp/B00BMVK8HG/ref=cm_cd_ql_qh_dp_i)>.

Adjustable Reflector, image post date Apr. 23, 2012, site visited Sep. 23, 2015, [http://web.archive.org/web/2012043260757/http://hydroponics-products.en.alibaba.com/product/519225678-213056444/adjustable\\_reflector\\_grow\\_light\\_hydroponics\\_greenhouse\\_horticulture\\_reflector\\_hood.html](http://web.archive.org/web/2012043260757/http://hydroponics-products.en.alibaba.com/product/519225678-213056444/adjustable_reflector_grow_light_hydroponics_greenhouse_horticulture_reflector_hood.html).

Agrotech Magnum Reflector, image post date Feb. 5, 2012, site visited Oct. 31, 2014, [www.hydroponics.net/i/136580](http://www.hydroponics.net/i/136580).

Cree CR22, image post date Apr. 28, 2011, site visited Nov. 15, 2014, <http://ledsmagazine.com/content/dam/leds/migrated/objects/news/8/4/19/cree204272011.jpg>.

ZR series High Efficacy Troffer, image post date Apr. 13, 2012, site visited Oct. 31, 2014, [www.cree.com/lighting/products](http://www.cree.com/lighting/products).

Grow Lights Home Depot: Find many types of grow lights for your plant, published Dec. 22, 2012, online. Site visited May 25, 2014. <http://besthomedecorfurniture.com/gardening-d%C3%A9cor/grow-lights-home-depot-few-things-to-consider-when-buying-grow-lighting-plants-online.html>.

LED Grow Light Comparison Test Review, Youtube.com, published Jun. 29, 2012, online. Site visited Jun. 25, 2014. [www.youtube.com/watch?v=f-8oy0qbgrs](http://www.youtube.com/watch?v=f-8oy0qbgrs).

Illuminator Pro-Series Hybrid 350W, wordpress.com, published Dec. 22, 2010, online, site visited Jun. 25, 2014. <http://growsetup.wordpress.com/category/grow-lights/>.

California Lightworks New SolarStorm 440W LED Grow Light with UVB, hydrobuilder.com, online. Site visited May 25, 2014. [http://hydrobuilder.com/solarstorm-440w-led-grow-light-with-uvb.html?dzid=strands\\_CLW-SS-440](http://hydrobuilder.com/solarstorm-440w-led-grow-light-with-uvb.html?dzid=strands_CLW-SS-440).

2013 Sunlight Supply Cataog, Issuu.com, published Aug. 1, 2013, online. Site visited Feb. 2, 2015. [http://issuu.com/sunlightsupply/docs/2013\\_sunlightproductcatalog/49](http://issuu.com/sunlightsupply/docs/2013_sunlightproductcatalog/49).

Pages 29 and 54 from 2014-2015 dealer catalog showing and describing Super Sun DE reflector published by Sunlight Supply, Inc. 2014.

Dominator XXXL Non AC Reflector pack of 3 Spec Sheet, GreenTreesHydroponics.com, date available Mar. 12, 2014, online. Site visited Feb. 3, 2015, <https://www.hydroponics.net/i/141477>.

Low Rider Air-Cooled Reflector—TinEye, image post date Oct. 11, 2012, site visited Oct. 1, 2015, [www.tineye.com/search/1b0e187c5ed9e4e9cfb55d0472271385a2c0e88/?pluginver](http://www.tineye.com/search/1b0e187c5ed9e4e9cfb55d0472271385a2c0e88/?pluginver).

OG Air Cooled Parabolic Reflector Only—Make the Most of Your Grow Light, GroWell Hydroponics, <http://www.growell.co.uk/og-air-cooled-parabolic-reflector-only.html>, pp. 1-2, accessed Aug. 26, 2014.

Air Resistance: Distinguishing Between Laminar and Turbulent Flow, [www.docstoc.com](http://www.docstoc.com), Dec. 29, 2010, p. 1-6.

Sun Systems LEC 630 Light Emitting Ceramic Fixture, Spec Sheet for 906217—Sun System LEC 630 120 Volt w/ 3100 K Lamps, [www.sunlightsupply.com/shop/bycategory/led-lighting/sun-system-lec-630-light-emitting-ceramic-fixture](http://www.sunlightsupply.com/shop/bycategory/led-lighting/sun-system-lec-630-light-emitting-ceramic-fixture), online, updated Feb. 9, 2015. Site visited Mar. 30, 2015, p. 1.

Mohri, Mineko, International Preliminary Report on Patentability for PCT/US2014/014959, dated Jan. 19, 2016.

A3V Reflector, Titaness Light Shop, [www.titanesslightshop.com/products-page/reflectors/a3v-reflector](http://www.titanesslightshop.com/products-page/reflectors/a3v-reflector), online. Site visited Jan. 14, 2015.

