

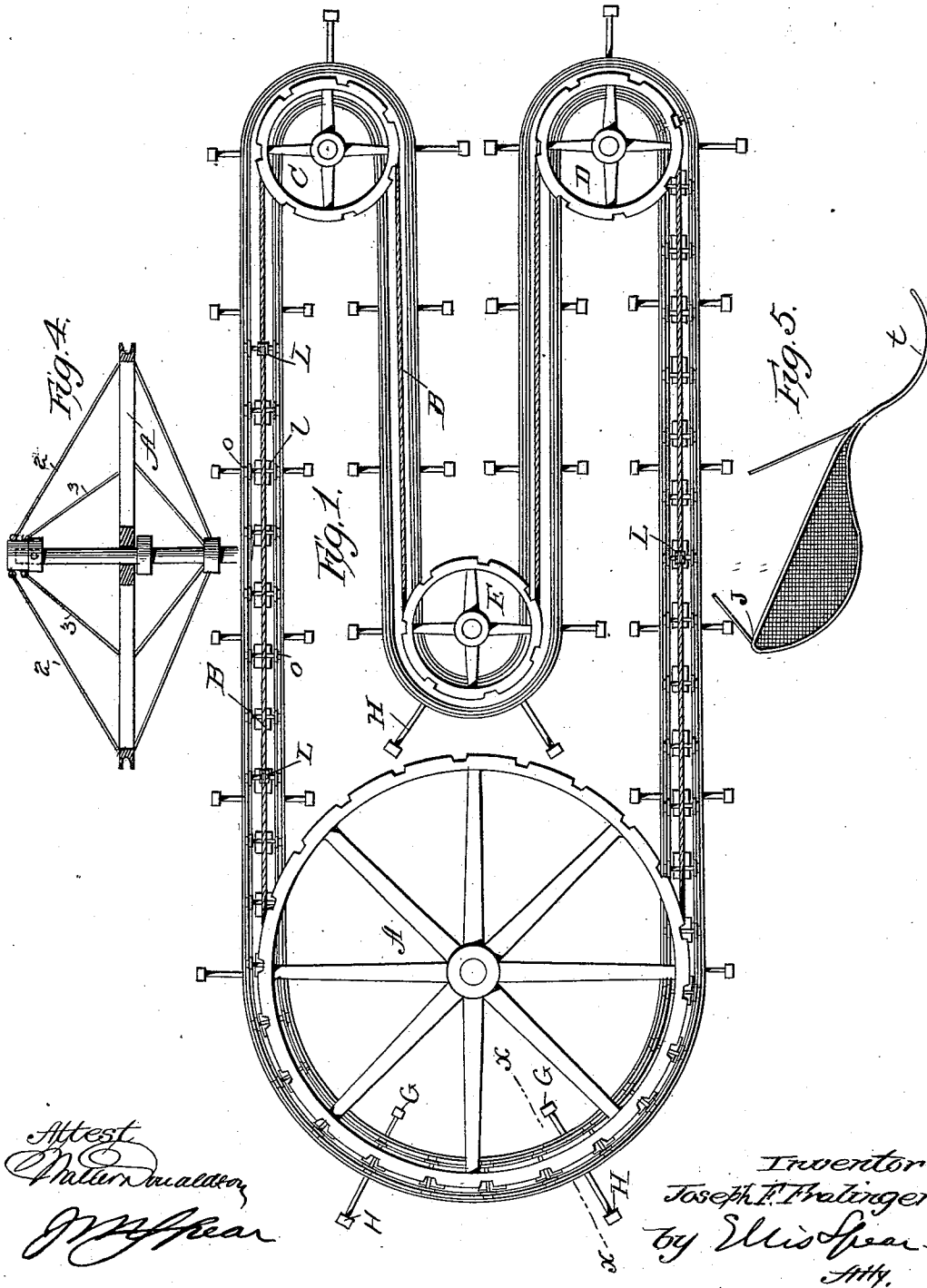
(No Model.)

2 Sheets—Sheet 1.

J. F. FRALINGER.
CABLE ROUNDABOUT.

No. 472,211.

Patented Apr. 5, 1892.



Attest
M. C. Mattern
J. M. Spear

Inventor
Joseph F. Fralinger
by Ellis Spear
Att'y.

