No. 872,253. PATENTED NOV. 26, 1907.

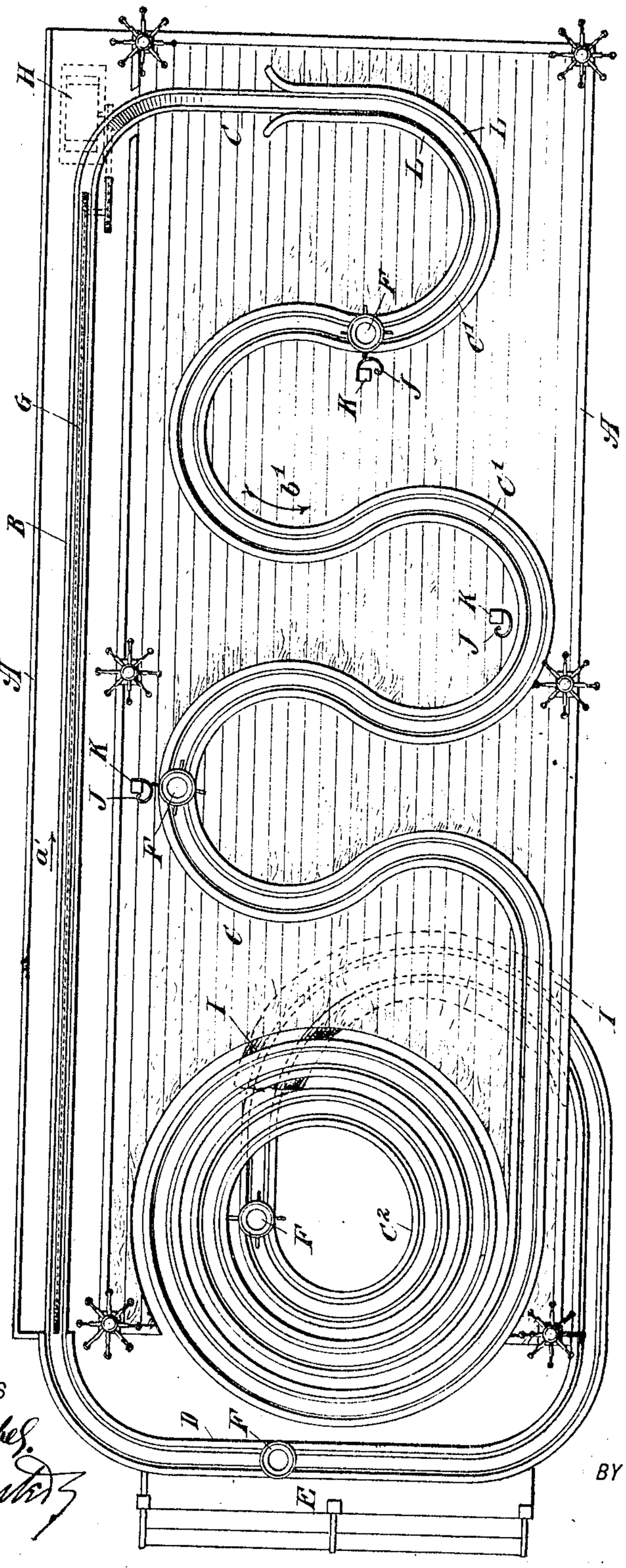
H. E. RIEHL.

AMUSEMENT APPARATUS.

APPLICATION FILED JULY 17, 1907.

3 SHEETS—SHEET 1.

Fig. 1.



WITNESSES

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3 SHEETS—SHEET 2.