G2V Grow Light Reflector, Titaness Light Shop, [www.titanesslightshop.com/products-page/reflectors/g2v-grow-light-reflector](http://www.titanesslightshop.com/products-page/reflectors/g2v-grow-light-reflector), online. Site visited Jan. 14, 2015.

1000 Watt Galaxy Grow Amp Double Ended Grow Light Packages, image post date Jan. 30, 2014, site visited Jul. 8, 2016, <<http://www.ehydroponics.com/100-watt-galaxy-grow-amp-double-ended-grow-light-package.html>>.

2009-10-watt-light-set—TinEye, image post date May 23, 2012, site visited Jul. 8, 2016, <<https://www.tineye.com/search/2de39cf51f7a031139a80ce555e2f30d0abd5216/>>.

Square 10 Watt LED Grow Light, image post date Aug. 1, 2011, site visited Jul. 8, 2016, <<http://www.dhgate.com/store/product/hydroponic-vegetable-10-watt-led-grow-light/216755031.html>>.

Sun System 630 Ceramic Metal Halide 120v Specifications, GrowersHouse.com, update on Sep. 9, 2014, Online. Site visited Feb. 3, 2015. <[http://growershouse.com/aitdownloadablefiles/download/aitfile/aitfile\\_id/583/](http://growershouse.com/aitdownloadablefiles/download/aitfile/aitfile_id/583/)>.

Growlite HDE 600W-1000W Double Ended Lamp Concealed Vacuum Airflow Technology, Indoor Grow Science, site visited Aug. 3, 2016, <<http://www.indoorgrowscience.net/downloads/specs/hde.pdf>>.

Sun Systems LEC 315—Reviews?, rollitup.com forum, published Oct. 23, 2013, online. Visited Nov. 8, 2016. <<http://rollitup.org/t/sun-systems-lec-315-reviews.742794>>.

Sun System LEC 315 120v Light Emitting Ceramic Metal Halide Fixture w/ Free Ratchet Light Hangers, Amazon.com, earliest review of Jul. 2, 2014, online. Visited Nov. 8, 2016 | <<https://www.amazon.com/sun-system-emitting-ceramic-fixture/dp/B00HBCV8TM>>. LEC 315 Watt Grow Light Great Yield Reports!, YouTube.com, published Mar. 31, 2014, online. Visited Nov. 8, 2016. (<<https://www.youtube.com/watch?v=QqcoW19KnUk>>).

Air Cooled Grow Lights, greensteamhydroponics.com, published May 24, 2014, online. Site visited Nov. 16, 2016. <[http://web.archive.org/web/20140524103407/http://www.greensteamhydroponics.com/aircooled-reflector-range-from-greensteam-hydroponics/prod\\_699.html](http://web.archive.org/web/20140524103407/http://www.greensteamhydroponics.com/aircooled-reflector-range-from-greensteam-hydroponics/prod_699.html)>.

AplusChoice-Hydroponics, image post date Dec. 2, 2014, site visited Jul. 13, 2017, (online), <[https://www.tineye.com/search/6589596c8738268de70acceca20d64855d0f1d2/?sort=crawal\\_date&order=asc](https://www.tineye.com/search/6589596c8738268de70acceca20d64855d0f1d2/?sort=crawal_date&order=asc)>.

iPower 600 wat HPS MH Grow Light Digital Dimm System Indoor Garden Set, image post date 2013, site visited Jul. 13, 2017, (online), <[https://bidjapon.com/item\\_View.aspx?itemId=150928769289](https://bidjapon.com/item_View.aspx?itemId=150928769289)>.

