



US00D984296S

(12) **United States Design Patent** (10) **Patent No.:** **US D984,296 S**
Smith (45) **Date of Patent:** **** Apr. 25, 2023**

(54) **AUTOMATED RAILROAD SIGNAGE DEVICE**

6,148,555 A 11/2000 Beauchamp
6,157,322 A 12/2000 Anderson
6,178,675 B1 1/2001 Strother
6,209,598 B1 4/2001 Petrey
6,594,930 B1 7/2003 Strauss
6,702,351 B2 3/2004 Buring
D501,891 S * 2/2005 Kaplan D20/41
(Continued)

(71) Applicant: **RailPros Field Services, Inc.**, Irving, TX (US)

(72) Inventor: **Chad Lee Smith**, Roscoe, IL (US)

(73) Assignee: **RailPros Field Services, Inc.**, Irving, TX (US)

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

FOREIGN PATENT DOCUMENTS

AU 2005202184 5/2005
CN 201514740 6/2010
(Continued)

(21) Appl. No.: **29/696,614**

(22) Filed: **Jun. 28, 2019**

OTHER PUBLICATIONS

(51) **LOC (14) Cl.** **10-05**

Triplesign VMS Solar, <https://www.triplesign.com/assets/pdf/Triplesign-VMS-Solar.pdf>.

(52) **U.S. Cl.**
USPC **D10/109.2**

(Continued)

(58) **Field of Classification Search**
USPC D10/104.1, 109.1, 109.2, 113.1, 113.4;
D20/17, 19, 41
CPC ... B61L 23/00; G09F 7/10; G09F 7/18; G09F
17/00
See application file for complete search history.

Primary Examiner — Joseph Kukella
(74) *Attorney, Agent, or Firm* — Scott Griggs; Griggs
Bergen LLP

(56) **References Cited**

(57) **CLAIM**

I claim the ornamental design for an automated railroad signage device, as shown and described.