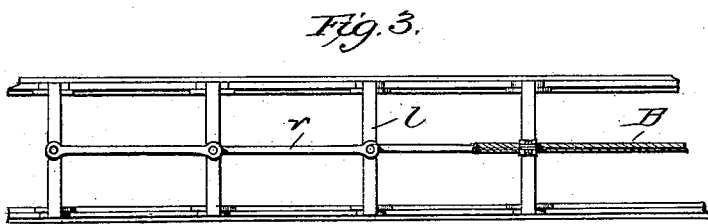
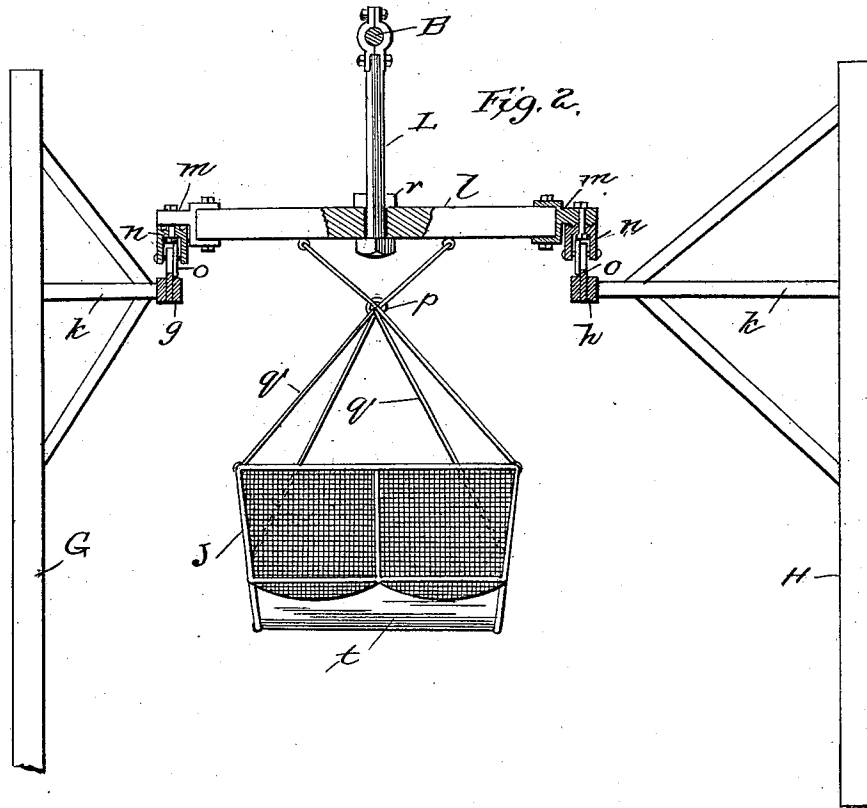
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2 Sheets—Sheet 2.

J. F. FRALINGER.
CABLE ROUNDABOUT.

No. 472,211.

Patented Apr. 5, 1892.



Attest
Walter M. Alden
J. M. Spear

Inventor
Joseph F. Fralinger
 by *Ellis Spear*
 ATT'Y.

UNITED STATES PATENT OFFICE.

JOSEPH F. FRALINGER, OF ATLANTIC CITY, NEW JERSEY, ASSIGNOR OF ONE-HALF TO LOUIS A. HAINES, OF SAME PLACE.

CABLE ROUNDABOUT.

SPECIFICATION forming part of Letters Patent No. 472,211, dated April 5, 1892.

Application filed October 17, 1891. Serial No. 409,081. (No model.)

To all whom it may concern:

Be it known that I, JOSEPH F. FRALINGER, a citizen of the United States of America, residing at Atlantic City, in the county of Atlantic and State of New Jersey, have invented certain new and useful Improvements in Roundabouts, of which the following is a specification.

My improved roundabout is designed to give the greatest possible length of track in a given space to give diversity to the movement of the riders, and it also includes details of construction for greater strength and simplicity.

The invention is illustrated in the accompanying drawings, in which—

Figure 1 shows a plan view of the roundabout. Fig. 2 is a cross-section, on an enlarged scale, on line *xx* of Fig. 1. Fig. 3 is a plan view, on a larger scale, of a part of the track. Fig. 4 shows a section of the wheel; and Fig. 5 a side elevation of the suspended seat.

