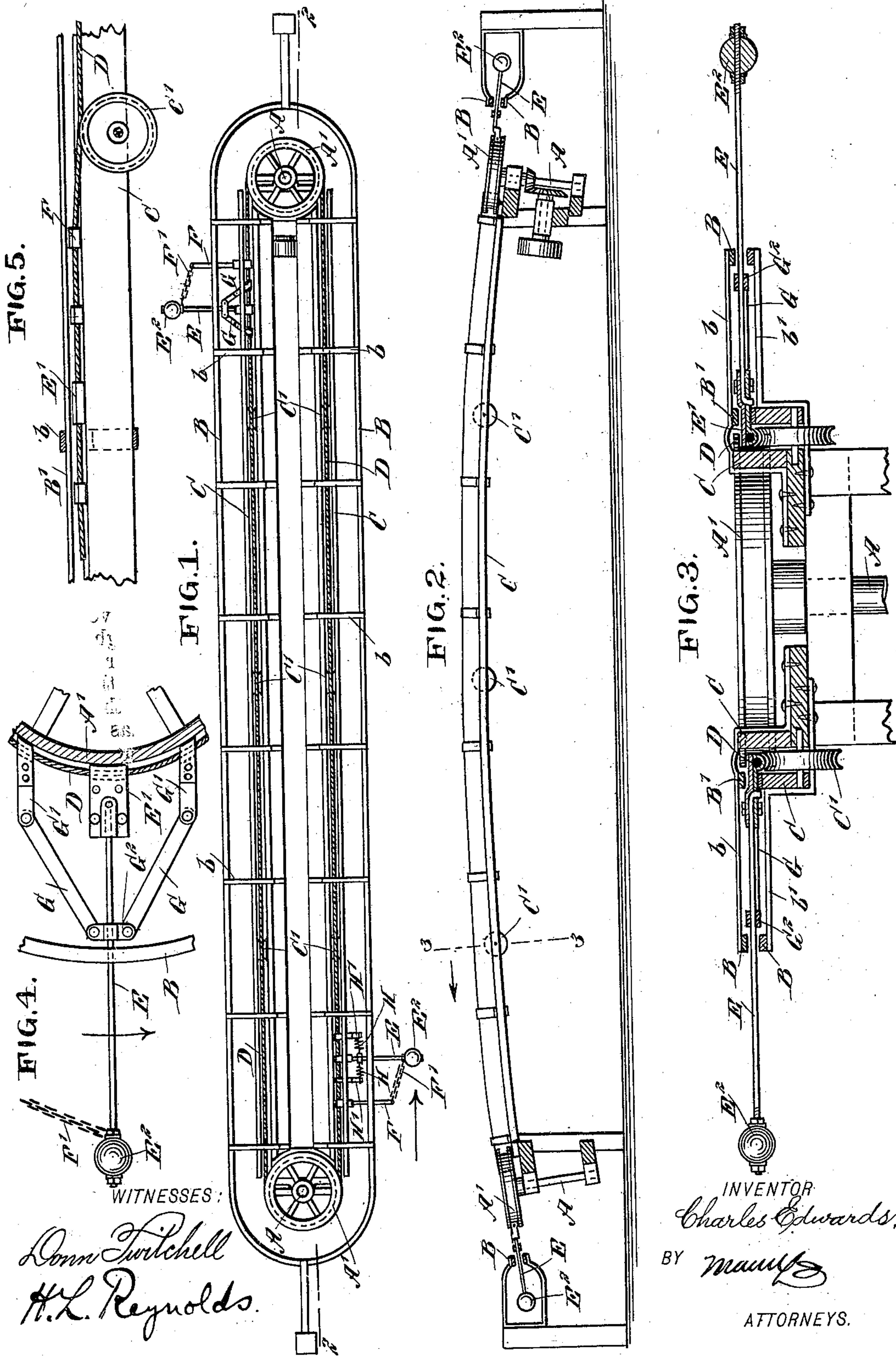


No. 617,928.

Patented Jan. 17, 1899.

C. EDWARDS.
GAME APPARATUS.
(Application filed Sept. 28, 1898.)

(No Model.)



UNITED STATES PATENT OFFICE.

CHARLES EDWARDS, OF NEW YORK, N. Y.

GAME APPARATUS.

SPECIFICATION forming part of Letters Patent No. 617,928, dated January 17, 1899.

Application filed September 28, 1898. Serial No. 692,116. (No model.)

To all whom it may concern:

Be it known that I, CHARLES EDWARDS, of the city of New York, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Game Apparatus, of which the following is a full, clear, and exact description.

My invention relates to an improvement in a form of game apparatus designed for carrying a ball which is mounted upon an arm toward a striker; and it consists of the novel features hereinafter described and claimed.

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 all the views.