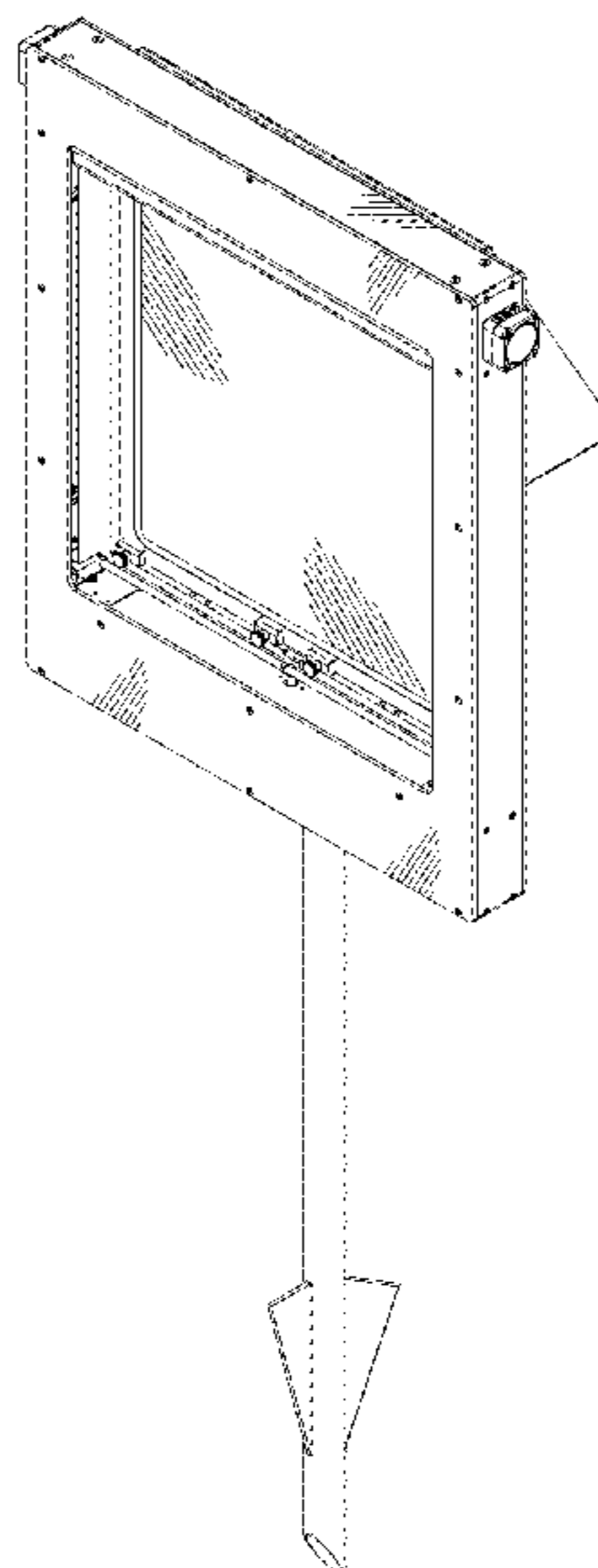
U.S. PATENT DOCUMENTS

DESCRIPTION

755,143 A * 3/1904 Landers G09F 17/00
116/175
4,059,915 A * 11/1977 Owens G09F 7/18
40/610
D265,746 S * 8/1982 Robillard D20/41
D304,039 S * 10/1989 Henderson D20/10
5,416,996 A 5/1995 Clemens
5,485,693 A 1/1996 Frenken
D375,979 S * 11/1996 Adams D20/26
5,918,924 A 7/1999 Cowan
6,065,232 A 5/2000 Haughey
6,092,320 A * 7/2000 Bringuet G09F 7/10
40/661.03
6,128,841 A 10/2000 Werner

FIG. 1 is a perspective front view of an automated railroad signage device showing the new design; and
FIG. 2 is a perspective rear view;
FIG. 3 is a bottom view;
FIG. 4 is a front view;
FIG. 5 is a right side view;
FIG. 6 is a left side view;
FIG. 7 is a rear view; and,
FIG. 8 is a top view.

1 Claim, 8 Drawing Sheets



(56)

References Cited

U.S. PATENT DOCUMENTS

7,075,427 B1 7/2006 Pace
 7,121,026 B2 10/2006 Chen
 7,163,108 B2 1/2007 Lyons
 7,333,277 B1 2/2008 Chen
 D598,053 S * 8/2009 Sanchez D20/19
 7,571,559 B2 8/2009 Olsson
 7,624,952 B1 12/2009 Bartek
 7,882,653 B2 2/2011 Barlow
 7,921,586 B2 4/2011 Reynolds
 8,138,948 B1 3/2012 Votava
 8,250,793 B1 8/2012 Halula
 8,312,676 B2 11/2012 Maciulewicz
 8,477,081 B2 7/2013 Daniel
 D716,679 S * 11/2014 Williams D10/109.1
 D791,241 S * 7/2017 Lemberger D20/41
 D797,856 S * 9/2017 Loew D20/41
 9,822,927 B2 11/2017 Frederick
 D804,583 S * 12/2017 Exley D21/483
 D807,434 S * 1/2018 Loew D20/41
 D842,383 S * 3/2019 Loew D20/41
 10,283,019 B2 5/2019 Ballow
 D898,827 S * 10/2020 Loew D20/41
 D902,315 S * 11/2020 Loew D20/41
 2003/0236598 A1 12/2003 Villarreal Antelo
 2004/0093777 A1 5/2004 Park
 2005/0178928 A1 8/2005 Wade
 2007/0146152 A1 6/2007 Welles
 2007/0199216 A1 8/2007 Atkinson
 2008/0073169 A1 3/2008 Walters
 2008/0084333 A1 4/2008 Forrest
 2008/0169385 A1 7/2008 Ashraf
 2008/0195312 A1 8/2008 Aaron
 2010/0146830 A1 6/2010 Large

2011/0006912 A1 1/2011 Sheardown
 2011/0118913 A1 5/2011 Pretorius
 2011/0127389 A1 6/2011 Bartek
 2012/0198739 A1 8/2012 Venetucci
 2012/0320204 A1 12/2012 Dahlin
 2013/0289873 A1 10/2013 Mitchell
 2014/0249877 A1 9/2014 Hull
 2017/0088046 A1 3/2017 Denny
 2017/0287368 A1 10/2017 Harter
 2018/0181992 A1 6/2018 Akhavan-Saraf
 2018/0247137 A1 8/2018 Boyle

FOREIGN PATENT DOCUMENTS

CN	202662247	1/2013
CN	104537837	4/2015
CN	104715625	6/2015
CN	112323673	2/2021
EP	0592208	4/1994
JP	5745928	5/2015
KR	101446063	9/2014
WO	2009055875	5/2009
WO	2018080382	5/2018
WO	2020264462	12/2020
WO	2020264477	12/2020
WO	2020264520	12/2020

OTHER PUBLICATIONS

Rotating Panel Billboard, Trivision, Trivision Billboard Advertising, Mobile Billboard, <https://www.youtube.com/watch?v=ddPn5AN9vqY>.
 "International Preliminary Report on Patentability." Dec. 28, 2021, for International Application No. PCT/US2020/040036.

