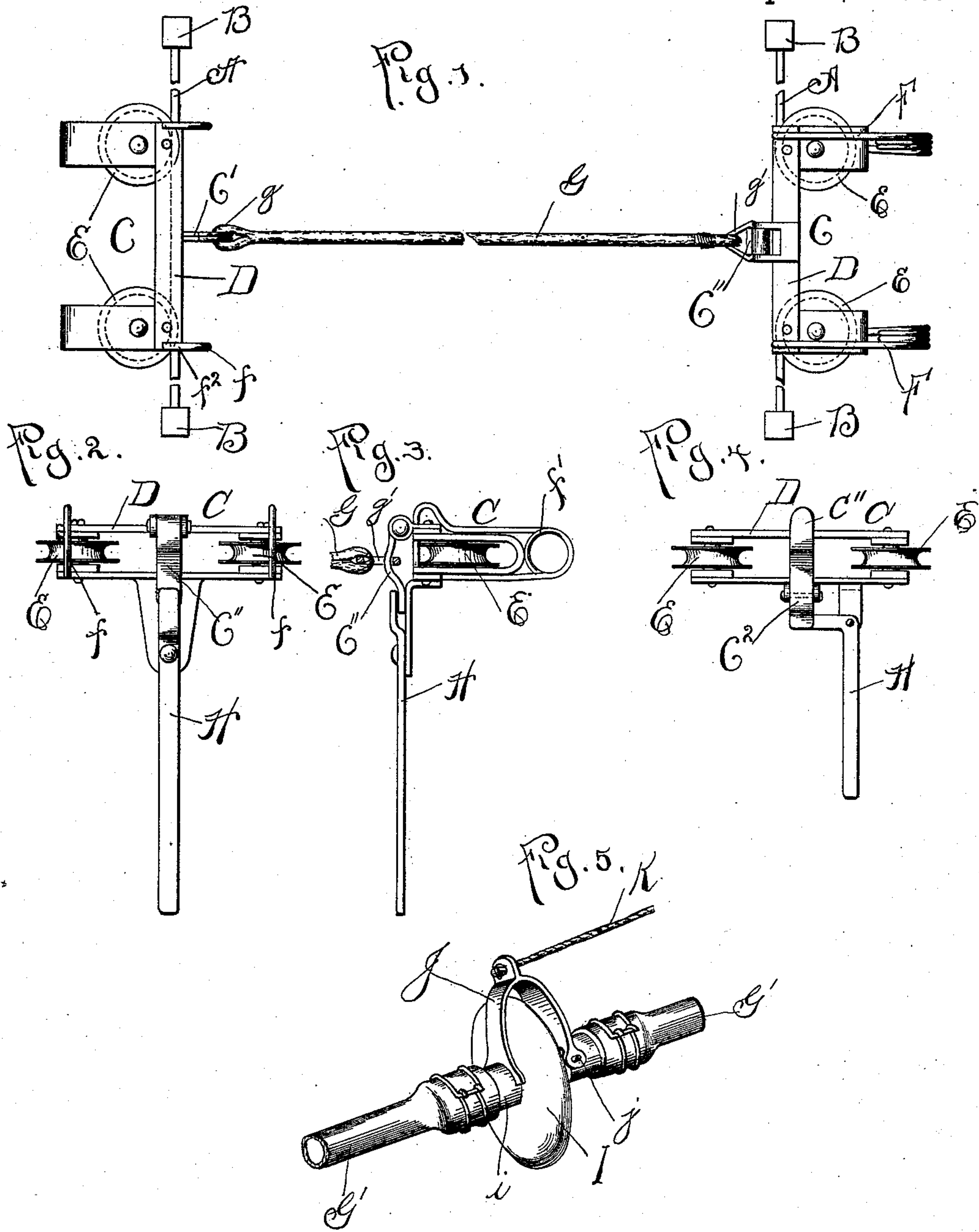


(No Model.)