\* cited by examiner

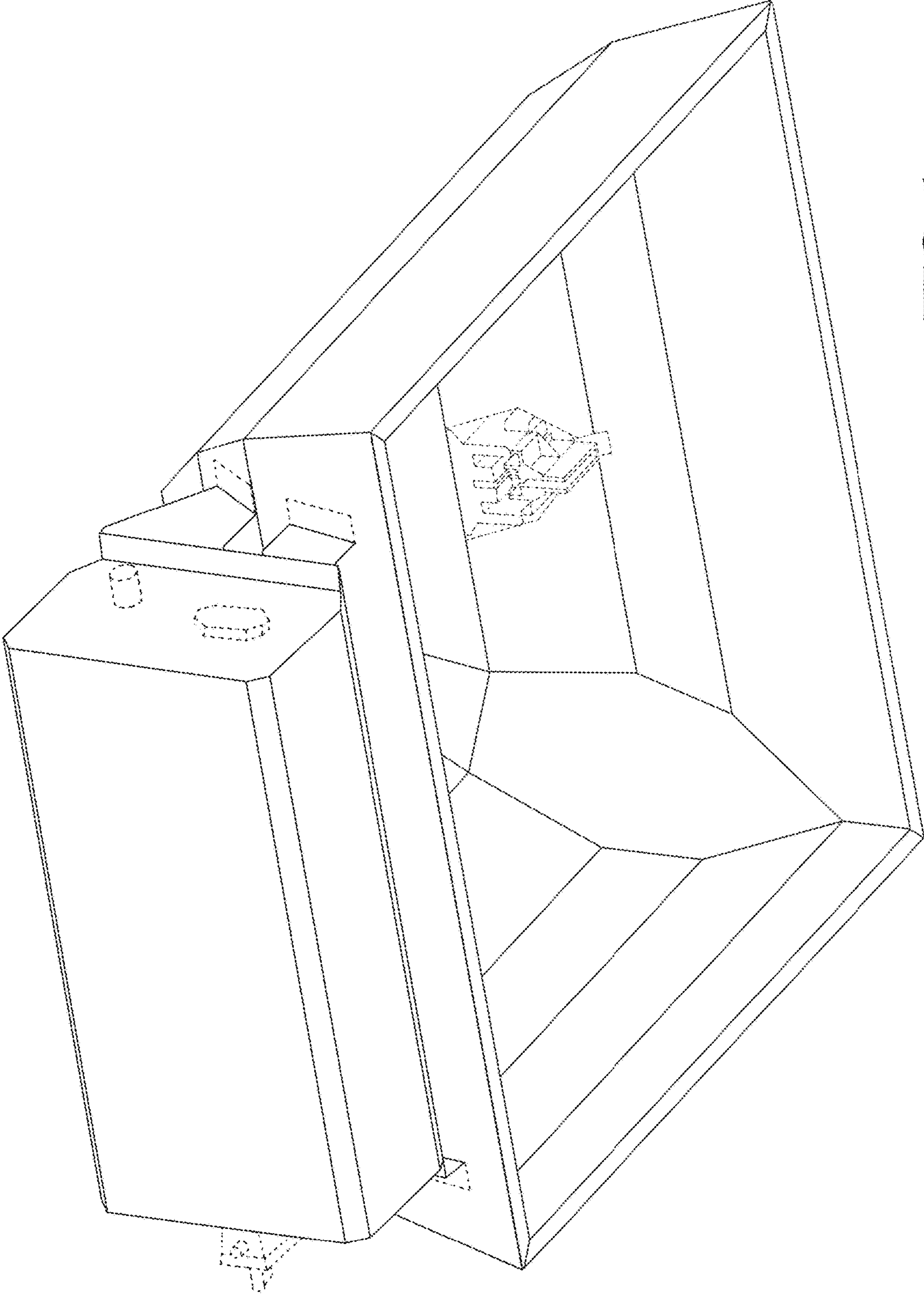


FIG. 1



