(Model.)

J. CHURCH.

VELOCIPEDE.

No. 263,857. Patented Sept. 5, 1882.

Fig. 1.

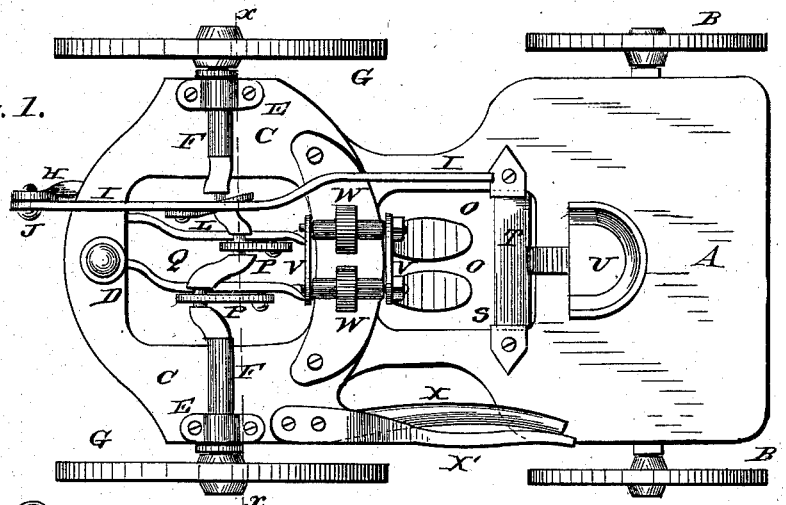


Fig. 2.

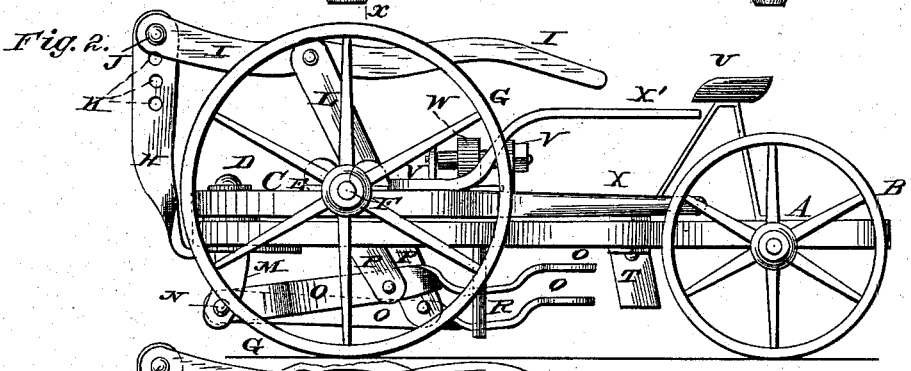


Fig. 3.

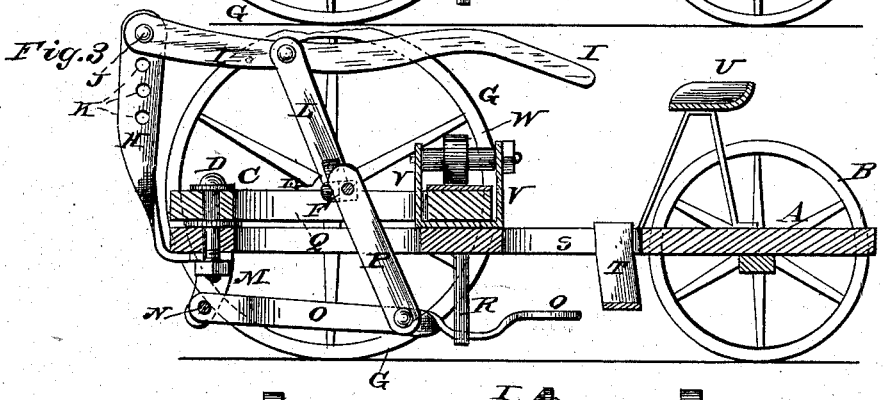
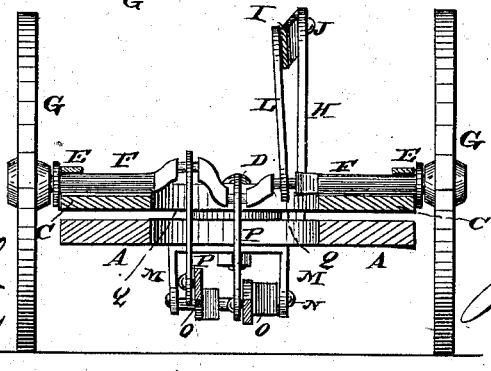


Fig. 4.



