(No Model.)

# J. E. CURRY.

## RACE HORSE STARTER.

No. 589,818. Patented Sept. 14, 1897.

Fig. 1.

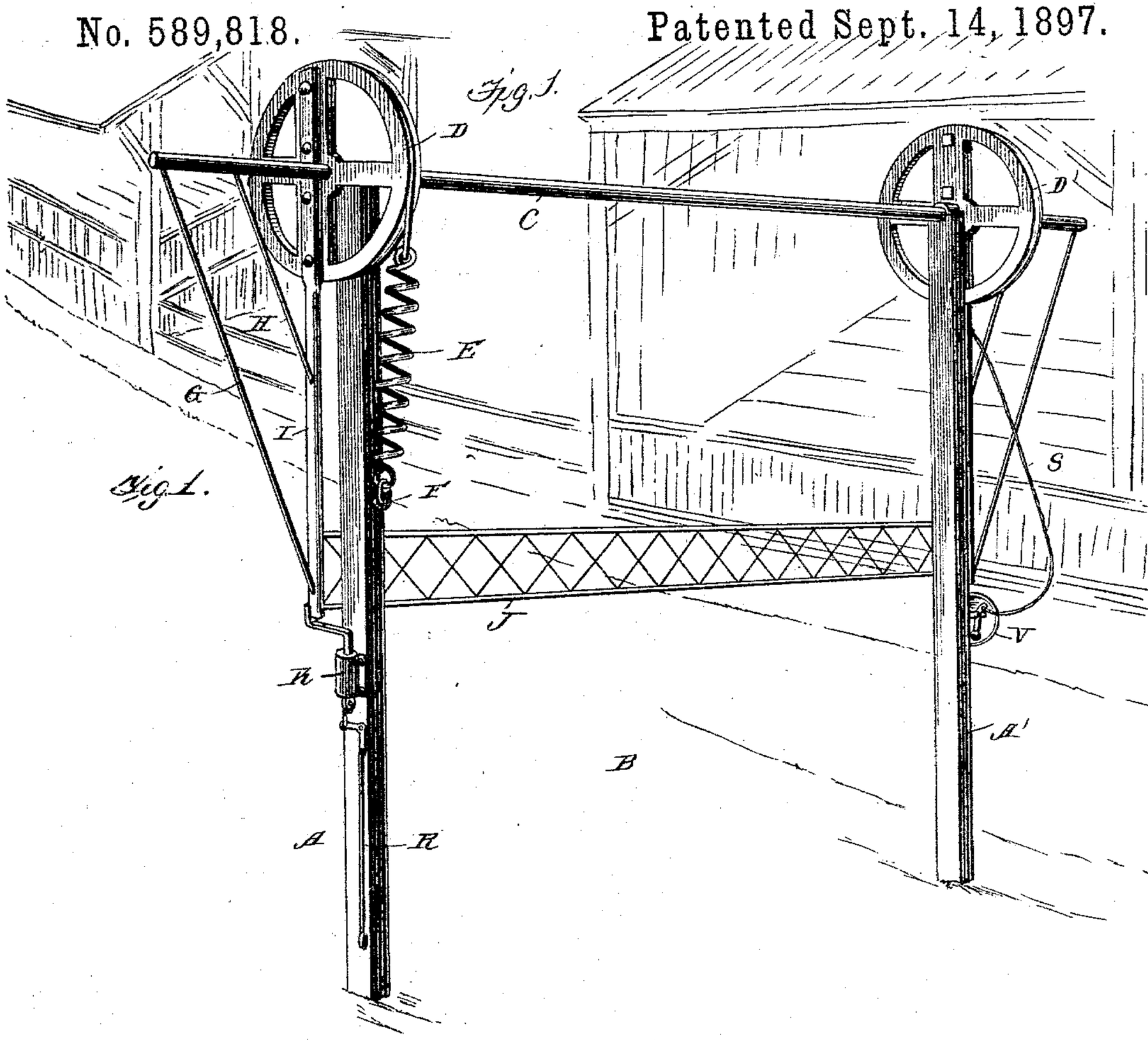



Fig. 2.