Figure 1 is a plan of my device. Fig. 2 is a sectional side elevation upon the line 2 2 of Fig. 1. Fig. 3 is a cross-sectional elevation upon the line 3 3 of Fig. 2. Fig. 4 is a detail plan showing the ball-carrying arm and the mechanism by which it is mounted upon the cable, and Fig. 5 is a detail showing the attachment of this arm in elevation.

The object of my invention is to provide a device for use in places of public amusement which will in a measure imitate the pitching of a ball to a striker.

With this object in view two shafts A are mounted at some distance from each other and carry wheels A', over which passes a belt or cable D. The wheels A' may be mounted either in a vertical or a horizontal position, as desired. This is not considered as making the device in any sense different. As herein shown, the shafts A are substantially vertical and the wheels A' substantially horizontal. The shafts A are not exactly vertical, but have a slight inclination, as clearly indicated in Fig. 2.

The cable D is supported between the wheels A' by means of a series of rollers C', which are journaled in bars C, which extend from one wheel to the other. This causes the cable to travel in a curve, which may be varied as desired. The path of travel of the cable and the ball carried thereby may be made undulating, if desired, by placing the pulleys C' alternately above and below the cable. Arms E are attached to the cable D, and at their outer ends each carry a ball E². The arms project horizontally from the cable and

are supported by means of guide-bars B, which are supported from the bars C by means of bars b and b', which respectively support the upper and lower of the guide-bars B. The guide-bars B are so placed as to engage the central portion of the arms E. The cable D and the inner ends of the arms E are guided by means of bars B', which are secured to the bars b and b' and embrace the inner ends of the arms E. The path of travel of the ball E² may be varied by the guides B. If these guides are made undulating, the motion of the ball will be correspondingly undulating.

The arm E is preferably secured to the cable D by means of clamping-plates E', which surround the cable and clamp one end of the arm E between them, as is clearly indicated in Fig. 4. In order to support the arm E, it is braced by two bars G, which are pivoted at one end to a slide-block G², through which the arm E passes, and at the other end to clamps G', which are secured upon the cable D. An arm F is also secured to the cable close to one of the clamps G', and has its outer end connected to the arm E by means of a chain or cord F'. This serves to limit the motion of the ball in one direction, but permits free motion in the other direction.

An alternate mounting from that described is shown at the left in Fig. 1, consisting of two arms H', which are clamped to the cable D at each side of the arm E and connected with the arm E by springs H. This supports the arm E and yet permits it to swing in either direction from the central position.

A connection such as that described is necessary for the arm E in passing about the wheels A'. When the construction shown in Fig. 4 is used, the block G² will slide upon the arm E, as may be necessary in passing about the wheel.

My device is used by stationing a striker with a bat alongside one of the runs of the cable, so that the ball is traveling toward him. As the ball approaches he endeavors to hit it with a bat. By the curving of the path of the ball this is sometimes very difficult. It may be made more difficult by causing the ball to travel in an undulating path. The object, however, is to imitate the path of a ball as delivered by a pitcher.

Having thus described my invention, I

claim as new and desire to secure by Letters Patent—

1. A game apparatus, comprising two revoluble wheels, a belt or cable passing over the
5 wheels, and horizontally-extending yielding arms supported from the cable and each carrying a ball.

2. A game apparatus, comprising two revoluble wheels, a belt or cable passing over the
10 wheels, horizontally-extending arms secured to the cable and each carrying a ball, and supporting-guides for said arms.

3. A game apparatus, comprising two revoluble wheels, an endless belt or cable passing
15 over the wheels, horizontally-extending yielding arms secured to the cable and each carrying a ball, and supporting-pulleys for the cable-runs between the wheels.

4. A game apparatus, comprising two revoluble wheels, an endless belt or cable passing
20 over the wheels, horizontally-extending yielding arms secured to the cable and each carrying a ball, pulleys supporting the runs of the cable between the wheels, and guides engaging and supporting the arms in their
25 course.

5. A game apparatus, comprising two revoluble wheels, an endless belt or cable passing over the wheels, arms secured to the cable and each carrying a ball, and bracing-rods
30 pivotally secured at one end to the cable and having a sliding connection at their other end with the ball-carrying arms.

6. A game apparatus, comprising two revoluble wheels, an endless belt or cable passing
35 over the wheels, arms secured to the cables and each carrying a ball, and springs supported at one end from the cable and at the other being connected with the ball-carrying arms.
40

7. A game apparatus, comprising two revoluble wheels, a belt or cable passing over the wheels, outwardly-extending arms attached to the cable and each carrying a ball, and
45 supporting-guides for the cable and arms arranged on a curve which is in a plane lying at an angle with the planes of the wheels.

CHARLES EDWARDS.

Witnesses:

EVERARD BOLTON MARSHALL,
F. W. HANAFORD.