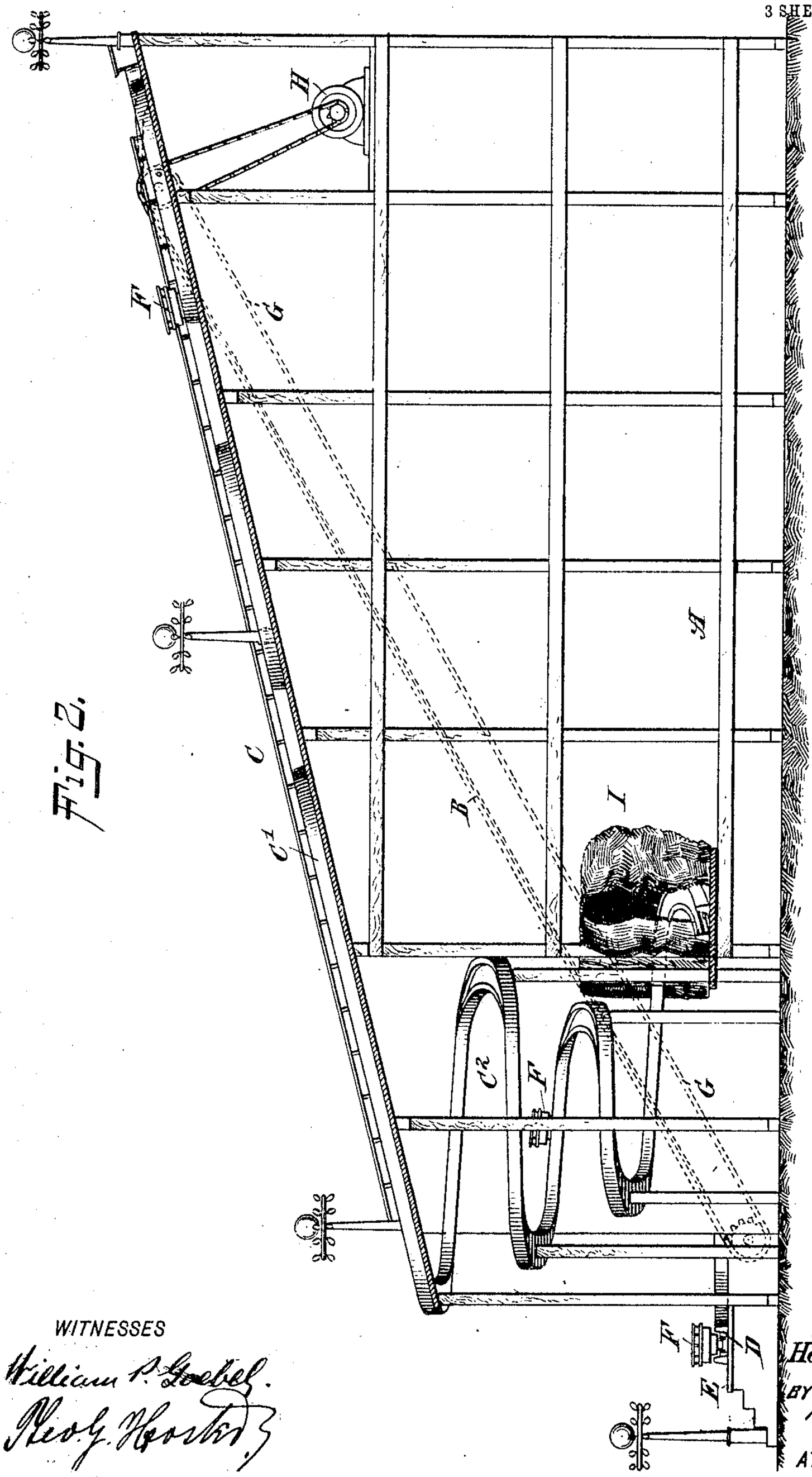

Fig. 2.

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3 SHEETS—SHEET 3.

Fig. 3.