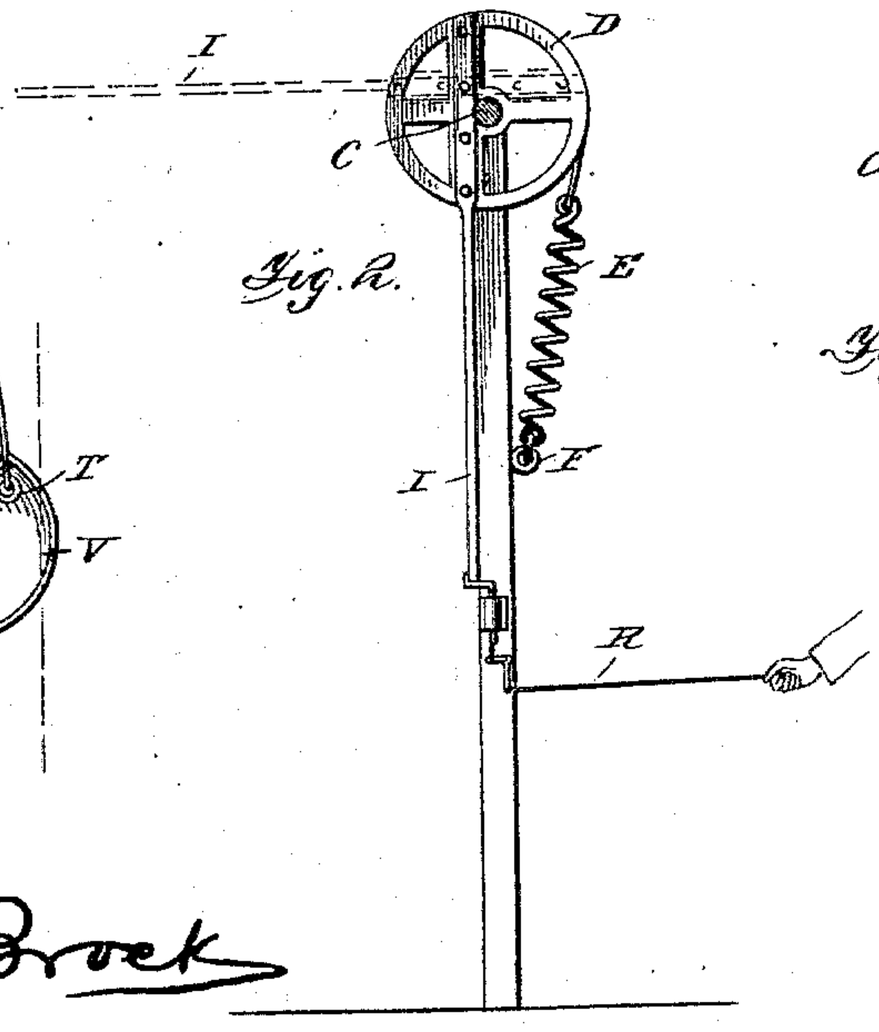



Fig. 3.