W. C. CREVELING.
DEVICE FOR STARTING RACE HORSES.

No. 567,298.

Patented Sept. 8, 1896.



Witnesses:
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UNITED STATES PATENT OFFICE.

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TWO-THIRDS TO ZEPHANIAH A. BARRETT AND RICHARD DWYER,
OF SAME PLACE.

DEVICE FOR STARTING RACE-HORSES.

SPECIFICATION forming part of Letters Patent No. 567,298, dated September 8, 1896.

Application filed April 29, 1896. Serial No. 589,530. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM CLEMENT CREVELING, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Devices for Starting Race-Horses, of which the following is a specification.

The present invention relates to that class of devices which comprise an obstruction or barrier arranged across the track at the starting-point in such position that it cannot be passed by the horses, and means for quickly removing the barrier from this position, so as to leave the track open and clear when the signal for the start is given. A device of this general description is not broadly new.

The object of the present invention is to provide a barrier that is better adapted to its purpose than any of which I am aware, and to provide improved means for removing it from its position across the track. To these ends I prefer to use a barrier consisting of an elastic device in the nature of a string or line which when not under tension is considerably less in length than the width of the track, but which may be stretched to the entire width of the track and have its opposite ends fastened to suitable supports or holding devices. I prefer to make this barrier of a single piece of pure-gum tubing, but I desire to have it understood that the invention is not limited in this respect and that any other device in the nature of a line or string having sufficient elasticity for the purposes herein described is within the scope of my invention. Nor is the invention limited to any particular means for supporting this barrier and holding it stretched across the track, or to any particular means for releasing it when the signal for the start is given. I prefer, however, to attach each of its ends to a carriage which is mounted upon a suitable track or way, preferably a tight wire, arranged at the side of the track so that the two carriages upon opposite sides of the track may be moved along and thereby move the barrier. This is preferred for the reason that it will enable the device to be used either for a flying start or for a standing start, and when used for a

standing start the device may be placed at any desired point along the track from which the start is to be made.

The invention consists in the features of novelty that are particularly pointed out in the claims hereinafter, and in order that it may be fully understood I will describe it with reference to the accompanying drawings, which are made a part of this specification, and in which—

Figure 1 is a plan view of the complete starting device. Figs. 2 and 3 are, respectively, a side elevation and an end elevation of the means for holding one end of the barrier and for releasing it when the signal for the start is given. Fig. 4 is a detailed view showing a slight modification in the construction of the means for holding and releasing the barrier. Fig. 5 is a perspective view showing a barrier and a holding and releasing device of still another modification.

Upon each side of the track is a wire A, which is stretched between posts B, the two wires being parallel and disposed in the direction of the length of the track. These wires may be of any desired length and constitute tracks or ways upon which are mounted carriages C. Each of these carriages comprises a frame or housing D and a pair of wheels E, journaled therein and having peripheral grooves for receiving the wire A. Each of them is also preferably provided with keepers F, by which they are suspended and thereby prevented from falling from the supporting-wire when not in use. Each of these keepers may consist of a wire secured at one end to the housing and having near the other end a portion f , which crosses the plane of the wheels, and an intermediate coiled portion f' , which permits the portion f to be withdrawn for placing the carriage upon or removing it from the wire A; or, if desired, these keepers may be of the simpler form with which the carriage shown at the other side of the track is provided. As here shown, each of the keepers consists of a wire secured at one end to the housing of the carriage, and having a portion f , which crosses the plane of the wheels, and a portion f^2 , which is bent backward over the housing, the portion f^2 being a

sufficient distance from the housing to admit the wire A.