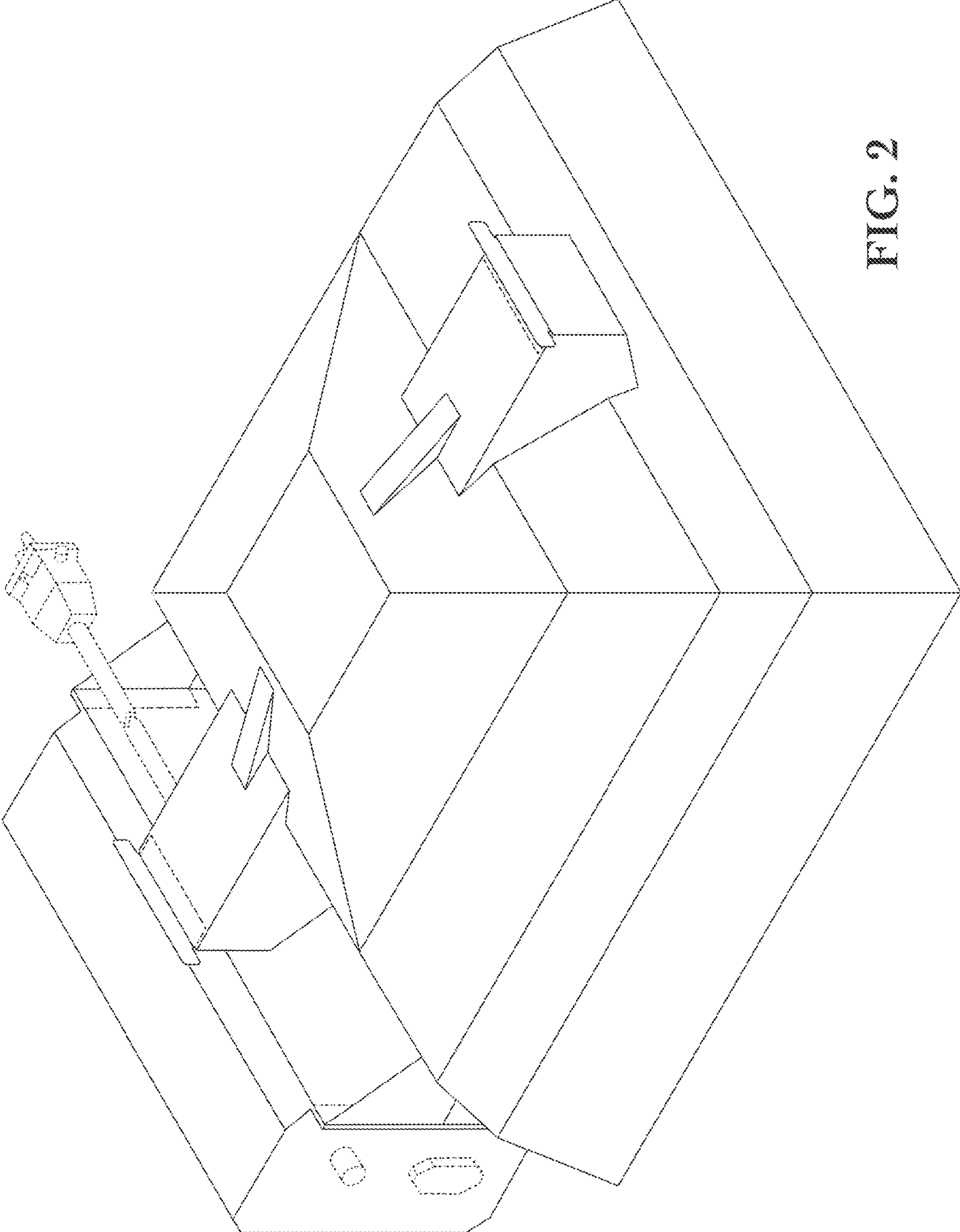


FIG. 2

