

Velocipede.

Patented Dec. 29, 1868.



J. L. Kingsley
W. K. King

K Inventor
Chas. Skidmore.

United States Patent Office.

SAMUEL M. SKIDMORE, OF BROOKLYN, NEW YORK.

Letters Patent No. 85,337, dated December 29, 1868.

IMPROVED VELOCIPEDE.

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

To all whom it may concern:

Be it known that I, SAMUEL M. SKIDMORE, of Brooklyn, in the county of Kings, in the State of New York, have invented certain new and useful Improvements in "Velocipedes;" and I do hereby declare the following to be a full, clear, and exact description of the same, reference being had to the accompanying drawings, and to the letters of reference marked thereon.

The nature of my invention consists in making a velocipede, that may be easily propelled by the person upon it, the contrivance and arrangement of the same being adapted to the result of accelerated speed, with greater ease, by means of advanced driving-wheels, the whole being controlled by the person upon it, through its propelling-bars and the steering-apparatus, as hereafter set forth.

To enable others skilled in the art to make and use my invention, I will now describe its construction and operation.

Of the drawings,—

Figure I is a longitudinal elevation.

Figure II is a ground plan, the seat being removed so as to expose the working-apparatus.

a, in the drawings, will be the main driving-shaft or axle. This is peculiar in its construction, inasmuch as it is, in itself, a double-acting instrument, in which the cranks *a*¹ and *a*², at the opposite ends, either one, appears as a parallel shaft, working in its journals at the point denoted by *c*.

The bars or levers *b* and *b*¹ are arranged so that they will both be actors to promote motion, and give the same to the main shaft *a*. These bars connect at the extreme impingent-extension of the cranks *a*¹ and *a*².

I provide driving-wheels, as *b*¹ and *b*², on either side of my apparatus, in its front part, so that these will be in front of the load upon the seat *c*.

I provide a frame, of which the braces *d* *d*¹ are a part, the main beams being *e* *e*¹.

At the centre of *d* is a journal or pin for the whiffle-tree *f*, the journal being *g*.

We next come to the guiding or steering-arrangement.

A centre or bolt, to act as a journal, will be seen at *h*, and upon the frame will be fastened the vibrating double-end axle *i*, the same being connected to the frame by *h*.

Upon this axle *i* are the wheels *k* *k*¹, which are the burden-wheels, one on either side.

These wheels are worked or controlled by the person upon the seat, by placing his feet against *f*, and pushing, or relieving pressure, he will guide these burden-wheels in either direction he may please.

For this purpose, some suitable connection, like *l* *l*¹, connects *f* with *i*, at a point near the wheels, and outside of the frame.

At the front end of the frame, a loop, *m*, connects the seat-spring *n* with the frame *e*, this spring, by its length from the loop *m* to the seat *c*, forming a suitable spring for the ease of the rider.

It will be seen that this contrivance is, in itself, a complete locomotive, when under command of the person seated upon it.

It will be noted that this is more a matter of novel arrangement than peculiar originality in any of the separate parts, the first essential feature being the large driving-wheels, at the front part of the carriage, fixed upon the double-cranked axle, to be used as a means of giving and increasing power and motion. A further feature is the means of steering and controlling the carriage, so that it may be turned in either direction from, or kept in a straight line, as may be required.

Operation.

The person will be mounted upon the seat *c*, and, with either hand, take up the loops of *b* *b*¹, and by drawing to and pushing from the body, give motion to the crank-shaft, which, being fast with the wheels at the front, drives them around and forwards. He will then place his feet against and in front of the whiffle-tree *f*, one towards each opposite end of the same, when, by pressing either end, it will turn it in the desired direction, and thus turn the axle and their driving-wheels, these being *i* and *k*, and are directly connected with the whiffle-tree, by the pieces *l* and *l*¹, for this purpose, so that, by this means, the machine may be steered in any desired direction.

Claim.

Having thus fully described the construction and operation of my velocipede,

I claim a "velocipede," arranged, constructed, and to operate substantially as described.

SAMUEL M. SKIDMORE.

Witnesses:

J. L. KINGSLEY,
W. KUKUP.