G represents the barrier, which, as before stated, preferably consists of a single piece of pure-gum tubing having at its ends means for securing it to the carriages C. As shown in Fig. 1, one end of the barrier is provided with a loop *g*, which is engaged by a fixed hook C', carried by one of the carriages, and the other end is provided with a loop *g'*, which is engaged by a latch C'', hinged to the carriage, a pivoted trigger H being provided for engaging and holding the latch when desired. To use the device thus constructed, the carriages are placed opposite each other on opposite sides of the track, the loop *g* is engaged over the hook C', the barrier is stretched until it extends completely across the track, the latch C'' is engaged with the loop *g'*, and the trigger is engaged with the latch. Thus the barrier is held in position across the track and under such tension that when the trigger is tripped and the latch released the recoil of the barrier will completely withdraw it from the track.

As shown in Figs. 1, 2, and 3, the latch C'' is pivoted to the top side of the housing and swings upward, while in the construction shown in Fig. 4 it is pivoted to the bottom side of the housing and swings downward. In order to hold it in place, it is provided with a tailpiece C², which is extended downward and is engaged by the trigger H, which in this instance takes the form of a bell-crank lever. The invention is not, however, limited to any particular means for securing the ends of the barrier or for releasing it, and in addition to the means shown in Figs. 1 to 4 inclusive, which are similar to the extent that they are both located at one end of the barrier, I have shown in Fig. 5 still a third means for accomplishing the same result. Here the barrier is formed of two sections G' of gum tubing of equal length. The outer ends of these sections of the barrier may be supposed to be engaged by a hook such as the hook C', and at their inner ends they are provided with cooperating devices for temporarily securing them together and for releasing them from each other when the signal to start is given. This securing and releasing means consists of an enlarged head I, secured to one section, and a hook J, pivoted to the other section at *j* and spanning the head I, the end of the hook being forked, as shown, in order to span the neck *i*, by which the head is secured to the tubing, and thereby enable the hook to have contact with the head at diametrically opposite points. This arrangement is such that the tension of the barrier itself will have no tendency to effect a disengagement of the hook from the head, but when tension is applied to a pull-cord K, which is connected to the hook at a considerable distance from its pivotal point *j*, it will be disengaged from the head and

the two sections of the barrier will separate, one going to each side of the track.

The ends of the barrier are attached to the carriages at points located in the planes of the wheels. As a result of this arrangement, the tension of the barrier will hold the wheels in practically horizontal planes and cause them to travel upon the outer sides instead of upon the top of the tracks.

Having thus described my invention, the following is what I claim as new therein and desire to secure by Letters Patent:

1. In a device for starting race-horses, the combination of an elastic barrier, means disposed upon opposite sides of the track by which the barrier is supported and between which it is stretched, and means for releasing the barrier, its tension being such that when released its recoil will withdraw it from its position across the track, substantially as set forth.

2. In a device for starting race-horses, the combination of a barrier consisting of a single elastic device in the nature of a line, means disposed upon opposite sides of the track by which the barrier is supported and between which it is stretched, and means disposed at one side of the track for releasing one end of the barrier, the tension of the barrier being such that when released its recoil will withdraw it from its position across the track, substantially as set forth.

3. In a device for starting race-horses, the combination of an elastic barrier formed of gum tubing, means disposed upon opposite sides of the track by which the barrier is supported and between which it is stretched, and means for releasing the barrier, the tension of the barrier being such that when released its recoil will withdraw it from its position across the track, substantially as set forth.

4. In a device for starting race-horses, the combination of two tracks or ways disposed upon opposite sides of the race-track, a carriage mounted upon each of said tracks or ways, an elastic barrier having its ends secured to said carriages at points located in the planes of their wheels, and means for releasing the barrier, substantially as set forth.

5. In a device for starting race-horses, the combination of two wires disposed upon opposite sides of the track, a carriage mounted upon each of said wires, an elastic barrier having its ends secured to said carriages and means for releasing the elastic barrier, each of the carriages having a housing, a wheel journaled therein and a keeper secured to the housing and crossing the plane of the wheel, so as to prevent the housing from falling from the wire when the barrier is released, substantially as set forth.

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Witnesses:

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