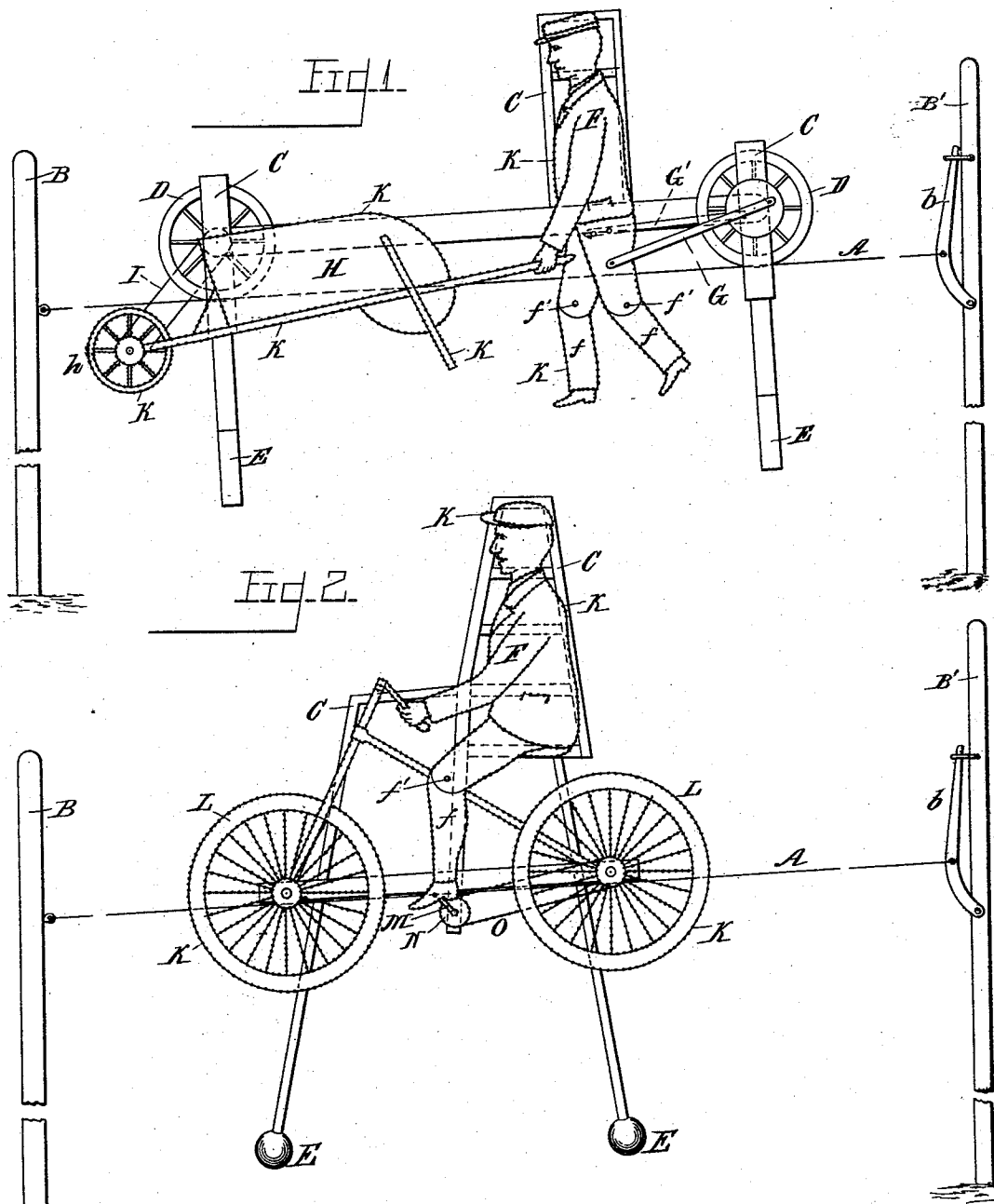


(No Model.)

E. HEBENSTREIT.
DEVICE FOR DISPLAYING FIREWORKS.

No. 489,444.

Patented Jan. 3, 1893.



Witnesses:
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UNITED STATES PATENT OFFICE.

EDWARD HEBENSTREIT, OF READING, OHIO, ASSIGNOR TO THE A. L. DUE FIREWORKS COMPANY.

DEVICE FOR DISPLAYING FIREWORKS.

SPECIFICATION forming part of Letters Patent No. 489,444, dated January 3, 1893.

