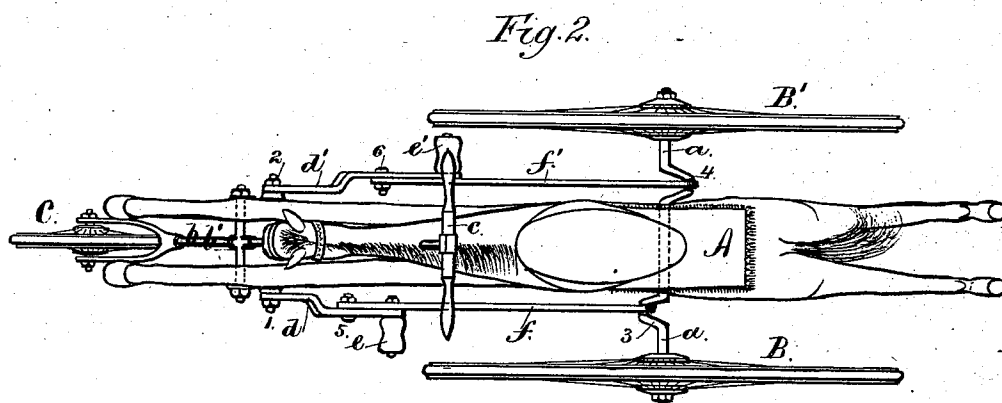
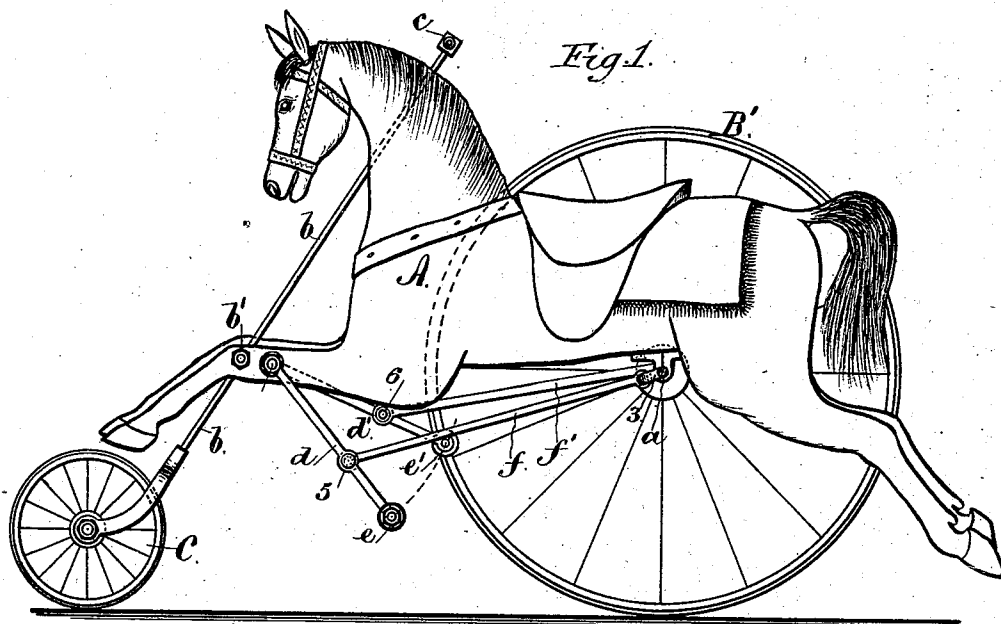


(No Model.)

C. F. STILLMAN.
VELOCIPEDE.

No. 381,038.

Patented Apr. 10, 1888.



Witnesses
Harold Terrell
Chas. N. Smith

Inventor
Charles F. Stillman
per Lemuel W. Terrell
att'y.

UNITED STATES PATENT OFFICE.

CHARLES F. STILLMAN, OF NEW YORK, N. Y.

VELOCIPED.

SPECIFICATION forming part of Letters Patent No. 381,038, dated April 10, 1888.

