(No Model.)

B. C. HICKS.

VELOCIPEDE.

No. 586,494. Patented July 13, 1897.

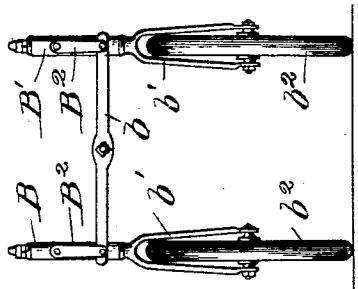

Fig. 3.

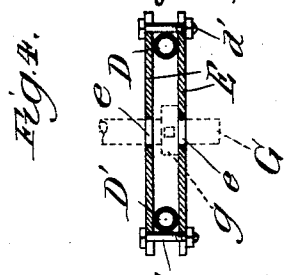

Fig. 4.

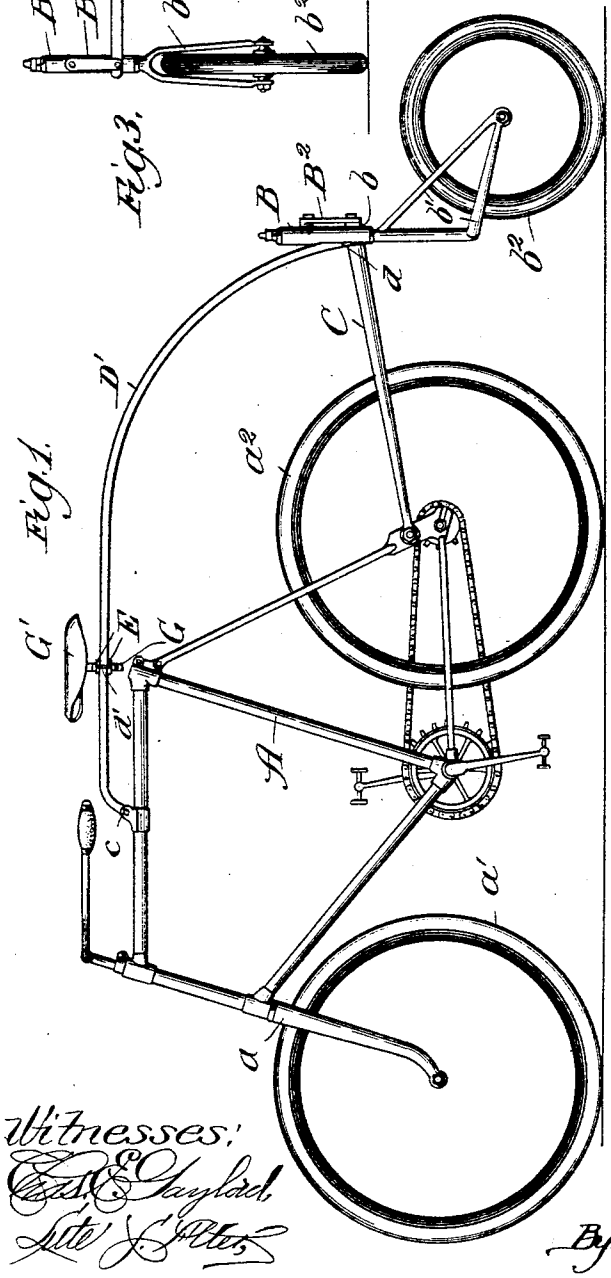

Fig. 1.

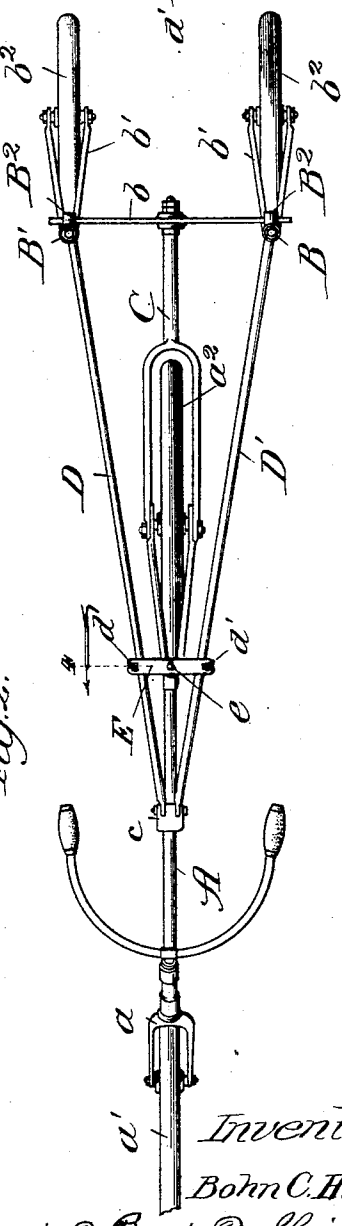

Fig. 2.

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UNITED STATES PATENT OFFICE.

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VELOCIPEDE.

SPECIFICATION forming part of Letters Patent No. 586,494, dated July 13, 1897.

Application filed October 26, 1896. Serial No. 610,114. (No model.)