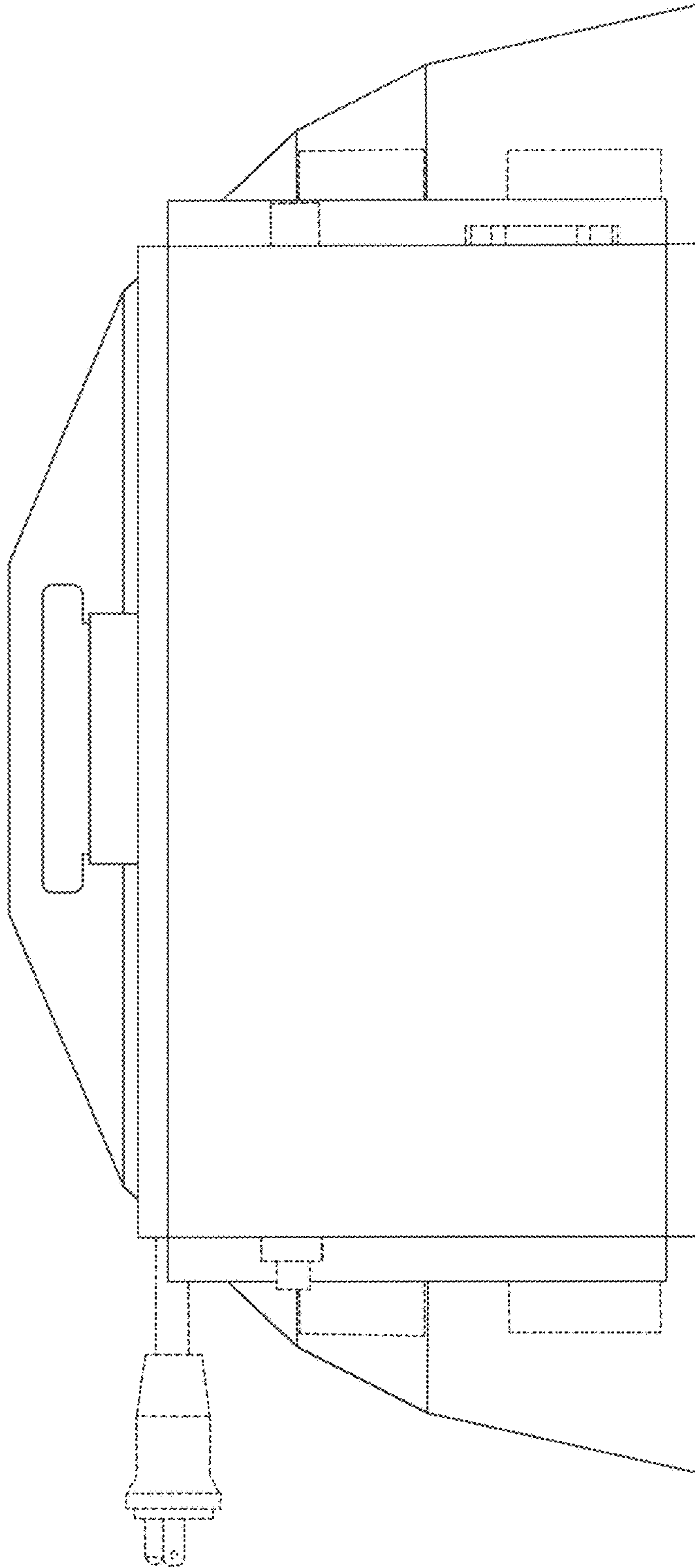


FIG. 3



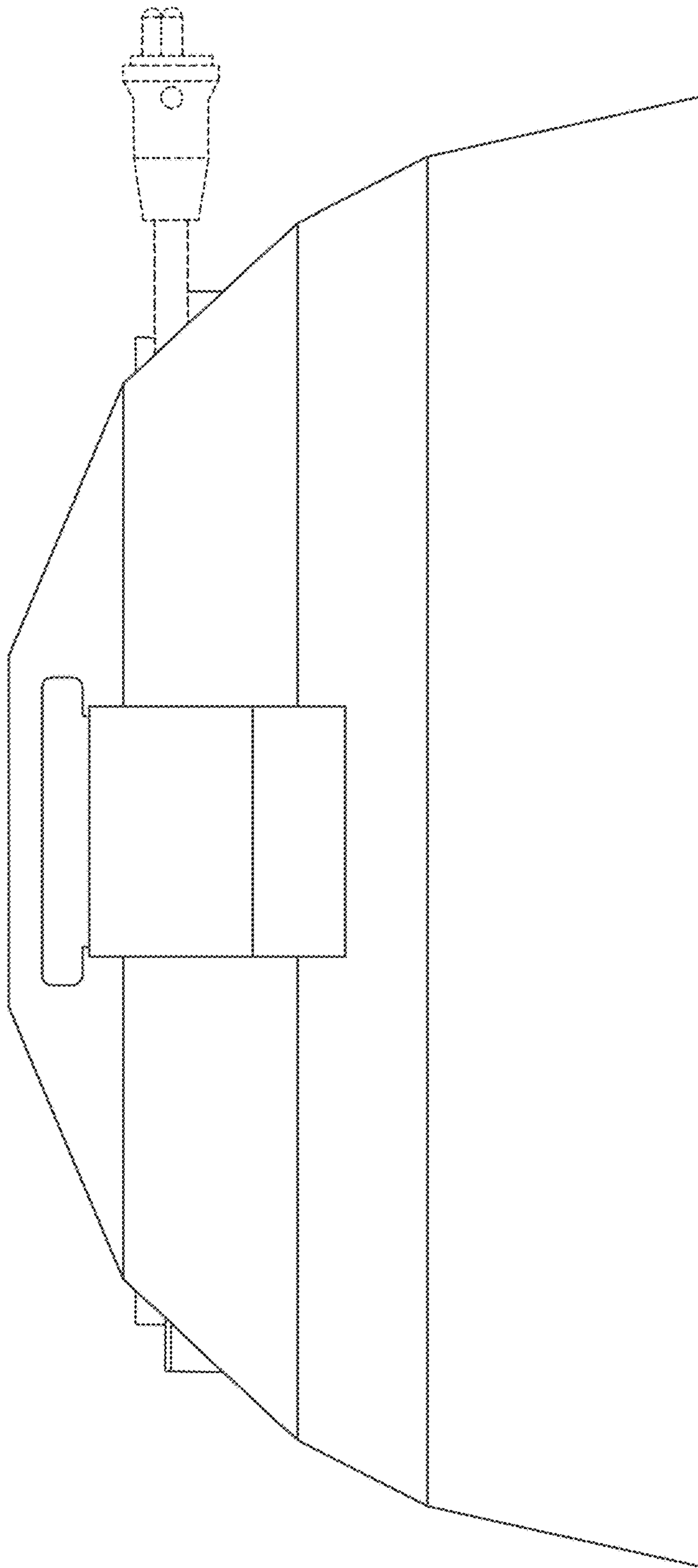