Application filed June 20, 1892. Serial No. 437,388. (No model.)

To all whom it may concern:

Be it known that I, EDWARD HEBENSTREIT, a citizen of the United States, residing at Reading, in the county of Hamilton and State of Ohio, have invented a new and useful Improvement in Devices for Displaying Fireworks, of which the following is a specification.

The object of my invention is to produce in mid air representations of the natural movements of living beings, the operation of machinery and the like in colored fireworks.

My invention consists in an elevated track and a frame adapted to be propelled along this track and to carry figures of living beings or machinery represented in colored fire to which the desired movements are transmitted by the frame moving along the track substantially as hereinafter described and claimed.

Referring to the drawings: Figure 1 is a side elevation of one of my improved devices representing a man wheeling a wheel-barrow; Fig. 2 is a side elevation of one of my improved devices representing a man riding a bicycle.

A is a track, preferably wire or rope, suspended from posts B and B'. This track is preferably inclined by means of a lever b on post B'. When the lever is in an upright position as shown in Fig. 2 the track will be higher near the post B' than at post B. When the lever is turned down the track inclines in the opposite direction.

C is a frame provided with grooved wheels D adapted to roll along track A.

E E are weights suspended from the frame beneath the track to ballast the frame.

F is the figure of a man made of some light material like thin wood, bamboo or wire covered with cloth, its legs f f being pivoted at f' f' and connected by pitmen G G' to the drive wheels D D in such a way that as the wheels move along the track an alternating forward and backward movement is given to the legs of the man as in walking.

H is a wheelbarrow made of light material like the figure of the man having a wheel h adapted to be rotated by means of a belt I connecting it with one of the driving wheels D. The outline of the man and wheelbarrow is marked by a series of colored lights or lances

K K secured to the figures in any suitable way. The track, frame, weights, &c., being painted black, are invisible in the night; but the moving image of the man and rotation of the barrow wheels are clearly seen, by the audience, moving through mid air. The device is propelled along the inclined track by gravity, or by any other convenient means.

I have shown in Fig. 2. the representation of a man riding a bicycle, the driving wheels D D being made upon the hub of the bicycle wheels L L and a movement given to the legs of the man by means of a crank M on wheel N and a driving belt O.

I do not wish to confine my invention to the particular forms shown because it is obvious that they may be varied indefinitely, for example the movements of acrobats, animals, or fishes and of birds flying through the air or machinery in full operation may be represented by using my invention.

I claim.

1. A device for displaying fireworks consisting of a track, a frame adapted to be propelled along the track and designs in colored fire carried by the frame, substantially as for the purpose described.

2. A device for displaying fireworks consisting of a track, a frame adapted to be propelled along the track, figures of living beings or machinery represented in colored fire carried by the frame and connecting devices, whereby desired movements are given to the figures or machinery by the moving frame, substantially as and for the purpose described.

3. A device for displaying fireworks consisting of an elevated track, a frame provided with wheels adapted to be propelled along the track, figures of living beings or machinery represented in colored fire carried by the frame and connecting devices, whereby desired movements are given to the figures or machinery by the moving frame, substantially as and for the purpose described.

4. A device for displaying fireworks consisting of a track, a frame adapted to be propelled along the track, figures of living beings or machinery represented in colored fire carried by the frame, connecting devices whereby desired movements are given to the figures or machinery by the moving frame and balance-

ing weights, substantially as and for the purpose described.

5. A device for displaying fireworks consisting of a track, a frame adapted to be automatically moved along the track, figures of living beings or machinery represented in colored fire carried by the frame and connecting devices, whereby desired movements are automatically given to the figures by the moving frame, substantially as and for the purpose described.

6. A device for displaying fireworks consisting of an inclined track, a frame mounted on wheels and adapted to be moved along the track by gravity and designs in colored fire carried by the frame, substantially as and for the purpose described.

7. A device for displaying fireworks consisting of an inclined track secured to a post at

one end, and to a lever at the other end, where- 20
by the inclination of the track is varied, a frame adapted to be propelled along the track by gravity and designs in colored fire, substantially as and for the purpose described.

8. A device for displaying fireworks consisting of an inclined track A, a frame C provided with grooved wheels D, weights E E, figure F, and pitmen G G', substantially as and for the purpose described. 25

9. A device for displaying fireworks consisting of an inclined track A lever b, a frame C provided with grooved wheels D, weights E E, figures F and H, pitmen G G', and belt I, substantially as and for the purpose described. 30

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Witnesses:

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