

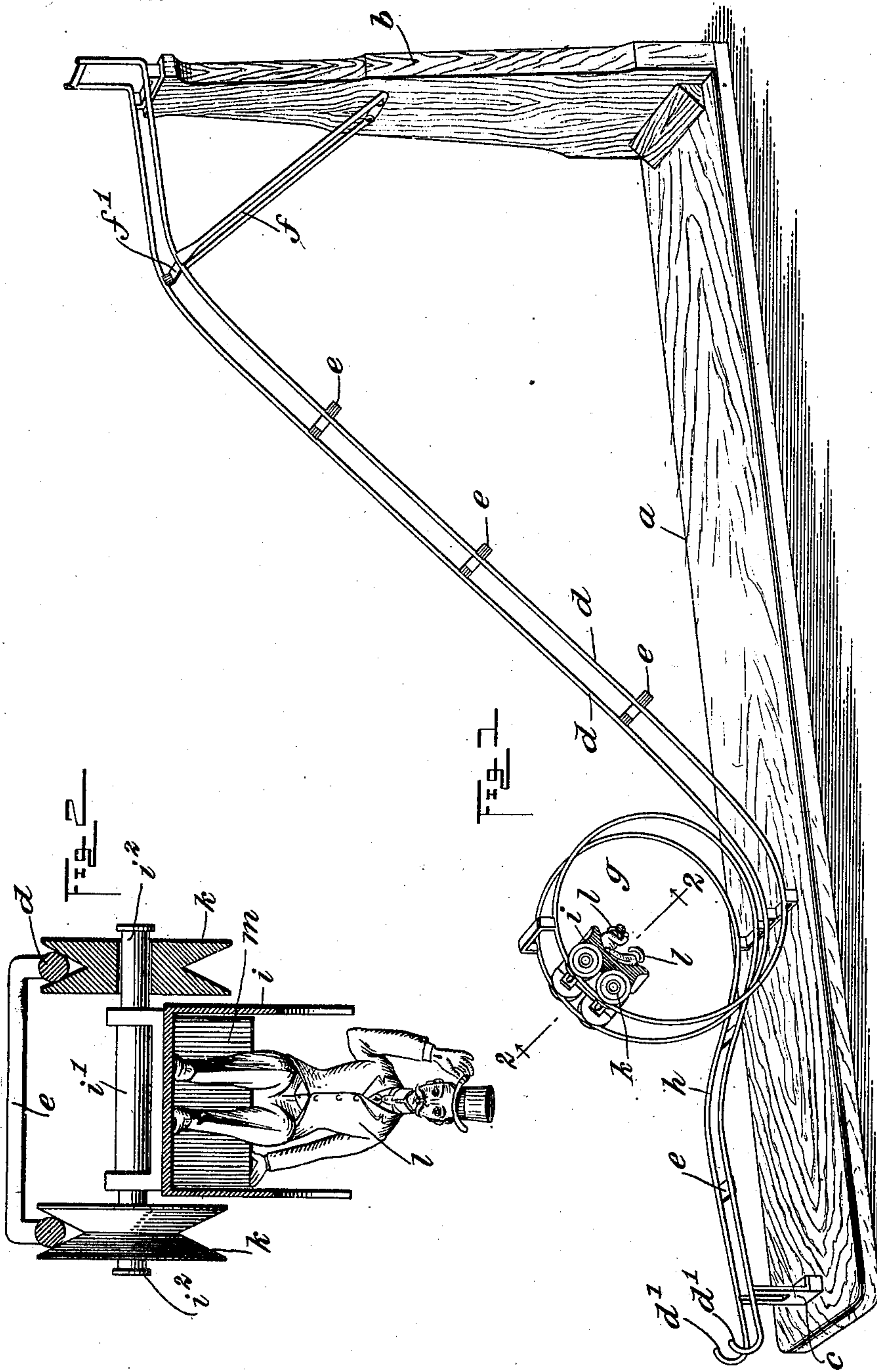
No. 719,200.

PATENTED JAN. 27, 1903.

F. DEAN.
TOY.

APPLICATION FILED AUG. 29, 1902.

NO MODEL.



WITNESSES:
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UNITED STATES PATENT OFFICE.

FRANK DEAN, OF ORANGE, NEW JERSEY.

TOY.

SPECIFICATION forming part of Letters Patent No. 719,200, dated January 27, 1903.