* cited by examiner

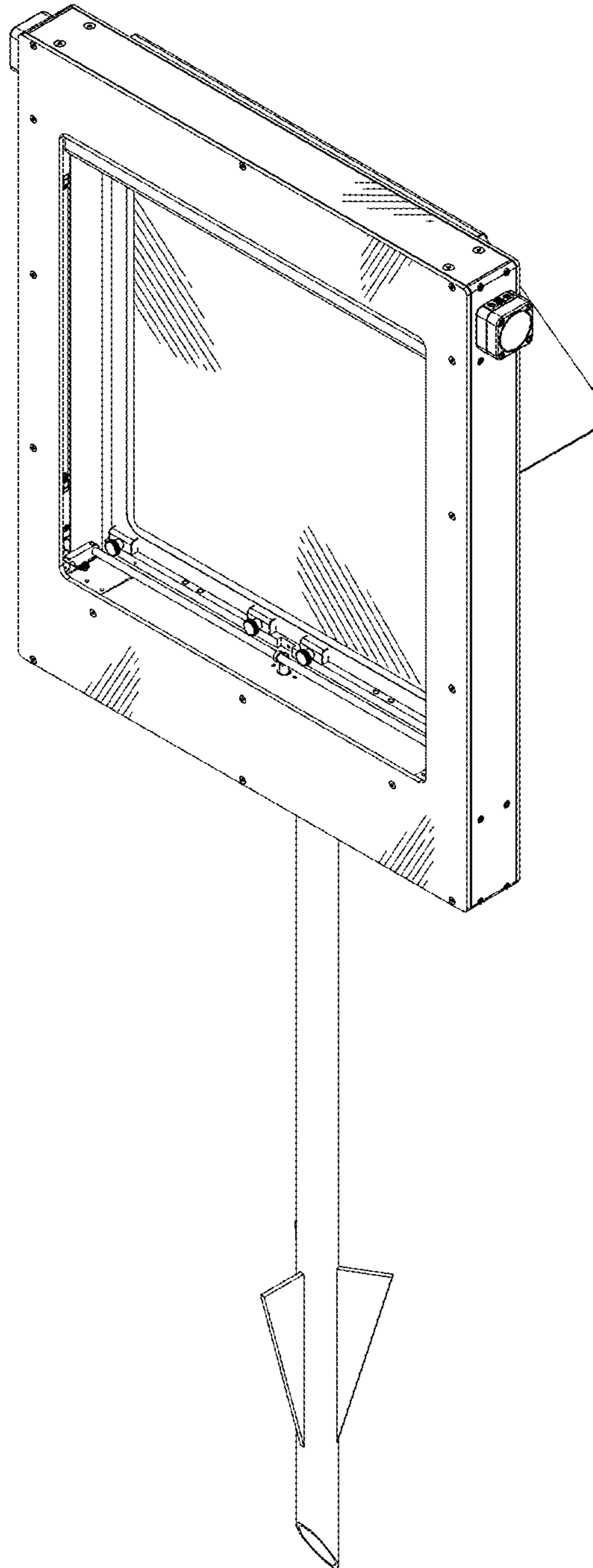


FIG. 1

