(No Model.) 2 Sheets—Sheet 1.

J. L. WATKINS.

VELOCIPEDE.

No. 410,681. Patented Sept. 10. 1889.

FIG. 1.

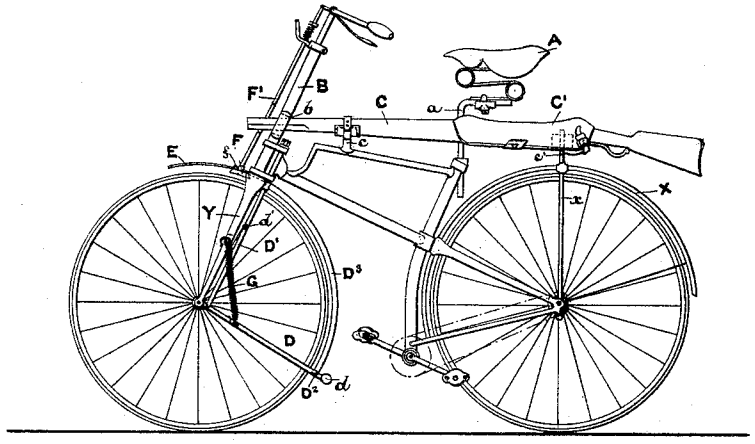


FIG. 4.

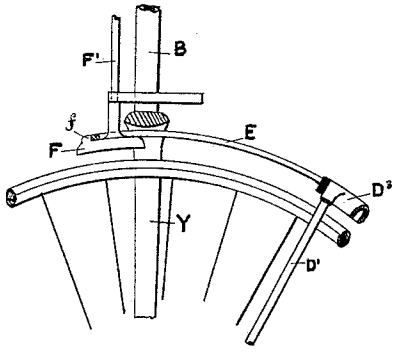


FIG. 8.

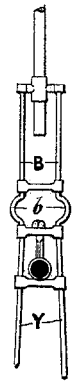
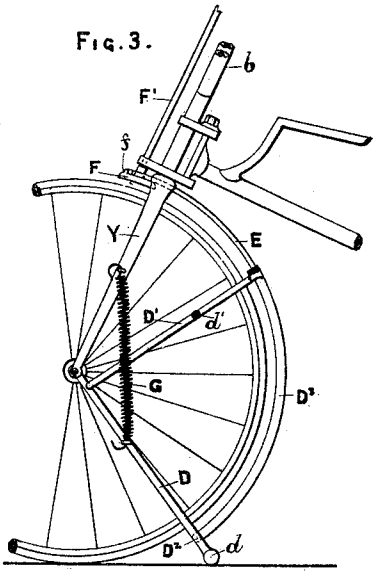


FIG. 3.



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(No Model.) 2 Sheets—Sheet 2.

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VELOCIPEDE.

No. 410,681. Patented Sept. 10, 1889.

FIG. 2.

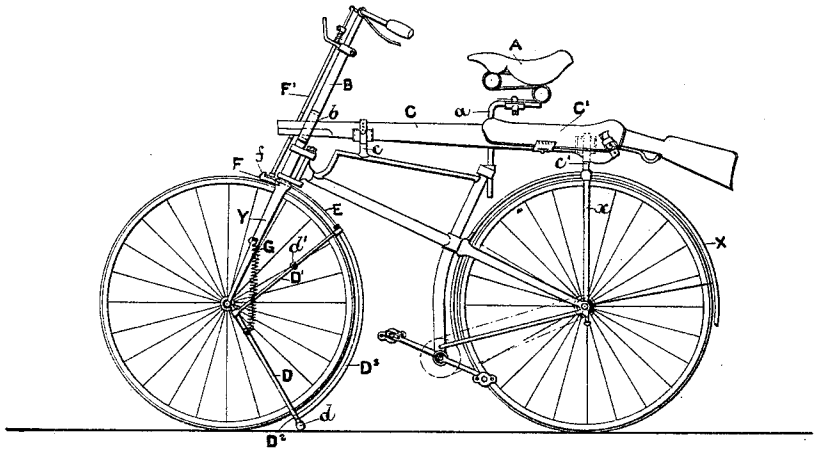


FIG. 5.

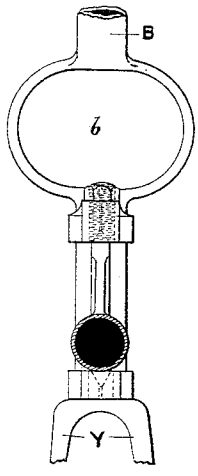


FIG. 6.