FIG. 4

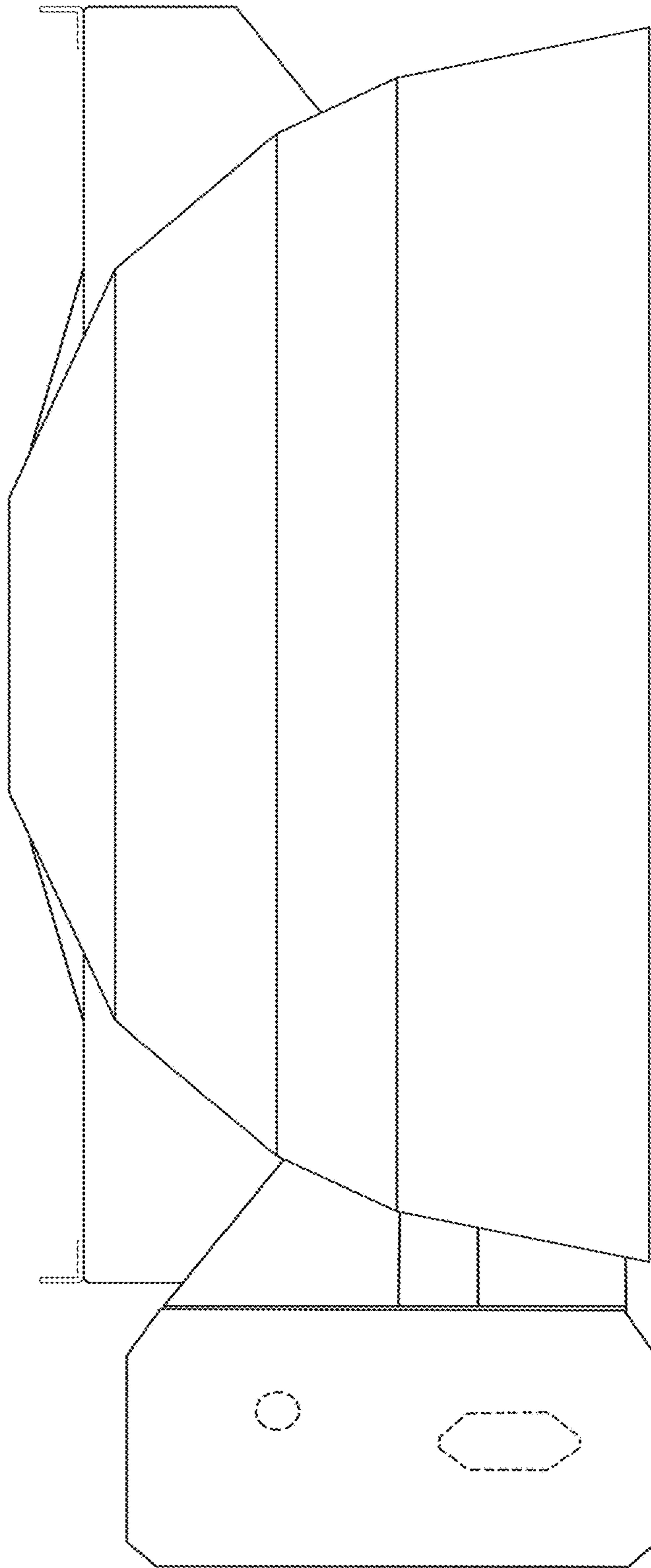


FIG. 5