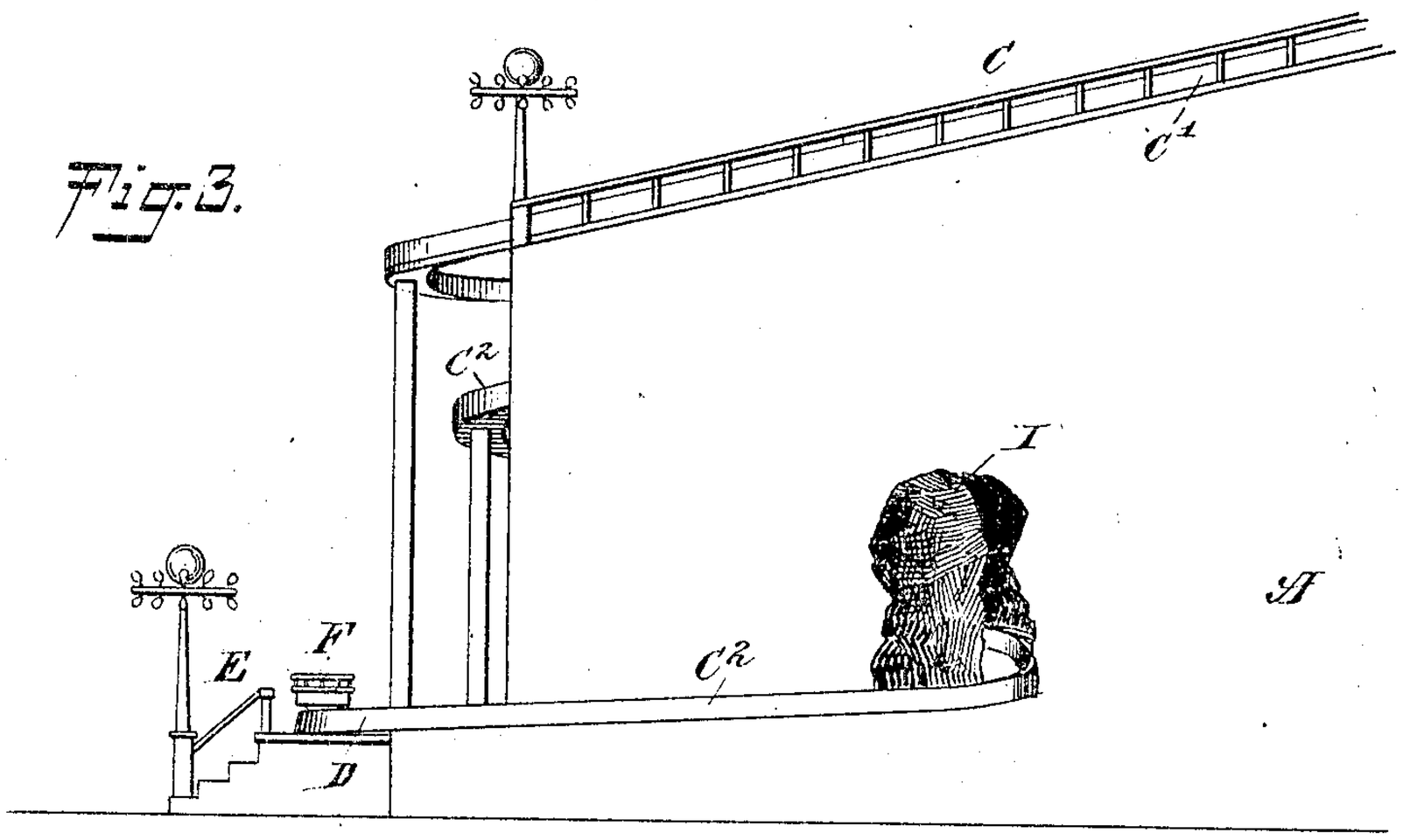


Fig. 4.