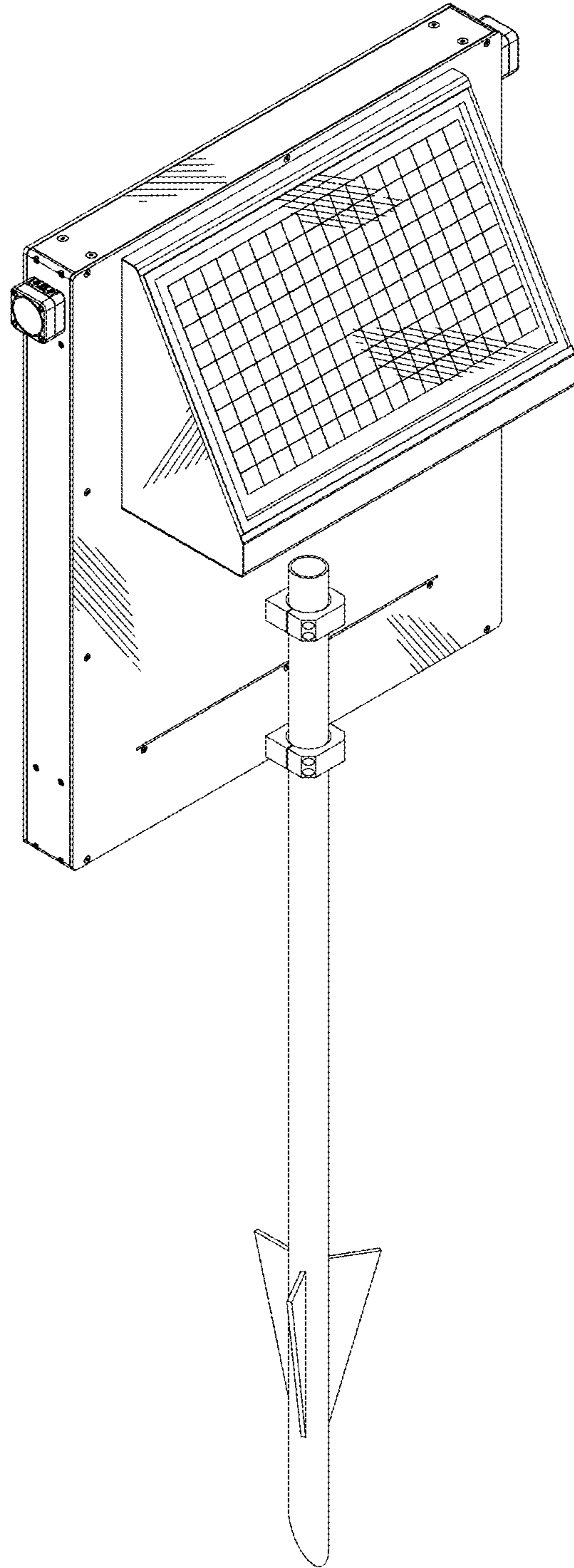


FIG. 2

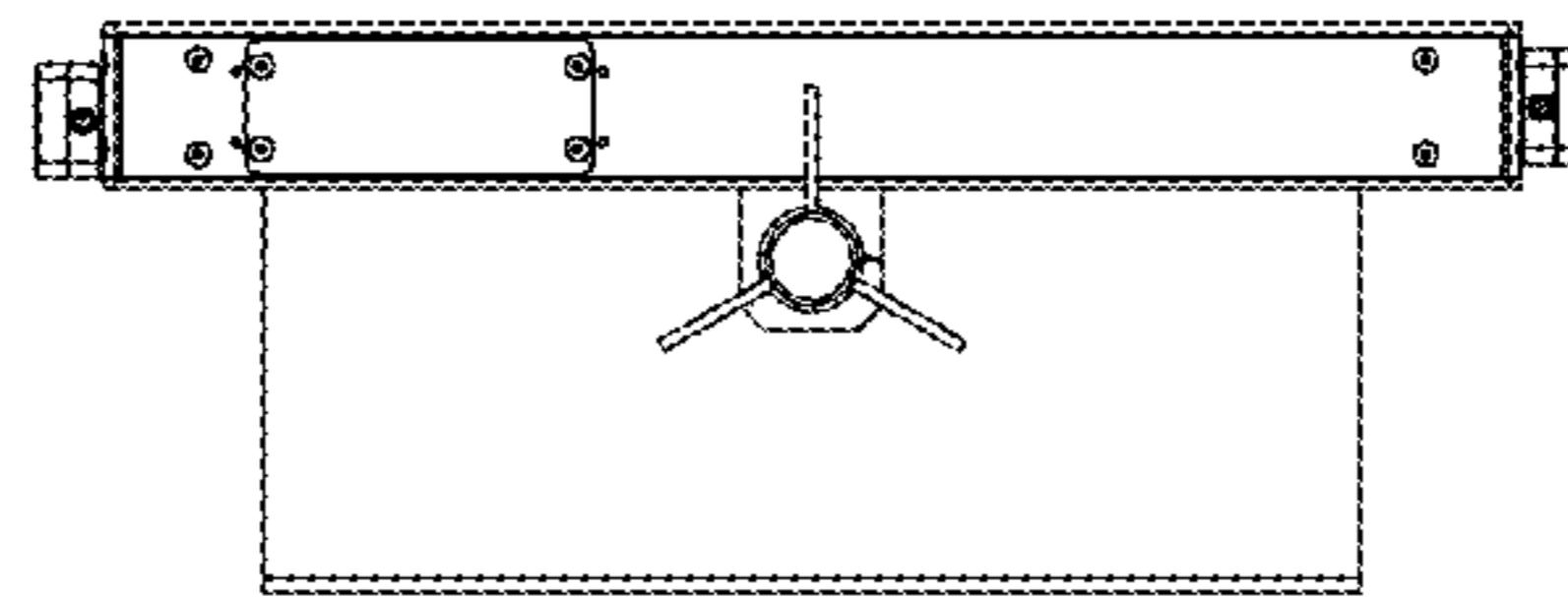


FIG. 3

