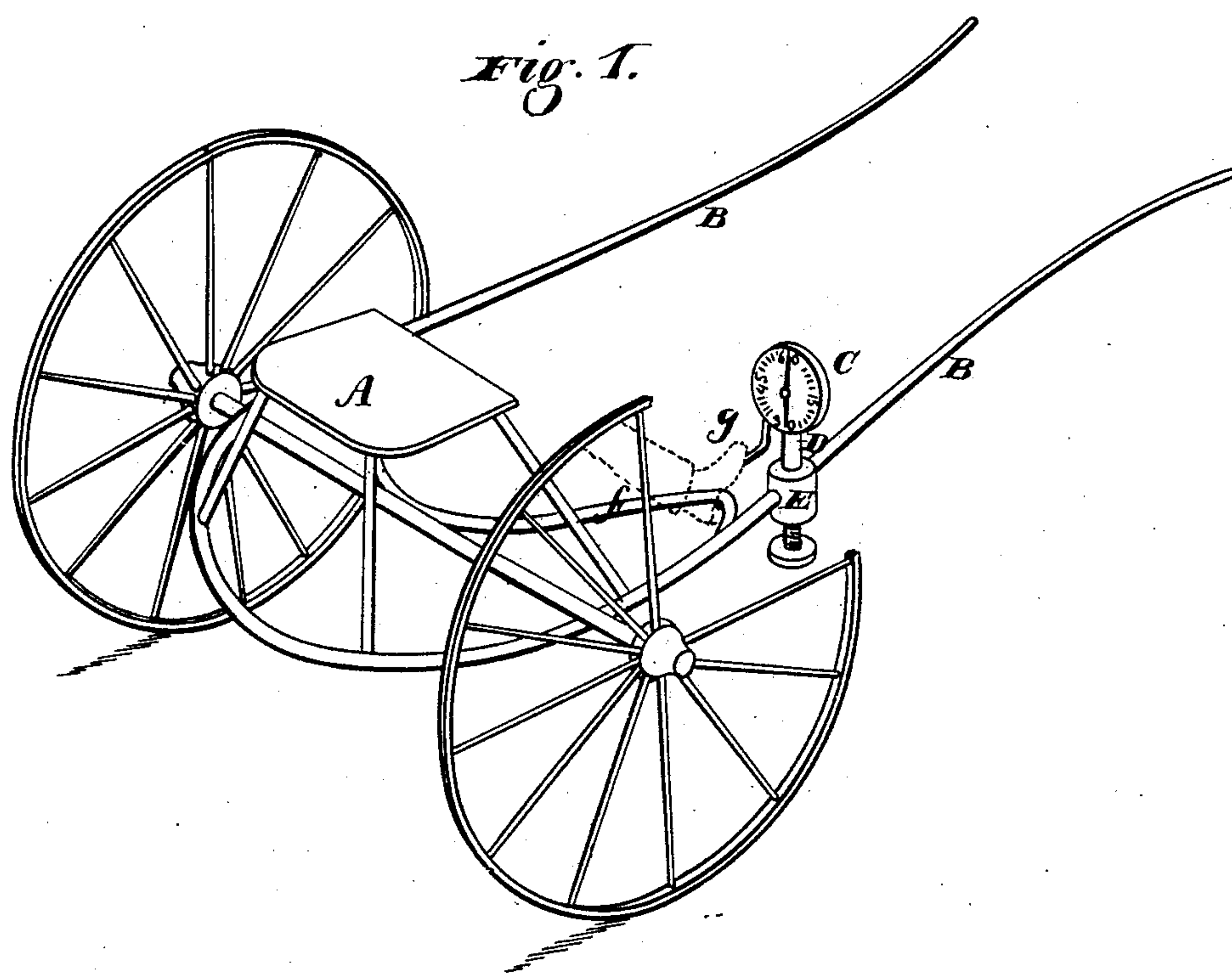


J. L. BOONE & E. J. FRASER.
Timing-Attachment for Racing-Vehicles.

No. 197,593.