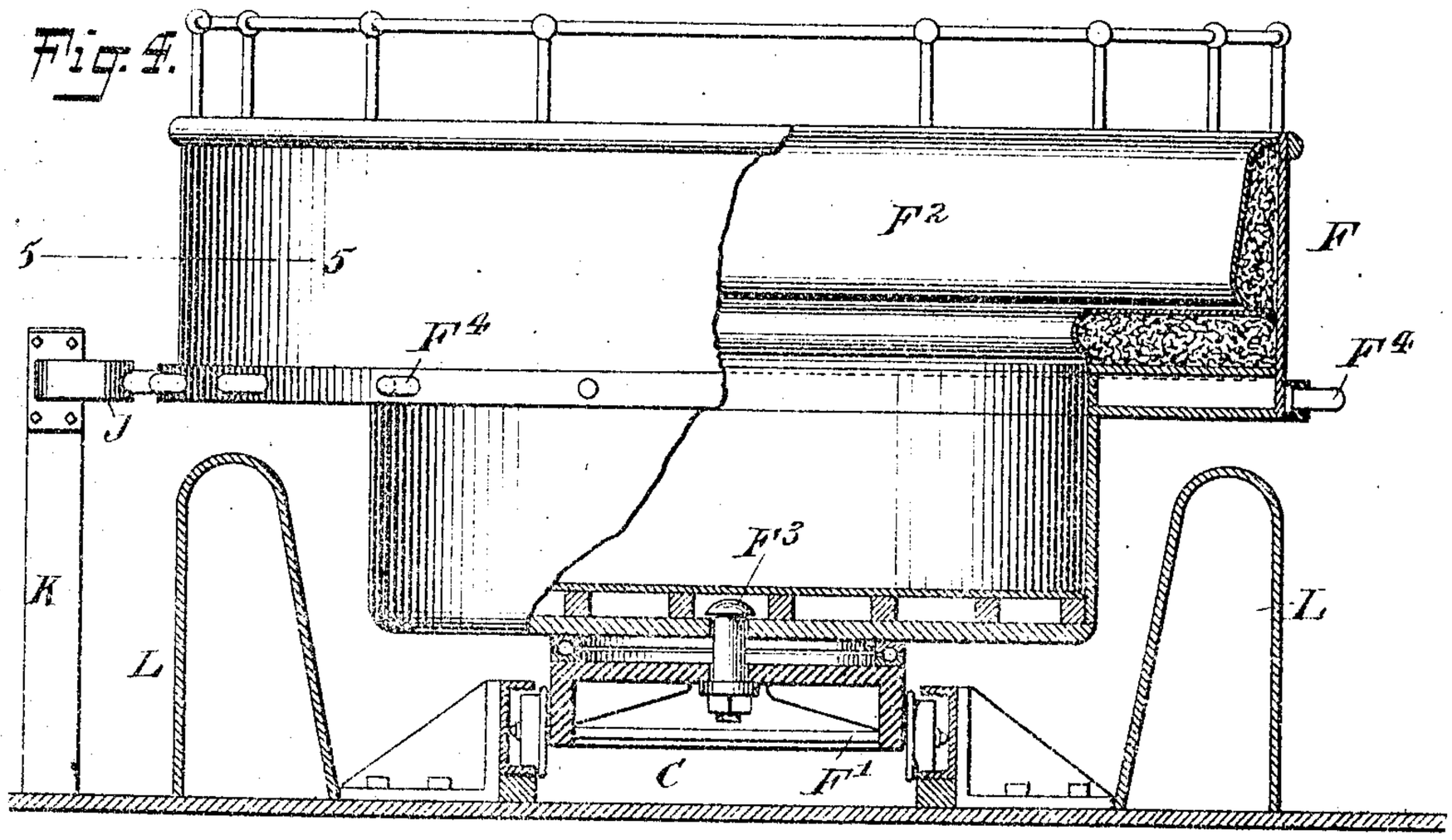
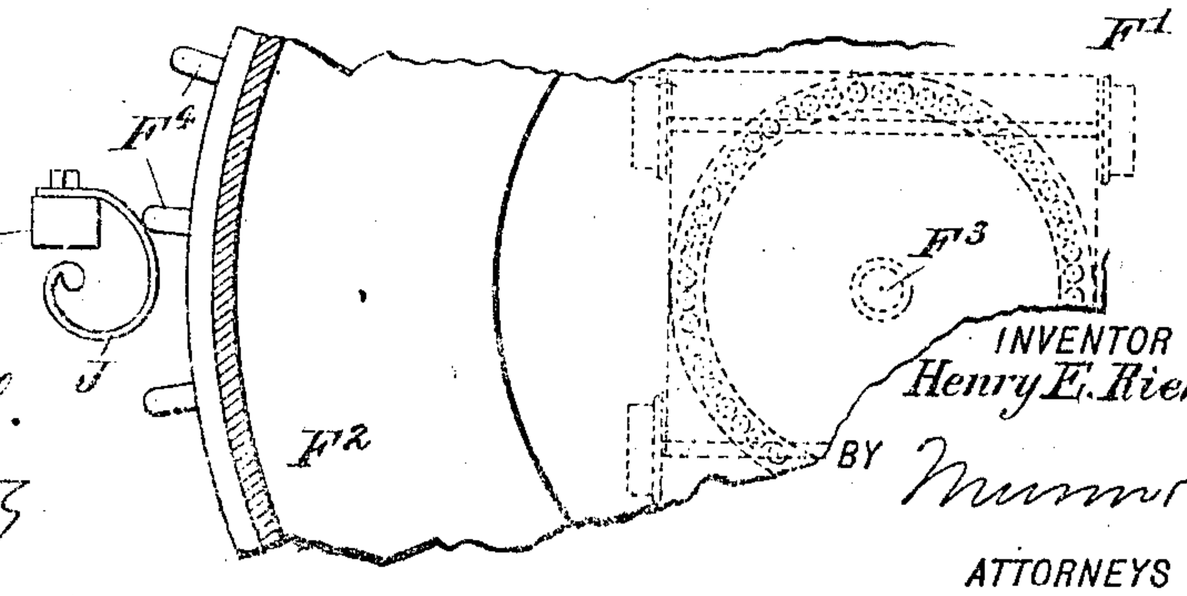