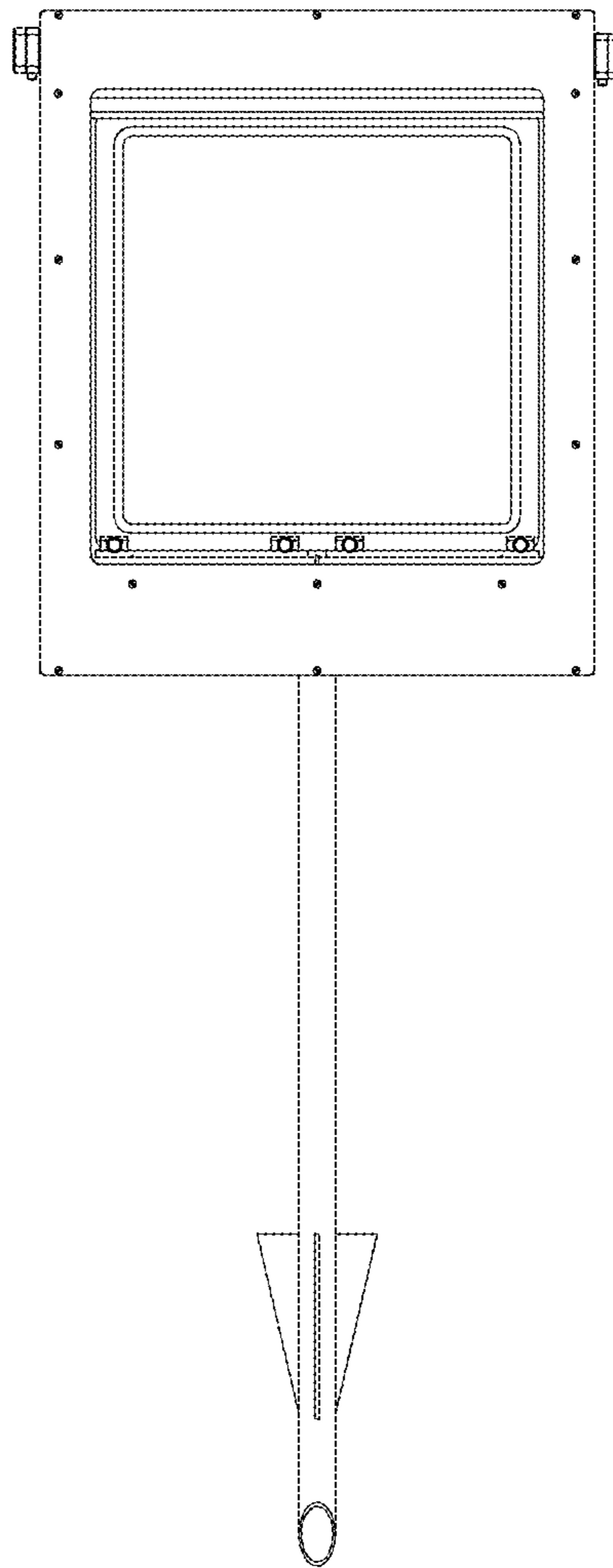


FIG. 4

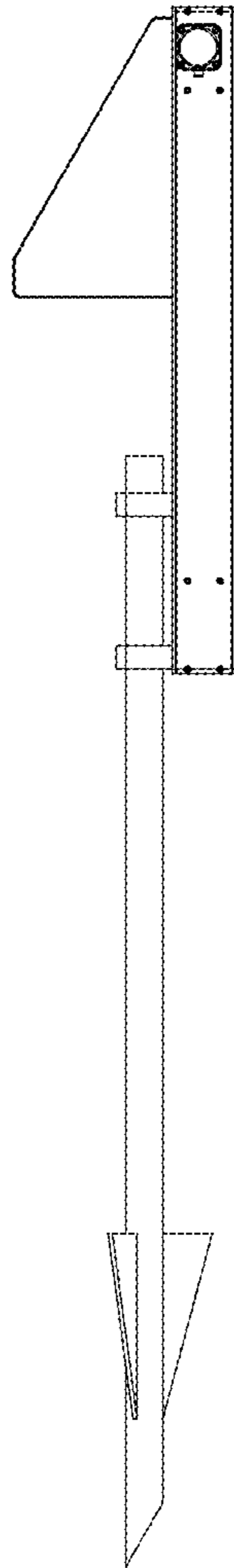


