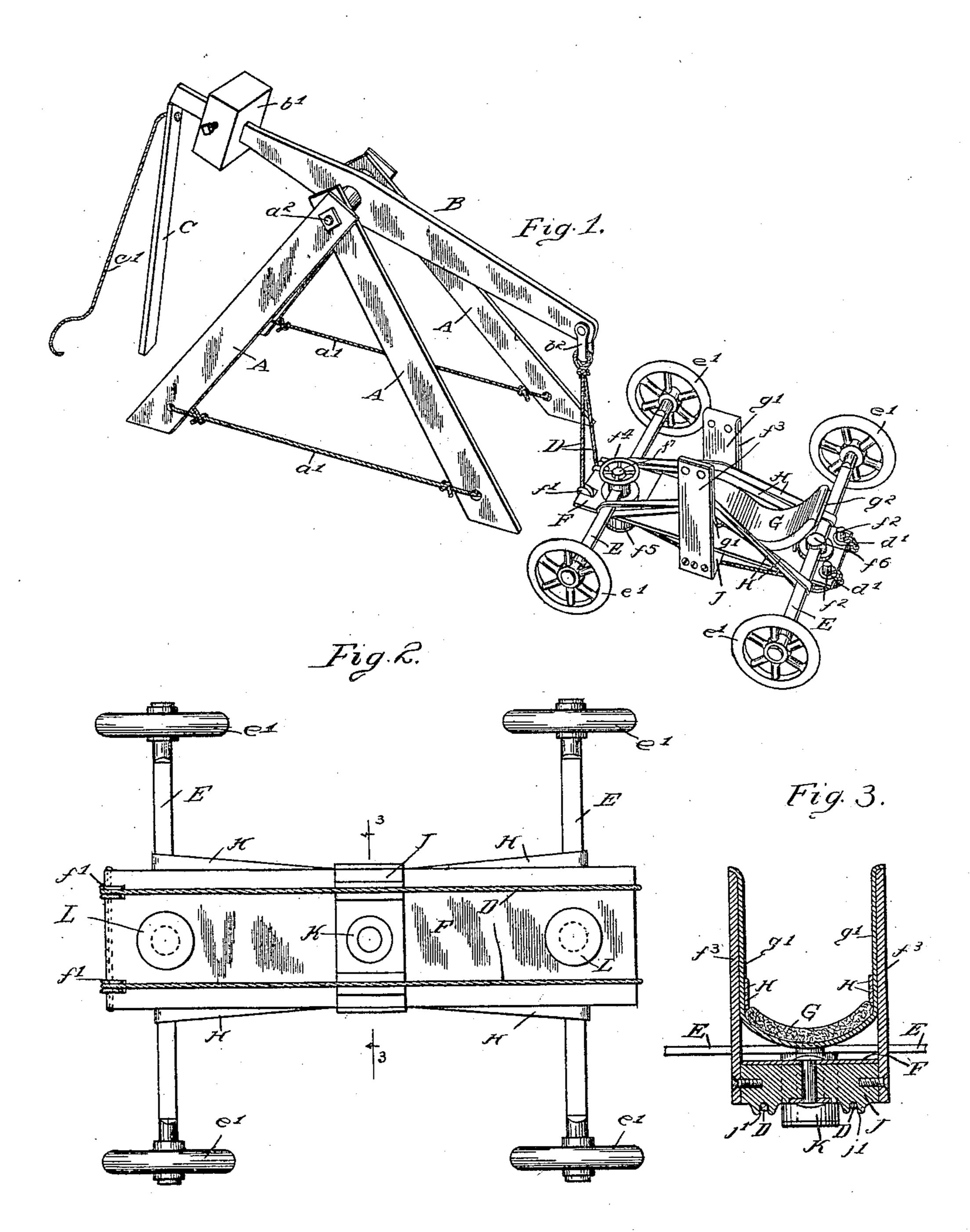
C. C. DEAN.

AMUSEMENT APPARATUS.

APPLICATION FILED SEPT. 20, 1905.



Witnesses: John Braumwalder M. A. Milord Inventor: Clayton C. Dean Frederick Genjamin Att'y.

## UNITED STATES PATENT OFFICE.

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## AMUSEMENT APPARATUS.

No. 816,220.

Specification of Letters Patent.

Patented March 27, 1906.

Application filed September 20, 1905. Serial No. 279,226.

To all whom it may concern:

Be it known that I, CLAYTON C. DEAN, a citizen of the United States, residing at Ivanhoe, in the county of Lake and State of Illi-5 nois, have invented certain new and useful Improvements in Amusement Apparatus, of which the following is a specification.

This invention relates to improvements in amusement apparatus of that class in which 10 a car or vehicle with its occupant are caused to turn a somersault through the impetus or force applied thereto by mechanical means.

In the accompanying drawings, which form a part of this application, Figure 1 is a 15 perspective view showing my invention in its complete form and operative arrangement. Fig. 2 is a bottom plan view, on an enlarged scale, of the vehicle which forms an important part of my invention; and Fig. 3 is a cross-

20 section on the line 3 3 of Fig. 2.

