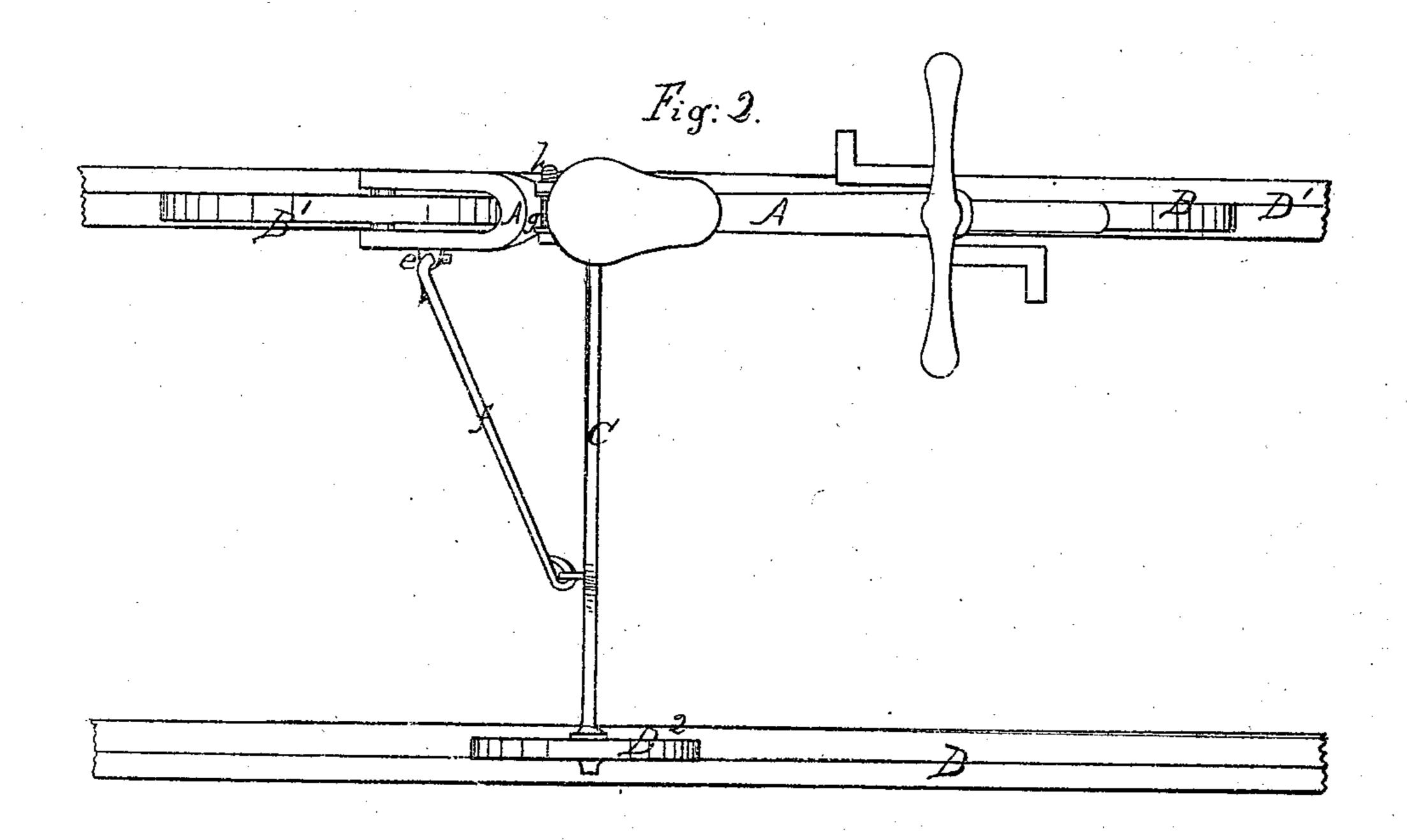
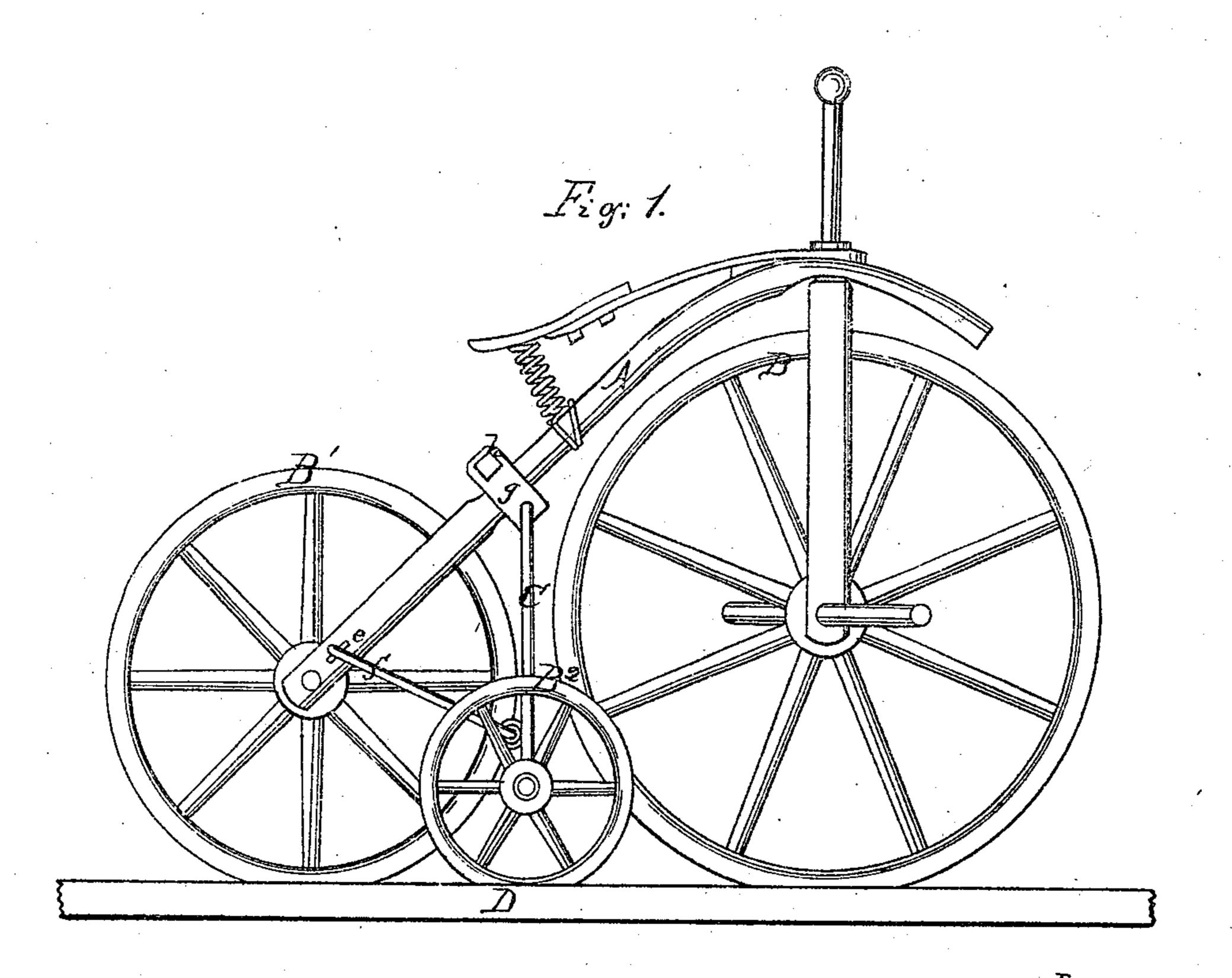
## J. A. ASPINWALL & C. M. PERRY. VELOCIPEDE.

