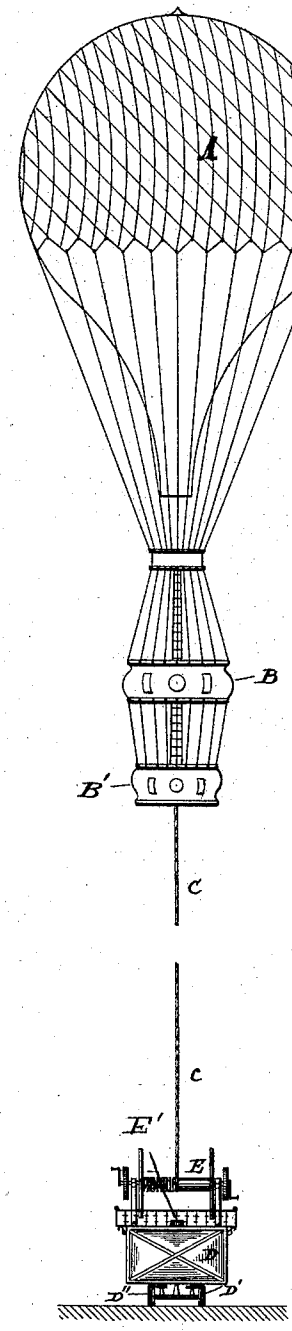
(No Model.) 3 Sheets—Sheet 1.

L. PAYN.

CAPTIVE BALLOON.

No. 476,893. Patented June 14, 1892.

Fig. 1.



Witnesses:
E. B. Bolton
W. C. Walsh

Inventor:
Lucien Payn
By Richards & Co
his Attorneys.

(No Model.) 3 Sheets—Sheet 2.

L. PAYN.

CAPTIVE BALLOON.

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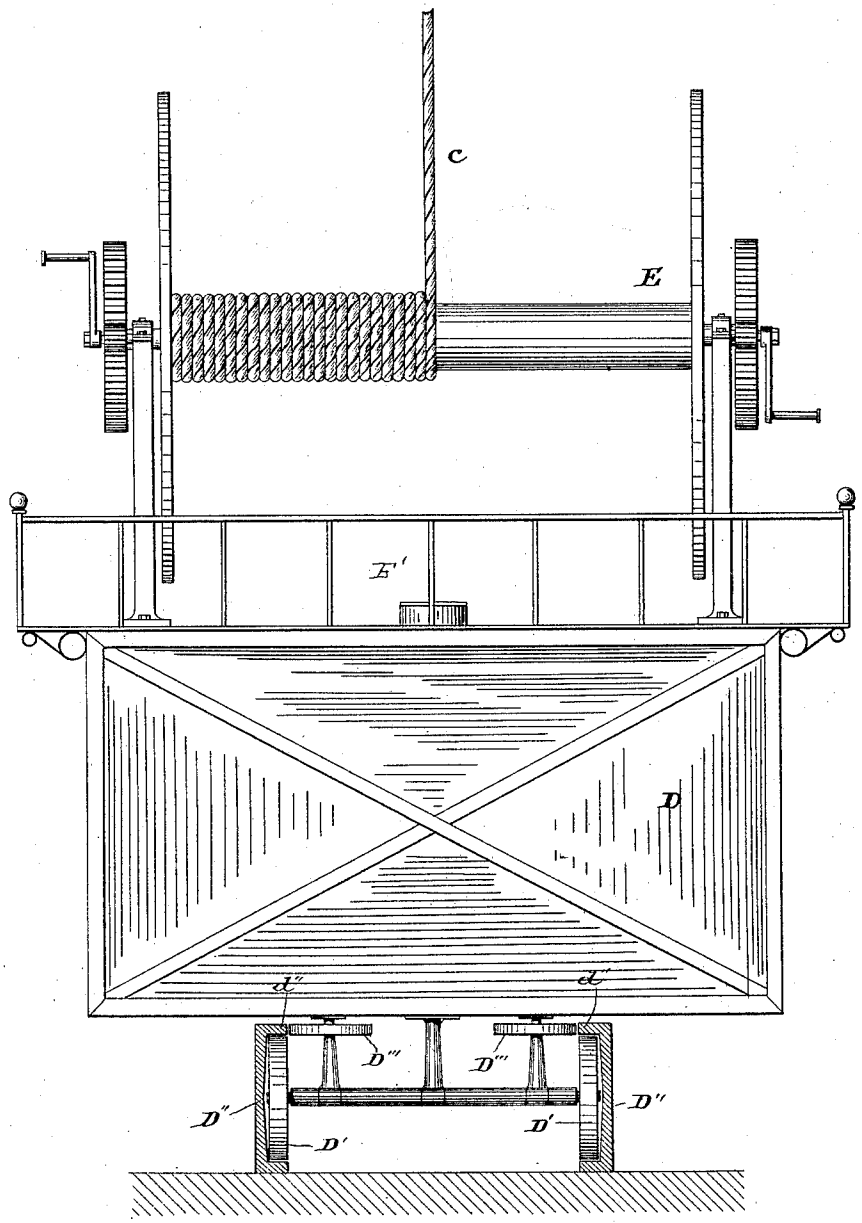
Fig. 2.