Fig. 5.



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HENRY ELMER RIEHL, OF NEW YORK, N. Y.

AMUSEMENT APPARATUS.

No. 872,253. Specification of Letters Patent. Patented Nov. 26, 1907.

Application filed July 17, 1907. Serial No. 384,206.

To all whom it may concern:

Be it known that I, HENRY E. RIEHL, a citizen of the United States, and a resident of the city of New York, Coney Island, borough of Brooklyn, in the county of Kings and State of New York, have invented a new and Improved Amusement Apparatus, of which the following is a full, clear, and exact description.

The invention relates to inclined pleasure railways such as are used in exhibition grounds, parks, pleasure resorts and the like, and its object is to provide a new and improved amusement apparatus, arranged to provide an exciting and interesting ride for the passengers.

The invention consists of novel features and parts and combinations of the same, which will be more fully described hereinafter and then pointed out in the claims.

A practical embodiment of the invention is represented in 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 view of the improvement; Fig. 2 is a sectional side elevation of the same; Fig. 3 is a side elevation of the front or lower portion of the improvement; Fig. 4 is an enlarged cross section of the track and showing a car in position thereon, and Fig. 5 is a sectional plan view of the same, on the line 5—5 of Fig. 4.

On a suitably constructed frame-work A is arranged a single continuous track having an up-track B and a down-track C, the terminal of which forms a station track D leading to the foot of the up-track B, and arranged adjacent to a station E, for the embarkation and disembarkation of the passengers seated in a car F adapted to travel over the said continuous track, as hereinafter more fully described. In the up-track B is arranged an endless propelling chain G having spaced cross bars or projections engaging the car or vehicle F, to propel the same up the up-track B, the said endless chain G being driven by a suitable mechanism from a motor H arranged in the frame-work A, as indicated in Figs. 1 and 2. The down-track C consists of a zigzag portion C′ leading from the upper end of the up-track B, and terminating at its lower end in a vertically disposed spiral C^2, a portion of which passes through a tunnel or grotto I erected on the main frame A. The lower convolution of the spiral C^2 terminates in the station track D. Now passengers desiring to enjoy a ride in the car F embark at the station E, and the car thus filled with passengers is pushed by an attendant to the bottom of the up-track B, so that the endless chain G now engages the car F and pushes the same up the up-track B, and finally the said chain G disengages the car when reaching the summit, so that the car now runs by its own gravity down over the down-track C to finally pass back onto the station track D, so that the passengers can disembark from the car, and as soon as the latter is empty it is pushed to the entrance side of the station, and the above described operation is then repeated.