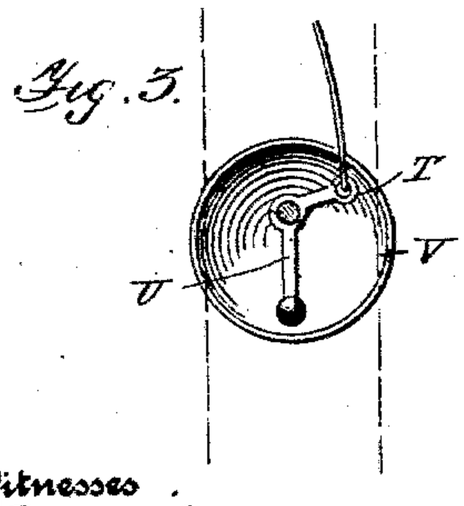
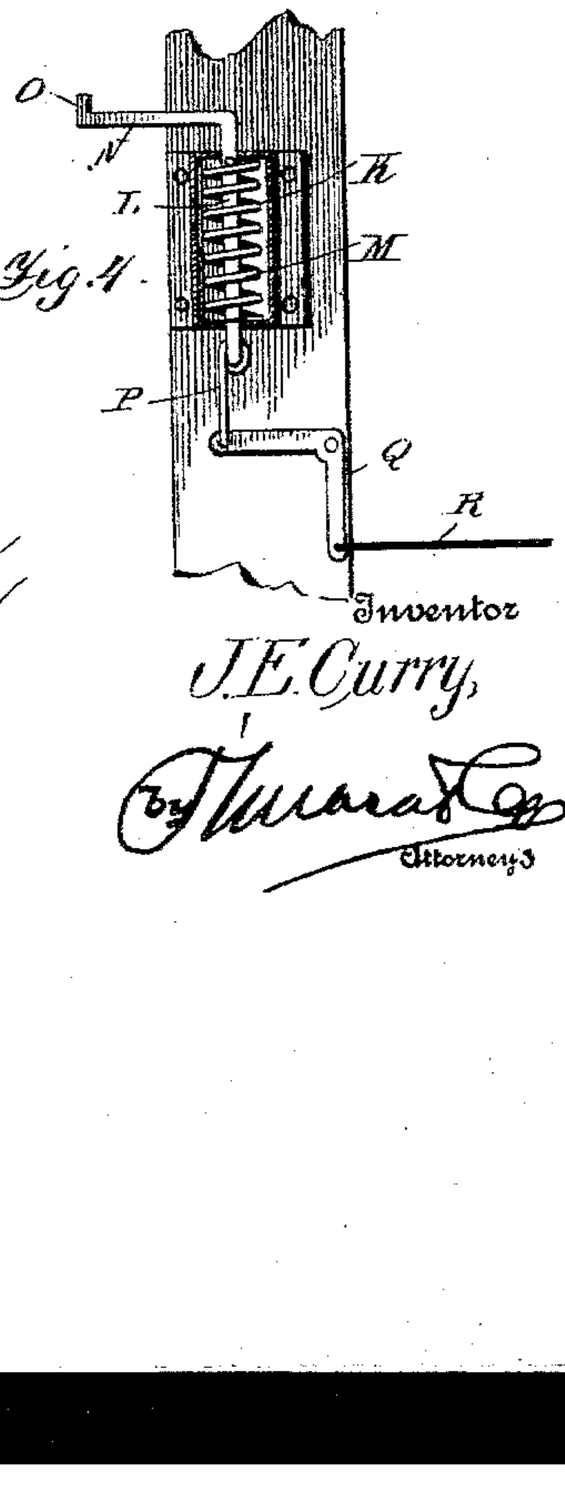



Fig. 4.

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# UNITED STATES PATENT OFFICE.

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## RACE-HORSE STARTER.

SPECIFICATION forming part of Letters Patent No. 589,818, dated September 14, 1897.

Application filed May 21, 1897. Serial No. 637,591. (No model.)

*To all whom it may concern:*

Be it known that I, JOSEPH E. CURRY, residing at New Orleans, in the parish of Orleans and State of Louisiana, have invented a new and useful Improvement in Race-Horse Starters, of which the following is a specification.

This invention has relation to certain improvements in race-horse starters.

An object of the invention is to provide a starting device for race-horses so constructed that the services of only one person will be required to operate the same.

A further object of the invention is to provide a race-horse starter automatic in action, certain lock-operating mechanism being employed to raise the wire or webbing when the signal is given for the horses to start.

A further object of the invention is to provide a horse-starting device so constructed that the webbing or wire arranged between the posts of the track will be raised as the signal is given for the horses to start and also to provide means operated by the same mechanism as that controlling said webbing, so as to make provision for the sounding of a bell or gong as said webbing or wire is raised.

With these and other objects in view my invention consists in certain novel features of construction and in combinations and arrangements of parts, as will be more fully hereinafter described, and specifically pointed out in the claims.

Referring to the accompanying drawings, illustrating my invention, Figure 1 is a perspective view of my device in an operative position. Fig. 2 is a side elevation. Fig. 3 is an inside elevation of the bell or gong and the operating-cord carrying the bell-hammer, and Fig. 4 is a sectional view of the lock-operating mechanism.

The same letters of reference will indicate like parts wherever they occur throughout the different views.

In the practical embodiment of my invention I have illustrated a starting device, the same consisting of uprights or posts A and A′, located on each side of the track B, the posts being secured in any desirable manner to the ground. Mounted within the bearings at the upper end of the posts A and A′ is a shaft or bar C, carrying the wheels D and D′ near each end of said bar or shaft. These wheels are formed with a circular groove on the outer periphery thereof, the wheel D being provided with a coiled spring E, the outer or free end of such spring being attached or connected with the wheel D, while the lower end thereof is secured to one of the posts, as shown at F.

It will be noticed that the shaft or bar is of a sufficient length to extend through the posts and the wheels above described, and secured to the outer extended ends of this shaft or bar are the brace-rods G and H, the lower ends thereof being secured to a vertical rod I, carrying at its lower end the wire or webbing J, the upper portion of said rod being connected to the wheel D, carried by the shaft. The lower end of the rod I extends a short distance below the lower portion of the webbing, the purpose of which will be shortly described.