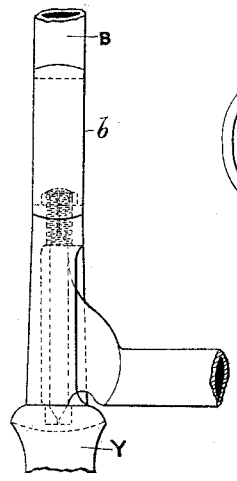
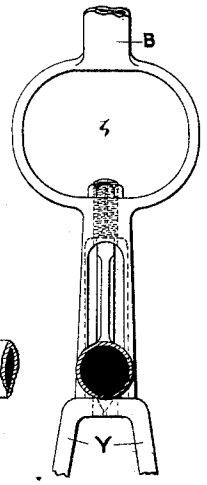


FIG. 7.



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UNITED STATES PATENT OFFICE.

JAMES LOGAN WATKINS, OF LONDON, COUNTY OF MIDDLESEX, ENGLAND.

VELOCIPEDE.

SPECIFICATION forming part of Letters Patent No. 410,681, dated September 10, 1889.

Application filed April 22, 1889. Serial No. 308,204. (No model.) Patented in England March 27, 1888, No. 4,676.

To all whom it may concern:

Be it known that I, JAMES LOGAN WATKINS, a subject of the Queen of Great Britain, residing at London, in the county of Middlesex, England, have invented a new and useful Improvement in and relating to Velocipedes, (for which I have obtained a patent in Great Britain, No. 4,676, bearing date March 27, 1888,) of which the following is a specification.

My invention relates to improvements in velocipedes steered by a single front wheel; and the objects of my improvements are, first, to better adapt such velocipedes to carry rifles and so adapt them for military purposes; secondly, to protect such rifles from injury by dust and dirt, and, thirdly, to enable two-wheeled velocipedes of unstable equilibrium having but one driving-wheel placed in the rear of the steering-wheel to be left in an upright position. I attain these objects by the mechanism illustrated in the accompanying drawings, in which—

Figure 1, Sheet No. 1, is a view in side elevation of a two-wheeled velocipede fitted up according to my invention. Fig. 2, Sheet No. 2, is a similar view of the same machine, showing the action of the upright standing gear. Fig. 3, Sheet No. 1, is a broken view in front elevation of a part of the machine, showing the upright standing gear. Fig. 4, Sheet No. 1, is a view on an enlarged scale, in broken longitudinal section, of the locking-down device for the upright standing gear. Fig. 5, Sheet No. 2, is a broken view, in front elevation, on an enlarged scale, of part of the steering-post of the machine, showing the construction of the loop or aperture to allow the rifle to project forward through the said post. Figs. 6 and 7, Sheet No. 2, are views showing a modification thereof; and Fig. 8, Sheet No. 1, is a view showing the construction of the loop or aperture when the sides of the fork carrying the steering-wheel are continued up to form the steering-post.

Throughout these views similar parts are marked with like letters of reference.

The main frame of the velocipede is constructed in the usual or any other convenient manner, the only point of novelty being that the support *a* for the seat-pillar A is carried on one side of the said frame, so that the pillar itself is not central with the machine. This is to allow the rifle to be placed and carried exactly in the center of the machine.

To enable the rifle to be carried well forward and still keep it in the center of the machine, I form in the steering-post B or its equivalent a loop *b*, through which the forward end of the rifle or case containing it can freely pass and allow room for the said steering-post to oscillate for the purpose of steering the machine. The method of constructing this loop or aperture *b* will depend entirely upon the method in which the steering-post and also the steering head or joint are constructed. For instance, when the steering-post is formed of extensions of the prongs of the front fork, as illustrated by Fig. 8, I fashion the said extensions to form the loop or aperture *b*, as illustrated. Where the construction of the machine does not permit of the rifle being conveniently carried above the steering head or joint, I form an aperture or loop in the steering-neck or its equivalent, as well as in the steering-post, the former being just large enough to take and hold the rifle-case and the latter to allow of the free action of the steering head or joint.

The rifle is carried in a leather sheath or bucket C, carried by two clips or supports *c* and *c'*, the former fixed to or carried by the forward end of the main frame as near to the steering-head as possible, and the latter, which is adapted to receive the breech-block of the rifle, is fixed to or supported by any convenient part of the rear part of the main frame. In a velocipede having two wheels, as illustrated, the mud-guard X of the driving-wheel, stiffened by a fork *x*, provides a convenient support for the clip *c'*. The rear part of the sheath or bucket C is provided with a suitable flap C' to facilitate taking the rifle in and out of the sheath or bucket. The flap C' is preferably fitted with a spring or springs to keep it open when its closing-straps are unfastened.

By carrying a rifle in the manner hereinbefore described it in no way incommodes the

rider, either when mounting and dismounting or when riding, and as its weight is placed central no uneven wear is thrown on any of the bearings, and in case of a two-wheeled velocipede there is also no tendency to destroy the balance of the rider. The sheath or bucket also most efficiently protects the rifle from injury by dust and dirt and other causes.