Witnesses:

P. C. Dieterich

Fred. G. Dieterich

Inventor:

J. Church

by C. A. Snow & Co.

attorneys.

UNITED STATES PATENT OFFICE.

JAMES CHURCH, OF ST. LOUIS, MISSOURI.

VELOCIPEDE.

SPECIFICATION forming part of Letters Patent No. 263,857, dated September 5, 1882.

Application filed February 17, 1882. (Model.)

To all whom it may concern:

Be it known that I, JAMES CHURCH, of St. Louis, in the county of St. Louis and State of Missouri, have invented certain new and useful Improvements in Vehicles; and I do hereby declare that the following is a full, clear, and exact description of the invention, which will enable others skilled in the art to which it appertains, to make and use the same, reference being had to the accompanying drawings, which form a part of this specification.

This invention relates to vehicles of that class which are designed to be driven by foot or hand power, and especially appertains to velocipedes and carriages, and has for its object to produce a simple, convenient, and easily-operated means of locomotion.

To this end it consists in certain improvements in the construction and operation of the same, substantially as will be hereinafter more fully described, and particularly pointed out in the claims.

In the drawings, Figure 1 is a top plan view; Fig. 2, a side view; Fig. 3, a central longitudinal sectional view; and Fig. 4, a cross-section on the line *x x*, Fig. 1.

Corresponding parts in the figures are denoted by the same letters of reference.

Referring by letter to the drawings, A designates the platform of my improved machine, the rear portion of which is mounted upon wheels B B. To the front part of the platform and on top the same is pivoted a turn-table, C, by means of bolt D, provided with bearings E for the tri-cranked main axle F, carrying the driving-wheels G G.

H denotes a vertical standard, secured at the front of the platform, to which is pivoted a rearwardly-extending lever, I, by means of a pin or pivot, J, passing through one of a series of perforations, K, in the standard. A downwardly-extending connecting-rod, L, is pivoted to the lever I, and connects it with one of the cranks on the main axle, which are preferably formed each at right angles to the others.

M denotes a bracket secured under the platform at the front thereof, and having a transverse rod, M, forming a bearing for the front ends of the treadle-levers O O. To these latter are pivoted upwardly-extending connecting pieces or rods P P, having their upper bearings in the cranks on the main axle. An aperture, Q, is provided in the platform and turn-table for the accommodation of the cranks, connecting rods, and other operating mechanism, and the bearings formed on the cranks of the main axle for the accommodation of the connecting-rods are of sufficient width to allow slight lateral movement of the latter. The under side of the platform is provided with guides R R to limit the lateral movement of the treadles.

S denotes an opening or aperture in the platform, through which the treadles may be operated, in which is provided a step, T, for convenience of the driver. The seat U is arranged in rear of this opening.

Two standards, V V, secured to the platform embrace the rear part of the turn-table, and serve as guides for the latter in turning, and to facilitate the operation rollers W W are arranged between the guides or standards.

X X′ are handles or levers secured at the side of the turn-table, by operating which the turn-table, carrying the driving-wheels, may be turned to either side to guide the vehicle.

By reference to the foregoing description, taken in connection with the drawings hereto annexed, the operation and advantages of my invention will be readily understood. It is simple, efficient, and durable, and may be easily driven, either by hand-power through lever I or foot-power on the treadle-levers.

Having thus described my invention, I claim and desire to secure by Letters Patent of the United States—

1. The combination, with the platform, of the turn-table mounted thereon, and carrying the main axle, to which are attached the driving-wheels, substantially as herein specified.

2. The combination, with the platform and turn-table carrying the cranked axle, of the standard H, operating hand-lever I, and connecting piece or rod L, substantially as and for the purpose set forth.

3. The combination, with the platform and turn-table carrying the right-angular cranked axle, of the bracket secured to the under side of the platform, the treadle-levers, and connecting pieces or rods, substantially as and for the purpose herein specified.

4. The combination of the platform, the turn-table provided with bearings for the tri-cranked

axle carrying the driving-wheels, and the operating-levers connected with the cranks on said axle, substantially as herein shown and specified.

5. The combination of the platform, provided with bracket M, having a transverse rod, N, forming bearings for the front part of the treadle-levers, guides R R, standard H, to which is pivoted the hand-lever I, and standards or guides V V, embracing the rear part of the turn-table, and having rollers W W, with the turn-table having one or more handles, X, and provided with bearings for the main axle carrying the drive-wheels, the operating-levers being connected to cranks on said main axle, all arranged and operating substantially as and for the purpose herein shown and specified.

In testimony that I claim the foregoing as my own I have hereto affixed my signature in presence of two witnesses.

JAMES CHURCH.

Witnesses:
MATT SHEAHAN,
J. REED LITTELL.