In my improved roundabout the suspended seats are carried upon trucks which run upon an elevated track, and are drawn by a cable which is endless and passes over a driving-wheel and idler-wheels. The large wheel is shown at A. It is mounted upon a vertical shaft suitably supported in bearings, and has a grooved periphery adapted to receive an endless cable. This cable runs over grooved pulleys C and D at the other end of the roundabout, and from them passes inward, in the form of a loop, over a fourth wheel E, the wheels C, D, and E being in the same plane as the wheel A and being supported upon suitable shafts. They are also grooved so as to retain the cable, which has sufficient frictional contact with the driving-wheel to propel the seats around the course.

The track which sustains the trucks is supported upon standards, which are illustrated in Fig. 2, the inner standard being marked G and the outer H. Each of these standards carries a stringer, the outer of which is marked *h* and the inner *g*, and on these are the tracks upon which the truck-wheels run. The stringers are fixed to the end of the horizontal beams *l*, connected to the posts G H and supported by suitable braces, as illustrated in Fig. 2. I have shown the trucks as supported

upon a single pair of wheels; but two pairs may be used, if desired. The truck also, as shown, consists of a single transverse beam *l*, upon the ends of which are castings *m*, having flanges or sockets to receive the ends of the beam, and provided with suitable annular bearing-surfaces to receive the upper faces of the casters *n*, in which are the wheels *o*. The spindles of the casters pass through the outer ends of the castings and are secured by nuts on the upper ends. The wheels are flanged and fitted to run on the rails, as shown.

The seats are suspended from the truck-beam so as to swing freely. This may be done in various ways; but I have shown one which is simple and convenient. A ring *p* is suspended from eyebolts, and to this ring are attached the suspending rods or ropes *q*, by which the seat is supported and properly balanced and left free to swing. The trucks are connected to the cable by means of arms *L*, the lower ends of which are swiveled in the cross-beams *l* and the upper ends provided with clamps, by means of which the arms are attached to the cable. For greater security and to guard perfectly against accident I provide connecting-bars *r*, having eyes in their ends, through which the arms *L* pass, and these securely connect the tracks, so that if any truck should become disengaged from its connection with the cable it will be held and carried around by the bars. It will be understood that the curved portions of the track are made to correspond with the periphery of the wheels, so that the cable is always directly over the center of the track. The larger wheel must manifestly be of great diameter and requires bracing, as illustrated in Fig. 4. It has tie-rods 2 and 3, connecting the wheel to the collar supported on the top of the shaft. The wheel may be made to turn with the shaft or upon it, according as the driving-power is applied to the wheel or to the shaft. The larger wheel may be fifty feet in diameter. The seats may be made of light material, of the shape shown in Fig. 5, and may be provided with a foot-board *t*.

When the seats are drawn on the straight part of the track, the tendency will be to swing backward only; but in passing rapidly

around the curves they will sway also outward. This gives variety to the movement. To provide space for this outward swing of the seats, the outer posts H at the curves are set farther out, as illustrated in Fig. 2. The straight portions of the track are shown in the plan view as being parallel with each other; but this parallel arrangement is not essential. The arrangement of the interior or re-entrant loop is an important feature, as it saves space and gives an increased number of curves.

The cars or seats are preferably formed of frame-work J, having a central bar extending longitudinally thereof to divide the car into two parts. The frame may be combined with hammock netting or canvas, which is secured to the central bar and the sides to form two hammocks or seats. The car is curved to provide an easy and comfortable seat.

I claim as my invention—

1. In combination with the elevated track carrying the trucks and suspended seats, an endless cable connected to the trucks, and a large wheel, as A, and smaller wheels, as C and D, combined with an interior wheel E,

said wheels supporting the cable, substantially as described.

2. In combination, the supporting-posts having beams and braces carrying the stringers and tracks, trucks arranged to run thereon with casters carrying the wheels arranged upon the tracks, the said trucks being connected by a swivel-arm to a cable, the cable, and the horizontally-arranged driving-wheels, all substantially as described.

3. The trucks, combined with swivel-arms connecting them to the cable, the cable and the driving-wheel, the track, and the bars connecting the trucks by means of the arms, passing through eyes in the ends of the bars, substantially as described.

4. The trucks, combined with swivel-arms connecting them to the cable, the cable, the driving-wheels, and the bars connecting the trucks, substantially as described.

In testimony whereof I affix my signature in presence of two witnesses.

JOSEPH F. FRALINGER.

Witnesses:

ALLEN B. ENDICOTT,
H. F. COGILL.