The car F is preferably constructed as follows: On a wheeled truck F′ is mounted to turn the car body F^2 by the use of a king bolt F^3, and the said car body F^2 is preferably made circular and provided with seats at the inside for accommodating passengers. On the outside of the car body F^2 are arranged spaced projections F^4, in the form of radially disposed arms or pins, and adapted to strike or abut against springs J, each of which is secured to a post K held on the frame-work A outside of the down-track C along the zigzag portion C′ thereof, as plainly indicated in Figs. 1, 4 and 5. Now a car traveling down the zigzag portion C′ of the down-track C engages with its projections F^4 the springs J, which offer a yielding resistance to the arm coming in contact with it, to cause the car body F^2 to turn on its king pin F^3. Thus while the car is traveling downward on the down-track C its car body F^2 is caused to turn the passengers.

As indicated in Fig. 1, the zigzag portion C′ of the down-track C is preferably formed of compound curves to render a comparatively easy running of the car, at the same time giving the passengers a forward and backward ride to which is added the sensation incident to the turning motion of the car body, so that the ride is rendered exceedingly exciting and interesting to the occupants of the car F.

As the car body F^2 is free to revolve on its king pin, it has a tendency to revolve while the car F is traveling down the several convolutions of the spiral C^2. The passage of the car through the tunnel or grotto I renders the ride still more interesting to the occupants of the car.

By arranging the amusement apparatus in

the manner described comparatively little space is occupied, at the same time a long and very interesting ride is had with the cars remaining at all times on the continuous track.

Walls or embankments L acting as guards are arranged on opposite sides of the down-track C, to prevent any one of the cars from leaving the track.

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

1. An amusement apparatus comprising an up-track and a down-track commencing at the terminal of the up-track and leading to the beginning of the up-track, the said down-track comprising a series of compound curves and a spiral and having guard walls on each side thereof, and a rotatable car for movement on the track, said down-track being provided with a plurality of yielding devices arranged at intervals for engagement by the car to impart rotation to the same.

2. An amusement apparatus comprising an up-track and a down-track commencing at the terminal of the up-track and leading to the beginning of the up-track, the said down-track comprising a series of compound curves and terminating in a spiral, a rotatable car for movement on the track, and a plurality of yielding devices alongside the down-track for engagement by said car to rotate the same.

3. An amusement apparatus comprising an up-track and a down-track commencing at the terminal of the up-track and leading to the beginning of the up-track, the said down-track comprising a series of compound curves and a spiral, a tunnel through which a part of the spiral passes, a rotatable car for movement on the track, and a plurality of yielding devices arranged alongside the down-track at intervals for engagement by the car to rotate the same.

4. An amusement apparatus comprising a car having a car truck and a car body mounted to turn on the said truck, a track for the said car truck to travel on, springs supported alongside the track, and projections on the outside of the car for engagement with the said springs.

5. An amusement apparatus provided with a car having a car truck, a circular car body, a king pin centrally connecting the said car body with the said car truck to allow the car body to turn on the said car truck, the said car body having radially disposed arms on the outer side of the car body, a track for the said car truck to travel on, and projections outside the said track and adapted to be engaged by the arms, the said projections being in the form of spiral springs secured to posts alongside the track.

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

HENRY ELMER RIEHL.

Witnesses:

THEO. G. HOSTER,

EVERARD B. MARSHALL.