Patented Nov. 27, 1877.



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UNITED STATES PATENT OFFICE.

JOHN L. BOONE AND EDWIN J. FRASER, OF SAN FRANCISCO, CALIFORNIA.

IMPROVEMENT IN TIMING ATTACHMENTS FOR RACING-VEHICLES.

Specification forming part of Letters Patent No. **197,593**, dated November 27, 1877; application filed April 26, 1877.

To all whom it may concern:

Be it known that we, JOHN L. BOONE and EDWIN J. FRASER, of San Francisco, State of California, have invented an Attachment for Racing-Sulkies; and we do hereby declare the following description and accompanying drawings are sufficient to enable any person skilled in the art or science to which it most nearly appertains to make and use our said invention, without further invention or experiment.

Our invention relates to an attachment for trotting-sulkies and other racing and training vehicles, by means of which the driver can time the speed of his horse without the necessity of employing a person for that purpose.

Few drivers like to have the speed of their horses known to outsiders; but it has been a necessity heretofore, in order to obtain the speed of a horse when training him for a race, to employ some person to mark or note the time he occupies in making a mile, and it was very easy for any outsider to time him in the same way.

Our invention provides an attachment for this class of vehicles by which the driver can, by a simple motion of his foot at any point in the circuit of a track, start a stop mechanism into operation, which will record the time and speed of the horse, and the same motion of the foot will stop the operation of the device when the circuit is made, thus enabling the driver to keep his own time, and prevent others from learning the speed of his horse.

Referring to the drawing, Figure 1 is a perspective view of our invention.

Let A represent the driver's seat; and B B, the thills or pole of any trotting, training, or racing vehicle.

Our attachment may be permanently secured to the vehicle, or it can be made detachable from it, as desired; and it may be secured to any part of the vehicle, such as under or behind the seat, to the pole, thills, or axle of the vehicle.

For the purpose of this application we have represented a detachable device, consisting of a time-piece, C, which may be constructed similar to any of the known devices used for

indicating intervals of time for recording the speed of horses.

This time-piece has a shank, D, and clamp E, by means of which it can be secured to one of the thills or the pole of a vehicle, directly in front of the stirrup *f*, in which the foot of the driver is supported.

The arm or lever *g*, which starts and stops the mechanism of the time-piece, projects out within reaching distance of the toe of the driver, when his foot is firmly seated in the stirrup, and slightly rocked forward.

As these time-pieces are constructed, a pressure upon the same arm or lever that starts the mechanism in motion also stops it, so that, in this case, only one operating arm or lever is required; but, if two arms or levers should be used, one could be operated by each foot, by leading the wire or other connection along under the shaft to the proper place in front of each foot.

The attachment may be secured to any convenient part of the vehicle, and the operating-arms extended along the shaft to the proper position to be operated by the foot of the driver. A convenient place to secure it would be under the driver's seat, and it can be mounted on hinged arms, so that it can be drawn out and adjusted directly in front of the driver, between his legs, and fixed in place by set-screws. By this arrangement it can be seen by the driver without taking his attention from his horse.

We thus provide a stop time-piece attachment for vehicles that can easily be operated by the driver.

The motion required to start and stop it will not cause him to relax any portion of his efforts, or withdraw his attention from his horse.

In a race the attachment will tell the driver what time he is making at any and all points of the race, and, besides, he can always keep his own time, so as to compare it with the time kept by the judges, thus detecting any attempt to falsify the time.

In training horses this device will be of the greatest benefit.

The driver can at any time speed his horse, commencing at any point in the circuit of the

track, and thus prevent outsiders from getting a record of his horse's speed.

Having thus described our invention, what we claim, and desire to secure by Letters Patent, is—

A timing attachment, C, for vehicles, having a shank, D, and clamp E, and provided with a

lever, g, or equivalent device, adapted to be operated by the foot of the driver, substantially as herein described.

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CHAS. G. PAGE.