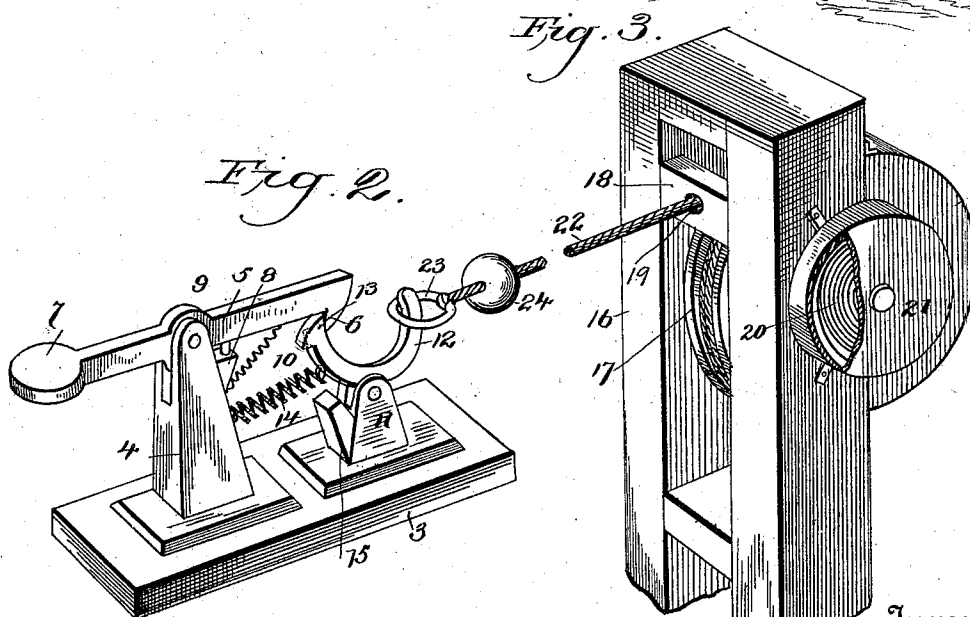
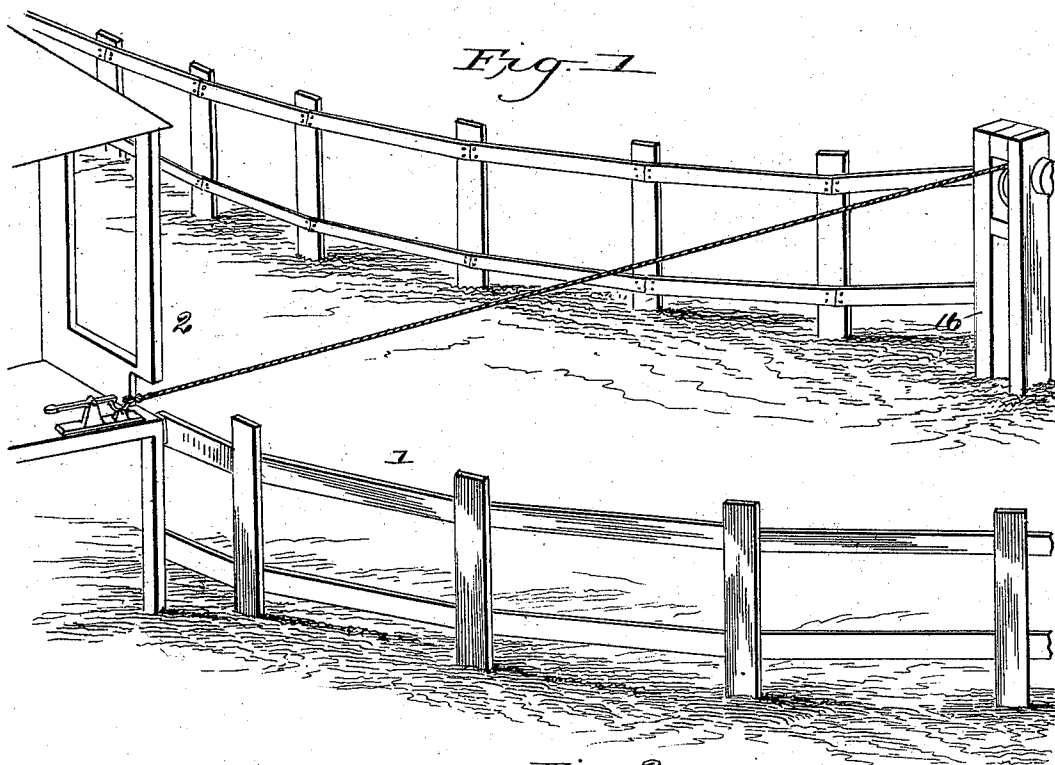


(No Model.)

T. F. LOGAN.
HORSE STARTER.

No. 535,141.

Patented Mar. 5, 1895.



Witnesses
Wm. Reynolds
Chas. S. Byrne

Inventor
Thomas F. Logan
By *John Wedderburn*
Attorney

UNITED STATES PATENT OFFICE.