FIG. 5

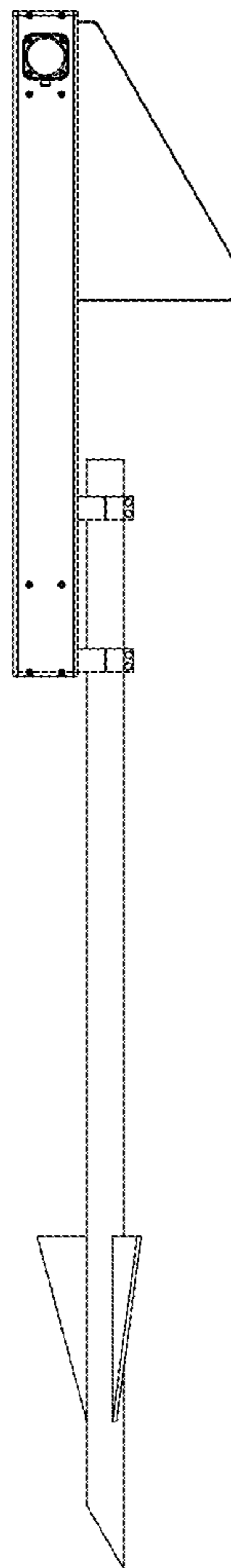


FIG. 6