Secured to the lower portion of the post A is a lock K, and extending through the lower portion of this lock is a bar or rod L, having a coiled spring M surrounding said rod or bar L and located within the box or casing of the lock. The upper end of the bar or rod is provided with an outwardly-extending arm N, the same being provided with the upwardly-extending portion O, adapted to bear against the lower extended end of the bar I, so as to hold the said bar in a closed position when the device is not in use. At the lower end of the spring-controlled rod passing through the lock is located a short section of rod P, the lower end thereof being secured to a bell-crank lever Q, pivoted to one of the posts A, a cord or chain R being attached to the lower arm of said bell-crank lever, the purpose of which will be more fully hereinafter set forth.

The wheel D′, mounted on the end of the shaft opposite to the post above described, is provided with a similarly-arranged groove on the periphery thereof for the reception of the cord or chain S, the lower end thereof being connected to an arm T to operate the hammer U, so that as the shaft is turned and the webbing is being raised the gong or bell V will be sounded by means of said cord or chain operating the hammer within said bell or gong, so that when the proper time arrives for the horses to start the webbing is raised and the

bell or gong is sounded simultaneously with the raising of the said webbing.

Suitable brace-rods can also be employed for bracing the shaft to the post A′, in this case said brace-rods being secured to the extended end of the shaft passing through the wheel D′, while the lower ends of said rods are secured to the sides of the post A′.

The operation of the device is as follows: Supposing the parts to be in a position as in Fig. 1, it will of course be understood that the horses will be arranged in line directly in the rear of the wire webbing J. When the proper time arrives for the starting of the horses, the rope or cord R is pulled or given a sudden jerk, thereby operating the bell-crank lever Q and depressing the spring-actuated stem or rod located within the case of the lock. As this stem or rod is lowered the projection O, formed on the arm at the upper portion thereof, will be released from the side of the bar or lever I, connected to the wheel D. The spring secured to said wheel will then contract, thereby revolving the wheel, consequently raising the webbing to a position clearly shown by dotted lines in Fig. 2. As the webbing is being raised the shaft will be turned, thereby imparting motion to the wheel D′ on the opposite end of said shaft, so that the cord surrounding said wheel D′ will be moved to operate the hammer located within the bell or gong, so that said bell or gong will be sounded as the horses are "let off." After the horses have been started the hand of the operator is removed from the operating-chain R, when, by reason of the coiled spring located within the lock, the parts will assume their normal position and the webbing can be lowered into place ready for another operation.

From the foregoing description it will be seen that I provide an improved race-horse starter whereby the services of only one person are necessary, and that I also produce a device of the character described wherein mechanism is employed to raise the webbing and also to sound a gong or bell simultaneously with such raising, thereby dispensing with the services of two or more operators and the usual batteries, &c., that have generally heretofore been employed for this purpose.

The device is very simple in construction and composed of but a very few and inexpensive parts, the arrangement thereof being such that the several parts can be set up and placed in the desired position in a very short space of time.

Various slight changes might be made in the forms and construction of the parts described without departing from the spirit and scope of my invention. Hence I do not care to limit myself to the precise construction herein set forth, and consider myself entitled to any slight changes as may fall within the spirit and scope of my invention.

Having thus fully described my invention, what I claim as new, and desire to secure by Letters Patent of the United States, is—

1. A race-horse starter comprising the posts, the shaft mounted in the upper portions thereof carrying the wheels D and D′, a lever attached to the wheel D and secured to the webbing at its lower end, a spring secured to said wheel and to the side of the post A, the wheel at the opposite end of the shaft carrying a cord or chain to sound a gong or bell, and mechanism substantially as described for simultaneously raising the webbing and sounding the gong as and for the purpose set forth.

2. A race-horse starter comprising the upright posts, the shaft mounted in the upper portions thereof carrying the wheels D and D′, the operating-rod attached to the wheel D, and the webbing, a spring connected to said wheel and the side of the post A, the wheel D′ on the opposite end of the shaft provided with the cord or chain connection to operate the hammer of a bell on the post A′, and the operating mechanism controlled by the spring to raise the webbing and sound the gong or bell in the manner and for the purpose set forth.

JOSEPH E. CURRY.

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