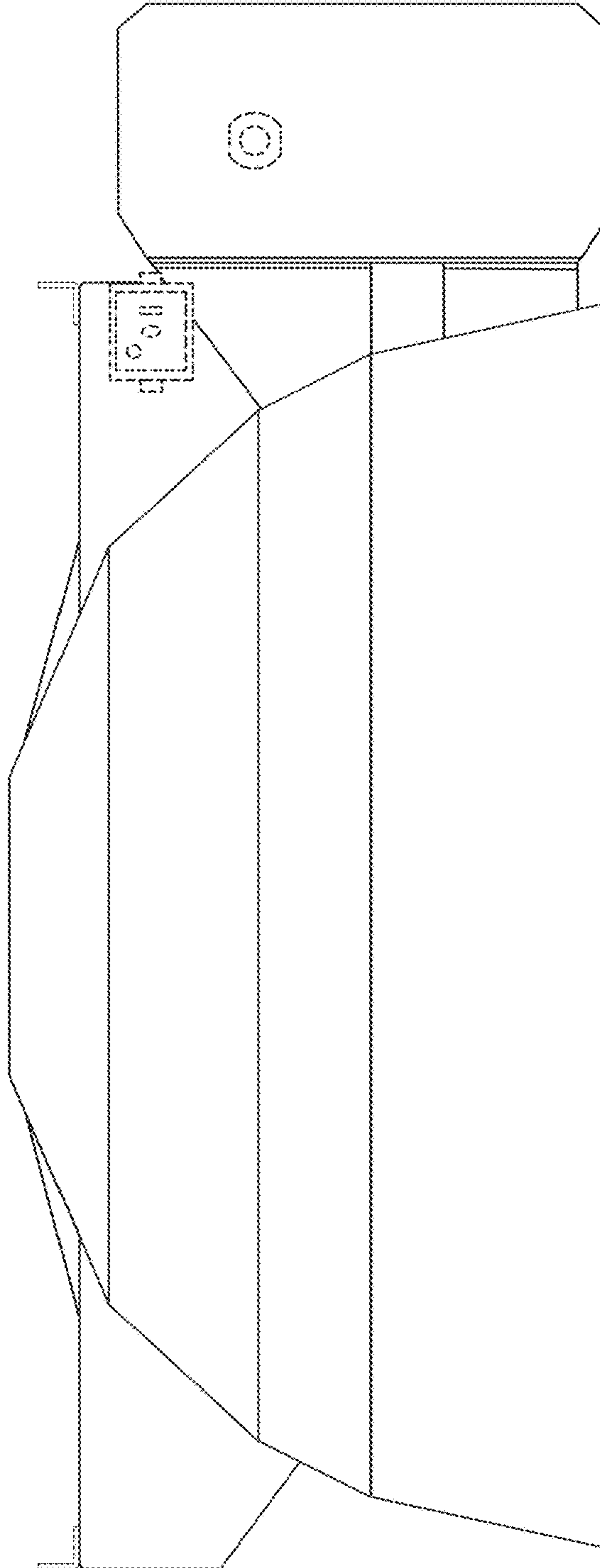


FIG. 6

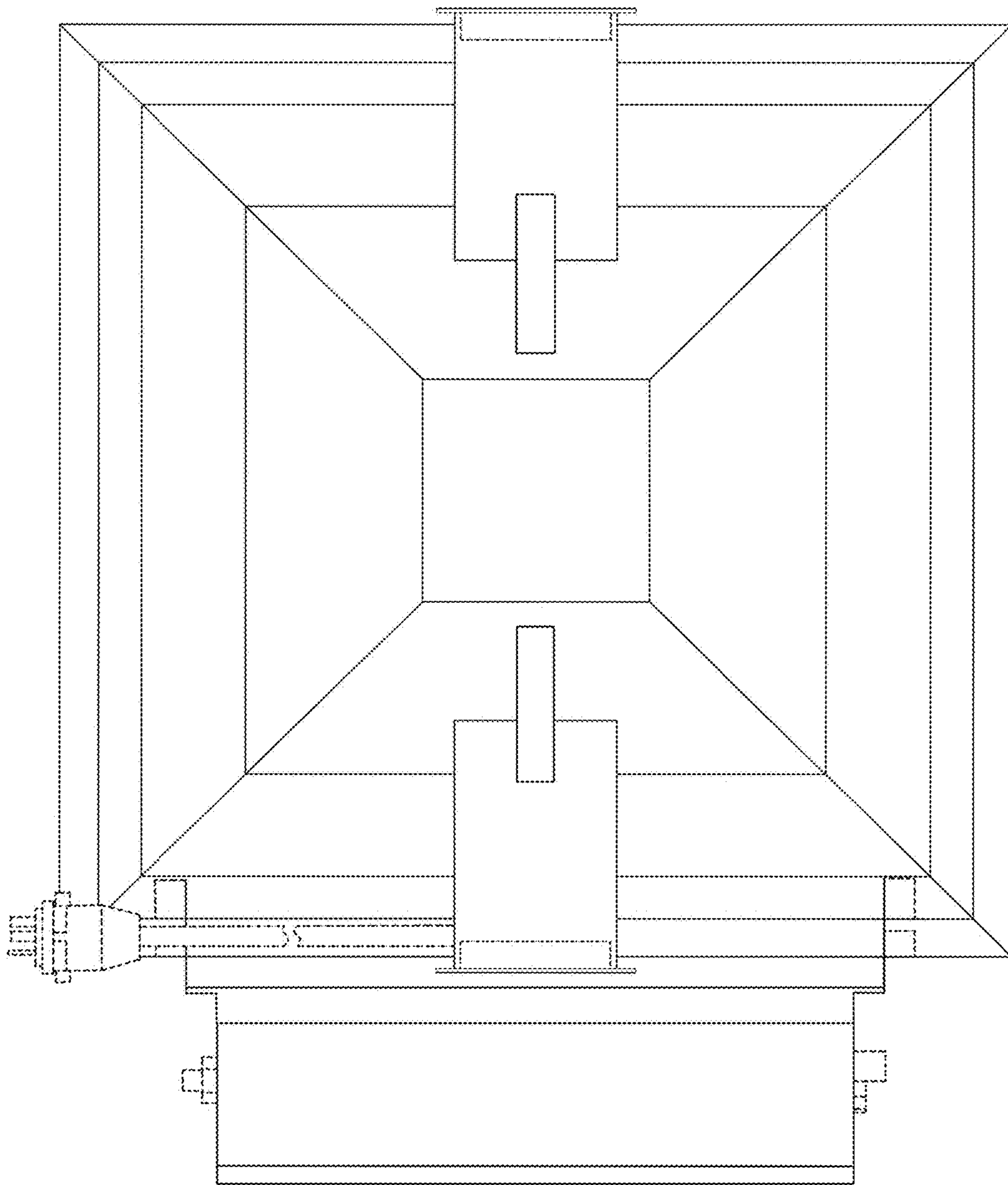


