

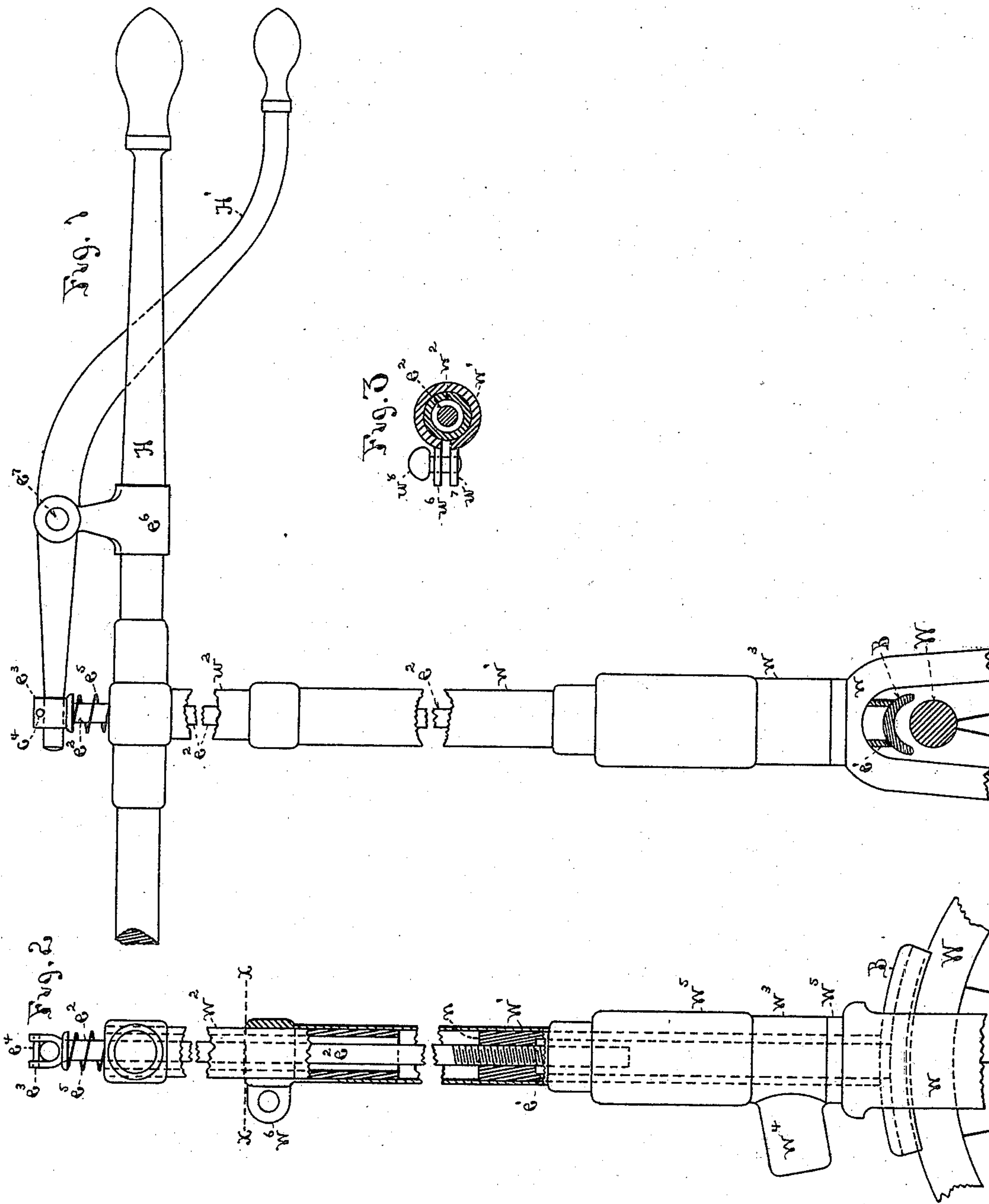
(No Model.)

J. M. MARLIN.

VELOCIPÈDE.

No. 369,541.

Patented Sept. 6, 1887.



Witnesses

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VELOCIPEDE.

SPECIFICATION forming part of Letters Patent No. 369,541, dated September 6, 1887.

Application filed June 6, 1887. Serial No. 240,354. (No model.)

To all whom it may concern:

Be it known that I, JOHN M. MARLIN, of New Haven, in the county of New Haven and State of Connecticut, have invented a certain
5 new and useful Improvement in Velocipedes, of which the following is a specification.

My invention relates to velocipedes; and it consists of certain new and useful improvements in the construction and combination of
10 the various parts thereof, substantially as described and claimed.

In the drawings, Figure 1 is a rear elevation, partly in section, of a portion of the steering-bar and its fork and handle bar and
15 the front or steering wheel of a tricycle constructed according to my invention. Fig. 2 is a side elevation of the same, partly in section. Fig. 3 is a horizontal section on the dotted line *xx* of Fig. 2.