To all whom it may concern:

Be it known that I, BOHN C. HICKS, a citizen of the United States, residing at Chicago, in the county of Cook and State of Illinois, have invented certain new and useful Improvements in Velocipedes, of which the following is a specification.

The object of my invention is to provide a simple, economical, and efficient velocipede of the tricycle type, or one that is adapted to remain in an upright position when the velocipede is at rest; and the invention consists in the features, combinations, and details of construction hereinafter described and claimed.

In the accompanying drawings, Figure 1 is a side elevation of a complete velocipede embodying my improvements; Fig. 2, a plan view of the same, looking at it from the top; Fig. 3, a rear end elevation of a portion of the velocipede; and Fig. 4, an enlarged view of the seat-supporting clip, taken on line 4 of Fig. 2.

In the art to which this invention relates it is well known that it is with great difficulty that beginners or heavy persons can maintain their equilibrium, so that resort has been had to the use of velocipedes of the tricycle type. The use of these wheels as ordinarily constructed is objectionable in that they are quite cumbersome and heavy; further, differential gear mechanism has to be provided for the driving-wheels, so that the same may take curves or turn corners properly with the least expenditure of force. My invention is designed principally to overcome these objections and provide a light, simple, and economical velocipede of the tricycle type.

In constructing a velocipede in accordance with my improvements I make a main frame A of the desired shape and size to support and hold the ordinary parts in position. In the drawings I have shown it constructed in accordance with what is known as the "diamond" type, having a front steering-fork a, carrying the steering-wheel a', and a rear driving-wheel a^2, adapted to be driven in the usual manner, all of such parts being so well understood by those skilled in the art as to need no further explanation here.

In order to maintain the equilibrium of the velocipede, absorb shocks incident to riding the same, and take curves properly, I use a supplemental frame portion comprising two heads B B′, joined together by a cross-bar b and vertical links B^2, that are pivotally secured to the cross-bar and head portions, so as to form a flexible connection. These heads are provided with independently-pivoted portions b', carrying trailing supporting-wheels b^2. The flexible part of the supplemental frame portion is connected to the main frame by means of a fork C, which is pivoted to the main frame at a point adjacent to the axle of the driving-wheel, so that it may properly rise, or permit the driving-wheel to rise, when passing over obstructions. This supplemental frame is further flexibly connected to the main frame at a pivot c in front of the seat portion by means of a V-frame or connecting-rod having two legs D D′, which are given a proper curve, so as to connect with the heads B, to which they are rigidly attached. It will thus be observed that the minimum amount of shock is imparted to the rider when the vehicle is passing over obstructions; further, that the vehicle can be held in an upright position while at rest, and as each of the trailing supporting-wheels is mounted so as to have independent pivotal and rotary movements they can take the proper curve without interfering with the operation of each other.

In taking some curves the machine will incline to the proper side, and it is desirable that the seat should remain perfectly horizontal or that its supporting-rod should be made truly perpendicular to the ground. In order to accomplish this result, I provide a clip which is made of two horizontal parallel bars E, having perforations e through both of the bars and in line with each other. These clips are secured to the connecting-bars D D′ by means of bolt mechanism d', and the saddle is supported thereon by means of a supporting-post G, which is provided with a collar g, that rests on the lower bar of the clip. The openings in the clip are slightly larger than the diameter of the saddle-post, and also preferably rounded, so that the post can remain perpendicular when the clip is slightly out of a horizontal plane and maintain the saddle G′ in its horizontal position.

I claim—

1. In a velocipede of the class described,

the combination of a main frame provided with a steering-wheel and a driving-wheel in line with each other, a supplemental frame consisting of two heads flexibly secured together, a trailing supporting-wheel in each head portion arranged opposite each other and having independent rotary and pivotal motions, a fork for flexibly securing the flexible connection of the supplemental frame to the main frame at a point adjacent to the driving-axle, and a bar or bars rigidly secured to the head portions of the supplemental frame and pivotally secured to the main frame and arranged to support the saddle or seat portion thereof, substantially as described.

2. In a velocipede of the class described, the combination of a main frame provided with a steering-wheel and driving-wheel in line with each other, a supplemental frame consisting of two head portions secured together by means of a cross-bar and vertical pivotal links, a trailing supporting-wheel in each head portion arranged opposite each other and having independent pivotal and rotary motions, a fork portion flexibly securing the cross-bar of the supplemental frame to the main frame adjacent to the driving-wheel, a substantially V-shaped bar rigidly secured to the head portions and pivotally secured to the main frame in front of the seat portion, and a seat portion arranged thereon, substantially as described.

3. In a velocipede of the class described, the combination of a main frame provided with a steering-wheel and a driving-wheel in line with each other, a supplemental frame provided with two trailing supporting-wheels, a V-shaped bar rigidly secured to the supplemental frame and flexibly secured to the main frame, a saddle-clip consisting of two parallel bars secured to the V-shaped frame and provided with a central aperture, and a seat-post carrying a saddle or seat portion passed through such apertures and loosely supported on the lower clip, substantially as described.

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