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E. B. Bolton
W. A. Walsh

Inventor:
Lucien Payn
By Richards & Co.
his Attorneys.

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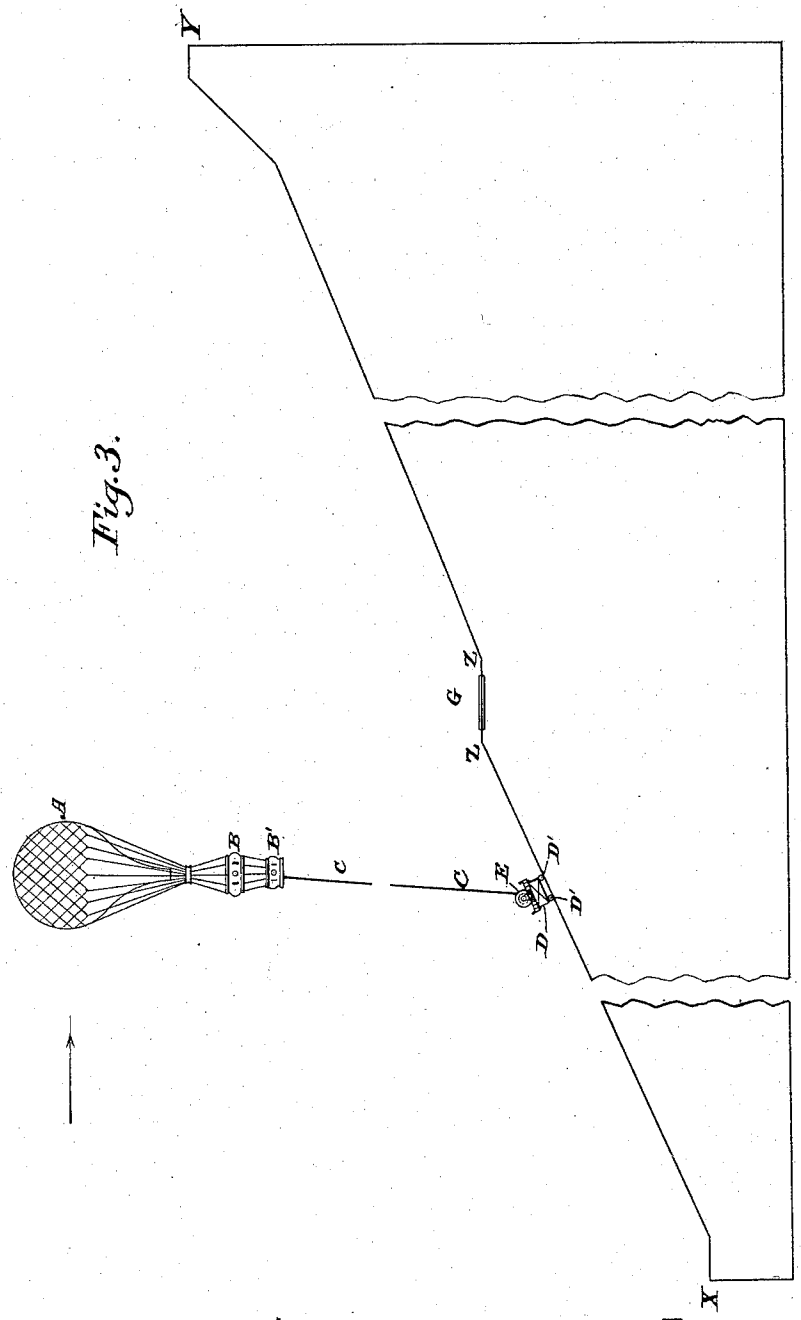

Fig. 3.