FIG. 7



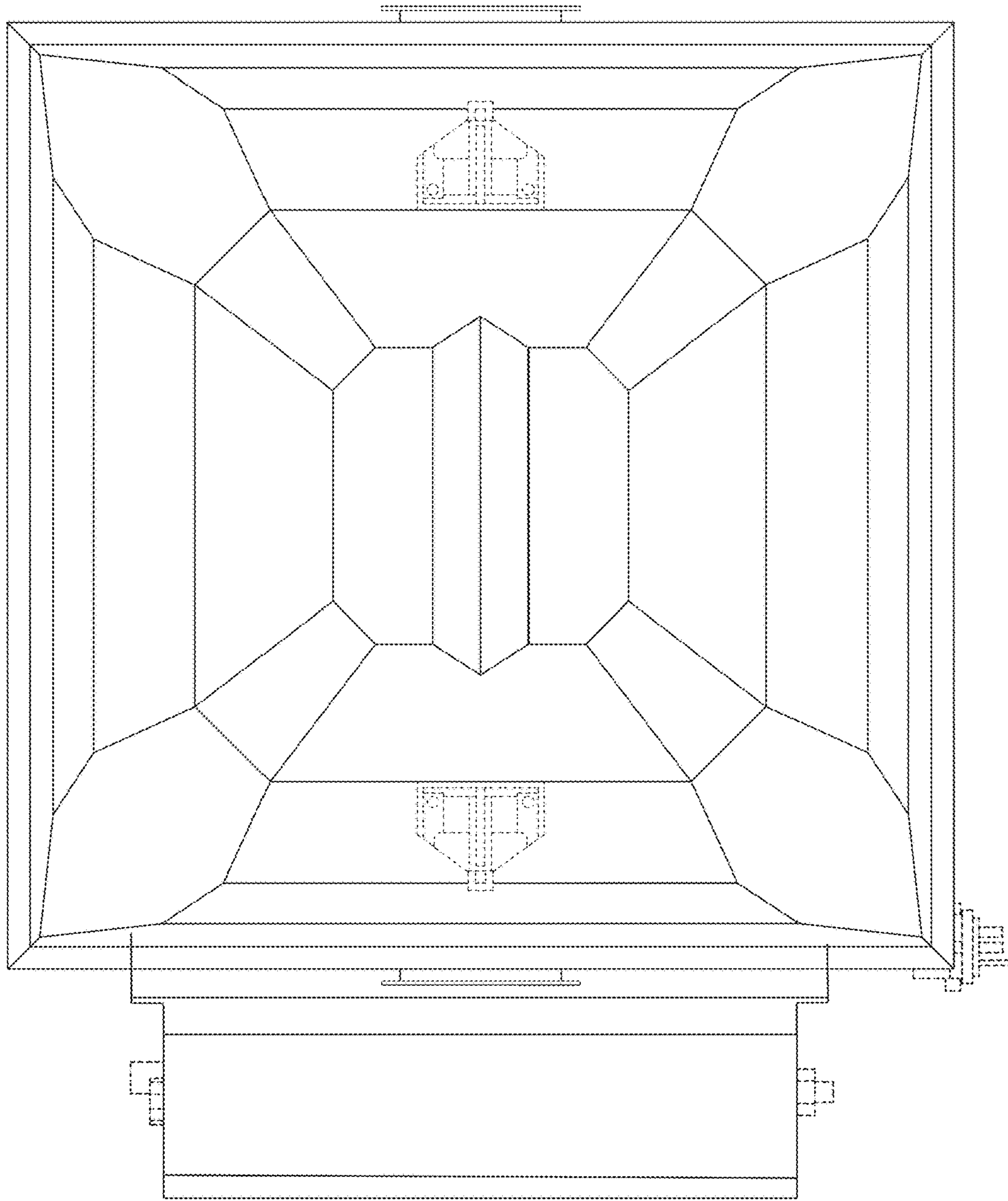


FIG. 8