THOMAS F. LOGAN, OF PHILADELPHIA, PENNSYLVANIA, ASSIGNOR OF ONE-HALF TO THOMAS CORLEY, OF SAME PLACE.

HORSE-STARTER.

SPECIFICATION forming part of Letters Patent No. 535,141, dated March 5, 1895.

Application filed February 27, 1894. Serial No. 501,746. (No model.)

To all whom it may concern:

Be it known that I, THOMAS F. LOGAN, a citizen of the United States, residing at Philadelphia, in the county of Philadelphia and State of Pennsylvania, have invented certain new and useful Improvements in Devices for Lining Up and Starting Horses at Race-Tracks; and I do hereby declare the following to be a full, clear, and exact description of the invention, such as will enable others skilled in the art to which it appertains to make and use the same.

This invention relates to a device for lining up and starting horses at race tracks, and has for its object to provide means for starting the horses evenly and avoiding delay consequent upon false starts.

With these and other objects in view the invention consists of the construction and arrangement of the several parts which will be more fully hereinafter described and claimed.

In the drawings: Figure 1 is a perspective view of a portion of a race track, showing the starter's stand and the improved device arranged in operative position. Fig. 2 is a detail perspective view on an enlarged scale, of the trip mechanism. Fig. 3 is a similar view of a post carrying the winding mechanism.

Similar numerals of reference are employed to indicate corresponding parts in the several views.

Referring to the drawings the numeral 1 designates a race track, and 2 the starter's stand. In, or adjacent to the starter's stand, is mounted a trip mechanism which consists of a base 3 having an upright 4 in which is pivotally mounted a trip lever 5 having an outer depending nose 6 and an inner flattened or otherwise constructed engaging end 7 to be pressed by the operator or starter. On the upright 4 is a lug 8, and depending from the under edge of the lever 5 is a pin or post 9 which is adapted to rest upon the said lug and is held in this position by the action of a spring 10 attached to the under edge of the said lever and to an adjacent portion of the upright 4. By these means the lever is normally held downward in a horizontal position, as shown in Fig. 2. Adjacent to the upright 4, and in advance thereof, is a

short standard 11 in the upper portion of which is pivotally mounted a latch 12 having an outer free end of curved form, and an inner shouldered end 13, adjacent to which is secured a spring 14 whose opposite end is also secured to the upright 4. The inner end of the said latch 12 is adapted to be engaged by the nose 6 of the lever 5 to hold the said latch in proper position in addition to the slight tension exerted thereon by the spring 14.

Across from the starter's stand is located a post 16 in which is mounted a drum 17, and above the said drum and on the outer side is a guide 18 having an opening therethrough as at 19. The said drum is connected to a spring 20 which is inclosed by a metallic casing 21, and the spring is normally set to cause a winding action of the drum. On the said drum is wound a rope or cable 22 of suitable material, preferably cotton, and this rope or cable is passed through the opening 19 of the guide 18. The free end of the rope is provided with a loop 23 which is adapted to be placed over the free end of the latch 12. Adjacent to the said loop 23 is a rubber ball 24 which prevents the rope from swirling when raised from the latch and also acts as a cushion against the guide 18 and further, as a stop to prevent the rope from passing entirely through the guide.

In operation the starter or his assistant draws the rope or cable 22 across the track, as shown in Fig. 1, and the loop 23 is attached to the free end of the latch 12, as shown in Fig. 2. After the horses are satisfactorily lined up, the inner end of the lever 5 is depressed to relieve the nose 6 from engagement with the inner end of the latch 12, and the tension on the rope or cable 22 being greater than the resistance offered by the spring 14, the said latch is thrown forward and the loop 23 released while at the same time the drum 17 is actuated by its spring 20 and winds the rope or cable 22 thereon with great rapidity, thereby permitting the horses to start off evenly.

The tripping mechanism is preferably located in the starter's stand as stated, and in a convenient position to be quickly operated.

By the use of this device continuous break-

ing in the start is avoided, as well as tiring and playing out of horses which are properly driven or ridden.

This device is especially useful where a
5 great many horses start at once, and will assist in permitting a great many more races within a given time than can now be accomplished. After the loop 23 is released from the latch 12, the springs 10 and 14 restore the
10 latch and lever to their normal position, as shown in Fig. 2 ready for engagement by the loop 23.

It is apparent that many changes in the construction and arrangement of the several
15 parts might be made and substituted for those shown and described, without in the least departing from the nature or spirit of the invention.

Having thus described the invention, what
20 is claimed as new is—

In a horse starter, the combination of a

spring drum, a rope or cable engaging said drum and having a ring at its free end, and an elastic ball near said free end to prevent the rope or cable from swirling, and a hold- 25 ing and tripping mechanism for said ring, consisting of a latch having an outer free end of curved form, and an inner shouldered end, a spring attached to the inner portion of said latch a rear stop for the latch, a lever having 30 a depending nose adapted to engage the inner shouldered end of said latch, a spring attached to said lever, and a stop in connection with the lever, substantially as and for the purposes specified. 35

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

THOMAS F. LOGAN.

Witnesses:

JAMES SMITH,

WILLIAM D. LELAN.