Referring to the drawings in detail, A represents four standards which are pivotally bolted together in pairs and connected at their upper ends by a bolt a2, and the mem-25 bers of each pair are connected at their lower ends by cables or ropes a', so that said standards may be arranged or set up in the form shown or knocked down and packed in compact form. Pivotally mounted between the 30 standards is a beam B, on one end of which is adjustably mounted a counterweight b' and on the other end is pivoted a clevis  $b^2$ . As a means of supporting the weighted end of the beam pending the performing of the somer-35 sault act I provide a prop C, with the upper end of which is connected a rope c'. The standards and beam may be made of any suitable materials and be of any desired size.

D represents two ropes which are securely 40 connected at one end to the clevis  $b^2$  and depend therefrom and at their other ends are

secured to rings d'.

E represents two axles which are preferably made thin or flat for the greater portion 45 of their length in order to provide a certain degree of resiliency, and on the ends of said

axles are mounted ground-wheels e'.

F is a platform made of suitable material having more or less resiliency and secured to 50 the axles in any approved manner. Mounted in the front end of the platform are two grooved pulleys f' and fixed in the upper side of the platform near its rear end are two posts  $f^2$ . Secured to the under side of the plat-55 form about midway its ends is a bolster J. Secured to the bolster are two uprights  $f^3$ , to

the upper ends of which is secured a sling g', which serves as a partial support for a cushion G, which extends longitudinally of the platform and is supported at one end by a 60 back  $g^2$ . As a further means of effecting an especially resilient connection between the axles and to provide hand-grips for the occupant I provide elastic bands H, which are passed around the axles and between the up- 65 rights  $f^3$  and over the cushion G and the sling g'. Said bands also serve to hold the cushion in position, as will be apparent from Fig. 3.

In the under side of the bolster J are formed two longitudinal grooves j', which re- 70 ceive and serve as guides for the ropes D when they are attached to the vehicle. Secured to the under side of the bolster is a buffer K, which normally extends down to within a short distance of the ground, so that 75 when the vehicle drops after turning over the buffer will receive a portion of the shock resulting from such drop and distribute same. Similar buffers, as L L, are secured to the under side of the platform at points below the 80 center of the axles and same coöperate with the buffer K in receiving and distributing the shock incident to the contact of the vehicle with the ground or other support after it has turned over.

In connecting the ropes D with the vehicle they are passed under the grooved pulleys f', through the grooves j', and the rings d' are placed loosely over the posts  $f^2$ . The pulleys and grooves serve as guides for the ropes, 90 so that they will equally support the weight of the vehicle and its occupant, and thus cause them to turn over accurately or without any twist or deviation from the lines or plane in which the vehicle stands before it is 95 caused to turn. This is an important result to be attained, inasmuch as said apparatus may be used in connection with various devices in which the vehicle travels over an inclined platform and it is necessary to have 100 the vehicle start accurately on its travels.

As a means of steering the vehicle the front axle E is secured to a vertical standard  $f^7$ , which is journaled in a tubular box  $f^5$ , which passes through and is secured to the platform 105 F, and the standard is provided with a handwheel  $f^4$ .

The weight b', together with the weight of the short end of the beam B, so overbalances the weight of the vehicle and its occupant that 110 as soon as the prop C is removed the long end of the beam to which the vehicle is connected,

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will be thrown upwardly and will carry with it the vehicle. Inasmuch as the only positive connection between the ropes D and the vehicle is at the rear end of the latter, it will be turned over and the number of such revolutions or somersaults will be controlled by the force resulting from the action of the beam and its distance above the ground or foundation on which the vehicle rests. The uprights extend high enough so that if by accident the vehicle should not turn completely over the ends of the uprights would strike the ground or foundation, and thus protect the occupant.

Having thus described my invention, what I claim as new, and desire to secure by Let-

ters Patent, is—

1. In an apparatus of the class described, a standard, a counterweighted beam pivoted on said standard, a wheeled vehicle adapted to support one or more persons, means connecting said vehicle with said beam whereby said vehicle will be caused to turn over upon the upward movement of the beam, and means on said vehicle for taking up the shock resulting from its drop.

2. In an apparatus of the class described, a

standard, a counterweighted beam pivoted on said standard, a wheeled vehicle adapted to support one or more persons and having 3° guides, ropes connected with said beam, adapted to be detachably connected with the rear end of said vehicle and to be arranged in said guides, and means on said vehicle for taking up the shock resulting from its drop. 35

3. In an apparatus of the class described, a standard, a beam pivoted on said standard and having a weight adjustably mounted thereon, removable means for holding said beam in inoperative position, a resilient vehicle adapted to support one or more persons, protective means on said vehicle substantially as described, guides and antifrictional rope-bearings on said vehicle, ropes connected with said beam and adapted to be arafaged in said guides and to be detachably connected with said vehicle.

In testimony whereof I affix my signature

in presence of two witnesses.

CLAYTON C. DEAN.

Witnesses:
Wm. B. Moore,
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