



US010626650B2

(12) **United States Patent**  
**Honeycutt et al.**

(10) **Patent No.:** **US 10,626,650 B2**  
(45) **Date of Patent:** **\*Apr. 21, 2020**

(54) **GATE**

(71) Applicant: **Safe Rack LLC**, Andrews, SC (US)

(72) Inventors: **Robert W. Honeycutt**, Pawleys Island, SC (US); **Carson Allan Jones**, Andrews, SC (US)

(73) Assignee: **Safe Rack LLC**, Andrews, SC (US)

(\* ) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

This patent is subject to a terminal disclaimer.

(21) Appl. No.: **16/375,038**

(22) Filed: **Apr. 4, 2019**

(65) **Prior Publication Data**

US 2019/0226258 A1 Jul. 25, 2019

**Related U.S. Application Data**

(63) Continuation of application No. 15/660,430, filed on Jul. 26, 2017, now Pat. No. 10,253,538, which is a (Continued)

(51) **Int. Cl.**

**E05F 1/12** (2006.01)  
**E06B 11/04** (2006.01)

(Continued)

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

CPC ..... **E05F 1/1207** (2013.01); **E05D 7/0009** (2013.01); **E05F 1/12** (2013.01);

(Continued)

(58) **Field of Classification Search**

CPC .... **E05F 1/1207**; **E06B 11/085**; **E06B 11/022**; **E06B 11/04**; **E06B 11/00**; **E06B 11/045**; **E05D 7/0009**; **E05D 7/0415**

See application file for complete search history.

(56)

**References Cited**

U.S. PATENT DOCUMENTS

244,539 A 7/1881 Boyden et al.  
922,544 A 1/1909 Turner et al.

(Continued)

FOREIGN PATENT DOCUMENTS

EP 2815053 B1 7/2017

OTHER PUBLICATIONS

Extended European Search Report dated Sep. 17, 2015 in corresponding European patent application No. 13749657.6, all enclosed pages cited.

(Continued)

*Primary Examiner* — Justin B Rephann

(74) *Attorney, Agent, or Firm* — Nelson Mullins Riley & Scarborough, LLP

(57)

**ABSTRACT**

A gate comprises a spring-loaded hinge arrangement defining a rotational axis. A gate structure having a first support arm connected to a first end of the hinge arrangement is also provided. The gate structure is rotatable about the rotational axis. A spring-loaded hinge arrangement includes an outer hinge tube fixedly connectable to an adjacent structure and an inner hinge tube received in the outer hinge tube. The inner hinge tube has a first portion and a second portion movable with respect to each other, the second portion of the inner hinge tube being fixed with respect to the outer hinge tube and the first portion of the inner hinge tube being fixed with respect to the support arm.

**1 Claim, 25 Drawing Sheets**