Application filed August 29, 1902. Serial No. 121,467. (No model.)

To all whom it may concern:

Be it known that I, FRANK DEAN, a citizen of the United States, and a resident of Orange, in the county of Essex and State of New Jersey, have invented a new and Improved Toy, of which the following is a full, clear, and exact description.

This invention has for its object to produce a toy representing the well-known vertical loop-railways—such, for example, as have been known as “loop-the-loop” apparatus.

The invention therefore consists in certain novel features of construction which make it possible for me to embody this principle in toy form.

This specification is a specific description of one form of the invention, while the claims define the actual scope thereof.

Reference is to be had to the accompanying drawings, forming a part of this specification, in which similar characters of reference indicate corresponding parts in both the figures.

Figure 1 is a perspective view of the device, and Fig. 2 is a section on the line 2 2 of Fig. 1. *a* indicates the base, which has at one end an elevated support *b* for the head of the track and at the other end a support *c* for the foot thereof. The track is formed of two parallel rods *d*, preferably round in cross-sectional form and connected by U-shaped ties *e*, so as to hold the rails properly disposed with respect to each other.

f indicates a bracket attached to the head-support *b* and terminating in a U-shaped tie *f'*, joined to the rails. At the foot of the track the ends of the rails *d* are turned upward to form buffers *d'*, which stop the car.

The loop is indicated at *g* and is essentially the same as that commonly employed. In order, however, quickly to arrest the movement of the car after the loop is traversed, I form the track with an abruptly-raised portion or grade *h*, which reduces the momentum of the car and causes it to strike gently against the buffers *d'*, thus preventing the passengers from being dislodged from the car.

i indicates the car, which has axles *i'* fastened to the bottom thereof. These axles are formed with elongated journals *i''*, and on said journals wheels *k* are mounted, these wheels being curved to receive the rails *d* and being free not only to turn on the axles, but to move

longitudinally of the axles. This arrangement allows the wheels to accommodate themselves to the inequalities in the track and to the twisting strain incident to passing the loop.

In order that the theory of centrifugal force be clearly impressed by the toy, it is necessary that the figures in the carriage be separate therefrom and readily removable. *l* indicates the figures, and these are formed integral with or fastened rigidly to a heavily-weighted seat *m*, (see Fig. 2,) which seats are removably placed in the car, so that ordinarily the seats and figures will fall from the car when it is inverted. When, however, the car is traveling through the loop, the weights *m*, being wholly within the car, will insure that the figures *l* are kept in place, since the centrifugal force of the weights greatly preponderates any tendency which the figures might have to topple or swerve.

In using the invention the car is lifted and placed at the top of the track and started on the descent. The loop is made and then the car strikes the incline *h*, which arrests the movement of the car and causes it to strike gently against the buffers *d'*, which completely stops the movement of the car.

Various changes in the form, proportions, and minor details of my invention may be resorted to without departing from the spirit and scope thereof. Hence I consider myself entitled to all such variations as may lie within the scope of my claims.

Having thus described my invention, I claim as new and desire to secure by Letters Patent—

1. A toy comprising a track with an incline and a vertical loop, a car adapted to run on the track, said car comprising a body, an axle having axially-elongated journals, and wheels arranged to turn on the journals and to move sidewise thereon, for the purpose specified.

2. A toy comprising an inclined track, and a vertical loop therein, a car arranged to run on the track and loop, and a figure removably placed in the car, said figure having the preponderance of its weight within the car.

3. A toy comprising the combination of an inclined track having a vertical loop therein, a car running on the track and loop, a figure adapted to be placed loosely within the car,

and a weighted seat on which the figure is fastened, said seat being loosely fitted in the car and removable with the figure.

4. A toy, comprising a base, a head-support
5 at one end thereof, a foot-support at the other
end thereof, a track, the head of which is
mounted on the head-support, said track slant-
ing down from the head-support and having a
vertical loop just above the base, the lower
10 end of the track being fastened to the foot-
support, a car adapted to run on the track,
and a figure placed removably in said car.

5. A toy, comprising a track having an in-
cline and also having a vertical loop therein,
a car adapted to run on said track, and a fig- 15
ure removably placed in said car.

In testimony whereof I have signed my
name to this specification in the presence of
two subscribing witnesses.

FRANK DEAN.

Witnesses:

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EMMA J. VAN BENSCHOTEN.