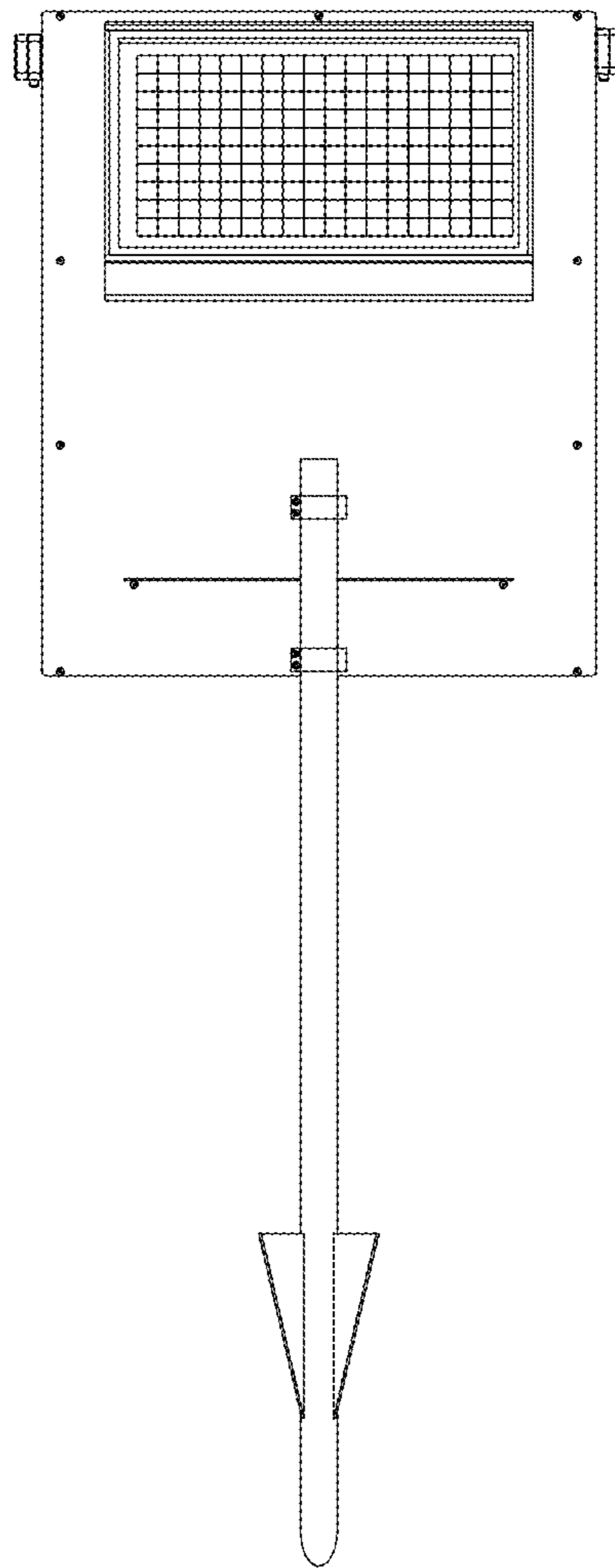


FIG. 7

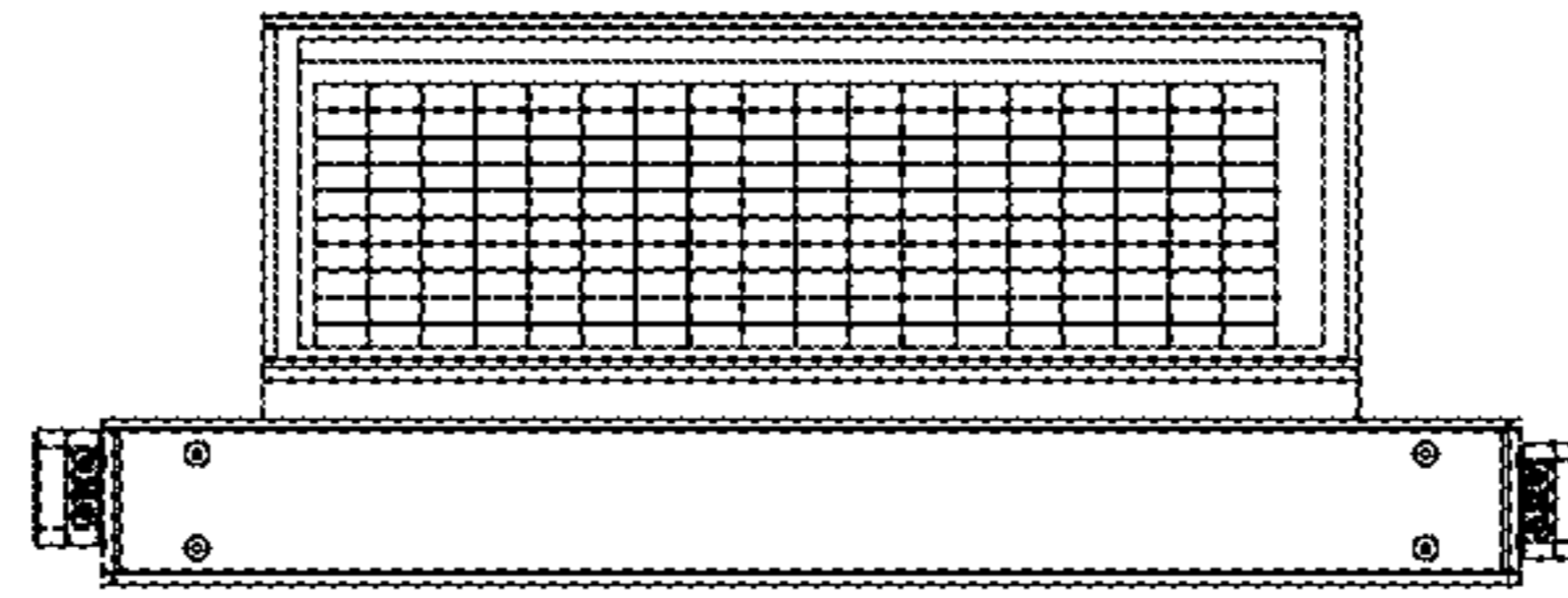


FIG. 8