20 The variety of velocipede to which my improvements are shown to be applied is what is commonly known as a "straight-steering" tricycle—that is, one in which the steering-wheel is guided by a steering-rod having bicycle
25 handles at the upper end and a fork carrying the steering-wheel at the lower end. As this type of machine is well known, I have shown only such parts thereof as are necessary to understand my invention.

30 *W* is the rim of the steering-wheel, which is held in the fork *w* of the steering-bar. This bar is made of two tubular sections, *w'* *w''*, the upper one of which slides up and down in the lower one to raise or lower the handle-bar.

35 To the part *w'* is attached the sleeve *w'''*, in which it turns (the latter being connected by the bar *w''* to the frame of the machine) by means of the collars *w''''* *w'''''*, above and below the sleeve. The handle-bar *H* is attached to the
40 upper section, *w''*, of the steering-bar, passing through a collar in the usual manner. The upper end of the portion *w'* of the steering-bar is split longitudinally through one side, and upon each side of the seam ears *w''''* *w'''''* project
45 outward laterally, through which a screw, *w''''''*, is passed horizontally to clamp them together and close the upper end of the tubular section *w'* around the section *w''* at any desired point to which they may be moved out or in. The
50 thread of the screw engages with a corresponding one in the ear *w''''* and slides freely

through the hole in *w''''*. These parts are of the ordinary construction; and the object of my present improvement is to carry the brake-rod
down from the handles *H* through the center 55 of the steering-bar, and to make its length readily adjustable to correspond with any alterations in the length of the steering-bar. To accomplish this I make the brake-rod in two parts, *e'* *e''*. The lower section, *e'*, which is 60 attached to the brake *B*, is made tubular and has an internally-threaded nut, *n*, secured solidly in its upper end, and it slides up and down freely in the lower section, *w'*, of the handle-bar. The upper section, *e''*, of the 65 brake-rod is a rod provided at its lower end with a screw-thread to fit the nut *n*, and as it is screwed into the same it descends within the lower section. The upper end of this upper section projects above the handle-bar, 70 through which it passes, and is provided at that end with a fork or yoke, *e'''*, with the pin *e''''* passed through the upper part of it, forming a loop. Below the yoke *e'''*, and between the handle-bar and it, is placed the coiled 75 spring *e''''''* around the brake-rod to hold the latter up. On the handle-bar *H* a sleeve, *e''''''*, is attached, which carries a short arm slotted at the outer end in the direction of the handle-bar to receive the brake-lever *L* in its slot, 80 and having the pivot *e''''''* passing through its slotted part and the brake-lever transversely, to serve as a fulcrum for the latter. The outer end of the brake-lever is provided with a handle, and its inner end passes through the yoke 85 *e'''* and under the pin *e''''*. As the handle of the brake-lever is in a convenient position to the hand of the rider which grasps the handle on the end of the handle-bar, the brake-lever can be grasped and drawn upward toward the 90 handle-bar at that end. This will depress the opposite end of the lever and push the brake-rod downward upon the wheel *W*, compressing the spring *e''''''*. When the brake-lever is released, the spring raises the brake-rod and 95 withdraws the brake.

In case the steering-bar is to be lengthened or shortened, the screw *w''''''* is loosened and the handle-bar and section *e''* of the brake-rod and section *w''* of the steering-bar are all revolved 100 around in the proper direction to screw up or unscrew the brake-rod until it reaches the

proper length, when the nut w^8 is again set up to secure the sections of the steering-bar together.

The advantages of my construction are that
5 it incloses the brake-rod within the steering-bar, and at the same time provides for their simultaneous extension or shortening, thus protecting the brake-rod and preserving the same position of its lever with relation to the
10 handle-bar under all circumstances, and making a neat and strong construction of the parts. The brake-rod and steering-bar can be used together on different patterns of machines, as it is not necessary that the brake should be
15 connected directly to the lower end of section e' of the rod, for an intermediate connection of levers between it and the brake may be employed, such as are in use on brake-rods attached to the outside of the steering-bar.

20 What I claim as new and of my invention is—

1. The combination of the extensible steering-bar made of two tubular telescoping sections provided with clamping mechanism, sub-

stantially as described, arranged to secure 25 them together at any desired position, and the brake-rod formed of two sections, $e' e^2$, extending through the tubular steering-bar and united by screw-coupling, and arranged to be lengthened or shortened simultaneously with 30 the steering-bar, substantially as described.

2. The combination of the extensible steering-bar made of two tubular telescoping sections provided with clamping mechanism, substantially as described, arranged to secure 35 them together in any desired position, the brake-rod, formed of two sections, $e' e^2$, extending through the tubular steering-bar and united by screw-coupling and arranged to be lengthened or shortened simultaneously with 40 the steering-bar, the lever H, connected to the brake-rod at its upper end, and the brake B, connected to it at its lower end, substantially as described.

JOHN M. MARLIN.

Witnesses:

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