To enable two-wheeled velocipedes of unstable equilibrium to be left in a standing position, I mount on the axle of the front steering-wheel a double-forked frame consisting of a pair of arms D D, well splayed out at the ends and terminating in knobs or rollers *d d*, of a light fork D′, departing from near to the pivotal point of the arms DD and encircling the steering-wheel, and of a connecting-bar D^2. The crown of the fork D′ is connected to the bar D^2 by a mud-guard D^3, which completes the said frame. From the forward part of the mud-guard D^3 a slotted bar or its equivalent E runs forward under the arch of the crown of the fork carrying the steering-wheel, the bar being slotted to allow the brake-spoon F and its connecting-rod F′ to pass freely down through the said bar. On the forward end of the brake-spoon F is formed or fixed a projection *f*, which, when the double-forked frame is forced down to bring the knobs or rollers *d d* on the ends of the arm D D into contact with the ground, engages with the forward end of the bar E and so locks the said frame down. To enable the frame to be forced down, a foot-bar *d′* is mounted on one or both prongs of the fork D′, or it may be connected by suitable links or rods with a hand-lever fulcrated on the handle-bar, so that it may be operated therefrom.

To restore the frame to its normal position, one or more springs G connect the arms D D with the fork Y, carrying the steering-wheel, as illustrated, so that when the slotted bar E is released by depressing the brake-spoon F, as in the action of applying the brake, until the projection *f* is clear of the forward end of the said bar, the spring or springs bring the double-forked frame up to its normal position, with its knobs or rollers *d d* clear of the ground.

By the use of this upright standing gear a velocipede of unstable equilibrium may be brought to a standstill and kept in an upright position by the rider without dismounting, and the machine may also be mounted from a state of rest.

Although this device is specially suitable for two-wheeled velocipedes of unstable equilibrium for military purpose, as it makes them as easy to handle as a three-wheeled velocipede of stable equilibrium, yet it is equally suited for the ordinary two-wheeled velocipedes used for pleasure and touring.

It will be understood that although my invention is hereinbefore particularly described and shown as applied to a two-wheeled velocipede, it is equally applicable to all other types of velocipedes. Even the upright standing gear, which is specially adapted for two-wheeled velocipedes of unstable equilibrium, is of great service on other velocipedes of stable equilibrium, as it provides a means of keeping the said machines firm on their wheel-base and partially locked in position, thus making them particularly suited for the use of photographers, enabling the camera to be mounted direct onto the machine.

I am aware that devices have already been used to keep two-wheeled velocipedes of unstable equilibrium in an upright position, and also that loops or apertures have been made in the steering posts or stems of velocipedes to allow the backbones to pass therethrough for the purpose of getting the steering heads or joints in front of the said steering posts or stems, and I therefore do not broadly claim such devices; but

What I do claim as my invention, and desire to secure by Letters Patent, is—

1. In a velocipede driven by the rear wheel or wheels and steered by the front wheel, constructing the steering-post forming the upward extension of the steering-fork with an aperture or loop immediately above the snugs or their equivalent forming the steering head or joint and below the level of the saddle, and adapting the upward extension of the steering-post above the said aperture or loop to receive the adjustable pillar carrying the transverse handle-bar, as and for the purpose set forth.

2. In a velocipede driven by the rear wheel or wheels and steered by the front wheel, constructing the frame in the manner hereinbefore set forth—*i. e.*, with a central aperture or loop in the steering-post and with the support for the saddle-pillar adapted to carry the said pillar out of the longitudinal center of the machine to enable a rifle or gun to be carried central on the machine, as and for the purpose set forth.

3. In a velocipede, the combination of the aperture or loop in the steering-post, or its equivalent, and the leather sheath or bucket for carrying a rifle, both combined, arranged, and operating as and for the purpose set forth.

4. In a velocipede, the combination, with the fork carrying the steering-wheel, of the double-forked frame consisting of the arms D D, the light fork D′, the cross-bar D^2, the mud-guard D^3, and of the slotted bar E, fixed to the said frame and adapted to interlock with a catch *f*, carried by the brake-spoon F, as and for the purpose set forth.

5. In an upright standing gear for two-wheeled velocipedes of unstable equilibrium, automatically locking down the said gear to support the machine by means of a suitable catch carried on and operated by the brake-gear of the machine, as set forth.

6. In a velocipede, the combination of the loop or aperture in the head, of the seat-pillar supported out of the center of the machine, of the sheath or bucket for carrying a rifle, and of the upright standing gear, all constructed, arranged, and operating as and for the purpose set forth.

In witness whereof I have hereunto signed my name in the presence of two subscribing witnesses.

JAMES LOGAN WATKINS.

Witnesses:
O. VERNÈDE,
M. C. W. HORNE.