Witnesses:
E. B. Bolton
W. A. Walsh

Inventor:
Lucien Payn.
By Richardson
his Attorneys.

UNITED STATES PATENT OFFICE.

LUCIEN PAYN, OF PARIS, FRANCE.

CAPTIVE BALLOON.

SPECIFICATION forming part of Letters Patent No. 476,893, dated June 14, 1892.

Application filed November 18, 1891. Serial No. 412,262. (No model.)

To all whom it may concern:

Be it known that I, LUCIEN PAYN, a citizen of the French Republic, residing at Paris, Department of the Seine, France, have invented certain new and useful Improvements in Captive Balloons, of which the following is a full, clear, and exact description.

The object of my invention is a balloon combined with and connected to an anchor-car which is adapted to roll on a suitably-arranged road, whereby the force exercised by the wind on the said balloon is utilized to run the said car.

To facilitate the understanding of my invention, reference is made to the accompanying drawings, in which—

Figure 1 is a view of the entire apparatus. Fig. 2 is a view, on a larger scale, of the anchor-car. Fig. 3 is a schematic view of one road on which the anchor-car may roll.

The same letters of reference represent the same parts in the different figures.

My apparatus comprises, Fig. 1, an ordinary balloon A, connected by any known means to one or several balloon-cars B B′, which may or may not communicate one with the other by means of ladders or otherwise, the whole balloon, with its car or cars, being attached by means of a cable C of variable length to a box-car D, Figs. 1 and 2, on which a winch E is mounted, which serves to wind up the cable. The car D rolls by means of rollers D′ on the road D″, which is solidly connected with the ground by any suitable means, and is formed of rails which form vertical grooves, in which the rollers D′ are imprisoned. The car D has also the horizontal rollers D‴, which, resting against the vertical sides *d*″ of the rails D″, maintain the vertical position of the car in case of sudden gusts of wind. The whole of this system rolls on a suitable road, which can be sloping, as shown in Fig. 3. Two roads are preferably made in a north, south, east, and west direction, which cross at right angles at their midst G—for instance, where a horizontal platform is arranged with a turning-plate—permitting, when necessary, of changing at will the direction of the balloon.

Supposing one wanted to go upward in the direction of X Y of Fig. 3, which demands naturally that the wind blows in that direction, the cable C is rolled off the winch E, and the balloon rising follows the impulse of the wind and draws with it the car D. Upon the arrival at Z on the platform the same direction Y is kept in, or, if in consequence of a change in the direction of the wind, it is deemed necessary to also change the direction of the balloon the car is turned on the turning plate arranged on this platform, so as to take an inclined direction of ninety per cent. in regard to the first direction X Y. When at Y or Y′, the position corresponding at ninety per cent. to the position Y on the road, the balloon is drawn down by means of the winch E, so as to diminish as much as possible the action of the wind, the box on the car D is filled with water through opening E′ or the platform loaded with persons, thus forming ballast, and the descent of the road Y X is made without the aid of the balloon to the spot X, the starting-point, changing the direction again or not when arriving on the platform Z.

It is well understood that the accessories of my apparatus—the winch, road-bed, &c.—can be of any kind. The winch, for instance, can be worked by hand or any other mechanical means. The car D can also be provided with brakes, permitting of moderating at will the speed of ascension or descent when necessary, all of these parts serving for the completion of the apparatus, but changing nothing in the principle of its establishment.

I claim—

1. The herein-described balloon-railway, consisting of the balloon and cars attached thereto, the rolling car having wheels placed in vertical grooves, horizontal rollers bearing against the flanges of the vertical grooves, and means for varying the weight of the car, as set forth.

2. The herein-described balloon-railway, consisting of the balloon and cars attached thereto, the rolling car having rollers D′ engaging vertical grooves D″, the horizontal rollers D‴, bearing against the flanges of said vertical grooves, and the tank D on said car and platform provided with a railing, said tank and platform adapted by means of water, &c., to increase or decrease the weight of the car, substantially as and for the purpose set forth.

In witness whereof I have hereunto set my hand in presence of two witnesses.

LUCIEN PAYN.

Witnesses:
C. BELLEY,
H. AYOLLE.