93,159.

Patented Aug. 3, 1869.





Mitnesses

M.L. Berneur. This p. Tindall. Inventors.

L. A. Aspinwall C. Mr. Perry by their assormery C. S. Kennesk

## Anited States Patent Office.

## JOHN ABEL ASPINWALL AND CHARLES MONTAGUE PERRY, OF NEW UTRECHT, NEW YORK.\_\_\_\_\_

Letters Patent No. 93,159, dated August 3, 1869.

## IMPROVEMENT IN VELOCIPEDES.

The Schedule referred to in these Letters Patent and making part of the same.

To all whom it may concern:

Be it known that we, John Abel Aspinwall and Charles Montague Perry, of New Utrecht, in the county of Kings, and State of New York; have made an invention of certain new and useful Improvements in Velocipedes; and that the following is a full, clear, and exact description and specification of our said invention.

The object of our invention is to enable velocipedes to be run with facility along the rail of an ordinary

street-railroad. To this end,

Our invention consists of the combination of the frame of the velocipede with a supplementary wheel, connected with said frame by means of an arm. in such manner that while the running wheels of the velocipede traverse one rail of a street-railway, the supplementary wheel traverses the other rail thereof, and guides and steadies the velocipede.

Our invention consists, further, in the combination of the wheel and arm, so constructed that they can be readily attached to or detached from the frame of a velocipede; the wheel and arm thus constructed and combined, constituting a velocipede-attachment that can be manufactured separately from velocipedes, and sold to those who use them, so as to enable velocipedes, to which such attachments are applied, to be run with facility and great speed along street-railways.

In order that our invention may be fully understood, we have represented, in the accompanying drawing, and will proceed to describe a velocipede embodying it,

Figure 1 representing a side view of the velocipede, and

Figure 2 representing a horizontal plan of it.

The frame A of the velocipede, the two running wheels B B', and the connections and appurtenances of the wheels and frame, may be the same as the corresponding parts of the two-wheeled velocipedes in common use.

The supplementary wheel B<sup>2</sup> is made by preference of smaller diameter than the ordinary running wheels B B<sup>1</sup>, and is applied to a journal at the outer end of an arm, C, which holds the supplementary wheel at the proper distance from the running wheels B B<sup>1</sup>, to enable the supplementary wheel to traverse one rail D of the track of a street-railroad, while the running wheels B B<sup>1</sup> traverse the other rail D<sup>1</sup>.

The arm C is so connected with the frame A as to extend rigidly from its side. The mode in which we prefer to secure this rigidity is by means of a diagonal

brace, f.

The wheel-arm C is constructed by preference with a clip, g, at its end, which embraces the frame A of the velocipede, and is secured thereto by a screwbolt, h.

The diagonal brace f may be constructed in the same manner, or may have its end hook-formed, to hook into an eye, e, which is connected with the frame A of the velocipede.

The latter mode of constructing the brace is preferable, because it permits the supplementary wheel and its appurtenances to be more quickly attached to and detached from the velocipede, as but one bolt h has to

be operated for the purpose.

The supplementary wheel B<sup>2</sup> and its arm O, with their appurtenances, thus constitute what may be termed a "velocipede-attachment," which may be manufactured separately from velocipedes, and sold to those who use them; and the construction of this attachment may be greatly varied, without ceasing to embody our invention, so long as it consists essentially of a supplementary wheel and an arm, suitable to be secured to the side of a velocipede, so as to operate in the manner before described.

The invention we have described, enables a velocipede to be run with great speed and steadiness along an ordinary street-railway, a speed of from twelve to fifteen miles per hour being readily attainable by an

expert operator.

Moreover, the invention does not unfit the velocipede for running on ordinary roads, as the attachment may be quickly detached, and then carried by the rider.

In turning out from a railroad, all that is necessary is to rock the velocipede slightly, so as to lift the supplementary wheel from the rail, whereupon the velocipede can be turned in the ordinary way, and afterwards the supplementary wheel may be again dropped to the ground.

Having thus described the modes in which we propose to apply the principle of our invention, we declare that we do not claim, broadly, the employment of three wheels in a velocipede, as we are aware that velocipedes have been constructed with three wheels, one in front and two behind, but in such cases neither of the hind wheels ran in the track of the leading wheel, and the vehicle was consequently not adapted to run upon the rail of a railway.

We are aware that guiding-wheels have been applied to carriages and cars, for the purpose of causing the wheels to traverse railway-tracks, the guiding-wheels in such cases being applied in the vicinity of the wheels they are intended to guide, so as to perform the function of flanges; we, therefore, do not claim broadly a guiding-wheel, nor the application of a guiding-wheel to carriages of every description; but

What we claim as our invention, and desire to secure by Letters Patent, is—

The combination of the frame of a velocipede with a supplementary wheel, and an arm sustaining said wheel

at one side of said frame, so as to run upon one rail of a railway-track while the running wheels of the velocipede run upon the other rail, substantially as before set forth.

Also, the combination of the supplementary wheel and arm, constituting a velocipede-attachment, suitable to be applied to and to operate in connection with a velocipede, as before set forth.

In testimony whereor, we have hereto set our hands, this 12th day of April, A. D. 1869.

J. A. ASPINWALL.

C. M. PERRY.

Witnesses:
WILLIAM C. DODGE,
COR. R. DISOSWAY.