Application filed December 7, 1887. Serial No. 257,223. (No model.)

To all whom it may concern:

Be it known that I, CHARLES F. STILLMAN, of the city, county, and State of New York, have invented an Improvement in Velocipedes, of which the following is a specification.

My present invention relates to a velocipede having at the rear a pair of driving-wheels, a cranked axle connecting said wheels, a steering-wheel, steering-rod and handle-bar at the front, a body extending from the cranked axle to the steering-rod, and treadles connected at their front ends to the body and having foot-pieces or spools at their back ends, and there are connecting-rods from these treadles to the cranks of the axle, whereby the velocipede is propelled by the feet of the rider; and my present invention is designed as an improvement upon Letters Patent No. 324,605, heretofore granted to me, and also upon the device shown in my application for patent filed October 21, 1887, Serial No. 252,976.

My improved velocipede is especially adapted to the use of children and youths, and by its peculiar construction I am enabled to obtain a direct rise-and-fall movement to the foot-pieces, because the treadles are pivoted at their front ends and their back ends carry the foot-pieces and rise and fall; hence the direct pressure or force of propulsion is applied vertically to the best advantage.

In the drawings, Figure 1 is an elevation of the velocipede with the rear driving-wheel removed, and Fig. 2 is a plan view of the same.

The body A, connecting the cranked axle with the steering-rod, is represented as that of a horse. The body may, however, be that of any other animal or form; or it may be a frame carrying a seat similar to that shown in my before-named application.

The back or driving wheels, B B', may be of any desired construction, and they are connected by a cranked axle, *a*, which revolves in bearings secured to the body A.

C represents the steering-wheel corresponding in character to the driving-wheels B B'. The steering-wheel has connected to it a steering-bar, *b*, and steering-handle *c*, and this backwardly-inclined steering-bar *b* is connected to the forward portion of the body A, and is adapted to turn in such connection *b'*. I have shown the bar as passing up through the head of the horse. The treadles *d d'* are piv-

oted at 1 2 at their front ends to the forward portion of the body A, and they are provided with foot-pieces or spools *e e'* at their back ends and said back ends are adapted to rise and fall. There are connecting-rods *f f'*, receiving at their back ends the cranks 3 4 of the driving-wheel axle *a*, and connected at their forward ends to the respective treadles *d d'* by pivots 5 6. The pivots 5 6, connecting the treadles and connecting-rods, are located between the treadle-pivots 1 2 and spools or foot-pieces *e e'* at any desired point, according to the power required to drive the velocipede.

By this improvement the rider has only to push the treadle down, and it acts with the connecting-rod like a toggle to give a powerful movement to the cranked axle of the driving-wheels, whereas in cases where the treadles hang vertically from their upper ends the movement of the foot is only forward and back and the rider is not able to bring his weight into action to aid in propelling the vehicle, and there is no toggle-action.

I claim as my invention—

1. The combination, with the driving-wheels and cranked axle, the steering-wheel, backwardly-inclined rod, and handle-bar, and a body extending from the cranked axle to the steering-rod, of treadles pivoted at their front ends to the body and foot-pieces at their back ends that rise and fall, and connecting-rods from the treadles to the cranks of the driving-wheel axle, substantially as specified.

2. The combination, with the driving-wheels B B', their cranked axle *a*, steering-wheel C, backwardly-inclined rod *b*, handle-bar *c*, and a body, A, connecting the driving and steering wheels, of the treadles *d d'*, pivots 1 2 for the same at their front ends and foot-pieces or spools *e e'* at their back ends, the connecting-rods *f f'*, receiving at their back ends the cranks of the driving-wheel axle, and pivoted at 5 6 at their forward ends to the treadles at points between the pivots and foot-pieces, substantially as and for the purposes specified.

Signed by me this 1st day of December, A. D. 1887.

CHAS. F. STILLMAN.

Witnesses:

GEO. T. PINCKNEY,
HAROLD SERRELL.